

## Features

- Light source: 1 pc AC power LED
- Source life: Approx 20,000 hours
- Low heat, less than 65°C for 3W
- no UV or IR light radiation
- Homogeneous illumination
- Thermal plastic heatsink with excellent thermal efficiency and total insulation
- 3W GU10 can achieve directional light output equal to 25W halogen lamp yet consume 80% less power
- Size equivalent to traditional GU10
- Safety Standard: **CE** and RoHS
- Works with 110V or 230VAC lighting systems

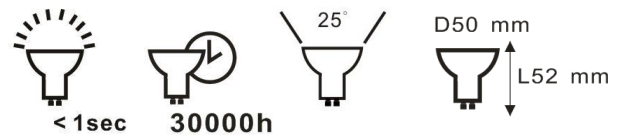


Note: Picture for illustration only



## Typical Applications

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



## PRODUCT SPECIFICATIONS

<b>LIGHT SOURCE</b>	1 X 4W AC power LED
<b>OPTICS</b>	Metalized glass reflector
<b>LENS DIAMETER</b>	50 mm
<b>BEAM ANGLE</b>	25° (Spot)
<b>RENDERING INDEX (Ra)</b>	>80 (for warm white color)
<b>TOTAL LENGTH</b>	52.7 mm (including pins)
<b>WEIGHT</b>	50 g
<b>HOUSING</b>	Molded thermal glass, 5 cm (2") diameter
<b>BASE</b>	GU10 pins
<b>DIMMERBILITY</b>	Dimmable

## ENVIRONMENTAL SPECIFICATIONS

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

## ELECTRICAL SPECIFICATIONS

<b>VOLTAGE REQUIREMENT</b>	110V AC or 230V AC
<b>POWER CONSUMPTION</b>	2.5W
<b>POWER FACTOR</b>	≥ 0.9

## PRODUCT DIMENSIONS (mm)

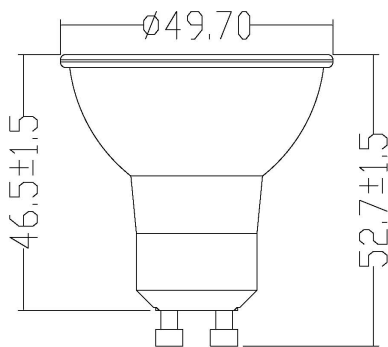
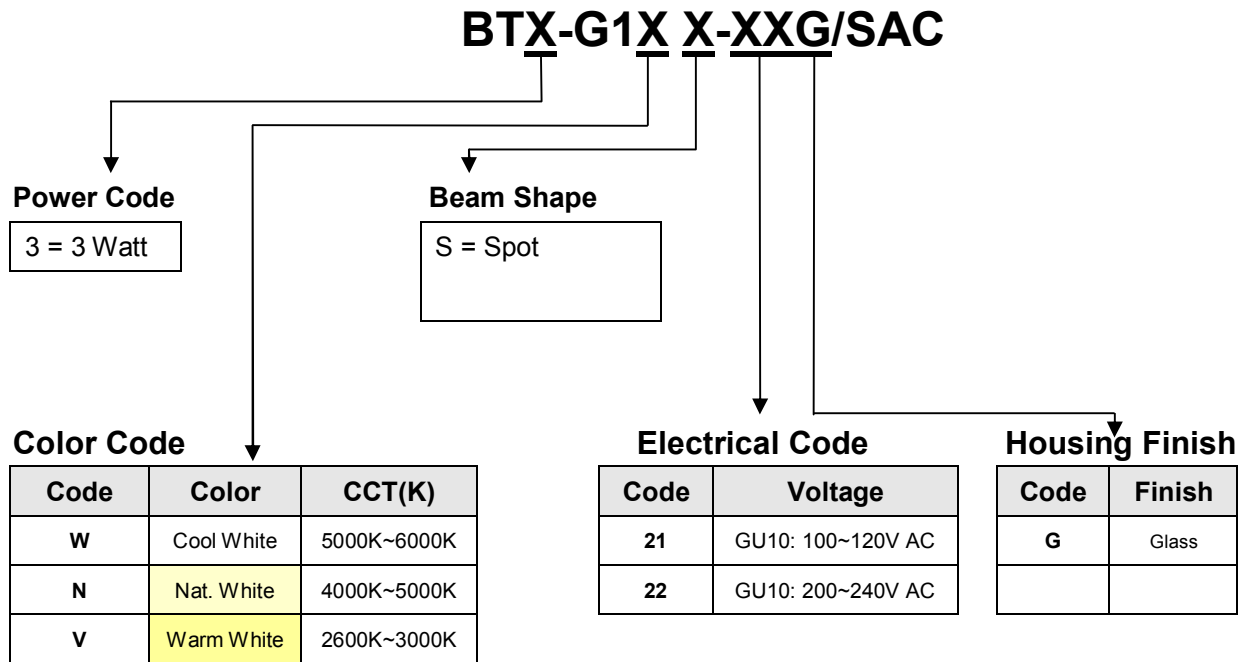
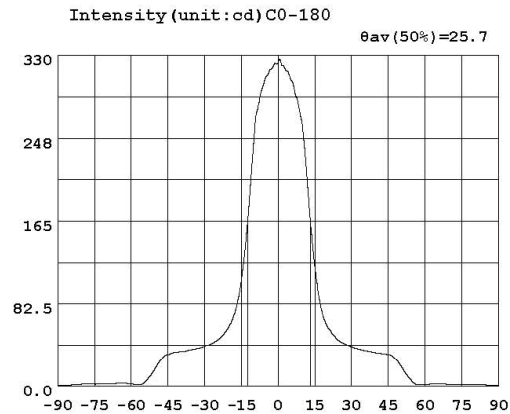
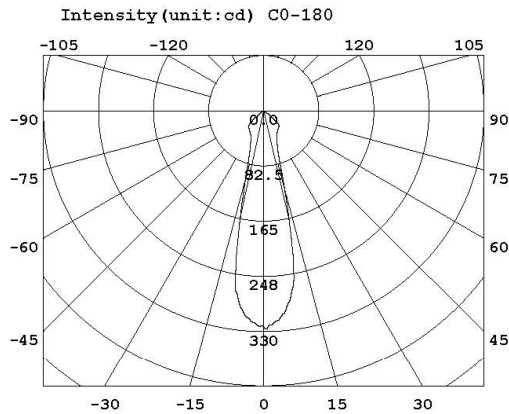


