

# The Pursuit of Excellence

Welcome to the Fusion LED Lamps catalogue.

A very warm welcome to the new and eagerly awaited fifth edition of the Fusion Lamps LED catalogue. Fusion Lamps have been established now for over 20 years and have become a trusted and reliable source for one of the most extensive ranges of lamps available in the UK.

With over 2000 product lines from stock, Fusion Lamps have been consistently one of the front runners in providing innovative, cost saving and maintenance saving solutions for its wide customer base. This includes its vast choice of LED options.

In this exciting new edition, Fusion Lamps covers every area of LED lamp replacements, whether domestic, commercial or industrial application. In a very overcrowded supplier market place with much confusion and vast choice, within this edition Fusion Lamps tries to provide the end user a clear understanding of energy saving against existing application, showing clear cost savings.

Fusion lamps fully appreciate the importance of service and availability in today's fast paced world of e-commerce and as such now offers an on line ordering facility on our website:

#### www.fusion-lamps.co.uk

So, whether it's via the website, or by speaking direct to one of our dedicated technical support team, please feel free to contact us at any time to discuss your energy saving requirements.

Contact us today and see why...

## ...life is brighter





Millfield Industrial Estate, Arksey Lane, Bentley, Doncaster, South Yorkshire DN5 0SJ

Tel: +44 (0)1302 822 833 Fax: +44 (0)1302 875 555 Email: info@fusion-lamps.co.uk

www.fusion-lamps.co.uk

# Contact Us!...

### **Technical Support**

Fusion Lamps are proud to offer over 20 years' experience in technical support from our internal sales team.

This technical support is also backed up by dedicated Business Development Managers who specialise in lamp solutions.

#### **Customer Service**

Fusion Lamps has a dedicated department open from 7:30am to 5.30pm, 5 days a week, Monday to Friday.

All staff are continuously trained to offer the highest quality service which we have become renowned for over the last 20 years. Our customers can be confident in our continued support.

## Delivery

With over 2000 product lines available in stock, our experienced despatch team enable products to be delivered at a rapid pace!





# Phone | Fax | Email | Web



01302 822 833

Our Sales Office & Technical Help Desk is open from 7.30am-5.30pm Monday-Friday.



01302 875 555

Our fax lines are operating 24 hours a day.



info@fusion-lamps.co.uk

Email us with your sales and technical enquiries.



www.fusion-lamps.co.uk

For up-to-date information and technical specifications, please visit our website.





With ever increasing energy costs and associated environmental issues, it has never been more important to consider energy efficient lamp sources.

The Fusion range of LED lamps have the benefit of extended lamp life, together with low running costs and reduced maintenance, resulting in energy savings up to 90% when compared to inefficient counterparts.

These savings are clearly stated along with the technical specification of each lamp. By simply retrofitting Fusion LED lamps, you can reduce your lighting costs and together, we can help to protect the environment.

...life is brighter







# **Explanation of Icons**

## **Key to Symbols**

**W** Wattage



Voltage



Cap type



Lamp diameter (mm)



Lamp length (mm)



Average lamp life (hrs)

## **Energy Saving Values**



Note: Savings do not include cost of replacement lamps, or maintenance costs. All figures are based on an electricity charge of £0.14 per kWh.



**LED Luminaires** and Retrofit Bulbs **Licensing Program** 

Member Fusion Lamps



#### All Fusion LED products carry a credible guarantee

In the unlikely event of failure, we can offer credit or a replacement product. (We cannot however, accept liability for any costs incurred.) See our website for full terms and conditions.



# Have you changed to LED?...

- Low power consumption
- Up to 95% energy saving
- Long lamp life (up to 30,000hrs) can last up to x30 times longer than incandescent lamps
- Up to 3 Year credible guarantee
- Low surface temperature
- No UV output
- Robust product
- Instant start, no warm-up period
- Operating temperature -20°C to +50°C (ideal for cold environments)
- Environmentally friendly

As more traditional lamps are banned under the EU legislation, the conventional means of judging light output by wattage will be replaced by lumens.

A lumen is an amount of light emitted by a source.

#### How much will LEDs save?

• LED lamps can save up to 95% in energy consumption, plus maintenance and replacement lamp costs.









#### Typical Energy Savings

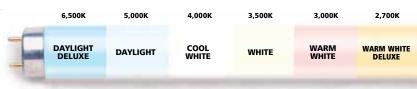






# What are the different colour types?

The colour of lamps is measured on a temperature scale in Kelvins. The higher the Kelvin, the cooler the colour. The lower the Kelvin, the warmer the colour - i.e. 3000k incandescent is warm/orange in colour.







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Conditions of Sale

Products offered for sale may differ from those described in this catalogue due to later production, changes in specification, components or place of manufacture.

Our policy is one of constant development and improvement. Whilst every effort is made to make the catalogue accurate at the date of printing, specification and/or appearance may be changed in the interest of continuing improvement.





# LED CANDLE RANGE

Fusion Lamps candle range use the latest high brightness SMD LED light sources and combine a range of both aluminium and thermo plastic materials providing optimal heat dissipation. Products are supplied in clear and frosted finishes, with both non-dimmable and fully dimmable options available.





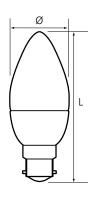
# OPAL



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- Polycarbonate cover
- No UV output
- Suitable replacement for a 40W incandescent lamp
- Dimmable and non-dimmable versions available



ref	W	V	Ω	Ø	L	(3)	)O(	<b>(</b>	$\triangle$	<b>•</b>
CRLED/CAN/BC	5	230	B22	35mm	94mm	30000	400	2700K	200	No
CRLED/CAN/ES	5	230	E27	35mm	95mm	30000	400	2700K	200	No
CRLED/CAN/SBC	5	230	B15	35mm	104mm	30000	400	2700K	200	No
CRLED/CAN/SES	5	230	E14	35mm	104mm	30000	400	2700K	200	No
CRLED/CAN/BC/DIM	5	230	B22	35mm	94mm	30000	400	2700K	200	Yes
CRLED/CAN/ES/DIM	5	230	E27	35mm	95mm	30000	400	2700K	200	Yes
CRLED/CAN/SBC/DIM	5	230	B15	35mm	104mm	30000	400	2700K	200	Yes
CRLED/CAN/SES/DIM	5	230	E14	35mm	104mm	30000	400	2700K	200	Yes

















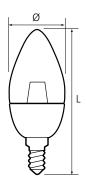
# CLEAR



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- Polycarbonate cover
- No UV output
- Suitable replacement for a 40W incandescent lamp
- Gives a sparkling effect required for chandeliers
- Dimmable and non-dimmable versions available



ref	W	V	Ω	Ø	L	<b>(</b>	X	•	$\triangle$	<b>3</b>
CRLED/CAN/BC/CL	5	230	B22	35mm	94mm	30000	380	2700K	250	No
CRLED/CAN/ES/CL	5	230	E27	35mm	95mm	30000	380	2700K	250	No
CRLED/CAN/SBC/CL	5	230	B15	35mm	104mm	30000	380	2700K	250	No
CRLED/CAN/SES/CL	5	230	E14	35mm	104mm	30000	380	2700K	250	No
CRLED/CAN/BC/CL/DIM	5	230	B22	35mm	94mm	30000	380	2700K	250	Yes
CRLED/CAN/ES/CL/DIM	5	230	E27	35mm	95mm	30000	380	2700K	250	Yes
CRLED/CAN/SBC/CL/DIM	5	230	B15	35mm	104mm	30000	380	2700K	250	Yes
CRLED/CAN/SES/CL/DIM	5	230	E14	35mm	104mm	30000	380	2700K	250	Yes



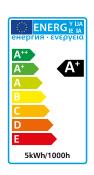
















# LED GOLFBALL RANGE

Fusion Lamps LED Golf Ball range utilise an ultra sonically welded thermo plastic shell to create a seamless incandescent like appearance. High brightness SMD LED's give a great light output with a high colour rendering of over 80Ra. Lamps are supplied in clear and frosted finishes, with both non-dimmable and fully dimmable options available.





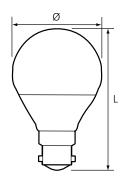
# OPAL



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- Polycarbonate cover
- No UV output
- Suitable replacement for a 40W incandescent lamp
- Dimmable and non-dimmable versions available



ref	W	٧	Q	Ø	L	(3)	X	•	$\triangle$	<b></b>
CRLED/G45/BC	5	230	B22	45mm	72mm	30000	400	2700K	200	No
CRLED/G45/ES	5	230	E27	45mm	73mm	30000	400	2700K	200	No
CRLED/G45/SBC	5	230	B15	45mm	80mm	30000	400	2700K	200	No
CRLED/G45/SES	5	230	E14	45mm	80mm	30000	400	2700K	200	No
CRLED/G45/BC/DIM	5	230	B22	45mm	72mm	30000	400	2700K	200	Yes
CRLED/G45/ES/DIM	5	230	E27	45mm	73mm	30000	400	2700K	200	Yes
CRLED/G45/SBC/DIM	5	230	B15	45mm	80mm	30000	400	2700K	200	Yes
CRLED/G45/SES/DIM	5	230	E14	45mm	80mm	30000	400	2700K	200	Yes

















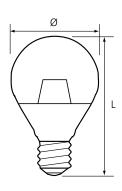
# CLEAR



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- Polycarbonate cover
- No UV output
- Suitable replacement for a 40W incandescent lamp
- Gives a sparkling effect
- Dimmable and non-dimmable versions available



ref	W	٧	Q	Ø	L	(3)	X	<b>(</b>	$\triangle$	<b>•</b>
CRLED/G45/BC/CL	5	230	B22	45mm	72mm	30000	380	2700K	250	No
CRLED/G45/ES/CL	5	230	E27	45mm	73mm	30000	380	2700K	250	No
CRLED/G45/SBC/CL	5	230	B15	45mm	80mm	30000	380	2700K	250	No
CRLED/G45/SES/CL	5	230	E14	45mm	80mm	30000	380	2700K	250	No
CRLED/G45/BC/CL/DIM	5	230	B22	45mm	72mm	30000	380	2700K	200	Yes
CRLED/G45/ES/CL/DIM	5	230	E27	45mm	73mm	30000	380	2700K	200	Yes
CRLED/G45/SBC/CL/DIM	5	230	B15	45mm	80mm	30000	380	2700K	200	Yes
CRLED/G45/SES/CL/DIM	5	230	E14	45mm	80mm	30000	380	2700K	200	Yes





















# GLS RANGE

Fusion Lamps GLS range offer the perfect LED replacement for traditional 40 Watt, 60 Watt, 75 Watt and 100 Watt lamps. Lightweight, ultra sonically welded thermo plastic gives a true incandescent like appearance, with unrivaled brightness and light quality. Products are available in both non-dimmable and dimmable versions.

