



Lumin
LED Lighting

Shenzhen Lumin Lighting Co.Ltd



WeChat

Address

F3,Building1, Baolu Technology Park, No.108, Baoshi West Road,
Shiyan St., Bao'an Dist., Shenzhen. P.C code 518108, China

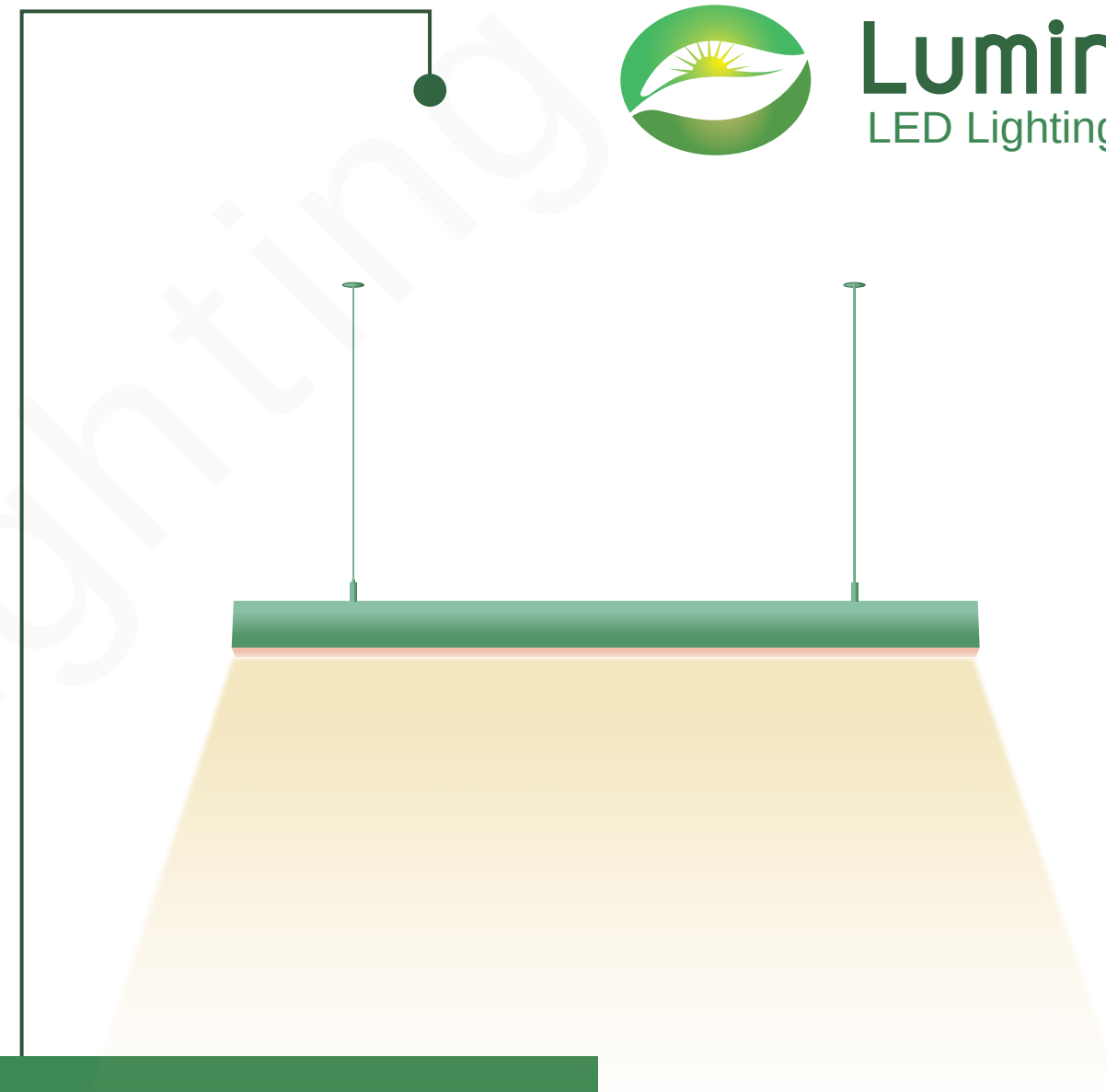
Telephone

M: +86 15875556677 T: +86 755 23316621

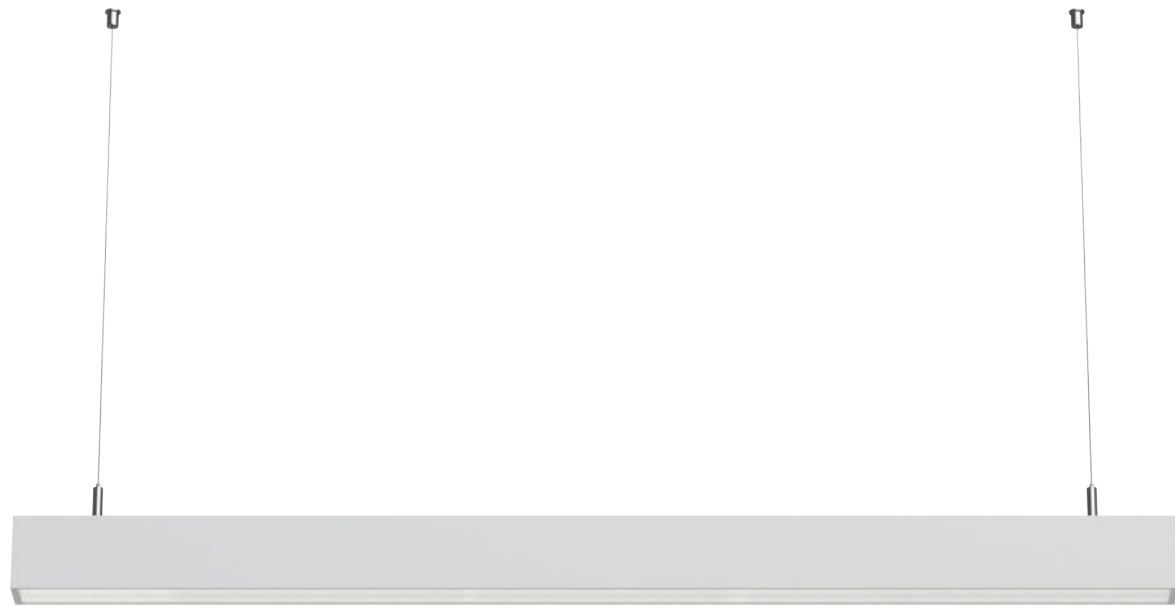
Website

www.luminlighting.com

UltLine X2 Linear Light



WHY ULTLINE X2



Benefits

- Suitable for office, education, retails
- Excellent total cost of ownership
- Wide range of options to suit the demands of different application

Features

- Comfortable, low glare: <UGR19
- High lumen output, up to 130LM/W
- Health-oriented solution, high CRI 98
- Flexibility to lighting design
- Standard options in different lengths, colors and light outputs • Customization options



Now, many office owners and office lighting designers prefer lines of light. The reason is simple. Not only do light lines come in a minimalistic design, they also offer far more choice and flexibility. Short or long lines and luminaires, standalone luminaires, different shapes and even a variety of colours; anything is possible.

UltLine X2 is an ultimate light line range with a slim, minimalistic design and a high lumen output(up to 130 lm/W) to illuminate the brightest architecture spaces. But with low levels of glare UGR19 , zero flicker, and CRI98, it' s also really good for people's eyes and health. This makes UltLine X2 ideal for linear applications, as well as standalone suspended or surface-mounted luminaires.

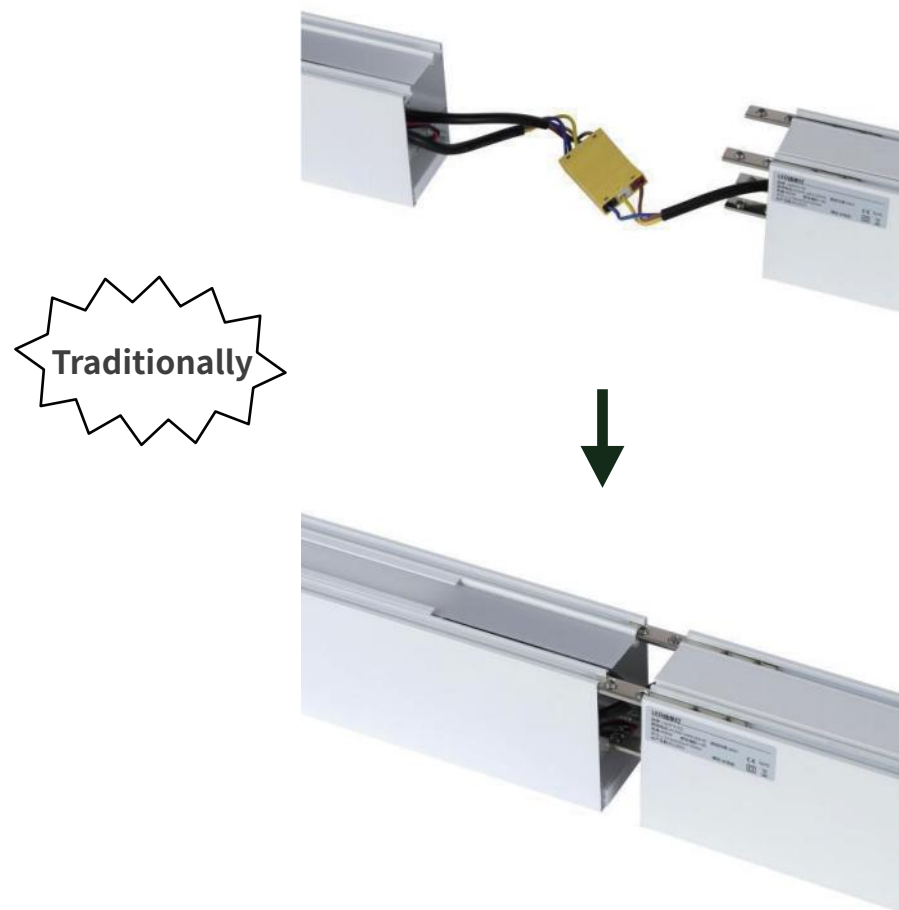
UltLine X2 is the range that offers the ultimate flexibility and unlimited possibilities. Its design flexibility comes in the form of different lengths, colors and light outputs – including shapes, as well as straight lines.

UltLine X2 can realize all these benefits under lighting norm at a competitive price.

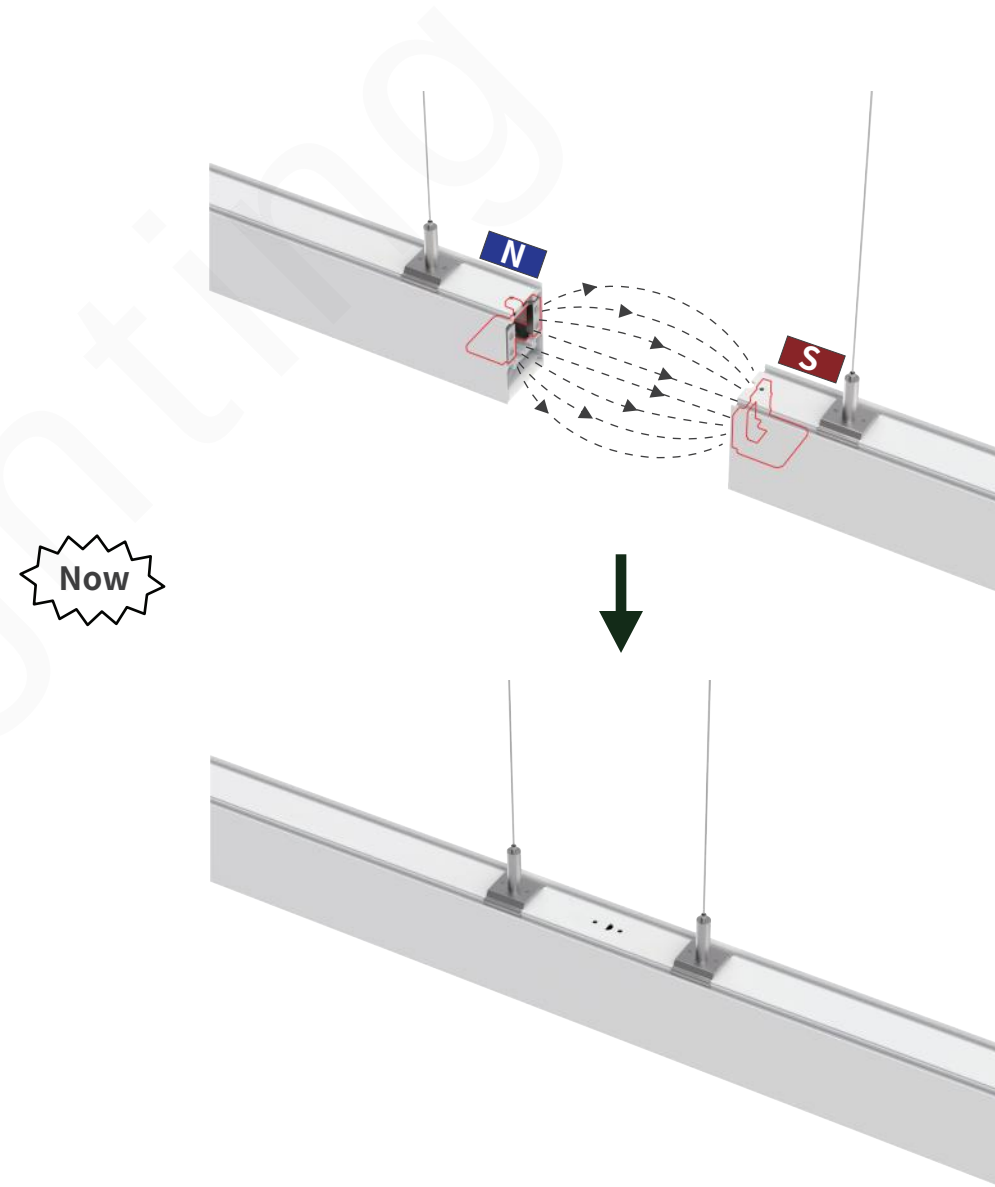
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1. Magnetic Seamless Connection

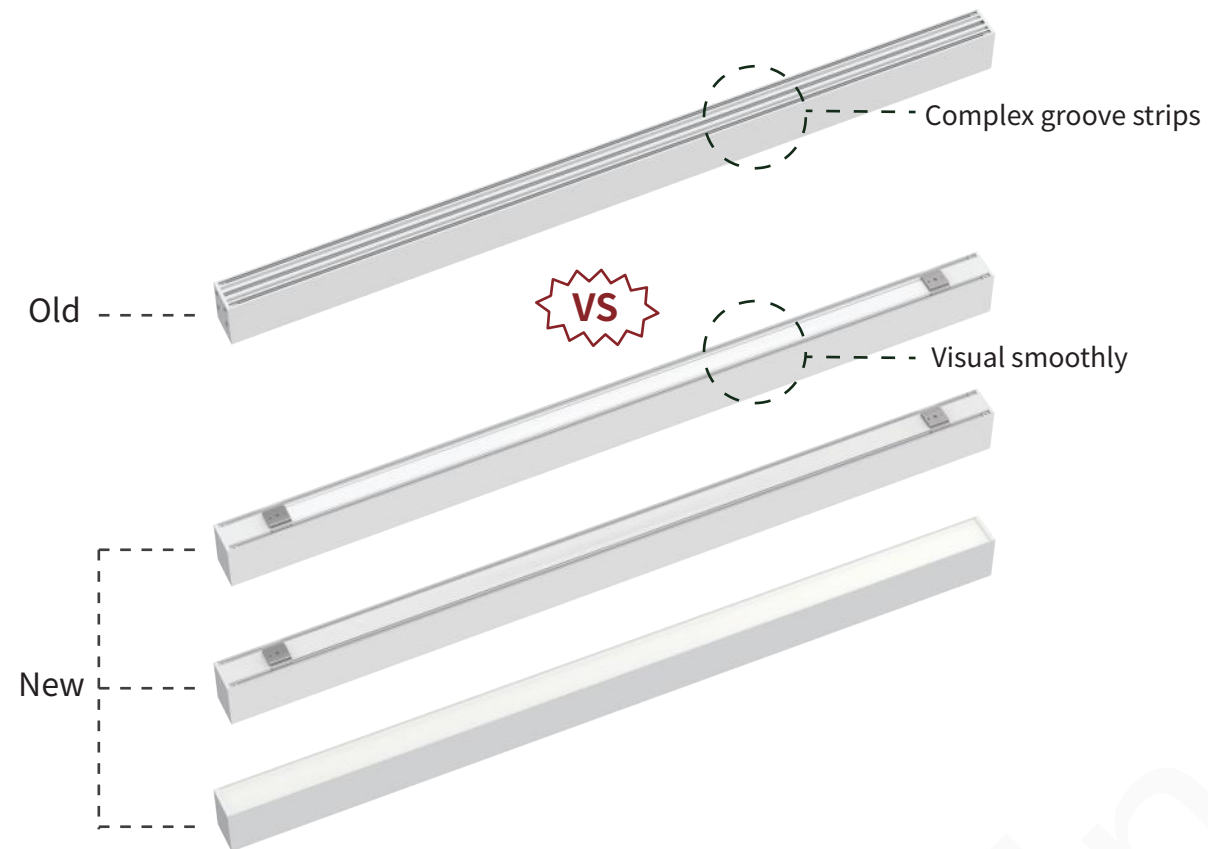


- “—” shaped iron connector and screws are used for the straight run connection for several LED linear lights, making the splicing process very complicated, and taking a lot of time.



