

# MR16-800 Series

## High-Power LED MR16 Retrofit DownLight



### Features

- Compact LED Array and heatsink
- Powered by Bridgelux LEDs
- Extremely high lumen output
- Durable machined aluminium housing and heatsink
- Suitable Driver Supplied
- MR16 Retrofit
- Available in Cool White, Neutral White and Warm White

### Description

The MR16-800 is a brand new concept in white lighting. Designed to retrofit directly into a standard MR16 downlight fitting and supplied complete with its own drive unit, this has a comparable light output to a 50W dichroic downlight and yet uses as little as 20% of the electrical energy which not only saves you money in the long run but also helps to cut down on carbon emissions.

The unit is suitable for any indoor lighting project and is designed to easily fit into most MR16-style housings.

### LIGHTING PERFORMANCE

| Model                | Light Source    | LED Qty | Lumen Output | Expected Lifetime |
|----------------------|-----------------|---------|--------------|-------------------|
| <b>Cool White</b>    | Bridgelux Array | 1       | 800 @ 700mA  | 50,000hrs +       |
| <b>Neutral White</b> | Bridgelux Array | 1       | 920 @ 1050mA | 50,000hrs +       |
| <b>Warm White</b>    | Bridgelux Array | 1       | 850 @ 1050mA | 50,000hrs +       |

(Lumen output figures based on clear optic cover and heatsink temperature of 60°)

### EFFICACY (With Cover Options)

| Model                | Drive Current | Lumen Output |          | Lumens per Watt |          |
|----------------------|---------------|--------------|----------|-----------------|----------|
|                      |               | Clear        | Diffused | Clear           | Diffused |
| <b>Cool White</b>    | 700mA         | 800 lm       | 720 lm   | 75 lm/W         | 68 lm/W  |
| <b>Neutral White</b> | 1050mA        | 920 lm       | 830 lm   | 61 lm/W         | 55 lm/W  |
| <b>Warm White</b>    | 1050mA        | 850 lm       | 760 lm   | 57 lm/W         | 51 lm/W  |

### INPUT DATA

| Model                | Drive Current | Input Voltage | Power Supply     | Input Connection |
|----------------------|---------------|---------------|------------------|------------------|
| <b>Cool White</b>    | 700mA         | 230VAC        | Constant Current | Flying Lead (2M) |
| <b>Neutral White</b> | 1050mA        | 230VAC        | Constant Current | Flying Lead (2M) |
| <b>Warm White</b>    | 1050mA        | 230VAC        | Constant Current | Flying Lead (2M) |

### OPERATING DETAILS

| Model                | Input Power    | Ambient Temp. Range  |
|----------------------|----------------|----------------------|
| <b>Cool White</b>    | 8.9W @ 700mA   | -10 to +40 Degrees C |
| <b>Neutral White</b> | 12.8W @ 1050mA | -10 to +40 Degrees C |
| <b>Warm White</b>    | 12.8W @ 1050mA | -10 to +40 Degrees C |

### PHYSICAL DETAILS

| Model             | Mounting Type                    | Finish         |
|-------------------|----------------------------------|----------------|
| <b>All Models</b> | Retrofit (MR16 Fitting Required) | Black Anodised |

Unit may be used with either rear-mounting or front mounting MR16 fittings

### OPTICS

| Model             | Reflector Optics (half-divergence angle -FWHM) | Optic Cover     |
|-------------------|--|-----------------|
| <b>All Models</b> | Spot (12°), Medium (16°), Wide (25°)           | Clear, Diffused |

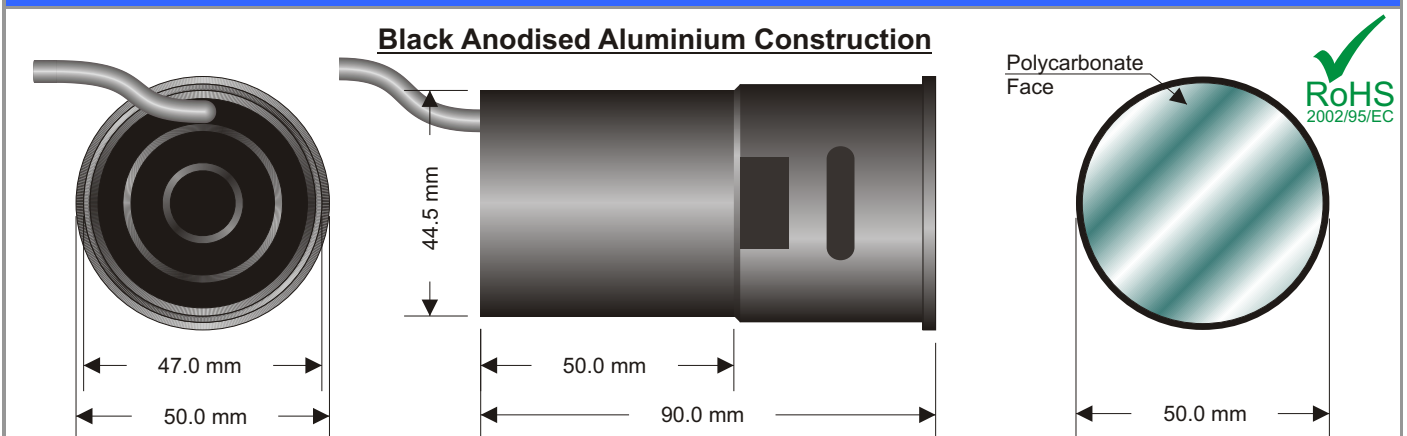
### COLOURS

| Model                | Single LED Colours   |
|----------------------|--|
| <b>Single-Colour</b> | Cool White (5600°K), Neutral White (4100°K), Warm White (3000°K) |