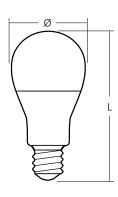




- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy savings
- Polycarbonate cover
- No UV output
- Suitable replacement for a 40W incandescent lamp
- Dimmable and non-dimmable versions available



ref	W	٧	Q	Ø	L	(3)	X	<b>(</b>	$\triangle$	<b>○</b>
CRLED/GLS6BC	6	230	B22	55mm	108mm	30000	500	2700K	200	No
CRLED/GLS6ES	6	230	E27	55mm	109mm	30000	500	2700K	200	No
CRLED/GLS6BC/DIM	6	230	B22	55mm	108mm	30000	500	2700K	200	Yes
CRLED/GLS6ES/DIM	6	230	E27	55mm	109mm	30000	500	2700K	200	Yes





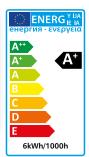












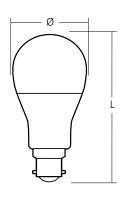




- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy savings
- Polycarbonate cover
- No UV output
- Suitable replacement for a 60W incandescent lamp
- Dimmable and non-dimmable versions available



ref	W	V	Ω	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
CRLED/GLS10BC	10	230	B22	60mm	108mm	30000	850	2700K	200	No
CRLED/GLS10ES	10	230	E27	60mm	109mm	30000	850	2700K	200	No
CRLED/GLS10BC/DIM	10	230	B22	60mm	108mm	30000	810	2700K	200	Yes
CRLED/GLS10ES/DIM	10	230	E27	60mm	109mm	30000	810	2700K	200	Yes
CRLED/GLS10BC/CW	10	230	B22	60mm	108mm	30000	850	4000K	200	No
CRLED/GLS10ES/CW	10	230	E27	60mm	109mm	30000	850	4000K	200	No
CRLED/GLS10BC/CW/DIM	10	230	B22	60mm	108mm	30000	810	4000K	200	Yes
CRLED/GLS10ES/CW/DIM	10	230	E27	60mm	109mm	30000	810	4000K	200	Yes
CRLED/GLS10BC 110V	10	110	B22	60mm	108mm	30000	850	2700K	200	No
CRLED/GLS10ES 110V	10	110	E27	60mm	109mm	30000	850	2700K	200	No
CRLED/GLS10BC/SEN*	10	230	B22	65mm	124mm	30000	850	2700K	200	No
CRLED/GLS10ES/SEN*	10	230	E27	65mm	125mm	30000	850	2700K	200	No



<sup>\*</sup>Sensor version has built-in photocell (dusk till dawn)













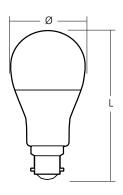




- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy savings
- Polycarbonate cover
- No UV output
- Suitable replacement for a 75W incandescent lamp
- Dimmable and non-dimmable versions available



ref	W	V	Q	Ø	L	<b>(</b>	X	•	$\triangle$	•
CRLED/GLS12BC	12	230	B22	65mm	124mm	30000	1150	2700K	200	No
CRLED/GLS12ES	12	230	E27	65mm	125mm	30000	1150	2700K	200	No
CRLED/GLS12BC/DIM	12	230	B22	65mm	124mm	30000	1080	2700K	200	Yes
CRLED/GLS12ES/DIM	12	230	E27	65mm	125mm	30000	1080	2700K	200	Yes

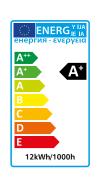


















# LED DECORATIVE FILAMENT RANGE

Fusion Lamps Filament range use the latest cutting edge LED Strip technology to replicate the effect an incandescent lamp achieves. Ideally suited to applications where a traditional looking filament effect is preferred, such as hotels, restaurants and domestic applications. Products are available in both non-dimmable and dimmable versions.



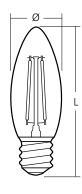
# FILAMENT LED CANDLE



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy savings
- No UV output
- Suitable replacement for a 25W & 40W incandescent lamp
- Gives a sparkling effect, ideal for chandeliers
- Dimmable and non-dimmable versions available



ref	W	V	Q	Ø	L	<b>(</b>	)Ó.	<b>(</b>	$\triangle$	<b>③</b>
EDLED/FCAN1.8BC	1.8	230	B22	35mm	100mm	20000	220	2700K	360	No
EDLED/FCAN1.8ES	1.8	230	E27	35mm	100mm	20000	220	2700K	360	No
EDLED/FCAN1.8SBC	1.8	230	B15	35mm	100mm	20000	220	2700K	360	No
EDLED/FCAN1.8SES	1.8	230	E14	35mm	100mm	20000	220	2700K	360	No
EDLED/FCAN1.8BC/DIM	1.8	230	B22	35mm	100mm	20000	220	2700K	360	Yes
EDLED/FCAN1.8ES/DIM	1.8	230	E27	35mm	100mm	20000	220	2700K	360	Yes
EDLED/FCAN1.8SBC/DIM	1.8	230	B15	35mm	100mm	20000	220	2700K	360	Yes
EDLED/FCAN1.8SES/DIM	1.8	230	E14	35mm	100mm	20000	220	2700K	360	Yes
EDLED/FCAN3BC	3	230	B22	37mm	100mm	20000	420	2700K	360	No
EDLED/FCAN3ES	3	230	E27	37mm	100mm	20000	420	2700K	360	No
EDLED/FCAN3SBC	3	230	B15	37mm	100mm	20000	420	2700K	360	No
EDLED/FCAN3SES	3	230	E14	37mm	100mm	20000	420	2700K	360	No
EDLED/FCAN3BC/DIM	3	230	B22	37mm	100mm	20000	420	2700K	360	Yes
EDLED/FCAN3ES/DIM	3	230	E27	37mm	100mm	20000	420	2700K	360	Yes
EDLED/FCAN3SBC/DIM	3	230	B15	37mm	100mm	20000	420	2700K	360	Yes
EDLED/FCAN3SES/DIM	3	230	E14	37mm	100mm	20000	420	2700K	360	Yes



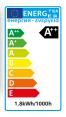
















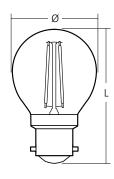
# FILAMENT LED GOLFBALL



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy savings
- No UV output
- Suitable replacement for a 25W & 40W incandescent lamp
- Gives a sparkling effect
- Dimmable and non-dimmable versions available



ref	W	V	Q	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
EDLED/FG45/1.8BC	1.8	230	B22	45mm	73mm	20000	220	2700K	360	No
EDLED/FG45/1.8ES	1.8	230	E27	45mm	73mm	20000	220	2700K	360	No
EDLED/FG45/1.8SBC	1.8	230	B15	45mm	78mm	20000	220	2700K	360	No
EDLED/FG45/1.8SES	1.8	230	E14	45mm	78mm	20000	220	2700K	360	No
EDLED/FG45/1.8BC/DIM	1.8	230	B22	45mm	73mm	20000	220	2700K	360	Yes
EDLED/FG45/1.8ES/DIM	1.8	230	E27	45mm	73mm	20000	220	2700K	360	Yes
EDLED/FG45/1.8SBC/DIM	1.8	230	B15	45mm	78mm	20000	220	2700K	360	Yes
EDLED/FG45/1.8SES/DIM	1.8	230	E14	45mm	78mm	20000	220	2700K	360	Yes
EDLED/FG45/3BC	3	230	B22	45mm	73mm	20000	420	2700K	360	No
EDLED/FG45/3ES	3	230	E27	45mm	73mm	20000	420	2700K	360	No
EDLED/FG45/3SBC	3	230	B15	45mm	78mm	20000	420	2700K	360	No
EDLED/FG45/3SES	3	230	E14	45mm	78mm	20000	420	2700K	360	No
EDLED/FG45/3BC/DIM	3	230	B22	45mm	73mm	20000	420	2700K	360	Yes
EDLED/FG45/3ES/DIM	3	230	E27	45mm	73mm	20000	420	2700K	360	Yes
EDLED/FG45/3SBC/DIM	3	230	B15	45mm	78mm	20000	420	2700K	360	Yes
EDLED/FG45/3SES/DIM	3	230	E14	45mm	78mm	20000	420	2700K	360	Yes



















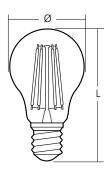
# FILAMENT LED GLS



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 25W, 40W & 60W incandescent lamp
- Gives a sparkling effect
- Dimmable and non-dimmable versions available



ref	W	V	Ω	Ø	L	(3)	X	•	$\triangle$	<b>(3)</b>
EDLED/FGLS3.5BC	3.5	230	B22	60mm	108mm	20000	420	2700K	360	No
EDLED/FGLS3.5ES	3.5	230	E27	60mm	108mm	20000	420	2700K	360	No
EDLED/FGLS3.5BC/DIM	3.5	230	B22	60mm	108mm	20000	420	2700K	360	Yes
EDLED/FGLS3.5ES/DIM	3.5	230	E27	60mm	108mm	20000	420	2700K	360	Yes
EDLED/FGLS6BC	6	230	B22	60mm	108mm	20000	600	2700K	360	No
EDLED/FGLS6ES	6	230	E27	60mm	108mm	20000	600	2700K	360	No
EDLED/FGLS6BC/DIM	6	230	B22	60mm	108mm	20000	600	2700K	360	Yes
EDLED/FGLS6ES/DIM	6	230	E27	60mm	108mm	20000	600	2700K	360	Yes
EDLED/FGLS8.5BC	8.5	230	B22	60mm	108mm	20000	850	2700K	360	No
EDLED/FGLS8.5ES	8.5	230	E27	60mm	108mm	20000	850	2700K	360	No
EDLED/FGLS8.5BC/DIM	8.5	230	B22	60mm	108mm	20000	850	2700K	360	Yes
EDLED/FGLS8.5ES/DIM	8.5	230	E27	60mm	108mm	20000	850	2700K	360	Yes























# FILAMENT LED ST58 & ST64 SQUIRREL CAGE

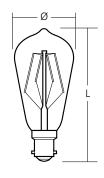


#### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy savings
- No UV output
- Suitable replacement for a 40W & 60W incandescent squirrel cage lamp
- Clear and Amber versions available
- Dimmable and non-dimmable versions available



ref	W	٧	Q	Ø	L	(3)	X	•	$\triangle$	•
EDLED/FST58/4BC	4	230	B22	58mm	132mm	20000	400	2200K	360	No
EDLED/FST58/4ES	4	230	E27	58mm	132mm	20000	400	2200K	360	No
EDLED/FST58/4BC/DIM	4	230	B22	58mm	132mm	20000	400	2200K	360	Yes
EDLED/FST58/4ES/DIM	4	230	E27	58mm	132mm	20000	400	2200K	360	Yes
EDLED/FST58A/4BC*	4	230	B22	58mm	132mm	20000	320	2200K	360	No
EDLED/FST58A/4ES*	4	230	E27	58mm	132mm	20000	320	2200K	360	No
EDLED/FST58A/4BC/DIM*	4	230	B22	58mm	132mm	20000	320	2200K	360	Yes
EDLED/FST58A/4ES/DIM*	4	230	E27	58mm	132mm	20000	320	2200K	360	Yes
EDLED/FST64/4BC	4	230	B22	64mm	142mm	20000	400	2200K	360	No
EDLED/FST64/4ES	4	230	E27	64mm	142mm	20000	400	2200K	360	No
EDLED/FST64/4BC/DIM	4	230	B22	64mm	142mm	20000	400	2200K	360	Yes
EDLED/FST64/4ES/DIM	4	230	E27	64mm	142mm	20000	400	2200K	360	Yes
EDLED/FST64A/4BC*	4	230	B22	64mm	142mm	20000	320	2200K	360	No
EDLED/FST64A/4ES*	4	230	E27	64mm	142mm	20000	320	2200K	360	No
EDLED/FST64A/4BC/DIM*	4	230	B22	64mm	142mm	20000	320	2200K	360	Yes
EDLED/FST64A/4ES/DIM*	4	230	E27	64 mm	142mm	20000	320	2200K	360	Yes



\* Amber version

















# LED REFLECTOR RANGE

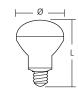
Fusion Lamps reflector series are a great replacement for traditional R39, R50, R63 and R80 products. The Lightweight thermo plastic and super high brightness SMD LED provide the optimal energy saving solution for all types of reflector applications.



# REFLECTOR LED



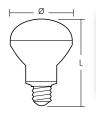
- Low power consumption
- Long lifetime
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacements for R39/30W, R50/40W, R63/40W & R80/60W incandescent lamp
- Dimmable and non-dimmable versions available







ref	W	٧	Q	Ø	L	(3)	)ŎĹ	<b>(</b>	$\triangle$	•
CRLED/R39	3	230	E14	39mm	67mm	30,000	230	3000K	100	No
CRLED/R50	5	230	E14	50mm	86mm	30,000	400	3000K	100	No
CRLED/R50/DIM	5	230	E14	50mm	86mm	30,000	400	3000K	100	Yes
CRLED/R63	8	230	E27	63mm	106mm	30,000	640	3000K	100	No
CRLED/R63/DIM	8	230	E27	63mm	106mm	30,000	640	3000K	100	Yes
CRLED/R80	10	230	E27	80mm	116mm	30,000	810	3000K	100	No
CRLED/R80/DIM	10	230	E27	80mm	116mm	30,000	810	3000K	100	Yes





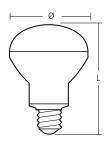




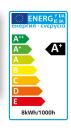


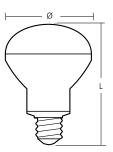




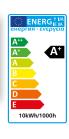












# LED PAR RANGE

Fusion Lamps PAR range is ideal for replacing traditional halogen lamps in both indoor and outdoor applications. Our unique IP65 design gives total versatility, allowing replacement of lamps in applications from track lighting through to garden spikes.







