

Specification / 产品规格

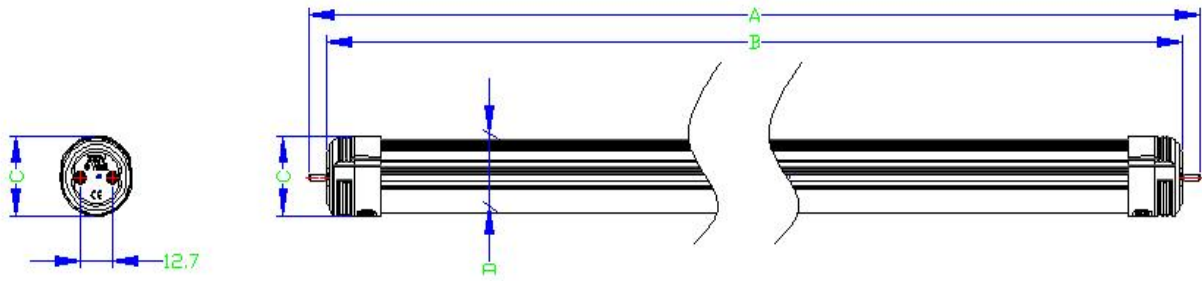
Base Type / 综合描述		Electrical/技术--电参数	
Base(Std designation) / 灯座	T8 Bi Pin	Input Voltage / 输入电压	AC 220 - 240 V
Enclosure	High Impact Polycarbonate	Frequency / 频率	50-60 Hz
Lens and Base cap	Polycarbonate-Anti UV	Direct Input Current / 直接室电	Yes
Assmby / 组装	Modular of 66 leds panel	Ballast Type (if input) / 镇流器	Magnetic
Connectors / 连接	Fast Clips (UL 94)	Power Consumption / 输出功率	8 Watts 16 Watts
LED / 光源	Optical Dios LED	Driver output Voltage/ 输出电压	68-72 V
RoHS	Yes	Construction Current / 电流	218mA
CE (World wide)	Yes	Power Factor / 功率	0.88 Min
TuV \ CB (For European Union)	No	Driver package / 驱动电源	Polycarbonate enclosure UV grade
PSB (For Singapore only)	No	EMC Approval / 高压测试	Yes

Light Range/技术--光参数		Options/可选配置	
CCT Colour temp. / 色温	Warm @ 3200K -3800k	Color Designation / 灯光色调	Warm Cool
	Cool @ 6000K - 7000k	Color Temperature (k) / 色温	3500k 6500k
Dimmable / 能否调光	No	Enclosure / 灯罩	Line Frost
CR Index / 显色指数	Ra 65 - 75	Tube Length / 管长	2 feet 4 feet Custom
Luminous flux / 光流量	750lm 1480lm	Power Consumption / 输出功率	16 Watts
Luminous Efficacy / 光效	92lm / watt	LED Make / 光源	Epistar
Beam angle / 光束角度	120°	Packaging Type / 包装规格	Industrial Commercial

Rated Life/技术--寿命		Packaging/包装	
Rated Life / 预计寿命	35,000hours	Packing Size/Wgt per Piece	40*40*1230mm/474g/1PC
Ambient Temp / 环境温度	(-15 to 45)°C	Qty per box	25PCS
Warranty / 保用	2 years Home	Packing Size/Wgt per Box	1300*240*240mm/13.30KG

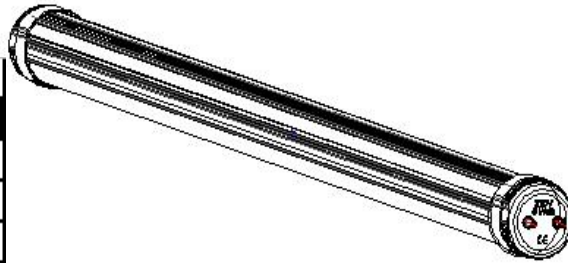
Ecco Sys Pte Ltd Mail: sales@ecco-sys.com Tel : (65)6447 8587 Fax: (65)6447 9493





