lumenal

Experts in LED

Edge Lit Lightboxes

Flux 18
Edge lit lightboxes

Description

Flux 18 is the all in one edge lit solution for your illuminated displays. Lumenal designed PCBs provide incredibly bright, even illumination across custom sized graphic display frames.

The aluminium frame houses the laser etched light guide plate, LEDs, wiring and thermal management allowing it to be built into any display fixture. Graphics are held in place by a PETG lens with magnetic fixing.

Key Attributes

- Even light distribution
- Clear gloss graphic lens for premium look
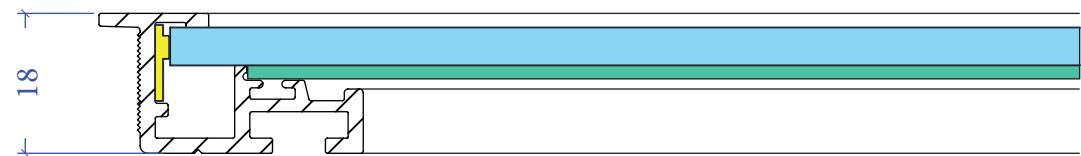- Slimmest 18mm profile

LED Details

Operating Voltage	110V~240V AC
Operating Frequency	50~60Hz
Power Factor	>0.9 Typical [3]
Total Power Consumption[1]	38W per square metre
LED	Seoul
LED Quantity	120 per metre
LED Operating Voltage	24V DC
Drive Current	1.3A per metre
PCB Power Consumption	32W per metre
LED Colour Temperature[2]	5700K
LED Lifetime[4]	>36,000 hours

1. Assuming Power Supply efficiency of 80%
2. 5700K typical. +/- 250K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius

Flux 18

18

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Ledge 22
Edge lit lightboxes

Description

Ledge 22 is our slimmest lightbox designed for even illumination of tension fabric graphics.

The lightweight 22mm edge lit slim lightbox is perfect for wall mounted displays and contains a bespoke laser etched light guide panel.

We created Ledge 22 using Lumenal's flexible linear LEDs, which provide bright, even illumination across custom sized frames.

Key Attributes

- Ultra slim lightweight profile
- Even light distribution
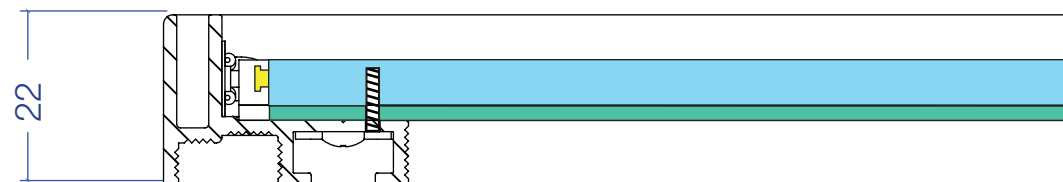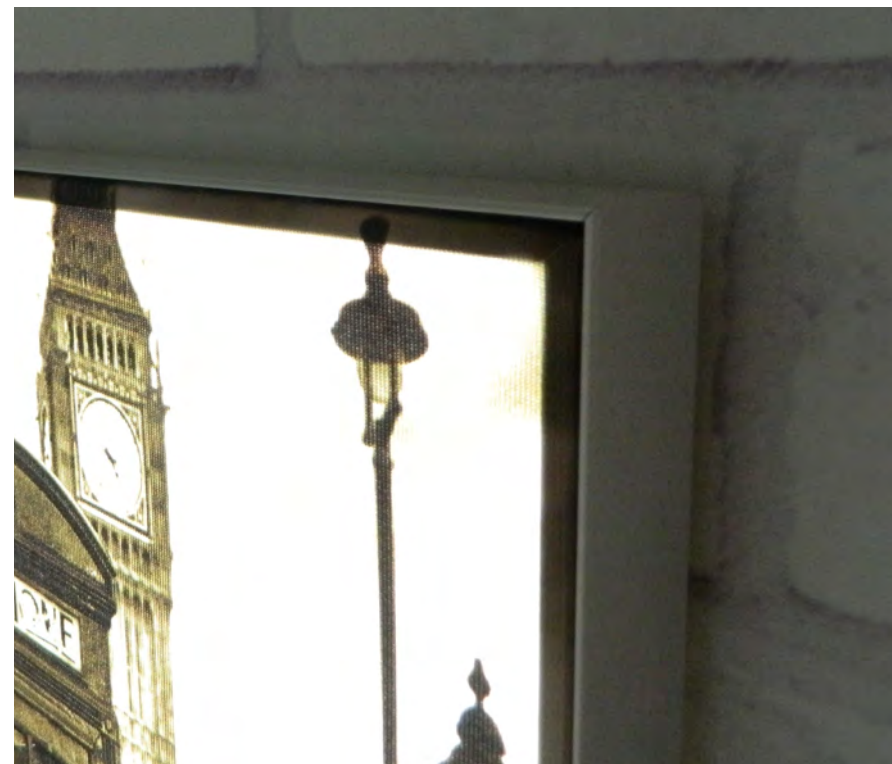- Up to 2800mm x 1300mm graphic size

LED Details

	9.6W	19.2W
Operating Voltage	110~240 VAC	
Operating Frequency	50~60Hz	
Power Factor	>0.9 Typical [3]	
Total Power Consumption [1]	11.5W per metre	23W per metre
LED	Flexible Linear	
LED Quantity	120 per metre	
Drive Current	0.8A per metre	1.6A per metre
PCB Power Consumption	9.6W per metre	19.2W per metre
LED Colour Temperature [2]	6000K	
LED Lifetime [4]	> 36,000 Hours	

1. Assuming Power Supply efficiency of 80%
2. Can vary +/- 1000K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius

22

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Ledge 34
Edge lit lightboxes

Description

Ledge 34 utilises our edge lit panel technology to illuminate tension fabric graphics. It does this by using high quality PCBs designed by Lumenal with a bespoke laser etched light guide plate in a lightweight robust frame.

The 34mm profile is slim enough for most wall mounted applications and even larger custom sizes are uniformly and brightly illuminated.

