GREEN LED LIGHTING SOLUTIONS

LED Neon FLEX



VIVID

S 270

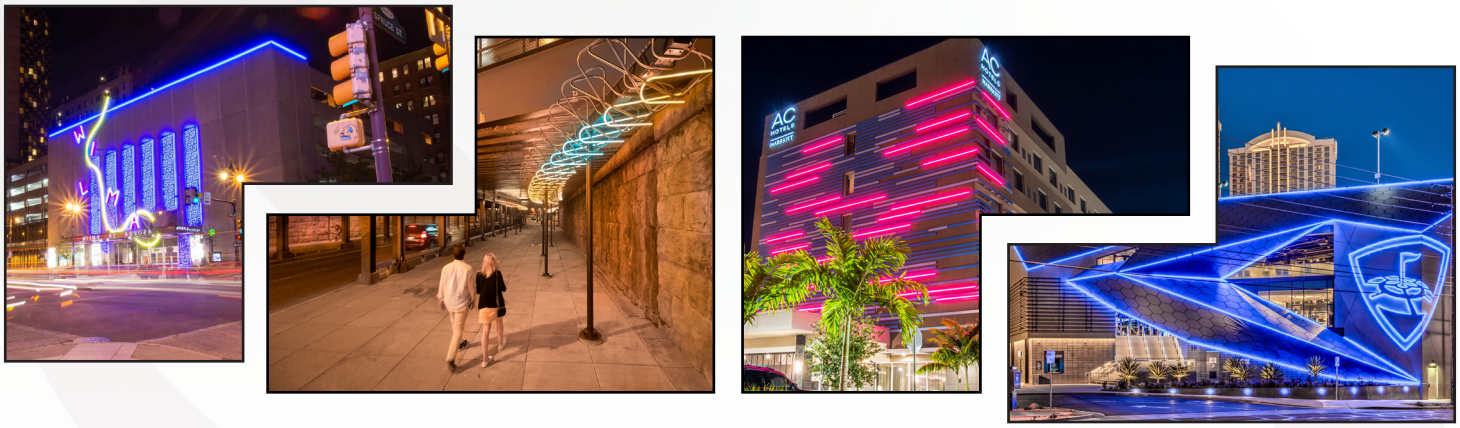
PVC 120V

Intertek 5015999 | RoHS COMPLIANT | INDOOR USE | OUTDOOR USE | IP65 | DIMMABLE

Version 1.0 | 03/05/2020

For More Information

Toll Free: 1 (888) 580-6366



Light Dimension	0.45 x 1.14in (11.5x29mm)	
Output	**Red/Amber**	**Green/Blue/White**
LED Light	Epistar SMD LED Chip	
Max Runs Length*		
Single Feed	131.23ft (40m)	131.23ft (40m)
***Double Feeding is prohibited		
Light Surface	Round profile 270°	
Lumen Maintenance	70,000 Hours L70 @ 25°C : 90,000 Hours L50 @ 25°C 50,000 Hours L70 @ 50°C : 70,000 Hours L50 @ 50°C	
Electrical		
Input Voltage	120V AC ±10V	
Power Consumption	3.05W/ft (10W/m)	3.05W/ft (10W/m)
Physical		
LED Count	24 LEDs / ft (80 LEDs/m)	25 LEDs / ft (84 LEDs/m)
LED Spacing	0.47in (11.94mm)	
Cutting Unit Length	4.92in (125mm) (10 LEDs)	3.28in (83.3mm) (7 LEDs)
Thermal Management	Free air convection	
Fixture Connections	End, side & bottom lead wires	
Minimum Bend Diameter	4.72in (120mm) (Side Bending)	
Temperature Ranges		
Installation	41°F to 95°F (5°C to 35°C)	
Operating	-4°F to 95°F (-20°C to 35°C)	
Humidity	0-95% non condensing	
Dependability		
Warranty	5 Year Warranty	
Safety		
Certification	Intertek *Certification #191001267SHA-001* Exceeds ANSI C78.377A, CE & RoHS Compliant.	
IP Rating	IP65 with appropriately rated accessories	

*Max Runs Length:

1. If Max Runs Length is over 65.62ft(20m), recommended maximum length for one run will be 65.62ft(20m) for handling capability.

