KKDC
www.kkdc.lighting

Symbol Key

Application

Interior	Product suitable for interior use
Exterior	Product suitable for exterior use according to IP rating

Cover Effect

Homogenous	Full diffusion with no visible LED nodes when illuminated
Spotting	LED nodes visible on diffused cover when illuminated

LED Types

n-line	Full Spectrum high CRI LED, replicating natural daylight
s-line	Premium LED for high-end specification, tight binning with high CRI
e-line	Economy specification LED with high CRI
h-line	Constant Voltage Lensed High Power LED
h-line	Constant Current Lensed High Power LED

Dynamic LED

RGB	Red, Green & Blue dynamic LED colour mixing
RGBW	Red, Green, Blue & White dynamic LED colour mixing
LEDmix	Dynamic white 2-Channel LED colour mixing

Ingress Protection

IP68	Suitable for underwater use

Product Category

Linear	KKDC range of rigid Linear LED strips & housings
Flexible	KKDC range of Flexible LED strips & housings
High Output	KKDC range of High Power LED strips & housings
Spotlights	KKDC range of Spotlighting products
General Lighting	KKDC range of General Lighting luminaires
Power	KKDC range of Power & Control options

KKDC
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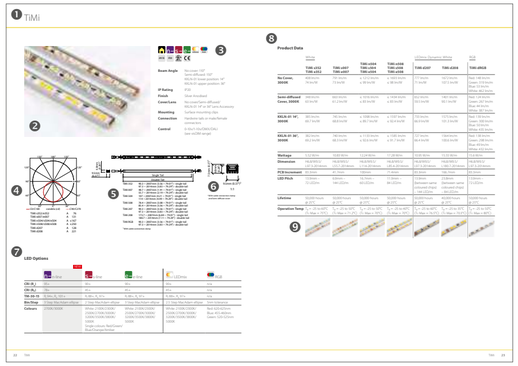
Product Page Description

1. Product family housing name
2. Family photo image (not all variants)
3. Family icons and data
4. Family Polar Curve Diagram (based on 500mm or closest samples)
5. Family Technical Drawing (Metric & Imperial)
6. Family Section Diagram 1:1 scale
7. Available LED type options
8. Product names & data chart
9. Images of available LED strip options



KKDC products and manufacturing processes are assessed and certified to comply with international standards. Certification and accreditation information is published both here and on our website – **www.kkdc.lighting**
Please consult your local KKDC branch or distributor with any queries relating to standards and accreditation for specific KKDC products or territories.
Where KKDC distribute products produced by 3rd parties – please consult the original manufacturer's product specification details for information on safety compliance and performance standards.

Key Product Standards

CE (DoC)	European safety standard confirming products conform to relevant EU Legislation.
EN 60598	Luminaires-part 1: General requirements and tests – Extra Low Voltage Safety (SELV).
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.
EN 61547	Equipment for general lighting purposes. EMC immunity requirements.
EN 62741:2008	Photobiological safety and optical hazard assessment.
IEEE 1798-2015	Recommended practices for modulating current in high-brightness LEDs for mitigating health risks to viewers.

Product Listings

LISTED E358143	KKDC have products listed with UL, please visit UL's 'Online Certification Directory' for full details on the listed products – **www.ul.com**

Product Performance

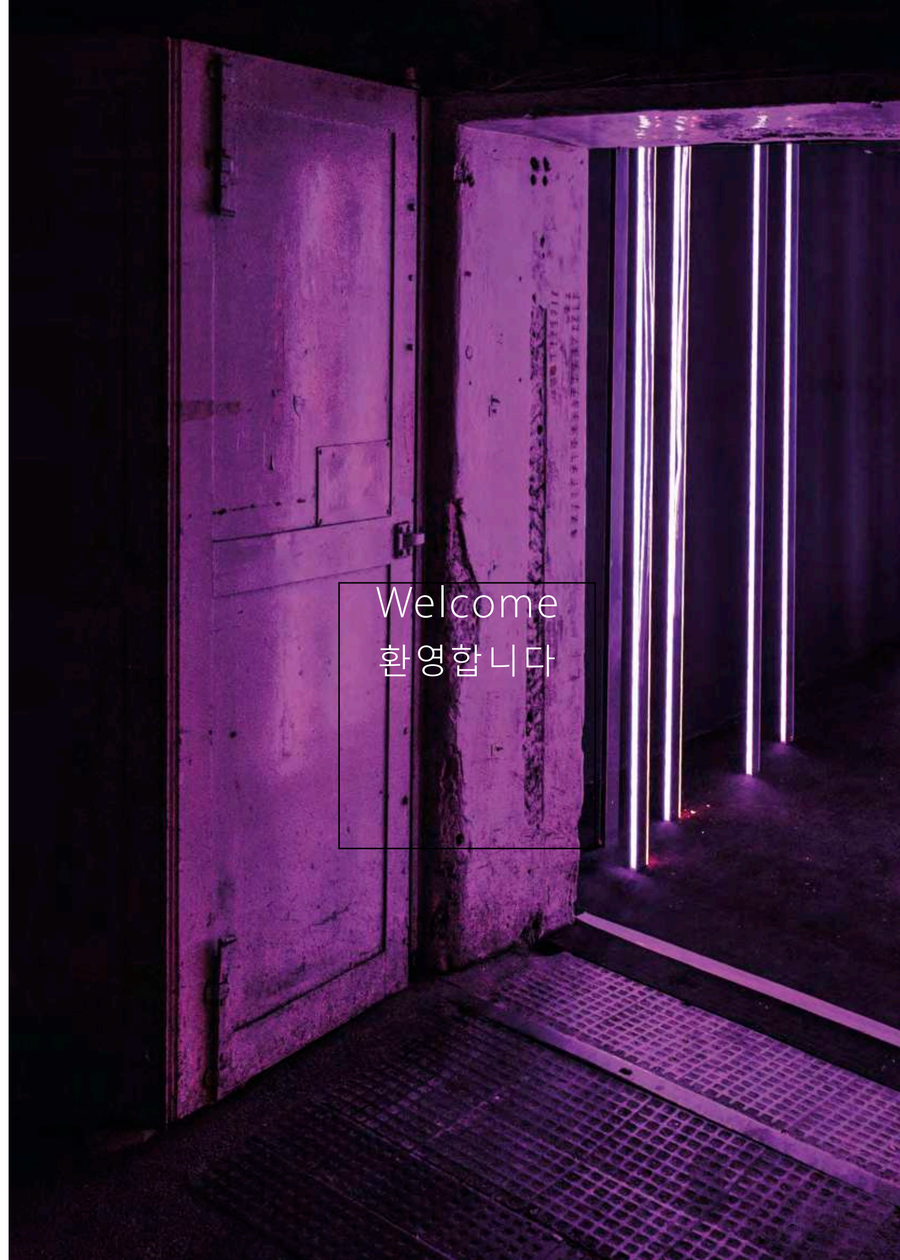
LM 79-08	Electrical and photometric measurements of solid-state lighting products. All KKDC white linear product data has been derived from UKAS accredited LUX-TSI test data.
LM 80-08 and TM 21-11	Measuring lumen maintenance of LED light sources and projecting long term lumen maintenance of LED light sources.
TM-30-15	Method for evaluating light source colour rendition.

Environmental Standards

RoHS Directive 2002/95/EC	Restriction of hazardous substances in electrical and electronic equipment.
WEEE Directive	Waste electronic and electrical equipment directive.

KKDC Quality Management Systems

ISO 14001	Environment management system.
ISO 9001	Quality management system.



Contents

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KKDC 2017/18

KKDC is pleased to announce the following products and company news for 2017.

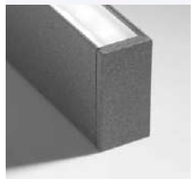
NEW Products and Technology

TANA Spot

TANA Spot is a compact and adjustable luminaire designed for shelf display spotlighting and used in conjunction with the popular TANA shelf lighting system.

KOH 40

Under the new category 'General Lighting' the KOH family of housings provides larger aperture linear luminaires suitable for interior office environments and commercial spaces. (See page 12).



LiNi BLADE-S

Premium finish linear housing designed to accommodate the new & innovative KKLN-01 linear lens. Can be surface mounted or suspended.

MoMo-L

Expansion of MoMo series, with increased housing height to accommodate 45° Micro Louvre.

SEN CV

Constant Voltage version of the powerful and versatile SEN exterior high power luminaire.

visDIM – Dimming 3X faster

Dimming frequency has been made 3 times faster, from 1.1Khz to 3.3Khz. Greatly improving dimming quality in accordance with IEEE 1789:2015.

Groove X & L

Accessories to Groove Light, Groove-X & Groove-L are new illuminated end forms to create interesting architectural lighting details.

UNI P-FX4

Innovative flexible, universally directional PCB design with self-adhesive backing designed for concealment into curved and organic architectural forms.

n-line

n-line (Natural LED)

Complementing the existing s-line & e-line series, the new KKDC n-line technology has been developed to produce highly accurate colour rendition of white shades, inspired by the natural effect of daylight (See page 10).

h-line

h-line (High Power LED)

The new h-line icon has been added to clearly define all KKDC 'Power LED' product types.

- Constant Voltage Lensed High Power LED
- Constant Current Lensed High Power LED

LEDmix RGB RGBW

Dynamic LED

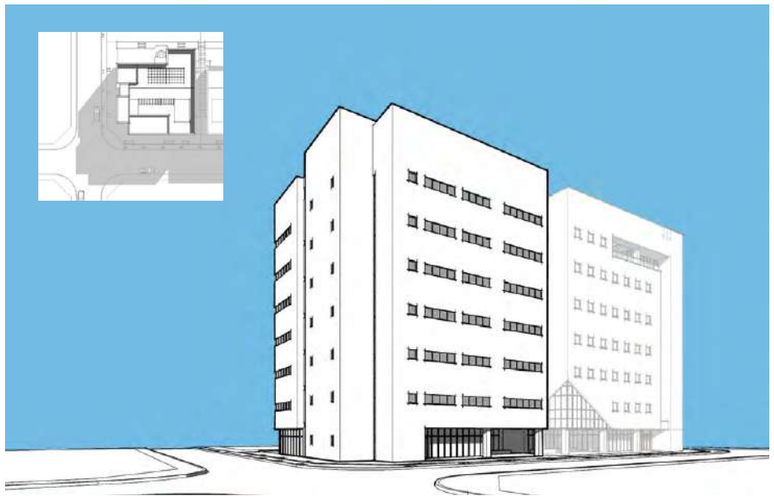
New LEDmix, RGB & RGBW icons to define the range of dynamic LED options.

Company Expansion

NEW KKDC R&D Centre, Seoul

Due for completion in the summer 2017, KKDC is excited to announce the construction of a large Research & Development Facility in Seoul, which is set to house cutting-edge design & testing machinery, including an impressive new 80-inch Integrating Sphere-photometer (LMT Type-C Gonio-photometer) and Sphere-spectroradiometer System (NeoLight PL5000-2M) ensuring continuation of the accurate, accredited data production that KKDC is known for.

Conveniently located for strong international communication links at the new Gangseo-gu district development in Seoul, the new KKDC R&D centre marks a milestone of investment, ensuring KKDC remains at the forefront of future technological trends.



KKDC England

KKDC opens the new London based global sales branch supporting local, EU and Middle Eastern territories.

KKDC Milan

The KKDC Global sales family continues to expand within Europe, with the opening of KKDC Italy, with new premises in the fashionable Milan.

KKDC North America

KKDC continues to drive expansion within the US and North America, with feedback from this important market being accommodated where possible, ensuring these market requirements are targeted within technical data and testing standards.

Website Upgrades

The KKDC website (www.kkdc.lighting) is currently undergoing major upgrade works to ensure it remains a functional specification tool for lighting design professionals, architects & specifiers.

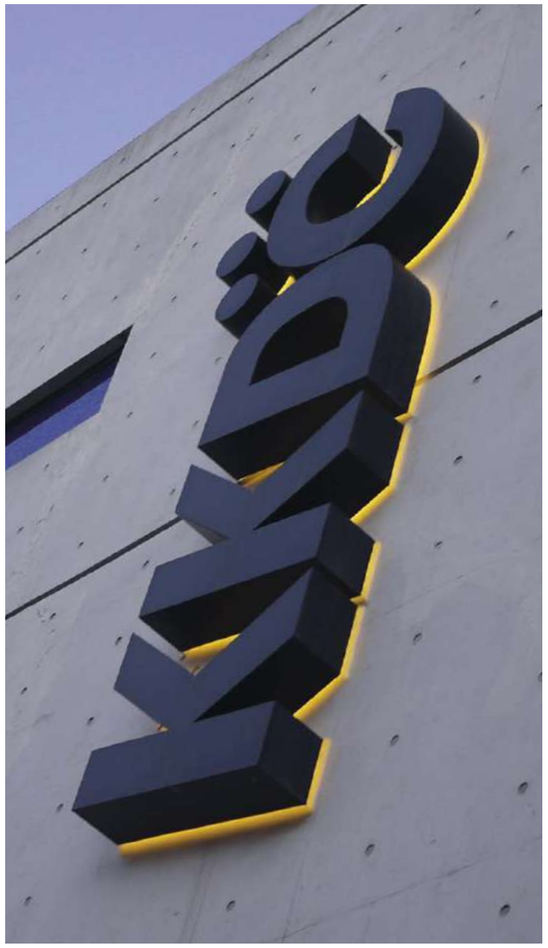
These upgrades include International **language options**, dedicated **US site**, Product **Code Generator** and a client **login area** for access to detailed design data.

About KKDC

KKDC is an established LED lighting manufacturer based in South Korea. With Research, development and manufacture taking place at our facility outside Seoul. The exciting expansion of a large R&D facility in Seoul opening in 2017 ensures KKDC continues to lead the way with LED technology advancements.

Initially founded in 2003 as an LED lighting and IT company under the name 'Konkuk Data Communication Co Ltd' in South Korea, KKDC was a small company with valuable expertise in three core areas of technology: LED, Hardware & Software Engineering.

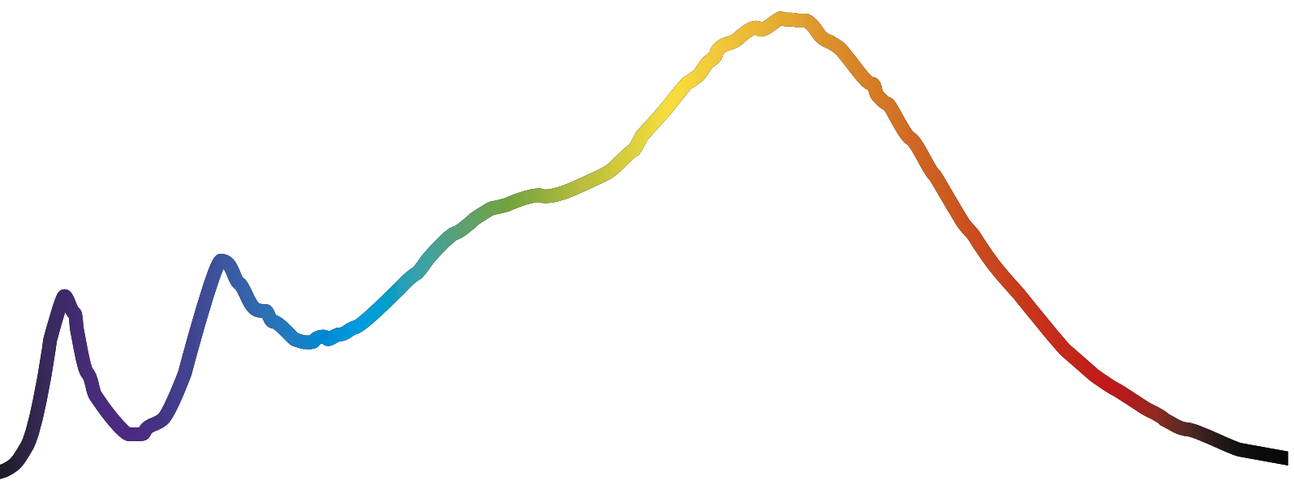
In 2005, founder Jack Choo moved to Sydney, Australia with his family to establish the company name known as KKDC PTY Ltd. From this time, KKDC was able to utilize these three core areas of technical skill and apply to the Architectural Lighting Industry. Building up the KKDC brand and product range with cutting edge technology and minimalist design, KKDC was able to offer professional LED lighting solutions to meet the growing demands of Lighting Designers worldwide. After dramatic international growth KKDC Design House Ltd was established in 2014 in the UK to expand professional design, marketing and technical support for KKDC branches globally.



With extensive in-house electronic engineering expertise from our Korean R&D team and working in partnership with UK based KKDC Design House, KKDC remains uniquely positioned and committed to meeting the growing demands of high-end architectural lighting projects worldwide.

Product sales and technical support services continue to expand with newly opened KKDC Branches in Milan and New Delhi, while KKDC North America continues to focus resources developing the US market, together with our valued network of partners. These established international relationships enable KKDC to benefit from a wealth of experience and meet the needs of our clients across continents.

n-líne Full Spectrum LED



NEW

n-líne Full Spectrum LED

Full Spectrum LED

- Emitting light across the entire visible spectrum (red, orange, yellow, green, blue, indigo and violet).

Rendering Natural Colours

- Allowing objects to appear as they would naturally under daylight.

Illuminating White

- Render white tones, and soft hues more accurately due to the violet content of the light.
- Making white look brighter and more vibrant – violet content of light removes the yellow/warm appearance that whites and soft hues often take on under LED lighting.

The Science of n-line

- Creating light by using Violet and blue based LED chips means light is being generated across the full visible spectrum. In normal Blue based LED lighting, there is no light emitted within the violet spectrum (below 430nm).
- Emission of violet light (380nm – 430nm) means that light is now interacting with 'optical brightening agents' (OBAs) or 'fluorescent brightening agents' (FBAs). These are chemicals that absorb ultraviolet and violet light and re-emit the light with a longer wavelength. This process greatly affects the rendering of whites and soft hues.
- OBAs and FBAs can be found naturally in objects such as flowers, eyes and teeth, or generated artificially and added to objects such as fabrics, papers and cosmetics to purposefully affect the appearance of objects under certain lighting.

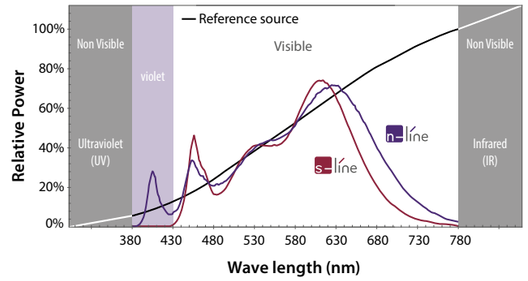
IESNA TM-30-15 Colour Analysis

R_f	95
R_g	101

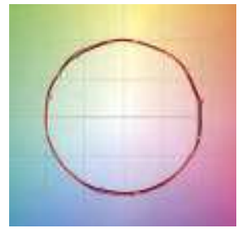
CIE CRI Colour Analysis

CRI (R_a)	97
R_g	80

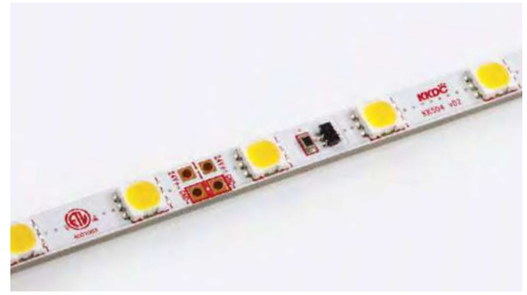
Spectral Power Distribution Comparison

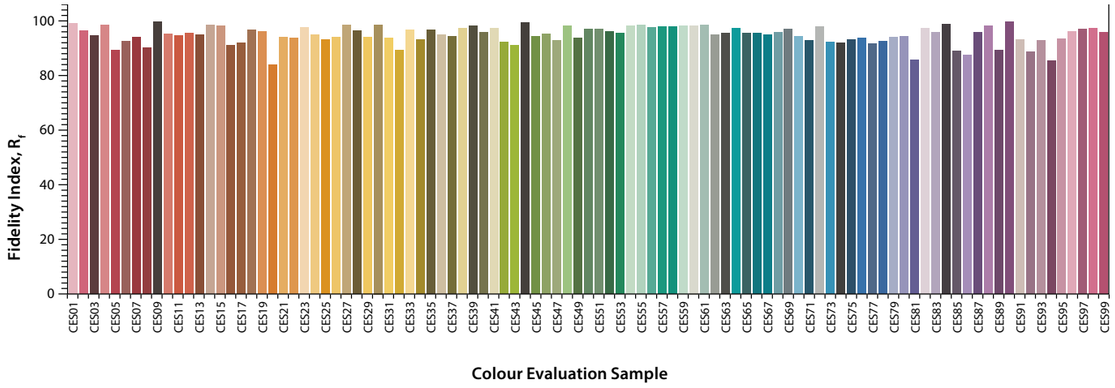


Colour Vector Graphic



Reference Source
Test Source

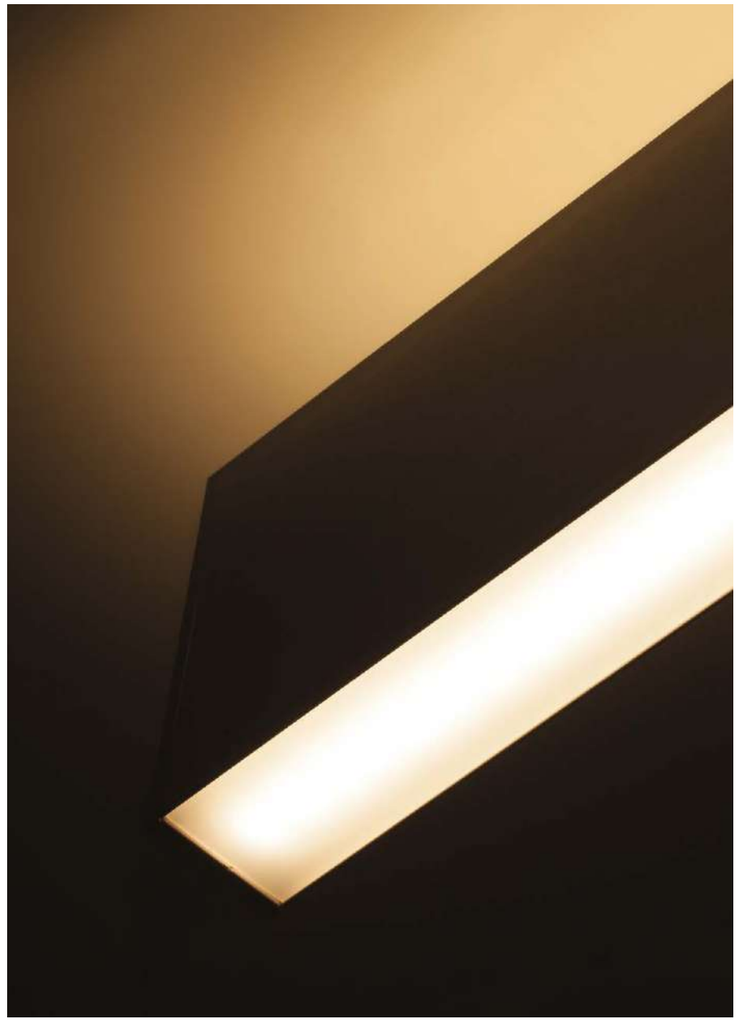


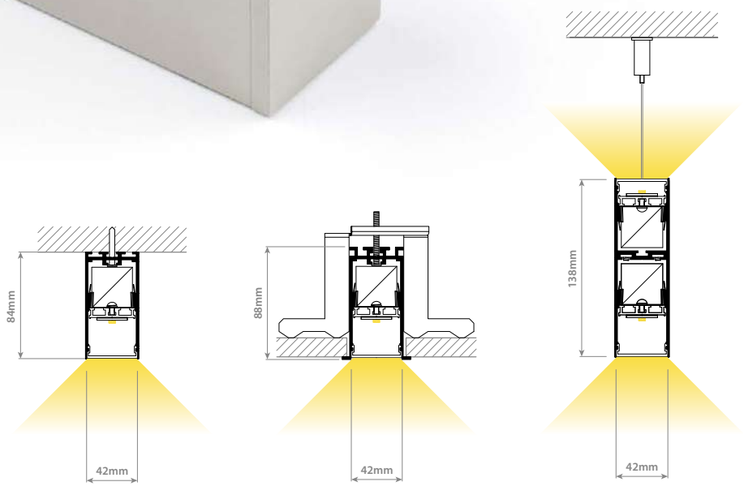


NEW

KOH System

KOH 40-S & KOH 40-R shown (white finish)





General Lighting

Under the new KKDC 'General Lighting' product category, KOH System – soft launched at Light + Building 2016 – is a new range of high power linear profiles with large luminous apertures, suitable for general interior downlighting applications. Recommended for office environments and commercial spaces, KOH products share a range of powerful, linear LED light engines with integral PSU (Switched/1-10V or DALI).

Available as KOH 40, KOH 60 & KOH 100 variants – where the number denotes the luminous aperture width in mm – KOH is available surface mounted, recessed or suspended for direct/indirect lighting.

With KOH 40 initially offered to the market, and KOH 60 & 100 to follow, KOH System will provide an installer friendly and versatile General Lighting Solution.

Key Features:

- Fully homogenous or Prismatic snap on covers.
- Optional dark-light louvre baffles.
- Easy to install and removable LED light engines using special tool.
- Continuous linear light runs possible with 'quick link' LED modules.
- Integral PSU for AC input.
- Wide range of high power LED package options & lenses.

KKDC LED Grades

Single Channel LED

n–line Full Spectrum, high rendering LED

s–line High-end specification with tight binning and high rendering

e–line Economy specification with tight binning and high rendering

Dynamic LED

LEDmix Dynamic lighting options with 2 channel white LED strips

RGB RGB LED

RGBW RGBW LED strip using RGB tri-chip and 2.5 step white LED

High Power LED

h– Constant Voltage Lensed High Power LED

h CC Constant Current Lensed High Power LED

All data is based on 3000K

KKDC KK504/KK352 LED (CIE 1931)

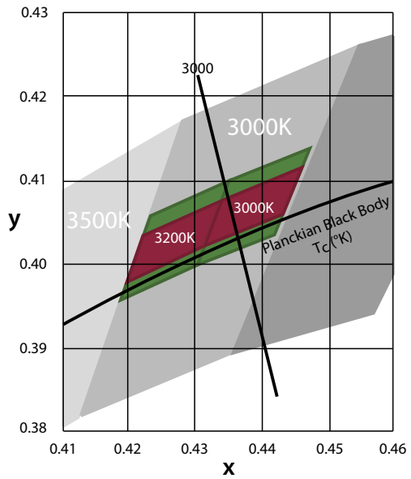


Fig 1. Diagram showing s-line and e-line binning relationship for 3200K and 3000K.

Single Channel LED

	n–		s–		e–	
TM-30-15	R_f 95	R_g 101	R_f 88	R_g 97	R_f 88	R_g 97
CRI	R_a 95	R_9 80	R_a 90	R_9 45+ (≤75 @ 5000K)	R_a 90	R_9 45+ (≤75 @ 5000K)
Bin/Step	3 Step MacAdam ellipse		2 Step MacAdam ellipse		3 Step MacAdam ellipse	
Colours	White: 2700K/3000K		White: 2100K/2300K/2500K/2700K/ 3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/ Orange/Amber		White: 2100K/2300K/2500K/2700K/ 3000K/3200K/3500K/3800K/5000K	
Chip	Toyoda Gosei		Toyoda Gosei		Toyoda Gosei	
PCBs	n504/508		s352/s007/s504/s508/s512		e352/e007/e504/e508/e512	

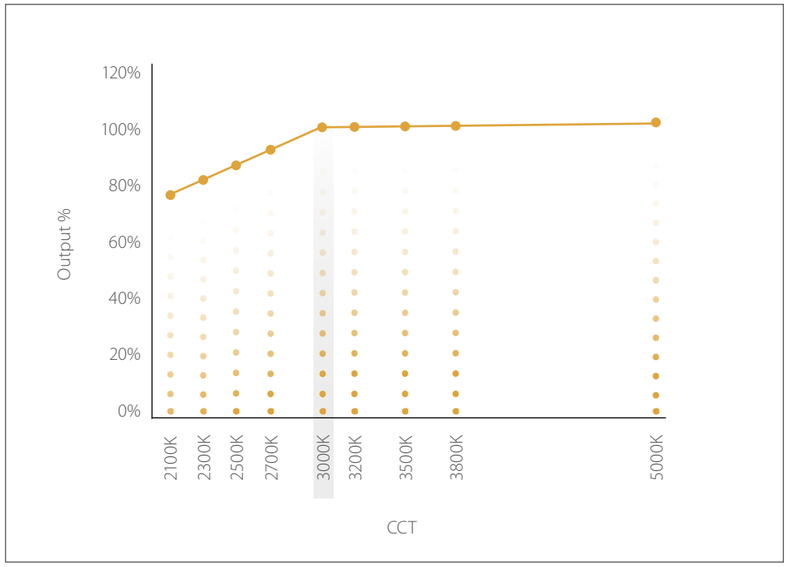
Dynamic LED

	LEDmix (Dynamic white)		RGB	RGBW	
TM-30-15	R_f 88	R_g 97		R_f 88	R_g 97
CRI	R_a 90	R_9 45+ (≤75 @ 5000K)		R_a 90	R_9 45+ (≤75 @ 5000K)
Bin/Step	2.5 Step MacAdam ellipse		5nm tolerance	White 2.5 Step MacAdam ellipse/ RGB: 5nm tolerance	
Colours	White: 2100K/2300K/2500K/2700K/ 3000K/3200K/3500K/3800K/5000K		Red: 620-625nm/ Blue: 455-460nm/ Green: 520-525nm	Red: 620-625nm/ Blue: 455-460nm/ Green: 520-525nm White: 2100K/2300K/2500K/2700K/ 3000K/3200K/3500K/3800K/5000K	
Chip	Toyoda Gosei		Red Opto tech/Green EPILEDS/Blue ETI	White Toyoda Gosei/Red Opto tech/ Green EPILEDS/Blue ETI	
PCBs	d207/d208		dRGB	dRGBW	

High Power LED

	h– Constant Voltage		h CC Constant Current		h– High Power RGB	
TM-30-15	R_f 83 (90 @3000K)	R_g 95 (102 @3000K)	R_f 95	R_g 101	n/a	n/a
CRI	R_a 80 (90 @3000K)	R_9 16 (76@3000K)	R_a 80	R_9 26	n/a	n/a
Bin/Step	3 Step MacAdam ellipse (4 Step for 5000K)		2 Step MacAdam ellipse (4 Step for 5000K, 6500K)		n/a	
Colours	White: 2700K/3000K/3500K/ 4000K/5000K (90CRI for 2700K, 3000K)		White: 2800K/3000K/3200K/3800K/ 5000K/6500K (70 CRI for 5000K,6500K) Single colours: Red/Green/Blue		Red: 618-629nm/ Blue: 455-465nm/ Green: 518-535nm	
PCBs	h035		h033/h050/h100		h047/h094	
Chip	Lumileds		Cree		SEOUL SEMICONDUCTOR	

Colour vs Output



% of output against 3000K

CCT	%
2100K	78%
2300K	81%
2500K	88%
2700K	94%
3000K	100%
3200K	100%
3500K	100%
3800K	101%
5000K	101%

Fig 2. CAT 3.0 based on 3000K testing using the following % to calculate lumens based on CCT as required.

Testing Standards

LM79-08 testing

All products are tested in accordance with LM79.

The majority of products have accredited test data.

Test Lab

LUX TSI

TM 30-15 and CRI

Both data sets are now standard for all KKDC products.

Test Lab

LUX TSI

LM80-08 Testing

All products life are covered by testing carried out on behalf of KKDC.

Test Lab

KTR 한국화학융합시험연구원 KOREA TESTING & RESEARCH INSTITUTE

KKDC Linear LED

352

s– e–

Power 5.52 W/m
lm/W in TiMi 74 lm/W
LED pitch 13.9mm
PCB increment 83.3mm

Lower output, single channel LED strip.

007

s– e–

Power 10.83 W/m
lm/W in TiMi 73 lm/W
LED pitch 6.9mm
PCB increment 41.7mm

Medium/lower output, single channel LED strip. Tight LED pitch suited to homogenous, and reduced spotted diffusion in small profile/housings.

504

n– s– e–

Power 12.24 W/m
lm/W in TiMi s/e-line 99 lm/W
TiMi n-line 69 lm/W
LED pitch 16.7mm
PCB increment 100mm

The 'flagship' KKDC LED strip. High to medium output, with high efficacy, single channel LED strip.

508

n– s– e–

Power 17.28 W/m
lm/W in TiMi s/e-line 98 lm/W
TiMi n-line 69 lm/W
LED pitch 11.9mm
PCB increment 71.4mm

Higher output, tighter pitch, with high efficacy, single channel LED strip.

512

s– e–

Power 30.24 W/m
lm/W in Power Cove with 30° lens 90 lm/W
LED pitch 11.9mm
PCB increment 71.4mm

High power, high efficacy, single channel LED strip.

Groove Light/Groove IN

s–

Power 8 W/m
lm/W in Groove Light 5 lm/W
LED pitch Homogenous output
PCB increment 100mm

Homogenous line of light, single channel LED strip.

KKDC Flexible LED

P-FX4

n– s– e–

Power 14.98 W/m
lm/W 96.6 lm/W
LED pitch 20.8mm
PCB increment 125mm

Medium output, high efficacy, single channel flexible LED strip.

P-FX8

n– s– e–

Power 17.14 W/m
lm/W 96.4 lm/W
LED pitch 10.4mm
PCB increment 62.5mm

High output, high efficacy, single channel flexible LED strip.

UNI P-FX4

n– s– e–

Power 14.98 W/m
lm/W 96.6 lm/W
LED pitch 20.8mm
PCB increment 125mm

Medium output, high efficacy, single channel flexible on 2 axis LED strip.

FX

s– e–

Power 6.96 W/m
lm/W 61 lm/W
LED pitch 12.5mm
PCB increment 62.5mm

Low output, single channel flexible LED strip.

KKFS

s–

Power 6.5 W/m
lm/W 60 lm/W
LED pitch 12.5mm
PCB increment 62.5mm

Edge lit, single channel flexible LED strip.

Duo Luna

s– e–

Power 5.27/3.65 W/m @ 9V
lm/W ≤87.1 lm/W
Module pitch 77mm/111mm

2 chips per module, high efficacy, IP68 flexible LED.

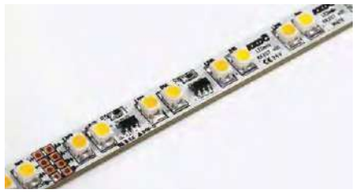
Quadro Luna

s– e–

Power 10.5/7.2 W/m @ 9V
lm/W ≤88.6 lm/W
Module pitch 77mm/111mm

4 chips per module, high efficacy, IP68 flexible LED.

KKDC Dynamic LED



207 LEDmix

Power 10.95 W/m
lm/W 71 lm/W
LED pitch (between same coloured chips) 13.9mm
PCB increment 83.3mm

2 channel LED strip, allowing Dynamic white and Dim to Warm control options.

208 LEDmix

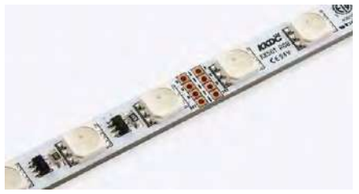
Power 15.55 W/m
lm/W 107.5 lm/W
LED pitch (between same coloured chips) 23.8mm
PCB increment 166.7mm

High power 2 channel LED strip, allowing Dynamic white and Dim to Warm control options.

RGBW LEDmix

Power 15.12 W/m
lm/W in TiMi-C,
all channels on full 49.2 lm/W
LED pitch (between same coloured chips) 27.8mm
PCB increment 166.7mm

RGBW 4 channel LED strip. White selectable from e-line colour options.



501 RGB

Power 15.6 W/m
LED pitch 13.9mm
PCB increment 83.3mm

Highly saturated RGB 3 channel LED strip.

FX RGB

Power 9.84 W/m
LED pitch 25mm
PCB increment 125mm

Flexible highly saturated colour RGB 3 channel LED strip.

Duo Luna RGB

Power 7.8/5.4 W/m
Module Pitch 77mm/111mm

2 chips per module, flexible highly saturated colour RGB 3 channel LED strip.

Quadro Luna RGB

Power 14.04/9.72 W/m
Module Pitch 77mm/111mm

4 chips per module, flexible highly saturated colour RGB 3 channel LED strip.

KKDC High Power LED

100

Power 10.675/23.1 W/m
lm/W in SEN 63.3/48.4 lm/W
LED pitch 100mm
PCB increment 100mm

Low power single channel LED strip with lens options as per SEN, SEN Louvre and SEN-F housings.

050

Power 21.53/46.2 W/m
lm/W in SEN 65.8/49.8 lm/W
LED pitch 50mm
PCB increment 100mm

Medium power single channel LED strip with lens options as per SEN, SEN Louvre and SEN-F housings.

033

Power 32.025/69.3 W/m
lm/W in SEN 63.6/48.2 lm/W
LED pitch 33mm
PCB increment 100mm

High power single channel LED strip with lens options as per SEN, SEN Louvre and SEN-F housings.

035 (Constant Voltage)

Power 67.2 W/m
lm/W in SEN 68 lm/W
LED pitch 35mm
PCB increment 250mm

High power single channel LED strip with lens options as per SEN and now in constant voltage.

094 RGB (Constant Voltage)

Power 16.34 W/m
LED pitch 94mm

Medium/high power RGB with lens options as per SEN, SEN Louvre and SEN-F housings.

047 RGB (Constant Voltage)

Power 32.68 W/m
LED pitch 47mm

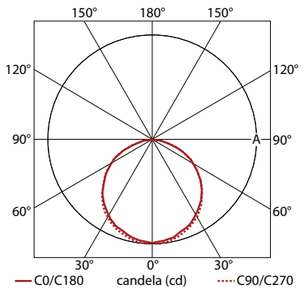
High power RGB with lens options as per SEN, SEN Louvre and SEN-F housings.

TiMi

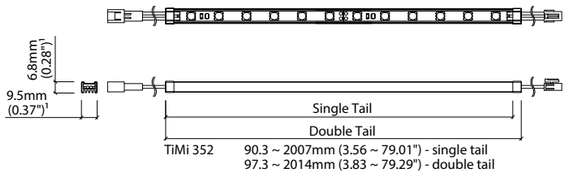
- TiMi is a very robust compact aluminium housing for linear strips with a notably wide choice of colour temperature, white colour mixes, single colours & RGB.
- Upgraded housing now allows an optional snap-in dust cover for dry wipe maintenance & subtle diffuser.
- Output options range from 409 to 1400 lumens per metre.

24V DC | IP20 | LEDmix | RGB

Beam Angle	No cover: 110° Semi-diffused: 150° KKLN-01 lower position: 14° KKLN-01 upper position: 36°
IP Rating	IP20
Finish	Silver Anodised
Cover/Lens	No cover/Semi-diffused/ KKLN-01 14° or 36° Lens Accessory
Mounting	Surface mounting clips
Connection	Hardwire tails or male/female connectors
Control	0-10v/1-10v/DMX/DALI (see visDIM range)

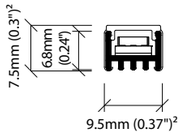


TiMi s352/e352	A	76
TiMi s007/e007	A	131
TiMi n504/s504/e504	A	≤167
TiMi n508/s508/e508	A	≤250
TiMi d207	A	128
TiMi d208	A	221



TiMi 352	90.3 ~ 2007mm (3.56 ~ 79.01") - single tail 97.3 ~ 2014mm (3.83 ~ 79.29") - double tail
TiMi 007	48.7 ~ 2007mm (1.91 ~ 79.01") - single tail 55.7 ~ 2014mm (2.19 ~ 79.29") - double tail
TiMi 504	107 ~ 2007mm (4.21 ~ 79.01") - single tail 114 ~ 2014mm (4.49 ~ 79.29") - double tail
TiMi 508	78.4 ~ 2007mm (3.08 ~ 79.01") - single tail 85.4 ~ 2014mm (3.36 ~ 79.29") - double tail
TiMi 207	90.3 ~ 2007mm (3.56 ~ 79.01") - single tail 97.3 ~ 2014mm (3.83 ~ 79.29") - double tail
TiMi 208	173.7 ~ 2007mm (6.84 ~ 79.01") - single tail 180.7 ~ 2014mm (7.11 ~ 79.29") - double tail
TiMi RGB	90.3 ~ 2007mm (3.56 ~ 79.01") - single tail 97.3 ~ 2014mm (3.83 ~ 79.29") - double tail

[1] With cable connection clamp



[2] With cable connection clamp and Semi-diffuser cover

LED Options

	n-line (NEW)	s-line	e-line	LEDmix	RGB
CRI (R_a)	95+	90+	90+	90+	n/a
CRI (R_9)	78+	45+	45+	45+	n/a
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

	White				LEDmix Dynamic White		RGB
	TiMi s352 TiMi e352	**TiMi s007 TiMi e007**	**TiMi n504 TiMi s504 TiMi e504**	**TiMi n508 TiMi s508 TiMi e508**	**TiMi d207**	**TiMi d208**	**TiMi dRGB**
No Cover, 3000K	408 lm/m 74 lm/W	791 lm/m 73 lm/W	≤ 1212 lm/m ≤ 99 lm/W	≤ 1693 lm/m ≤ 98 lm/W	777 lm/m 71 lm/W	1672 lm/m 107.5 lm/W	Red: 148 lm/m Green: 319 lm/m Blue: 53 lm/m White: 462 lm/m
Semi-diffused Cover, 3000K	348 lm/m 63 lm/W	663 lm/m 61.2 lm/W	≤ 1016 lm/m ≤ 83 lm/W	≤ 1434 lm/m ≤ 83 lm/W	652 lm/m 59.5 lm/W	1401 lm/m 90.1 lm/W	Red: 124 lm/m Green: 267 lm/m Blue: 44 lm/m White: 387 lm/m
KKLN-01 14°, 3000K	385 lm/m 69.7 lm/W	745 lm/m 68.8 lm/W	≤ 1098 lm/m ≤ 89.7 lm/W	≤ 1597 lm/m ≤ 92.4 lm/W	733 lm/m 66.9 lm/W	1575 lm/m 101.3 lm/W	Red: 139 lm/m Green: 300 lm/m Blue: 50 lm/m White: 435 lm/m
KKLN-01 36°, 3000K	382 lm/m 69.2 lm/W	740 lm/m 68.3 lm/W	≤ 1133 lm/m ≤ 92.6 lm/W	≤ 1585 lm/m ≤ 91.7 lm/W	727 lm/m 66.4 lm/W	1564 lm/m 100.6 lm/W	Red: 138 lm/m Green: 298 lm/m Blue: 49 lm/m White: 432 lm/m
Wattage	5.52 W/m	10.83 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H6.8/W9.5/ L97.3-2014mm	H6.8/W9.5/ L55.7-2014mm	H6.8/W9.5/ L114-2014mm	H6.8/W9.5/ L85.4-2014mm	H6.8/W9.5/ L97.3-2014mm	H6.8/W9.5/ L180.7-2014mm	H6.8/W9.5/ L97.3-2014mm
PCB Increment	83.3mm	41.7mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	6.9mm – 144 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	40,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_C Max = 75°C)	T_a = -25 to 50°C (T_C Max = 71.2°C)	T_a = -25 to 50°C (T_C Max = 70°C)	T_a = -25 to 40°C (T_C Max = 70°C)	T_a = -25 to 60°C (T_C Max = 76.5°C)	T_a = -25 to 35°C (T_C Max = 70.3°C)	T_a = -25 to 50°C (T_C Max = 80°C)

NEW TiMi Accessories

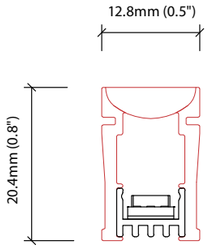
Innovative co-extruded linear lens accessory design for multiple applications.

High efficiency with 90% LOR.

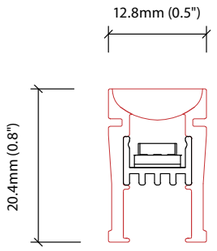
KKLN-01 can be used with TiMi or LiNi BLADE-S housings for interior applications or inside MoMo for exterior facade lighting.

Compatible with extensive range of KKDC LED strips with minimal light distortion.

Various beam angles possible according to housing type & position, with excellent narrow beam performance.



KKLN-01D
14° beam angle lens accessory
TiMi factory fitted in lower position
Co-extruded PMMA

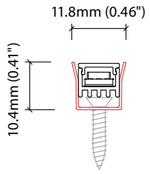


KKLN-01U
36° beam angle lens accessory
TiMi factory fitted in upper position
Co-extruded PMMA

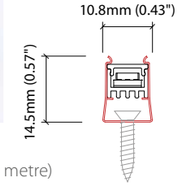
TiMi cable connections now reinforced with cable clamp clip.

Other Accessories

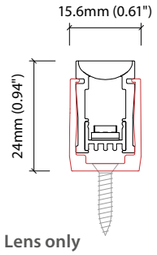
Mounting Options



KKCP-01 (1no.)
KKCP-51 (500no.)
Clip (Allow 3 per metre)
S/Steel finish



KKCP-13
Lock clip (Allow 2 per metre)
S/Steel finish



KKCP-05 (1no.)
KKCP-55 (500no.)
For use with KKLN-01 Lens only
Lens Lock clip (Allow 3 per metre)
Clear polycarbonate finish

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

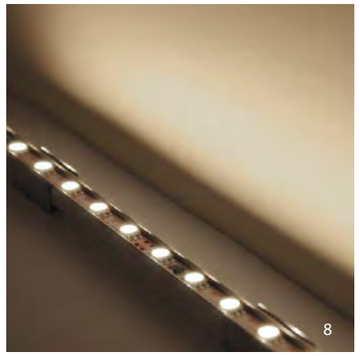
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1. TiMi LED strip range
2. New KKLN-01 narrow beam co-extruded lens
3. New cable clamp feature
4. TiMi extrusion with snap cover
5. Removable semi-diffused dust cover
6. Innovative PCB design
7. TiMi 504 with KKLN-01 Lens
8. TiMi 504 clip mounted
9. LEDmix dynamic colour mixing

TiMi **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		
TiMi, Silver anodised	TISA	No cover[4]	X	n–	504[5]	n504	2100K	21K	
		Semi-diffused[4]	D		508[5]	n508	2300K	23K	
		KKLN-01U (36°)[4]	R	s–	352	s352	2500K	25K	
		KKLN-01D (14°)[4]	S		007	s007	2700K	27K	
					504	s504	3000K	30K	
					508	s508	3200K	32K	
				e–	352	e352	3500K	35K	
					007	e007	3800K	38K	
					504	e504	5000K	50K	
					508	e508	RED	RED	s– s352, s007, s504 only
					207[1]	d207	GREEN	GRN	
					208[1]	d208	BLUE	BLU	
					RGB	d501	ORANGE	ORN	
							AMBER	AMB	
							RGB	RGB	

Length Availability			IP Rating/Connection Type		Voltage	
TiMi 352	M	97.3-2014mm[2] 90.3-2007mm[3] 83.3mm increments	IP20, 50mm Single IP20 connector	20a3	24V DC	g
			IP20, 50mm Double IP20 connector	20a4		
TiMi 007	M	55.7-2014mm[2] 48.7-2007mm[3] 41.7mm increments	IP20, 300mm Single tail	20c1		
			IP20, 300mm Double tail	20c2		
TiMi 504	M	114-2014mm[2] 107-2007mm[3] 100mm increments	IP20, 300mm Single IP20 connector	20c3		
			IP20, 300mm Double IP20 connector	20c4		
TiMi 508	M	85.4-2014mm[2] 78.4-2007mm[3] 71.4mm increments				
TiMi 207	M	97.3-2014mm[2] 90.3-2007mm[3] 83.3mm increments				
TiMi 208	M	180.7-2014mm[2] 173.7-2007mm[3] 166.7mm increments				
TiMi RGB	M	97.3-2014mm[2] 90.3-2007mm[3] 83.3mm increments				

[1] LEDmix requires two colour temperature choices
[2] Double tail TiMi length
[3] Single tail TiMi length
[4] Operating temperatures vary for TiMi with cover and TiMi without cover; please check with a KKDC engineer if operating temperature is limiting product application
[5] n-line: 2700K/3000K

Code Example:

TISA	-	D	-	s504	-	35K	-	M	514	-	20a4	-	g
TiMi, Silver anodised		Semi-diffused		s-line 504		3500K		514mm			IP20, 50mm Double IP20 connector		24V DC

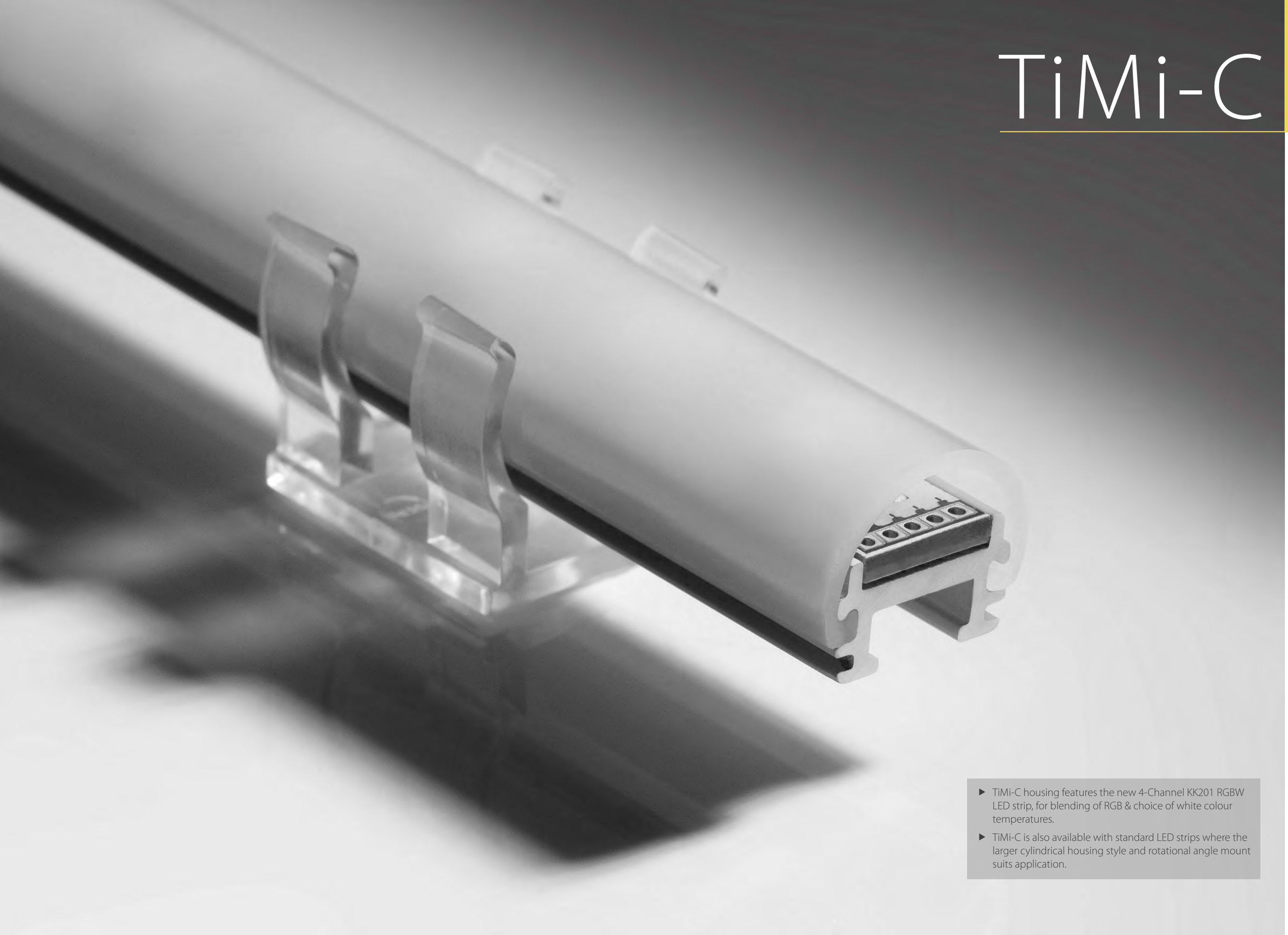
[1] LEDmix Code Example:

TISA	-	D	-	d207	-	21	-	35	-	M	514	-	20a4	-	g
TiMi, Silver anodised		Semi-diffused		LEDmix 207		2100K		3500K		514mm			IP20, 50mm Double IP20 connector		24V DC

Queen Sirikit Museum of Textile
Grand Palace, Bangkok
Lighting Design: APLD
KKDC Bangkok

Moyant New Bond Street
Lighting Design: Barbara Balestreri
Architect: Curiosity INC
KKDC Paris

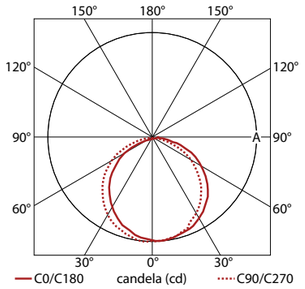
TiMi-C



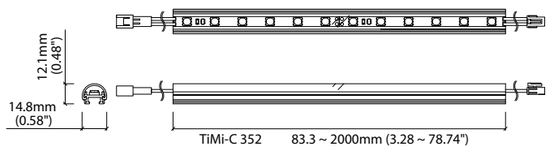
- TiMi-C housing features the new 4-Channel KK201 RGBW LED strip, for blending of RGB & choice of white colour temperatures.
- TiMi-C is also available with standard LED strips where the larger cylindrical housing style and rotational angle mount suits application.

24V DC | IP20 | LEDmix | RGBW

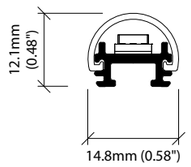
Beam Angle	Clear cover: 110° Diffused cover: 125°
IP Rating	IP20
Finish	Silver Anodised
Cover/Lens	Diffused/Clear
Mounting	Surface mounting via clips or magnets
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



TiMi-C s352/e352	A	76
TiMi-C s007/e007	A	138
TiMi-C n504/s504/e504	A	≤162
TiMi-C n508/s508/e508	A	≤145
TiMi-C d207	A	128
TiMi-C d208	A	231
TiMi-C dRGBW	A	133



TiMi-C 352	83.3 ~ 2000mm (3.28 ~ 78.74")
TiMi-C 007	83.3 ~ 2000mm (3.28 ~ 78.74")
TiMi-C 504	100 ~ 2000mm (3.94 ~ 78.74")
TiMi-C 508	71.4 ~ 2000mm (2.81 ~ 78.74")
TiMi-C 207	83.3 ~ 2000mm (3.28 ~ 78.74")
TiMi-C 208	166.7 ~ 2000mm (6.56 ~ 78.74")
TiMi-C RGBW	166.7 ~ 2000mm (6.56 ~ 78.74")



1:1

LED Options

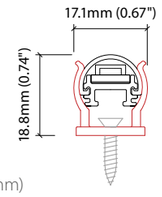
	n-line (NEW)	s-line	e-line	LEDmix	RGBW
CRI (R_a)	95+	90+	90+	90+	90+
CRI (R_9)	78+	45+	45+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	White: R_f 88+, R_g 97+
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	White: 2.5 Step MacAdam ellipse Red: 620-625nm Blue: 455-460nm Green: 520-525nm
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

Product Data

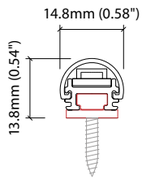
	White				LEDmix Dynamic White		RGBW
	TiMi-C s352 TiMi-C e352	**TiMi-C s007 TiMi-C e007**	**TiMi-C n504 TiMi-C s504 TiMi-C e504**	**TiMi-C n508 TiMi-C s508 TiMi-C e508**	**TiMi-C d207**	**TiMi-C d208**	**TiMi-C dRGBW**
Clear Cover, 3000K	392 lm/m 71.1 lm/W	759 lm/m 70.1 lm/W	≤ 1151 lm/m ≤ 94 lm/W	≤ 1628 lm/m ≤ 94.2 lm/W	747 lm/m 68.2 lm/W	1606 lm/m 103.3 lm/W	966 lm/m 63.9 lm/W
Diffused Cover, 3000K	342 lm/m 61.9 lm/W	662 lm/m 61.1 lm/W	≤ 1015 lm/m ≤ 82.9 lm/W	≤ 1417 lm/m ≤ 82 lm/W	650 lm/m 59.4 lm/W	1400 lm/m 90 lm/W	847 lm/m 56 lm/W
Wattage	5.52 W/m	10.83 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.12 W/m
Dimension	H12.1/W14.8/L83.3-2000mm	H12.1/W14.8/L83.3-2000mm	H12.1/W14.8/L100-2000mm	H12.1/W14.8/L71.4-2000mm	H12.1/W14.8/L83.3-2000mm	H12.1/W14.8/L166.7-2000mm	H12.1/W14.8/L166.7-2000mm
PCB Increment	83.3mm	41.7mm	100mm	71.4mm	83.3mm	166.7mm	166.7mm
LED Pitch	13.9mm – 72 LED/m	6.9mm – 144 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	27.8mm (between same coloured chips) – 72 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	40,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_C Max = 66.3°C)	T_a = -25 to 50°C (T_C Max = 69.5°C)	T_a = -25 to 50°C (T_C Max = 66.2°C)	T_a = -25 to 50°C (T_C Max = 71.9°C)	T_a = -25 to 50°C (T_C Max = 68.3°C)	T_a = -25 to 50°C (T_C Max = 74.3°C)	T_a = -25 to 55°C (T_C Max = 74.6°C)

Accessories

Mounting Options



TCFC-01
Clip (Allow 2 per 500mm)
Clear plastic finish



TCMS-01
Magnet fixing set
(Allow 2 per 500mm)
Aluminium/Steel finish

TCJT-01
Joint bar (allow 1 per join)

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

KKCN-29 & KKCN-30
5 PIN LEDmix RGBW male+female
50mm & 300mm pair

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

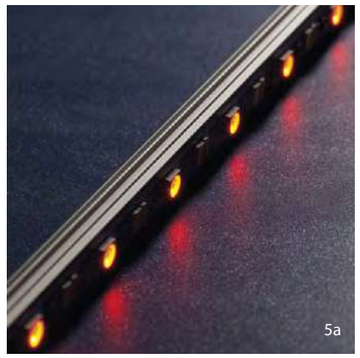
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. Clear or Diffused covers
2. TiMi-C 504
3. Rotational clear mounting clip
4. TiMi-C LEDmix RGBW
5. LEDmix Dynamic colour mixing



Retail store, Edinburgh
Lighting Design: Lighting Design International (London)

TiMi-C **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating/Connection Type		Voltage	
TiMi-C, Silver anodised	TCSA	Clear cover	B	n–	504[4]	n504	2100K	21K		TiMi-C 352	M	83.3-2000mm 83.3mm increments	IP20, 50mm Single IP20 connector	20a3	24V DC	g
		Diffused cover	C		508[4]	n508	2300K	23K		TiMi-C 007	M	83.3-2000mm[3] 41.7mm increments	IP20, 50mm Double IP20 connector	20a4		
				s–	352	s352	2500K	25K		TiMi-C 504	M	100-2000mm 100mm increments	IP20, 300mm Single tail	20c1		
					007	s007	2700K	27K		TiMi-C 508	M	71.4-2000mm 71.4mm increments	IP20, 300mm Double tail	20c2		
					504	s504	3000K	30K		TiMi-C 207	M	83.3-2000mm 83.3mm increments	IP20, 300mm Single IP20 connector	20c3		
					508	s508	3200K	32K		TiMi-C 208	M	166.7-2000mm 166.7mm increments	IP20, 300mm Double IP20 connector	20c4		
				e–	352	e352	3500K	35K		TiMi-C RGBW	M	166.7-2000mm 166.7mm increments				
					007	e007	3800K	38K								
					504	e504	5000K	50K								
					508	e508	RED	RED	s– s352, s007, s504 only							
					207[1]	d207	GREEN	GRN								
					208[1]	d208	BLUE	BLU								
					RGBW[2]	d201	ORANGE	ORN								
							AMBER	AMB								

[1] LEDmix requires two colour temperature choices
[2] LEDmix RGBW requires white colour choice
[3] Minimum product length of 83.3mm to allow 2 mounting clips
[4] n-line: 2700K/3000K

Code Example:

TCSA	-	C	-	s504	-	35K	-	M 500	-	20a4	-	g
TiMi-C, Silver anodised		Diffused cover		s-line 504		3500K		500mm		IP20, 50mm Double IP20 connector		24V DC

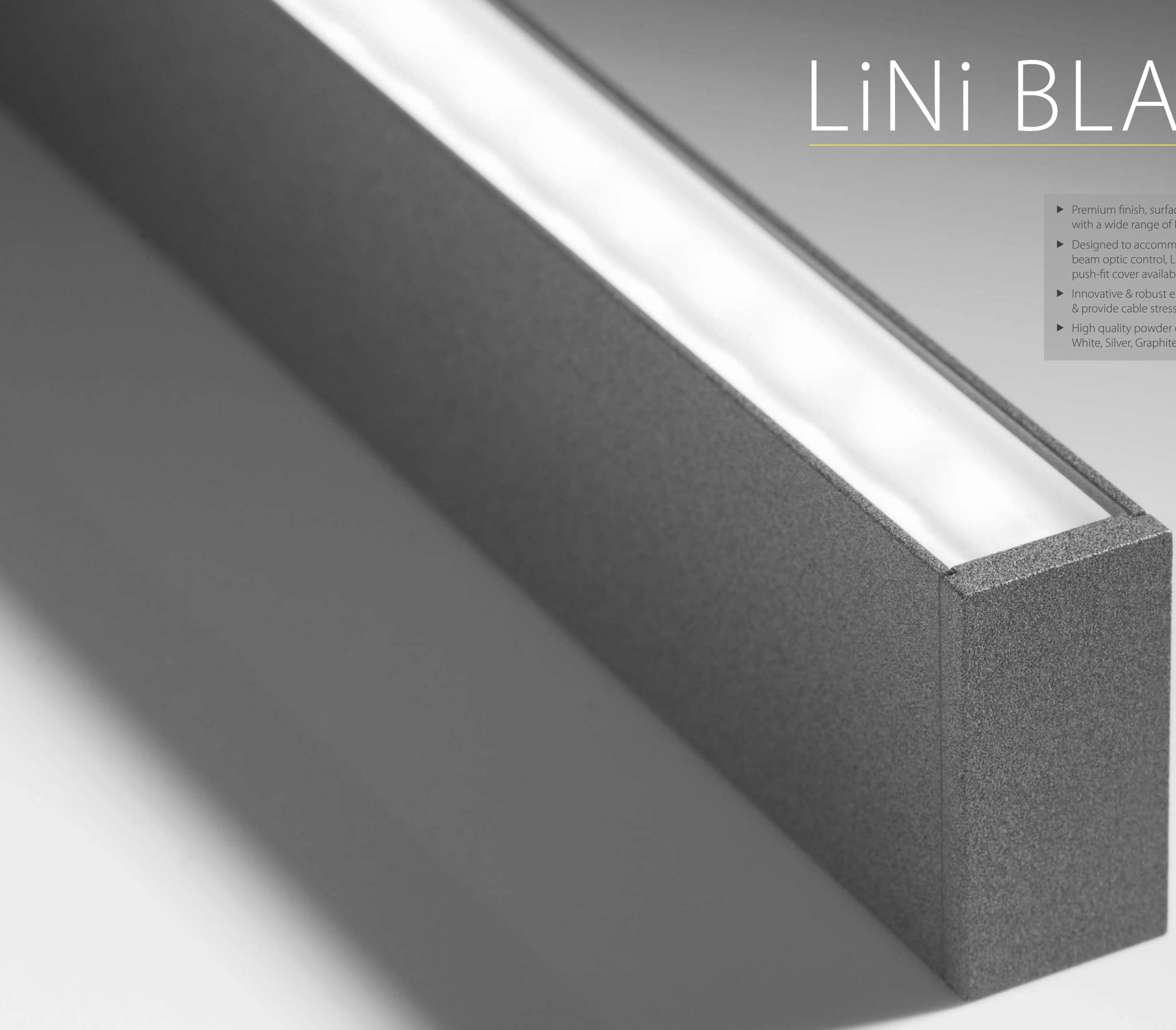
[1] LEDmix Code Example:

TCSA	-	C	-	d207	-	21	-	35	-	M 500	-	20a4	-	g
TiMi-C, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		500mm		IP20, 50mm Double IP20 connector		24V DC

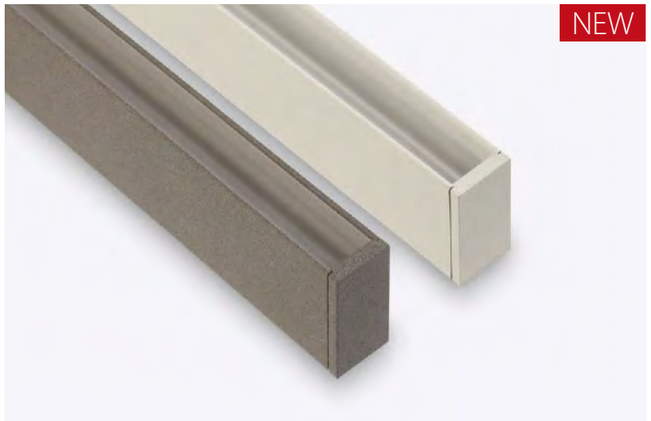
[2] LEDmix RGBW Code Example:

TCSA	-	C	-	d201	-	35K	-	M 514	-	20a4	-	g
TiMi-C, Silver anodised		Diffused cover		RGBW 201		RGB + 3500K		514mm		IP20, 50mm Double IP20 connector		24V DC

LiNi BLADE-S

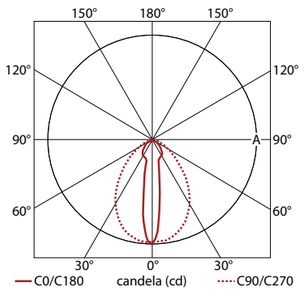


- Premium finish, surface mounted linear luminaire compatible with a wide range of KKDC LED strips.
- Designed to accommodate KKLN-01 linear lens for narrow beam optic control, LiNi BLADE-S also has fully homogenous push-fit cover available.
- Innovative & robust end-cap design to minimise light leakage & provide cable stress relief.
- High quality powder coat finish options available as standard: White, Silver, Graphite Grey, Black & textured Bronze.

