# VRUo

LED - Recessed High Abuse/Correctional Luminaire with Overlapping Door Frame

Project: Notes: Catalogue #:



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### Product Description

The VRUo series by Certolux is a vandal-resistant specification-grade recessed luminaire for flanged, grid, or security ceilings. The luminaire also features tamperresistant fasteners to protect from unauthorized fixture penetration and security lenses to maximize impact resistance. The full assembly is tested to exceed the rating of IK10 for impact resistance. For Anti-Ligature applications, select the <u>VRUo-LRC</u>.

# Featured Options

- LED Night Light
- Emergency Lighting Battery Pack
- IP65 Rating

# Approvals

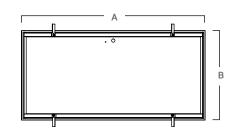
Dimensions

Top View

- Approved to CSA and UL standards.
- UL listed for insulated ceilings, wet locations.













	Dimensions (inch) & Weights							
	А	В	С	D	E	F		
1x4	47 3/4"	11 3/4"	10 11/16"	46 3/4"	10 11/16"	46 3/4"		
2x2	23 3/4"	23 3/4"	22 11/16"	22 7/8"	22 11/16"	22 7/8"		
2x4	47 3/4"	23 3/4"	22 11/16"	46 3/4"	22 11/16"	46 3/4"		

Consult installation guide for exact dimensions.

Housing

Precision die formed and TIG seam welded housing with no post grinding for added strength. Select from multiple materials and gauges to meet application needs. (see product ordering key).

#### Mounting

Flange installation is supported by swing style mounting brackets. Grid installation suitable for 1" and 1.5" T-Bar ceilings. See ordering key for additional 2" T-Bar support (option C57). Suitable for use with metal security ceilings.

#### Door Frame

Single piece precision die formed with specified material (see product ordering key). Corners are TIG welded. Countersunk tamper resistant Torx® head with center pin fasteners made of high strength stainless steel, secures the door fame to the housing. Closed cell foam gasket seals out moisture, dust and air while preventing light leaks. Lenses are secured with continuous hold-down brackets secured by thru-studs.

### LED

Available in three standard colour temperatures 3500K, 4000K, 5000K. Additional LED night light available (consult ordering key).

#### Lens & Lens Retention

Multiple lens choices available (see product key for options). Lens sealed to door frame with continuous retention system and supported with stainless steel aircraft cables.

#### Finish

Polyester powder painted white finish features a high reflectivity coating for improved performance and efficiency.

#### Electrical

Long life LED's coupled with high efficiency drivers provide quality illumination. Rated to deliver an L80 performance >50,000 hours. The standard driver has a THD of <10%. Standard low-voltage dimming (0-10v). All electrical components are CSA or UL approved. A ½" EMT hole is provided for wiring connections. Night light options in white or amber LEDs.

### Warranty

5 year limited warranty. For complete warranty, click here:



Side View

Cutout

End View

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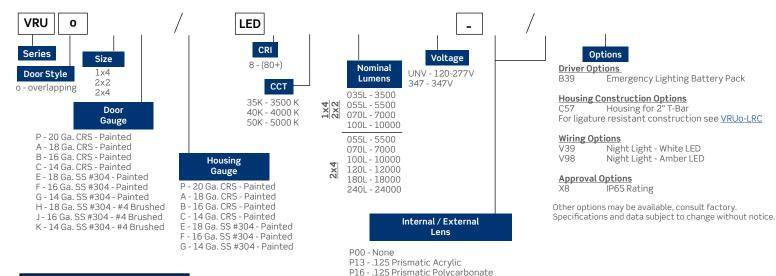


# Order Key

Project:

Notes:

EXAMPLE: VRUo2X2A/PLED840KL070LUNV-P82/P45

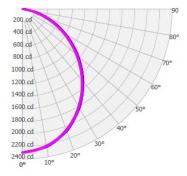


P42 - .156 Prismatic Polycarbonate
P45 - .125 Clear Polycarbonate
P43 - .187 Prismatic Polycarbonate
P46 - .187 Clear Polycarbonate
P08 - .250 Clear Polycarbonate
P47 - .375 Clear Polycarbonate
P48 - .500 Clear Polycarbonate
P48 - .010 Clear Polycarbonate
P82 - .040 White Frosted Acrylic (Not for external use)
Note: Maximum lens thickness combined

Performance Data						
Size	Nominal Lumens	Watts				
	3500	33				
1x4	5500	53				
2x2	7000	70				
	10000	99				
	5500	47				
	7000	61				
2x4	10000	82				
284	12000	101				
	18000	146				
	24000	201				

# Photometrics

IES File:	VRUI-2X2-LED840K055LUNV P82P08
Lumens:	5569
Wattage:	52
Efficacy:	107



Zonal Lumen Summary					
Zone	Lumens	%Lamp			
0° - 30.0°	1723	-43,083.69			

0.0° - 30.0°	1723	-43,083.6%	30.9%
0.0° - 40.0°	2764	-69,091.0%	49.6%
0.0° - 60.0°	4646	-116,155.7%	83.4%
0.0° - 90.0°	5569	-139,225.4%	100.0%

is .625'

#### Average Luminance Table (cd/m2) CP Summary

	0.00°	45.00°	90.00
0.00°	6364	6364	6364
45.00°	5202	5147	5232
55.00°	4664	4579	4681
65.00°	3910	3791	3915
75.00°	2659	2559	2780
85.00°	797	1170	1738

# **Coefficients of Utilization**

ρς		80%			70%			50%	
ρw	70%	50%	30%	70%	50%	30%	70%	50%	30%
0	119	119	119	116	116	116	111	111	111
1	110	105	101	107	103	99	102	99	96
2	100	93	86	98	91	85	93	87	82
3	92	82	74	89	80	73	85	77	71
4	84	73	65	82	72	64	78	69	62
5	78	65	57	76	64	56	72	62	55
6	72	59	50	70	58	50	67	56	49
7	67	54	45	65	53	45	62	51	44
8	62	49	41	61	48	41	58	47	40
9	58	45	37	57	45	37	54	44	36
10	55	42	34	53	41	34	51	40	33