

Cyanlite LED Backlit Panel

- To the Future.

- Background
- Backlit Strength
- Comparison



Background: Catch-22 Situation of Edge-lit Panel

- ☐ Mounting Kits(11)
- ☐ Drivers(24)
- ☐ Hanging(1)

— Luminous flux

| Luminous efficiency

- ☐ 110-130 lm/W(15)
- ☐ 140-160 lm/W(3)

— Dimmable



Re:42W 595x595mm led-panel light

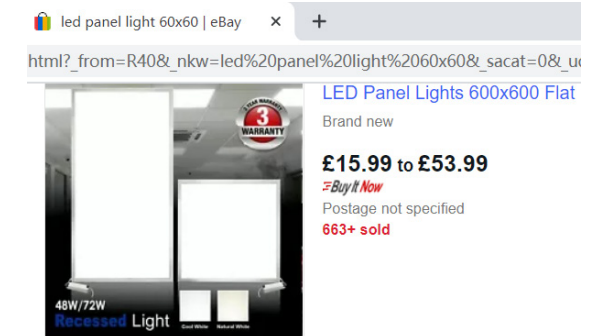
发件人: JWSLED-stomlighting77@163.com>

Hello, how are you?

Do you import LED panel light?

42W led panel lightings 600x600mm--5.8\$

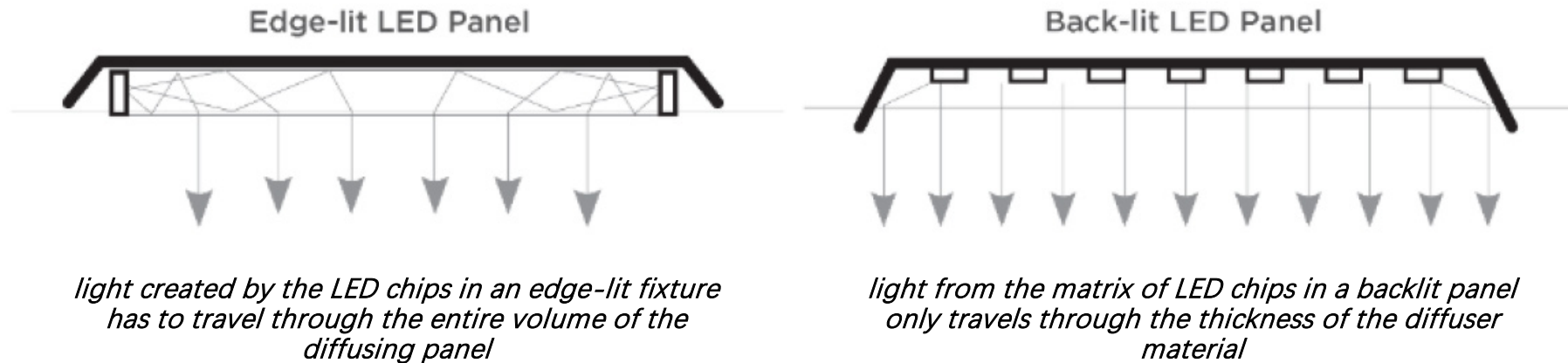
We are a professional LED panel Light Factory in China, and we will offer best price for you.



1. Lumen output / Lumen per watt is driving ever higher.
2. Unit price is going the other way.
3. Embarrassing quality problems occur frequently, such as yellowing.

The situation can be changed with LED backlit panel.

Backlit Strength 1: More Efficient than Edge-lit

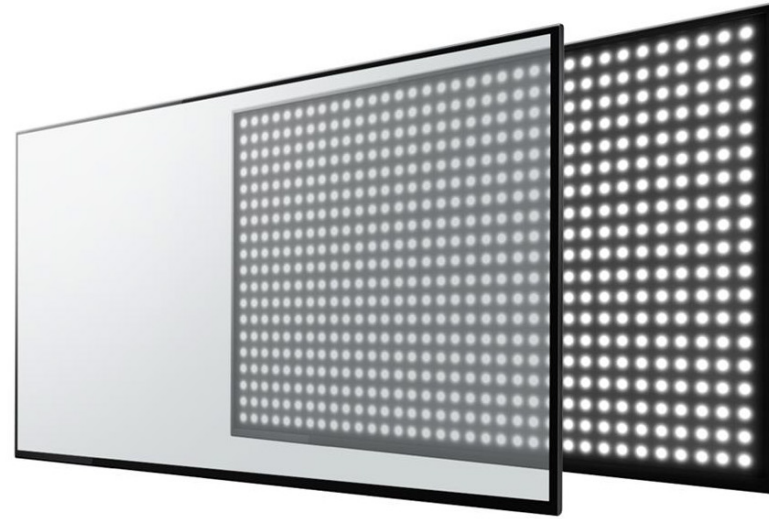


Light losses within the fixture are lower, meaning a higher delivered lumen output.