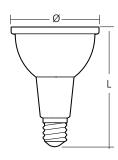
# PAR20 LEI



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy saving
- No UV output
- Suitable replacement for a 50W halogen lamp
- Retro fit size
- Ideal for accent, retail and display lighting



ref	W	٧	Ω	Ø	L	(3)	)Ć	•	$\triangle$	<b>(3)</b>
CRLED/PAR20	6	230	E27	63mm	89mm	30000	400	3000K	24	No
CRLED/PAR20/DIM	6	230	E27	63mm	89mm	30000	400	3000K	24	Yes

















# PAR30 LEI



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 75W halogen lamp
- Retro-fit size
- Ideal for accent, retail and display lighting



ref	W	٧	Q	Ø	L	()	X	<b>(</b>	$\triangle$	<b>③</b>
CRLED/PAR30	10	230	E27	97mm	98mm	30000	720	3000K	30	No
CRLED/PAR30/DIM	10	230	E27	97mm	98mm	30000	720	3000K	30	Yes

















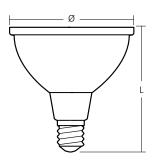
# PAR38 LEI



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 80W to 120W incandescent lamp
- Retro-fit size
- Ideal for accent, retail and display lighting
- Suitable for outdoor use in a certified IP rated fitting



ref	W	٧	Ω	Ø	L	(3)	X	<b>(</b>	$\triangle$	<b>•</b>
CRLED/PAR38	15	230	E27	122mm 1	135mm	30000	1030	3000K	30	No
CRLED/PAR38/DIM	15	230	E27	122mm 1	135mm	30000	1030	3000K	30	Yes
CRLED/PAR38 110V	15	110	E27	122mm 1	135mm	30000	1030	3000K	30	No





















### LED GLOBE RANGE

Fusion Lamps Globes offer a great replacement for decorative lamps. Lightweight thermo plastic gives a true incandescent like appearance, with unrivaled brightness and light quality.



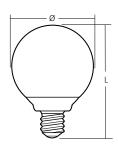
### GLOBE LED



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 60W incandescent lamp
- Retro-fit size
- Ideal for decorative, retail and display lighting



ref	W	V	Q	Ø	L	(3)	)Ó.	•	$\triangle$	<b>•</b>
EDLED/G95BC	8	230	B22	95mm	138mm	25000	700	2700K	360	No
EDLED/G95ES	8	230	E27	95mm	138mm	25000	700	2700K	360	No





















# LED GU10 RANGE

Fusion lamps comprehensive GU10 range uses the latest technology and the highest quality materials. Offering unbeatable light output and performance, our products provide genuine retrofit replacements for 35 Watt to 50 Watt halogen lamps. The latest LED chip and technologies are used with innovative optical solutions to give a single lit element, replicating the effect of a halogen lamp.



### ED GU10



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 35W halogen lamp
- Retrofit size
- Ideal for general lighting (i.e. kitchens, bedrooms etc)



ref	W	٧	Ω	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
CRLED/GU10WW	3.5	230	GU10	50mm	55mm	20000	250	3000K	30	No
CRLED/GU10CW	3.5	230	GU10	50mm	55mm	20000	260	4000K	30	No
CRLED/GU10DW	3.5	230	GU10	50mm	55mm	20000	270	6000K	30	No

















- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Looks just like a halogen GU10
- Retrofit size
- 3-pack blister
- Ideal for accent and general lighting (i.e. hotels, shops, offices etc)





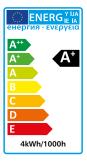














### GU10 FL



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Retrofit size
- Ideal for accent and general lighting (i.e. hotels, shops, offices etc)



ref	W	V	Q	Ø	L	(3)	)X	•	$\triangle$	<b>③</b>
EDLED/GU10/4WW	4	230	GU10	50mm	56mm	20000	340	3000K	38	No
EDLED/GU10/4CW	4	230	GU10	50mm	56mm	20000	350	4000K	38	No
EDLED/GU10/4DW	4	230	GU10	50mm	56mm	20000	360	6000K	38	No
EDLED/GU10/4WW/DIM	4	230	GU10	50mm	56mm	20000	340	3000K	38	Yes
EDLED/GU10/4CW/DIM	4	230	GU10	50mm	56mm	20000	350	4000K	38	Yes
EDLED/GU10/4DW/DIM	4	230	GU10	50mm	56mm	20000	360	6000K	38	Yes

















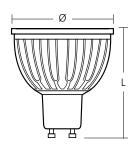
# **GU10**



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Retrofit size
- Ideal for general lighting due to wide beam angle (i.e. quad fittings, track lights and wall wash fittings)
- Dimmable and non-dimmable versions available



ref	W	V	Ω	Ø	L	(3)	X	•	$\triangle$	•
EDLED/GU10WF/4WW	4	230	GU10	50mm	56mm	20000	340	3000K	110	No
EDLED/GU10WF/4CW	4	230	GU10	50mm	56mm	20000	350	4000K	110	No
EDLED/GU10WF/4DW	4	230	GU10	50mm	56mm	20000	360	6000K	110	No
EDLED/GU10WF/4WW/DIM	4	230	GU10	50mm	56mm	20000	340	3000K	110	Yes
EDLED/GU10WF/4CW/DIM	4	230	GU10	50mm	56mm	20000	350	4000K	110	Yes
EDLED/GU10WF/4DW/DIM	4	230	GU10	50mm	56mm	20000	360	6000K	110	Yes

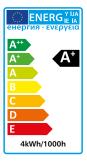














### FD GU10 FLO



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Equivalent replacement for a 50W halogen lamp
- Retrofit size
- Dimmable and non-dimmable versions available
- Ideal for accent and general lighting (i.e. hotels, shops, offices etc)



ref	W	V	Ω	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
EDLED/GU10/5WW	5	230	GU10	50mm	56mm	30000	430	3000K	38	No
EDLED/GU10/5CW	5	230	GU10	50mm	56mm	30000	440	4000K	38	No
EDLED/GU10/5DW	5	230	GU10	50mm	56mm	30000	450	6000K	38	No
EDLED/GU10/5WW/DIM	5	230	GU10	50mm	56mm	30000	430	3000K	38	Yes
EDLED/GU10/5CW/DIM	5	230	GU10	50mm	56mm	30000	440	4000K	38	Yes
EDLED/GU10/5DW/DIM	5	230	GU10	50mm	56mm	30000	450	6000K	38	Yes



















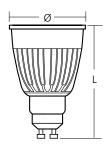
### DB LED PAR16



- 1 x 8W high power COB LED
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Ideal for accent and general lighting (eg; hotels, shops, offices)



ref	W	٧	Ω	Ø	L	(3)	X	<b>\( \rightarrow\)</b>	\( \( \text{\( \text{\) \exiting	<b>③</b>
EDLED/PAR16/8WW	8	230	GU10	50mm	76mm	30000	550	2700-3000K	35	No
EDLED/PAR16/8DW	8	230	GU10	50mm	76mm	30000	600	6000-6500K	35	No

















## LED MR11 & MR16 RANGE

Fusion lamps comprehensive MR11 and MR16 range uses the latest technology and the highest quality materials. Offering unbeatable light output and performance, our products provide genuine retrofit replacements for halogen lamps. COB and SMD LED technologies are used with innovative optical solutions to give a halogen effect light appearance.







### ED MR16



#### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 35W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers
- Retro-fit size
- Ideal for accent and general lighting (eg; hotels, shops, offices)



ref	W	٧	Ω	Ø	L	(3)	X	<b>(</b>	$\triangle$	<b>③</b>
CRLED/MR16/4WW	4	12	GU5.3	50mm	49mm	30000	285	3000K	38	No
CRLED/MR16/4CW	4	12	GU5.3	50mm	49mm	30000	293	4000K	38	No
CRLED/MR16/4DW	4	12	GU5.3	50mm	49mm	30000	299	6000K	38	No

Note: Suitable for use with most standard 12V transformers.

If not compatible, try our **LED DRIVER 18W** on page 107.

















- 1 x 5W high power COB LED
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers
- Retro-fit size
- Ideal for accent and general lighting (eg; hotels, shops, offices)



ref	W	V	Q	Ø	L	(3)	X	•	$\triangle$	<b>•</b>
EDLED/MR16COB5WW	5	12	GU5.3	50mm	52mm	30000	430	3000K	38	No
EDLED/MR16COB5CW	5	12	GU5.3	50mm	52mm	30000	442	4000K	38	No
EDLED/MR16COB5DW	5	12	GU5.3	50mm	52mm	30000	451	6000K	38	No



Note: Suitable for use with most standard 12V transformers.

If not compatible, try our **LED DRIVER 18W** on page 107.











- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Dimmable (when used in conjunction with included driver)
- Retro-fit size
- Ideal for accent and general lighting (eg; hotels, shops, offices)



ref	W	V	Ω	Ø	L	(3)	Ŏ.	<b></b>	$\triangle$	<b>③</b>
EDLEDKIT/DIM	5	12	GU5.3	50mm	50mm	30000	300	3500-4500K	38	Yes
EDLEDKIT/DIM/WW	5	12	GU5.3	50mm	50mm	30000	290	2700-3000K	38	Yes

**Note:** Image shown is for illustrative purposes only - product subject to slight change.



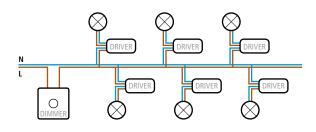












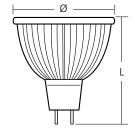
Driver dimensions (I x w): 76mm x 40mm Maximum circuit wattage: 7W



- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Equivalent replacement for a 50W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers
- Retro-fit size
- Ideal for accent and general lighting (eg; hotels, shops, offices)



ref	W	V	Ω	Ø	L	<b>(</b>	X		$\triangle$	<b>③</b>
CRLED/MR16/7WW	7	12	GU5.3	50mm	50mm	30000	550	3000K	38	No
CRLED/MR16/7CW	7	12	GU5.3	50mm	50mm	30000	570	4000K	38	No
CRLED/MR16/7DW	7	12	GU5.3	50mm	50mm	30000	580	6000K	38	No



Note: Suitable for use with most standard 12V transformers. If not compatible, try our **LED DRIVER 18W** on page 107.







### 2 WATT LED MR11

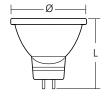


#### **Features and Benefits**

- 1 x 2 Watt Osram LED
- Low power consumption
- Long lamp life
- Low surface temperature
- Can operate AC/DC 12V
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 20W halogen lamp
- Retro-fit size
- Ideal for accent and general lighting (eg; hotels, shops, offices)



ref	W	V	Ω	Ø	L	(3)	X	<b>(</b>	$\triangle$	<b>○</b>
EDLED/MR11WW	2	12	GU4	35mm	35mm	30000	116	3000K	30	No
EDLED/MR11DW	2	12	GU4	35mm	35mm	30000	127	6000K	30	No



**Note:** Suitable for use with most standard 12V transformers.

If not compatible, try our **LED DRIVER 18W** on page 107.

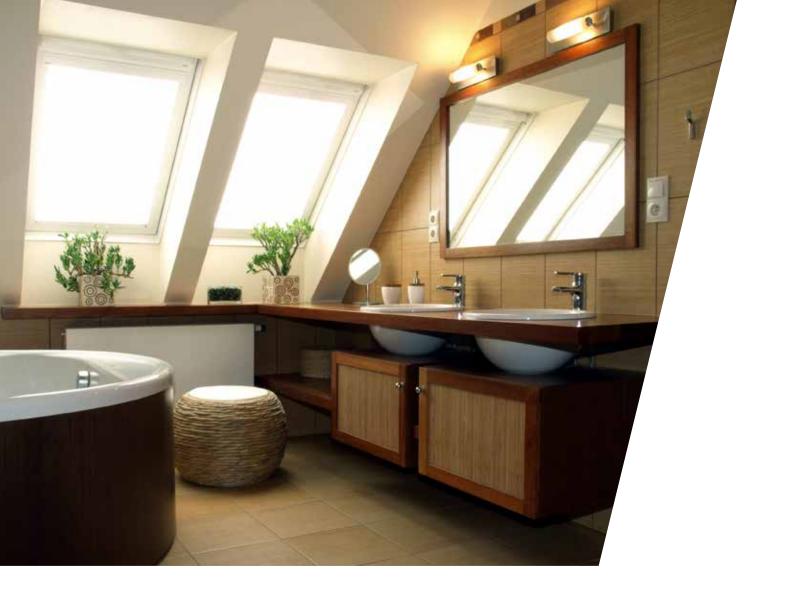












### LED STRIPLIGHTS RANGE

Fusion Lamps offers 221mm and 284mm LED strip lights for replacement of incandescent or compact fluorescent striplights. These products are lightweight and offer great brightness, they are perfect for use in under cabinet lighting, shaver lights and picture lights.



