



SO-LED

Correctional High Abuse LED Surface Mount Ceiling Surface

PRODUCT SPECIFICATION

The SO series is designed for use in all levels of correctional facilities and high abuse applications.

Mounting

Surface-mounts to ceiling.

Housing

Die-formed cold rolled steel with seams welded and ground smooth. 304 Stainless steel available.

Door

One piece, die formed cold rolled steel with seams welded and ground smooth and 14 gauge lens retainers. Freedom Hinge™ design permits removal and hinging from either side. 304 Stainless steel available.

Internal Lens

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

Finish

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

Driver

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

Hardware

Recessed, stainless steel, tamper-proof fasteners.

Wiring

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

Certifications

UL Listed damp or wet location.
Covered ceilings only.

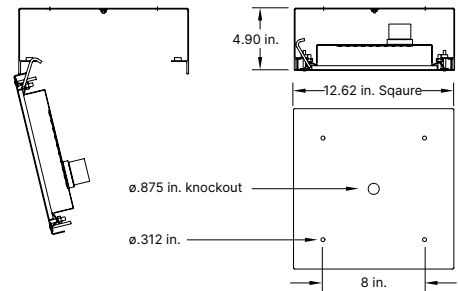
Job Name

Fixture Type

Catalog No.

Approval

Date



one two three four five six seven eight nine ten eleven twelve thirteen fourteen
SO - - / - - DM - / - K -

one LED Source

Refer to the LED Source Table on Page 2 for available options.

two Color Temperature

30 3000K
35 3500K
40 4000K
50 5000K

three CRI

80 80 CRI
90 90 CRI

four Material Gauge

N 18 gauge, minimum security
D 16 gauge, medium security
X 14 gauge, maximum security

five Material

A Aluminum
C Cold rolled steel
S 304 Stainless steel

six Finish

R Brushed (Stainless steel only)
W White

seven Voltage

VAR Variable, 120-277 V, 50/60Hz
347 347VAC, 60Hz

eight Driver

DM 0-10Vdc Dimming, standard

nine Internal Lens

122 Optic Plus LED diffusing acrylic, standard
130 .125 in. LED diffusing Lexan
53 .125 in. K12 prismatic acrylic
12 .125 in K12 prismatic polycarbonate
15 .156 in. K12 prismatic polycarbonate
16 .187 in. K12 prismatic polycarbonate

ten External Lens

30 .187 in. clear polycarbonate
32 .250 in. clear polycarbonate
36 .375 in. clear polycarbonate
38 .500 in. clear polycarbonate
90 .187 in. clear tempered glass
92 .250 in. clear tempered glass
96 .375 in. clear tempered glass

eleven Door Fasteners

AP Stainless steel allen head with pin
TP Stainless steel torx head with pin
PH Phillips, non-security

twelve Electrical Access

K 0.875 in. diameter knockout(s), standard

thirteen UL Listing

D Damp Location
W Wet Location

fourteen Options

AM Anti-microbial coating (exposed areas)
CU Canadian UL Listing
EM Emergency battery back up
FH Fuse and holder

Modifications are available to meet custom requirements.
Specifications and dimensions are subject to change without notice.

CRI	LED Life
>80	>100,000

LED Source (Box 2)	3000K		3500K		4000K		5000K		Input Watts
	Delivered Lumens	L/W	Delivered Lumens	L/W	Delivered Lumens	L/W	Delivered Lumens	L/W	
1' x 1' Fixture									
1W19	1680	98	1706	100	1756	103	1806	106	17.1
1W25	2250	98	2284	99	2351	102	2418	105	23.0
1W31	2769	96	2810	98	2893	101	2975	104	28.7

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					
Internal Lens			External Lens		
122	Optic Plus diffusing acrylic	1.00	30	.187" Clear polycarbonate	1.02
130	.125 in. LED diffusing Lexan	.95	32	.250" Clear Polycarbonate	1.00
53	.125 in. K12 prismatic acrylic	1.00	36	.375" Clear polycarbonate	.96
12	.125 in K12 prismatic polycarbonate	.98	38	.500" Clear polycarbonate	.92
15	.156 in. K12 prismatic polycarbonate	.97	90	.187" Clear tempered glass	1.04
16	.187 in. K12 prismatic polycarbonate	.95	92	.250" Clear tempered glass	1.03
90 CRI Multiplier		.83	96	.375" Clear tempered glass	.99

Specified Output Option

LC 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:

SO-1W**SO**-40/80-DCW-VARDM-122/32-TPKD-(**XX/LUMENS**)

LUMENS = You provide the lumens.

XX = We will provide the wattage information.