

DESCRIPTION

The newly designed SPZ Series air-return sterilization LED edgelit panel features a four layer HEPA filter including antiseptic and antiviral mechanisms. The SPZ offers 24-hour protection against bacteria, virus and other airborne contaminants and pathogens even when the LED light is not illuminated using titanium dioxide photocatalytic oxidation and silver ion nano technology. This unit saves space by being a two-in-one package, providing illumination while purifying air in the surrounding area to maintain a bright and sanitized environment in offices, corridors, classrooms, public spaces and any other applications that would require a purified air environment.

SPECIFICATIONS

Construction:

- Sleek ABS housing designed for easy installation in grid ceilings
- UV-stabilized polycarbonate optical lens
- Integral centrifugal industrial fan rated for 202 CFM (12,120 CADR - Clean Air Delivery Rate) circulates air through filters with little noticeable sound (<40dB)
- Four (4) intake ports with four-stage HEPA filtration system, removes up to 99% of airborne contaminants (<0.3 pm) including virus and bacteria (see page 2 for details)
- Four (4) exhaust ports for clean, purified air, one unit is ideal for 100-165ft² space
- 3W UVA LED located inside air intake to activate titanium dioxide photocatalytic oxidation (ozone free)

Filtration:

- Four-stage HEPA filtration system removes up to 99% of airborne contaminants (<0.3 pm) and pathogens including virus and bacteria (see page 2 for details)
- This system uses photocatalytic oxidation purification; the enclosure and filters are embedded with titanium dioxide that when exposed to UVA light (located in the filtration chamber) reacts with airborne contaminants and pathogens to oxidize them, undergoing a chemical reaction transforming them into non-toxic substances. Titanium dioxide photocatalytic oxidation purification has been proven over the years to be an effective method to purify and disinfect water and air against virus, bacteria, TVOC (total concentration of volatile organic compounds) and a multitude of other waterborn contaminants to less than >0.3 microns at 99% efficiency
- This system also uses a silver nanocoating on the complete enclosure, lens and filters; the silver ions go through a catalytic reaction with hydrogen sulfide ion in bacteria and inhibit its reproduction, creating superoxide free radicals and breaking down the bacteria
- This air-circulation/return system has gone through rigorous testing in 3rd party labs and effectively neutralizes up to 99% virus such as H1N1, enterovirus and other mixed respiratory viruses after 20 minutes of operation (see page 2 for details)
- This system has also been tested against a multitude of common bacteria and other airborne contaminants such as formaldehyde, common microbes and drastically reduces TVOC when operational over 24 hours
- Easily replaceable filters are rated for five years or 2100 hours (whichever comes first); a built-in indicator light illuminates when filters need replacing

Optics/LEDs:

- 35W LEDs produce 4000 lumens, edgelit panel
- Efficacies up to 114 LPW maximize energy savings and utility rebates
- 4000K CCT
- L70 over 100,000 hours
- CRI ≥82

Electrical:

- Class 2 power supply, 120-277VAC, 50/60Hz
- Power: 50W (35W LED, 3W UVA LED (inside air intake), 12W fan)
- 0-10V Dimming
- Total Harmonic Distortion (THD) of less than 20%
- Power supply with high-power factor of 95% typical
- Fan rated for 70,000 hours
- Noise >40db

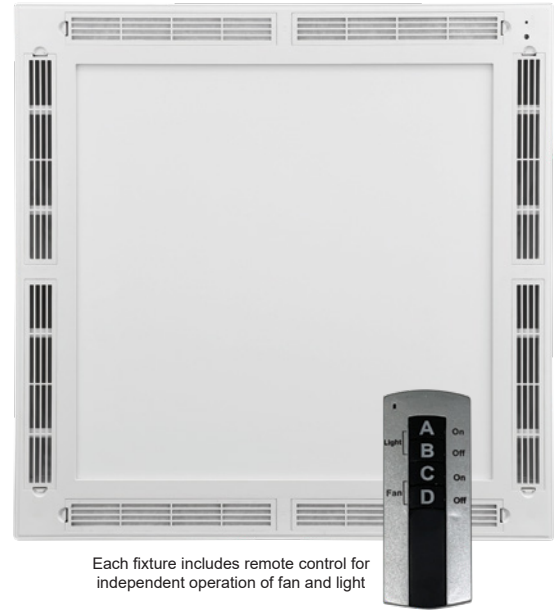
Warranty:

- Five Year Warranty (Terms and Conditions Apply)

Accessories:

- Replacement 4-Stage HEPA Filter (complete set - 4pcs for one (1) fixture)

Model: _____ Date: _____
Accessories: _____
Job Name: _____ Type: _____



Specs at a Glance	
Wattage (System)	50W
CCT (K)	4000K
Lumens (lm)	4000
CRI	>82
Input Voltage	120-277VAC, 50-60Hz, 1-10V Dimming
Operating Temp	-20°C to 40°C (-4°F to 104°F)
Filtration	Four-stage HEPA filtration system Nano silver ion catalization Titanium dioxide photocatalytic oxidation
Airflow	202 CFM (12,120 CADR)
Application Area	100-165 Sq Ft
Certifications	cUL Listed for Damp Locations
Warranty*	5 Years
Weight	16.8 lbs

Note: Environment and application will affect actual performance. Typical values and 25°C used for testing.