Dimension in mm

Model	A	B	C	D
S806	613	597	29	26
S812	1,213	1,197	29	26
T806	613	597	32	30
T812	1,213	1,197	32	30



- Rubber insulator
- Copper Pin G13
- High impact / Heat
- Anti Aging additives
- Driver fully enclosed
- Connectors Std fitting
- Procedure Assembly
- UV resistance Lens
- Simple Plug adapt
- Press Catch release
- Pressure fit Pins
- Inter-connectors
- Dual layer LED module



Certification and Test Standards

Manufacturing Site Certification :	ISO 9001	ISO 14001	UL Certified
Product Certification :	EN 60598-2-1:1989	EN 55015:2006+A1:2007	EN 60598-1:2008+A11:2009
EN 61547:1995+A1:2000	EN 61000-4-2:2008	EN 61000-3-2:2006	EN 62031:2008
IEC 61000-4-5:2005	IEC 61000-4-6:2006	IEC 61000-4-3:2006	EN 61000-3-3:1995+A1:2001+A2:2005
IEC 61000-4-8:2001	IEC 61000-4-11:2004	IEC 61000-4-5:2005	IEC 61000-4-4:2004
			IEC 61000-4-6:2006



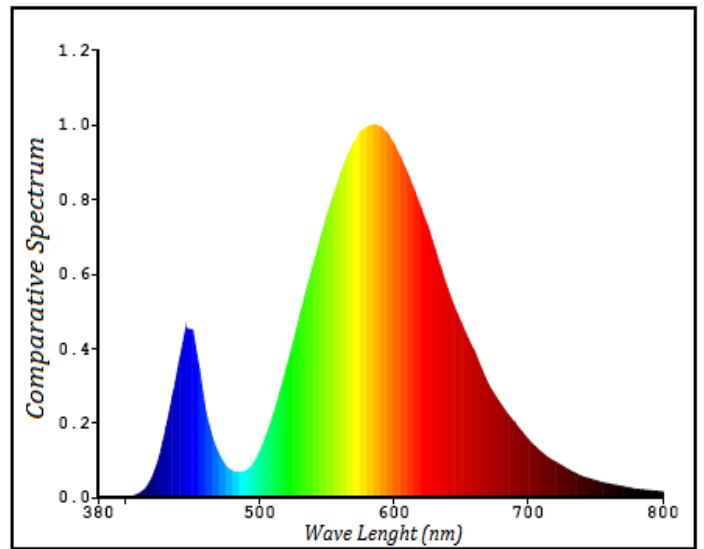
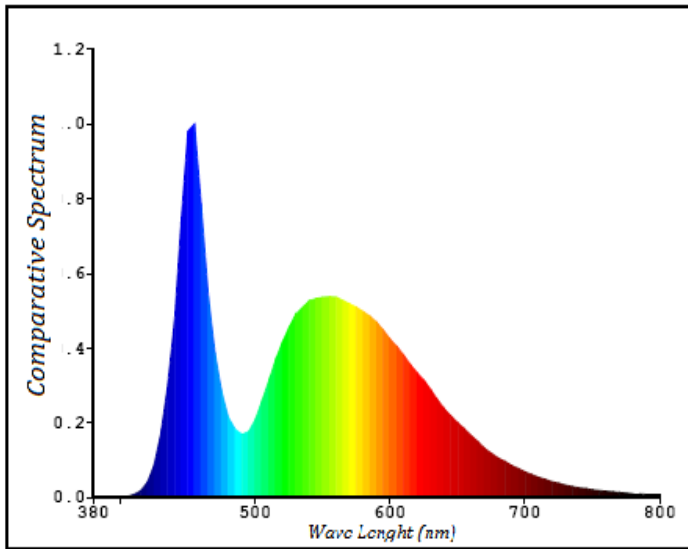
Light Spectrum Distribution chart