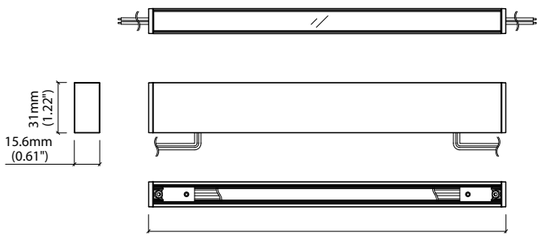


24V DC | IP40 | LEDmix | RGB

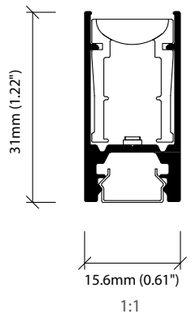
Beam Angle	KKLN-01 lens: 14° Diffused cover: 110°
IP Rating	IP40
Finish	White(RAL9010)/Black(RAL9011)/ Grey(RAL9007)/Silver(RAL9006)/ Bronze Matt Powder coating
Cover/Lens	Diffused/KKLN-01 Lens
Mounting	Surface mounting via concealed clips
Connection	Hardwire tails
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



LiNi BLADE-S s352/e352	A	141
LiNi BLADE-S s007/e007	A	240
LiNi BLADE-S s504/e504	A	308
LiNi BLADE-S s508/e508	A	443
LiNi BLADE-S d207	A	204
LiNi BLADE-S d208	A	411



LiNi BLADE-S 352	103.3 ~ 2020mm (4.07 ~ 79.53")
LiNi BLADE-S 007	103.3 ~ 2020mm (4.07 ~ 79.53")
LiNi BLADE-S 504	120 ~ 2020mm (4.72 ~ 79.53")
LiNi BLADE-S 508	91.4 ~ 2020mm (3.6 ~ 79.53")
LiNi BLADE-S 207	103.3 ~ 2020mm (4.07 ~ 79.53")
LiNi BLADE-S 208	186.7 ~ 2020mm (7.35 ~ 79.53")
LiNi BLADE-S RGB	103.3 ~ 2020mm (4.07 ~ 79.53")



LED Options

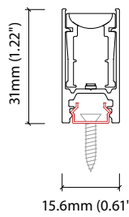
	s-line	e-line	LEDmix	RGB
CRI (R_a)	90+	90+	90+	n/a
CRI (R_9)	45+	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/ 2500K/2700K/3000K/ 3200K/3500K/3800K/ 5000K Single colours: Red/Green/ Blue/Orange/Amber	White: 2100K/2300K/ 2500K/2700K/3000K/ 3200K/3500K/3800K/ 5000K	White: 2100K/2300K/ 2500K/2700K/3000K/ 3200K/3500K/3800K/ 5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

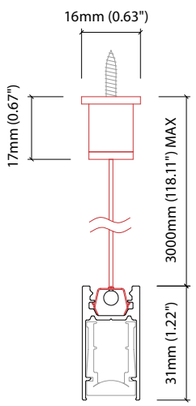
	White				LEDmix Dynamic White		RGB
	LiNi BLADE-S s352 LiNi BLADE-S e352	**LiNi BLADE-S s007 LiNi BLADE-S e007**	**LiNi BLADE-S s504 LiNi BLADE-S e504**	**LiNi BLADE-S s508 LiNi BLADE-S e508**	**LiNi BLADE-S d207**	**LiNi BLADE-S d208**	**LiNi BLADE-S dRGB**
KKLN-01, 3000K	195 lm/m 35.4 lm/W	379 lm/m 35 lm/W	563 lm/m 46 lm/W	810 lm/m 46.9 lm/W	372 lm/m 34 lm/W	801 lm/m 51.5 lm/W	Red: 71 lm/m Green: 153 lm/m Blue: 25 lm/m White: 221 lm/m
Diffused Cover, 3000K	106 lm/m 19.2 lm/W	205 lm/m 18.9 lm/W	282 lm/m 23 lm/W	439 lm/m 25.4 lm/W	201 lm/m 18.4 lm/W	434 lm/m 27.9 lm/W	Red: 38 lm/m Green: 83 lm/m Blue: 14 lm/m White: 120 lm/m
Wattage	5.52 W/m	10.83 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H31/W15.6/ L103.3-2020mm	H31/W15.6/ L103.3-2020mm	H31/W15.6/ L120-2020mm	H31/W15.6/ L91.4-2020mm	H31/W15.6/ L103.3-2020mm	H31/W15.6/ L186.7-2020mm	H31/W15.6/ L103.3-2020mm
PCB Increment	83.3mm	41.7mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	6.9mm – 144 LED/m	16.7mm – 60 LED/m	11.9mm - 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Lifetime	35,000 hours @ 25°C	35,000 hours @ 25°C	35,000 hours @ 25°C	35,000 hours @ 25°C	35,000 hours @ 25°C	35,000 hours @ 25°C	35,000 hours @ 25°C
Operation Temp	T_a = -25 to 45°C (T_c Max = 54.3°C)	T_a = -25 to 41°C (T_c Max = 58.9°C)	T_a = -25 to 45°C (T_c Max = 66.5°C)	Ta= -25 to 40°C (Tc max = 70°C)	T_a = -25 to 45°C (T_c Max = 64.6°C)	T_a = -25 to 43°C (T_c Max = 65°C)	T_a = -25 to 44°C (T_c Max = 68.3°C)

Accessories

Mounting Options



KKCP-10
Concealed Clip
(Allow 2 per metre)
S/Steel finish



KKSW-06
Suspension
Mounting Kit
(Allow 2 per metre)
S/Steel finish

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

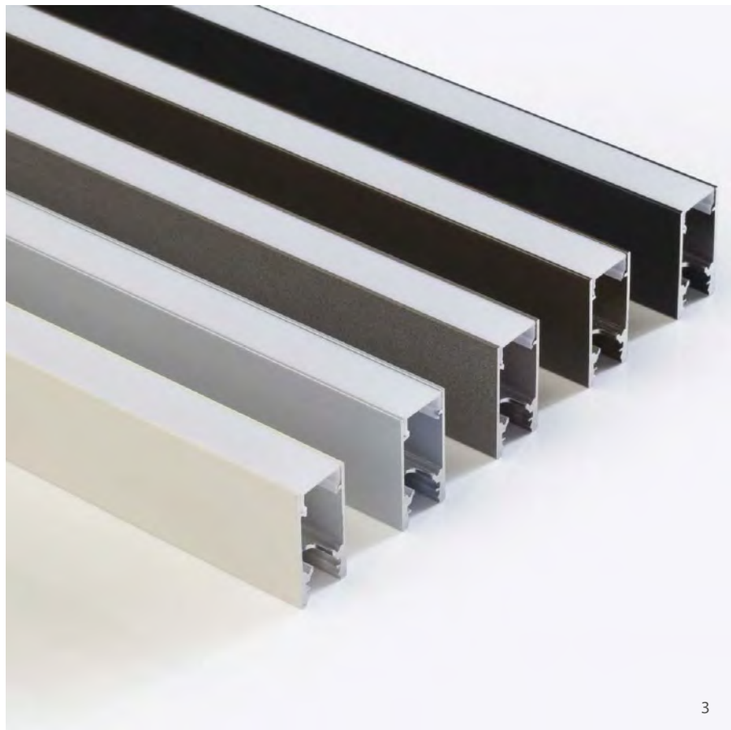
KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

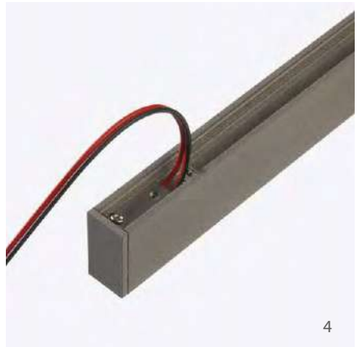
See pages 332-335 for more details

1

2

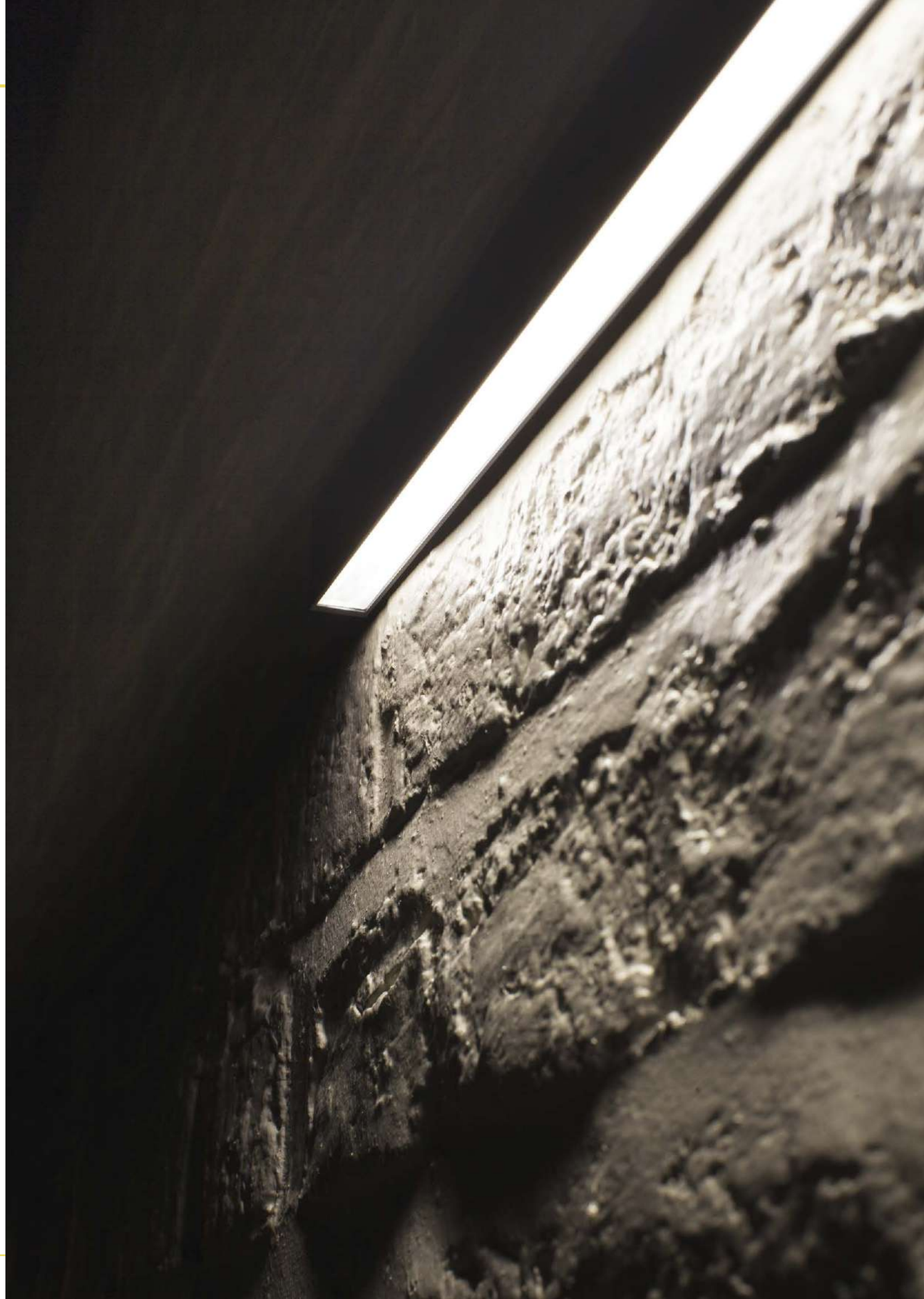


3



4

1. LiNi BLADE housing section with homogenous cover
2. LiNi BLADE with suspension kit
3. Standard paint finishes:
   White, Silver, Grey, Black, Bronze
4. Robust end cap and cable grip



LiNi BLADE-S **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating/Connection Type		Voltage	
LiNi BLADE-S, Matt white paint	BSMW	Diffused cover	C	s–	352	s352	2100K	21K		LiNi BLADE-S 352	M	103.3-2020mm 83.3mm increments	IP40, 300mm Single tail	40c1	24V DC	g
		KKLN-01	S		007	s007	2300K	23K		LiNi BLADE-S 007	M	103.3-2020mm 41.7mm increments	IP40, 300mm Double tail	40c2		
LiNi BLADE-S, Matt sliver paint	BSMS				504	s504	2500K	25K		LiNi BLADE-S 504	M	120-2020mm 100mm increments	IP40, 300mm Single IP20 connector	40c3		
					508	s508	2700K	27K		LiNi Blade-S 508	M	91.4-2020mm 71.4mm increments	IP40, 300mm Double IP20 connector	40c4		
LiNi BLADE-S, Matt grey paint	BSMG			e–	352	e352	3000K	30K		LiNi BLADE-S 207	M	103.3-2020mm 83.3mm increments	IP40, 3000mm Suspension Single tail[2]	40eb		
					007	e007	3200K	32K		LiNi BLADE-S 208	M	86.7-2020mm 166.7mm increments				
LiNi BLADE-S, Matt black paint	BSMB				504	e504	3500K	35K		LiNi BLADE-S RGB	M	103.3-2020mm 83.3mm increments				
					508	e508	3800K	38K								
LiNi BLADE-S, Matt bronze paint	BSBP				207[1]	d207	5000K	50K								
					208[1]	d208	RED	RED	s– s352, s007, s504 only							
					RGB	d501	GREEN	GRN								
							BLUE	BLU								
							ORANGE	ORN								
							AMBER	AMB								
							RGB	RGB								

[1] LEDmix requires two colour temperature choices

[2] Transparent suspension wire

Code Example:

BSMW	-	C	-	s504	-	35K	-	M 520	-	40c2	-	g
LiNi BLADE-S, Matt white paint		Diffused cover		s-line 504		3500K		520mm		IP40, 300mm Double tail		24V DC

[1] LEDmix Code Example:

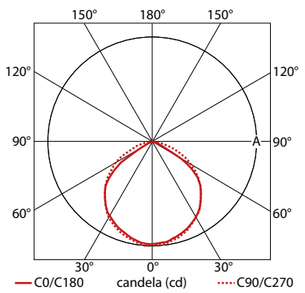
BSMW	-	C	-	d207	-	21	-	35	-	M 520	-	40c2	-	g
LiNi BLADE-S, Matt white paint		Diffused cover		LEDmix 207		2100K		3500K		520mm		IP40, 300mm Double tail		24V DC

LiNi-S

- LiNi-S is a compact linear interior profile with a wide range of LED strip options available.
- LEDmix d208 & d207 LED strips are now available for creative lighting control.
- For use with concealed clip mountings and available with clear, diffused or prismatic cover options.

24V DC | IP40 | LEDmix | RGB

Beam Angle	Clear cover: 105° Diffused cover: 110° Prismatic cover: 85°
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused/Clear/Prismatic
Mounting	Surface mounting via concealed clips
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



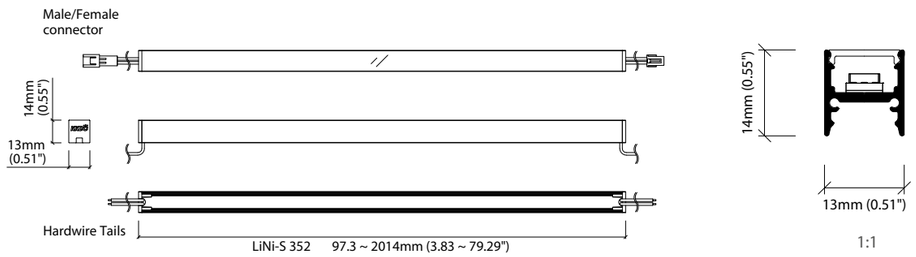
LiNi-S s352/e352	A	59
LiNi-S s007/e007	A	111
LiNi-S n504/s504/e504	A	≤177
LiNi-S n508/s508/e508	A	≤237
LiNi-S d207	A	127
LiNi-S d208	A	220

LED Options

	n-line (NEW)	s-line	e-line	LEDmix	RGB
CRI (R_a)	95+	90+	90+	90+	n/a
CRI (R_9)	78+	45+	45+	45+	n/a
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

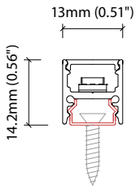
	White				LEDmix Dynamic White		RGB
	LiNi-S s352 LiNi-S e352	**LiNi-S s007 LiNi-S e007**	**LiNi-S n504 LiNi-S s504 LiNi-S e504**	**LiNi-S n508 LiNi-S s508 LiNi-S e508**	**LiNi-S d207**	**LiNi-S d208**	**LiNi-S dRGB**
Clear Cover, 3000K	354 lm/m 64.1 lm/W	684 lm/m 63.2 lm/W	≤ 1040 lm/m ≤ 85 lm/W	≤ 1467 lm/m ≤ 84.9 lm/W	673 lm/m 61.5 lm/W	1449 lm/m 93.2 lm/W	Red: 134 lm/m Green: 284 lm/m Blue: 46 lm/m White: 423 lm/m
Diffused Cover, 3000K	258 lm/m 46.8 lm/W	500 lm/m 46.2 lm/W	≤ 759 lm/m ≤ 62 lm/W	≤ 1071 lm/m ≤ 62 lm/W	492 lm/m 44.9 lm/W	1057 lm/m 68 lm/W	Red: 94 lm/m Green: 202 lm/m Blue: 33 lm/m White: 292 lm/m
Prismatic Cover, 3000K	284 lm/m 51.5 lm/W	550 lm/m 50.8 lm/W	≤ 842 lm/m ≤ 68.8 lm/W	≤ 1177 lm/m ≤ 68.1 lm/W	541 lm/m 49.4 lm/W	1163 lm/m 74.8 lm/W	Red: 103 lm/m Green: 222 lm/m Blue: 37 lm/m White: 321 lm/m
Wattage	5.52 W/m	10.83 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H14/W13/ L97.3-2014mm	H14/W13/ L55.7-2014mm	H14/W13/ L114-2014mm	H14/W13/ L85.4-2014mm	H14/W13/ L97.3-2014mm	H14/W13/ L180.7-2014mm	H14/W13/ L97.3-2014mm
PCB Increment	83.3mm	41.7mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	6.9mm – 144 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm - 72 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_C Max = 72°C)	T_a = -25 to 50°C (T_C Max = 69°C)	T_a = -25 to 50°C (T_C Max = 65°C)	T_a = -25 to 45°C (T_C Max = 78°C)	T_a = -25 to 60°C (T_C Max = 74.8°C)	T_a = -25 to 50°C (T_C Max = 75.1°C)	T_a = -25 to 50°C (T_C Max = 76°C)



LiNi-S 352	97.3 ~ 2014mm (3.83 ~ 79.29")
LiNi-S 007	55.7 ~ 2014mm (2.19 ~ 79.29")
LiNi-S 504	114 ~ 2014mm (4.49 ~ 79.29")
LiNi-S 508	85.4 ~ 2014mm (3.36 ~ 79.29")
LiNi-S 207	97.3 ~ 2014mm (3.83 ~ 79.29")
LiNi-S 208	180.7 ~ 2014mm (7.11 ~ 79.29")
LiNi-S RGB	97.3 ~ 2014mm (3.83 ~ 79.29")

Accessories

Mounting Options



KKCP-10
Concealed Clip
(Allow 2 per metre)
S/Steel finish

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

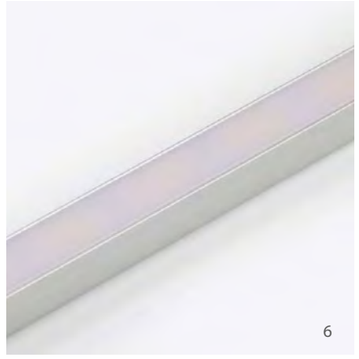
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1. LiNi-S section with concealed clip
2. End cap with side cable exit (included)
3. Snap fit diffused cover
4. LiNi-S 207 and 208 LEDmix dynamic LED
5. Linear prismatic cover
6. Diffused cover

BP4 Canary Wharf, London
Lighting Design: PJC Lighting Design
Architect: Kohn Pedersen Fox Associates
KKDC UK

LiNi-S **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating/Connection Type		Voltage	
LiNi-S, Silver anodised	LSSA	Clear cover	B	n-	504[2]	n504	2100K	21K		LiNi-S 352	M	93.3-2014mm 83.3mm increments	IP40, 50mm Single IP20 connector	40a3	24V DC	g
		Diffused cover	C		508[2]	n508	2300K	23K		LiNi-S 007	M	55.7-2014mm 41.7mm increments	IP40, 50mm Double IP20 connector	40a4		
		Prismatic cover	G	s-	352	s352	2500K	25K		LiNi-S 504	M	114-2014mm 100mm increments	IP40, 300mm Single tail	40c1		
					007	s007	2700K	27K		LiNi-S 508	M	85.4-2014mm 71.4mm increments	IP40, 300mm Double tail	40c2		
					504	s504	3000K	30K		LiNi-S 207	M	97.3-2014mm 83.3mm increments	IP40, 300mm Single IP20 connector	40c3		
					508	s508	3200K	32K		LiNi-S 208	M	180.7-2014mm 166.7mm increments	IP40, 300mm Double IP20 connector	40c4		
				e-	352	e352	3500K	35K		LiNi-S RGB	M	97.3-2014mm 83.3mm increments	IP40, 1000mm Single tail	40d1		
					007	e007	3800K	38K								
					504	e504	5000K	50K								
					508	e508	RED	RED	s- s352, s007, s504 only							
					207[1]	d207	GREEN	GRN								
					208[1]	d208	BLUE	BLU								
					RGB	d501	ORANGE	ORN								
							AMBER	AMB								
							RGB	RGB								

[1] LEDmix requires two colour temperature choices
[2] n-line: 2700K/3000K

Code Example:

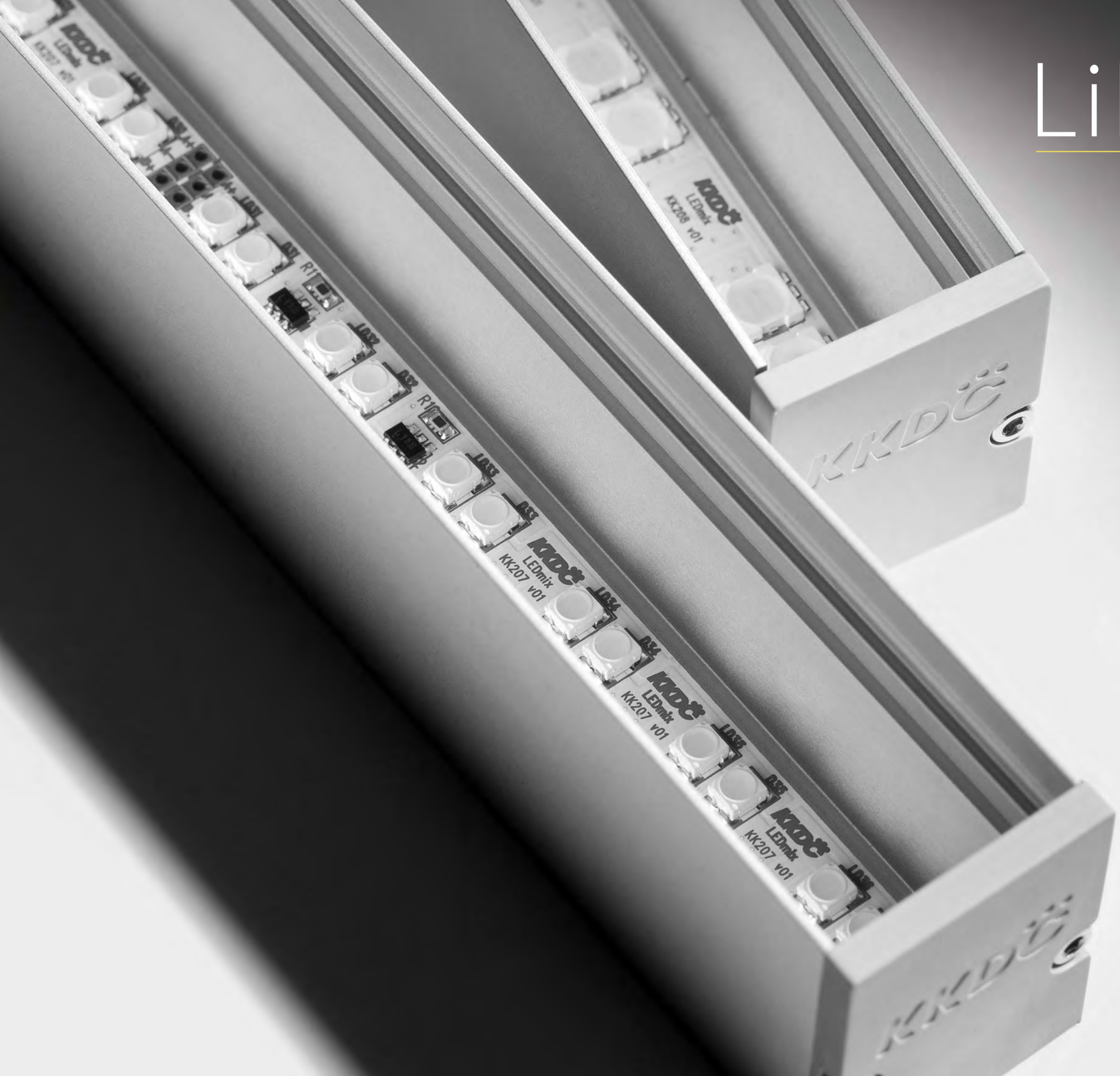
LSSA	-	C	-	s504	-	35K	-	M	514	-	40c2	-	g
LiNi-S, Silver anodised		Diffused cover		s-line 504		3500K		514mm			IP40, 300mm Double tail		24V DC

[1] LEDmix Code Example:

LSSA	-	C	-	d207	-	21	-	35	-	M	514	-	40c2	-	g
LiNi-S, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		514mm			IP40, 300mm Double tail		24V DC

The Fonterra Centre NZ
Interior Lighting Design: Beca
Architect: Jasmax
KKDC New Zealand

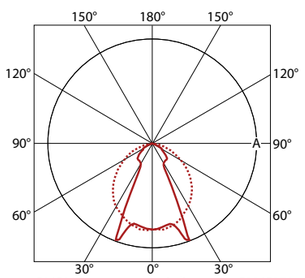
LiNi-S XL



- Fully homogenous diffusion on cover.
- Full range of LED strips available, including LEDmix for dynamic lighting control.
- Concealed surface mounting clips and optional snap-fit cable raceway accessory.

24V DC | IP40 | LEDmix | RGB

Beam Angle	Clear cover: 50° Diffused cover: 110°
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused/Clear
Mounting	Surface mounting via concealed clips or cable raceway
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



— C0/C180 candela (cd) ····· C90/C270

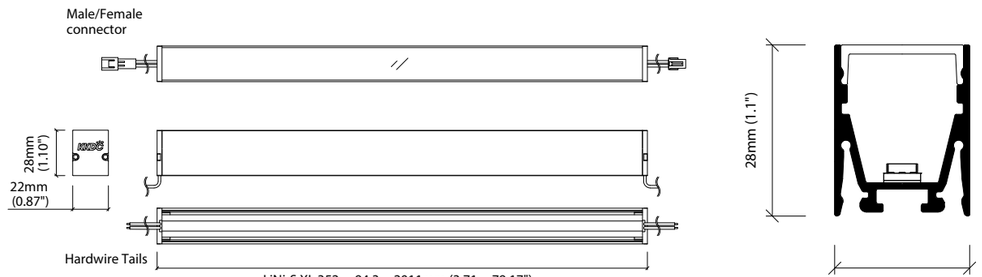
LiNi-S XL s352/e352	A	71
LiNi-S XL n504/s504/e504	A	172
LiNi-S XL n508/s508/e508	A	239
LiNi-S XL d207	A	158
LiNi-S XL d208	A	263

LED Options

	n-line (NEW)	s-line	e-line	LEDmix	RGB
CRI (R_a)	95+	90+	90+	90+	n/a
CRI (R_9)	78+	45+	45+	45+	n/a
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

	White			LEDmix Dynamic White		RGB
	LiNi-S XL s352 **LiNi-S XL e352**	**LiNi-S XL n504** **LiNi-S XL s504** **LiNi-S XL e504**	**LiNi-S XL n508** **LiNi-S XL s508** **LiNi-S XL e508**	**LiNi-S XL d207**	**LiNi-S XL d208**	**LiNi-S XL dRGB**
Clear Cover, 3000K	236 lm/m 42.7 lm/W	≤ 700 lm/m ≤ 57.2 lm/W	≤ 978 lm/m ≤ 56.6 lm/W	449 lm/m 41 lm/W	966 lm/m 62.1 lm/W	Red: 85 lm/m Green: 184 lm/m Blue: 30 lm/m White: 267 lm/m
Diffused Cover, 3000K	167 lm/m 30.3 lm/W	≤ 497 lm/m ≤ 40.6 lm/W	≤ 695 lm/m ≤ 40.2 lm/W	319 lm/m 29.1 lm/W	686 lm/m 44.1 lm/W	Red: 61 lm/m Green: 131 lm/m Blue: 22 lm/m White: 189 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H28/W22/ L94.3-2011mm	H28/W22/ L111-2011mm	H28/W22/ L82.4-2011mm	H28/W22/ L94.3-2011mm	H28/W22/ L177.7-2011mm	H28/W22/ L94.3-2011mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm - 72 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_c Max = 66°C)	T_a = -25 to 50°C (T_c Max = 62.8°C)	T_a = -25 to 45°C (T_c Max = 61.5°C)	T_a = -25 to 60°C (T_c Max = 69.1°C)	T_a = -25 to 60°C (T_c Max = 76.2°C)	T_a = -25 to 60°C (T_c Max = 72.5°C)

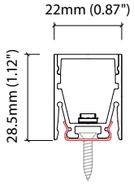


LiNi-S XL 352	94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi-S XL 504	111 ~ 2011mm (4.37 ~ 79.17")
LiNi-S XL 508	82.4 ~ 2011mm (3.24 ~ 79.17")
LiNi-S XL 207	94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi-S XL 208	177.7 ~ 2011mm (6.99 ~ 79.17")
LiNi-S XL RGB	94.3 ~ 2011mm (3.71 ~ 79.17")

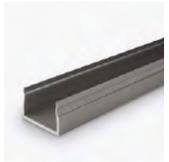
1:1

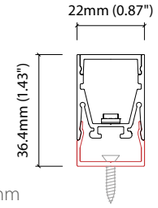
Accessories

Mounting Options



KKCP-11
Concealed clip
(Allow 3 per metre)
S/Steel finish





KKCR-01-1000 1000mm
KKCR-01-2000 2000mm
KKCR-01-3000 3000mm
Cable Raceway*
Anodised aluminium finish
*Cut & drilled to fit on site

KKJT-02
Joining Bar (Allow 1 per join)
Anodised aluminium finish

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

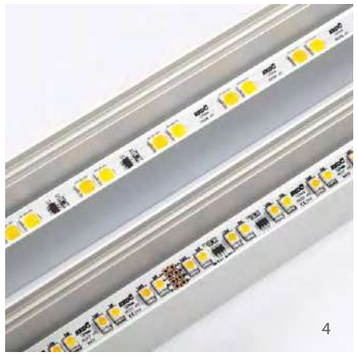
KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details


1

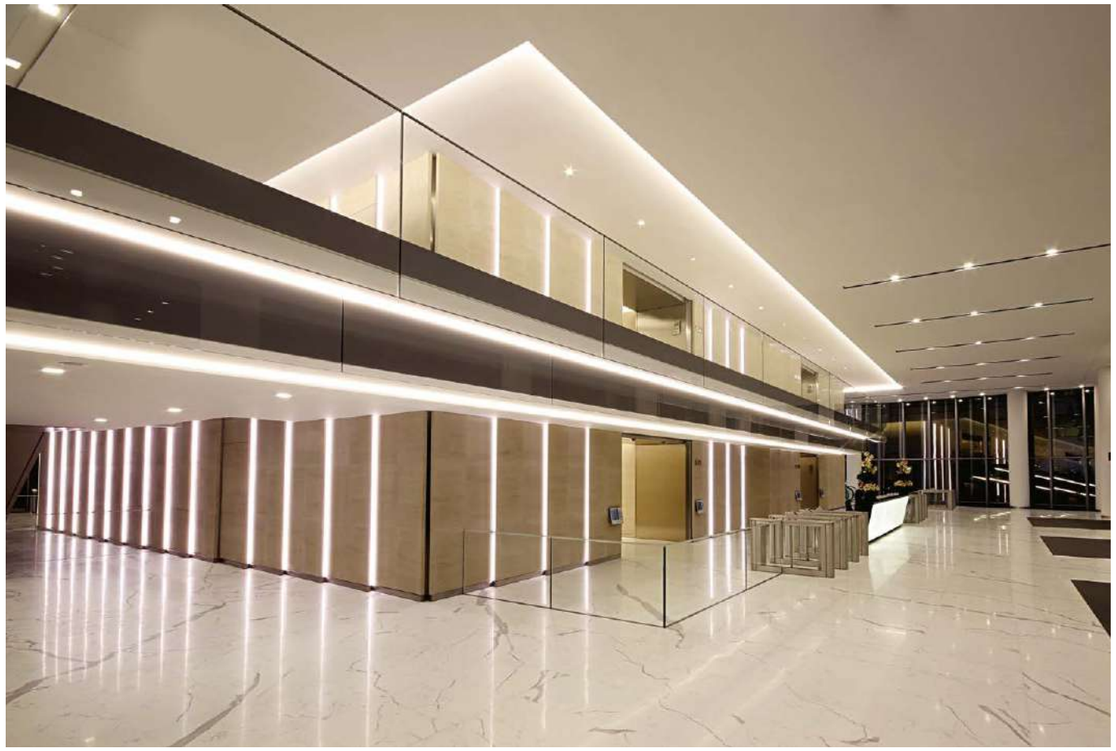
2


3


4


5

1. Snap-on diffused cover
2. Fully homogenous diffusion
3. Screw-on plastic end caps
4. LiNi-S XL 207 and 208 LEDmix dynamic LED
5. Snap-fit cable raceway mounting



Fenchurch Street, London
Lighting Design: MBLD
Architect: Rafael Vinoly
KKDC UK

LiNi-S XL **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		
LiNi-S XL, Silver anodised	SXSA	Clear cover	B	n-	504[2]	n504	2100K	21K	
		Diffused cover	C		508[2]	n508	2300K	23K	
				s-	352	s352	2500K	25K	
					504	s504	2700K	27K	
					508	s508	3000K	30K	
				e-	352	e352	3200K	32K	
					504	e504	3500K	35K	
					508	e508	3800K	38K	
					207[1]	d207	5000K	50K	
					208[1]	d208	RED	RED	s- s352, s504 only
					RGB	d501	GREEN	GRN	
							BLUE	BLU	
							ORANGE	ORN	
							AMBER	AMB	
							RGB	RGB	

Length Availability			IP Rating/Connection Type		Voltage	
LiNi-S XL 352	M	94.3-2011mm 83.3mm increments	IP40, 50mm Single IP20 connector	40a3	24V DC	g
LiNi-S XL 504	M	111-2011mm 100mm increments	IP40, 50mm Double IP20 connector	40a4		
LiNi-S XL 508	M	82.4-2011mm 71.4mm increments	IP40, 300mm Single tail	40c1		
LiNi-S XL 207	M	94.3-2011mm 83.3mm increments	IP40, 300mm Double tail	40c2		
LiNi-S XL 208	M	177.7-2011mm 166.7mm increments	IP40, 300mm Single IP20 connector	40c3		
LiNi-S XL RGB	M	94.3-2011mm 83.3mm increments	IP40, 300mm Double IP20 connector	40c4		
			IP40, 1000mm Single tail	40d1		

[1] LEDmix requires two colour temperature choices
[2] n-line: 2700K/3000K

Code Example:

SXSA	-	C	-	s504	-	35K	-	M 511	-	40c2	-	g
LiNi-S XL, Silver anodised		Diffused cover		s-line 504		3500K		511mm		IP40, 300mm Double tail		24V DC

[1] LEDmix Code Example:

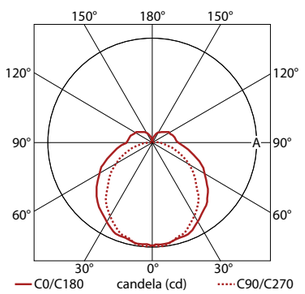
SXSA	-	C	-	d207	-	21	-	35	-	M 511	-	40c2	-	g
LiNi-S XL, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		511mm		IP40, 300mm Double tail		24V DC

LiNi Glow

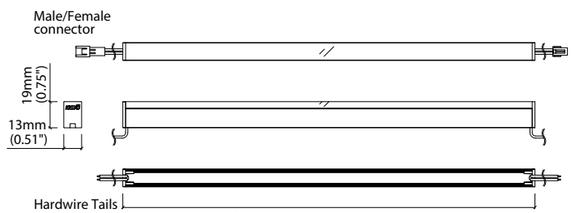
- LiNi Glow is a very compact housing with an extended cover to provide soft diffused lighting to 180°.
- Offered with tight pitch LED strips 007 & 508 to minimise hot spots on diffuser.

24V DC IP40

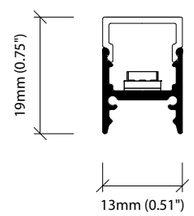
Beam Angle	130°
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused
Mounting	Surface mounting via concealed clips
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



LiNi Glow s007/e007	A	78
LiNi Glow n508/s508/e508	A	166



LiNi Glow 007 55.7 ~ 2014mm (2.19 ~ 79.29")
LiNi Glow 508 85.4 ~ 2014mm (3.36 ~ 79.29")



1:1

LED Options

	n-line (NEW)	s-line	e-line
CRI (R_a)	95+	90+	90+
CRI (R_g)	78+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

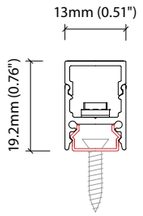
Product Data

White

	LiNi Glow s007 LiNi Glow e007	LiNi Glow n508 LiNi Glow s508 LiNi Glow e508
Luminous Flux, 3000K	474 lm/m 43.8 lm/W	≤ 1016 lm/m ≤ 58.8 lm/W
Wattage	10.83 W/m	17.28 W/m
Dimension	H19/W13/L55.7-2014mm	H19/W13/L85.4-2014mm
PCB Increment	41.7mm	71.4mm
LED Pitch	6.9mm – 144 LED/m	11.9mm – 84 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 55°C (T_c Max = 73°C)	T_a = -25 to 45°C (T_c Max = 78°C)

Accessories

Mounting Options



KKCP-10
Concealed Clip
(Allow 3 per metre)
S/Steel finish

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

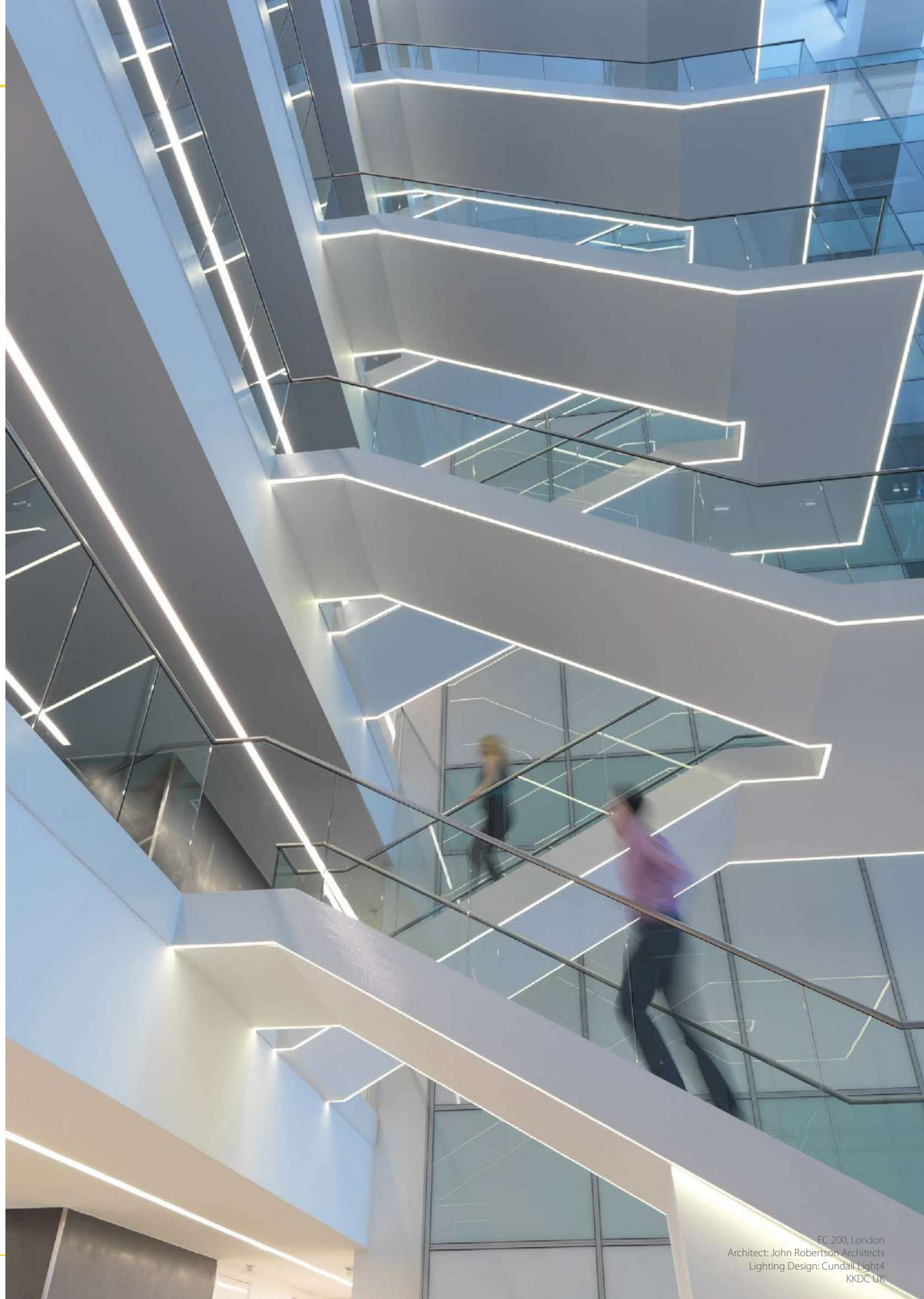
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. Side cable exit end cap (included)
2. Fully homogenous 180° diffusion
3. Concealed mounting clip



EC 200, London
Architect: John Robertson Architects
Lighting Design: Cundall Light4
KKDC UK

Moyant New Bond Street
Lighting Design: Barbara Balestreri
Architect: Curiosity INC
KKDC Paris

LiNi Glow **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating/Connection Type		Voltage	
LiNi Glow, Silver anodised	LGSA	Diffused U cover	0	n–	508[1]	n508	2100K	21K		LiNi Glow 007	M	55.7-2014mm 41.7mm increments	IP40, 50mm Single IP20 connector	40a3	24V DC	g
				s–	007	s007	2300K	23K		LiNi Glow 508	M	85.4-2014mm 71.4mm increments	IP40, 50mm Double IP20 connector	40a4		
					508	s508	2500K	25K					IP40, 300mm Single tail	40c1		
				e–	007	e007	2700K	27K					IP40, 300mm Double tail	40c2		
					508	e508	3000K	30K					IP40, 300mm Single IP20 connector	40c3		
							3200K	32K					IP40, 300mm Double IP20 connector	40c4		
							3500K	35K					IP40, 1000mm Single tail	40d1		
							3800K	38K								
							5000K	50K								
							RED	RED	s– s007 only							
							GREEN	GRN								
							BLUE	BLU								
							ORANGE	ORN								
							AMBER	AMB								

[1] n-line: 2700K/3000K

Code Example:

LGSA	-	0	-	s508	-	35K	-	M 514	-	40c2	-	g
LiNi Glow, Silver anodised		Diffused U cover		s-line 508		3500K		514mm		IP40, 300mm Double tail		24V DC

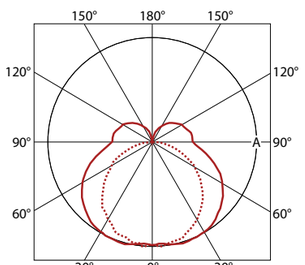
LiNi Glow XL

- LiNi Glow XL provides fully homogenous diffusion with extended diffuser to provide 180° lighting.
- Available with wide range of LED strip options including LEDmix for dynamic lighting control.

LiNi Glow XL

24V DC | IP40 | LEDmix | RGB

Beam Angle	130°
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused
Mounting	Surface mounting via concealed clips or cable raceway
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



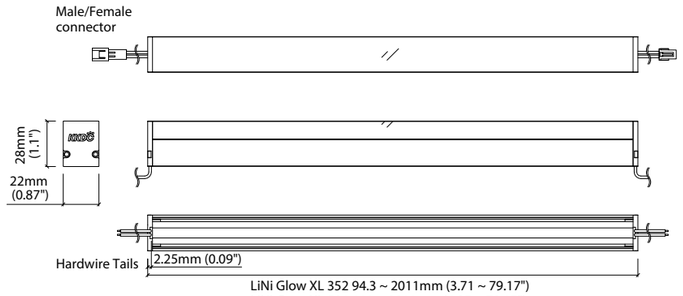
LiNi Glow XL s352/e352	A	35
LiNi Glow XL n504/s504/e504	A	89
LiNi Glow XL n508/s508/e508	A	124
LiNi Glow XL d207	A	52
LiNi Glow XL d208	A	87

LED Options

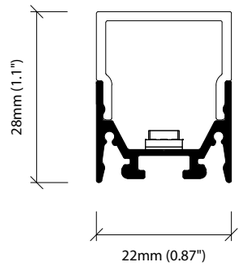
	n-line (NEW)	s-line	e-line	LEDmix	RGB
CRI (R_a)	95+	90+	90+	90+	n/a
CRI (R_g)	78+	45+	45+	45+	n/a
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

	White			LEDmix Dynamic White		RGB
	LiNi Glow XL s352 LiNi Glow XL e352	**LiNi Glow XL n504 LiNi Glow XL s504 LiNi Glow XL e504**	**LiNi Glow XL n508 LiNi Glow XL s508 LiNi Glow XL e508**	**LiNi Glow XL d207**	**LiNi Glow XL d208**	**LiNi Glow XL dRGB**
Luminous Flux, 3000K	248 lm/m 44.9 lm/W	≤ 734 lm/m ≤ 60 lm/W	≤ 1026 lm/m ≤ 59.4 lm/W	472 lm/m 43.1 lm/W	1014 lm/m 65.2 lm/W	Red: 90 lm/m Green: 193 lm/m Blue: 32 lm/m White: 280 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H28/W22/L94.3-2011mm	H28/W22/L111-2011mm	H28/W22/L82.4-2011mm	H28/W22/L94.3-2011mm	H28/W22/L177.7-2011mm	H28/W22/L94.3-2011mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_c Max = 67°C)	T_a = -25 to 60°C (T_c Max = 72°C)	T_a = -25 to 50°C (T_c Max = 63°C)	T_a = -25 to 60°C (T_c Max = 70.9°C)	T_a = -25 to 60°C (T_c Max = 73.4°C)	T_a = -25 to 55°C (T_c Max = 70°C)



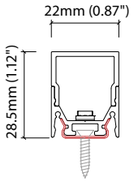
LiNi Glow XL 352 94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi Glow XL 504 111 ~ 2011mm (4.37 ~ 79.17")
LiNi Glow XL 508 82.4 ~ 2011mm (3.24 ~ 79.17")
LiNi Glow XL 207 94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi Glow XL 208 177.7 ~ 2011mm (6.99 ~ 79.17")
LiNi Glow XL RGB 94.3 ~ 2011mm (3.71 ~ 79.17")



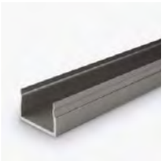
1:1

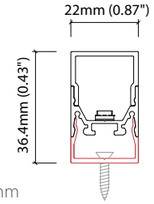
Accessories

Mounting Options



KKCP-11
Concealed clip
(Allow 3 per metre)
S/Steel finish





KKCR-01-1000 1000mm
KKCR-01-2000 2000mm
KKCR-01-3000 3000mm
Cable Raceway*
Anodised aluminium finish
*Cut & drilled to fit on site

KKJT-02
Joining Bar (Allow 1 per join)
Anodised aluminium finish

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

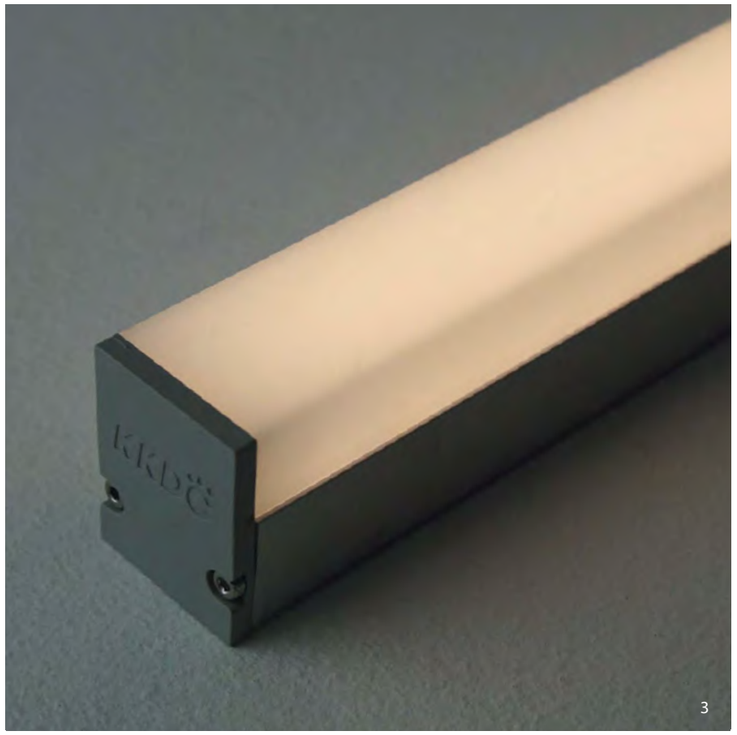
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

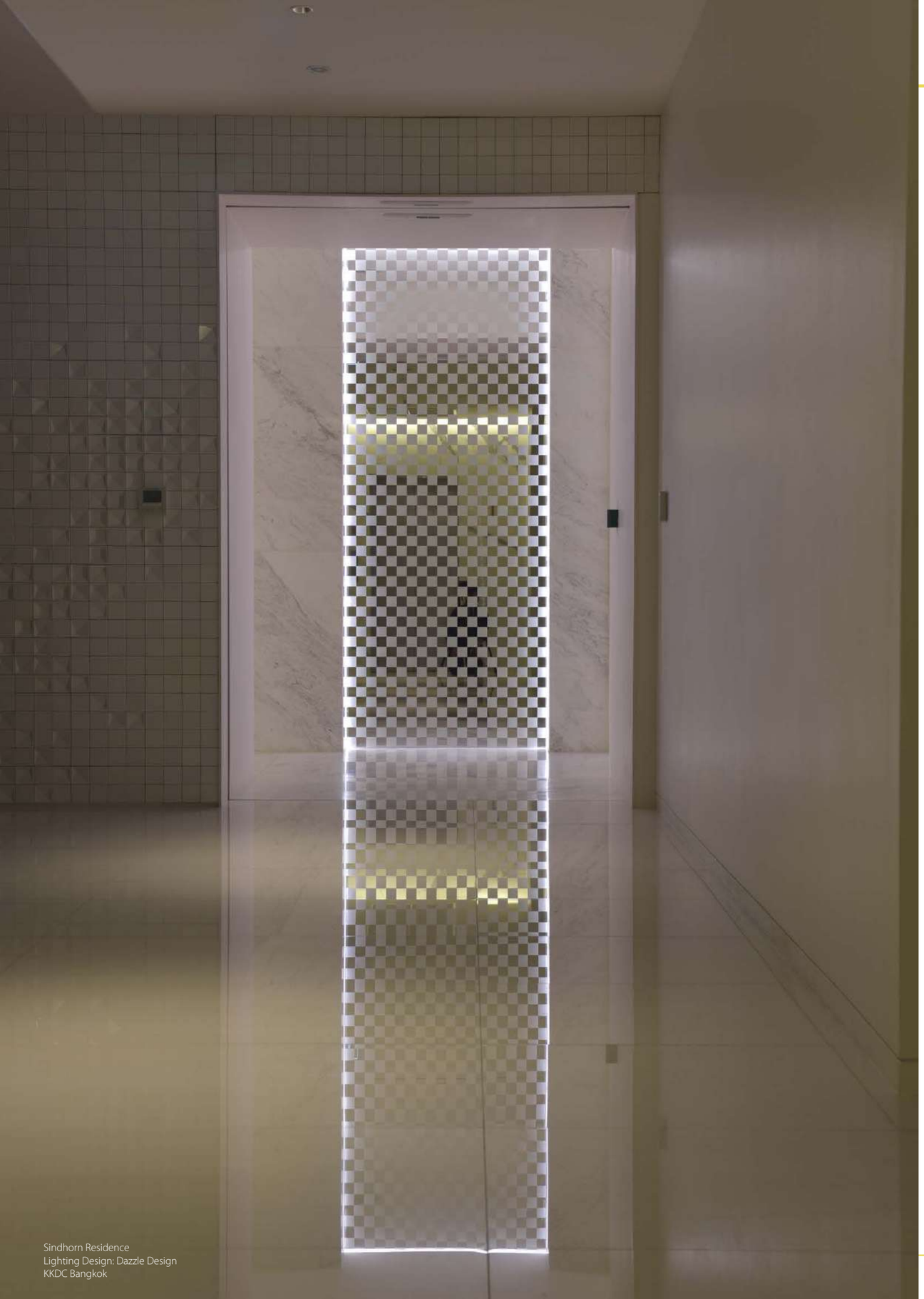
KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1. LiNi Glow XL LEDmix dynamic LED
2. Joining bar with grub screw
3. LiNi Glow XL with 180° viewable homogenous diffusion
4. Push-fit cable raceway mounting accessory channel
5. Concealed mounting clip
6. U-shaped snap-fit cover for edge to edge illumination



Sindhorn Residence
Lighting Design: Dazzle Design
KKDC Bangkok

LiNi Glow XL **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		
LiNi Glow XL, Silver anodised	GXSA	Diffused U cover	0	n-	504[2]	n504	2100K	21K	
					508[2]	n508	2300K	23K	
				s-	352	s352	2500K	25K	
					504	s504	2700K	27K	
					508	s508	3000K	30K	
				e-	352	e352	3200K	32K	
					504	e504	3500K	35K	
					508	e508	3800K	38K	
					207[1]	d207	5000K	50K	
					208[1]	d208	RED	RED	s- s352, s504 only
					RGB	d501	GREEN	GRN	
							BLUE	BLU	
							ORANGE	ORN	
							AMBER	AMB	
							RGB	RGB	

Length Availability			IP Rating/Connection Type		Voltage	
LiNi Glow XL 352	M	94.3-2011mm 83.3mm increments	IP40, 300mm Single tail	40c1	24V DC	g
LiNi Glow XL 504	M	111-2011mm 100mm increments	IP40, 300mm Double tail	40c2		
LiNi Glow XL 508	M	82.4-2011mm 71.4mm increments	IP40, 300mm Single IP20 connector	40c3		
LiNi Glow XL 207	M	94.3-2011mm 83.3mm increments	IP40, 300mm Double IP20 connector	40c4		
LiNi Glow XL 208	M	177.7-2011mm 166.7mm increments	IP40, 1000mm Single tail	40d1		
LiNi Glow XL RGB	M	94.3-2011mm 83.3mm increments				

[1] LEDmix requires two colour temperature choices
[2] n-line : 2700K, 3000K

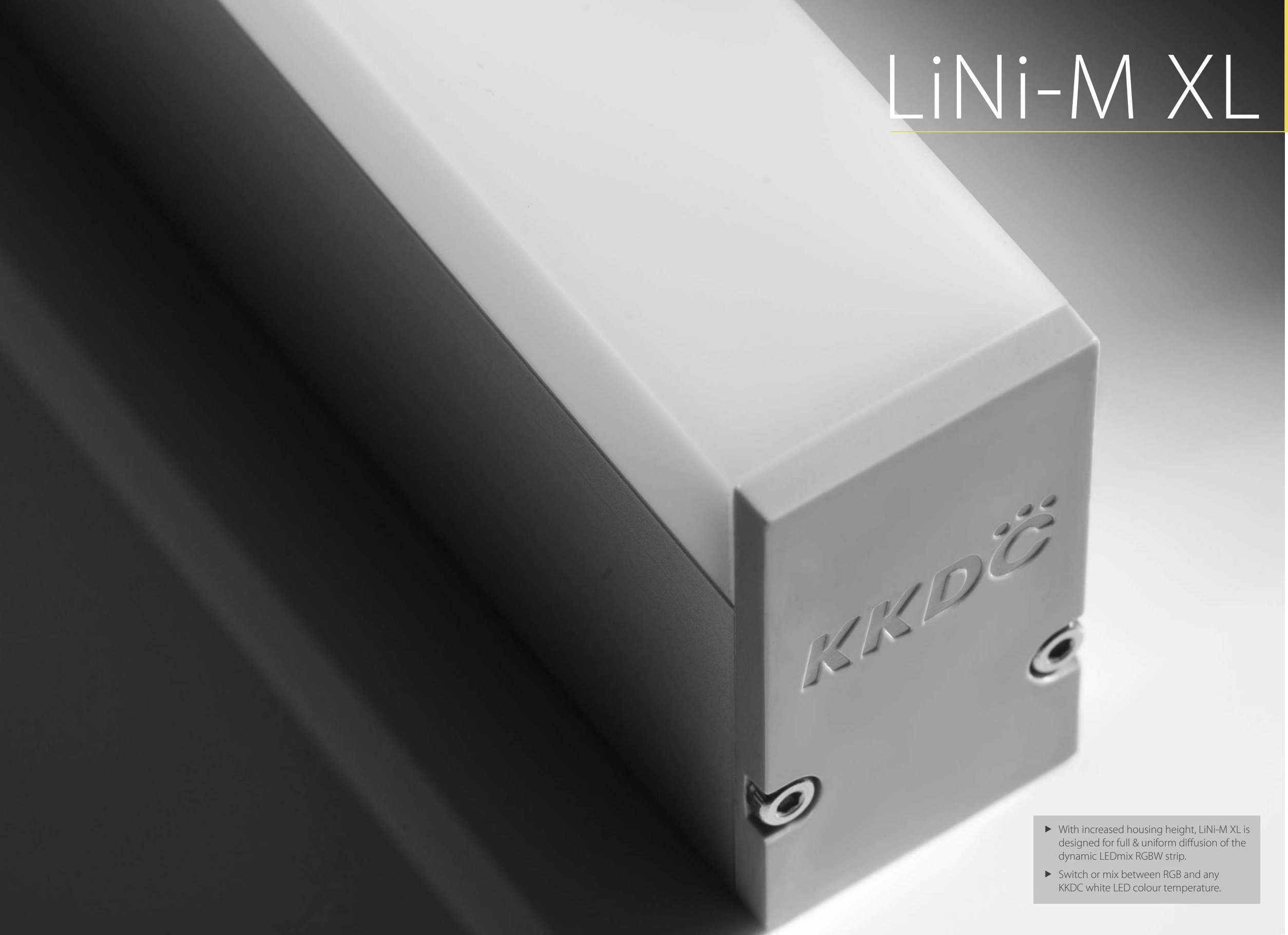
Code Example:

GXSA	-	0	-	s504	-	35K	-	M 511	-	40c2	-	g
LiNi Glow XL, Silver anodised		Diffused U cover		s-line 504		3500K		511mm		IP40, 300mm Double tail		24V DC

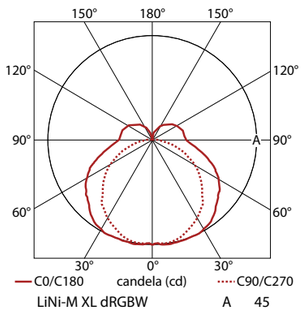
[1] LEDmix Code Example:

GXSA	-	0	-	d207	-	21	-	35	-	M 511	-	40c2	-	g
LiNi Glow XL, Silver anodised		Diffused U cover		LEDmix 207		2100K		3500K		511mm		IP40, 300mm Double tail		24V DC

LiNi-M XL



- With increased housing height, LiNi-M XL is designed for full & uniform diffusion of the dynamic LEDmix RGBW strip.
- Switch or mix between RGB and any KKDC white LED colour temperature.

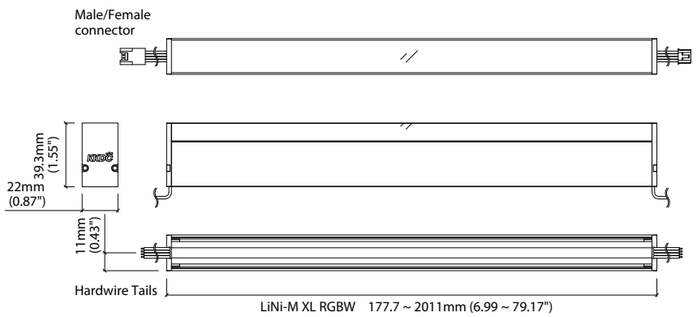


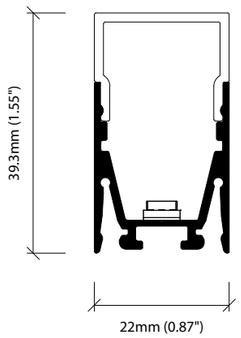
RGBW

24V DC | IP40 | c UL us LISTED E356145 | CE

LiNi-M XL RGBW

Luminous Flux, 3000K	470 lm/m 30.1 lm/W
Wattage	15.6 W/m
Dimension	H39.3/W22.2/L177.7-2011mm
PCB Increment	166.7mm
LED pitch	23.8mm (between same coloured chips) – 84 LED/m
Lifetime	50,000 hours @ 25°C
Operation Temp	T_a= -25 to 60°C (T_C max = 75.9°C)
Beam Angle	130°
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused
Mounting	3M double sided tape (IP20) surface mounting clips (IP65)
Connection	Surface mounting via concealed clips or cable raceway
Control	0-10V/1-10V/DMX/DALI (see visDIM range)
LED Strip	d201





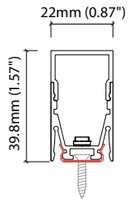
1:1

LED Options

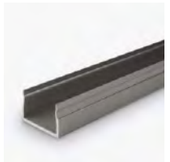
	RGBW
CRI (R_a)	90+
CRI (R_9)	45+
TM-30-15	White: R_f 88+, R_g 97+
Bin/Step	White: 2.5 Step MacAdam ellipse Red: 620-625nm Blue: 455-460nm Green: 520-525nm
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

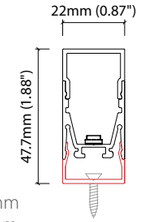
Accessories

Mounting Options



KKCP-11
Concealed clip
(Allow 3 per metre)
S/Steel finish





KKCR-01-1000 1000mm
KKCR-01-2000 2000mm
KKCR-01-3000 3000mm
Cable Raceway*
Anodised aluminium finish
*Cut & drilled to fit on site

KKJT-02
Joining Bar (Allow 1 per join)
Anodised aluminium finish

Connectors

KKCN-29 & KKCN-30
5 PIN LEDmix RGBW male+female 50mm & 300mm pair

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

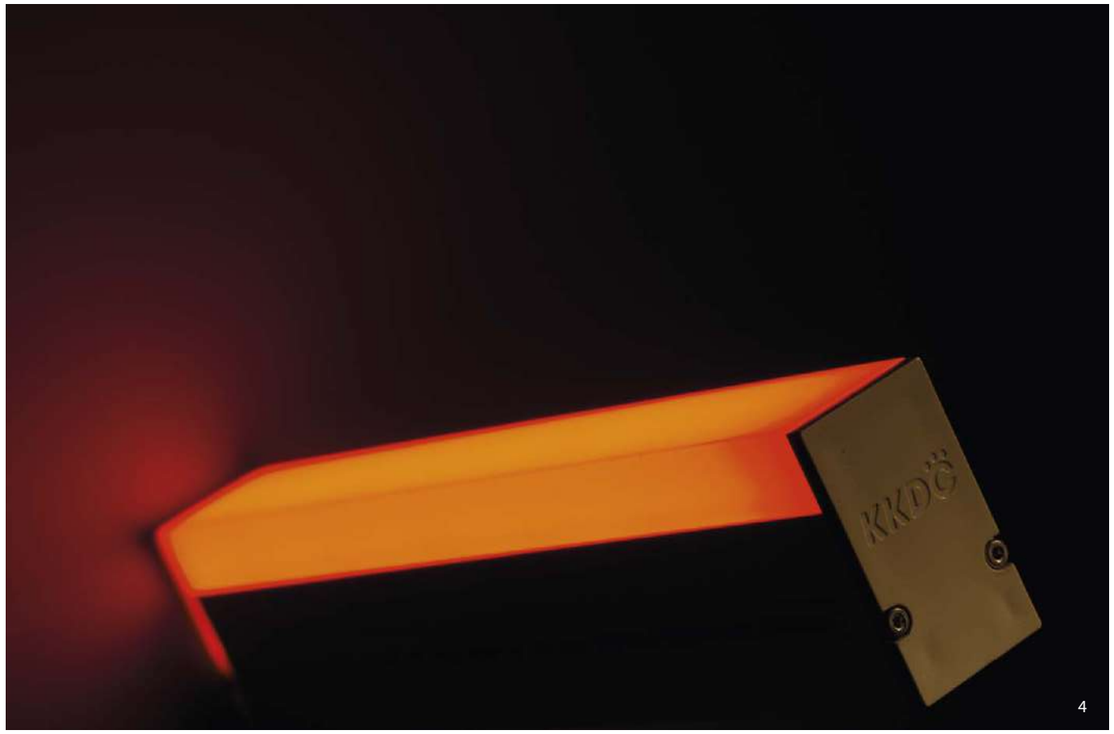
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1. 180° fully homogenous diffusion
2. RGBW LEDmix dynamic colour mixing
3. Rear cable exit
4. Dynamic LED effect lighting with full diffusion

Soul Bar, New Zealand
Lighting Design: Switch Lighting Design
Architect: Godward Guthrie Architecture
KKDC New Zealand

Vodafone Christchurch
Architect: Jasmax
Photography: Intense Photography
KKDC New Zealand

LiNi-M XL **Code Table**

Housing/Finish		Cover/Lens		LED Type		Colour (CCT)		Length Availability		IP Rating/Connection Type		Voltage	
LiNi-M XL, Silver anodised	GMSA	Diffused U cover	0	RGBW	d201	RGB+2100K	21K	M	177.7-2011mm 166.7mm increments	IP40, 300mm Single tail	40c1	24V DC	g
						RGB+2300K	23K			IP40, 300mm Double tail	40c2		
						RGB+2500K	25K			IP40, 300mm Single IP20 connector	40c3		
						RGB+2700K	27K			IP40, 300mm Double IP20 connector	40c4		
						RGB+3000K	30K			IP40, 1000mm Single tail	40d1		
						RGB+3200K	32K						
						RGB+3500K	35K						
						RGB+3800K	38K						
						RGB+5000K	50K						

Code Example:

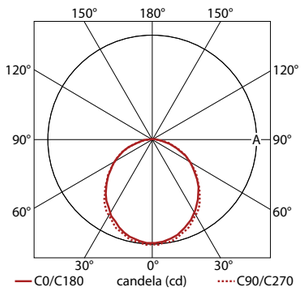
GMSA	-	0	-	d201	-	35K	-	M	511	-	40c1	-	g
LiNi-M XL, Silver anodised		Diffused U cover		RGBW 201		RGB + 3500K		511mm			IP40, 300mm Single tail		24V

LiNi-R

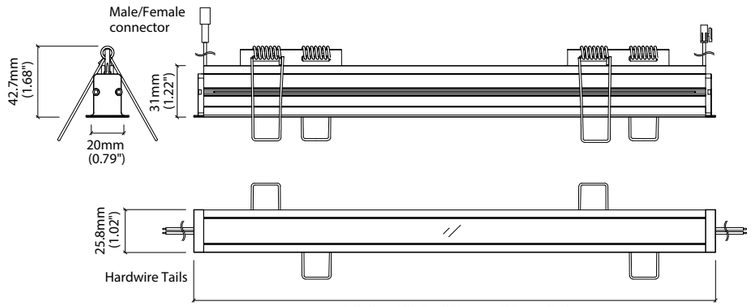
- Recessed, slim aperture linear profile with spring fixings.
- Fully homogenous diffusion across full range of KKDC LED strips.

