HEALTHCARE LIGHTING®

EvolAIR UV™ HFLV DN
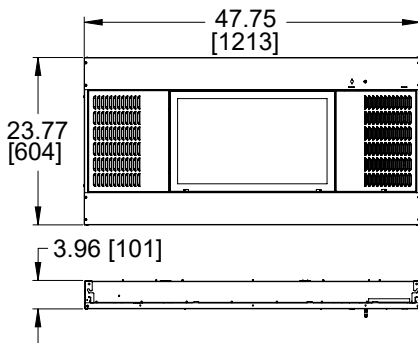UV Air Disinfection Luminaire with Downlight

HIGHLIGHTS

- Concealed UV air treatment chamber integrated into a 2x4 (0.6M x 1.2M) illuminated troffer allowing use in occupied spaces
- Engineered with advanced UV-C based pathogen control technology powered by UV Angel Clean Air™
- Designed to operate without interruption 24/7/365
- Air is circulated through the UV-C chamber, treated with the high-intensity UV-C light to inactivate bacteria, fungus, and viruses, and returned to room for a cleaner environment
- Air treatment chamber operates independently of the LED ambient light
- Installation available for drop-in grid ceiling, recessed hard ceiling, surface mount, or suspended
- Discreet down facing status indicator light for easy sight verification of operation or maintenance
- Tool-less UV lamp and filter service from below without need to access ceiling plenum

UV | c(ETL)us LISTED Intertek | FC | NON IC RATED | **DRY** | Buy American

DIMENSIONS

47.75 [1213]

23.77 [604]

3.96 [101]

COMPANION LUMINAIRE(S)

HFLV NDN
UV Air Disinfection Luminaire without Downlight

PATHOGEN REDUCTION EFFECTIVENESS

Average Pathogen Reduction Over Specific Control Time Within 800 ft³ (22.7M³) Space

Pathogen	Calculated Percent Reduction*	
	Control Time 1 Hour	Control Time 4 Hours
Staphylococcus aureus (S. Aureus) ATCC 6538	83.6%	99.9%
Cladosporium cladosporioides (Cladosporium) ATCC 16022	61.1%	97.7%
MS2 Bacteriophage (MS2) ATCC 15597-B1	65.8%	------------

Third Party Clinical Validation

The pathogen reduction effectiveness of an equivalent to the EvolAIR UVTM HFLV UV Air Disinfection unit using UV Angel Clean AirTM technology has been tested by independent accredited third-party testing lab (Microchem Laboratory, Round Rock, TX) and a data analysis of the test results has been performed by Paul Arthur Jensen, PhD, PE, CIH (Final Approach Inc., Port Orange, FL) to calculate the percent pathogen reduction listed above.

Reference: Study ID Number: NG13519-A1 August 2019, "Evaluation of Bioaerosols and UV Angel's Prototype Device"

 Reference: Study ID Number: NG13726 October 2019, "Evaluation of Bioaerosols and UV Angel's Prototype Device"

*Reference: April 2021, "Review, Analysis, and Conclusions: Microchem Laboratory Study Reports Titled "Evaluation of Bioaerosols and UV Angel's Prototype Device" (Report Numbers NG13519-A1 and NG13726)"

PERFORMANCE DATA

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Actual performance may differ as a result of end-user environment and application. Refer to website for the latest IES file updates.

Fixture	CCT	Delivered Lumens	LED Input Watts	Lumens/Watt
HFLV	30K	5822	58	100
	35K	5946	58	103
	40K	6457	58	111
	50K	6341	58	109

HEALTHCARE LIGHTING®

EvolAIR UV™ HFLV DN
UV Air Disinfection Luminaire with Downlight

Type:

Project:

CATALOG NUMBER
Example: HFLV DN UV254 MVOLT 40K 80CRI GWAM

Series		Light Function		Wavelength		Voltage		LED Color Temperature		LED Color Rendering	
HFLV	Healthcare UV Air Disinfection Luminaire	DN	Downlight	UV254	Ultraviolet 254nm	MVOLT	120-277 Volt	30K	3000K	80CRI	80CRI
								35K	3500K		
								40K	4000K		
								50K	5000K		

