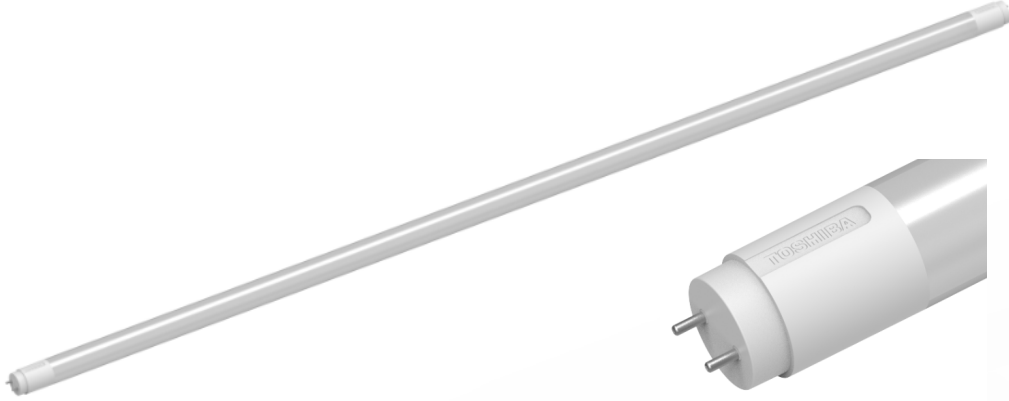


LED T8 glass tube – 5ft 23W

Authorized Licensee for TOSHIBA trademark



1. Specification:

A. General Data

Model	5ft T8 glass tube 23W	
Product Code	00301315549A	00301315550A
P/N	MMR-T840623A5-K5Bx	MMR-T865623A5-K5Bx
Rated Voltage	230 VAC	230 VAC
Frequency	50 Hz	50 Hz
Rated Wattage	23 W	23 W
Deviation Tolerance of Wattage	±10 %	±10 %
Power Factor (Input 230V, 50Hz)	0.9(typical)	0.9(typical)
Rated Current (Input 230V)	0.11A	0.11A
Maximum Input Current (Input 230V)	0.127A	0.127A
Start On	<0.5S	<0.5S
Dimmable	NO	NO
Beam Angle	210°	210°
Energy class	A++	A++
EEL	0.09	0.09
Safety requirements	CE	CE
Ingress Protection Rating	IP20	IP20

Fluorescent Equivalent	60W	60W
Photobiological Group	RG 1	RG 1

B. Light Data

Color	Neutral White	Cool White
Color Temperature (CCT)	4000K	6500 K
Rated Lumen Output*	3450 lm	3450 lm
Color Rendering Index*	80	
Efficacy*	150 lm/W	150 lm/W
Color Consistency**	6 Step MacAdam Ellipse (6 SDCM)	

* tolerance +/- 10% ** 4000K center point(0.380, 0.380) ; 6500K center point (0.313, 0.337)

C. Lifetime

(Supplied Voltage: AC230V ; Ambient Temperature: 15°C~40°C)

Lumen Maintenance Factor	70% of the rated lifetime
Rated Lifetime – L ₇₀ B ₅₀	40,000 hrs
Switch cycles	≥ 20000

