

DESCRIPTION

Fail-Safe's development of the asymmetric/symmetric ORM LED represents the latest technology in precise control of light to the surgical task and to the surrounding area, and allows multi-level lighting without changing the character of the lighting distribution. The ORM LED's high efficiency and precise lighting distribution delivers high illumination to the surgical task area. Quality and value are maintained to provide the best performance solution for your design needs.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Mounting

Recessed grid or flange, ceiling mount. Standard 1" or 1 1/2" NEMA Type "G" ceiling systems.

Housing

Die-formed, heavy gauge aluminum, powder coat painted white. Seam-welded construction, absent of holes.

Door

Door is hinged to the housing with two stainless steel aircraft cables.

Fasteners

Captive stainless steel Philips head screws secure door frame to the housing.

Door Frame

Cold rolled steel, painted white, flat inset door standard. Optional brushed stainless steel, flat inset.

Gasket

Closed-cell silicone gasket seals door to housing.

Finish

High gloss, electrostatically applied, white powder coat finish, average minimum reflectance 92%.

Lens

One-piece asymmetric/symmetric acrylic lens. RFI 3/8" square metalized grid, grounded to housing. Silicone gasket around the acrylic lens perimeter. Other lenses available, refer to Ordering Information.

LED

LEDs available in 3000K, 3500K and 4000K, and 5000k with CRI > 85. Projected life is 50,000 hours at 70% lumen maintenance.

Driver

Electronic, standard 0-10V dimming.

Compliance

MIL-STD-461F available with standard drivers (ASY/SYM/RFI or 89BC lens required) and filter(s). Results furnished upon request. See Options for exact catalog nomenclature.

Labels

ETL listed for wet location under covered ceiling, non-IC rated. IP65 rated.



ORM LED

2x2

2x4

1x4

LD4 LED

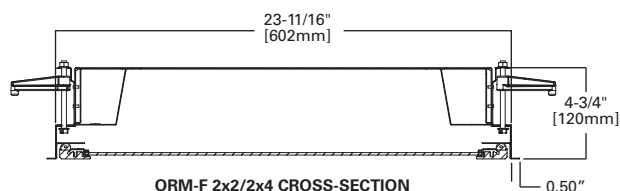
Healthcare: Operating Room

RECESSED FLANGE
RECESSED GRID

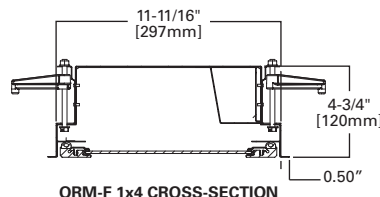
Wet Location

IP65 rated

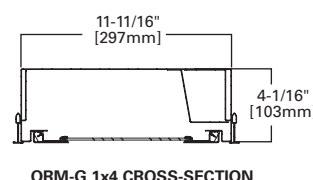
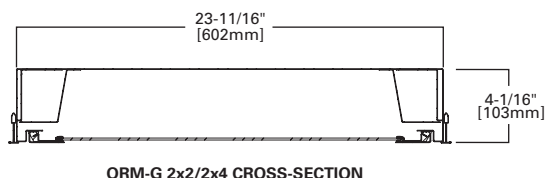
MIL-STD-461F



2x2 ceiling cut-out dimensions: 24" (W) x 24-5/16" (L)
2x4 ceiling cut-out dimensions: 24" (W) x 48-5/16" (L)



1x4 ceiling cut-out dimensions: 12" (W) x 48-5/16" (L)



