Job Name:

Type:

Part #:

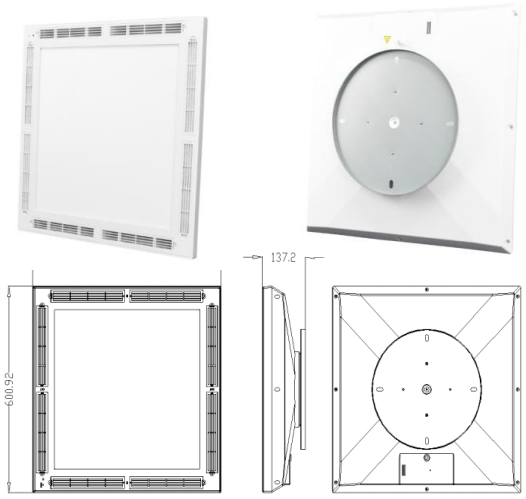
Notes:

HLT-NTPL2250

120-277 VAC, Nanometer Technology Antiseptic/
Anti-Virus, Air-Sanitizing/Filtering 2 x 2 LED Panel

Product Features

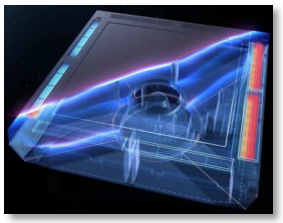
- Cleans and Freshens the air
- Automatically killing bacteria and viruses that are airborne
- Reduces floating particles in air
- Eliminates the TVOC concentration in the air
- Saves installation space
- Efficacy 110-130 lm/W
- Input Voltage: Universal 120-277 VAC
- High efficiency optical design
- Standard 2 x 2 lighting applications
- 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 schools, health facilities, gyms transportation facilities, manufacturing, offices, retail/wholesale stores, dining areas, etc.



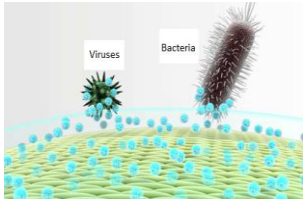
Working Principle

- The filters and surface of Polycarbonate cover are coated with Nanometer Silver and Titanium Dioxide. When bacteria or viruses in air touch the surface of the Nanometer coated filters and cover, they will subse-quently be killed.
- Silver ion reacts with hydrogen sulfide ion in bacteria and inhibits its reproduction.
- Contact produces auperoxide free radicals an breaks down the bacteria.
- The Nanometer surface has an electric charge that pulls the membranes of bacteria, causing them to rupture and eradication.
- The fixture is installed with a centrifugal industri fan which is powerful and silent. Air is filtered through the intake and also filtered through the outlet. The intake air will be purified by getting rid of floating particles and automatically kills bacteria, virus and neutralizes VOCs and other impurities.

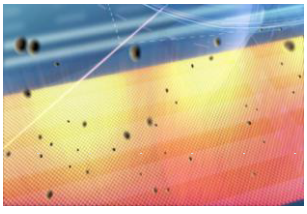
Fixture with centrifugal industrial fan



Nanometer silver killing the bacteria and virus



New nanometer material filter



Ordering Information

Model	
HLT-NTPL2250SMV40KD1	= 2 X 2, 50W, 120-277 VAC, 4000K, 0-10 V Dimming
HLT-NTPL2250SMV50KD1	= 2 X 2, 50W, 120-277 VAC, 5000K, 0-10 V Dimming

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Job Name:

Type:

Part #:

Notes:

Parameters

Model:	HLT-SPZUCP2250
Power:	50W (35W LED, 15W FAN)
Input Voltage:	Univ: 120-277 VAC
Dimming:	0-10 Volt
Power Factor:	≥.95
Lumens:	4,000 lm
Lumens Efficiency:	≥10 lm/W
CCT:	4000K/5000K
CRI:	≥82
CADR:	202 ft³/min.
Application Area:	100-165 ft²
Noise:	<40dB
Certification:	UL (Pending), EPA, SGS and FDA (Pending)
Operating Life:	50,000 Hrs.
Working Temperature:	-20 ~ 50˚C
Size:	23.65” x 23.65” x 5.40”
Net Weight:	16.8 lb

Filters effectively work for 2,160 hours. An indicator light will start flickering when that time threshold is reached. After the filters are replaced, a simple pin is used to reset the internal timer.

Certifications

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

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

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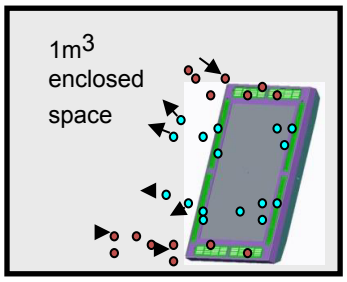
b. Test and Verification for Antiseptic Effect of New Nanometer Compound Material

Classification	Type	Effect
Bacteria	Superbug	Antiseptic rate after 24 hours>99%
	Tubercle	Inhabiting rate of tubercle>80.8%
	Pseudomonas aeruginosa	Antiseptic rate after 24 hours>99%
	Staphylococcus	Antiseptic rate after 24 hours>99%
	Colibacillosis	Antiseptic rate after 24 hours>99%
	White Candida	Antiseptic rate after 10 minutes>99%
	Pneumophilia	Antiseptic rate after 24 hours>99%
	Salmonella	Antiseptic rate after 30 minutes>99%



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

c. Test and Verification for Organic Gas Decomposition

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

d. Antiseptic Test for Air-circulating Panel Light

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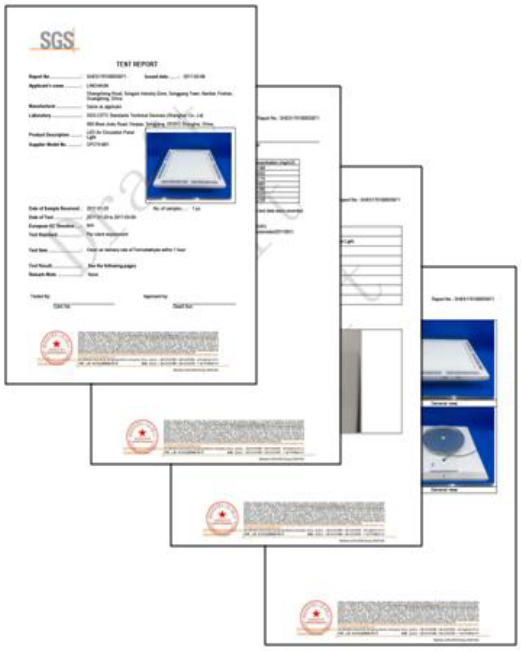
e. Air-circulating Panel Light Formaldehyde Decompsition Test



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

Office: 410.404.0080
www.High5LED.com