CRUI-DFX

LED - Recessed Cleanroom Luminaire with 365DisInFx™ and WavePort™ Technologies

CERTOLUX a LEVITON

Project:	Catalog#:	Туре:
Notes:		

Product Description

The CRUi-DFX series provides a UVA source from an inset door luminaire to provide a simple and effective way of adding surface disinfection to clean rooms. It also has advanced clean room features to provide uncompromising illumination for a wide variety of applications. It is certified dust-tight and water resistant to IP65 for frequent rigorous cleaning practices. The mouning is universal for 15/16", 1.0" and 1.5" T-bar grid and flanged installations. The CRUI-DFX featuring Leviton's WavePort™ technology harnesses the power of 365DisInFx to kill bacteria while delivering superior white light.

Feature Options

- 2x2 Standard Size for Grid Ceilings
- BIOS® SkyBlue®

- Red and Amber LEDs
- High CRI (80+ and 90+)

Housing

Precision formed, seam welded, one-piece, hole-free construction. 20 gauge cold rolled steel standard. Rigid 18 gauge flange with welded and rounded corners for safety. Stainless Steel and Aluminum are available options. 5 Stage pretreatement and gloss white polyester powder coated after fabrication. ASTM B117 1000hr Salt Spray tested.

Door Frame

Inset one-piece door frame, fabricated from 18 gauge, cold rolled steel with welded corners. Countersunk flat head, stainless steel, captive fasteners with integral silicone o-rings. Door frame is removable, reversible, and hinged by stainless steel aircraft cables. Highly resilient and chemical resistant CertaSeal microcellular closed-cell gasket seals door frame to housing.

Lens & Lens Retention

Standard lens; Impact resistant 0.125" thick diffuse symmetric acrylic lens (DSA). Smooth external surface for easy cleaning. Sealed to doorframe with RTV silicone sealant and retained by continuous perimeter brackets. UVA transmissive and resistant materials used in DFX aperture. See order code for other options.

Gasket Systems

Triple gasketed: Lens: RTV 100% pure silicone seals lens to door. Door: Highly resilient and chemical resistant CertaSeal microcellular closed-cell gasket seals door frame to the housing. Housing: Closed cell neoprene gasket provided to seal flange to ceiling. Door screws: Silicone o-rings with special sealing flat-head screws.

LED

LED board modules are high efficiency and closely regulated to maintain CRI, color consistency, lumen performance, and efficacy. Select from 3000K, 3500K, 4000K, and 5000K color temperatures with a color consistency of 3 SDCM, standard 80 CRI, optional 90 CRI. Tunable White CCT range is 2700-6500K. Lifetime L90 is greater than 60,000 hrs. Modules are field replaceable and commercially available. Optional amber and red LEDs arrays available alone or in combination with white LEDs. Tunable White and Bios SkyBlue® options are also available. See specific CRUi-Red & Amber spec sheet <a href="https://example.com/heres/bessels/b

Electrical

The standard electronic driver is constant current, programmable and dimmable to 1% using a 0-10V protocol. High efficiency (>85%) and low THD (<10%). Certified to FCC Part 15, Class A. 120-277Vac or 347Vac, 50/60hz. See "Options" for Lutron™ or DALI driver choices. Internal Emergency Drivers are serviceable from the room side unless otherwise noted. Each LED color is separately circuited.

Finish

5 Stage pretreatement and gloss white polyester powder coated after fabrication. ASTM B117 1000hr Salt Spray tested. Stainless Steel is available with a choice of brushed #4 polished finish or gloss white polyester powder coated.

Installation

Flange installation is supported by swing style mounting brackets. Bracket vertical range is 1.3-2.9 inches. Grid installation suitable for 1" and 1.5" T-Bar NEMA LE4 Type G ceilings. See ordering key for use with 2" T-Bar Grid systems. (option C57) Consult factory for compatibility with non-standard grid systems). Ambient operating temperture: -4°F (-20°C) to 104°F (40°C).

