

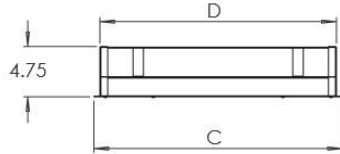
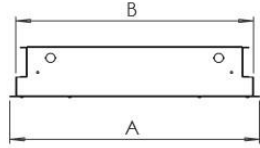
PROJECT:

NOTES:

ORDERING INFORMATION:

**EXAMPLE** MRGA1- M - 24 - F - 60 - 9 - 40 - M4 - MV - PB - AM - D  
 SERIES SECURITY NOMINAL LENGTH MOUNTING LUMENS CRI KELVINS LENS VOLTAGE DIFFUSER OPTIONS DRIVER

SHOP DRAWINGS



1x4

- A - 11.75"
- B - 10.65"
- C - 47.75"
- D - 46.57"

2x2

- A - 23.75"
- B - 22.65"
- C - 23.75"
- D - 22.57"

2x4

- A - 23.75"
- B - 22.65"
- C - 47.75"
- D - 46.57"



ORDERING INFORMATION

**SERIES**  
MRGA1

**SECURITY LEVEL**

H	14-Ga CRS (painted white)
M	16-Ga CRS (painted white)
L	18-Ga CRS (painted white)
HS	14-Ga SS (painted white)*
MS	16-Ga SS (painted white)*
LS	18-Ga SS (painted white)*
HB	14-Ga SS (brushed)*
MB	16-Ga SS (brushed)*
LB	18-Ga SS (brushed)*

\*Overlapping floor in SS and housing is CRS

**NOMINAL LENGTH**

14	12"x 48"
22	24"x 24"
24	24"x 48"

**MOUNTING**

T	T-Bar
F	Flange

**LUMENS**

Lumen Package*	Nominal Lumens
<b>12" x 48"</b>	
30	3,000
40	4,000
60	6,000
<b>24" x 24"</b>	
30	3,000
40	4,000
60	6,000
<b>24" x 48"</b>	
40	4,000
60	6,000
80	8,000
100	10,000

\*Other lumen packages available

**CRI**

BLANK	80 CRI
9	90 CRI

**KELVIN**

30	3000K
35	3500K
40	4000K
50	5000K
TW	Tunable White

**SECURITY LENS (NOMINAL THICKNESS)**

M1	Clear Polycarbonate (1/8")
M3	Clear Polycarbonate (3/16")
M4	Clear Polycarbonate (1/4")
M5	Clear Polycarbonate (3/8")
M6	Clear Polycarbonate (1/2")

**VOLTAGE**

MV	120-277V
347	347V

**DIFFUSER**

BLANK	Frosted Ribbed Lens
PB	Peforated Basket

**OPTIONS**

AM	Anti-Microbial Paint
EM	Emergency Power Pack
CC	COI Compliant
OS	Internal occupancy and daylight harvesting sensor (OSM3D-DDW)
NLA	Amber LED night light (500 lumens)
NLR	Red LED night light (500 lumens)
NL	White LED night light (500 lumens)*

\*Confirm TempK with manufacture

**DRIVERS**

ND	Non-dimming applications
D	0-10V dimming
D1	0-10V dimming to 1%
DA	DALI driver

FEATURES

- > Specification-grade patient room LED luminaire for anti-vandal behavioral healthcare applications
- > Provides low-glare direct and indirect light distribution for primary ambient lighting
- > Robust design with security lens tightly secured by double-frame fastened internally with multiple screws
- > Door frame fastened with TORX tamper resistant screws
- > Welded housing for additional structural strength
- > Minimum 80 CRI; color range 3000K - 5000K available
- > 90 CRI Optional
- > Anti-microbial paint optional
- > Multiple dimming protocols available
- > Fully gasketed fixture
- > IP65 for recessed applications\*
- > Anti-ligature
- > IK10 rated

\* Faceplate is sealed with multiple gaskets and luminaire is IP65 certified as providing protection against dust and water entering the luminaire through the faceplate in a recessed application. Note that the housing (which is designed to be recessed into ceiling and is not visible once installed) does not provide ingress protection against dust and water entering the luminaire from the plenum.

