DS UVC

LED
FIXTURE
UV-C INDIRECT RECESSED TROFFER

Energy Solutions INTERNATIONAL, INC.

FEATURES

Recessed Troffer fixture with two UV-C radiant tubes for surface and air disinfection.

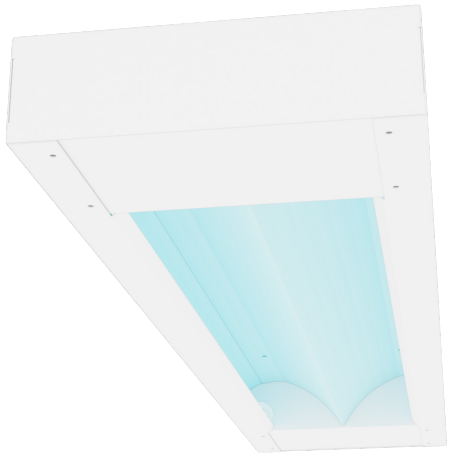
Recessed Troffer built for standard T-grid opening of 1’ x 4’. No need for additional T-grid component.

Wide beam photometry for maximum coverage.

White steel and reflective aluminum construction for increased efficiency. Engineered material for maximum UV-C reflectance.

Fixture built for multiple applications including: Office Spaces, Hospitals, Retail, Schools, Corridors, and many more.

5 year fixture warranty and 1 year UV-C lamp warranty.



TECHNICAL DETAILS

	VALUE(S)	UNIT(S)
LAMP LIFE	9,000	HRS
UV-C POWER	24	W
WATTAGE	54	W (AC)
INPUT VOLTAGE	120 / 277 / *480*	V
IRRADIANCE @ 2m	1.5	W/SQ.M
REFLECTANCE @254NM	85%	
AMBIENT TEMP	*0 - 55*	C
UV-C TUBES	36IN, 30W, T8	
COMPLIANCE	ETL / BAA	
WARRANTY	5 / 10	YRS

NUMBERS SHOWN IN RED ITALIC TEXT REQUIRE ADDITIONAL INFORMATION, PLEASE CONTACT CUSTOMER SERVICE FOR DETAILS

54 Total System Watts with 24W of UV-C Radiant Power. 254nm low pressure Mercury vapor lamps for high efficiency in UV light creation.

UV-C lamps are protected from view using specially engineered UV-C reflective material. More information can be found in the reflectance section below.

Bat wing distribution of UV-C radiance for maximum coverage. More information can be found in the distribution section below.

ETL tested and certified. Fixture tested and certified to meet UL 1598 for electrical investigation and IEC 62471 for photobiological assessment. Non ozone or any secondary contaminant producing fixture. Fully manufactured in an **EPA certified** facility.

Reverse logic sensor included with fixture used to terminate output upon triggering. Complimentary controls package is recommended. Contact customer service with questions about controls packages.

ORDERING INFORMATION

F	14DS	UVC	2L	20591
STYLE	SIZE	LIGHT ENGINE	LAMPS	OPTIONS
F FIXTURE	14DS 1’ x 4’	UVC Low-Pressure Mercury Vapor UV-C lamp, 254nm	2L 2-LAMPS	20591 Bat-Wing Design

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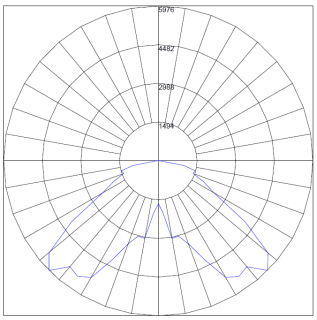
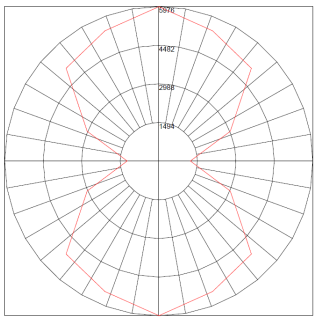
PHOTOMETRY



VERTICAL TO FIXTURE
Max Intensity: 5976 mW/sr or 1.5W/sq.m @ 2m
Max Angle: 45 deg



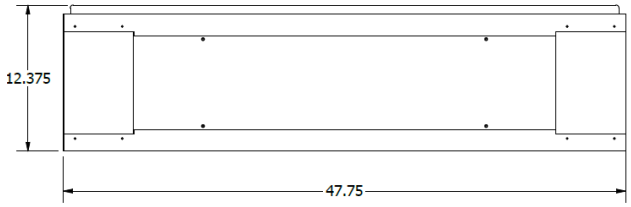
HORIZONTAL TO FIXTURE
Max Intensity: 5976 mW/sr or 1.5 W/sq.m @ 2m
Max Angle: 90 deg

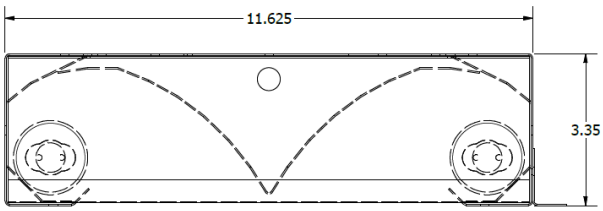
Graphs above represent the max UV-C radiant intensity at different angles from the fixture.

