

## Features

- Light source: 3.6W Zenigata power LED
- Source life: More than 30,000 hours
- Low heat, no UV or IR light radiation
- Homogeneous and well defined illumination
- Highest Luminous Efficacy: 55 lm/watt for warm white color
- Optimized heat sink with the right looks and sleek design
- 5W version can achieve directional light output equal to 50W halogen lamp yet consume 80% less power
- Reverse polarity protection
- Safety Standard: **CE** and RoHS
- 2 year limited warranty (see page 8)
- Works with 12V AC/DC lighting systems



## Typical Applications

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

## PRODUCT SPECIFICATIONS

<b>LIGHT SOURCE</b>	1X3.6W Mini-Zenigata power LED
<b>OPTICS</b>	Optical grade reflector
<b>LENS DIAMETER</b>	33 mm
<b>BEAM ANGLE</b>	25° (Narrow Spot)
<b>RENDERING INDEX (Ra)</b>	> 80 (for cool white color) > 80 (for warm white color)
<b>TOTAL LENGTH</b>	53 mm (including pins)
<b>WEIGHT</b>	40g
<b>HOUSING</b>	Machined pure aluminum with anodized silver finish, 5 cm (2") diameter
<b>BASE</b>	GX5.3 pins
<b>DIMMABILITY</b>	Not Dimmable

## ENVIRONMENTAL SPECIFICATIONS

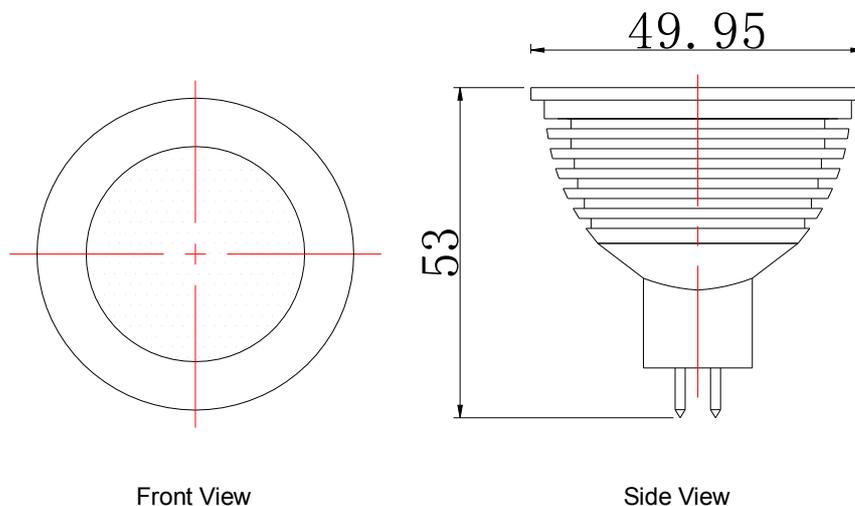
<b>TEMPERATURE RANGE</b>	Ambient: -20°C to 40°C; Surface of Lamp: 40°C to 50°C
<b>HUMIDITY RANGE</b>	0 to 95% non-condensing humidity

