M II - Type

SPOT & FLOOD - High Voltage

## PAR20 50W Equivalent

Ø63mm



Dimmable



Base Type: E27

Input Voltage: H2 200~240V LED Source: Nichia/Epistar

Beam Angle: 23°/40°

**Total Power Consumption:**Beam Angle 23°: 7.5W±10%
Beam Angle 40°: 8W±10%

### Safety & Environment Specifications

M II - Type - PAR20 bulbs are manufactured to conform to the following safety approbation.



Certificate Approval :  $\bullet$  : Completed  $\ \triangle$  : In Progress

Energy Efficiency Class: A+
Rated luminous flux (ErP): 480lm

#### 200/240V Dimmable Compatibility

BLTC's dimmable lamps can work with most of leading edge (TRIAC) and trailing edge dimmers, however please note 100% compatibility can not be guaranteed due to the variety and quality of dimmers in the market.

Some of the compatibility issues may include audible noise, flickering and higher light output when the dimmer is set at a certain level.

Maximum total LED lamps power ≤ (20%)dimmer's maximum rated power. For instance, if a dimmer's maximum rated power is 600 Watts, the recommended maximum LED lamp load power should be under 120 Watts.

## **Specification**

Polar Diagram	No.	Part Number	LED Source	Input Voltage	сст	C.R.I. (RA)	Beam Angle (°)	CBCP Candela (cd)	Total Pow. +/-10%	Typical Lumens (lm)	Efficiency (lm/W)	Dimming	Power Factor H2
-105-120 120 105	1	BLM2027M-NVW81H2DM2	– N-757	200V/240V	2700K	80	23	1655	7.5	625	83	YES	0.9
-90 90 -75 75	2	BLM2027M-NWW81H2DM2			3000K	80	23	2180	7.5	660	88	YES	0.9
-60	3	BLM2027M-NCW81H2DM2			5000K	70	23	2200	7.5	690	92	YES	0.9
-45 -30-15 0 15 30	4	BLM2027M-NW81H2DM2	_		5700K	70	23	2245	7.5	735	98	YES	0.9
-105-120 120 105	5	BLM2027M-TVW81H2DM2	— EPISTAR 3030	200V/240V	2700K	80	23	1470	7.5	570	76	YES	0.9
-90 -75 75	6	BLM2027M-TWW81H2DM2			3000K	80	23	1605	7.5	620	83	YES	0.9
-60	7	BLM2027M-TNW81H2DM2			4000K	80	23	1735	7.5	690	92	YES	0.9
-45 -30-15 0 15 30	8	BLM2027M-TW81H2DM2			5700K	70	23	1945	7.5	730	97	YES	0.9
-105-120 120 105	9	BLM2027W-NVW81H2DM2	 N-757 	200V/240V	2700K	80	40	1245	8	660	83	YES	0.8
-90 90 -75 75	10	BLM2027W-NWW81H2DM2			3000K	80	40	1310	8	680	85	YES	0.8
-60 -45	11	BLM2027W-NCW81H2DM2			5000K	70	40	1310	8	750	94	YES	0.8
-30-15 0 15 30	12	BLM2027W-NW81H2DM2			5700K	70	40	1378	8	790	99	YES	0.8
-105-120 120 105	13	BLM2027W-TVW81H2DM2	– – EPISTAR 3030	200V/240V	2700K	80	40	1120	8	595	74	YES	0.8
-90 -75	14	BLM2027W-TWW81H2DM2			3000K	80	40	1180	8	610	76	YES	0.8
-60	15	BLM2027W-TNW81H2DM2			4000K	80	40	1180	8	675	84	YES	0.8
-45 -30-15 0 15 30	16	BLM2027W-TW81H2DM2			5700K	70	40	1240	8	710	89	YES	0.8

Option 1: Lamp base: E27
Option 2: Input Voltage: H2 220~240V
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.



# Illuminace Figure

Dimmable

Nichi	ia 757	2700K	3000K	5000K	5700K		
Average Ar	ngle: 23 deg	BLM2027M-NVW81H2DM2	BLM2027M-NWW81H2DM2	BLM2027M-NCW81H2DM2	BLM2027M-NW81H2DM2		
Illumina	ice Figure	Center Illumination(lx)					
Λ	0.5m	6624	8725	8805	8985		
	1.0m	1655	2180	2200	2245		
Γ	1						
	2.0m	414	545	550	562		
	2.5m	265	349	352	359		
	3.0m	184	242	245	250		

Dimmable

Nichia 757		2700K	2700K 3000K 5000K		5700K		
Average Angle	: 40 deg	BLM2027W-NVW81H2DM2	BLM2027W-NWW81H2DM2	BLM2027W-NCW81H2DM2	BLM2027W-NW81H2DM2		
Illuminace Figure		Center Illumination(lx)					
<b>N</b>	0.5m	6624	7284	7945	8605		
	1.0m	1655	1820	1985	2150		
	\						
	2.0m	414	455	497	538		
	2.5m	265	291	318	344		
	3.0m	184	202	221	239		