Frame Kit		Mount Adapter		Finish		US Made	
<blank>	Not Required	<blank>	Not Required	GWAM	Gloss White Antimicrobial	<blank>	Not Required
PFHFLV	Plaster Frame Kit for HFLV (Hard Ceiliing Mount)	HFLSKGWAM	Surface Mount Kit Gloss White Antimicrobial Finish	MBKAM	Matte Black Antimicrobial	BAA*	Buy America(n) Act Compliant
		HFLSKMBKAM	Surface Mount Kit Matte Black Antimicrobial Finish			*Applies to 35K & 40K w/ 80CRI. All other CCT options are automatically BAA compliant.	
		HFLCK72	Suspension Cable Kit 72" (1.8M) Long (Includes Surface Mount Kit & Cable Kit)				
		HFLCK120	Suspension Cable Kit 120" (3.1M) Long (Includes Surface Mount Kit & Cable Kit)				
		HFLCK180	Suspension Cable Kit 180" (4.6M) Long (Includes Surface Mount Kit & Cable Kit)				

For sale only in the United States of America and Mexico.

Meets California ozone emissions limits. California Air Resources Board (CARB) certified.

REPLACEMENT PART ORDERING
Example: RK8HFLV KIT

Series		Part	
RK8HFLV	HFLV Replacement Parts	FILTER	Filter Only
		LAMP	UV254 Lamp Only
		KIT	Filter & UV254 Lamp

nLIGHT® CONTROLS

nLight® UV controls solutions are available for specific applications, please contact your Acuity Brands representative for more information.

SPECIFICATIONS

Housing
Aluminum housing construction.

Lens
Non-yellowing acrylic downlight panel

Finish
Painted in durable polyester powder coat paint with antimicrobial additive. Gloss white and matte black colors available.

Mounting
Lay-in grid mounting standard for recess T-grid acoustical ceilings. Fits standard 9/16" (14.3mm), 15/16" (23.8mm), and 1" (25.4mm) acoustical ceiling grids. Hard ceiling recessed mounting requires plaster frame kit. Hard ceiling surface mounting requires surface mount kit. Suspension cable kits also available for use with the surface mount kit. All kits require assembly in the field. Reference installation instructions for more information.

Source
UV: UV-C, TUV PL-L 95 watt lamp with 4-pin 2G11 base, 90 watt dosage at 254 nanometers 300J/m2 (Lamp supplied with HFLV luminaire purchase.)

LED: Four (4) static white color temperatures: 3000K, 3500K, 4000K, 5000K; standard CRI >80. All LED within a 2.5 step MacAdam ellipse.

Expected Lamp Life
UV: 9000 hours per Philips Lighting TUV PL-L 95W/4P HO lamp technical data

LED: Rated 60,000 hours (L80) at 25° ambient temperature.

Ballast
Integral 95 watt Class P ballast developed for use with UV

Driver
Integral 50 watt Class P 1% dimming driver

Power Supply (Fan)
Integral 12 VDC Class 2 power supply

Voltage
120-277 VAC in 50/60Hz

Input Current (Maximum)
1.0A at 120V for UV system; 0.45A for LED downlight
0.44A at 277V for UV system; 0.20A for LED downlight

Filter
Polyester filter

Air Flow Rate
50 CFM (1.4 CMM)

Sound
35-42 dB in laboratory chamber. Actual sound level will vary depending on application. Typical office is 47-49 dB.

Wattage
115 watts for UV system
58 watts for LED downlight

Circuits
Dual circuit standard with shared neutral

Controls
0-10V dimming capable with infield wiring procedure. Consult installation instructions for additional guidelines and details. nLight® controls solutions are available for specific applications, please contact your Acuity Brands representative for more information.

