



Lighting solutions that don't cost the earth

**MR16 Polymer
XPE - Series**

This MR16 retrofit lamp is usually made in Aluminum, and now replaced by a thermally conductive plastic, to control the heat. This new Polymer system also offers the additional benefits of flexibility in design, exceptional durability and weight reduction. This Polymer type is recyclable and therefore the sustainable solution for the future.

Features

- Light source: 3 x 1 Watt Cree XPE power LED
- More than 40.000 hours
- Low heat, less than 58°C for 3 Watt
- no UV or IR light radiation
- Homogeneous illumination
- **Thermal plastic** heat fins with excellent efficiency,
- **light weight: 27 gram only**
- 3 Watt MR16 can achieve directional light output equal to 30 Watt halogen lamp yet consumes 80% less power
- **CE** and RoHS
- Works with 12V AC/DC lighting systems



Typical Applications

- Retail Store Lighting
- Retrofit Lamp
- Ceiling Lighting
- Energy Saving Programs
- Sustainable Energy
- Spot lighting
- Architectural Lighting
- Display Case Accent
- Artwork Lighting
- General lighting
- Amusement Park Accent





PRODUCT SPECIFICATIONS

LIGHT SOURCE	3 x 1 Watt Cree XPE power LED
OPTICS	3 in 1 optical grade PC lens
LENS DIAMETER	35mm
BEAM ANGLE	30° (Wide Spot)
RENDERING INDEX (Ra)	>80 (for warm white color)
TOTAL LENGTH	50±1.5 mm (including pins)
WEIGHT	27.5 g
HOUSING MATERIAL	Thermal plastic, 5 cm (2") diameter
BASE	G x 5.3 pins
DIMMERBILITY	Not Dimmable

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 50°C to 70°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	12V AC or DC
POWER CONSUMPTION	≤ 4W
POWER FACTOR	≥ 0.9
TRANSFORMER	Low voltage magnetic to provide 12V AC or 12V DC

DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER

PRODUCT DIMENSIONS (mm)

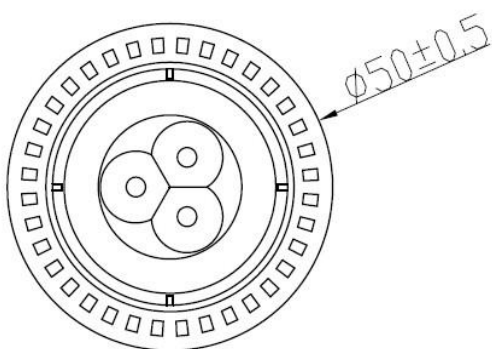


Fig 1. MR16 top view

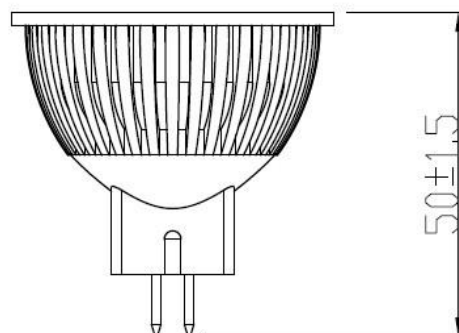


Fig 2. MR16 side view



3 Watt MR16 PRODUCT CODE

ORDER CODE	Color	CCT (K)	Operating Voltage	LED Power (W)	Typ. Luminous Flux (lm)	Typ. Center Illuminance @ 1m (Lux)	BEAM ANGLE
BT3-D3VS-1P/XPE	Warm White	3000K	12V AC/DC	3 x 1 Watt	175 lm	800	30° ±2°

Illumination Characteristics (T_a=25°C)

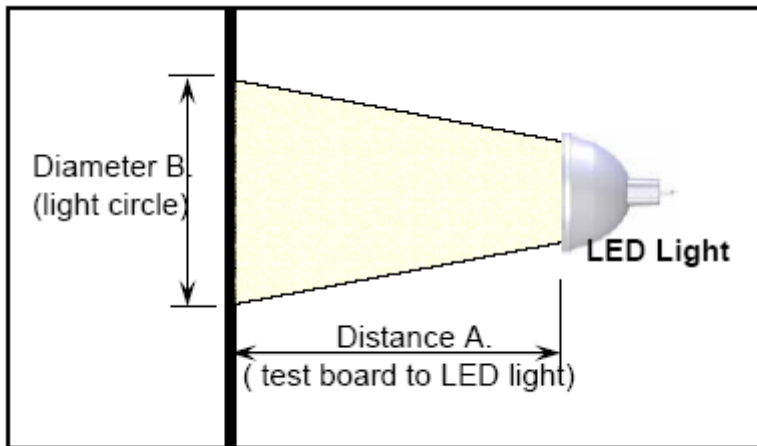


Fig 1. Set up for Illuminance Measurement

3 x 1 Watt Model

Distance		Typical Illuminance Measured at Center of Beam
Dist A (cm)	Dia. B (cm)	Warm White
30	70	6800
50	110	2900
100	170	800
150	250	380
200	320	220

Note: Center beam lux is measured with Digital Lux Meter (Model TES-1334A)

Typical Electrical Characteristics at T_a=25°C

Note: Lamp is optimized for 12V DC input voltage



3 x 1 Watt Model

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	V _{AC}	10	12	14	V
Input Voltage (DC)	V _{DC}	9	10	12	V
Individual LED Forward Current	I _F	-	300	-	mA
Estimated Life ^[1]		-	40,000	-	hours
Optimized Body Temp (3 x 1 Watt LED)	T	-	55	60	°C

Note[*] – Manufacturer projects spotlights made with Cree XPE LED to maintain an average of 70% lumens maintenance after 40,000 hours. This estimation is made based on data from LED manufacturer

THIRD PARTY WARRANTIES

With respect to products sold to the purchaser by manufacturer but not manufactured by manufacturer, manufacturer makes no warranty of any kind, express or implied, including, without limitation, any warranty of merchantability or fitness for a particular purpose, but will make available to the purchaser, to the extent permitted by law and relevant contracts, the warranties of the manufacturer of the relevant product upon the purchaser's timely written request.

NON-IMPLIED WARRANTIES

The warranties given in these terms are the only warranties given by the manufacturer with respect to the products and are given in lieu of all other warranties, express or implied, including, but not limited to, warranties of merchantability, of non infringement and of fitness for a particular purpose. Purchaser's exclusive remedies, and manufacturer's sole liability, for any nonconformity or defect in any product shall be those expressed herein.

LIMITATION OF LIABILITY

An essential purpose of the limited exclusive liabilities and remedies in this agreement is allocation of risks between manufacturer and purchaser, which allocation of risks is reflected in the purchase price for the products. under no circumstances shall manufacturer's liability arising out of or in connection with this agreement or manufacturer's performance or asserted failure to perform hereunder, in contract, tort (including negligence) or otherwise, exceed the purchase price of the product to which such liability relates. in no event shall manufacturer be liable for special, incidental or consequential damages, including, without limitation, damages resulting from loss of use, profits, business or goodwill, whether or not manufacturer has been advised of the possibility thereof.

WARNING:

Patents in China, Europe, USA and Asian Countries have been applied for since December 2010 and we shall not hesitate to bring any manufacturing or distributing parties infringing our Intellectual Property Rights to Court and claim damages.

Patents Pending Product
MR16Polymer-XPE-2011
Specifications are subject to change without notice.
Copyright LINE LITE INTERNATIONAL B.V. All rights reserved