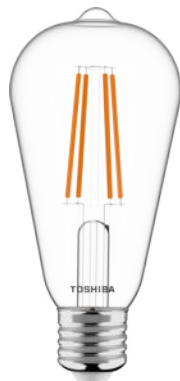


LED Dimmable Filament – ST64_ Clear glass

Authorized Licensee for TOSHIBA trademark



1. Specification:

A. General Data

Model	ST64 dimmable filament 4.5W E27
P/N	DELS-STW44P567DF11
Rated Voltage	230 VAC
Frequency	50 Hz
Rated Wattage	4.5 W
Deviation Tolerance of Wattage	±10 %
Rated Current	0.026 A
Maximum Input Current	0.03 A
Start On	<0.5S
Warm up time	<1S
Dimmable	YES
Beam Angle	270°
Energy Efficiency Class(EEC)	F
Peak luminous intensity (cd)	Non-directional
R9 CRI	1
Survival factor	0.9
Lumen Maintenance factor	93.1%
Safety requirements	CE
Displacement factor (cos φ1)**	No limit
Stroboscopic effect metric (SVM)	0.9

Flicker metric (PstLM)	1
Applicable Environments	Dry locations; Not suitable for totally enclosed fixtures
Incandescent Equivalent	40W
Base	E27
Photobiological Group	RG 1

* Displacement factor tolerance +/- 10%

**No limit at $P_{on} \leq 5W$

B. Light Data

Color	Soft White
Color Temperature (CCT)	2700K
Lumen Output* (φ Total °)	470 lm
Color Rendering Index*	≥ 80
Efficacy(φ Total °)	104.44 lm/W
Color Consistency**	6 Step MacAdam Ellipse (6 SDCM)

* tolerance +/- 10%

** 2700K center point (0.458, 0.410)

C. Lifetime

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

Lumen Maintenance Factor	70% of the rated lifetime
Rated Lifetime – L₇₀B₅₀	15,000 hrs
Switch cycles	>20,000

D. Temperature Operation

Normal operation temperature	-20°C ~ 40°C
Relative Humidity	10% ~ 90%

E. Geometric Data

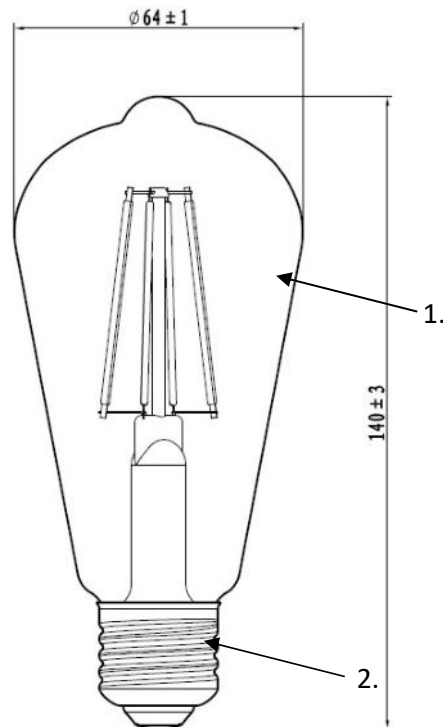
Model	ST64 dimmable filament 4.5W E27
Maximum overall length	64 ± 1 mm
Maximum overall width	140 ± 3 mm
Mass	40 g ± 10%

