



Patent Pending



Features

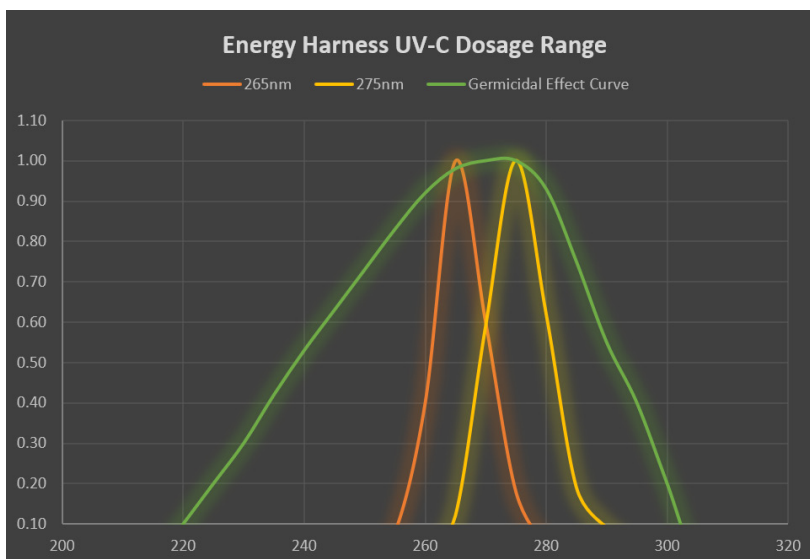
- High dosage short-wave UV-C applied to airflow for controlled duration period.
- Solid-state LED technology to deliver precise UV-C reliability.
- Exact nanometer wavelengths are used to cover germicidal vulnerability spectrum.
- Air circulation up to 131 CFM can help to clean room or area air many times per hour.
- Standard 2'x 4' fixture size fits into any commercial ceiling grid configuration.
- Easy installation compatible with all standard 120-277VAC electrical systems.
- Replaceable LED modules allow for years of reliable service with the same fixture.
- Filters are easily changed or cleaned to increase longevity and efficiency.

The Energy Harness® Active-Airflow fixture is designed to eliminate airborne pathogens. It can be installed into standard commercial ceiling grids located in most office buildings, schools and medical facilities.

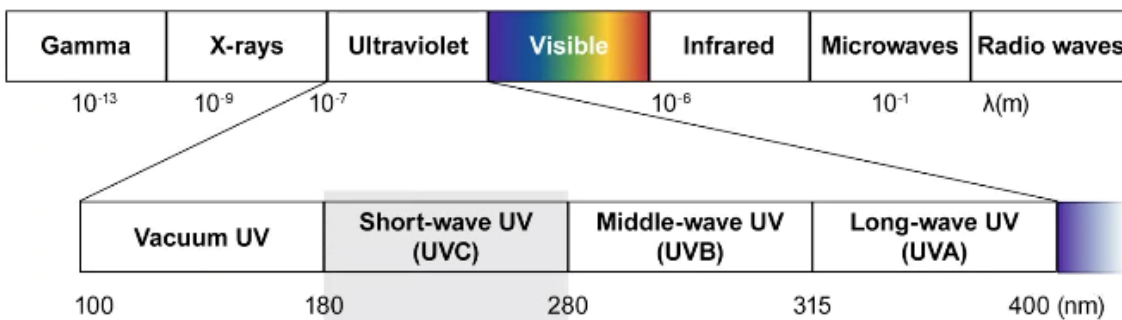
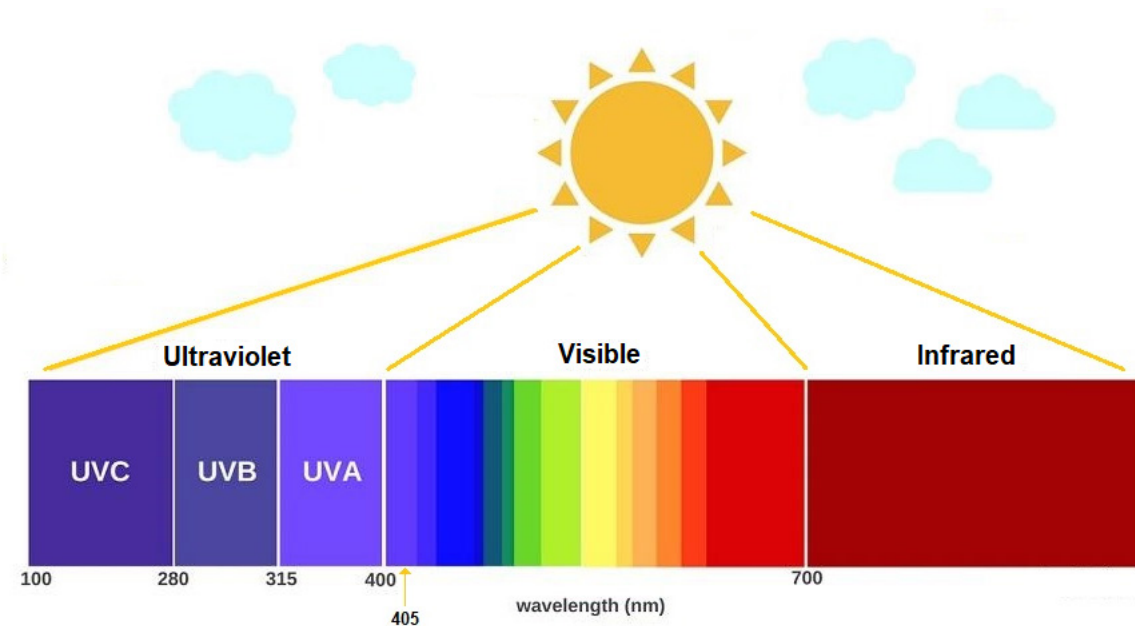
Research indicates that most viruses and bacteria are spread by breathing airborne particles. Studies conclusively show that ultraviolet light (UV), particularly UV-C spectrum (265-280nm) is especially effective in eliminating these pathogens.

