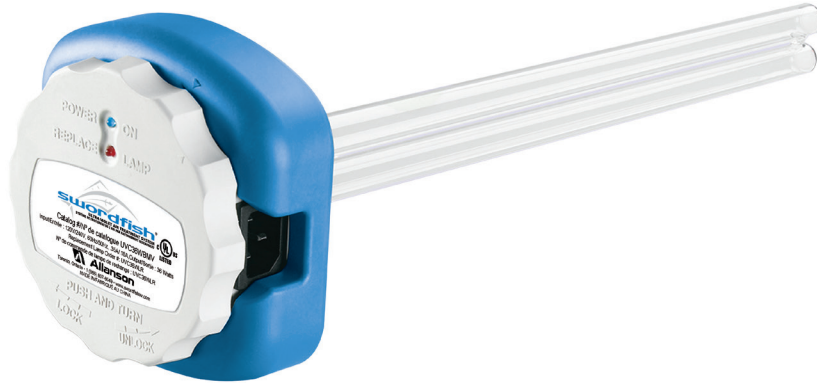


Swordfish Air

DATASHEET



On average, we take 20,000+ breaths per day. Because much of our time is spent at home, it is crucial that the air we breathe is safe and clean. Swordfish Air UVC lamps are designed to mount onto existing ductwork to provide clean air throughout the whole home by inactivating airborne pathogens, rendering them harmless.

Swordfish Air can be mounted on either the supply or return duct of your heating/AC system for air purification. If installed over the AC coil, the lamp will provide the additional benefit of preventing the accumulation of mold and bacteria. A clean AC coil helps the furnace operate more efficiently and save energy.

We recommend that the fan of your air system remain on at all times so that your lamp is constantly sterilizing your air.

Features:

- Swordfish Air is a whole home air purifier
- Powerful 36W lamp operates at optimum 254 nm
- Reduces up to 99.9% of pathogens
- Air purification and mold prevention
- Swordfish Air Lamp is ozone free
- Easy installation
- Lamp replacement indicator
- Lifetime warranty (power head only)

Application:

- Residential furnaces
 - o Furnace Return or supply duct (air purification)
 - o Above AC coil (air purification and mold prevention)