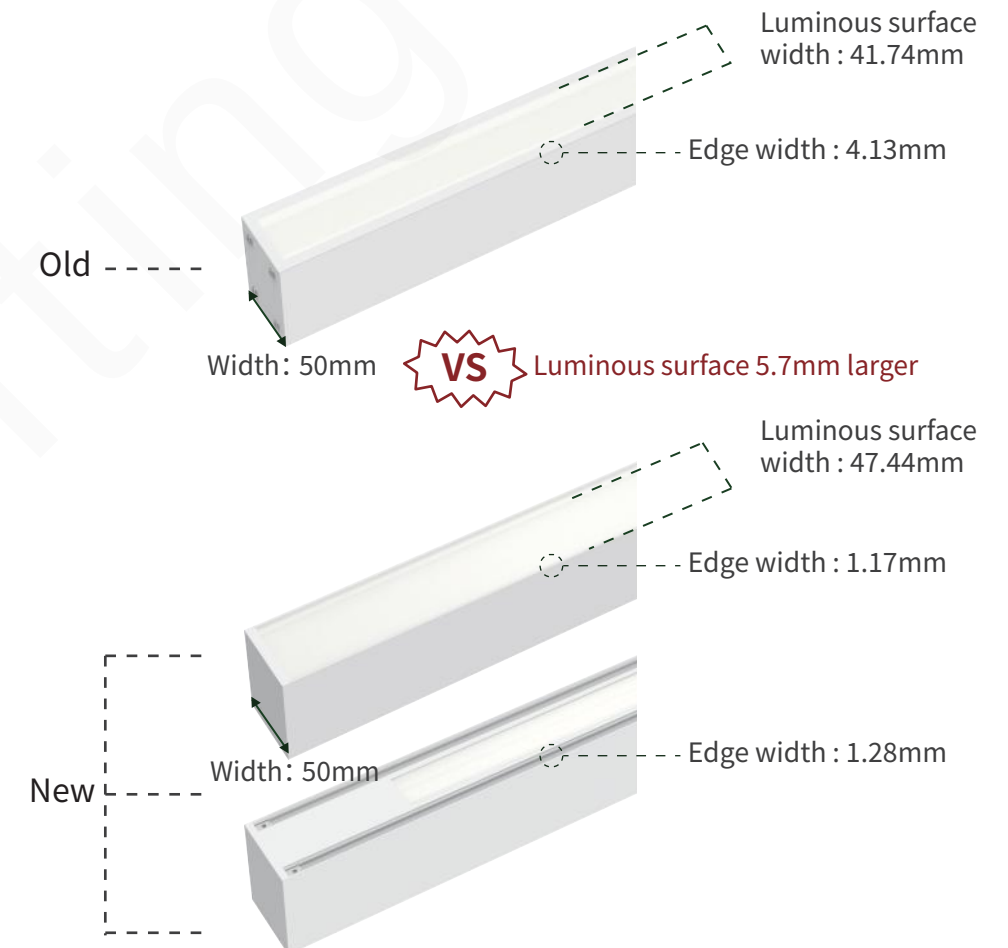
- UltLine X2 innovates the splicing design, a kind of magnetic adsorption structure, which solves the pain points of users, saving them a lot of work time and labor costs.

2. Invisible Edge



Design Concept

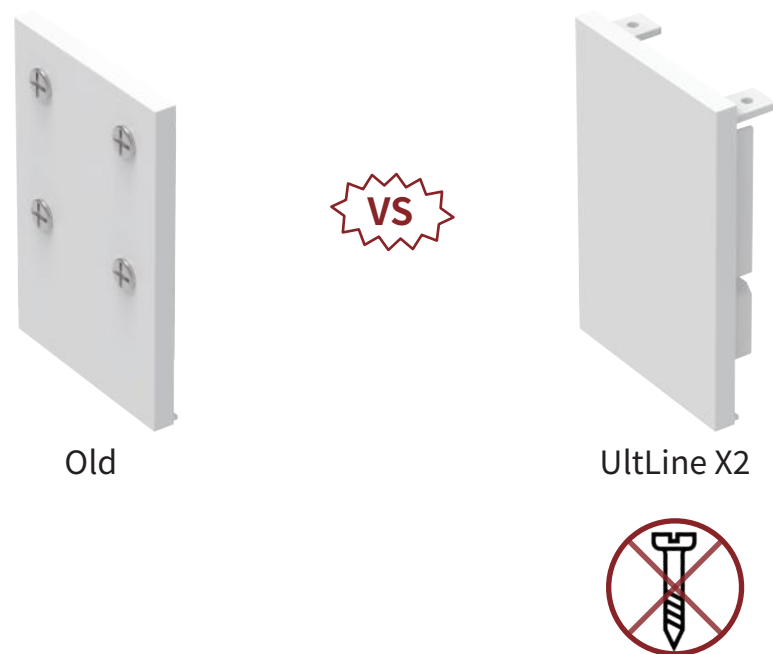
- The design language is concise, compatible, flexible, and practical
- For old linear lights, its upper part is full of complex and ugly groove stripes
- But UltiLine X2's top design is very slim, harmonious, and perfect



Invisible Edge

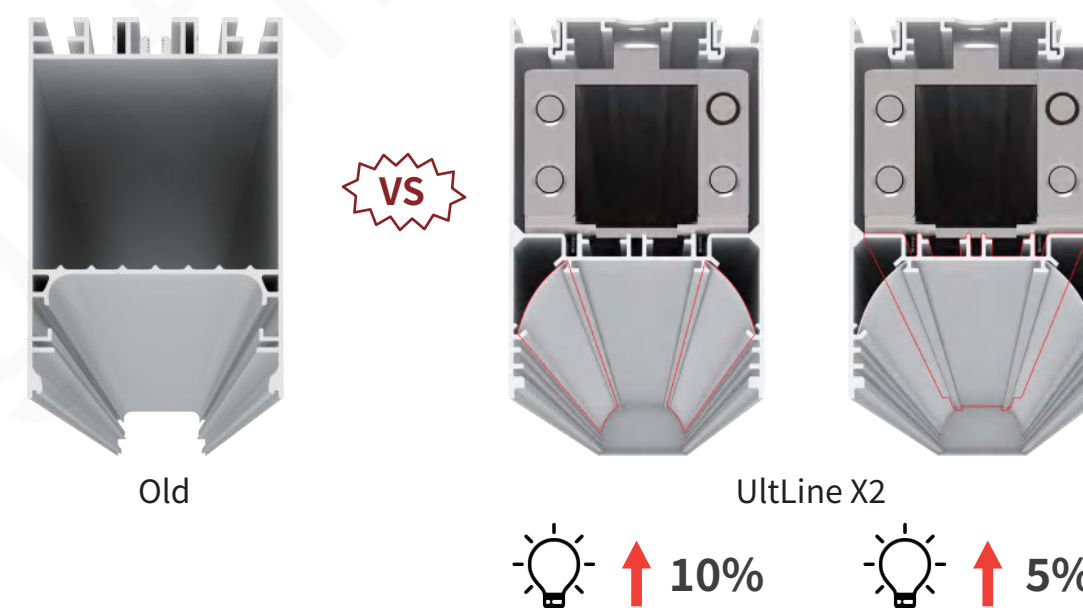
- The upper edge of the UltLine X2 is very slim, only 1.17mm wide
- The downward edge is smaller than others, only 1.28mm wide
- Compared to the same size of others, UltLine X2 has a wider luminous surface, which makes visual aesthetics better and the architectural space look more beautiful.

3. Screwless End Cap



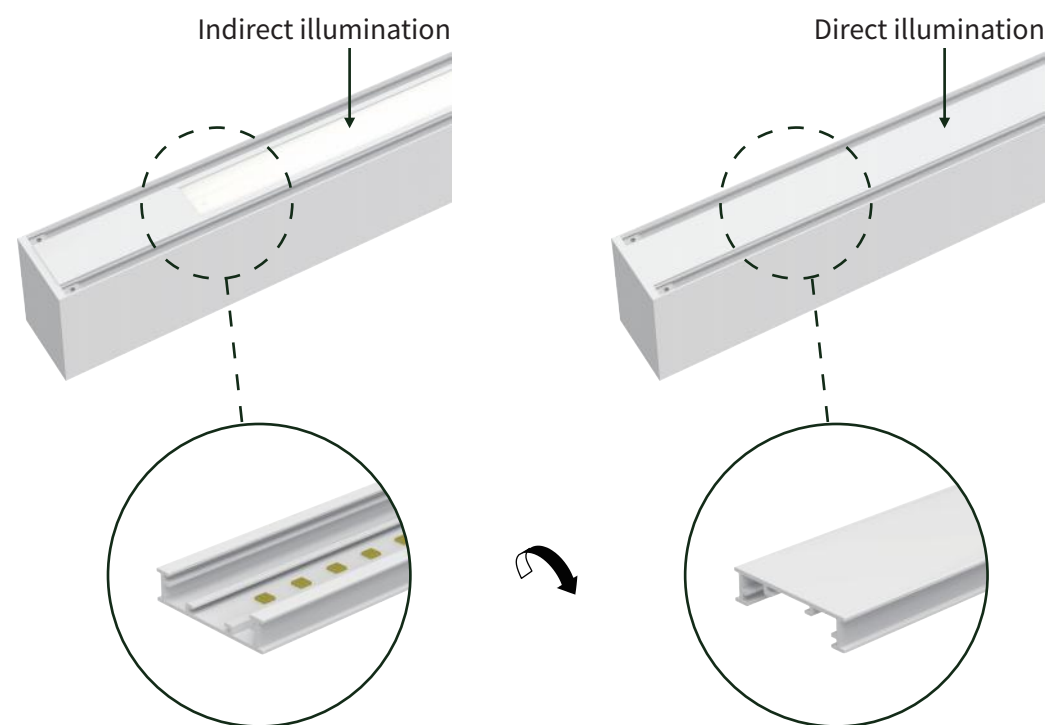
- There is no huge nut at the end cap of UltLine X2.
- For old linear lights, 2 or 4 pieces of nuts are screwed on the end cap. It looks very unharmonious in the architectural space.
- UltLine X2 makes it different from others.

4. Light Efficacy Enhancement



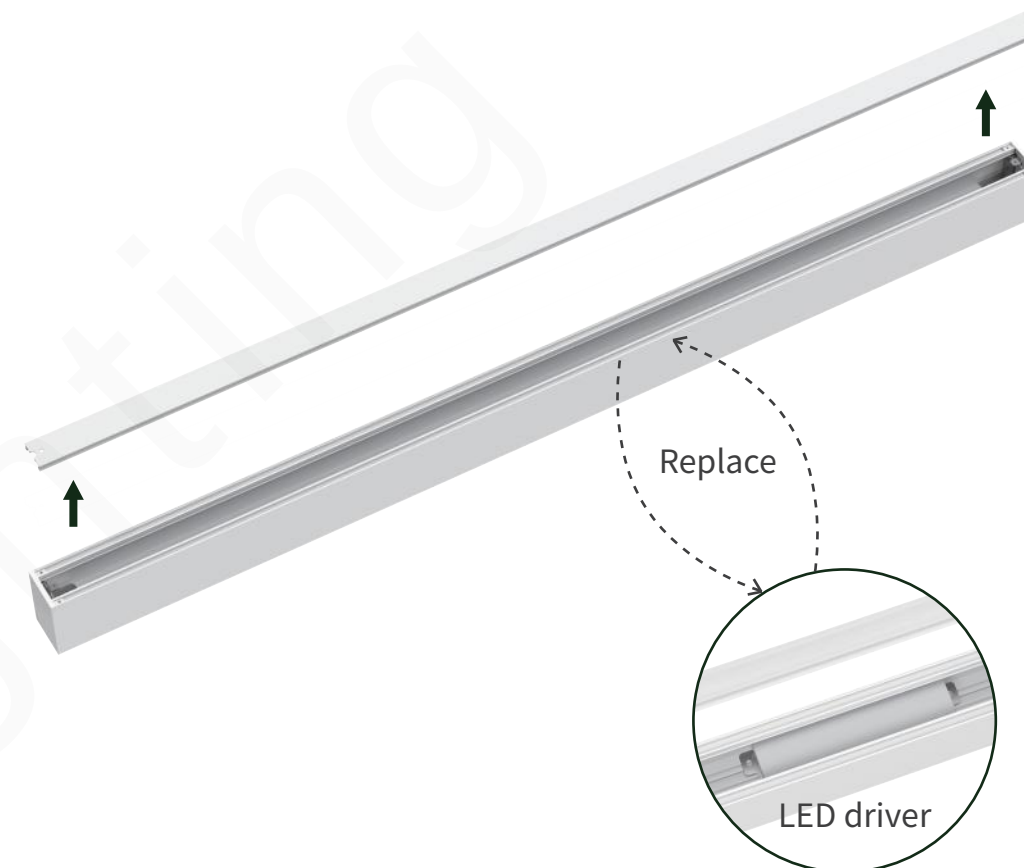
- The old linear lights' illumination structure is common and out of date. It's hard to improve light efficiency.
- UltLine X2 has a special emitting structure 凸-shape, which makes the light emitting surface closer to the optical diffuser, thereby improving the effective utilization of light source. This structure helps improve luminous output by 5%.
- UltLine X2 is designed with two "card slots", in which high reflective optical material PET is placed to form a secondary optical reflective U-shaped structure. The special "U" structure helps to improve the overall lighting efficiency by more than 10% compared to ordinary structures.

