

# LED Dimmable SMD Bulb- A60 8.5W

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## 1. Specification:

### A. General Data

<b>Model</b>	A60 Dimmable 8.5W E27 2700K	A60 Dimmable 8.5W E27 3000K	A60 Dimmable 8.5W E27 4000K	A60 Dimmable 8.5W E27 6500K
<b>P/N</b>	DELS-BLW48P5A 8DE51	DELS-BL348P5A8 DE51	DELS-BL448P5A8 DE51	DELS-BLC48P5A 8DE51
<b>Rated Voltage</b>	230 VAC			
<b>Frequency</b>	50 Hz			
<b>Rated Wattage</b>	8.5 W			
<b>Deviation Tolerance of Wattage</b>	±10 %			
<b>Rated Current</b>	0.039 A			
<b>Maximum Input Current</b>	0.045 A			
<b>Start On</b>	<0.5S			
<b>Warm up time</b>	<1S			
<b>Dimmable</b>	YES			
<b>Beam Angle</b>	180°			
<b>Energy Efficiency Class(EEC)</b>	F			
<b>Peak luminous intensity(cd)</b>	Non-directional			
<b>R9 CRI</b>	>0			
<b>Survival factor</b>	0.9			
<b>Safety requirements</b>	CE			
<b>Displacement factor (cos φ1)**</b>	>0.5			

<b>Stroboscopic effect metric (SVM)</b>	0.4
<b>Flicker metric (PstLM)</b>	1
<b>Applicable Environments</b>	Dry locations; Not suitable for totally enclosed fixtures
<b>Ingress protection rating</b>	IP20
<b>Impact resistance</b>	N.A
<b>Incandescent Equivalent</b>	60W
<b>Base</b>	E27
<b>Photobiological Group</b>	RG 1

\* Displacement factor tolerance +/- 10%

**B. Light Data**

<b>Color</b>	Soft White	Warm White	Natural White	Cool White
<b>Color Temperature (CCT)</b>	2700K	3000K	4000K	6500K
<b>Lumen Output* (φ Total °)</b>	806 lm			
<b>Color Rendering Index*</b>	≥ 80			
<b>Efficacy( φ Total °)</b>	94.8 lm/W			
<b>Color Consistency**</b>	6 Step MacAdam Ellipse (6 SDCM)			

\* tolerance +/- 10%

\*\* 2700K center point (0.445766, 0.40983) · center point (0.4338, 0.403) · 4000K center point (0.3818, 0.3796) · 6500K center point (0.3123, 0.3283)

**C. Lifetime**

(Supplied Voltage: AC 230V ; Ambient Temperature: 25°C)

<b>Lumen Maintenance Factor</b>	70% of the rated lifetime
<b>Rated Lifetime – L<sub>70B50</sub></b>	15,000 hrs
<b>Lumen Maintenance factor</b>	93.1%

**D. Temperature Operation**

<b>Normal operation temperature</b>	-20°C ~ 40°C
<b>Relative Humidity</b>	10% ~ 90%

E. Geometric Data

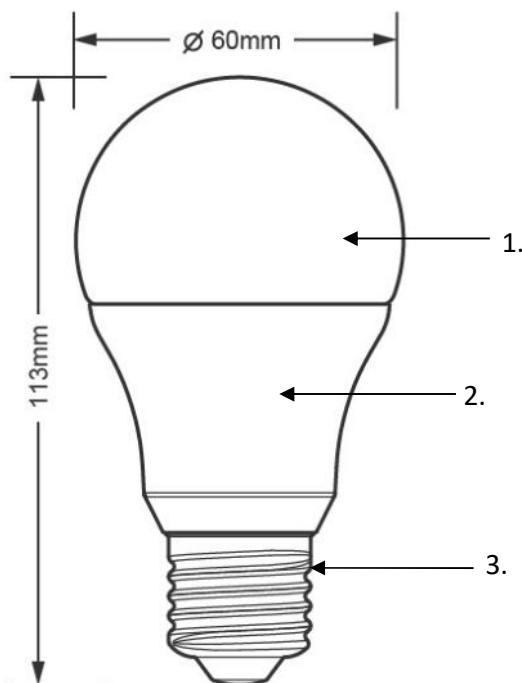
<b>Model</b>	A60 Dimmable 8.5W E27
<b>Maximum overall length</b>	60 ± 2 mm
<b>Maximum overall width</b>	113 ± 2 mm
<b>Mass</b>	45g ± 10%

