

“The BriLux™ Starline series combine the brightness of power LEDs with a rugged heatsink capable of operating in excess of 7 watt. Starline series leads the solid state spot lighting industry in brightness while providing a plug and play solution for lighting designers.

BriLux™ S series compact lamps are designed to fit into standard B22 fixtures and sockets, and project a light beam at 10° narrow or 30° wide angle. It is well suited for tracks, rails, cables and pendants in interior architectural, retail, exhibit, display and residential applications.

The lamp features standard B22 base connectors and molded aluminum housing with chrome finish. The **BriLux™ S** series is available in 7W power rating. They are also available in two distinct white Kelvin temperatures: 3500K and 6000K. Other custom colors are also available.

The **S** series utilizes the Brilliance Technologies' enhanced Cool Beam Technology specifically developed for driving high power (up to 7W) solid state lighting devices. It uniquely allows heat to dissipate properly; making the product thermally stable for long hours of operation and last much longer than conventional halogen and 5mm LED based B22.

BriLux™ S series B22 is equipped with optical grade polycarbonate lens that allows highest light transmission at 10° and 30° beam angle.



Features

- Light source: 7 pieces 1W power LED
- Source life: more than 30,000 hours
- Low heat, no UV or IR light radiation
- Full range of colors
- Homogeneous illumination
- Molded heat sink for excellent heat management
- 7W B22 can achieve directional light output equal to 50W halogen lamp yet consume 80% less power
- Safety Standard: **CE and RoHS**
- 1 year limited warranty (see page 6)
- Works with worldwide electrical systems (100~240V AC)

Typical Applications

- Landscape Accent/Spot lighting
- Architectural Lighting
- Display Case Accent
- Art work Lighting



PRODUCT SPECIFICATIONS

LIGHT SOURCE	7 X 1W power LED
OPTICS	Optical grade PC cluster lens
BEAM ANGLE	10° (Narrow Spot) or 30° (Wide Spot)
RENDERING INDEX (Ra)	> 70 (for cool white color)
TOTAL LENGTH	65 mm (including pins)
WEIGHT	96 g
HOUSING	Molded aluminum with chrome or black anodized finish, 50mm diameter
BASE	B22 bayonet base
DIMMABILITY	Not Dimmable

