

# LED Ceiling Light D400\_Brightness Selectable

Authorized Licensee for TOSHIBA trademark





# 1. Specification:

### A. General Data

Model	LED Ceiling Light D400-Brightness Selectable		
P/N (White frame)	DELL-CL340242NWB41	DELL-CL440242NWB41	DELL-CLC40242NWB41
P/N (Black frame)	DELL-CL340242BWB41	DELL-CL440242BWB41	DELL-CLC40242BWB41
Rated Voltage	230 VAC	230 VAC	230 VAC
Frequency	50 Hz	50 Hz	50 Hz
Rated Wattage	24 W	24 W	24 W
Deviation Tolerance of Wattage	±10 %	±10 %	±10 %
Displacement factor (cos φ1)*	≥ 0.9	≥ 0.9	≥ 0.9
Rated Current	0.135A	0.135A	0.135A
Maximum Input Current	0.149A	0.149A	0.149A
Start On	<0.5\$	<0.5S	<0.5S
Warm up time	<18	<18	<18
Dimmable	3 Step Dimming 100%->50%->15%		
Beam Angle	110°	110°	110°
Peak luminous intensity (cd)	Non-directional	Non-directional	Non-directional
R9 CRI	>2	>2	>2
Survival factor	90%	90%	90%
Safety requirements	CE	CE	CE
Stroboscopic effect metric (SVM) ≤ 0.9	<0.05	<0.05	<0.05



Flicker metric (PstLM) ≤ 1	<0.02	<0.02	<0.02
Energy Efficiency Class(EEC)	F	F	F
Applicable Environments	IP20	IP20	IP20
Exchangeable  LED Module	NO	NO	NO
Photobiological Group	RG 0	RG 0	RG 0
Safety class	Class II	Class II	Class II

<sup>\*</sup> Displacement factor tolerance +/- 10%

### B. Light Data

Color	Warm White	Natural White	Cool white
Color Temperature (CCT)	3000K	4000K	6500K
Lumen Output* (φ120°)		2500 lm	
Lumen Output* (φ Total)		2500 lm	
Directional lamp		No	
Beam angle correspondence*		Sphere	
Color Rendering Index*	83		
Efficacy ( Useful )*	104.2 lm/W	104.2 lm/W	104.2 lm/W
Efficacy ( Total )*	104.2 lm/W	104.2 lm/W	104.2 lm/W
Color Consistency**		6 Step MacAdam Ellipse (6 S	DCM)

<sup>\*</sup> tolerance +/- 10%

### C. Lifetime

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

Lumen Maintenance Factor	70% of the rated lifetime	
Rated Lifetime – L <sub>70</sub> B <sub>50</sub>	15,000 hrs	
Lumen Maintenance	93.1%	
factor	93.176	

<sup>\*\* 3000</sup>K center point (0.43387, 0.40319); 4000K center point (0.38177, 0.37959); 6500K center point (0.31230, 0.32825)

<sup>\*</sup> Sphere : non-directional  $\cdot$  Wide cone : Bean angle  $\geq 90^{\circ}(\Phi 120^{\circ}, \text{ in a } 120^{\circ}\text{cone}) \cdot \text{Narrow cone}$  :Bean angle  $< 90^{\circ}(\Phi 90^{\circ}, \text{ in a } 90^{\circ}\text{cone})$ 

# D. Temperature Operation

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

# E. Geometric Data

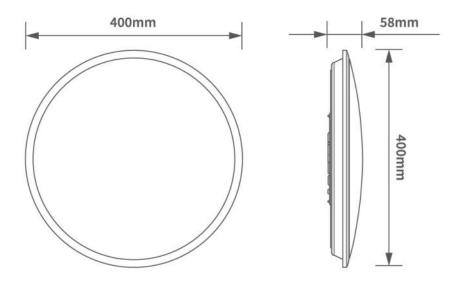
Model	LED Ceiling Light D400-Brightness Selectable	
Maximum diameter	400 ± 2 mm	
Maximum overall thickness	58 ± 1 mm	
Mass	830 g± 60g	

### F. Environmental relevant materials

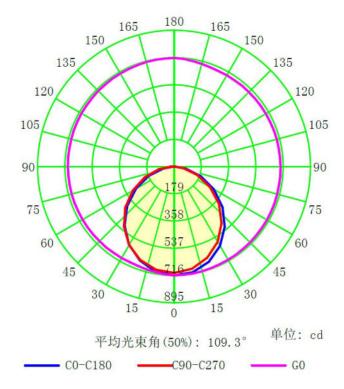
Mercury (Hg)  Lead (Pb)  Cadmium(Cd)	
Hexavalent Chromium(Cr6+) Polybrominated Biphenyls(PBBs) Polybrominated Diphenyl Ethers(PBDEs)	Comply with RoHS Directive 2011/65/EU
Bis (2-ethylhexyl) phthalate(DEHP)	
Butyl benzyl phthalate(BBP)	
Dibutyl phthalate(DBP)	
Diisobutyl phthalate(DIBP)	

