

New Designed Air-circulating LED Panel Light with Antiseptic and Anti-virus Nanometer Material



Product Features

- Cleaning and Freshing air
- Automatically killing bacteria and virus in air
- Reducing the floating particles in air
- Eliminating the TVOC concentration in air
- Saving installation space
- Up to 110-130LM/W
- Input Voltage: 120-277Vac
- High-tech optical design
- Widely used for ambient lighting application
- Ambient operating temperature: -20°C to 50°C
- THD: <20%
- Power Factor > 0.95
- LED chip lifetime, L70 >100,000 hours @ 25°C
- Suitable for school, hospital, subway station, office, chain stores and etc.

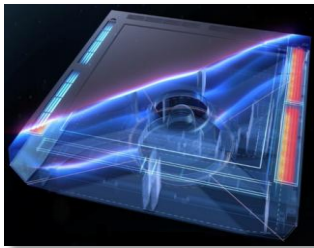
Working Principle

1. The surface of PC cover is coated with Nanometer Silver and Titanium Dioxide and the filters are also soaked with Nanometer Silver and Titanium Dioxide. When the bacteria or virus in air touch the surface of the Nanometer coating or filters, then they will be killed.

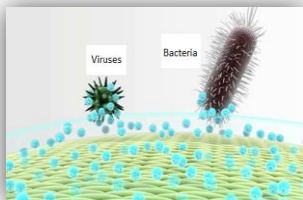
- Silver ion reacts with hydrogen sulfide ion in bacteria and inhibits its reproduction
- Produces superoxide free radicals and breaks down the bacteria
- Material surface is with electric charge that pull the membranes of bacteria, cause rupture and bring bacteria to death

2. The fixture is installed with centrifugal industrial fan which is powerful and silent with less noise when it works. Air comes into the intake and goes out through the outlet. The inhaled air will be purified by getting rid of the floating particles and automatically killing bacteria and virus in air.

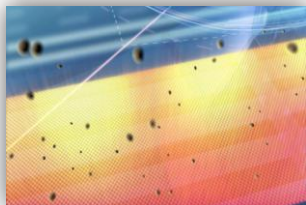
Fixture with centrifugal industrial fan



Nanometer silver killing the bacteria and virus



New nanometer material filter



Parameters

Model: SPZUCP2250

Power: 50W (35W LED, 15W FAN)

Input Voltage: AC 120-277V

Dim: 0-10V Dimmable

Power Factor: ≥ 0.95

Lumens: 4000LM

Lumens Efficiency: $\geq 110\text{lm/W}$

CCT:4000K/5000K/6000K

CRI: >82

Emergency: 15W/90mins(Optional)

CADR: 202CFM

Application Area: 100-165ft²

Noise: <40dB

Operating Life: 50000H

Working Temperature: -20~50°C

Size: 23.65"*23.65"*5.40"

Net Weight: 16.8LBS



Filters will be changed after working for 2160hrs when the indicator light is flickering. Using the pin to reset the timing counter.




Shipment by One Full Container

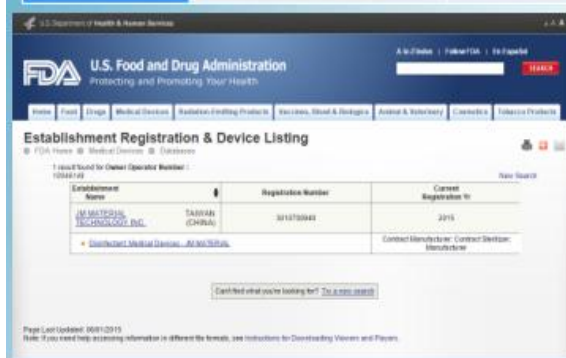
20GP 405pcs; 40GP 819pcs

40HQ 948pcs; 45HQ 1076pcs








Certifications

a. Test and Verification for Anti-viral Effect of New Nanometer Compound Material