24V DC | IP40 | LEDmix | RGB

Beam Angle	110°
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused
Mounting	Recessed mounting via spring clip
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



LiNi-R s352/e352	A	25
LiNi-R s504/e504	A	69
LiNi-R s508/e508	A	92
LiNi-R d207	A	53
LiNi-R d208	A	91



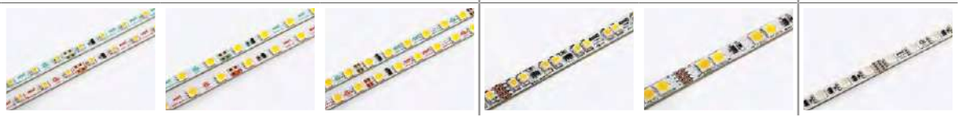
LiNi-R 352	100.3 ~ 2017mm (3.95 ~ 79.41")
LiNi-R 504	117 ~ 2017mm (4.61 ~ 79.41")
LiNi-R 508	88.4 ~ 2017mm (3.48 ~ 79.41")
LiNi-R 207	100.3 ~ 2017mm (3.95 ~ 79.41")
LiNi-R 208	183.7 ~ 2017mm (7.23 ~ 79.41")
LiNi-R RGB	100.3 ~ 2017mm (3.95 ~ 79.41")

LED Options

	s-line	e-line	LEDmix	RGB
CRI (R_a)	90+	90+	90+	n/a
CRI (R_g)	45+	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

	White			LEDmix Dynamic White		RGB
	LiNi-R s352 LiNi-R e352	**LiNi-R s504 LiNi-R e504**	**LiNi-R s508 LiNi-R e508**	**LiNi-R d207**	**LiNi-R d208**	**LiNi-R dRGB**
Luminous Flux, 3000K	148 lm/m 26.8 lm/W	428 lm/m 35 lm/W	613 lm/m 35.5 lm/W	281 lm/m 25.7 lm/W	606 lm/m 39 lm/W	Red: 54 lm/m Green: 116 lm/m Blue: 19 lm/m White: 167 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H42.7/W25.8/L100.3-2017mm	H42.7/W25.8/L117-2017mm	H42.7/W25.8/L88.4-2017mm	H42.7/W25.8/L100.3-2017mm	H42.7/W25.8/L183.7-2017mm	H42.7/W25.8/L100.3-2017mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_c Max = 70°C)	T_a = -25 to 55°C (T_c Max = 70°C)	T_a = -25 to 45°C (T_c Max = 60°C)	T_a = -25 to 60°C (T_c Max = 69.1°C)	T_a = -25 to 50°C (T_c Max = 76.6°C)	T_a = -25 to 50°C (T_c Max = 74°C)



Accessories

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

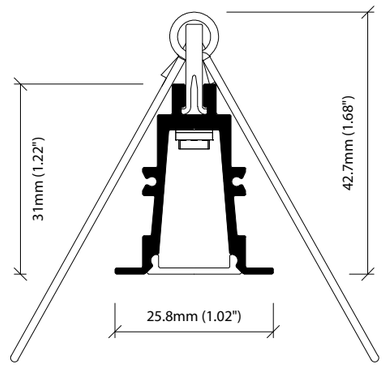
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1:1

1. Recessed and concealed into joinery
2. Easy fit recessed spring fixings
3. Cable exit from end cap
4. Anodised, machined aluminium end caps
5. Dynamic LEDmix LED options
6. Low profile recessed with fully homogenous snap cover

LiNi-R **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating/Connection Type		Voltage	
LiNi-R, Silver anodised	LRSA	Diffused cover	C	s–	352	s352	2100K	21K		LiNi-R 352	M	100.3-2017mm 83.3mm increments	IP40, 50mm Single IP20 connector	40a3	24V DC	g
					504	s504	2300K	23K		LiNi-R 504	M	117-2017mm 100mm increments	IP40, 50mm Double IP20 connector	40a4		
					508	s508	2500K	25K		LiNi-R 508	M	88.4-2017mm 71.4mm increments	IP40, 300mm Single tail	40c1		
				e–	352	e352	2700K	27K		LiNi-R 207	M	100.3-2017mm 83.3mm increments	IP40, 300mm Double tail	40c2		
					504	e504	3000K	30K		LiNi-R 208	M	183.7-2017mm 166.7mm increments	IP40, 300mm Single IP20 connector	40c3		
					508	e508	3200K	32K		LiNi-R RGB	M	100.3-2017mm 83.3mm increments	IP40, 300mm Double IP20 connector	40c4		
					207[1]	d207	3500K	35K					IP40, 1000mm Single tail	40d1		
					208[1]	d208	3800K	38K								
					RGB	d501	5000K	50K								
							RED	RED	s– s352, s504 only							
							GREEN	GRN								
							BLUE	BLU								
							ORANGE	ORN								
							AMBER	AMB								
							RGB	RGB								

[1] LEDmix requires two colour temperature choices

Code Example:

LRSA	-	C	-	s504	-	35K	-	M	517	-	40c1	-	g
LiNi-R, Silver anodised		Diffused cover		s-line 504		3500K		517mm			IP40, 300mm Single tail		24V DC

[1] LEDmix Code Example:

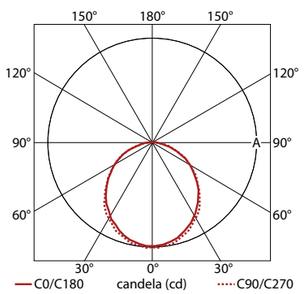
LRSA	-	C	-	d207	-	21	-	35	-	M	517	-	40c1	-	g
LiNi-R, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		517mm			IP40, 300mm Single tail		24V DC

LiNi-R XL

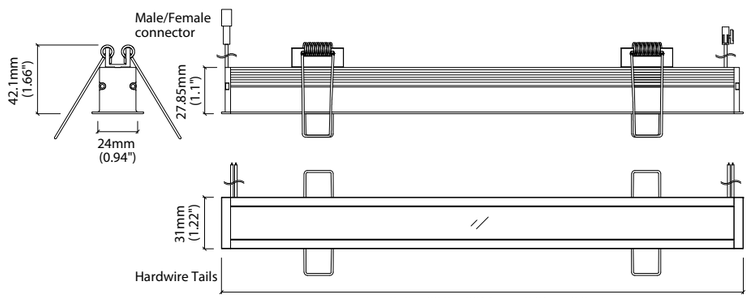
- Recessed, linear profile with full homogenous diffusion across KKDC LED strip range.
- Anodised aluminium housing with diffused or clear snap-fit covers.

24V DC | IP40 | LEDmix | RGB

Beam Angle	Diffused
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused
Mounting	Recessed mounting via spring clip
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



LiNi-R XL s352/e352	A	25
LiNi-R XL s504/e504	A	69
LiNi-R XL s508/e508	A	92
LiNi-R XL d207	A	53
LiNi-R XL d208	A	91



LiNi-R XL 352	99.3 ~ 2016mm (3.91 ~ 79.37")
LiNi-R XL 504	116 ~ 2016mm (4.57 ~ 79.37")
LiNi-R XL 508	87.4 ~ 2016mm (3.44 ~ 79.37")
LiNi-R XL 207	99.3 ~ 2016mm (3.91 ~ 79.37")
LiNi-R XL 208	182.7 ~ 2016mm (7.19 ~ 79.37")
LiNi-R XL RGB	99.3 ~ 2016mm (3.91 ~ 79.37")

LED Options

	s-line	e-line	LEDmix	RGB
CRI (R_a)	90+	90+	90+	n/a
CRI (R_9)	45+	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

	White			LEDmix Dynamic White		RGB
	LiNi-R XL s352 LiNi-R XL e352	**LiNi-R XL s504 LiNi-R XL e504**	**LiNi-R XL s508 LiNi-R XL e508**	**LiNi-R XL d207**	**LiNi-R XL d208**	**LiNi-R XL dRGB**
Luminous Flux, 3000K	169 lm/m 30.7 lm/W	503 lm/m 41.1 lm/W	703 lm/m 40.7 lm/W	323 lm/m 29.5 lm/W	695 lm/m 44.7 lm/W	Red: 61 lm/m Green: 132 lm/m Blue: 22 lm/m White: 192 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H42.1/W31/L99.3-2016mm	H42.1/W31/L116-2016mm	H42.1/W31/L87.4-2016mm	H42.1/W31/L99.3-2016mm	H42.1/W31/L182.7-2016mm	H42.1/W31/L99.3-2016mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_c Max = 65°C)	T_a = -25 to 60°C (T_c Max = 66°C)	T_a = -25 to 55°C (T_c Max = 64°C)	T_a = -25 to 60°C (T_c Max = 68.3°C)	T_a = -25 to 55°C (T_c Max = 67.6°C)	T_a = -25 to 55°C (T_c Max = 66.5°C)

Accessories

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-18 & KKCN-19
4 PIN LEDmix male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

KKCN-24
4 PIN LEDmix 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

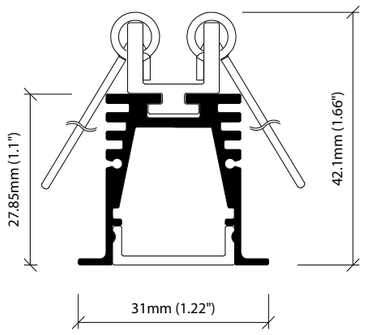
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



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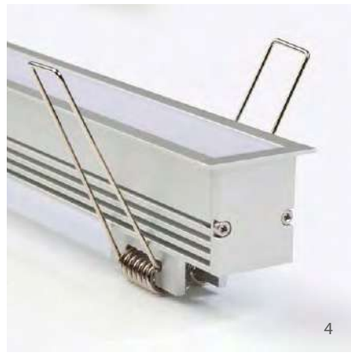


1. Snap-fit diffused cover
2. Fully homogenous, soft, diffused lighting
3. Dynamic LEDmix LED options
4. Easy fit recessed spring fixings and machined aluminium end caps
5. Recessed concealment into joinery

LiNi-R XL **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		
LiNi-R XL, Silver anodised	RXSA	Diffused cover	C	s–	352	s352	2100K	21K	
					504	s504	2300K	23K	
					508	s508	2500K	25K	
				e–	352	e352	2700K	27K	
					504	e504	3000K	30K	
					508	e508	3200K	32K	
					207[1]	d207	3500K	35K	
					208[1]	d208	3800K	38K	
					RGB	d501	5000K	50K	
							RED	RED	s– s352, s504 only
							GREEN	GRN	
							BLUE	BLU	
							ORANGE	ORN	
							AMBER	AMB	
							RGB	RGB	

Length Availability			IP Rating/Connection Type		Voltage	
LiNi-R XL 352	M	99.3-2016mm 83.3mm increments	IP40, 50mm Single IP20 connector	40a3	24V DC	g
LiNi-R XL 504	M	116-2016mm 100mm increments	IP40, 50mm Double IP20 connector	40a4		
LiNi-R XL 508	M	87.4-2016mm 71.4mm increments	IP40, 300mm Single tail	40c1		
LiNi-R XL 207	M	99.3-2016mm 83.3mm increments	IP40, 300mm Double tail	40c2		
LiNi-R XL 208	M	182.7-2016mm 166.7mm increments	IP40, 300mm Single IP20 connector	40c3		
LiNi-R XL RGB	M	99.3-2016mm 83.3mm increments	IP40, 300mm Double IP20 connector	40c4		
			IP40, 1000mm Single tail	40d1		

[1] LEDmix requires two colour temperature choices

Code Example:

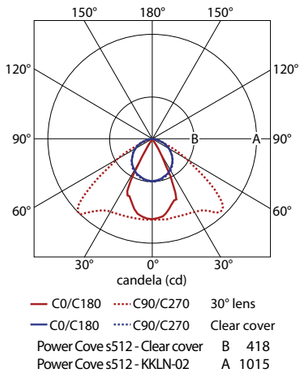
RXSA	-	C	-	s504	-	35K	-	M 516	-	40c1	-	g
LiNi-R XL, Silver anodised		Diffused cover		s-line 504		3500K		516mm		IP40, 300mm Single tail		24V DC

[1] LEDmix Code Example:

RXSA	-	C	-	d207	-	21	-	35	-	M 516	-	40c1	-	g
LiNi-R XL, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		516mm		IP40, 300mm Single tail		24V DC

Power Cove

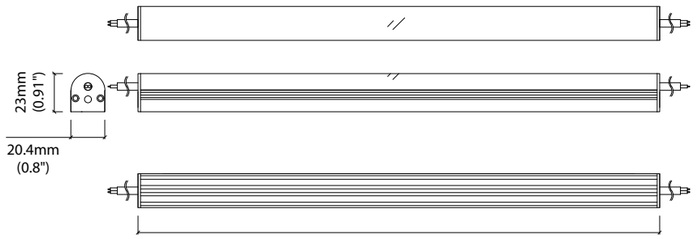
- Compact and powerful linear LED solution featuring 512 high power strip.
- Suitable for ceiling coves and architectural details.
- Various snap-on cover optics including 30° lens and range of mounting options.

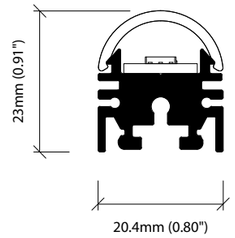


24V DC IP40

Power Cove s512
Power Cove e512

Diffused cover, 3000K	1772 lm/m 58.6 lm/W
Semi-diffused, 3000K	2625 lm/m 86.8 lm/W
Clear cover, 3000K	2782 lm/m 92 lm/W
KKLN-02, 3000K	2722 lm/m 90 lm/W
Wattage	30.24 W/m
Dimension	H23/W20.4/L84.4-2013mm (excluding brackets)
PCB Increment	71.4mm increment
LED pitch	11.9mm – 84 LED/m
Lifetime	50,000 hours @ 25°C
Operation Temp	T_a= -25 to 45°C (T_C max = 75°C)
Beam Angle	Diffused: Semi-diffused: Clear: 105° KKLN-02: 30°
IP Rating	IP40
Finish	Silver Anodised
Cover/Lens	KKLN-02/Clear/Semi-diffused/Diffused
Mounting	Surface mounting via clips or brackets
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)





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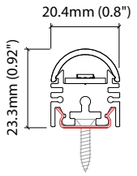
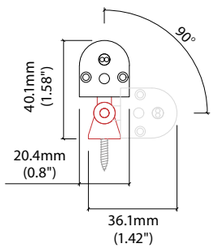
Accessories

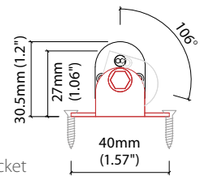
Mounting Options



KKCP-11
Concealed clip
(Allow 3 per metre)
S/Steel finish



KKBK-05
Adjustable bracket
(Allow 2 per metre)
S/Steel finish
Pre-assembled in factory
for double tail option



KKBK-22*
Adjustable end cap bracket
(Allow 2 per length)
S/Steel finish
* When using adjustable end cap bracket, max length is limited to 1500mm

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

LED Options

	s-line	e-line
CRI (R_a)	90+	90+
CRI (R_9)	45+	45+
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

1. Adjustable angle mounting bracket
2. Power Cove 512 close up
3. Cover options available, clear, semi-diffused, diffused, and KKLN-02 lens option
4. Power Cove with KKLN-02 lens

Private Residence, Vietnam
Lighting Design: Project Lighting Design Pte Ltd
KKDC Singapore

Power Cove **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating/Connection Type		Voltage	
Power Cove, Silver anodised	PWSA	Clear cover	B	s–	512	s512	2100K	21K		M	84.4-2013mm 71.4mm increments[1]		IP40, 300mm Single tail	40c1	24V DC	g
		Diffused cover	C	e–	512	e512	2300K	23K					IP40, 300mm Double tail	40c2		
		Semi-diffused	D				2500K	25K								
		KKLN-02	H				2700K	27K								
							3000K	30K								
							3200K	32K								
							3500K	35K								
							3800K	38K								
							5000K	50K								
							RED	RED	s– s512 only							
							GREEN	GRN								
							BLUE	BLU								
							ORANGE	ORN								
							AMBER	AMB								

[1] When using adjustable end cap bracket, max length is limited to 1,500mm

Code Example:

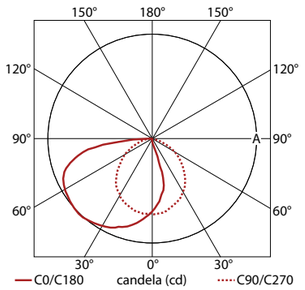
PWSA	-	C	-	s512	-	35K	-	M 513	-	40c1	-	g
Power Cove, Silver anodised		Diffused cover		s-line 512		3500K		513mm		IP40, 300mm Single tail		24V DC

TANA

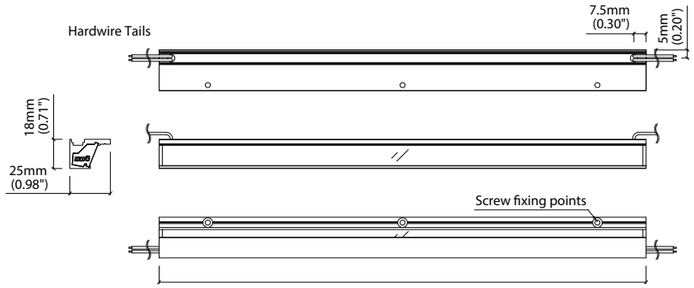
- Discreet, surface mounted linear shelf light with custom length aluminium housing.
- Diffused or clear cover options available and wide range of LED strips.
- Single strip or twin strips (TANA2 504) can be specified.
- New TANA Spot option for highlighting objects within shelving display.

24V DC | IP40 | LEDmix | RGB

IP Rating	IP40
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Diffused/Clear
Mounting	Surface mounting via screw fixing, 3M tape or magnets
Connection	Hardwire tails
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



TANA s352/e352	A	57
TANA n504/s504/e504	A	≤189
TANA2 n504/s504/e504	A	348
TANA n508 s508/e508	A	≤244
TANA d207	A	117
TANA d208	A	205



TANA 352	103.3 ~ 2020mm (4.07 ~ 79.53")
TANA 504	120 ~ 2020mm (4.72 ~ 79.53")
TANA 508	91.4 ~ 2020mm (3.60 ~ 79.53")
TANA 207	103.3 ~ 2020mm (4.07 ~ 79.53")
TANA 208	186.7 ~ 2020mm (7.35 ~ 79.53")
TANA RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

LED Options

	n-line (NEW)	s-line	e-line	LEDmix	RGB
CRI (R_a)	95+	90+	90+	90+	90+
CRI (R_9)	78+	45+	45+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

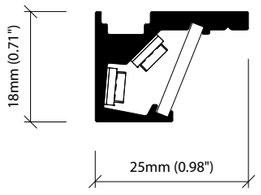
	White				LEDmix Dynamic White		RGB
	TANA s352 **TANA e352**	**TANA n504** **TANA s504** **TANA e504**	**TANA2 n504 (45° & 5°)** **TANA2 s504 (45° & 5°)** **TANA2 e504 (45° & 5°)**	**TANA n508** **TANA s508** **TANA e508**	**TANA d207**	**TANA d208**	**TANA dRGB**
Clear Cover @ 45° LED position, 3000K	330 lm/m 59.7 lm/W	≤ 942 lm/m ≤ 77 lm/W	≤ 1584 lm/m ≤ 64.7 lm/W	≤ 1365 lm/m ≤ 79 lm/W	626 lm/m 57.2 lm/W	1348 lm/m 86.7 lm/W	Red: 119 lm/m Green: 257 lm/m Blue: 42 lm/m White: 372 lm/m
Diffused Cover @ 45° LED position, 3000K	238 lm/m 43.1 lm/W	≤ 710 lm/m ≤ 58 lm/W	≤ 1140 ≤ 46.6 lm/W	≤ 987 lm/m ≤ 57.1 lm/W	453 lm/m 41.4 lm/W	975 lm/m 62.7 lm/W	Red: 86 lm/m Green: 186 lm/m Blue: 31 lm/m White: 269 lm/m
Wattage	5.52 W/m	12.24 W/m	24.48 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H18/W25/ L103.3-2020mm	H18/W25/ L120-2020mm	H18/W25/ L120-2020mm	H18/W25/ L91.4-2020mm	H18/W25/ L103.3-2020mm	H18/W25/ L186.7-2020mm	H18/W25/ L103.3-2020mm
PCB Increment	83.3mm	100mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	16.7mm – 120 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Beam angle	Clear cover: 50° Diffused cover: 100°	Clear cover: 90° Diffused cover: 80°	Clear cover: 90° Diffused cover: 100°	Clear cover: 95° Diffused cover: 100°	Clear cover: 90° Diffused cover: 80°	Clear cover: 95° Diffused cover: 100°	Clear cover: 90° Diffused cover: 80°
Operation Temp	T_a = -25 to 60°C (T_C Max = 69°C)	T_a = -25 to 60°C (T_C Max = 77°C)	T_a = -25 to 60°C (T_C Max = 77°C)	T_a = -25 to 50°C (T_C Max = 68°C)	T_a = -25 to 60°C (T_C Max = 72.9°C)	T_a = -25 to 45°C (T_C Max = 69.2°C)	T_a = -25 to 50°C (T_C Max = 83°C)

Accessories

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead



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Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. TANA 504 installed into shelving
2. TANA end cap detail
3. Various paint finishes available
4. Flush end cap plug to prevent light leakage
5. Dynamic LEDmix LED options available
6. TANA2, twin strip positions for increased lumen output

TANA **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating/ Connection Type		Mounting/ Fixing		LED Position		Voltage	
TANA, Silver anodised	TNSA	Clear cover	B	n-	504[2]	n504	2100K	21K		TANA 352	M	103.3-2020mm 83.3mm increments	IP40, 50mm Single IP20 connector	40a3	Screw Fixed	1	5°	1	24V DC	g
		Diffused cover	C		508[2]	n508	2300K	23K					IP40, 50mm Double IP20 connector	40a4	3M Tape Fixed	2	45°	2		
				s-	352	s352	2500K	25K		TANA 504	M	120-2020mm 100mm increments	IP40, 300mm Single tail	40c1	Magnet Fixed	3	TANA(2) 5 + 45° (504 only)	3		
					007	s007	2700K	27K					IP40, 300mm Double tail	40c2						
					504	s504	3000K	30K		TANA 508	M	91.4-2020mm 71.4mm increments	IP40, 300mm Single IP20 connector	40c3						
					508	s508	3200K	32K					IP40, 300mm Double IP20 connector	40c4						
				e-	352	e352	3500K	35K		TANA 207	M	103.3-2020mm 83.3mm increments	IP40, 1000mm Single tail	40d1						
					007	e007	3800K	38K					IP40, 1000mm Double tail	40d2						
					504	e504	5000K	50K		TANA 208	M	186.7-2020mm 166.7mm increments	IP40, 3000mm Single tail	40e1						
					508	e508	RED	RED	s- s352, s504 only				IP40, 3000mm Double tail	40e2						
					207[1]	d207	GREEN	GRN		TANA RGB	M	103.3-2020mm 83.3mm increments								
					208[1]	d208	BLUE	BLU												
					RGB	d501	ORANGE	ORN												
							AMBER	AMB												
							RGB	RGB												

[1] LEDmix requires two colour temperature choices
[2] n-line : 2700K, 3000K

Code Example:

TNSA	-	C	-	s504	-	35K	-	M 520	-	40d1	-	1	-	1	-	g
TANA, Silver anodised		Diffused cover		s-line 504		3500K		520mm		IP40, 1000mm Single tail		Screw Fixed		5°		24V DC

[1] LEDmix Code Example:

TNSA	-	C	-	d207	-	21	-	35	-	M 520	-	40d1	-	1	-	2	-	g
TANA, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		520mm		IP40, 1000mm Single tail		Screw Fixed		45°		24V

Hotel le Bristol, Paris
Architect: Pierre-Yves Rochon
Photography: Jean Garcin
KKDC Paris

TANA Spot

- New TANA Spot is a compact and adjustable luminaire designed for shelf display feature illumination.
- High Power LED with integral converter.
- Can be used in-line with TANA profile to create linear shelf systems or as a standalone spotlighting unit.

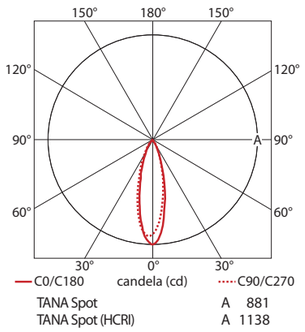
TANA Spot

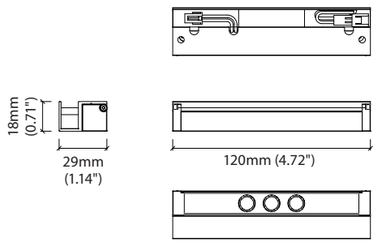
24V DC IP40 CE

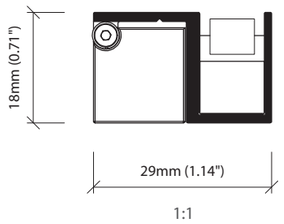
Lifetime	50,000 hours @ 25°C
Operation Temp	Ta = -25 to 50°C (Tc max = 86.1°C) @ Ta = 25°C (Tc = 61.1°C)
IP Rating	IP40
Finish	Silver Anodised
Cover/Lens	16°/24° lens (TANA Spot)/ 26° lens (TANA Spot HCRI)
Mounting	Surface mounting via screw fixing
Connection	Male/female connectors

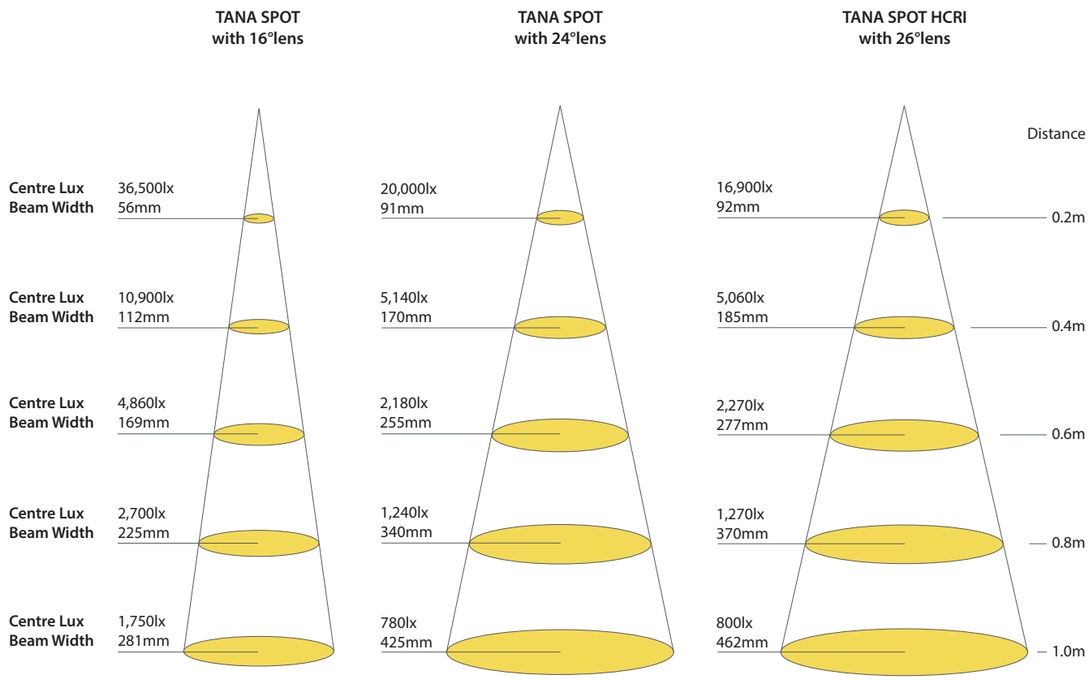
Product Data

	TANA Spot	TANA Spot HCRI
Luminous flux **Clear Cover**	207 lm 58.0 lm/W	257 lm 72.0 lm/W
Wattage	3.57 W	3.57 W
Dimension	H18/W29/W120mm	H18/W29/W120mm
Beam angle	16°/24°	26°









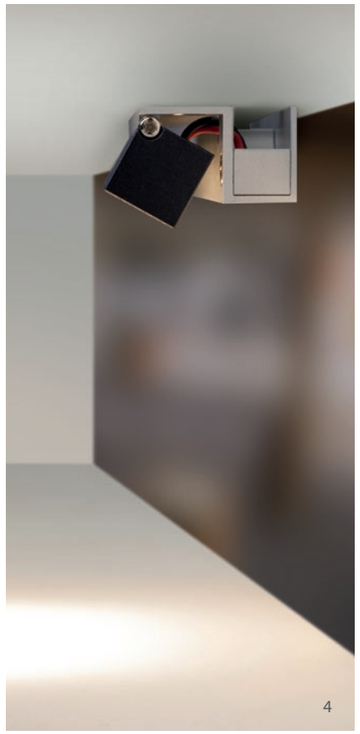
LED Options

	TANA Spot	TANA Spot HCRI
CRI (R_a)	80+	90+
CRI (R_9)	12	80 +
TM-30-15	R_f 80+, R_g 90+	R_f 90+, R_g 100+
Bin/Step	3 Step MacAdam ellipse (4 Step for 5000K/6500K)	3 Step MacAdam ellipse
Colours	2800K/3000K/3200K/3800K (70CRI - 5000K/6500K)	2700K/3000K

1

2

3



4

1. Directional LED module, mounted in line with TANA shelf light
2. End-to-end link connection with TANA
3. Mini lensed high Power LED with integral converter
4. Machined black and silver anodised aluminium compact housing

TANA Spot **Code Table**

Housing/Finish		LED Type		Colour (CCT)			IP Rating/Connection Type		Mounting/ Fixing		Cover/Lens			Voltage	
TANA Spot, Silver anodised	TASA	TANA Spot	h108	2800K	28K	h108 only	IP40, Single IP20 connector	40x3	Screw Fixed	1	16° lens	K	h108 only	24V DC	g
TANA Spot, Black anodised	TABA	TANA Spot HCRI	h109	3000K	30K		IP40, Double IP20 connector	40x4			24° lens	I			
				3200K	32K						26° lens	J	h109 only		
				3800K	38K										
				5000K	50K										
				6500K	65K										
				2700K	27K	h109 only									
				3000K	30K										

Code Example:

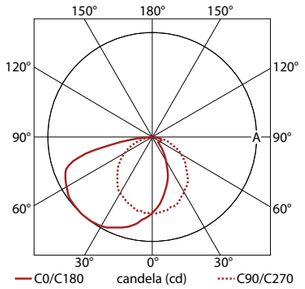
TASA	-	h108	-	32K	-	40x3	-	1	-	K	-	g
TANA Spot, Silver anodised		TANA Spot		3200K		IP40, Single IP20 connector		Screw Fixed		16° lens		24V

TANA Micro

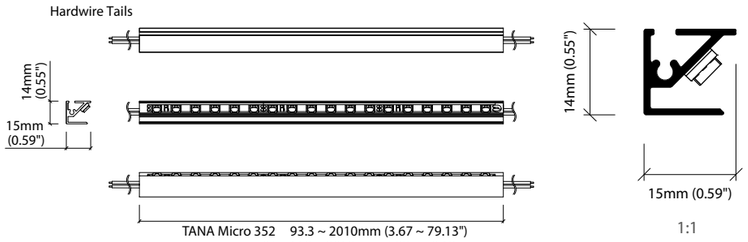
- TANA Micro is a slim linear profile for discreet shelf lighting designed for concealment within architectural details.
- Wide range of LED strip options available, fixed at 45°.

TANA Micro

IP Rating	IP20
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	N/A
Mounting	Surface mounting via 3M tape or screw mount end caps
Connection	Hardwire tails
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



TANA Micro s352/e352	A	58
TANA Micro n504/s504/e504	A	≤202
TANA Micro n508 s508/e508	A	≤257
TANA Micro d207	A	128
TANA Micro d208	A	226



TANA Micro 352	93.3 ~ 2010mm (3.67 ~ 79.13")
TANA Micro 504	110 ~ 2010mm (4.33 ~ 79.13")
TANA Micro 508	81.4 ~ 2010mm (3.20 ~ 79.13")
TANA Micro 207	93.3 ~ 2010mm (3.67 ~ 79.13")
TANA Micro 208	176.7 ~ 2010mm (6.95 ~ 79.13")

LED Options

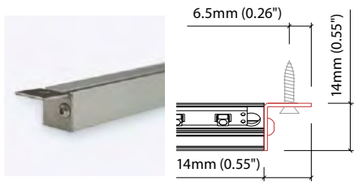
	n-line (NEW)	s-line	e-line	LEDmix
CRI (R_a)	95+	90+	90+	90+
CRI (R_g)	78+	45+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

Product Data

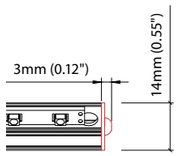
	White			LEDmix Dynamic White	
	TANA Micro s352 TANA Micro e352	**TANA Micro n504 TANA Micro s504 TANA Micro e504**	**TANA Micro n508 TANA Micro s508 TANA Micro e508**	**TANA Micro d207**	**TANA Micro d208**
Luminous Flux, 3000K	383 lm/m 69.4 lm/W	≤ 1136 lm/m ≤ 92.8 lm/W	≤ 1588 lm/m ≤ 91.9 lm/W	729 lm/m 66.6 lm/W	1567 lm/m 100.8 lm/W
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m
Dimension	H14/W15/L93.3-2010mm	H14/W15/L110-2010mm	H14/W15/L81.4-2010mm	H14/W15/L93.3-2010mm	H14/W15/L176.7-2010mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m
Beam angle	90°	45°	65°	95°	90°
Operation Temp	T_a = -25 to 55°C (T_C Max = 65°C)	T_a = -25 to 55°C (T_C Max = 70°C)	T_a = -25 to 45°C (T_C Max = 69°C)	T_a = -25 to 60°C (T_C Max = 69.5°C)	T_a = -25 to 50°C (T_C Max = 65.9°C)

Accessories

Mounting Options



TMEC-02*
End cap bracket pair (Includes screws)
S/Steel finish
*Not recommended for use on lengths over 1000mm



TMEC-01
End cap pair (Includes screws)
S/Steel finish

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

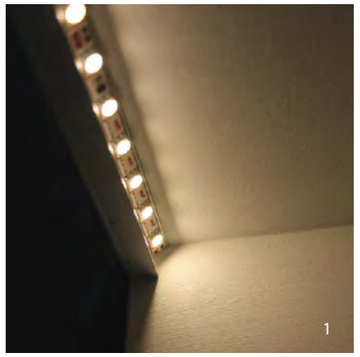
KKDM-05
visDIM 1-10V sub-controller

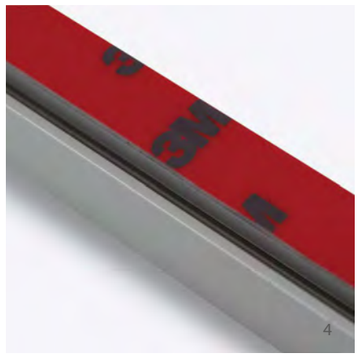
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details





1. Surface mounted TANA Micro 504
2. Private Residence in Interlace, Singapore
3. LEDmix cable exit detail
4. High strength self-adhesive 3M tape
5. Optional end cap bracket accessory (sold separately)
6. TANA Micro d207 & d208 LEDmix options

TANA Micro **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		
TANA Micro, Silver anodised	TMSA	No cover	X	n-	504[3]	n504	2100K	21K	
					508[3]	n508	2300K	23K	
				s-	352	s352	2500K	25K	
					504	s504	2700K	27K	
					508	s508	3000K	30K	
				e-	352	e352	3200K	32K	
					504	e504	3500K	35K	
					508	e508	3800K	38K	
					207[1]	d207	5000K	50K	
					208[1]	d208	RED	RED	s- s352, s504 only
							GREEN	GRN	
							BLUE	BLU	
							ORANGE	ORN	
							AMBER	AMB	

Length Availability[2]			IP Rating/Connection Type		Voltage	
TANA Micro 352	M	93.3-2010mm 83.3mm increments	IP20, 1000mm Single tail	20d1	24V DC	g
TANA Micro 504	M	110-2010mm 100mm increments	IP20, 1000mm Double tail	20d2		
TANA Micro 508	M	81.4-2010mm 71.4mm increments	IP20, 3000mm Single tail	20e1		
TANA Micro 207	M	93.3-2010mm 83.3mm increments	IP20, 3000mm Double tail	20e2		
TANA Micro 208	M	176.7-2010mm 166.7mm increments				

[1] LEDmix requires two colour temperature choices
[2] When using adjustable end cap bracket, max length is limited to 1000mm
[3] n-line: 2700K/3000K

Code Example:

TMSA	-	X	-	s504	-	35K	-	M 510	-	20d2	-	g
TANA Micro, Silver anodised		No cover		s-line 504		3500K		510mm		IP20, 1000mm Double tail		24V DC

[1] LEDmix Code Example:

TMSA	-	X	-	d207	-	21	-	35	-	M 510	-	20d2	-	g
TANA Micro, Silver anodised		No cover		LEDmix 207		2100K		3500K		510mm		IP20, 1000mm Double tail		24V DC

Gold On 27, Burj Al Arab, Dubai
Lighting Design: Delta Lighting Solutions
KKDC UK

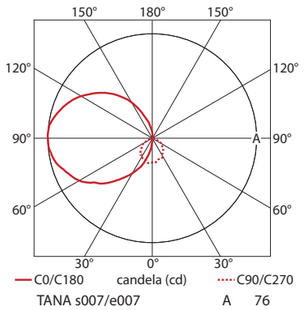
TANA SP

- TANA SP is a compact linear shelf mounted profile with push-fit dust cover.
- Flush fit concealed clip mounting
- Utilises 007 tight-pitch LED strip for homogenous illumination.

24V DC IP40

TANA SP s007
TANA SP e007

Luminous Flux, 3000K	417 lm/m 38.5 lm/W
Wattage	10.83 W/m
Dimension	H15.8/W16/L61.7-2020mm
PCB Increment	41.7mm increment
LED pitch	6.9mm – 144 LED/m
Lifetime	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_c max = 77.3°C)
Beam Angle	60°
IP Rating	IP40
Finish	Silver anodised
Cover/Lens	Diffused
Mounting	Surface mounted concealed clips
Connection	Hardwire tails
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

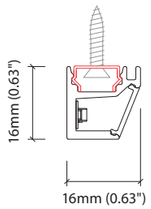


LED Options

	s-line	e-line
CRI (R_a)	90+	90+
CRI (R_9)	45+	45+
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

Accessories

Mounting Options



KKCP-10
Concealed Clip
(Allow 3 per metre)
S/Steel finish

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

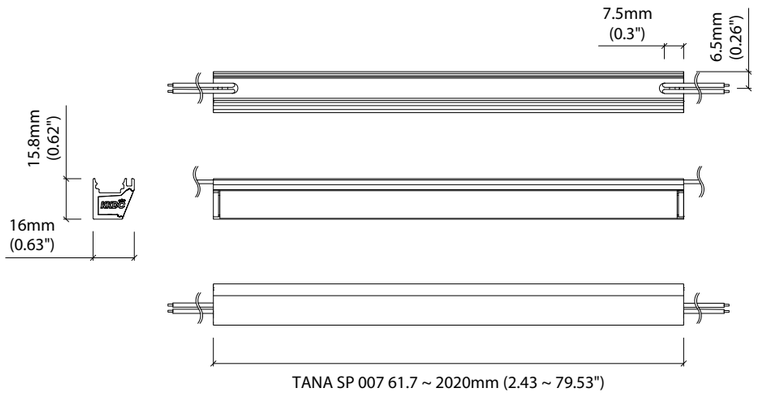
KKDM-05
visDIM 1-10V sub-controller

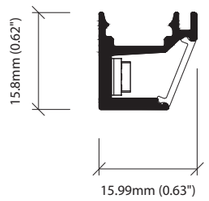
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details





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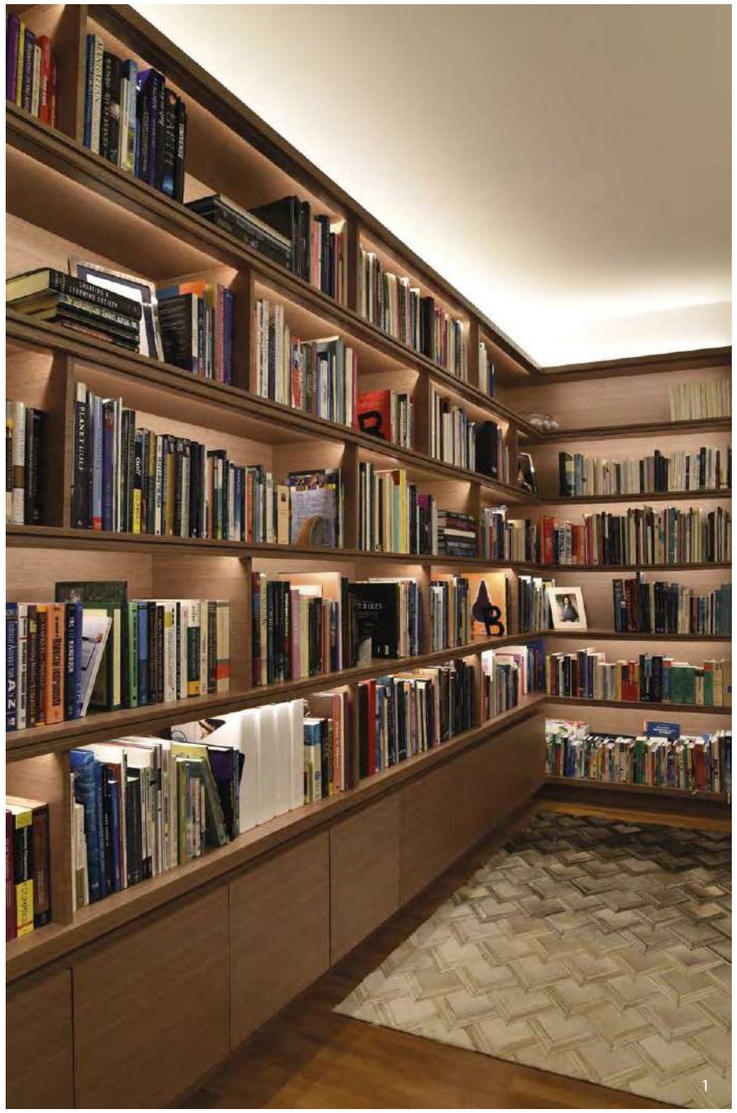
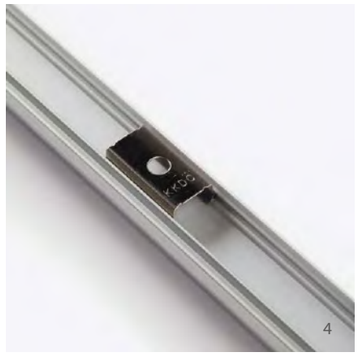




1. Private Residence in Interlace, Singapore
2. TANA SP end detail with snap cover
3. TANA SP 007 with cover removed
4. TANA SP fixing clip detail

TANA SP **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability		IP Rating/Connection Type		Voltage	
TANA SP, Silver anodised	TSSA	Diffused cover	C	s–	007	s007	2100K	21K		M	61.7-2020mm 41.7mm increments	IP40, 1000mm Single tail	40d1	24V DC	g
				e–	007	e007	2300K	23K				IP40, 1000mm Double tail	40d2		
							2500K	25K				IP40, 3000mm Single tail	40e1		
							2700K	27K				IP40, 3000mm Double tail	40e2		
							3000K	30K							
							3200K	32K							
							3500K	35K							
							3800K	38K							
							5000K	50K							
							RED	RED	s– s007 only						
							GREEN	GRN							
							BLUE	BLU							
							ORANGE	ORN							
							AMBER	AMB							

Code Example:

TSSA	-	C	-	s007	-	35K	-	M 520	-	40d2	-	g
TANA SP, Silver anodised		Diffused cover		s-line 007		3500K		520mm		IP40, 1000mm Double tail		24V DC

PICO

- Slim & elegant surface mounted picture luminaire with directional cover.
- Also suitable for other interior display applications.
- Machined anodised aluminium in Silver or Black with innovative quick release power connection mountings.

24V DC IP40 CE

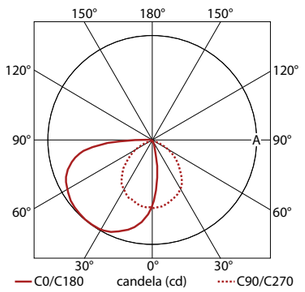
Beam angle	90°
IP Rating	IP40 (diffused Cover)/IP20 (No cover)
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Diffused/No cover
Mounting	Surface mounted wall brackets
Connection	Hardwire tails (Polarity split between mounting arms)
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

Product Data

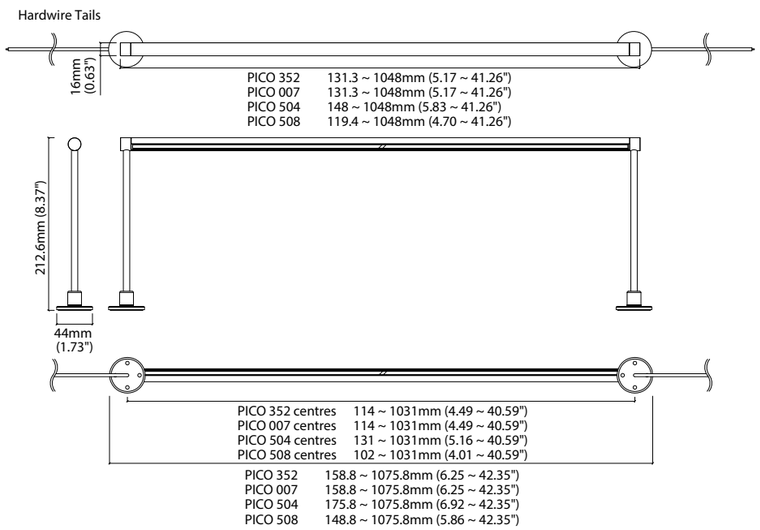
White

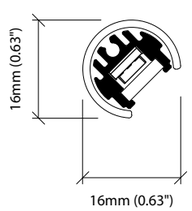
	PICO s352 PICO e352	PICO s007 PICO e007	PICO n504 PICO s504 PICO e504	PICO n508 PICO s508 PICO e508
Diffused Cover, 3000K	282 lm/m 51 lm/W	545 lm/m 50.3 lm/W	≤ 835 lm/m ≤ 68.2 lm/W	≤ 1166 lm/m ≤ 67.5 lm/W
No Cover, 3000K	344 lm/m 62.3 lm/W	665 lm/m 61.5 lm/W	1020 lm/m 83.4 lm/W	1426 lm/m 82.5 lm/W
Wattage	5.52 W/m	10.83 W/m	12.24 W/m	17.28 W/m
Dimension (Excludes mounting plates)	H44/W212.6/Ø16mm L131-1048mm	H44/W212.6/Ø16mm L131-1048mm	H44/W212.6/Ø16mm L148-1048mm	H44/W212.6/Ø16mm L119-1048mm
PCB Increment	83.3mm	41.7mm	100mm	71.4mm
LED Pitch	13.9mm – 72 LED/m	6.9mm – 144 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m
Operation Temp	Ta= -20 to 60°C (T_C max = 70.6°C)	T_a= -20 to 60°C (T_C max = 79.4°C)	Ta= -25 to 50°C (T_C Max = 76.6°C)	T_a = -25 to 45°C (T_C Max = 69°C)



PICO s352/e352	A	69
PICO s007/e007	A	124
PICO n504/s504/e504	A	162
PICO n508/s508/e508	A	208





1:1

LED Options

	n-line (NEW)	s-line	e-line
CRI (R_a)	95+	90+	90+
CRI (R_9)	78+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

Accessories

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

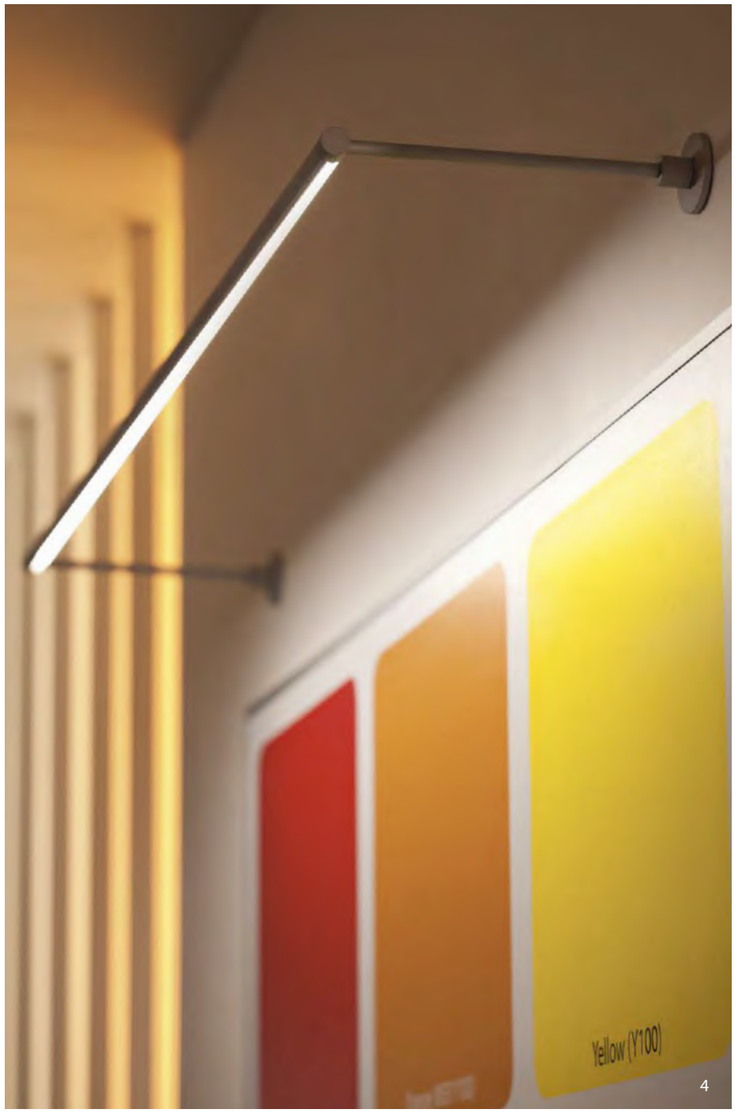
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1. PICO wall mounted
2. Innovative pin connection
3. PICO end cap detail

PICO Code Table

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating		Voltage	
PICO, Silver anodised	PCSA	No cover[1]	X	n	504[2]	n504	2100K	21K		PICO 352	M	131-1048mm 83.3mm increments	IP40	40	24V DC	g
PICO, Black anodised	PCBA	Diffused cover	C		508[2]	n508	2300K	23K		PICO 007	M	131-1048mm 83.3mm increments	IP20[1]	20		
				s	352	s352	2500K	25K		PICO 504	M	148-1048mm 100mm increments				
					007	s007	2700K	27K		PICO 508	M	119-1048mm 71.4mm increments				
					504	s504	3000K	30K								
					508	s508	3200K	32K								
				e	352	e352	3500K	35K								
					007	e007	3800K	38K								
					504	e504	5000K	50K								
					508	e508	RED	RED	s – s352, s007, s504 only							
							GREEN	GRN								
							BLUE	BLU								
							ORANGE	ORN								
							AMBER	AMB								

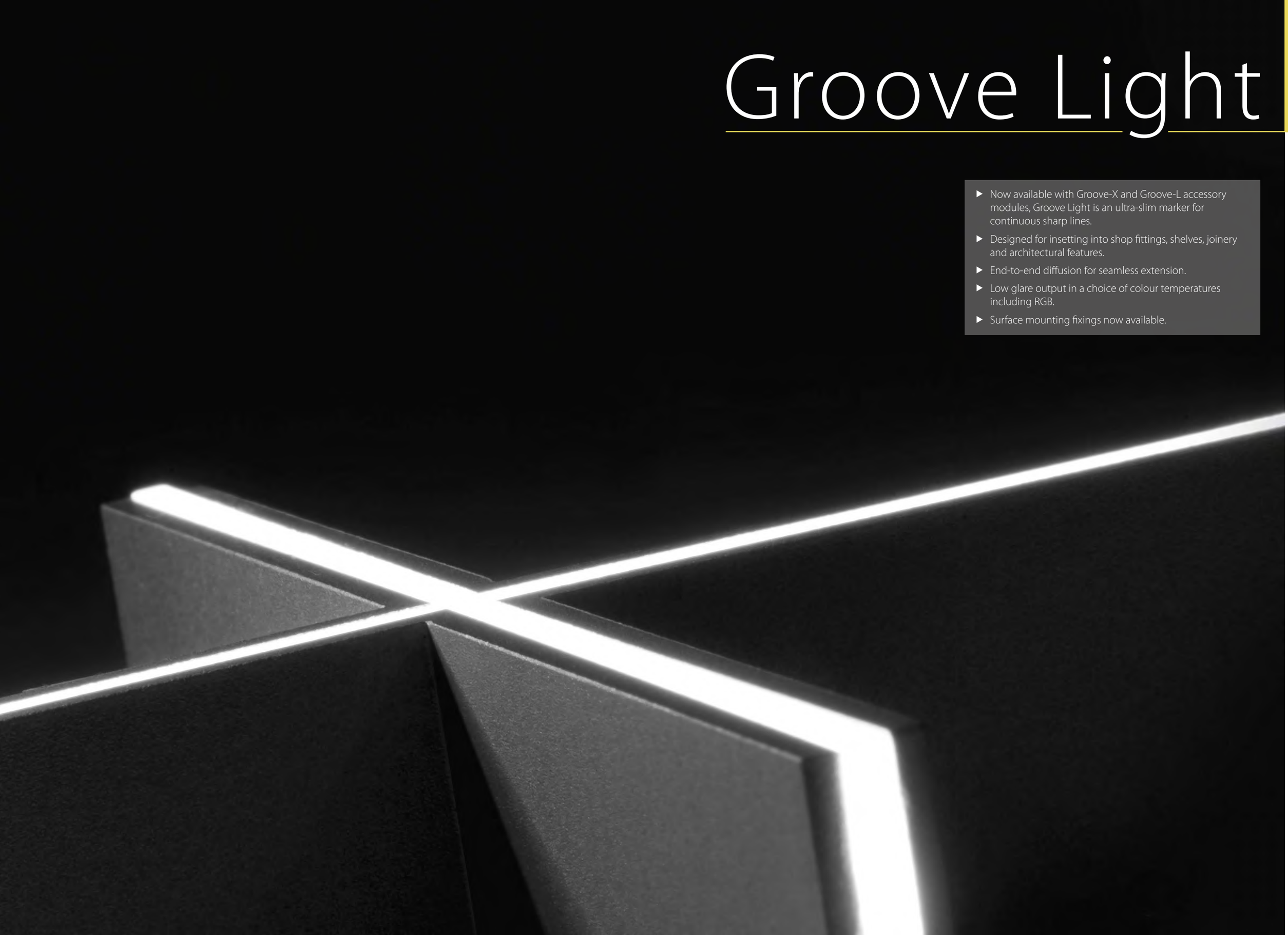
[1] When no cover option is selected, product is IP20
[2] n-line: 2700K/3000K

Code Example:

PCSA	-	C	-	s504	-	35K	-	M 548	-	40	-	g
PICO, Silver anodised		Diffused cover		s-line 504		3500K		548mm		IP40		24V DC

Groove Light

- Now available with Groove-X and Groove-L accessory modules, Groove Light is an ultra-slim marker for continuous sharp lines.
- Designed for insetting into shop fittings, shelves, joinery and architectural features.
- End-to-end diffusion for seamless extension.
- Low glare output in a choice of colour temperatures including RGB.
- Surface mounting fixings now available.



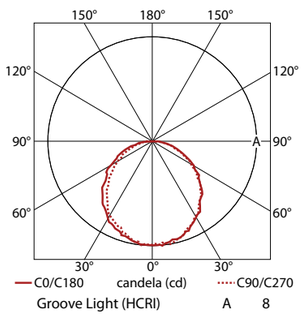
Groove Light

24V DC IP40/65

Beam Angle	110°
IP Rating	IP40/65
Finish	Silver Anodised
Cover/Lens	Diffused
Mounting	Recessed mounting via clips or channel (no flange)
Connection	Hardwire tails
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

Product Data

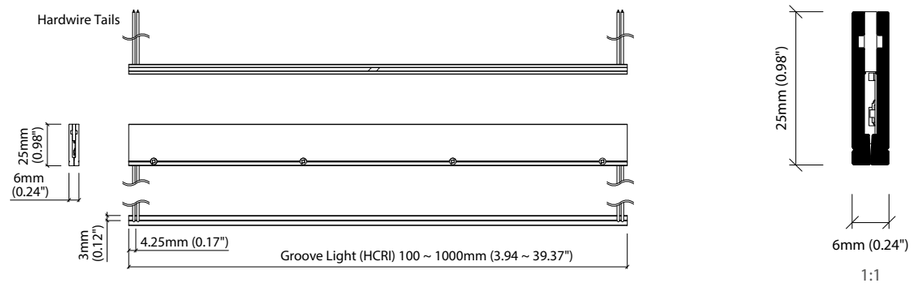
	White **Groove Light (HCRI)**	RGB **Groove Light RGB**
Luminous flux Diffused Cover	40 lm/m 5 lm/W	Red: 2 lm/m Green: 10 lm/m Blue: 3 lm/m White: 15 lm/m
Wattage	8 W/m	21.6 W/m
Dimension	H25/W6/L100-1000mm	H35/W6/L100-1000mm
PCB Increment	100mm increment/ 1000mm max	100mm increment/ 1000mm max
Lifetime	30,000 hours @ 25°C	20,000 hours @ 25°C
Operation Temp	T_a = -25 to 50°C (T_C max = 60°C)	T_a = -25 to 35°C (T_C max = 66°C)



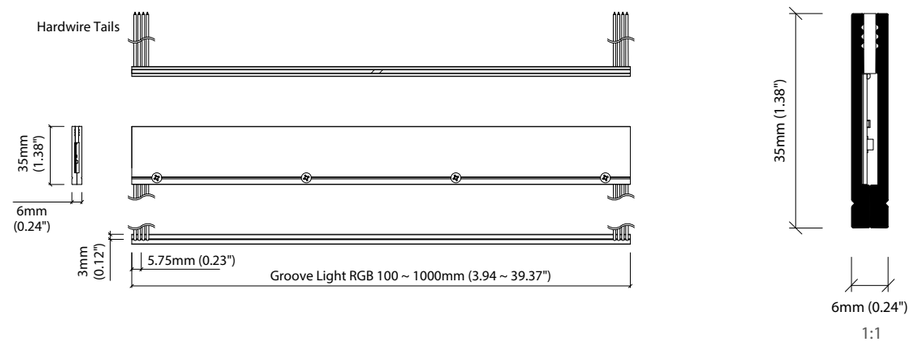
LED Options

	s-line	RGB
CRI (R_a)	90+	n/a
CRI (R_9)	90+	n/a
Bin/Step	3-3.5 Step MacAdam ellipse	12nm tolerance
Colours	White: 2700K/3000K	Red: 621-633nm Blue: 465-475 Green: 515-525nm

Groove Light (HCRI)



Groove Light RGB



NEW Groove Light **Accessories**

Groove-X & Groove-L are accessory additions to the popular Groove Light linear product from KKDC.

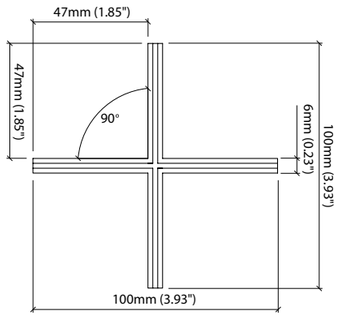
Illuminated end forms to create interesting architectural lighting details.

'Groove-X' cross-shape Junction & 'Groove-L' 90° corner junction.

For recessing into ultra slim 6mm slots & gaps.

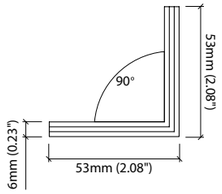
Available in a range of KKDC white LED colour temperatures.

Anodised aluminium and polycarbonate construction.



Groove Light-X accessory,
4 x 300mm single tails, IP40 only

KKLA-02A (2700K HCRI)
KKLA-02P (3000K HCRI)



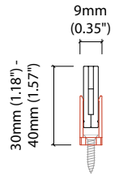
Groove Light-L accessory,
2 x 300mm single tails, IP40 only

KKLA-01A (2700K HCRI)
KKLA-01P (3000K HCRI)

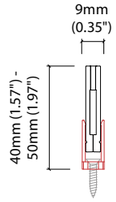
Other Accessories

Mounting Options

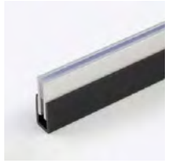
KKCP-16 (1no.)
Clip (Allow 2 per metre)
Anodised aluminium finish



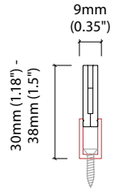
Groove Light (HCRI)



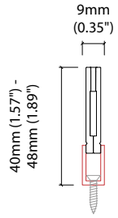
Groove Light RGB



KKCH-01*
PVC channel
(minimum 200mm PVC channel per 500mm of Groove Light)
Black PVC finish
* Specify length of channel in 1000mm increments (to be cut on site further as required)



Groove Light (HCRI)



Groove Light RGB

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

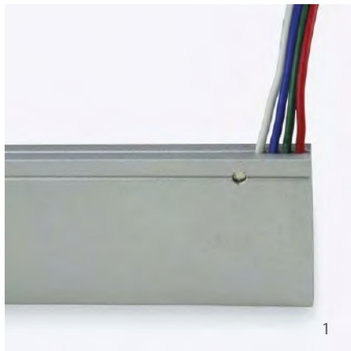
KKDM-05
visDIM 1-10V sub-controller

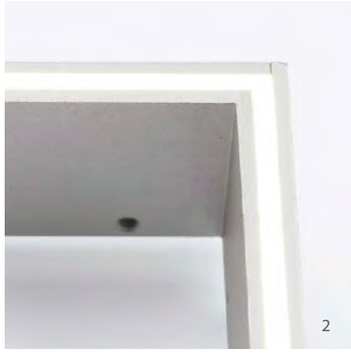
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

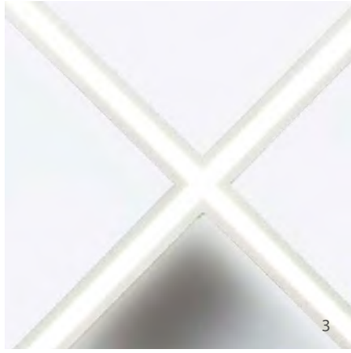
KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

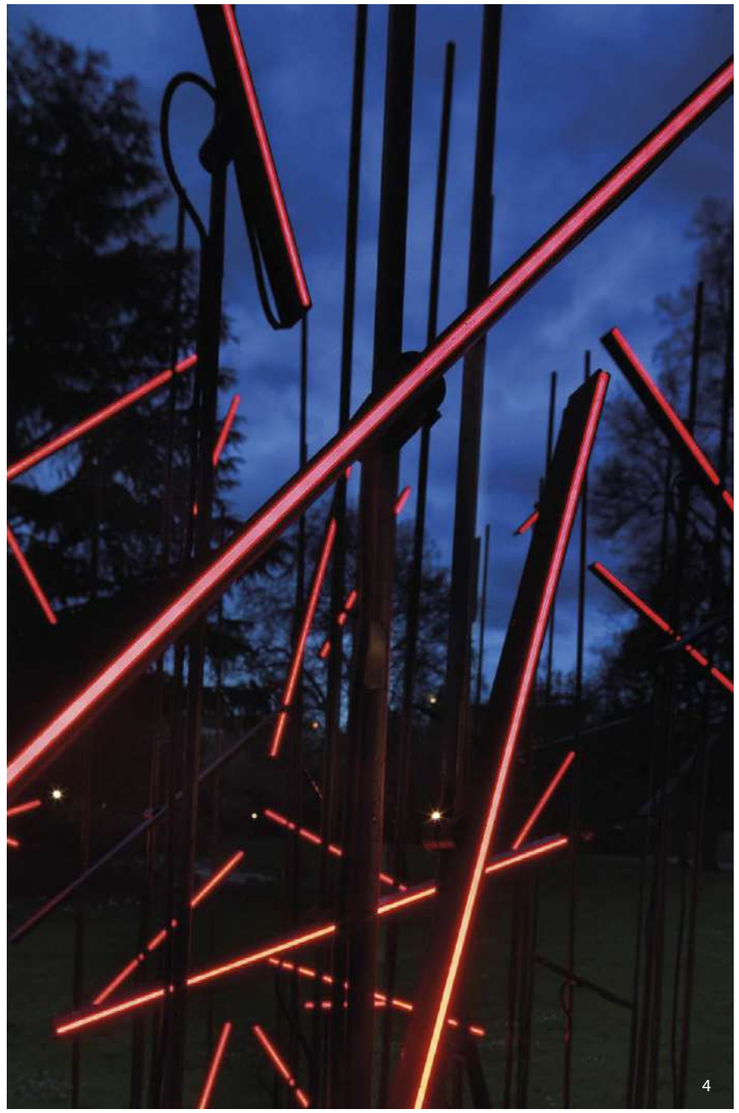
KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details









1. Groove Light RGB cable exit detail
2. Groove Light-L detail
3. Groove Light-X detail
4. "Broken Heart" Luminale, Light & Building 2012, Frankfurt Design: GNI Projects

3

Groove Light **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		Length Availability			IP Rating		Connection Type		Voltage	
Groove Light, Silver anodised	GRSA	Diffused	C	s-	103	s103	2700K	27K	Groove Light 103	M	100-1000mm 100mm increments	IP40	40	300mm Single tail	c1	24V DC	g
Groove Light RGB, Silver anodised	GQSA				RGB	d101	3000K	30K	Groove Light 101	M	100-1000mm 100mm increments	IP65	65	300mm Double tail	c2		
							RGB	RGB									

Code Example:

GRSA	-	C	-	s103	-	30K	-	M	500	40	-	c2	-	g
Groove Light, Silver anodised		Diffused		s-line 103		30K		500mm		IP40		300mm Double tail		24V DC

Groove IN

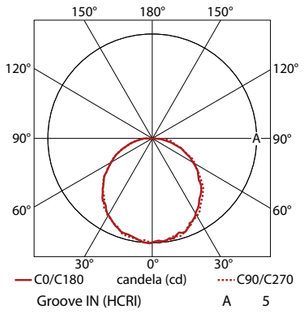
- Ultra slim linear accent marker light for sharp, straight lines.
- Low glare output in choice of colour temperatures or RGB variant.
- Spring clip fixing for hollow wall installations.

