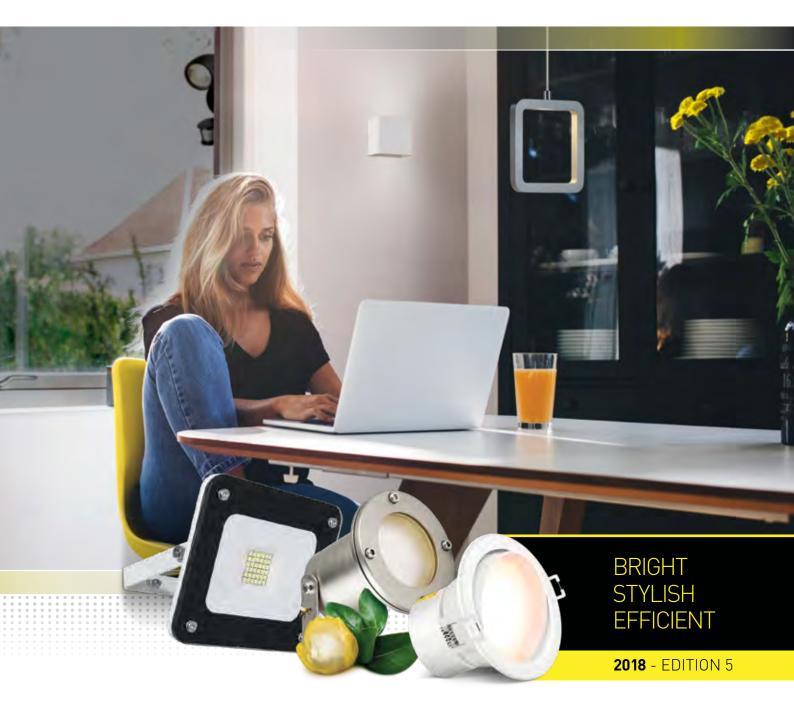
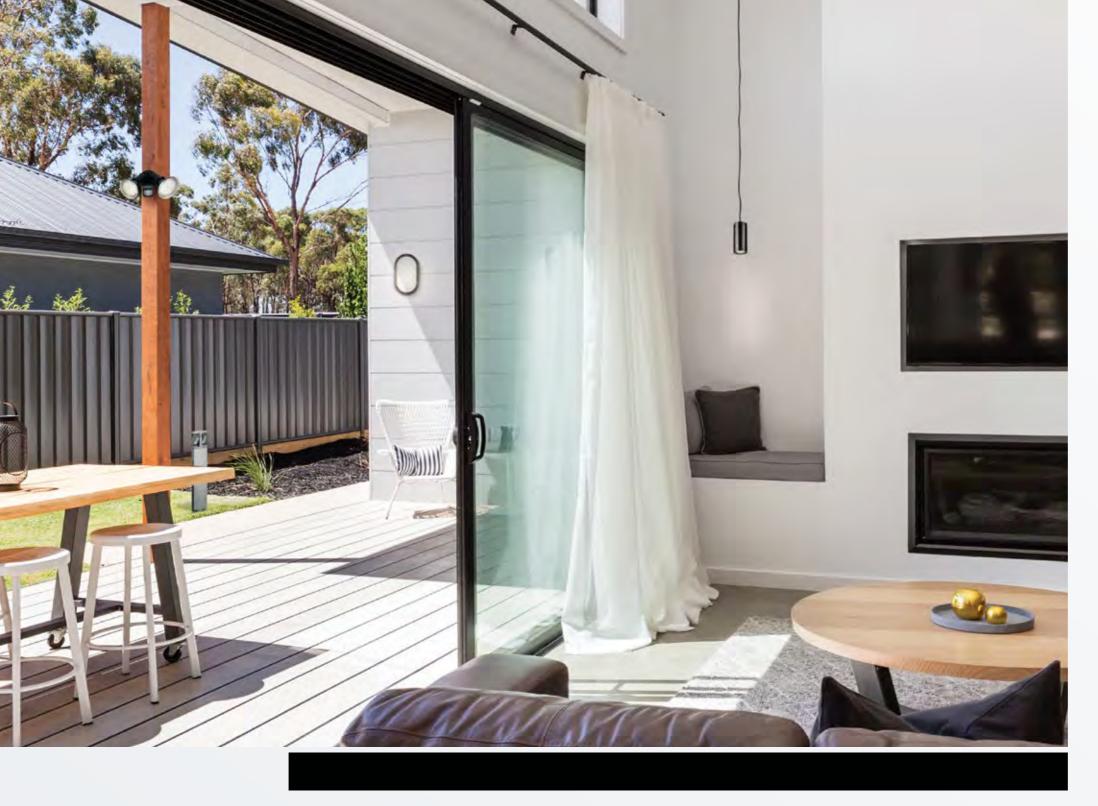