Classification	Type	Effect	Verification
virus	H1N1	99.99% of virus is eliminated after 20 minutes	 H1N1
	Enterovirus	99.99% of virus is eliminated after 20 minutes	 腸病毒
	Respiratory mixed virus	Inhibiting ability reaches 90.0%	 呼吸道融合病毒



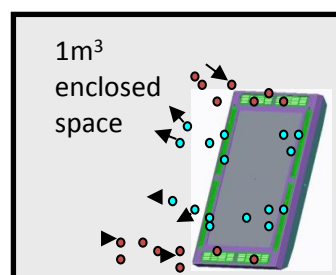
b. Test and Verification for Antiseptic Effect of New Nanometer Compound Material

Classification	Type	Effect	Verification
Bacteria	Superbug	Antiseptic rate after 24 hours>99%	 超級細菌
	Tubercle	Inhabiting rate of tubercle>80.8%	 結核菌
	Pseudomonas aeruginosa	Antiseptic rate after 24 hours>99%	 綠膿桿菌
	Staphylococcus	Antiseptic rate after 24 hours>99%	 葡萄球菌 大腸桿菌
	Colibacillosis	Antiseptic rate after 24 hours>99%	 白色念珠菌
	White Candida	Antiseptic rate after 10 minutes>99%	 退伍軍人菌
	Pneumophilia	Antiseptic rate after 24 hours>99%	 沙門氏菌
	Salmonella	Antiseptic rate after 30 minutes>99%	

c. Test and Verification for Organic Gas Decomposition

Classification	Type	Effect	Verification
Microbe	5 common microbes	No microbe growing after 28-day culture	 菌落
Environment	Formaldehyde	Antiseptic rate after 24 hours>99%	 甲醛
	TVOC	Antiseptic rate after 24 hours>96.4%	 TVOC
	ROHS	No Pb, Hg, Cd, Cr, PBB, PBDE	 ROHS

d. Antiseptic Test for Air-circulating Panel Light



Specification referred to GB21551
(test space is revised as large as 1 m³)

- Inject Staphylococcus aureus by gas in 1m³ space
- Calculate value of natural colony ratio / formaldehyde concentration ratio before and after placing this fixture into the enclosed space
- As a clean antibacterial effect

e. Air-circulating Panel Light Formaldehyde Decomposition Test

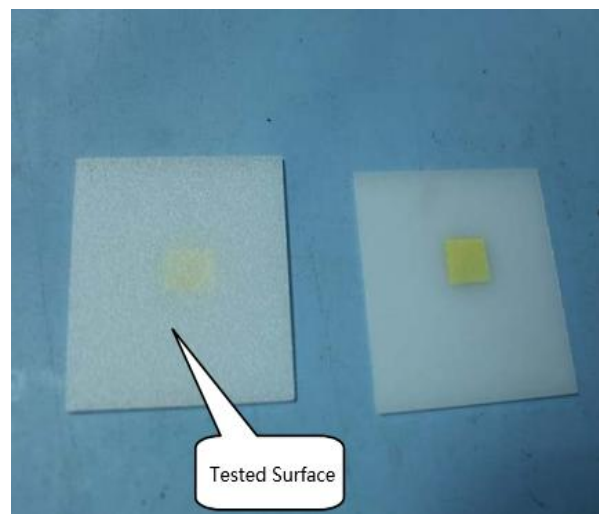


Test time (min)	Formaldehyde concentration(mg/m3)	Removal rate
0	1.18	/
10	0.932	21.02%
20	0.715	39.41%
30	0.493	58.22%
40	0.396	66.44%
50	0.322	72.71%
60	0.276	76.61%

Pass the SGS lab test

- Conduct the experiment according to national standard GB18801-2015
- Use 30-cubic meters experimental chamber
- **Decomposition and removal rate of formaldehyde reaches 76.61% in an hour**

f. Antiseptic Test for Panel Light



Shiny Surface Test(expanded)

Pass the SGS lab test

- Conduct the experiment according to national standard QB/T2591-2003
- **Removal rate of staphylococcus reaches 99%**