Key Attributes

- High output, even light distribution
- Up to 2800mm x 1300mm graphic size
- Quick and easy graphic change

LED Details

Operating Voltage	110~240 VAC
Operating Frequency	50~60Hz
Power Factor	>0.9 Typical [3]
Total Power Consumption[1]	38W per metre
LED Type	Seoul
LED Quantity	120 per metre
LED Operating Voltage	24VDC
Drive Current	1.3A per metre
PCB Power Consumption	32W per metre
LED Colour Temperature[2]	5700K
LED Lifetime [4]	>36,000 hours

1. Assuming Power Supply efficiency of 80%
2. 5700K typical. +/- 250K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius

34

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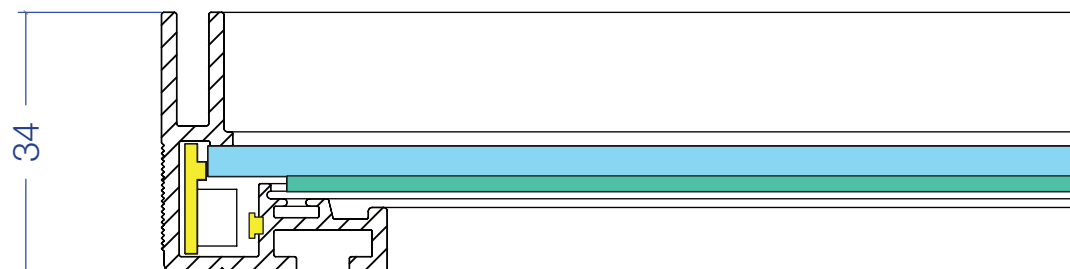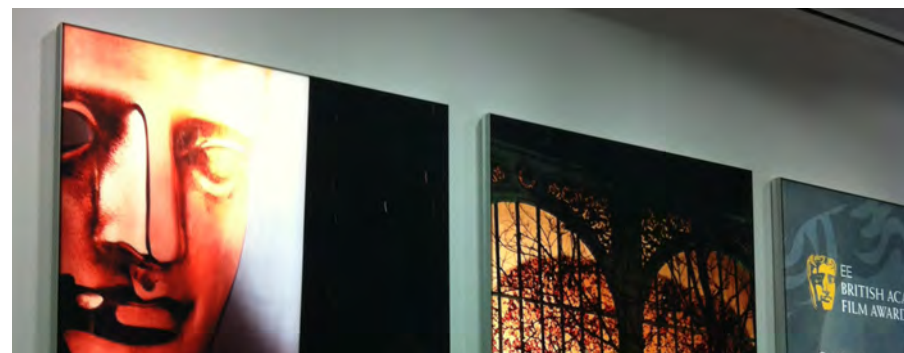
Ledge 50
Edge lit lightboxes

Description

Ledge 50 is a lightweight, high quality double sided tension fabric graphic display for ceiling-hung signage, gondola headers, and wayfinding.

Our thinnest double sided lightbox utilises the latest edge lighting technology, with a bespoke laser etched light guide plate and Lumenal designed PCBs providing bright, even illumination.

The light guide plate is housed in the centre of 50mm deep aluminium profile, illuminating both sides from one light source.
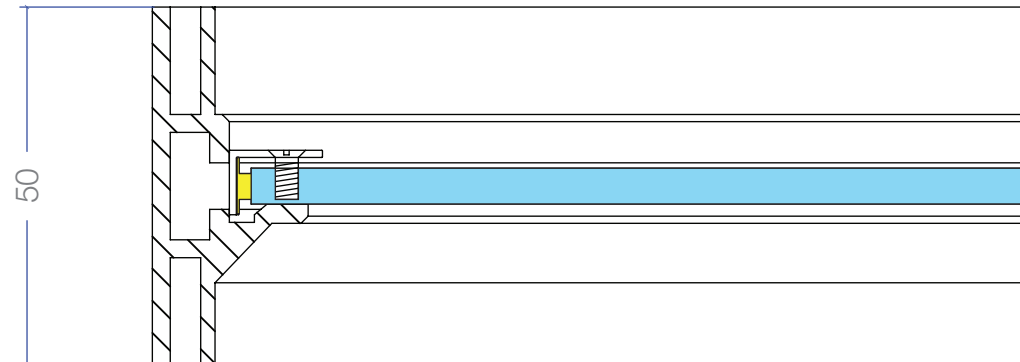
Key Attributes

- Ultra slim double sided graphic display
- Quick and easy graphic change
- Flexible mounting options

LED Details

	9.6W	19.2W
Operating Voltage	110~240 VAC	
Operating Frequency	50~60Hz	
Power Factor	>0.9 Typical [3]	
Total Power Consumption [1]	11.5W per metre	23W per metre
LED	Flexible Linear	
LED Quantity	120 per metre	
Drive Current	0.8A per metre	1.6A per metre
PCB Power Consumption	9.6W per metre	19.2W per metre
LED Colour Temperature [2]	6000K	
LED Lifetime [4]	> 36,000 Hours	

1. Assuming Power Supply efficiency of 80%
2. Can vary +/- 1000K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius

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Ledge 105
Edge lit lightboxes

Description

The edge lit Ledge 105 utilises high output LEDs and the latest optical control technology to create bright, even illumination across a single or double sided tension fabric graphic display.

The Ledge 105 is a freestanding graphic display system, but can also be wall mounted or ceiling suspended.

Ledge 105 is available in custom sizes up to 2.25m wide x 3m high and is suitable for easy self-assembly.

Key Attributes

- Flat packed for reduced shipping costs
- Double or single sided graphic illumination available within one product
- Option to add Ledge Fix magnetic merchandising system

LED Details

Operating Voltage	120V~277V AC
Operating Frequency	50~60Hz
Power Factor	>0.98 Typical [3]
Total Power Consumption[1]	26.5W per square metre
LED	Seoul
LED Quantity	10 per metre
Drive Current	0.7A
PCB Power Consumption	2.2W per LED
LED Colour Temperature[2]	5700K
LED Lifetime[4]	>36,000 hours

1. Assuming Power Supply efficiency of 80%
2. 5700K typical. +/- 250K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius

105

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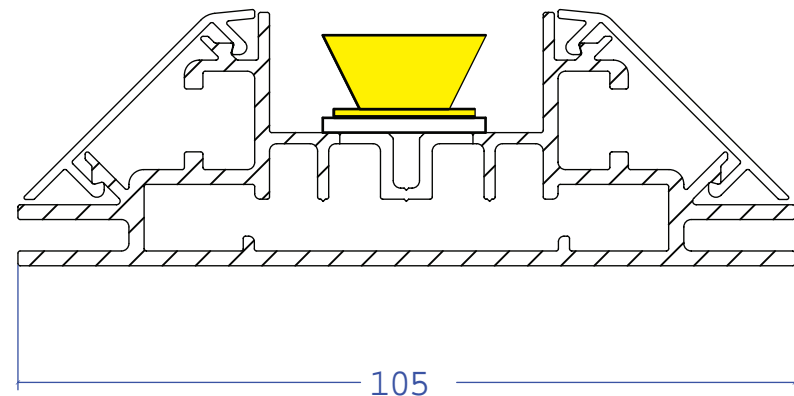
Back Lit Lightboxes

Ledge 65
Back lit lightboxes

Description

This 65mm back lit LED tension fabric graphic lightbox is manufactured using a slim 65mm deep aluminium frame. This gives a clean, bright look which is ideal for showing off images of your products or your brand in a way that makes them stand out in a crowd.

The 65mm is designed to be wall mounted or can be used as a freestanding display.

