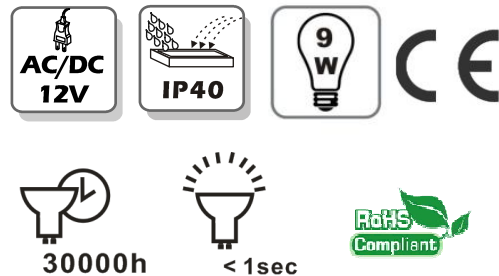


Features

- Light source: Samsung 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
- 7W version can achieve directional light output equal to 75W 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



Picture for illustration only



Typical Applications

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

PRELIMINARY

PRODUCT SPECIFICATIONS

LIGHT SOURCE	7X1W Samsung power LED
OPTICS	Optical grade PC cluster lens
LENS DIAMETER	33 mm
BEAM ANGLE	15° (Narrow Spot)
RENDERING INDEX (Ra)	> 80 (for cool white color) > 80 (for warm white color)
TOTAL LENGTH	78.5 mm (including pins)
WEIGHT	95g
HOUSING	Machined pure aluminum with anodized silver finish, 50 mm (2") diameter
BASE	GX5.3
DIMMABILITY	Not Dimmable

ENVIRONMENTAL SPECIFICATIONS

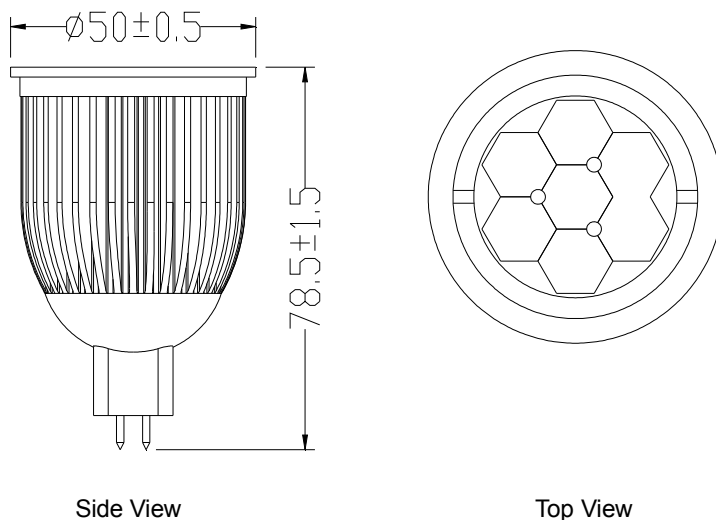
TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 40°C to 50°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

ELECTRICAL SPECIFICATIONS

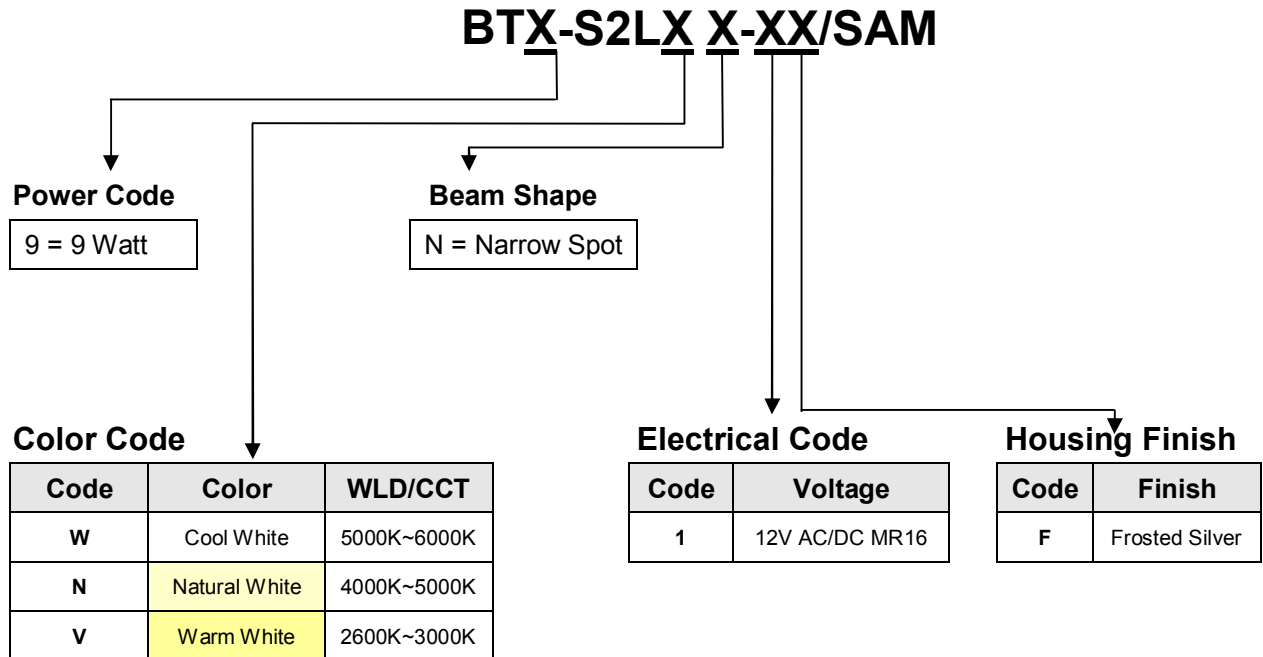
VOLTAGE REQUIREMENT	12V AC or 12V DC
POWER CONSUMPTION	7 W
TRANSFORMER	Low voltage magnetic or switching power supply to provide 12V AC or 12V DC

DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER

PRODUCT DIMENSIONS (mm)



PRELIMINARY

PRODUCT ORDERING CODE

Narrow Spot Model (25° Beam Angle)

ORDER CODE	Color	CCT (K)	Operating Voltage (V)	Lamp Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 3m (Lux)	BEAM ANGLE
BT7-S2LWN-1F/SAM	Cool White	5000K~6000K	12V AC/DC	7W	600±5%	TBA	15° ±2°
BT7-S2LNN-1F/SAM	Nat. White	4000K~5000K			550±5%	TBA	
BT7-S2LVN-1F/SAM	Warm White	2600K~3000K			500±5%	320	

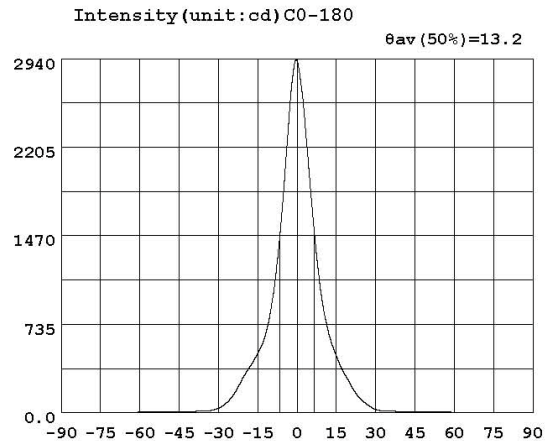
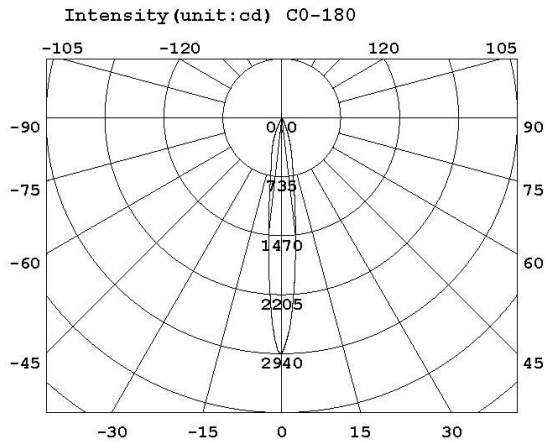
Typical Electrical Characteristics at T_a=25°C (For 7W Model)

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	V _{AC}	10	12	14	V
Input Voltage (DC)	V _{DC}	9	12	14	V
Input Current @ 12V	I _F	—	420	—	mA
Estimated Life ^[6]		—	30,000	—	Hours
Optimized Body Temperature	T	—	65	70	°C