T806 Cool

T812 Cool

T806 Warm

T812 Warm

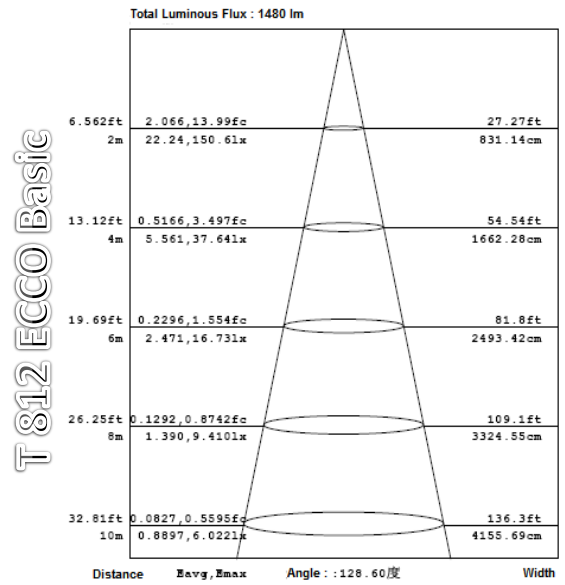
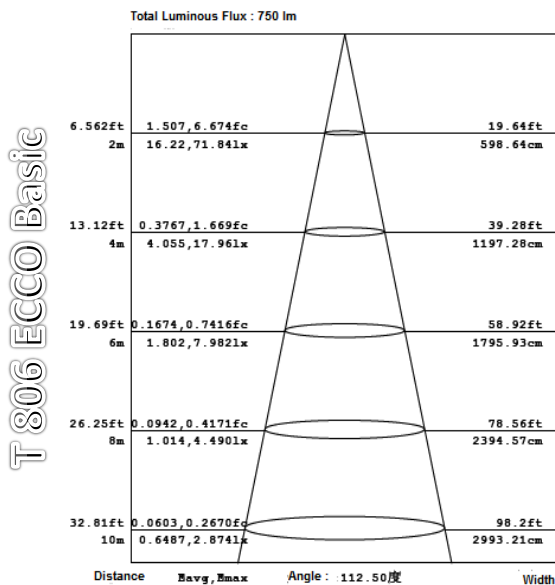
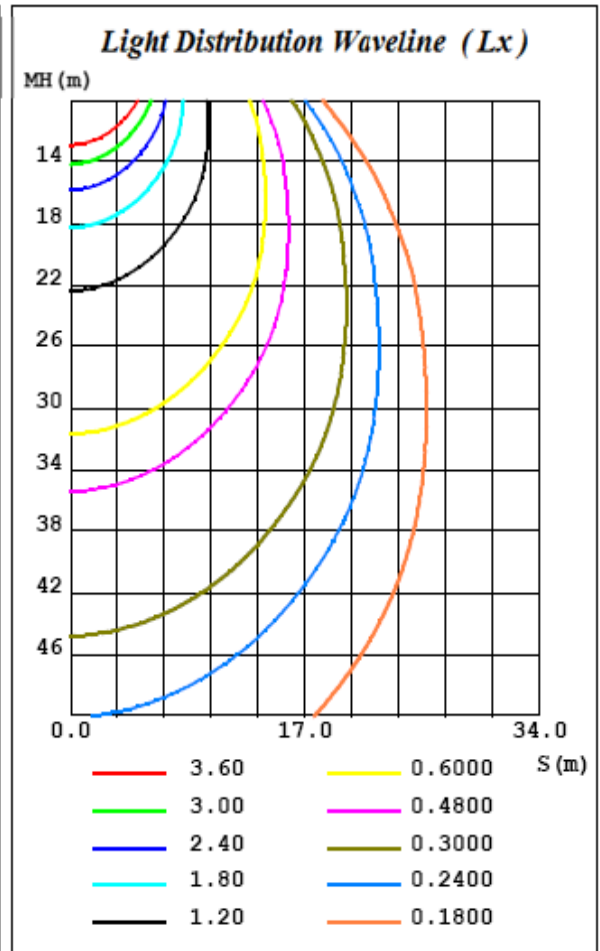
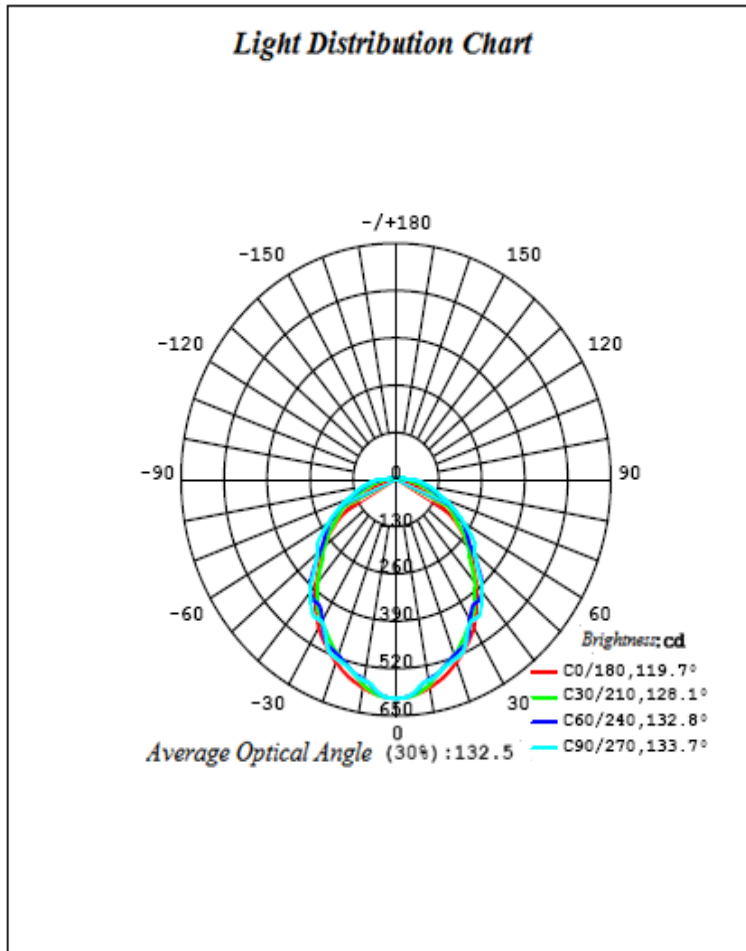


