

## M II - Type

SPOT & FLOOD - Low Voltage

# AR111

Broadly Dimmable



**Base Type :** G53 / Screw Terminal (ST)  
**Input Voltage :** 12V AC/DC  
**LED Source :** Nichia / Epistar / Osram  
**Total Power Consumption :** 16W±10%

### Safety & Environment Specifications

M II - Type - AR111 bulbs are manufactured to conform to the following safety approbation.

Certificated Mark		CE	EMC	LVD	ErP		REACH
Certificate Approval	●	●	●	●	●	●	●

Certificate Approval : ● : Completed △ : In Progress

**Energy Efficiency Class : A**  
**Rated luminous flux (ErP) : 1050lm**

#### 12V Lamps compatibility of transformers and dimmers :

Since there are various kinds of AC 12V transformers and dimmers in the market, 100% compatibility between these accessories is unlikely to be achieved.

##### -Electronic AC Transformer:

One and broadly compatible with 12V lamps. However, flicking and burning might occur when incompatible.

Even if the 12V lamp is compatible with the selected transformer, dimmer compatibility might be another issue that needs to be resolved.

##### -Magnetic AC Transformer:

LED bulb is compatible with magnetic transformers when used with 12V halogens, however it would be less efficient and have a shorter lifespan.

Even if the 12V lamp is compatible with the selected transformer, dimmer compatibility might be another issue that needs to be resolved.

##### DC Power Supply/Driver:

We highly recommend using this type of device, since it gives the highest efficiency and with no compatible issue. However, the dimming function will be hindered because it is designed in constant voltage and the dimmer can not work properly with it.

# Specification

Polar Diagram	No.	Part Number	LED Source	Input Voltage	CCT	C.R.I. (RA)	Beam Angle (°)	CBCP Candela (cd)	Total Pow. +/-10%	Typical Lumens (lm)	Efficiency (lm/W)	Dimming	Power Factor @ DC12V
	1	BLM111XXM-NVW1607LET	N-757	12V	2700K	80	25	3405	16	1030	64	YES	0.99
	2	BLM111XXM-NWW1607LET			3000K	80	25	3745	16	1135	71	YES	0.99
	3	BLM111XXM-NCW1607LET			5000K	70	25	4085	16	1235	77	YES	0.99
	4	BLM111XXM-NW1607LET	Osram 3030	12V	5700K	70	25	4425	16	1340	84	YES	0.99
	5	BLM111XXM-OVW1607LET			2700K	80	25	3725	16	1135	71	YES	0.99
	6	BLM111XXM-OWW1607LET			3000K	80	25	4100	16	1250	78	YES	0.99
	7	BLM111XXM-ONW1607LET	EPISTAR 3030	12V	4000K	80	25	4470	16	1360	85	YES	0.99
	8	BLM111XXM-OW1607LET			5700K	70	25	4845	16	1475	92	YES	0.99
	9	BLM111XXM-TVW1607LET			2700K	80	25	2715	16	865	54	YES	0.99
	10	BLM111XXM-TWW1607LET	EPISTAR 3030	12V	3000K	80	25	2985	16	950	59	YES	0.99
	11	BLM111XXM-TNW1607LET			4000K	80	25	3260	16	1040	65	YES	0.99
	12	BLM111XXM-TW1607LET			5700K	70	25	3530	16	1125	70	YES	0.99
	13	BLM111XXW-NVW1607LET	N-757	12V	2700K	80	40	1970	16	1120	70	YES	0.99
	14	BLM111XXW-NWW1607LET			3000K	80	40	2165	16	1230	77	YES	0.99
	15	BLM111XXW-NCW1607LET			5000K	70	40	2365	16	1345	84	YES	0.99
	16	BLM111XXW-NW1607LET	Osram 3030	12V	5700K	70	40	2560	16	1455	91	YES	0.99
	17	BLM111XXW-OVW1607LET			2700K	80	40	2075	16	1180	74	YES	0.99
	18	BLM111XXW-OWW1607LET			3000K	80	40	2285	16	1300	81	YES	0.99
	19	BLM111XXW-ONW1607LET	EPISTAR 3030	12V	4000K	80	40	2490	16	1415	88	YES	0.99
	20	BLM111XXW-OW1607LET			5700K	70	40	2700	16	1535	96	YES	0.99
	21	BLM111XXW-TVW1607LET			2700K	80	40	1560	16	925	58	YES	0.99
	22	BLM111XXW-TWW1607LET	EPISTAR 3030	12V	3000K	80	40	1715	16	1020	64	YES	0.99
	23	BLM111XXW-TNW1607LET			4000K	80	40	1870	16	1110	69	YES	0.99
	24	BLM111XXW-TW1607LET			5700K	70	40	2030	16	1205	75	YES	0.99
	25	BLM111XXWD-NVW1607LET	N-757	12V	2700K	80	60	975	16	1040	65	YES	0.99
	26	BLM111XXWD-NWW1607LET			3000K	80	60	1075	16	1145	72	YES	0.99
	27	BLM111XXWD-NCW1607LET			5000K	70	60	1170	16	1250	78	YES	0.99
	28	BLM111XXWD-NW1607LET	Osram 3030	12V	5700K	70	60	1270	16	1350	84	YES	0.99
	29	BLM111XXWD-OVW1607LET			2700K	80	60	1010	16	1040	65	YES	0.99
	30	BLM111XXWD-OWW1607LET			3000K	80	60	1110	16	1145	72	YES	0.99
	31	BLM111XXWD-ONW1607LET	EPISTAR 3030	12V	4000K	80	60	1210	16	1250	78	YES	0.99
	32	BLM111XXWD-OW1607LET			5700K	70	60	1315	16	1350	84	YES	0.99
	33	BLM111XXWD-TVW1607LET			2700K	80	60	805	16	865	54	YES	0.99
	34	BLM111XXWD-TWW1607LET	EPISTAR 3030	12V	3000K	80	60	885	16	950	59	YES	0.99
	35	BLM111XXWD-TNW1607LET			4000K	80	60	965	16	1040	65	YES	0.99
	36	BLM111XXWD-TW1607LET			5700K	70	60	1045	16	1125	70	YES	0.99