5. Flexible Top Cover "X"



Cost Optimization

- In some architectural spaces, the indirect and direct lighting of linear lights are always cleverly combined.
- For common linear lights, one mold is designed for direct lighting, the other is for direct and indirect lighting. It will take 2 different molds to achieve the goal.
- But top cover "X" design of the UltLine X2 solves that pain point. Only exchanging the installing position of top cover, it's easy to realize indirect illumination and direct illumination.
- Top cover "X" design greatly helps the maker and users lower down the cost.



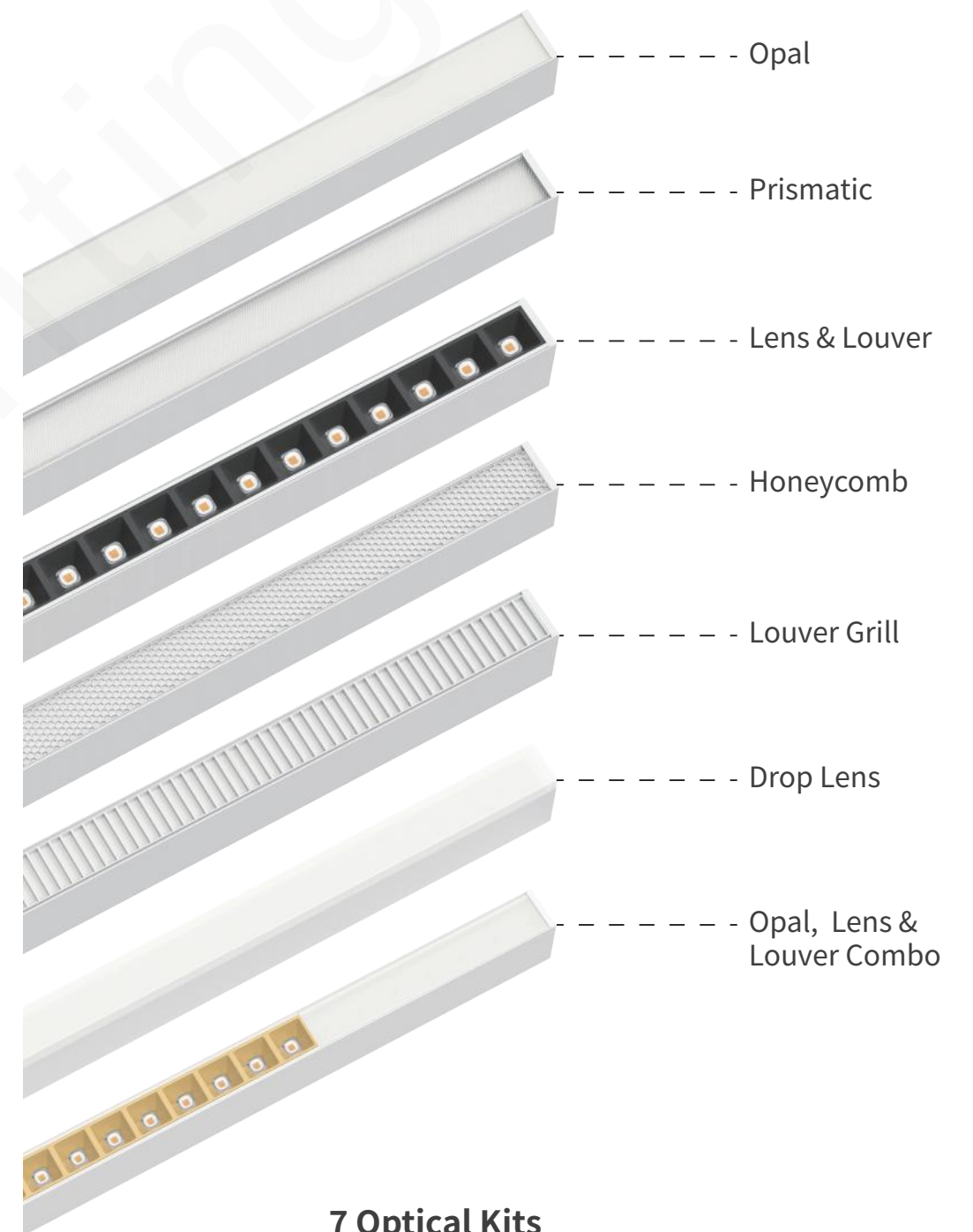
User-friendly

- Common linear lights are formed by a mold, which makes it inconvenient for makers and users to install and maintain the driver inside the linear lights.
- But UltLine X2 is formed with 2 different molds. One is the main aluminum profile, the other is the top cover "X".
- Before installation, users can take out the top cover from the main profile, wiring the driver, setting color temperature and wattage, replacing the on-off driver with a DALI driver as they wish.
- Users can easily open the top cover to replace the defective with the new driver if a failure case happens.

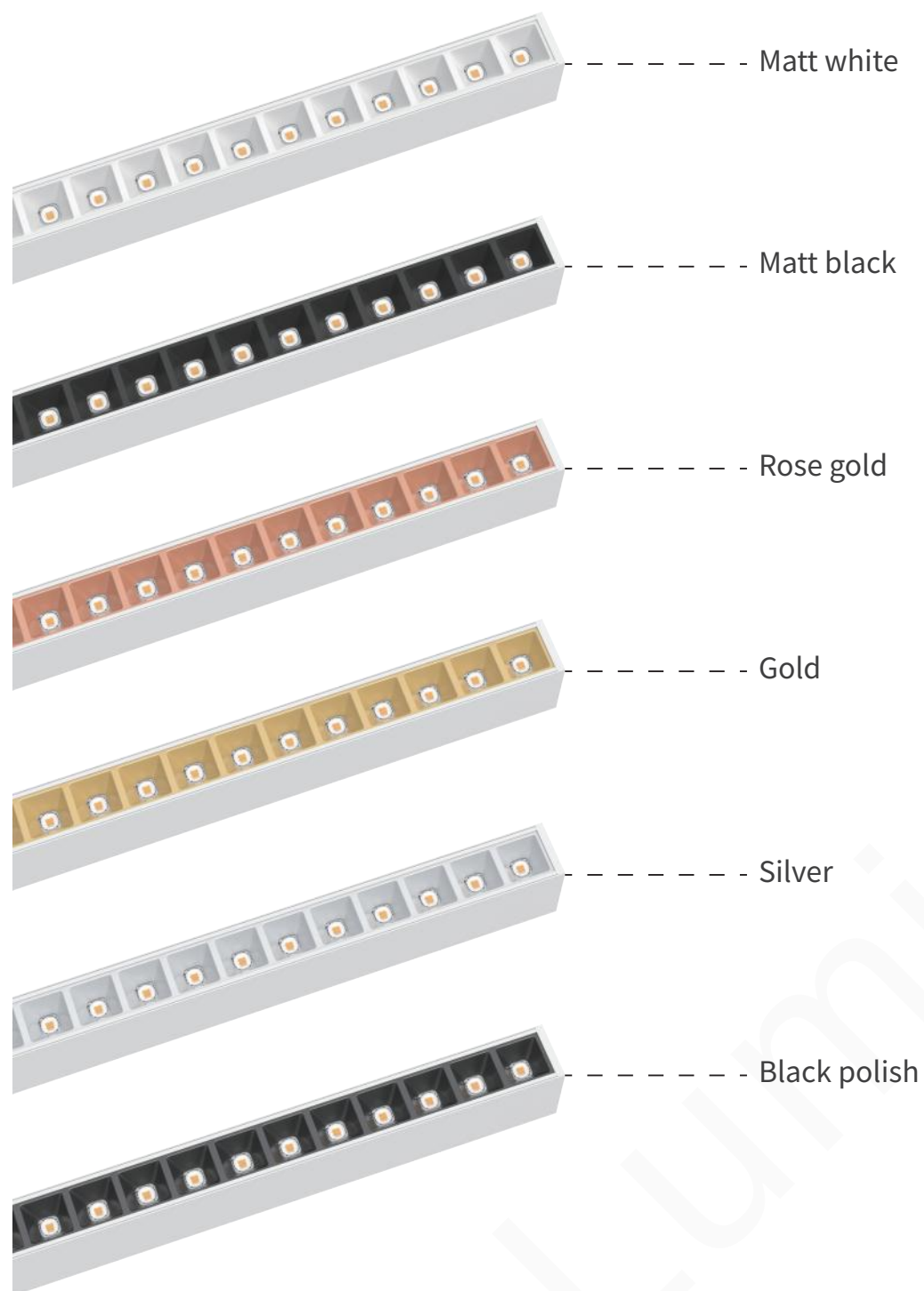
6. Diversified Optical System



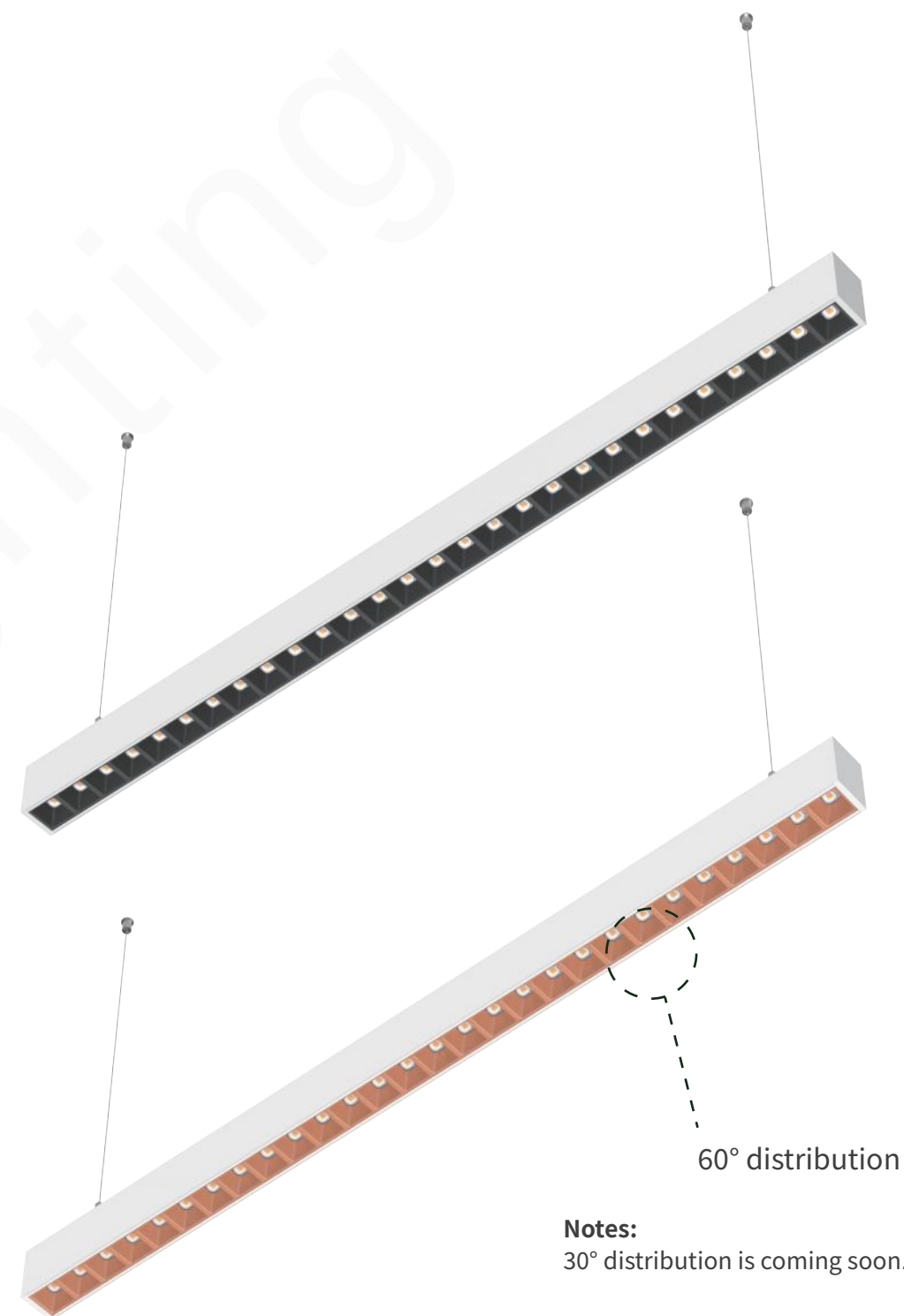
- UltLine X2 boasts its innovative structure design that enable the solution to be compatible with 7 different optical kits.
- According to different application scenario, users can choose 7 different optical suits: lens+louvers, louver grilles, honeycomb, prismatic PC diffuser, and opal PC diffuser, drop lens, as well as mixed PC diffusers and lens& louver.