Reflective Factor

UGR (Unified Glare Rating)

Reflective Factor	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Overhead	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall Side	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Desk Level	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	(Viewed crosswise)					(Viewed endwise)				
x = 2H y = 2H	17.1	18.5	17.4	18.8	19.1	18.1	19.5	18.4	19.8	20.1
3H	18.0	19.4	18.4	19.7	20.0	19.7	21.1	20.1	21.4	21.7
4H	18.3	19.6	18.7	19.9	20.3	20.5	21.8	20.9	22.1	22.5
6H	18.5	19.7	18.9	20.0	20.4	21.4	22.6	21.8	22.9	23.3
8H	18.5	19.7	18.9	20.0	20.4	21.8	23.0	22.2	23.3	23.7
12H	18.5	19.6	18.9	20.0	20.4	22.3	23.4	22.7	23.8	24.2

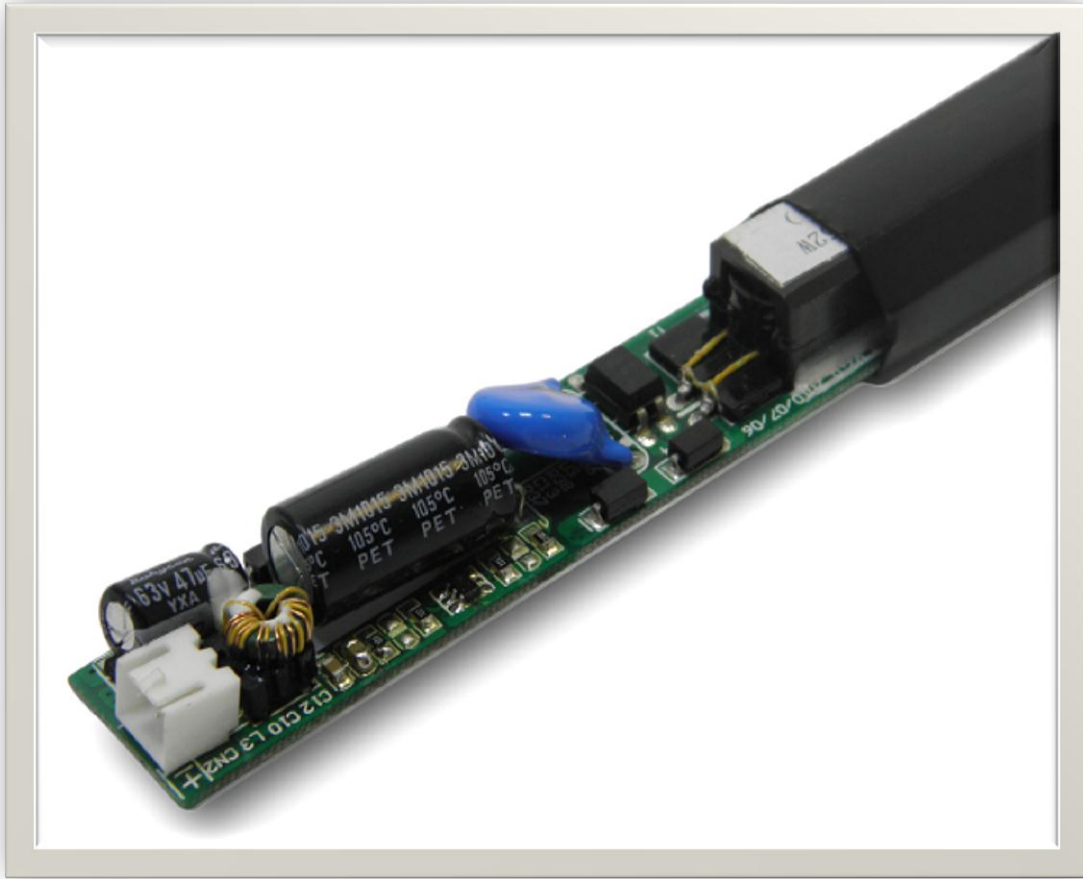
Goniophotometry Diagram



Flux Characteristics (T = 25°)

Model	Color Temp.	CCT		Luminous Flux (LED) (lm)	Luminous Flux (LENS) (lm)	Optical Angle Degree
		Min	Max			
T806	Cool	6000	7000	792	750	130
T806	Day Warm	3500	4500	765	708	130
T812	Cool	6000	7000	1584	1480	135
T812	Day Warm	3500	4500	1531	1395	135