Backlit Strength 2: Mature Technology



Widely used for LED ceiling and wall mounted luminaires



Fully array or direct light for LED TVs and monitors

Mature technology with self-evident strength
when adopt on LED panel light.



Backlit Strength 3: Fully Assembled by Machines

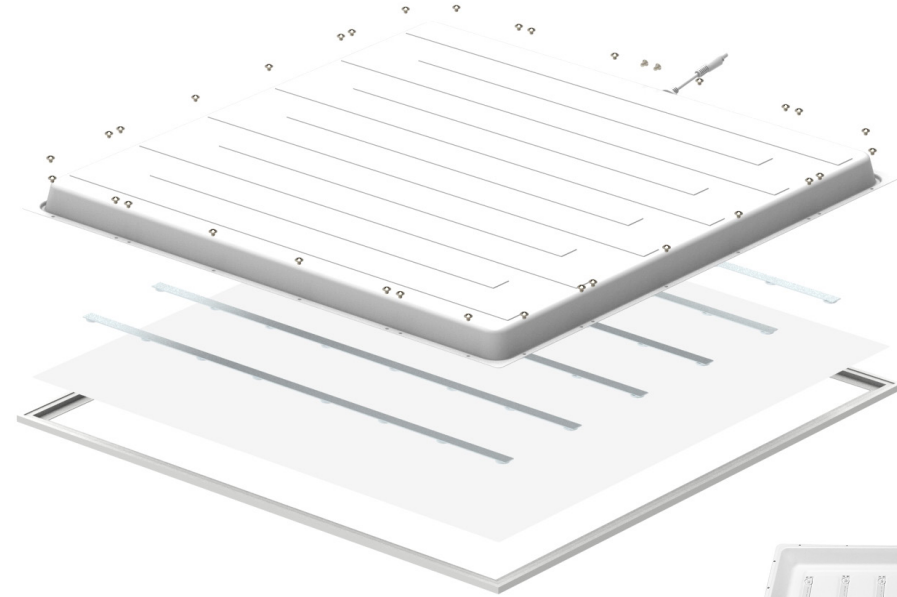
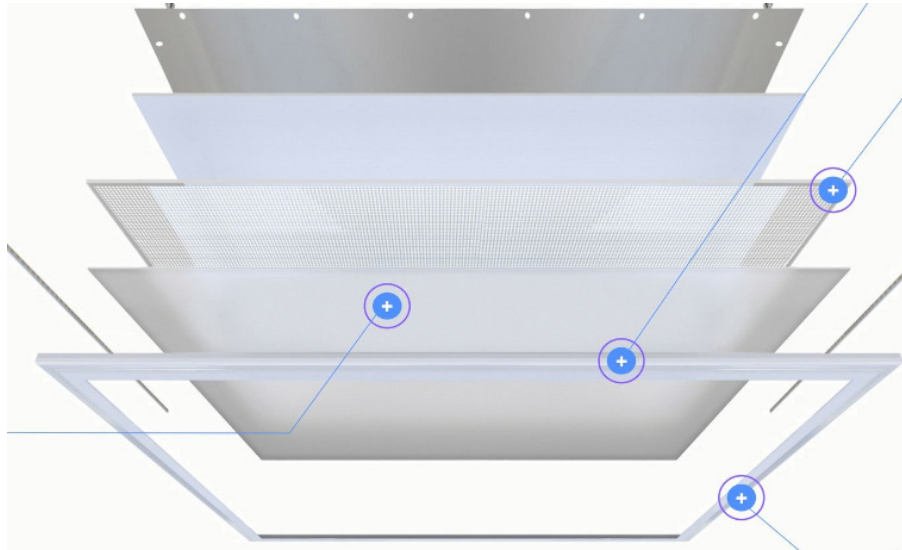


