LCOM-DFX

LED - Strip Luminaire with 365DisInFx™ UVA Technology

VISIONEERING® | a **LEVITON** brand

Project:	Catalogue #:	Type:

Notes:

Product Description

The Visioneering LCOM-DFX Series is a low-profile linear LED luminaire designed for efficacious illumination of general commercial spaces. It features a captive semiround acrylic lens and 365DisInFxTM UVA technology to help in the inactivation of surface bacteria where people are present and conventional lighting is needed.

Technical Summary

Test Results: 365DisInFx™ UVA disinfection technology was tested using in-vitro methods (as described in Livingston, Kvam[1,2]) which resulted in 99.7% reduction in MRSA on surfaces exposed to 3W/m2 of 365nm UVA over a single 8-hour period. Results of this testing also showed significant reduction over a similar exposure period of certain common pathogens including Staphylococcus aureus, Enterococcus faecalis, Escherichia coli, Acinetobacter baumannii, Pseudomonas aeruginosa, Candida albicans and auris, associated with Hospital Acquired Infections (HAIs). Photobiological science and mathematical modeling enables us to calculate expected inactivation rates for 24-hour continuous operation of the 365DisInFx™ UVA technology.

Safety: 24-hour dosage is designed to operate below human health exposure limits per IEC 62471 Photobiological Safety for Lamps and Lamp Systems standard and American Conference of Governmental Industrial Hygienists (ACGIH®) TLVs® guidelines.

Disinfection Light Source: 365nm UVA light emitted is invisible to the human eye and does not impact CCT or CRI.

Light Control: Fixture LED white light source may be controlled by wired or wireless controls and is dimmable to 1%. The UVA disinfection light source has a fixed output and operates continuously on a separate circuit.

Optical System

Ribbed frosted acrylic diffuser, specially formulated for enhanced UV transmission and resistance. Captive diffuser is secured with tamper resistant brackets. Indirect reflectors are precision formed and contoured to provide soft, low-glare, indirect illumination, while maintaining high-efficiency and a wide, uniform light distribution.

Mounting

Holes are provided for surface mounted applications. Consult DFX application guide for spacing information.

Construction

Precision-formed steel housing assembly. Standard downlight aperture is rectangular opening (see options for oval aperture).

Finish

UV resistant antimicrobial white polyester painted housing.

Electrical

Long life white LEDs coupled with high efficiency drivers provide quality illumination. Rated to deliver L80 lumen performance >50,000 hrs.

Warranty

5 year limited warranty on visible light portion of fixture.

Caution

UVA emitted from this product. Install in compliance with manufacturer instructions to prevent risk of personal injury from UV radiation.

Approvals

- Approved to CSA/UL standards. UL listed for insulated ceilings.
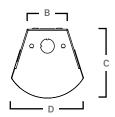- Tested in accordance to IESNA LM-79.
- Suitable for damp locations.

c(UL)us LISTED | DAMP LOC | RoHS COMPL | TAA COMPL

Dimensions

Top View

End View

Size	A	B	C	D
24"	23 1/8"	2.574"	4.28"	4.56"
48"	45 3/16"	2.574"	4.28"	4.56"

Consult installation guide for exact dimensions.

Notes:
1. Livingston SH, Cadnum JL, Benner KJ, Donskey CJ (2020) Efficacy of an ultraviolet-A lighting system for continuous decontamination of health care-associated pathogens on surfaces. Am. J. Infect. Control 48: 337-339. https://doi.org/10.1016/j.ajic.2019.08.003
• Inoculated steel disk carriers, modification of ASTM E-2197-02
• using a benchtop device that delivered the 3W/m² irradiance
2. Kvam E, Benner K (2017) Disinfection via LED Lighting: summary of mechanism and results for 365nm-mediated inactivation of microbes. GE Global Research Technical Information Series 2017GRC0545, GE Confidential
(Class 3) Kvam E, Benner K. Mechanistic insights into UV-A mediated bacterial disinfection via endogenous photosensitizers. Journal of Photochemistry and Photobiology B: Biology. 2020;209:111899. doi:10.1016/j.jphotobiol.2020.111899.
• Inoculated steel disk carriers, modification of ASTM E-2197-02
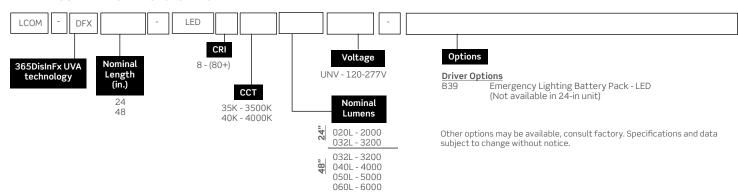• using a benchtop device that delivered the 3W/m² irradiance

Project:	Catalogue #:	Type:
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Order Key

EXAMPLE: LCOM-DFX48- LED840K044LUNV

LCOM	-	DFX		-	LED					-	

365DisInFx UVA technology

Nominal Length (in.)
24
48

CRI
8 - (80+)

CCT
35K - 3500K
40K - 4000K

Voltage
UNV - 120-277V

Nominal Lumens

24"
020L - 2000
032L - 3200

48"
032L - 3200
040L - 4000
050L - 5000
060L - 6000

Options

Driver Options
B39   Emergency Lighting Battery Pack - LED
        (Not available in 24-in unit)

Other options may be available, consult factory. Specifications and data subject to change without notice.

Performance Data

LED Performance Data					
	White LED				
Size	Nominal Lumens	Delivered Lumens	Watts	Lumens Per Watt	UV Watts
24	2000	2039	15.6	131	15
	3200	3127	26.7	117.5	15
48	3200	3452	24.7	139.7	30
	4000	4334	32.2	134	30
	5000	5472	43.2	126	30
	6000	6549	54.6	120	30

Values based on 840K with standard lens at 25C

Make an Informed Decision

- UV radiation can pose a risk of personal injury. Overexposure can result in damage to eyes, bare skin, and immune system. To reduce risk of overexposure, equipment must be installed in accordance with site planning and application recommendations.
- UV solutions are intended for common high traffic spaces and not recommended for dwellings or home use.
- Installation of the devices must be performed by qualified professionals as detailed in the device installation guide.
- To allow for occupancy, 365DisInFx™ UVA products comply with IEC 62471 Photobiological Safety for Lamps and Lamp Systems standard and American Conference of American Hygienists (ACGIH®) TLVs®.
- UV products are meant to be used in conjunction with other protective measures like manual cleaning and the use of proper PPE. They are not a substitute for other measures.
- 365DisInFx™ UVA products are not intended to be used as a medical device.
- When combining two or more UV solutions, regardless of the manufacturer, please consult a trained product application representative to ensure the total irradiance (UV dose) does not exceed recommended human exposure limits. To the extent UV solutions are combined, it may affect the deactivation and inactivation rates.
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