Key Attributes

- Up to 3.5m high x 50m width
- Quick and easy graphic change
- Even light distribution with no shadow

LED Details

Operating Voltage	110V~240V AC
Operating Frequency	50~60Hz
Power Factor	>0.9 Typical [3]
Total Power Consumption[1]	42W per metre
LED	Flexible Linear
LED Quantity	432 per metre
Luminous Flux	3024 lm per square metre
LED Operating Voltage	12V DC
Drive Current	6A per square metre
PCB Power Consumption	35W per square metre
LED Colour Temperature[2]	6000K
LED Lifetime[4]	>36,000 hours

1. Assuming Power Supply efficiency of 80%
2. Can vary +/- 1000K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius

65

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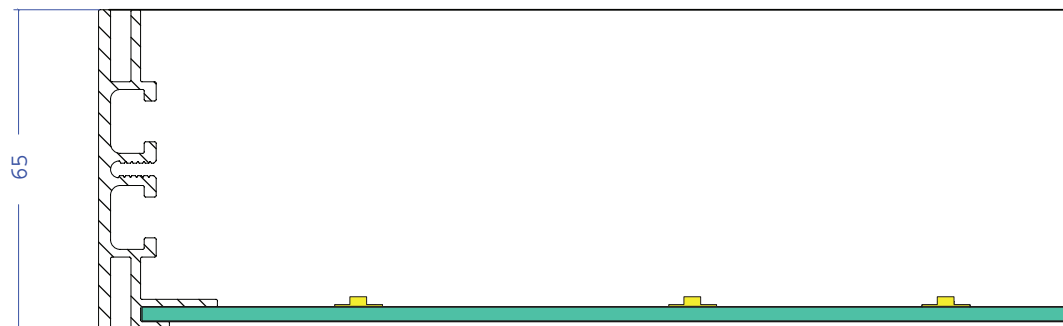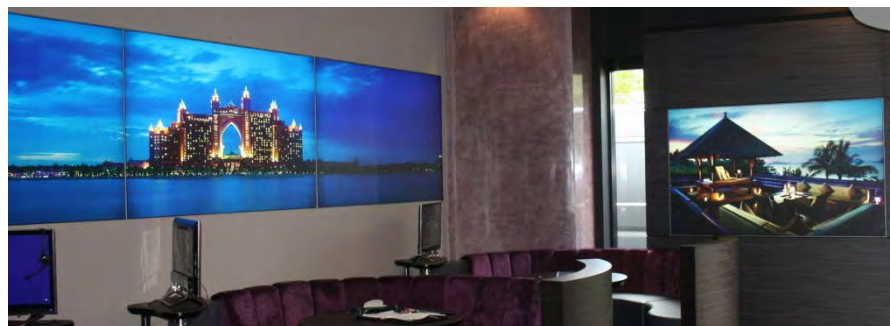
Ledge 135
Back lit lightboxes

Description

Ledge 135 is a back lit tension fabric graphic which uses a 135mm deep frame and is designed to be a freestanding or wall mounted unit, ideal for attracting attention at exhibitions, in retail locations and any other indoor environment where graphics or adverts are being displayed.

We can manufacture our lightboxes to your bespoke size specifications.

Key Attributes

- Up to 3.5m high x 50m width
- Quick and easy graphic change
- Even light distribution with no shadow

LED Details

|	
Operating Voltage	110V~240V AC
Operating Frequency	50~60Hz
Power Factor	>0.9 Typical [3]
Total Power Consumption[1]	84W per square metre
LED Type	Flexible Linear
LED Quantity	864 per metre
Luminous Flux	6048 lm per square metre
LED Operating Voltage	12V DC
Drive Current	12A per square metre
PCB Power Consumption	70W per square metre
LED Colour Temperature[2]	6000K
LED Lifetime[4]	>36,000 hours

1. Assuming Power Supply efficiency of 80%
2. Can vary +/- 1000K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius

135
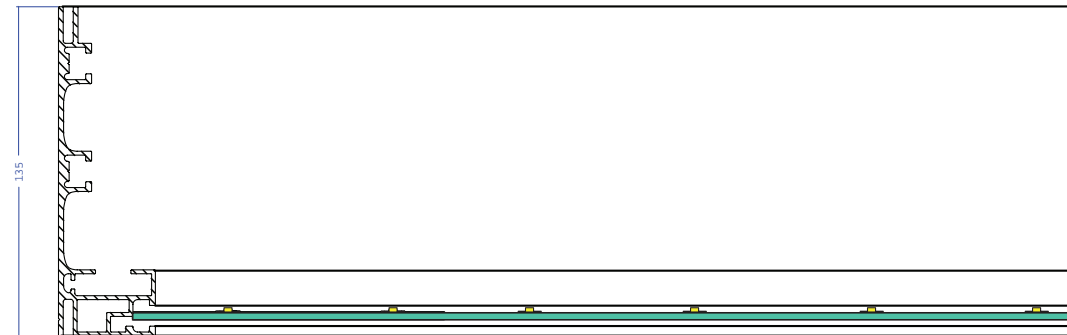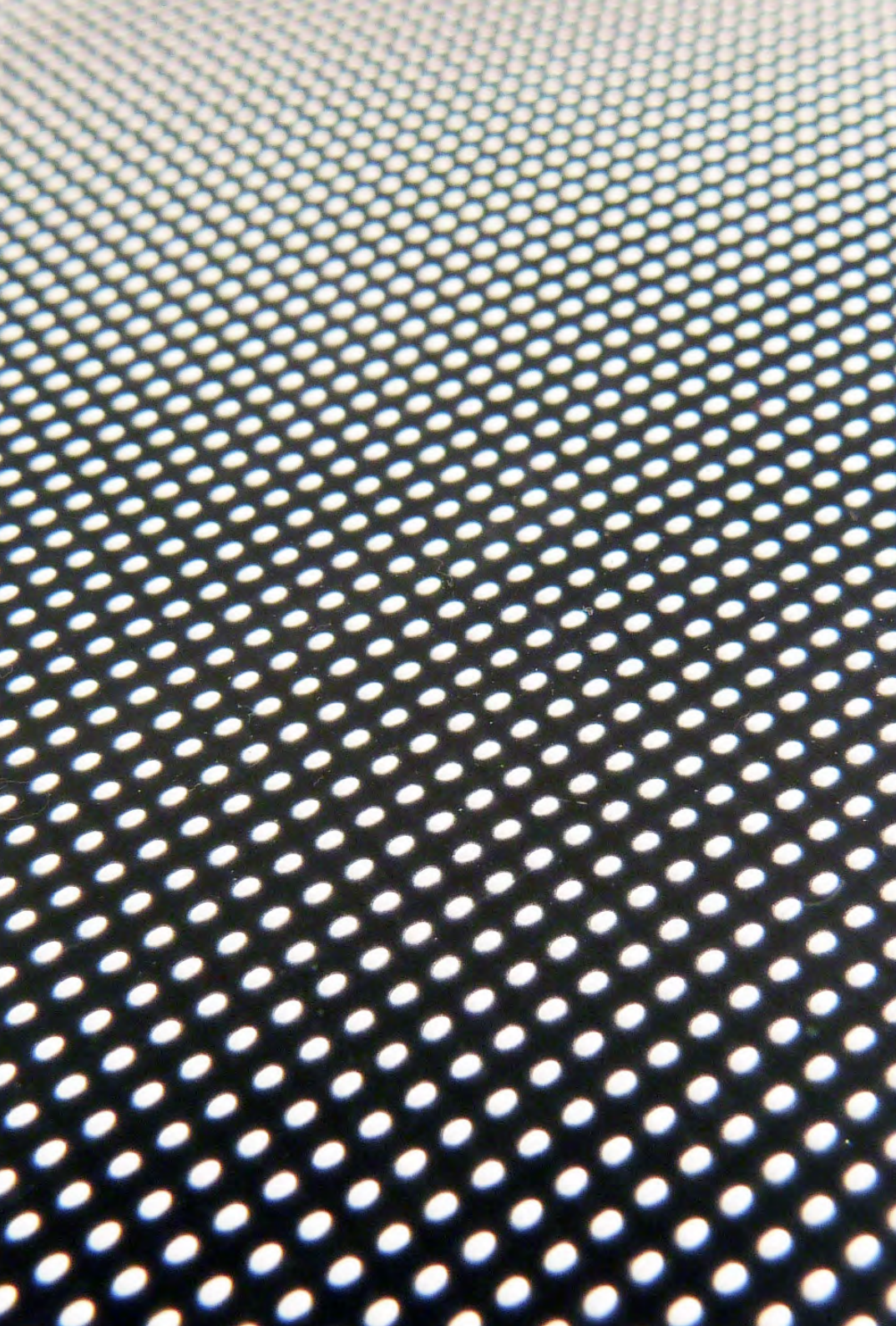
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Edge Lit Panels