Note: Lamp is optimized for 12V DC input voltage

PRELIMINARY

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



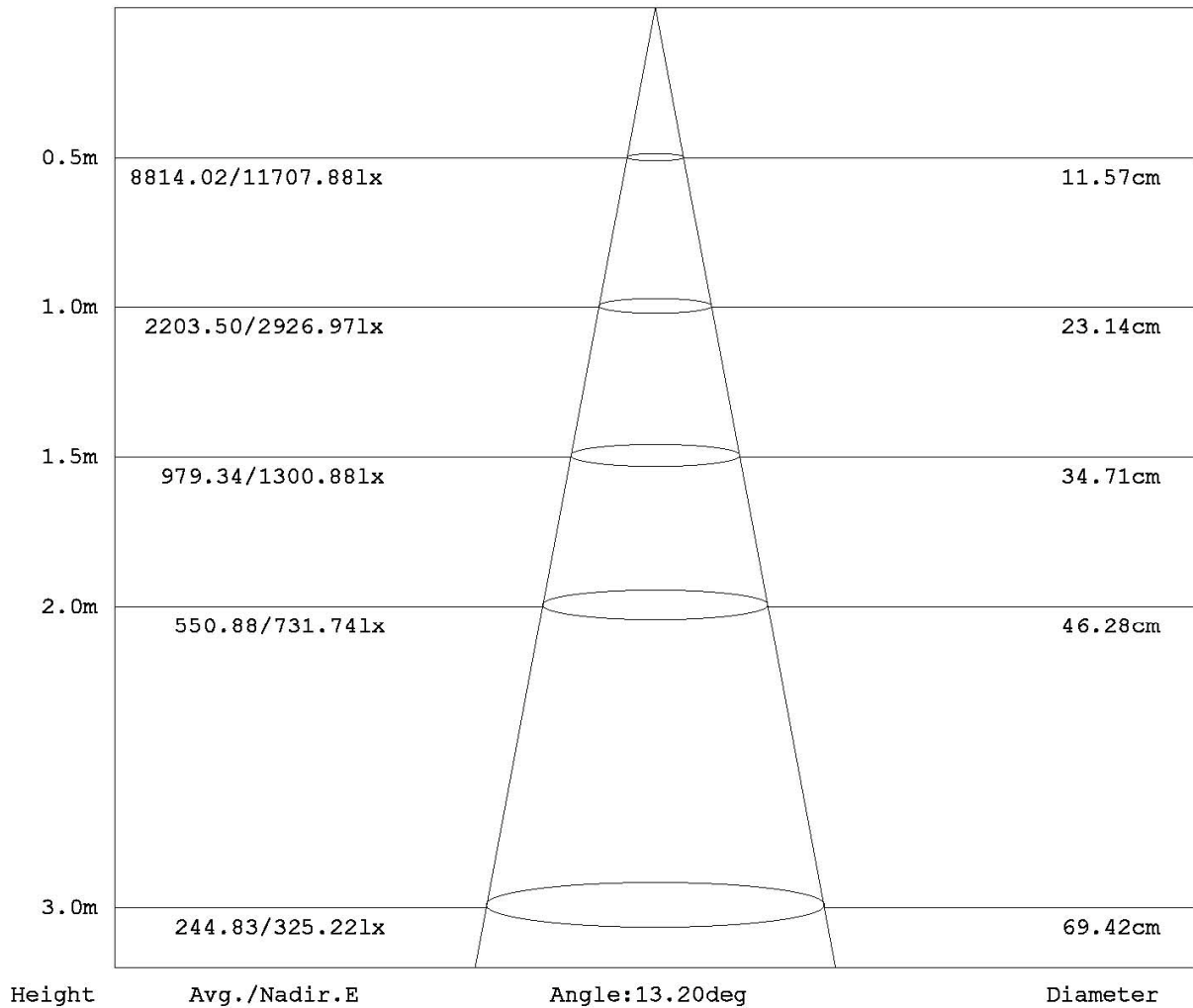
Intensity data: (deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.2128	-58.5	6.651	-27.0	80.74	4.5	2032	36.0	13.83	67.5	4.791
-88.5	0.2197	-57.0	6.939	-25.5	113.6	6.0	1641	37.5	12.64	69.0	4.494
-87.0	0.3393	-55.5	7.251	-24.0	157.6	7.5	1305	39.0	11.70	70.5	4.184
-85.5	0.5717	-54.0	7.567	-22.5	211.9	9.0	1022	40.5	10.97	72.0	3.861
-84.0	0.9201	-52.5	7.802	-21.0	276.6	10.5	818.3	42.0	10.63	73.5	3.525
-82.5	1.306	-51.0	8.105	-19.5	332.8	12.0	670.4	43.5	10.07	75.0	3.174
-81.0	1.686	-49.5	8.453	-18.0	381.5	13.5	559.7	45.0	9.548	76.5	2.810
-79.5	2.096	-48.0	8.850	-16.5	434.6	15.0	474.4	46.5	9.034	78.0	2.437
-78.0	2.501	-46.5	9.280	-15.0	494.8	16.5	394.2	48.0	8.505	79.5	2.050
-76.5	2.916	-45.0	9.733	-13.5	556.8	18.0	327.9	49.5	8.016	81.0	1.673
-75.0	3.323	-43.5	10.27	-12.0	650.6	19.5	272.8	51.0	7.627	82.5	1.315
-73.5	3.689	-42.0	10.95	-10.5	792.6	21.0	213.3	52.5	7.236	84.0	0.9713
-72.0	4.034	-40.5	11.59	-9.0	989.5	22.5	161.2	54.0	6.957	85.5	0.6320
-70.5	4.380	-39.0	12.27	-7.5	1262	24.0	122.0	55.5	6.743	87.0	0.3970
-69.0	4.705	-37.5	13.21	-6.0	1595	25.5	90.99	57.0	6.514	88.5	0.2729
-67.5	5.006	-36.0	14.51	-4.5	2016	27.0	66.16	58.5	6.267	90.0	0.2728
-66.0	5.318	-34.5	16.19	-3.0	2462	28.5	44.10	60.0	6.041		
-64.5	5.598	-33.0	19.10	-1.5	2820	30.0	27.36	61.5	5.799		
-63.0	5.860	-31.5	25.74	0.0	2927	31.5	19.89	63.0	5.577		
-61.5	6.114	-30.0	37.59	1.5	2737	33.0	17.11	64.5	5.337		
-60.0	6.375	-28.5	56.45	3.0	2420	34.5	15.39	66.0	5.078		