F. Environmental relevant materials

<b>Mercury (Hg)</b>	Comply with RoHS Directive 2011/65/EU
<b>Lead (Pb)</b>	
<b>Cadmium(Cd)</b>	
<b>Hexavalent Chromium(Cr6+)</b>	
<b>Polybrominated Biphenyls(PBBs)</b>	
<b>Polybrominated Diphenyl Ethers(PBDEs)</b>	
<b>Bis (2-ethylhexyl) phthalate(DEHP)</b>	
<b>Butyl benzyl phthalate(BBP)</b>	
<b>Dibutyl phthalate(DBP)</b>	
<b>Diisobutyl phthalate(DIBP)</b>	

**2. Outline Drawing**

Unit : mm

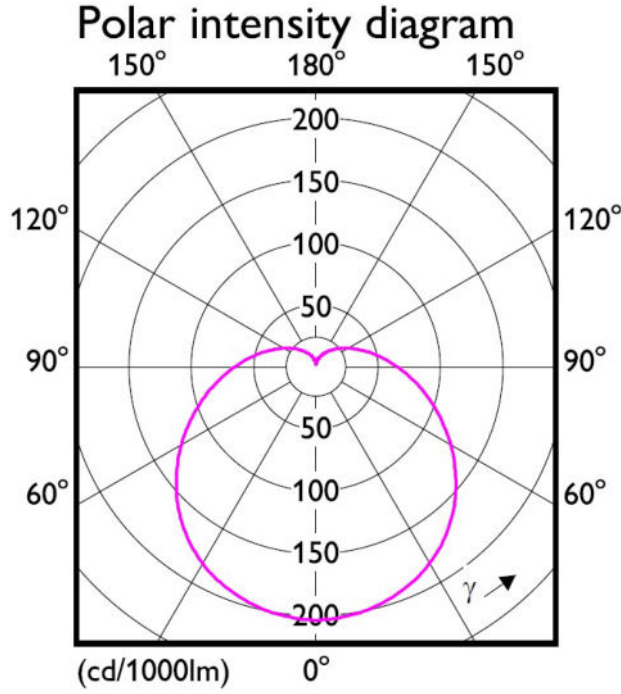


**Material Information**

- 1. Globe: Plastic
- 2. Body: Plastic
- 3. Base: Metal

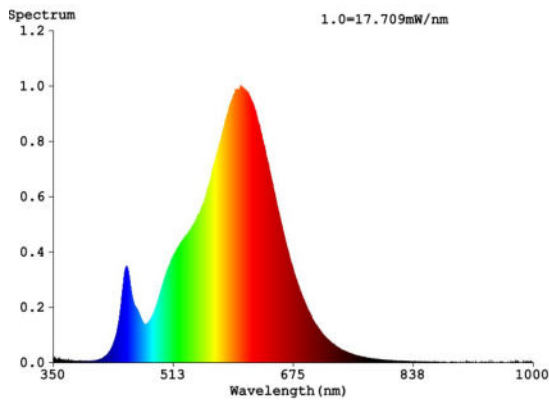
### 3. Light Distribution Curve

FWHM 180°

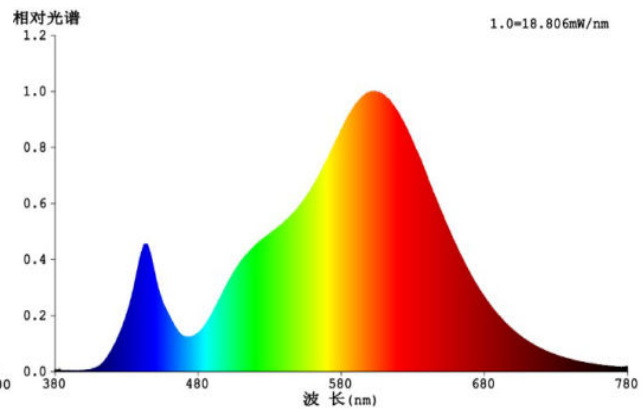


### 4. Spectrum Distribution

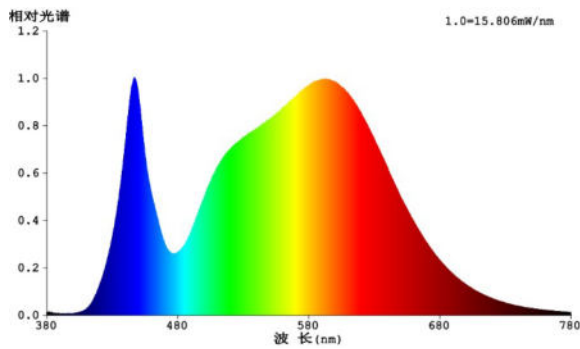
● 2700K Color Temperature



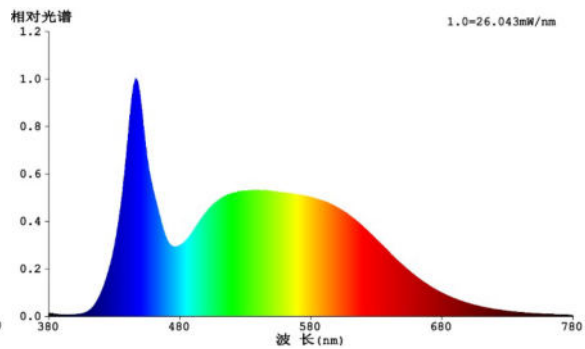
● 3000K Color Temperature



● 4000K Color Temperature



● 6500K Color Temperature



**5. Warnings**

Before replacing, turn off power and let lamp cool to avoid electrical shock or burn.

**6. Cautions**

Only to apply in dry and most of open fixtures with lamp-holders that offer sufficient space (10 mm free air space). Not intended for use with emergency light fixtures for exit lights.

**7. Notes**

All characteristics are estimated at room temperature (25°C), free air burning, base up burning position and at rated voltage. In view of the complex manufacturing process for light above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technic individual products may vary from the typical values.

**8. Logistic information**

<b>Model</b>	A60 Dimmable 8.5W E27 2700K	A60 Dimmable 8.5W E27 3000K	A60 Dimmable 8.5W E27 4000K	A60 Dimmable 8.5W E27 6500K
<b>Pieces per pack</b>	1	1	1	1
<b>EAN code on pack</b>	4711112389704	4711112387267	4711112387274	4711112387281
<b>Size of pack</b>	60 * 60 * 119mm			
<b>Weight per pack (G.W)</b>	55g			
<b>Packs per inner box</b>	N/A			
<b>EAN code on inner box</b>	N/A			
<b>ITF code on inner box</b>	N/A			
<b>Size of inner box</b>	N/A			
<b>Weight per inner box(G.W)</b>	N/A			
<b>Packs per outer box</b>	100			
<b>EAN code on outer box</b>	N/A			
<b>ITF code on outer box</b>	14711112389701	14711112387264	14711112387271	14711112387288
<b>Size of outer box</b>	620 * 315 * 258mm			
<b>Weight per outer box(G.W)</b>	6.8kg			