Flux 10
LED light panel

Description

The Flux 10 is an illuminated edge lit panel suitable for a variety of applications including signage, shelving and backlighting. It is a self-contained unit comprising a Lumenal bespoke laser etched light guide plate, LEDs, wiring and thermal management ready to be integrated within a retail display or architectural applications.

The Flux 10 is designed and manufactured in the UK.

Key Attributes

- Can be cut to bespoke shapes and sizes
- Even light distribution with no hotspots
- High output option for premium applications

LED Details

|	
Operating Voltage	110V~240V AC
Operating Frequency	50~60Hz
Power Factor	>0.9 Typical [3]
Total Power Consumption[1]	11.5W per metre
LED Type	Flexible Linear
LED Quantity	120 per metre
Drive Current	0.8A per metre
LED Colour Temperature[2]	6000K
LED Lifetime[4]	>36,000 hours

1. Assuming Power Supply efficiency of 80%
2. Can vary +/- 1000K
3. Power Factor is dependent on Power Supply Unit and Load
4. Based on Manufacturers data at 55 degrees celcius
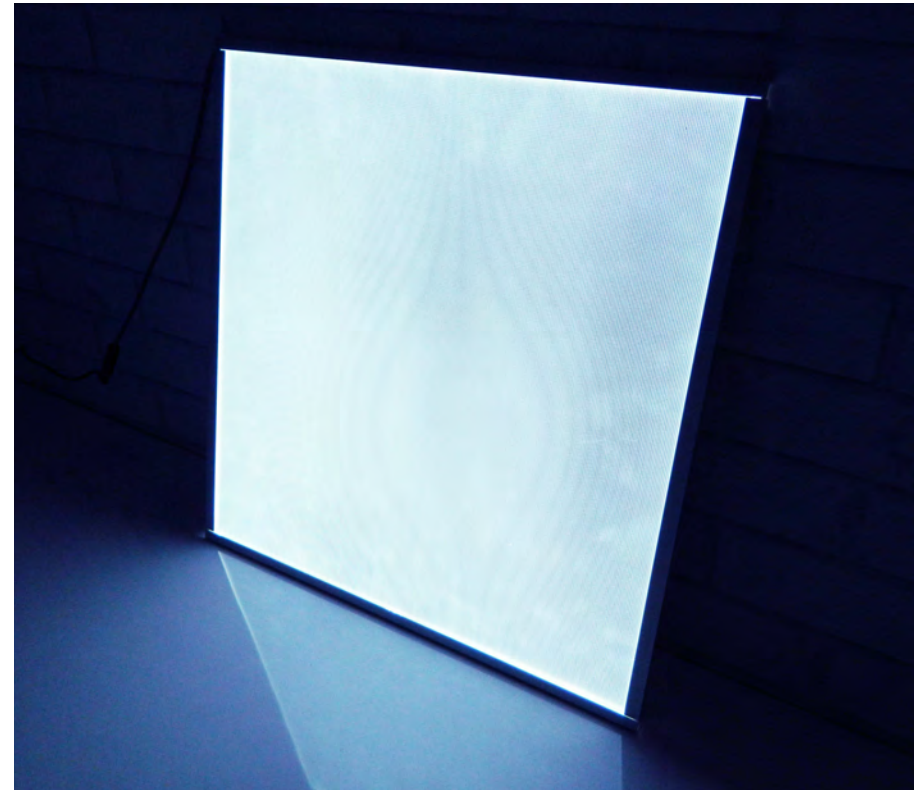
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LED Edge Lit Panels

Description

Lumenal's LED edge lit panel is designed to emit a bright, even output of light, and is an ideal solution for graphic display, point of sale units, shelving and signage.

The technology allows each panel to be brightly illuminated across its entire surface without dark spots. It is also possible to engrave and specify any point at which light needs to be shone from the panel.

We can create complex shapes such as text, symbols or company branding as well as square panels. Edge lit with highly efficient LEDs, the light travels from the edges of the panel through the laser etched dot matrix pattern in optical grade acrylic, to the centre of the panel.

Our laser etched LED panels are the core component of our Edge Lit Lightbox range.

Key Attributes

- World class edge-lit technology
- Even light distribution
- Total shape flexibility
- Highly energy efficient
- Designed and manufactured in the UK

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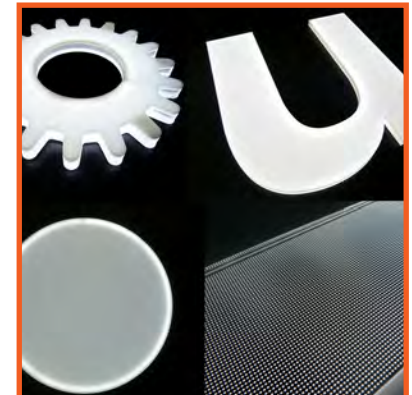
Linear LED Lighting

Mira
Linear LED lighting

Description

Mira is our most discreet linear luminaire design, making it ideal where space is minimal such as shelf lighting, shadow gap and POS displays.

Key Attributes

- Smallest surface or recessed mounted profile
- Super lightweight
- Flexible connectivity options

Mira

LED Details

PCB	LED Manufacturer	CCT (K)	LED Qty	Voltage (V)	Current (mA)	Power (W)	Calculated flux excl diffuser (Lm)
				1m Extrapolated from calculated			
Eco	Seoul	3000	20	12	600	8	767
Eco	Seoul	4000	20	12	600	8	826
Eco+	Seoul	3000	40	12	1200	16	1533
Eco+	Seoul	4000	40	12	1200	16	1651
Eco+	Seoul	TP	40	12	1400	16	1592
Eco Power	Seoul	3000	60	12	1800	24	2300
Eco Power	Seoul	4000	60	12	1800	24	2477

All Lumenal linear LED luminaires can be supplied with a range of PCB options, not limited to those listed above, and clear, semi, fully frosted or coloured lenses. Our aluminium profiles are anodised satin silver with a full range of RAL colours available on request. A selection of standard fixings are available for all solutions.