7 Optical Kits

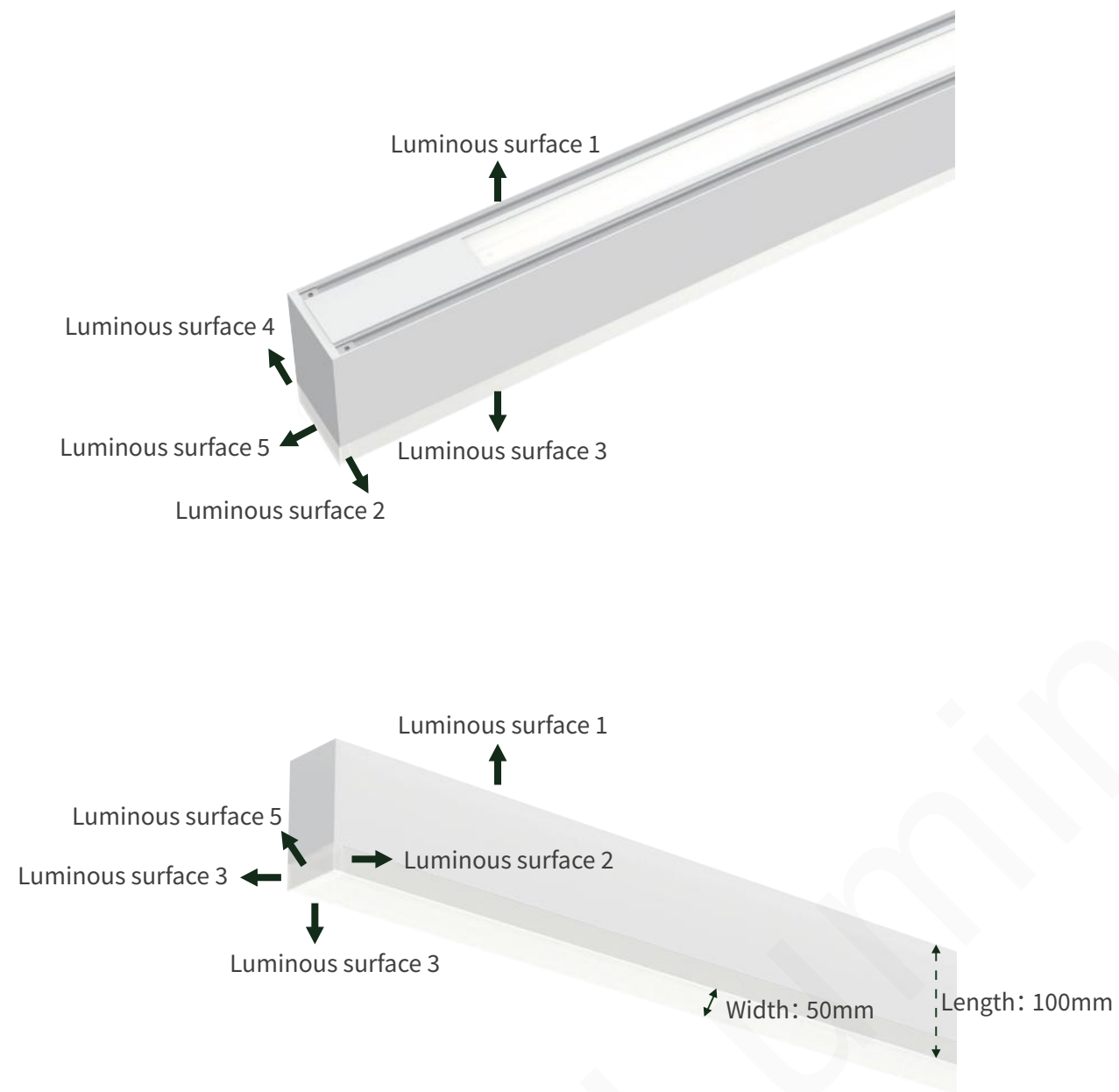


More Colors of the Louver



Part I Design Highlights

Drop Lens



5 Light Emitting Surfaces

Part I Design Highlights

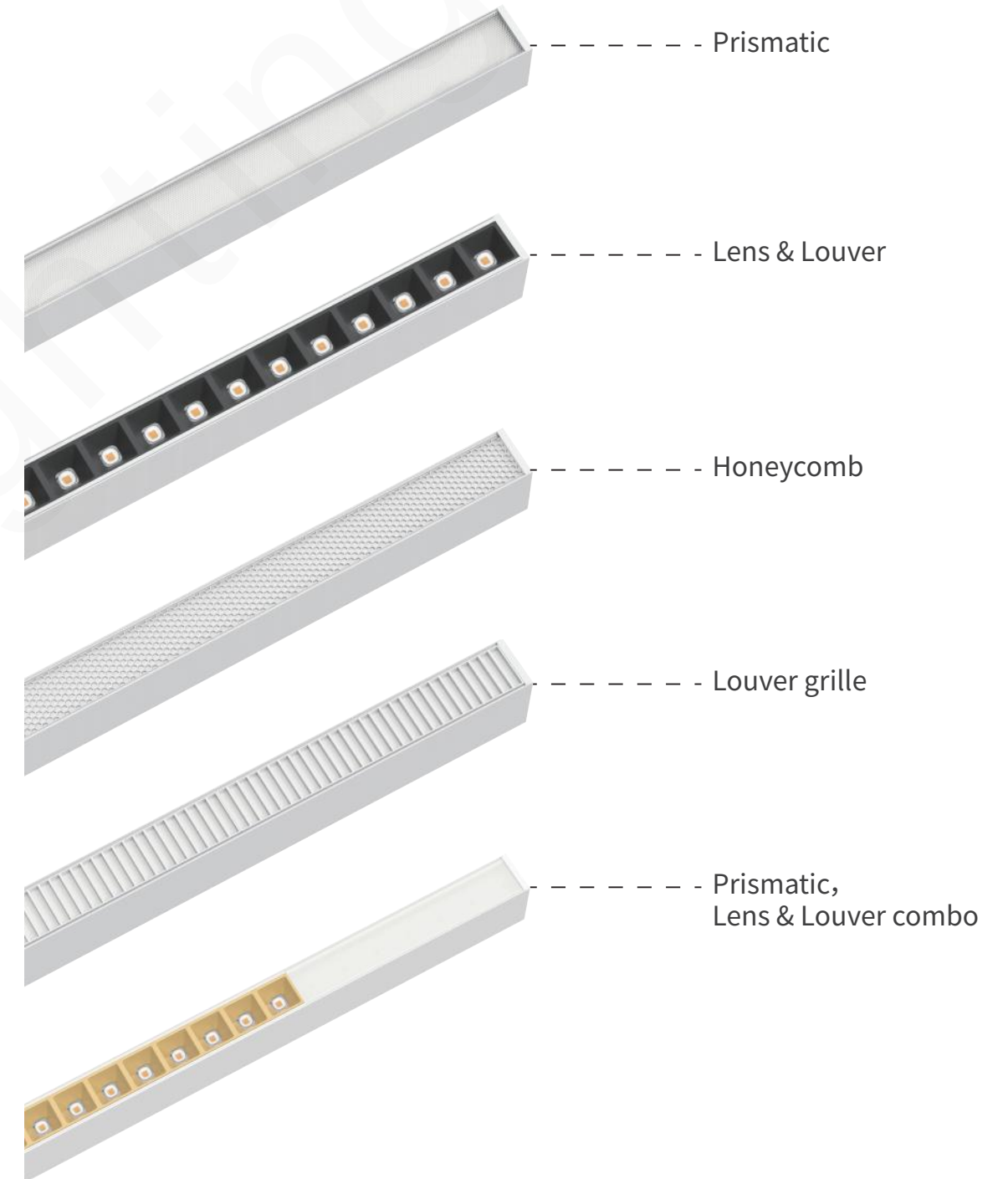


Coiled PC Cover

- The PC diffuser can be cut into fixed lengths or coiled up. The coiled PC diffuser is very helpful for engineering installation, because seamless connection is easy to handle with the coiled PC diffuser.



- UltLine X2 is equipped with the opal diffuser very often. The glare value of the linear light is UGR22, which can meet the most general application scenarios.
- But, for some special scenarios like schools, the glare value must be less than 22 under the design standard, in order to improve students' visual comfortability.
- UltLine X2 has 5 different optical kits for glare control.





UGR 20.1



UGR 14

Note:
This is a case study for a classroom in a primary school.
Through professional test instruments, we can find the difference of light distribution between UGR20.1 and UGR 14.

UGR & Discomfort

UGR Value	Discomfort Glare Criterion
28	Uncomfortable
25	Just uncomfortable
22	Unacceptable
19	Just acceptable
16	Perceptible
13	Just perceptible
10	Imperceptible



- The glare of lighting fixtures can affect people's eye comfort, work efficiency, and health status.
 - Through scientific light distribution and exquisite optical anti-glare structure, Ultline X2 provides a complete set of anti-glare solutions for line lights.
-  For further information, please contact us.

Part III High Lumen Output 130 LPW



- Generally speaking, common LED linear lights deliver light efficiency around 100LM/W, But UltLine X2 can deliver 130lm/w.
- UltLine X2 boast its unique optical structural design: “凸” shape light emitting design and “Card Slot” PET optical design. It can help improve 15% more lumen output than common ones.
- UltLineX2 adopts LM-80 high quality LEDs, which stimulates the highest lumen output of a single LED through professional current control. More lumen output will be delivered under the excellent PCB electrical design.
- UltLine X2 has high efficient LED driver, up to 94% with the highest power factor over 0.98. That will help the linear lower down power consumption obviously.

Part III High Lumen Output 130 LPW

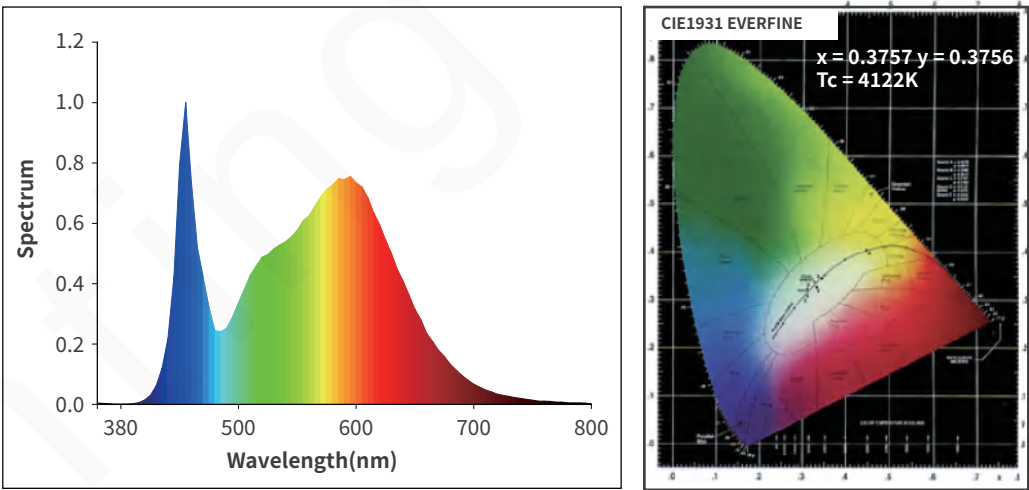
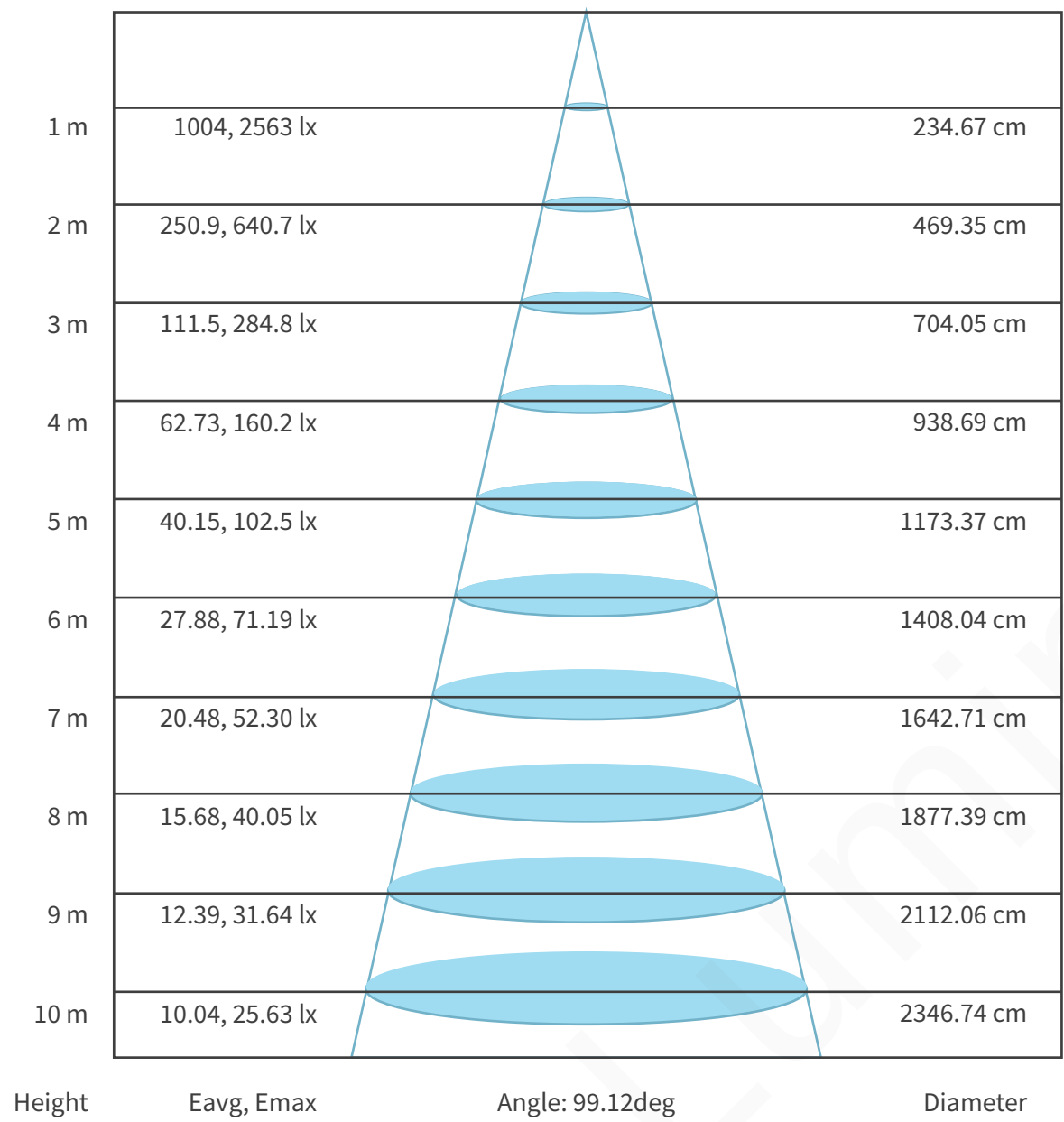
Electricity Cost Calculation Table

	Lamps A	UltLine X2	Cut down
Efficacy	100lm/w	130lm/w	
Power factor	0.98	0.98	
Actual power = Luminous Flux/Efficacy/ Power factor	4000(Preset)/100/0.98 =40.8w	4000(Preset)/130/0.98 =31.4w	9.4w
Electricity bill / day	0.0408kw*8h*2000pcs*0.15\$ =97.92\$	0.0314kw*8h*2000pcs*0.15\$ =75.36\$	22.56\$
Electricity bill / week	0.0408kw*8h*7*2000pcs*0.15\$ =685.44\$	0.0408kw*8h*7*2000pcs*0.15\$ =527.52\$	157.92\$
Electricity bill / year	0.0408kw*8h*365*2000pcs*0.15\$ =35740.8\$	0.0408kw*8h*365*2000pcs*0.15\$ =27506.4\$	8234.4\$

Case Study

- In the UK, 2000 pieces of LED linear lights was installed in an office building in 2024. We can compare the power consumption and electricity cost with the linear of 100lm/w and 130lm/ of UltLine X2 every day, every week, and every year.
- It is found that USD8234.4 is saved for the owner of the building in a year.
- 130lm/w UltLine X2 is deserved to buy.

