



# UVC Germicidal Disinfection Lighting

## Independent Third-Party Laboratory Testing

### 99.9% Microbial Reduction Test by INTERTEK Microbiological Lab.

**intertek**  
Total Quality Assured

**OLYMPIA LIGHTING, INC**  
**EFFICACY TEST REPORT**

SCOPE OF WORK  
Non-standardized Test Method: Microbial Reduction Rate Test

PRODUCT – Air Purifier


MODEL – UVW-110W-UVC-120V & UVT-2X4FT-100W-UVC-120V

REPORT NUMBER  
104493272COL-001

ISSUE DATE  
12/18/20

PAGES 9

DOCUMENT CONTROL NUMBER  
GFT-OP-10H (6-July-2017)  
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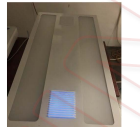


ANTIMICROBIAL EFFICACY TEST REPORT

OLYMPIA LIGHTING, INC.  
Report No.: 104493272COL-001

SECTION 6 SUMMARY OF RESULTS

Fan Speed	Optional Features
Max	N/A

**UV AIR PURIFIER**  
Model: UVW-110W-UVC-120V  
120V, 60Hz, 110W  
WARNING: UV LIGHT HAZARD!  
Avoid Looking Directly at UV Light!  
OLYMPIA LIGHTING, INC.  
2740 South 10th Street, Suite 100  
Tulsa, OK 74119  
Tel: (918) 738-8008  
www.OlympiaLighting.com

**UV LED TROFFER**  
Model: UVT-2X4FT-100W-UVC-120V  
120V, 60Hz, 100W  
WARNING: UV LIGHT HAZARD!  
Avoid Looking Directly at UV Light!  
OLYMPIA LIGHTING, INC.  
2740 South 10th Street, Suite 100  
Tulsa, OK 74119  
Tel: (918) 738-8008  
www.OlympiaLighting.com

UVW-110W-UVC-120V (Wall Unit)			
Organism Type	Virus	Mold	Bacteria
Temperature Min/Max	18°C (64°F) / 19°C (66°F)	20°C (68°F)	18°C (64°F)
Humidity Min/Max	43% RH / 44% RH	45% RH	40% RH
Organism Name	Phi-X174	A. niger	E. coli
Percent Reduction	99.9%	99.9%	99.9%

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ANTIMICROBIAL EFFICACY TEST REPORT

OLYMPIA LIGHTING, INC.  
Report No.: 104493272COL-001

UVT-2X4FT-100W-UVC-120V (Troffer)

Organism Type	Virus	Mold	Bacteria
Temperature Min/Max	18°C (64°F) / 19°C (66°F)	20°C (68°F)	18°C (64°F)
Humidity Min/Max	43% RH / 44% RH	45% RH	40% RH
Organism Name	Phi-X174	A. niger	E. coli
Percent Reduction	99.9%	99.9%	99.9%

Completed by: Amanda Mastrorillo  
Title: Microbiology Tech I  
Signature: [Signature]  
Date: 18-DEC-2020

Reviewed by: Nicholas Unger  
Title: Staff Engineer  
Signature: [Signature]  
Date: 18-DEC-2020

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## CSA America Certification – IES LM-58 Spectral Irradiance Testing

**CSA GROUP**

Product Performance Report - On-Axis Irradiance/Energy  
Product Test Report

Test results reported for:  
Olympia Lighting Inc.  
Product Description: UVC LED Strip

Issued Report:  
OLYG003-010\_UVC LED Strip  
0004813 - 1999

Original Issue date:  
Wednesday, December 9, 2020

Revision Issue Date:  
First Issue

Prepared for:  
CSA Group  
1483 NE 87th St.  
Redmond, WA 98052  
425-855-8500

Testing performed by:  
CSA Group  
1483 NE 87th St.  
Redmond, WA 98052  
425-855-8500  
www.csagroupusa.com

Test report prepared by:  
Aaron Miller  
Laboratory Manager  
Test & Measurement Services

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Product Performance Report - On-Axis Irradiance/Energy

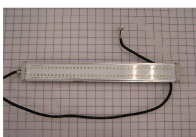
Manufacturer: Olympia Lighting Inc.  
Product Description: UVC LED Strip  
Report Number: OLYG003-010  
Release Date: 12/9/2020

SAMPLE DESCRIPTION


Lab sample identification: UVC LED Strip  
Customer identification: 4W UVC LED  
Manufacturer: Olympia Lighting  
Part number: NA  
Model Number: UVT-2X4FT-100W-UVC-120V  
Description: UVC LED Strip

Manufacturer's ratings  
Max Current (A): N/A  
Operating voltage (V): 120V  
Wattage (watts): 100  
Frequency (Hz): 60  
Type: LED

Sample Device as Received

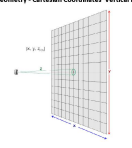


Sample Device Mounted to Test Apparatus



Equipment Geometry

Test Geometry - Cartesian Coordinates, Vertical Plane



Measurement System Description  
Reference: Custom Test: Irradiance on a Plane  
A single point or plane is established distance (x) from the emission aperture. A single measurement, or series of measurements are performed at this distance.

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Product Performance Report - On-Axis Irradiance/Energy

Manufacturer: Olympia Lighting Inc.  
Product Description: UVC LED Strip  
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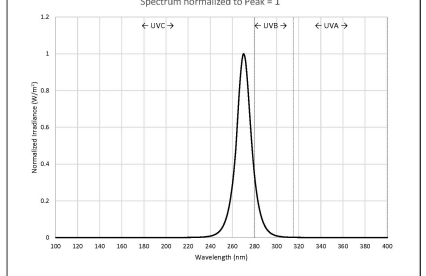
TIME EXPOSURE SUMMARY

Distance to Surface (meters)	Average Total Irradiance (μW/cm²)	Average UVC Irradiance (μW/cm²)	Time needed to reach 20mJ/cm² UVC (s)	Time needed to reach 100mJ/cm² UVC (s)
1.000	75.29	27.40	730	2943
2.000	7.65	2.73	2974	14869
3.048	3.43	1.06	6662	33308

SPECTRAL BIN

Wavelength (nm)	% of Spectrum	Peak λ	FWHM (nm)
UVC (100 - 280nm)	87.58%	271 nm	14.46 nm
UVA (280 - 315nm)	12.67%	-	-
UVA (315 - 400nm)	0.27%	-	-
Visible (400 - 700nm)	0.08%	-	-
Near Infrared (700 - 1500nm)	0.01%	-	-
TOTAL UV	99.93%	-	-

Spectrum normalized to Peak = 1



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