

Maximum Security Low Profile Correctional Behavioral Health Surface Mount Ceiling

PRODUCT SPECIFICATION

The USL series is designed for ceiling surface mount cell lighting in medium, maximum and super max detention facilities. The low profile and superior LED technology make the USL the perfect solution for today's cell lighting requirements. Anti-ligature for patient safety.

## Mounting

Surface mounts to ceiling.

# Clamshell Housing

One piece, die formed cold rolled steel with seams welded and ground smooth and 14 gauge lens retainers. Hinge free housing removes completely from back-plate and hangs freely from either side for ease of installation. 304 Stainless steel available.

# **Back Plate**

16 gauge die-formed cold rolled steel with continuous drop channel providing contraband drop slot / irretrievable blade trap. 304 Stainless steel available.

## Internal Lens

Optic Plus lens (standard) completely hides diode image while providing greater than 90% light transmission.

Polyester powder-coated after phosphate pretreatment for superior adhesion and corrosion resistance. Brushed stainless steel available.

### Hardware

Recessed, stainless steel, tamper-proof fasteners.

## Driver

0-10Vdc 1% dimming, >0.9 PF, <20% THD Factory programmable, Operating temp -40°C Min. to 50°C Max

Driver provided with pre-wired 3-wire self-aligning input power quick disconnect and 2-wire quick disconnect to LED module.

**Housing Material** 

Cold rolled steel

Stainless steel

six

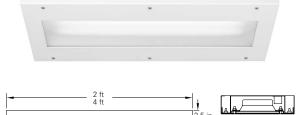
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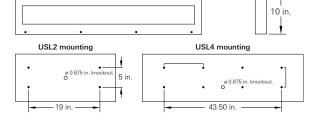
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# Certifications

UL Listed damp or wet location. Covered ceilings only. IP66 Rated, optional IP67 Rating available. Constructed to pass MIL-S-901 Grade A, Type A, High Impact Shock Test and MIL-S-167 Type 1, Vibration Test















Modifications are available to meet custom requirements.

Specifications and dimensions are subject to change without notice.



fifteen

USL	one two three	four	five six	seven eig -	ght nine DM -	ten eleven	twelve thirteen	fourteen fifteen	
one 2 4	Luminaire Size 2 ft. fixture 4 ft. fixture		seven R W	Finish Brushed (Sta White	ainless steel only	<i>(</i> )	twelve AP TP	Door Fasteners Stainless steel allen head with pin Stainless steel torx head with pin	
two	LED Source Refer to the LED Source Ton Page 2 for available op		<b>eight</b> VAR 347	Voltage Variable, 120 347VAC, 60	0-277 V, 50/60H )Нz	lz	PH <b>thirteen</b> K	Phillips head, non-security  Electrical Access  0.875 in. diameter knockout(s), star	ndard
three 30 35 40	Color Temperature 3000K 3500K 4000K		nine DM ten 122	Internal Le	mming, <u>standard</u> ens ED diffusing acry		fourteen D W	UL Listing Damp Location Wet Location (IP 66)	
50 <b>four</b> 80	5000K  CRI 80 CRI		130 53 12 15	.125 in. LED .125 in. K12 .125 in. K12	diffusing Lexan prismatic acrylic prismatic polyca prismatic polyca	rbonate	fifteen 2C CU EM	Options Two-circuit wired Canadian UL Listing Emergency battery backup	
90 <b>five</b> D	90 CRI  Housing Gauge 16 gauge, medium securit	V	16 75 <b>eleven</b>	.187 in. K12	prismatic polyca prismatic tempe	rbonate	FH IMS IP67	Fuse and holder Integral Occ Sensor IP67 Rated	
X U	14 gauge, maximum secu 12 gauge, super max secu	rity	30	.187 in. clea .250 in. clea	r polycarbonate ar polycarbonate ar polycarbonate		NL-LED SBP	Night light, LED (Amber available) 5-100% Adjustability Stainless steel backplate	