F. Environmental relevant materials

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

2. Outline Drawing

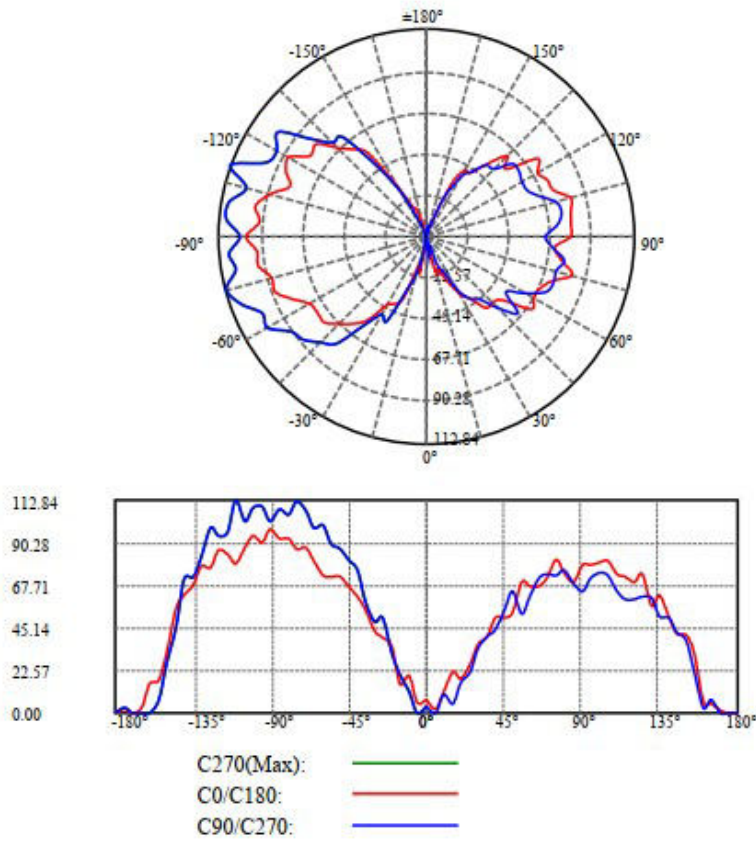
Unit : mm

**Material Information**

1. Globe & Body : Glass
2. Base : Metal

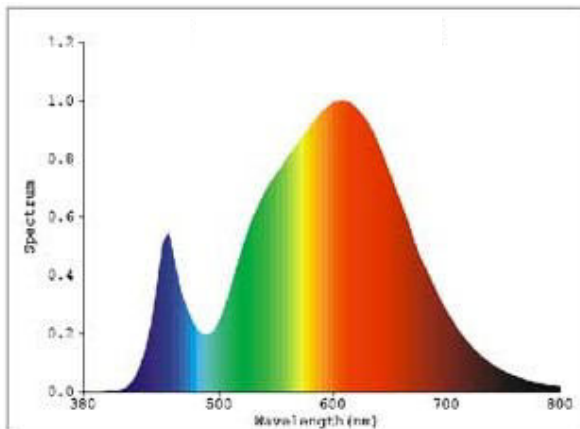
3. Light Distribution Curve

FWHM 270°



4. Spectrum Distribution

- 2700K 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.

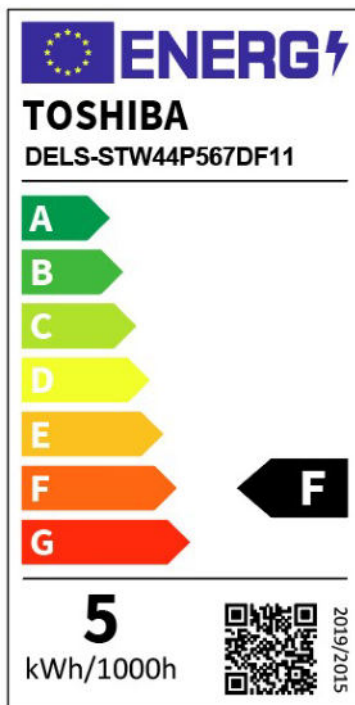
8. Logistic information

Model	ST64 dimmable filament 4.5W E27 2700K
Pieces per pack	1
EAN code on pack	4711112387182
Size of pack	70 * 75 * 152mm
Weight per pack (G.W)	48g
Packs per inner box	N/A
EAN code on inner box	N/A
ITF code on inner box	N/A
Size of inner box	N/A
Weight per inner box(G.W)	N/A
Packs per outer box	80
EAN code on outer box	N/A
ITF code on outer box	1471112387189
Size of outer box	578 * 390 * 321mm
Weight per outer box(G.W)	5Kg

Packing Photograph



9. ERP Label



10. Conformity

2014/35/EU; Low Voltage Directive	EN 62560:2012 + A11:2019 、 EN 62493:2015 、 IEC TR 62778:2014
2014/30/EU; EMC Directive	EN IEC 55015:2019 + A11:2020 、 EN IEC 61000-3-2:2019 、 EN 61547:2009 EN 61000-3-3:2013 + A1:2019
2009/125/EC; ErP Directive	(EU) 2019/2015 、 (EU) 2019/2020 、 (EU)2021/340 、 (EU)2021/341
2011/65/EU+(EU)2015/863; RoHS Directive	EN 50581: 2012

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.