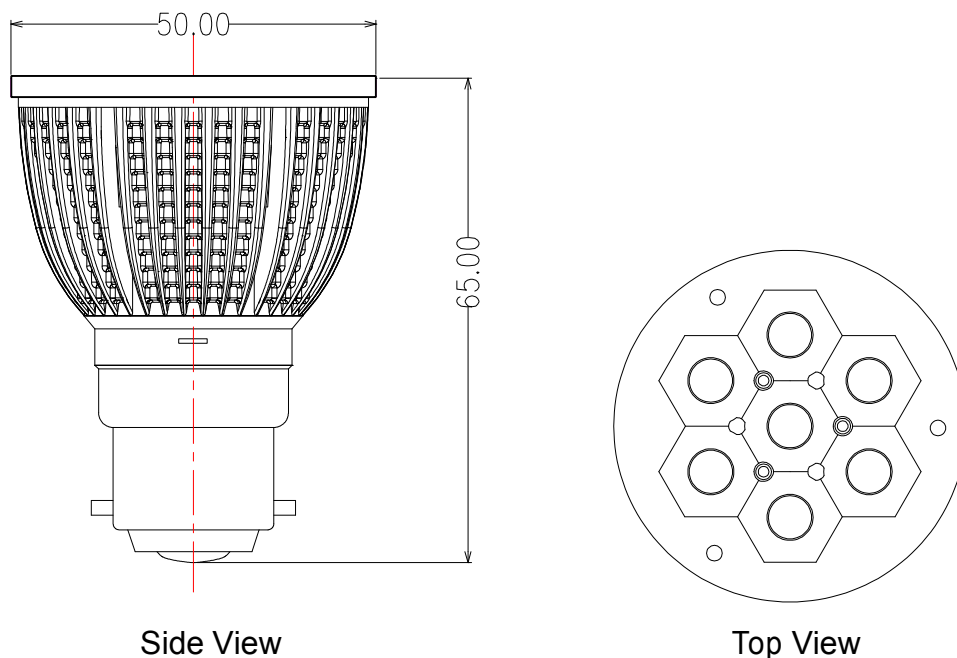
ENVIRONMENTAL SPECIFICATIONS

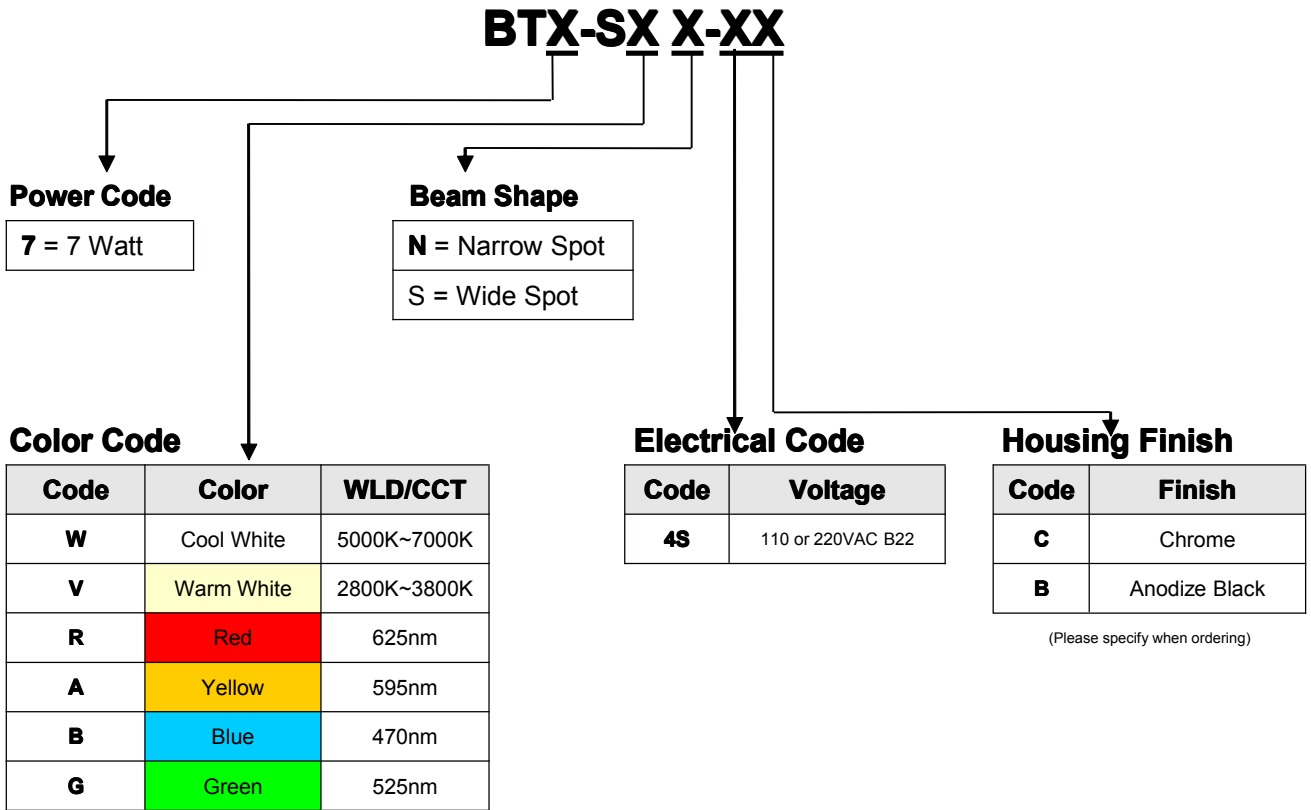
TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 65°C to 70°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	110 or 220V AC
POWER CONSUMPTION	≤ 6.5W
POWER FACTOR	≥ 0.6

PRODUCT DIMENSIONS (mm)



PRODUCT ORDERING CODE

10° BEAM ANGLE PRODUCT CODE

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
BT7-SWN-4SX	Cool White	5000K~7000K	110/220 V AC	7X1W	200 lm	550	10° ±2°
BT7-SVN-4SX	Warm White	2800K~3800K			140 lm	450	
BT7-SRN-4SX	Red	625 nm			280 lm	1000	
BT7-SAN-4SX	Yellow	595 nm			250 lm	TBA	
BT7-SBN-4SX	Blue	470 nm			70 lm	20	
BT7-SGN-4SX	Green	530 nm			350 lm	850	

30° BEAM ANGLE PRODUCT CODE

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 1m (Lux)	BEAM ANGLE
BT7-SWS-4SX	Cool White	5000K~7000K	110/220 V AC	7X1W	200 lm	500	30° ±2°
BT7-SVS-4SX	Warm White	2800K~3800K			140 lm	400	
BT7-SRS-4SX	Red	625 nm			280 lm	800	
BT7-SAS-4SX	Yellow	595 nm			250 lm	TBA	
BT7-SBS-4SX	Blue	470 nm			70 lm	10	
BT7-SGS-4SX	Green	530 nm			350 lm	750	

Typical Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (110V AC)	V_{AC}	100	—	120	V
Input Voltage (AC)	V_{AC}	200	—	240	V
LED Forward Current	I_F	—	300	—	mA
Estimated Life ^[6]		—	40,000	—	hours
Optimized Body Temperature	T	—	65	70	$^\circ\text{C}$

