

We design, build and deliver incredible

# Back Lighting

## Specifications

Performance Series / Terminator Tunable Performance Large 4/1000mm- TTPL410

### Photos



### Applications

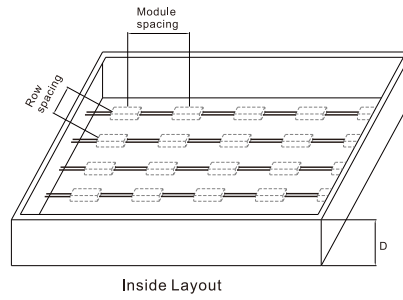
- Translucent surface backlighting for architectural and decorative applications
- Translucent materials like Stone/Glass/Wood/Resin/Fabric



### Features

- Extremely uniform illumination thanks to optimized lens
- Lighting distribution is designed for 12~18cm depth
- Pure lighting shape without yellowish edge
- Exceptional color Rendering: CRI90 R9:50(@4000K)
- Consistent color uniformity :3 SDCM(ANSI Standard)
- Flicker free (3800HZ PWM Driver)
- The quality of image shooting is easy to maintain under the lighting
- High Reliability. 7 years warranty.70,000 hours lifetime
- Density could be customized for design
- Varied size are available

### Layout



### Population Density

Depth (mm)	Distance (mm)	Density (pcs/m <sup>2</sup> )	Illumination (Lux)	Luminous Intensity (cd/m <sup>2</sup> )	Surface uniformity
D=120	Module spacing=150, Row spacing=150	45	4500	1220	5%-10%
D=150	Module spacing=200, Row spacing=200	25	3500	956	5%-10%
D=180	Module spacing=215, Row spacing=230	20	1800	490	5%-10%

#### ① Stretch ceiling

\* Fiberglass fabric (light transmission factor: 60%) is used for testing the face intensity and uniformity on stretch ceiling. Other surface materials may vary light uniformity and brightness.

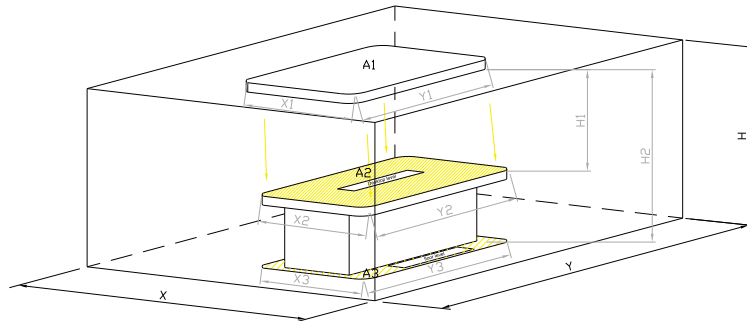
#### ② Test Condition

\* 4000K/CR190 LED module as backlighting source.

#### ③ Reference

- \* PVC Film Transmission Factor : 60-80%
- \* Woven Fabric Transmission Factor: 40-60%
- \* Onyx/Marble Transmission Factor: 20%
- \* Translucent Glass Factor: 40%~55%
- \* Fiberglass fabric Factor: 40%~60%

### Lux Calculation



$E_{A1}$  stand for illumination of A1     $A1=X1 \times Y1, A1=A2=A3$     The subject size is equal to stretch ceiling lighting

$E_{A2}$ (Lux)	$E_{A1}$ (Lux)	$E_{A3}$ (Lux)	H1 (m)	H2 (m)	H (m)	Density (pcs/m <sup>2</sup> )	Consumption (W/m <sup>2</sup> )
900	4500	700	2	2.8	2.8	45	50
700	3500	550	2	2.8	2.8	25	30
360	1800	200	2	2.8	2.8	20	24

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#### ② Test Condition

\* 4000K/CR190 LED module as lighting source.

#### ③ Reference

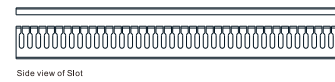
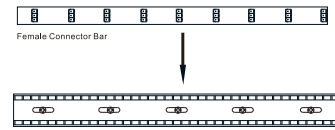
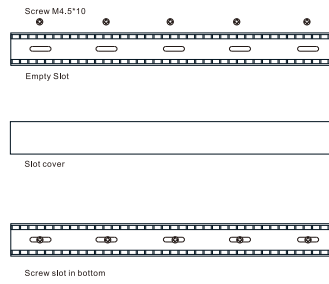
- \* GB 50034-2013: Standard for lighting design of buildings
- \* Fashion store (high end): 500lux (Desktop level/ 0.75meter)
- \* Museum: 500lux (Desktop level/ 0.75meter)    Meeting room: 300lux (Desktop level/ 0.75meter)
- \* Surgery: 750lux (Desktop level/ 0.75meter)    Lounge & Lobby: 200lux (Floor level)