Optical Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3757$ $y=0.3756/u'=0.2225$ $v'=0.5004$
Tc=4122K Dominant WL: Ld=578.1nm Purity=25.5% Centroid WL: 567.0nm
Ratio: R=19.4% G=77.3% B=3.4% Peak WL: Lp=450.0nm HWL: 19.5nm
Render Index: Ra=82.6
R1=81 R2=89 R3=95 R4=81 R5=81 R6=85 R7=86
R8=63 R9=4 R10=74 R11=80 R12=58 R13=83 R14=97 R15=75

Photo Parameters:

Flux: 4242.8 lm Fe: 12.739 W Efficacy:137.1 lm/W

Electrical Parameters:

Luminaire: U=222.5V I=0.1448A P=30.96W PF=0.9596
Lamp : U=3.000V I=0.03760A P=0.1128W PF=1.000

Instrument Status:

Scan Range: 380.0nm-800.0nm Interval: 5.0nm[0] Ip=24983(G=5,D=56)
REF=10711(R=3) %=0.057% PMT: 29.1 centigrade [150.0]

PC cover 1.103 ratio

Product Type : UltLine x2
Number : 120
Temperature : 25.3 deg
Test Operator: oya
software : v2.00.100

Manufacturer : LUMIN
Test Department : LUMIN
Humidity: 65.0%
Test Date : oya
Instrument : PMS-80_v1 (SN : 1003037)

Notes: The data subject to change due to the tolerance of test environments

Part IV High CRI 98 & Circadian Rhythm

1. High Performance



UltLine X2 will improve performance here

- Helping people enjoy the true color, esp. in art gallery
- Helping people have a good feeling esp. in the office
- Helping people work right and efficiently esp. in the clothes workshop
- Helping store owners improve sales performance greatly ,esp. in retails

Part IV High CRI 98 & Circadian Rhythm

CRI & Reality

CRI = 97



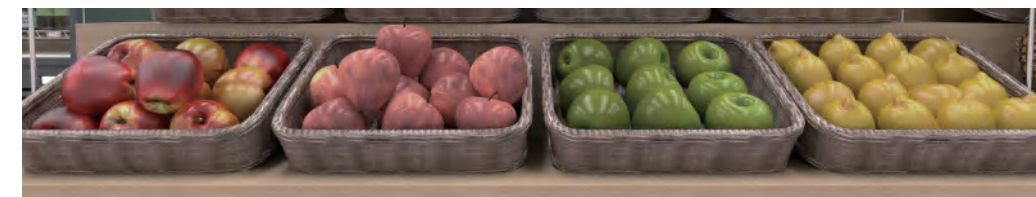
CRI = 90



CRI = 80



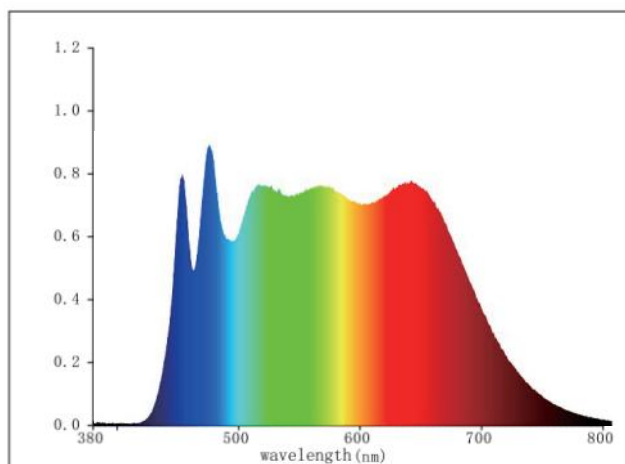
CRI = 70



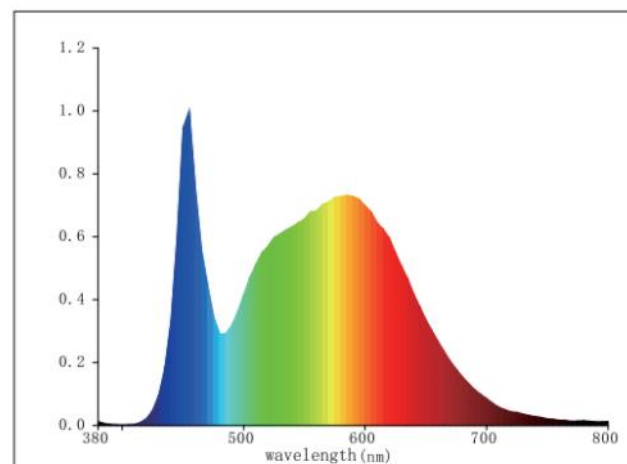
It shows that higher CRI will reflect true color of the objects under the linear light. And vivid true colors will inspire clients' shopping enjoy, so that sales performance will be increased.

Part IV High CRI 98 & Circadian Rhythm

2. Health Care



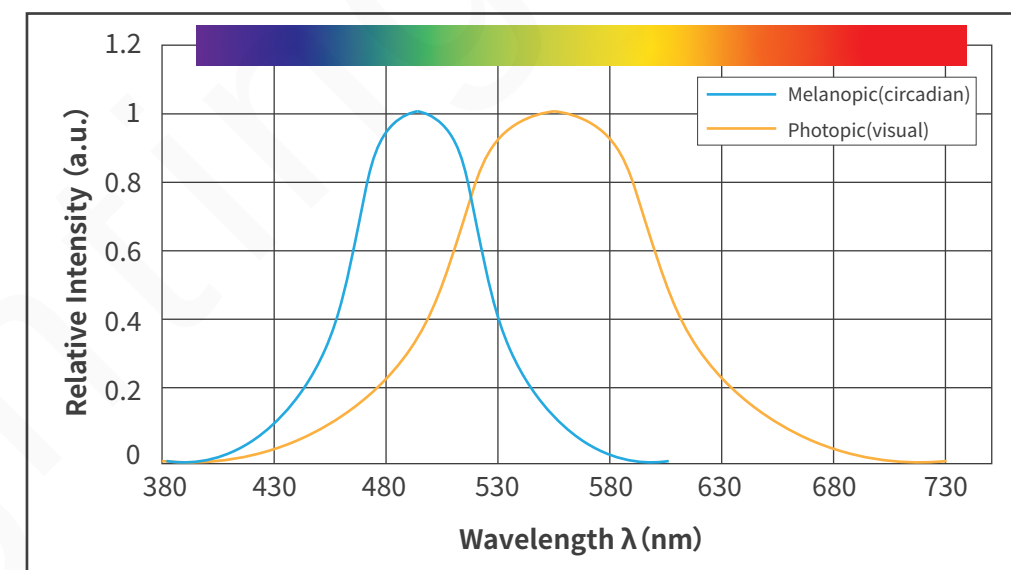
LumiSun LEDs spectrum



Common LEDs spectrum

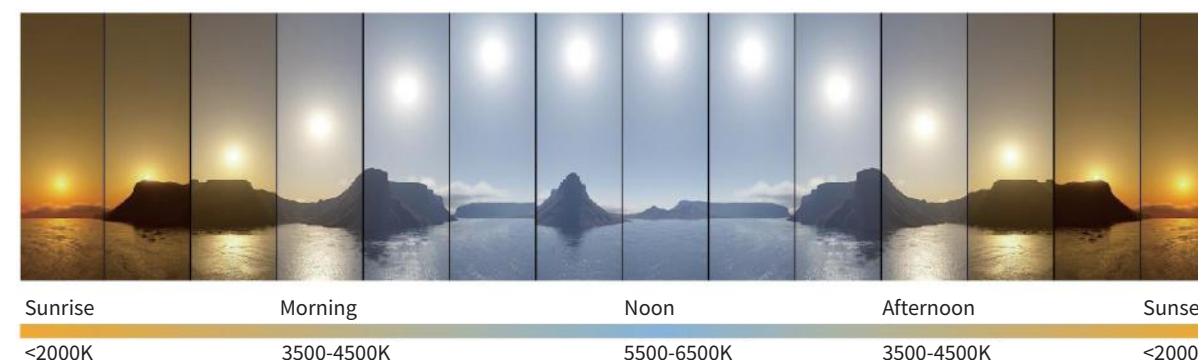
- UltLine X2 provides users with the solutions to CRI98 that simulates the spectrum of sunlight, and healthy rhythmic lighting experience.
- LumiSun LEDs are with less blue light hazard, similar to sun light spectrum, it's good for health.
- Ultline X2 can simulate the sunlight, changing CCT from 2700K to 65000K, and adjusting the brightness at the different time through App or remote control.

Part IV High CRI 98 & Circadian Rhythm



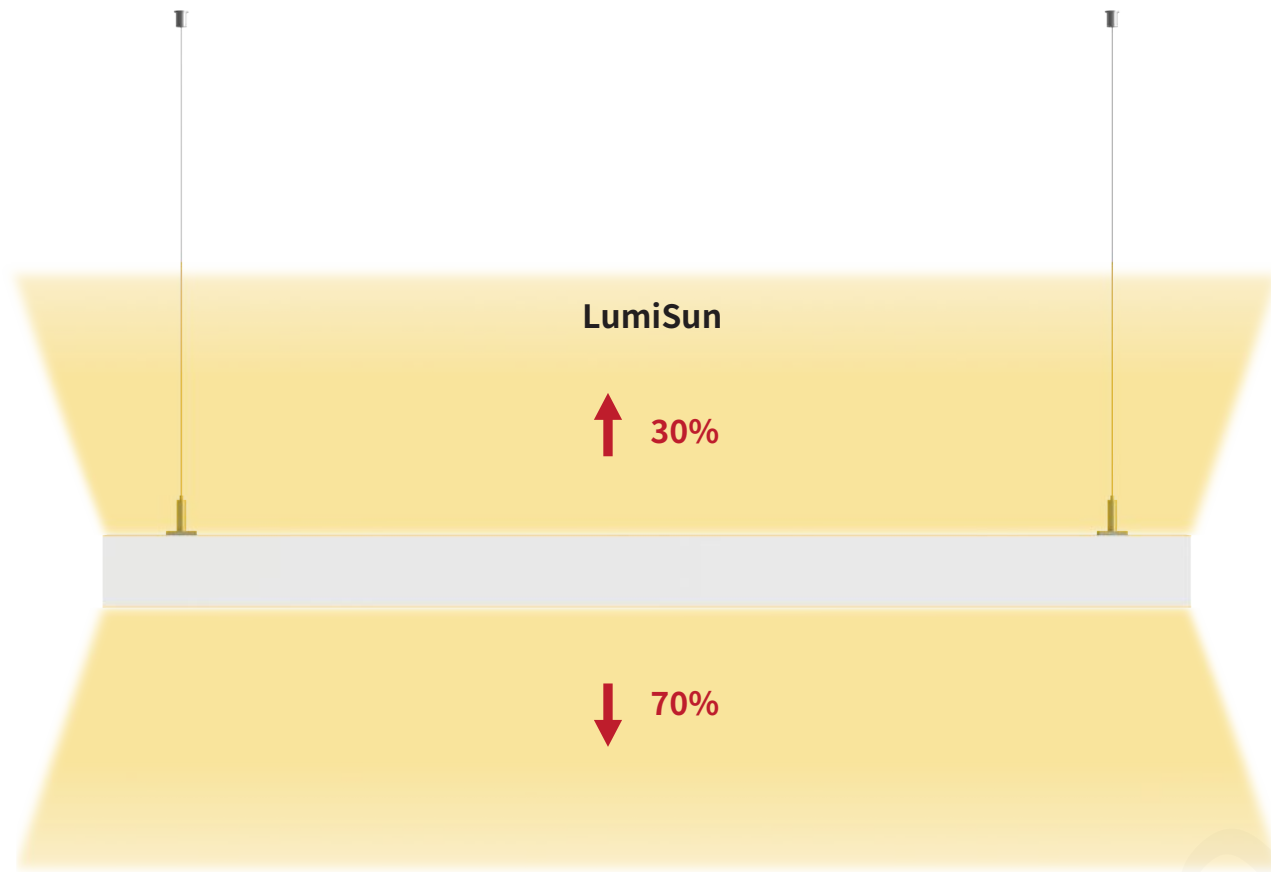
The Figure :

Compare the response curves of human photopic and melanopic vision, where the peak represents the peak response of the eye to light. Visually, the human eye has the strongest response to green or yellow green light; In biology, blue light causes the strongest response, inhibiting the production of melatonin and promoting wakefulness.



UltLine X2 provides users with App and remote control to realize the circadian rhythm lighting.

Part V Direct /Indirect Illumination & Circadian Rhythm

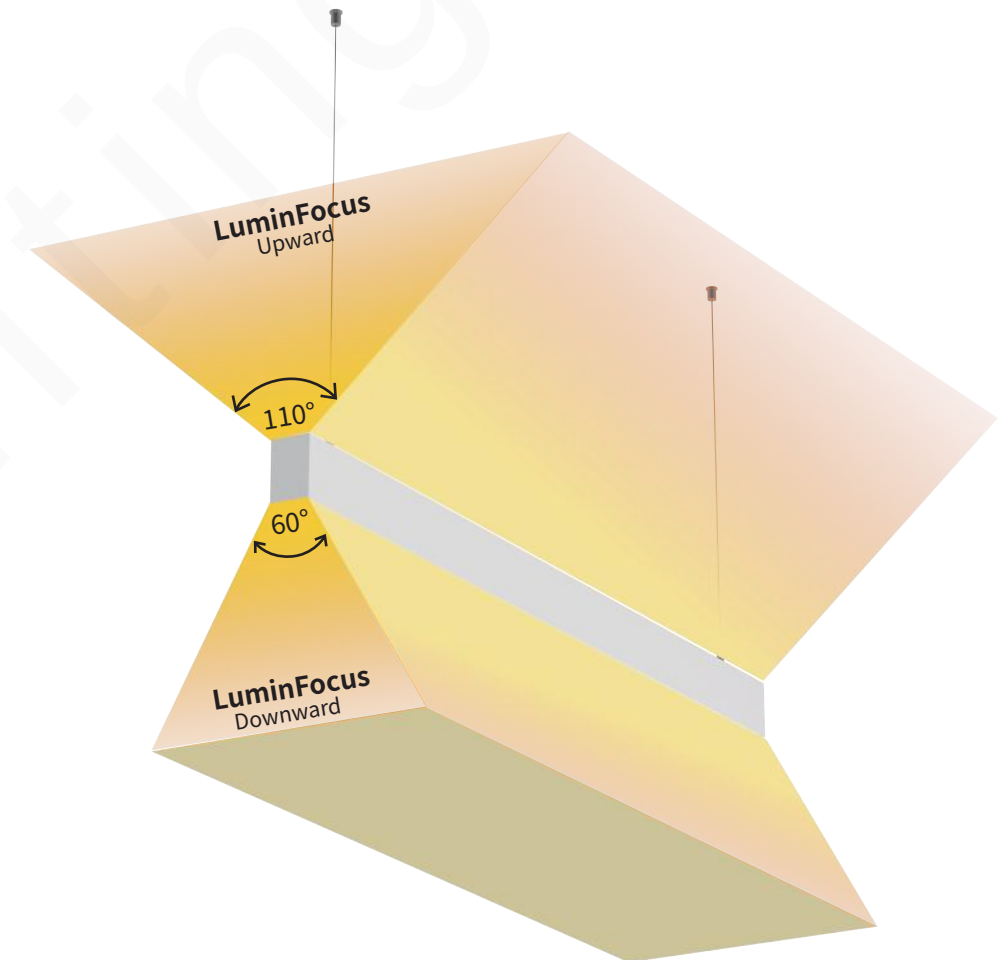


UltLinear X2 boasts its direct/indirect illumination with distribution 30% upwards and 70% downwards. The distribution ratio upwards and downwards can be preset.

LuminFocus and LuminFlood are innovative design with dual-light-emission , making uniform illumination without “dark zones” in the space.

Combining LumiSun LED technologies and proper power regulation, LuminFocus and LuminFlood can realize the truly natural and circadian rhythm regulated lighting.

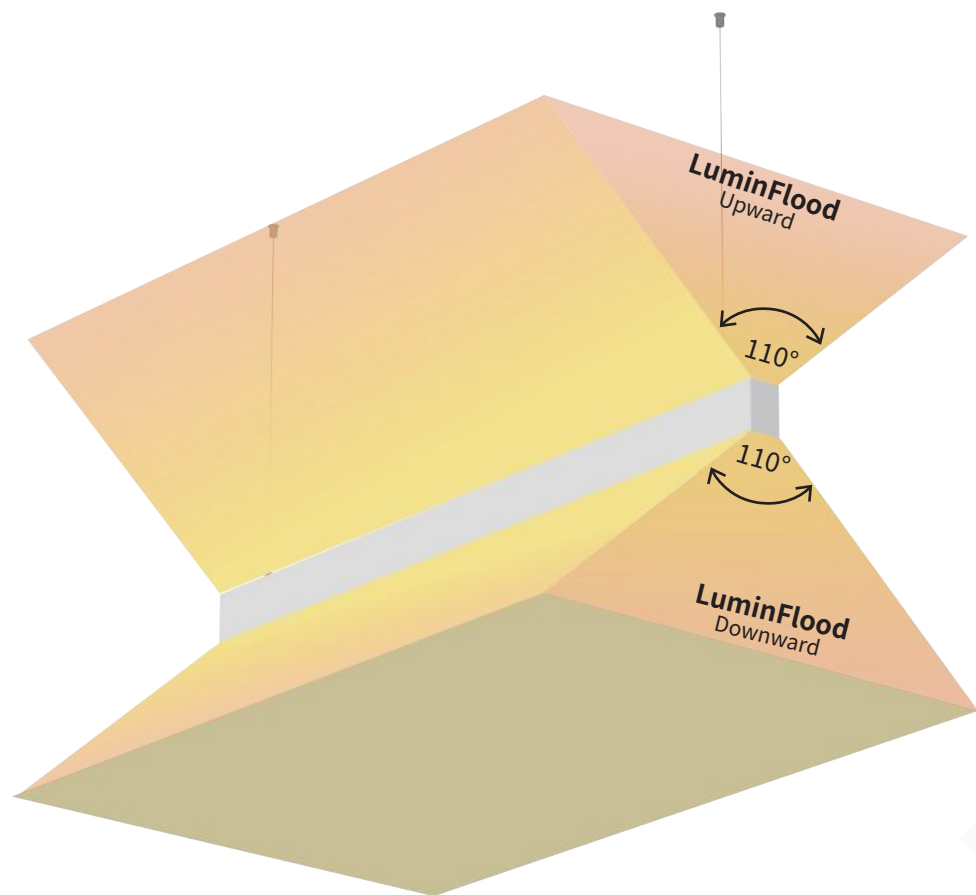
Part V Direct /Indirect Illumination & Circadian Rhythm



LuminFocus features different beam angles upwards and downwards. It creates the uniform illumination without “dark zones” with flood beam angle 120° upward , and creates the focus light with beam angle 60° downward.