### SUPPLIED DRIVER

| Model  |
|--|
| Drivers supplied will be either 700mA or 1050mA constant current (models may vary) |

### PROFILE DIMENSIONS

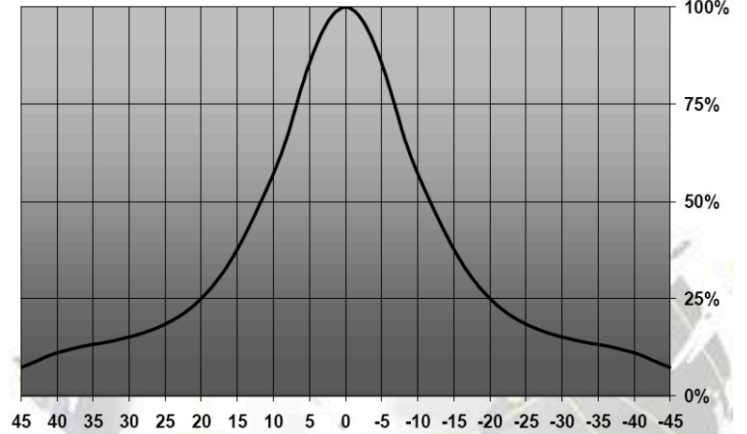


We reserve the right to make changes at any time in order to maintain the highest product quality.

**Spread Pattern - Spot Optic (24°)**



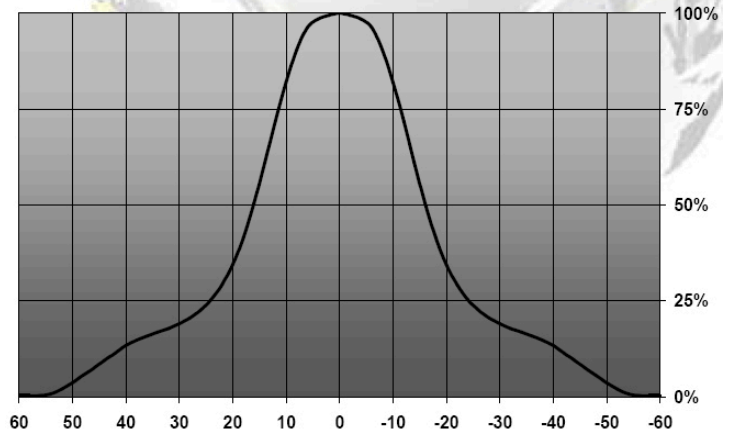
**Relative Intensity - Spot Optic (24°)**



**Spread Pattern - Medium Optic (32°)**



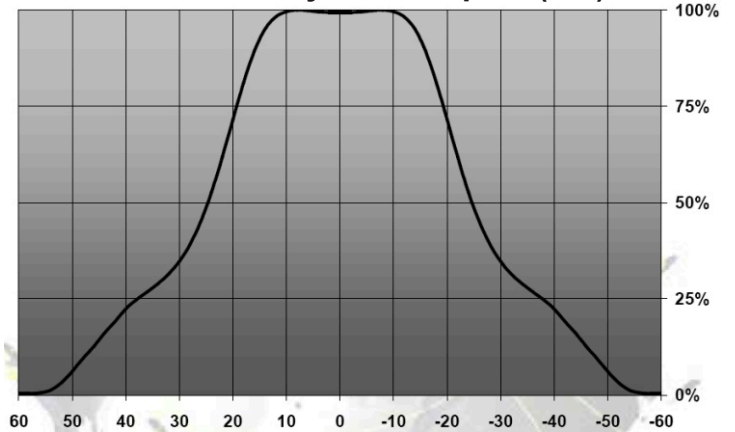
**Relative Intensity - Medium Optic (32°)**



**Spread Pattern - Wide Optic (50°)**



**Relative Intensity - Wide Optic (50°)**



**Photometric Lux Figures for Neutral White - 4100°K (1050mA Operating Current)**

| DISTANCE | SPOT (24°) |             | MEDIUM (32°) |             | WIDE (50°) |             |
|----------|------------|-------------|--------------|-------------|------------|-------------|
|          | Diameter   | Illuminance | Diameter     | Illuminance | Diameter   | Illuminance |
| 1 Metre  | 0.43 m     | 1460 lux    | 0.63 m       | 1320 lux    | 0.93 m     | 750 lux     |
| 2 Metres | 0.85 m     | 370 lux     | 1.26 m       | 330 lux     | 1.87 m     | 190 lux     |
| 3 Metres | 1.28 m     | 160 lux     | 1.89 m       | 150 lux     | 2.80 m     | 80 lux      |
| 4 Metres | 1.70 m     | 90 lux      | 2.52 m       | 80 lux      | 3.73 m     | 50 lux      |

