RXM-LED

Cleanroom LED Top Access IMP Ceilings

PRODUCT SPECIFICATION

Cleanrooms, laboratories, research facilities, food areas, top accessible from walkable ceilings.

Mounting
Suitable for installation in 4" Insulated Metal Panel (IMP) walkable ceilings. Suitable for direct static loads of 600 lbs., not intended to be walked on.

Housing
Welded CRS housing/collar with plenum-side gasketed flange. Secures directly to plenum-side IMP surface via IMP manufacturer approved screws (hardware provided by others).

Top Access Door
16 gauge CRS top plate with formed and welded sides. Top plate perimeter seals to housing to prevent contaminant intrusion from plenum space. Removable electrical compartments and top plate provide for easy wiring, replacement of parts and servicing.

Lens Frame
One-piece 18 gauge cold rolled steel overlapping lens frame, gasketed and sealed to IMP ceiling surface. Secures to housing without room-side hardware. 304 stainless available.

Lens
Optic Plus diffusing acrylic lens completely hides diode image while providing greater than 90% light transmission. LED diffusing Lexan available.

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

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

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 wet location. IP66 rated.
Suitable for use in ISO-3 clean rooms (209E Class 1).
Suitable for use in 4" IMP Ceilings. USP 797 and USP 800 compliant.
Suitable for biosafety labs rated BSL 1-4.

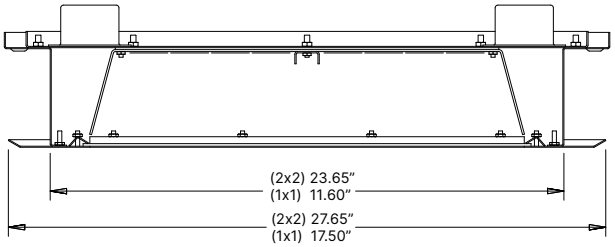
Job Name

Fixture Type

Catalog No.

Approval Date

Walkable Ceiling, Top Access



one	two	three	four	five	six	seven	eight	nine	ten	eleven
RXM		-		-	/	-		-	VAR	DM	-	/	-	

one Luminaire Size
- 11 — 1 × 1
- 22 — 2 × 2

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

three Color Temperature
- 30 — 3000K
- 35 — 3500K
- 40 — 4000K
- 50 — 5000K
- A — Pure Amber
- APC — Phosphor Amber

four CRI
- 80 — 80 CRI
- 90 — 90 CRI

five Lens Frame Material
- C — Cold rolled steel, standard
- S — 304 Stainless steel

six Lens Frame Finish
- R — Brushed (Stainless steel only)
- W — White, standard

seven Voltage
- VAR — Variable, 120-277 V, 50/60Hz

eight Driver
- DM — 0-10VDC Dimming

nine Internal Lens
- 122 — Optic Plus LED diffusing acrylic, standard
- 122R — Optic Plus with RF grid
  *Must be used with RF filter
- 130 — .125 in. LED diffusing Lexan

ten External Lens
- 00 — No external lens
- 33 — .125 in. clear polycarbonate

eleven Options
- 2C — Two circuit wired
- AM — Anti-microbial coating (exposed areas)
- CU — Canadian UL Listing
- CP — CCEA Chicago
- FH — Fuse and holder
- NS — NSF listing
- RF — Radio interference filter, one per circuit*

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									
1W22	2135	138	2167	140	2231	144	2295	148	15.5
1W30	2859	132	2902	134	2987	138	3073	142	21.6
1W37	3518	127	3570	129	3676	133	3781	136	27.7
2' x 2' Fixture									
2W39	3753	139	3809	141	3921	146	4033	150	26.9
2W55	5257	134	5335	136	5492	140	5649	144	39.1
2W73	7036	127	7141	129	7351	133	7561	136	55.4
4W100	9569	136	9712	138	9998	142	10284	146	70.2
4W114	10977	133	11141	135	11469	139	11798	143	82.3
4W147	14072	127	14282	129	14702	133	15123	136	110.8
6W193	18505	131	18782	132	19335	136	19888	140	141.8
6W220	21107	127	21423	129	22054	133	22684	136	166.3
8W258	24674	131	25042	132	25779	136	26517	140	189.0
8W294	28143	127	28564	129	29405	133	30246	136	221.7

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 for a 2×4 on how this will be specified:

Example Model:

RXM24-XX[1]SO-40/80-CW/CW-VARDM-122/00-(XX[2]/LUMENS)

LUMENS = You provide the lumens.
XX[1] = We will determine the number of rows.
XX[2] = We will provide the wattage information.

Photometric Data @ 80 CRI with 122 lens

Use the multipliers below to adjust the delivered lumens

33 lens multiplier	.86
90 CRI multiplier	.83

CRI	LED Life
>80	>100,000

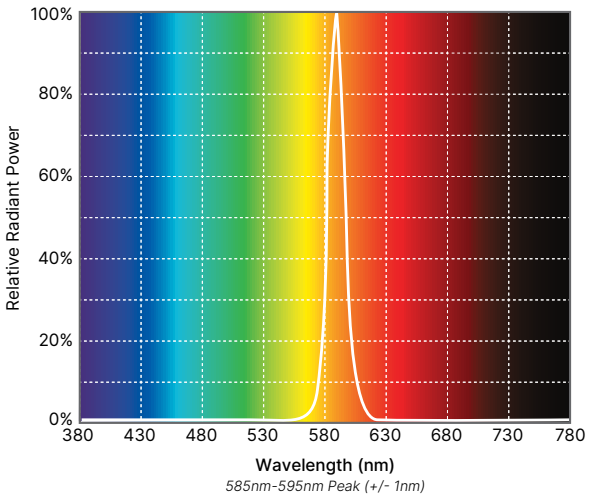
A - Pure Amber

LED Source (Box 2)	Delivered Lumens	L/W	Input Watts
2 × 2′ Fixture			
2A15	1529	36	43.0
4A30	3059	36	86.0
6A46	4588	36	128.9

APC - Phosphor Amber

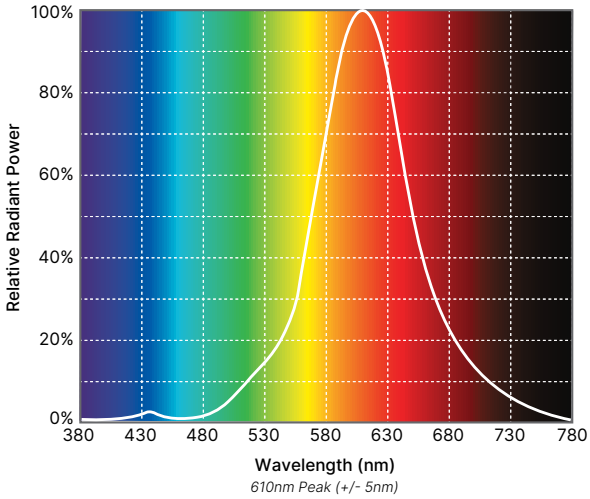
LED Source (Box 2)	Delivered Lumens	L/W	Input Watts
2 × 2′ Fixture			
2APC45	4552	105	43.2
3APC68	6828	105	64.8
4APC91	9104	105	86.3
6APC118	11797	109	108.6
6APC136	13657	105	129.5

A - Pure Amber Spectrum



585nm-595nm Peak (+/- 1nm)

APC - Phosphor Amber Spectrum



610nm Peak (+/- 5nm)

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90 CRI multiplier	.83