## 221MM & 284MM LEI STRIPLIGHTS



- 30 & 40 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy saving
- No UV output
- Suitable replacement for 30W incandescent striplights
- Ideal for retro fitting into picture lights, shaver lights and under cupboard lights



ref	W	٧	Q	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
EDLED/221	3	230	S15s	25mm	221mm	30000	230	3000K	120	No
EDLED/221DW	3	230	S15s	25mm	221mm	30000	240	6000K	120	No
EDLED/284	5	230	S15s	25mm	284mm	30000	350	3000K	120	No
EDLED/284DW	5	230	S15s	25mm	284mm	30000	360	6000K	120	No

















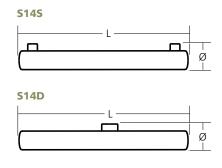
# 300MM & 500MM LED



- Low power consumption
- · Long lamp life
- Low surface temperature
- Up to 90% energy saving
- No UV output
- Suitable replacement for 35W & 60W incandescent architectural lamps



ref	W	٧	Q	Ø	L	(3)	)Ó.	<b>(</b>	$\triangle$	
EDLED/S14D/300MM	5	230	S14d	30mm	300mm	30000	350	3000K	120	No
EDLED/S14D/500MM	7	230	S14d	30mm	500mm	30000	450	3000K	120	No
EDLED/S14S/300MM	5	230	S14s	30mm	300mm	30000	350	3000K	120	No
EDLED/S14S/500MM	7	230	S14s	30mm	500mm	30000	450	3000K	120	No

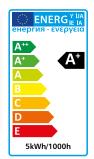




















## LED AR111 RANGE

Fusion Lamps AR111 lamps use the latest SMD LED technology, with innovative optical solutions.



### T LED AR111

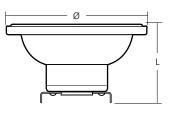


#### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 75% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Retro-fit size
- Ideal for accent, retail and display lighting



ref	W	٧	Q	Ø	L	<b>(</b>	X	•	$\triangle$	•
EDLED/AR111/13*	13	12	G53	111mm	65mm	30000	1000	3000K	24	No
EDLED/AR111/13/DIM**	13	24	G53	111mm	65mm	30000	1000	3000K	24	Yes
EDLED/AR111/13GU10	13	230	GU10	111mm	73mm	30000	1000	3000K	24	No



### Note:

- It is advised that an appropriate LED driver is used with this product. If not compatible, try our **LED DRIVER 18W** on page 107.
- \*\* Supplied complete with dimmable driver Lamp and driver MUST be used together.









## LED LINEAR RANGE

Fusion Linear replacements use high brightness SMD LED to give great light output. Our products are suitable for use in a wide range of floodlight applications and are a perfect way to save energy.



# 78MM & 118MM

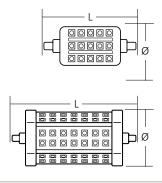




- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy saving
- No UV output
- Instant start
- Suitable replacements for 120W and 400W halogen lamps
- Ideal for retro fitting into floodlights and uplighters



ref	W	V	Q	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
EDLED/78	5	230	R7s	54mm	78mm	30000	500	6000K	200	No
EDLED/118	10	230	R7s	54mm	118mm	30000	850	6000K	200	No
EDLED/118 110V	10	110	R7s	54mm	118mm	30000	850	6000K	200	No
CRLED/78	5	230	R7s	23.5mm	78mm	30000	500	6000K	360	No
CRLED/118	10	230	R7s	23.5mm	118mm	30000	900	6000K	360	No



















# LED GX53, G4, G9 & PYGMY RANGE

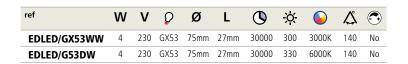
Fusion Lamps offers a series of LED lamps, including GX53, G4, G9 and pygmy types. These products are perfect for use in under cabinets, decorative and home appliance applications.



### GX53 LED



- 40 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 55% energy saving
- No UV output
- Retrofit size
- Suitable replacement for a 9W compact fluorescent lamp
- Ideal for use in under cupboard lighting and bed-side table lamps















### G4 LEI



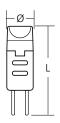
#### **Features and Benefits**

- 4 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy saving
- No UV output
- Can operate AC/DC 12V
- Suitable replacement for a 10W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers
- Ideal for general lighting (i.e. kitchens, living rooms etc)





Note: Suitable for use with most standard 12V transformers. If not compatible, try our **LED DRIVER 18W** on page 107.















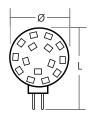


- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy saving
- No UV output
- Can operate AC/DC 12V
- Suitable replacement for a 20W halogen lamp
- Broadly compatible with existing electromagnetic & electronic halogen transformers
- Ideal for general lighting (i.e. kitchens)



ref	W	٧	Ω	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
EDLED/G4/3	3	12	G4	28mm	39mm	20000	280	3000K	120	No

**Note:** Suitable for use with most standard 12V transformers. If not compatible, try our **LED DRIVER 18W** on page 107.















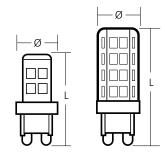




- 17 & 51 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 95% energy saving
- No UV output
- Suitable replacements for 25W and 40W halogen lamps
- Ideal for general lighting (i.e. kitchens, bathrooms etc)



ref	W	٧	Q	Ø	L	<b>(</b>	)X	•	$\triangle$	<b>3</b>
EDLED/G9/2	2	230	G9	16mm	38mm	30000	220	3000K	275	No
EDLED/G9/3	3	230	G9	16mm	50mm	30000	370	3000K	230	No

















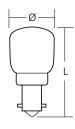
### PYGMY LEI



- 6 & 9 Super-bright SMDS
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 15W incandescent pygmy lamp
- Ideal for appliances (i.e. cooker hoods and fridges)



ref	W	٧	Ω	Ø	L	(3)	X	<b>(</b>	$\triangle$	<b>(3)</b>
EDLED/PT22SBC	1.1	230	B15	22mm	49mm	30000	90	3000K	300	No
EDLED/PT22SES	1.1	230	E14	22mm	49mm	30000	90	3000K	300	No
EDLED/PT25SBC	1.4	230	B15	25mm	58mm	30000	130	3000K	300	No
EDLED/PT25SES	1.4	230	E14	25mm	58mm	30000	130	3000K	300	No
EDLED/PT28BC	1.6	230	B22	28mm	58mm	30000	150	3000K	300	No
EDLED/PT28ES	1.6	230	E27	28mm	58mm	30000	150	3000K	300	No

























# 2D RANGE

Fusion Lamps offer a comprehensive 2D range for replacement of fluorescent lighting. Our series comprises of both 2 pin and 4 pin versions, and products can be used to retrofit 16 Watt, 28 Watt and 38 Watt traditional lamps. Full emergency backup is also available for all products.



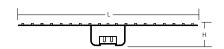


### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- No UV Output
- Up to 50% energy savings
- Suitable replacements for 16W, 28W & 38W 2D fluorescent lamps
- Can be used with PIRs and other presence or light level detectors (Lamp life is not reduced when used with PIRs, unlike fluorescent counterparts)
- Ideal for accent and general lighting (eg; hotels, care homes, offices)
- Emergency Pack also available



ref	W	V	Ω	L	Н	(3)	)Ŏ	•	$\triangle$	•
CRLED/2D8/2P	8	230	GR8	140mm	33mm	30000	810	4000K	120	No
CRLED/2D8/4P	8	230	GR10q	140mm	33mm	30000	810	4000K	120	No
CRLED/2D14/2P	14	230	GR8	190mm	32mm	30000	1430	4000K	120	No
CRLED/2D14/4P	14	230	GR10q	190mm	32mm	30000	1430	4000K	120	No
CRLED/2D18/4P	18	230	GR10q	190mm	32mm	30000	1820	4000K	120	No









Emergency Pack also available - LED2D/EPV2







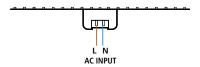






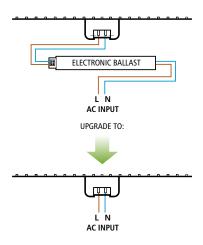
### **New Installation**

- i. Connect live and neutral to each end of light fixture
- ii. Install the LED 2D lamp into fixture



### Retrofit Installation: High Frequency

Remove electronic ballast and wire as shown in the diagram below:



### Retrofit Installation: Switch Start

Easy Installation:

- i. Remove the starter as shown below ii. Install the LED 2D lamp







### Recommended Installation:

- Remove the starter (as above)
- Bypass the ballast as shown below
- iii. Install the LED 2D lamp













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# COMPACT RANGE

Fusion Lamps LED compact range offers both double compact and long compact replacements. Our products use the best quality SMD LED to ensure maximum brightness, and are backed with pure aluminium heat sinks for optimal heat dissipation.



### DOUBLE COMPACT LEI



### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 75% energy savings
- No UV output
- Suitable replacement for 18W & 26W compact fluorescent lamp
- Ideal for use in commercial and retail downlights

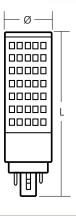








ref	W	٧	₽	Ø	L	<b>(</b>	X	•	$\triangle$	<b>③</b>
EDLED/G24-D2	7	230	G24-D2	35mm	124mm	30000	630	6000K	180	No
EDLED/G24-D3	7	230	G24-D3	35mm	124mm	30000	630	6000K	180	No
EDLED/G24-Q2	7	230	G24-Q2	35mm	124mm	30000	630	6000K	180	No
EDLED/G24-Q3	7	230	G24-Q3	35mm	124mm	30000	630	6000K	180	No





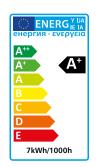






**Emergency Pack** also available







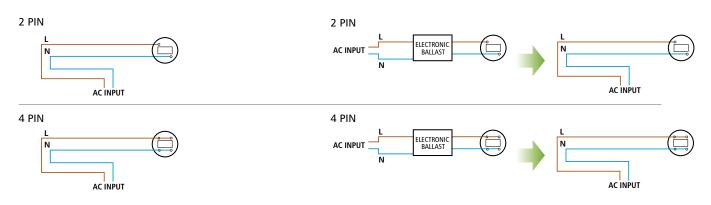
### **Double Compact LED Replacement Installation**

### **New Installation**

- i. Connect live and neutral to the pins on opposite sides as shown in the diagram below.
- ii. Install the LED double compact replacement into fixture.

### Retrofit Installation: High Frequency

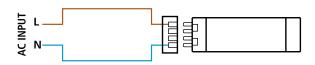
Remove electronic ballast and wire as shown in the diagram below:



### **Long Compact LED Replacement Installation**

### **New Installation**

- i. Connect live and neutral to the end pins as shown in the diagram below.
- Install the LED PLL into fixture.



### Retrofit Installation: High Frequency

Remove electronic ballast and wire as shown in the diagram below:



### LONG COMPACT LEI

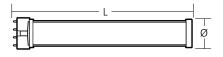


### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 60% energy savings
- No UV output
- Suitable replacement for 18W 55W compact fluorescent lamps
- Ideal for use in commercial and retail applications



ref	W	V	Q	Ø	L	(3)	Ŏ.	•	$\triangle$	<b>3</b>
EDLED/PLL8	8	85-265	2G11	39mm	227mm	30000	720	6000K	140	No
EDLED/PLL16	16	85-265	2G11	39mm	322mm	30000	1440	6000K	140	No
EDLED/PLL18	18	85-265	2G11	39mm	416mm	30000	1620	6000K	140	No
EDLED/PLL25	25	85-265	2G11	39mm	542mm	30000	2300	6000K	140	No

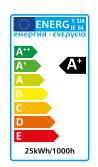
















## TUBE RANGE

Fusion Lamps tube range offers easy to install solutions for the retrofit of fluorescent tubes. Our products use the latest high brightness SMD LED and advanced LED driver technology to guarantee product performance and lifetime.



### T8 GLASS LED TUBES

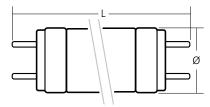


### **Features and Benefits**

- Long lamp life
- Built-in LED driver
- No UV output
- Light weight glass construction
- Ultra-wide beam spread
- Over current protection
- c/w LED starter for use in retro-fit installations
- Emergency Pack also available













Emergency Pack also available - LEDTUBE/EP













# T8 THERMOPLASTIC & ALUMINIUM LED TUBES

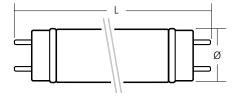


#### **Features and Benefits**

- Long lamp life
- Built-in LED driver
- No UV output
- High transmittance tube lens manufactured from optical grade polycarbonate
- Over voltage protection
- Over current protection
- c/w LED starter for use in retro-fit installations
- Rotating end caps
- Emergency Pack also available



ref	W	V	₽	Ø	L	(3)	X	•	$\triangle$	No. of LEDs	<b>③</b>
EDLEDTUBE/2FT/CW	10	185-265	G13	26mm	600mm	30000	1000	4000K	200	54	No
EDLEDTUBE/3FT/CW	13	185-265	G13	26mm	900mm	30000	1300	4000K	200	81	No
EDLEDTUBE/4FT/CW	18	185-265	G13	26mm	1200mm	30000	1800	4000K	200	108	No
EDLEDTUBE/5FT/CW	23	185-265	G13	26mm	1500mm	30000	2300	4000K	200	135	No
EDLEDTUBE/6FT/CW	28	185-265	G13	26mm	1800mm	30000	2800	4000K	200	192	No
EDLEDTUBE/8FT/CW	36	185-265	G13	26mm	2400mm	30000	3500	4000K	200	248	No



**Note:** Also available as a special order item with a clear cover, or in alternative colour temperatures. Other sizes can be manufactured on request.