D. Temperature Operation

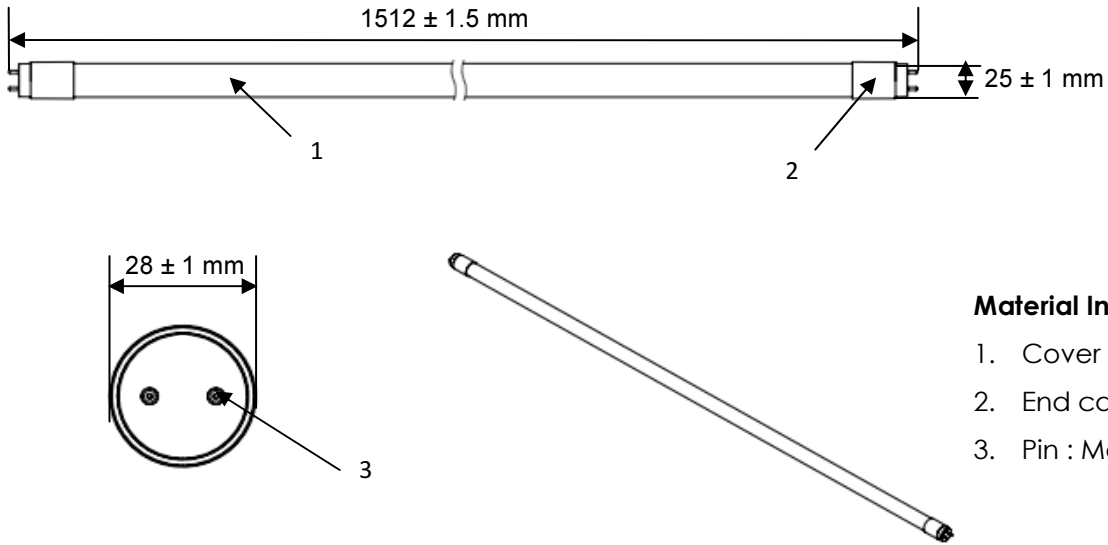
Normal operation temperature	-20°C ~ 45°C
Relative Humidity	10% ~ 90%

E. Geometric Data

Maximum overall length	1512 ± 1.5 mm (59.53 ± 0.06 inch)
Glass cover diameter	25 ± 1 mm (1.0 ± 0.04 inch)
End cap diameter	28 ± 1 mm (1.1 ± 0.04 inch)
Mass	310 ± 10%

