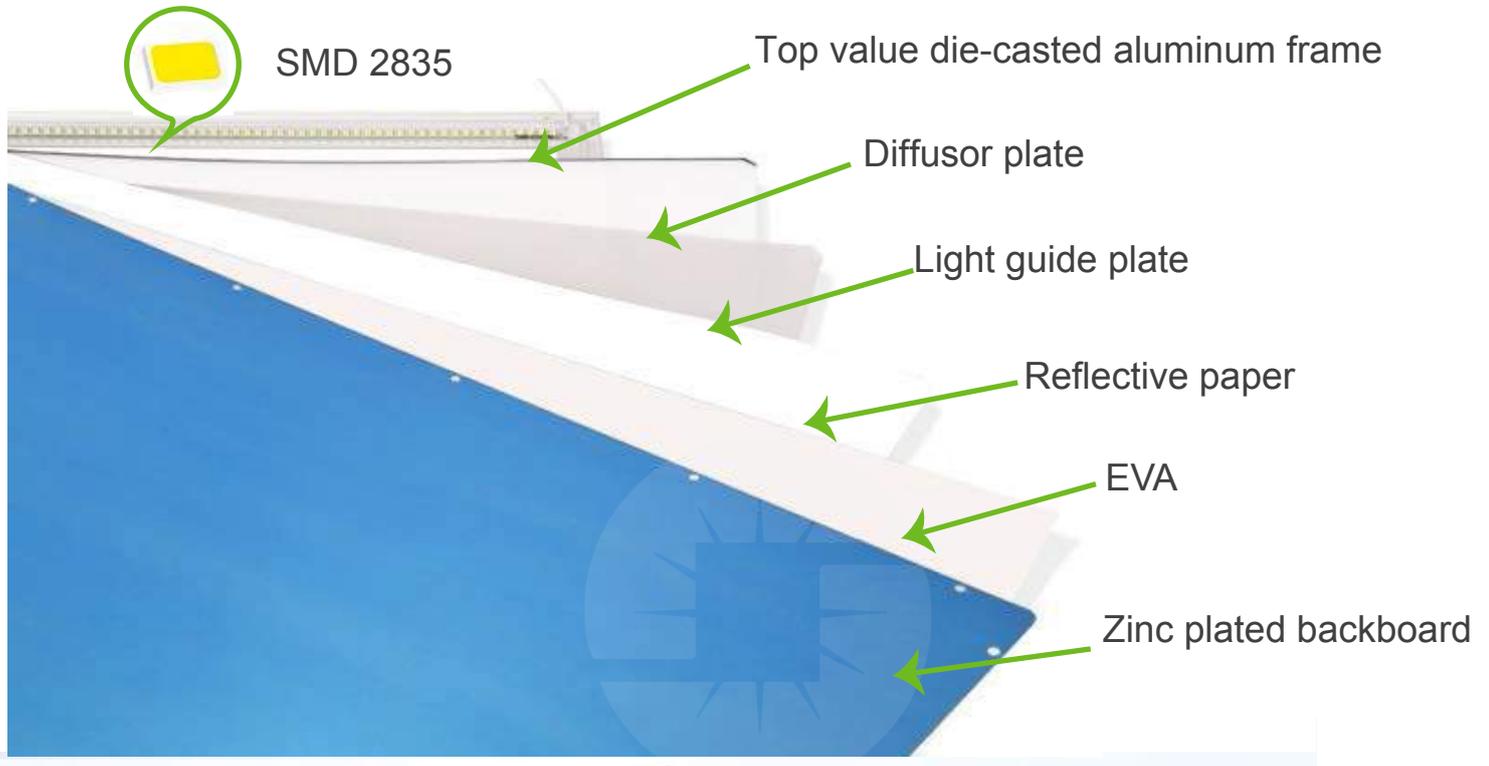


1. Structure of the LED panel light



2. What makes a difference?

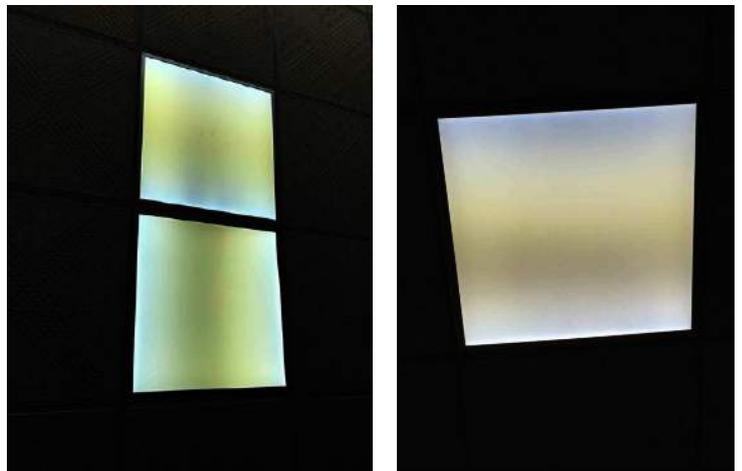
The quality of an LED panel light mainly depends on the light guide plate and driver.

- 1). The light guide plate will decide the light transmittance and power conversation efficiency.
- 2). The driver will decide the power factor and lifespan of entire light panel.

3. How to select the LED panel light?

(1). Light Guide Plate

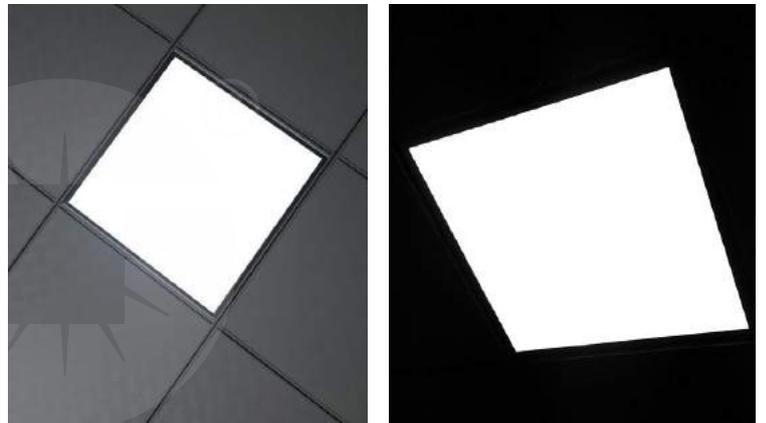
①. Bad light guide plate (PS material)



Real pictures after half year of usage of a panel light with PS light guide plate, which is very popular on the market for its low price.

PS material turns yellow easily and gets dark spots, that decreases the power conversation efficiency and effects the elegant appearance.

②. Seniorled light guide plate (PMMA material)



Real pictures after half year of usage of our panel light with PMMA light guide plate.

PMMA material has the advantages of anti-aging and higher light transmittance compared with PS material.

The plate color and light transmittance will have little change even after several years of usage.

