



Lighting solutions that don't cost the earth

## 10 Watt AR111 Series 450 Lm Warm White

### Features

- 1 x 10 Watt Power LED SHARP
- More than 40,000 hours LED life
- 111 mm diam. Aluminum reflector type
- Low heat, less than 65°C for 10 Watt
- No UV or IR light Radiation
- No Mercury or other inorganics
- **Highest optical efficiency: 45 Lm/Watt for Warm White**
- Homogeneous flood illumination
- Machined Aluminum heat fins with excellent thermal efficiencies
- The 10 Watt AR111 lamp is available in color temperature: 2700K (Warm White)
- 10 Watt AR111 LED reflector lamp can achieve directional light output equal to 70W halogen AR-R111
- 2 year limited warranty



### Typical Applications

- Retail Store Lighting
- Retrofit Lamp
- Ceiling Lighting System
- Energy Saving Programs
- Sustainable Energy
- Spot lighting
- Commercial Lighting
- General lighting
- Project Lighting





## PRODUCT SPECIFICATIONS

LIGHT SOURCE	1 x 10 Watt Power LED SHARP
OPTICS	Optic with Aluminum reflector with metalized coating
BULB TYPE	AR111
BEAM ANGLE	45° (Flood)
RENDERING INDEX (Ra)	>85 (warm white)
TOTAL LENGTH	see product dimensions below
WEIGHT	123 ±2 g
HEATSINK	Machined pure aluminum with anodized finish
BASE TYPE	GX53
DIMMABILITY	Not Dimmable

## ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 60°C to 70°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

## ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	12 AC/DC
POWER CONSUMPTION	≤ 10 Watt
POWER FACTOR	≥ 0.7

## PRODUCT DIMENSIONS (mm)

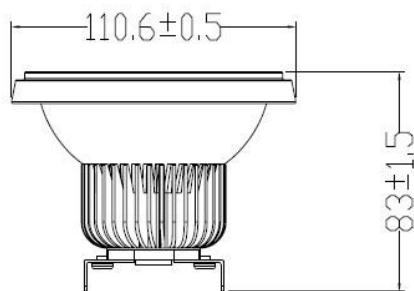


Fig 1. G53 Side View

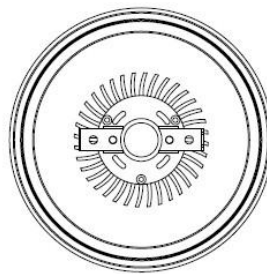


Fig 2. Rear View



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## PRODUCT ORDERING CODE

ORDER CODE	Color	CCT (°K)	BEAM ANGLE	Base Type	Operating Voltage	LED Power (W)	Typical Luminous Flux (lm)	Typical Illuminance @ 2m (Lux)
AR111VF-10-1/S	Warm White	2700K	45° ±2°	GX53	12V	1X10W optics	450	1000

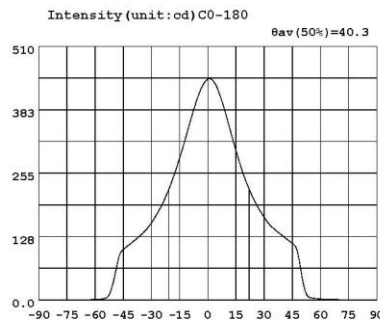
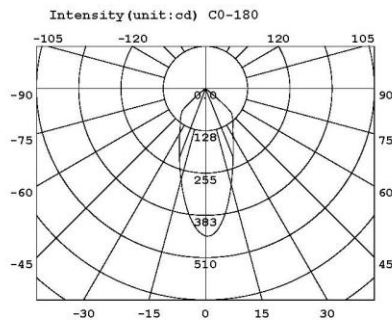
Typical Electrical Characteristics at T<sub>a</sub>=25°C

## 10W AR111 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	10	12	V
LED Forward Current	I <sub>F</sub>	—	600	—	mA
Estimated Life <sup>[1]</sup>		—	40,000	—	hours
Optimized Body Temperature (1X10W LED)	T	—	55	60	°C

*Note[\*] – Manufacturer projects AR111 lamp made with Sharp LED to maintain an average of 70% lumens maintenance after 40,000 hours. This estimation is made based on data from LED manufacturer*

