365DisInFx™ LED Luminaires

LBU Recessed Lumaire with 365DisInFx™ UVA technology

LBU24 Series - Back lit T-Grid, Disinfection Series D-Light

Product Description:
Current’s 365DisInFx™ LBU Series Recessed LED Luminaires offer a conventional look similar to the LBT Series with significantly more capability. In addition to delivering a smooth uniform lit appearance with LED technology, the LBU series also provides Current’s 365DisInFx™ UVA technology to help in the inactivation of surface bacteria where people are present and conventional lighting is needed.

Test Results:
365DisInFx™ UVA disinfection technology was tested using in-vitro methods (as described in Livingston, Kvam¹,²) 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 American 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 5%. The UVA disinfection lightsource has a fixed output and operates continuously.

Technical Summary:

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Notes:


• Inoculated steel disk carriers, modification of ASTM E-2197-02
• Using a benchtop device that delivered the 3W/m² irradiance

Product Availability:
Product Ordering: Product is commercially available and can be ordered for general use.
Ordering Number Logic

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Notes:
- LBU = 365DisInFx™
- Backlit UVA
- Fixtures of 2’ x 4’ is 4th Generation
- 2’ x 4’ LBU24 Series

Photometric Data: 365DisInFx™ 2’ x 4’ LBU24 Series

Polar Graph:
- Maximum Candela = 2.505
- Located At Horizontal Angle = 270, Vertical Angle = 1

White light + UVA output

Contact your Sales representative for UVA photometric data
Product Specifications:

LED & Optical Assembly

- **CRI:** >80+
- **R9:** >0
- **Color Consistency:** Central limit 4-Step MacAdam Ellipse with LED recipe approach for tight unit to unit color control
- **Rated Luminaire Lumen Depreciation:** L85@50,000 Hours
- **UV Output:** 365nm +/- 5nm

Electrical

- **Input Voltage:** 120-277 VAC
- **Input Frequency:** 50/60 Hz
- **System Power Factor (PF):** >0.9*
- **Total Harmonic Distortion (THD):** <20%*
- **LED Driver Type:** Class 2
  *PF and THD may vary with options*

Ratings & Evaluations

- **Operating Temperature:** -20°C to +25°C
- **Storage Temperature:** -40°C to +70°C
- **Surge Protection:** ANSI C82.77 Compliant
- **Location:** Damp
- **Safety:** UL/cUL Classified
- **Environmental:** Compliant with material restrictions of RoHS

Construction & Finish

- **Housing:** Durable, long lasting construction. Steel, electrogalvanized, powder-coated
- **Lensing:** UV rated, tempered glass diffuser
- **Paint:** Highly reflective white gloss finish, antimicrobial paint
- **Weight:** <35 pounds

Design Life & Warranty:

- **Warranty:** 5 Year on visible light portion of fixture
- **Driver Design Lifetime:** >10 year life of continuous operation, >100,000 hour design parameters
- **Reliability Testing:** Components and systems evaluation

Controls

- **Standard Dimming:** 0-10VDC ANSI C137.x compliant
- **Minimum Dimming:** 5% of rated lumens
- **Optional Dimming:** Contact Manufacturer
- **Wireless Networking and Sensing Device Options:** Daintree Enterprise Wireless enabled

Power Addition for Controls: <2 watts
*Contact Factory for specific option availability

Mounting

- **Typical Mounting:** Fits standard T-Bar grid (dropceilings)
- **Wiring Access:** ½” trade-size KOs on a removable access plate provided
- **T-grid Clips:** T-grid clips included on fixture body, with holes for seismic wires
- **Surface Mounting:** Surface mount kit available

Accessories & Options:

- **Contact your GE Current, a Daintree company sales representative for available options.** For more information and access to all of our resources, including our design tools, visit: [www.gecurrent.com](http://www.gecurrent.com)

Make An Informed Decision

- UV radiation can pose a risk of personal injury. Overexposure can result in damage to eyes and bare skin. To reduce risk of overexposure, equipment must be installed in accordance with manufacturer’s site planning and application recommendations, including minimum ceiling height restrictions.
- UV solutions are intended for common high traffic spaces and not recommended for dwellings or home use.
- Installation of the devices should be performed by qualified professionals as detailed in Current’s installation guide.
- To allow for occupancy during use, Current products comply with IEC 62471 – Photobiological Safety of Lamps and Lamp Systems standards and American Conference of Governmental Industrial Hygienists (ACGIH®) TLVs® guidelines when installed as directed.
- Current’s 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.
- Current products are not intended to be used as a medical device.
- If combining two or more UV solutions, whether from GE Current, a Daintree company and/or other manufacturers, 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 impact inactivation rates.

CAUTION

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