



The **BriLux™ V2-SHARP** utilized Sharp's new **M2-SHARP** series power LED in the MR16 base lamp that is capable of producing up to 160 lumens of warm white light with only 4 Watt of power, offering the highest lumens per watt spotlight in the industry.

With our "Cool Beam" thermal solutions, we are able to maximize the light output of our 4 Watt SHARP series spotlight while maintaining a very low heat sink temperature of about 65°C. The SHARP series features one piece of 3.6 Watt SHARP LED.



- Light source: 4 Watt SHARP Power LED
- More than 50,000 hours
- **40° Beam Angle Frosted Lens**
- Low heat, no UV or IR light radiation
- Homogeneous and well defined illumination
- Highest Luminous Efficacy: 50 Lm/Watt for Cool White color
- Optimized heat sink with the right looks and sleek design
- 4 Watt version can achieve directional light output equal to 50 Watt halogen lamp yet consuming 80% less power
- Reverse polarity protection
- Safety Standard: **CE, KEMA** and RoHS
- 12V AC/DC

Typical Applications

- Landscape Accent/Spot lighting
- Architectural Lighting
- Display Case Accent
- Artwork Lighting
- Mood Lighting
- Amusement Park Accent





PRODUCT SPECIFICATIONS

LIGHT SOURCE	1 x 4 Watt SHARP Power LED
OPTICS	Optical grade Frosted Lens Polycarbonate collimator
LENS DIAMETER	33 mm
BEAM ANGLE	40° (Wide Spot)
RENDERING INDEX (Ra)	> 60 (cool white) > 70 (warm white)
TOTAL LENGTH	49 mm (including pins)
WEIGHT	40g
HOUSING	Aluminum with Anodized Silver Finish, 5 cm (2") diameter
BASE	GX5.3 pins
DIMMABILITY	Not Dimmable

ENVIRONMENTAL SPECIFICATIONS

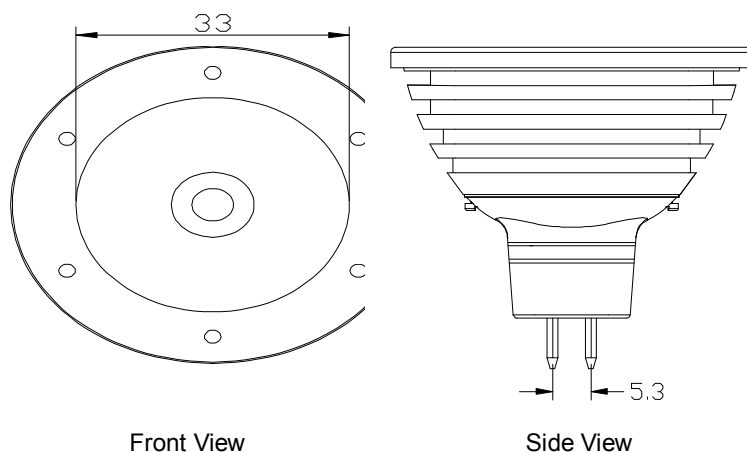
TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 40°C to 50°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	12V AC or 12V DC
POWER CONSUMPTION	≤ 4 Watt
TRANSFORMER	Low voltage magnetic or switching power supply to provide 12V AC or 12V DC