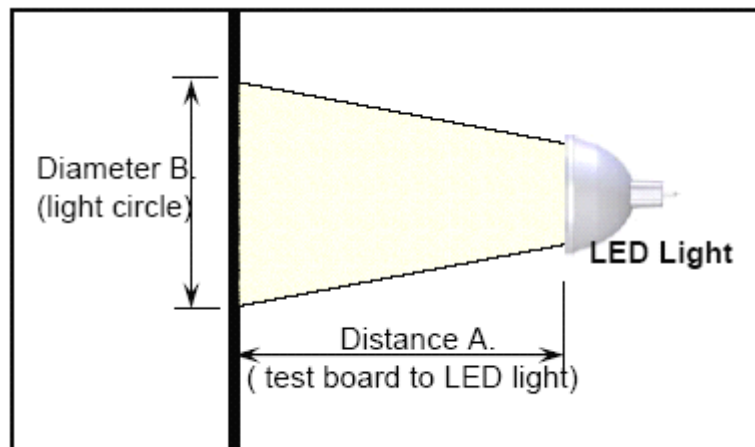
Illumination Characteristics


Fig 1. Set up for Illuminance Measurement

10° Narrow Spot Model

Distance		7W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30	20	6200	6000	9990	215	12000	TBA
50	30	2100	1800	3600	70	4300	TBA
100	60	550	450	880	20	1050	TBA
150	100	180	180	380	10	490	TBA
200	130	110	80	200	8	250	TBA

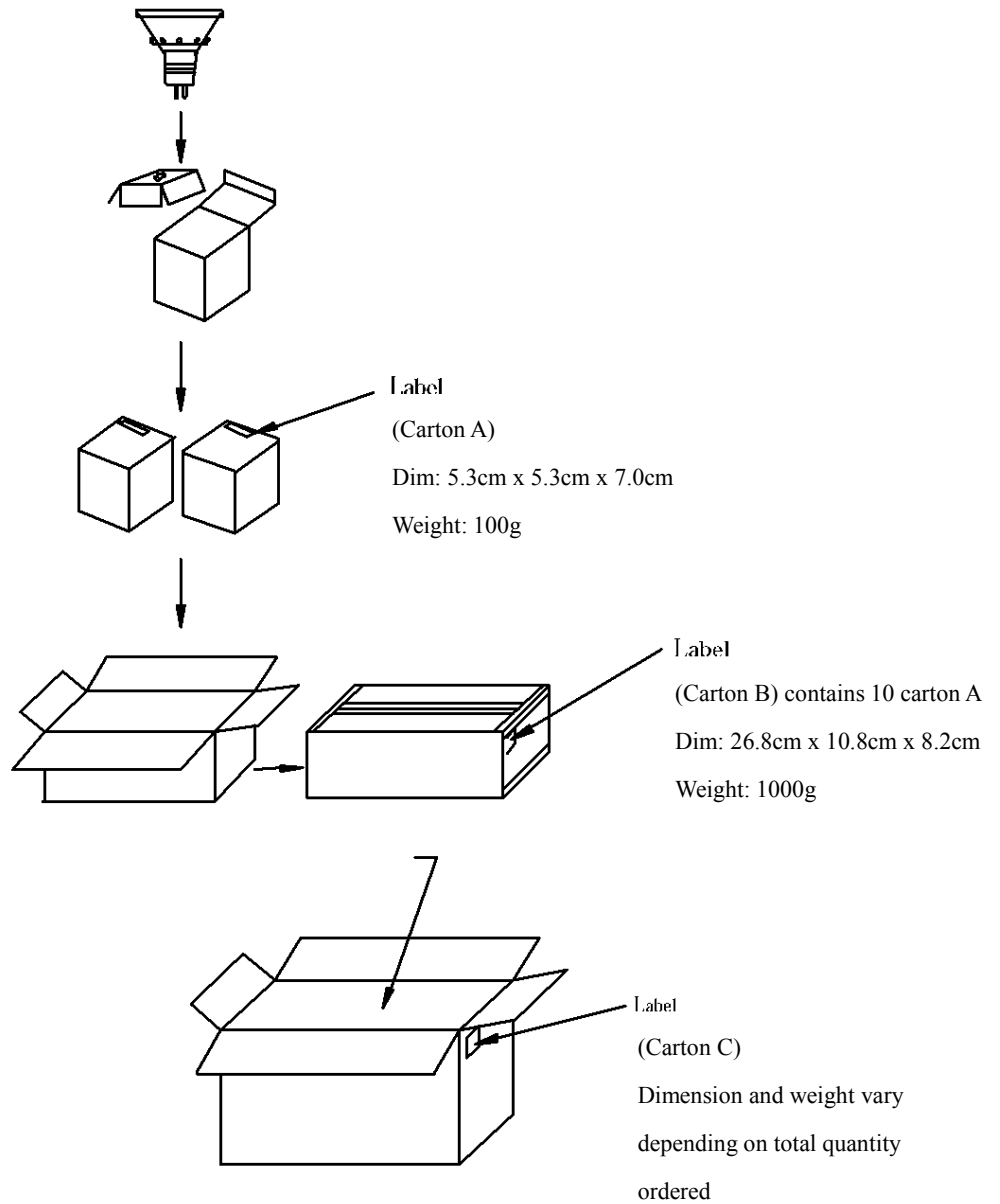
Notes: Center beam lux is measured with Digital Lux Meter (Model TES-1334A)

30° Wide Spot Model

Distance		7W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30	30	5200	5000				
50	50	1500	2000				
100	100	500	400				
150	100	150	180				
200	130	80	110				

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

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 one year 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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Patents Pending Product
S Series B22-Rev. 1.0a
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