Epistar

Available Colors

Color	Wavelength/CCT
Red	620-630nm
Green	520-530nm
Blue	465-475nm
Amber	585-595nm
2200K	2238 ± 102K
2700K (WW)	2725 ± 145K
3000K	3045 ± 175K
3500K (W)	3465 ± 245K
4000K	3985 ± 275K
5700K (DW)	5669 ± 355K

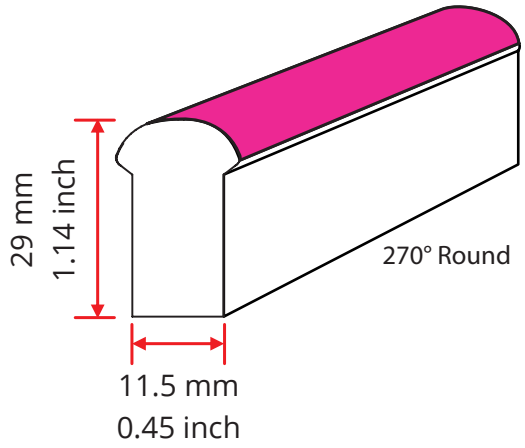
Lumen Count

Color	Per Foot	Per Meter	Power
Red	>76lm	>250lm	3.05W/ft (10W/m)
Green	>159lm	>520lm	3.05W/ft (10W/m)
Blue	>27lm	>90lm	3.05W/ft (10W/m)
Amber	>76lm	>250lm	3.05W/ft (10W/m)
2200K	>104lm	>340lm	3.05W/ft (10W/m)
2700K (WW)	>128lm	>420lm	3.05W/ft (10W/m)
3000K	>128lm	>420lm	3.05W/ft (10W/m)
3500K (W)	>128lm	>420lm	3.05W/ft (10W/m)
4000K	>128lm	>420lm	3.05W/ft (10W/m)
5700K (DW)	>128lm	>420lm	3.05W/ft (10W/m)

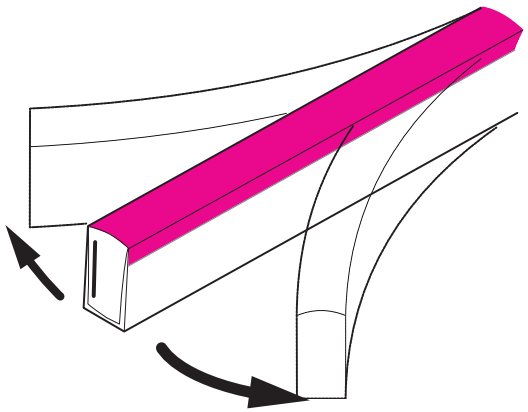


Beam Angle | **Bending Diameter** | **Flame Resistant** | **UV Resistant** | **Solvents Resistant** | **Saltwater Resistant** | **IP65 Protection** | **IK08 Protection** | **5 Year Warranty**