Fixture Weight
(Weight may vary depending upon options or accessories selected.)
HFLV DN: 22.00 lbs (9.98 kg)

Environment
Indoor dry location only

Ambient Operating Temperature
+68°F (+20°C) to +122°F (+50°C)

Ambient Operating Humidity
<80% relative humidity non-condensing

Disclaimer
All references to "disinfection" are referring generally to the reduction of pathogenic bioburden and are not intended to refer to any specific definition of the term as may be used for other purposes by the U.S. Food and Drug Administration or the U.S. Environmental Protection Agency. The disinfection technology as incorporated in Acuity Brands products is not intended for use in the cure, mitigation or prevention of disease and is not certified or approved for use as or for the disinfection of medical devices by the FDA. Reduction of the pathogenic bioburden is a function of fixture run time, distance to the UV light source, air flow, room size, shadow areas and/or other factors, and the level of reduction will vary within a specific space.

Antimicrobial properties are built in to inhibit the growth of bacteria that may affect this product. The antimicrobial properties do not protect users or others against bacteria, viruses, germs or other pathogens.

Certification
ETL Listed, Certified to UL STD 507 and CAN/CSA STD C22.2 No. 113

Tested to be compliant with FCC Part 15 Class A

Registration Information
EPA Est. No.: 95756-GA-1
EPA Est. No.: 89661-MEX-1

Produced for:
Acuity Brands lighting, Inc.
One Lithonia Way
Conyers, GA 30012

For sale only in the United States of America and Mexico.

Meets California ozone emissions limits. California Air Resources Board (CARB) certified.

Buy American
Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

Warranty
5-year limited warranty for UV device housing, mechanical, white light-emitting components, ballast, and driver. 2-year limited warranty on UV device fans, switches, and other electrical components. No warranty on UV-C lamps and filters. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
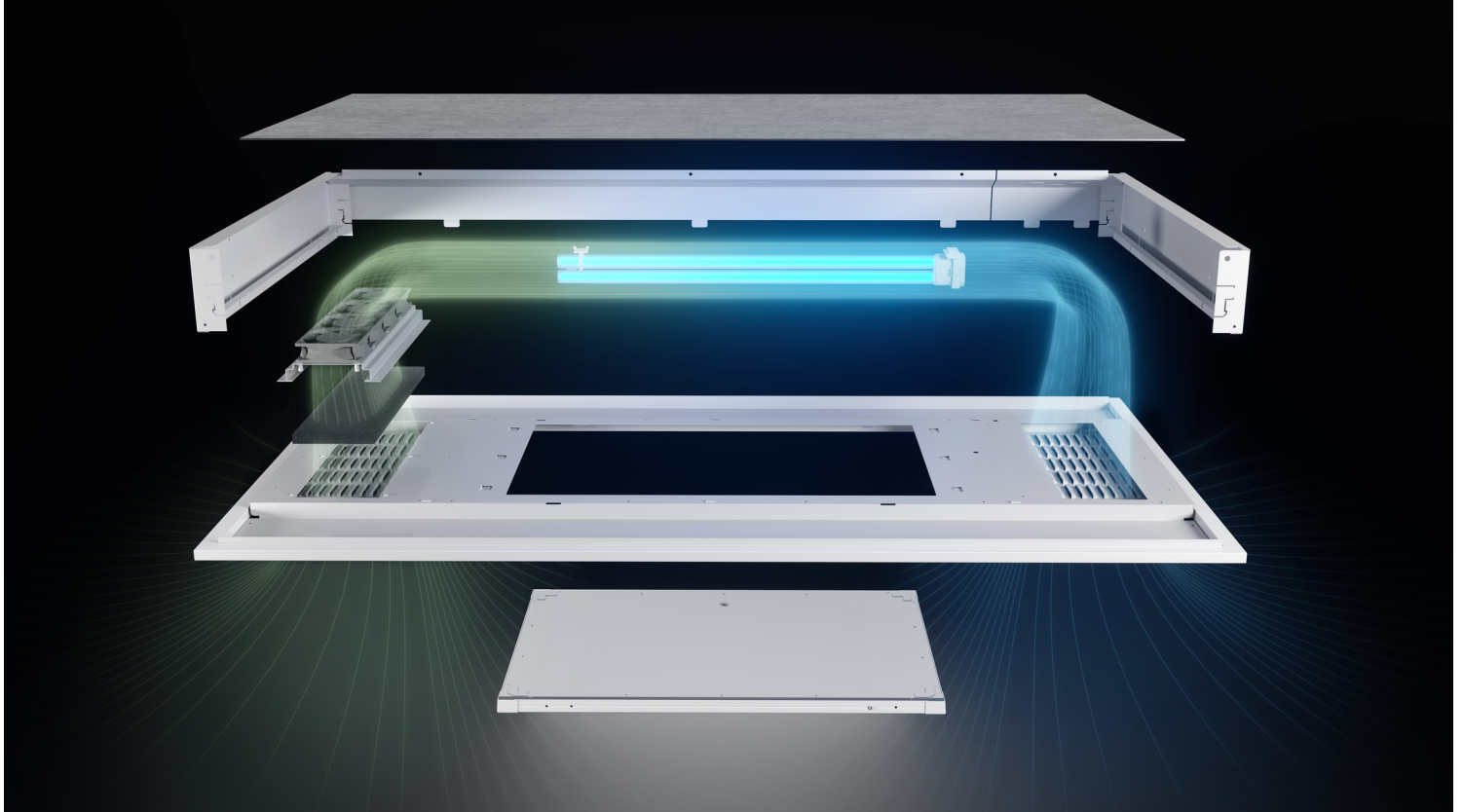Specifications subject to change without notice.