④ Lux calculation service is available. PLS contact your sales

# Specifications

## Performance Series / Terminator Performance Large 2/1000mm - TPL210

### Plug&Play

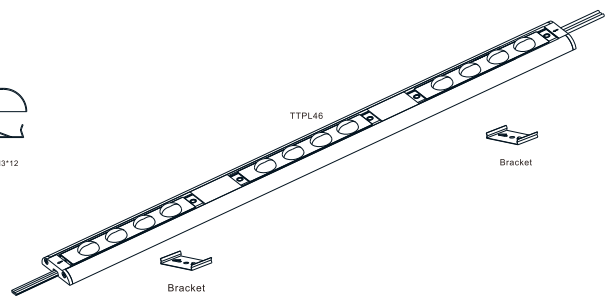
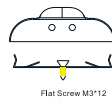
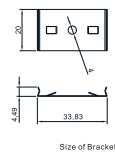


Slot with Connector Bar

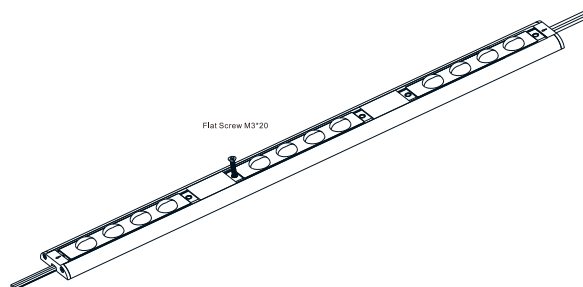


### Multiple installation

#### Invisible installation



#### Fast installation

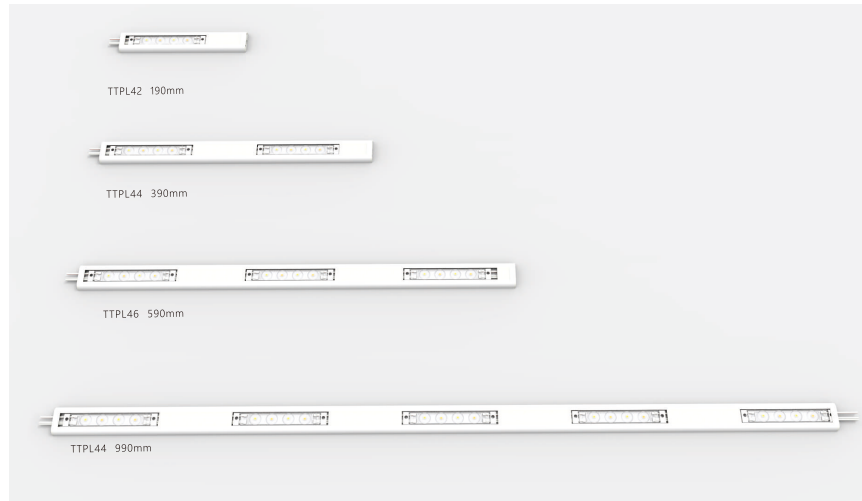
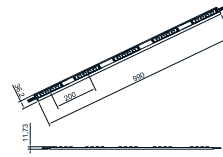


# Specifications

## Performance Series / Terminator Performance Large 2/1000mm-TPL210

### Dimensions

Length : 990mm  
 Width : 36.2mm  
 Thickness : 11.73mm  
 Lamp Pitch :200 mm



### Electrical Characteristics

Part No	TPL22	TPL24	TPL26	TPL210
Voltage Range(V)	22~26			
Reverse Voltage(V)	22~26			
Power /pc (W)	1.2	2.4	3.6	6
Max Run Length(m)	4			
Technology	Integrated current source			

### Optical Characteristics

Lumen/unit	142	248	425	708
Efficiency(lm/w)	118			
Beam Angle	160 degree			
CRI	90			
MacAdam ellipse	3SDCM			
Ra	93			
R9	50			
Available Colors	2700K~6500K			