Notes:

30° downward will be coming soon.

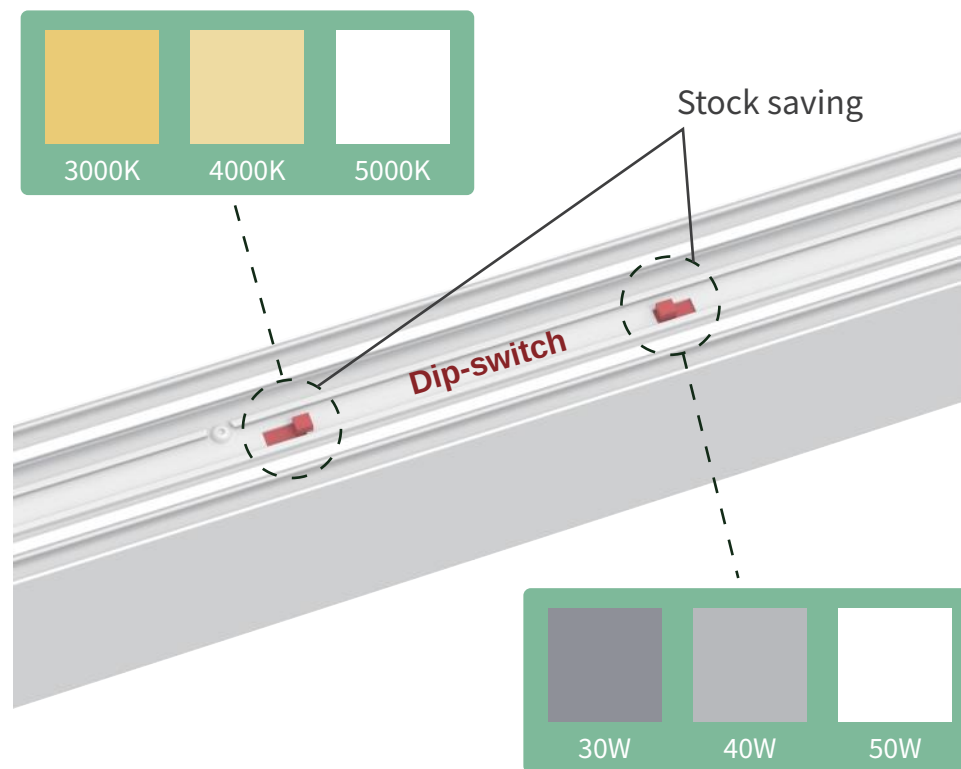


LuminFlood features the flood beam angles 120° upwards and downwards.

Typical Data		
Light distribution	Indirect & Direct	
Wattage (system)	60w	
	Indirect	Direct
Wattage	18w	40w(LuminFocus) 42w(LuminFlood)
Efficacy	100lm/w	100lm/w(LuminFocus) 110lm/w(LuminFlood)
Color rendering index (Ra)	98 LumiSun	
Optional CCT	2200K / 2700K 4000K / 5000K	LumiSun 2200K / 2700K LumiSun 4000K / 5000K
Melanopic ratio (M/P)	0.28 (2200K) 0.37 (2700K) 0.92 (4000K) 1.03 (5000K)	TM-30-20 Rf: 98
Melanopic daynight efficacy ratio (M/P)	0.25 (2200K) 0.34 (2700K) 0.79 (4000K) 0.93 (5000K)	TM-30-20 Rf: 101
MacAdam step	3	
UGR	<14 (LuminFocus) <22 (LuminFlood)	
Optional control type	On-off / Dali / 0-10V dimmable	

Notes: Data is subject to change

Part VI CCT & Wattage Selectable



UltLine X2 integrates the DIP switch of the driver that can adjust CCT and wattage into the top cover of "X" design.

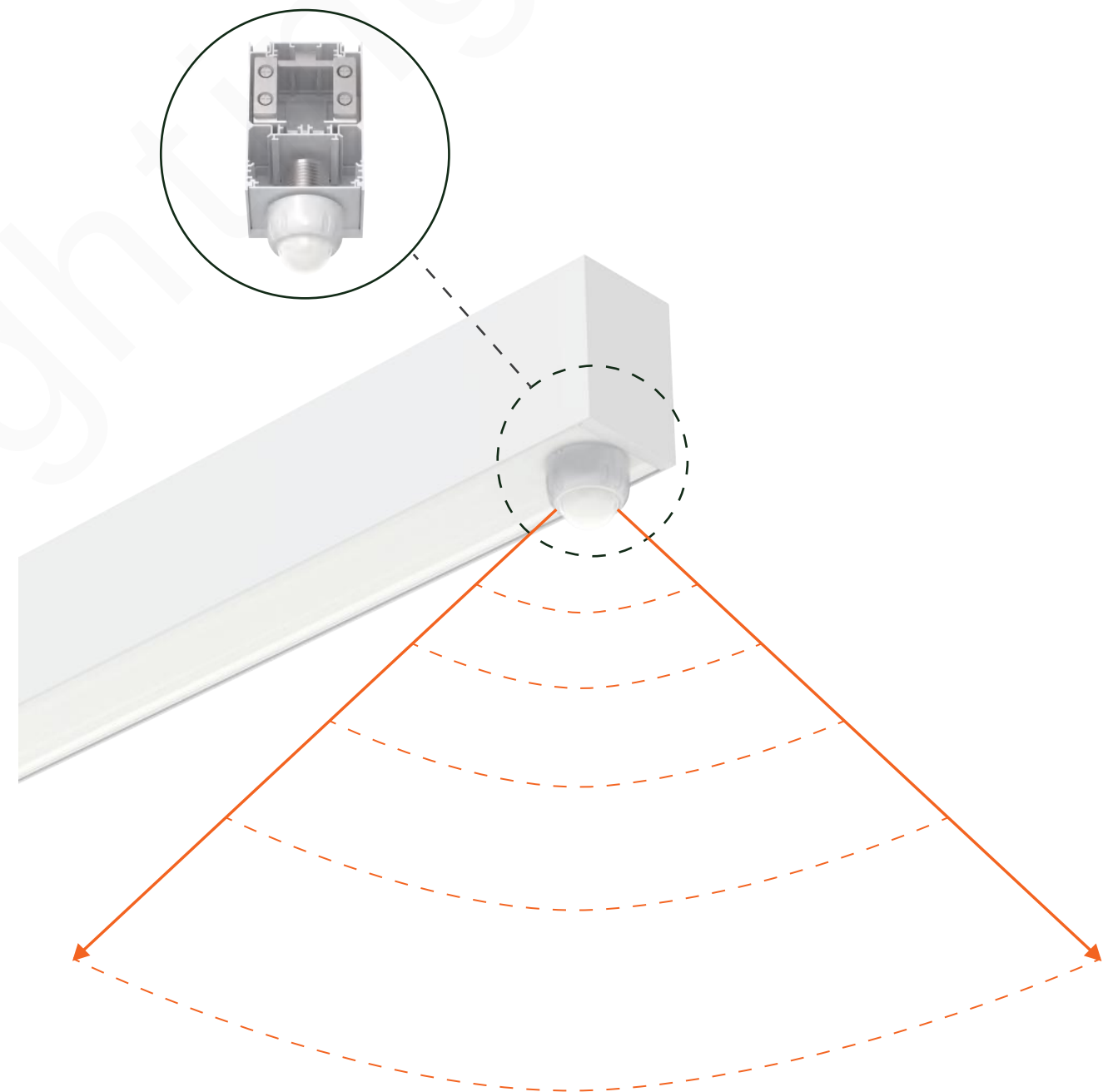
It's easy for users to select CCT and wattage according to the actual installation situation.

The design is good for whole sellers, engineering companies, installation companies. it can help the sellers and users save a lot of stock and improve service flexibility.

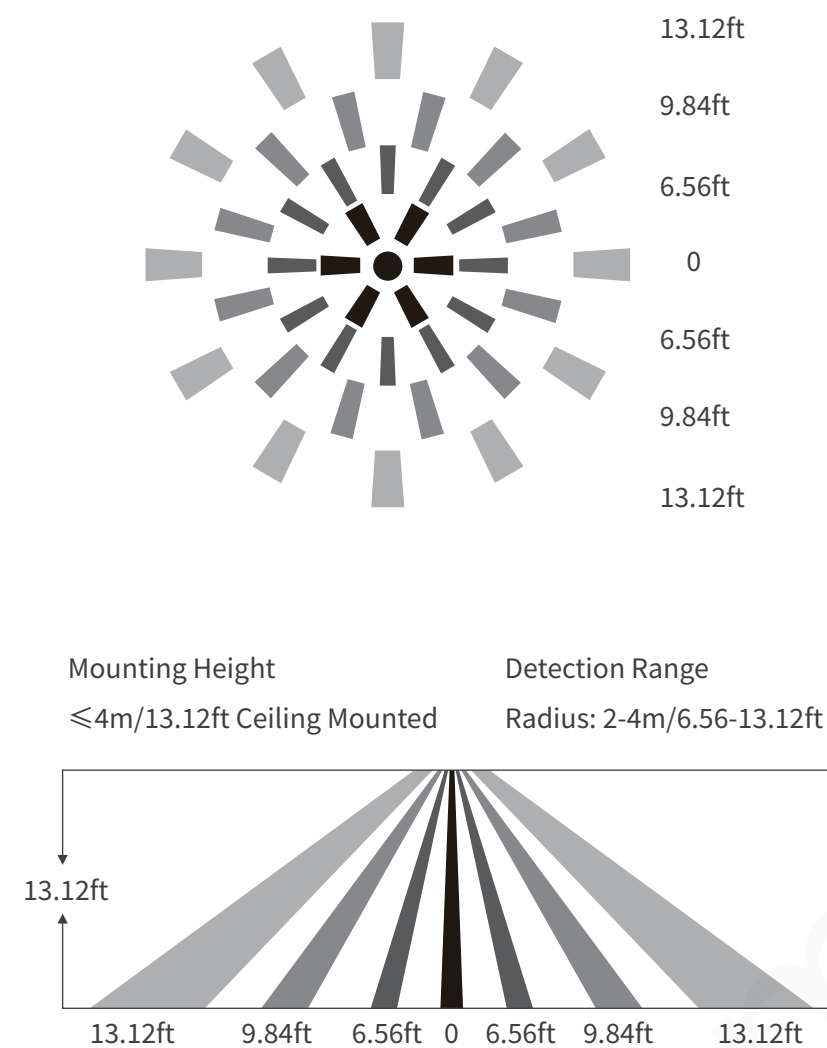
Notes:

Color temperature and wattage can be pre-set before delivery.

Part VII PIR Sensor & Intelligent Control



Detection Range



UltiLine X2' s dimmable PIR sensor is a part of the smart lighting solution. The working mode can be selected via the remote.

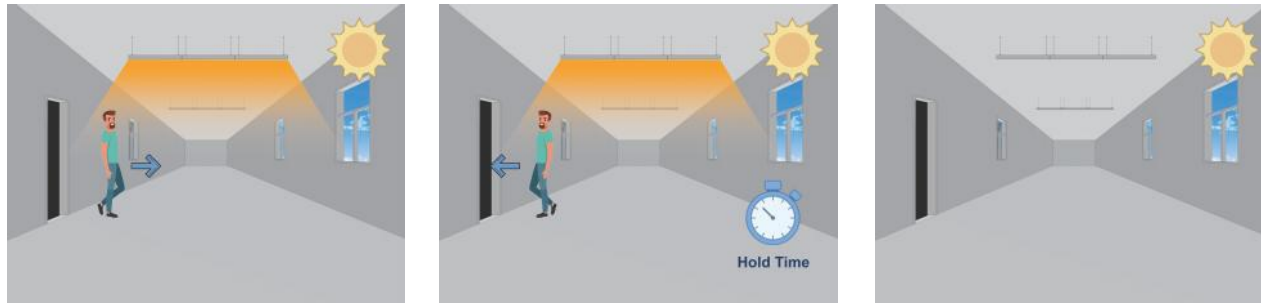
It's good for office lighting.

1. Automatically ON/OFF function



- I . With sufficient daylight, even when motion detected, light remains OFF.
- II . With insufficient daylight, the sensor turns light ON when motion gets detected.
- III. The sensor turns OFF light automatically after the hold time when there's no motion detected.

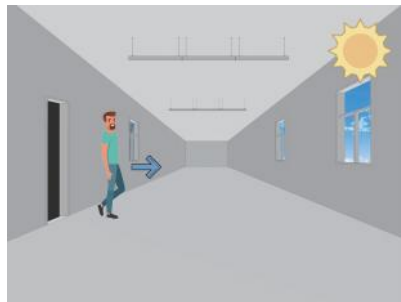
2. Daylight Disable



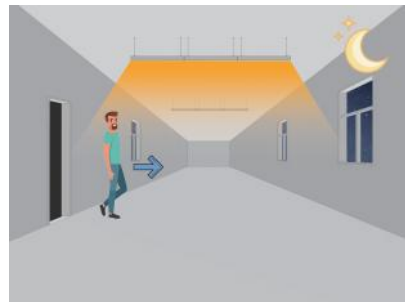
- I . The sensor turns light ON when motion gets detected.
- II . The sensor keeps light ON for holdtime period after motion leaves.
- III. The sensor turns OFF light automatically after the holdtime.

Part VII PIR Sensor & Intelligent Control

3. Corridor Function, Bi-level Dimmable



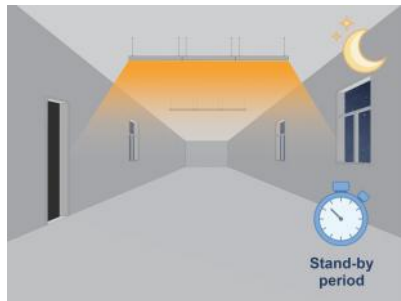
I . The sensor turns light ON when motion gets detected.



II . The sensor keeps light ON for holdtime period after motion leaves.