Consult installation instructions for additional guidelines and details.

Precautionary Statements

⚠ WARNING
- Skin or eye damage may result from directly viewing the light produced by the lamp in this apparatus.
- Always disconnect power before relamping or servicing.
- Replace Lamp with TUV PL-L 95W. manufactured by Philips.

TECHNOLOGY

The patented UV light technology draws air containing viruses, bacteria, and fungi into sealed UV-C chamber at 50cfm (1.4 CMM) where they are neutralized. Treated air is then circulated back out into the space. The unit treats a 100 sq. ft. room (10' L x 10' W x 8' H) (3.0M L x 3.0M W x 2.4M H), approximately four times every hour when operated 24/7/365.
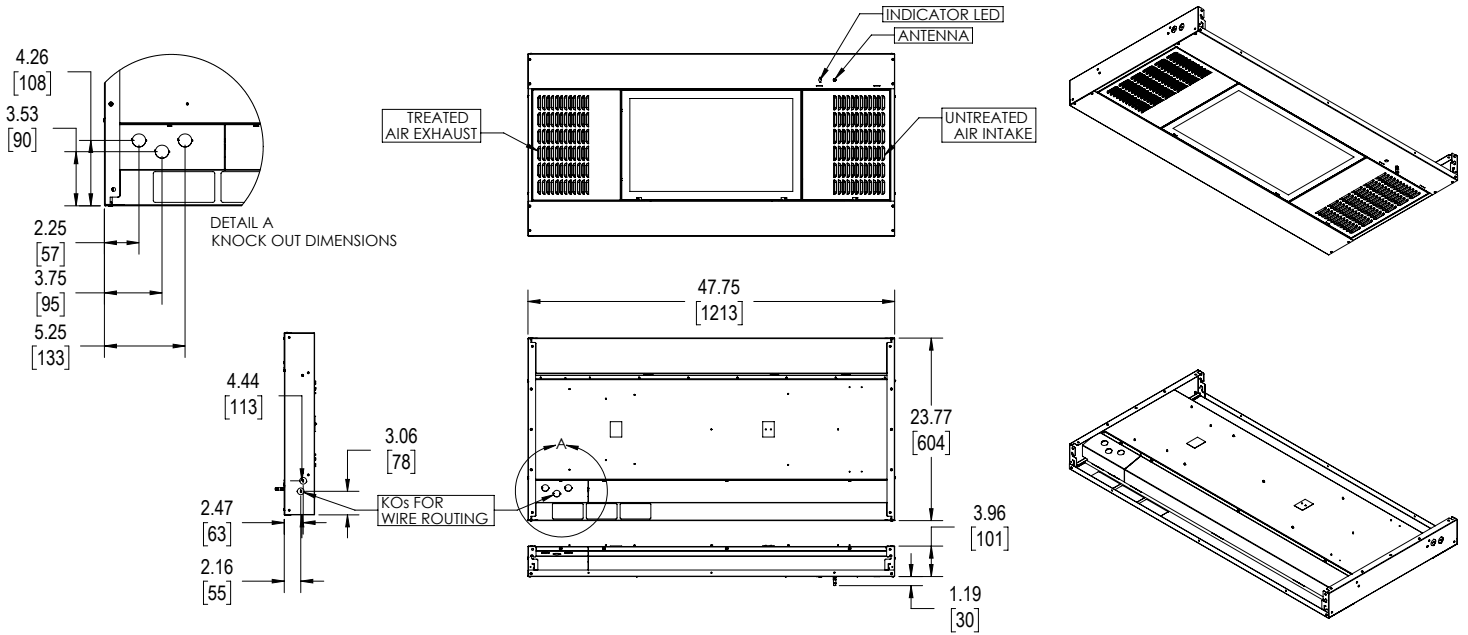
DIMENSIONS