RoHS





**Emergency Pack also available** 

- LEDTUBE/EF



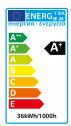










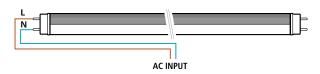


## LED TUBE LATION GUIDE

### **T8 LED Installation Guide**

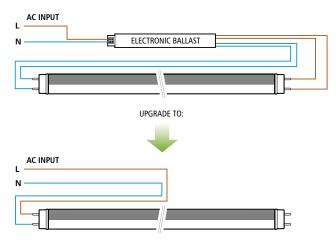
### **New Installation**

- Connect live and neutral to one end of light fixture
- ii. Install the LED tube into fixture



### Retrofit Installation: High Frequency

Remove electronic ballast and wire as shown in the diagram below:



### Retrofit Installation: Switch Start

### Easy Installation:

- Remove the fluorescent starter as shown below and replace with LED link starter
- ii. Install the LED tube





### Recommended Installation:

- Remove the fluorescent starter as shown above and replace with LED link starter
- Bypass the ballast as shown below
- iii. Install the LED tube





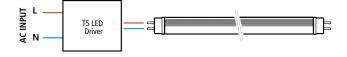




### **T5 LED Installation Guide**

### **New Installation**

- Connect live and neutral to the LED Driver then connect the live and neutral output from the LED Driver to one end of light fixture.
- ii. Install the LED T5 tube into fixture.



### Retrofit Installation: Switch Start

- Replace High Frequency ballast with the LED Driver and connect live and neutral output from the LED Driver to one end of light fixture.
- ii. Install the ELD T5 tube into fixture.



### T5 LED TUBES

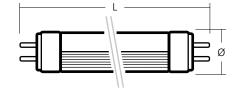


### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 50% energy saving
- No UV output
- Suitable replacements for 14W 35W fluorescent lamps
- Ideal for use in commercial and retail applications (i.e. offices, shops etc)



ref	W	V	Q	Ø	L	(3)	X	•	$\triangle$	<b>•</b>
EDLEDTUBE/T5/8	8	85-265	G5	15mm	549mm	30000	700	6500K	120	No
EDLEDTUBE/T5/12	12	85-265	G5	15mm	849mm	30000	1100	6500K	120	No
EDLEDTUBE/T5/16	16	85-265	G5	15mm	1149mm	30000	1500	6500K	120	No
EDLEDTUBE/T5/20	20	85-265	G5	15mm	1449mm	30000	1900	6500K	120	No



 $\textbf{Note:} \ \mathsf{Supplied} \ \mathsf{with} \ \mathsf{a} \ \mathsf{separate} \ \mathsf{LED} \ \mathsf{driver}.$ 







Emergency Pack also available















### HID REPLACEMENT RANGE

Fusion Lamps HID series provide the perfect solution for replacement of high intensity discharge lamps. Our unique thermal management systems facilitate optimal heat dissipation, allowing our products to be used in both open and enclosed fittings.



# 10 WATT G12 LED HII REPLACEMENT



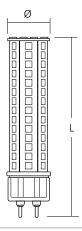
### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for 70W-150W HID lamps
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into track lighting and wall washing style





Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.













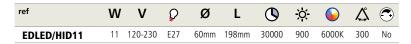


# REPLACEMEN

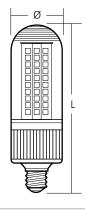


### **Features and Benefits**

- 88 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 70W HID lamp
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into bollards, bulkheads etc



Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.













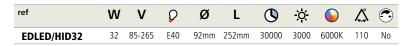


# 32 WATT LED HID REPLACEMENT

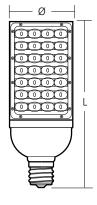


### **Features and Benefits**

- 28 x 1 Watt high power LEDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 80% energy savings
- No UV output
- Suitable replacement for a 150W HID lamp
- Instant start
- Can be used in enclosed fittings
- · Adjustable neck
- Ideal for retro-fitting into lowbays, floodlights and streetlights



Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.

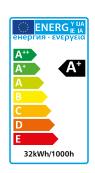














# 20 WATT LED HID REPLACEMEN

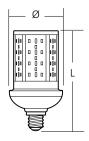


### **Features and Benefits**

- 84 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 80% energy saving
- No UV output
- Suitable replacement for 70W HID lamps
- Instant start
- Can be used in enclosed fittings
- Ideal for retro fitting into miniature high bays, floodlights and



Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.

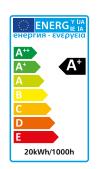














# 30 WATT LED HID REPLACEMENT

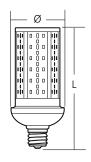


### **Features and Benefits**

- 105 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 85% energy saving
- No UV output
- Suitable replacement for 70W 150W HID lamps
- Instant start
- Can be used in enclosed fittings
- Ideal for retro fitting into low bays, high bays, floodlights and street lighting

ref	W	V	Q	Ø	L	<b>(</b>	X	<b>(</b>	$\triangle$	•
EDLED/HID30/E27	30	85-265	E27	92mm	200mm	30000	3600	6000K	300	No
EDLED/HID30	30	85-265	E40	92mm	200mm	30000	3600	6000K	300	No

Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.















# REPLACEMEN

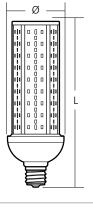


### **Features and Benefits**

- 195 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 80% energy savings
- No UV output
- Suitable replacement for a 250W HID lamp
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into lowbays, highbays, floodlights and streetlights



Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.















## 85 WATT LED HID REPLACEMENT

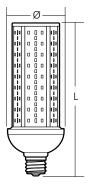


### **Features and Benefits**

- 300 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 80% energy savings
- No UV output
- Suitable replacement for 250W 400W HID lamps
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into lowbays, highbays, floodlights and streetlights

ref	W	V	Q	Ø	L	(3)	X	<b>(</b>	$\triangle$	<b>•</b>
EDLED/HID85	85	85-265	E40	105mm	290mm	30000	8750	6000K	300	No

Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.















# REPLACEMENT

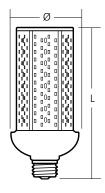


### **Features and Benefits**

- 390 super bright SMDs
- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 75% energy saving
- No UV output
- Suitable replacement for a 400W HID lamp
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into lowbays and highbays

ref	W	V	Ω	Ø	L	(3)	)Ŏ.	<b>(</b>	$\triangle$	<b>•</b>
EDLED/HID120	120	85-265	E40	120mm	310mm	30000	12500	6000K	300	No

Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.

















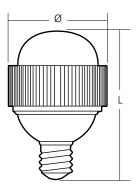
### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 55% energy savings
- No UV output
- Suitable replacement for a 150W HID lamp
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into prismatic high bays



ref	W	V	Ω	Ø	L	(3)	)Ć	•	$\triangle$	•
EDLED/HID80	80	85-265	E40	120mm	200mm	30000	8000	6000K	150	No
EDLED/HID80/CW	80	85-265	E40	120mm	200mm	30000	8000	4000K	150	No

Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.

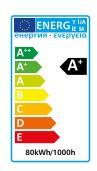


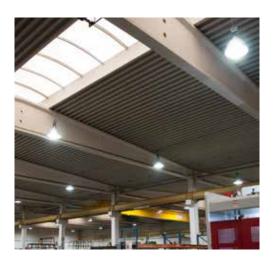












# REPLACEMENT

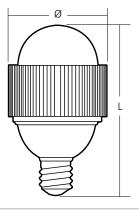


### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 60% energy savings
- No UV output
- Suitable replacement for a 250W HID lamp
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into prismatic high bays

ref	W	V	Ω	Ø	L	(3)	)Ć	•	$\triangle$	<b>•</b>
EDLED/HID110	110	85-265	E40	120mm	200mm	30000	11000	6000K	150	No
EDLED/HID110/CW	110	85-265	E40	120mm	200mm	30000	11000	4000K	150	No

Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.

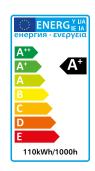














# 150 WATT LED HID REPLACEMENT



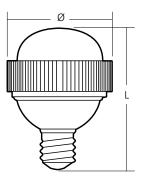
#### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 65% energy savings
- No UV output
- Suitable replacement for a 400W HID lamp
- Instant start
- Can be used in enclosed fittings
- Ideal for retro-fitting into prismatic high bays



ref	W	V	Ω	Ø	L	(3)	)X	•	$\triangle$	<b>(3)</b>
EDLED/HID150	150	85-265	E40	150mm	200mm	30000	15000	6000K	150	No
EDLED/HID150/CW	150	85-265	E40	150mm	200mm	30000	15000	4000K	150	No

### Retro-fitting can be achieved by simply bypassing the HID control gear and wiring directly to the lamp holder.



















# COLOURED D RANGE

Fusion Lamps range of coloured LED lamps are perfect to create an energy saving accent or decorative effect. Our range comprises of LED GU10, MR16, PAR38 and Golfball lamps and is available in a variety of colours.









STANDARD GU10

### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- Up to 90% energy savings
- No UV output
- Suitable replacement for a 50W halogen lamp
- Ideal for accent and general lighting (eg; restaurants, retail, etc)



### HIGH OUTPUT GU10

ref	W	V	Q	Ø	L	(3)	X	•	$\triangle$	<b>③</b>
CRLEDSMD/BL	5	230	GU10	50mm	56mm	30000	46	Blue	100	No
CRLEDSMD/GR	5	230	GU10	50mm	56mm	30000	289	Green	100	No
CRLEDSMD/RE	5	230	GU10	50mm	56mm	30000	142	Red	100	No



### STANDARD GU10

ref	W	٧	Ω	Ø	L	(3)	X	<b>\( \rightarrow\)</b>	\begin{align*} \text{\text{\$\sigma}}	<b>(3)</b>
EDLED/GU10/WH	1.3	230	GU10	50mm	52mm	50000	147	White	15	No
EDLED/GU10/BL	1.3	230	GU10	50mm	52mm	50000	31	Blue	15	No
EDLED/GU10/GR	1.3	230	GU10	50mm	52mm	50000	206	Green	15	No
EDLED/GU10/RE	1	230	GU10	50mm	52mm	50000	25	Red	15	No
EDLED/GU10/AM	1	230	GU10	50mm	52mm	50000	92	Amber	15	No
EDLED/GU10/CC	0.6	230	GU10	50mm	52mm	50000	44	RGB	15	No

















### MR16 LEI



### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- No UV output
- Available in the following colours:
  - White
  - Blue
  - Green
  - Red
  - Amber



ref	W	V	Ω	Ø	L	(3)	)X	<b>(</b>	$\triangle$	•
EDLED12V/WH	1.3	12	GU5.3	50mm	45mm	50000	88	White	15	No
EDLED12V/BL	1.3	12	GU5.3	50mm	45mm	50000	13	Blue	15	No
EDLED12V/GR	1.3	12	GU5.3	50mm	45mm	50000	132	Green	15	No
EDLED12V/RE	1	12	GU5.3	50mm	45mm	50000	36	Red	15	No
EDLED12V/AM	1	12	GU5.3	50mm	45mm	50000	66	Amber	15	No



**Note:** It is advised that an appropriate LED Driver is used with this product.

Try our **LED DRIVER 18W** on page 107.