Fig 1. GU10 side view

**PRODUCT ORDERING CODE**

**3W AC-GU10 PRODUCT CODE**

ORDER CODE	Color	CCT (K)	Operating Voltage	Lamp Power (W)	Typ. Luminous Flux (lm)	Typ. Center Illuminance @ 1m (Lux)	BEAM ANGLE
BT3-G1WS-21G/SAC	Cool White	5000K~6000K	110V AC	2.5W	230 lm	320	25° ±2°
BT3-G1NS-21G/SAC	Nat. White	4000K~5000K			200 lm		
BT3-G1VS-21G/SAC	Warm White	2600K~3000K			160 lm		
BT3-G1WS-22G/SAC	Cool White	5000K~6000K	230V AC	2.5W	230 lm	320	25° ±2°
BT3-G1NS-22G/SAC	Nat. White	4000K~5000K			200 lm		
BT3-G1VS-22G/SAC	Warm White	2600K~3000K			160 lm		

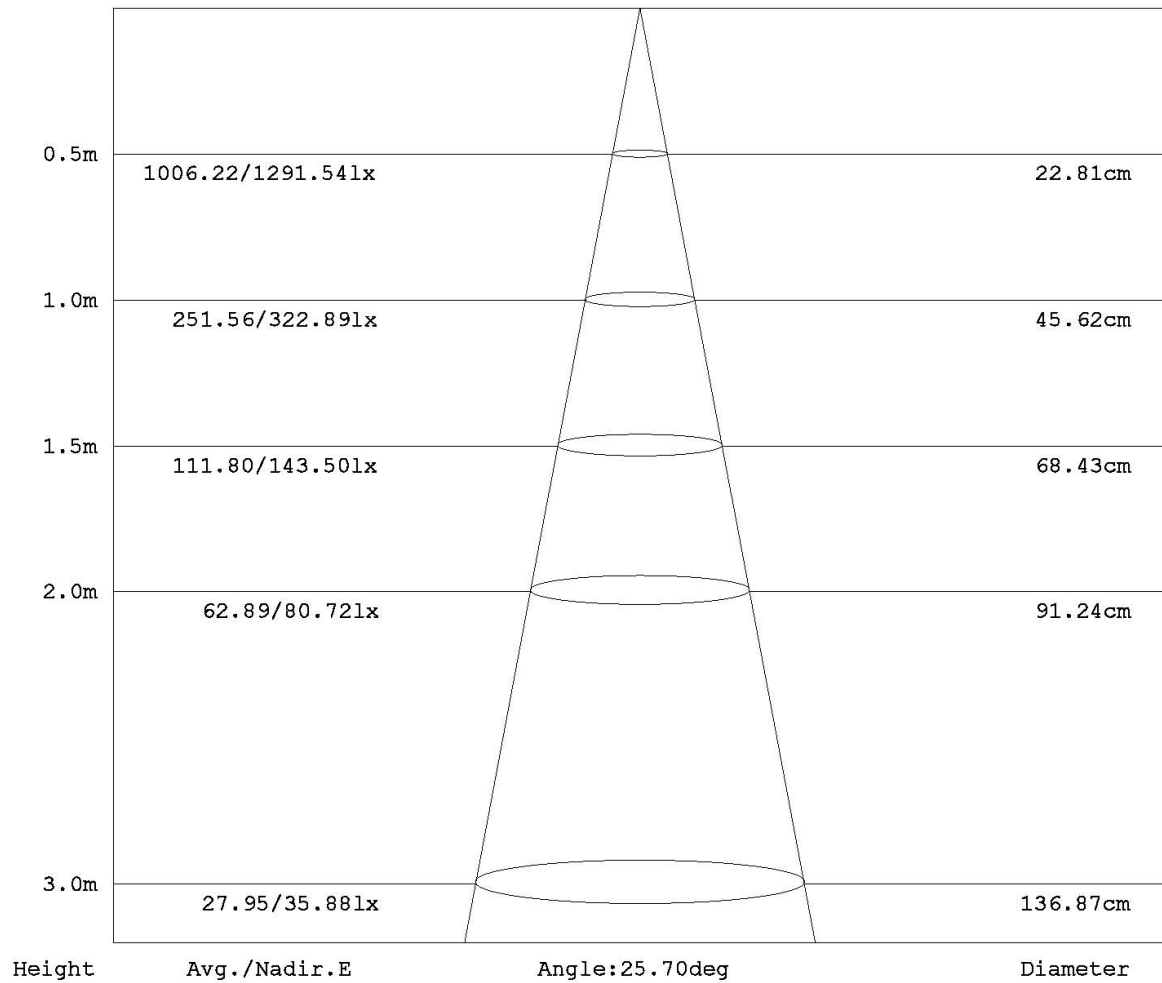
## Warm White Intensity (C0-180 plane) Measurement



Intensity data:(deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.4507	-58.5	1.666	-27.0	43.12	4.5	311.1	36.0	35.80	67.5	1.915
-88.5	0.3854	-57.0	1.476	-25.5	45.40	6.0	302.6	37.5	34.98	69.0	1.800
-87.0	0.3941	-55.5	2.041	-24.0	48.27	7.5	288.4	39.0	34.30	70.5	1.747
-85.5	0.5758	-54.0	5.100	-22.5	51.57	9.0	271.2	40.5	33.74	72.0	1.706
-84.0	1.312	-52.5	9.478	-21.0	56.23	10.5	245.7	42.0	33.19	73.5	1.628