# LED LIGHTING







# CONTENTS

LED LIGHTING EXPLAINED	4
LED LIGHTING FIXTURES	6
INDOOR	
DOWNLIGHTS	
PANEL LIGHTS	28
OYSTER LIGHTS	30
SPOTLIGHTS	36
PENDANT LIGHTS	38
UP/DOWN LIGHTS	42
STRIP LIGHTS	46
BATTENS	48
OUTD00R	
DECK LIGHTS	54
STEP LIGHTS	56
STARLIGHTS	58
UP/DOWN LIGHTS	60
ADJUSTABLE LIGHTS	70
BUNKER LIGHTS	78
FLOODLIGHTS	84
WORKLIGHTS	100
DIMMERS AND LED COMPATIBILITY	102
DOWNLIGHT ACCESSORIES	104
LIGHTING SENSORS	104
INDEX OF PROTECTION	105
LED LIGHTING GLOBES	106
LED GARDEN LIGHTING	120
BENEFITS	122
SPOTLIGHTS	124
POND SPOTLIGHTS	136
BOLLARDS	140
WALL & STEP LIGHTS	144
DECK LIGHTS	150
TRANSFORMERS	154
CABLE & TRANSFORMER CONFIGURATION CHART	158
CABLES	160
ACCESSORIES	162

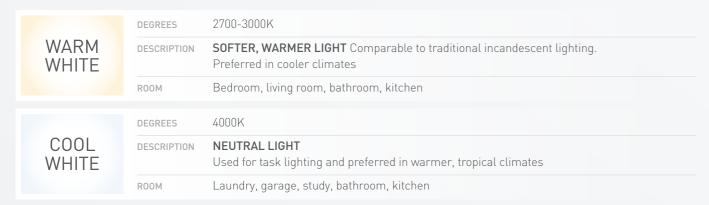
LED LIGHTING CONTENTS | BROCHURE | 3



# **LED** LIGHTING EXPLAINED

### LIGHT COLOUR

Expressed in Degrees Kelvin (K), light colours are the key to determining the mood of a room.



## **AVERAGE LAMP LIFE**





COMPACT FLUORESCENT 10,000 HOURS



INCANDESCENT 1,000 HOURS

**DURABILITY:** LEDs are very long-lasting compared to other lighting technologies, with an average 30,000 hours life expectancy. We use quality components which make our lamps even more durable, being laboratory tested and assessed at 30,000 hours life expectancy. That represents approximately 20 years based on 3 to 4 hours usage per day.

#### DIMMING COMPATIBILITY

Critical to a successful installation is an understanding of LED compatibility with dimmers.

HPM is one of the only major brands on the market to deliver a full solution from dimmers to drivers and LED fixtures. Choose the winning combination of HPM LED fixtures and HPM or Legrand dimmers to ensure superior performance – including smooth dimming with no flickering, reliability and long life.



## LIGHT PERFORMANCE

LIGHT OUTPUT	INCANDESCENT	HALOGEN	CFL	LED
220 lm	25W	18W	5-7W	3W
420 lm	40W	28W	7-8W	4-5W
720 lm	60W	42W	11-12W	6-8W
930 lm	75W	52W	13-18W	9-13W
1300 lm	100W	70W	18-23W	16-20W

## LUMINOUS EFFICACY (lm/W)

Picking a lamp fixture based only on wattage or physical size could result in the wrong choice: Wattage (measured in W) represents the power consumed by the luminaire. The actual output of a lamp is measured in lumens (lm): the more lumens, the more light emitted by the luminaire. A smart criteria for determining the efficiency of a light fixture is its lumens/Watt ratio, which represents how much light the fixture delivers versus what it consumes to perform. This value is called luminous efficacy, and proves LED lights are more efficient than other light technologies.

