



# Clinical Validation

## (Third Party Lab Testing)

PURO™ Lighting products, powered by Violet Defense™ technology, have been tested by independent accredited third-party testing labs. Units tested utilize pulsed Xenon technology to deploy powerful, broad spectrum UV-C, UV-B, UV-A, and violet blue light to kill germs.

### Virus Testing

	Average Percentage Reduction
	2 meters
Coronavirus	99.99%
Norovirus	99.99%

### Bacterial Testing

	Average Percentage Reduction
	3 meters
<i>E. coli</i>	99.99%
Salmonella	99.9%
MRSA	99.9%

### Bacterial Spore Testing

	Average Percentage Reduction
	1.5 meters
<i>C. diff</i>	99.99%

### Fungal Testing

	Average Percentage Reduction
	1 meter
<i>C. auris</i>	>99.98%

### PATHOGENS TESTED

The CDC actively maintains a list of drug-resistant pathogens that pose a threat to the United States. The loss of effective antibiotics makes it even more critical to have alternate solutions to prevent the spread of bacteria, viruses, and fungi. PURO™ Lighting products, powered by Violet Defense™, have tested against key pathogens of greatest concern.

#### Coronavirus

- Coronaviruses are highly contagious viruses causing severe respiratory illnesses, including the 2020 global pandemic.

#### Norovirus

- Highly contagious virus, norovirus causes inflammation of stomach and intestines, resulting in vomiting and diarrhea
- Estimated to cause 19-21 million illnesses each year in the U.S.

#### *E. coli*

- This bacteria has multiple strains that is most commonly known for food poisoning.
- Over 260,000 infections occur each year from Shiga toxin-producing *E. coli* (STEC)

#### Salmonella

- Leading cause of hospitalizations due to foodborne disease costs an estimated \$2.2 billion in healthcare costs

#### MRSA

- MRSA is a type of staph bacteria resistant to many antibiotics
- Over 80,000 cases of MRSA each year and 11,000 associated deaths each year in the U.S.

#### *C. diff*

- Clostridioides difficile (*C. diff*) is a bacterium that causes diarrhea and colitis (an inflammation of the colon)
- Approximately 29,000 people diagnosed with *C. diff* in a year died within one month of diagnosis.

#### *C. auris*

- This highly lethal, antifungal resistant fungus is an emerging, yet serious global health threat.