Lumenal LED luminaires are designed and manufactured in the UK.

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Capella
Linear LED lighting

Description

Capella is ideal for showcases, cabinet and under-shelf lighting. It can also be fitted with slimline uprights to create a Libra adjustable display light.

Key Attributes

- Slim profile, high output
- Adjustable fixing options
- Flexible connectivity options

LED Details

PCB	LED Manufacturer	CCT (K)	LED Qty	Voltage (V)	Current (mA)	Power (W)	Calculated flux excl diffuser (Lm)
				1m Extrapolated from calculated			
Eco	Seoul	3000	20	12	600	8	767
Eco	Seoul	4000	20	12	600	8	826
Eco+	Seoul	3000	40	12	1200	16	1533
Eco+	Seoul	4000	40	12	1200	16	1651
Eco+	Seoul	TP	40	12	1400	16	1592
Eco Power	Seoul	3000	60	12	1800	24	2300
Eco Power	Seoul	4000	60	12	1800	24	2477
ZX	Cree	3000	20	12	2450	28	2061
ZX	Cree	4000	20	12	2450	28	2318

All Lumenal linear LED luminaires can be supplied with a range of PCB options, not limited to those listed above, and clear, semi, fully frosted or coloured lenses. Our aluminium profiles are anodised satin silver with a full range of RAL colours available on request. A selection of standard fixings are available for all solutions.

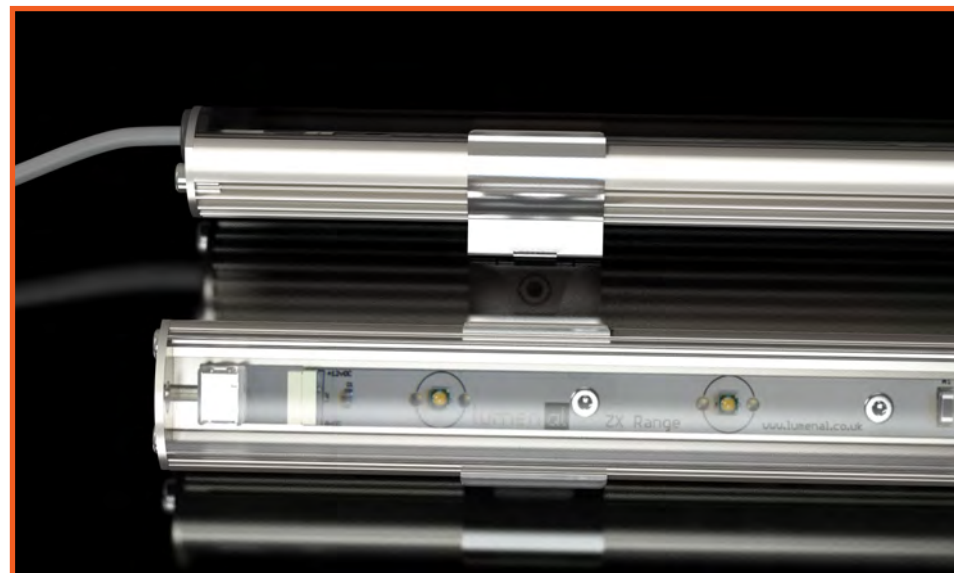**Lumenal LED luminaires are designed and manufactured in the UK.**

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Sirius
Linear LED lighting

Description

The Sirius linear luminaire is suitable for various applications in the retail and display sectors, but is ideal for task lighting and suspended display lighting.

Key Attributes

- Slim profile, high output
- Adjustable fixing options
- Linkable fittings
- Flexible connectivity options

LED Details

PCB	LED Manufacturer	1m Extrapolated from calculated					
		CCT (K)	LED Qty	Voltage (V)	Current (mA)	Power (W)	Calculated flux excl diffuser (Lm)
Eco	Seoul	3000	20	12	600	8	767
Eco	Seoul	4000	20	12	600	8	826
Eco+	Seoul	3000	40	12	1200	16	1533
Eco+	Seoul	4000	40	12	1200	16	1651
Eco+	Seoul	TP	40	12	1400	16	1592
Eco Power	Seoul	3000	60	12	1800	24	2300
Eco Power	Seoul	4000	60	12	1800	24	2477
ZX	Cree	3000	20	12	2450	28	2061
ZX	Cree	4000	20	12	2450	28	2318

All Lumenal linear LED luminaires can be supplied with a range of PCB options, not limited to those listed above, and clear, semi, fully frosted or coloured lenses. Our aluminium profiles are anodised satin silver with a full range of RAL colours available on request. A selection of standard fixings are available for all solutions.
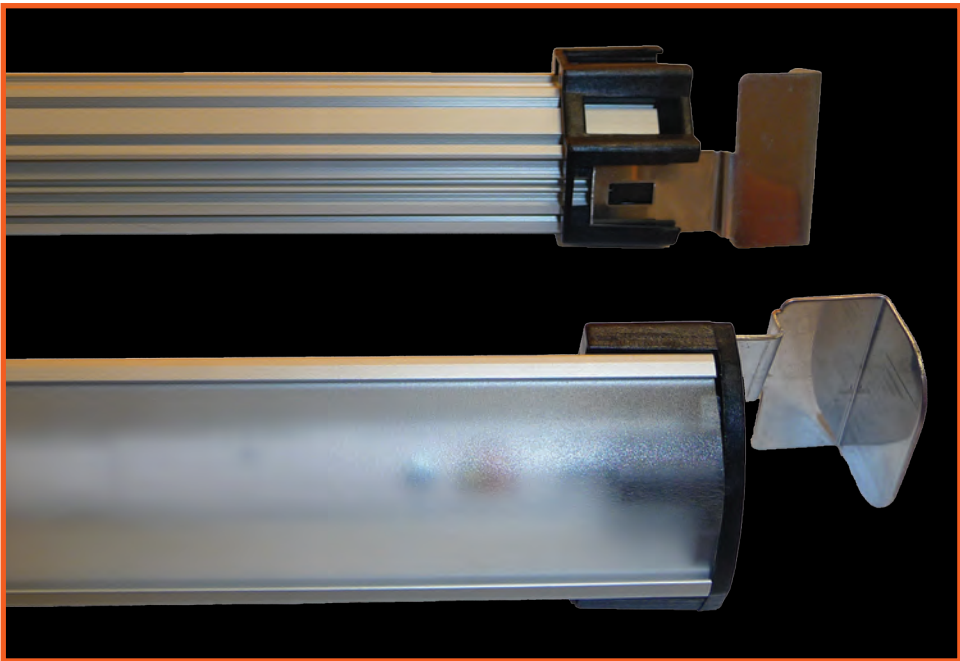**Lumenal LED luminaires are designed and manufactured in the UK.**

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Velorum
Linear LED lighting

Description

Velorum is designed and manufactured specifically for supermarket under-shelf lighting, and is compatible with most propriety shelving systems.