2. Outline Drawing

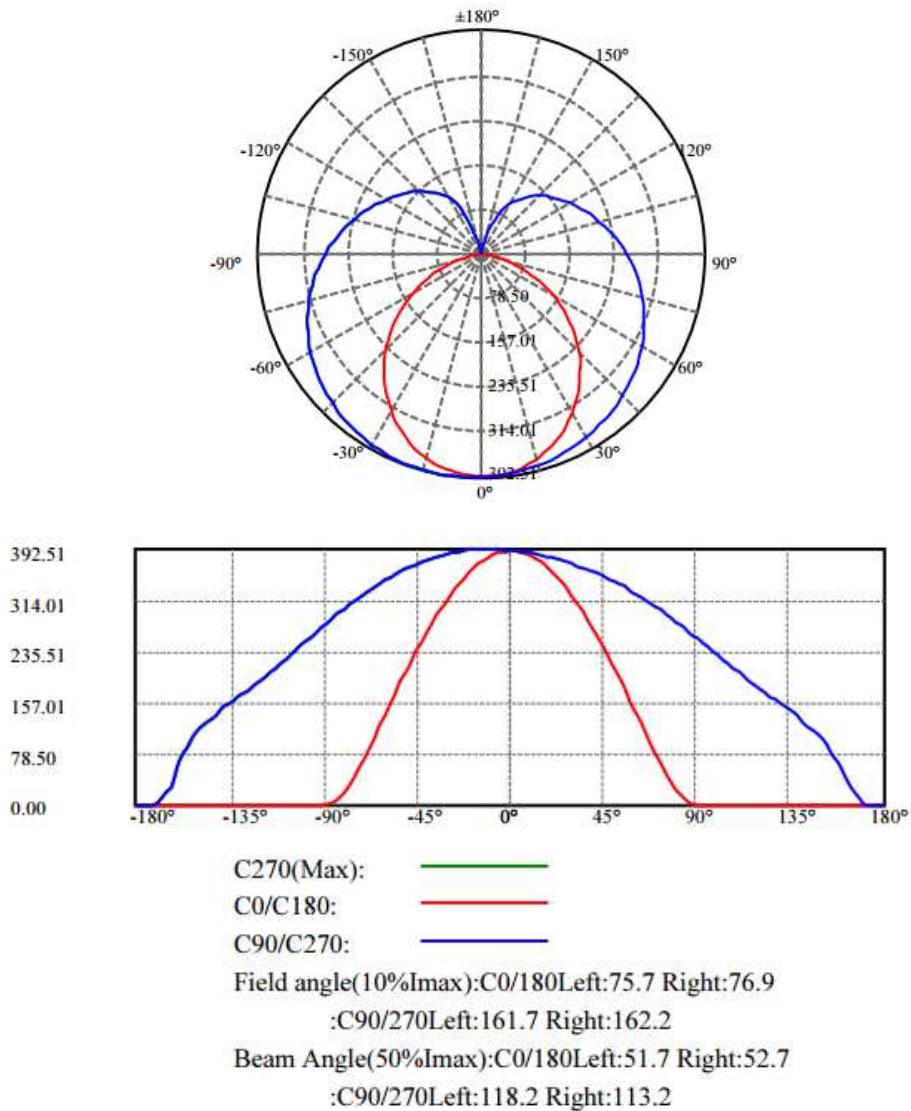
Unit : mm



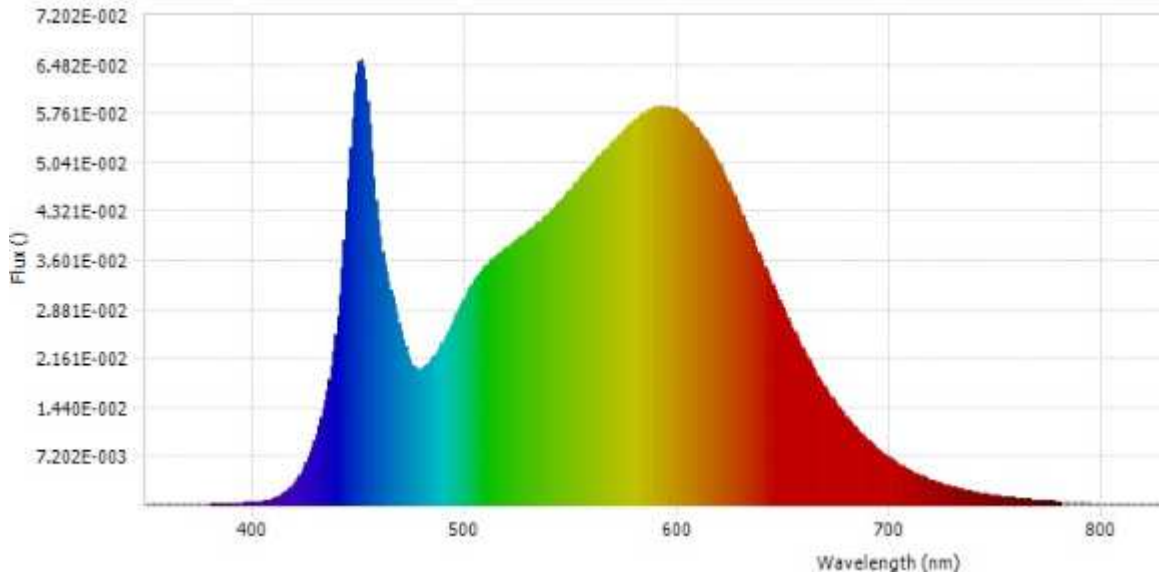
Material Information

1. Cover : Glass
2. End cap : Plastic
3. Pin : Metal

3. Light Distribution Curve

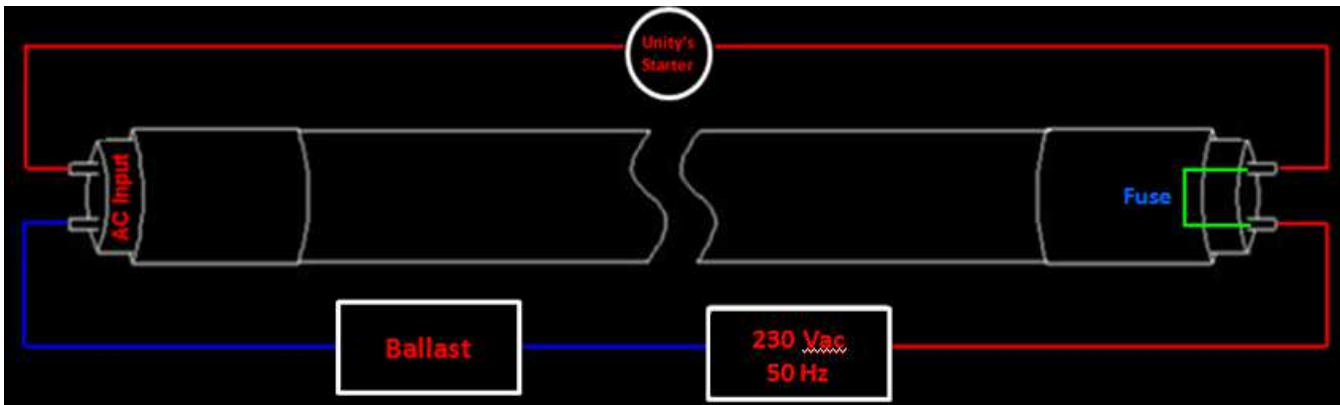


4. Spectrum Distribution



5. Installation Options

- Retrofitting in a CCG luminaire
 - (1) Make sure that the supply voltage is disconnected
 - (2) Remove the conventional lamp
 - (3) Remove the starter and power factor correction capacitor
 - (4) Install Unity's own starter.
 - (5) Rewire the luminaire as shown in the circuit diagram below
 - (6) Insert LED tube into lamp holders and turn on the supply voltage to check the light distribution



NOTE :

- It can't be guaranteed LED tube can match up all kinds of electromagnetic ballasts,

6. Warnings

- Before replacing, turn off power and let lamp cool to avoid electrical shock or burn.
- The LED tube must not be damaged or operated in a damaged condition.
- If having flickering issue on LED tube when installing with the electromagnetic ballast, please change suitable electromagnetic ballasts.

7. Cautions

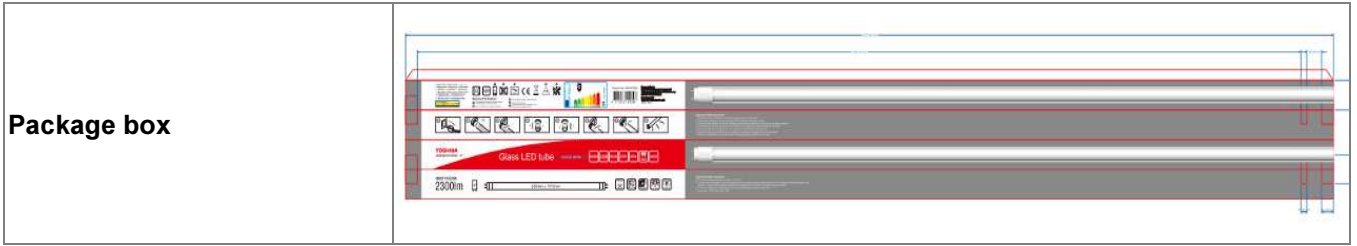
- Not intended for use with emergency light fixtures or exit lights.
- When operating with CCG (Electromagnetic Ballast), if the conventional starter is not removed, the LED tube will start blinking. Switch off immediately, the LED tube can be damaged.