Ray Tracing

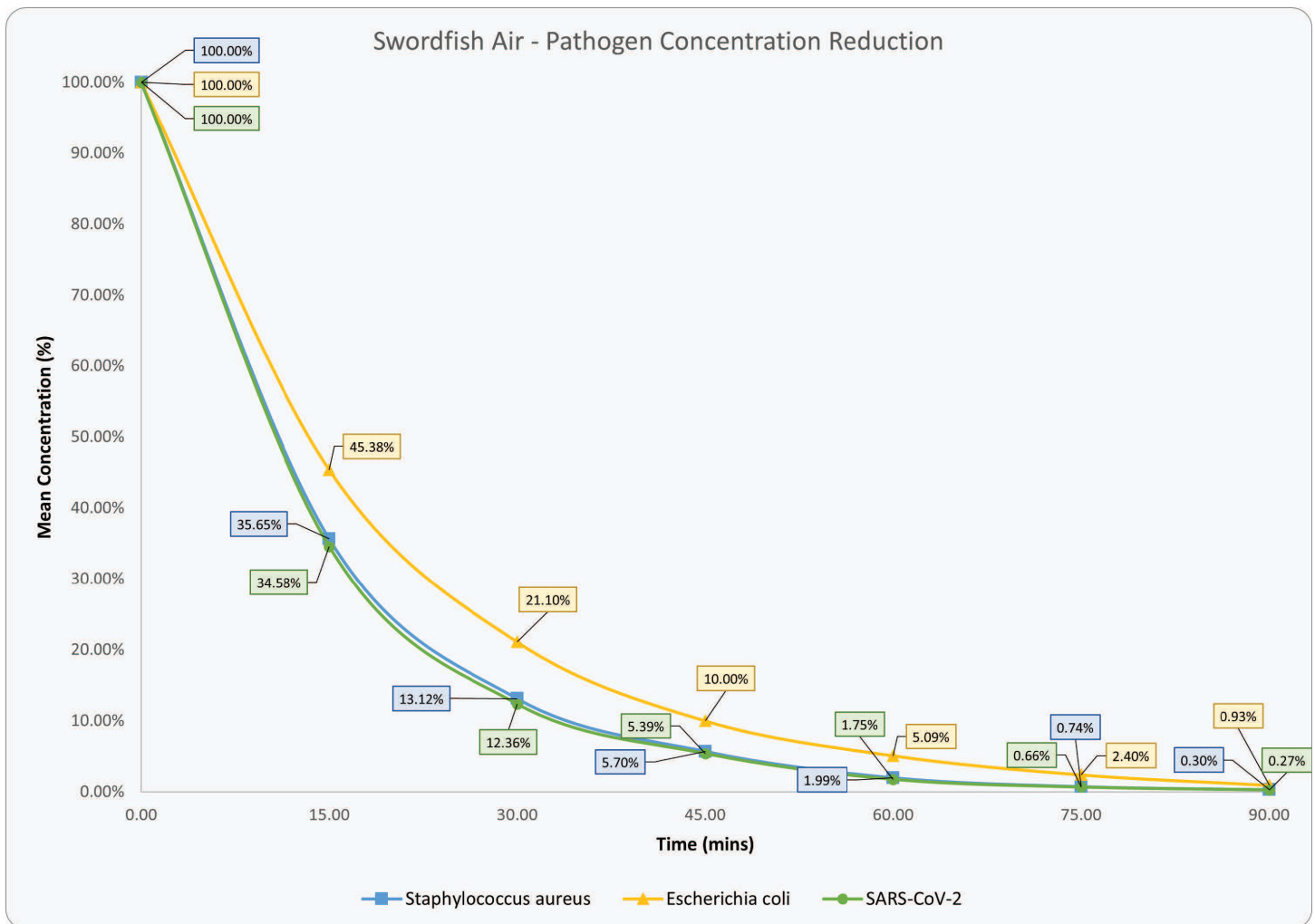


Figure 1: Pathogen concentration reduction using 36W lamp

Pathogen Inactivation simulation completed by UV Lamp Consulting

Lamp used: Swordfish 36W; Duct size: 24" (W) x 24" (H);
 Furnace Air Velocity: 1,250 CFM with recirculation mode;
 Target Area: 2,000 sq. ft. with 8 feet ceiling or 16,000 cubic ft.

Staphylococcus aureus (ATCC 6538), D90 = 5.5 mJ cm⁻²

Lu G, Li C, Liu P (2011) UV inactivation of milk-related microorganisms [...], Eur. Food. Res. Tech. DOI: 10.1007/s00217-011-1498-5

Abshire R & Dunton H (1981) Resistance of Selected Strains of Pseudomonas aeruginosa to Low-Intensity Ultraviolet Radiation. DOI: 10.1128/AEM.41.6.1419-1423.1981