### **COLOUR RENDERING INDEX (CRI)**

CRI measures how well a lamp makes colours appear. CRI scores light sources from 1 – 100: a high CRI means that the eye can pick up slight variations in colour, making details in an interior appear sharper and more vibrant. For outstanding colour rendering, opt for our Dalia series which boasts a very high 92 index.

Our downlights range from 80 to 92, to enhance skin tones, hues and textures in rooms.

#### **BEAM ANGLE**

The light effect from a luminaire is determined by its beam angle, That is the shape and direction of light generated by the lamp. Most conventional fixtures deliver a focused light distribution at 35-60° beam angle, but LED technology can go well above those values, while still maintaining a fair pool of light.

Our lights deliver beam angles ranging from 80 to 120° to ensure a beautiful light is spread throughout a room.

## **OUR QUALITY PROMISE**



#### DIMMING COMPATIBILITY

Many of our lights are capable of being dimmed effectively. For optimum dimming performance and to reduce flickering, use HPM or Legrand dimmers. See pages 102-103 for more details.



#### **INSULATION RATING**

All recessed luminaires included in this brochure have an insulation rating of IC, IC-F, IC-4, CA80 and CA90.

This means insulation may abut or cover the LED luminaire.



# NATA ACCREDITED LABORATORY

To ensure the highest possible quality assurance standards all HPM lighting fixtures and lamps are tested in our NATA accredited laboratory in Sydney.

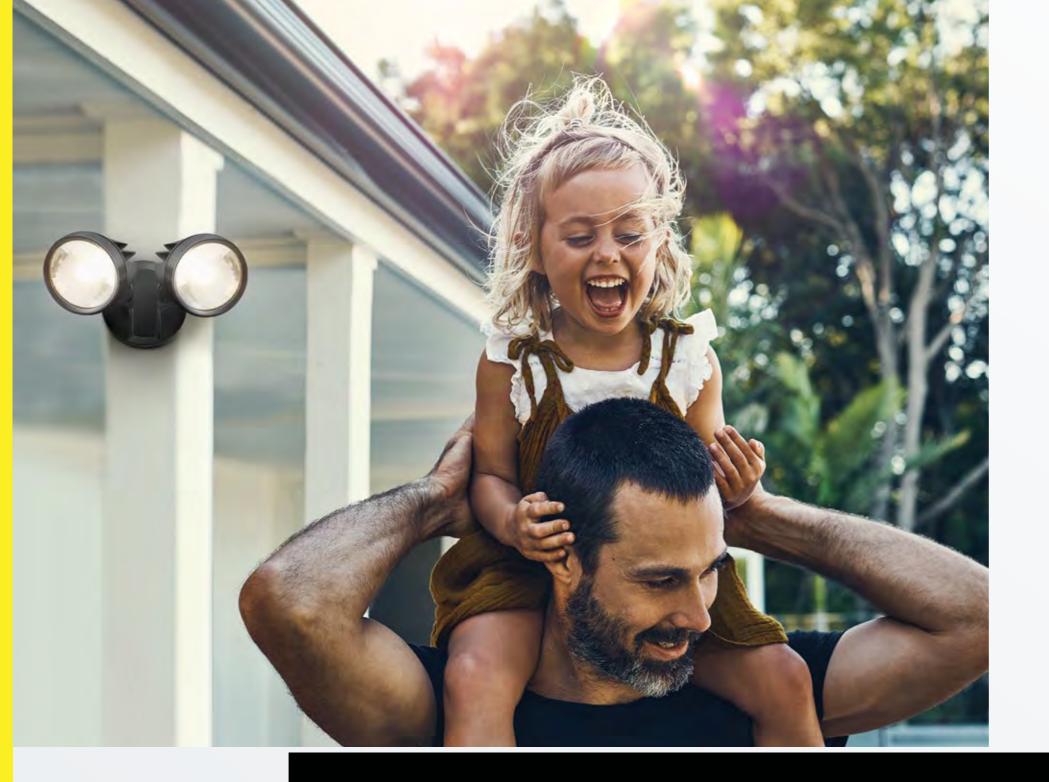


# **IP RATING**

All our products are assured against insects and moisture, with IP ratings ranging from IP42 to IP65. See IP chart on page 105 for more information.