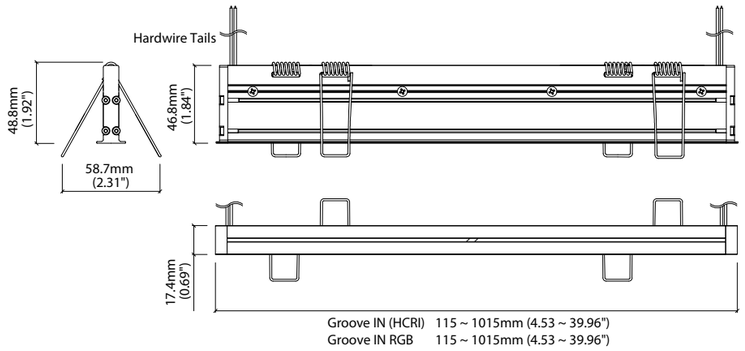
24V DC IP40/65 RGB

Beam Angle	110°
IP Rating	IP40/65
Finish	Silver Anodised
Cover/Lens	Diffused
Mounting	Recessed mounting via spring clips
Connection	Hardwire tails
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

Product Data

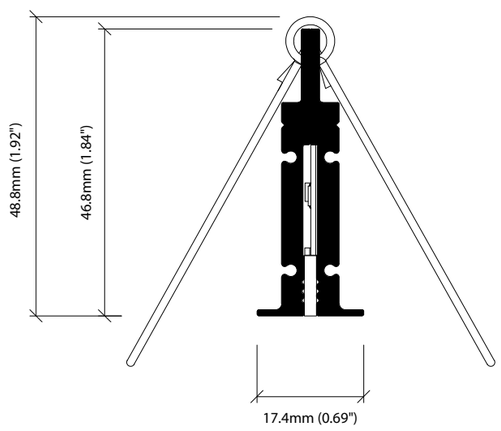
	White **Groove IN (HCRI)**	RGB **Groove IN RGB**
Luminous flux Diffused Cover	32 lm/m 4 lm/W	Red: 2 lm/m Green: 10 lm/m Blue: 3 lm/m White: 15 lm/m
Wattage	8 W/m	21.6 W/m
Dimension	H46.8/W17.4/L115-1015mm	H46.8/W17.4/L115-1015mm
PCB Increment	100mm increment/ 1000mm max	100mm increment/ 1000mm max
Lifetime	30,000 hours @ 25°C	20,000 hours @ 25°C
Operation Temp	T_a = -25 to 50°C (T_C max = 65°C)	T_a = -25 to 40°C (T_C max = 57°C)





LED Options

	s-line	RGB
CRI (R_a)	90+	n/a
CRI (R_9)	90+	n/a
Bin/Step	3-3.5 Step MacAdam ellipse	5nm tolerance
Colours	White: 2700K/3000K	Red: 621-633nm Blue: 465-475 Green: 515-525nm



1:1

Accessories

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. The Darling Hotel Lobby, Sydney
   Lighting Design: Point Of View
2. Recessed as low level marker light
3. Spring fixings for hollow wall installation

Groove IN **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		Length Availability			IP Rating		Connection Type		Voltage	
Groove IN, Silver anodised	GNSA	Diffused	C	s	103	s103	2700K	27K	Groove IN 103	M	115-1015mm 100mm increments	IP40	40	300mm Single tail	c1	24V DC	g
Groove IN RGB , Silver anodised	GLSA				RGB	d101	3000K	30K	Groove IN 101	M	115-1015mm 100mm increments	IP65	65	300mm Double tail	c2		
							RGB	RGB									

Code Example:

GNSA	-	C	-	s103	-	30K	-	M	515	40	-	c2	-	g
Groove IN, Silver anodised		Diffused		s-line 103		30K		515mm		IP40		300mm Double tail		24V DC

MiMi

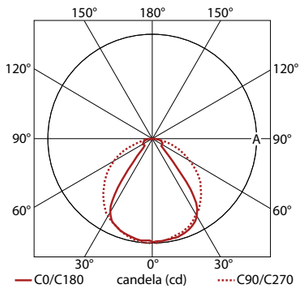
- Compact aluminium housing suitable for exterior concealed architectural details.
- Available with full range of KKDC LED strip options.
- Range of mounting options.

LEDmix

RGB

24V DC | IP54/67 | LEDmix | RGB

Beam angle	Clear cover: 75° Diffused cover: 90°
IP Rating	IP54/67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Diffused/Clear
Mounting	Surface mounting via clips or brackets
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



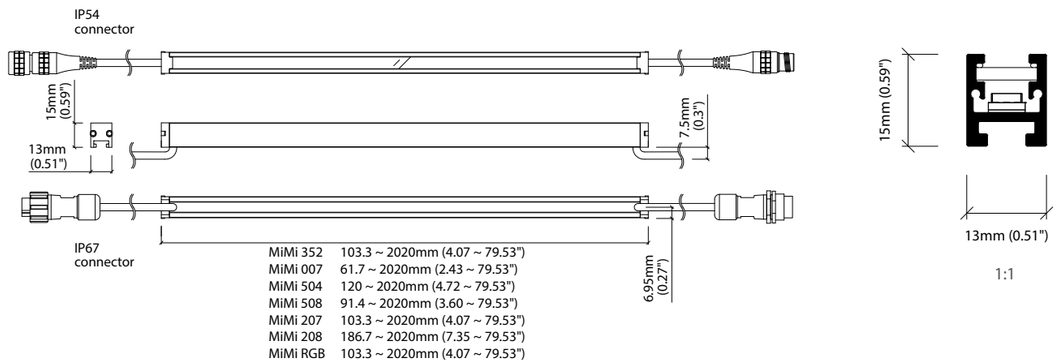
MiMi s352/e352	A	54
MiMi s007/e007	A	105
MiMi n504/s504/e504	A	158
MiMi n508/s508/e508	A	231
MiMi d207	A	121
MiMi d208	A	212

LED Options

	n-line (NEW)	s-line	e-line	LEDmix	RGB
CRI (R_a)	95+	90+	90+	90+	n/a
CRI (R_9)	78+	45+	45+	45+	n/a
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

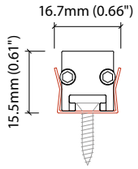
Product Data

	White				LEDmix Dynamic White		RGB
	MiMi s352 MiMi e352	**MiMi s007 MiMi e007**	**MiMi n504 MiMi s504 MiMi e504**	**MiMi n508 MiMi s508 MiMi e508**	**MiMi d207**	**MiMi d208**	**MiMi dRGB**
Clear Cover, 3000K	269 lm/m 48.8 lm/W	522 lm/m 48.2 lm/W	≤ 799 lm/m ≤ 65.3 lm/W	≤ 1118 lm/m ≤ 64.7 lm/W	514 lm/m 46.9 lm/W	1104 lm/m 71 lm/W	Red: 98 lm/m Green : 210 lm/m Blue: 35 lm/m White : 305 lm/m
Diffused Cover, 3000K	221 lm/m 40 lm/W	428 lm/m 39.5 lm/W	≤ 656 lm/m ≤ 53.6 lm/W	≤ 916 lm/m ≤ 53 lm/W	420 lm/m 38.4 lm/W	905 lm/m 58.2 lm/W	Red: 80 lm/m Green : 172 lm/m Blue: 29 lm/m White : 250 lm/m
Wattage	5.52 W/m	10.83 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H15/W13/L103.3-2020mm	H15/W13/L61.7-2020mm	H15/W13/L120-2020mm	H15/W13/L91.4-2020mm	H15/W13/L103.3-2020mm	H15/W13/L186.7-2020mm	H15/W13/L103.3-2020mm
PCB Increment	83.3mm	41.7mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	6.9mm – 144 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Operation Temp	T_a = -25 to 60°C (T_c Max = 65°C)	T_a = -25 to 45°C (T_c Max = 60°C)	T_a = -25 to 55°C (T_c Max = 75°C)	T_a = -25 to 45°C (T_c Max = 70°C)	T_a = -25 to 60°C (T_c Max = 69.4°C)	T_a = -25 to 55°C (T_c Max = 75.9°C)	T_a = -25 to 55°C (T_c Max = 70°C)

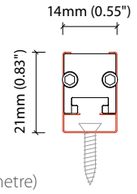


Accessories

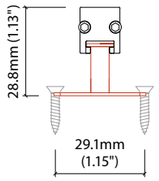
Mounting Options



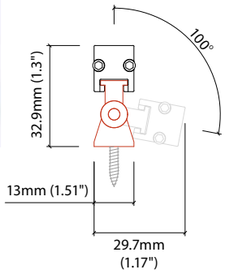
KKCP-02 (1no.)
KKCP-52 (500no.)
Clip (Allow 3 per metre)
S/Steel finish



KKCP-14
Lock clip (Allow 2 per metre)
S/Steel finish



KKBK-06
Fixed bracket
(Allow 3 per metre)
S/Steel finish
Pre-assembled in
factory for double tail
option



KKBK-05
Adjustable bracket
(Allow 2 per metre)
S/Steel finish
Pre-assembled in
factory for double tail
option

Connectors

CN54-2P-0300
2 PIN male+female 300mm pair

CN54-4P-0300
4 PIN RGB male+female 300mm pair

CN67-2P-0300, CN67-2P-1000 & CN67-2P-3000
2 PIN male + female 300mm,
1000mm & 300mm pair

CN67-4P-0300, CN67-4P-1000 & CN67-4P-3000
4 PIN RGB male + female 300mm,
1000mm & 300mm pair

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

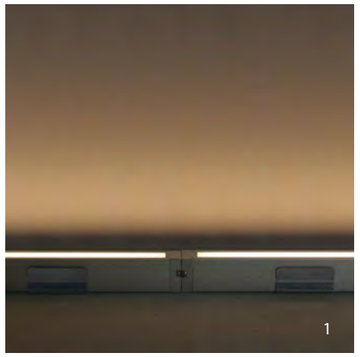
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel,
screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details


1


2


3


4


5


6a


6b


6c

1. End-to-end for continuous indirect lighting
2. MiMi d207 & d208 LEDmix with clear cover
3. Soft spotting on diffused cover
4. MiMi end cap detail
5. MiMi cable exit detail
6. Surface mounting options

Fenchurch Street, London
Lighting Design: MBLD
Architect: Rafael Vinoly
KKDC UK

MiMi Code Table

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating		Connection Type		Voltage	
MiMi, Silver anodised	MISA	Clear cover	B	n	504[3]	n504	2100K	21K		MiMi 352	M	103.3-2020mm 83.3mm increments	IP54	54	300mm Single tail	c1	24V DC	g
		Diffused cover	C		508[3]	n508	2300K	23K		MiMi 007	M	61.7-2020mm 41.7mm increments	IP67[2]	67	300mm Double tail	c2		
				s	352	s352	2500K	25K		MiMi 504	M	120-2020mm 100mm increments			300mm Single IP54 connector[3]	c5		
					007	s007	2700K	27K		MiMi 508	M	91.4-2020mm 71.4mm increments			300mm Double IP54 connector[3]	c6		
					504	s504	3000K	30K		MiMi 207	M	103.3-2020mm 83.3mm increments			300mm Single IP67 connector[3]	c7		
					508	s508	3200K	32K		MiMi 208	M	186.7-2020mm 166.7mm increments			300mm Double IP67 connector[3]	c8		
				e	352	e352	3500K	35K		MiMi RGB	M	103.3-2020mm 83.3mm increments						
					007	e007	3800K	38K										
					504	e504	5000K	50K										
					508	e508	RED	RED	s: s352, s007, s504 only									
				d	207[1]	d207	GREEN	GRN										
					208[1]	d208	BLUE	BLU										
					RGB	d501	ORANGE	ORN										
							AMBER	AMB										
							RGB	RGB										

[1] LEDmix requires two colour temperature choices
[2] Due to the clear, flush potted polyurethane top layer on IP67 MiMi a colour shift of +/-20K should be expected
[3] n-line: 2700K / 3000K

Code Example:

MISA	-	C	-	s504	-	35K	-	M 520	67	-	c5	-	g
MiMi, Silver anodised		Diffused cover		s-line 504		3500K		520mm	IP67		300mm Single IP54 connector		24V DC

[1] LEDmix Code Example:

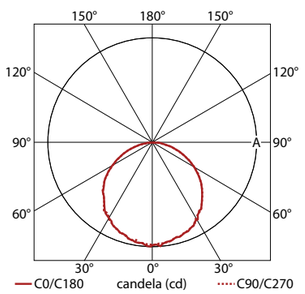
MISA	-	C	-	d207	-	21	-	35	-	M 520	67	-	c5	-	g
MiMi, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		520mm	IP67		300mm Single IP54 connector		24V DC

KKSL

- Compact linear solution for IP67 exterior applications.
- Silicone potted LED strip suitable for concealed accent lighting.
- Wide range of LED strip options and mounting accessories available.

24V DC IP67 RGB

Beam angle	110°
IP Rating	IP67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Silicone potted
Mounting	Surface mounting via clips or brackets
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

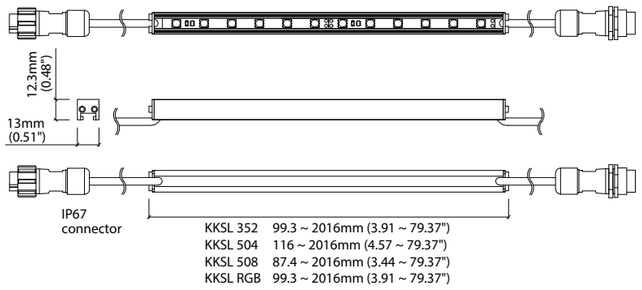


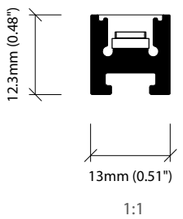
KKSL s352/e352	A	42
KKSL n504/s504/e504	A	130
KKSL n508/s508/e508	A	186

Product Data

	White			RGB
	KKSL s352 KKSL e352	**KKSL n504 KKSL s504 KKSL e504**	**KKSL n508 KKSL s508 KKSL e508**	**KKSL dRGB**
Luminous Flux	312 lm/m 56.6 lm/W	≤ 927 lm/m ≤ 75.7 lm/W	≤ 1296 lm/m ≤ 75 lm/W	Red: 113 lm/m Green: 224 lm/m Blue: 40 lm/m White: 353 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	15.6 W/m
Dimension	H12.3/W13/ L99.3-2016mm	H12.3/W13/ L116-2016mm	H12.3/W13/ L87.4-2016mm	H12.3/W13/ L99.3-2016mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm – 72 LED/m
Operation Temp	T_a = -25 to 50°C (T_C Max = 60°C)	T_a = -25 to 50°C (T_C Max = 65°C)	T_a = -25 to 50°C (T_C Max = 75°C)	T_a = -25 to 50°C (T_C Max = 70°C)





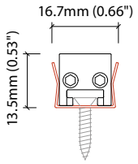
LED Options[1]

	n-line (NEW)	s-line	e-line	RGB
CRI (R_a)	95+	90+	90+	n/a
CRI (R_9)	78+	45+	45+	n/a
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/ 2500K/2700K/3000K/ Single colours: Red/Green/ Blue/Orange/Amber	White: 2100K/2300K/ 2500K/2700K/3000K/	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

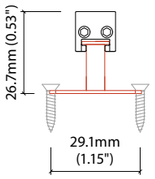
[1] Please refer to code table for colour of complete luminaire

Accessories

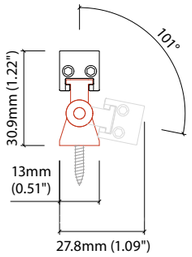
Mounting Options



KKCP-02 (1no.)
KKCP-52 (500no.)
Clip (Allow 3 per metre)
S/Steel finish



KKBK-06
Fixed bracket
(Allow 3 per metre)
S/Steel finish
Pre-assembled in factory for double tail option



KKBK-05
Adjustable bracket
(Allow 2 per metre)
S/Steel finish
Pre-assembled in factory for double tail option

Connectors

CN67-2P-0300, CN67-2P-1000 & CN67-2P-3000
2 PIN male + female 300mm, 1000mm & 300mm pair

CN67-4P-0300, CN67-4P-1000 & CN67-4P-3000
4 PIN RGB male + female 300mm, 1000mm & 300mm pair

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

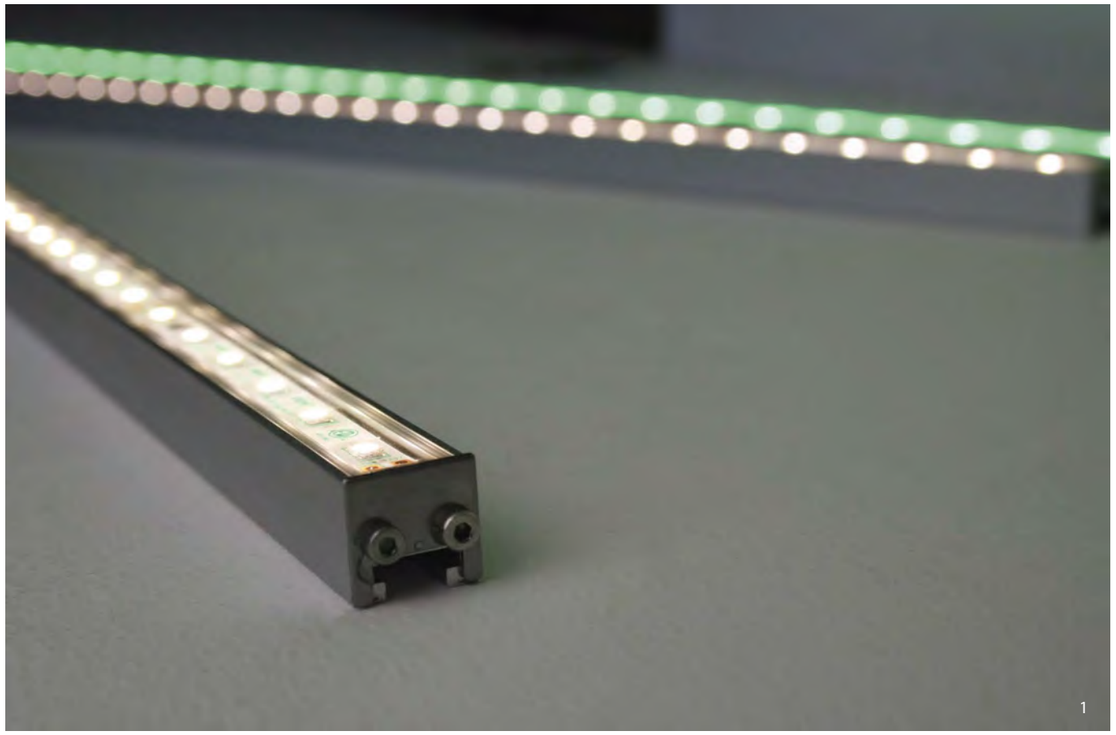
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

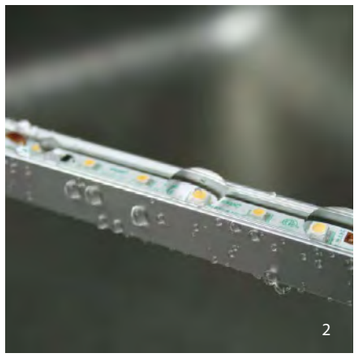
KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1. KKSL with range of LED options
2. Silicone potting for IP67 protection
3. Stainless steel adjustable angle bracket



Auckland War Memorial Museum
Architect: Vincent Associates
Photography: Simon Devitt
KKDC New Zealand

KKSL **Code Table**

Housing/Finish		LED Type			Colour (CCT)		
KKSL, Silver anodised	SLSA	n–	504[2]	n504	2300K[1] (2100K PCB)	23K	
			508[2]	n508	2500K[1] (2300K PCB)	25K	
		s–	352	s352	3000K[1] (2500K PCB)	30K	
			504	s504	3400K[1] (2700K PCB)	34K	
			508	s508	4000K[1] (3000K PCB)	40K	
		e–	352	e352	RED	RED	s– s352, s504 only
			504	e504	GREEN	GRN	
			508	e508	BLUE	BLU	
			RGB	d501	ORANGE	ORN	
					AMBER	AMB	
					RGB	RGB	

Length Availability			IP Rating		Connection Type		Voltage	
KKSL 352	M	99.3-2016mm 83.3mm increments	IP67	67	300mm Single tail	c1	24V DC	g
KKSL 504	M	116-2016mm 100mm increments			300mm Double tail	c2		
KKSL 508	M	87.4-2010mm 71.4mm increments			300mm Single IP67 connector	c7		
KKSL RGB	M	99.3-2016mm 83.3mm increments			300mm Double IP67 connector	c8		

[1] Actual colour temperature after colour shift caused by silicone potting
[2] n-line: 3400K (2700K PCB)/4000K (3000K PCB)

Code Example:

SLSA	-	s504	-	40K	-	M 516	-	67	-	c7	-	8	-	g
KKSL, Silver anodised		s-line 504		4000K[1] (3000K PCB)		516mm		IP67		300mm Single IP67 connector		Clip		24V DC

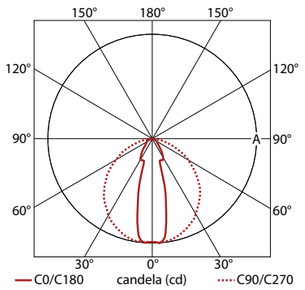
POKI

- Compact IP67 rated housing with fully homogenous diffusion suitable for incorporation into exterior building features.
- Mounted via snap-fit aluminium cable raceway rail, for secure & discreet wiring.
- Wide range of LED types & Colour temperatures available.

LEDmix

RGB

Beam angle	Clear cover: 30° Diffused cover: 70°
IP Rating	IP54/67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Diffused/Clear
Mounting	Surface mounting via cable raceway
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



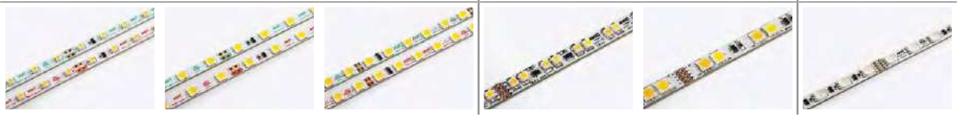
POKI s352/e352	A	68
POKI s504/e504	A	156
POKI s508/e508	A	218
POKI d207	A	132
POKI d208	A	221

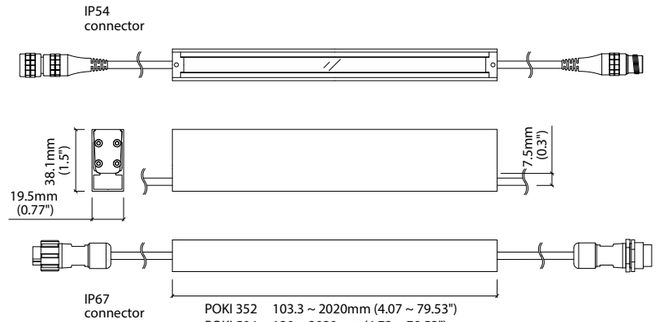
LED Options

	s-line	e-line	LEDmix	RGB
CRI (R_a)	90+	90+	90+	n/a
CRI (R_9)	45+	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

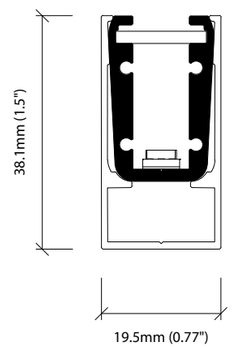
Product Data

	White			LEDmix Dynamic White		RGB
	POKI s352 POKI e352	**POKI s504 POKI e504**	**POKI s508 POKI e508**	**POKI d207**	**POKI d208**	**POKI dRGB**
Clear Cover, 3000K	137 lm/m 24.8 lm/W	406 lm/m 33.2 lm/W	569 lm/m 32.9 lm/W	261 lm/m 23.8 lm/W	561 lm/m 36.1 lm/W	Red: 50 lm/m Green: 107 lm/m Blue: 18 lm/m White: 155 lm/m
Diffused Cover, 3000K	92 lm/m 16.7 lm/W	273 lm/m 22.3 lm/W	382 lm/m 22.1 lm/W	175 lm/m 16 lm/W	376 lm/m 24.2 lm/W	Red: 33 lm/m Green: 72 lm/m Blue: 12 lm/m White: 104 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H38.1/W19.5/ L103.3-2020mm	H38.1/W19.5/ L120-2020mm	H38.1/W19.5/ L91.4-2020mm	H38.1/W19.5/ L103.3-2020mm	H38.1/W19.5/ L186.7-2020mm	H38.1/W19.5/ L103.3-2020mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Operation Temp	T_a = -25 to 60°C (T_C Max = 67.3°C)	T_a = -25 to 45°C (T_C Max = 64.2°C)	T_a = -25 to 40°C (T_C Max = 64.5°C)	T_a = -25 to 60°C (T_C Max = 71.5°C)	T_a = -25 to 50°C (T_C Max = 64.5°C)	T_a = -25 to 50°C (T_C Max = 68.6°C)





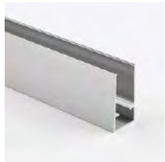
POKI 352	103.3 ~ 2020mm (4.07 ~ 79.53")
POKI 504	120 ~ 2020mm (4.72 ~ 79.53")
POKI 508	91.4 ~ 2020mm (3.60 ~ 79.53")
POKI 207	103.3 ~ 2020mm (4.07 ~ 79.53")
POKI 208	186.7 ~ 2020mm (7.35 ~ 79.53")
POKI RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

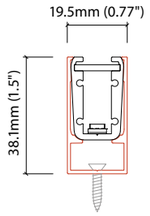


1:1

Accessories

Mounting Options





KKCR-02*
Channel
Anodised aluminium finish
* Specify length to match POKI

Connectors

CN54-2P-0300
2 PIN male+female 300mm pair

CN54-4P-0300
4 PIN RGB male+female 300mm pair

CN67-2P-0300, CN67-2P-1000 & CN67-2P-3000
2 PIN male + female 300mm, 1000mm & 300mm pair

CN67-4P-0300, CN67-4P-1000 & CN67-4P-3000
4 PIN RGB male + female 300mm, 1000mm & 300mm pair

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

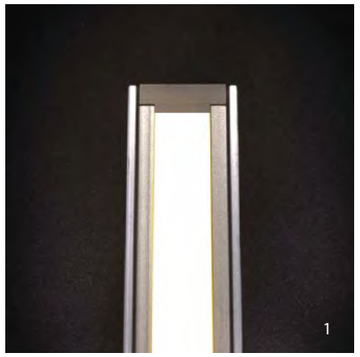
KKDM-05
visDIM 1-10V sub-controller

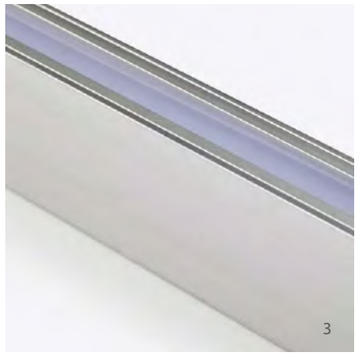
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details





1. POKI illuminated inside mounting rail
2. Snap-fit mounting rail and removal screw
3. POKI housing detail
4. POKI with dynamic LEDmix LED

Vodafone Christchurch
Architect: Jasmax
Photography: Intense Photography
KKDC New Zealand

POKI **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating		Connection Type		Voltage	
POKI, Silver anodised	PKSA	Clear cover	B	s-	352	s352	2100K	21K		POKI 352	M	103.3-2020mm 83.3mm increments	IP54	54	300mm Single tail	c1	24V DC	g
		Diffused cover	C		007	s007	2300K	23K		POKI 007	M	61.7-2020mm 41.7mm increments	IP67[2]	67	300mm Double tail	c2		
					504	s504	2500K	25K		POKI 504	M	120-2020mm 100mm increments			300mm Single IP54 connector[3]	c5		
					508	s508	2700K	27K		POKI 508	M	91.4-2020mm 71.4mm increments			300mm Double IP54 connector[3]	c6		
				e-	352	e352	3000K	30K		POKI 207	M	103.3-2020mm 83.3mm increments			300mm Single IP67 connector[3]	c7		
					007	e007	3200K	32K		POKI 208	M	186.7-2020mm 166.7mm increments			300mm Double IP67 connector[3]	c8		
					504	e504	3500K	35K		POKI RGB	M	103.3-2020mm 83.3mm increments						
					508	e508	3800K	38K										
					207[1]	d207	5000K	50K										
					208[1]	d208	RED	RED	s- s352, s007, s504 only									
					RGB	d501	GREEN	GRN										
							BLUE	BLU										
							ORANGE	ORN										
							AMBER	AMB										
							RGB	RGB										

[1] LEDmix requires two colour temperature choices
[2] Due to the clear, flush potted polyurethane top layer on IP67 POKI a colour shift of +/-20K should be expected
[3] IP rated connectors do not fit inside the cable raceway

Code Example:

PKSA	-	C	-	s504	-	35K	-	M 520	-	67	-	c5	-	g
POKI, Silver anodised		Diffused cover		s-line 504		3500K		520mm		IP67		300mm Single IP54 connector		24V DC

[1] LEDmix Code Example:

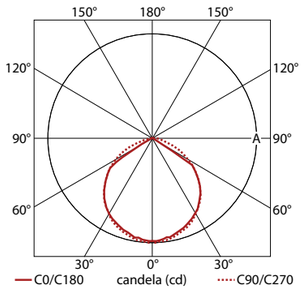
PKSA	-	C	-	d207	-	21	-	35	-	M 520	-	67	-	c5	-	g
POKI, Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		520mm		IP67		300mm Single IP54 connector		24V DC

MoMo

- Robust exterior linear housing with wide range of LED strips and new KKLN-01 narrow beam lens accessory option.
- Fully homogenous diffusion on cover.
- Internal reflectors for improved performance.
- Various fixed & adjustable mounting options available.

24V DC IP54/67

IP Rating	IP54/67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Diffused/Clear/KKLN-01 Lens
Mounting	Surface mounting via clips or brackets
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



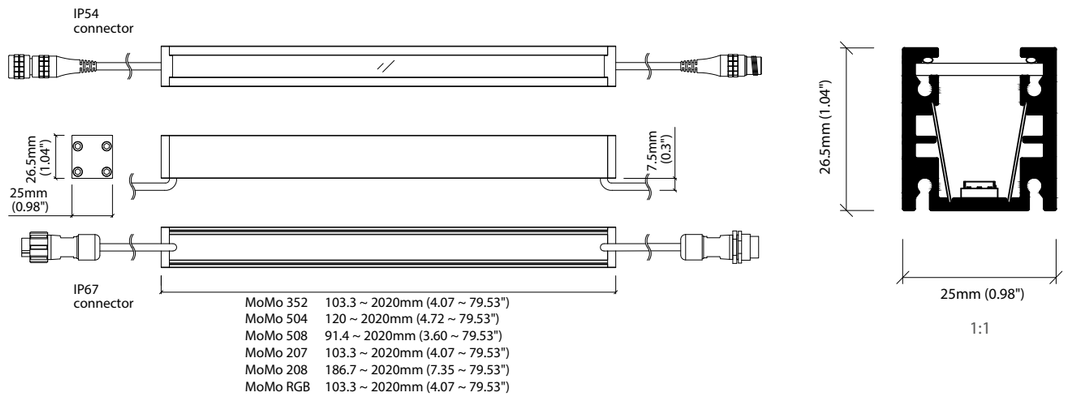
MoMo s352/e352	A	68
MoMo n504/s504/e504	A	156
MoMo n508/s508/e508	A	218
MoMo d207	A	132
MoMo d208	A	221

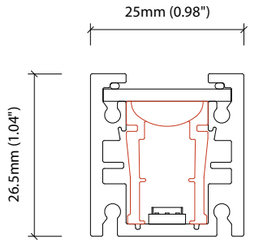
Product Data

	White			LEDmix Dynamic White		RGB
	MoMo s352 MoMo e352	**MoMo n504 MoMo s504 MoMo e504**	**MoMo n508 MoMo s508 MoMo e508**	**MoMo d207**	**MoMo d208**	**MoMo dRGB**
Clear Cover, 3000K	326 lm/m 59.1 lm/W	≤ 968 lm/m ≤ 79.1 lm/W	≤ 1353 lm/m ≤ 78.3 lm/W	621 lm/m 56.7 lm/W	1336 lm/m 85.9 lm/W	Red: 124 lm/m Green: 252 lm/m Blue: 41 lm/m White: 398 lm/m
Diffused Cover, 3000K	179 lm/m 32.5 lm/W	≤ 532 lm/m ≤ 43.5 lm/W	≤ 745 lm/m ≤ 43.1 lm/W	342 lm/m 31.2 lm/W	736 lm/m 47.3 lm/W	Red: 65 lm/m Green: 140 lm/m Blue: 23 lm/m White: 203 lm/m
KKLN-01 Lens Clear Cover, 3000K	160 lm/m 28.9 lm/W	≤ 474 lm/m ≤ 38.7 lm/W	≤ 662 lm/m ≤ 38.3 lm/W	303 lm/m 27.7 lm/W	653 lm/m 42 lm/W	Red: 58 lm/m Green: 125 lm/m Blue: 21 lm/m White: 180 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H26.5/W25/ L103.3-2020mm	H26.5/W25/ L120-2020mm	H26.5/W25/ L91.4-2020mm	H26.5/W25/ L103.3-2020mm	H26.5/W25/ L186.7-2020mm	H26.5/W25/ L103.3-2020mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84 LED/m	13.9mm – 72 LED/m
Beam angle	50° (Clear cover) 95° (Diffused cover) 14° (KKLN-01 Lens)	50° (Clear cover) 95° (Diffused cover) 14° (KKLN-01 Lens)	45° (Clear cover) 90° (Diffused cover) 14° (KKLN-01 Lens)	105° (Clear cover) 90° (Diffused cover) 14° (KKLN-01 Lens)	100° (Clear cover) 90° (Diffused cover) 14° (KKLN-01 Lens)	45° (Clear cover) 95° (Diffused cover) 14° (KKLN-01 Lens)
Operation Temp	T_a = -25 to 60°C (T_C Max = 65°C)	T_a = -25 to 60°C (T_C Max = 70°C)	T_a = -25 to 45°C (T_C Max = 65°C)	T_a = -25 to 60°C (T_C Max = 66.7°C)	T_a = -25 to 60°C (T_C Max = 74.2°C)	T_a = -25 to 60°C (T_C Max = 70°C)

LED Options

	n-line (NEW)	s-line	e-line	LEDmix	RGB
CRI (R_a)	95+	90+	90+	90+	n/a
CRI (R_g)	78+	45+	45+	45+	n/a
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm



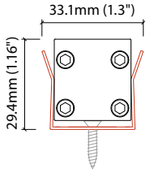


1:1

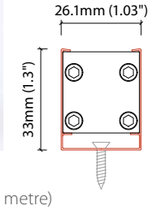
KKLN-01 with MoMo
14° beam angle lens accessory
MoMo factory fitted
Co-extruded PMMA

Other Accessories

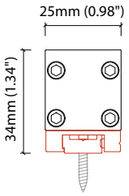
Mounting Options



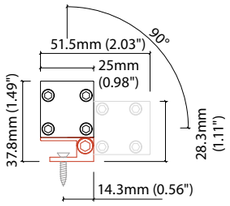
KKCP-03 (1no.)
KKCP-53 (500no.)
Clip (Allow 3 per metre)
S/Steel finish



KKCP-09
Lock clip (Allow 2 per metre)
S/Steel finish



KKBK-07
Fixing plate
(Allow 2 per metre)
Anodised aluminium finish
Pre-assembled in factory



KKBK-21
Adjustable bracket
(Allow 2 per metre)
Anodised aluminium finish
Pre-assembled in factory

Connectors

CN54-2P-0300
2 PIN male+female 300mm pair

CN54-4P-0300
4 PIN RGB male+female 300mm pair

CN67-2P-0300, CN67-2P-1000 & CN67-2P-3000
2 PIN male + female 300mm, 1000mm & 300mm pair

CN67-4P-0300, CN67-4P-1000 & CN67-4P-3000
4 PIN RGB male + female 300mm, 1000mm & 300mm pair

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

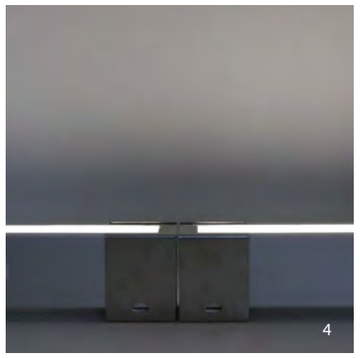
KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details


1


2


3


4

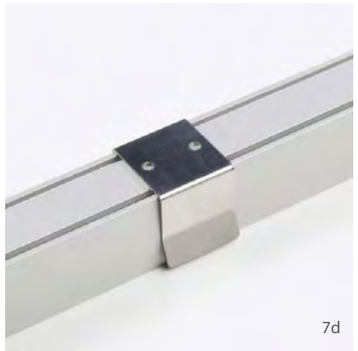

5


6


7a


7b


7c


7d


8

1. Internal reflector for increased lumen efficiency
2. MoMo cable exit detail
3. Homogenous lighting with all LED strip options
4. End-to-end for continuous indirect lighting
5. MoMo with fully homogenous diffuser
6. Adjustable angle bracket
7. Surface mounting options
8. Robust machine aluminium screwed end cap for superior ingress protection

Hedonism Wines, London
Lighting Design: Speirs and Major
KKDC UK

MoMo **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating		Connection Type		Voltage	
MoMo Silver anodised	MMSA	Clear cover	B	n–	504[3]	n504	2100K	21K		MoMo 352	M	103.3-2020mm 83.3mm increments	IP54	54	300mm Single tail	c1	24V DC	g
		Diffused cover	C		508[3]	n508	2300K	23K		MoMo 504	M	120-2020mm 100mm increments	IP67[2]	67	300mm Double tail	c2		
		KKLN-01	P	s–	352	s352	2500K	25K		MoMo 508	M	91.4-2020mm 71.4mm increments			300mm Single IP54 connector[3]	c5		
		Clear + 508 Louvre (508 only)	N		504	s504	2700K	27K		MoMo 207	M	103.3-2020mm 83.3mm increments			300mm Double IP54 connector[3]	c6		
					508	s508	3000K	30K		MoMo 208	M	186.7-2020mm 166.7mm increments			300mm Single IP67 connector[3]	c7		
				e–	352	e352	3200K	32K		MoMo RGB	M	103.3-2020mm 83.3mm increments			300mm Double IP67 connector[3]	c8		
					504	e504	3500K	35K										
					508	e508	3800K	38K										
					207[1]	d207	5000K	50K										
					208[1]	d208	RED	RED	s– s352, s007, s504 only									
					RGB	d501	GREEN	GRN										
							BLUE	BLU										
							ORANGE	ORN										
							AMBER	AMB										
							RGB	RGB										

[1] LEDmix requires two colour temperature choices
[2] Due to the clear, flush potted polyurethane top layer on IP67 MoMo a colour shift of +/-20K should be expected
[3] n-line: 2700K/3000K

Code Example:

MMSA	-	C	-	s504	-	35K	-	M	520	-	67	-	c5	-	g
MoMo Silver anodised		Diffused cover		s-line 504		3500K		520mm			IP67		300mm Single IP54 connector		24V DC

[1] LEDmix Code Example:

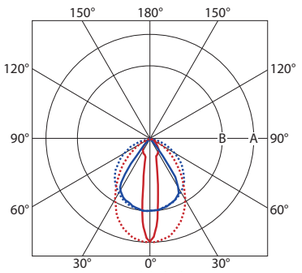
MMSA	-	C	-	d207	-	21	-	35	-	M	520	-	67	-	c5	-	g
MoMo Silver anodised		Diffused cover		LEDmix 207		2100K		3500K			520mm		IP67		300mm Single IP54 connector		24V DC

MoMo-L

- Expanding the MoMo family, MoMo-L has an increased housing height to accommodate an internal anti-glare, dark light micro-louvre.
- 45° angle micro-louvre fins for wall grazing and improved visual comfort.
- Wide range of LED strips available.
- Fully homogenous diffusion on cover.
- Various fixed & adjustable mounting options available.

24V DC IP54/67 CE

Beam angle	70° Clear cover 18° KKLN-01 lens 85° Diffused cover
IP Rating	IP54/67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Clear/Diffused/KKLN-01 Lens/ Micro Louvre + Clear cover
Mounting	Surface mounting via clips or brackets
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



C0/C180 C90/C270 Clear cover
C0/C180 C90/C270 KKLN-01 + Clear cover

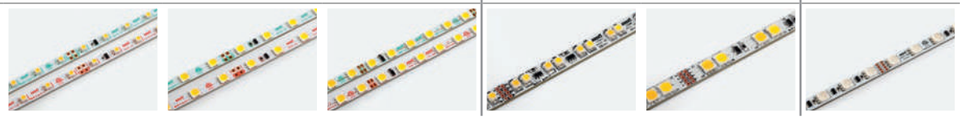
MoMo-L s352/e352 - Clear cover	B	70
MoMo-L s352/e352 - KKLN-01	A	96
MoMo-L s504/e504 - Clear cover	B	169
MoMo-L s504/e504 - KKLN-01	A	243
MoMo-L s508/e508 - Clear cover	B	282
MoMo-L s508/e508 - KKLN-01	A	322
MoMo-L d207 - Clear cover	B	139
MoMo-L d207 - KKLN-01	A	182
MoMo-L d208 - Clear cover	B	145
MoMo-L d208 - KKLN-01	A	330

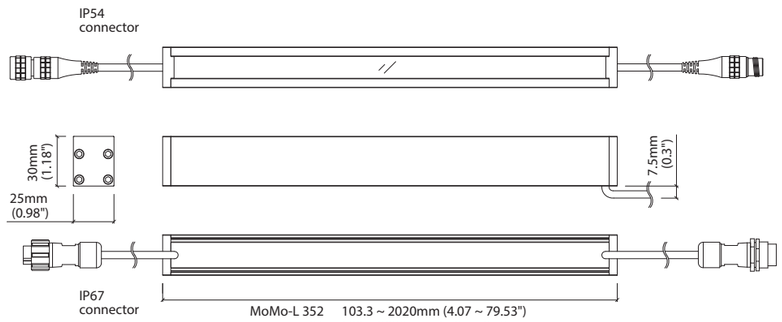
LED Options

	s-line	e-line	LEDmix	RGB
CRI (R_a)	90+	90+	90+	n/a
CRI (R_9)	45+	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	2.5 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/ 2500K/2700K/3000K/ 3200K/3500K/3800K/ 5000K Single colours: Red/Green/ Blue/Orange/Amber	White: 2100K/2300K/ 2500K/2700K/3000K/ 3200K/3500K/3800K/ 5000K	White: 2100K/2300K/ 2500K/2700K/3000K/ 3200K/3500K/3800K/ 5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

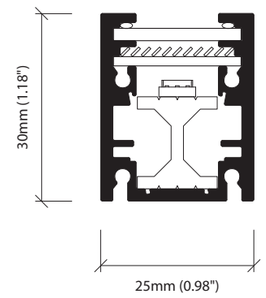
Product Data

	White			LEDmix Dynamic White		RGB
	MoMo-L s352 MoMo-L e352	**MoMo-L s504 MoMo-L e504**	**MoMo-L s508 MoMo-L e508**	**MoMo-L d207**	**MoMo-L d208**	**MoMo-L dRGB**
Clear Cover, 3000K	248 lm/m 44.9 lm/W	734 lm/m 60 lm/W	1028 lm/m 59.5 lm/W	472 lm/m 43.1 lm/W	1015 lm/m 65.3 lm/W	Red: 95 lm/m Green: 206 lm/m Blue: 34 lm/m White: 318 lm/m
Diffused Cover, 3000K	148 lm/m 26.9 lm/W	428 lm/m 35 lm/W	617 lm/m 35.7 lm/W	283 lm/m 25.8 lm/W	608 lm/m 39.1 lm/W	Red: 54 lm/m Green: 118 lm/m Blue: 19 lm/m White: 180 lm/m
KKLN-01 Lens + Clear Cover, 3000K	134 lm/m 24.3 lm/W	398 lm/m 32.5 lm/W	556 lm/m 32.2 lm/W	255 lm/m 23.3 lm/W	549 lm/m 35.3 lm/W	Red: 49 lm/m Green: 105 lm/m Blue: 17 lm/m White: 152 lm/m
Micro Louvre + Clear Cover, 3000K	95 lm/m 17.3 lm/W	284 lm/m 23.2 lm/W	397 lm/m 23 lm/W	182 lm/m 16.6 lm/W	392 lm/m 25.2 lm/W	Red: 35 lm/m Green: 75 lm/m Blue: 12 lm/m White: 108 lm/m
KKLN-01 Lens + Micro Louvre + Clear Cover, 3000K	43 lm/m 7.7 lm/W	126 lm/m 10.3 lm/W	176 lm/m 10.2 lm/W	81 lm/m 7.4 lm/W	174 lm/m 11.2 lm/W	Red: 15 lm/m Green: 33 lm/m Blue: 5 lm/m White: 48 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	10.95 W/m	15.55 W/m	15.6 W/m
Dimension	H30/W25/ L103.3-2020mm	H30/W25/ L120-2020mm	H30/W25/ L91.4-2020mm	H30/W25/ L103.3-2020mm	H30/W25/ L186.7-2020mm	H30/W25/ L103.3-2020mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm	166.7mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm (between same coloured chips) – 144 LED/m	23.8mm (between same coloured chips) – 84LED/m	13.9mm – 72 LED/m
Operation Temp	T_a = -25 to 60°C (T_C Max = 65°C)	T_a = -25 to 60°C (T_C Max = 70°C)	T_a = -25 to 45°C (T_C Max = 65°C)	T_a = -25 to 60°C (T_C Max = 66.7°C)	T_a = -25 to 60°C (T_C Max = 74.2°C)	T_a = -25 to 60°C (T_C Max = 70°C)





MoMo-L 352	103.3 ~ 2020mm (4.07 ~ 79.53")
MoMo-L 504	120 ~ 2020mm (4.72 ~ 79.53")
MoMo-L 508	91.4 ~ 2020mm (3.60 ~ 79.53")
MoMo-L 207	103.3 ~ 2020mm (4.07 ~ 79.53")
MoMo-L 208	186.7 ~ 2020mm (7.35 ~ 79.53")
MoMo-L RGB	103.3 ~ 2020mm (4.07 ~ 79.53")



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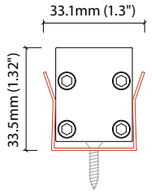
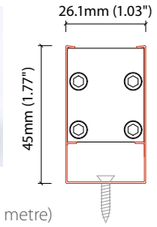
Accessories

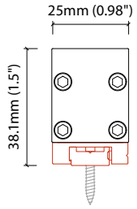
Mounting Options



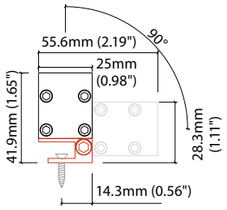
KKCP-03 (1no.)
KKCP-53 (500no.)
Clip (Allow 3 per metre)
S/Steel finish



KKCP-17
Lock clip (Allow 2 per metre)
S/Steel finish



KKBK-07
Mounting plate
(Allow 2 per metre)
Anodised aluminium finish
Pre-assembled in factory for
double tail option



KKBK-21
Adjustable bracket
(Allow 2 per metre)
Anodised aluminium finish
Pre-assembled in factory
for double tail option

Connectors

CN54-2P-0300
2 PIN male+female 300mm pair

CN54-4P-0300
4 PIN RGB male+female 300mm pair

CN67-2P-0300, CN67-2P-1000 & CN67-2P-3000
2 PIN male + female 300mm,
1000mm & 300mm pair

CN67-4P-0300, CN67-4P-1000 & CN67-4P-3000
4 PIN RGB male + female 300mm,
1000mm & 300mm pair

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel,
screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. MoMo-L with integral 45° micro louvre
2. 'Dark light' micro louvre for glare reduction
3. NEW 'Cluster BAR' LED strip (see page 265 for details of MoMo-L Cluster)
4. 45° micro louvre angle for wall grazing

MoMo-L **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating		Connection Type		Voltage	
MoMo-L Silver anodised	MOSA	Clear cover	B	s	352	s352	2100K	21K		MoMo-L 352	M	103.3-2020mm 83.3mm increments	IP54	54	300mm Single tail	c1	24V DC	g
		Diffused cover	C		504	s504	2300K	23K		MoMo-L 007	M	61.7-2020mm 41.7mm increments	IP67[2]	67	300mm Double tail	c2		
		KKLN-01	P		508	s508	2500K	25K		MoMo-L 504	M	120-2020mm 100mm increments			300mm Single IP54 connector	c5		
		KKLN-01 + Micro Louvre	U	e	352	e352	2700K	27K		MoMo-L 508	M	91.4-2020mm 71.4mm increments			300mm Double IP54 connector	c6		
		Micro Louvre	K		504	e504	3000K	30K		MoMo-L 207	M	103.3-2020mm 83.3mm increments			300mm Single IP67 connector	c7		
		Clear + 508 Louvre (508 only)	N		508	e508	3200K	32K		MoMo-L 208	M	186.7-2020mm 166.7mm increments			300mm Double IP67 connector	c8		
					207[1]	d207	3500K	35K		MoMo-L RGB	M	103.3-2020mm 83.3mm increments						
					208[1]	d208	3800K	38K										
					RGB	d501	5000K	50K										
							RED	RED	s352, s007, s504 only									
							GREEN	GRN										
							BLUE	BLU										
							ORANGE	ORN										
							AMBER	AMB										
							RGB	RGB										

[1] LEDmix requires two colour temperature choices

[2] Due to the clear, flush potted polyurethane top layer on IP67 MoMo-L a colour shift of +/-20K should be expected

Code Example:

MOSA	-	U	-	s504	-	35K	-	M 520	-	67	-	c5	-	g
MoMo-L Silver anodised		KKLN-01 + Micro Louvre		s-line 504		3500K		520mm		IP67		300mm Single IP54 connector		24V DC

[1] LEDmix Code Example:

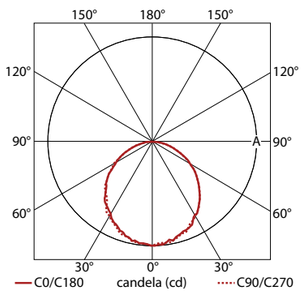
MOSA	-	C	-	d207	-	21	-	35	-	M 520	-	67	-	c5	-	g
MoMo-L Silver anodised		Diffused cover		LEDmix 207		2100K		3500K		520mm		IP67		300mm Single IP54 connector		24V DC

MoMo-F

- Recessed IP67 linear marker light designed for installation into interior floors.
- Fully homogenous diffusion on cover across full range of LED strips.
- Recessed cable raceway channel.

24V DC IP67

Beam angle	110°
IP Rating	IP67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Diffused
Mounting	Ground recessed
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)
IK Rating	IEC 62262:2010/IK08/IK10

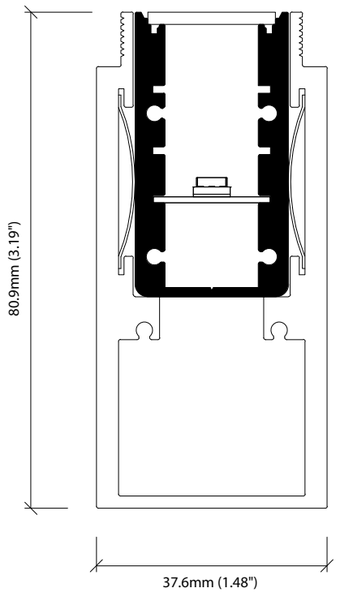


MoMo-F s352/e352	A	23
MoMo-F s504/e504	A	58
MoMo-F s508/e508	A	77

Walk Over

IEC 62262:2010

- IK08 and IK10 tested



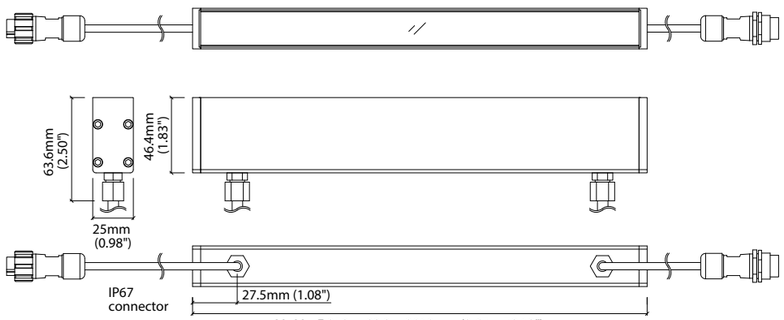
1:1

LED Options

	s-line	e-line	RGB
CRI (R_a)	90+	90+	n/a
CRI (R_9)	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Product Data

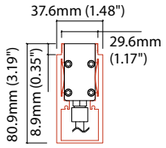
	White			RGB
	MoMo-F s352 MoMo-F e352	**MoMo-F s504 MoMo-F e504**	**MoMo-F s508 MoMo-F e508**	**MoMo-F dRGB**
Luminous Flux, 3000K	112 lm/m 20.3 lm/W	333 lm/m 27.2 lm/W	465 lm/m 26.9 lm/W	Red: 41 lm/m Green: 88 lm/m Blue: 14 lm/m White: 127 lm/m
Wattage	5.52 W/m	12.24 W/m	17.28 W/m	15.6 W/m
Dimension	H46.4/W25/ L93.3-2010mm	H46.4/W25/ L110-2010mm	H46.4/W25/ L81.4-2010mm	H46.4/W25/ L93.3-2010mm
PCB Increment	83.3mm	100mm	71.4mm	83.3mm
LED Pitch	13.9mm – 72 LED/m	16.7mm – 60 LED/m	11.9mm – 84 LED/m	13.9mm – 72 LED/m
Operation Temp	T_a = -25 to 60°C (T_c Max = 65°C)	T_a = -25 to 60°C (T_c Max = 70°C)	T_a = -25 to 45°C (T_c Max = 65°C)	T_a = -20 to 60°C (T_c Max = 70°C)



MoMo-F 352	93.3 ~ 2010mm (3.67 ~ 79.13")
MoMo-F 504	110 ~ 2010mm (4.33 ~ 79.13")
MoMo-F 508	81.4 ~ 2010mm (3.20 ~ 79.13")
MoMo-F RGB	93.3 ~ 2010mm (3.67 ~ 79.13")

Accessories

Mounting Options



KKFR-03*
Ground box
Anodised aluminium finish
* Specify length to match MoMo-F

Connectors

CN67-2P-0300, CN67-2P-1000 & CN67-2P-3000
2 PIN male + female 300mm, 1000mm & 300mm pair

CN67-4P-0300, CN67-4P-1000 & CN67-4P-3000
4 PIN RGB male + female 300mm, 1000mm & 300mm pair

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

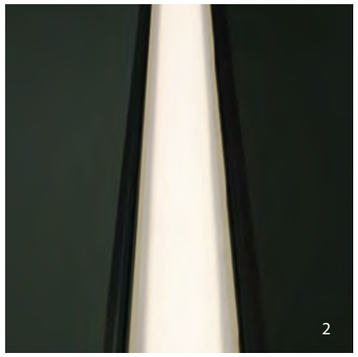
KKDM-05
visDIM 1-10V sub-controller

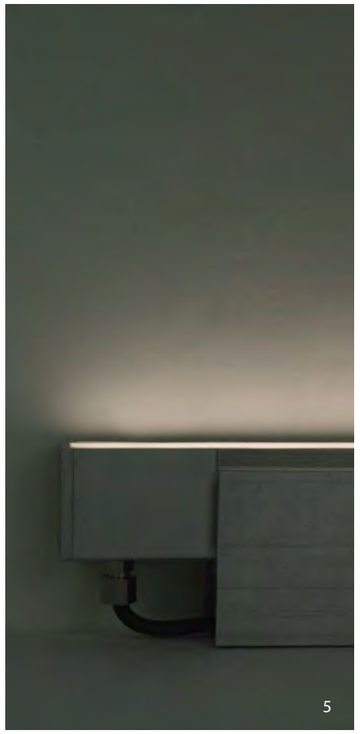
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

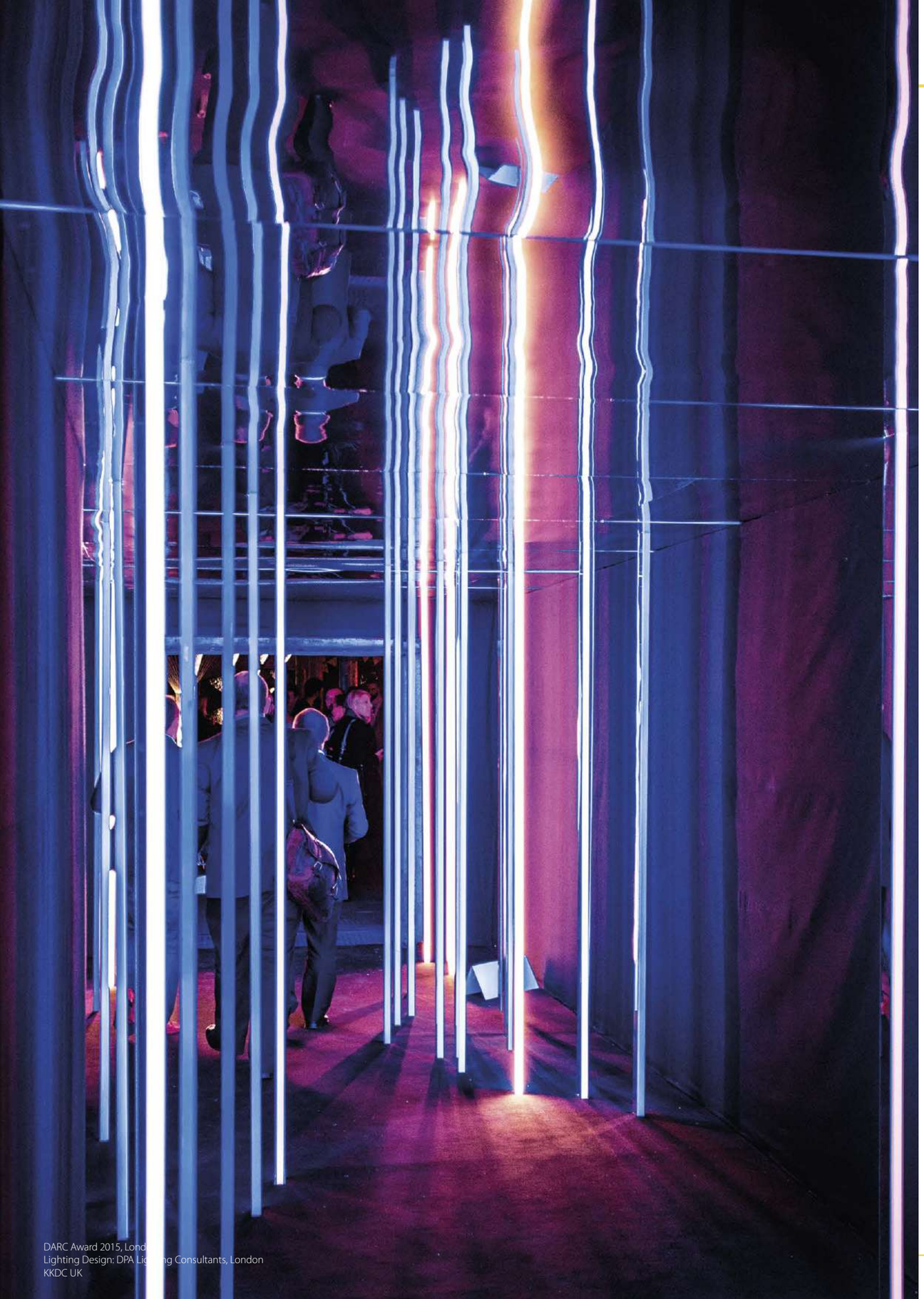
KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details





1. Recessed floor installation
2. Homogenous lighting with all LED strip options
3. MoMo-F with ground box
4. Ground box cover plate
5. Ground box for cable raceway
6. Tommy Hilfiger Store, Paris



DARC Award 2015, Londo
Lighting Design: DPA Lig ng Consultants, London
KKDC UK

MoMo-F **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability			IP Rating		Connection Type		Voltage	
MoMo-F Silver anodised	MFSA	Diffused cover	C	s–	352	s352	2100K	21K		MoMo-F 352	M	93.3-2010mm 83.3mm increments	IP67	67	300mm Single tail	c1	24V DC	g
					504	s504	2300K	23K		MoMo-F 007	M	93.3-2010mm 41.7mm increments			300mm Double tail	c2		
					508	s508	2500K	25K		MoMo-F 504	M	110-2010mm 100mm increments			300mm Single IP67 connector	c7		
				e–	352	e352	2700K	27K		MoMo-F 508	M	81.4mm-2010mm 71.4mm increments			300mm Double IP67 connector	c8		
					504	e504	3000K	30K		MoMo-F RGB	M	93.3mm-2010mm 83.3mm incrementsxf						
					508	e508	3200K	32K										
					RGB	d501	3500K	35K										
							3800K	38K										
							5000K	50K										
							RED	RED	s– s352, s007, s504 only									
							GREEN	GRN										
							BLUE	BLU										
							ORANGE	ORN										
							AMBER	AMB										
							RGB	RGB										

Code Example:

MFSA	-	C	-	s504	-	35K	-	M	520	-	67	-	67c7	-	g
MoMo-F Silver anodised		Diffused cover		s-line 504		3500K		520mm			IP67		300mm Single IP67 connector		24V DC

MoMo-BLOC

- MoMo-BLOC is a heavy duty, linear in-ground IP67 marker light suitable for exterior high-traffic areas with fully homogenous diffusion.
- Dual IP67 design for superior, fail-safe ingress protection.
- Scratch resistant toughened glass and stainless steel construction.
- Full drive-over tested to EN60598-2-13:2006+A1:2012 and 3 metric ton static load.
- Various Stainless Steel ground box options to suit installation and full range of KKDC LED strip options.