Light Profile

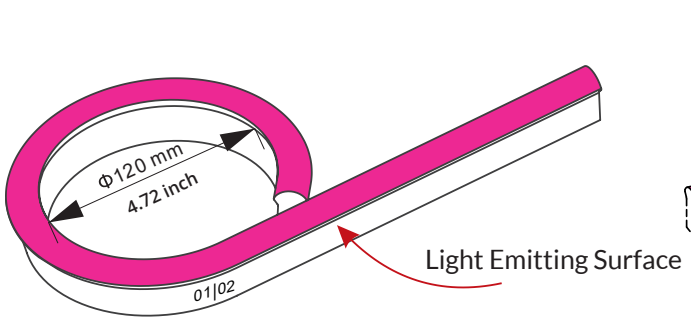


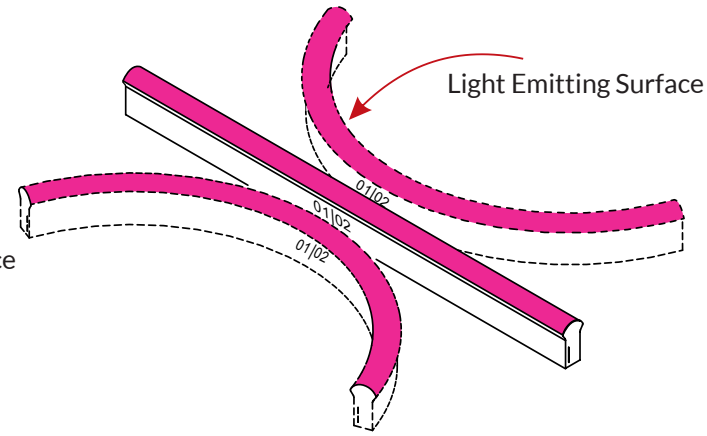
Bending Direction



Side Bending

Minimum Bending Diameter





Fixtures

NL-11D-1-01-2W-E-XXX-120J

LED Color (3 digits)

LED Color (3 digits)	
RED - Red	27K - 2700K
GRE - Green	30K - 3000K
BLU - Blue	35K - 3500K
AMB - Amber	40K - 4000K
22K - 2200K	57K - 5700K

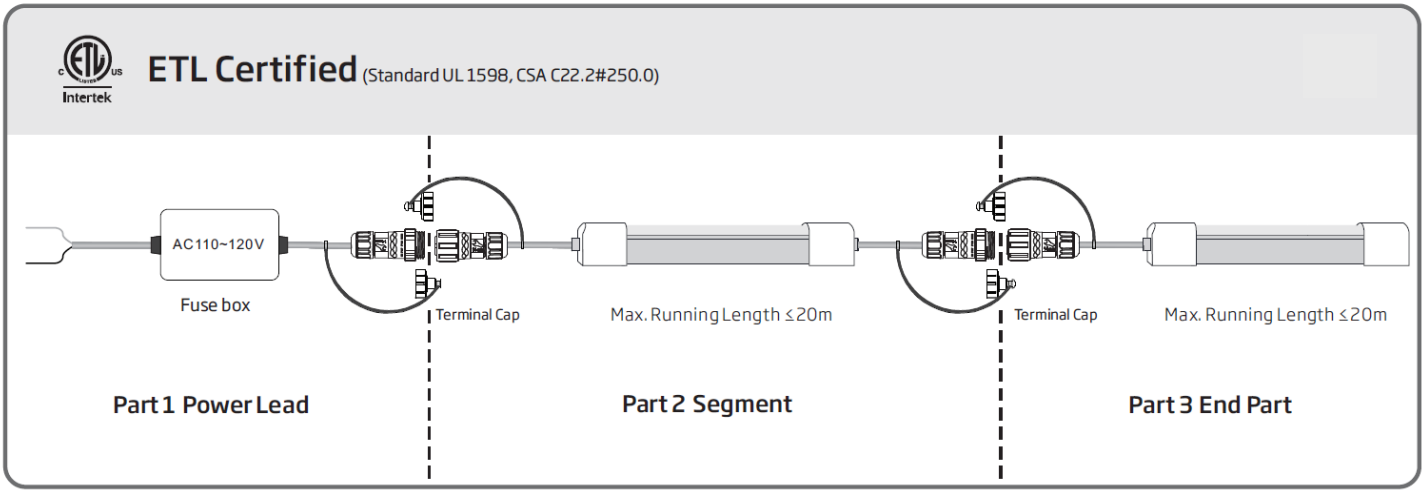
Lead Connector

NL-11D-1-01-2W-SX-0-XX-XXX-P

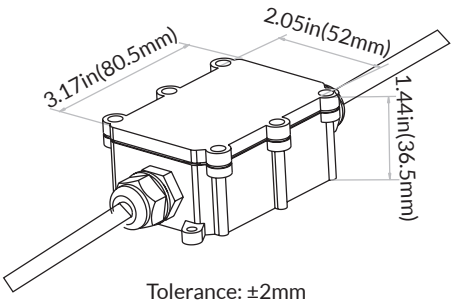
Length (3 digits)
Exit Type (2 Digits)