* Consult Trace*lite's Terms and Conditions for more details. Not intended as a medical device.

Installation:

- Unit simply lifts through grid ceiling and rests on T-bars – must be secured to ceiling
- Unit is equipped with internal switch and remote control to independently operate the air return system and light
- Easy installation in new construction or retrofit, standard recessed mounting in most 2' x 2' grid ceilings, 9/16" and 15/16" grids
- One unit is ideal for 100-165 square foot space

Testing & Compliance:

- cUL Listed for Damp Locations
- EPA Registration (In Process)
- Operating temperature: -20°C to 40°C (-4°F to 104°F)
- FDA tested for antiviral, anti-bacterial and organic gas decomposition nanometer compound filter
- SGS tested for antiseptic material and air-circulation (Specification GB21551 & Specification QB/T2591-2003)
- SGS tested for formaldehyde decomposition (Specification GB18801)

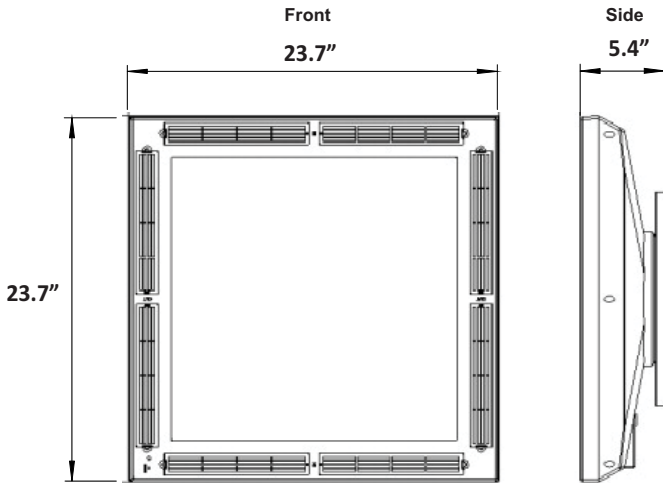
Ordering Information (Example: NTPL2250SMV40KD1-RCP)

Note: One remote is included with each fixture, remote will operate up to 25 fixtures

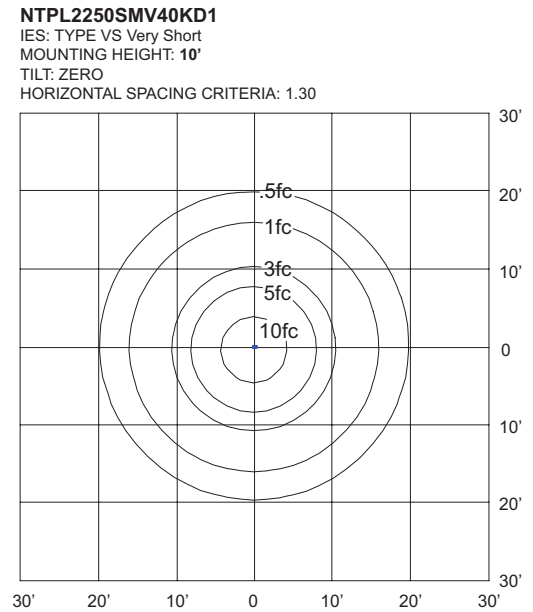
SKU	Description
NTPL2250SMV40KD1-RCP	2'x2' Air-Return LED Flat Panel, 50W System, 4000K CCT, 120-277VAC, 0-10v Dimming Driver, TiO2 and NanoSilver Technology, Ambient Air Sterilization, White Finish, Fan System On-Off Control, Includes Remote

ACCESSORIES ¹ (Field Installed)	Notes
SPF-RF = Replacement Filters (complete set of four filters)	¹ Order as separate line item for final installation in the field