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.
- The LED tube emits light only with a limited angle, not like a fluorescent tube with 360 degree output.
- Due to the characteristic light distribution of the LED tube, the current luminaire light characteristic will likely change.

9. Logistic information

Model	5ft T8 glass tube 23W	
Pieces per pack	1	
Product Code	00301315549A	00301315550A
EAN code on pack	4713233155497	4713233155503
Size of pack	1575x42x42 mm	
Weight per pack (G.W)	0.31 kg ± 10%	
Packs per inner box	N/A	
EAN code on inner box	N/A	N/A
ITF code on inner box	N/A	N/A
Size of inner box	N/A	
Weight per inner box(G.W)	N/A	
Packs per outer box	25	
EAN code on outer box	N/A	N/A
ITF code on outer box	34713233155498	34713233155504
Size of outer box	1590*225*225 mm	
Weight per outer box(G.W)	10.5 kg ± 10%	



10. Business Scheme (Countries)

A. Applicable countries

France, Italy, Belgium, Spain, Morocco, Portugal, Netherlands, Luxembourg, Germany, Turkey, Greece, Austria, Switzerland, Bulgaria, Poland, Hungary, Israel, Sweden, Norway, Ireland, England, Note : The requirement of each country will be reflected to the product specifications, when the products will be shipped to such country.

B. Manufacture

Unity Opto Technology Co., Ltd.

C. Sales channel

B2B