

# LED60 - SPECIFICATION SHEET



## KEY FEATURES

- LED strip specifically engineered for high-usage retail and commercial applications where low running costs and a long life expectancy is required.
- Inbuilt current regulation technology to ensure a uniformed light output and reduced operating temperature.
- Strict manufacturing processes including 2 step McAdam ellipse binning for exceptional colour consistency.
- Achieves over 790lm per metre output and efficiency of 150 lumen per watt.
- Over 50,000 hour LED life expectancy and 5 year warranty.
- Independently tested to LM-79-08, (BS) EN 13032-4:2015 & CIE S025:2015 standards.



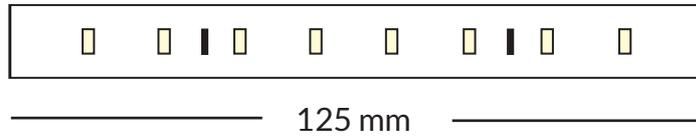
## EXAMPLE APPLICATIONS



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## ELECTRICAL & PHYSICAL DATA

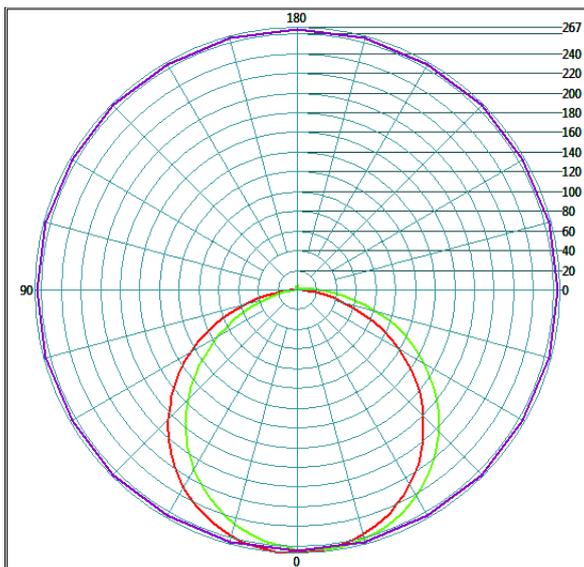
IP RATING	IP20	LEDS PER METRE	64
FREQUENCY	DC	FPC WIDTH	8 mm
VOLTAGE	24V	FPC HEIGHT	2 mm
CURRENT (PER METRE)	0.220A	FPC CUTTING INCREMENT	125 mm
CONSUMPTION (PER METRE)	6W	FPC FINISH	White FPC with Ledridge® logo
BEAM ANGLE	120	MAXIMUM RUN LENGTH	5 m
REEL SIZE	5 m	OPERATING TEMPERATURE	Max 60 °C @ tc point



## LIGHT & PERFORMANCE DATA

LUMINOUS FLUX	790 lm	COLOUR TEMPERATURE (CCT)	3000K
LUMINOUS EFFICACY	150 lm/W	CRI	>80
LUX @ 0.5M	1059 lx	LED TOLERANCE	2SDCM
LUX @ 1M	265 lx	LED LIFE EXPECTANCY	50,000 hours