Vertical to fixture represents the distribution perpendicular to the 4' side of the 1'x4' fixture through center.

Horizontal to fixture represents the distribution parallel to the 4' side of the 1'x4' fixture through center.

DIMENSIONS





IRRADIANCE

Irradiance is the power over an area of UV-C light created by this fixture.

To quantify the cleaning properties of this fixture the table to the right is provided. From distances of 2m - 3m irradiance values are given at the maximum Intensity through, vertical angle = 90 deg and horizontal angle = 45 deg.

Calculations for irradiance at 2m is based directly on lab testing. Values for all other distances are extrapolated from the initial value at 2m.

Irradiance values are rounded for ease of display. Distances of 2 - 3m are equivalent to approximately 6.5 - 10ft, an average distance between surfaces and the fixture.

Contact sales and engineering for more information on irradiance data.

MAX IRRADIANCE
Horizontal angle = 90 Vertical Angle = 45

DISTANCE	IRRADIANCE
2.00m	1.50 W/ sq.m
2.25m	1.18 W /sq.m
2.50m	0.96 W / sq.m
2.75m	0.79 W / sq.m
3.00m	0.66 W / sq.m

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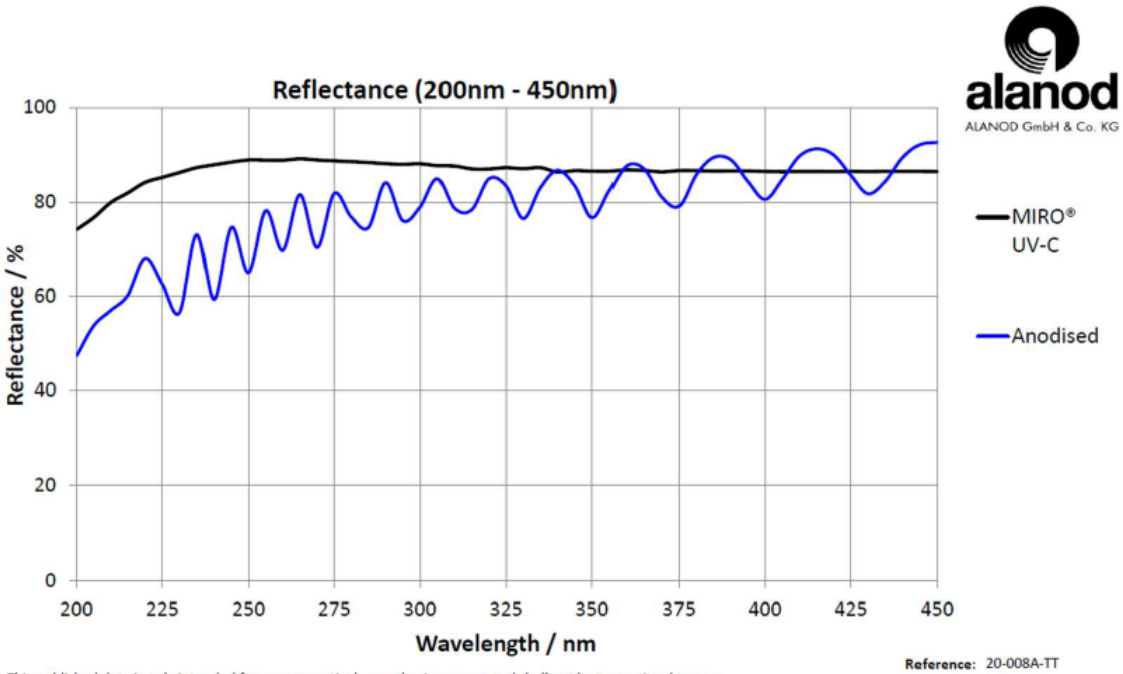
REFLECTANCE

Reflectance is an important value for this fixture as it represents the ability of the specially engineered material from ALANOD to reflect UV-C radiant power.

From the chart below, provided by ALANOD, it can be seen that the specialized material provides 85% reflectance of the UV-C power at the 254nm wavelength created by our UV-C lamps.

Better reflectance directly correlates to higher irradiance which is required to sanitize the areas covered by this fixture.



Reference: 20-008A-TT
Version: 1.0
Date: 2020 May

WARNING

This product is intended only for unoccupied spaces and restricted areas. Exposure will cause serious harm to skin and eyes. It is the responsibility of the installing contractor and building owner/occupier to use appropriate controls to insure that this fixture is only energized in unoccupied spaces.

For more safety information and installation instructions refer to the DS series UV-C Direct Sanitizing Luminaire Safety Sheet which can be found on our website.