4 LED LIGHTING FIXTURES BROCHURE 5





# **LED** LIGHTING FIXTURES

LED LIGHTING FIXTURES | **BROCHURE** | 7

# RIBA STRIPLIGHT

Where other lights fear to tread the Riba calls home. Whatever your lighting challenge, the Riba is equipped to match it – and always with style to spare. Be it a confined space or delicate mood lighting, satisfaction is assured.



Colour temperature	Warm White 3,000K		
CRI	80+		
Lifespan	30,000 h		
Package contents	LDR01N700/36: 1m LED strip 7.2W & plug-in 36W transformer LSL013K: 1m LED strip with quick-connector		
Installation	Starter kit (cat no LDR01N700/36) contains plug-in transformer with 1m LED strip. Additional interconnectible 1m LED strips available (cat no LSL013K).  Connect up to 5m of LED strips on one transformer. LED strips can be cut off every 10cm.		
Product codes	LED striplight (1m) and transformer LDR01N700/36		
	LED striplight (1m) and quick-connector LSL013K		

7W

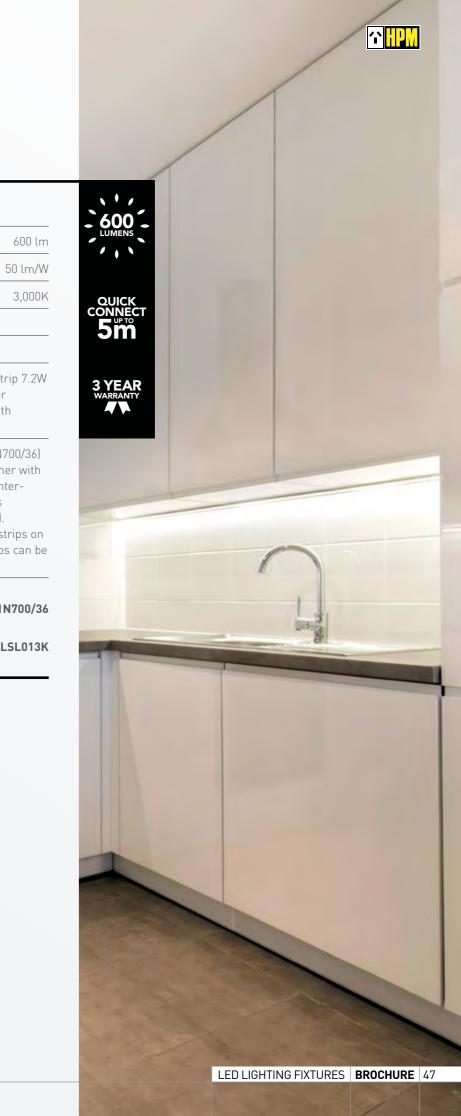
Warm White

Warm White

Power

Efficacy

Lumen output



Under cabinets, entertaining areas, kitchens, home theatres

# CALLA STEP LIGHTS (2.4W)

Scale the heights of style with Calla step lights, an illuminating choice for stairwells or hallways. Whether indoor or outdoor, the Calla excels with its impressive IP65 weatherproof rating.

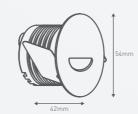
# Main applications Stairs, hallways, corridors

Use every second or third step, approximately 300-350mm above floor level, for the ultimate light spread



Power	2.4W		
Lumen output	Warm White	24 lm	
Efficacy	Warm White	10 lm/W	
Colour temperature	Warm White	3,000K	
CRI	80+		
Insulation rating	IC		
Dimming	Trailing & leading ed	dge, 2 & 3 wire	
Lifespan	30,000 h		
Construction	Anodised aluminium	٦	
Weatherproof rating	IP65		
Package contents	2.4W LED step light fixture		
Product codes	White Finish Warm White Light	LST013KWE	
	Aluminium Finish Warm White Light	LST013KPS	
	Driver Kit	LDR02D700/18	
Installation	Must be installed wi LDR02D700/18. A m and a maximum of 6 must be connected driver. Cable connecting in the kit.	inimum of 2 step lights with each	
Driver kit contents	Plug, lead, driver		
LDR02D700/18	900mm DRIV	VER 100mm	
	Plug coupler (x2)	100mm	
	Socket coupler (x2)		
	Jumper (x1)		
	Hub (x3)	300mm R	









# ZINNIA STARLIGHTS (2.4W)

A fusion of discretion and efficiency, the Zinnia starlights are an in vogue choice for those with an eye for detail. Whether illuminating under cabinets or wall features – indoors or outdoors – the Zinnia is the epitome of versatile style. Available in white and silver. Weatherproof rated IP65.