The Active-Airflow fixture circulates room air many times per hour through encapsulated UV-C light eliminating pathogens while keeping humans safe. Built with advanced solid-state LED technology, it delivers precise UV-C dosages for effective, quiet and reliable operation.

By applying LED technology to the science of how ultraviolet light affects micro-organisms, we have developed a system to effectively protect indoor areas, and the people in them, against airborne pathogens.



Visible and Invisible Light Spectrum



Ultraviolet Light and Visible Light

- Visible Light is between 400nm and 700nm
- Ultraviolet Light is between 100nm and 400nm
- The wavelengths between 222nm and 275nm are the most effective for germicidal eradication effectiveness.

Ultraviolet Dosage

Germicidal lamps provide effective protection against microorganisms. A small cross-section is shown below.

ORGANISM	ALTERNATE NAME	TYPE	DISEASE	DOSE*
Corynebacterium diphtheriae	C. diphtheriae	Bacteria	Diphtheria	6,500
Legionella pneumophila	L. pneumophila	Bacteria	Legionnaire's Disease	12,300
Mycobacterium tuberculosis	M. tuberculosis	Bacteria	Tuberculosis (TB)	10,000
Pseudomonas aeruginosa	P. aeruginosa	Bacteria		3,900
Serratia Marcescens	S. marcescens	Bacteria		6,160
Staphylococcus aureus	S. aureus	Bacteria		6,600
Staphylococcus epidermidis	S. epidermidis	Bacteria		5,800
Adeno Virus Type III		Virus		4,500
Coxsackie A2		Virus		6,300
Influenza		Virus	Flu	6,600

* Nominal Ultraviolet dosage (mWSec/cm²) necessary to inactivate better than 99% of specific microorganism / microbe.

Active Airflow UV-C Fixture	
Model	EHF-UVC-AA2x4-277
A/C Power	120V - 277VAC
Max Wattage	120 watts
Amperage	1.002 Amps (120 VAC)
Wavelength	260nm-280nm
UVC Dosage	12,000 - 18,000 $\mu\text{W}^*\text{Sec}/\text{cm}^2$
Noise Level	36 - 38dB
Airflow	131 CFM
Optimum Coverage per Fixture	360sq/ft
Fixture Dimensions (Lx Wx H)	47.75" x 23.75" x 2.75"
Fixture Weight	21 lbs

Project Name:
Project Number:
Fixture Schedule ID:
Model Name:

REPLACEMENT COMPONENTS:

UVC Maintenance Module	EHA-UVC-MODULE
Filter Module	EHA-UVC-FILTER