SMD mounting → Reflow Oven → Lens mounting → PCB mounting on back plate with glue → Screwing → Testing

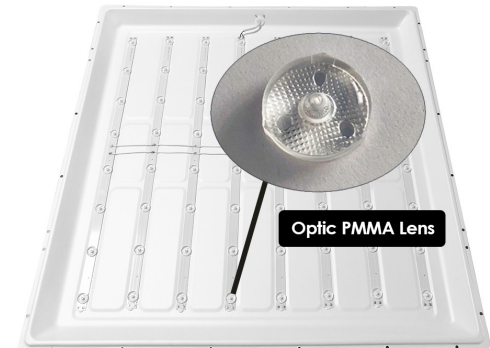


Edge-lit panel mostly by manual labour, backlit panel highly relies on machines, meaning exceptional quality consistency, production efficiency, and price advantage.

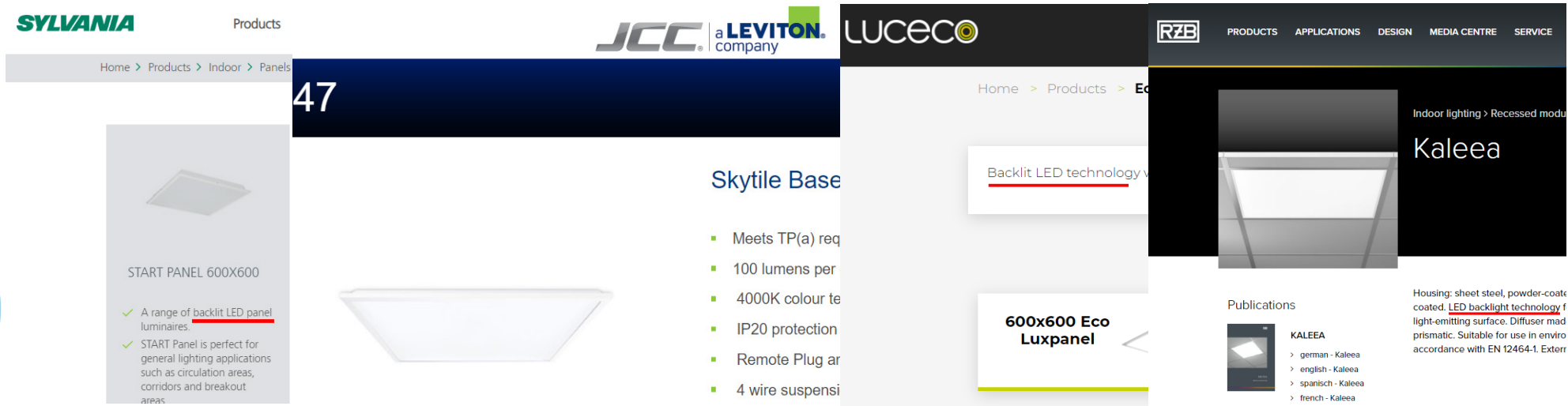
Backlit Strength 4: No LGP, No Yellowing



Optic PMMA lens for backlit panel, no LGP as edge-lit, no yellowing.
Rest your heart always.

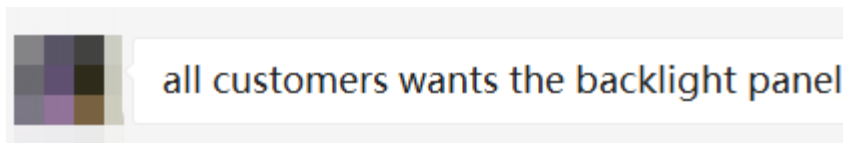


Big Players Go to Backlit Panels Already



Hi Nancy,

why is backlight panel so popular now?
More details please for backlight panel with sensor.



Don't lose your market share with sidelit panel only.

Catch the Tide. Seize Your Moment.

Comparison 1: Homogeneous illumination at the edge with square back plate



Cyanlite



Others

Square back plate has better performance on light uniform than beveled one, because there is less distance between LEDs and panel edge.