## 45° AR111 Intensity (C0-180 plane) Measurement



Intensity data: (deg , cd) C0-180

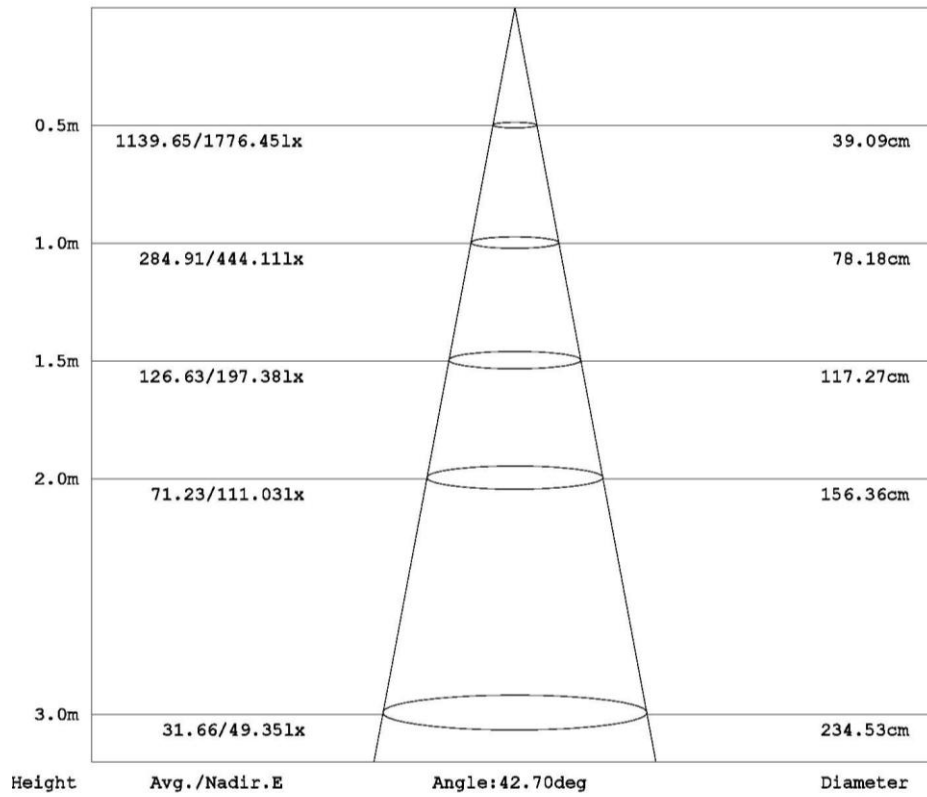
A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.0017	-58.5	1.503	-27.0	173.6	4.5	430.5	36.0	140.7	67.5	1.112
-88.5	0.0	-57.0	1.983	-25.5	183.5	6.0	416.6	37.5	136.0	69.0	0.9325
-87.0	0.0034	-55.5	2.716	-24.0	194.7	7.5	400.1	39.0	131.5	70.5	0.8005
-85.5	0.0169	-54.0	4.543	-22.5	207.1	9.0	381.6	40.5	127.0	72.0	0.6683
-84.0	0.0336	-52.5	10.94	-21.0	220.2	10.5	361.6	42.0	122.7	73.5	0.5564
-82.5	0.0540	-51.0	27.04	-19.5	234.7	12.0	340.8	43.5	118.2	75.0	0.4634
-81.0	0.0791	-49.5	49.45	-18.0	250.5	13.5	320.2	45.0	113.9	76.5	0.3728
-79.5	0.1012	-48.0	76.75	-16.5	267.4	15.0	300.2	46.5	108.8	78.0	0.2941
-78.0	0.1281	-46.5	94.78	-15.0	285.5	16.5	281.7	48.0	92.98	79.5	0.2326
-76.5	0.1548	-45.0	101.5	-13.5	304.0	18.0	263.9	49.5	61.37	81.0	0.1644
-75.0	0.1916	-43.5	106.2	-12.0	323.5	19.5	247.3	51.0	31.15	82.5	0.1148
-73.5	0.2289	-42.0	110.8	-10.5	343.7	21.0	232.4	52.5	11.98	84.0	0.0568
-72.0	0.2675	-40.5	115.2	-9.0	363.5	22.5	218.8	54.0	5.716	85.5	0.0253
-70.5	0.3163	-39.0	119.8	-7.5	382.5	24.0	206.3	55.5	4.149	87.0	0.0082
-69.0	0.3838	-37.5	124.4	-6.0	400.4	25.5	195.0	57.0	3.316	88.5	0.0132
-67.5	0.4510	-36.0	129.4	-4.5	416.3	27.0	184.7	58.5	2.728	90.0	0.0183
-66.0	0.5421	-34.5	134.5	-3.0	429.4	28.5	175.5	60.0	2.266		
-64.5	0.6572	-33.0	140.5	-1.5	438.7	30.0	166.5	61.5	1.920		
-63.0	0.7812	-31.5	147.3	0.0	444.1	31.5	158.3	63.0	1.693		
-61.5	0.9288	-30.0	155.1	1.5	444.5	33.0	151.2	64.5	1.487		
-60.0	1.147	-28.5	164.0	3.0	440.1	34.5	145.6	66.0	1.296		



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**10 Watt AR111 Series**  
**450 Lm Warm White**

### 45° AR111 Illuminance Measurement





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## **10 Watt AR111 Series 450 Lm Warm White**

### **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 manufactured date. 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 [www.linelite.com](http://www.linelite.com) 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.

### **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 2011 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  
AR111 Series – May 2011  
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