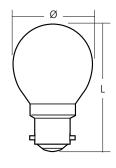


### **Features and Benefits**

- Low power consumption
- Long lamp life
- Ideal replacement for festive coloured lighting
- Low surface temperature
- Available in the following colours:
  - Blue
  - Green
  - Red
  - Amber



ref	W	٧	Ω	Ø	L	(3)	<b>(</b>	<b>(3)</b>
EDLED/G45BC/BL	0.4	240	B22	45mm	68mm	10000	Blue	No
EDLED/G45BC/GR	0.4	240	B22	45mm	68mm	10000	Green	No
EDLED/G45BC/RE	0.4	240	B22	45mm	68mm	10000	Red	No
EDLED/G45BC/AM	0.4	240	B22	45mm	68mm	10000	Amber	No















### PAR38 LED



### **Features and Benefits**

- Low power consumption
- Long lamp life
- Low surface temperature
- No UV output
- Suitable for outdoor use in a certified IP rated fitting
- Available in the following colours:
  - Blue
  - Green
  - Red



ref	W	٧	Q	Ø	L	(3)	)X	•	$\triangle$	<b>③</b>
CRLED/PAR38BL	8	230	E27	122mm	135mm	30000	60	Blue	30	No
CRLED/PAR38GR	8	230	E27	122mm	135mm	30000	330	Green	30	No
CRLED/PAR38RE	8	230	E27	122mm	135mm	30000	176	Red	30	No

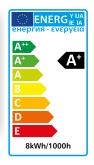
















### **ACCESSORIES**

A range of Fusion Lamps accessories to complement the LED range. A specific driver for efficient safe operation and adaptors for cap conversions and retro-fitting, saving the cost of changing the whole luminaire, turning a standard fitting into an energy saving and cost effective solution.



### LED DRIVERS



### **Features and Benefits**

• LED Driver for 12V fittings

ref	description
<b>LED DRIVER 18W</b>	12V LED Driver 18W Max Constant Voltage





### **Features and Benefits**

• Adaptors can help to find a retrofit energy saving lamp solution

ref	description
B15/E27	B15 (SBC) to E27 (ES)
B22/E27	B22 (BC) to E27 (ES)
E14/E27	E14 (SES) to E27 (ES)
E40/E27	E40 (GES) to E27 ES)
G9/E27	G9 to E27 (ES)
GU10/B22	GU10 to B22 (BC)
GU10/E27	GU10 to E27 (ES)
E27/E40	E27 (ES) to E40 (GES)
E27/G24-q	E27 (ES) to G24-q (4-pin)

### Index

B15/E27107	CRLED/GLS10BC/CW/DIM 22	CRLED/R80/DIM31
B22/E27107	CRLED/GLS10BC/DIM22	CRLEDSMD/BL102
CRLED/2D14/2P75	CRLED/GLS10BC/SEN22	CRLEDSMD/GR102
CRLED/2D14/4P75	CRLED/GLS10ES22	CRLEDSMD/RE102
CRLED/2D18/4P75	CRLED/GLS10ES 110V22	E14/E27107
CRLED/2D8/2P75	CRLED/GLS10ES/CW22	E27/E40107
CRLED/2D8/4P75	CRLED/GLS10ES/CW/DIM22	E27/G24-q107
CRLED/CAN/BC13	CRLED/GLS10ES/DIM22	E40/E27 107
CRLED/CAN/BC/CL 14	CRLED/GLS10ES/SEN22	EDLED/FCAN1.8BC26
CRLED/CAN/BC/CL/DIM14	CRLED/GLS12BC23	EDLED/FCAN1.8BC/DIM26
CRLED/CAN/BC/DIM13	CRLED/GLS12BC/DIM23	EDLED/FCAN1.8ES26
CRLED/CAN/ES13	CRLED/GLS12ES23	EDLED/FCAN1.8ES/DIM26
CRLED/CAN/ES/CL14	CRLED/GLS12ES/DIM23	EDLED/FCAN1.8SBC26
CRLED/CAN/ES/CL/DIM 14	CRLED/GLS6BC21	EDLED/FCAN1.8SBC/DIM26
CRLED/CAN/ES/DIM13	CRLED/GLS6BC/DIM21	EDLED/FCAN1.8SES26
CRLED/CAN/SBC 13	CRLED/GLS6ES21	EDLED/FCAN1.8SES/DIM 26
CRLED/CAN/SBC/CL14	CRLED/GLS6ES/DIM21	EDLED/FCAN3BC26
CRLED/CAN/SBC/CL/DIM 14	CRLED/GU10CW42	EDLED/FCAN3BC/DIM26
CRLED/CAN/SBC/DIM13	CRLED/GU10DW 42	EDLED/FCAN3ES26
CRLED/CAN/SES13	CRLED/GU10WW 42	EDLED/FCAN3ES/DIM26
CRLED/CAN/SES/CL14	CRLED/MR16/4CW 52	EDLED/FCAN3SBC26
CRLED/CAN/SES/CL/DIM14	CRLED/MR16/4DW 52	EDLED/FCAN3SBC/DIM 26
CRLED/CAN/SES/DIM13	CRLED/MR16/4WW 52	EDLED/FCAN3SES26
CRLED/G45/BC18	CRLED/MR16/7CW55	EDLED/FCAN3SES/DIM26
CRLED/G45/BC/CL19	CRLED/MR16/7DW 55	EDLED/FG45/1.8BC27
CRLED/G45/BC/CL/DIM 19	CRLED/MR16/7WW 55	EDLED/FG45/1.8BC/DIM 27
CRLED/G45/BC/DIM 18	CRLED/PAR2034	EDLED/FG45/1.8ES27
CRLED/G45/ES18	CRLED/PAR20/DIM34	EDLED/FG45/1.8ES/DIM27
CRLED/G45/ES/CL 19	CRLED/PAR3035	EDLED/FG45/1.8SBC27
CRLED/G45/ES/CL/DIM19	CRLED/PAR30/DIM35	EDLED/FG45/1.8SBC/DIM 27
CRLED/G45/ES/DIM18	CRLED/PAR3836	EDLED/FG45/1.8SES27
CRLED/G45/SBC18	CRLED/PAR38 110V36	EDLED/FG45/1.8SES/DIM27
CRLED/G45/SBC/CL19	CRLED/PAR38/DIM36	EDLED/FG45/3BC27
CRLED/G45/SBC/CL/DIM 19	CRLED/PAR38BL105	EDLED/FG45/3BC/DIM 27
CRLED/G45/SBC/DIM 18	CRLED/PAR38GR105	EDLED/FG45/3ES27
CRLED/G45/SES 18	CRLED/PAR38RE105	EDLED/FG45/3ES/DIM27
CRLED/G45/SES/CL19	CRLED/R3931	EDLED/FG45/3SBC27
CRLED/G45/SES/CL/DIM 19	CRLED/R5031	EDLED/FG45/3SBC/DIM 27
CRLED/G45/SES/DIM18	CRLED/R50/DIM31	EDLED/FG45/3SES27
CRLED/GLS10BC22	CRLED/R6331	EDLED/FG45/3SES/DIM27
CRLED/GLS10BC 110V22	CRLED/R63/DIM31	EDLED/FGLS3.5BC28
CRLED/GLS10BC/CW22	CRLED/R8031	EDLED/FGLS3.5BC/DIM28

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FDI FD/FCI (2) FFC 20		
EDLED/FGLS3.5ES	EDLED/GU10/4CW	EDLED/MR16COB5WW 53
EDLED/FGLS3.5ES/DIM28	EDLED/GU10/4CW/DIM 44	EDLED/PAR16/8DW
EDLED/FGLSGBC/DIA 28	EDLED/GU10/4DW	EDLED/PAR16/8WW
EDLED/FGLS6BC/DIM28	EDLED/GU10/4DW/DIM 44	EDLED/PLL1681
EDLED/FGLS6ES28	EDLED/GU10/4WW 44	EDLED/PLL1881
EDLED/FGLS6ES/DIM28	EDLED/GU10/4WW/DIM44	EDLED/PLL2581
EDLED/FGLS8.5BC28	EDLED/GU10/5CW46	EDLED/PLL881
EDLED/FGLS8.5BC/DIM28	EDLED/GU10/5CW/DIM46	EDLED/PT22SBC 72
EDLED/FGLS8.5ES28	EDLED/GU10/5DW 46	EDLED/PT22SES72
EDLED/FGLS8.5ES/DIM28	EDLED/GU10/5DW/DIM46	EDLED/PT25SBC 72
EDLED/FST58/4BC29	EDLED/GU10/5WW 46	EDLED/PT25SES72
EDLED/FST58/4BC/DIM29	EDLED/GU10/5WW/DIM46	EDLED/PT28BC72
EDLED/FST58/4ES29	EDLED/GU10/AM102	EDLED/PT28ES72
EDLED/FST58/4ES/DIM29	EDLED/GU10/BL102	EDLED12V/AM 103
EDLED/FST58A/4BC29	EDLED/GU10/CC102	EDLED12V/BL103
EDLED/FST58A/4BC/DIM29	EDLED/GU10/GR102	EDLED12V/GR103
EDLED/FST58A/4ES29	EDLED/GU10/RE102	EDLED12V/RE103
EDLED/FST58A/4ES/DIM 29	EDLED/GU10/WH 102	EDLED12V/WH103
EDLED/FST64/4BC29	EDLED/GU10WF/4CW45	EDLEDKIT/DIM54
EDLED/FST64/4BC/DIM29	EDLED/GU10WF/4CW/DIM 45	EDLEDKIT/DIM/WW54
EDLED/FST64/4ES29	EDLED/GU10WF/4DW 45	EDLEDTUBE/2FT/CW84
EDLED/FST64/4ES/DIM29	EDLED/GU10WF/4DW/DIM 45	EDLEDTUBE/3FT/CW84
EDLED/FST64A/4BC29	EDLED/GU10WF/4WW 45	EDLEDTUBE/4FT/CW84
EDLED/FST64A/4BC/DIM29	EDLED/GU10WF/4WW/DIM 45	EDLEDTUBE/5FT/CW84
EDLED/FST64A/4ES29	EDLED/HID1190	EDLEDTUBE/6FT/CW84
EDLED/FST64A/4ES/DIM 29	EDLED/HID11098	EDLEDTUBE/8FT/CW84
EDLED/G12CW89	EDLED/HID110/CW98	EDLEDTUBE/G2FT83
EDLED/G24-D279	EDLED/HID12096	EDLEDTUBE/G3FT83
EDLED/G24-D379	EDLED/HID15099	EDLEDTUBE/G4FT83
EDLED/G24-Q279	EDLED/HID150/CW99	EDLEDTUBE/G5FT83
EDLED/G24-Q379	EDLED/HID20/E2792	EDLEDTUBE/G6FT83
EDLED/G469	EDLED/HID3093	EDLEDTUBE/T5/12 86
EDLED/G4/370	EDLED/HID30/E2793	EDLEDTUBE/T5/1686
EDLED/G45BC/AM104	EDLED/HID3291	EDLEDTUBE/T5/2086
EDLED/G45BC/BL104	EDLED/HID60	EDLEDTUBE/T5/8
EDLED/G45BC/GR104	EDLED/HID80	G9/E27107
EDLED/G45BC/RE104	EDLED/HID80/CW97	GU10/B22107
EDLED/G9/271	EDLED/HID85	GU10/E27107 LED DRIVER 18W107
EDLED/G9/371	EDLED/MR11DW	רבט טאועבא זאטע 107
EDLED/G95BC39	EDLED/MR11WW56	
EDLED/G95ES	EDLED/MR16COB5CW53	
EDLED/GU10/3P43	EDLED/MR16COB5DW53	

### Conditions of Sale

#### 1. Interpretation

In these Conditions, the following words shall have the following meanings: (a)

Buyer means the person, firm or company who places an Order with the Seller; Customer Agreement means the Credit Account Application overleaf and any and all agreements made between the Buyer and the Seller for the supply of Goods.

Goods means any goods (or instalment or part thereof) howsoever ordered by the Buyer from the

Guarantee means the guarantee embedded in the Seller's Credit Account Application Guarantor means the person who enters into the Guarantee embedded in the Seller's Credit Account

Order means any order sent to the Seller by the Buyer for the supply of Goods and/or Services; Seller means City Electrical Factors Ltd (CRN: 336408) whose registered office is at

141 Farmer Ward Road, Kenilworth, Warwickshire, CV8 2SU; Services means any services (or instalment or part thereof) howsoever ordered by the Buyer from the

A reference to a particular law is a reference to it as it is in force for the time being taking account of any amendment, extension, application or re-enactment and includes any subordinate legislation for the time being in force made under it.

- An Order shall be accepted entirely at the discretion of the Seller and if accepted will only be accepted on the basis of these Conditions which shall (together with such conditions as may be expressly incorporated by reference herein or as may be agreed in writing by the Buyer and the Seller) form the entire agreement between the Buyer and Seller to the exclusion of any other conditions (including any terms or conditions which the Buyer purports to apply under any purchase order, confirmation of order, specification or other document).
- Each Order which the Seller accepts (by way only of issue of the Seller's standard order acknowledgement form or on delivery of the Goods and/or performance of the Services (as the case may be) to the Buyer's address shown in the Order) shall constitute a separate legally binding contract between the Seller and the Buyer.
- No addition, variation or substitution of these Conditions shall bind the Seller or form any part of any contract unless expressly accepted in writing by an authorised representative of the Seller.
- The Seller's employees or agents are not authorised to make any representations with regard to the subject matter of any contract between the Seller and the Buyer. In entering into a contract with the Seller, the Buyer acknowledges that if it relies on any representation, advice or recommendation given by the Seller, its employees or agents to the Buyer as to the Goods and/or the Services (as the case may be) it does so entirely at the Buyer's own risk.