III. The sensor turns OFF light automatically after the holdtime.

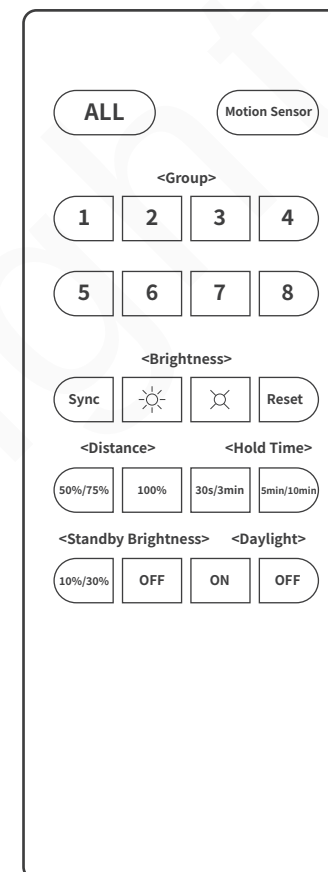


IV. The sensor turns light ON when motion gets detected.



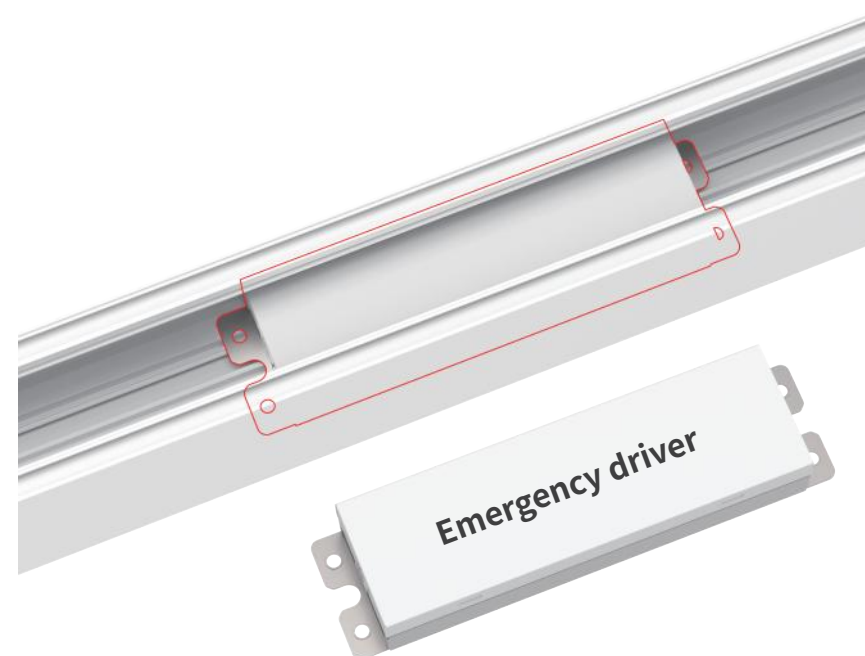
V . The sensor keeps light ON for holdtime period after motion leaves.

Remote Control



Part VII PIR Sensor & Intelligent Control

Area	Remote Keys	Function
	ALL	To turn on or off the light, same function as ON/OFF button
	Motion Sensor	To turn on or off the motion sensor function.(Reserved function for future, not available at this version)
Group	1 - 2 - 3 - 4 5 - 6 - 7 - 8	Make different groups and control them individually, with 2.4G RF wireless connection. (Reserved function for future,not available at this version)
Brightness	Sync	SYNC Function after having different groups.(Reserved function for future, not available at this version.)
		Dimming up or down light brightness, 10-100% in ON/OFF mode,60-100% in SENSOR mode
	Reset	Press the button, sensor will perform as detection area 100%,5s holdtime, daylight OFF, standby OFF
Distance	50% 70%	Adjust detection areal sensitivity, short push - 50%, long push 3s - 75%
	100%	Choose detection areal sensitivity to 100%
Hold Time	30s 3min	Choose the holdtime. short push-30s, long push 3s -3min
	5min 10min	Choose the holdtime,short push-5min, long push 3s - 10min
Standby Brightness	10% 30%	Choose standby dimming level shortpush- 10%, long push 3s-30%; With infinite standby period
	OFF	No standby, after holdtime, the sensorwill turn off light
Daylight	ON	With daylight check function, even it's brighter than 30lux,it won't turn onlight after detect presence
	OFF	Sensor doesn't check daylight, it turns light on everytime it detects presence



UltLine X2 can be equipped with emergency kits. There is one LED driver and one emergency driver, as well as battery pack to control the lamp for general lighting and emergency lighting.

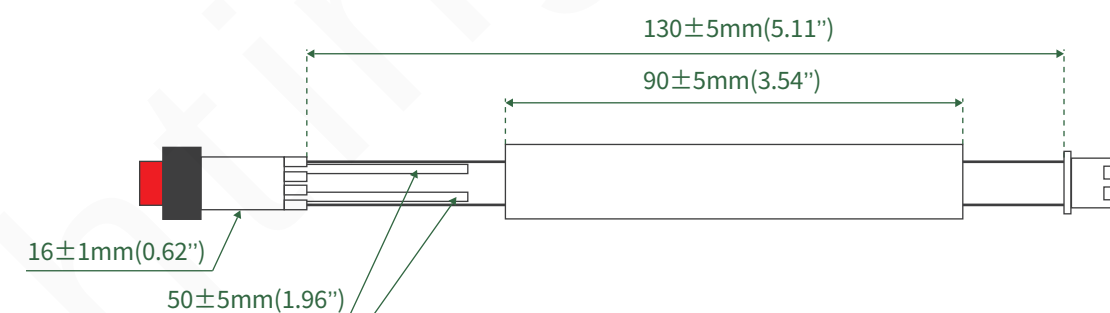
Emergency driver is for switching from mains to emergency operation. When power cut happens, emergency driver will automatically switch to external emergency supply.

UltLine X2 will be powered 8W/16W with 3 hours working under emergency mode.

Features of the Emergency Kit

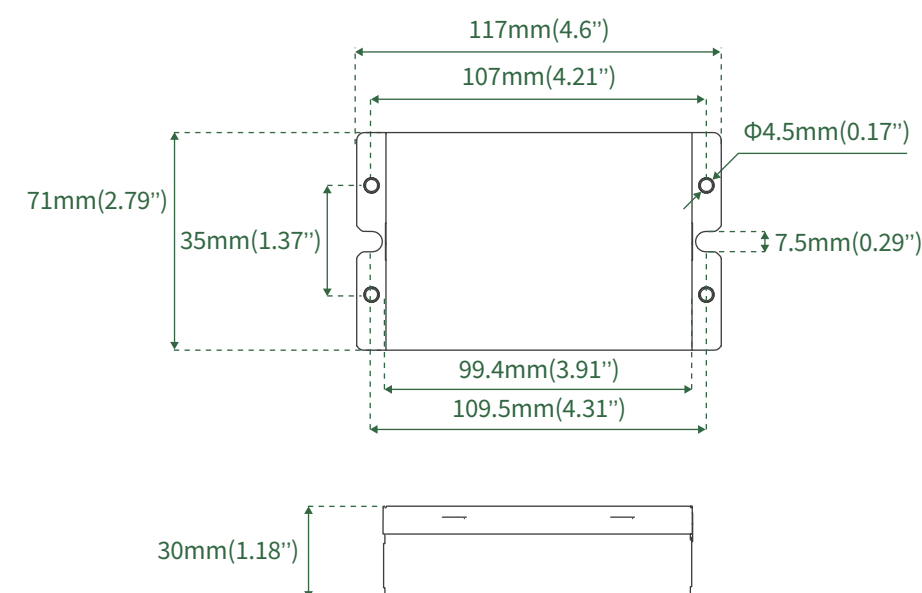
- UL listed for field or factory installation, CEC title 20 compliant
- Compliance with American NFPA 101 life Safety Code
- Constant output power
- 2-in-1 LED test switch and indicator light included
- Manual testing via remote control (optional)
- Monthly/annual self-testing
- With multi-protection function:
 - Battery overcharge protection
 - Battery over-discharge protection
 - Output overload protection
 - Short-circuit protection
 - Open load protection
- 5 years limited warranty

Regular plastic test button



Battery pack 8W

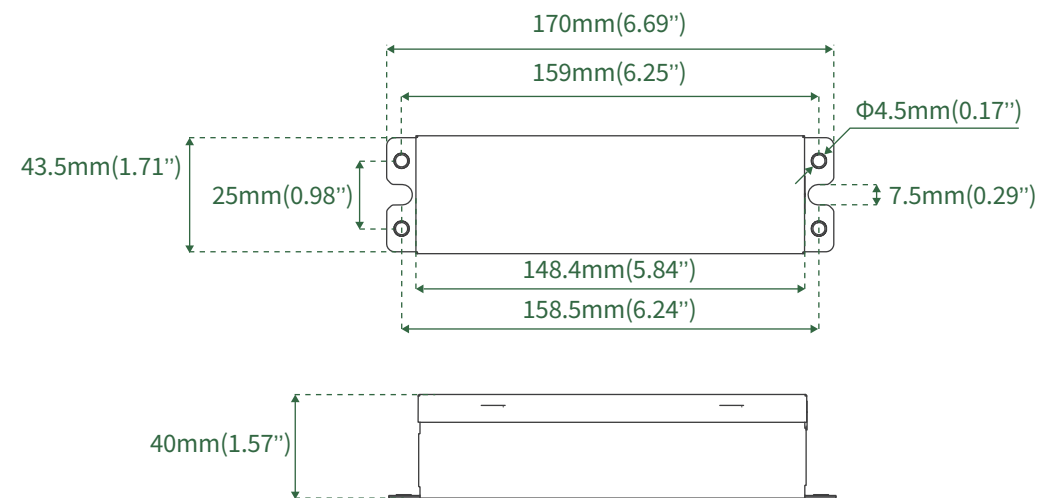
117mm(4.6") x 71mm(2.79") x 30mm(1.18")



Part VIII Emergency

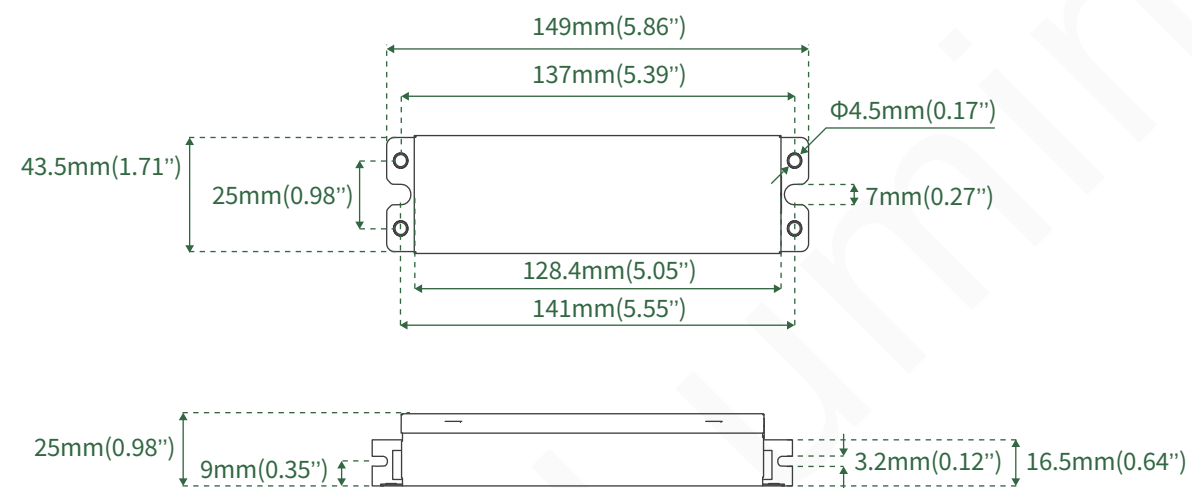
Battery pack 16W

170mm(6.69") x 43.5mm(1.71") x 40mm(1.57")



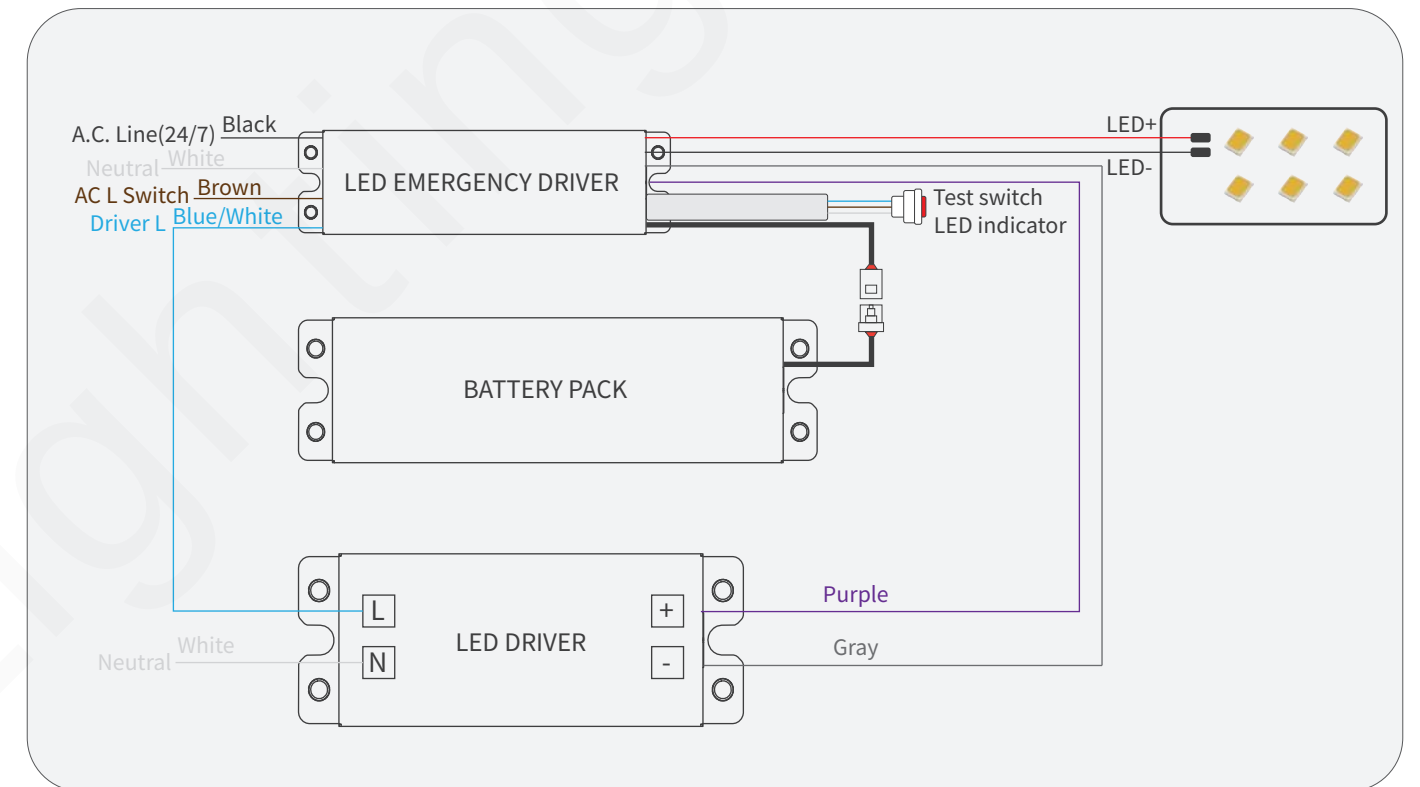
Emergency driver 8W

149mm(5.86") x 43.5mm(1.71") x 25.5mm(1")



Part VIII Emergency

Wiring



1. Shapes



L-Shaped



Y-Shaped



Cross-Shaped



T-Shaped



- UltLine X2 can achieve different shape designs through its different connectors "+", "x", "Y", and "L", providing a dynamic and versatile design sense for architectural space lighting.
- The office is no longer a static strip lighting, nor is it a panel lighting that makes people aesthetically fatigued. The addition of styling design elements makes the architectural space incredibly beautiful.