Comparison 2: Our back plate matters a lot



Cyanlite



Shape: Square → Stable structure

Thickness: 0.25~0.3mm → Stiffness

Surface Treatment: Nano coating → High light efficiency



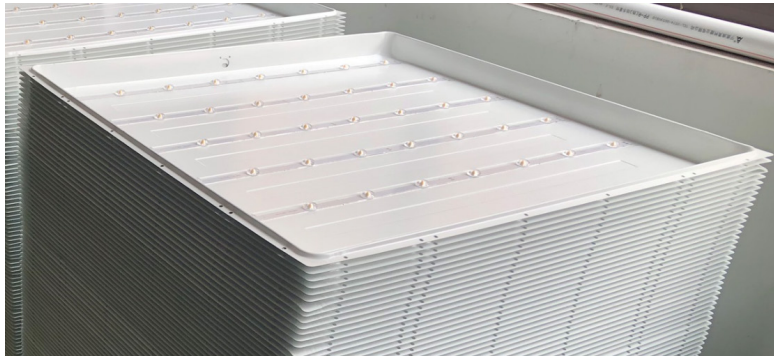
Others

Shape: Beveled → Weak structure

Thickness: 0.15~0.18mm → Deformed after screws fixed

Surface Treatment: Powder coating or rolled coating → Low light efficiency and PCB may fall off easily

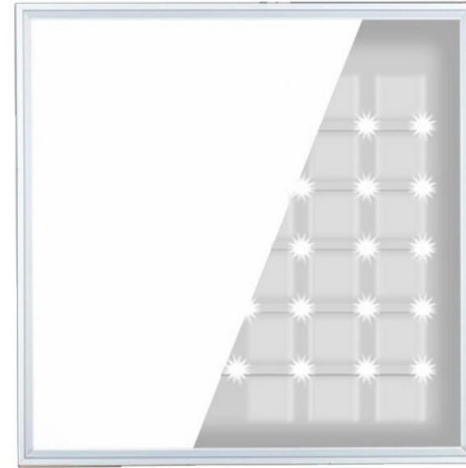
Comparison 3: Self-designed PMMA Lens



Cyanlite



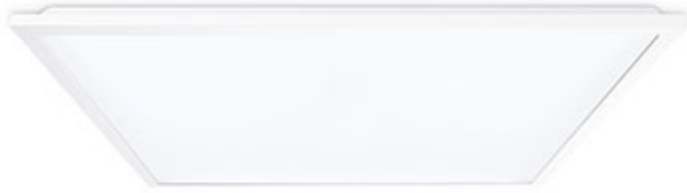
Thanks to our self-designed PMMA lens, the combination of LEDs and back plate height is carefully considered, so that we get uniform light surface.



Others

Simply assemble all cheap raw materials together, it turns out light spots and dark area on the panel surface.

Comparison 4: Thicker diffuser, Solider panel surface



Cyanlite



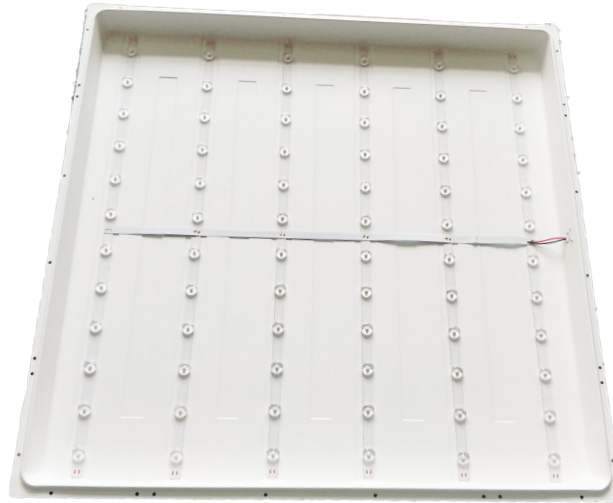
1mm thickness diffuser, strong and smooth