Option 1 : Lamp base: G53 / Screw Terminal (ST)

Option 2 : Input voltage will be 12V if not specified. Special request such as 24V or constant current 350mA or higher/lower can be accomplished with a different price.

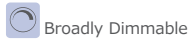
Option 3 : The above CCT. is defined based on ANSI standard. Specific color temperature can be done upon customer request. For instance 2700K could be assigned as 2580~2725K or 2725~2870K, the same can be accomplished for 3500K and 5500K as well but shall be with different price. 2200K is also available upon request.

Option 4 : 4700~6700K typical CRI +70; 2580~4500K typical CRI +80; CRI+90 is also available upon request.

Option 5 : Power factor: AC12V is above 0.8; DC12V is 0.99


Certificate Approval :

# Illuminance Figure



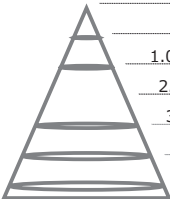
Nichia - 757  
Average Angle: 25 deg

	2700K	3000K	5000K	5700K
	BLM111XXM-NVW1607LET	BLM111XXM-NWW1607LET	BLM111XXM-NCW1607LET	BLM111XXM-NW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	3400	3740	4080	4420
2.0m	850	935	1020	1105
3.0m	378	416	454	491
4.0m	213	234	256	277
5.0m	136	150	163	177



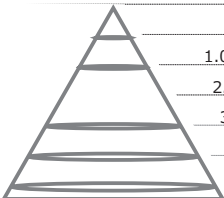

Nichia - 757  
Average Angle: 40 deg

	2700K	3000K	5000K	5700K
	BLM111XXW-NVW1607LET	BLM111XXW-NWW1607LET	BLM111XXW-NCW1607LET	BLM111XXW-NW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	1960	2155	2350	2550
2.0m	490	539	588	638
3.0m	218	240	261	284
4.0m	123	135	147	160
5.0m	78	86	94	101

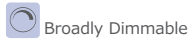



Nichia - 757  
Average Angle: 60 deg

	2700K	3000K	5000K	5700K
	BLM111XXWD-NVW1607LET	BLM111XXWD-NWW1607LET	BLM111XXWD-NCW1607LET	BLM111XXWD-NW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	970	1065	1165	1260
2.0m	243	267	292	316
3.0m	108	119	130	140
4.0m	60	66	72	78
5.0m	39	43	47	51