Exit Type (2 digits)	Length (3 digits)
EE - Extendable - End Exit	0M3 - 0.98ft (30cm)
EB - Extendable - Bottom Exit	01M - 3.28ft (1m)
ES - Extendable - Side Exit	03M - 9.84ft (3m)
NE - Non-Extendable - End Exit	05M - 16ft (5m)
NB - Non-Extendable - Bottom Exit	10M - 32.81ft (10m)
NS - Non-Extendable - Side Exit	

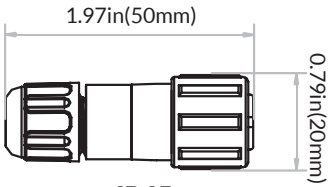
For full part number naming rules, please refer to the document on https://glls.com/documentation/







Tolerance: ±2mm



IP65

Fuse Box Kit

- It's SJTW cable with 18AWG*2 wires inside. 1.4m and 0.3m standard cable lengths before and after the fuse box correspondingly, and custom cable length is optional, while total length of cable and light shall be within 42m considering the voltage drop.
- Fuse box is connected with junction box and light at both ends.
- It's forbidden to open the fuse box in the process of installation and use.

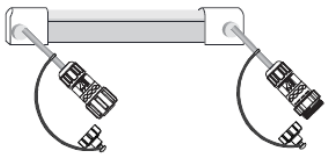
Item Code

NL-2W-1M4-JB-0M3-F



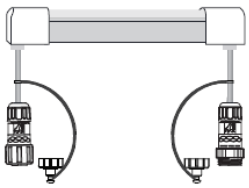
End Exit

NL-11D-1-01-2W-SX-0-EE-0M3-P



Side Exit

NL-11D-1-01-2W-SX-0-ES-0M3-P



Bottom Exit

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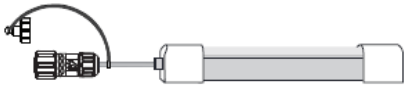
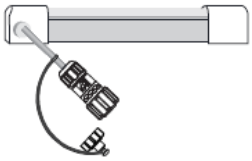