#### Main applications

Under cabinets, alfresco areas, home theatres. Ideal for illuminating features and creating ambience





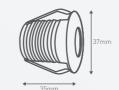
With a slim 35mm depth, Zinnia fits into almost any wall or ceiling cavity











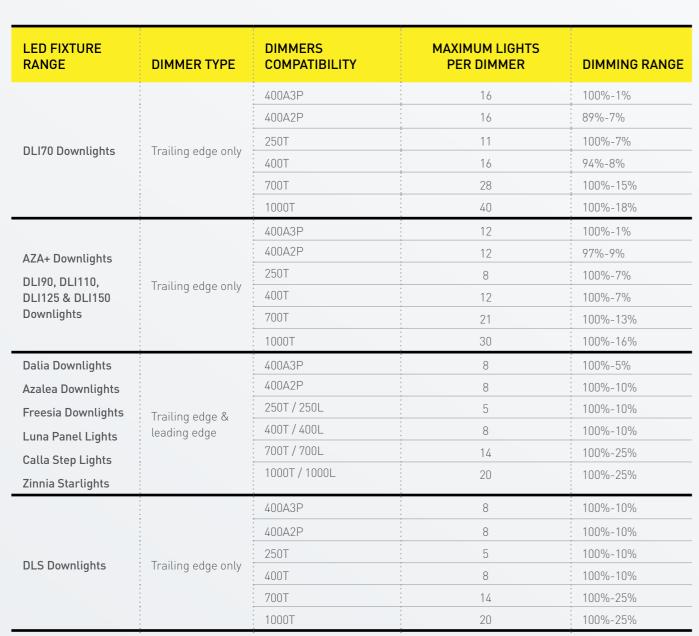






# DIMMER COMPATIBILITY





Note: Not all LED lights are dimmable, refer to product details to confirm suitability for dimming.



## **LEGRAND EXCEL LIFE™**



LEGRAND ARTEOR™



HPM LINEA™ AND EXCEL



EVM400A3\* (3 wire)

EVM400A2\* (2 wire)

dimmer mechanism

White: EVM400A3WE.

Grey: EVM400A3GR,

EVM400A2WE

EVM400A2GR

VIVO 400VA all load 2 & 3

wire electronic push button

VIVO™



#### EM400A3P (3 wire) EM400A2P (2 wire)

Excel Life 400VA all load 2 & 3 wire electronic push-button dimmer mechanism White: EM400A3PWE

EM400A2PWE Urban Grey: EM400A3PUG EM400A2PUG

Excel Life 250VA 2 wire

White: EM250TRWE

mechanism

**EM400T\*** 

mechanism

trailing edge rotary dimmer

Urban Grey: EM250TRUG

Excel Life 400VA 2 wire

White: EM400TRWE

trailing edge rotary dimmer

**Urban Grey:** EM400TRUG

\*T = Trailing Edge, L = Leading Edge



#### AR400A3P (3 wire) AR400A2P (2 wire)

Arteor 400VA all load 2 & 3 wire push-button dimmer mechanism

White: AR400A3PMWE AR400A2PMWE Magnesium: AR400A3PMMGN AR400A2PMMGN



#### 400A2P (2 wire)

Excel or Linea and 400VA (2 wire) electronic push-button dimmer mechanism White: 400A2PWE



#### 250T / 250L\*

Excel or Linea 250VA 2 wire rotary dimmer mechanism White: 250LMWE 250TMWE Also available in black & cream



#### 400T / 400L\*

Excel or Linea 400VA 2 wire rotary dimmer mechanism White: 400TMWE 400LMWE Also available in black & cream



rotary dimmer mechanism



#### 1000T / 1000L\*

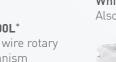
Excel or Linea 1000VA 2 wire rotary dimmer mechanism White: 1000TMWE 1000LMWE