# Illuminance Figure



Osram 3030  
Average Angle: 25 deg

	2700K	3000K	4000K	5700K
	BLM111XXM-OVW1607LET	BLM111XXM-OWW1607LET	BLM111XXM-ONW1607LET	BLM111XXM-OW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	3720	4090	4465	4835
2.0m	930	1023	1116	1209
3.0m	413	454	496	537
4.0m	233	256	280	303
5.0m	149	164	179	194



Osram 3030  
Average Angle: 40 deg

	2700K	3000K	4000K	5700K
	BLM111XXW-OVW1607LET	BLM111XXW-OWW1607LET	BLM111XXW-ONW1607LET	BLM111XXW-OW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	2075	2285	2490	2700
2.0m	519	572	623	675
3.0m	230	253	276	299
4.0m	130	143	156	169
5.0m	83	91	100	108



Osram 3030  
Average Angle: 60 deg


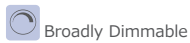
	2700K	3000K	4000K	5700K
	BLM111XXWD-OVW1607LET	BLM111XXWD-OWW1607LET	BLM111XXWD-ONW1607LET	BLM111XXWD-OW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	995	1095	1195	1295
2.0m	248	273	298	323
3.0m	110	121	132	143
4.0m	62	68	74	81
5.0m	40	44	48	52

# Illuminance Figure



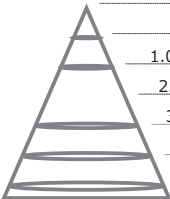
EPISTAR 3030  
Average Angle: 25 deg

	2700K	3000K	4000K	5700K
	BLM111XXM-TVW1607LET	BLM111XXM-TWW1607LET	BLM111XXM-TNW1607LET	BLM111XXM-TW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	2710	2980	3250	3525
2.0m	678	746	813	882
3.0m	302	332	362	393
4.0m	170	187	204	221
5.0m	109	120	131	142

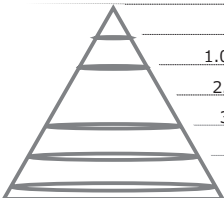
EPISTAR 3030  
Average Angle: 40 deg

	2700K	3000K	4000K	5700K
	BLM111XXW-TVW1607LET	BLM111XXW-TWW1607LET	BLM111XXW-TNW1607LET	BLM111XXW-TW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	1545	1700	1855	2010
2.0m	386	425	463	502
3.0m	172	189	207	224
4.0m	96	106	115	125
5.0m	62	68	74	81

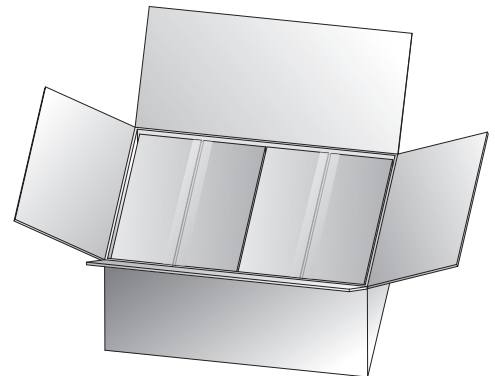
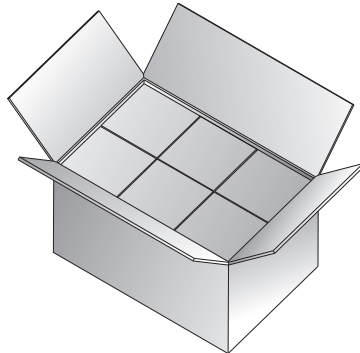
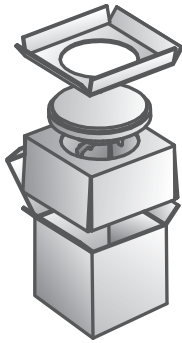



EPISTAR 3030  
Average Angle: 60 deg

	2700K	3000K	4000K	5700K
	BLM111XXWD-TVW1607LET	BLM111XXWD-TWW1607LET	BLM111XXWD-TNW1607LET	BLM111XXWD-TW1607LET
Illuminance Figure	Center Illumination(lx)			
1.0m	800	880	960	1040
2.0m	200	220	240	260
3.0m	89	98	107	116
4.0m	50	55	60	65
5.0m	32	35	38	42