PRELIMINARY

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

Average Illuminance Figure



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

PRELIMINARY

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) 20W Switching Power Supply – Part No.: LPV-20W-12

Specifications:

Input: 90V~260V AC 50/60 Hz

Output Voltage: DC12V

Output Current: 1.67A max

Power: 20W max

Weight: 0.22Kg

Casing Size: 118X35X26 mm

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

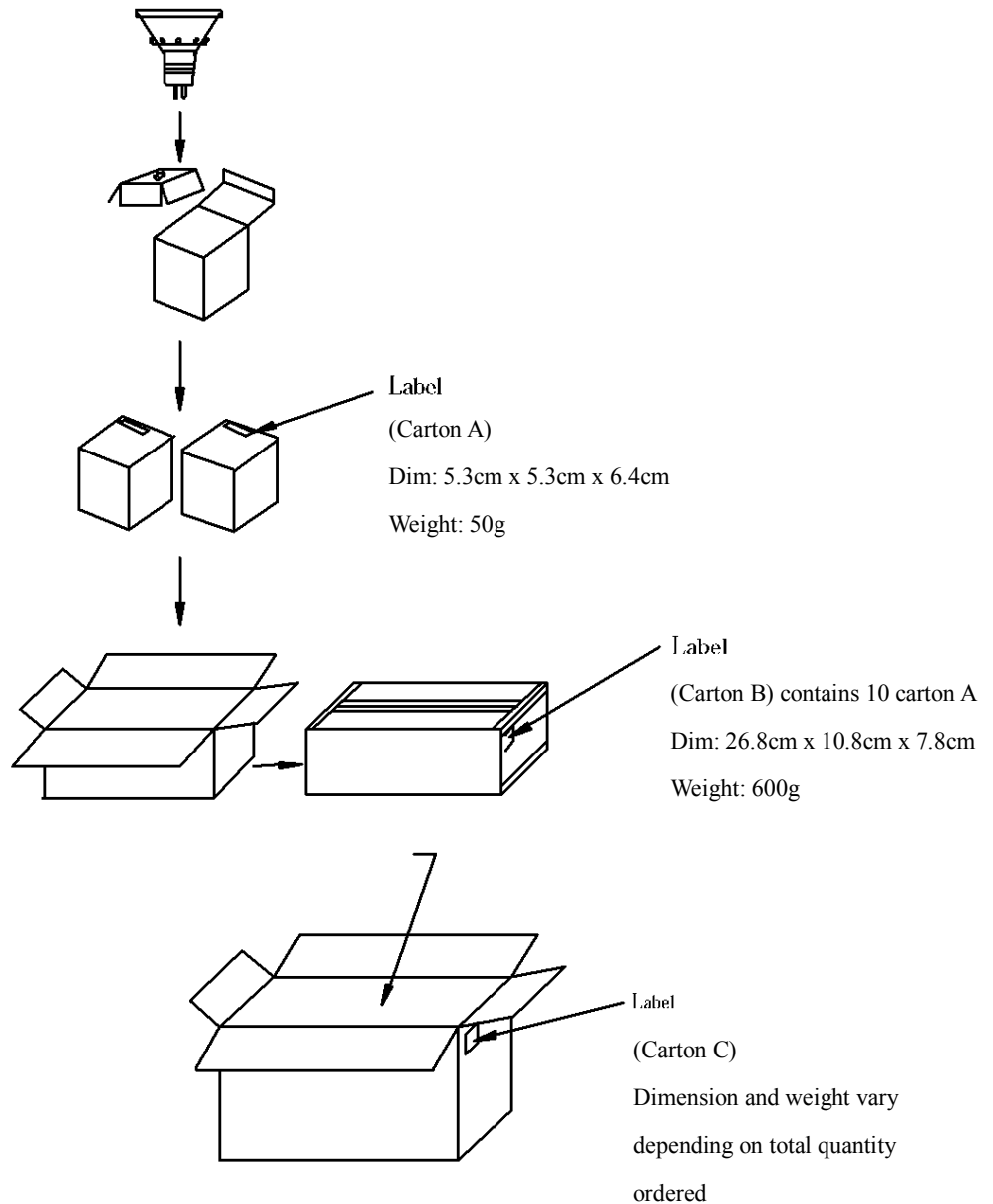


Installation Note:

9W MR16 – Maximum 2 lamps connection per power supply

PRELIMINARY

PACKAGING SPECIFICATIONS



PRELIMINARY

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. 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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