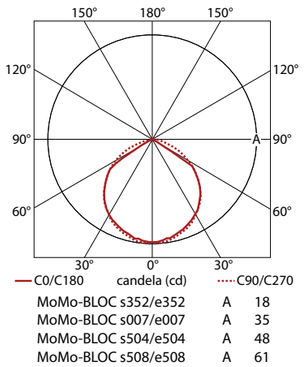
24V DC IP67 RGB

Beam angle	Frosted: 78°
IP Rating	IP67
Lifetime	50,000 hours @ 25°C
Finish	Silver/Hard anodised (stainless steel ground box)
Cover/Lens	Frosted glass
Mounting	Recessed ground box
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)
IK Rating IK08	IEC 62262:2010/IK08
Drive over	EN 60598-2-13:2006+A1:2012 (Static load, Torque and Shear load testing)

Product Data

White

	MoMo-BLOC s352 MoMo-BLOC e352	MoMo-BLOC s007 MoMo-BLOC e007	MoMo-BLOC s504 MoMo-BLOC e504	MoMo-BLOC s508 MoMo-BLOC e508	MoMo-BLOC dRGB
Luminous Flux Frosted glass	76 lm/m 13.7 lm/W	146 lm/m 13.5 lm/W	224 lm/m 18.3 lm/W	313 lm/m 18.1 lm/W	Red: 30 lm/m Green: 88lm/m Blue: 14 lm/m White: 127 lm/m
Wattage	5.52 W/m	10.83 W/m	12.24 W/m	17.28 W/m	15.6 W/m
Dimension	H50.2/W24.6/ L524-1024mm	H50.2/W24.6/ L524-1024mm	H50.2/W24.6/ L524-1024mm	H50.2/W24.6/ L524-1024mm	H50.15/W24.6/ L543-1024mm
Operation Temp	T_a = -25 to 60°C (T_C Max = 63.8°C)	T_a = -25 to 58°C (T_C Max = 64.4°C)	T_a = -25 to 60°C (T_C Max = 68.5°C)	T_a = -25 to 49°C (T_C Max = 61.2°C)	T_a = -25 to 55°C (T_C Max = 67°C)



Drive Over

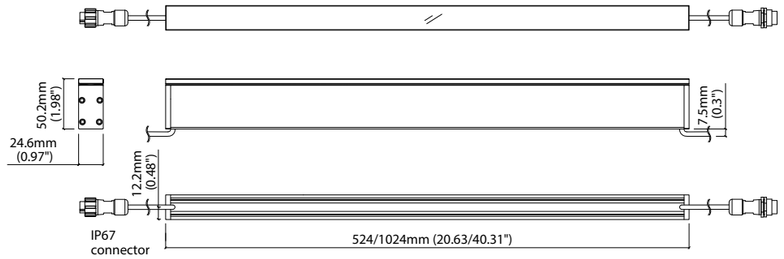
EN 60598-2-13:2006+A1:2012

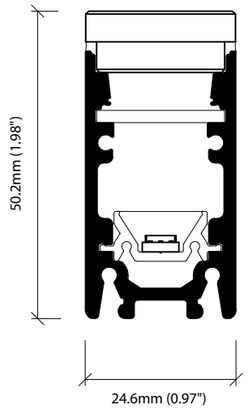
- 3 ton Static
- 1 ton Torque and Shear

Walk Over

IEC 62262:2010

- IK08 tested





1:1

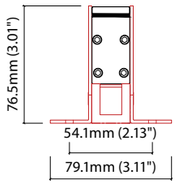
LED Options[1]

	s-line	e-line	RGB
CRI (R_a)	90+	90+	n/a
CRI (R_g)	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/ 2500K/2700K/3000K/ Single colours: Red/Green/ Blue/Orange/Amber	White: 2100K/2300K/ 2500K/2700K/3000K/	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

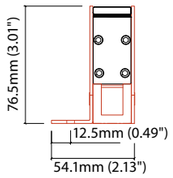
[1] Please refer to code table for colour of complete luminaire

Accessories

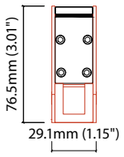
Mounting Options

KKBG-01*
Ground box 01
Stainless steel finish
* Specify length to match MoMo-BLOC

KKBG-02*
Ground box 02
Stainless steel finish
* specify length to match MoMo-BLOC

KKBG-03*
Ground box 03
Stainless steel finish
* specify length to match MoMo-BLOC

Connectors

CN67-2P-0300, CN67-2P-1000 & CN67-2P-3000
2 PIN male + female 300mm, 1000mm & 300mm pair

CN67-4P-0300, CN67-4P-1000 & CN67-4P-3000
4 PIN RGB male + female 300mm, 1000mm & 300mm pair

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

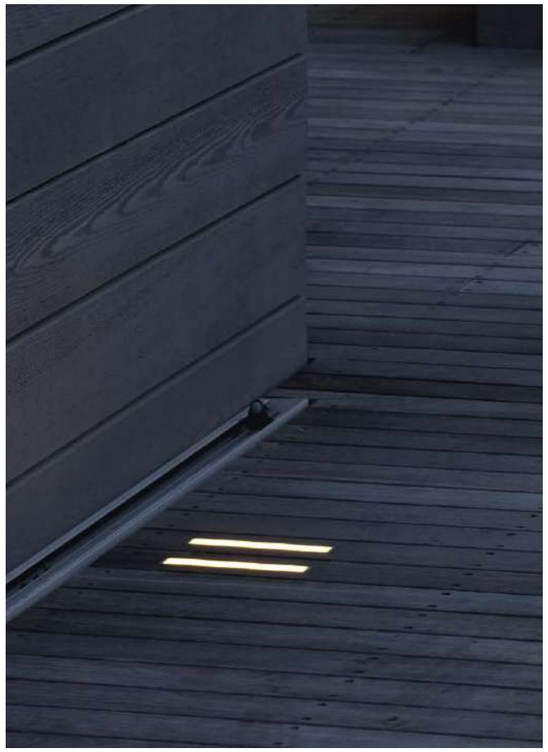
KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

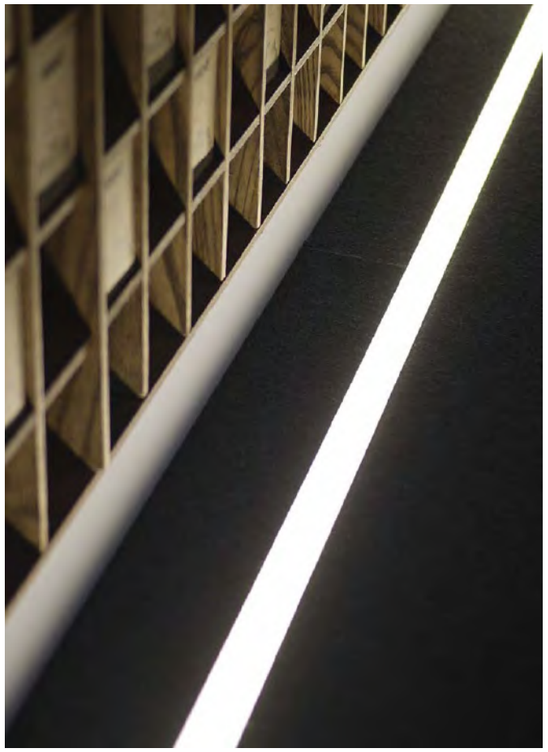
KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. MoMo-BLOC with KKGB-03 S/Steel ground box
2. Cable exit detail
3. Robust screw-fit end cap and safety glass cover





MoMo-BLOC **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)[2]		
MoMo BLOC Silver anodised	BLSA	Frosted Glass	F	s–	352	s352	2300K (2100K PCB)	23K	
MoMo BLOC Hard anodised[1]	BLHA				504	s504	2500K (2300K PCB)	25K	
					508	s508	3000K (2500K PCB)	30K	
				e–	352	e352	3400K (2700K PCB)	34K	
					504	e504	4000K (3000K PCB)	40K	
					508	e508	RED	RED	s– s352, s007, s504 only
					RGB	d501	GREEN	GRN	
							BLUE	BLU	
							ORANGE	ORN	
							AMBER	AMB	
							RGB	RGB	

Length Availability		IP Rating		Connection Type		Voltage	
M	524/1024mm[3]	IP67	67	300mm Single tail	c1	24V DC	g
				300mm Double tail	c2		
				300mm Single IP67 connector	c7		
				300mm Double IP67 connector	c8		

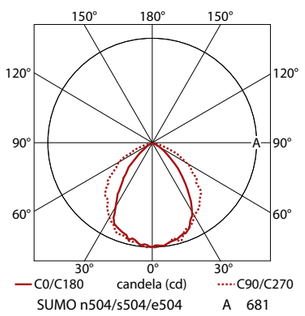
[1] Hard anodised finish reduces light output by an average of 30%.
[2] Actual colour temperature after colour shift caused by silicone potting
[3] 2 lengths available on all PCB types

Code Example:

BLSA	-	F	-	s504	-	40K	-	M 524	-	67	-	c8	-	g
MoMo-BLOC Silver anodised		Frosted Glass		s-line 504		4000K (3000K PCB)		524mm		IP67		300mm Double IP67 connector		24V DC

SUMO

- Robust large aperture surface mounted luminaire for exterior applications.
- Integral Power Supply with AC input, available as switched or 1-10V dimmable.
- Range of length options available.



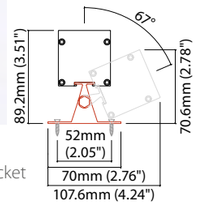
220~240V AC IP54/67 CE

SUMO n504
SUMO s504
SUMO e504

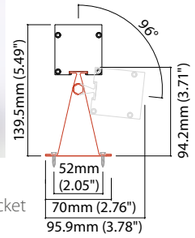
Clear Cover, 3000K	≤ 2131 lm/m ≤ 62.5 lm/W
Diffused Cover, 3000K	≤ 1800 lm/m ≤ 52.8 lm/W
Wattage	34.1 W/m
Dimension	H53.2/W50/L520, 1020, 1520, 2020mm
PCB Increment	100mm increment
LED pitch	16.7mm – 120 LED/m
Lifetime	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_C max = 65°C)
Beam Angle	Clear cover: 75° Diffused cover: 105°
Chip	Toyoda Gosei
IP Rating	IP54/67
Finish	Silver Anodised
Cover/Lens	Diffused/Clear
Mounting	Surface mounting via brackets
Connection	Sheathed hardwire tails (AC Input: 220~240V AC, DIM Input: 1-10V)
Control	Integral 1-10V/Switched

Accessories

Mounting Options



KKBK-16
Small adjustable bracket
(Allow 2 per metre)
Silver anodised aluminium finish
Pre-assembled in factory for double tail option

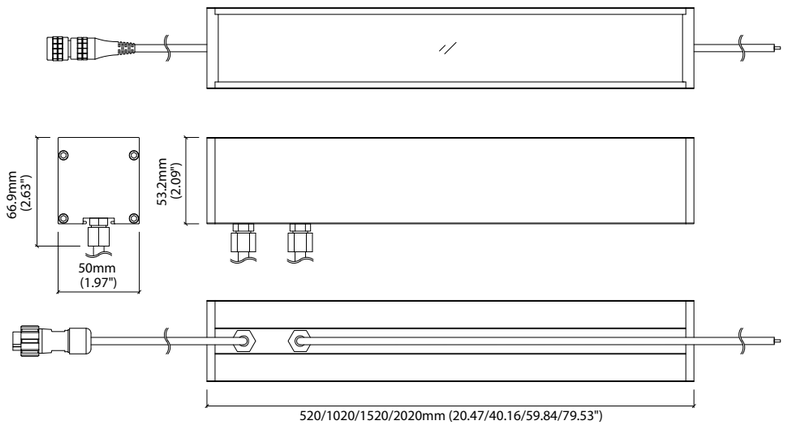


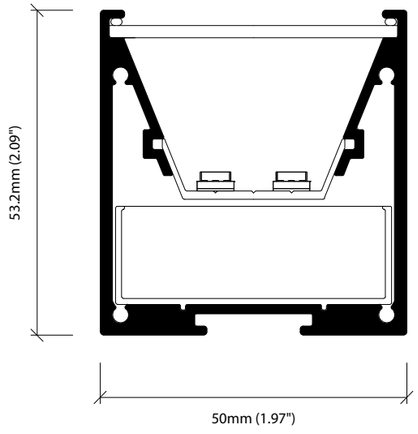
KKBK-17
Large adjustable bracket
(Allow 2 per metre)
Silver anodised aluminium finish
Pre-assembled in factory for double tail option

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

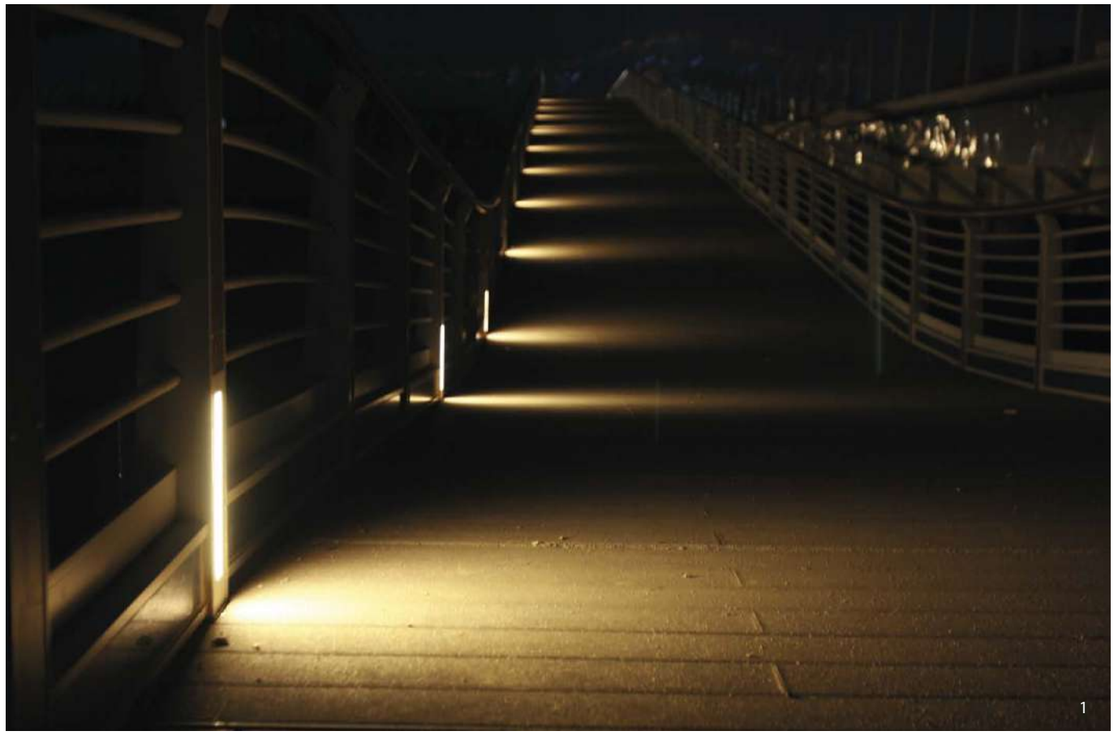


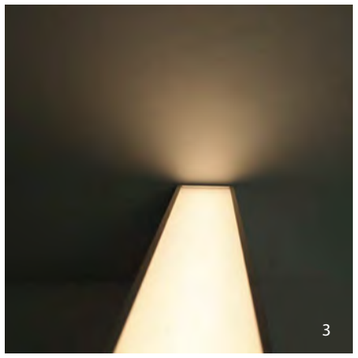


1:1

LED Options

	n-line (NEW)	s-line	e-line
CRI (R_a)	95+	90+	90+
CRI (R_9)	78+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K





1. 2012 YEOSU Expo, South Korea
   Lighting Design: Bizro
2. SUMO with small adjustable angle bracket
3. Diffused cover for homogenous lighting
4. SUMO 504 with clear cover
5. Single cable exit gland (dimmable version has two cable glands)

SUMO **Code Table**

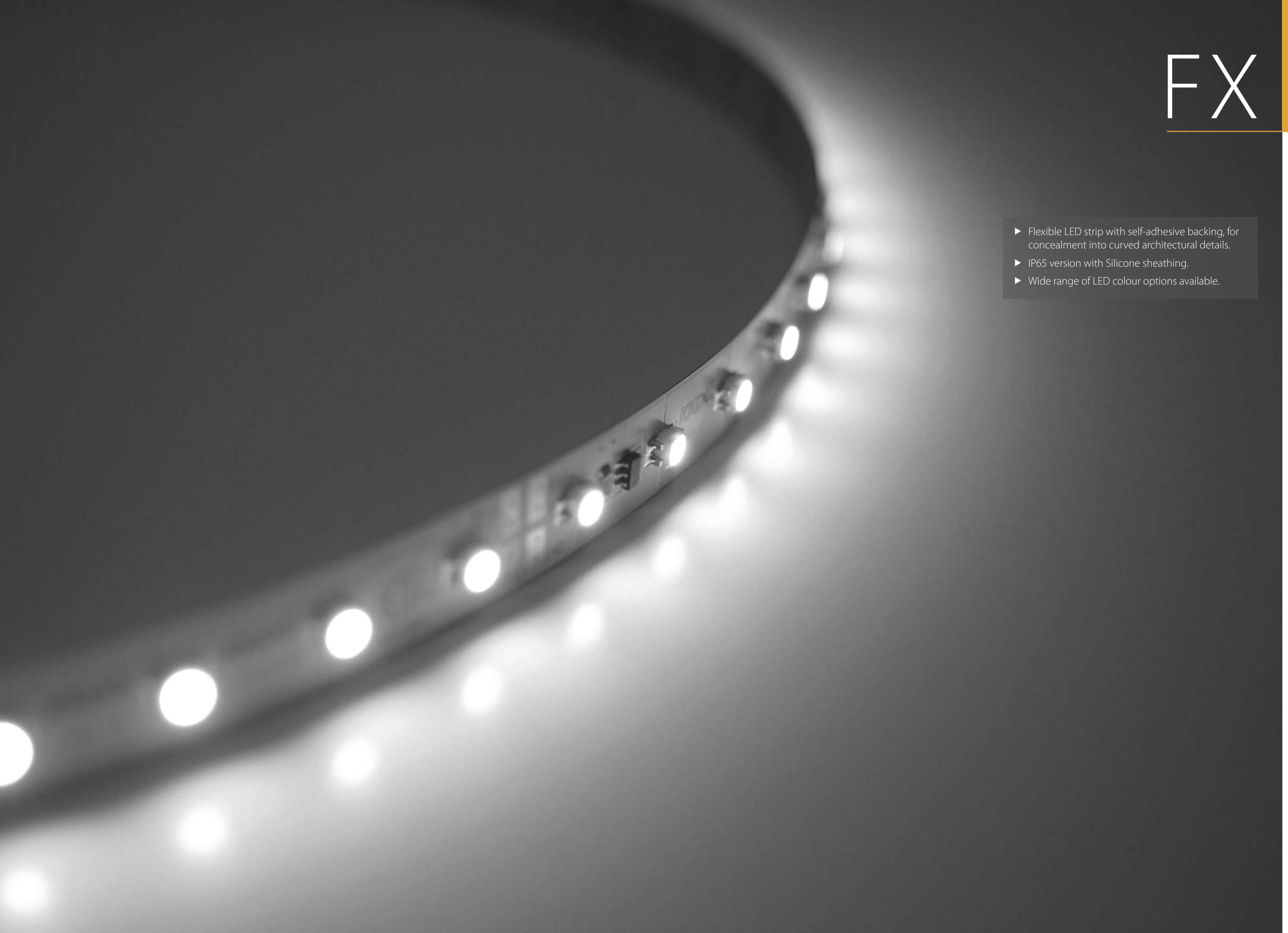
Housing/Finish		Cover/Lens		LED Type			Colour (CCT)			Length Availability		IP Rating		Connection Type		Control		Voltage	
SUMO Silver anodised	SUSA	Clear cover	B	n–	504	n504	2100K	21K		M	520/1020/1520/2020mm	IP54	54	1000mm Single tail	d1	Switched	0	24V DC	g
		Diffused cover	C	s–	504	s504	2300K	23K				IP67[1]	67			1-10V[2]	1		
				e–	504	e504	2500K	25K											
							2700K	27K											
							3000K	30K											
							3200K	32K											
							3500K	35K											
							3800K	38K											
							5000K	50K											
							RED	RED	s– s504 only										
							GREEN	GRN											
							BLUE	BLU											
							ORANGE	ORN											
							AMBER	AMB											

[1] Due to the clear, flush potted polyurethane top layer on IP67 SUMO a colour shift of +/-20K should be expected
[2] 1-10V version has two cable exits: 1000mm power connection & 1000mm dimming connection

Code Example:

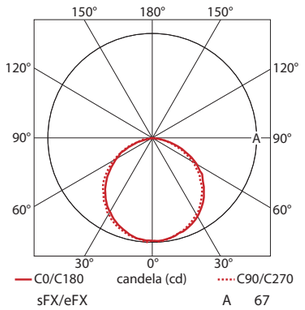
SUSA	-	B	-	s504	-	35K	-	M 520	-	67	-	d1	-	1	g
SUMO Silver anodised		Clear cover		s-line 504		3500K		520mm		IP67		1000mm Single tail		1-10V Control	24V DC

FX



- Flexible LED strip with self-adhesive backing, for concealment into curved architectural details.
- IP65 version with Silicone sheathing.
- Wide range of LED colour options available.

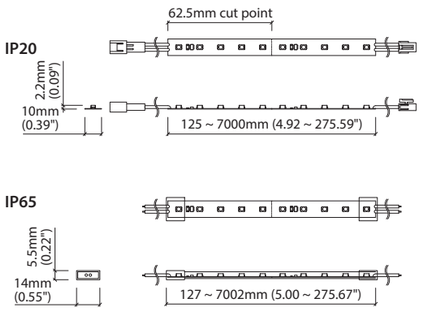
Beam angle	110°
IP Rating	IP20/65
Lifetime	50,000 hours @ 25°C
Finish	Silicone cover for IP65
Cover/Lens	IP65 version with silicone sheathed cover
Mounting	3M double sided tape (IP20), surface mounting clips (IP65)
Minimum bend radius	20mmØ(IP20) 35mmØ (IP65)
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)



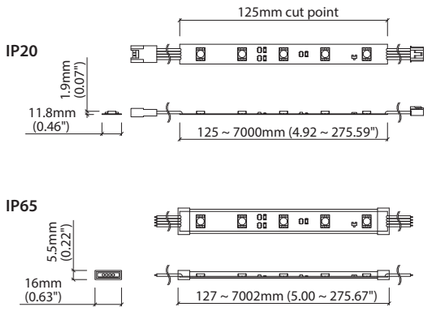
Product Data

	White **FX** **eFX**	RGB **FX RGB**
Luminous Flux, 3000K	425 lm/m 61 lm/W	Red: 73 lm/m Green: 183 lm/m Blue: 28 lm/m White: 267 lm/m
Wattage	6.96 W/m	9.84 W/m
Dimension	H2.2mm/W10mm/L125-7000mm (IP20) H5.5/W14/L127-7002mm (IP65)	H1.9mm/W11.8mm/L125-7000mm (IP20) H5.5/W16/L127-7002mm (IP65)
PCB Increment	Power connection and cut points every 62.5mm	Power connection and cut point every 125mm
LED Pitch	12.5mm – 80 LED/m	25mm – 40 LED/m
Operation Temp	T_a = -25 to 50°C (T_c Max = 67°C)	T_a = -25 to 50°C (T_c Max = 78°C)

FX



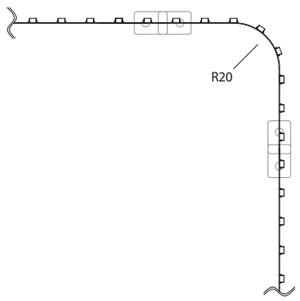
FX RGB



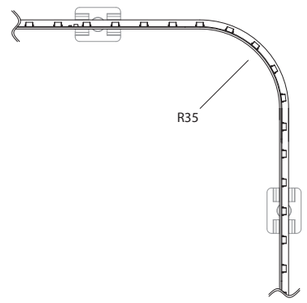
LED Options

	s-line	e-line	RGB
CRI (R_a)	90+	90+	n/a
CRI (R_9)	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

FX/FX RGB minimum bend radius

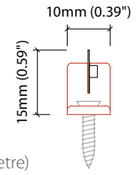


IP65 FX/FX RGB minimum bend radius

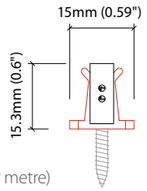


Accessories

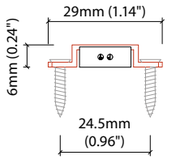
Mounting Options



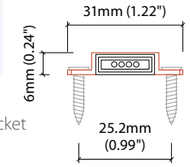
KKCP-07
Side clip (Allow 4 per metre)
White plastic



KKCP-08
IP65 side clip (Allow 4 per metre)
Clear plastic



KKBK-14
IP65 silicone bracket
(Allow 4 per metre)
Translucent silicone



KKBK-18
IP65 RGB silicone bracket
(Allow 4 per metre)
Translucent silicone

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-07 & KKCN-09
4 PIN RGB male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

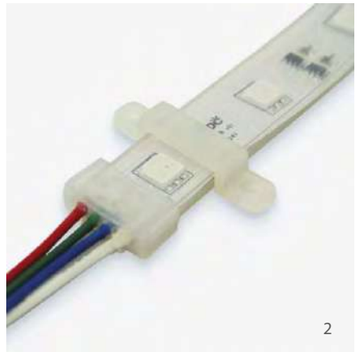
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1. IP65 FX with side mounting clip
2. IP65 FX RGB end cap with cable exit
3. IP65 s-line and e-line FX with silicone brackets
4. FX RGB and IP65 FX RGB

FX Code Table

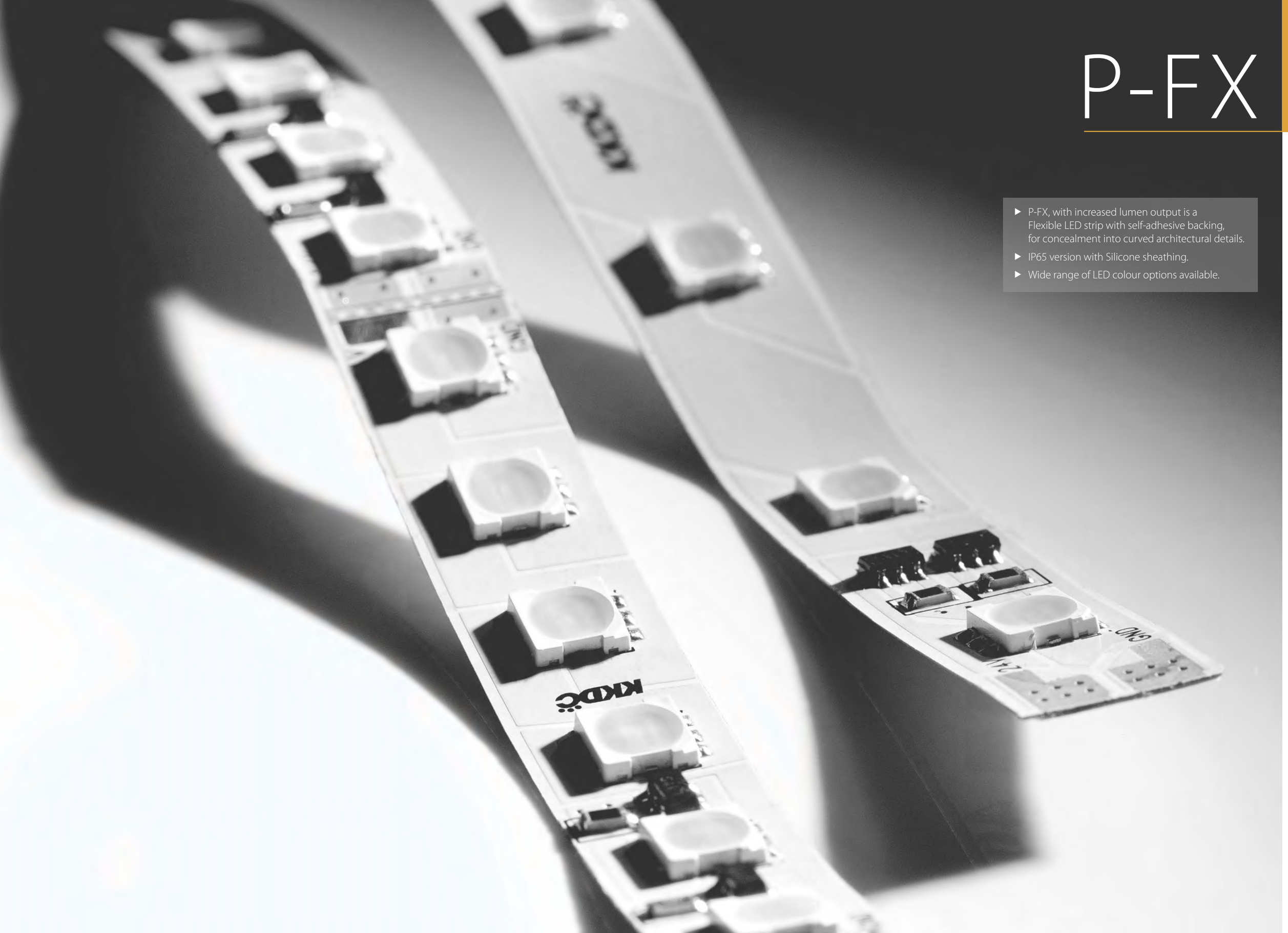
Housing		LED Type			Colour (CCT)			Length Availability			IP Rating		Connection Type		Voltage	
FX	FX	s902	902	s902	2100K	21K		FX IP20	M	125-7000mm 62.5mm increments	IP20	20	50mm Single tail	a1	24V DC	g
		e902	902	e902	2300K	23K		FX IP65	M	127-7002mm 62.5mm increments	IP65	65	50mm Double tail	a2		
		RGB	RGB	d901	2500K	25K		FX RGB IP20	M	125-7000mm 125mm increments			50mm Single IP20 connector	a3		
					2700K	27K		FX RGB IP65	M	127-7002mm 125mm increments			50mm Double IP20 connector	a4		
					3000K	30K							300mm Single tail	c1		
					3200K	32K							300mm Double tail	c2		
					3500K	35K							300mm Single IP20 connector	c3		
					3800K	38K							300mm Double IP20 connector	c4		
					5000K	50K										
					RED	RED	s902 only									
					GREEN	GRN										
					BLUE	BLU										
					ORANGE	ORN										
					AMBER	AMB										
					RGB	RGB										

Code Example:

FX	-	s902	-	35K	-	M 502	-	65	-	c4	-	g
FX		s-line FX		3500K		502mm		IP65		300mm Double IP20 connector		24V DC

DARC Awards 2016, London
Lighting Design: DPA Lighting Consultants, London
KKDC UK

P-FX



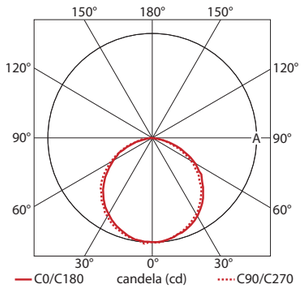
- P-FX, with increased lumen output is a Flexible LED strip with self-adhesive backing, for concealment into curved architectural details.
- IP65 version with Silicone sheathing.
- Wide range of LED colour options available.

24V DC IP20/65

Beam angle	120°
IP Rating	IP20/65
Lifetime	50,000 hours @ 25°C
Finish	Silicone cover for IP65
Cover/Lens	IP65 version with silicone sheathed cover
Mounting	3M double sided tape (IP20), surface mounting clips (IP65)
Minimum bend radius	20mmØ(IP20) 35mmØ (IP65)
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

Product Data

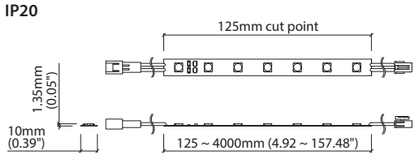
	White	
	nP-FX4 **sP-FX4** **eP-FX4**	**nP-FX8** **sP-FX8** **eP-FX8**
Luminous Flux	≤ 1447 lm/m ≤ 96.6 lm/W	≤ 1652 lm/m ≤ 96.4 lm/W
Wattage	14.98 W/m	17.14 W/m
Dimension	H1.35/W10/L125-4000mm (IP20) H5.5/W14/L127-4002mm (IP65)	H1.35/W10/L125-4000mm (IP20) H5.5/W14/L127-4002mm (IP65)
PCB Increment	Power connection and cut point every 125mm	Power connection and cut point every 62.5mm
LED Pitch	20.8mm – 48 LED/m	10.4mm – 96 LED/m
Operation Temp	T_a = -25 to 40°C (T_c Max = 85°C) (IP20/65)	T_a = -25 to 40°C (T_c Max = 85°C) (IP20/65)



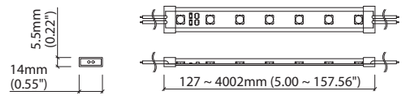
nP-FX4/sP-FX 4/eP-FX 4	A	215
nP-FX8/sP-FX 8/eP-FX 8	A	263

P-FX4

IP20

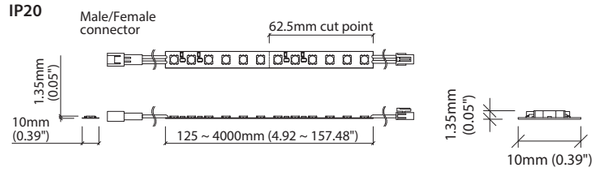


IP65

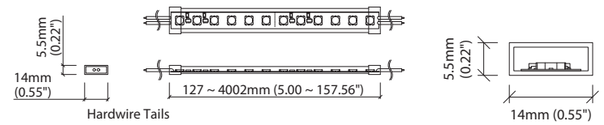


P-FX8

IP20



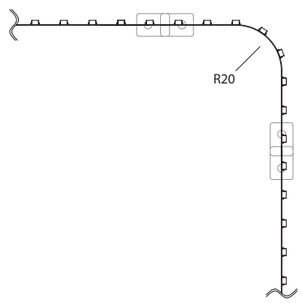
IP65



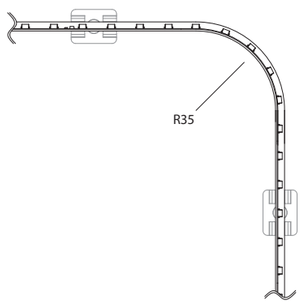
LED Options

	n-line (NEW)	s-line	e-line
CRI (R_a)	95+	90+	90+
CRI (R_g)	78+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

P-FX4/P-FX8 minimum bend radius

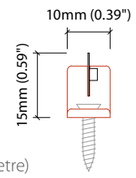


IP65 P-FX4/P-FX8 minimum bend radius

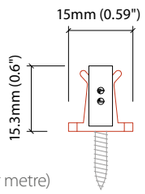


Accessories

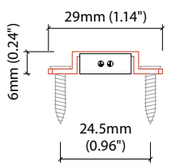
Mounting Options



KKCP-07
Side clip (Allow 4 per metre)
White plastic



KKCP-08
IP65 side clip (Allow 4 per metre)
Clear plastic



KKBK-14
IP65 silicone bracket
(Allow 4 per metre)
Translucent silicone

Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. Concealed ceiling cove lighting installation
2. 50mm 2-PIN connector
3. P-FX4 flexible strip with self-adhesive backing
4. P-FX4 and P-FX8 flexible strips

P-FX **Code Table**

Housing		LED Type			Colour (CCT)		Length Availability			IP Rating		Connection Type		Voltage	
P-FX	FX	n–	P-FX4	n904[3]	2100K	21K	P-FX IP20	M	125-4000mm 125mm increments	IP20	20	50mm Single tail[2]	a1	24V DC	g
			P-FX8	n908[3]	2300K	23K	P-FX IP65	M	127-4002mm 125mm increments	IP65[1]	65	50mm Double tail[2]	a2		
		s–	P-FX4	s904	2500K	25K						50mm Single IP20 connector[2]	a3		
			P-FX8	s908	2700K	27K						50mm Double IP20 connector[2]	a4		
		e–	P-FX4	e904	3000K	30K						300mm Single tail	c1		
			P-FX8	e908	3200K	32K						300mm Double tail	c2		
					3500K	35K						300mm Single IP20 connector	c3		
					3800K	38K						300mm Double IP20 connector	c4		
					5000K	50K									

[1] External dimensions of IP65 version increase slightly due to silicone sleeve cover
IP65 variant only available with tail options
IP65 requires silicone mounting solutions, please see accessories

[2] Not available for IP65

[3] n-line 2700K/3000K

Code Example:

FX	-	s908	-	35K	-	M	502	-	65	-	c4	-	g
P-FX		s-line P-FX8		3500K		502mm			IP65		300mm Double IP20 connector		24V DC

Qantas Lounge, Australia
Lighting Design: Point of View
KKDC Sydney

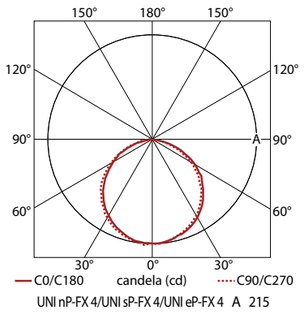
UNI P-FX

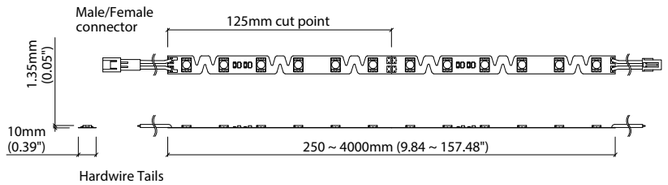
- UNI P-FX is a new flexible LED strip designed for concealment into curved architectural details and organic forms.
- Innovative, universally directional PCB design with self-adhesive backing.
- s-line and e-line variants available.

24V DC IP20 CE

UNI nP-FX4
UNI sP-FX4
UNI eP-FX4

Luminous Flux **No Cover**	≤ 1447 lm/m ≤ 96.6 lm/W
Wattage	14.98 W/m
Dimension	H1.35/W10/L250-4000mm
PCB Increment	Power connection and cut point every 125mm
LED Pitch	20.8mm – 48 LED/m
Lifetime	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 40°C (T_c max = 85°C)
Beam angle	120°
IP Rating	IP20
Finish	n/a
Cover/Lens	n/a
Mounting	3M double sided tape and surface mounting clips
Minimum bend radius	20mmØ
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)





1. Universally directional flexibility
2. Illuminated UNI P-FX4, warm white LED
3. On-board IC drives
4. 3M self-adhesive backing

LED Options

	n-line (NEW)	s-line	e-line
CRI (R_a)	95+	90+	90+
CRI (R_9)	78+	45+	45+
TM-30-15	R_f 94+, R_g 101+	R_f 88+, R_g 97+	R_f 88+, R_g 97+
Bin/Step	3 Step MacAdam ellipse	2 Step MacAdam ellipse	3 Step MacAdam ellipse
Colours	2700K/3000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K

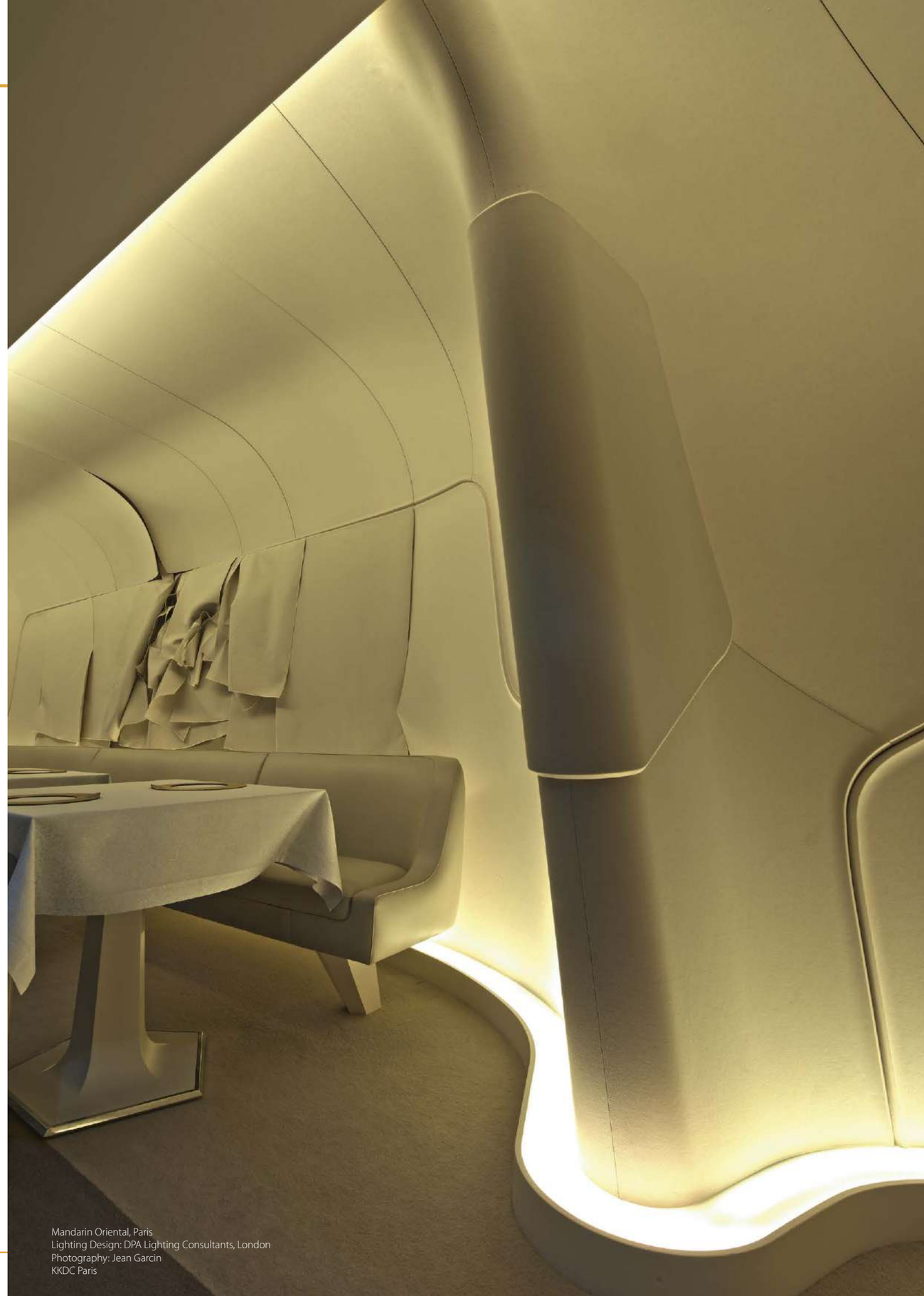
UNI P-FX4 **Code Table**

Housing		LED Type			Colour (CCT)		Length Availability			IP Rating		IP Rating/ Connection Type		Voltage	
UNI P-FX	FX	n–	UNI nP-FX4[1]	n903	2100K	21K	UNI P-FX	M	250-4000mm 125mm increments	IP20	20	50mm Single tail	a1	24V DC	g
		s–	UNI sP-FX4	s903	2300K	23K						50mm Double tail	a2		
		e–	UNI eP-FX4	e903	2500K	25K						50mm Single IP20 connector	a3		
					2700K	27K						50mm Double IP20 connector	a4		
					3000K	30K						300mm Single tail	c1		
					3200K	32K						300mm Double tail	c2		
					3500K	35K						300mm Single IP20 connector	c3		
					3800K	38K						300mm Double IP20 connector	c4		
					5000K	50K									

[1] n-line 2700K/3000K

Code Example:

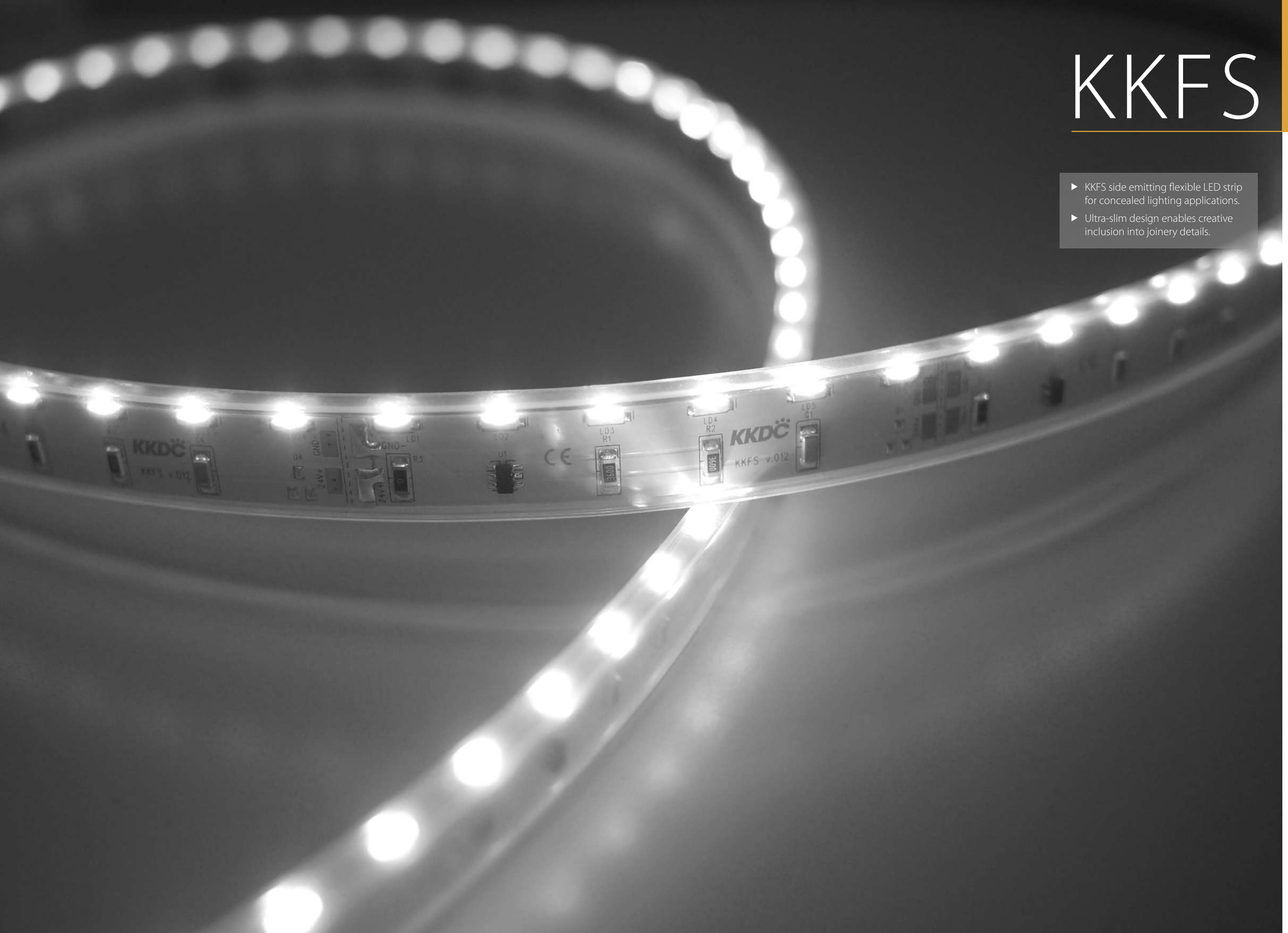
FX	-	s903	-	35K	-	M	500	-	20	-	c4	-	g
UNI P-FX		UNI sP-FX4		3500K		500mm			IP20		300mm Double IP20 connector		24V DC

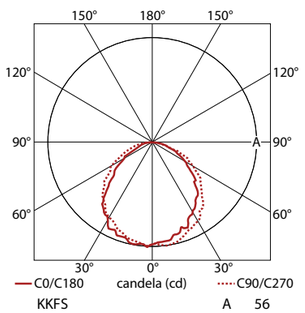


Mandarin Oriental, Paris
Lighting Design: DPA Lighting Consultants, London
Photography: Jean Garcin
KKDC Paris

KKFS

- KKFS side emitting flexible LED strip for concealed lighting applications.
- Ultra-slim design enables creative inclusion into joinery details.





24V DC IP20/65

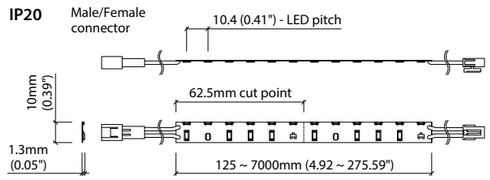
KKFS

Luminous Flux, 3000K	390 lm/m 60 lm/W
Wattage	6.5 W/m
Dimension	H1.3mm/W10mm/L125-7000mm (IP20) H5.5/W14/L127-7002mm (IP65)
PCB Increment	Power connection possible at 125mm, cut point every 62.5mm
LED pitch	12.5mm – 96 LED/m
Lifetime	30,000 hours @ 25°C
Operation Temp	Ta = -25 to 50°C (Tc max = 65°C) (IP20/65)
Beam Angle	Diffused: 105°
Colours	2700K/3000K
Bin/Step	3 Step MacAdam ellipse
CRI	90+
Chip	Toyoda Gosei
IP Rating	IP20/65
Finish	Silicone cover for IP65
Cover/Lens	IP65 version with silicone sheathed cover
Mounting	3M double sided tape (IP20) surface mounting clips (IP65)
Minimum bend radius	20mmØ(IP20)/35mmØ (IP65)
Connection	Hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

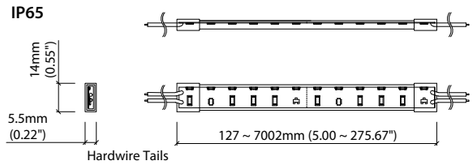
LED Options

	s-line
CRI (R_a)	90+
CRI (R_9)	80+
Bin/Step	3 Step MacAdam ellipse
Colours	White: 2700K/3000K

IP20

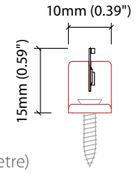


IP65

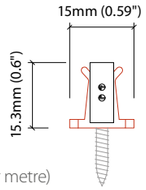


Accessories

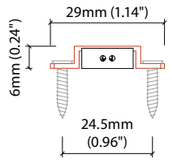
Mounting Options



KKCP-07
Side clip (Allow 4 per metre)
White plastic

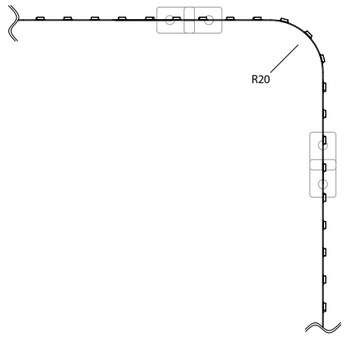


KKCP-08
IP65 side clip (Allow 4 per metre)
Clear plastic

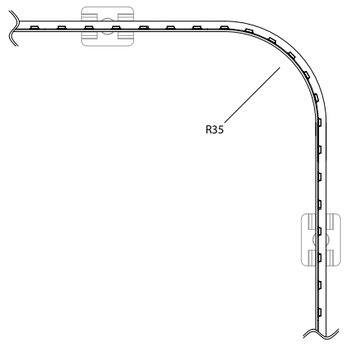


KKBK-14
IP65 silicone bracket
(Allow 4 per metre)
Translucent silicone

KKFS minimum bend radius



IP65 KKFS minimum bend radius



Connectors

KKCN-01 & KKCN-03
2 PIN male+female 50mm & 300mm pair

KKCN-06
2 PIN 300mm extension lead

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. KKFS IP65 with silicone sheath
2. KKFS flexible side emitting LED
3. KKFS adhered to surface with 3M self-adhesive backing tape
4. Plastic side mounting clip
5. KKFS IP65 silicone mounting bracket

KKFS Code Table

Housing	LED Type	Colour (CCT)	Length Availability	IP Rating	IP Rating/Connection Type	Voltage
KKFS FS	s_ KKFS s113	2700K 27K	KKFS IP20 M 125-7000mm 62.5mm increments	IP20 20	50mm Single tail a1	24V DC g
		3000K 30K	KKFS IP65 M 127-7002mm 62.5mm increments	IP65[1] 65	50mm Double tail a2	
					50mm Single IP20 connector[2] a3	
					50mm Double IP20 connector[2] a4	
					300mm Single tail c1	
					300mm Double tail c2	
					300mm Single IP20 connector[2] c3	
					300mm Double IP20 connector[2] c4	

[1] External dimensions of IP65 version increase slightly due to silicone sleeve cover
IP65 variant only available with tail options
IP65 requires silicone mounting solutions, please see accessories

[2] Not available for IP65

Code Example:

FS	-	s113	-	30K	-	M 502	-	65	-	c4	-	g
KKFS		s-line KKFS		3000K		502mm		IP65		300mm Double IP20 connector		24V DC

Artwork by United Visual Artists
Commissioned by Hengrove Park Leisure Centre
KKDC UK

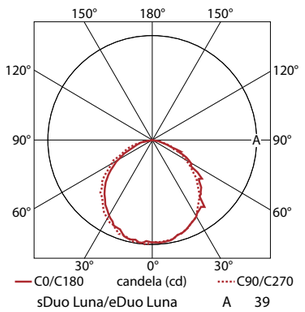
Luna

- The Luna series offers cost effective, flexible LED lighting solutions for concealing into architecture details and backlighting solutions.
- Range of IP ratings suitable for exterior use, including encapsulated IP68 for underwater installations.
- 2 or 4 LED modules with 77mm or 111mm pitch array options.

Duo Luna

9/12V DC | IP40/65/68 | RGB

Beam angle	105˚
IP Rating	IP40/65/68
Lifetime	50,000 hours @ 25°C
Finish	Polycarbonate
Cover/Lens	Clear
Mounting	3M adhesive tape (IP40/65), Screw fixing (IP68)
Minimum bend radius	130°(77mm pitch) 180°(111mm pitch)
Connection	Sheathed hardwire single/double ended sheathed tail
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

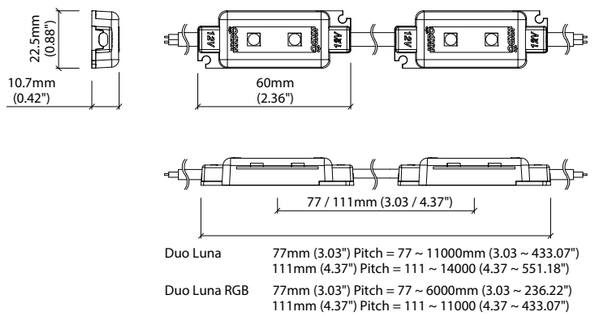


Product Data

	White			RGB	
	Duo Luna **eDuo Luna**			**Duo Luna RGB**	
Luminous Flux, 3000K	9V DC	13 modules (77mm pitch)	459 lm/m 87.1 lm/W	13 modules (77mm pitch)	Red: 41 lm/m Green: 117 lm/m Blue: 17 lm/m White: 163 lm/m
	9V DC	9 modules (111mm pitch)	320 lm/m 87.6 lm/W		
	12V DC	13 modules (77mm pitch)	455 lm/m 64.7 lm/W	9 modules (111mm pitch)	Red: 26 lm/m Green: 75 lm/m Blue: 11 lm/m White: 106 lm/m
	12V DC	9 modules (111mm pitch)	316 lm/m 64.8 lm/W		
Wattage	9V DC	13 modules (77mm pitch)	5.27 W/m	13 modules (77mm pitch)	7.8 W/m
	9V DC	9 modules (111mm pitch)	3.65 W/m	9 modules (111mm pitch)	5.4 W/m
	12V DC	13 modules (77mm pitch)	7.03 W/m		
	12V DC	9 modules (111mm pitch)	4.87 W/m		
Dimension	H10.7/W22.5/L60mm (9/13 modules per metre)			H10.7/W22/L60mm (9/13 modules per metre)	
Operation Temp	T_a = -25 to 50°C (T_C Max = 65°C)			T_a = -25 to 50°C (T_C Max = 65°C)	

LED Options

	s-line	e-line	RGB
CRI (R_a)	90+	90+	n/a
CRI (R_9)	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm



Accessories

Power & Control

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

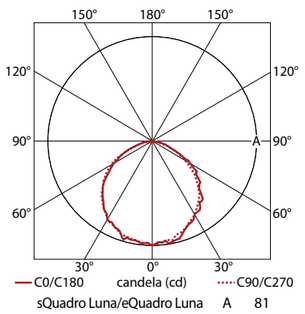
See pages 332-335 for more details

Quadro Luna

9/12V DC | IP40/65/68 | RGB

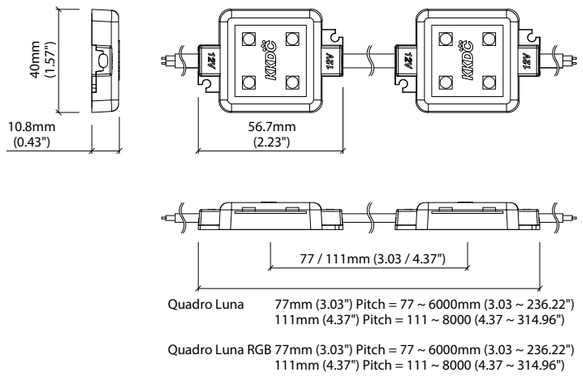
Beam angle	110°
IP Rating	IP40/65/68
Lifetime	50,000 hours @ 25°C
Finish	Polycarbonate
Cover/Lens	Clear
Mounting	3M adhesive tape (IP40/65), Screw fixing (IP68)
Minimum bend radius	90°(77mm pitch) 180°(111mm pitch)
Connection	Sheathed hardwire single/double ended tail (RGB non-sheathed)
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

RGB not UL listed



Product Data

	White			RGB	
	Quadro Luna eQuadro Luna			**Quadro Luna RGB**	
Luminous Flux	9V DC	13 modules (77mm pitch)	933 lm/m 88.6 lm/W	13 modules (77mm pitch)	Red: 85 lm/m Green: 225 lm/m Blue: 36 lm/m White: 322 lm/m
	9V DC	9 modules (111mm pitch)	646 lm/m 88.6 lm/W		
	12V DC	13 modules (77mm pitch)	910 lm/m 64.8 lm/W	9 modules (111mm pitch)	Red: 63 lm/m Green: 142 lm/m Blue: 25 lm/m White: 213 lm/m
	12V DC	9 modules (111mm pitch)	636 lm/m 65.4 lm/W		
Wattage	9V DC	13 modules (77mm pitch)	10.53 W/m	13 modules (77mm pitch)	14.04 W/m
	9V DC	9 modules (111mm pitch)	7.29 W/m	9 modules (111mm pitch)	9.72 W/m
	12V DC	13 modules (77mm pitch)	14.04 W/m		
	12V DC	9 modules (111mm pitch)	9.72 W/m		
Dimension	H10.8/W40/L56.7mm (9/13 modules per metre)			H10.8/W40/L56.7mm (9/13 modules per metre)	
Operation Temp	T_a = -25 to 50°C (T_C Max = 68°C)			T_a = -25 to 50°C (T_C Max = 68°C)	



LED Options

	s-line	e-line	RGB
CRI (R_a)	90+	90+	n/a
CRI (R_9)	45+	45+	n/a
TM-30-15	R_f 88+, R_g 97+	R_f 88+, R_g 97+	n/a
Bin/Step	2 Step MacAdam ellipse	3 Step MacAdam ellipse	5nm tolerance
Colours	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K Single colours: Red/Green/Blue/Orange/Amber	White: 2100K/2300K/2500K/2700K/3000K/3200K/3500K/3800K/5000K	Red: 620-625nm Blue: 455-460nm Green: 520-525nm

Accessories

Power & Control

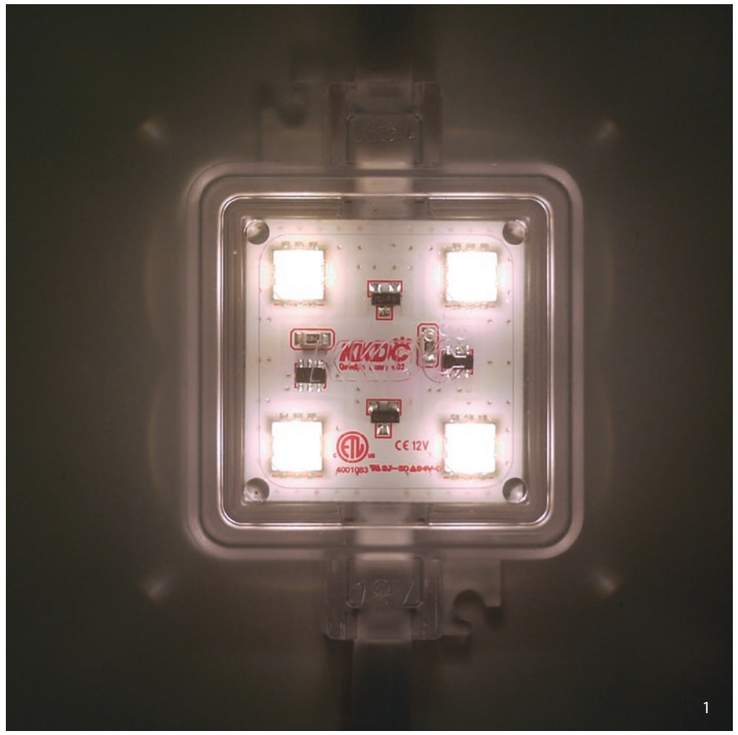
KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details



1

1. Quadro Luna robust encapsulated housing with ultra-sonic welding
2. Duo Luna with self-adhesive backing
3. Duo Luna with 90° bend (77mm pitch with 90° minimum bend radius, 111mm pitch with 180° minimum bend radius)

2

3

Luna **Code Table**

Housing		LED Type		Colour (CCT)		Length Availability			IP Rating		IP Rating/ Connection Type		Module Pitch		Voltage	
Duo Luna	DL	Duo Luna	s204	2100K	21K	Duo Luna 9V 111mm pitch	M	111-5000mm	IP40	40	100mm Single tail[1]	b1	77mm[2]	a	9/12V DC	g
Quadro Luna	QL	Quadro Luna	s404	2300K	23K	Duo Luna 9V 77mm pitch	M	77-4000mm	IP65	65	100mm Double tail[1]	b2	111mm[3]	b		
		Duo Luna	e204	2500K	25K	Duo Luna 12V 111mm pitch	M	111-14000mm	IP68	68	1000mm Single tail	d1				
		Quadro Luna	e404	2700K	27K	Duo Luna 12V 77mm pitch	M	77-11000mm			1000mm Double tail	d2				
		Duo Luna RGB	d202	3000K	30K	Quadro Luna 9V 111mm pitch	M	111-3000mm								
		Quadro Luna RGB	d402	3200K	32K	Quadro Luna 9V 77mm pitch	M	77-2000mm								
				3500K	35K	Quadro Luna 12V 111mm pitch	M	111-8000mm								
				3800K	38K	Quadro Luna 12V 77mm pitch	M	77-6000mm								
				5000K	50K											
				RED	RED											
				GREEN	GRN											
				BLUE	BLU											
				ORANGE	ORN											
				AMBER	AMB											
				RGB	RGB											

s-line only

[1] Not available for IP68 variant
[2] 13 modules per metre @ 77mm pitch
[3] 9 modules per metre @ 111mm pitch

Code Example:

DL	-	s204	-	30K	-	M	1000	-	65	-	d2	-	a	-	f
Duo Luna		sDuo Luna		3000K		1000mm			IP65		1000mm Double tail		77mm		9/12V DC

Daldy Street Linear Park
Lighting Design: Opus International
Architect: Landlab & Architectus
Photography: Intense Photography
KKDC New Zealand

Cluster

- Cluster family includes Cluster PIXEL, Cluster BAR (PCB), and MoMo-L Cluster
- Flexible and extensible string of individually addressable RGB or white modules designed for creative dynamic large scale display projects.
- Various media applications: RGB wave, video, Media Facade.
- Robust IP67 module housing for interior or exterior use.
- Multiplexed control via software PC application and KKDC interface customized according to project.

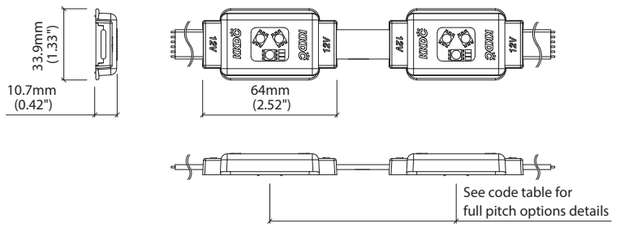
Cluster PIXEL

12V DC IP67 CE

Dimension	H10.7/W33.9/L64mm
Lifetime	50,000 hours @ 25°C
Operating temp	T_a= -25 to 50°C (T_C max = 66°C)
IP rating	IP67
Finish	Polycarbonate
Cover/Lens	Clear
Mounting	Surface mounting via clips
Connection	Cluster to Distributor: 4Pin typeIP67 connector
Control	DMX/Media display (DVI)

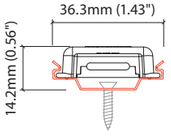
Product Data

	White **Cluster sPIXEL** **Cluster ePIXEL**	RGB **Cluster PIXEL RGB**
Power consumption	0.51W	0.72W
Supply voltage	12V DC	12V DC
Supply current	0.0425A	0.06A
Luminous Flux	33 lm	Red: 5 lm Green: 13 lm Blue: 2 lm White: 13 lm



Accessories

Mounting Options

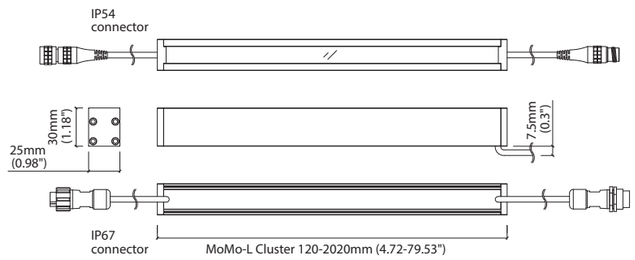


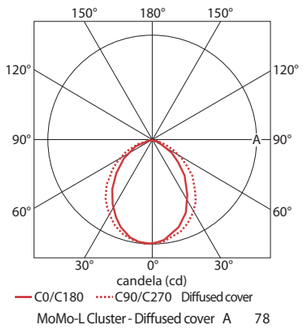
KKCP-15
Clip

MoMo-L Cluster & Cluster BAR

12V DC 17.4 W/m 5.3 W/ft ≤29.6 lm/W IP54/67 CE

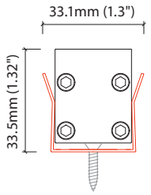
Luminous flux	515 lm/m 29.6 lm/W @ Clear cover 358 lm/m 20.6 lm/W @ Diffused cover
Power consumption	17.4 W/m
Supply voltage	24V DC
Dimension	H30/W25/L120-2020mm (100mm increment)
Lifetime	50,000 hours @ 25°C
Operating temp	T_a= -25 to 45°C (T_C max = 65°C)
IP rating	IP54/67
Finish	Silver anodised
Cover/Lens	Diffused/Clear/Micro Louvre
Mounting	Surface mounting via clips or brackets
Connection	Sheathed hardwire tails or male/female connectors
Control	DMX/Media display (DVI)



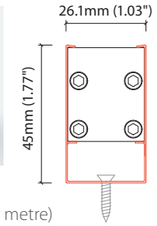


Accessories

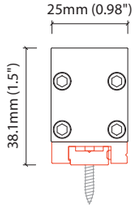
Mounting Options



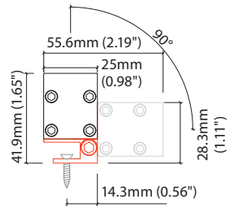
KKCP-03 (1no.)
KKCP-53 (500no.)
Clip (Allow 3 per metre)
S/Steel finish



KKCP-17
Lock clip (Allow 2 per metre)
S/Steel finish



KKBK-07
Fixing plate
(Allow 2 per metre)
Anodised aluminium finish
Pre-assembled in factory for double tail option



KKBK-21
Adjustable bracket
(Allow 2 per metre)
Anodised aluminium finish
Pre-assembled in factory for double tail option

Control Options

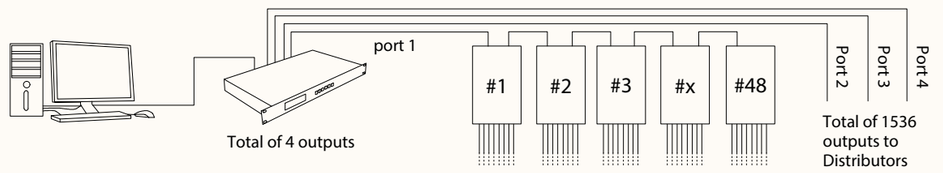
Choose 1 of 4 system control options based on desired number of Cluster PIXELs or Cluster BAR pixels to control.