(2). Driver

①. About flicker



Non-Flicker



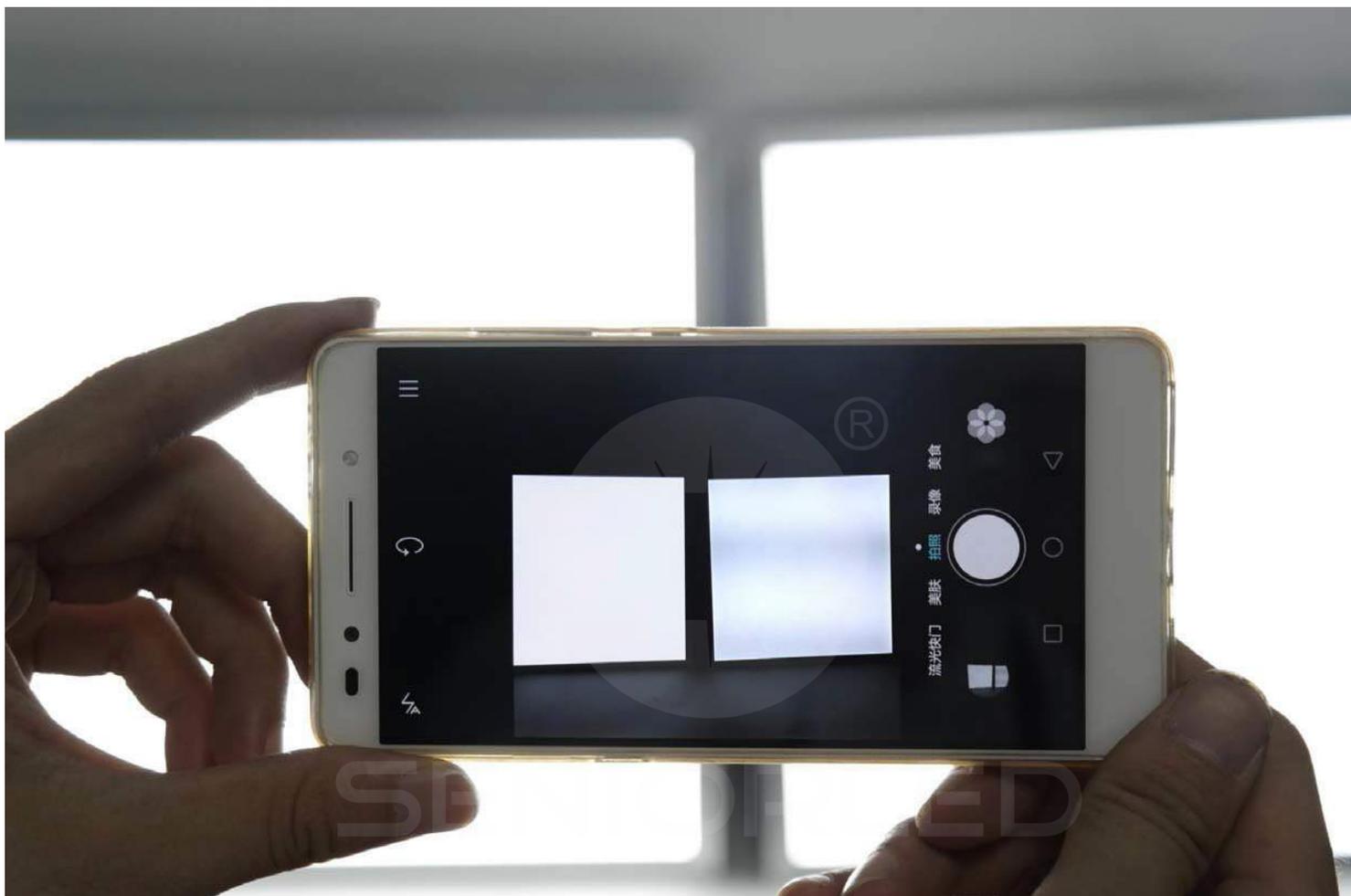
Flicker

0 ← - PF + → 1
0.6

Led light flicker is generally caused by big driver ripples. Usually a high PF value comes with flicker. It cannot be detected by human eyes but would be visible when taking pictures on a cell phone. As low PF value drivers use a lot of energy and power, a certain PF value is required on LED drivers of higher than 10w panel lights.

Due to the high cost, existing drivers with high PF value mostly have flicker.

However, we can offer panel lights with a high PF but without flicker. The higher PF value it has, the higher utilization rate of power it will have, and the more energy-efficient it will be.



You can see 2 panels in on the phone screen - The left one shows a SeniorLED panel light and the right one is a general panel light.

②. The driver temperature

The data below shows the results of aging tests and electronic load tests for our drivers and general drivers on the market, under the same temperature (50 °C).

It turns out that the highest temperature of our driver is 101 °C while that of general panel light is 138 °C.

This means our drivers have better performance in safety and stability, which means a longer panel light lifespan.

II. 元器件温度 测试数据:				客户样机			
RK251A		环境温度: 50°C		RK251A		环境温度: 50°C	
测试负载: 电子负载	输入电压	220	277	测试负载: 电子负载	输入电压	220	277
	工作时间	2	2		工作时间	2	2
	输出电流	0.952A	0.951A		输出电流	0.972A	0.98A
测试位号	测试温度数据记录 (°C)			测试位号	测试温度数据记录 (°C)		
Es	83.4	78.19	83.4	CE2	86.5	85.69	86.5
Qi	88.4	76.5	77.69	CE1	73.5	71.5	73.5
E1	85.8	73.9	85.8	D30A	107.09	108.9	107.07
Es	76.09	72.7	76.09	R20	94.9	94.19	96.9
T.线	93.8	91.4	93.8	T.线	123.59	117.69	123.59
T.线	80	88.5	90.69	T.线	116.8	106.9	116.8
D1	101.09	98.9	101.09	BD1	113.9	118.69	127.09
E4	80.59	78.3	80.59	CE5	87.8	80.8	87.8
E2	82.9	80.19	82.9	CE2	102.5	98.59	107.5
D16	89.8	87.4	89.8	R1	138.8	113.9	131.19
D2	89.9	87.5	89.9	D5	86.5	80	86.5
D3	98	95.59	98	IL1	92.9	87	92.9
环境	68.5	62.59	63.5	环境	77.69	73.3	75.19
环境	50	50.09	50	环境	50	50.09	50