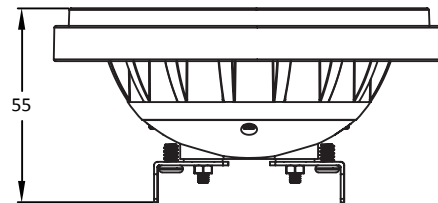
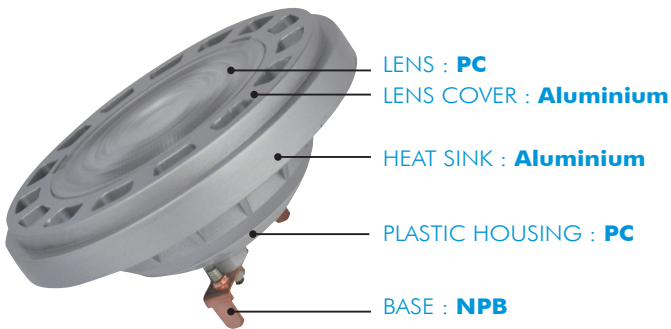
## Product Packing AR111



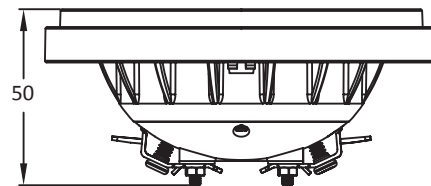
Step 1		Step 2		Step 3	
Gife Box/ White Box	1Pc of Lamp	Inner Carton	12 Boxes	Outer Carton	2 Inner Cartons (24 White Boxes)
Dimensions(mm)	L:120*W:120*H:105	Dimensions(mm)	L:375*W:250*H:227	Dimensions(mm)	L:522*W:391*H:240

### Lamp body material

### Dimension (mm) - Ø : 111 Net Weight (g)



Base G53  
Net Weight (g) 210



Base Screw Terminal (ST)  
Net Weight (g) 210

### Luminaire Notice

The LED Lamp is not compatible with all luminaires for halogen lamps. Before installation, please read following guidelines:

- No sealed fixtures.
- Not for outdoor fixtures.
- Not for wet environment.
- Not for integral primary optics.



No sealed fixtures Not for outdoor fixtures

## Safety Label & Warning

- Do not cover lamp with paper, fabric, or any flammable material to avoid burning.
- Working Environmental Temperature: -20 ~ +40°
- Do not insert metal objects into the gap of lamp base.
- The appropriate combination of lamp and lamp base should be carefully selected for different voltage and wattage.
- Do not use in high-humidity environment or near water to avoid damage. (Except B.L.T.C. Outdoor IP65 version)
- Not suitable for use in automatic light sensor system, emergency lighting fixture and mercury fixture to avoid damage and burning.
- Do not use near flammable objects such as gasoline, spray, chemicals, paints, oil...etc.
- Do not use in place that is likely to be impacted by force or vibration.
- Do not use in acidic environment.
- Please turn the light off when installing or cleaning to avoid electrical shock.
- Please handle with care to avoid damage and collision.
- Do not touch any powered-on lamps or lamps that have just been turned off to avoid burning.
- Please ensure the lamp is tightly installed into the socket to avoid dropping.
- Please select the appropriate fixture based on lamp size and weight.

## General Guideline

- Slight difference of color temperature and brightness is likely to occur for the same part number due to the difference of LED chips.
- Brightness, color temperature, and light distribution may vary with different types of bulbs.
- To avoid heat build-up and the shortening of product lifetime, sealed fixture is not recommended.
- Keep the lamp away from radio, video and television for a distance of 1 meter to avoid noise caused by interference.
- Do not install lamp in heat insulated fixture.
- Do not disassemble or reconstruct the lamp.
- Do not stare directly at the lamp to avoid eye injury.
- The light distribution may vary with different type of fixtures.
- Do not wash the lamp with water.
- Do not use the lamp outdoor if it is not marked as IP65.
- To avoid damage and poor insulation, do not use the lamp near water or in frosted environment if it is not marked as IP65.
- For lamps with a weight significantly higher than that of the lamps for which they are a replacement, attention should be drawn to the fact that the increased weight may reduce the mechanical stability of certain luminaires and lampholders and may impair contact making and lamp retention.