Control Option 1

PC Control System
1.5 million pixels
(1,572,864 pixel up-to
1440x1080 resolution)

Stelite
4 x outputs

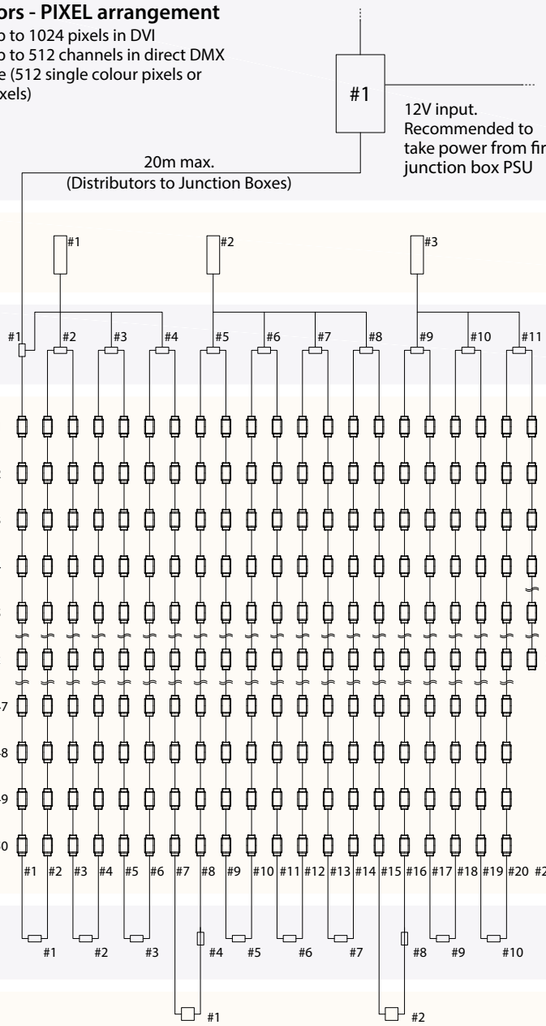
Line Drivers
- Example showing 1 grouping of up-to 4
- Stelite can control up to 48 Line Drivers in each of the 4 outputs (total #192 Line Drivers)
- Each Line Driver has 8 outputs to Distributors (total of 1536 Distributors)



300m max. (Line Drivers to Distributors)

Distributors - PIXEL arrangement
- Controls up to 1024 pixels in DVI
- Controls up to 512 channels in direct DMX input mode (512 single colour pixels or 170 RGB pixels)

# of Distributors per system
Stelite + Line drivers = 1536 Distributors
H4K = 4 Distributors
H2K = 2 Distributors



Power Supplies
350W 12V PSU for
400 pixels max.

Junction Boxes
Required every
100 pixels.

Cluster PIXEL
Runs #1-#20 = 50 PIXELs
Run #21 = 24 PIXELs100
pixels.

IP67 Connector
Required every 50 pixels
or 7m of Cluster PIXEL.

Power Isolator
Required in-between
PSUs in chains.
Separates power circuits
while passing signal
through.

Cluster PIXEL, Cluster PIXEL RGB

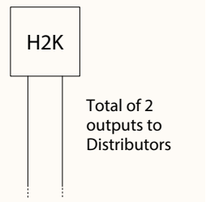
Choose common system components for Cluster PIXEL based on requirement.

Control Options

Choose 1 of 4 system control options based on desired number of Cluster PIXELs or Cluster BAR pixels to control.

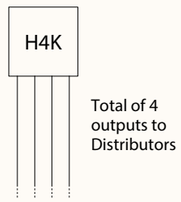
Control Option 2

H2K Control system
2048 pixels or modules



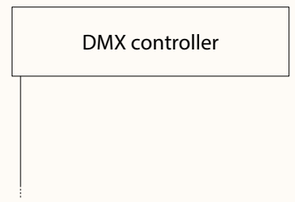
Control Option 3

H4K Control system
4096 pixels or modules



Control Option 4

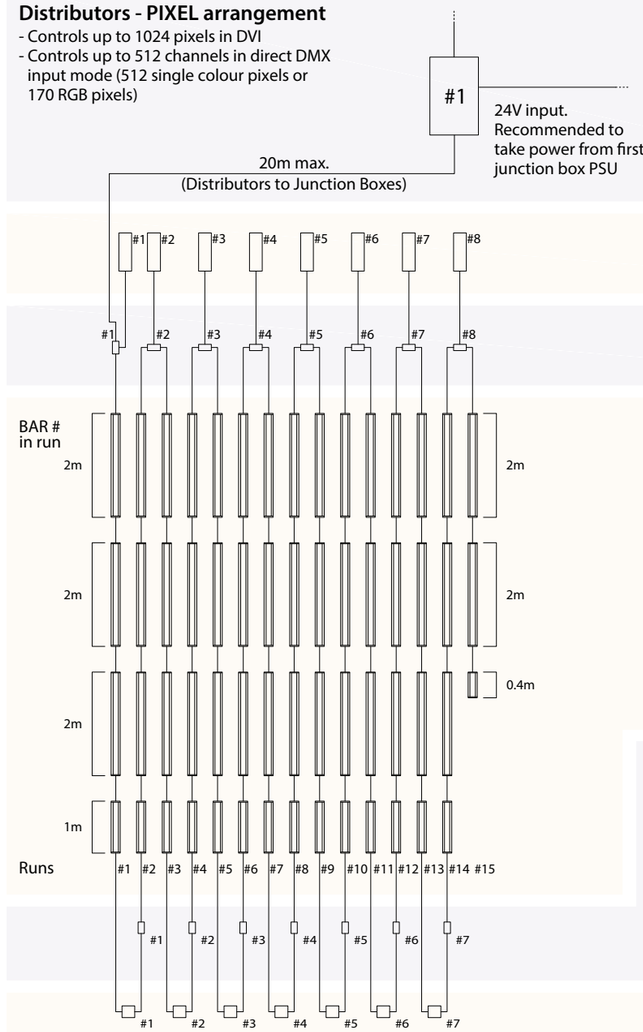
External DMX input
512 channels
512 single colour pixels or modules
170 RGB pixels or modules



300m max. (H2K or H4K to Distributors)

Distributors - PIXEL arrangement
- Controls up to 1024 pixels in DVI
- Controls up to 512 channels in direct DMX input mode (512 single colour pixels or 170 RGB pixels)

# of Distributors per system
Stelite + Line drivers = 1536 Distributors
H4K = 4 Distributors
H2K = 2 Distributors



Power Supplies
350W 24V PSU for
14m of Cluster BAR.

Junction Boxes
Required every 14m
of Cluster BAR.

Cluster BAR
1 pixel = 100mm of Cluster BAR
Runs #1- #14 = 7m (70modules)
Run #15 = 4.4m (44modules)
Total 102.4m of Cluster BAR.

IP67 Connector
Required every 50 pixels
or 7m of Cluster BAR.

Power Isolator
Required in-between
PSUs in chains.
Separates power circuits
while passing signal
through.

Cluster BAR

Choose common system components for Cluster BAR based on requirement.

KKDC Cluster System Control Components

Stelite

- Operates in DVI mode
- DVI converter for larger systems
- 4 output ports
- 48 Line Drivers per port
- total of (4 x 48) 192 Line Drivers
- Controls 1,572,864 pixels
- IP20

Code
KKCS-04

Major system component in large PC controlled systems.

Line Driver

- DVI to DMX converter
- Connect up to 48 units in-line in map mode
- Each port can control a single Distributor
- 8 ports x 1024 pixels = 8192 pixels per unit
- IP20

Code
KKSC-05

Major system component in large PC controlled systems.

H2K / H4K

- Operates in DVI mode
- Simple controller for static or patterns
- H4K = 4096 pixels
- H2K = 2048 pixels
- Programmed via SSD card
- Output ports wire directly to Distributors
- IP20

Codes
H2K – KKCS-02
H4K – KKCS-03

Perfect controller options for small to medium size Cluster installations.

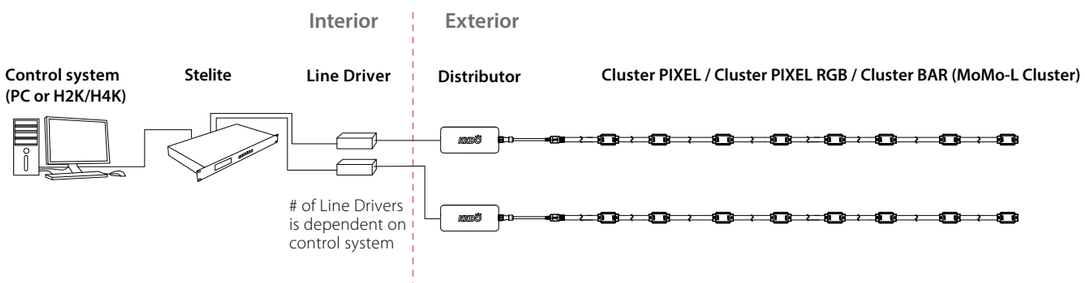
Distributor

- Main Distributor for Cluster PIXEL and BAR products
- DVI mode can control 1024 pixels
- DMX mode can control 512 Channels; 512 Single colour pixels or 170 RGB pixels
- IP20

Code
KKCS-01

Main Distributor in all system setups, allows signal and power to the PIXELs or BAR modules.

Typical Cluster System example (using Cluster PIXEL)



*Note – System shown above is example only, components and materials may change due to project size and environment.

Control system options

1. PC Control system – Video output – 1920x1080 resolution (2,073,600 modules/pixels)
2. H4K Controller - 4096 modules/pixels
3. H2K Controller - 2048 modules/pixels
4. External DMX input - Wired directly to Distributor - 512 Channels; 512 single channel pixels or 170 RGB pixels

Stelite

DVI converter for PC control systems.

- 4 ports for Line Drivers, 48 line drivers per port.

Line Driver

For use with Stelite and PC control systems.

- 8 ports for connecting distributers

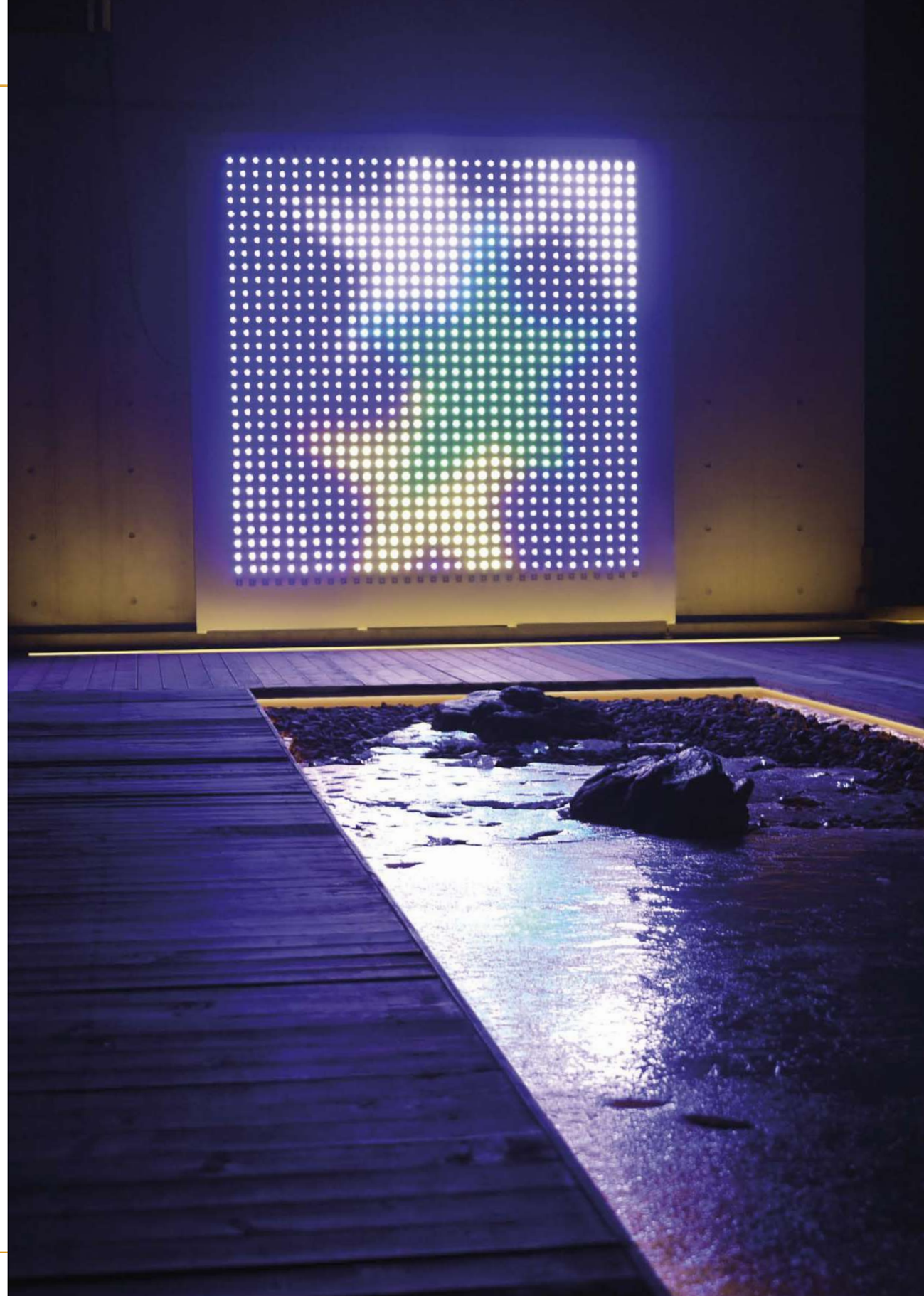
Distributor

Provides power and data to Cluster products

- 170 RGB pixels for DMX 512 or 1024 pixels for DVI

Cluster PIXEL/ Cluster PIXEL RGB/ Cluster BAR (MoMo-L Cluster)

- 1~170 pixels per Line Driver in DMX 512 or 1~1024 pixels per Line Driver in DVI, or
- 1~170 modules per Line Driver in DMX 512 (up to 17m of Cluster BAR) or 1~1024 pixels per Line Driver in DVI (up to 102.4m of Cluster BAR)



Cluster PIXEL **Code Table**

Housing/Finish		LED Type		Colour (CCT)			Length Availability[1]		IP Rating		Connection Type		Module Pitch		Voltage	
Cluster PIXEL	CP	Cluster PIXEL	304	2100K	21K	s-line only	M	200-10,000mm, 1-50 modules @ 200mm pitch	IP67	67	300mm Double IP67 connector	c8	200mm	c	12V DC	f
		Cluster PIXEL RGB	301	2300K	23K		M	250-11,750mm, 1-47 modules @ 250mm pitch					250mm	d		
				2500K	25K		M	333-14,319mm, 1-43 modules @ 333mm pitch					333mm	e		
				2700K	27K		M	500-19,000mm, 1-38 modules @ 500mm pitch					500mm	f		
				3000K	30K		M	1000-30,000mm, 1-30 modules @ 1000mm pitch					1000mm	g		
				3200K	32K		M	2000-44,000mm, 1-22 modules @ 2000mm pitch					2000mm	h		
				3500K	35K											
				3800K	38K											
				5000K	50K											
				RED	RED											
				GREEN	GRN											
				BLUE	BLU											
				ORANGE	ORN											
				AMBER	AMB											
				RGB	RGB	dRGB only										

[1] Length dependant on Module Pitch

Code Example:

CP	-	s304	-	30K	-	M 1000	-	67	-	c8	-	d	-	f
Cluster PIXEL		s-line 304		3000K		1000mm		IP67		300mm Double tail		250mm pitch		12V DC

Cluster BAR **Code Table**

Housing/Finish		Cover/Lens		LED Type		Colour (CCT)		Length Availability		IP rating		Connection Type		Voltage	
MoMo-L Cluster and Cluster Bar Silver anodised	MOSA	Clear cover	B	Cluster Bar	305	2100K	21K	M 120-2020mm 100mm increments		IP54	54	300mm Single tail	c1	24V DC	g
		Diffused cover	C	Cluster Bar RGB	306	2300K	23K			IP67[1]	67	300mm Double tail	c2		
		Micro Louvre	K			2500K	25K					300mm Single IP54 connector	c5		
						2700K	27K					300mm Double IP54 connector	c6		
						3000K	30K					300mm Single IP67 connector	c7		
						3200K	32K					300mm Double IP67 connector	c8		
						3500K	35K								
						3800K	38K								
						5000K	50K								
						RED	RED								
						GREEN	GRN								
						BLUE	BLU								
						ORANGE	ORN								
						AMBER	AMB								

[1] Due to the clear, flush potted polyurethane top layer on IP67 MoMo-L a colour shift of +/-20K should be expected

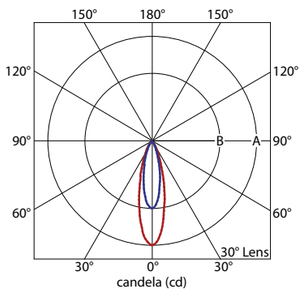
Code Example:

MOSA	-	K	-	305	-	35K	-	M 520	-	54	-	c5	-	g
Cluster Bar Silver anodised		Micro Louvre		s-line 305		3500K		520mm		IP54		300mm Single IP54 connector		24V DC

SEN

- Powerful linear illumination for exterior facades, wall washing, and other architectural applications.
- Output options from 676 to 3340 lumens per metre in a choice of white colour temperatures or RGB and single colours.
- Constant Current remote driven white CREE LED with many lens and control options available.

Beam Angle	10°/20°/30°/60°/Spread lens (10°x45°)/ No lens
IP Rating	IP54/67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Clear/Clear+Micro Louvre/ Lens options
Mounting	Surface mounting via brackets
Connection	Sheathed hardwire tail
Control	0-10V/1-10V/DMX/DALI via. External power supply options (DMX for RGB SEN only)

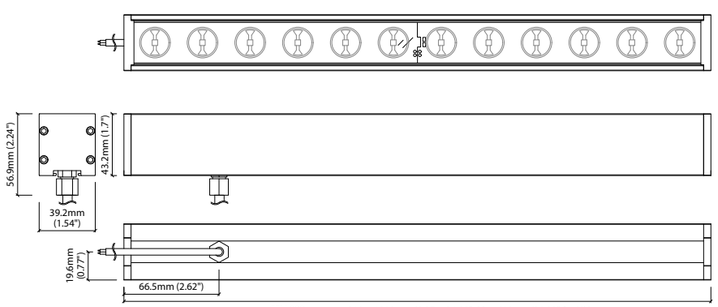


C0/C180 C90/C270 700mA
C0/C180 C90/C270 350mA

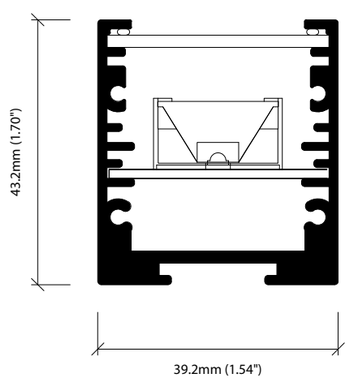
SEN 033 - 350mA	B	2049
SEN 033 - 700mA	A	3220
SEN 050 - 350mA	B	1392
SEN 050 - 700mA	A	2281
SEN 100 - 350mA	B	658
SEN 100 - 350mA	A	1091

LED Options

	Constant Current		High Power RGB	
CRI (R_9)	R_a 80	R_9 26	n/a	n/a
TM-30-15	R_f 95	R_g 101	n/a	n/a
Bin/Step	2 Step MacAdam ellipse (4 Step for 5000K,6500K)		17nm tolerance	
Colours	White: 2800K/3000K/3200K/ 3800K/5000K/6500K (70CRI for 5000K, 6500K) Single colours: Red/Green/Blue		Red : 618-629nm Blue : 455-465nm Green : 518-535nm	



SEN 033	210 ~ 1210mm (8.27 ~ 24.02", Max 610mm/24.02" for UL)
SEN 050	210 ~ 1810mm (8.27 ~ 71.26", Max 1010mm/39.76" for UL)
SEN 100	210 ~ 1810mm (8.27 ~ 71.26", Max 1810mm/71.26" for UL)
SEN RGB 047	480 ~ 1890mm (18.90 ~ 74.41")
SEN RGB 094	480 ~ 1890mm (18.90 ~ 74.41")



1:1

Product Data

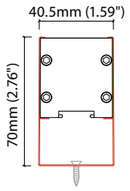
	White			RGB	
	SEN 033	**SEN 050**	**SEN 100**	**SEN 047 RGB**	**SEN 094 RGB**
Clear Cover 10°	2168 lm/m, 67.7 lm/W @ 3200K, 350mA 3556 lm/m, 51.3 lm/W @ 3200K, 700mA	1508 lm/m, 70 lm/W @ 3200K, 350mA 2449 lm/m, 53 lm/W @ 3200K, 700mA	719 lm/m, 67.4 lm/W @ 3200K, 350mA 1190 lm/m, 51.5 lm/W @ 3200K, 700mA	Red: 187 lm/m Green: 774 lm/m Blue: 43 lm/m White: 946 lm/m	Red: 125 lm/m Green: 374 lm/m Blue: 16 lm/m White: 502 lm/m
Clear Cover 20°	2234 lm/m, 69.8 lm/W @ 3200K, 350mA 3664 lm/m, 52.9 lm/W @ 3200K, 700mA	1554 lm/m, 72.2 lm/W @ 3200K, 350mA 2523 lm/m, 54.6 lm/W @ 3200K, 700mA	741 lm/m, 69.5 lm/W @ 3200K, 350mA 1226 lm/m, 53.1 lm/W @ 3200K, 700mA	Red: 193 lm/m Green: 797 lm/m Blue: 44 lm/m White: 975 lm/m	Red: 129 lm/m Green: 385 lm/m Blue: 16 lm/m White: 518 lm/m
Clear Cover 30°	2037 lm/m, 63.6 lm/W @ 3200K 350mA 3340 lm/m, 48.2 lm/W @ 3200K 700mA	1417 lm/m, 65.8 lm/W @ 3200K 350mA 2301 lm/m, 49.8 lm/W @ 3200K 700mA	676 lm/m, 63.3 lm/W @ 3200K 350mA 1118 lm/m, 48.4 lm/W @ 3200K 700mA	Red: 176 lm/m Green: 727 lm/m Blue: 40 lm/m White: 889 lm/m	Red: 117.5 lm/m Green: 351 lm/m Blue: 15 lm/m White: 472 lm/m
Clear Cover 60°	2312 lm/m, 72.2 lm/W @ 3200K 350mA 3791 lm/m, 54.7 lm/W @ 3200K 700mA	1608 lm/m, 74.7 lm/W @ 3200K 350mA 2611 lm/m, 56.5 lm/W @ 3200K 700mA	767 lm/m, 71.8 lm/W @ 3200K 350mA 1269 lm/m, 54.9 lm/W @ 3200K 700mA	N/A	N/A
Clear Cover Spread Lens	2168 lm/m, 67.7 lm/W @ 3200K, 350mA 3556 lm/m, 51.3 lm/W @ 3200K, 700mA	1508 lm/m, 70 lm/W @ 3200K 350mA 2449 lm/m, 53 lm/W @ 3200K 700mA	719 lm/m, 67.4 lm/W @ 3200K 350mA 1190 lm/m, 51.5 lm/W @ 3200K 700mA	Red: 187 lm/m Green: 774 lm/m Blue: 43 lm/m White: 946 lm/m	Red: 125 lm/m Green: 374 lm/m Blue: 16 lm/m White: 502 lm/m
Clear Cover No Lens	1807 lm/m, 56.4 lm/W @ 3200K, 350mA 2963 lm/m, 42.8 lm/W @ 3200K, 700mA	1257 lm/m, 58.4 lm/W @ 3200K 350mA 2041 lm/m, 44.2 lm/W @ 3200K 700mA	599 lm/m, 56.5 lm/W @ 3200K 350mA 992 lm/m, 42.9 lm/W @ 3200K 700mA	Red: 156 lm/m Green: 645 lm/m Blue: 35 lm/m White: 789 lm/m	Red: 104 lm/m Green: 311 lm/m Blue: 13 lm/m White: 419 lm/m
+ Micro Louvre	-60% Output when combined with the above options	-60% Output when combined with the above options	-60% Output when combined with the above options	-60% Output when combined with the above options	-60% Output when combined with the above options
Wattage	TYP. 32.025 W/m @ 350mA TYP. 69.3 W/m @ 700mA	TYP. 21.53 W/m @ 350mA TYP. 46.2 W/m @ 700mA	TYP. 10.675 W/m @ 350mA TYP. 23.1 W/m @ 700mA	32.68 W/m	16.34 W/m
Voltage	TYP. 91.5V/m @ 350mA TYP. 99.0V/m @ 700mA	TYP. 61V/m @ 350mA TYP. 66V/m @ 700mA	TYP. 30.5V/m @ 350mA TYP. 33V/m @ 700mA	24V	24V
Dimension	H43.2/W39.2/ L210-1210mm (610mm max for UL)	H43.2/W39.2/ L210-1810mm (1010mm max for UL)	H43.2/W39.2/ L210-1810mm (1810mm max for UL)	H43.2/W39.2/ L480-1890mm	H43.2/W39.2/ L480-1890mm
PCB Increment	100mm	100mm	100mm	470mm	470mm
LED Pitch	33mm - 30 LED/m	50mm - 20 LED/m	100mm - 10 LED/m	47mm - 21 LED/m	94mm - 10 LED/m
Operation Temp	350mA T_a = -25°C to 70°C (T_c max = 85°C) 700mA T_a = -25°C to 30°C (T_c max = 47°C)	350mA T_a = -25°C to 75°C (T_c max = 87°C) 700mA T_a = -25°C to 30°C (T_c max = 54°C)	350mA T_a = -25°C to 75°C (T_c max = 82°C) 700mA T_a = -25°C to 55°C (T_c max = 71°C)	T_a = -20 to 40°C (T_c max = 60°C)	T_a = -20 to 40°C (T_c max = 55°C)



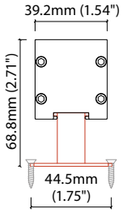


Accessories

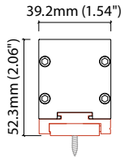
Mounting Options



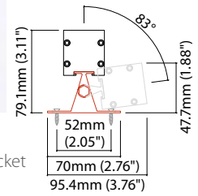
KKCP-12
Lock clip (Allow 2 per metre)
S/Steel finish



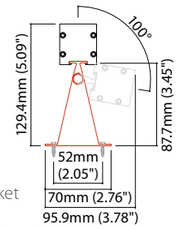
KKBK-02
Fixed bracket
(Allow 2 per metre)
Steel finish
Pre-assembled for double tail



KKBK-09
Mounting plate
(Allow 2 per metre – factory fitted)
Silver anodised aluminium finish
Pre-assembled for double tail



KKBK-16
Small adjustable bracket
(Allow 2 per metre)
Silver anodised aluminium finish
Pre-assembled for double tail



KKBK-17
Large adjustable bracket
(Allow 2 per metre)
Silver anodised aluminium finish
Pre-assembled for double tail

Exterior Junction boxes

KKJB-07
IP67 Slim J-Box

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

Various power options available, see pages 332-335 for details and specification

1. SEN optional micro smart louvre
2. Cree high power LED with various lens options
3. SEN lighting effect with no lens
4. SEN fixed bracket
5. Small adjustable bracket and cable exit gland

Battery Road, Singapore
Lighting Design: iLAB
Image © iLAB
KKDC Singapore

SEN **Code Table**

Housing/ Finish		Cover/ Lens		LED Type			Colour (CCT)			Length Availability			IP Rating		Connection Type		Lens		Voltage/control	
SEN, Silver anodised	SNSA	Clear cover	B		033	h033	2800K	28K		SEN 033	M	210-1210mm 100mm increments	IP54	54	1000mm Single tail	d1	No lens	x	Constant current DC (White only)	a
		Micro Louvre	K		050	h050	3000K	30K		SEN 050	M	210-1810mm 100mm increments	IP67[1]	67	1000mm Double tail	d2	10°	a	DMX, 24V DC (RGB only)	2g
					100	h100	3200K	32K		SEN 100	M	210-1810mm 100mm increments					20°	b		
					047 RGB	h147	3800K	38K		SEN 047 RGB	M	480/715/950/1185/ 1420/1655/1890mm					30°	c		
					094 RGB	h194	5000K	50K		SEN 094 RGB	M	480/950/ 1420/1890mm					35° (RGB only)	g		
							6500K	65K									60°	d		
							RED	RED									Spread Lens	e		
							GREEN	GRN												
							BLUE	BLU												
							RGB	RGB												

[1] Due to the clear, flush potted polyurethane top layer on IP67 SEN a colour shift of +/-20K should be expected

Code Example:

SNSA	-	B	-	h033	-	32K	-	M 1210	-	54	-	d2	-	c	-	a
SEN, Silver anodised		Clear cover		h-line 033		3200K		1210mm		IP54		1000mm Double tail		30°		Constant current DC (White only)

La Dame a la Licorne, Musee de Cluny Paris
Lighting Design: Francois Magos
Photography: Jean Garcin
KKDC Paris

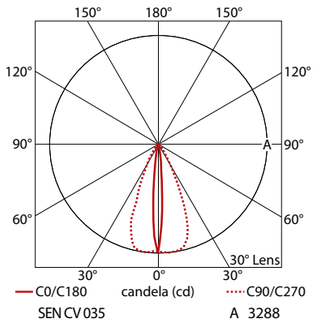
SEN CV

- Constant Voltage SEN CV for easy 24V DC connectivity and suitable for exterior building facades.
- Range of power outputs available depending on LED pitch.
- Various lengths, lens options and mounting accessories available.
- Consistent LED pitch array when positioned end-to-end for continuous runs.

SEN CV 035

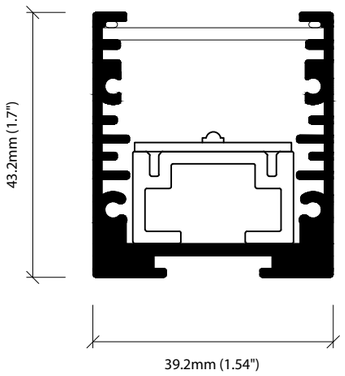
24V DC IP54/67

10° lens, 3000K	3567 lm/m 53.1 lm/W
20° lens, 3000K	3542 lm/m 52.7 lm/W
30° lens, 3000K	3239 lm/m 48.2 lm/W
Spread lens, 3000K	3468 lm/m 51.6 lm/W
No lens, 3000K	2863 lm/m 42.6 lm/W
Wattage	67.2 W/m
Dimension	H43.2/W39.2/L250-2000mm (1250mm max for UL)
PCB Increment	250mm
LED pitch	35mm – 28 LED/m
Lifetime	50,000 hours @ 25°C
Operation Temp	= T_a -25°C ~ 50°C (T_C max : 90°C)
Beam Angle	No lens: 75° 10° lens: 15° 20° lens: 23° 30° lens: 25° Spread lens: 15 x 45°
IP Rating	IP54/IP67
Finish	Silver Anodised
Cover/Lens	Clear Cover/No lens/10° lens/ 20° lens/30° lens/Spread lens
Mounting	Surface mounting via clips or brackets
Connection	Sheathed hardwire tails or male/female connectors
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

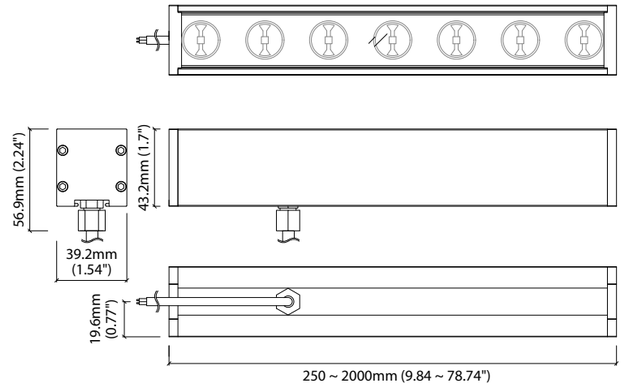


LED Options

	Constant Voltage	
CRI	R_a 80 (90@3000K)	R_g 16 (76@3000K)
TM-30-15	R_f 83 (91@3000K)	R_g 95 (102@3000K)
Bin/Step	3 Step MacAdam ellipse (4 Step for 5000K)	
Colours	White: 2700K/3000K/3500K/ 4000K/5000K (90CRI for 2700K/3000K)	

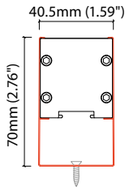


1:1

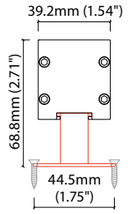


Accessories

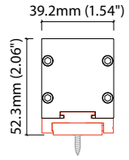
Mounting Options



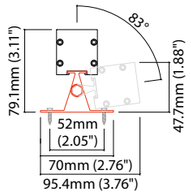
KKCP-12
Lock clip (Allow 2 per metre)
S/Steel finish



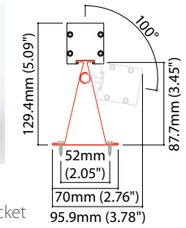
KKBK-02
Fixed bracket
(Allow 2 per metre)
Steel finish
Pre-assembled for double tail



KKBK-09
Mounting plate
(Allow 2 per metre)
Silver anodised aluminium finish
Pre-assembled for double tail



KKBK-16
Small adjustable bracket
(Allow 2 per metre)
Silver anodised aluminium finish
Pre-assembled for double tail



KKBK-17
Large adjustable bracket
(Allow 2 per metre)
Silver anodised aluminium finish
Pre-assembled for double tail

Exterior Junction boxes

KKJB-07
IP67 Slim J-Box

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

Various power options available, see pages 332-335 for details and specification


1


2


3


4


5

1. SEN CV 035 Lumileds LED array
2. Robust housing with machined aluminium screw-fit end caps
3. SEN Lock clip
4. Surface mounting plate
5. Small adjustable angle bracket

AUT WG Precinct, Auckland
Lighting Design: Lightworks
Architect: Jasmax
Photography: Ewen Cafe
KKDC New Zealand

National Theatre, London
Lighting Design: Atelier Ten
Architect: Haworth Tompkins
Photography: Philip Vile
KKDC UK

SEN CV 035 **Code Table**

Housing/ Finish		Cover/Lens		LED Type		Colour (CCT)		Length Availability		IP Rating		Connection Type		Mounting/ Finishing		Lens		Voltage	
SEN CV, Silver anodised	SNSA	Clear cover	B	035	h035	2700K	27K	M	250-2000mm 250mm increments	IP54	54	1000mm Single tail	d1	Profile Cable Exit	4	No lens	x	24V	g
		Micro Louvre	K			3000K	30K			IP67[1]	67	1000mm Double tail	d2	End cap Cable Exit	5	10°	a		
						3500K	35K					1000mm Single IP54 connector	d5			20°	b		
						4000K	40K					1000mm Double IP54 connector	d6			30°	c		
						5000K	50K					1000mm Single IP67 connector	d7			Spread Lens	e		
												1000mm Double IP67 connector	d8						

[1] Due to the clear, flush potted polyurethane top layer on IP67 SEN CV 035 a colour shift of +/-20K should be expected

Code Example:

SNSA	-	B	-	h035	-	30K	-	M 1250	-	54	-	d2	-	4	-	c	-	g
SEN CV, Silver anodised		Clear cover		h-line 035		3000K		1250mm		IP54		1000mm Double tail		Profile Cable Exit		30°		24V DC

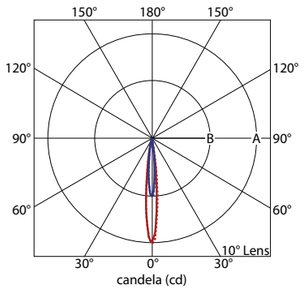
SEN Louvre

- SEN Louvre with increased height housing to accommodate black 'dark-light' louvre baffles.
- Effective glare control for improved visual comfort and high output LED source.
- Various mounting options available, suitable for exterior facade lighting applications.
- Choice of LED pitch options available depending on lumen output requirements, and many product lengths to choose from.

SEN Louvre

350/700mA IP54/67

Beam Angle	10°/20°/30°
IP Rating	IP54/67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Clear
Mounting	Surface mounting via brackets
Connection	Sheathed hardwire tail
Control	0-10V/1-10V/DMX/DALI via. External power supply options (DMX for RGB SEN only)



C0/C180 C90/C270 700mA
C0/C180 C90/C270 350mA

SEN Louvre 033 - 350mA	B	12956
SEN Louvre 033 - 700mA	A	20303
SEN Louvre 050 - 350mA	B	8753
SEN Louvre 050 - 700mA	A	13949
SEN Louvre 100 - 350mA	B	4253
SEN Louvre 100 - 350mA	A	7033

LED Options

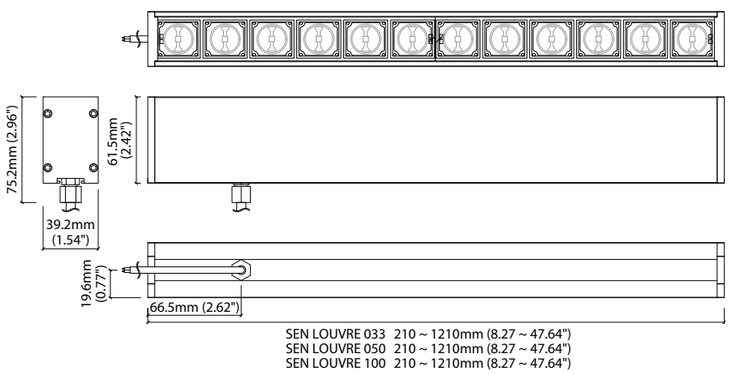
	Constant Current	
CRI (R_9)	R_a 80	R_9 26
TM-30-15	R_f 95	R_g 101
Bin/Step	2 Step MacAdam ellipse (4 Step for 5000K,6500K)	
Colours	White: 2800K/3000K/3200K/ 3800K/5000K/6500K (70CRI for 5000K, 6500K) Single colours: Red/Green/Blue	

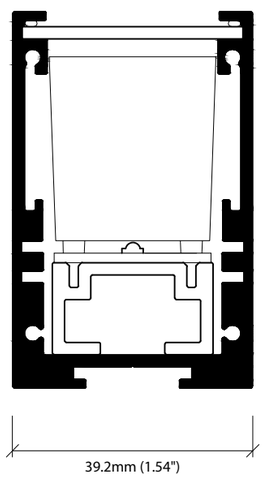
Product Data

White

	SEN Louvre 033	SEN Louvre 050	SEN Louvre 100
Clear Cover 10°	1958 lm/m, 61.1 lm/W @ 3200K, 350mA 3070 lm/m, 44.3 lm/W @ 3200K, 700mA	1323 lm/m, 61.4 lm/W @ 3200K, 350mA 2107 lm/m, 45.6 lm/W @ 3200K, 700mA	643 lm/m, 60.2 lm/W @ 3200K, 350mA 1063 lm/m, 46 lm/W @ 3200K, 700mA
Clear Cover 20°	1849 lm/m, 57.7 lm/W @ 3200K, 350mA 2901 lm/m, 41.9 lm/W @ 3200K, 700mA	1249 lm/m, 58 lm/W @ 3200K, 350mA 1991 lm/m, 43.1 lm/W @ 3200K, 700mA	607 lm/m, 56.9 lm/W @ 3200K, 350mA 1004 lm/m, 43.5 lm/W @ 3200K, 700mA
Clear Cover 30°	1464 lm/m, 45.7 lm/W @ 3200K, 350mA 2297 lm/m, 33.1 lm/W @ 3200K, 700mA	989 lm/m, 45.9 lm/W @ 3200K 350mA 1576 lm/m, 34.1 lm/W @ 3200K 700mA	481 lm/m, 45 lm/W @ 3200K 350mA 795 lm/m, 34.4 lm/W @ 3200K 700mA
Wattage	32.025 W/m @ 350mA 69.3 W/m @ 700mA	21.53 W/m @ 350mA 46.2 W/m @ 700mA	10.675 W/m @ 350mA 23.1 W/m @ 700mA
Voltage	91.5V/m @ 350mA 99.0V/m @ 700mA	61V/m @ 350mA 66V/m @ 700mA	30.5V/m @ 350mA 33V/m @ 700mA
Dimension	H61.5/W39.2/L210-1210mm (610mm max for UL)	H61.5/W39.2/L210-1810mm (1010mm max for UL)	H61.5/W39.2/L210-1810mm (1810mm max for UL)
PCB Increment	100mm	100mm	100mm
LED Pitch	33mm - 30 LED/m	50mm - 20 LED/m	100mm - 10 LED/m
Operation Temp	350mA T_a = -25°C to 75°C (T_C max = 87.6°C) 700mA T_a = -25°C to 45°C (T_C max = 67.5°C)	350mA T_a = -25°C to 75°C (T_C max = 83.9°C) 700mA T_a = -25°C to 50°C (T_C max = 65.7°C)	350mA T_a = -25°C to 80°C (T_C max = 84.8°C) 700mA T_a = -25°C to 60°C (T_C max = 69.1°C)







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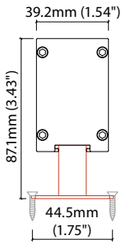
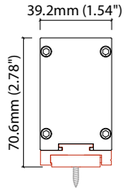
Accessories

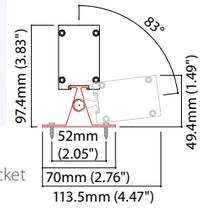
Mounting Options



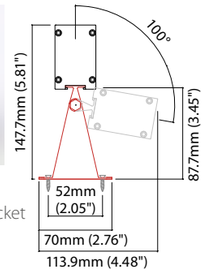
KKBK-02
Fixed bracket
(Allow 2 per metre)
Steel finish



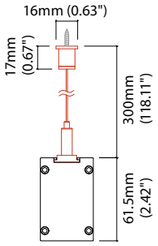
KKBK-09
Mounting plate
(Allow 2 per metre)
Silver anodised aluminium finish



KKBK-16
Small adjustable bracket
(Allow 2 per metre)
Silver anodised aluminium finish



KKBK-17
Large adjustable bracket
(Allow 2 per metre)
Silver anodised
aluminium finish



KKSW-05
Quick release
suspension wire kit

Exterior Junction boxes

KKJB-07
IP67 Slim J-Box

KKJB-07R
Potting Resin for IP67 Slim J-Box

See pages 332-335 for more details

1. SEN Louvre downlighting application
2. SEN Louvre illuminated
3. Suspended installation
4. SEN Louvre detail
5. SEN Louvre cable exit detail
6. Robust screw-fit anodised aluminium end cap

SEN Louvre **Code Table**

Housing/ Finish		Cover/Lens		LED Type			Colour (CCT)		Length Availability			IP Rating		Connection Type		Mounting/ Finishing		Lens		Voltage/ Control	
SEN Louvre, Silver anodised	SVSA	Clear cover	B	h-line 033	033	hl33	2800K	28K	SEN Louvre 033	M	210-1210mm 100mm increments	IP54	54	1000mm Single tail	d1	Profile Cable Exit	4	No lens	x	Constant current DC	a
					050	hl50	3000K	30K	SEN Louvre 050	M	210-1810mm 100mm increments	IP67[1]	67	1000mm Double tail	d2	End cap Cable Exit	5	10°	a		
					100	hl10	3200K	32K	SEN Louvre 100	M	210-1810mm 100mm increments							20°	b		
							3800K	38K										30°	c		
							5000K	50K													
							6500K	65K													
							RED	RED													
							GREEN	GRN													
							BLUE	BLU													

[1] Due to the clear, flush potted polyurethane top layer on IP67 SEN Louvre a colour shift of +/-20K should be expected

Code Example:

SVSA	-	B	-	hl33	-	32K	-	M 1210	-	54	-	d2	-	4	-	c	-	a
SEN Louvre, Silver anodised		Clear cover		h-line 033		3200K		1210mm		IP54		1000mm Double tail		Profile Cable Exit		30°		Constant Current DC

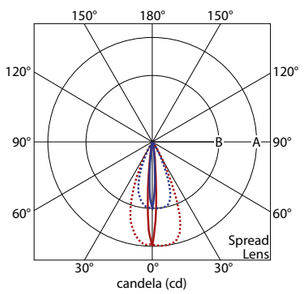
Khun by Yoo Sales Gallery
Lighting Design: Matteo Messervy
KKDC Bangkok

SEN-F

- Exterior in-ground linear luminaire for flush installation. Suitable for uplighting building facades and exterior architectural details.
- Robust anodised housing design with toughened glass.
- Constant Current High Power CREE LED options and power outputs familiar to the SEN family.

350/700mA IP67 CE

Beam Angle	10°/20°/30°/60°/Spread lens (10°x45°)/ No lens
IP Rating	IP67
Lifetime	50,000 hours @ 25°C
Finish	Silver Anodised
Cover/Lens	Clear Glass, Frosted Glass, Micro Louvre + Clear Glass
Mounting	Ground Recessed Mounting
Connection	Sheathed hardwire tail
Control	0-10V/1-10V/DMX/DALI via. External power supply options
IK Rating	IEC 62262:2010/IK08/IK10



C0/C180 C90/C270 700mA
C0/C180 C90/C270 350mA

SEN-F 033 - 350mA	B	4335
SEN-F 033 - 700mA	A	4983
SEN-F 050 - 350mA	B	2826
SEN-F 050 - 700mA	A	4517
SEN-F 100 - 350mA	B	1512
SEN-F 100 - 350mA	A	2339

Drive Over

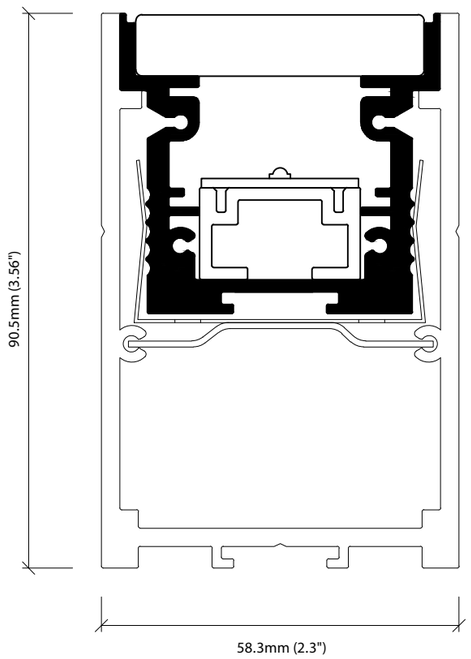
EN 60598-2-13:2006+A1:2012

- 3 ton Static
- 1 ton Torque and Shear

Walk Over

IEC 62262:2010

- IK08 tested



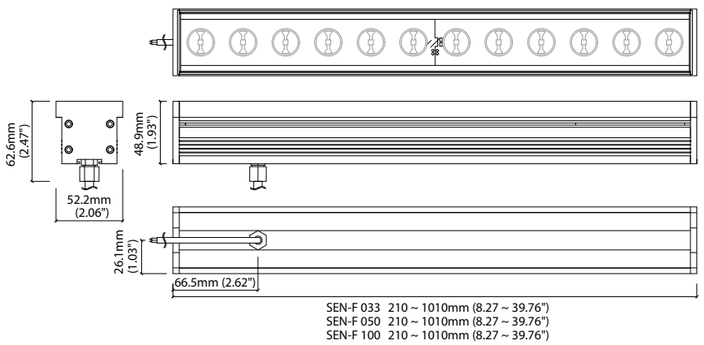
1:1

LED Options

	Constant Current	
CRI (R_9)	R_a 80	R_9 26
TM-30-15	R_f 95	R_g 101
Bin/Step	2 Step MacAdam ellipse (4 Step for 5000K,6500K)	
Colours	White: 2800K/3000K/3200K/ 3800K/5000K/6500K (70CRI for 5000K, 6500K) Single colours: Red/Green/Blue	

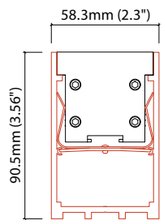
Product Data

	White		
	SEN-F 033	**SEN-F 050**	**SEN-F 100**
Clear Cover 10°	2136 lm/m, 66.7 lm/W @ 3200K, 350mA 3465 lm/m, 50 lm/W @ 3200K, 700mA	1479 lm/m, 68.7 lm/W @ 3200K, 350mA 2430 lm/m, 52.6 lm/W @ 3200K, 700mA	731 lm/m, 68.5 lm/W @ 3200K, 350mA 1229 lm/m, 53.2 lm/W @ 3200K, 700mA
Clear Cover 20°	2146 lm/m, 67 lm/W @ 3200K, 350mA 3479 lm/m, 50.2 lm/W @ 3200K, 700mA	1483 lm/m, 68.9 lm/W @ 3200K, 350mA 2439 lm/m, 52.8 lm/W @ 3200K, 700mA	733 lm/m, 68.7 lm/W @ 3200K, 350mA 1236 lm/m, 53.5 lm/W @ 3200K, 700mA
Clear Cover 30°	2008 lm/m, 62.7 lm/W @ 3200K, 350mA 3264 lm/m, 47.1 lm/W @ 3200K, 700mA	1391 lm/m, 64.6 lm/W @ 3200K 350mA 2287 lm/m, 49.5 lm/W @ 3200K 700mA	687 lm/m, 64.4 lm/W @ 3200K 350mA 1157 lm/m, 50.1 lm/W @ 3200K 700mA
Clear Cover 60°	2235 lm/m, 69.8 lm/W @ 3200K, 350mA 3624 lm/m, 52.3 lm/W @ 3200K, 700mA	1546 lm/m, 71.8 lm/W @ 3200K, 350mA 2541 lm/m, 55 lm/W @ 3200K, 700mA	764 lm/m, 71.6 lm/W @ 3200K, 350mA 1287 lm/m, 55.7 lm/W @ 3200K, 700mA
Spread Lens	2050 lm/m, 64 lm/W @ 3200K, 350mA 3326 lm/m, 48 lm/W @ 3200K, 700mA	1419 lm/m, 65.9 lm/W @ 3200K, 350mA 2333 lm/m, 50.5 lm/W @ 3200K, 700mA	701 lm/m, 65.7 lm/W @ 3200K, 350mA 1180 lm/m, 51.1 lm/W @ 3200K, 700mA
Clear Cover No Lens	1726 lm/m, 53.9 lm/W @ 3200K, 350mA 2800 lm/m, 40.4 lm/W @ 3200K, 700mA	1195 lm/m, 55.5 lm/W @ 3200K, 350mA 1968 lm/m, 42.6 lm/W @ 3200K, 700mA	591 lm/m, 55.4 lm/W @ 3200K, 350mA 996 lm/m, 43.1 lm/W @ 3200K, 700mA
Wattage	32.025 W/m @ 350mA 69.3 W/m @ 700mA	21.53 W/m @ 350mA 46.2 W/m @ 700mA	10.675 W/m @ 350mA 23.1 W/m @ 700mA
Voltage	91.5V/m @ 350mA 99.0V/m @ 700mA	61V/m @ 350mA 66V/m @ 700mA	30.5V/m @ 350mA 33V/m @ 700mA
Dimension	H48.9/W52.2/L210-1010mm	H48.9/W52.2/L210-1010mm	H48.9/W52.2/L210-1010mm
PCB Increment	200mm	200mm	200mm
LED Pitch	33mm - 30 LED/m	50mm - 20 LED/m	100mm - 10 LED/m
Operation Temp	350mA T_a = -25°C to 70°C (T_c max = 76°C) 700mA T_a = -25°C to 40°C (T_c max = 57°C)	350mA T_a = -25°C to 75°C (T_c max = 83°C) 700mA T_a = -25°C to 50°C (T_c max = 70°C)	350mA T_a = -25°C to 75°C (T_c max = 80°C) 700mA T_a = -25°C to 55°C (T_c max = 67°C)



Accessories

Mounting Options



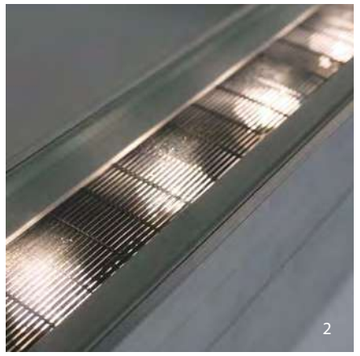
KKSG-02*
Ground box
Anodised aluminium finish
* Specify length to match SEN-F

Exterior Junction boxes

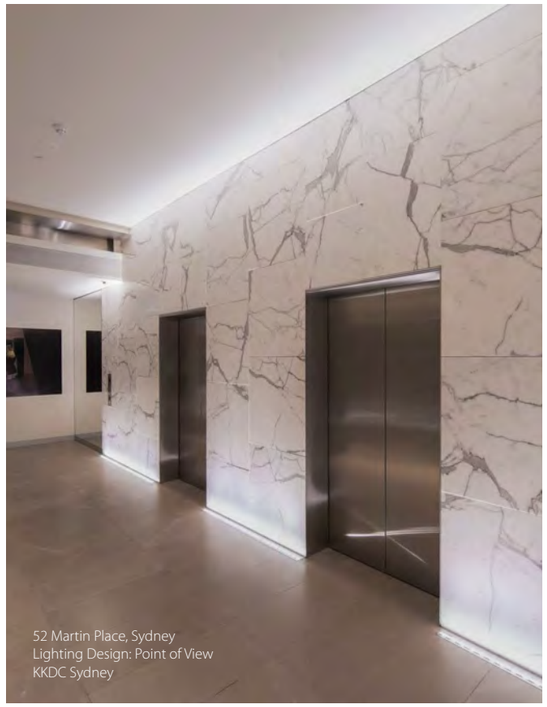
KKJB-07
IP67 Slim J-Box

KKJB-07R
Potting Resin for IP67 Slim J-Box

See pages 332-335 for more details



1. SEN-F inside aluminium ground box rail
2. 45° Micro Louvre Baffle
3. SEN-F end view
4. Installation removable ground box shield
5. Cable exit hole



52 Martin Place, Sydney
Lighting Design: Point of View
KKDC Sydney

52 Martin Place, Sydney
Lighting Design: Point of View
KKDC Sydney

The Darling Star City Casino, Sydney
Lighting Design: Point of View
KKDC Sydney

SEN-F **Code Table**

Housing/Finish		Cover/Lens		LED Type			Colour (CCT)		Length Availability		IP Rating		Connection Type		Lens		Voltage/Control	
SEN-F, Silver anodised	SFSA	Clear Glass	E	h-cc	033	h033	2800K	28K	M	210-810mm 100mm increments	IP67	67	1000mm Single tail	d1	No Lens	x	Constant current DC	a
		Micro Louvre	K		050	h050	3000K	30K					1000mm Double tail	d2	10°	a		
		Frosted Glass	M		100	h100	3200K	32K							20°	b		
							3800K	38K							30°	c		
							5000K	50K							60°	d		
							6500K	65K							Spread Lens	e		
							RED	RED										
							GREEN	GRN										
							BLUE	BLU										

Code Example:

SFSA	-	K	-	h050	-	30K	-	M 610	-	67	-	d2	-	c	-	a
SEN-F, Silver anodised		Micro Louvre		h-line 050		3000K		610mm		IP67		1000mm Double tail		30°		Constant current DC

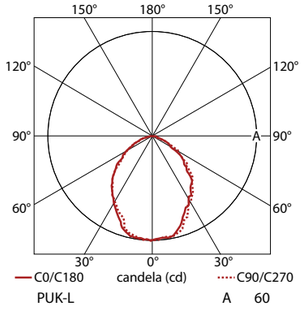
PUK

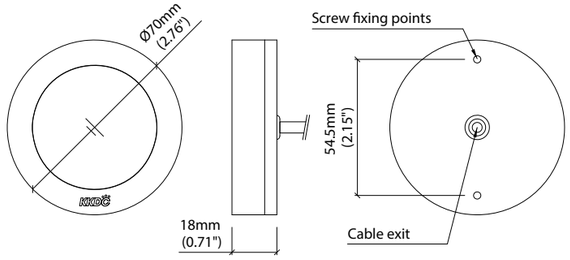
- Compact surface mounted luminaire designed for illumination beneath cabinets and shelves.
- High quality machined aluminium housing available in Silver or Black anodised.
- IP44 suitable for use within bathrooms (Zone 2).
- Clear or fully homogenous diffusion, and optional Anti-glare honeycomb louvre accessory.

PUK-L

24V DC IP44

Luminous Flux	136 lm 51.7 lm/W
Wattage	2.64W
Dimension	H18/Ø70mm
Beam Angle	90° (Clear cover)
IP Rating	IP44
Lifetime	50,000 hours @ 25°C
Operating temp	T_a = -25 to 45°C (T_C max = 62°C)
Finish	Silver Anodised or Black
Cover/Lens	Diffused/Clear (Optional honeycomb louvre accessory)
Mounting	Surface mounted via screws (supplied)
Connection	Hardwire tails
Control	0-10V/1-10V/DMX/DALI (see visDIM range)





Accessories

Mounting Options

PUHC-01
5mm Honeycomb louvre (Includes clip)
Black finish

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. PUK-L installed with diffused cover
2. Cable exit and fixing hole positions
3. High quality machined and anodised aluminium housing

PUK-L **Code Table**

Housing/Finish		Cover/Lens		LED Type		Colour (CCT)		IP Rating/Connection Type		Voltage	
PUK-L, Silver anodised	PLSA	Clear cover	B	143	143	2300K	23K	IP44, 1000mm Single tail	44d1X	24V DC	g
		Diffused cover	C			2500K	25K	IP44, 1000mm Single tail, Honeycomb Louvre	44d1h		
						2700K	27K				
						3000K	30K				
						3500K	35K				
						4000K	40K				
						5000K	50K				

Code Example:

PLSA	-	B	-	143	-	23K	-	44d1X	-	g
PUK-L, Silver anodised		Clear cover		143		2300K		IP44, 100mm Single tail		24V DC

TAYO

- TAYO Family consists of single point source spotlight luminaires for various interior or exterior applications.
- With robust Stainless Steel housing and glass cover, TAYO Spot and TAYO Ceiling provide a high power spotlight solution for interior or exterior uplighting or downlighting applications.
- Ultra compact TAYO Micro housings for interior or exterior marker lighting.

12V DC IP67

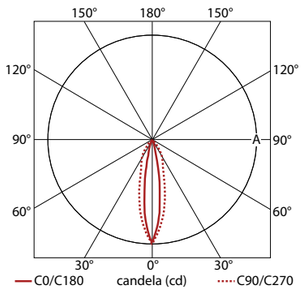
Beam Angle	10°/20°/30°/60°/Spread Lens
IP Rating	IP67
Lifetime	50,000 hours @ 25°C
Finish	Stainless Steel 304
Cover/Lens	Clear Glass/10°/20°/30°/60°/Spread Lens
Mounting	Recessed mounting
Connection	Single sheathed tail
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

Product Data

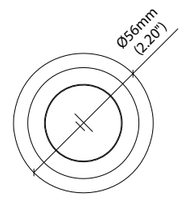
White

	TAYO Spot	TAYO Ceiling
Luminous Flux Clear Cover	49 lm 30.2 lm/W	49 lm 30.2 lm/W
Wattage	1.62 W	1.62 W
Dimension	H63/Ø56mm	H63/Ø66mm
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 50°C (T_C Max = 70°C)	T_a= -25 to 50°C (T_C max = 70°C)

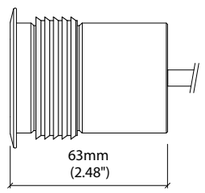
TAYO Spot



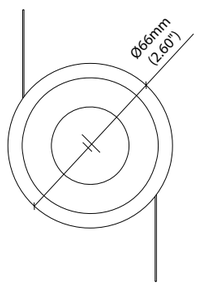
TAYO Spot 10° Lens	A	499
TAYO Ceiling 10° Lens	A	499



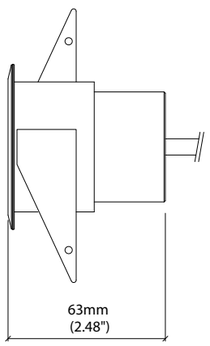
Cut out: Ø47mm (1.85")

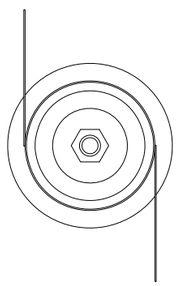


TAYO Ceiling



Cut out: Ø54mm (2.13")





Accessories

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

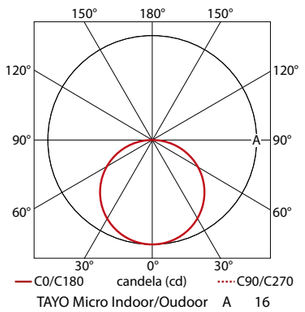
TAYO Micro

12V DC IP67

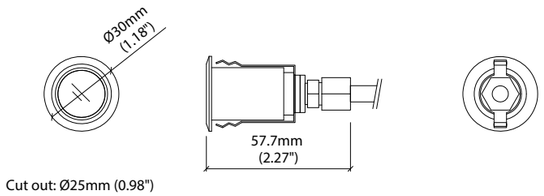
Beam Angle	Diffused: 160°
IP Rating	IP54/IP67
Lifetime	50,000 hours @ 25°C
Finish	Silver anodised (Indoor) Stainless Steel 304 (Outdoor)
Cover/Lens	Diffused (Indoor) Frosted Glass (Outdoor)
Mounting	Recessed mounting
Connection	Single sheathed tail
Control	0-10V/1-10V/DMX/DALI (see visDIM range)

Product Data

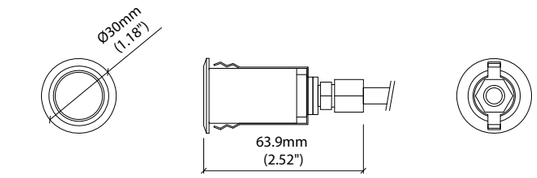
	White	
	TAYO Micro (Indoor)	**TAYO Micro (Outdoor)**
Luminous Flux	3.25 lm 22.6 lm/W	2.19 lm 15.2 lm/W
Wattage	0.144 W	0.144 W
Dimension	H57.7/Ø30mm	H63.9/Ø30mm
Lifetime	50,000 hours @ 25°C	50,000 hours @ 25°C
Operation Temp	T_a = -25 to 60°C (T_C Max = 65°C)	T_a= -25 to 60°C (T_C max = 65°C)
IP rating	IP54	IP67



TAYO Micro (Indoor)



TAYO Micro (Outdoor)



Accessories

Exterior Junction Boxes

KKJB-07
IP67 Slim J-Box
(including type A,B,C bushings)

KKJB-07R
Potting Resin for IP67 Slim J-Box

Power & Control

KKPS-01
visDIM 1-10V 100W PSU, 24V (1-channel)

KKPS-02
visDIM DMX 100W PSU, 24V (3-channel)

KKPS-03
visDIM D 100W PSU, 24V (3-channel)

KKDM-05
visDIM 1-10V sub-controller

KKSC-03A DMX
visDIM DMX sub-controller (3-channel, screw terminal)

KKSC-03B DMX
visDIM DMX sub-controller (3-channel, RJ45)

KKDL-01
visDIM D sub-controller (3-channel)

See pages 332-335 for more details

1. TAYO Spot with narrow beam optic
2. TAYO Micro
3. TAYO Spot installed in floor
4. TAYO Ceiling installed
5. TAYO Ceiling S/Steel Bezel
6. Strong spring fixing collar

Auckland Convention Centre
KKDC New Zealand

TAYO **Code Tables**

Housing/Finish		Cover/Lens		LED Type		Colour (CCT)		IP Rating/Connection Type		Lens		Voltage	
TAYO Spot, Stainless Steel	TPST	Clear	E	h– TAYO Spot	h107	2800K	28K	IP67, 1000mm Single tail	67d1	10°	a	12V DC	f
TAYO Ceiling, Stainless Steel	TLST					3000K	30K			20°	b		
						3200K	32K			30°	c		
						3800K	38K			60°	d		
						5000K	50K			Spread Lens	e		
						6500K	65K						
						RED	RED						
						GREEN	GRN						
						BLUE	BLU						

TAYO Code Example:

TLST	-	E	-	h107	-	38K	-	67d1	-	c	f
TAYO Spot, Stainless Steel		Clear		h-line TAYO Spot		3800K		IP67, 1000mm Single tail		30°	12V DC

Housing/Finish		Cover/Lens		LED Type		Colour (CCT)		IP Rating/Connection Type		Voltage	
TAYO Micro Outdoor, Stainless Steel	TOST	Diffused (Indoor only)	C	s– TAYO Micro	s106	2700K	27K	IP67, 1000mm Single tail (Outdoor only)	67d1	12V DC	f
TAYO Micro Indoor, Silver anodised	TRSA	Clear glass and inner diffused (Outdoor only)	Q			3000K	30K	IP54, 1000mm Single tail (Indoor only)	54d1		
						3500K	35K				
						5000K	50K				
						RED	RED				
						GREEN	GRN				
						BLUE	BLU				

TAYO Micro Code Example:

TRSA	-	C	-	s106	-	35K	-	54d1	-	f
TAYO Micro Indoor, Silver anodised		Diffused		s-line TAYO Micro		3500K		IP54, 1000mm Single tail		12V DC

Control Gear

visDIM

9-24V DC | IP20

Dimension	H34/W64/L164mm (H1.34/W2.52/L6.46in)
Weight	160g (0.35lbs)
Operating Temp	T_a = -10 to 60°C (T_c max = 80°C) T_a = 14 to 140°F (T_c max = 176°F)
Storage Temp	T_a = -20 to 70°C T_a = -4 to 158°F
IP Rating	IP20
Finish	Plastic cover (black)
Mounting	Surface mount via screws
Input Voltage	9-24V DC
Output Voltage	as Input Voltage
PWM Frequency	3.3KHz
EMC Emission	EN 55015, EN 61547
EMC Immunity	EN 61000-4-2, 3, 4, 6
UL Safety	UL8750
CSA Safety	CSA C22.2 No. 250.13

KKDC designed, control units – for superior dimming and control of KKDC LED products.