Dimensions noted in US imperial inches with metric system millimeters in brackets

HFLV DN
Base fixture used for recessed grid ceiling applications and for integrating with frame kits and mount adapter accessories.
(Reference installation instructions for additional details on orientation and mounting of units within a space.)
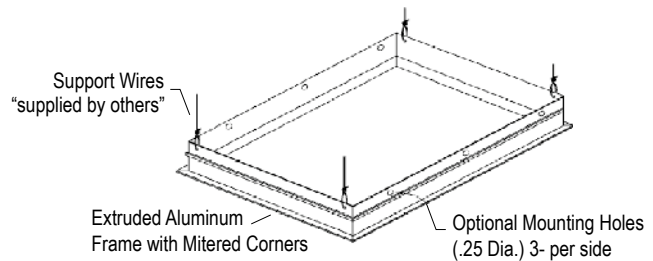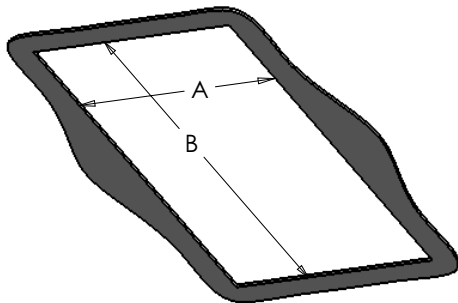

INDICATOR LED
ANTENNA
TREATED AIR EXHAUST
UNTREATED AIR INTAKE

4.26 [108]
3.53 [90]
2.25 [57]
3.75 [95]
5.25 [133]

DETAIL A
KNOCK OUT DIMENSIONS

4.44 [113]
3.06 [78]
2.47 [63]
2.16 [55]

KOs FOR WIRE ROUTING

47.75 [1213]
23.77 [604]
3.96 [101]
1.19 [30]

PFHFLV Plaster Frame Kit
For recessed hard ceiling mount applications.

Rough-In Dimensions

Size	A (Inches)	B (Inches)	A (Millimeters)	B (Millimeters)
2X4	24-3/8"	48-3/8"	619mm	1229mm

A
B

Support Wires "supplied by others"