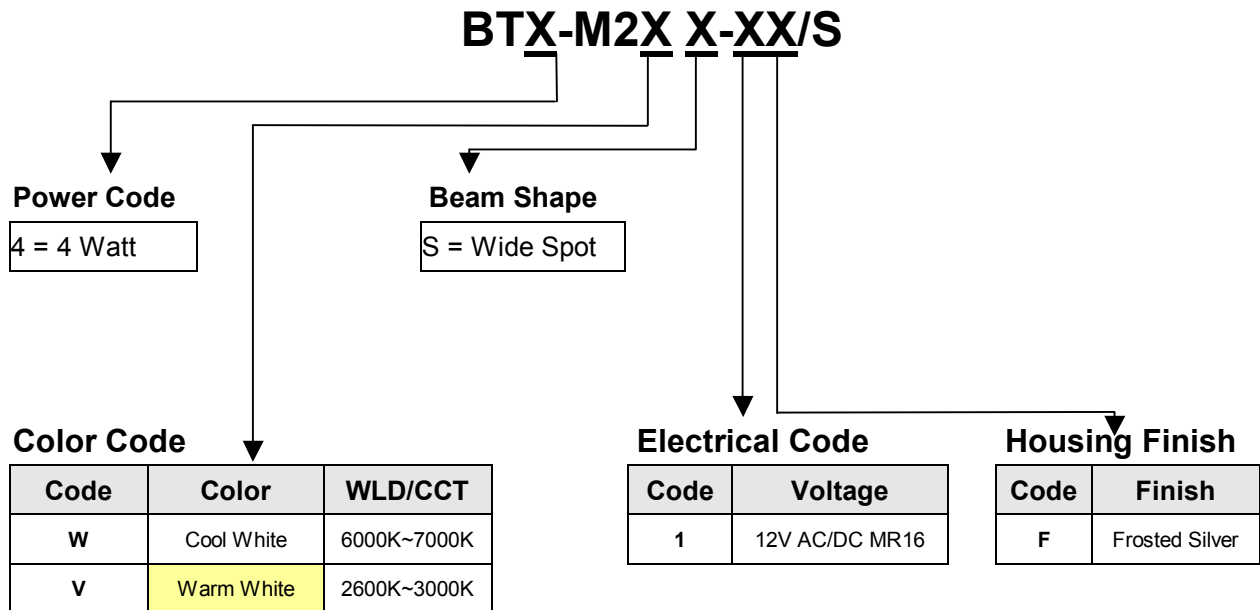
DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER

PRODUCT DIMENSIONS (mm)





PRODUCT ORDERING CODE



Wide Spot Model (40° Beam Angle)

ORDER CODE	Color	CCT (K)	Operating Voltage (V)	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
BT3-M2WS-1F/S	Cool White	6000K~7000K	12V AC/DC	1X3,6W	180lm	500	40° ±2°
BT3-M2VS-1F/S	Warm White	2600K~3000K			180 lm	430	

Typical Electrical Characteristics at T_a=25°C (For 4 Watt Model)

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	V _{AC}	10	12	14	V
Input Voltage (DC)	V _{DC}	9	12	14	V
LED Forward Current	I _F	—	330	—	mA
Estimated Life ^[6]		—	40,000	—	Hours
Optimized Body Temperature (4 Watt LED)	T	—	57	60	°C

Note: Lamp is optimized for 12V DC input voltage



Illumination Characteristics($T_a=25^{\circ}\text{C}$)

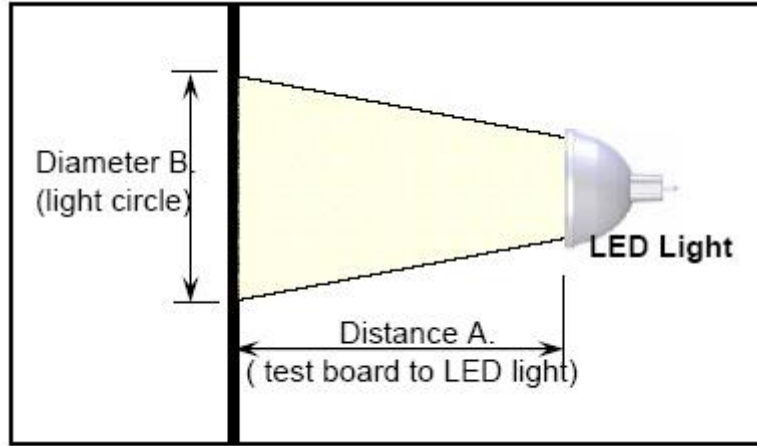


Fig 1. Set up for Illuminance Measurement

4 Watt Wide Spot Model (40° Beam Angle)

Distance		4 Watt Typical Illuminance Measured at Center of Beam (Lux)	
Dist A (cm)	Dia. B (cm)	Cool White	Warm White
50	30		1800
100	60	500	430
150	90	180	180
200	120		110

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

Note: All LED MR16 lamps are burnt in for 72 hours before every order shipment



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 April 2007 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
MR16M2-S-Rev. 1.0c
Specifications are subject to change without notice.
Copyright LINE LITE INTERNATIONAL B.V. All rights reserved