- High Frequency dimming in accordance with 'IEEE 1789:2015, Recommended Practice 2 – No Effect Limits'.
- visDIM range high frequency minimises flicker and stroboscopic effects for comfortable dimming and interference-free video monitoring or recording.
- Dim to warm single input functions and Dynamic white control options, with 1-10V systems.
- Smooth, stable dimming across the output range with very good resolution and subtle pop-on/pop-off at low levels.
- High quality components and circuit design preserves both control and output quality over longer wiring distances, maximising the colour stability and lifetime of LED products.
- High load capacity sub-controllers (5A per channel) for reduced numbers and lower costs in larger projects.

	visDIM 1-10V Sub-controller	**visDIM D Sub-controller**	**visDIM DMX Sub-controller**	**visDIM DMX 4 Channel Sub-controller**
Order Code	KKDM-05 KKDM-05U (UL version)	KKDL-01 KKDL-01U (UL version)	KKSC-03A (Terminal type) KKSC-03B (RJ45 type) KKSC-03AU (UL version, Terminal type) KKSC-03BU (UL version, RJ45 type)	KKSC-04A (Terminal type) KKSC-04B (RJ45 type)
Control	1-10V sink or source control inputs (100KΩ Potentiometer)	3 DALI Channels (IEC 62386-101) or stand alone function (RGB sequence, fixed colour and white control)	DMX512 system or stand alone function (RGB sequence, fixed colour and white control)	DMX512 system or stand alone function (RGB sequence, fixed colour and white control)
Output Current	2 x 5A max. @ 9~24V DC 4A max. total output @ 24V, 8A max. total output @ 9~12V (UL version)	3 x 5A max. @ 9~24V DC 4A max. total output @ 24V, 8A max. total output @ 9~12V (UL version)	3 x 5A max. @ 9~24V DC 4A max. total output @ 24V, 8A max. total output @ 9~12V (UL version)	4 x 5A max. @ 9~24V DC
Output Wattage	2 x 120W @ 24V, 2 x 60W @ 12V, 2 x 45W @ 9V max. 96W max. total output @ 12~24V, 72W max. total output @ 9V (UL version)	3 x 120W @ 24V, 3 x 60W @ 12V, 3 x 45W @ 9V max. 96W max. total output @ 12~24V, 72W max. total output @ 9V (UL version)	3 x 120W @ 24V, 3 x 60W @ 12V, 3 x 45W @ 9V max. 96W max. total output @ 12~24V, 72W max. total output @ 9V (UL version)	4 x 120W @ 24V, 4 x 60W @ 12V, 4 x 45W @ 9V max.

visDIM 1-10V Sub-controller functions

DIP Switch							
Input Type	1-10V Sink	1-10V Source	1-10V Sink	1-10V Source	1-10V Sink	1-10V Source	1-10V Sink (2ch)
Dimming Curve	Linear	Linear	Log	Log	Dynamic White	Dynamic White	Tunable White
Output	1ch	1ch	1ch	1ch	LEDmix	LEDmix	LEDmix

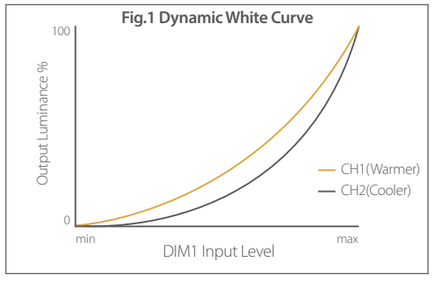
Symbols explained

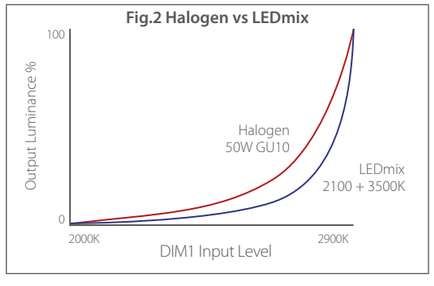
	Dip switch controller
1-10V Sink	For single input 1-10V control. Requires resistive controller
1-10V Source	For single input 1-10V control. Requires control voltage input
1-10V Sink (2ch)	For independent 1-10V control of 2 channel input (DIM1 & DIM2)
	Linear dimming curve
	Logarithmic dimming curve

Dynamic White

Single input (DIM 1) controls both output channels as LEDmix control (Fig.1).

When using 2100K mixed with 3500K it produces dimming and CCT curves closely matched to halogen/ incandescent (Fig.2).



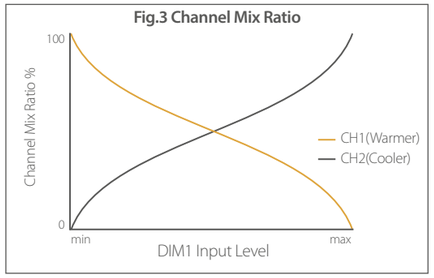


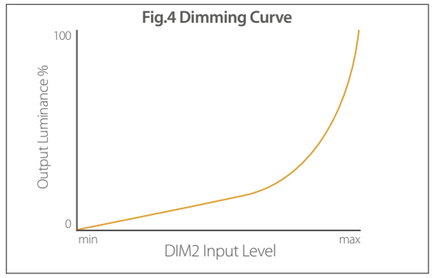
Tunable White

Two input channels to control colour and dimming for LEDmix.

DIM 1 input controls the channel mixing (cool/warm) between CH1 & CH2 outputs (Fig.3).

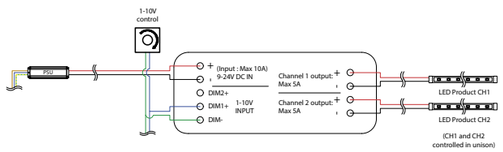
DIM2 input controls the overall output level, while keeping the colour mix consistent (Fig.4).



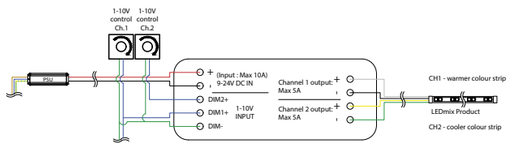


visDIM 1-10V Sub-controller wiring

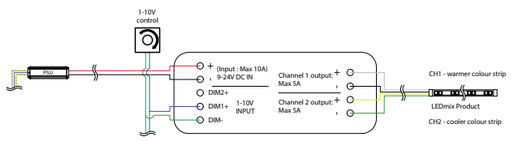
Single input dimming control



Tunable white control



Dynamic white control



Single input Dynamic white function for 207/208 family strip

visDIM DMX Sub-controller functions and wiring

DMX Receiver Mode — Rotary pots control DMX channel (Unit must be reset after changing the DMX channel, by switching unit off then on)

DMX end of line termination — Rotary pots control DMX channel (Unit must be reset after changing the DMX channel, by switching unit off then on)

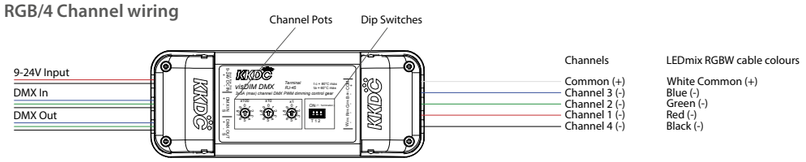
Stand alone (white/mono) — Rotary pots act as dimmer
x100 = 10% dim step
x10 = 1% dim step
x1 = 0.1% dim step

Stand alone (RGB) — Rotary pots act as sequence control

STAND ALONE SET UP

	Pot address/function		
Mode	x100	x10	x1
Fixed colour	0	Output control, 0=Low, 9=High	Static colour, 0=Blue, 1=Red, 2=Yellow, 3=Green...
RGB Scroll	1~9	Output control, 0=Low, 9=High	Scroll speed, 0=Low, 9=high

RGB/4 Channel wiring

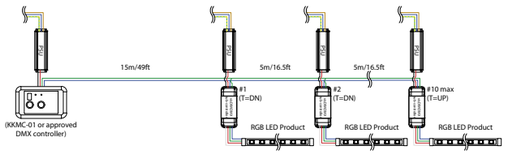


For RJ45 Pin Connections

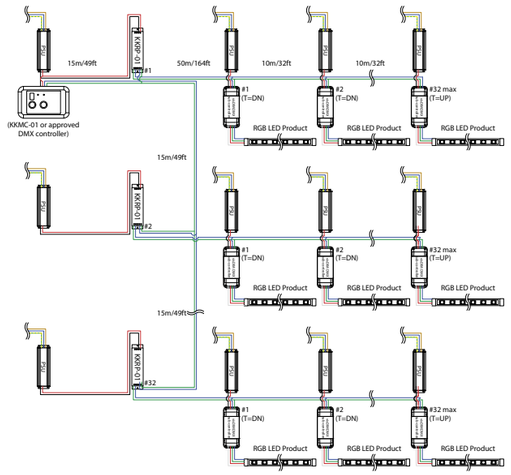
Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8
White/Green	Green	White/Orange	Blue	White/Blue	Orange	White/Brown	Brown
DMX -	DMX +	Shield	+ (supplied Voltage for DMX control gear)	+ (supplied Voltage for DMX control gear)	N/C	- (supplied Voltage for DMX control gear)	- (supplied Voltage for DMX control gear)

DMX System wiring examples

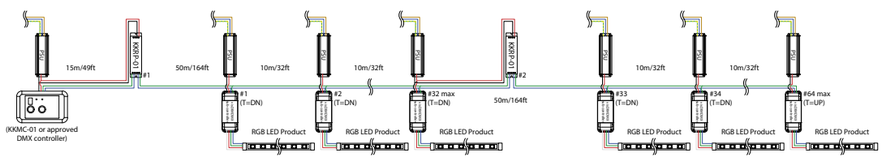
Small system – DMX controller + visDIM DMX



Large system – DMX controller + visDIM DMX + KKRP-01 DMX repeater



Linear system – DMX controller + visDIM DMX + KKRP-01 DMX repeater

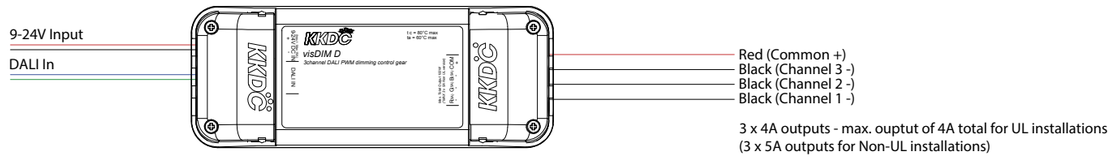


visDIM D Sub-controller functions and wiring

- When constructing DALI systems, please reference the DALI master controller device/console manual.
- Before constructing the DALI system, note for the address setup, please refer the below factory shipment setup address.
- DALI Address: No.0 ~ No.63 / DALI Group : No.0 ~ No.15

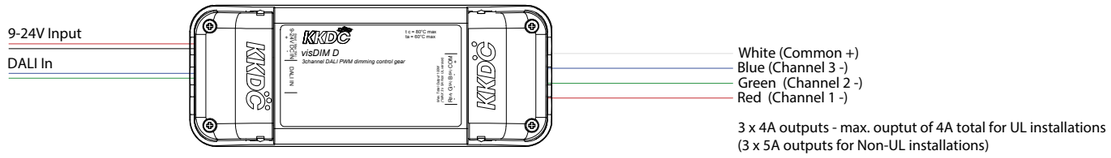
visDIM Output Channel	Ch.1 (Red)	Ch.2 (Green)	Ch.3 (Blue)
DALI Channel	DALI 0	DALI 1	DALI 2

visDIM D Sub-controller 3 white channels wiring

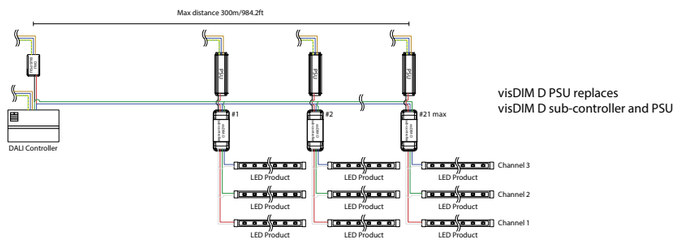


When output channels are linked, the 3 controlling channels MUST be linked and controlled in unison.

visDIM D Sub-controller RGB wiring



DALI System wiring examples



visDIM PSU (24V DC)

220~240V AC | IP67 | CE

Dimension	H48/W73/L248mm
Weight	1.5Kg
Operating Temp	T_a = -20 to 50°C (T_c max = 85°C)
Operating Humidity	25RH to 85RH
Storage Humidity	25RH to 90RH
Storage Temp	T_a = -40°C to 85°C
IP Rating	IP67
Finish	Silver anodised
Mounting	Surface mount via screws
Input Voltage	220-240V AC
Output Voltage	24V DC
PWM Frequency	3.3KHz
DC IN +, DC IN-	DC IN +, DC IN-
Input Frequency Range	50~60Hz
Power Factor	PF > 0.9
Efficiency	Min. 80%
Ripple & Noise	< 250mV
Safety Standards	EN 61347-1, EN 61347-2-13
EMC emission	EN 55015, EN 61547, EN 61000-3-2, EN61000-3-3
EMC immunity	EN 61000-4-2, 3, 4, 5, 6, 11

	visDIM 1-10V PSU	visDIM DMX PSU	visDIM D PSU (DALI input)
Order Code	KKPS-01	KKPS-02	KKPS-03
Control	Via 1-10V system or 100KOhm Variable Resistor	DMX512 system	3 DALI Channels (DALI according to IEC 62386-101, IEC 62386-102, IEC 62386-207)
Channels	1	3	3
Output Wattage	4.3A max	4.3A max	4.3A max
Rated Power	100W max	100W max	100W max
Heat Shield			

DMX Master Controller

9-24V DC | IP20 | CE

Order Code	KKMC-01
Dimension	H45.4/W116.6/L72.7mm
IP Rating	IP20
Finish	Plastic cover (White)
Mounting	Surface mounting via clip
Control	DMX512 output
Input Voltage	9-24V DC
Output Voltage	Depending on the Input Voltage
Output Current	3 x 1mA (max) channels on RGB output
Unit Load	2W max
Port Description	DMX512 control output RGB output to product (Ch1 + Ch2 + Ch3)

- Simple DMX controller with variable speed RGB sequence, static colours and dimming mode.
- DMX output.
- RGB (3x1A max.) PWM output.

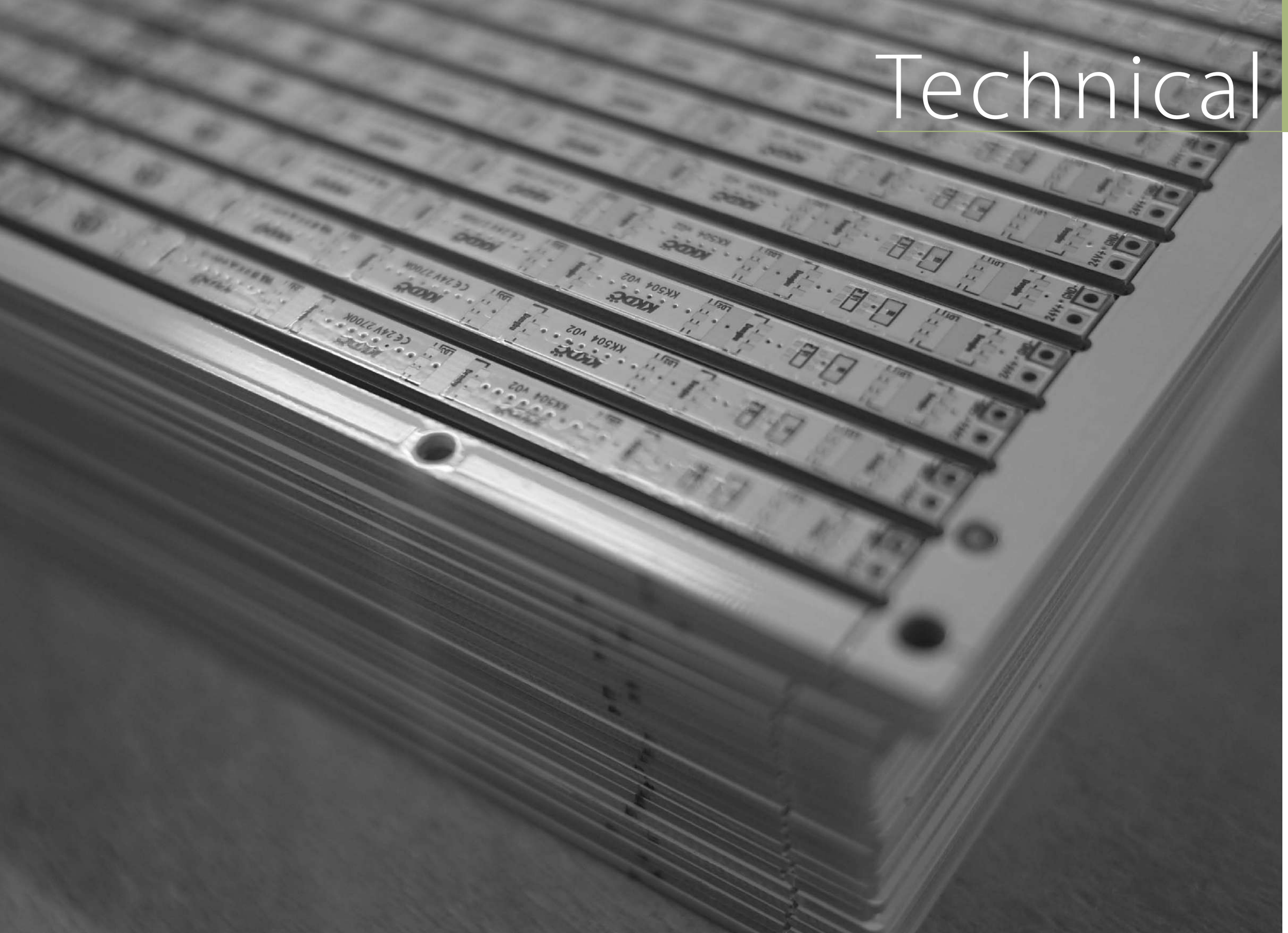
DMX Repeater

12-24V DC | IP20 | CE

Order Code	KKRP-01
Dimension	H30/W49.5/L194.5mm
IP Rating	IP20
Finish	Metal cover (Black)
Mounting	Surface mount via screw
Input Voltage	9-24V DC
Unit load	2W max
Port Description	9-24V DC power input DMX512 control input DMX shield Boosted DMX512 output

- DMX Signal Boost.
- Preserves signal level and integrity in long/complex DMX systems or areas of high electromagnetic interface.

Technical



Accessory Connectors

Interior Connectors

KKCN-01 (50mm pair)
KKCN-03 (300mm pair)
2 PIN male + female connector set

KKCN-07 (50mm pair)
KKCN-09 (300mm pair)
4 PIN RGB male + female connector set

KKCN-18 (50mm pair)
KKCN-19 (300mm pair)
4 PIN LEDmix WHITE male + female connector set

KKCN-29 (50mm pair)
KKCN-30 (300mm pair)
5 PIN LEDmix RGBW male + female connector set

KKCN-06
2 PIN 300mm extension lead

KKCN-24
4 PIN LEDmix WHITE 300mm extension lead

KKCN-11
4 PIN RGB 300mm extension lead

Exterior Connectors

CN54-2P-0300 (300mm pair)
CN54-2P-1000 1000mm pair
IP54
2 PIN male + female connector set

CN54-4P-0300 (300mm pair)
IP54
4 PIN RGB/LEDmix male + female connector set

CN67-2P-0300 (300mm pair)
CN67-2P-1000 (1000mm pair)
CN67-2P-3000 (3000mm pair)
IP67
2 PIN male + female connector set

CN67-4P-0300 (300mm pair)
CN67-4P-1000 (1000mm pair)
CN67-4P-3000 (3000mm pair)
IP67
4 PIN RGB/LEDmix male + female connector set

Sub-controllers & Power supply

Dimming Power Supplies

KKPS-01
IP67 visDIM 1-10V 100W PSU,
24V (1-channel)
L248/W73/H48mm

KKPS-02
IP67 visDIM DMX 100W PSU,
24V (3-channel)
L248/W73/H48mm

KKPS-03
IP67 visDIM D 100W PSU,
24V (3-channel)
L248/W73/H48mm

Dimming Sub-controllers

KKDM-05
visDIM 1-10V sub-controller
L164/W64/H34mm

KKSC-03A DMX
visDIM DMX sub-controller
(3-channel, Screw terminal)
L164/W64/H34mm

KKSC-03B DMX
visDIM DMX sub-controller
(3-channel, RJ45)
L164/W64/H34mm

KKDL-01
visDIM D sub-controller
(3-channel)
L164/W64/H34mm

Sub-controllers & Power supply accessories

Exterior Junction Boxes

KKJB-01
IP67 Large junction box
White Polycarbonate casing
L128mm W88mm H44mm

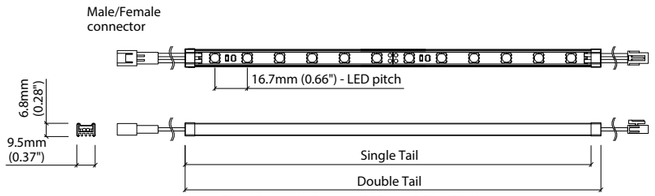
KKJB-06
IP68 Slimline junction box
Gel filled ABS casing
L94mm W44mm H24mm

KKJB-07
IP67 Slim J-Box
(Include Type A,B,C bushings)

KKJB-07R
Potting Resin for
IP67 Slim J-Box

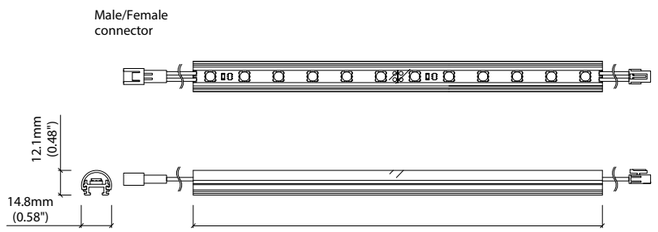
Technical Drawings

TiMi



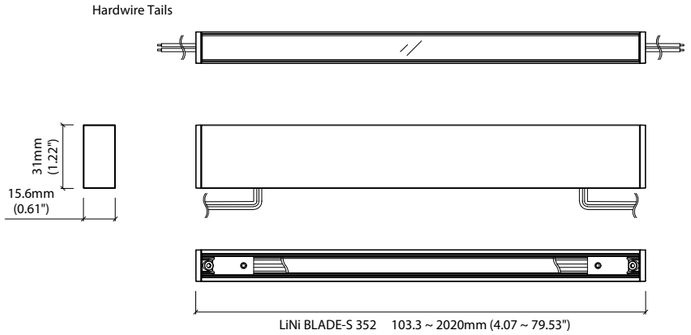
TiMi 352	90.3mm ~ 2007mm (3.56 ~ 79.01") - single tail 97.3mm ~ 2014mm (3.83 ~ 79.29") - double tail
TiMi 007	48.7mm ~ 2007mm (1.91 ~ 79.01") - single tail 55.7mm ~ 2014mm (2.19 ~ 79.29") - double tail
TiMi 504	107mm ~ 2007mm (4.21 ~ 79.01") - single tail 114mm ~ 2014mm (4.49 ~ 79.29") - double tail
TiMi 508	78.4mm ~ 2007mm (3.08 ~ 79.01") - single tail 85.4mm ~ 2014mm (3.36 ~ 79.29") - double tail
TiMi 207	90.3mm ~ 2007mm (3.56 ~ 79.01") - single tail 97.3mm ~ 2014mm (3.83 ~ 79.29") - double tail
TiMi 208	173.7mm ~ 2007mm (6.84 ~ 79.01") - single tail 180.7mm ~ 2014mm (7.11 ~ 79.29") - double tail
TiMi RGB	90.3mm ~ 2007mm (3.56 ~ 79.01") - single tail 97.3mm ~ 2014mm (3.83 ~ 79.29") - double tail

TiMi-C



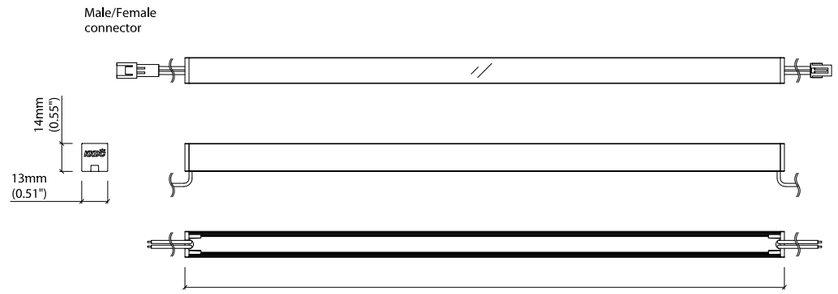
TiMi-C 352	83.3 ~ 2000mm (3.28 ~ 78.74")
TiMi-C 007	83.3 ~ 2000mm (3.28 ~ 78.74")
TiMi-C 504	100 ~ 2000mm (3.94 ~ 78.74")
TiMi-C 508	83.3 ~ 2000mm (3.28 ~ 78.74")
TiMi-C 207	83.3 ~ 2000mm (3.28 ~ 78.74")
TiMi-C 208	166.7 ~ 2000mm (6.56 ~ 78.74")
TiMi-C RGBW	166.7 ~ 2000mm (6.56 ~ 78.74")

Lini BLADE-S



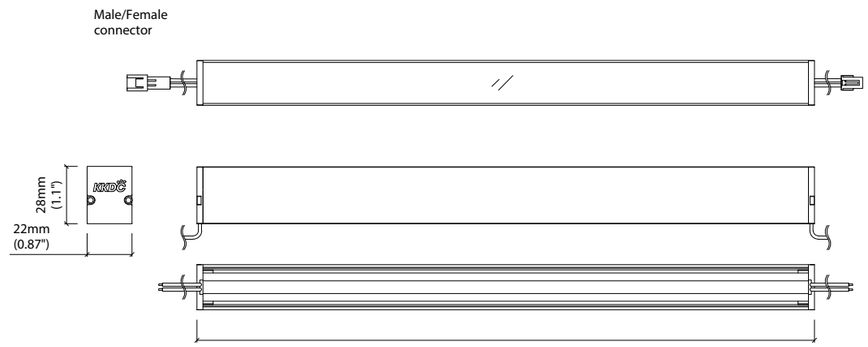
LiNi BLADE-S 352	103.3 ~ 2020mm (4.07 ~ 79.53")
LiNi BLADE-S 007	103.3 ~ 2020mm (4.07 ~ 79.53")
LiNi BLADE-S 504	120 ~ 2020mm (8.66 ~ 79.53")
LiNi BLADE-S 508	91.4 ~ 2020mm (3.6 ~ 79.53")
LiNi BLADE-S 207	103.3 ~ 2020mm (4.07 ~ 79.53")
LiNi BLADE-S 208	186.7 ~ 2020mm (7.35 ~ 79.53")
LiNi BLADE-S RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

LiNi-S



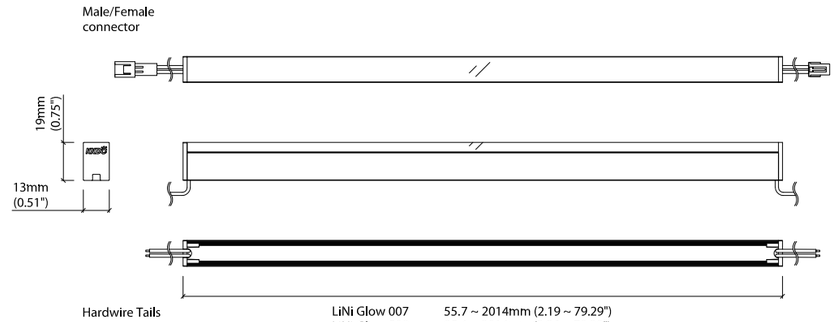
LiNi-S 352	97.3 ~ 2014mm (3.83 ~ 79.29")
LiNi-S 007	55.7 ~ 2014mm (2.19 ~ 79.29")
LiNi-S 504	114 ~ 2014mm (4.49 ~ 79.29")
LiNi-S 508	85.4 ~ 2014mm (3.36 ~ 79.29")
LiNi-S 207	97.3 ~ 2014mm (3.83 ~ 79.29")
LiNi-S 208	180.7 ~ 2014mm (7.11 ~ 79.29")
LiNi-S RGB	97.3 ~ 2014mm (3.83 ~ 79.29")

LiNi-S XL



LiNi-S XL 352	94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi-S XL 504	111 ~ 2011mm (4.37 ~ 79.17")
LiNi-S XL 508	82.4 ~ 2011mm (3.24 ~ 79.17")
LiNi-S XL 207	94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi-S XL 208	177.7 ~ 2011mm (6.99 ~ 79.17")
LiNi-S XL RGB	94.3 ~ 2011mm (3.71 ~ 79.17")

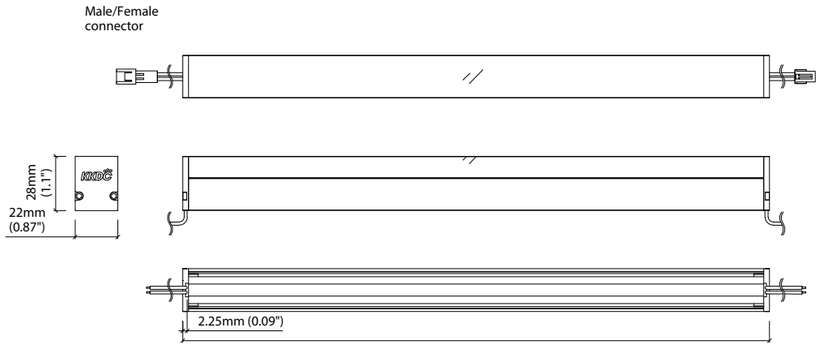
LiNi Glow



LiNi Glow 007	55.7 ~ 2014mm (2.19 ~ 79.29")
LiNi Glow 508	85.4 ~ 2014mm (3.36 ~ 79.29")

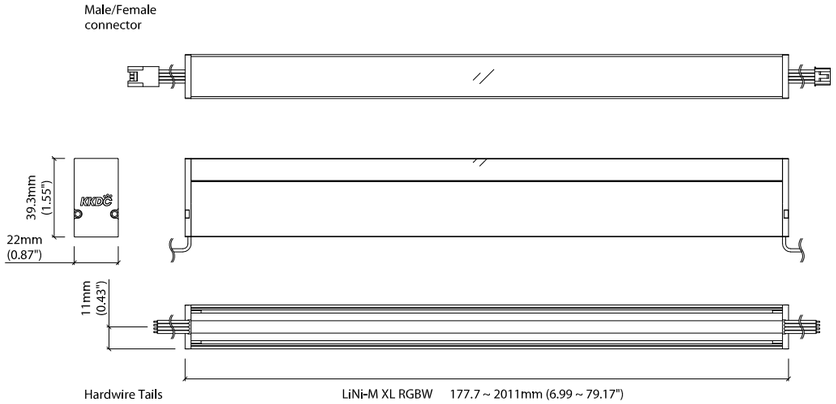
Technical Drawings

LiNi Glow XL



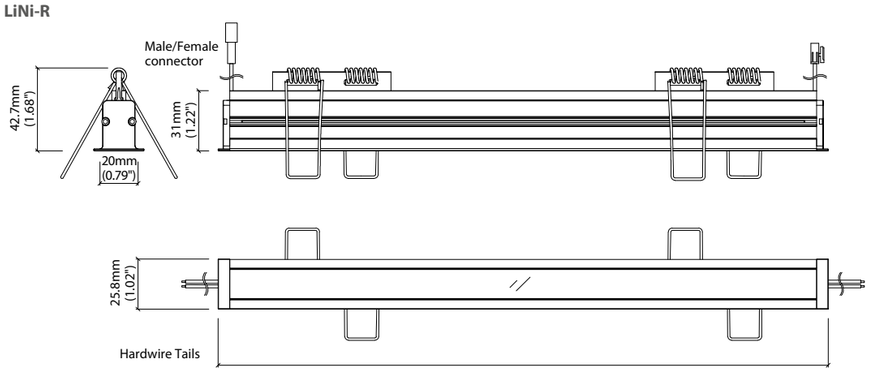
LiNi Glow XL 352	94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi Glow XL 504	111~2011mm (4.37 ~ 79.17")
LiNi Glow XL 508	82.4 ~ 2011mm (3.24 ~ 79.17")
LiNi Glow XL 207	94.3 ~ 2011mm (3.71 ~ 79.17")
LiNi Glow XL 208	177.7 ~ 2011mm (6.99 ~ 79.17")
LiNi Glow XL RGB	94.3 ~ 2011mm (3.71 ~ 79.17")

LiNi-M XL



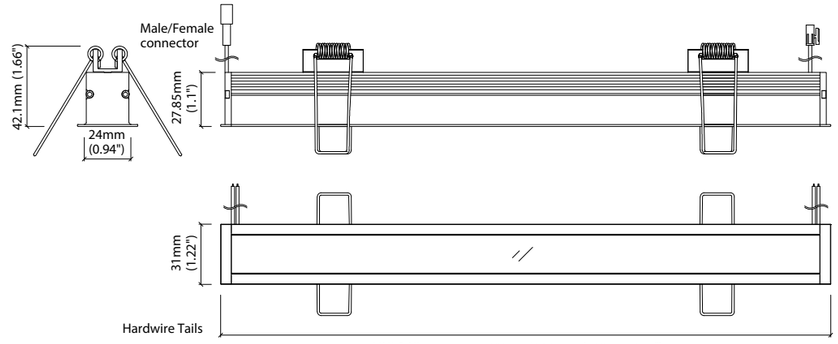
LiNi-M XL RGBW 177.7 ~ 2011mm (6.99 ~ 79.17")

LiNi-R



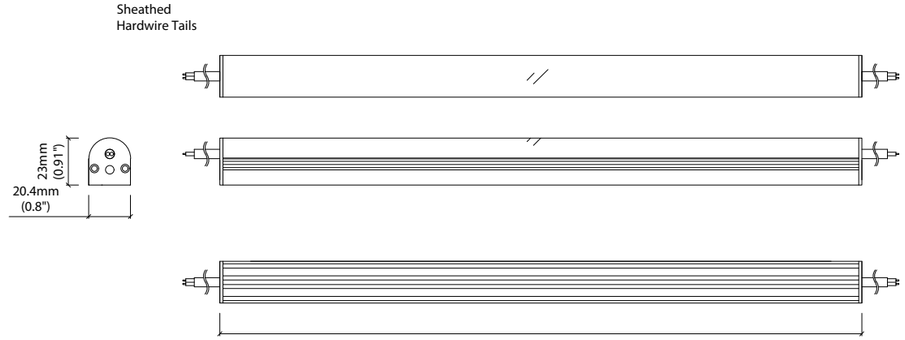
LiNi-R 352	100.3 ~ 2017mm (3.95 ~ 79.41")
LiNi-R 504	117 ~ 2017mm (4.61 ~ 79.41")
LiNi-R 508	88.4 ~ 2017mm (3.48 ~ 79.41")
LiNi-R 207	100.3 ~ 2017mm (3.95 ~ 79.41")
LiNi-R 208	183.7 ~ 2017mm (7.23 ~ 79.41")
LiNi-R RGB	100.3 ~ 2017mm (3.95 ~ 79.41")

LiNi-R XL



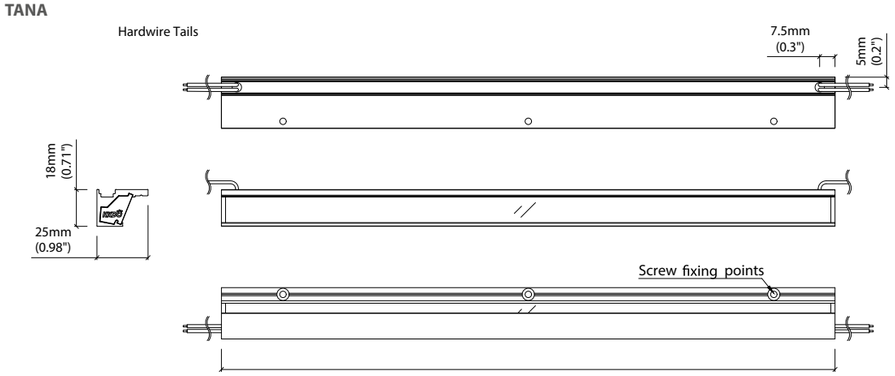
LiNi-R XL 352	99.3 ~ 2016mm (3.91 ~ 79.37")
LiNi-R XL 504	116 ~ 2016mm (4.57 ~ 79.37")
LiNi-R XL 508	87.4 ~ 2016mm (3.44 ~ 79.37")
LiNi-R XL 207	99.3 ~ 2016mm (3.91 ~ 79.37")
LiNi-R XL 208	182.7 ~ 2016mm (7.19 ~ 79.37")
LiNi-R XL RGB	99.3 ~ 2016mm (3.91 ~ 79.37")

Power Cove



Power Cove 512 84.4 ~ 2013mm (3.32 ~ 79.25")

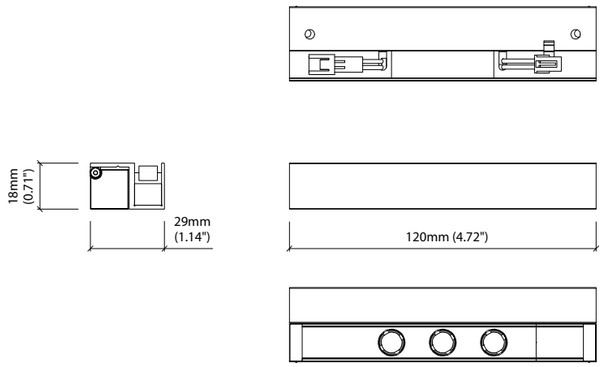
TANA



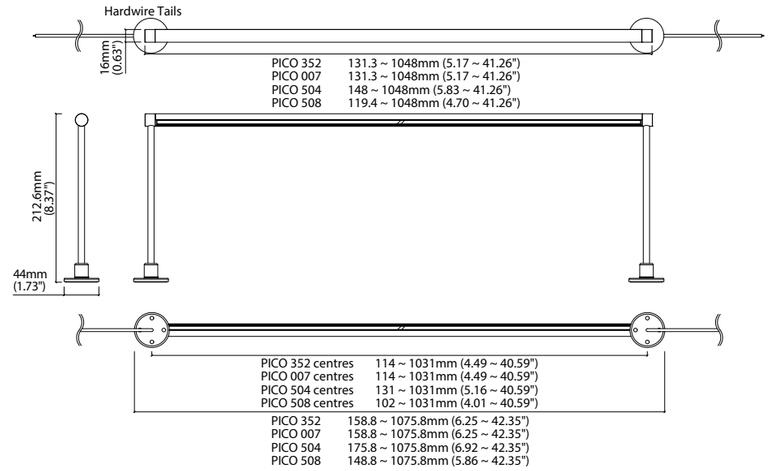
TANA 352	103.3 ~ 2020mm (4.07 ~ 79.53")
TANA 504	120 ~ 2020mm (4.72 ~ 79.53")
TANA 508	91.4 ~ 2020mm (3.60 ~ 79.53")
TANA 207	103.3 ~ 2020mm (4.07 ~ 79.53")
TANA 208	186.7 ~ 2020mm (7.35 ~ 79.53")
TANA RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

Technical Drawings

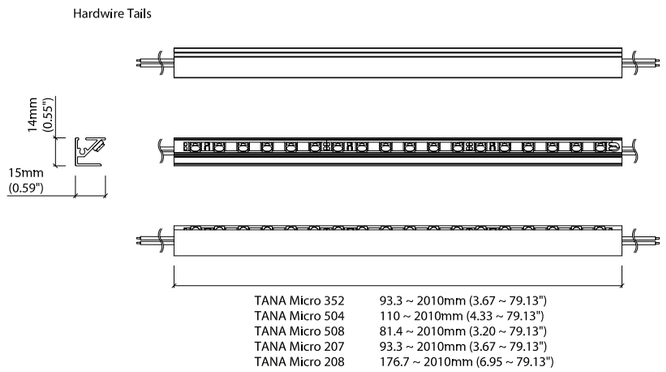
TANA Spot



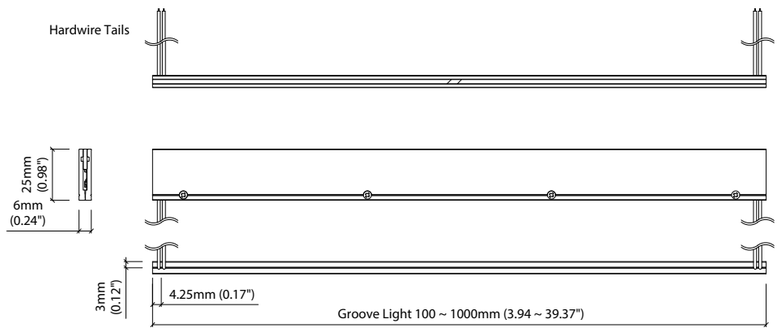
PICO



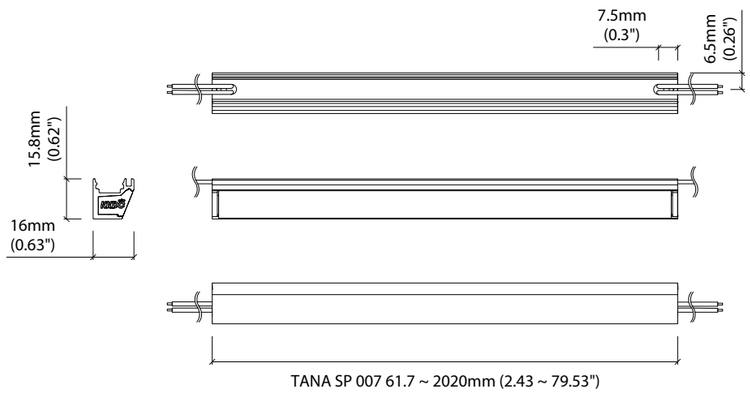
TANA Micro



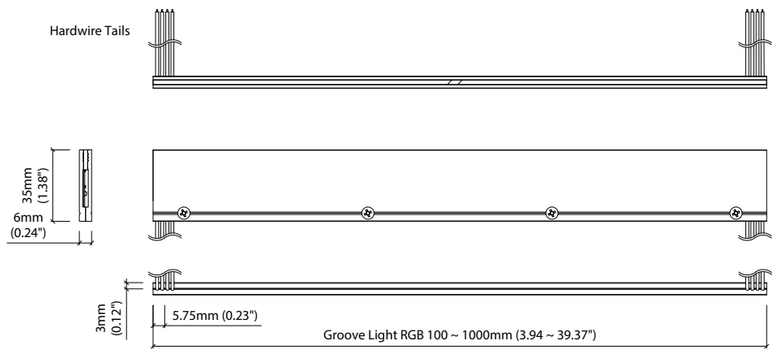
Groove Light



TANA SP

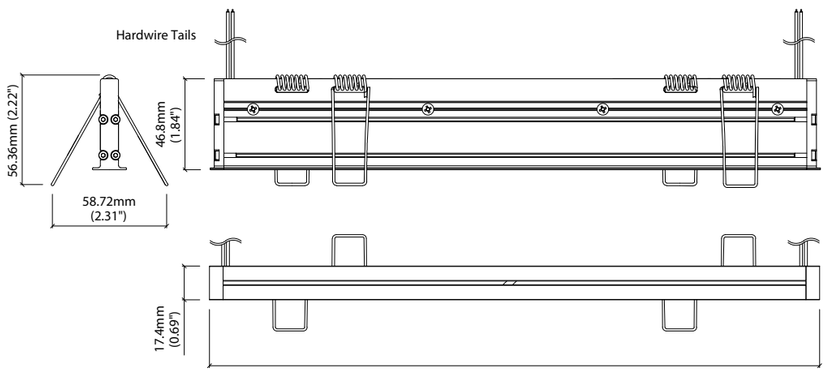


Groove Light RGB



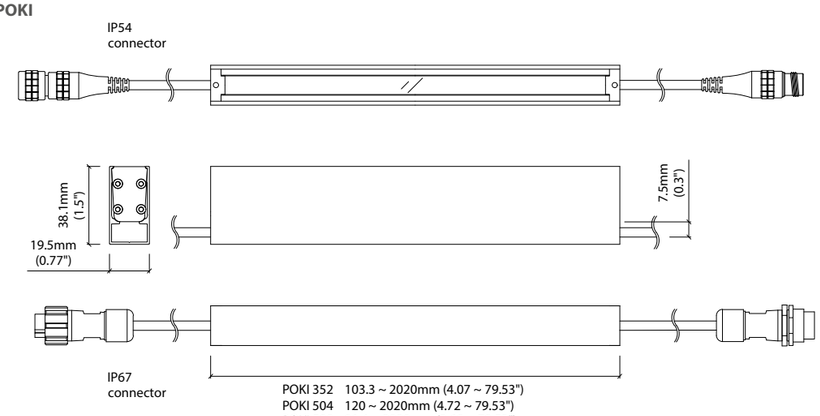
Technical Drawings

Groove IN



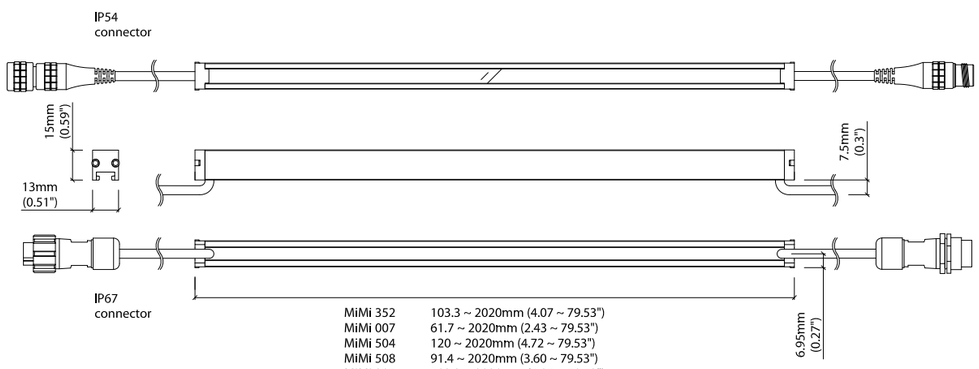
Groove IN	114 ~ 1014mm (4.49 ~ 39.92")
Groove IN RGB	114 ~ 1014mm (4.49 ~ 39.92")

POKI



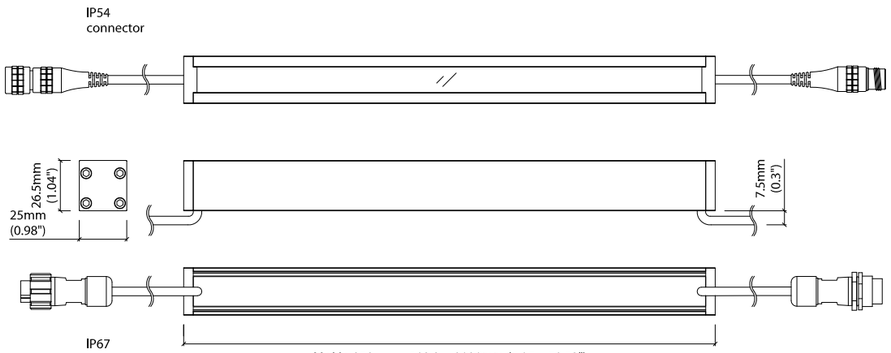
POKI 352	103.3 ~ 2020mm (4.07 ~ 79.53")
POKI 504	120 ~ 2020mm (4.72 ~ 79.53")
POKI 508	91.4 ~ 2020mm (3.60 ~ 79.53")
POKI 207	103.3 ~ 2020mm (4.07 ~ 79.53")
POKI 208	186.7 ~ 2020mm (7.35 ~ 79.53")
POKI RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

MiMi



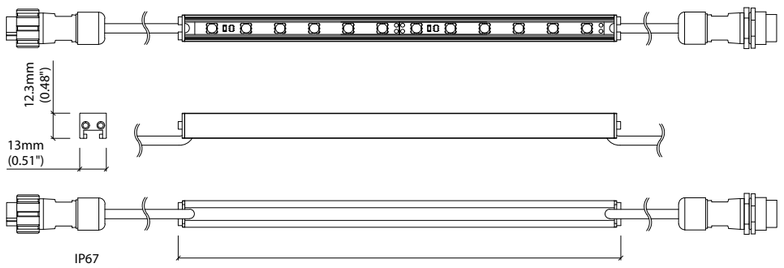
MiMi 352	103.3 ~ 2020mm (4.07 ~ 79.53")
MiMi 007	61.7 ~ 2020mm (2.43 ~ 79.53")
MiMi 504	120 ~ 2020mm (4.72 ~ 79.53")
MiMi 508	91.4 ~ 2020mm (3.60 ~ 79.53")
MiMi 207	103.3 ~ 2020mm (4.07 ~ 79.53")
MiMi 208	186.7 ~ 2020mm (7.35 ~ 79.53")
MiMi RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

MoMo



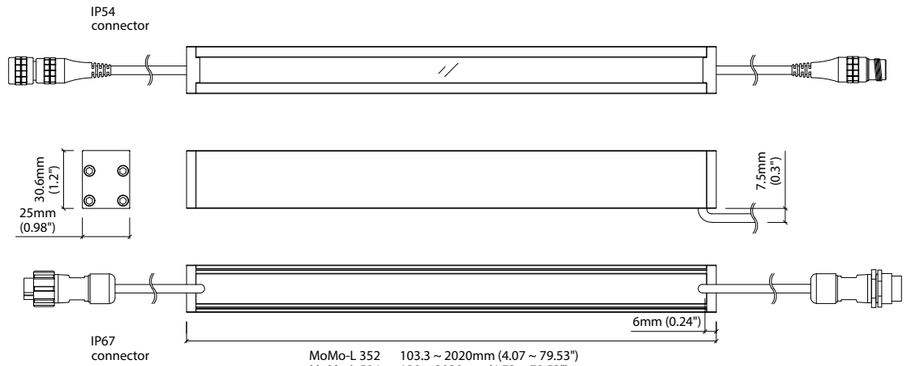
MoMo 352	103.3 ~ 2020mm (4.07 ~ 79.53")
MoMo 504	120 ~ 2020mm (4.72 ~ 79.53")
MoMo 508	91.4 ~ 2020mm (3.60 ~ 79.53")
MoMo 207	103.3 ~ 2020mm (4.07 ~ 79.53")
MoMo 208	186.7 ~ 2020mm (7.35 ~ 79.53")
MoMo RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

KKSL



KKLS 504	116 ~ 2016mm (4.57 ~ 79.37")
KKSL 352	99.3 ~ 2016mm (3.91 ~ 79.37")
KKSL 508	87.4 ~ 2016mm (3.44 ~ 79.37")
KKSL RGB	99.3 ~ 2016mm (3.91 ~ 79.37")

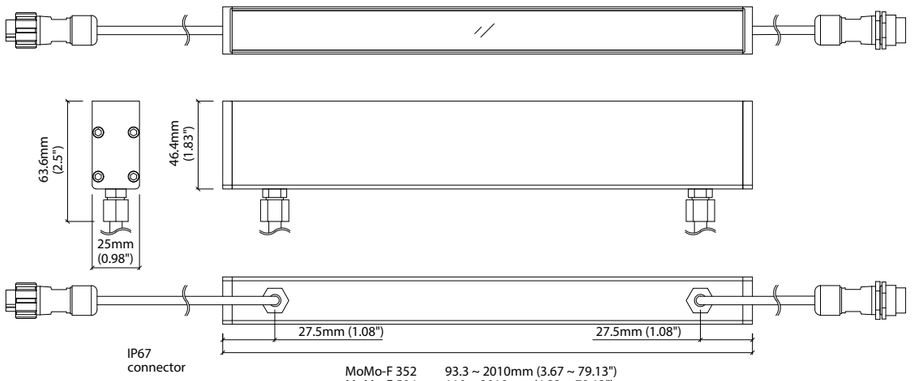
MoMo-L



MoMo-L 352	103.3 ~ 2020mm (4.07 ~ 79.53")
MoMo-L 504	120 ~ 2020mm (4.72 ~ 79.53")
MoMo-L 508	91.4 ~ 2020mm (3.60 ~ 79.53")
MoMo-L 207	103.3 ~ 2020mm (4.07 ~ 79.53")
MoMo-L 208	186.7 ~ 2020mm (7.35 ~ 79.53")
MoMo-L RGB	103.3 ~ 2020mm (4.07 ~ 79.53")

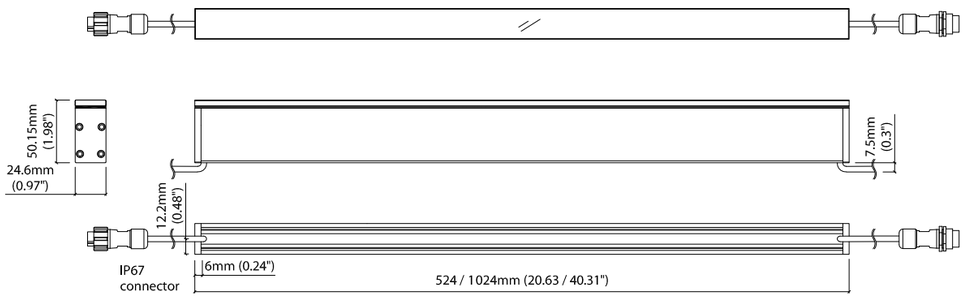
Technical Drawings

MoMo-F

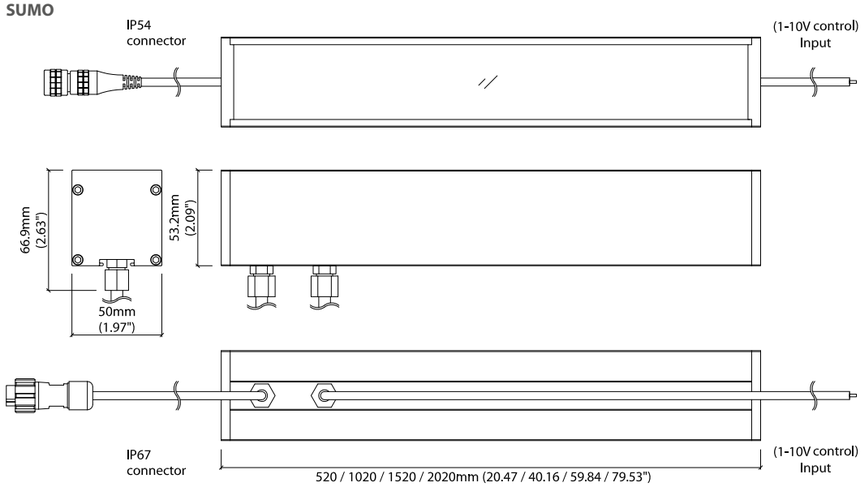


MoMo-F 352	93.3 ~ 2010mm (3.67 ~ 79.13")
MoMo-F 504	110 ~ 2010mm (4.33 ~ 79.13")
MoMo-F 508	81.4 ~ 2010mm (3.20 ~ 79.13")
MoMo-F RGB	93.3 ~ 2010mm (3.67 ~ 79.13")

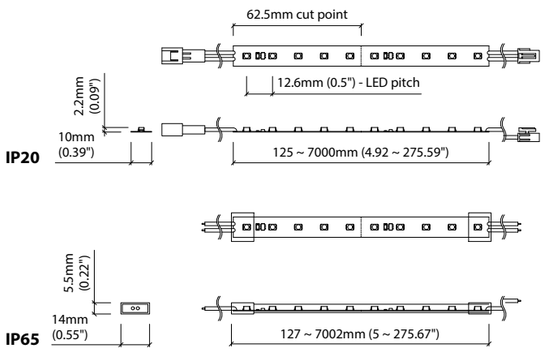
MoMo-BLOC



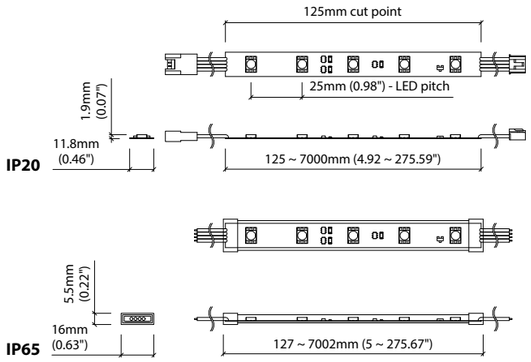
SUMO



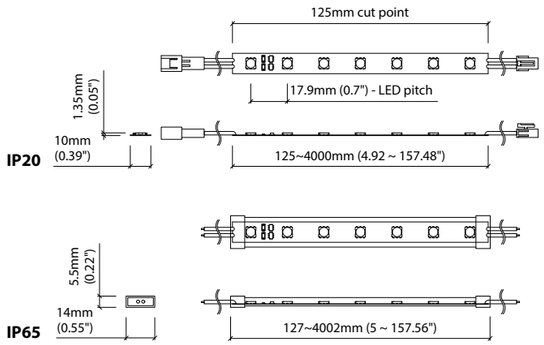
FX



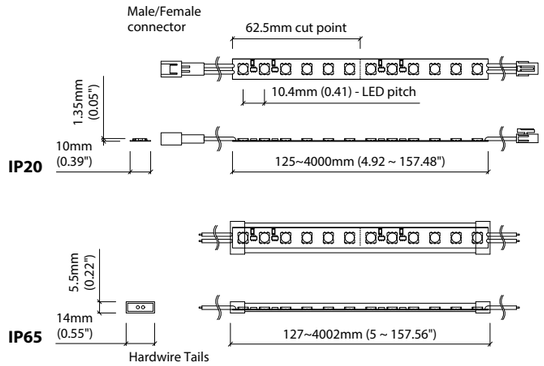
FX RGB



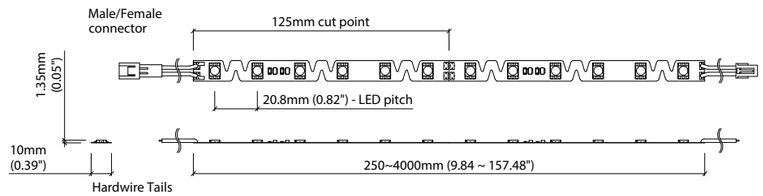
P-FX4



P-FX8

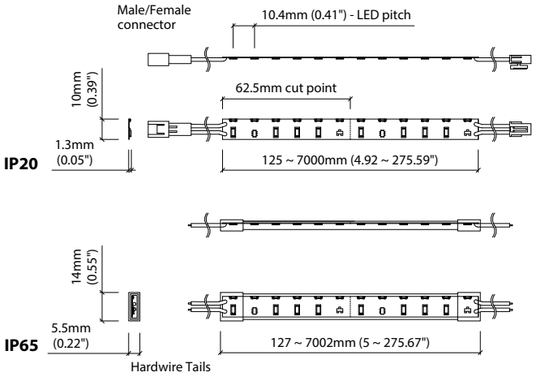


UNI P-FX

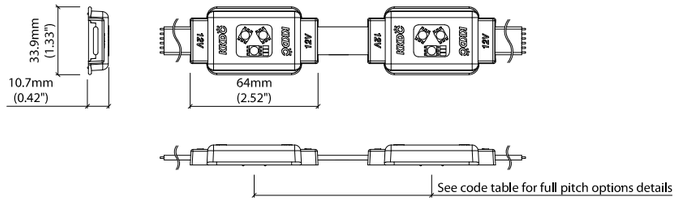


Technical Drawings

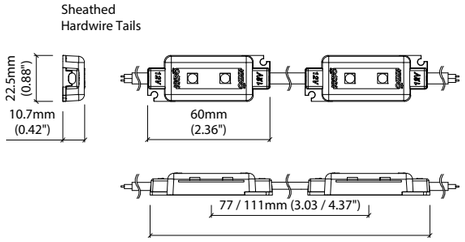
KKFS



Cluster PIXEL

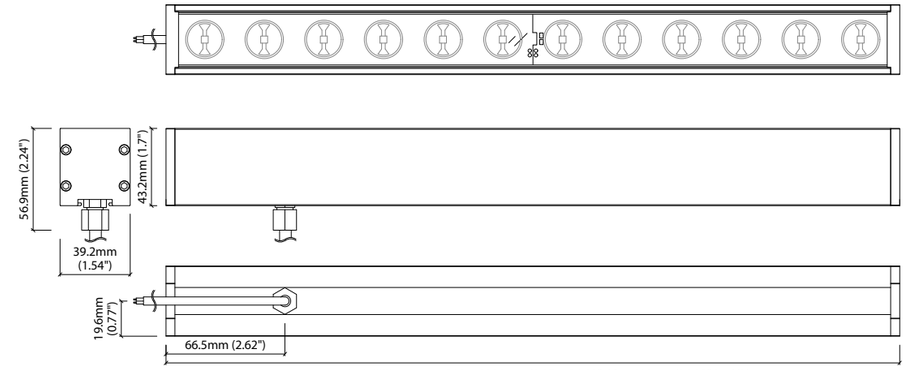


DUO Luna



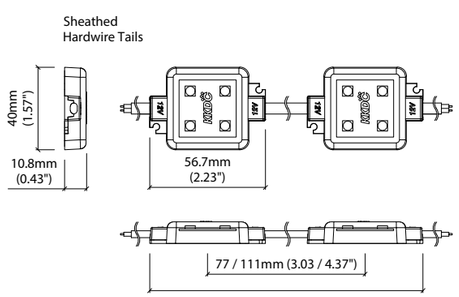
Duo Luna	77mm (3.03") Pitch = 77 ~ 11000mm (39.37 ~ 433.07") 111mm (4.37") Pitch = 111 ~ 14000 (39.37 ~ 551.18")
Duo Luna RGB	77mm (3.03") Pitch = 77 ~ 6000mm (39.37 ~ 236.22") 111mm (4.37") Pitch = 111 ~ 11000 (39.37 ~ 433.07")

SEN



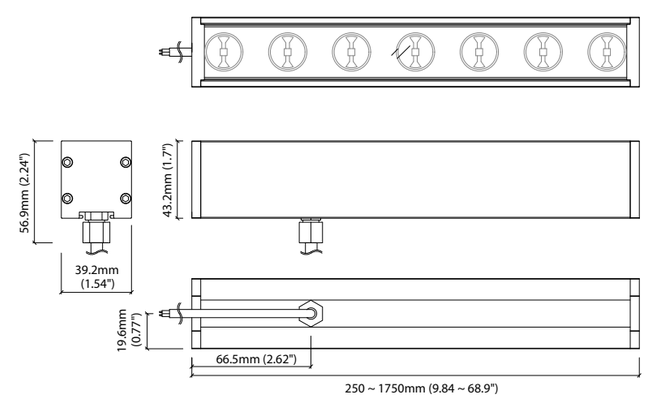
SEN 033	210 ~ 1210mm (8.27 ~ 24.02", Max 610mm/24.02" for UL)
SEN 050	210 ~ 1810mm (8.27 ~ 71.26", Max 1010mm/39.76" for UL)
SEN 100	210 ~ 1810mm (8.27 ~ 71.26", Max 1810mm/71.26" for UL)
SEN RGB 047	480 ~ 1890mm (18.90 ~ 74.41")
SEN RGB 094	480 ~ 1890mm (18.90 ~ 74.41")

Quadro Luna

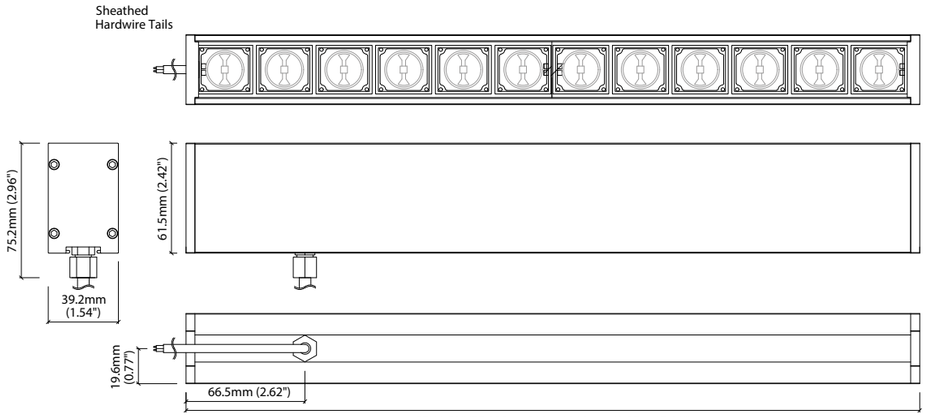


Quadro Luna	77mm (3.03") Pitch = 77 ~ 6000mm (39.37 ~ 236.22") 111mm (4.37") Pitch = 111 ~ 8000 (39.37 ~ 314.96")
Quadro Luna RGB	77mm (3.03") Pitch = 77 ~ 6000mm (39.37 ~ 236.22") 111mm (4.37") Pitch = 111 ~ 8000 (39.37 ~ 314.96")

SEN CV

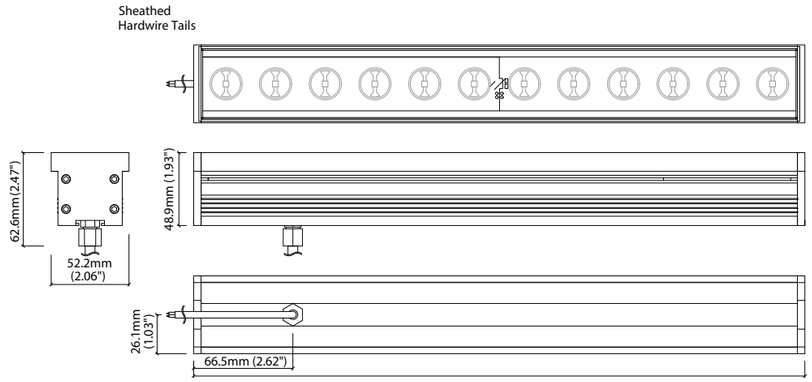


SEN Louvre



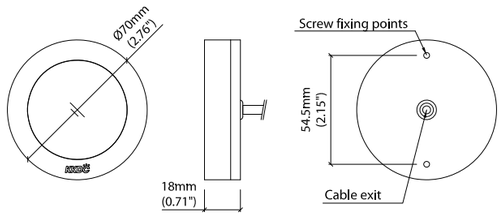
SEN LOUVRE 033	210 ~ 1210mm (8.27 ~ 47.64")
SEN LOUVRE 050	210 ~ 1210mm (8.27 ~ 47.64")
SEN LOUVRE 100	210 ~ 1210mm (8.27 ~ 47.64")

SEN-F

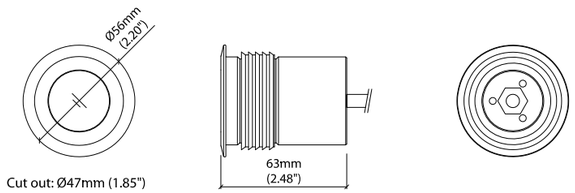


SEN-F 033	210 ~ 1010mm (8.27 ~ 39.76")
SEN-F 050	210 ~ 1010mm (8.27 ~ 39.76")
SEN-F 100	210 ~ 1010mm (8.27 ~ 39.76")

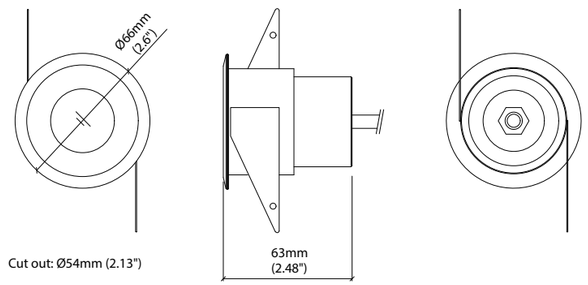
PUK-L



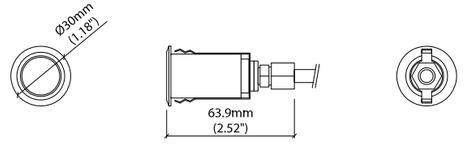
TAYO Spot



TAYO Ceiling

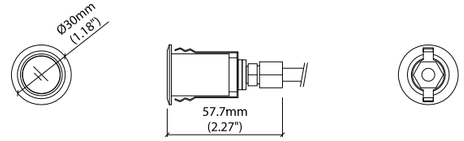


TAYO Micro (Outdoor)



Cut out: Ø25mm (0.98")

TAYO Micro (Indoor)



Cut out: Ø25mm (0.98")

Industry Terms

1. Lighting

1.1 General Lighting Terms
1.1.1 Luminaire
1.1.2 Glare
1.1.3 Optic
1.1.4 Lens
1.1.5 Diffusion/Diffuser
1.1.6 Beam Angle
1.1.7 Louvre
1.1.8 Baffle
1.1.9 Flicker
1.1.10 Stroboscopic Effect

1.2 Photometry
1.2.1 Photopic Vision
1.2.2 Scotopic Vision
1.2.3 Mesopic Vision
1.2.4 Luminous Flux & Lumens
1.2.5 Radiant Flux
1.2.6 Illuminance & Lux
1.2.7 Candela (cd)
1.2.8 Wavelength
1.2.9 Nanometer
1.2.10 Electromagnetic Radiation
1.2.11 Visible Spectrum
1.2.12 Full Spectrum Lighting
1.2.13 Spectral power distribution
1.2.14 Ultraviolet (UV)
1.2.15 Infrared (IR)
1.2.16 Luminous Efficacy
1.2.17 Luminous Efficiency
1.2.18 Photometric Testing
1.2.19 Absolute Photometry
1.2.20 Relative Photometry
1.2.21 Integrating Sphere
1.2.22 Goniophotometer
1.2.23 Polar Curve

1.3 Colourimetry
1.3.1 Colour Space (CIE colour space/ chromaticity diagrams)
1.3.2 Kelvin (Correlated Colour Temperature – CCT)
1.3.3 Planckian Locus/ Black Body Line
1.3.4 MacAdam Ellipse (SDCM)
1.3.5 Saturation/Saturated
1.3.6 Hue
1.3.7 Colour Rendering Index (CRI)
1.3.8 Rendering Average (R_a)
1.3.9 TM-30-15
1.3.10 CQS (Colour Quality Scale)

2. Electrical

2.1 General Electrical
2.1.1 Voltage
2.1.2 RMS Voltage
2.1.3 Current
2.1.4 Resistance
2.1.5 Wattage
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1. Lighting

1.1 General Lighting Terms

1.1.1 Luminaire

A term for 'light fittings' or 'fixtures', referring to a complete lighting product.