#### 3. Specification

- The Buyer shall be responsible to the Seller for ensuring the accuracy of the terms of any Order and specification submitted by the Buyer and for checking and ensuring the accuracy of any order acknowledgment form issued by the Seller.
- The Buyer shall not be entitled to rely on any typographical, clerical or other error or omission in any sales literature, quotations, price-list, acceptance of offer, invoice or other document or information issued by the Seller which the Buyer acknowledges shall not form part of or be incorporated by reference into any contract between the Seller and the Buyer. Any such error or omission shall be
- subject to correction without any liability on the part of the Seller.

  The Seller reserves the right to make changes in the specification of the Goods and/or the Services (as the case may be) which are required to conform with any applicable statutory or regulatory requirements and which do not materially affect quality or performance.
- If the Goods are to be manufactured or any process is to be applied to the Goods by the Seller in accordance with a specification submitted by the Buyer, the Buyer shall indemnify the Seller against all loss, damages costs and expenses awarded against or incurred by the Seller 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 result from the Seller's use of the Buyer's specification.

### Price of Goods and Services

- The price for the Goods and/or the Services (as the case may be) shall be:
- the Seller's price set out in the Seller's quotation issued to the Buyer; or
- in the absence of any such quotation, the Seller's standard price for the Goods or Services (subject to
- any discount in accordance with clause 4(g));
  Any prices quoted are valid for only 30 days from the date of quotation or until earlier acceptance by the
- Buyer, after which they may be altered by the Seller without giving notice to the Buyer.

  Any quotation or estimate given by the Seller is an indication given in good faith and shall not become binding upon the Seller unless subsequently confirmed by the Seller in writing.

  All prices quoted are based on information available at the date of quotation and the Seller reserves
- the right to vary prices at any time without notice prior to the date of issue of the relevant invoice and the price payable by the Buyer shall be the price applicable at the date of the invoice.
- Unless otherwise stated, the price of the Goods and/or the Services (as the case may be) is exclusive of VAT and any other taxes and the cost of carriage and any other matters all of which the Buyer shall pay to the Seller in addition.
- In the event of any increase in cost to the Seller which is beyond the control of the Seller (including (without limitation) any increases imposed upon the Seller by its own suppliers) and/or any variation or suspension of the work which is agreed to by the Seller upon the Buyer's request, or if the Buyer's instructions are incorrect or insufficient, the Seller shall be entitled to adjust the price of the Good and/or the Services (as the case may be) to reflect the costs involved, and to adjust delivery dates as appropriate.
- The Seller shall be entitled to bring an action for the price of the Goods and/or the Services (as the case may be) or part thereof notwithstanding that delivery and/or performance may not have taken place and/or that ownership in the Goods has not passed to the Buyer.
- The Seller at its absolute discretion may decide to apply a discount in such amount as it may think fit to the price for the Goods and/or Services. The amount of any discount shall be recorded in the invoice issued to the Buyer.

#### 5. Payment

- The Seller shall be entitled to invoice the Buyer for the price of the Goods and/or the Services (as the case may be) at any time prior, on or following delivery of the Goods and/or performance of the Services (as the case may be) unless the Buyer wrongfully fails to take delivery of the Goods in which event the Seller shall be entitled to invoice the Buyer for the full amount at any time after the Seller has notified the Buyer that the Goods are ready for collection or (as the case may be) the Seller has tendered delivery of the Goods.
- Until a Credit Account has been opened by the Seller in favour of the Buyer, the Buyer shall pay the price for the Goods and/or the Services (as the case may be) on or prior to delivery and (where applicable) upon receipt of the Seller's invoice.

- The time of payment of the price shall be of the essence of any contract between the Seller and the
- A Buyer in whose favour a Credit Account has been opened shall, unless otherwise agreed in writing by the Seller, pay the price for the Goods and/or the Services (as the case may be) on or before the 28th day (or the next working day if the 28th day of a particular month is a Saturday or a Sunday) of the month following the date of the Seller's invoice.
- No payment shall be deemed to have been received until the Seller has received cleared funds. All payments payable to the Seller under the contract between the Seller and the Buyer shall become due
- immediately on its termination despite any other provision.

  Where payment is not made by the due date, regardless of its other remedies, the Seller shall be entitled to (i) cancel the contract between the Seller and the Buyer or suspend any further deliveries to the Buyer; and (ii) claim interest and /or compensation for reasonable debt recovery costs under
- to the buyer; and (ii) claim interest and /or compensation for reasonable debt recovery costs under the Late Payment of Commercial Debts (Interest) Act 1998 as amended and supplemented by the Late Payment of Commercial Debts Regulations 2002. In the event that the Seller is, for whatever reason, unable to claim interest and/or compensation under the Late Payment of Commercial Debts (Interest) Act 1998 as amended and supplemented by the Late Payment of Commercial Debts Regulations 2002, the Seller reserves the right to charge the Buyer interest (both before and after any judgment) on the amount unpaid at the rate of 4% (four per cent) per annum above the base rate from time to time of the Bank of England, accruing on a daily basis until payment is made in full, and for such purposes, the Buyer and the Seller agree that such
- basis of the payment is induced in indication, and not such purposes, the buyer and the seller agree that such rate is reasonable and reflects a genuine pre-estimate of the loss that the Seller would incur as a result of any default by the Buyer to make payment on the due date. If any payment is dishonoured or countermanded by the Buyer, the Seller shall have the right to charge the Buyer an administration fee of £25.00 (or such other fee as may be notified to the Buyer. from time to time).
- Any claim by the Buyer that an invoice rendered by the Seller is in the incorrect amount or contains any other error must be notified to the Seller in writing within 7 days of the date of the invoice. If the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to claim that the invoice is incorrect or contains any other error whatsoever.

#### Delivery

- Delivery of the Goods shall be made by the Buyer collecting the Goods at the Seller's premises or, if
- some other place for delivery is agreed by the Seller, by the Seller delivering the Goods to that place Any delivery date quoted is given in good faith, but the Seller shall not be responsible for any delay in delivery of the Goods and/or the performance of the Services (as the case may be) howsoever caused. Time for delivery shall not be of the essence of the contract between the Seller and the Buyer
- and the Seller shall not be liable for any delay in delivery howsoever caused. The Seller shall be entitled to make delivery by instalments (in which case each delivery shall constitute a separate contract), and to invoice the Buyer separately for each instalment. Failure by the Seller to deliver any one or more of the instalments in accordance with these Conditions or any claim by the Buyer in respect of any one or more instalments shall not entitle the Buyer to treat the contract as a whole between the Seller and the Buyer as repudiated.
- Except in the case of delivery at the Seller's premises, the Buyer shall at its own expense use all reasonable endeavours to ensure that the Seller is able to freely access and make any deliveries to any other place for delivery at such time(s) as may be specified by the Seller. Any failure by the Buyer to comply with the provisions of this condition or to otherwise accept delivery (save upon such grounds for rejection as are specified in the law relating to the Sale of Goods) shall be deemed to be a breach of contract. Any additional costs incurred by the Seller in re-delivering the Goods (either to the originally agreed place for delivery or to such other place as may be reasonably requested by the Buyer) will be charged to the Buyer.
- The quantity of any consignment of Goods as recorded by the Seller upon despatch from the Seller's premises shall be conclusive evidence of the quantity received by the Buyer on delivery unless the
- Buyer can provide conclusive evidence proving the contrary.

  Notwithstanding the provisions of condition 8(e), the Seller shall not be liable for any under-delivery of Goods in whole or in part (even if caused by the Seller's negligence) unless the Buyer gives writter notice to the Seller of the under-delivery within 48 hours of the date when the Goods are delivered to the Buyer (as recorded by the Seller) or, if there is no such record, when the Goods would in the ordinary course of events have been received. Any liability of the Seller for under-delivery of the Goods shall be limited to replacing the Goods within a reasonable time or issuing a credit note at the pro rata contract rate against any invoice raised for such Goods.

#### Risk and Title 7.

- Risk of damage to or loss of the Goods shall pass to the Buyer at the time of delivery
- Notwithstanding delivery and the passing of risk in the Goods, or any other provisions in these Conditions, ownership in the Goods shall not pass to the Buyer until the Seller has received in full (in cash or cleared funds) all sums due to it in respect of the Goods and all other sums which are or which become due to the Seller from the Buyer on any account.
- Until ownership of the Goods has passed to the Buyer in accordance with these Conditions, the Buyer
- hold the Goods on a fiduciary basis as the Seller's bailee;
- store the Goods (at no cost to the Seller) separately from all other Goods of the Buyer or any third party in such a way that they remain readily identifiable as the Seller's property;
- not destroy, deface or obscure any identifying mark or packaging on or relating to the Goods; maintain the Goods in satisfactory condition insured on the Seller's behalf for their full price against
- all risks to the reasonable satisfaction of the Seller (and produce the policy of insurance to the Seller
- hold the proceeds of the insurance referred to in condition 7(c) (iv) on trust for the Seller and not mix them with any other money, nor pay the proceeds into an overdrawn bank account.

  The Buyer may resell the Goods before ownership has passed to it solely on the following conditions: any sale shall be effected in the ordinary course of the Buyer's business at full market value and the
- Buyer shall hold such part of the proceeds of sale as represent the amount owed by the Buyer to the Seller on behalf of the Seller and the Buyer shall immediately account to the Seller accordingly; and any such sale shall be a sale of the Seller's property on the Buyer's own behalf and the Buyer shall
- deal as principal when making such a sale.

  The Buyer's right to possession of the Goods shall terminate immediately if:
  - The Buyer's right to possession of the Goods shall terminate immediately if:
    the Buyer has a bankruptcy order made against him or makes an arrangement or composition with
    his creditors, or otherwise takes the benefit of any statutory provision for the time being in force for
    the relief of insolvent debtors, or (being a body corporate) convenes a meeting of creditors (whether
    formal or informal), or enters into liquidation (whether voluntary or compulsory) except a solvent
    voluntary liquidation for the purpose only of reconstruction or amalgamation, or has a receiver and/or
    manager, administrator or administrative receiver appointed of its undertaking or any part thereof, or
    documents are filed with the court for the appointment of an administrator of the Buyer or notice of
    intention to appoint an administrator is given by the Buyer or its directors or by a qualifying floating
    charge holder (as defined in paragraph 14 of Schedule B1 to the Insolvency Act 1986), or a resolution
    is passed or a petition presented to any court for the winding-up of the Buyer or for the granting of is passed or a petition presented to any court for the winding-up of the Buyer or for the granting of is passed of a period presented to any court of the Williams and proceedings are commenced relating to the insolvency or possible insolvency of the Buyer; or

- the Buyer suffers or allows any execution, whether legal or equitable, to be levied on his/its property or obtained against him/it, or fails to observe or perform any of his/its obligations under the Contract or any other contract between the Seller and the Buyer, or is unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986 or the Buyer ceases to trade; or
- the Buyer encumbers or in any way charges any of the Goods.

  The Buyer grants the Seller, its agents and employees an irrevocable licence at any time to enter any premises where the Goods are or may be stored in order to inspect them, or, where the Buyer's right to possession has terminated, to recover them.
- Where the Seller is unable to determine whether any Goods are the goods in respect of which the Buyer's right to possession has terminated, the Buyer shall be deemed to have sold all goods of the
- kind sold by the Company to the Buyer in the order in which they were invoiced to the Buyer.

  On termination of the contract between the Seller and the Buyer, howsoever caused, the Seller's (but not the Buyer's) rights contained in this condition 7 shall remain in effect.

  Following the transfer of ownership of the Goods to the Buyer in accordance with these Conditions,
- the Buyer shall (where applicable) (i) be responsible for financing the collection, treatment, recovery and environmentally sound disposal of all WEEE (as hereinafter defined) arising or deriving from the Goods; and all WEEE arising or deriving from goods placed on the market prior to 13 August 2005 where such goods are to be replaced by the Goods and the Goods are of an equivalent type or are fulfilling the same function as that of such goods; (ii) comply with all additional obligation placed upon the Buyer by the Waste Electrical and Electronic Equipment Regulations 2006 ("the WEEE Regulations") by virtue of the Buyer accepting the responsibility set out in section (i) above; (iii) provide the Buyer's WEEE compliance scheme operator with such data, documents, information and other assistance as such compliance scheme operator may from time to time reasonably require to enable such compliance scheme operator to satisfy the obligations assumed by it as a result of the Buyer's membership of such scheme, and (iv) be responsible for all costs and expenses arising from and relating to its obligations set out in this paragraph (except in respect of Goods which constitute gas discharge lamps, in which case an upfront and 'visible' charge will have been levied at the outset and the Buyer undertakes to contact the compliance scheme operator of the gas discharge lamp branded manufacturer to arrange compliance with the WEEE Regulations on that basis). Terms used in this Condition shall have the meaning ascribed thereto in the WEEE Regulations.