# 2. Outline Drawing

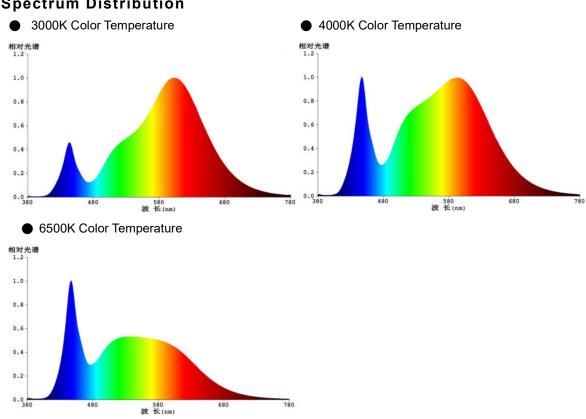
Unit: mm



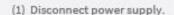
# 3. Light Distribution Curve

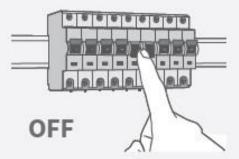


# 4. Spectrum Distribution

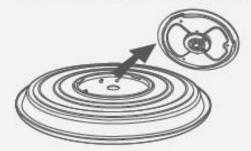


#### 5. Installation Instructions





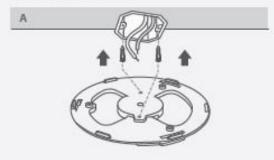
Open packaging, get the ceiling light, and separate the base from the Luminaire body.



#### (3) Install the base

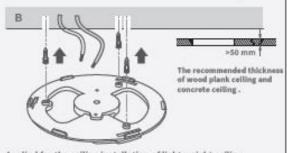
#### A. For Ceiling Junction Box

Fix the base onto the ceiling junction box by using a self-tapping screw and make sure the base is fixed securely.



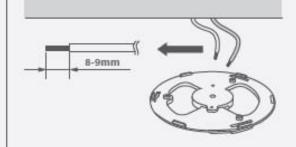
#### B. Without Ceiling Junction Box

Make three L≥25mm installation holes. Place the wall anchor in the installation hole, then fix the base onto the ceiling by using a self-tapping screw and make sure the base is fixed securely.

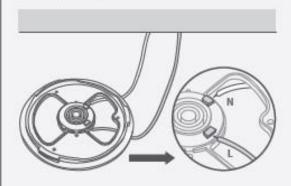


Applied for the ceiling installation of light weight ceiling, wood plank ceiling, or concrete ceiling.

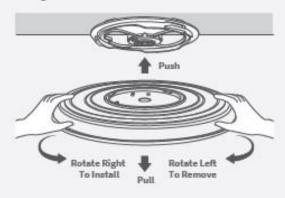
(4) According to the requirements of the following scheme, it is necessary to remove isolation from the wire on 8-9mm.



(5) Press the pink button and insert a cord into the terminal block, then make sure the reliability of connection.



(6) Hold the lamp body to align and fix in the base. Rotate the lamp body to the left and right to remove and install.



(7) Accessories:

Including 4 pcs of self-tapping screws M3.5 x 35mm and 4 pcs of wall anchors.



Self-tapping screw



Wall anchor



#### 6. Warnings

- Before replacing, turn off power and let lamp cool to avoid electrical shock or burn.
- Before opening the package, please check if there's damage or defect during transportation, if damage occurs, please don't use it and inform your supplier immediately.
- Please do not attempt to use a damaged product.
- The product should be installed, dismantled and maintained by a qualified electrician; Suppliers don't take charge of any problems or damages that occur due to mishandling such as an operation not permitted in this manual.
- Choose an install place where can withstand 10 times the weight of the product to ensure a solid installation.
- Wipe the veil with soft cloth dipped a little neutral detergent, be sure not to use any sandpaper, polishing powder or alcohol, gasoline and so on liquor.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