### Construction

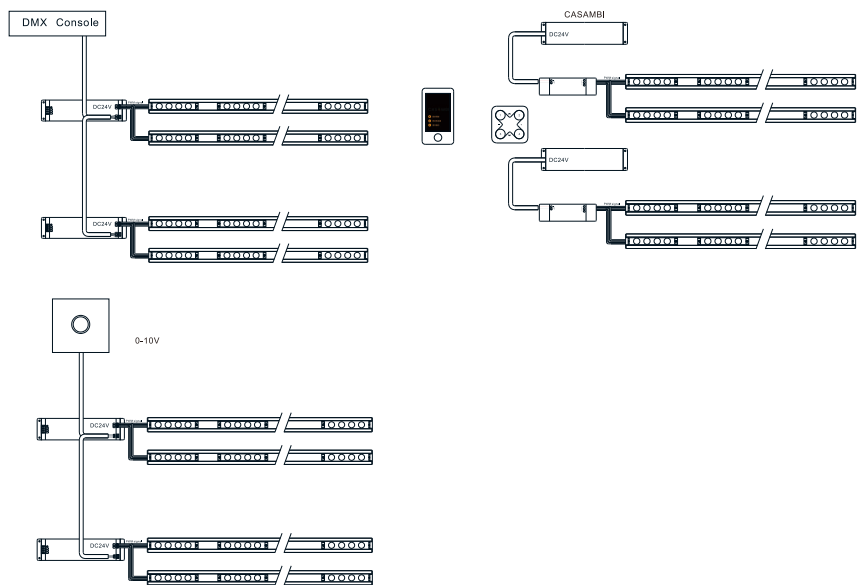
Body	PVC Profile/PC lens/Aluminum pcb/PVC base/3M VHB Tape			
Lead wire	80mm 18AWG			
Max distance in series	4			
Weigh/pcs(g)	59.6	125.6	183.6	291.6

### Dependability

Warranty	7 years			
IP	66			
Flame Resistance	UL94			
UV Exposure	ASTMG 154, ISO 4892-3, UVA@340nm			

Dimming Diagrams

DMX512, CASAMBI (Bluetooth Mesh), 0/1-10V



Standards&Certificates

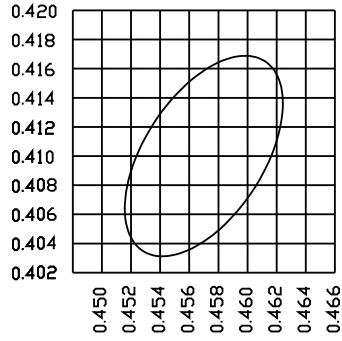
Integrating Sphere Test	IES LM79 (lumen,CCT,CRI,XY,SDCM,wave length)
Photometric Distribution Test	IES LM79
Aging Test	IES LM84&IES TM28
Ambient Temperature Test	UL1598&UL2388&IEC60598-1&IEC60598-2-21
High temperature High Humidity Test	UL1598&UL2388&IEC60598-1&IEC60598-2-21
Bending Test	500 cycles
Vibration Test	UL2388>750cycles
Tensile Test	Defined by Manufacturer
Drop Test	UL1598&UL2388&IEC60598-1&IEC60598-2-21
IK Test	IEC62262
Fire-Rating Test	UI94
UV Test	ASTMG154,ISO4892-3,UVA@340nm IEC60529
Salt Spray Test	IEC68-2-11
Thermal Shock Test	Non-lighting -40°C-55°C ( 25mins ) with 5mins , 100 cycles
High temperature test	55°C

Bining

ANSI C78.377

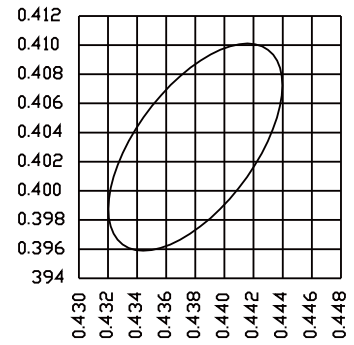
BIN:27A

Centred x	Centred y	Nominal CCT (K)	CCT Range(K)	MacAdam ellipse
0.4578	0.4101	2700	2660-2790	3SDCM



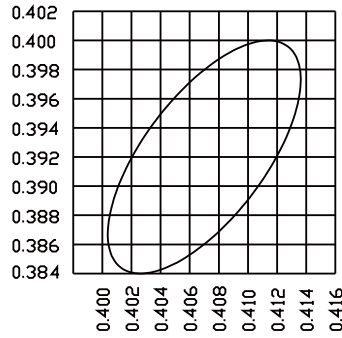
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Centred x	Centred y	Nominal CCT (K)	CCT Range(K)	MacAdam ellipse
0.4338	0.403	3000	2865-2940	3SDCM