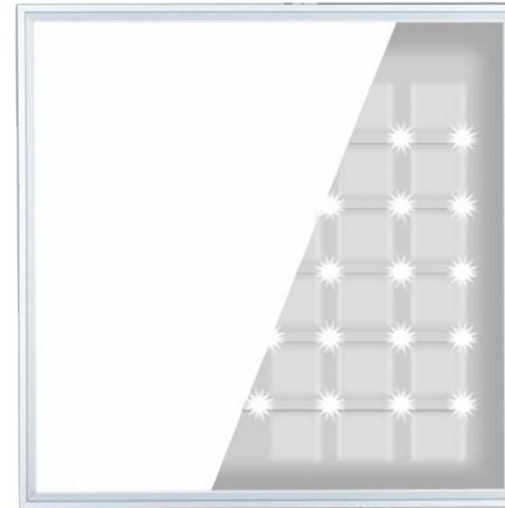
Others

0.5~0.8mm diffuser, get bent surface after installation easily

Comparison 5: LPW & Price in perfect counterpoise



Cyanlite



Others



<i>System Power</i>	<i>Efficacy</i>	<i>Luminous Flux</i>	<i>Light Colour</i>	<i>2835SMD Qt'y</i>
30W	125lm/W	3750lm	840	72pcs
35W	125lm/W	4375lm	840	72pcs
40W	100lm/W	4000lm	840	48pcs

Cyanlite Versatile Products by Backlit



Backlit panel integrated with Philips occupancy sensing, daylight harvesting and task tuning.

Smart control with Android smartphone App.

Up to 40 panels to be grouped together.

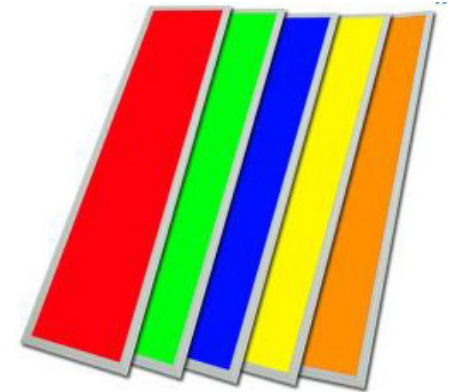


Backlit panel with special LED $R_a > 97$ and $R1-R15 > 90$ for medical lighting.

Significant for medical staff to detect cyanosis through clinical observation.




Color temperature changeable from 3000K-6000K for Human Centric Lighting.



Edge-lit panel has problem with RGBW LEDs because of the prevailing $< 2\text{mm}$ LGP, but Cyanlite backlit panel has enough space for RGBW.

No Distance for Quality Control

Shanghai Cyanlite Technology Co., Ltd.
Quality Department



PSI Report Overview

PO No.	PO19-100216-20	Date	Jan. 17 th 2020	Report No.	QC3030611709
PI No.	CYL20191110603-06	Sales		Product	Round panel
Inspector	M. C.	Audit	F. F. Z.	Approved by	X. B. Z.


No.	Item No.	Order QTY	Inspection QTY	Result	Process if Failed				
				Pass	Fail	Concession	Re-do	Hold	Reject
1	011	100	20	Pass					
2	012	100	20	Pass					
3	011	100	20	Pass					
4	012	100	20	Pass					
5	011	100	20	Pass					
6	012	100	20	Pass					
7	901	200	32	Pass					
8	902	300	50	Pass					
9	903	300	50	Pass					
10	904	500	50	Pass					
11									
12									
13									
14									
15									
16									
17									
18									
19									

Inspected to normal inspection general level II as MIL-STD-105E				
Total quantity	Sample size	Rejects allowed		
		Critical (CR) 0%	Major (MA) 1.0%	Minor (MI) 4.0%
51 ~ 90	13	0	1	1
91 ~ 150	20	0	1	1
151 ~ 280	32	0	1	2
281 ~ 500	50	0	1	2
501 ~ 1,200	80	0	2	4
1,201 ~ 3,200	125	0	2	5
3,201 ~ 10,000	200	0	3	8

Critical defects	Expected hazard of human life, health or environment
Major defects	Usability or life time probably significant affected
Minor defects	Usability or life time probably less or not affected

Shanghai Cyanlite Technology Co., Ltd. Tel: +86 (21) 62499986
Add: No. 885, Sub-Lane 3, Lane 699, Nantu Road, Pudong District, Shanghai, China. Zip code 201399.