Extruded Aluminum Frame with Mitered Corners
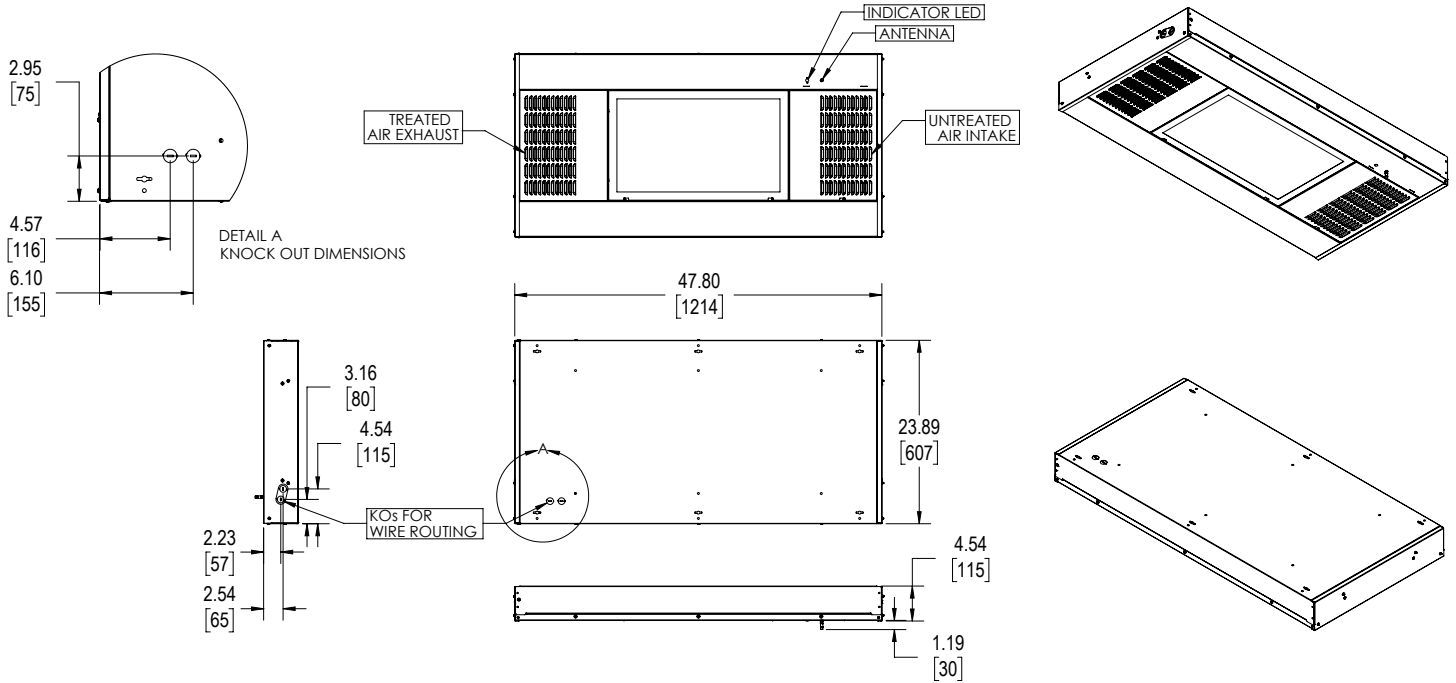
Optional Mounting Holes (.25 Dia.) 3- per side

DIMENSIONS (Continued)

Dimensions noted in US imperial inches with metric system millimeters in brackets

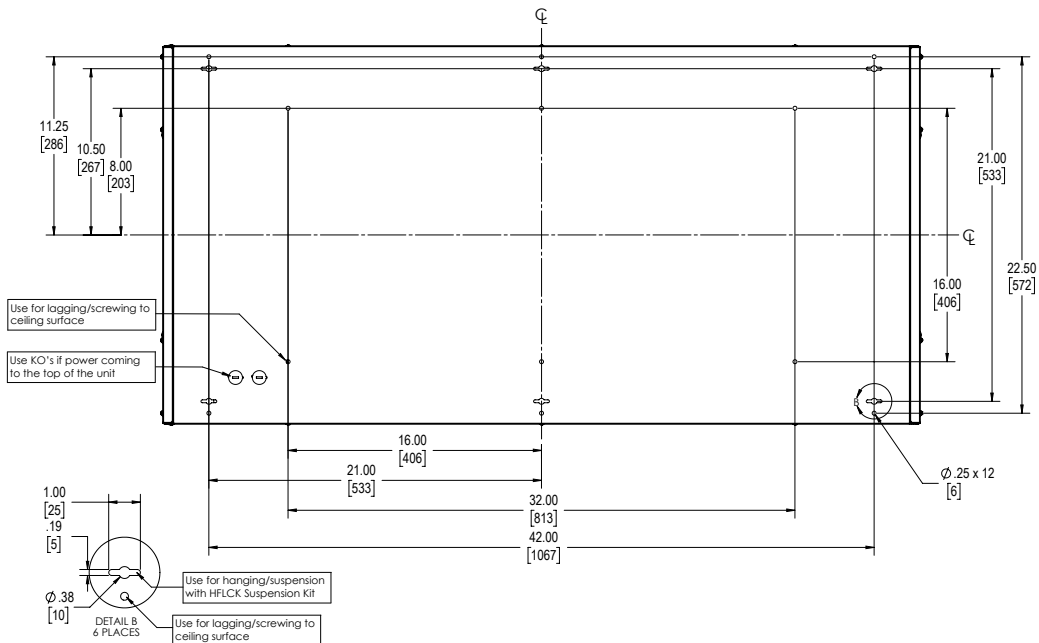### HFLSK Surface Mount Adapter
For surface hard ceiling mount applications or for use with suspension mount adapter accessories.