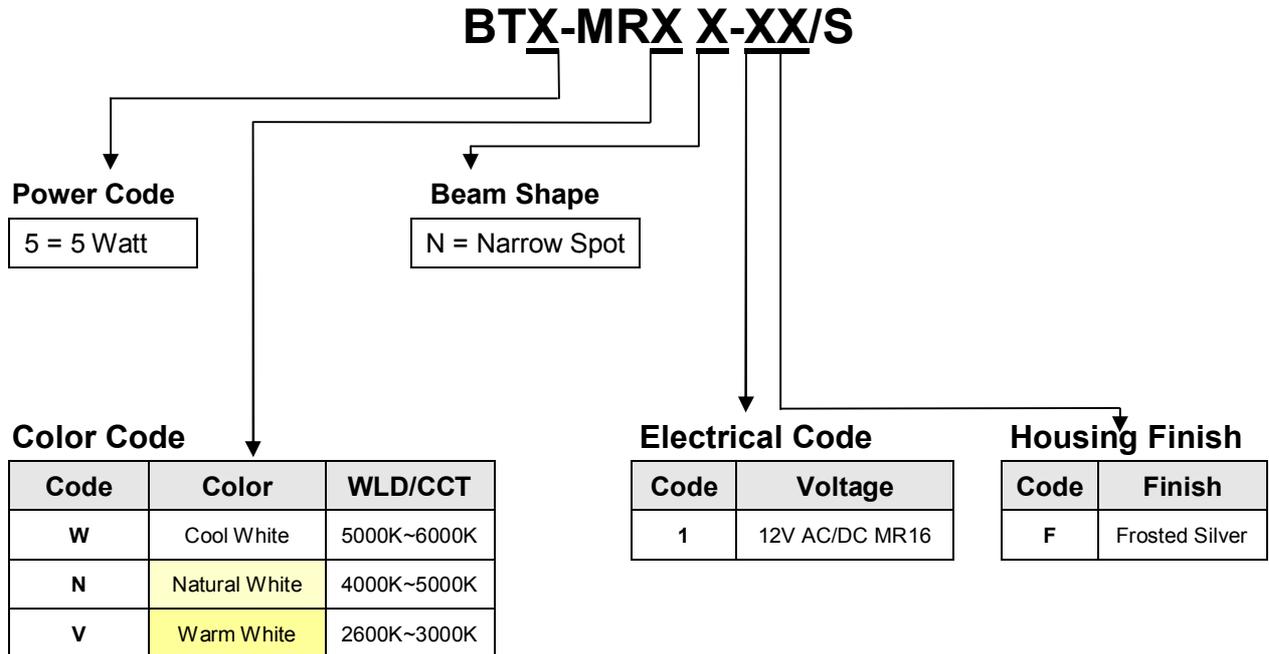
## ELECTRICAL SPECIFICATIONS

<b>VOLTAGE REQUIREMENT</b>	12V AC or 12V DC
<b>POWER CONSUMPTION</b>	5W
<b>TRANSFORMER</b>	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**

**Narrow Spot Model (25° Beam Angle)**

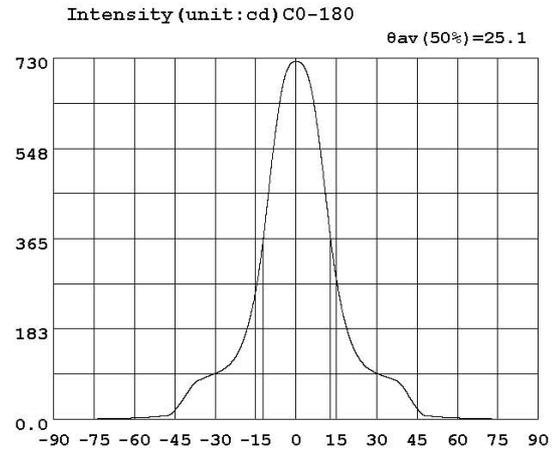
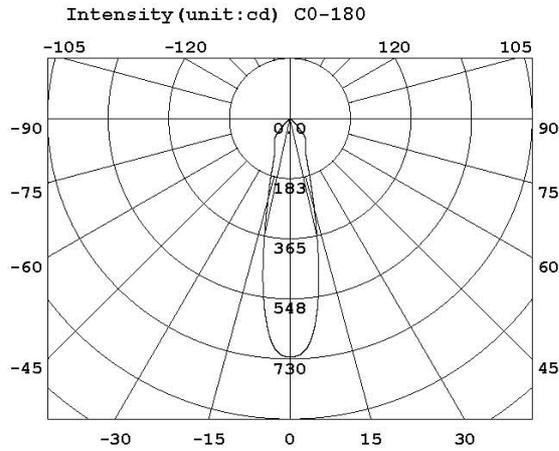
ORDER CODE	Color	CCT (K)	Operating Voltage (V)	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
BT5-MRWN-1F/S	Cool White	5000K~6000K	12V AC/DC	1X3,6W	N/A	720	25° ±2°
BT5-MRNN-1F/S	Nat. White	4000K~5000K			N/A		
BT5-MRVN-1F/S	Warm White	2600K~3000K			280 lm		

**Typical Electrical Characteristics at T<sub>a</sub>=25°C (For 5W Model)**

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	V <sub>AC</sub>	10	12	14	V
Input Voltage (DC)	V <sub>DC</sub>	9	12	14	V
Input Current	I <sub>F</sub>	—	420	—	mA
Estimated Life <sup>[6]</sup>		—	30,000	—	Hours
Optimized Body Temperature	T	—	65	70	°C