Safety

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. This fixture has assigned to Risk Group 0 (Zero) per this standard. *Risk Group 0 (Zero) is the lowest test group and requires no special warnings or cautions. See the Application Guide for proper installation and use. UVA emitted from this product. Install in compliance with manufacturer instructions to prevent risk of personal injury from UV radiation.

Listings, Certifications and Ratings

ETL listed for wet locations under covered ceiling (CAN & USA, ANSI/UL1598 & UL8750). Recessed Type IC for insulated ceilings. NSF2 for Splash zone and non-food zones (See option X5 for Food Zone certification). IEC60529 IP65 (Certified dust-tight and resistant to jets of water). Cleanroom classified ISO3-8. EU GMP Grade A, Suitable for Biosafety BSL1-2. (See overlapping door for BSL1-3) Compliant with CCEA requirements. Rated for 2500psi washdown conditions. ETL Listed to UL8802 Germicidal Systems, IEC60598 IP65 Certified. EPA #xxxx

Warrant

5 year limited warranty. For complete warranty,



Approvals

• Certified for safety by ETL and is suitable for continuous, 24-hour use.

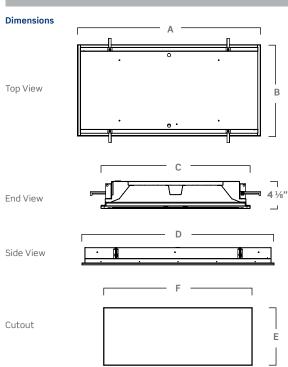












	Dimensions (inch) & Weights						
	Α	В	С	D	Е	F	Weight
2x2	23.75	23.75	22.69	22.88	22.69	22.88	29 lbs.
2x4	47.75	23.75	22.69	46.75	22.69	46.75	50 lbs.

Consult installation guide for exact dimensions.

* 365DisInFX™ is a trademark of Current Lighting Solutions, LLC.

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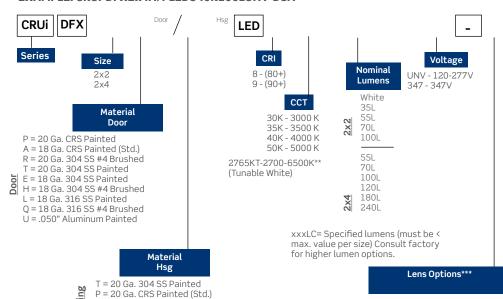
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Order Kev

EXAMPLE: CRUi-DFX2x4A/PLED840K100LUNV-DSA

L = 18 Ga. SS #316 Painted

U = .050" Aluminum Painted



(DSA Standard)

Diffuse Symmetric Acrylic (Std.) P11 .156" Prismatic Acrylic (pattern #19, inverted) .125" Prismatic Acrylic P13 (pattern #12, inverted) P15 .140" Prismatic High Impact Acrylic (pattern #12, inverted) .125" Clear Polycarbonate P103 w/Diffuse inside layer

C/F Consult Factory for glass and other lens options ***Lens choices for white light apertures. Center, disinfection

aperture lens is unchanged.

Driver Options

DSA

B02 Dimming Addressable Digital (DALI) B39 Emergency Bat. Pack -LED 10 Watts B39(ST) Emergency Bat. Pack, Self Testing -LED 10

Wiring Options
V25 Radio Frequency Filter Two Circuit Switching V55 Sealed wireway

V68 Microwave Occupancy Sensor

V114(BI01) Bios Dynamic Circadian LED + Bio-Dimming V114(BI02) Bios Static Circadian LED

Construction Options
C57 Hsg. For 2" T-bar (Consult factory for

compatibility)

Finish Options (Gloss White Standard) Gloss White Antimicrobial

C77 White Stainless Steel Door Screws

Accessories

Install Frame, (Typ. for wet plaster ceilings) Continuous Row Mtg. -Not Required for Grid M70 M46

* Standard emergency battery pack options are internal and serviced from the room side. The exception is for some 2x2 wattages may have remote battery packs. Consult factory for details regarding 2x2 with emergency pack options.