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Quality Department




PSI Report

PO No.	PO19-100216	Date	Jan. 17 th 2020
PI No.	CYL20191110603	Inspector	M. C.
Item No.	1	Qty	100

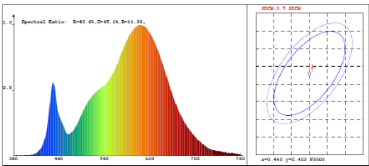
Export box	Export box	Export box weight
Export box inside	Master box label	Gift box label
Product label	Inside the gift box	Visual inspection
Driver	Test	Test

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Quality Department



PSI Report



Chroma Parameters
Obs. Coord.: x=0.4407 y=0.4046 u=0.2529 v=0.3481 dxy=0.1003
CIE L: 29.428 Dominant Wave: 650.3nm Purity: 53.7%
FWHM: 80nm Halfwidth: 80.21nm Peak: 650.3nm Peak: 650.3nm

Rendering Index Ra= 92.4
R1 =81 R2 =90 R3 =97 R4 =81 R5 =82 R6 =89 R7 =82 R8 =58
R9 =8 R10 =79 R11 =81 R12 =71 R13 =83 R14 =99 R15 =73


Photo Parameters
Flux: 2475.23lm REEL: 92.33lm/W Radiant: 7340.8mW Tx: 0.8mW

ELV Parameters
Voltage: 0-20.300V Overvoltage: 0.1300A
Power: 0-28.34W Power Factor: 0.990.947

Lamp Parameters
Voltage: 0-20.300V Current: 1.400A
Power Factor: 0.990.947 Efficiency: 0.33lm/W

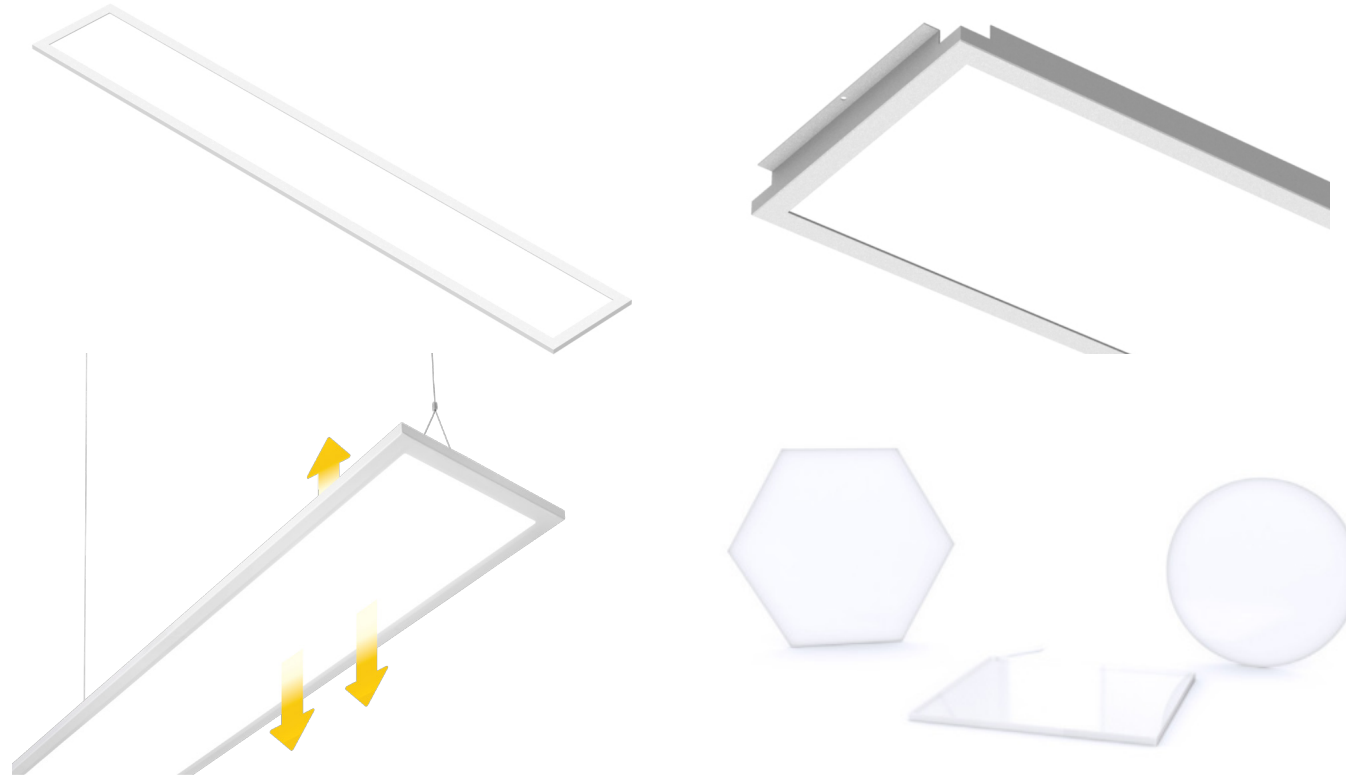
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Pre-shipment inspection (PSI) report will be provided to customer for each order, you know what you will have before receiving them.

