

**archlum**  
The right light for every space



**MR16**  
Retrofit LED Engine

## archlum MR16

Replacement of 50 W MR16 halogen lamps or 20 W HID lamp.

With three different beam angles: spot, medium and wide, Archlum's MR16 LED Engine can be used in various applications ranging, from accent illumination of sculptures and artworks, to general lighting in indoor areas.

It is available in warm-light colours and suitable for use in high-class hotels and restaurants.

With a Colour Rendering Index of maximum CRI 97 and R9 (Red) >85, colour reproduction of our MR16 is close to that of daylight.

A deep TIR lens is optimised for best light-control, whilst the faceted structure spreads the light over a large surface to maximise the visual comfort.



## LARGE LENS

The large volumetric TIR lens has a specific ratio of diameter and height, which allows for better control of light in comparison to the flat Fresnel lenses. The increased effectiveness of the lens gives it a more precise light beam.

The dark lens holder absorbs any escaping light, instead reflecting it back without control as a glare, stray light.

Due to the contact between the reflecting and refracting (exit) surface, the lens rim is an area particularly critical for generating uncontrolled stray light. By covering this area with a dark snoot, we precisely eliminate stray light, without any major influence on the optic efficiency.



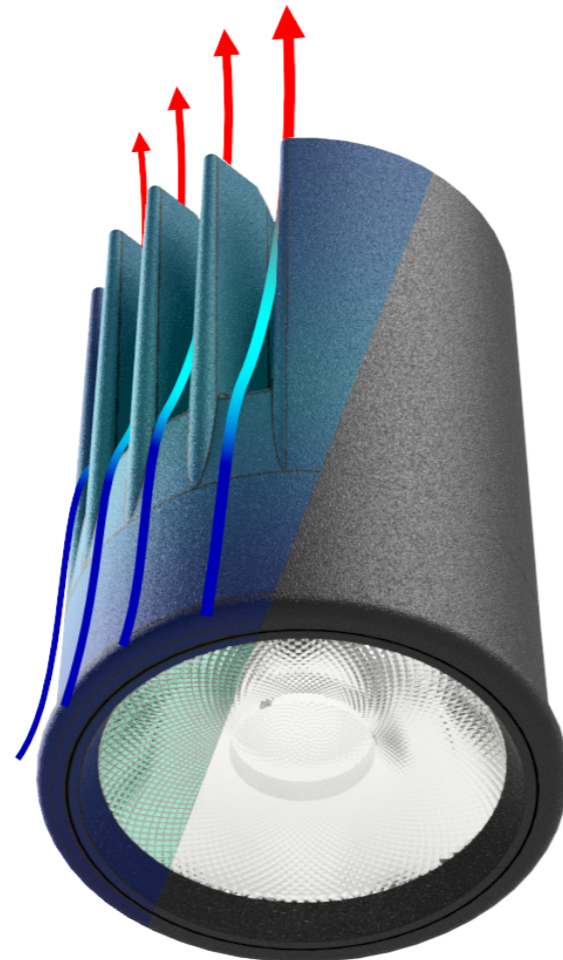


# THERMAL MANAGEMENT

Heat sink fins that are too dense or have the wrong positioning can block the airflow and lead to air pockets where hot air is accumulated and cannot be extracted from the heat sink.

Designed by our R&D team, this heat sink has optimised fins in terms of size and fin distance to promote airflow and allows for the best usage of heat sink volume and surface area.

This enables us to dissipate more heat from the engine of merely 70mm.



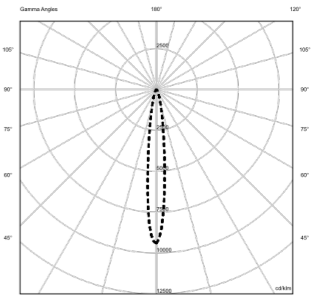
70 mm



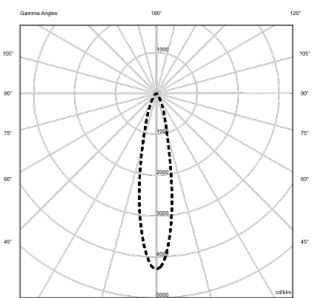
Ø 50 mm

2200K 2400K 2700K 3000K 97 CRI max. 5 YEARS WARRANTY

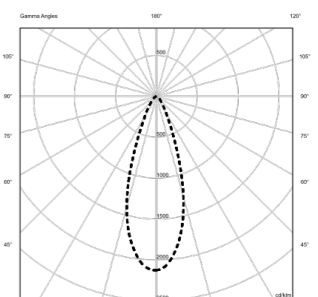
Spot 13°



Medium 24°



Wide 38°



| Catalog ID        | CCT    | CRI | Beam angle | Light output | Vf   | Imax.  | Pmax. |
|-------------------|--------|-----|------------|--------------|------|--------|-------|
| ARCH-MR16-13-922  | 2200 K | 90  | 13°        | 980 lm       | 36 V | 350 mA | 13 W  |
| ARCH-MR16-24-922  | 2200 K | 90  | 24°        | 1030 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-38-922  | 2200 K | 90  | 38°        | 1000 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-13-924  | 2400 K | 90  | 13°        | 1020 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-24-924  | 2400 K | 90  | 24°        | 1080 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-38-924  | 2400 K | 90  | 38°        | 1040 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-13-927+ | 2700 K | 97  | 13°        | 950 lm       | 36 V | 350 mA | 13 W  |
| ARCH-MR16-24-927+ | 2700 K | 97  | 24°        | 1000 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-38-927+ | 2700 K | 97  | 38°        | 970 lm       | 36 V | 350 mA | 13 W  |
| ARCH-MR16-13-927  | 2700 K | 90  | 13°        | 1090 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-24-927  | 2700 K | 90  | 24°        | 1150 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-38-927  | 2700 K | 90  | 38°        | 1110 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-13-930+ | 3000 K | 97  | 13°        | 1020 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-24-930+ | 3000 K | 97  | 24°        | 1080 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-38-930+ | 3000 K | 97  | 38°        | 1040 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-13-930  | 3000 K | 90  | 13°        | 1150 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-24-930  | 3000 K | 90  | 24°        | 1210 lm      | 36 V | 350 mA | 13 W  |
| ARCH-MR16-38-930  | 3000 K | 90  | 38°        | 1180 lm      | 36 V | 350 mA | 13 W  |

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[www.archlum.com](http://www.archlum.com)