2' × 2' Cross



4' × 4' Cross



1' × 4' Rectangle



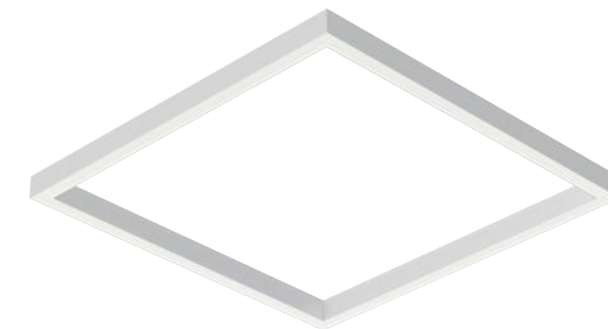
2' × 4' Rectangle



1' × 1' Square



2' × 2' Square

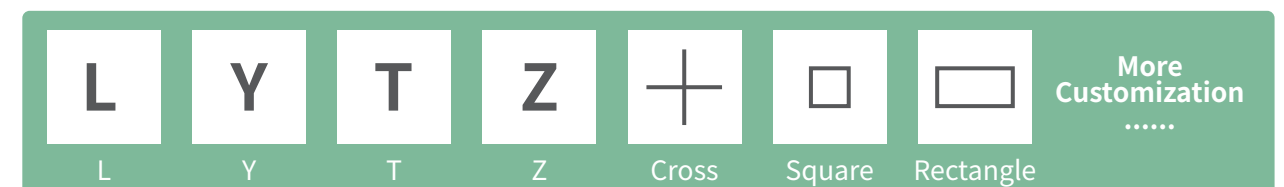


4' × 4' Square

2. Customization



- Ultline X2 is an aesthetically cohesive family with complete application flexibility and excellent illumination effects.
- The design flexibility of UltLine X2 supports personal customization by customers.
 1. Finish
 2. Color temperature \Wattage
 3. Length of the linear light
 4. Length of the AC cable
The standard length of cable is 1.5m. But different length of AC cable 2M, 3M, and 5M can be customized.
 5. Shapes
“X”, “+”, “L”, “Y” corner can help us make different creative shape design.
 6. Control mode



Part X Accessories & Installation



- A good design, saving your worry, labor, and money.
- UltLine X2 not only brings customers a convenient and comfortable user experience, but also better meets their different usage scenarios with the excellent installation design.

Part X Accessories & Installation



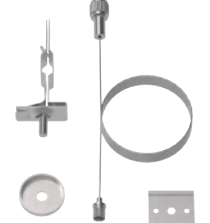
Suspended installation
(wire inlet of flexible
mounting clip-square)



Suspended installation
(wire inlet of flexible
mounting clip-round)



Suspended installation
(flexible mounting
clip-square)



Suspended installation
(flexible mounting
clip-round)



Suspended installation
- square



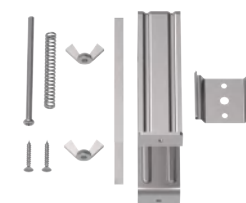
Suspended installation
- round



Wall mounting
accessories



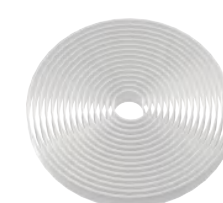
Ceilin
gaccessories



Recessed (exposed)
accessories



PIR sensor

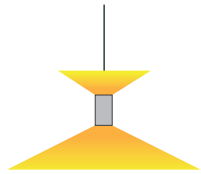


Coil cover

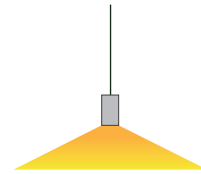
Part X Accessories & Installation



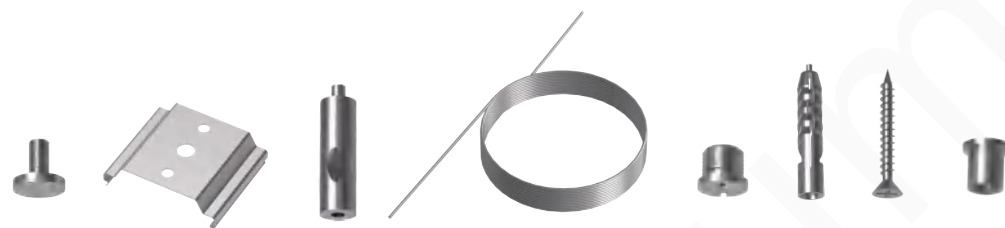
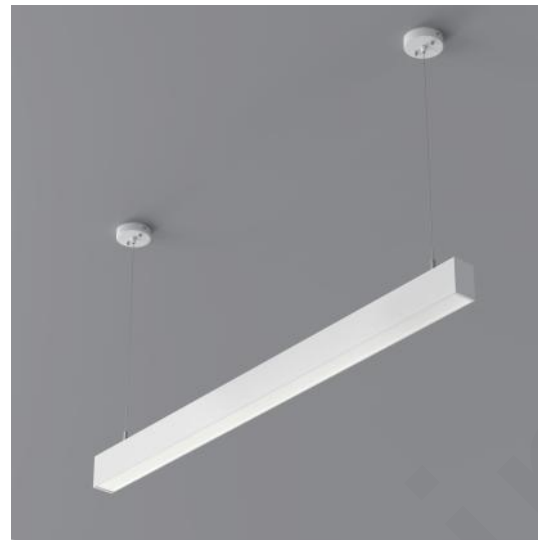
Suspended



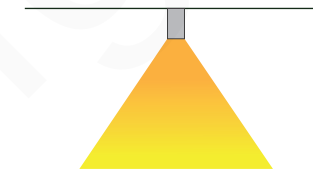
Suspension installation for direct and indirect lighting



Suspension installation for direct lighting



Surface



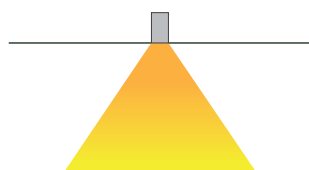
Ceiling installation



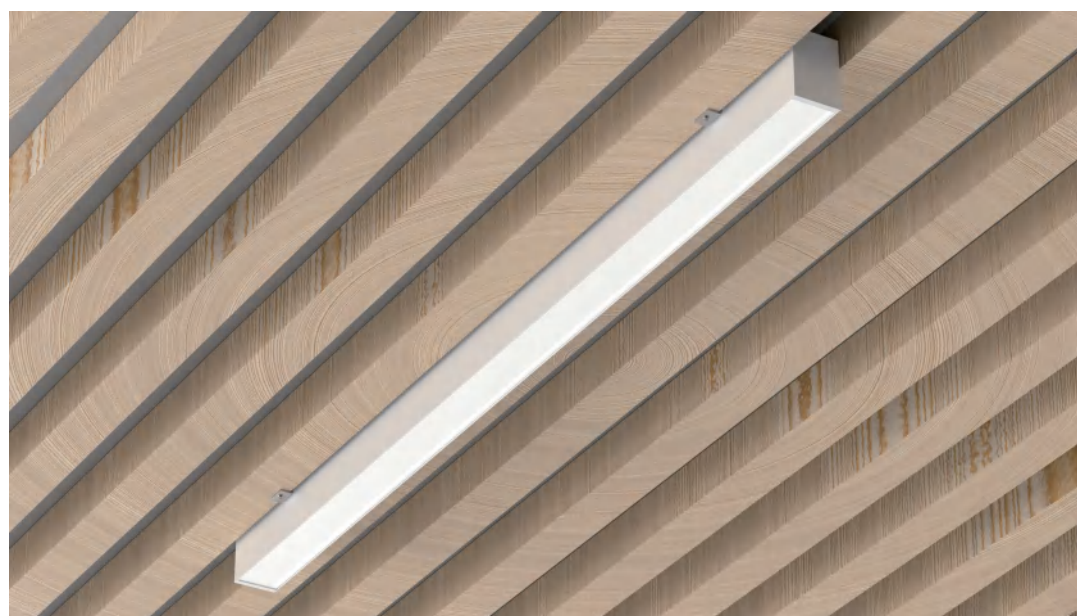
Part X Accessories & Installation



Recessed



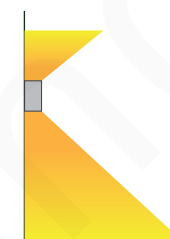
Recessed installation



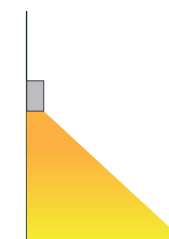
Part X Accessories & Installation



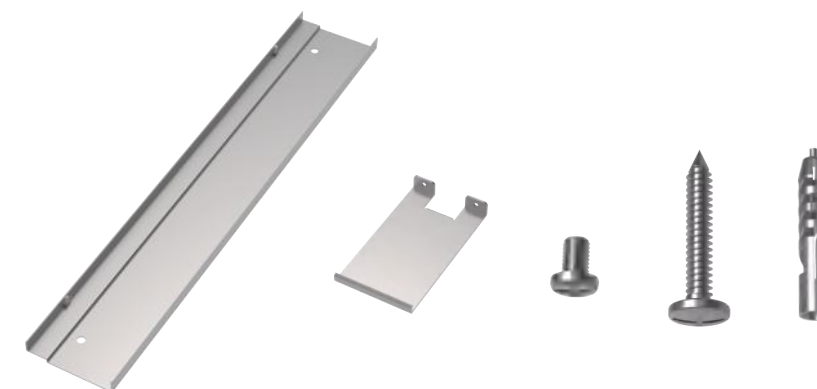
Wall



Wall installation for
indirect / direct lighting



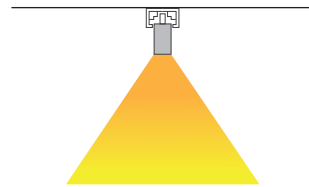
Wall installation for
direct lighting



Part X Accessories & Installation



Track



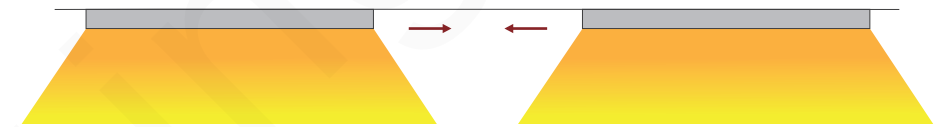
Track installation



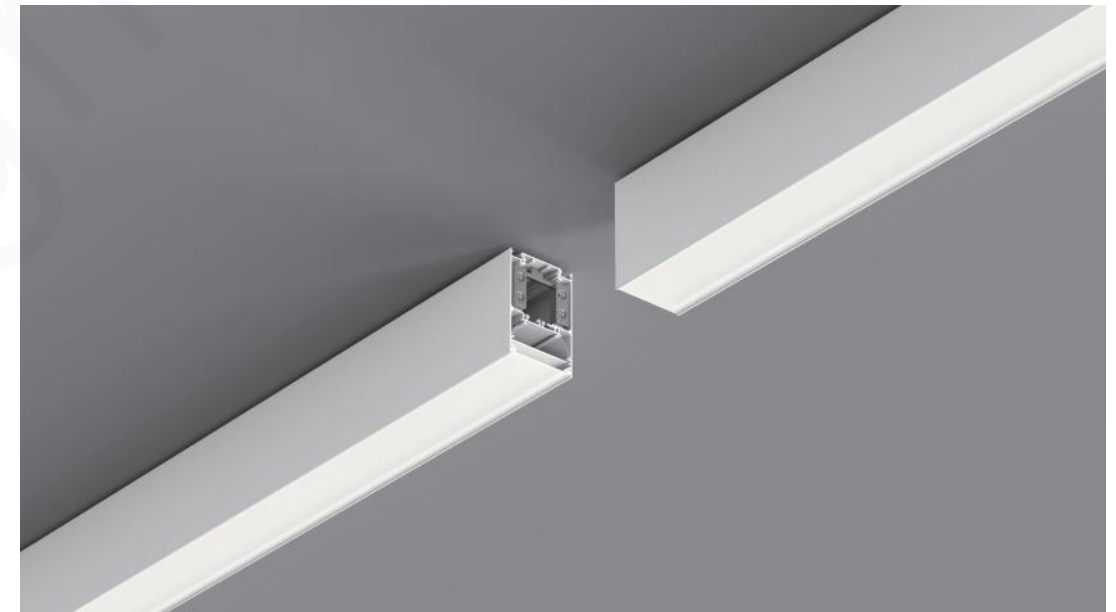
Part X Accessories & Installation



Straight Run



Splicing



Part XI Specifications & Orders

Type	Model	Length	Wattage	CCT	Input Voltage
Single Color	UL-7550X-A06O-15XY-DCCXYZ-F	2FT	15W	3000K	120-277V AC
	UL-7550X-A12O-30XY-DCCXYZ-F	4FT	30W	3500K	120-347V AC
	UL-7550X-A24O-60XY-DCCXYZ-F	8FT	60W	4000K	220-240V AC
	UL-7550X-E12O-40XY-DCCXYZ-F	1133mm	40W	5000K	
	UL-7550X-E15O-50XY-DCCXYZ-F	1412mm	50W	6500K	
	UL-7550X-E17O-60XY-DCCXYZ-F	1691mm	60W	2700K-3000K (TW)	
CCT and Power Selectable	UL-7550X-A06O-20SXY-DCCXYZ-F	2FT	20W-15W -12W	3000K-4000K -5000K	
	UL-7550X-A12O-40SXY-DCCXYZ-F	4FT	40W-30W -25W	(SW)	
	UL-7550X-A24O-80SXY-DCCXYZ-F	8FT	80W-60W -50W		

Notes: TW means tunable white, SW means selectable white

Part XI Specifications & Orders

General Information	
ETL Mark	Yes
CE Mark	Yes
ENEC Mark	Yes
Efficiency	110LM/W & 130LM/W
Control	1-10V, DALI, On-off, etc
LEDs Type	2835
Warranty	5 Years Limited (5000Hrs)
Working Temperature	-25 to 45 degree
Relative Humidity	10% to 90% RH
Finish	White, Black, Silver
Construction	
Frame Material	Alu. alloy 6063
Optical Diffuser	PC
Performance Data	
Initial Chromaticity	SDCM<6
Lifespan L80B20 @25 degree	≥50000Hrs
CRI	>80
CCT	3000K\4000K\5000K\; 3000K-4000K-5000K
Beam Angle	110°, 90°, 60°
UGR	22, 19, 14
Electrical	
Input Voltage	AC 120-277V \ 120-374V , 50\60Hz
Output Voltage	DC 28-42V
Power Factor	>0.9
THD	≤20%
Approval & Application	
Protection class IEC	Class I
Mech. impact protection code	IK06
Ingress protection code	IP20

Notes: Data subject to change

Lengths	A	B	C
2FT	575 (22.6")	75 (3")	50 (2")
4FT	1133 (44.6")	75 (3")	50 (2")
8FT	2528 (99.5")	75 (3")	50 (2")

Model	7550X-E06-20	7550X-E12-40	7550X-E25-80
Length	575 mm	1133 mm	2528 mm
Product size (mm)	575*75*50 mm	1133*75*50 mm	2528*75*50 mm
Product netweight (kg)	0.98Kg	1.95Kg	3.89Kg
Inner box size (mm)	633*202*75 mm	1191*202*75 mm	2586*202*75 mm
Gross weight per inner packaging (kg)	2.20Kg	4.35Kg	11.2Kg
Carton size (mm)	653*220*320 mm	1211*220*320 mm	2606*220*320 mm
Packing City. (pcs/carton)	8	8	4
Gross weight per carton (kg)	9.38Kg	18.03Kg	22.3Kg

UL - 7550X - XLLO - PPXY - DCC XYZ - FX

[illegible]