.500 in. clear polycarbonate

.187 in. clear tempered glass

.250 in. clear tempered glass

.375 in. clear tempered glass

38

90

92

96

CRI	LED Life
>80	>100,000

LED	3000	К	3500	(	4000	K	5000				
Source (Box 2)			Delivered Lumens	L/W	Delivered Lumens	////		L/W	Input Watts		
2' Fixture											
1W24	2438	106	2475	108	2548	111	2619	114	23.0		
2W45	4484	113	4551	115	4685	118	4816	122	39.6		
2W60	6000	109	6091	111	6270	114	6446	118	54.8		
				4' Fix	ture						
1W25	2534	114	2572	115	2648	119	2722	122	22.3		
1W45	4484	113	4551	115	4685	118	4816	122	39.6		
1W60	6000	109	6091	111	6270	114	6446	118	54.8		
2W80	7723	114	7839	116	8070	119	8296	123	67.6		
2W109	10521	112	10680	114	10994	117	11302	121	93.7		
2W125	12001	109	12181	111	12540	114	12891	118	109.6		

Delivered lumen output calculated using 122 inner lens and 32 (.250" Clear Polycarbonate) outer lens (Highlighted below).

Lens Multiplier - Use the multipliers below to adjust the delivered lumens									
	Inte	ernal Lens		External Lens					
53	.125 in. K12 prismatic ac	rylic		1.00		30	.187" Clear polycarbonate	1.02	
12	.125 in K12 prismatic polycarbonate			.98		32	.250" Clear Polycarbonate	1.00	
15	.156 in. K12 prismatic polycarbonate			.97		36	.375" Clear polycarbonate	.96	
16	.187 in. K12 prismatic polycarbonate		.95		38	.500" Clear polycarbonate	.92		
75	.156 in. C73 prismatic tempered glass		.97		90	.187" Clear tempered glass	1.04		
122	Optic Plus diffusing acrylic		1.00		92 .250" Clear tempered glass		1.03		
9	90 CRI Multiplier .83					96	.375" Clear tempered glass	.99	

# **Specified Output Option**

L.C. Doane programmable drivers allows us to deliver a specific lumen output. If none of the options in the chart above fit your application, let us know the desired lumen output and we will do the rest. See the example how this will be specified.

# **Example Model:**

USL4-XX1SO-40/80-DCW-VARDM-122/32-(XX2/LUMENS)

**LUMENS** = You provide the lumens.

**XX**<sup>1</sup> = We will determine the number of rows.

XX<sup>2</sup> = We will provide the wattage information.

# Typical Cell Using a 2' USL-LED

Grooming							Task					
		24.6	28.0	•31.2	•33.3	•33.4	•31.6	28.4	•24.5	20.8	•17.5	•15.1
	•24.7	29.2	•34.2	•39.0	42.2	42.4	•39.8	•35.1	29.6	24.3	•20.0	• 16.9
•22.	8 27.7	•33.9	41.2	48.1	•52.7	• 53.3	49.5	42.9	•35.3	28.2	•22.6	•18.7
20.1 24.	2 30.1	•37.9	•47.2	•55.9	•62.1	•63.1	58.3	49.7	40.1	•31.4	•24.7	•20.1
20.7 25.	0 31.5	40.1	•50.2	60.0	•66.7	67.4	62.1	•52.7	•42.2	32.8	•25.6	20.8
Room 20.2 24.	2 30.3	38.5	48.0	•57.0	•63.1	•63.9	59.1	50.5	•41.0	32.2	•25.4	20.7
18.9 <sup>•</sup> 22.	4 27.6	•34.3	42.0	49.3	54.0	•54.8	•51.2	44.2	•36.5	29.2	•23.5	•19.5
•17.2 •20.	0 24.1	29.3	•35.0	•40.2	43.7	44.1	41.5	•36.7	30.9	• 25.5	• 21.0	•17.7
15.4 17.	7 20.8	•24.6	28.6	•32.3	•34.6	•34.9	• 33.2	29.8	• 25.8	• 21.8	18.4	• 15.8

Reflectance: 70/70/20 LLF: 0.80 Room Dimension: 11'x7'x8'

# **Calculation Summary**

Label	Units	Avg	Max	Min	Avg/Min	Max/Min
All Points (3' plane)	Fc	34.73	67.40	15.10	2.30	4.46
Grooming	Fc	28.49	41.20	20.10	1.42	2.05
Room	Fc	36.23	67.40	15.10	2.40	4.46
Task	Fc	29.26	39.80	20.80	1.41	1.91