LED Driver Module Specification



Input voltage range from 220 Vac to 240 Vac single phase

Driver Module Information

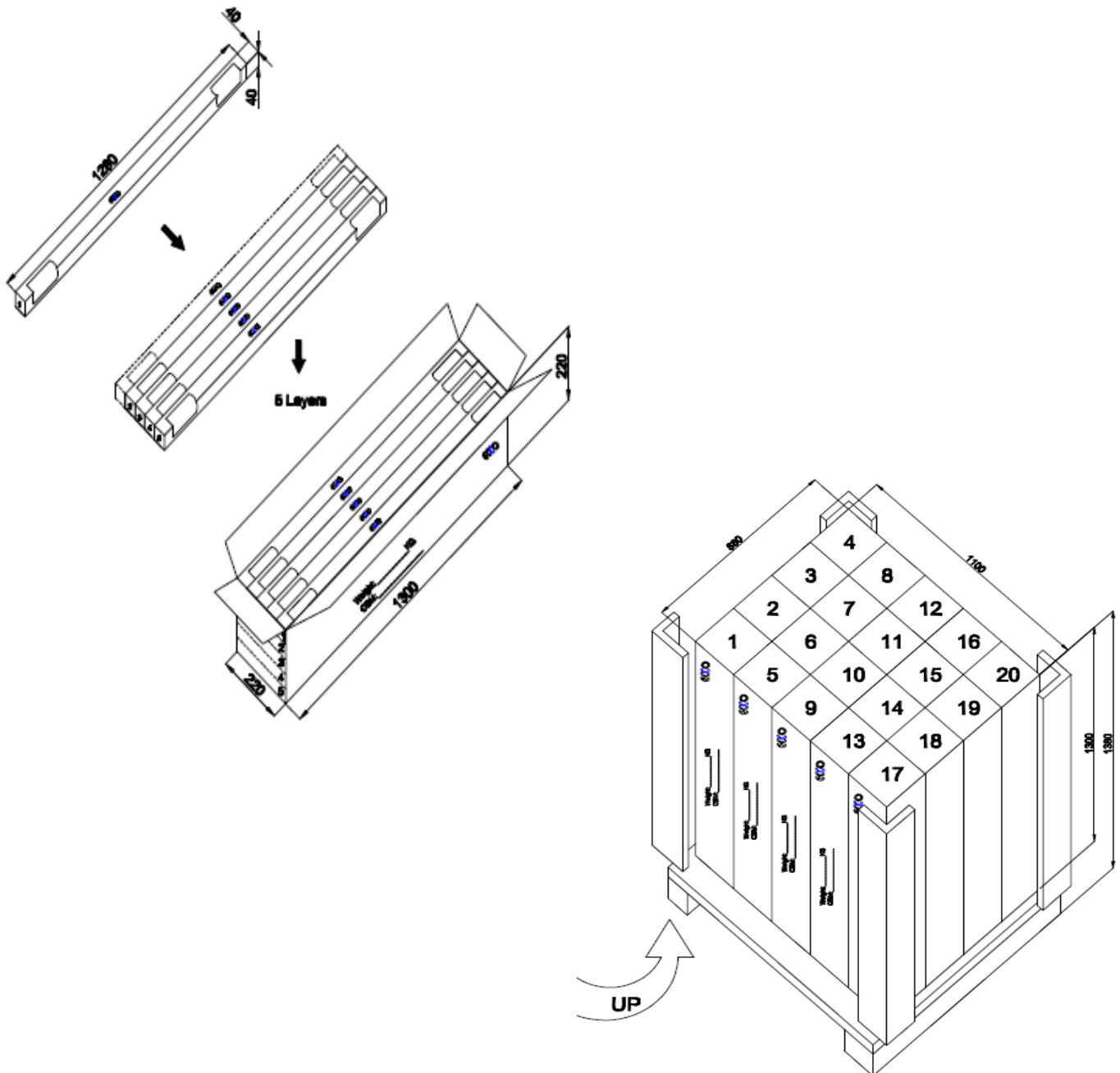
Input	Minimum	Nominal	Maximum
Input Voltage	220 Vac	230 Vac	240 Vac
Input Frequency	47Hz	50Hz	63Hz
Input AC Current	0.5A max @ Full load		
Inrush Start Current	20A max @ 220 Vac & Full load		
Efficiency Rate	0.88 Minimum		
THD Level	25% Max		
Output	Specification		
Min. Load	0mA		
Normal Load	108mA	216mA	
Line Regulation	+/- 5%		
Temperature Drift	+/- 0.2 Deg. Celcius		
Dielectric Strength			
Primary to Secondary	3000 Vac , 10mA max / 60 second		