Key Attributes

- Brackets to suit all standard gondola shelving systems
- Wedge shape for maximum light distribution
- Extra bright / high output option
- Flexible connectivity options

LED Details

PCB	LED Manufacturer	CCT (K)	LED Qty	Voltage (V)	Current (mA)	Power (W)	Calculated flux excl diffuser (Lm)
				1m Extrapolated from calculated			
Eco	Seoul	3000	20	12	600	8	767
Eco	Seoul	4000	20	12	600	8	826
Eco+	Seoul	3000	40	12	1200	16	1533
Eco+	Seoul	4000	40	12	1200	16	1651
Eco+	Seoul	TP	40	12	1400	16	1592
Eco Power	Seoul	3000	60	12	1800	24	2300
Eco Power	Seoul	4000	60	12	1800	24	2477
ZX	Cree	3000	20	12	2450	28	2061
ZX	Cree	4000	20	12	2450	28	2318
Eco+ S CV 1200	Cree	3000	12	38	700	13	1236
Eco+ S CV 1200	Cree	4000	12	38	700	13	1391

All Lumenal linear LED luminaires can be supplied with a range of PCB options and clear, semi, fully frosted or coloured lenses. Our aluminium profiles are anodised satin silver with a full range of RAL colours available on request. A selection of standard fixings are available for all solutions.
Lumenal LED luminaires are designed and manufactured in the UK.

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Polaris
Linear LED lighting

Description

Polaris is a linear LED luminaire designed for use in a number of applications, but is perfect for cove, coffer and plinth lighting.

Key Attributes

- Wedge shape for maximum light distribution
- Extra bright / high output option
- Flexible connectivity options

Polaris (side tab)

LED Details

PCB	LED Manufacturer	CCT (K)	LED Qty	Voltage (V)	Current (mA)	Power (W)	Calculated flux excl diffuser (Lm)
				1m Extrapolated from calculated			
Eco	Seoul	3000	20	12	600	8	767
Eco	Seoul	4000	20	12	600	8	826
Eco+	Seoul	3000	40	12	1200	16	1533
Eco+	Seoul	4000	40	12	1200	16	1651
Eco+	Seoul	TP	40	12	1400	16	1592
Eco Power	Seoul	3000	60	12	1800	24	2300
Eco Power	Seoul	4000	60	12	1800	24	2477
ZX	Cree	3000	20	12	2450	28	2061
ZX	Cree	4000	20	12	2450	28	2318

All Lumenal linear LED luminaires can be supplied with a range of PCB options, not limited to those listed above, and clear, semi, fully frosted or coloured lenses. Our aluminium profiles are anodised satin silver with a full range of RAL colours available on request. A selection of standard fixings are available for all solutions.
Lumenal LED luminaires are designed and manufactured in the UK.

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Display Cabinet Lighting

Libra
Display cabinet lighting

Description

Libra is a versatile, flexible showcase lighting solution with adjustable aluminium posts at each side of a high quality linear LED bar, offering the option of our various light engines.

Perfect for jewellery and cabinet displays, Libra can be made to custom lengths and heights, and is available in a range of anodised finishes.

The LED lightbar can be rotated 130 degrees, making your displays easily reconfigurable without having to replace any light fixtures or bases, and features a stop mechanism built into the assembly ensuring no cables are twisted.

Key Attributes

- Twin peaks PCB option to optimise jewellery display
- 130 degree adjustment of lighting angle with lockout mechanism
- Fully recyclable aluminium framework
- Frosted lens for minimum glare

LED Details

PCB	LED Manufacturer	1m Extrapolated from calculated					
		CCT (K)	LED Qty	Voltage (V)	Current (mA)	Power (W)	Calculated flux excl diffuser (Lm)
Eco	Seoul	3000	18	12	600	7	573
Eco	Seoul	4000	18	12	600	7	609
Eco+	Seoul	3000	36	12	1200	14	1146
Eco+	Seoul	4000	36	12	1200	14	1218
Eco Power	Seoul	3000	54	12	1800	22	1719
Eco Power	Seoul	4000	54	12	1800	22	1826
ZX	Cree	3000	18	12	2100	25	1855
ZX	Cree	4000	18	12	2100	25	2087

Libra

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Moda
Display cabinet lighting

Description

Lumenal's Moda cabinet light is designed especially for display cases and is ideal for jewellery, souvenirs, watches, pens and many other luxury items.

The Moda cabinet light is adjustable from 35mm to 350mm high, comes in 4000K colour temperature and features 1 adjustable LED to enable you to focus the light onto your product. Up to 4 Moda luminaires can be run from one of the LED drivers we supply.

Key Attributes

- Adjustable lamp head
- Highly energy efficient
- Massively reduces energy costs
- Lifetime - 35,000 hours (L70)
- Elegant and bright

Technical Details

Wattage	1.25w
Colour Temperature	4000k (3000k to order)
Number of LED's	1
Beam Angle	25°
Height	Adjustable from 35mm to 350mm
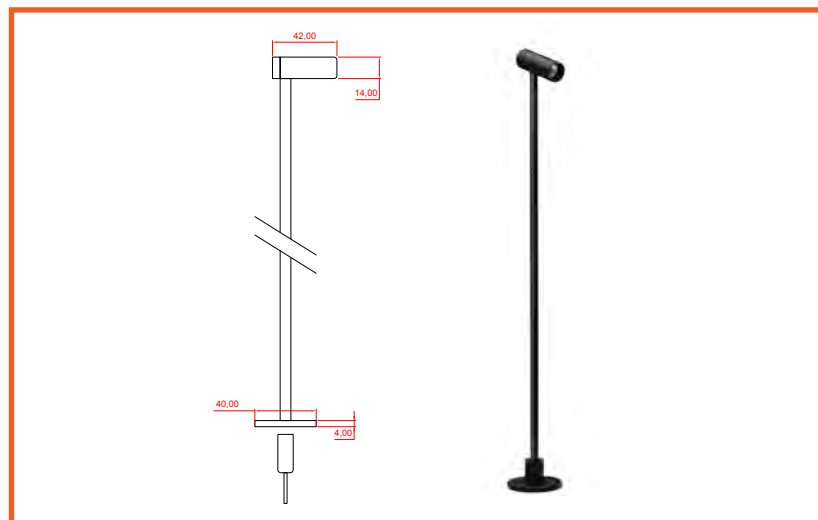
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Trio
Display cabinet lighting

Description

Lumenal's Trio cabinet light is designed especially for display cases and is ideal for jewellery, souvenirs, watches, pens and many other luxury items.

The Trio cabinet light is 250mm high, is available in Black and Silver and features 3 adjustable LED's to enable you to focus the light onto your product. Up to 2 Trio luminaires can be run from one of the LED drivers we supply.