#### 7. 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.

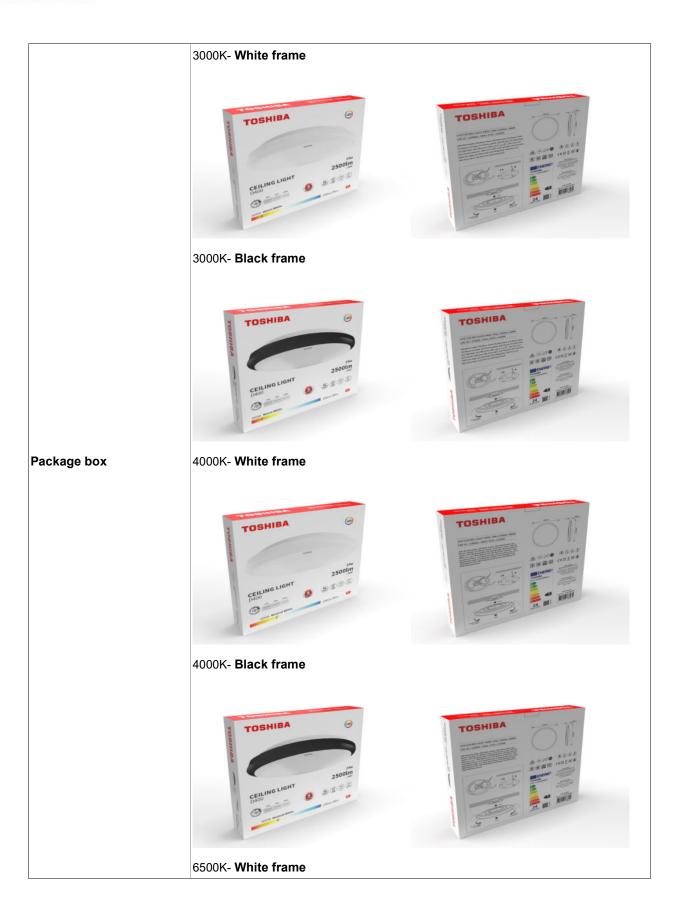
#### 8. Notes

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.



# 9. Logistic information

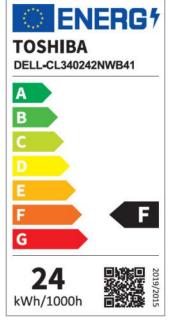
iion		
Brightness Selectable D400 24W 3000K	Brightness Selectable D400 24W 4000K	Brightness Selectable D400 24W 6500K
1	1	1
4711112388264	4711112388271	4711112388288
4711112388295	4711112388301	4711112388318
40.3 x 6.8 x 40.2 cm	40.3 x 6.8 x 40.2 cm	40.3 x 6.8 x 40.2 cm
1.09 kg	1.09 kg	1.09 kg
N/A	N/A	N/A
6	6	6
N/A	N/A	N/A
14711112388261	14711112388278	14711112388285
14711112388292	14711112388308	14711112388315
43 x 43 x 43 cm	43 x 43 x 43 cm	43 x 43 x 43 cm
7.5 Kg	7.5 Kg	7.5 Kg
	Brightness Selectable D400 24W 3000K  1  4711112388264  4711112388295  40.3 x 6.8 x 40.2 cm  1.09 kg  N/A  N/A  N/A  N/A  14711112388261  14711112388261  14711112388292  43 x 43 x 43 cm	Brightness Selectable D400 24W 3000K         Brightness Selectable D400 24W 4000K           1         1           4711112388264         4711112388271           4711112388295         4711112388301           40.3 x 6.8 x 40.2 cm         40.3 x 6.8 x 40.2 cm           1.09 kg         1.09 kg           N/A         N/A           N/A         N/A           N/A         N/A           N/A         N/A           N/A         N/A           N/A         N/A           14711112388261         14711112388278           14711112388292         14711112388308           43 x 43 x 43 x 43 cm         43 x 43 x 43 cm

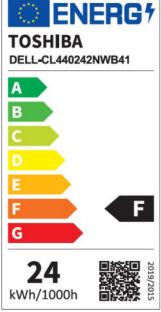


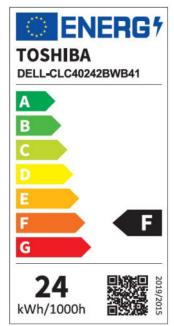


### 10. ERP Label

D400\_Brightness selectable\_white frame

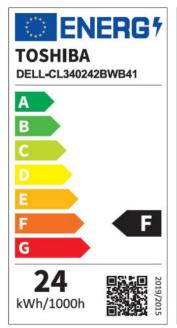


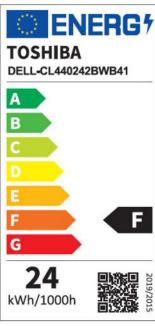


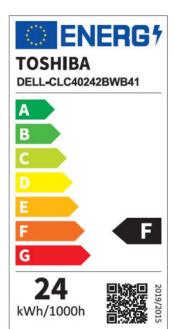




### D400\_Brightness selectable\_black frame







### 11. Conformity

2014/35/EU; Low Voltage Directive	EN 60598-2-1:2021 ; EN 60598-1: 2021+AMD11:2022
2014/30/EU; EMC Directive	EN IEC 55015: 2019+A11: 2020 ; EN61547:2009 ; EN IEC 61000-3-2:2019+A1:2021 ; EN 61000-3-3:2013+A1:2019+A2:2021
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

### 12. 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.

# 13. Manufacturer and Toshiba brand licensee

EPILEDS TECHNOLOGIES, INC.