#### AR400T / AR400L\*

Arteor 400VA 2 wire rotary dimmer mechanism White: AR400TMWE AR400LMWE

Magnesium: AR400TMMGN AR400LMMGN





#### 700T / 700L\*

Excel or Linea 700VA 2 wire White: 700TMWE 700LMWE

LED LIGHTING FIXTURES | **BROCHURE** | 103 102

# **ACCESSORIES**

#### **DOWNLIGHT EXTENSION PLATES**

Cat No.	Image	Description
LEP120WE		Suitable for hole cut-outs up to Ø120mm
LEP150WE		Suitable for hole cut-outs up to Ø150mm

Suitable for: DLI90, AZA+, Dalia, Azalea, and DLS series

# LIGHTING SENSORS

#### Passive infrared (PIR) sensor

Sensitive to a person's skin temperature through emitted body radiation, in contrast to background objects at room temperature. HPM range of sensors is suitable for both indoor and outdoor for various locations throughout the house including corridors, wardrobes, secluded walkways and garages.

Whether used for extra safety around the house or for convenience indoors, these deliver great energy savings all year round.

Cat No.	Image	Description	Finish	Manual override	IP Rating	Application	Mounting type	Detection range	Detection angle	Time delay
630S01BL		180° PIR Sensor	Black	No	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630S01WE		180° PIR Sensor	White	No	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630SM01BL		180° PIR Sensor	Black	Yes	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630SM01WE		180° PIR Sensor	White	Yes	IP44	Indoor/Outdoor	Wall Surface Mounted	12m	180°	8s to 7min
630S02WE		360° PIR Sensor	White	No	IP20	Indoor	Ceiling Surface mouted	8m	360°	10s to 10min
630R02WE		360° PIR Sensor	White	No	IP41	Indoor	Ceiling Surface mounted	8m	360°	10s to 10min
630R01WE		360° PIR Sensor	White	No	IP20	Indoor	Ceiling surface mounted	6m	360°	10s to 15min
488TRI3W		Triscan 3-Wire Pir Sensor	White	Yes	IP66	Outdoor	Wall Surface Mounted	8m	120°	8s to 15min

# INDEX OF PROTECTION



#### 1. Protection against solid bodies and liquids: IP index of protection

Degrees of protection for enclosures of electrical equipment according to standards: IEC 60529, BS EN 60529 and NF EN 60529

#### First digit:

Protection against solid bodies (See AS 1939, Clause 5)

IP	Tests		IP
0		No protection	
1	Ø 50 mm	Protected against solid bodies larger than 50 mm (e.g. accidental contact with the hand)	A
2	Ø 12.5 mm	Protected against solid bodies larger than 12.5 mm (e.g. finger)	В
3	Ø 2.5 mm	Protected against solid bodies larger than 2.5 mm (e.g. tools, wires)	C
4	<u>Ø 1 mm</u>	Protected against solid bodies larger than 1 mm (e.g. fine tools and small wires)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5		Protected against dust (no harmful deposit)	D
6	0)	Completely protected against dust	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

#### Second digit:

Protection of equipment against ingress of harmful liquids (See AS 1939, Clause 6)

IP	Tests	
0		No protection
1	Ö	Protected against vertically-falling drops of water (condensation)
2	199	Protected against drops of water falling at up to 15° from the vertical
3		Protected against drops of rain water at up to 60° from the vertical
4		Protected against projections of water from all directions
5		Protected against jets of water (from all directions)
6		Protected against jets of water of similar force to heavy seas
7	H15 cm	Protected against the effects of immersion
8	E O	Protected against prolonged effects of immersion

## 2. Protection IK, against mechanical impact.

According to standards: IEC 62262, BS EN 62262 and NF EN 62262

IK	Tests	Impact energy (in Joules)
IK 00		0
IK 01	0.2 kg 75 mm	0.15
IK 02	0.2 kg	0.2
IK 03	0.2 kg	0.35
IK 04	0.2 kg 250 mm	0.5
IK 05	0.2 kg 350 mm	0.7

IK	Tests	Impact energy (in Joules)
IK 06	0.5 kg 200 mm	1
IK 07	0.5 kg 400 mm	2
IK 08	1.7 kg 295 mm	5
IK 09	200 mm	10
IK 10	5 kg 400 mm	20

• This table can be used to ascertain the resistance of a product to an impact given in Joules from the IK code (graduated from 00 to 10)

LED LIGHTING FIXTURES | **BROCHURE** | 105



A brand of **Glegrand**°

#### Member of:







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