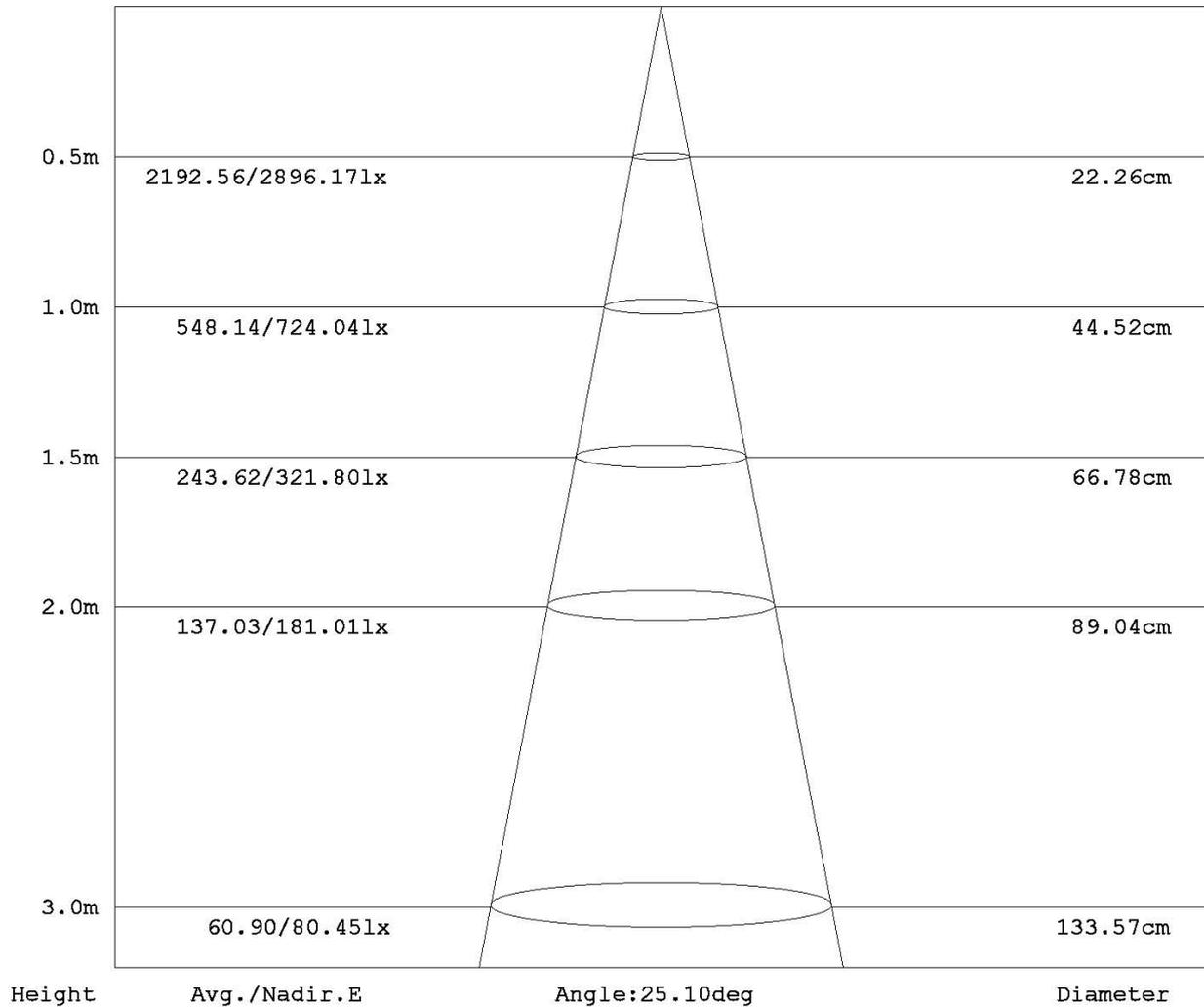
Note: Lamp is optimized for 12V DC input voltage