1.1.2 Glare

The result of excessive amounts of viewable contrast. Glare is often the cause of visual discomfort and can lead to sight being impaired or an individual being distracted, in the extreme it's called disability glare. Interior glare is often known as 'discomfort glare'; caused by sources of bright light such as windows or luminaires.

1.1.3 Optic

The method of controlling light, either by reflection or by refraction.

1.1.4 Lens

An optic device used to control the beam angle or output shape of a luminaire.

1.1.5 Diffusion/Diffuser

Where an optical element – often translucent glass or plastic – covers the light source within a housing. The light transmitted throughout the diffuser will be redirected and scattered with the optical properties and transmission efficiency of the material used.

1.1.6 Beam Angle

The angular dimension a light distributes from a fitting. The angle is measured from the point of maximum beam intensity out to the angle where the intensity is 50% of maximum. Beam angle is sometimes referred to as 'beam spread'.

1.1.7 Louvre

A method of reducing ambient glare from luminaires. This may be use of angled slats over a light source or deep slats from which the light source shines out of.

1.1.8 Baffle

Another ambient glare reduction tool which projects the light from deeper within the luminaire, meaning that ambient glare is greatly reduced.

1.1.9 Flicker

Undesired periodic variation in light levels. At higher speeds flicker becomes strobing.

1.1.10 Stroboscopic Effect

Is the visual phenomenon that causes the perception of motion to become obvious. This may be the spinning of a wheel appearing to spin backwards in strobing light, or, a stuttering/flickering effect due to eye movement in an environment with flickering/strobing lighting.

1.2 Photometry

1.2.1 Photopic Vision

Explains vision of the human eye under well-lit conditions. Photopic vision allows colour perception by the use of cone cells within the eyes.

1.2.2 Scotopic Vision

Is the vision of the human eye in very low light levels. Reduced colour perception due to use of rod cells within the eyes.

1.2.3 Mesopic Vision

Is the function of both Rods and Cones working together to allow humans to see in light levels between photopic and scotopic levels of light.

1.2.4 Luminous Flux & Lumens

The total quantity of light emitted by a light source within the visible spectrum (380-780nm) as perceived by the human eye, luminous flux is measured in lumens (lm).

1.2.5 Radiant Flux

The total power of radiation produced through all spectrums, measured in Watts (W).

1.2.6 Illuminance & Lux

Illuminance is the number of lumens falling per square metre, measured in lux (lx).

1.2.7 Candela (cd)

Is the measurement of luminous intensity within a narrow cone, calculated by:

luminous flux ÷ unit solid angle.

This is often the quantitative figure used to describe the output of directional lamps.

1.2.8 Wavelength

Light is considered as a wave, and has measurable wavelengths, it is the wavelength of light that determines its type of electromagnetic radiation. The distance between the successive waves is defined as its wavelength. Within the visible spectrum, it is the combined visual power of light at every given wavelength that makes up a light source's apparent colour. LED dice producing light in the visible spectrum, emit light of wavelengths ranging from around 330 to 780 nanometres – a specified range of wavelengths indicating the colour of light produced. In most white LED's, phosphors absorb the shorter blue wavelengths and re-emit light at a wider range of longer wavelengths.

1.2.9 Nanometer

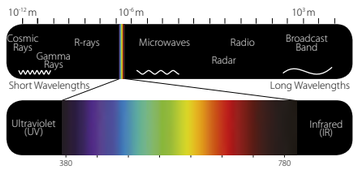
A unit of length equal to one billionth of a meter, 1/1,000,000,000 meters. This scale is used to describe the wavelength of electromagnetic radiation.

1.2.10 Electromagnetic Radiation

Refers to all electromagnetic radiant energy that propagates through all space. The radiation is made up of waves or rays of photons (while radiation can be measured as a particle ray or a wave of particles, with regards to the lighting industry it is best to think of radiation as waves with wavelengths/frequencies). The frequency of the waves of electromagnetic radiation dictates the properties of the radiation, including; radio waves, microwaves, infrared, ultraviolet, x and gamma radiation and visible light.

1.2.11 Visible Spectrum

The visible spectrum refers to the limited part of electromagnetic radiation that humans can see. On average this range is 380-780nm.

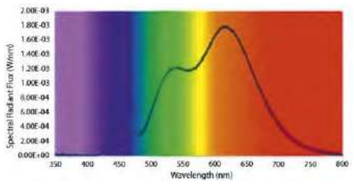


1.2.12 Full Spectrum Lighting

Describes light across the entire visual spectrum.

1.2.13 Spectral Power Distribution

Displayed in graph form, plotting emitted radiation power against wavelength. By integrating the graph/function you would get the wattage of light being emitted.



Spectral Radiant Flux versus Wavelength

1.2.14 Ultraviolet (UV)

A range of non-visible radiation with wavelengths less than 380nm beyond the blue end of the visible spectrum. Protection from the sun's UV radiation is required to prevent degradation of plastics and other materials used in exterior lighting products.

1.2.15 Infrared (IR)

Infrared radiation is non-visible electromagnetic radiation with a longer wavelength than visible light beyond the red end of the spectrum. Infrared radiation includes thermal radiation which is used for thermal imaging.

1.2.16 Luminous Efficacy

Defined as the number of lumens produced from a luminaire, divided by Wattage of power provided, lumens per Watt (lm/W).

1.2.17 Luminous Efficiency

Refers to the percentage of emitted radiation within the visible spectrum compared to the emitted radiation outside the visible spectrum, including UV, IR and heat. A light source that is 45% efficient would turn 45% of the input power into visible light and the remaining 55% would be emitted as non-visible radiation.

1.2.18 Photometric Testing

The science of measuring light intensity, colour and quality of light perceived by the human eye.

1.2.19 Absolute Photometry

The collected photometric data produced from testing a finished and complete solid state lighting system (as supplied to end users) under realistic conditions. Essential for accurate comparison and evaluation of LED lighting products. Data produced allows true specification of luminous flux, chromaticity, efficacy and electrical power. Absolute photometry is the basis of the IESNA LM79 testing standard.

1.2.20 Relative Photometry

Data set produced from comparative photometric testing using a reference light source or by separation of light source from other parts of the system. Some figures may be obtained by normalisation calculations. Provides at best only a partial description of LED product performance.

1.2.21 Integrating Sphere

Part of the testing system used for photometric measurements and is the most accurate way of measuring total luminous flux, colour temperature and colour properties.

1.2.22 Goniophotometer

The goniophotometer is a piece of photometric testing equipment that measures light intensity at a given angle to the luminaire or light source. The data a goniophotometer records can be used to generate photometric files (e.g. ies, ldt, etc.) which digitally model the output of a luminaire and allows it to be loaded into lighting design software.

1.2.23 Polar Curve

A method of showing the 3d distribution of a luminaire with a 2d graphic. Normally 2 planes of distribution are detailed; C0/C180 which is the plane of distribution if you were to look down the length of the fitting (axial view), and C90/C270 which is the distribution shape looking at the face of the luminaire (transverse view).

1.3 Colourimetry

1.3.1 Colour Space (CIE colour space/ chromaticity diagrams)

A theoretical colour concept illustrated by a series of graphical projections mathematically representing all visible colours of light. The International Commission on Illumination (CIE) has defined several of these spaces – the CIE 1931 colour space and CIE 1976 CIELUV colour space being the most widely referenced in lighting. A three dimensional colour space is projected as a two-dimensional chromaticity diagram on which other colourimetric scales, such as CCT ranges and the Planckian locus, can be overlaid. Measured colourimetric data for LED sources can be plotted and compared to illustrate colour performance and consistency between products and relative to the colour specifications of lighting test standards.

1.3.2 Kelvin (Correlated Colour Temperature – CCT)

In lighting, Kelvin is the system adopted to define the colour of white light with a single-number. It compares the colour of a black body conductor emitting light when being heated to the given temperature in degrees Kelvin (K). It is important to note that CCT can only relate a light source to the closest Kelvin value of a black body conductor, and thus does not account for hue shift within the colour.

1.3.3 Planckian Locus/ Black Body Line

The plot of colour temperature that a black body conductor or tungsten filament produces as it is heated up through degrees Kelvin.

1.3.4 MacAdam Ellipse (SDCM)

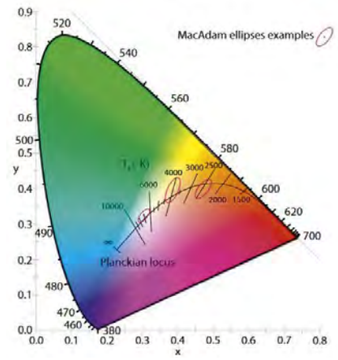
The results of a statistical study being plotted on to a colour space diagram. The spread of results is defined within an elliptical plot, the edges of which represent a set deviation in colour from that at its centre. The scale of the ellipse is determined by the number of standard deviations of colour matching or 'steps' used in plotting. The colour variation represented by a 1-step MacAdam ellipse in not visible but becomes progressively more discernible in ellipses with a greater number of steps and becomes apparent to most observers above 2 or 3 steps. MacAdam ellipses are sometimes quoted in the specifications of white LED products to quantify colour consistency. Standard Deviation Colour Matching or SDCM has the same meaning as MacAdam ellipse.

1.3.5 Saturation/Saturated

Describes the amount of colour compared to white within a colour. 0% saturated would be a black and white image, whereas fully saturated would be vivid colours (at the very edge of the CIE colour space diagrams).

1.3.6 Hue

Is the attribute based on classification of colour as reddish, yellowish, greenish, bluish or their intermediaries.



CIE 1931 xy chromaticity diagram

1.3.7 Chromaticity

The quality of colour, independent of brightness, derived from two separate factors, 'hue' and 'saturation'.

1.3.8 Colour Rendering Index (CRI)

Is the method of measuring how well a light source renders a specific set of colours. CRI is based on 14 colour samples, the first 8 in the set are pastel colours arranged around the hue circle. 9 to 14 are colours of special significance (skin tone, organic materials etc.). A blackbody radiator such as an incandescent lamp and natural midday sun (5000-6000K) will have a CRI of 100%.

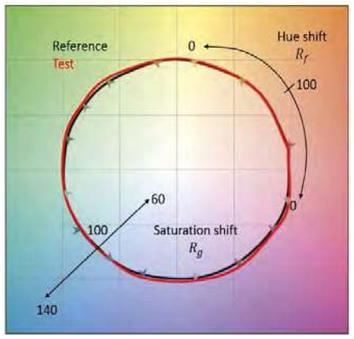
1.3.9 Rendering Average (R_a)

The average of the rendering values for the first 8 colour samples for a given light source.

1.3.10 TM-30-15

The new method to evaluate colour quality. Where CRI only produces 1 data point for fidelity, requiring extra detail such as R_9 values. TM-30-15 provides 2 data points as standard; fidelity and gamut. TM-30-15 also provides a suit of graphical representations of the data. Below is an example of the Colour Vector Graphic.

Colour Vector Graphic



R_g value range varies depending on R_f, when R_f <60 R_f range is ~60-140

1.3.11 CQS (Colour Quality Scale)

Developed by NIST as a potential replacement for CRI. CQS is a colour rendering index very similar to CRI but the mathematics behind the calculation are focused on being more representative to humans.

2. Electrical

2.1 General Electrical

2.1.1 Voltage

Defined as the potential difference across a conductor, often referred to as the electrical force or pressure that drives a circuit. Unit of measurement is Volts (V).

2.1.2 RMS Voltage

When dimming LEDs with PWM DC power. The LED will be receiving 24V signal in PWM format. A standard voltmeter will read this as an RMS voltage, which is the averaged-out voltage over time. So, a product receiving a 50% PWM signal will read as 12V, although in reality it is a switched 24V signal.

2.1.3 Current

Measured in Amperes (Amps, A) is the flow of electric charge. Electric charge flows when there is a voltage or electric potential difference between connected conductors.

2.1.4 Resistance

Measured in Ohms (Ω) defines the resistance against current flow when a voltage or electrical potential is present.

2.1.5 Wattage

Is the measure of work done, or energy consumed most commonly known as power. Unit of measurement is Watts (W). One Watt is defined as the work done when one ampere (A) of current flows through an electrical potential difference of one volt (V).

2.1.6 Circuit Watts

Is the total number of watts used by a circuit. This includes all losses such as PSU efficiencies, PSU power factory and the efficacy of the lighting product.

2.1.7 Direct Current (DC)

Is when the direction of current flow in a circuit remains constant, the type of supply you would expect from a battery.

2.1.8 Alternating Current (AC)

When the current flow in a circuit alternates or reverses direction at regular intervals. Used for transmission and distribution of industrial and household power.

2.1.9 Constant Current

Often referred to when describing circuits and products' power requirements.
A constant current product or component would require a power source (driver) to vary voltage to maintain the desired current. Constant current products are most commonly wired in series circuits. The individual LED chips on the circuit boards of power LED products are supplied with a constant current power source for stable performance and control of thermal output. The voltage supplied varies to accommodate multiple chips. Almost all KKDC LED products employ on-board constant current conversion of an external constant voltage power supply.

2.1.10 Constant Voltage

Often referred to when describing circuits and products' power requirements.
A constant voltage component or product would require a power source to vary current to maintain the desired voltage. Constant voltage products are most commonly wired in parallel circuits.

2.1.11 Power Factor (PF)

In AC circuits, power factor is the ratio of real power to apparent power in the circuit. This power loss is caused by components in the circuit pushing the current flow out of phase with the voltage. A power factor of 1, is achieved when the current and voltage are in unity, whereby the real power and apparent are equal. A power of 0 is achieved when the current is 180° out of phase with the voltage, and no power can be delivered to the load. i.e. when power factor is less than 1, more power is required to produce the desired output.

Example of calculating power factor:

PSU has power factor of 0.85. If you want to power 100W then you will need to input: -

100 ÷ 0.85 = 117.6W

2.1.12 Interference

Unwanted distortions in a digital signal or analogue wave. Interference causes control inaccuracies and loss of data. In extreme cases, total loss of control.

2.1.13 Electromagnetic Inference (EMI)

Describes unintentional radio waves produced by electronic devices that can cause interference to receiver devices such as Radios and TVs.

2.1.14 Parasitic Capacitance

The effect of closely located conductors acting as capacitors which can cause unwanted electromagnetic effects, due to induced oscillations into circuits and components that are not intended to be there. This is quite often the major cause of interference within dimming controllers. High inrush currents can also be a result of poorly managed parasitic capacitance.

2.1.15 Inrush Current

Refers to the initial current draw when first switching on a component, circuit or electronic device. The inrush current is often a multiple of the normal operating current. When dealing with LED circuits, high inrush currents can cause chip fatigue due to heat leading to colour drift over time. In extreme cases can lead to premature chip failure.

2.2 Electrical & Electronic Components

2.2.1 Printed Circuit Board (PCB)

An assembly of single or multi-layered mounting surfaces with conductive tracks (and soldered components) found at the heart of most modern electronic devices. Most KKDC products use metal based PCB technologies which provide significant advantages in thermal management. As a result, KKDC's metal based flexible linear products can be used without additional heat sinking.

2.2.2 Capacitor

A component that temporarily stores electrical charge, having many uses including signal filtering and stabilising voltage and power flow.

2.2.3 Resistor

A circuit component which has a specific resistance measured in Ohms (Ω). May have multiple applications including reducing voltages for component requirements or used as parameter settings for certain IC's.

2.2.4 Integrated Circuit (IC)

A circuit or collection of circuits mounted on a small plate of semiconductor material, most commonly silicon. IC's have a range of applications, for LED technology the most common uses for IC's are voltage and current control within circuits.

2.2.5 Diode

A circuit component with asymmetric conductance, meaning that current will only flow in one direction. Some diodes also emit light (LED's) in response to the passage of current in a phenomenon called electroluminescence.

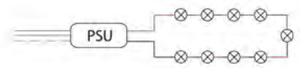
2.2.6 Bridge Rectifier

A combination of 4 diodes arranged in a way that converts AC supply to DC.

2.3 Installation

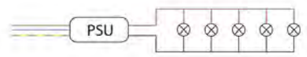
2.3.1 Series Circuit

When components, or products, are wired from positive to negative, or in series, throughout the circuit.



2.3.2 Parallel Circuit

When all components, or products, in the circuit share common positives and negatives.



2.3.3 AWG

Abbreviation for 'American Wire Gauge' – a numerical scale for wire size. The AWG number relates to the diameter, cross sectional area and thus the current carrying capacity of electrical wires. By contrast, in the Metric system electrical conductors are described directly by cross sectional area in mm^2 or in stranded wires by the number and size of the strands.

2.3.4 IP Rating

Ingress protection rating refers to a specific set of numbers that refer to a products ability to prevent intrusion from solid objects (including fingers and dust) and water.

IPX-

The first digit of the IP code indicates the degree of protection against contact with internal components and the degree of protection against foreign bodies intruding into the product enclosure.

0 No special protection

1 Protection from large solid objects, greater than 50mm in diameter.

2 Protection against finger sized objects no greater than 80mm in length and 12mm in diameter.

3 Protection from entry by tools, wires, etc., with a diameter of thickness greater than 2.5mm.

4 Protection from entry by solid objects with a diameter or thickness greater than 1.0mm

5 Dust protected, limited ingress of dust permitted.

6 Dust tight.

IP-X

The second digit indicates the degree of protection the product has against various forms of moisture and liquid.

0 No special protection. Limited ingress permitted.

1 Protection from dripping water. Limited ingress permitted.

2 Protection from vertically dripping water when enclosure is tilted to 15° from vertical. Limited ingress permitted.

3 Protection from sprays of water at 60° from vertical. Limited ingress permitted.

4 Protection from low pressure water jets from all directions. Limited ingress permitted.

5 Protection from high pressure water jets from all directions. Limited ingress permitted.

6 Protection against heavy seas, or powerful jets of water. Limited ingress permitted.

7 Protection against temporary immersion at a depth of 150~1000mm.

8 Protection against complete, continuous submersion in water at a specified depth*.

* Submersion depth must be specified by the manufacturer.

2.4 Lighting Control

2.4.1 Dynamic White

A multi- channelled white LED luminaire. Allowing customer to customise the mix of 2 (or more) CCTs from a luminaire.

2.4.2 Dim-to-Warm

KKDC have adopted this term to describe the control of LEDmix products to match Halogen output with a single 0-10V/1-10V control input.

2.4.3 Dimmable/Dimming

Whether or not the system has the ability to vary the light output via input control.

2.4.4 Analogue Dimming

Describes dimming systems that rely on analogue signals for control. Such as 1-10v, 0-10V, Leading and Trailing edge (Phase/Triac dimming). Interference benefits due to simplicity but lacks flexibility and customisation beyond what the initial wiring allows.

2.4.5 Digital Dimming

Describes a system that relies on a digital communication protocol, such as DALI or DMX. Can be complex to install and program but offer high levels of control and customisation. Digital systems are more susceptible to interference than analogue counter parts.

2.4.6 Control Gear

In general lighting, control gear is a term for any additional electronics that are required to power or control a luminaire, such as; a ballast for florescent, PSU or driver for LED or a dimming sub-controller.

2.4.7 DALI – Digitally Addressable Lighting Interface

A digital communication protocol originally developed for the centralised control of fluorescent lighting in buildings and now also used for control of LED installations.

2.4.8 DMX

A digital communication protocol for control of dimming, colour change and other control parameters. Used extensively in the theatre and entertainment industry and has become a commonly used method for digital control of architectural lighting.

2.4.9 Shield

All control cables should be shielded from external interference. This is done by means of producing a faraday cage; either metal foiling or twisted cables grounded at either transmission or reception ends of the communication chain.

2.4.10 1-10V

A standard convention for control of dimming used in LED lighting – originally developed for fluorescent lighting. An analogue control voltage is varied between 0 and 10 Volts by means of a variable resistor or other controller and produces a corresponding change in the pulse width modulated power supplied to an LED circuit and thus the brightness.

The following is helpful for quick 1-10V on-site testing:

Shorted (10V) = lowest output (0%)

Open (0V) = highest output (100%)

2.4.11 0-10V

Often referring to the same operation of 1-10V, 0-10V can mean that a sub-controller or dimmable fitting is set up to receive a control voltage generated by the master controller. A resistive dimmer may not work with a 0-10V system so it is worth checking the exact meaning from the manufacturer.

KKDC have adopted the following understanding:

- 1-10V – device will operate and respond to resistive control, and receiving supply control voltage.
- 0-10V – device will only operate when supplied with a control voltage.

2.4.12 Sink/Source input

If the control system generates a voltage that is fed into the control gear the control system is the source and control gear sinks. If the control system is a passive resistive system controlling a voltage generated at the control gear then the controller is a sink and the control gear source.

2.4.13 KNX

A standardised control protocol for intelligent building control. The standard is administered by the KNX Association, where by a list of compliant manufacturers are listed on the KNX website. Its aim is to standardise control protocol to avoid compatibility issues through the systems used in building control.

2.4.14 Power Supply Unit (PSU)

Refers to the device that produces the, normally low voltage, DC signal for equipment and lighting products. PSUs have a wide range of power variations available with various constant current or constant voltage outputs. Dimmable PSUs are also available, which normally receive a control signal and output a PWM supply to the light source.

2.4.15 Driver

General term for a power supply unit or power supply circuit. KKDC have adopted the following understanding:

- PSU – for constant voltage power sources
- Driver – for devices performing constant current power conversion

2.4.16 Pulse Width Modulation (PWM)

An electronic method for varying the power supplied to LED light sources through rapid switching. Adjustment of pulse duration or duty cycle gives rise to variations in brightness for dimming and colour mixing.

2.4.17 visDIM

KKDC's term for the technology in our range of dimmable sub-controllers and dimmable PSUs, which utilise a high frequency PWM output of 3.3KHz. visDIM provides extremely stable dimming environments for a range of dimming protocols.

2.4.18 Integral

A popular term that describes the inclusion of certain aspects of control or power. For example, the KKDC SUMO product uses an integral PSU and 1-10V controller. This means that the PSU and 1-10V controller is supplied as a part of the overall luminaire; it is supplied by default internally.

2.4.19 Phase Dimming (leading edge, trailing edge, triac dimming)

An analogue dimming method that relies on the mains or line voltage AC signal to trigger a 'triac' switch. In simple terms the triac produces an AC PWM signal at the same frequency as the AC system.

2.5 LED

2.5.1 Bin/Binning

During manufacture, LED dice will have significant performance variations and can be sorted or 'binned' in to smaller groups according to spectral distribution, luminous intensity and forward voltage for example. The application of phosphors during the packaging of white LEDs introduces further variations in colour and performance which may in turn be 'binned'. The scale and parameters of the bins used will often determine the colour consistency and cost of finished white LED products – (coordinates (x, y or u', v') of quadrangles on colour space plots are used to document colour consistency of binned white LEDs).

2.5.2 Phosphor

Absorbs a specific spectrum of wavelengths and re-emits light in a wider range of wavelengths. In most white LEDs, the die is emitting a small range of blue wavelengths and the phosphor is absorbing this and re-emitting light across the green and red spectrums.

2.5.3 Die

Term for the manufactured semiconductor junction component/s within an LED package. A 3 chip or tri-chip LED having 3 dice in a single LED package.

2.5.4 Package

Package or LED package is the outer component of an LED that contain and protects the LED chip.

2.5.5 LED Array

An assembly of LED packages on a printed circuit board or substrate.

2.5.6 Heat Sink

In LED lighting – a component or assembly to conduct and dissipate heat away from an LED package. KKDC products have heat sinking elements as integral parts of the product design and require no additional heat sink under all normal operating conditions.

2.5.7 LED Lifetime

The useful lifetime of an LED light source in hours.

L70 (lifetime to 70% of initial lumen output) has become a standard way of stating lifetime. The length of time an LED light source actually performs to an acceptable standard depends on most aspects of design and manufacture including quality of source components and thermal, electrical and environmental operating conditions.

Poor design, components, manufacture or operation can result in premature loss of light output, colour shifts and failure. The LM80 lumen maintenance test can provide data that can be extrapolated to give more reliable L70 lifetime figures.

2.5.8 LED Package

An assembly or encapsulation of one or more LED dice that contains wire bond connections along with any phosphors, optical elements and thermal or mechanical structures.

The complete LED component for incorporation into arrays and finished products.

2.5.9 Temperature – T_a/T_c/T_j

T_a – Ambient temperature;
T_c – Reference point (Case) temperature;
T_j – Junction temperature.

Values for these are often quoted in the testing of LED components, specification of LED products and discussion of thermal design of LED products.

T_j is the temperature at the semiconductor junction within an LED die. Heat produced must be removed by efficient thermal design of LED package, PCB and housing in order that T_j does not exceed a specified maximum (T_j max) or degradation of performance and failure may occur.

T_a is the temperature of the surroundings. In KKDC specifications, T_a is given as a range of temperatures within which the product is designed to operate.

T_c, in testing of products, may refer to any named reference point where temperature is measured. In KKDC products T_c is given as a maximum value which the outside of a product housing or mounting may reach in operation within the T_a range given.

2.5.10 Thermal Management

Referring to the practical steps taken by the designers of LED packages and LED lighting products, to ensure that heat is conducted and dissipated away from the light producing junction within an LED package. In general, higher LED light output requires more electrical power which, in turn, generates more heat. Failure to address this adequately leads to degradation of output power, colour quality and ultimately premature LED failure.

2.5.11 Thermal Resistance

Describes the heat conducting or transferring properties of a material, component or assembly. Expressed in degrees Celsius per Watt (°C/W). Thermal resistance is minimised in the design of high quality LED lighting products.

3. Standards

3.1 Standards

3.1.1 LM79-08

LM79-08 defines the "Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products" developed by the IES. It provides absolute photometric, colourimetric and electrical data for luminous flux, chromaticity, CCT and CRI for complete LED products. LM79 allows fair comparison of LED lighting products and evaluation for use in particular environments.

KKDC products have been independently tested by an accredited UK laboratory and testing facility to the LM79 standards.

3.1.2 LM80

Developed by the IES it is the standard for "Approved method for measuring lumen depreciation of LED light sources." It is important to note that LM80 covers light sources (LED chips, arrays and modules) not lamps and luminaires. It provides guidance for measuring lumen maintenance by testing for at least 6000 hours at 3 different case temperatures: 55°C, 85°C and another manufacturer specified.

3.1.3 TM-21

TM-21 provides the extrapolation method for LM-80 measurements. This provides lumen maintenance predictions for either 5.5 or 6 times the measured data, dependent on sample size tested.

3.1.4 1789-2015

IEEE 1789-2015 Recommended Practices for Modulating Current in High-Brightness LEDs for Mitigating Health Risks to Viewers

3.1.5 CE

Mandatory conformity marking for products sold in the European Economic Area (EEA). The marking is the manufacturer's declaration that the product meets the specific requirements applicable to that product.

3.1.6 60598

BS EN '60598-1:2008 - Luminaires. General requirements and tests' sets out the general requirements for safety with regards to classification, marking, mechanical and electrical design and thermal management. This standard should be considered for all lighting prior to CE marking.

3.1.7 55015

BS EN 55015:2006+A2:2009 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

3.1.8 61547

BS EN 61547:2009 Equipment for general lighting purposes. EMC immunity requirements

3.1.9 62471

BS EN 62471:2008 Photobiological safety of lamps and lamp systems. Specifically looks at the levels of Blue and UV light and produces a scale of use/exposure/safety.

3.1.10 RoHS Directive 2002/95/ECN

The Restriction of Hazardous Substances Directive (RoHS), is a European directive that has become law in EC member countries that restricts the use of several hazardous materials in the manufacture of electronics.

3.1.11 WEEE

The Waste Electrical and Electronic Equipment Directive is the European Community directive 2002/96/EC developed to reduce the amount of 'Waste Electrical and Electronic Equipment' being scrapped into landfills by promoting recycling.

3.2 Organisations

3.2.1 UL (Underwrites Laboratories)

A private organisation which tests and lists electrical and other equipment for electrical and fire safety according to recognised and other safety standards.

The KKDC file numbers for luminaires is E356145, for controllers is E474410

3.2.2 Intertek

Intertek is a multinational testing laboratory that provides certification and listing services.

3.2.3 UKAS

The United Kingdom Accreditation Service, quoted from the UKAS website, about UKAS section; 'The United Kingdom Accreditation Service is the sole national accreditation body recognised by government to assess, against internationally agreed standards, organisations that provide certification, testing, inspection and calibration services.' UKAS also provide an online accreditation Test Schedule, which anybody can use to see what companies are accredited and what measurements the organisation can perform under the accredited conditions.

3.2.4 IEC

International Electrotechnical Commission, quoted from IEC website, about IEC; 'Millions of devices that contain electronics,

and use or produce electricity, rely on IEC International Standards and Conformity Assessment Systems to perform, fit and work safely together.' It is the IEC for instance, who produced IEC 60598-1 for Luminaires – Part 1: General requirements and tests

3.2.5 IEEE

The Institute of Electrical and Electronics Engineers is the largest professional association. Its objectives are the education and technical advancements in the disciplines of Electrical, electronic engineering, telecommunications and computer engineering.

3.2.6 BSI

British Standards Institution. A business standards company providing manufacturers and service providers with assessment, certification and specification of British, European and international standards and quality marks.

3.2.7 IESNA

Illuminating Engineering Society of North America (IES or IESNA) are a non-profit organisation whose mission statement is: 'The IES seeks to improve the lighted environment by bringing together those with lighting knowledge and by translating that knowledge into actions that benefit the public.'

The IES have developed some of the now commonplace global standards for measuring light such as LM79, and LM80. The IES constantly updates standards to reflect the evolving industry.

3.2.8 ANSI

The American National Standards Institute co-ordinates and accredits national and international standards meeting the needs of American organisations and companies. Lighting performance is one area in which their standards have reached international prominence.

3.2.9 OSHA

Occupational Safety and Health Administration is the main federal agency in the U.S. that is charged with the enforcement of safety and health legislation. Their Nationally Recognised Testing Laboratory (NRTL) Program recognises independent or private sector laboratories or organisations and signifies that qualifications specified in the regulations are met and maintained.

3.2.10 ISO

Comprised of representatives from various national standards organisations, the International Organisation for Standardisation produces international standards.

3.2.11 NIST

National Institute of Standards and Technology, a measurement and standards laboratory.

4. Manufacturing Terms

4.1 Machining

4.1.1 Extruding

Extruding or extrusion is a process of manufacturing an object with a fixed cross section. The process involves a material being pushed or drawn through a mould or die of the desired cross section. KKDC uses this process for housing and diffused and clear cover production.

4.1.2 CNC Machining

An automated machining process in manufacturing; drilling, milling or cutting material as per a digital program or drawing. KKDC utilises in-house CNC machining for manufacture of end caps and SIL end caps for example.

4.1.3 Ultrasonic Welding

A low heat method for joining suitable plastics, utilised in KKDC's Luna range.

4.1.4 SMT

SMT stands for surface-mount technology. Replacing through-hole techniques in the production of electronic circuit boards, SMT allows more compact products and more automation in their manufacture. KKDC has SMT machine processes in the manufacture of all our linear LED light sources.

4.2 Surface Treatment

4.2.1 Anodising

An electrolytic process producing a very hard oxide layer on the surface of aluminium parts. Anodising can protect against corrosion in harsh chlorinated or marine environments and can also incorporate coloured dyes for decorative effect.

4.2.2 Powder Coating

Is a painting method where the coating is applied as a free-flowing, dry powder via electrostatic and cured under heat. This method of coating forms a 'skin' finish.

4.2.3 Silicone

Any one of a class of largely inert, synthetic polymer compounds used for sealing and encapsulation in some KKDC products. Thermal, optical and environmental factors govern the choice of compound for a particular application.

4.2.4 VP – Vacuum Plating

A protective conformal coating produced by vacuum deposition polymerisation techniques on circuit boards and assemblies to prevent dust and moisture ingress. KKDC use this process with some products to enhance waterproofing and protection of components.

Terms and Conditions

1. THESE TERMS AND CONDITIONS OF SALE ESTABLISH THE RIGHTS, OBLIGATIONS AND REMEDIES OF KKDC AND THE CUSTOMER WHICH APPLY TO ANY CONTRACT FOR THE PURCHASE OF KKDC'S GOODS. NO ADDITIONAL OR DIFFERENT TERMS OR CONDITIONS, WHETHER CONTAINED IN THE CUSTOMER'S ORDER FORM OR ANY OTHER DOCUMENT OR COMMUNICATION PERTAINING TO THE CUSTOMER'S ORDER, WILL BE BINDING UPON KKDC UNLESS ACCEPTED IN WRITING, AND KKDC HEREBY EXPRESSLY OBJECTS TO ANY SUCH TERMS AND CONDITIONS WHICH SHALL BE DEEMED INEFFECTIVE AND ARE REJECTED.

2. Interpretation

2.1 In these conditions, unless the contrary intention appears:

2.1.1 **Confidential Information** has the meaning as set out in clause 15.1;

2.1.2 **contract** means any contract or agreement whatsoever made by KKDC to supply any goods to the customer, whether resulting from the acceptance by KKDC of an order given by a customer, the acceptance by a customer of a quote from KKDC or otherwise;

2.1.3 **contract price** means the total of the prices specified for the Supply by KKDC to a customer;

2.1.4 **KKDC** means KKDC Pty Ltd ACN 117 624 370 being a company duly incorporated under the laws of Australia and having its registered office at Suite 305, 160 Rowe Street, Eastwood in the State of New South Wales;

2.1.5 **customer** means a customer of KKDC who buys goods from KKDC;

2.1.6 **goods** means any or all of the products the subject of Supply by KKDC to a customer;

2.1.7 **order** means any offer to purchase the goods from KKDC made by a customer;

2.1.8 **parties** means both KKDC and the customer;

2.1.9 **party** means KKDC and the customer;

2.1.10 **price** means, in relation to any goods, the price of those goods;

2.1.11 **Supply** means the supply of any goods the subject of any contract; and

2.1.12 **Tax** means sales tax, GST, value added tax, retail tax or any other tax or duty that may be imposed on or in relation to any Supply made by KKDC;

2.1.13 a reference to a clause is a reference to a clause of these conditions;

2.1.14 where any word or phrase is given a definite meaning in these conditions, any part of speech or other grammatical form of that word or phrase has a corresponding meaning;

2.1.15 a reference to a statute, statutory provision or regulation includes all amendments, consolidations or replacements thereof;

2.1.16 headings and captions are for convenience or reference only and do not alter the meaning or interpretation of these conditions;

3. Orders & Specifications

3.1 The customer shall be responsible for ensuring the accuracy of the terms of any order (including any applicable specification) submitted by the customer, and for giving KKDC any necessary information relating to the Supply within a sufficient time to enable KKDC to perform the contract in accordance with its terms.

3.2 The quantity, quality and description of and any specification for the Supply shall be those set out in the quotation (if accepted by the customer) or the customer's order (if accepted by KKDC).

3.3 If the goods are to be manufactured or any process is to be applied to the goods by KKDC in accordance with a specification submitted by the customer, the customer shall indemnify KKDC against all loss, damages, cost and expenses awarded against or incurred by KKDC in connection with or paid or agreed to be paid by KKDC in settlement of any claim for infringement of any patent, copyright, design, trade mark or other industrial or intellectual property rights of any other person which results from KKDC's use of the customer's specification.

3.4 KKDC reserves the right to make any changes in the specification of the goods which are required to conform to any applicable statutory requirements or, where the goods are to be supplied to the customer's specification, which do not materially affect their quality or performance.

3.5 No order which has been accepted by KKDC may be cancelled by the customer except with the written consent of KKDC and on terms that the customer shall indemnify KKDC in full against all loss (including loss of profit), costs (including the cost of all labour and material used), damages, charges and expenses incurred by KKDC as a result of cancellation.

3.6 The customer may issue a written change order to request changes within the scope of the contract. Such requests are subject to acceptance by KKDC.

3.7 KKDC will inform the customer if the change will cause an increase in KKDC's costs or time required to perform the contract. The change will become effective, and KKDC will commence performance, only upon execution of a written amendment to the contract.

3.8 Unless otherwise agreed in writing, upon performance of the change order KKDC will be entitled to invoice the customer and the customer shall be obligated to pay for the costs of the change, even if KKDC agreed to proceed with the change prior to execution of an amendment.

3.9 KKDC reserves the right to establish minimum order sizes or to reject purchase orders if KKDC does not have sufficient capacity to fulfil such orders.

3.10 KKDC reserves the right to change its prices if series production ends, or if, from the time of quotation:

3.10.1 raw material prices have changed; or

3.10.2 actual volume is less than forecast volume; or

3.10.3 there is any significant change in economic circumstances.

4. Terms of Payment

4.1 Time for payment of the price for any Supply is of the essence in any contract.

4.2 Payment must be made in the applicable currency quoted.

4.3 If KKDC:

4.3.1 accepts an order, and KKDC has not agreed in writing to extend credit to the customer, the customer must pay the contract price to KKDC in full on delivery of the goods; or

4.3.2 has agreed in writing to extend credit to the customer, the customer must pay the contract price to KKDC in full prior to the end of the month following the date of the invoice sent by KKDC in relation to that Supply.

4.4 If the customer is delinquent in its payment obligation to KKDC, KKDC may upon written notice to the customer stop work and withhold future shipments until all delinquent amounts and late interest, if any, are paid. Additionally, KKDC may at its option:

4.4.1 repossess goods for which payment has not been made;

4.4.2 charge interest on delinquent amounts at the maximum rate permitted by law for each full or partial month;

4.4.3 recover all costs of collection, including but not limited to reasonable legal fees;

4.4.4 combine any of the above rights and remedies as may be permitted by applicable law.

4.5 These remedies are in addition to all other remedies available at law or in equity.

4.6 KKDC may re-evaluate the customer's credit standing at all times.

4.7 If KKDC reasonably determines in its sole discretion that the customer fails to qualify for the above payment terms at any time, then KKDC may without notice to Buyer modify or withdraw credit terms, including but not limited to requiring advance payment, guarantees, or other security.

5. Setoff

5.1 The customer will not set off or recoup invoiced amounts or any portion thereof against sums that are due or may become due from KKDC.

6. Taxes

6.1 All prices are in the applicable currency of the contract.

6.2 If, notwithstanding the provisions hereof, the customer's terms and conditions of purchase are deemed to apply by a court of competent jurisdiction, then KKDC reserves the right to either:-

6.2.1 modify the prices (including retroactively) according to the additional level of risk and responsibility that the customer's terms and conditions require KKDC to undertake; or

6.2.2 cancel the contract any time after such determination without liability for such termination other than for the goods already delivered on the terms set out herein;

6.3 Unless otherwise expressly agreed by, or shown on an invoice issued by KKDC, the prices specified do not include any charges for services such as packaging; insurance; or brokerage fees. KKDC's pricing excludes all taxes (including but not limited to, sales, use, excise, value-added, and other similar taxes), duties and charges.

6.4 The customer is responsible for all such taxes, duties and charges resulting from a contract or as a result of KKDC's performance hereunder, whether now or hereafter imposed, levied, collected, withheld, or assessed.

6.5 If KKDC is required to impose, levy, collect, withhold or assess any such taxes, duties or charges on any transaction under these terms, then in addition to the price, KKDC will invoice the customer for such taxes, duties, and charges unless at the time of order placement the customer furnishes KKDC with an exemption certificate or other documentation sufficient to verify exemption from such taxes, duties or charges.

7. Delivery and Costs

7.1 KKDC will not be liable for any delays or increased costs caused by a failure of the customer, such as delays in providing necessary information.

7.2 KKDC may, but is not obliged to, deliver the goods to the customer's premises, in accordance with KKDC's usual practices, but if:

7.2.1 the customer requests another method of delivery; or

7.2.2 KKDC elects to use an independent courier to deliver the goods; KKDC may arrange another form of transport with that independent courier by a separate contract, and the customer must pay to KKDC on demand any costs of that courier incurred by KKDC.

7.3 KKDC reserves the right to quote additional charges for any special routing, packing, labelling, handling or insurance required by the customer.

7.4 Where the goods are to be delivered in instalments, each delivery shall constitute a separate contract and failure by KKDC to deliver any one or more of the instalments in accordance with these conditions or any claim by the customer in respect of any one or more instalments shall not entitle the customer to treat the contract as a whole as repudiated.

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7.5 If KKDC fails to deliver the goods (or any instalment) for any reason other than any cause beyond KKDC's reasonable control or the customer's fault, and KKDC is accordingly liable to the customer, KKDC's liability is limited to the excess (if any) of the cost of the customer (in the cheapest available market) of similar goods to replace those not delivered over the price of the goods.

7.6 If delivery of the goods fail (otherwise than by reason of any cause beyond the customer's reasonable control or by reason of KKDC's fault) then, without prejudice to any other right or remedy available to KKDC, KKDC may:

7.7 Store the goods at the customer's risk and expense and, may invoice the customer just as if there had been no delay in delivery and charge the customer for the reasonable costs (including insurance) or storage; or

7.7.1 Sell the goods at the best readily obtainable and (after deducting all reasonable storage and selling expenses) account to the customer for the excess over the price under the contract or charge the customer for any shortfall below the price under the contract

8. Export and Import Compliance

8.1 The customer is responsible for compliance with all import and export control laws and regulations. The customer will obtain import, export, and re-export approvals and licenses required for goods delivered and will retain documentation evidencing compliance with those laws and regulations.

8.2 KKDC will not be liable to the customer for any failure to provide goods as a result of government actions that impact KKDC's ability to perform, including:

8.2.1 The failure to provide or the cancellation of export or re-export licenses;

8.2.2 Any subsequent interpretation of applicable import, transfer, export or re-export law or regulation after the date of any order or commitment that has a material adverse effect on KKDC 's performance; or

8.2.3 Delays due to the customer's failure to follow applicable import, export, transfer, or re-export laws and regulations.

8.3 If the customer designates the freight forwarder/ independent courier for export shipments from Australia, then the customer's forwarder/ independent courier will export on the customer's behalf and the customer will be responsible for any failure of the customer's forwarder/ independent courier to comply with all applicable export requirements. KKDC will provide the customer's designated freight forwarder/ independent courier with required commodity information.

9. Hardship

9.1 If for any reason KKDC's production or purchase costs for the goods (including without limitation costs of energy, equipment, labour, regulation, transportation, raw material, or goods) increases over KKDC's production or purchase costs for the goods on the date of entering into a contract, then KKDC may, by written notice to the customer of such increased costs, request a renegotiation of the price of the goods under a contract. In the event the parties are not able to agree on a revised price within 10 days after a request for renegotiation is given, then KKDC may terminate the contract on 10 days written notice to the customer.

10. Acceptance

10.1 Unless other acceptance criteria have been expressly agreed to by the parties under a contract the customer will inspect goods within a reasonable period after delivery not to exceed 30 calendar days.

10.2 Goods are presumed accepted unless KKDC receives written notice of rejection explaining the basis for proper rejection within the same timeframe.

10.3 KKDC will have a reasonable opportunity to repair or replace rejected goods, at its option.

10.4 Following initial delivery, the party initiating shipment will bear the risk of loss or damage to goods in transit.

10.5 If KKDC reasonably determines that rejection was improper, the customer will be responsible for all expenses caused by the improper rejection.

10.6 Subject to clause 10.5, KKDC assumes shipping costs in an amount not to exceed normal surface shipping charges to KKDC's designated facility for the return of properly rejected goods.

11. Title and Property

11.1 The title to and property in the goods will not pass from KKDC to the customer until the customer has paid the contract price in full (other than the costs of any independent courier referred to in clause 7.2) to KKDC in accordance with these conditions. Until then, the customer:

11.1.1 holds the goods in a fiduciary relationship with KKDC as bailee only;

11.1.2 must keep the goods separate from other items it holds and must not resell or transfer possession of the goods;

11.2 If the customer:

11.2.1 fails to pay the contract price in full when due;

11.2.2 pays for the goods by cheque (in whole or in part) and that cheque is not met on presentation;

11.2.3 commits any act of bankruptcy, becomes bankrupt, or is insolvent under administration, as defined in section 9 of the Corporations Act;

11.2.4 is or becomes insolvent within the meaning as given by any of section 9 and subsection 95A (2) of the Corporations Act or regulation 7.5.02 of the Corporations Regulations; or

11.2.5 has a controller appointed, as defined in section 9 of the Corporations Act, in respect of any of the customer's property;

11.3 KKDC may:

11.3.1 enter onto the premises where the goods are situated; and

11.3.2 repossess the goods, notwithstanding that the goods may have been affixed to any structure by KKDC or the customer, and if necessary for that purpose, may sever the goods from any structure to which they may have been affixed.

11.4 If KKDC repossesses the goods, it reserves the right to resell them.

11.5 The customer must also indemnify and keep KKDC indemnified against, and pay to KKDC, all expenses, loses and damages incurred or sustained by KKDC as a result of, or in relation, to KKDC exercising its rights under:

11.5.1 this clause;

11.5.2 under any other term, express or implied, of these conditions; or

11.5.3 otherwise at law or in equity, and

11.5.4 any bank or other costs, charges or expenses incurred by KKDC resulting from any customer's cheque not being met on presentation

12. Risk and Insurance

12.1 Notwithstanding clauses 7 and 11, the goods will be at the customer's risk after they leave KKDC's premises.

12.2 If the customer requests it in writing, KKDC may, at the customer's expense, insure the goods.

13. Compliance with Laws

13.1 The customer shall comply with all local laws and regulations applicable to the installation, use or import of all goods delivered under a contract. As a condition of purchase the customer shall comply with all applicable export control laws and regulations of Australia, the United States, the European Union and any other country having proper jurisdiction and shall obtain all necessary export licenses in connection with any subsequent export, re-export, transfer and use of all goods delivered under a contract.

14. LIMITED WARRANTY

14.1 KKDC DISCLAIMS ALL WARRANTIES, WHETHER WRITTEN, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE.

14.2 No provision of these conditions purports to exclude, restrict or modify or have the effect of excluding, restricting or modifying:

14.2.1 the application in relation to the supply of the goods of any provision of the Trade Practices Act 1974 or of any similar State or Federal legislation that may not be excluded, restricted or modified;

14.2.2 the exercise of a right conferred by such provision; or

14.2.3 subject to clauses 14.2.3.1, 14.2.3.2, 14.2.3.3 and 14.2.3.4 any liability of KKDC for breach of a condition or warranty implied by such a provision of Division 2 of Part V of the Trade Practices Act 1974, or of any similar State or Federal legislation where KKDC may similarly limit its liability, will be limited to any one of the following:

14.2.3.1 the replacement of the relevant goods or the supply of equivalent goods;

14.2.3.2 the repair of the relevant goods (excluding costs of removal and installation)

14.2.3.3 the payment of the costs of replacing the relevant goods, or of acquiring equivalent goods; or

14.2.3.4 the payment of the costs of having the relevant goods repaired; and KKDC may in its sole discretion determine which of the foregoing limits will apply in any case.

15. Confidentiality

15.1 'Confidential Information' means:

15.1.1 any information, technical data or know-how in whatever form, including, but not limited to, documented information, machine readable or interpreted information, information contained in physical components, mask works and artwork, that is clearly identified as being confidential, proprietary or a trade secret;

15.1.2 business related information including but not limited to pricing, manufacturing, or marketing;

15.1.3 the terms and conditions of any proposed or actual contract between the parties;

15.1.4 either party's business policies, or practices; and

15.1.5 the information of others that is received by either party under an obligation of confidentiality.

15.2 The receiving party will keep all Confidential Information disclosed hereunder confidential for a period of 5 years following the expiration or termination of a contract.

15.3 Each party will retain ownership of its Confidential Information including, without limitation, all rights in patents, copyrights, trademarks and trade secrets.

15.4 No right or license is granted hereby to a party or its customers, employees or agents, expressly or by implication, with respect to the Confidential Information or any patent, patent application or other Confidential right of the other party, notwithstanding the expiration of the confidentiality obligations stated herein.

15.5 KKDC agrees to use the Confidential Information of the customer only to provide goods for the customer. The customer agrees that it will not use or disclose KKDC's Confidential Information for any purpose besides the purchase or use of goods under these terms.

15.6 The customer will not use KKDC's Confidential Information for the manufacture or procurement of parts that are the subject of these conditions or any similar parts or to cause such goods to be manufactured or procured from any other source.

15.7 The receiving party has no duty to protect information that is proven by written records to be:

15.7.1 publicly known at the time of disclosure or becomes publicly known through no fault of recipient;

15.7.2 known to recipient at the time of disclosure through no wrongful act of recipient;

15.7.3 received by recipient from a third party without restrictions similar to those in this section; or

15.7.4 independently developed by recipient

16. Intellectual Property

16.1 Any design, source code, drawing, description, model, documentation, sample and/or the like, created by KKDC, shall remain the intellectual property of KKDC

16.2 Intellectual property may only be used under license from KKDC

16.3 The customer agrees not to remove or alter any indicia of manufacturing contained on or within the goods, including without limitation trademarks on nameplates or cast or machined components.

17. LIMITATION OF LIABILITY

17.1 IN NO EVENT WILL KKDC BE LIABLE TO COMPENSATE OR INDEMNIFY THE CUSTOMER FOR ANY LOSS OR DAMAGE SUFFERED OR INCURRED BY THE CUSTOMER IN RELATION TO THE ORDER, THE GOODS, OR THEIR DELIVERY, MIS-DELIVERY OR NON-DELIVERY FOR ANY INCIDENTAL DAMAGES, CONSEQUENTIAL DAMAGES, SPECIAL DAMAGES, PUNITIVE DAMAGES, STATUTORY DAMAGES, INDIRECT DAMAGES, LOSS OF PROFITS, LOSS OF REVENUES, OR LOSS OF USE, EVEN IF INFORMED OF THE POSSIBILITY OF SUCH DAMAGES.

17.2 KKDC'S LIABILITY FOR DAMAGES ARISING OUT OF OR RELATED TO THESE CONDITIONS SHALL IN NO CASE EXCEED THE AMOUNT ACTUALLY PAID TO KKDC FOR THE GOODS FROM WHICH THE CLAIM AROSE. TO THE EXTENT PERMITTED BY APPLICABLE LAW, THESE LIMITATIONS AND EXCLUSIONS WILL APPLY REGARDLESS OF WHETHER LIABILITY ARISES FROM BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE), BY OPERATION OF LAW, OR OTHERWISE. NOTHING HEREIN, HOWEVER, IS INTENDED TO DISCLAIM KKDC'S LIABILITY FOR PERSONAL INJURY OR DEATH CAUSED BY DEFECTIVE GOODS TO THE EXTENT SUCH LIABILITY IS MANDATED BY APPLICABLE LAW.

17.3 The customer's sole remedy for any defective goods will be the repair or replacement of the defective goods.

18. Governing Law

18.1 Any Supply by KKDC to the customer, and the construction and interpretation of these conditions, shall be governed by the laws of New South Wales including the United Nations Convention on the International Sale of Goods of 1980 (and any amendments or successors thereto) and any dispute not resolved by the parties shall be subject to the exclusive jurisdiction of the Courts of New South Wales.

19. Dispute Resolution

19.1 If a dispute arises out of or relates to these conditions, or the breach, termination, validity or subject matter thereof, or as to any claim in tort, in equity or pursuant to any domestic or international statute or law, the parties to the contract and to the dispute expressly agree to endeavour in good faith to settle the dispute by mediation administered by the Australian Commercial Disputes Centre (ACDC) before having recourse to arbitration.

19.1.1 A party claiming that a dispute has arisen, must give written notice to the other party to the dispute specifying the nature of the dispute.

19.1.2 On receipt of the notice specified in clause 19.1.1, the parties to the dispute must within 7 days of receipt of the notice seek to resolve the dispute.

19.1.3 If the dispute is not resolved within 7 days or within such further period as the parties agree then the dispute is to be referred to ACDC.

19.1.4 The mediation is to be conducted in accordance with ACDC Mediation Guidelines which set out the procedures to be adopted, the process of selection of the mediator and the costs involved and which terms are deemed incorporated.

19.2 In the event that the dispute has not settled within 28 days or such other period as agreed to in writing between the parties after the appointment of the mediator, the dispute is to be submitted to arbitration (administered by ACDC) and conducted in accordance with ACDC's Arbitration Guidelines available at https://www.acdcltd.com.au. The arbitrator is not to be the same person as the mediator.

19.2.1 Any such arbitration is to be administered by ACDC.

19.2.2 The appointing authority is to be ACDC.

19.2.3 The number of arbitrators is to be one.

19.2.4 The place of arbitration is to be New South Wales, Australia.

19.2.5 The language to be used in the arbitral proceedings is to be English.

20. General

20.1 Any notice required or permitted to be given by either party to the other under these conditions shall be in writing addressed to that other party at its registered office or principal place of business or such other address as may at the relevant time have been notified pursuant to this provision to the party given the notice.

20.2 No waiver by KKDC of any breach of these conditions by the customer shall be considered as a waiver of any subsequent breach of the same or any other provision nor shall any such waiver prejudice the right of KKDC to take any action in the future to enforce any provisions of a contract.

20.3 If any provision of these conditions is held by any competent authority to be illegal, invalid or unenforceable in whole or in part the validity of the other provisions of these conditions and the remainder of the provision in question shall not be affected and, in lieu of such illegal, invalid or unenforceable provision, there will be added, as part of these conditions, one or more provisions as similar in terms as may be legal, valid and enforceable under applicable law.

20.4 All provisions of these conditions which by their nature should apply beyond the term of a contract will remain in force after acceptance and complete performance of a contract, including but not limited to, the Payment, Confidentiality, Limitation of Liability and Dispute Resolution clauses.

20.5 The customer will not assign any rights or obligations under these conditions without the prior written consent of KKDC. KKDC may assign any rights or obligations under these conditions without the prior written consent of the customer.

20.6 For the avoidance of doubt nothing in these conditions shall confer on any third party any benefit or the right to enforce any term of these conditions.

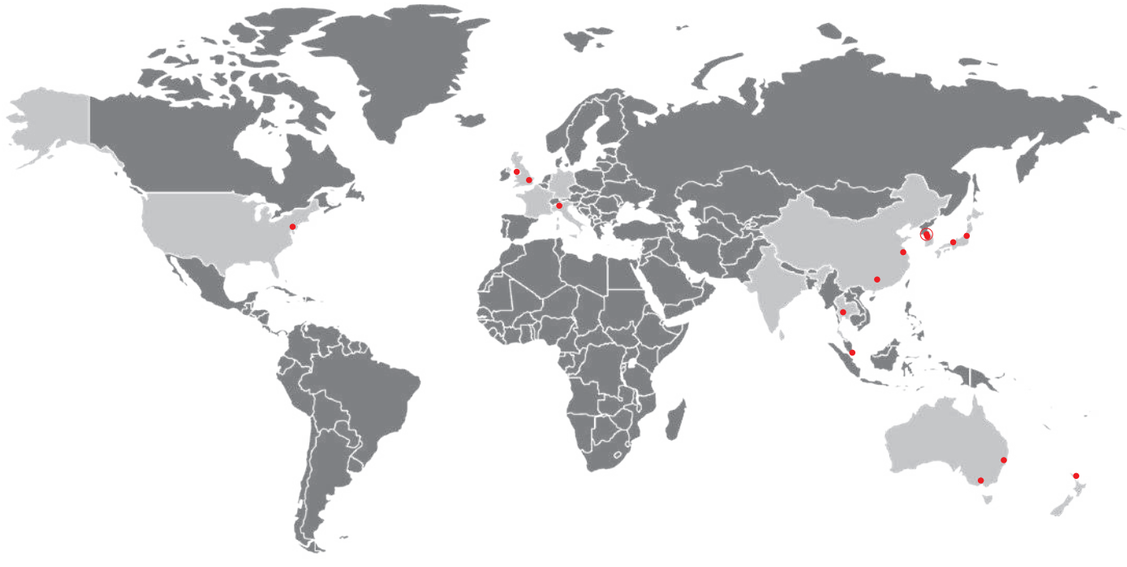
KKDC is constantly developing and improving its products, therefore, KKDC reserves the right to discontinue any products from its ranges at any time whatsoever and without prior notice.
KKDC also reserves the right to make technical and photometric modifications in addition to the change of any parts, details or finishes deemed suitable for improvement purposes and meeting statutory requirements.

For installation purposes, refer exclusively to the conditions described in the instruction sheet supplied with the product package and/or download from the website **www.kkdc.lighting**.

Whilst every effort has been made to accurately depict KKDC product in context with use of genuine project photography, some images may have been used for illustrative purposed only.

Catalogue Produced by KKDC Design House Ltd

KKDC Worldwide



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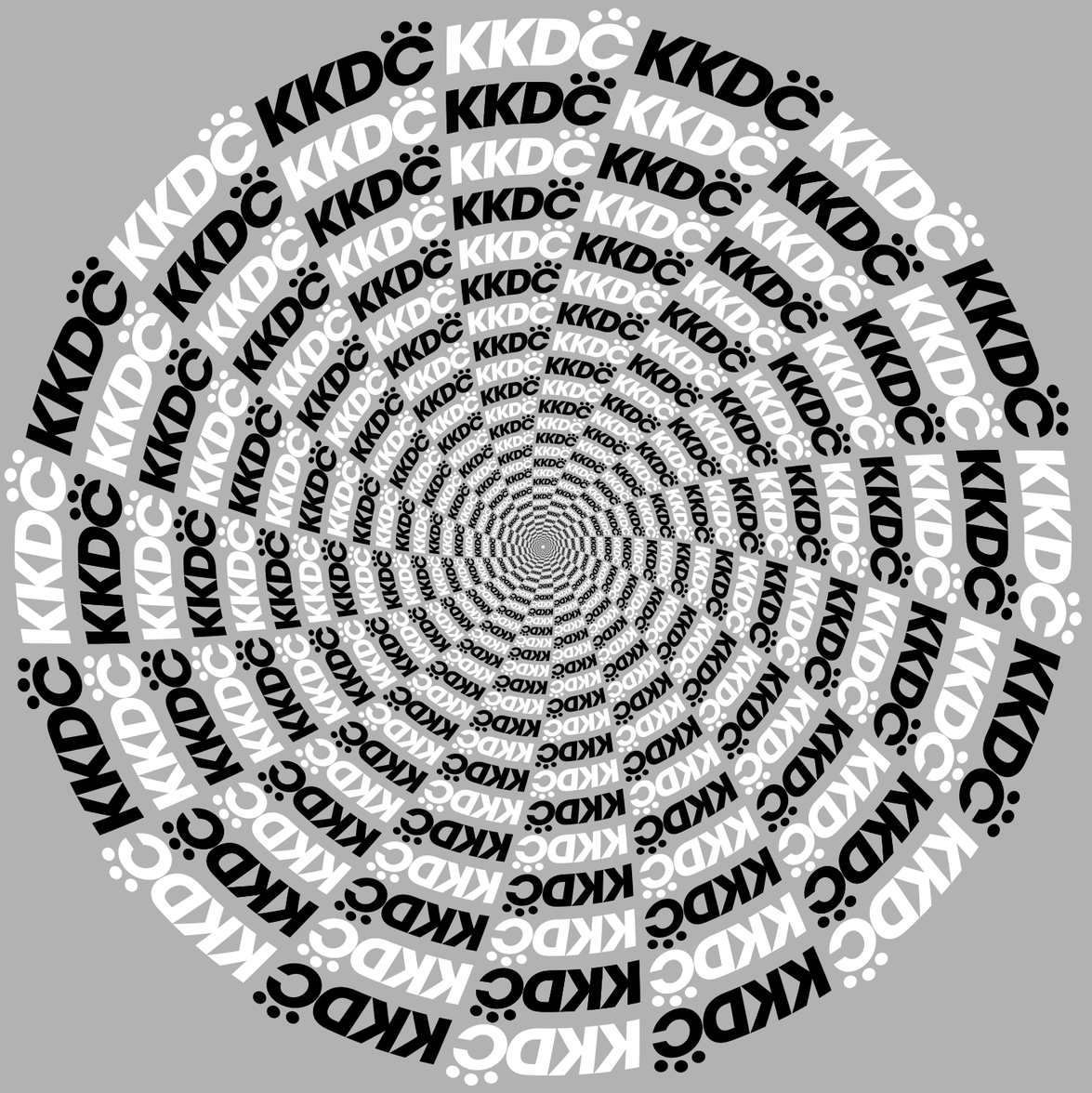

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KKDC LED Housing & Homogenous Guide

	TiMi n s e	TiMi-C n s e	LiNi BLADE-S s e	LiNi-S n s e	LiNi-S XL s e	LiNi Glow s e	LiNi Glow XL s e	LiNi-M XL s	LiNi-R s e	LiNi-R XL s e	Power Cove s e	TANA n s e	TANA Micro n s e	TANA SP s e	PICO s e	MiMi s e	KKSL s e	POKI s e	MoMo s e	MoMo-L s e	MoMo-F s e	MoMo-BLOC s e	SUMO s e
 352	●●●	●●●	▬	●●●	▬	n/a	▬	n/a	▬	▬	n/a	●●●	●●●	n/a	●●●	●●●	●●●	▬	▬	▬	▬	▬	n/a
 007	●●●	●●●	▬	●●●	n/a	▬	n/a	n/a	n/a	n/a	n/a	n/a	n/a	▬	●●●	●●●	n/a	n/a	n/a	n/a	n/a	▬	n/a
 504	●●●	●●●	▬	●●●	▬	n/a	▬	n/a	▬	▬	n/a	●●●	●●●	n/a	●●●	●●●	●●●	▬	▬	▬	▬	▬	▬
 508	●●●	●●●	▬	●●●	▬	●●●	▬	n/a	▬	▬	n/a	●●●	●●●	n/a	●●●	●●●	●●●	▬	▬	▬	▬	▬	n/a
 512	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	●●●	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
 207	●●●	●●●	▬	●●●	▬	n/a	▬	n/a	▬	▬	n/a	●●●	●●●	n/a	n/a	●●●	n/a	▬	▬	▬	n/a	n/a	n/a
 208	●●●	●●●	▬	●●●	▬	n/a	●●●	n/a	●●●	●●●	n/a	●●●	●●●	n/a	n/a	●●●	n/a	●●●	●●●	▬	n/a	n/a	n/a
 RGBW	n/a	●●●	n/a	n/a	n/a	n/a	n/a	▬	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
 RGB	●●●	n/a	▬	●●●	▬	n/a	▬	n/a	▬	▬	n/a	●●●	n/a	n/a	n/a	●●●	●●●	▬	▬	▬	▬	▬	n/a

●●● Spotting on diffuser ▬ Homogenous diffusion

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