-82.5	1.618	-51.0	14.50	-19.5	62.66	12.0	202.1	43.5	32.73	75.0	1.545
-81.0	1.751	-49.5	20.57	-18.0	71.81	13.5	156.7	45.0	32.11	76.5	1.627
-79.5	1.910	-48.0	26.08	-16.5	85.92	15.0	119.7	46.5	30.59	78.0	1.731
-78.0	1.926	-46.5	30.25	-15.0	107.1	16.5	92.22	48.0	27.32	79.5	1.531
-76.5	1.944	-45.0	32.33	-13.5	137.6	18.0	74.08	49.5	22.78	81.0	1.356
-75.0	1.824	-43.5	33.44	-12.0	177.1	19.5	63.52	51.0	16.84	82.5	1.253
-73.5	1.876	-42.0	34.20	-10.5	227.2	21.0	57.38	52.5	11.39	84.0	1.202
-72.0	1.908	-40.5	34.87	-9.0	271.0	22.5	51.88	54.0	6.793	85.5	0.9028
-70.5	1.917	-39.0	35.34	-7.5	287.4	24.0	47.45	55.5	2.965	87.0	0.4892
-69.0	2.045	-37.5	35.71	-6.0	300.4	25.5	44.84	57.0	1.228	88.5	0.4440
-67.5	2.352	-36.0	36.42	-4.5	310.0	27.0	42.82	58.5	1.214	90.0	0.4937
-66.0	2.716	-34.5	37.16	-3.0	316.4	28.5	41.26	60.0	1.500		
-64.5	2.927	-33.0	38.13	-1.5	321.8	30.0	39.78	61.5	1.772		
-63.0	2.866	-31.5	39.12	0.0	322.8	31.5	38.50	63.0	1.925		
-61.5	2.580	-30.0	40.44	1.5	320.4	33.0	37.53	64.5	1.992		
-60.0	2.102	-28.5	41.41	3.0	316.0	34.5	36.59	66.0	1.970		