2.95 [75]

4.57 [116]

6.10 [155]

DETAIL A
KNOCK OUT DIMENSIONS

INDICATOR LED
ANTENNA

TREATED AIR EXHAUST

UNTREATED AIR INTAKE

47.80 [1214]

23.89 [607]

3.16 [80]

4.54 [115]

2.23 [57]

2.54 [65]

KOs FOR WIRE ROUTING

4.54 [115]

1.19 [30]

HFLSK Mount Hole Pattern
Mount hardware "supplied by others". Size to support a minimum of 60 lbs (27.2 kg) load.

11.25 [286]

10.50 [267]

8.00 [203]

21.00 [533]

16.00 [406]

22.50 [572]

Use for lagging/screwing to ceiling surface

Use KO's if power coming to the top of the unit

16.00 [406]

21.00 [533]

32.00 [813]

42.00 [1067]

Ø .25 x 12 [6]

1.00 [25]

.19 [5]

Ø .38 [10]

DETAIL B
6 PLACES

Use for hanging/suspension with HFLCK Suspension Kit
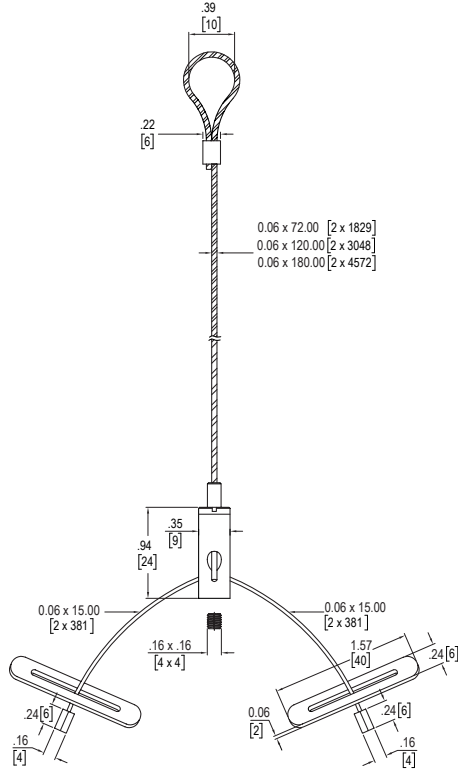
Use for lagging/screwing to ceiling surface

DIMENSIONS (Continued)

Dimensions noted in US imperial inches with metric system millimeters in brackets

HFLCK Suspension Cable Kit
For pendant hanging fixture only. Cannot be used as tethers for supporting recessed fixture.
Includes two (2) gripper assemblies and cable per kit.
*Note: HFLCK requires HFLSK Surface Mount Kit to be available for making connection.

INDICATOR LIGHT

Embedded LED Staus Indicator Light
Clear indication of the status of the unit

	LED Indicator	Mode	Description
☀	Flashing Yellow	Power Up	Single flash when power is applied.
●	Solid Green	Normal	UV lamp and fans are operating correctly, the door is closed properly, and the system is in normal operating mode.
○	Solid Yellow	Warning	The UV lamp nearing end of 9000 hour life. Replace lamp filter with replacement kit part number noted in spec sheet or manual.
✳	Flashing Green	Maintenance	1 second on, 1 second off indication during service with door open.
✳	Flashing Red	Fault	Reoccurring every 5 seconds: Lamp fault - 1 flash Control board fault - 2 flashes Fan fault - 3 flashes