** When Selecting 2765KT, if a tunable white-compatible control is not selected the luminaire will come standards with two sets of 0-10V wires for dimming and color tuning. For compatible control options please consult factory.

	Performance Data							
	White LED Performance*							
Size	Nominal Lumens Order Code	Lumens (4000K)	Watts	Efficacy	UVA Watts			
	35L	3527	27.5	128	14			
2x2	55L	5544	45	123	14			
	70L	7083	59.2	120	14			
	100L	10056	84.3	119	14			
	55L	5589	43.1	130	29			
	70L	7055	55	128	29			
2x4	100L	10056	80.6	125	29			
	120L	12012	98.3	122	29			
	180L	18076	149.4	121	29			

^{*} Lumen values are based on 4000K, 80 CRI erformance. See Lumen Multipliers below for other CCT or CRI perfomance data.

Standard White										
80 CRI			90 CRI							
ССТ	Lumen Factor	CRI	R9	Rf	Rg	Lumen Factor	CRI	R9	Rf	Rg
3000	0.95		-	-	-	0.77		-	-	-
3500	0.97		12	85	97	0.80	90	62	91	100
4000	1.00	80	10	84	97	082	90	68	91	101
5000	1.01		10	84	97	0.84		65	91	98



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Photometric Performance

CRUi-DFX-2X4-LED840K120LUNV-DSA

Characteristics				
Luminaire Lumens	12012			
Efficacy Rating	121			
Total Luminaire Watts	99			
Spacing Criterion (0-180)	1.2			
Spacing Criterion (90-270)	1.2			
Spacing Criterion (Diagonal)	1.3			

Luminance Data (cd/sq.m)

Deg

5077

4444

3414

2093

0-Deg

5169

xx51

3623

2875

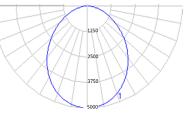
Degrees

XX

65

75

85



	XIII
1250	MAY -
2500	
3750	
5000	

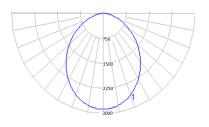
Zonal Lumens			
Zone	Lumens		
0-30	XXXX		
X-XX	XXXX		
X-XX	9893		
0-90	12011		

90-180

CRUi-DFX-2X2-LED840K070LUNV-DSA

Characteristics				
Luminaire Lumens	7083			
Efficacy Rating	120			
Total Luminaire Watts	59			
Spacing Criterion (0-180)	1.2			
Spacing Criterion (90-270)	1.2			
Spacing Criterion (Diagonal)	1.3			

Luminance Data (cd/sq.m)						
Degrees	0-Deg	45- Deg	90- Deg			
XX	XXXX	XXXX	XXXX			
XX	6208	6102	6158			
65	5482	5365	5379			
75	4379	4156	3869			
85	3498	2588	869			



Zonal Lumens	
Zone	Lumens
0-30	2131.89
0-40	3432.31
0-60	5838.59
0-90	7083.29
90-180	0

Lumen Maintenance

90-

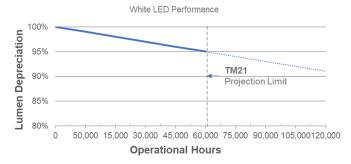
Deg XXXX

5146

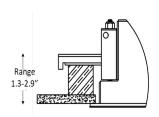
4486

3212

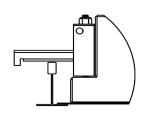
725



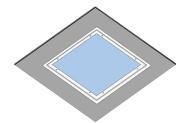
Installation Details



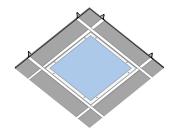
Inset Door Flanged (Framing by others)



Inset Door in T-bar Grid Ceiling



Inset Door Flanged



Inset Door in T-bar Grid Ceiling