#### **Additional Terms of Guarantee**

- All sums of money which may not be recoverable from the Guaranter on the footing of the guarantee whether by reason of legal limitation on the Buyer or any other circumstance shall nevertheless be recoverable from the Guarantor as principal debtor and shall be paid on demand.

  A demand for payment or any other notice to the Guarantor may be made by any authorised officer
- of the Seller by letter addressed to the Guarantor and delivered to it's registered office or residential address and if sent by post shall be deemed to have been made at noon the following day after the letter was posted.
- This Guarantee shall be a continuing security and the Guarantor shall remain liable for all sums due by the Buyer notwithstanding any event which absolves the Buyer from liability. The Guarantor shall remain liable notwithstanding any alteration to the Customer Agreement or any terms applying
- thereto, which may be agreed between the Seller and the Buyer.
  Until payment in full by the Guarantor of all sums due to the Seller by the Buyer, the Guarantor shall not be entitled to participate in any security held or money received by the Seller on account of such
- This Guarantee may be terminated and the Guarantor's liability shall be fixed at the expiration of one calendar month after receipt by the Seller from the Guarantor of notice in writing to terminate it. It shall be lawful for the Seller to continue the account with the Buyer notwithstanding such termination and the Guarantor shall remain liable for any amount due at the date of termination of this Guarantee.
- The Guarantor may be released absolutely from the Guarantee upon written application to the Seller. Any such release shall be at the Seller's absolute discretion and shall be on such terms including as to the date of release that the Seller may specify. Any settlement discharge or release between the
- Guarantor and the Seller shall be conditional upon no security or payment to the Seller by the Buyer or any other person being avoided or reduced due to insolvency laws or otherwise.

  The Seller may at any time without giving notice to or obtaining the consent of the Guarantor refuse or grant further credit to the Buyer for any period and compound with give time for payment grant other indulgence or make any other arrangements with the Buyer, give up modify exchange or abstain from perfecting or taking advantage of or enforcing any security guarantee and discharge any
- parties thereto and realise any securities in such manner as the Seller may think expedient.

  All costs charges and expenses incurred by the Seller in obtaining payment of the moneys secured under this guarantee (and so that any taxation of the Seller's costs charges and expenses shall be on a full indemnity basis) shall be recoverable from the Guarantor as a debt

### Warranties and Liability

- The Seller warrants that, except in relation to intellectual property rights of third parties, it has good title to the Goods and (subject to the conditions set out below) the Goods shall correspond with their written specification (if any) at the time of delivery and will be free from material defects in materials and workmanship for a period of 12 months or separately stated period from delivery, provided that the Seller shall be under no liability:
- in respect of any defect arising from any drawing, design, specification or stipulation of the Buyer; or in respect of any defect or lack of performance arising from fair wear and tear, wilful damage,
- negligence, abnormal working conditions, failure to follow Seller's instructions, or misuse, alteration or repair of the Goods without the Seller's approval; or
- in respect of parts or materials not manufactured by the Seller, in respect of which the Buyer shall only be entitled to the benefit of any warranty or guarantee which is given by the manufacturer to
- if the full price for the Goods has not been paid by the due date for payment
- The Seller warrants that the Services will be provided using reasonable care and skill and, as far as reasonably possible, in accordance with the contract between the Seller and the Buyer
- Subject as expressly provided in these Conditions, and except where the Goods and/or Services (as the case may be) are supplied to a person dealing as a consumer (within the meaning of the Unfair Contract Terms Act 1977), all warranties, conditions or other terms implied by statute or common law are excluded to the fullest extent permitted by law.
- Where the Goods and/or the Services (as the case may be) are supplied under a consumer transaction (as defined by the Consumer Transactions (Restrictions on Statements) Order 1976) the statutory
- rights of the Buyer are not affected by these Conditions.

  Any claim by the Buyer arising from any defect in the quality or condition of the Goods or their Buyer) be notified to the Seller in writing within a reasonable time of the defect or failure was not apparent on reasonable inspection) within a reasonable time of the defect or failure becoming apparent. If delivery is not refused, and the Buyer does not notify the Seller accordingly, the Buyer shall not be entitled to reject the Goods and the Seller shall have no liability for such defect or failure, and the Buyer shall be bound to pay the contract price as if the Goods had been delivered in accordance with the contract between the Seller and the Buyer.

- Where the Seller accepts a claim made by the Buyer in respect of the Goods made in accordance with these Conditions, the Buyer's right shall be to a full or partial credit note (in relation to Goods purchased on credit account) full or partial refund (in relation to Goods purchased by cash) or replacement of the Goods (or the part(s) in question), at the Seller's option, but the Seller shall have
- no further liability to the Buyer. Except in respect of death or personal injury caused by the Seller's negligence, the Seller shall not be liable to the Buyer by reason of any representation (unless fraudulent), or any implied warranty, condition, or other term, or any tortious act (including negligence) or any duty at common law, or under the express terms of the contract between the Seller and the Buyer, or in any manner
- for any indirect, special or consequential loss or damage;
- for any economic loss including loss of profits, loss of business, depletion of goodwill and/or similar losses, loss of anticipated savings, loss of goods, loss of contract, loss of use, or loss of /or corruption of data or information, howsoever caused and even if foreseeable by the Seller; which in either case may arise out of, or in connection with the supply of the Goods and/or the Services or their use or resale by the Buyer (and whether caused by the negligence of the Seller, its employees or agents or
- otherwise) save as may be expressly provided in these Conditions.

  The entire liability of the Seller under or in connection with the contract between the Seller and the Buyer shall not exceed the price of the Goods and/or the Services (as the case may be) save as expressly provided in these Conditions.
- Any repair, replacement or refund of any monies made by the Seller to the Buyer shall not under any circumstances be deemed to be an admission of any liability on the part of the Seller to the Buyer (or any third party), and shall be without prejudice to the rights of the Seller which the Seller hereby reserves in full should it make any such repairs, replacements or refunds of monies.
- The Seller shall not be liable to the Buyer, or be deemed to be in breach of contract by reason of any delay in performing, or any failure to perform any of the Seller's obligations in relation to any Goods and/or Services (as the case may be) if the delay or failure is due to any cause beyond the Seller's reasonable control.

#### 10. Design and Drawings

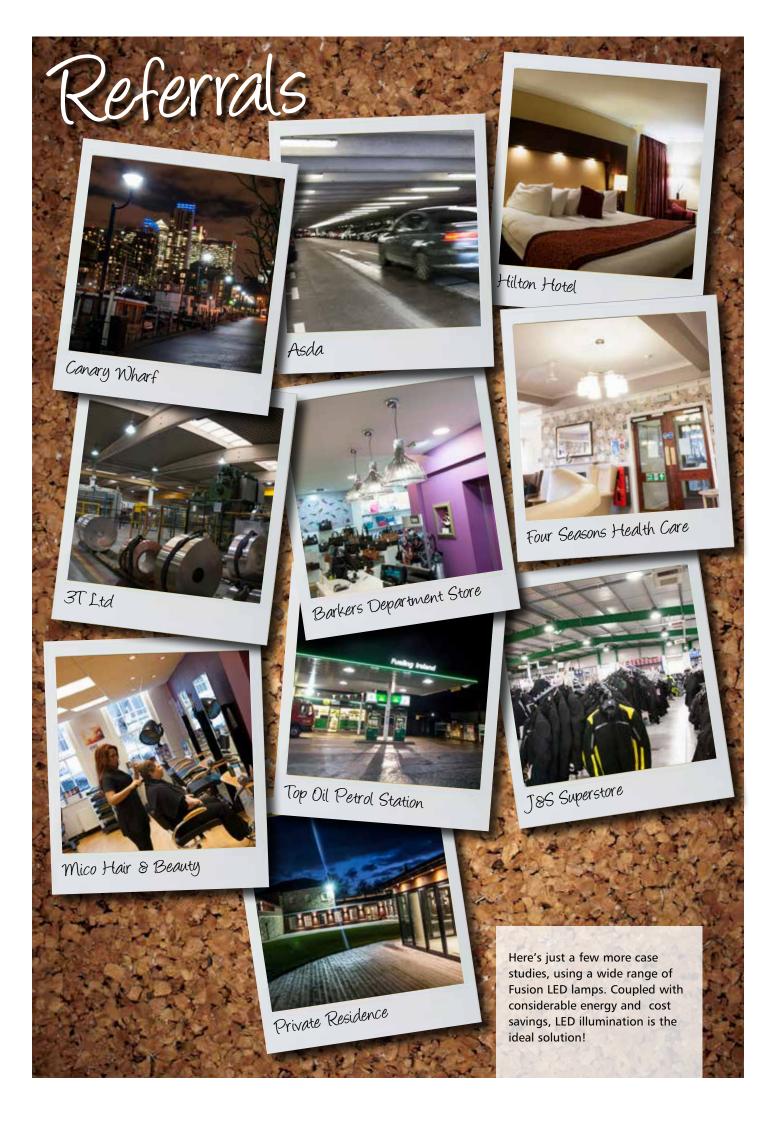
- All figures, statements, advice, recommendations, drawings, designs, suggestions and specifications contained or referred to in any documents supplied by the Seller to the Buyer are given in good faith, but shall be approximate only, and shall not (unless the Seller specifically warrants the same in writing) be warranted to be accurate. All such matters should be checked and verified for accuracy and suitability by the Buyer, and accordingly the Seller accepts no liability or responsibility whatsoever in relation to such matters unless specifically warranted in writing in the manner referred
- The Seller will make available information required in relation to the design, construction and testing of the Goods as is reasonably necessary for the Buyer to take appropriate steps to see that the Goods will be, when installed, safe and not constitute a risk to the health of any person provided always that the Buyer shall indemnify, and keep indemnified, the Seller against all claims, costs, actions, damages or liabilities resulting directly or indirectly (including economic and consequential loss) for any claim brought against the Seller arising out of the use of the Goods

#### 11. Termination/Suspension

- The Buyer shall not be entitled to cancel the contract between the Seller and the Buyer and if the Buyer purports to do so it shall indemnify the Seller for all losses, costs and expenses incurred by the Seller in relation to the contract.
- Without prejudice to any other right or remedy, the Seller shall be entitled to suspend forthwith further performance and/or terminate contractual relations with the Buyer without any liability to the Buver if the Buver:
- is in breach of any of these Conditions or (in the absolute opinion of the Seller) is likely to breach any Condition herein: or
- becomes insolvent, has a receiver appointed over the whole or any part of its assets, enters into any compound with creditors, or has an order made or resolution passed for it to be wound up (otherwise than in furtherance of a scheme for amalgamation or reconstruction) or if the ownership or control of it shall pass into the hands of any other legal person, or an event analogous occurs in respect of the Buyer in any jurisdiction to which the Buyer is subject.

- The Seller is a member of a group of companies and accordingly the Seller may perform any of its (a) obligations or exercise any of its rights hereunder by itself or through any other member of its group
- The Seller shall be entitled to subcontract the whole or any part of its obligations under the contract between the Seller and the Buyer to any third party which it may at its absolute discretion determine but any subcontract shall not relieve the Seller of its obligations hereunder.
- Any notice required or permitted to be given by either party to the other under these Conditions shall be given in writing and addressed to the other party at its registered office, principal place of business or at such other address as may be notified to the other party from time to time.
- No waiver by the Seller of any breach of contract by the Buyer shall be considered a waiver of any subsequent breach of the same or any other provision.

  If any term of these Conditions prove illegal or unenforceable in whole or part, such term shall be
- deemed excised from these conditions without effect upon the validity of the remainder of these
- A person who is not a party to the contract between the Seller and the Buyer has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce or enjoy the benefit of any term of such
- In addition to these Conditions of Sale, Orders placed via the Seller's website shall be subject to any
- legal terms and notices published there by the Seller.
  These Conditions and the contract between the Buyer and Seller shall be governed by the laws of England, and the English Courts shall have exclusive jurisdiction.

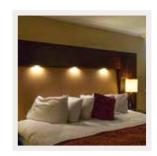


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