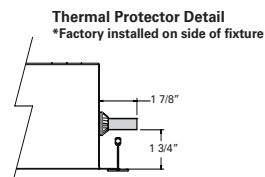
ORDERING INFORMATION

SAMPLE NUMBER: ORM-G-24-4-LD4-6-STD-40-277-ASY/SYM/RFI-EDC2

Product Family	Ceiling Type	Width	Length	No. of LED	Illumination Level	Color Temp.	Voltage	Lens	Driver	No. of Circuits	Door/Finish Options	Options
ORM				LD4								
<p>ORM= Operating Room/ Surgical Suite</p> <p>G=Grid (1" & 1-1/2" T-Bar) F=Flange (Swing-out brackets standard)</p> <p>24=24" Wide 12=12" Wide</p> <p>2=2' Length 4=4' Length</p> <p>LD4=Linear LED, Version 4.0</p> <p>2=(2) LED Modules in cross-section (1' x 4' only) 3=(3) LED Modules in cross-section (1' x 4' only) 4=(4) LED Modules in cross-section (2' x 2', 2' x 4') 6=(6) LED Modules in cross-section (2' x 2', 2' x 4')</p> <p>STD=Standard LO=Low HI=High ⁸ (See table below)</p> <p>30=3000K 35=3500K 40=4000K 50=5000K</p> <p>120=120V 277=277V</p> <p>ASY/SYM=Asymmetric/Symmetric Lens, with 0.125" Clear Acrylic Lens Underlay ⁹ ASY/SYM/RFI=Asymmetric/Symmetric Lens with RFI grid, with 0.125" Clear Acrylic Lens Underlay ^{1,9} A125=Pattern 12 acrylic, 0.125" thick inverted KSH25=BatWing Distribution, with 0.125" Clear Acrylic Lens Underlay 89BC=0.125" thick KSH19RFI- Symmetrical, with 0.125" Clear Acrylic Lens Underlay ¹ MICROLNRPMS032/89BV=Acrylic, Linear Prismatic Pattern .032" and Acrylic K12 RFI .125" with Clear Acrylic Lens Underlay</p> <p>Electronic Driver 2 EDC =Electronic Driver, Non-Dimming EDD =Electronic Driver, 0-10V Dimming 10% ED1D =Electronic Driver, 0-10V Dimming 1% 1= Single Circuit ³ 2=Two Circuits ^{3,4} 3=Three Circuits ^{3,4}</p> <p>Blank=Die-formed, cold rolled steel, white powder coat, flat inset door ALP=Die-formed Aluminum, white powder coat finish, flat inset door. SSP=Stainless Steel, white powder coat finish flat inset door. SSN=Stainless Steel Brushed finish, flat inset door.</p> <p>EL7W=7W EM Pack ^{3,7} EL10W=10W EM Pack ^{3,7} EL14W=14W EM Pack ^{3,7} AM=Anti-microbial finish (all painted parts) GRNF=Green Filter over outboard 2 LED Modules MIL1=MILSTD 461F compliant, one filter for single circuit ^{1,3,6,8} MIL2=MILSTD 461F compliant, two filters for dual circuits ^{1,3,6,8} MIL3=MILSTD 461F compliant, three filters for three circuits ^{1,3,6,8} MSC4=Mounting Security Clips ¹⁰</p>												

NOTES:

- For MILSTD461F compliance, the ASY/SYM/RFI or 89BC lens is required.
- Default is (1) driver per (2) 2' nominal LED modules, (1) driver per (1) 4' nominal length LED module.
- Each circuit requires a separate thermal protector. Thermal protector is installed along fixture side, approximately 2 inches from bottom of fixture. Non-IC rated. See "Thermal Protector Detail" below.
- For two circuits, outboard two LED modules on one circuit, all other LED modules on second circuit.
- For three circuits, outer-most two modules on one circuit, inner-most two modules on one circuit, remaining two modules on third circuit.
- MILSTD requires factory-installed back-box on fixture top, which adds 2" to fixture height.
- Emergency requires factory-installed back-box on fixture top, which adds 2" to fixture height.
- 1' x 4' with 3 LED modules in cross-section, 2' x 2' and 2' x 4' with 6 LED modules in cross-section, in combination with EBP not available with HI illumination level.
- Light is directed away from hinge/lanyard. Orient fixture with hinge/lanyard to the outside, away from the patient/table.
- MSC4-PK for use with grid fixtures only.
- Green Filter on separate circuit by default.



Accessories

MSC4-PK=Mounting Security Clips. Use to secure fixture to grid or to attach tie-wires. ¹⁰
DFCL-2448W-U*=2' x 4' gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 24.25" x 48.25"
DFCL-1248W-U*=1' x 4' gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 12.25" x 48.25"
DFCL-2424W-U*=2' x 2' gasketed drywall framing kit. Ships with gasket to be applied in field. Cut out dimension 24.25" x 24.25"
*Change W to AMW for antimicrobial matte white finish

NOMINAL INPUT WATTS/DELIVERED LUMENS

Size	Number of Modules in Cross-Section*	Output Level	Nominal Input Watts	Nominal Delivered Lumens
2' x 4'	4	Low	97.3	8576
	4	Std.	146.7	11598
	4	High	184.1	13935
	6	Low	143.6	12759
	6	Std.	213.4	17100
	6	High	274.3	20438
2' x 2'	4	Low	48	3770
	4	Std.	71.2	5120
	4	High	92.5	6224
	6	Low	71.9	5607
	6	Std.	104.5	7507
	6	High	136.8	9101
1' x 4'	2	Low	51.2	3800
	2	Std.	71.1	5162
	2	High	92.2	6280
	3	Low	74.8	5727
	3	Std.	104.8	7643
	3	High	136.6	9225

* Modules are either 22" (2' x 2') or 44" (1' x 4', 2' x 4') in length and consist of highly efficient LEDs attached to the interior of the fixture body.