Dimmable

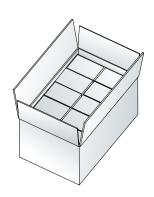
Epista	ar 3030	2700K	3000K	4000K	5700K		
Average A	ingle: 23 deg	BLM2027M-TVW81H2DM2	BLM2027M-TWW81H2DM2	BLM2027M-TNW81H2DM2	BLM2027M-TW81H2DM2		
Illumina	ace Figure	Center Illumination(Ix)					
/	0.5m	5875	6415	6934	7773		
F	1.0m	1470	1605	1735	1945		
	2.0m	367	401	433	486		
	2.5m	235	257	277	311		
	3.0m	163	178	192	216		
	<b>=</b>						

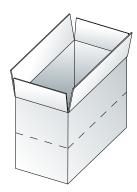
O Dimmable

Epistar 3030		2700K	3000K	4000K	5700K		
Average Angle:	40 deg	BLM2027W-TVW81H2DM2	BLM2027W-TWW81H2DM2	BLM2027W-TNW81H2DM2	BLM2027W-TW81H2DM2		
Illuminace Figure		Center Illumination(lx)					
<b>^</b> 0.	.5m	3079	3379	3699	3999		
	L.0m	770	845	925	1000		
	2.0m	192	211	231	249		
	2.5m	123	135	148	160		
	3.0m	85	93	102	110		

## **Product Packing PAR20**





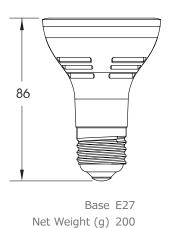


Step 1	Step 2	Step 5
Gife Box/ White Box 1Pc of Lamp	Interior Box 12 Boxes	Outerior Box 5 Inner Cartons (60 White Boxes)
Dimensions(mm) L:74*W:74*H:90	Dimensions(mm) L:316*W:94*H:290	Dimensions(mm) L:490*W:336*H:314

## **Lamp body material**

## Dimension (mm) - Ø: 63 Net Weight (g)





## **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.





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 heal 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.

#### **Guide to Dimming**

- The maximum LED lamp load is not clearly defined by most of the key dimmer manufactures.
- BLTC's dimmable lamps can work with most of leading edge (TRIAC) and trailing edge dimmers, however 100% compatibility cannot be guaranteed due to the variety and quality of dimmers in the market. Some of the compatibility issues may include audible noise, flickering and higher light output when the dimmer is set at a certain level.
- Maximum total LED lamps power should not exceed 20% of dimmer's maximum rated power.
- For instance, if a dimmer's maximum rated power is 600 Watts, the recommended maximum LED lamp load power should be under 120 Watts.
- The remote control may not work properly when using around infrared remote control such as television remote and AC remote.
- If the dimmer is set at a lower than 10% level when the blub is turned on, it is possible to have no light emission at all or is easy to blink. In this case, please just tune the dimmer to 100% and turn the bulb on again.
- The time it takes to turn on the light may vary with different kind of dimmer switch.
- Do not use dimmer with non-dimmable bulbs to avoid damage and burning.
- Sometimes the lamp may fail to dim when working with the following kinds of dimmers.
  - -sensor dimmers
  - -stepping dimmers
  - -remote control dimmers
  - -dimmers with memory

function--to re-show the light scene with even just a button.

- When dimming, the brightness of the lamp will be affected by the variation of power supply and bulb types.
- When the dimmer is tuned at the lowest lever, a moment of brightness might occur after the power is turned on.
- When the dimmer is tuned at the lowest lever, dimming or flickering might occur when a high-power consumption device such as hair dryer or air conditioner is used due to power and current fluctuation.
- When turning off light, it is highly recommended to turn off the power switch instead of simply tuning the dimmer to the lowest level.
- When more than one bulb is connected to a dimmer, the brightness of each bulb may vary depending on its characteristic.
- It is normal to have minor noises when turning dimmers.
- If the light flickers when dimming, please adjust the dimmer until the light is tuned to a steady level.

#### **Solution to Abnormal Dimmable Bulbs**

- Please ensure the dimmer is operated on an independent AC line, not connecting to other electrical appliances or devices. If high-power consumption devices such as freezer, air conditioner, laundry machine, and hair dryers are connected to the same AC line with the dimmer, abnormal light emission is likely to occur.
- When abnormal light occur when a dimmer is connected to only one LED bulb, please try the combination of more than two LED bulbs. The optimal combination is to connect one dimmer to the quantity of LED bulbs adding up to over 35 watts. This is due to the minimum power consumption of a dimmer.