## POLAR PLOT (CD)

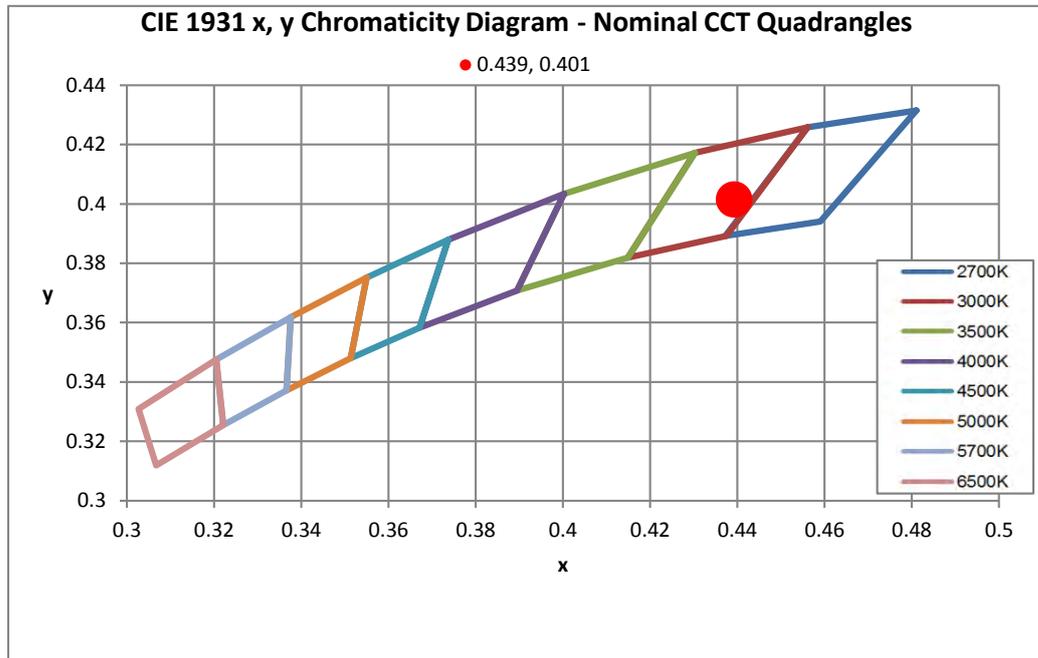


## PROJECTED ILLUMINANCE

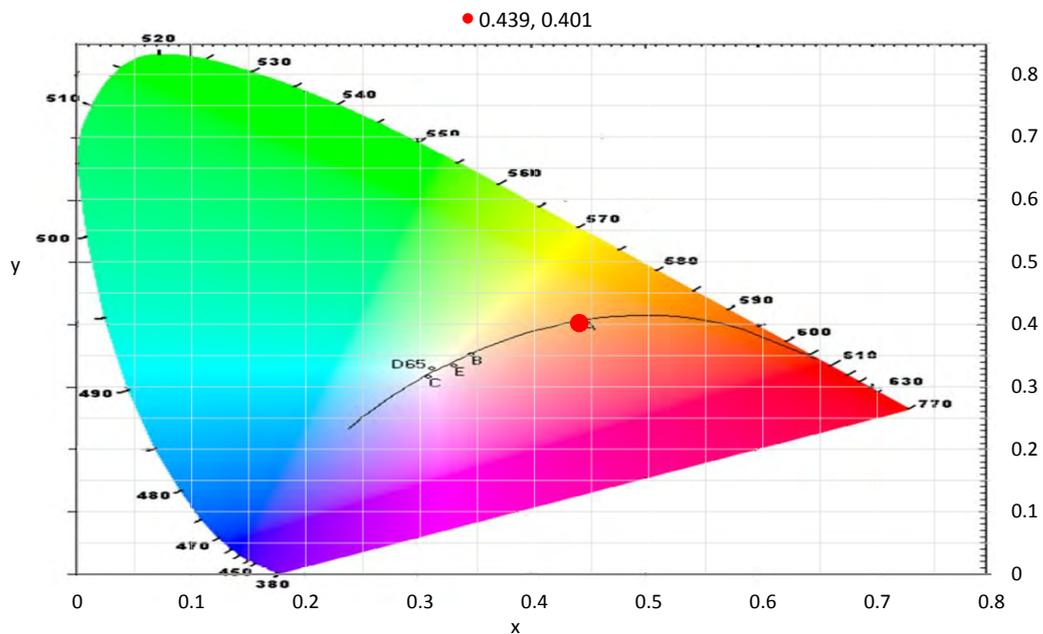
MOUNTING HEIGHT (M)	PROJECTED ILLUMINANCE (LX)
0.5M	1059 lx
1.0M	265 lx
2.0M	66 lx
3.0M	29 lx
4.0M	17 lx
5.0M	11 lx

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## CIE 1931 CHROMACITY DATA (X, Y)



## CIE 1931 COLOUR CHART



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## INSTALLATION GUIDANCE & TESTING INFORMATION

**WARNING!** Read this section before any installation work is carried out. All work should be carried out as per our instructions. Failure to do so may damage the unit and other products associated with it and void any warranty.

### VOLTAGE, DRIVERS & MAXIMUM LOAD

This LED tape is not mains voltage. This LED strip product must be used with a 24v DC constant voltage LED driver.

You should check the correct LED driver is used before starting installation as incorrect drivers may damage the LED tape beyond repair. Do not exceed the maximum load of your LED driver.

To calculate the correct minimum wattage of your LED driver for your LED tape use the following calculation:

Wattage of LED tape per Metre	X	Total Length Metres of LED Tape in	=	Total Wattage Required of LED Driver
e.g 3.4w	X	4	=	13.6W

Ensure your LED drivers maximum load is greater than Total Wattage Required of LED Driver from the above calculation.

For retail applications, as a minimum, all LED drivers should have inbuilt short circuit, overload and over temperature protection. They must also be MM and F rated to be enclosed within a wooden carcass or mounted directly onto a combustible surface.

### INSTALLATION ENVIRONMENT

LED tape is not designed to be attached directly to a non conductive surface such as wood, brick, paper, plaster or plastic. Doing so will reduce the life of the LED.

For retail applications it is strongly recommended that the LED strip is installed onto an aluminium housing or heatsink. An aluminium heatsink will ensure that the heat generated by the LEDs is dissipated correctly and keep the LED strip operating temperature in its normal working range.