(3). Aluminum Frame

SeniorLED panel light frame



General panel light frame



Environmental aluminum housing, fast heat dissipation, anodized, anti-corrosion, best control. Common characteristics of an inferior aluminum panel light: slow heat dissipation, short chip life, fast fading light.

(4). Insurance and warranty

Most of our LED lights are insured by AIG, including LED panel lights. Not only a promise of warranty. That means our partners have an additional safeguard and will not feel the effect of manufacturing defects.

We also guarantee full support during warranty claims and subsequent repairs or replacements.



(5). Certificate

DLC 4.0 premium

Date Qualified: 08/24/2016

Model No.: **SL-36W-66-28-TG-01(5000K)**
 Brand Name: Seniorled
 Manufacturer: seniorled limited

VIEW DETAILS VIEW PARENT (1)

Indoor Luminaires | Troffer
2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces

Classification: DLC Standard
 DLC Product Code: P7VYX8BY
 DLC Family Code: SSSBNT

RATED DATA			
Light Output	4,428 lm	Efficacy	123 lm/W
Wattage			36 W
CRI	80	CCT	5,000 K

Expand details

<http://www.designlights.org/qpl>

UL E485145

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Company Name	Category Name	Link to File
SENIORLED LTD	Light-emitting-diode Luminaire Retrofit Kits	IFAD7.E484385
SENIORLED LTD	Light-emitting-diode Luminaire Retrofit Kits Certified for Canada	IFAD7.E484383
SENIORLED LTD	Light-emitting-diode Recessed Luminaires	IFAD7.E485145
SENIORLED LTD	Light-emitting-diode Recessed Luminaires Certified for Canada	IFAD7.E485145

Model number information is not published for all product categories. If you require information about a specific model number, please contact [Customer Service](#) for further assistance.

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81 RESULTS FOUND Done defining your criteria? Click 'search' to see your results. Search

Search by Keyword

Manufacturer Reset

Manufacture: Seniorled Limited

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BEGIN A BASIC SEARCH

To begin a search, please enter one or more search criteria in the parameters below.

Company Name (options)

City

US State

Manufacture: Seniorled Ltd

(6). Luminous Efficiency

The luminous efficiency can be higher than **120lm/w**. No flicker, top power efficiency (PF>0.9) and high CRI (Ra>80), THD<15% under DLC4.0 standards.

Model # **SL-45W-66-28-TG-01(5000K)**

Manufacturer: seniorled limited
 Brand: Seniorled
 Technical Requirements Version:
 Date Qualified: 08/24/2016
 Product ID: PQSR4EYW

Categorization

Main: Indoor Luminaires
 General Application: Troffer
 Primary Use: 2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces

Classification: Standard
 Is Parent Product: No
 DLC Family Code: SSSBNV
 Dimming Status: Dimmable
 Listing Status: Listed

Reported Data Family Data

Light Output: 5580 lm
 Wattage: 45 W
 Efficacy: **124 lm/W** → **124lm/W**
 Power Factor: 0.992
 CCT: 5000 K
 CRI: 80
 Total Harmonic Distortion: 3.69 %

DLC 4.0 Premium version has higher efficacy, **136lm/w**.

Model # **SL-40W-66-28-TG-01(5000K)**

Manufacturer: Seniorled LTD
 Brand: Seniorled
 Technical Requirements Version:
 Date Qualified: 12/19/2016
 Product ID: P3NY26WQ

Categorization

Main: Indoor Luminaires
 General Application: Troffer
 Primary Use: 2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces

Classification: Premium
 Is Parent Product: No
 DLC Family Code: DDDIRM
 Dimming Status: Dimmable
 Listing Status: Listed

Reported Data Family Data

Light Output: 5448 lm
 Wattage: 40 W
 Efficacy: **136.2 lm/W** → **136.2lm/W**
 Power Factor: 0.92
 CCT: 5000 K
 CRI: 82
 Total Harmonic Distortion: 12 %



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