Dimensions



Photometric Sample



Filter Effectiveness

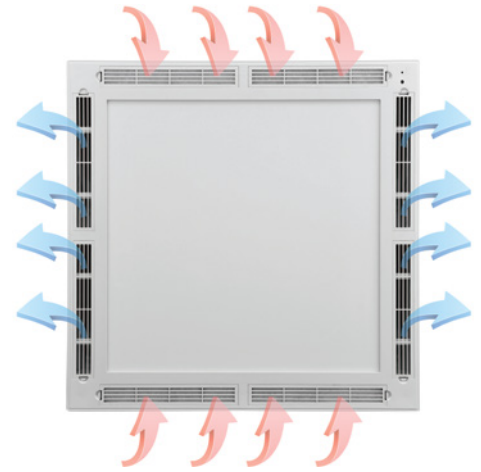
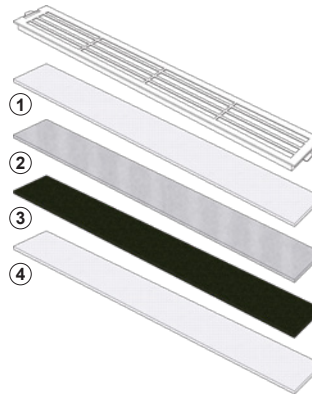
CLASSIFICATION	TYPE	RESULT
VIRUS	H1N1	99.99% of virus is eliminated after 20 minutes
	Enterovirus	99.99% of virus is eliminated after 20 minutes
	Respiratory Mixed Virus	Inhibiting ability reaches 90.0%
BACTERIA	Superbug	Antiseptic rate after 24 hours >99%
	Tubercle	Inhibiting rate of tubercle >80.8%
	Pseudomonas Aeruginosa	Antiseptic rate after 24 hours >99%
	Staphylococcus	Antiseptic rate after 24 hours >99%
	Calibacillosis	Antiseptic rate after 24 hours >99%
	White Candida	Antiseptic rate after 10 minutes >99%
	Pneumophila	Antiseptic rate after 24 hours >99%
Salmonella	Antiseptic rate after 30 minutes >99%	
MICROBE	5 Common Microbes	No microbe growing after 28 day culture
	Formaldehyde	Antiseptic rate after 24 hours >99%
ENVIRONMENT	TVOC	Antiseptic rate after 24 hours >96.4%
	ROHS	No Pb, Hg, Cd, Cr, PBB, PBDE

Specifications are subject to change without notice. Installation must be performed in accordance with Barron Lighting Group installation instructions.

Filtration Details

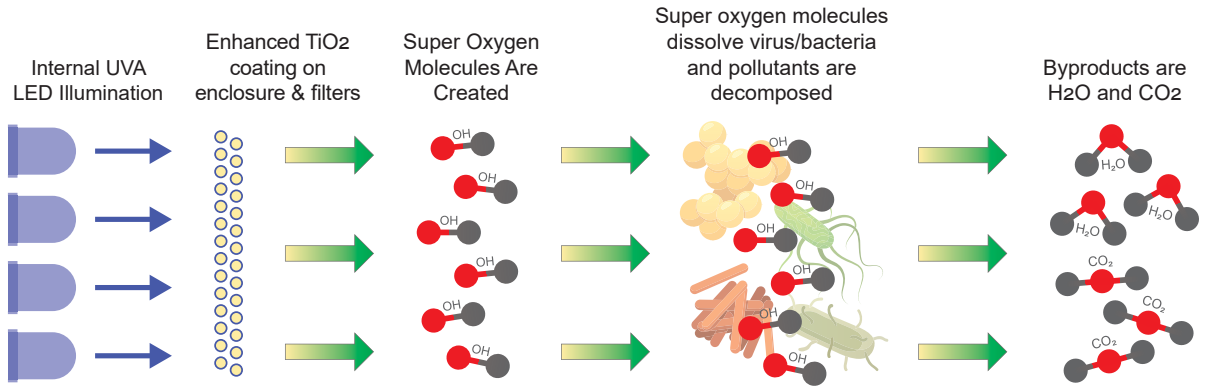
Four-Stage HEPA Filter System:

- Layer 1** PET filter blocks floating particles in the air
- Layer 2** Newly designed compound nanometer materials
Removes virus and bacteria from the air
Decomposition of formaldehyde and organic gases
Deeply cleans the indoor air
- Layer 3** Highly efficient activated carbon filter absorbs and eliminates odor molecules
- Layer 4** PET filter purifies the air again



How It Works:

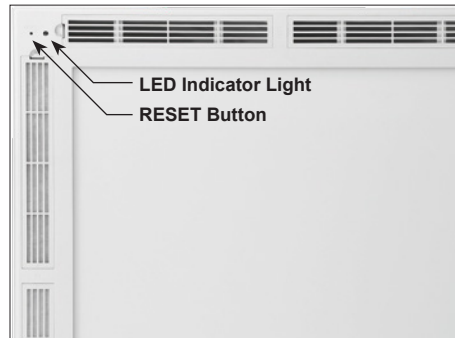
This system uses photocatalytic oxidation purification; the enclosure and filters are embedded with titanium dioxide that when exposed to UVA light (located in the filtration chamber) reacts with airborne contaminants and pathogens to oxidize them.



Filter Replacement Detail



Filters snap in place for easy replacement



LED indicates when filter change is required



Reset after filter changes

Remote Details



Remote control for independent operation of fan and light.
Remote can operate up to 25 fixtures.
(Included with each fixture)

Switch located on back of fixture enables/disables remote control operation.