It also is important that there is a flow of free air movement around the LED strip to allow convection of generated heat.

LED extrusions can be used to change the direction of light and reduce LED glare or spotting for a more homogeneous effect within a retail unit.

This product is rated IP20 and does not offer any ingress protection against water or damp/humid environments.

Installing this product in the incorrect environment will void the extended 3 year warranty.

**IF IN ANY DOUBT CONTACT US: 0116 246 1188**

### CUTTING, CORNERS & BENDS

This product can only be cut on the cut points shown on the FPC. For this product the cutting increment is every 100mm (8 LEDs). This is indicated by a scissor mark on the FPC. If the LED is cut in any other place this will damage the FPC and cause failure of the product.

LED tape is flexible, however it will not make flat bends. LED strip will only bend concave and convex along its length.

Forcing the LED tape to make flat bends will damage the FPC, causing some or all LEDs to stop working. To make 90° beds you should create a link between two LED tapes. Careful consideration should be taken with this at the design stage of the project.

### MAXIMUM RUN LENGTH

The maximum run length of this product is 5 metres. The total length of LED strip or strips wired in series must not exceed 5 metres.

To create longer runs, wire multiple lengths in parallel to the LED driver (not exceeding maximum load of driver).

Installing this product in a total run length in excess of 5m will void the extended warranty.

### CONNECTORS & CABLING

In a retail environment consideration must be taken for the specification and route planning of low voltage cabling.

As a minimum all cables and connectors must be rated according to the load on each low voltage circuit. Low voltage fusing should be used to act as a secondary failsafe to minimise risk in the event of damage to/failure of the LED driver, cabling, connectors or LED strip.

Careful route planning of low voltage cables at a design stage will minimise excess cable and reduce the risk of excess heat build up within the circuit/unit.

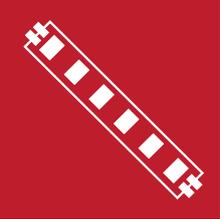
Ledridge can offer guidance on the design and planning of lighting circuits and have fully bespoke manufacturing capabilities.

### TESTING INFORMATION

All electrical and lighting data supplied in this product guide has been independently tested and verified by LUX-TSI Ltd, Pencoed Technology Park, Pencoed, Bridgend, CF35 5AQ.

LUX-TSI Ltd. hold all information on file under report number GNC-2191.

LUX-TSI Ltd. are a UKAS accredited testing house and a member of the BSI Associate Laboratory Programme.



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## 3 YEAR EXTENDED PRODUCT WARRANTY

This product is sold with a 5 year extended warranty, effective for 60 months from the date of purchase. This is on a return-to-base basis and is subject to the terms and conditions outlined below. In the unlikely event of a validated product failure during this period Ledridge will arrange for the product to be repaired or replaced at our discretion.

Please note, the 5 year extended warranty applies to this LED strip product only.

## TERMS & CONDITIONS

1.1 Subject to the conditions set out below the Seller (Ledridge Lighting) warrants that the Goods will 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 as stated above from the date of purchase or for such longer period as the Seller (in its absolute discretion) may determine. The warranty does not apply to consumable items included with or in the product, which may have a reduced or no warranty period.

1.2 The warranty given in clause 1.1 above is given by the Seller strictly subject to the following conditions:

1.2.1 The Seller shall be under no liability in respect of any defect in the Goods arising from any drawing design specification or other information supplied by the Buyer or their agents.

1.2.2 The Seller shall be under no liability in respect of any defect arising from fair wear and tear, willful damage, negligence, abnormal working conditions or water damage where the product has limited or no water protection and installed in the incorrect environment, failure to follow the Seller's instructions (whether oral or written), misuse or alteration or repair of the goods without the Seller's approval.

1.2.3 The Seller shall be under no liability under the warranty given in 1.1 above (or any other warranty condition or guarantee) if the total price for the Goods has not been paid by the due date for payment.

1.2.4 The warranty given in 1.1 above does not extend to any Goods, parts, materials or equipment not manufactured by the Seller in respect of which the Buyer shall only be entitled to the benefit of any such warranty or guarantee as is given by the manufacturer thereof the Seller.

1.3 Any claim by the Buyer which is based on any defect in the quality or condition of the Goods shall be notified to the Seller within 7 days from the date of delivery of the Goods or within a reasonable time after discovery of the defect or failure. 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 price of the Goods.

1.4 Any repair, replacement or refund or 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.

1.5 All liabilities of the Seller to the Buyer determined by the Court of Law as not having been excluded hereunder shall be limited in total to the total price of the Goods as shown on the Seller's invoice.

1.6 To obtain warranty service, the original proof of purchase will be required.