Escherichia coli (ATCC 8739), D90 = 8 - 10 mJ cm⁻²

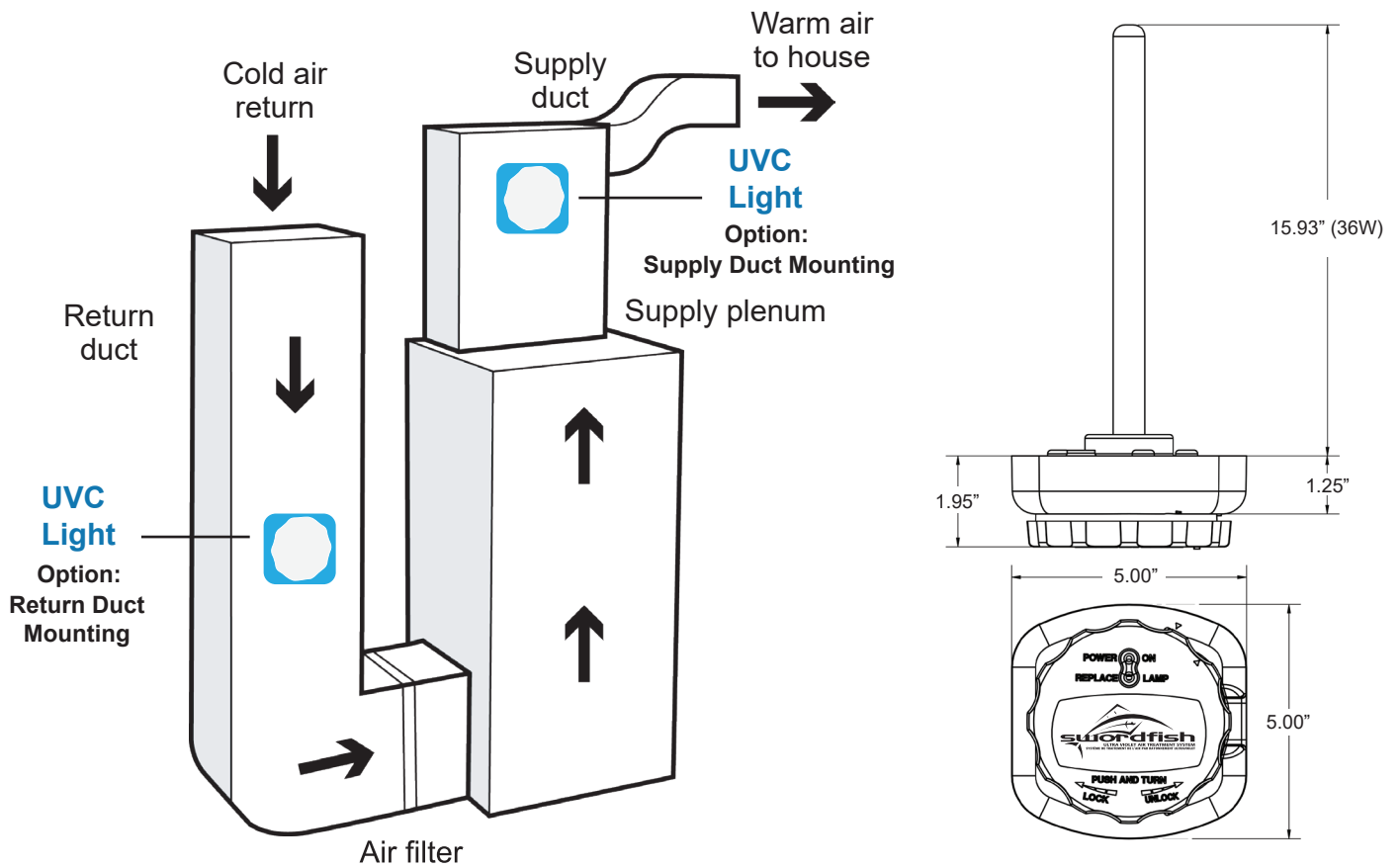
Green A, et al. (2018) Inactivation of Escherichia coli, Listeria and Salmonella [...], Innovative Food Science and Emerging Tech. DOI: 10.1016/j.ifset.2018.03.019

Abshire R & Dunton H (1981) Resistance of Selected Strains of Pseudomonas aeruginosa to Low-Intensity Ultraviolet Radiation. DOI: 10.1128/AEM.41.6.1419-1423.1981

SARS-CoV-2 (COVID-19), D90 < 5 mJ cm⁻²

Lawal O, Simons R, Herman A, & Pagan J (2021) <https://uvsolutionsmag.com/articles/2021/sars-cov-2-dose-response-research-update>

Specifications



PRODUCT SPECIFICATION	Swordfish Air
INPUT SUPPLY VOLTAGE (V)	120
INPUT SUPPLY FREQUENCY (Hz)	60
POWER (W)	36
PRIMARY AMPERES	0.35A
AMBIENT TEMPERATURE (°C)	0-40
CASE MAXIMUM TEMPERATURE (°C)	75
POWERHEAD DIMENSIONS	4.25" (D) x 2.0" (H)
LAMP REPLACEMENT INDICATOR	Yes
LAMP OUT INDICATOR	Yes
BALLAST OVER CURRENT PROTECTION	Yes
APPROVALS	cCSAus