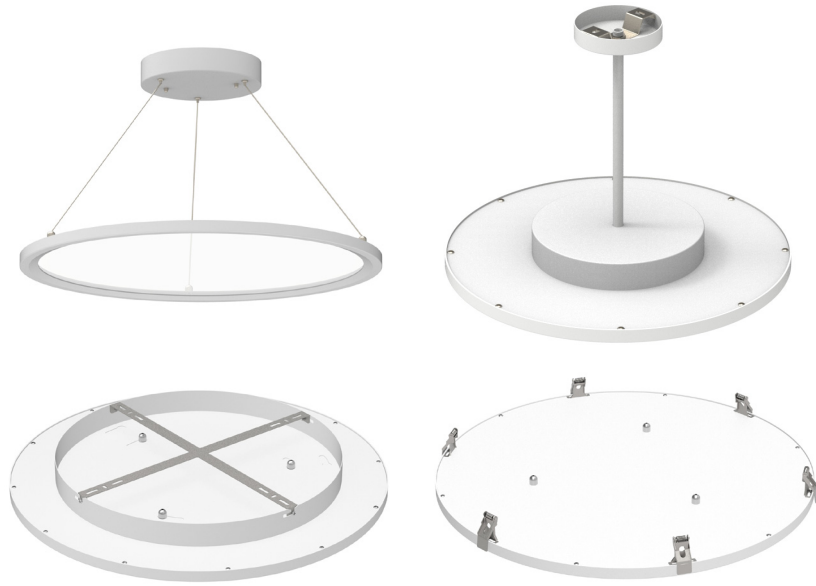
 | www.cyanlite.com

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Future of LED Edge-lit Panel



LED backlit panel will become a commodity product for standard sizes in near future.
LED edgelit panel will still exist for special ceiling types, customized dimensions or shapes...

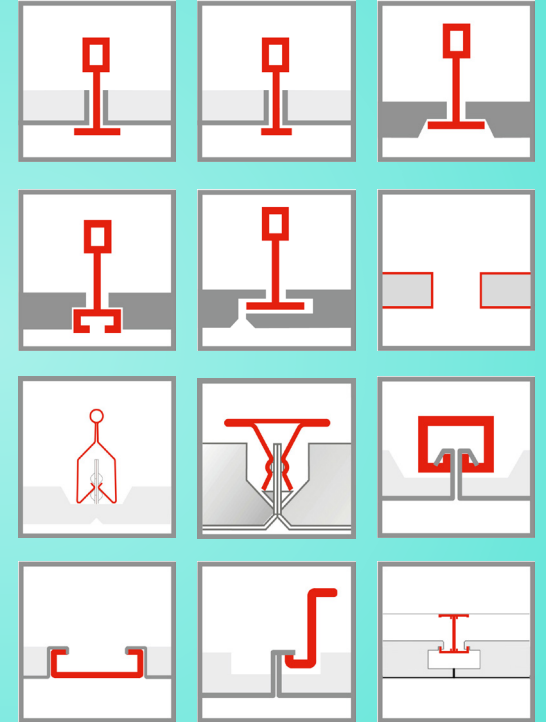


Cyanlite LED Round Panel Lights



Cyanlite™ LED Lighting Products For

- Lay-On
 - Lay-In
 - Cut-Out
 - Clip-In
 - Hook-In
 - Hook-Over
 - Hook-On
 - Double-Hook
- ## Ceilings



SERVICES

Pre sales services

- ✓ OEM &ODM
- ✓ Customized Product Development
- ✓ Free Project Consultant
- ✓ Professional Light Planning
- ✓ Easy Communication
- ✓ Fast response and Quotation

After sales services

- ✓ Product Warranty
- ✓ Installation Guideline
- ✓ Customer Satisfaction Survey
- ✓ Complaint handling
- ✓ Onsite Support

Thank you!

Questions are welcome!



Call us: +86 189 6463 6209
Email us: sales@cyanlite.com
Know us: www.cyanlite.com