## Warm White LED Spotlight Intensity (C0-180 plane) Measurement



Intensity data:(deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.0017	-58.5	3.145	-27.0	100.8	4.5	693.6	36.0	80.88	67.5	1.369
-88.5	0.0370	-57.0	3.581	-25.5	106.6	6.0	659.0	37.5	77.64	69.0	1.219
-87.0	0.0891	-55.5	4.055	-24.0	114.5	7.5	608.6	39.0	70.66	70.5	1.083
-85.5	0.1682	-54.0	4.564	-22.5	125.4	9.0	546.7	40.5	59.77	72.0	0.9627
-84.0	0.2522	-52.5	5.160	-21.0	140.3	10.5	478.1	42.0	45.56	73.5	0.8576
-82.5	0.3430	-51.0	5.788	-19.5	159.8	12.0	406.4	43.5	32.85	75.0	0.7609
-81.0	0.4321	-49.5	6.479	-18.0	185.6	13.5	338.5	45.0	21.36	76.5	0.6682
-79.5	0.5246	-48.0	7.353	-16.5	218.5	15.0	283.1	46.5	11.53	78.0	0.5761
-78.0	0.6271	-46.5	10.22	-15.0	259.0	16.5	238.0	48.0	7.214	79.5	0.4900
-76.5	0.7264	-45.0	18.37	-13.5	310.6	18.0	200.8	49.5	6.350	81.0	0.4031
-75.0	0.8339	-43.5	28.41	-12.0	371.8	19.5	171.4	51.0	5.651	82.5	0.3304
-73.5	0.9447	-42.0	39.80	-10.5	444.1	21.0	148.6	52.5	5.050	84.0	0.2479
-72.0	1.064	-40.5	52.19	-9.0	517.9	22.5	131.7	54.0	4.478	85.5	0.1771
-70.5	1.197	-39.0	64.33	-7.5	585.0	24.0	118.5	55.5	3.954	87.0	0.1060
-69.0	1.335	-37.5	74.03	-6.0	642.0	25.5	108.8	57.0	3.493	88.5	0.0554
-67.5	1.491	-36.0	79.12	-4.5	684.9	27.0	102.0	58.5	3.052	90.0	0.0063
-66.0	1.682	-34.5	82.83	-3.0	710.0	28.5	97.01	60.0	2.643		
-64.5	1.903	-33.0	86.24	-1.5	721.5	30.0	93.03	61.5	2.299		
-63.0	2.147	-31.5	89.44	0.0	724.0	31.5	89.69	63.0	2.013		
-61.5	2.429	-30.0	92.71	1.5	721.8	33.0	86.68	64.5	1.762		
-60.0	2.759	-28.5	96.34	3.0	713.2	34.5	83.88	66.0	1.557		

Illuminance Measurement ( $T_a=25^{\circ}\text{C}$ )


Notes: 1) BriLux Spotlight typical illuminance data is measured with the GO1900L Goniophotometer

## Optional Accessories

### 1) MR16 Connector without clip – Part No.: 21101

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



### 2) MR16 Connector with spring clip – Part No.: 21105

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



## Optional Power Supply (Recommended for LED MR16 lamps)

### 1) 60W Ferro Magnetic Power Supply – Part No.: PS-60W-12

Specifications:

Input: AC110V or AC230V 50/60 Hz

Output Voltage: AC12V

Output Current: 5A max

Power: 60W max

Weight: 1.2Kg

Casing Size: 120X80X65 mm

Remarks: Other wattages is available, please inquire with our sales associates



### 2) 60W Switching Power Supply – Part No.: SS-60W-12

Specifications:

Input: AC110V or AC230V 50/60 Hz

Output Voltage: DC12V

Output Current: 5A max

Power: 60W max

Weight: 0.5Kg

Casing Size: 150X96X40 mm

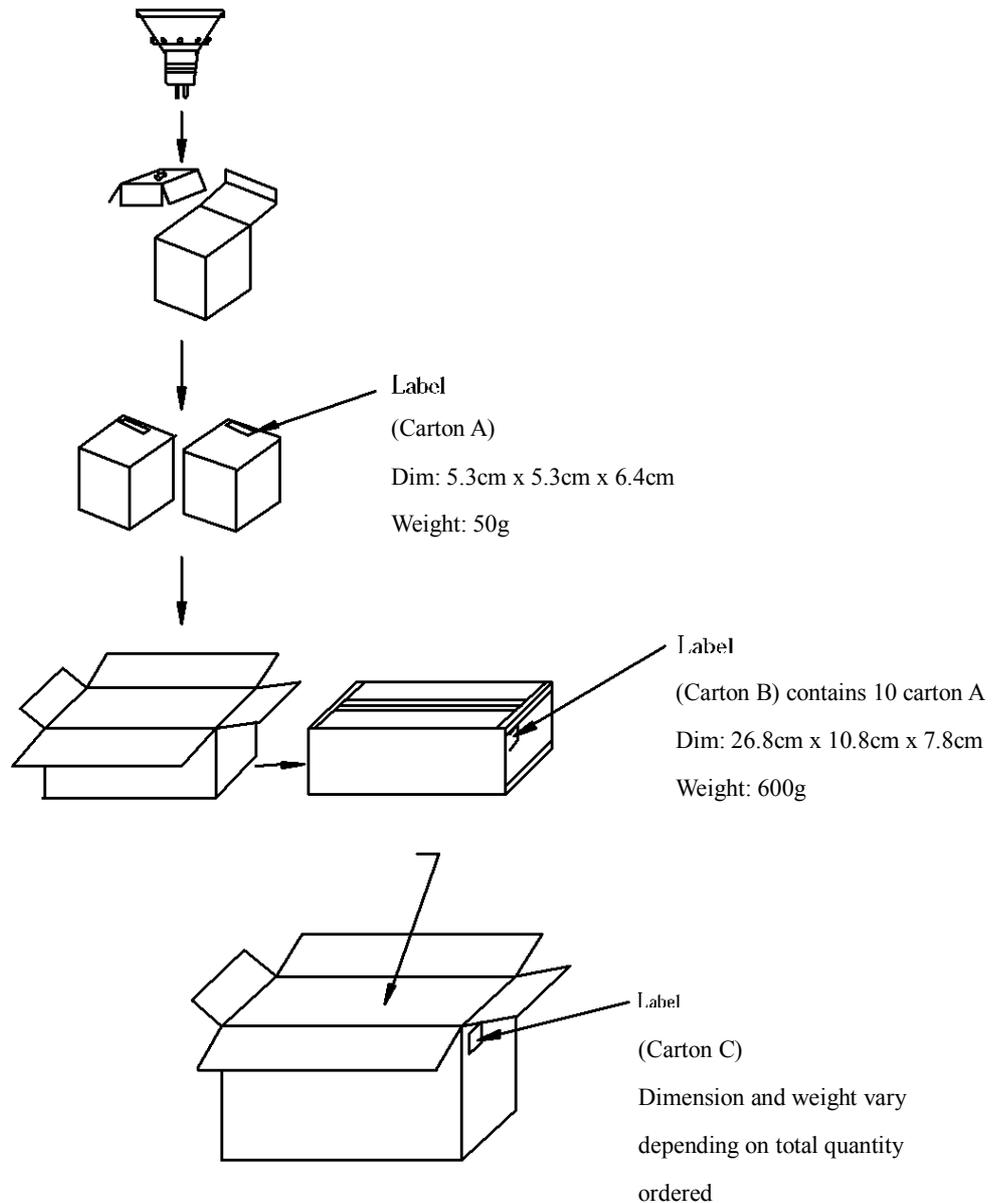
Remarks: Other wattages is available, please inquire with our sales associates



Installation Note:

5W MR16 – Maximum 10 lamps connection per power supply

## PACKAGING SPECIFICATIONS



## LIMITED WARRANTY

Manufacturer warrants to the Purchaser that each Product manufactured and sold by it will be free from defects in material and workmanship in its intended use (normal wear and tear excepted) for the period of two years from date of Purchaser's purchase (the invoice date) from Manufacturer. Manufacturer's warranty flows only to Purchaser. If any Product covered by this warranty is returned by Purchaser in accordance with Manufacturer's Products Return Policy, including without limitation its return authorization provisions, within the applicable warranty period set forth above, and upon examination Manufacturer determines to its satisfaction that such Product was defective in material or workmanship at the time of delivery to the Purchaser, Manufacturer will, at its option, repair or replace the Product or the defective part thereof, or reimburse Purchaser for the purchase price. For purposes of clarity, "repair or replace the Product or the defective part thereof" does not include any reinstallation costs or expenses. If Manufacturer chooses to replace the Product and is not able to do so because it has been discontinued or is not available, Manufacturer may replace it with a comparable product. The Products Return Policy is posted on Manufacturer's Internet web site at [http://www.brilliance-led.com/En\\_terms\\_conditions.asp](http://www.brilliance-led.com/En_terms_conditions.asp). The foregoing notwithstanding, Manufacturer will not be responsible for damage to any Product resulting from misuse, negligence, acts of God or accident or resulting from repairs or alterations made by any person or firm not duly authorized by Manufacturer in writing. Purchaser shall convey with each Product distributed to end users the MANUFACTURER'S LIMITED WARRANTY included by Manufacturer with such Product, and, if Manufacturer determines that the appropriate remedy for a defective product is refund of Purchaser's purchase price, Purchaser shall refund to the end user (or arrange for the refund to the end user of) the full purchase price paid by the end user for such defective Product.

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