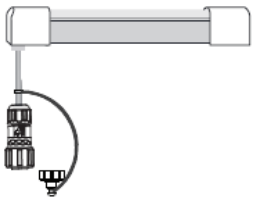
End Exit

NL-11D-1-01-2W-SX-0-NE-0M3-P



Side Exit

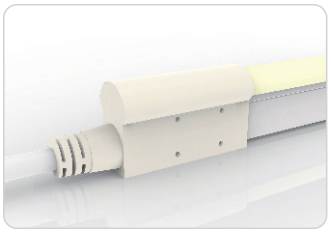
NL-11D-1-01-2W-SX-0-NS-0M3-P



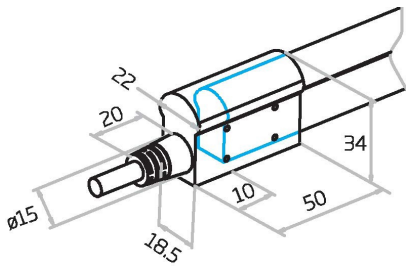
Bottom Exit

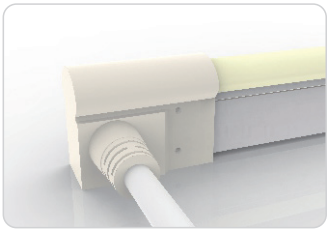
NL-11D-1-01-2W-SX-0-NB-0M3-P

Double Injection

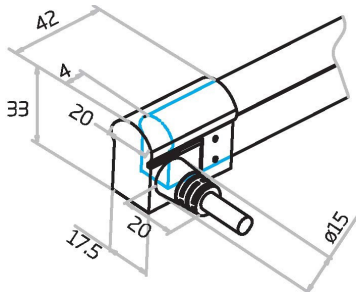


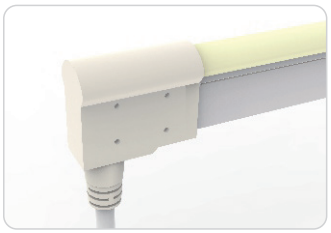
Double Injection End Exit



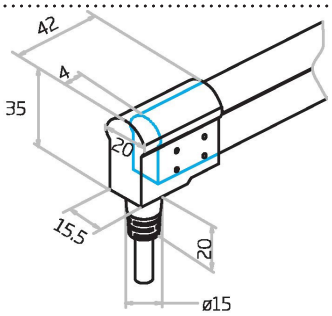


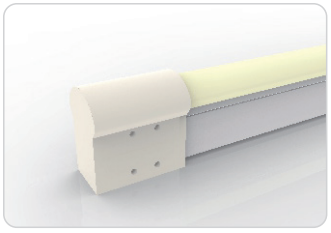
Double Injection Side Exit



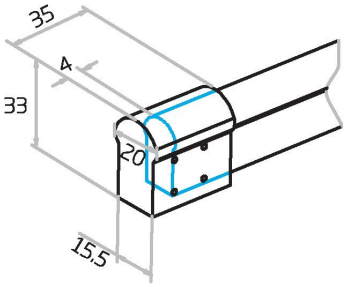


Double Injection Bottom Exit

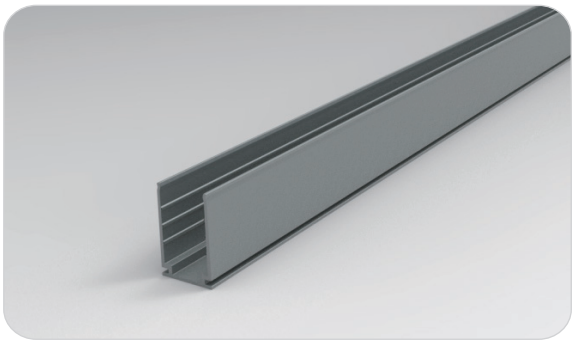


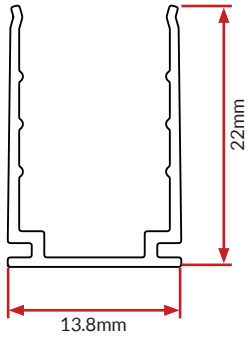


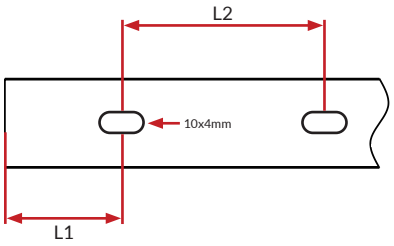
Double Injection End Cap



Standard Anodized Aluminum Channel



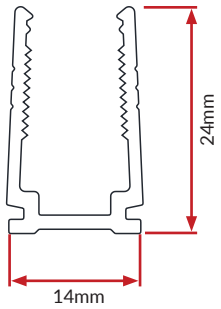


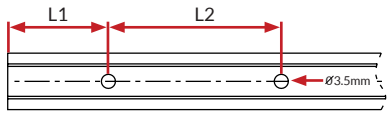


W x H	Standard Length	Part Number	L1	L2	Screw Hole	Hole #
0.54 x 0.87in	1.38in (35mm)	CL-11-R-AL-3C5-SD	0.69in (17.5mm)	/	0.39x0.16in(10x4mm)	1
(13.8 x 22mm)	19.69in (500mm)	CH-11-R-AL-0M5-SD	1.97in (50mm)	7.87in (200mm)	0.39x0.16in(10x4mm)	3
	39.37in (1000mm)	CH-11-R-AL-01M-SD	3.94in (100mm)	7.87in (200mm)	0.39x0.16in(10x4mm)	5
	78.74in (2000mm)	CH-11-R-AL-02M-SD	3.94in (100mm)	7.87in (200mm)	0.39x0.16in(10x4mm)	10