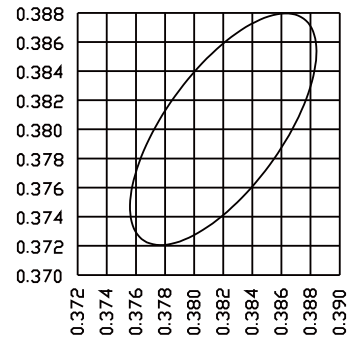
BIN:35A

Centred x	Centred y	Nominal CCT (K)	CCT Range(K)	MacAdam ellipse
0.4073	0.3917	3500	3350-3550	3SDCM



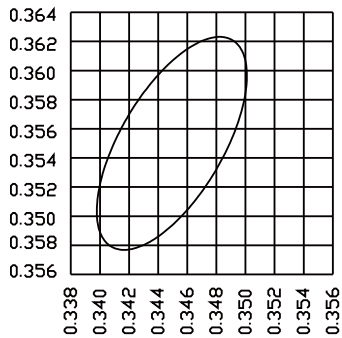
BIN:40A

Centred x	Centred y	Nominal CCT (K)	CCT Range(K)	MacAdam ellipse
0.3818	0.3797	4000	3900-4175	3SDCM



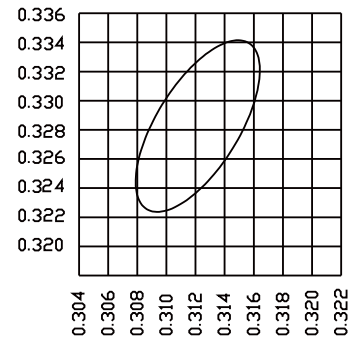
BIN:50A

Centred x	Centred y	Nominal CCT (K)	CCT Range(K)	MacAdam ellipse
0.3447	0.3553	5000	4815-5175	3SDCM

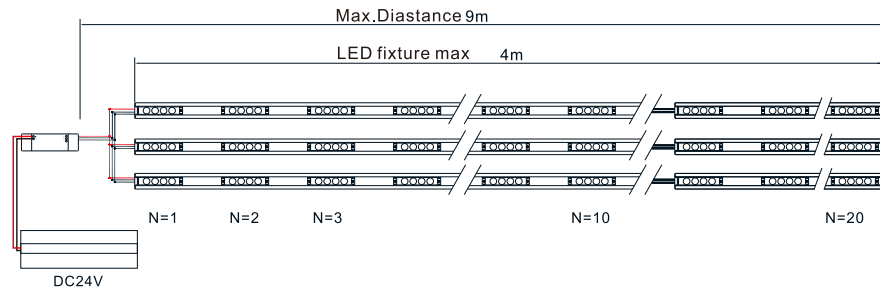


BIN:65A

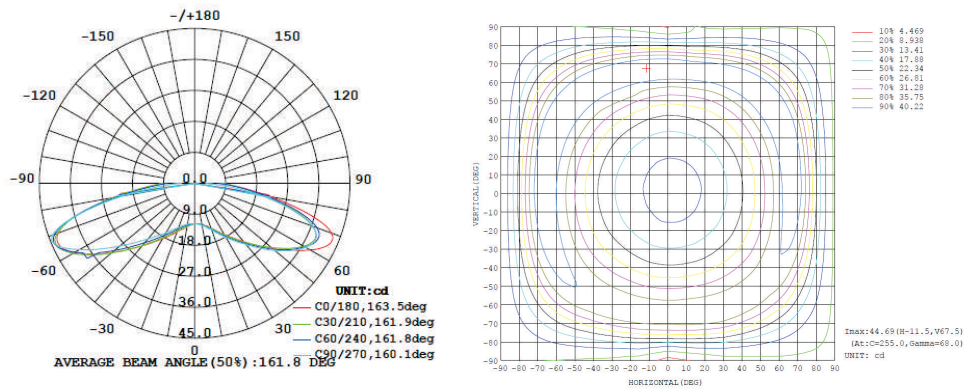
Centred x	Centred y	Nominal CCT (K)	CCT Range(K)	MacAdam ellipse
0.3123	0.3282	6500	6200-6700	3SDCM



Wiring



Lighting Distribution



Packaging



	Qty of LED module	Qty of Chain	Dimension (mm)	Net weight(kg)	Gross Weight(kg)
Inner Box	20pcs (4 meters)	1	1050*85*45	1.2	1.3
Master Box	200pcs (40meters)	10	1070*245*190	12	13.5