Packing Photograph

DELS-BLW48P5A8DE51 2700K

DELS-BL348P5A8DE51 3000K



DELS-BL448P5A8DE51 4000K

DELS-BLC48P5A8DE51 6500K



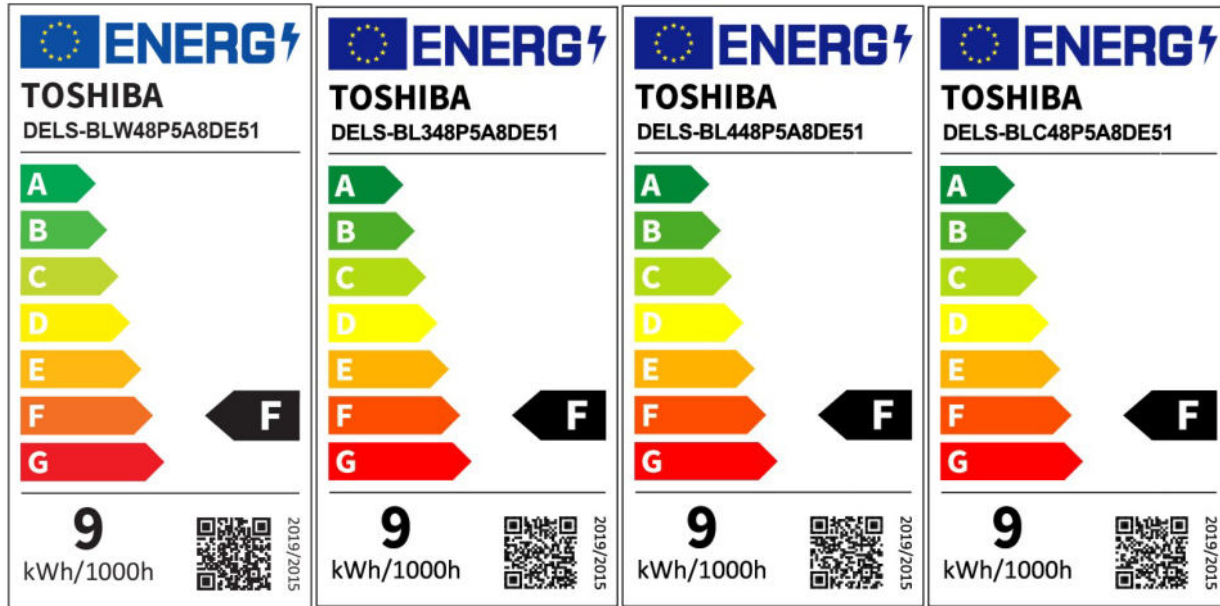
**9. ERP Label**

**2700K**

**3000K**

**4000K**

**6500K**



**10. Conformity**

<b>2014/35/EU; Low Voltage Directive</b>	EN 62560:2012 + A1:2015 + A11:2019 · EN 62493:2015 · IEC TR 62778:2014
<b>2014/30/EU; EMC Directive</b>	EN IEC 55015:2019 + A11:2020 · EN IEC 61000-3-2:2019+A1:20211 · EN 61547:2009 · EN 61000-3-3:2013 + A1:2019
<b>2009/125/EC; ErP Directive</b>	(EU) 2019/2015 · (EU) 2019/2020 · (EU)2021/340 · (EU)2021/341
<b>2011/65/EU+(EU)2020/659; RoHS Directive</b>	EN IEC 63000 : 2018

**11. Applicable countries**

Albania ,Austria , Belgium , Bulgaria , Croatia , Cyprus , Czech , Denmark , Estonia , Finland , France , Georgia  
Germany ,Greece , Iceland , Ireland , Italy , Luxembourg , Malta , Morocco , Netherland , Norway , Portugal  
Romania ,Serbia , Spain , Sweden , Switzerland , Tunisia ,U.K

Note : The requirement of each country will be reflected to the product specifications, when the products will be shipped to such country.

**12. Manufacturer and Toshiba brand licensee**

EPILEDs TECHNOLOGIES, INC.