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



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

### 3W Model

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (110V AC)	$V_{AC}$	100	110	120	V
Input Voltage (230V AC)	$V_{AC}$	200	230	240	V
Input Power	P		2.5		W
Input Current (@ 230V AC)	$I_F$	—	12	—	mA
Estimated Life <sup>[1]</sup>	$T_{70\%}$	—	20,000	—	hours
Optimized Body Temp	T	—	65	70	$^{\circ}\text{C}$

Note[\*] – Manufacturer projects G1 spotlight made with AC LED to maintain an average of 70% lumens maintenance after 20,000 hours. This estimation is made based on data from LED manufacturer

## Optional Connector Accessories

### 1) GU10 Connector – Part No.: 23201

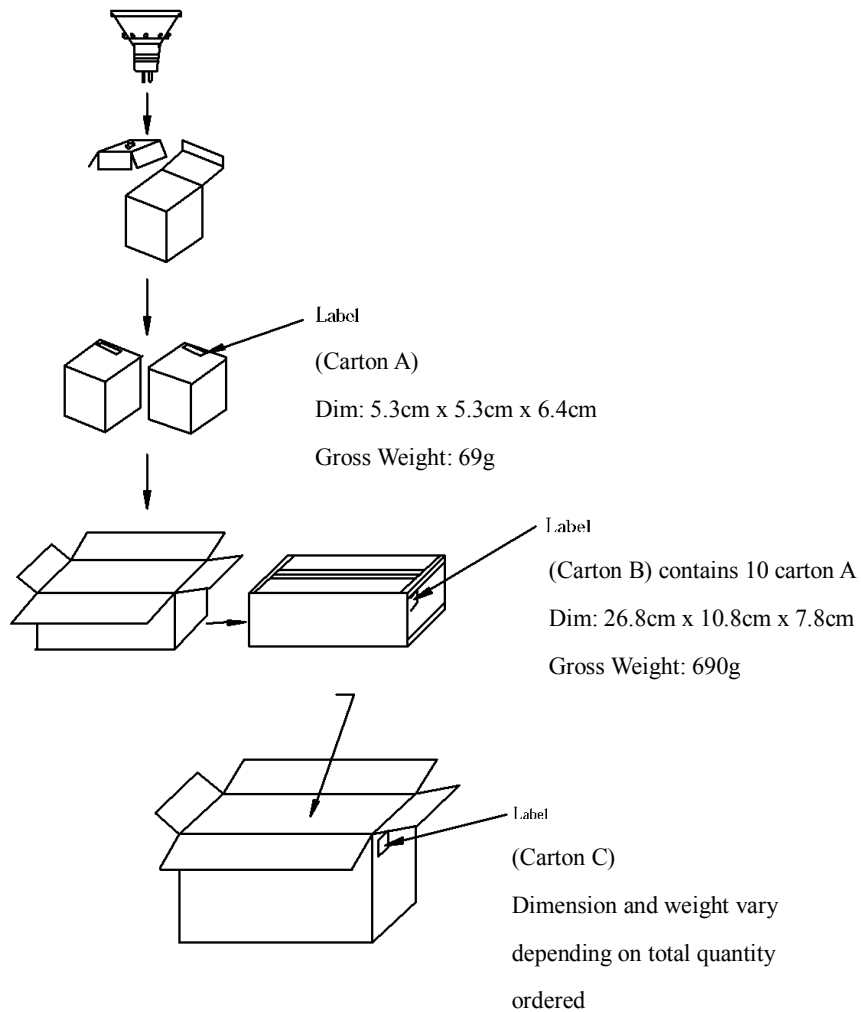
Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



## 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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GU10G1-3W-SAC-Rev. 1.0b  
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