Plastic Channel

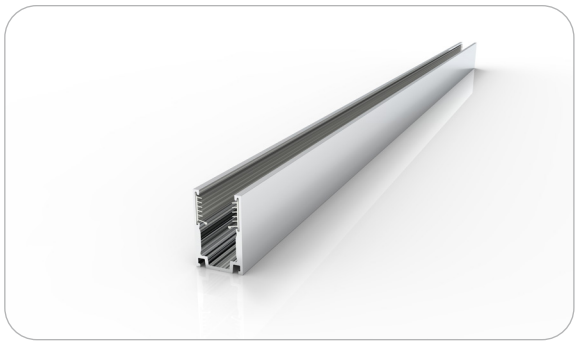


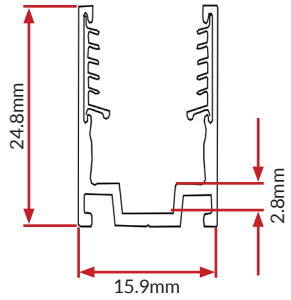


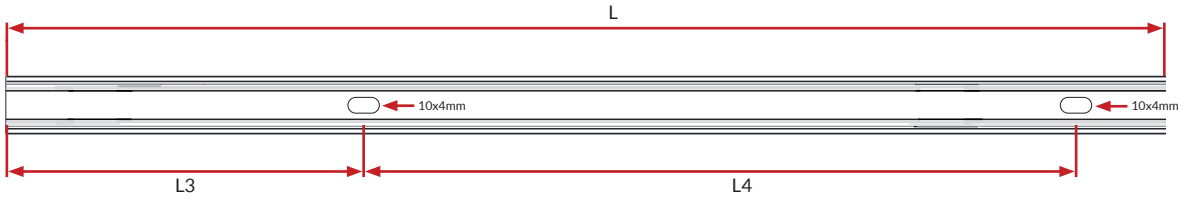


W x H	Standard Length	Part Number	L1	L2	Screw Hole	Hole #
0.55 x 0.94in	19.69in (500mm)	CH-11-R-PL-0M5-SD	1.97in (50mm)	7.87in (200mm)	Ø 0.14in (3.5mm)	3
(14 x 24mm)	39.37in (1000mm)	CH-11-R-PL-01M-SD	3.94in (100mm)	7.87in (200mm)	Ø 0.14in (3.5mm)	5
	78.74in (2000mm)	CH-11-R-PL-02M-SD	3.94in (100mm)	7.87in (200mm)	Ø 0.14in (3.5mm)	10