Key Attributes

- Adjustable lamp head
- Highly energy efficient
- Massively reduces energy costs
- Lifetime - 35,000 hours (L70)
- Elegant and bright

Technical Details

Wattage	5.4w
Colour Temperature	4000k (3000k to order)
Number of LED's	3
Beam Angle	25°
Height	250mm

Trio

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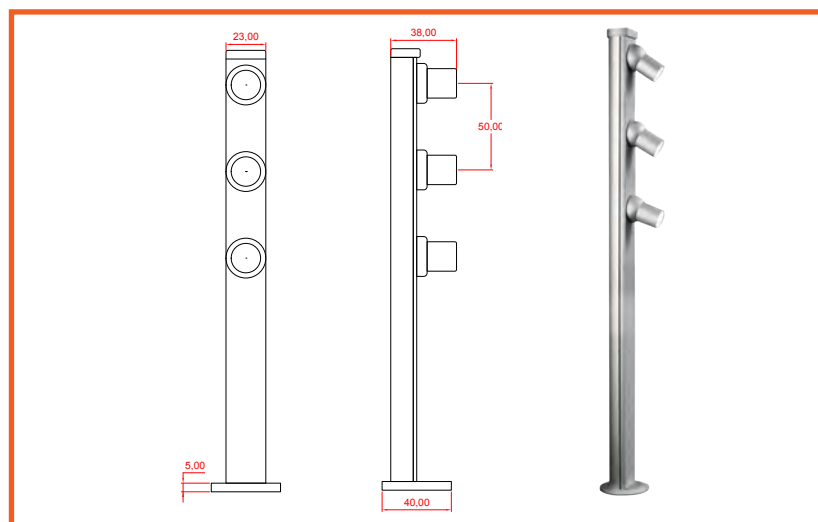
Orion
Display cabinet lighting

Description

Possibly the most compact system on the market, Orion is a simple, elegant and effective mini track light system.

Satin aluminium finished fittings clip onto a clear extruded polycarbonate busbar track, offering easily adjustable directional light.

Perfect for use in showcases, galleries, exhibition displays, and feature lighting for point of purchase applications. Each track is supplied with end caps and secure low voltage supply cables.

Key Attributes

- Clear polycarbonate track
- Translucent bonding tape
- Easy clip fitting allows simple relocation
- Adjustable, directional fitting lamp

Technical Details

Lifetime	25,000 hours @ 70% lumen maintenance
Mounting & Connection	Included
Voltage	12V AC
Housing Colour	Satin silver anodised aluminium finish
Track Length	2000mm (this can be cut to your desired lengths)
Track	Slimline clear extruded polycarbonate
Track Rating	8A max
Operating Temperature	-10°C to +40°C
Lamp Sustainability	Philips 12V GU4

Orion
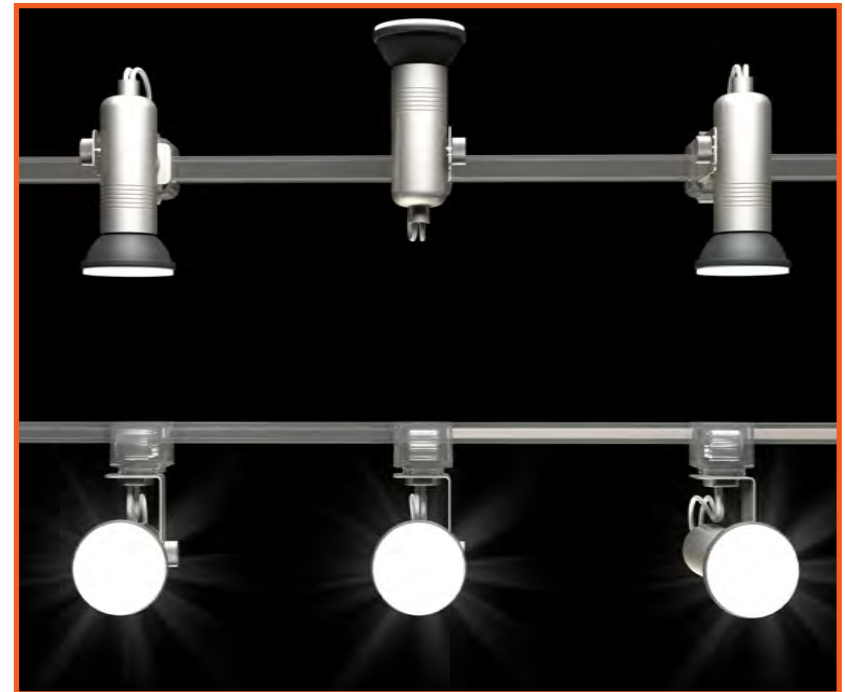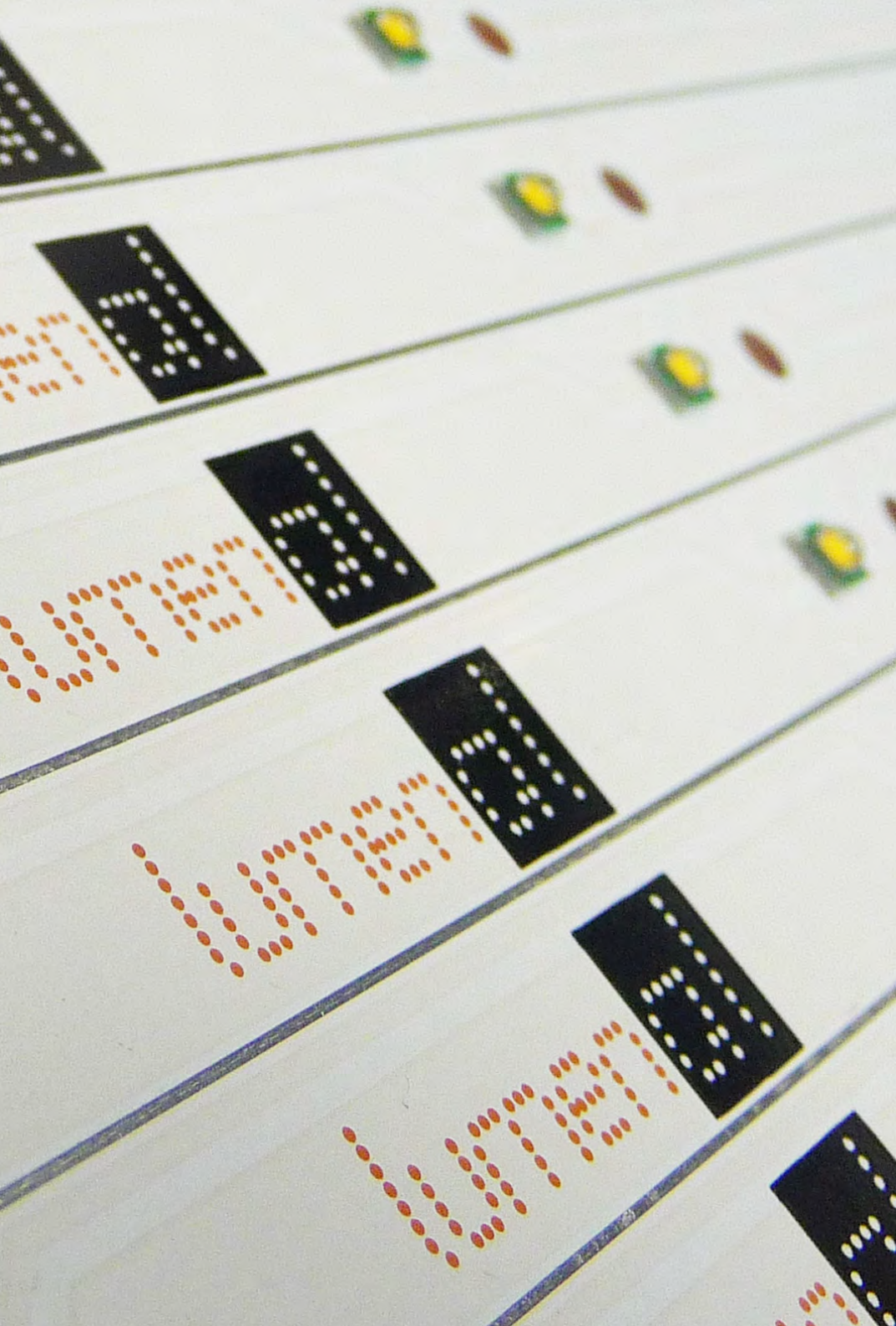
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PCB's & LED Tape