Model	Color	Lens	Part Name	Ordering Code	Qty / Carton
T806	Cool	Line	ECCO Basic T806 Line Cool	T86PLD-APA8C	25
T806	Cool	Frost	ECCO Basic T806 Frost Cool	T86PFD-APA8C	25
T806	Day Warm	Frost	ECCO Basic T806 Frost Warm	T86PFD-APA8W	25
T812	Cool	Line	ECCO Basic T812 Line Cool	T82PLD-APA16C	50
T812	Cool	Frost	ECCO Basic T812 Frost Cool	T82PFD-APA16C	50
T812	Day Warm	Frost	ECCO Basic T812 Frost Warm	T82PFD-APA16W	50

Packaging Option :

Industrial Packaging

Commercial Pack

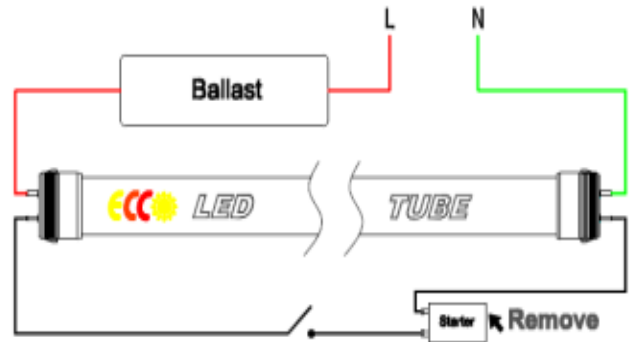


Installation

• On existing lighting fixtures with 'Magnetic Ballast'

- Identify 'Magnetic type Ballast' by observing for any removable 'Starter'
- We Strongly recommend user to bypass existing ballast due to safety reasons and can prevent future ballast failure
- Ensure power is switch OFF
- Remove existing fluorescent tube from light fixture
- Remove existing 'Starter' from the light fixture
- Install ECCO LED TUBE to light set, ensure all fittings are secured
- Switch On power to complete the installation

Wire Diagram With Magnetic Ballas:

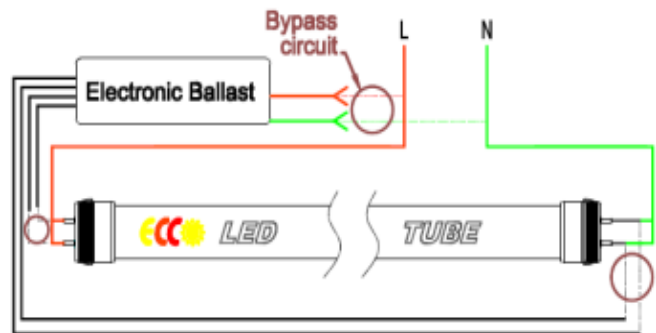


Installation

• On existing Lighting fixture with 'Electronic Ballast'

- ECCO LED TUBE **cannot** be directly install on 'Electronic type Ballast'
- Consult your professional electrician to bypass electrical circuitry in the light set
- ECCO LED TUBE can work by connecting either side with (Neutral) and the other end with (Live)
- Contact your local Agent or Distributor for assistance to bypass "ballast" from the light fixture

Wire Diagram With Electronic Ballas:

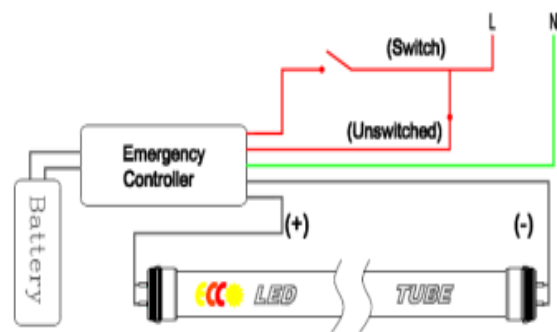


Installation

• On existing lighting fixture with 'Emergency Battery Pack'