Standard Aluminum Channel with Silicone Grip

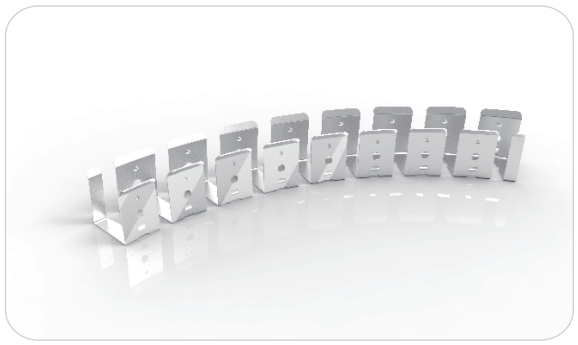


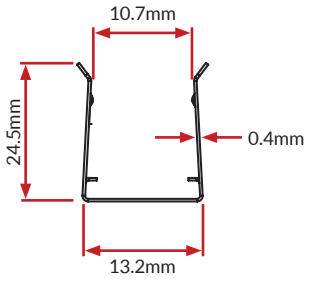


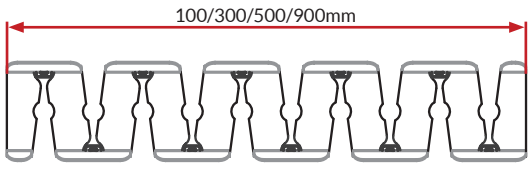


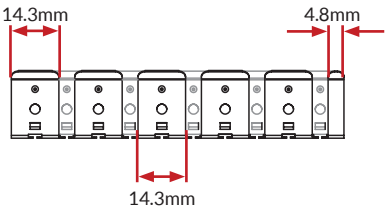
W x H	Standard Length	Part Number	L3	L4	Screw Hole	Hole #
0.82 x 0.88in	0.79in (20mm)	CL-11-R-AL-02C-SE	0.2in (5mm)	0.98in (25mm)	0.39in x 0.16in (10 x 4mm)	1
(20.7 x 22.3mm)	19.69in (500mm)	CH-11-R-AL-0M5-SE	1.97in (50mm)	7.87in (200mm)	0.39in x 0.16in (10 x 4mm)	3
	39.37in (1000mm)	CH-11-R-AL-01M-SE	3.94in (100mm)	7.87in (200mm)	0.39in x 0.16in (10 x 4mm)	5
	78.74in (2000mm)	CH-11-R-AL-02M-SE	3.94in (100mm)	7.87in (200mm)	0.39in x 0.16in (10 x 4mm)	10

Stainless Steel Flexible Channel









W x H	Standard Length	Part Number
0.52 x 0.97in	3.94in (100mm)	CH-11-F-SS-0M1-SD
(13.2 x 24.5mm)	11.81in (300mm)	CH-11-F-SS-0M3-SD
	19.69in (500mm)	CH-11-F-SS-0M5-SD
	35.23in (900mm)	CH-11-F-SS-0M9-SD

This profile can be mounted using screws in any gaps where the channel bends.

Certifications

	Testing Organization	Certificate Serial N°	Report Reference
UL1598	Intertek	191001267SHA-001	191001267SHA-001
UL 2108	UL	20160726-E360029	E360029-2013
CE-EMC	SGS	SZEM1702001259LMV	SZEM160600421302

Fixture Testing

Optical Testing

Spectrum Analysis	IES LM 79 (Lumen, CCT, CRI, XY, SDCM, wavelength)
Photometric Distribution	IES LM 73 (Lumen intensity distribution & Lux diagram)
Lumen Maintenance & Lifetime	IES LM 84 & IES TM28

Temperature Testing

Normal Temperature Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
Abnormal Operation Test	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21

Durability Testing

Bending Test	Manufacturer-defined, 500 cycles
Swing Test	UL2388, >750 cycles
Tensile Test	Manufacturer-defined, > the weight of light in max. connection length double feed
Twist Test	Max connection length double feed Manufacturer-defined, >200 cycles
Ball Impact	UL1598 & UL2388 & IEC60598-1 & IEC60598-2-21
IK07 IK08	IEC62262

Environmental Testing

Chlorinated Water Immersion	BG9667, PH6.8-7.6, free chlorine 0.3-0.6mg/L
Salt Water Immersion	IEC60598-1, Sailinity 4%
Salt Spray Test	IEC68-2-11
Outdoor Exposure	Manufacturer-defined
Flame Resistance	UL94
UV Exposure	ASTMG 154, ISO 4892-3, UVA @ 340nm
IPX5, IPX6, IPX7, IPX8	IEC60529
Temperature Shock	Manufacturer-defined, -40°C - 60°C (typical temperature range)
Constant Temperature	Manufacturer-defined, 70°C (typical temperature range)