Modular LED Light Engines

Description

Core to the Lumenal product portfolio is our range of modular LED light engines, designed and manufactured in the UK to enable us to provide solutions ranging in light efficacy, length and overall aesthetics.

We offer a variety of luminaires for different applications and environments that the light engine range is compatible with.

Key Attributes

- Highly energy efficient
- Bespoke lengths, delivered in "off the shelf" lead times
- Available in a wide range of CCT, lumen output and CRI
- Easy to install
- No UV and low IR

Light Engines

LED Details

PCB	LED Manufacturer	1m Extrapolated from calculated					
		CCT (K)	LED Qty	Voltage (V)	Current (mA)	Power (W)	Calculated flux excl diffuser (Lm)
Eco	Seoul	3000	20	12	700	8	767
Eco	Seoul	4000	20	12	700	8	826
Eco+	Seoul	3000	40	12	1400	16	1533
Eco+	Seoul	4000	40	12	1400	16	1651
Eco+	Seoul	TP	40	12	1400	16	1592
Eco Power	Seoul	3000	60	12	2000	24	2300
Eco Power	Seoul	4000	60	12	2000	24	2477
ZX	Cree	3000	20	12	2450	28	2061
ZX	Cree	4000	20	12	2450	28	2318
Eco S 1200	Seoul	3000	23	12	800	9	882
Eco S 1200	Seoul	4000	23	12	800	9	949
Eco S 600	Seoul	3000	23	12	800	9	882
Eco S 600	Seoul	4000	23	12	800	9	949
Eco +S CV 1200	Cree	3000	12	38	700	13	1236
Eco +S CV 1200	Cree	4000	12	38	700	13	1391
Eco Power22-100	Seoul	5700	10	32	1400	22	2290
Eco Power22-300	Seoul	5700	10	32	1400	22	2290
Eco Power22-500	Seoul	5700	10	32	1400	22	2290
Eco Power S 1200	Seoul	3500	100	24	680	16	1816
Eco Power S 600	Seoul	3500	100	24	680	16	1816
Eco Power HD	Seoul	5700	124	24	1365	32	3327

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Flexible LED Solutions

Description

Flexible LED PCB is one of the most streamlined and cost effective LED sources currently available and is ideally suited for use in our Mira aluminium profile.

Supplied in 5 metre reels or pre-assembled into bespoke solutions, our tape is available in a range of lumen outputs and colours, offering maximum choice for a variety of applications.
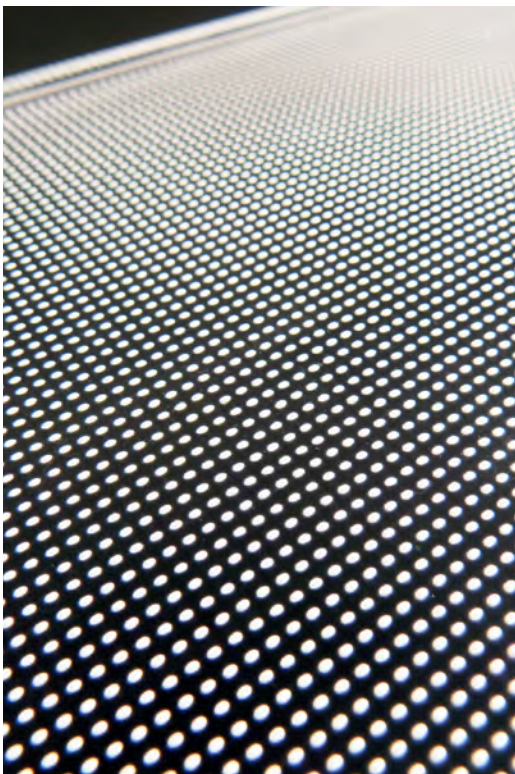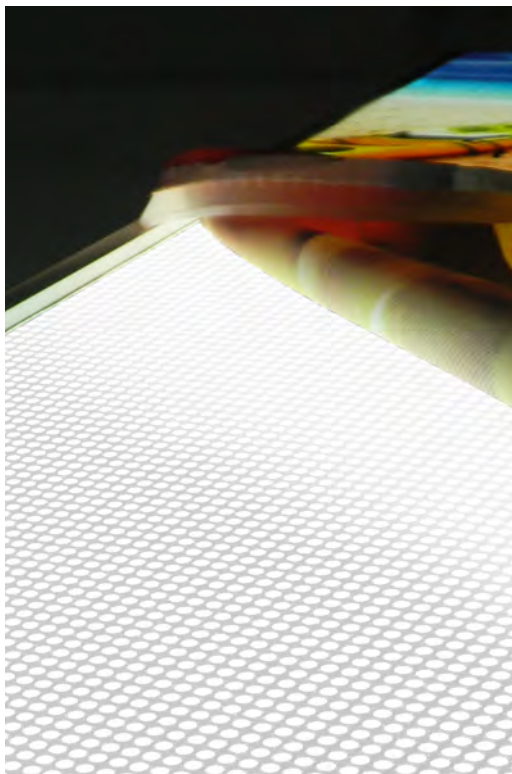
Key Attributes

- Highly energy efficient
- Long life span
- Low power consumption
- Extremely thin - 3mm
- 3M self adhesive backing enabling easy application to most smooth surfaces

Applications

- POS display lighting
- Backlighting for signage
- Accent lighting
- Exhibition display

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Experts in LED

Lumenal LED Lighting

ISO 9001
REGISTERED FIRM

ISO 14001
REGISTERED FIRM

LIGHTING INDUSTRY ASSOCIATION