- Certain models and types of 'Emergency Battery Pack' are not compatible to be use with ECCO LED TUBE
- Consult your professional electrician to bypass electrical circuitry if your lighting fixture is 'Electronic type Ballast'
- For "Magnetic type Ballast", remove 'Starter' and replace ECCO LED TUBE to your light fixture directly
- Contact your local Agent and Distributor for assistance to recommend a compatible model and type of 'Emergency Battery Pack' that are available in your country if products do not function correctly

Wire Diagram With Compactable



Wire Diagram for New Installation

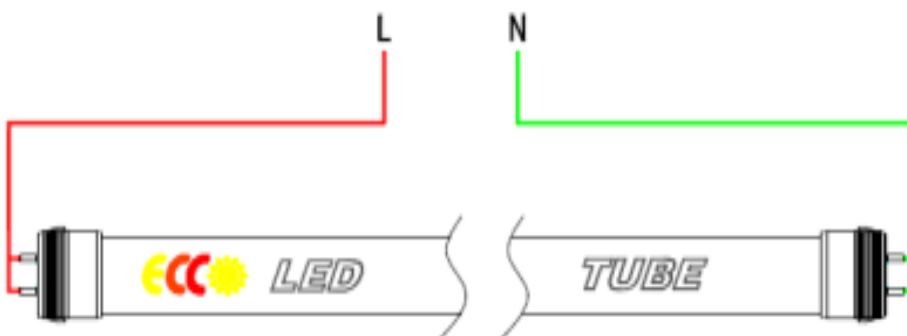


Table only serve as a guide, it should not to be served as warranty to meet same brightness level

Common lightings replacement table

Category	Products	Wattage	Base type		ECCO Products	Wattage
Tube	Fluorescent 1 feet	10-12	Bi-pin	➔	Tube Premium S803 \ Basic T803	5
	Fluorescent 2 feet	18-22	Bi-pin		Tube Premium S806 \ Basic T806	8-9
	Fluorescent 4 feet	36-40	Bi-pin		Tube Premium S812 \ Basic T812	16-18

Benchmarking

• Brightness and Light Angle

- Different model and type of ECCO Products are designed with different specifications to suit most type of application use'
- Existing fluorescent lamp specification is being taken as a key reference during our design stages to out perform or match existing lightings
- Caution needs to be taken to select the correct replacement product follow some basic steps
- Step 1 : Select the correct 'Base type' (E14, E27, Etc)
- Step 2 : Measure and ensure dimension and size are fit well into existing light fixture
- Step 3 : Select equivalent brightness with reference table provided (May varies due to products upgrade)
- Step 4 : Select Bulbs with lens type that fits the disired light spread angle as LED Lightings are single directional unlike conventional 'Gas type' bulbs

Benchmarking

• Color Temperature

- ECCO LED products offers wide variety of color temperature from Warm (CRT : 2900k) , Day Warm (CRT : 4000k) , Cool (CRT : 6500k)
- Warmer CRT provide users with smoother and relax feel of the environment , they are most suitable to use in bedroom, entertainment facilities, commercial displays
- Day Warm gives a great combination between a feel of warmth and sharp clear cool light
- Cool CRT gives users with clear, brighter scope of light spectrum best for reading, offices and industry application

Warranty and Services

• We assure our products are made with best processes and practices

- Warranty period are indicated in your invoice or packaging .
- Our warranty refers to exchange warranty to replace a NEW product to you if failure is caused by manufacturing default
- Our local Agent and Distributors will offer any assitance to user in services related to install, maintain, replace, repair if ECCO LED Products are used
- We can be contacted at www.ecco-sys.com
- (ECCO Official web site) or send us your enquires to enquires@ecco-sys.com