Charts

ANSI STANDARD

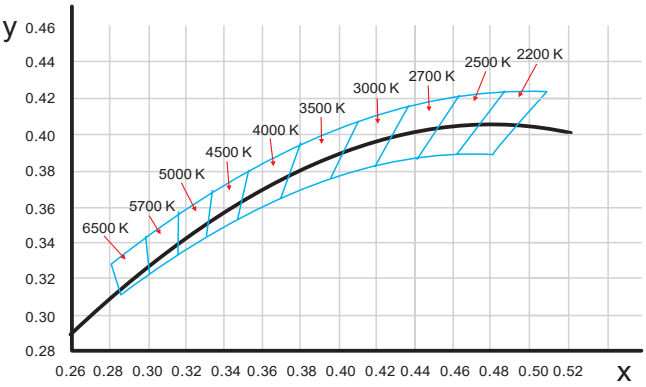
Nominal CCT Categories

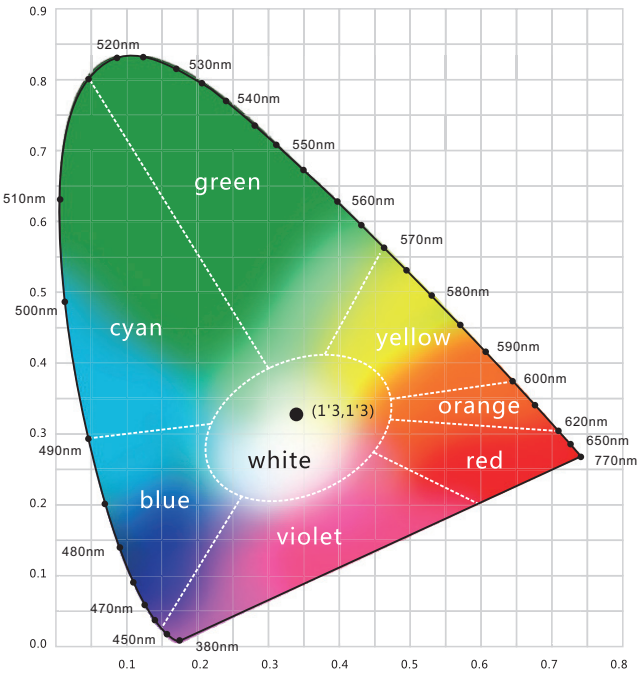
Nominal CCT	Target CCT and tolerance(K)	Target D_{uv}	D_{uv} Tolerance Range
2200K	2238 ±102	0.0000	Tx:CCT of the source
2500K	2460±120	0.0000	For Tx<2870K
2700K	2725 ±145	0.0000	0.000±0.0060
3000K	3045±175	0.0001	For Tx≥2870K
3500K	3465±245	0.0005	Duv(Tx)±0.0060
4000K	3985±275	0.0010	where
4500K	4503±243	0.0015	Duv(Tx)=57700 x (1/Tx)2
5000K	5029±283	0.0020	-44.6 x (1/Tx)
5700K	5667±355	0.0025	+0.00854
6500K	6532±510	0.0031	
Flexible CCT (2200-6500K)	T_F 1) ±ΔT 2)	$D_{uv}T_F$ 3)	

Remark:

1) T_F is chosen to be at 100K steps (2300,2400,.....,6400K),excluding the ten nominal CCTs listed in Table 1.
2) $\Delta T=1.1900x10^{8}xT^{3}-1.5434x10^{4}xT^{2}+0.7168xT-902.55$
3) Same as in the D_{uv} Tolerance Range.

(X,Y) Chromaticity Diagram



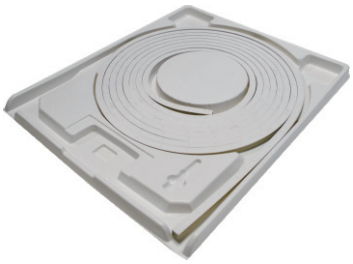
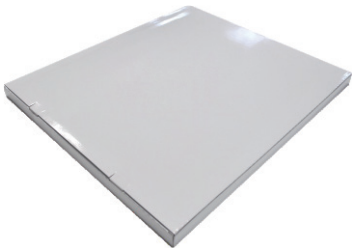


Light Color

Red
620-630nm

Green
520-530nm

Blue
465-475nm



White Box Packing Box

Fixture Length	White Box Dimensions	Packing Box Dimensions	# Of White Boxes	Package Weight
196.85in (5m)	15.35x2.05x19.67in (39x5.2x50cm)	20.47x16.14x11.02in (52x41x28cm)	5	30.86lbs (14kg)
393.7in (10m)	20.08x2.05x24.41in (51x5.2x62cm)	25.2x20.87x11.02in (64x53x28cm)	5	57.32lbs (26kg)
393.7in (10m)	20.08x2.05x24.41in (51x5.2x62cm)	25.2x20.87x6.9in (64x53x17.5cm)	3	35.27lbs (16kg)
787.4in (20m)	26.77x2.05x31.1in (68x5.2x79cm)	31.9x27.56x4.92in (81x70x12.5cm)	2	48.5lbs (22kg)