APPLICATIONS

- > Hospitals
- > Behavioral Healthcare Facilities
- > Rehabilitation Centers



## LED

## FIXTURE PERFORMANCE DATA

## SPECIFICATIONS

**Housing** – Precision die-formed 14, 16 or 18-gauge C.R.S. or stainless steel with continuously welded end plates

**Door Frame** – Single piece precision 14 or 16-gauge die formed frame with tamper-resistant fasteners that secure door frame to housing

**Security Lens** – Variety of robust polycarbonate lenses available. Secured with internal frame that is fastened internally to door frame with multiple screws

**Finish** – Baked white enamel powder finish applied post production on all surfaces for smooth edges and safe handling. Anti-microbial finish optional.

**Electrical** – High quality mid-power LED boards. L85 >50,000 hours.

**Mounting** – Recessed (plaster or T-Bar ceiling). We strongly recommend to add wire hangers on each earthquake clips/brackets (see fixture details)

**Listings** –

- IP65
- cUL certified

**Warranty** – 5-year limited warranty

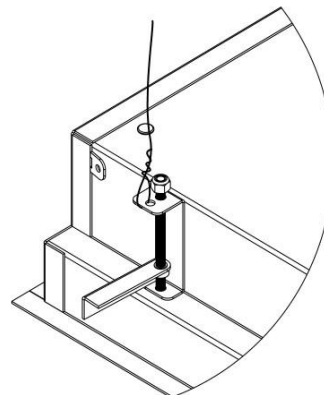
LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
12" x 48"			
30	3,009	29	104
50	4,997	44	114
24" x 24"			
30	3,082	28	110
50	4,910	42	117
24" x 48"			
40	4,113	36	114
60	6,139	60	102

\*Results based on 4000K, 80 CRI, Acrylic ribbed diffuser

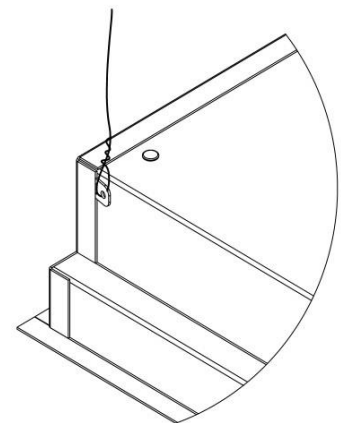
MULTIPLIER TABLE	
COLOR TEMPERATURE	
CCT/CRI	CONVERSION FACTOR
3000K / 80 CRI	0.95
3500K / 80 CRI	0.97
4000K / 80 CRI	1
5000K / 80 CRI	1.03

## FIXTURE DETAILS

Hanging brackets to secure housing to structure (wires not supplied by PA-CO)



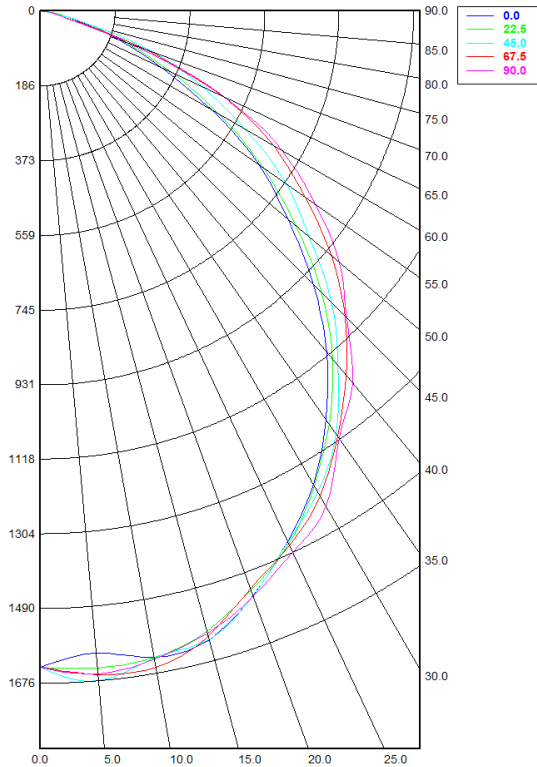
Plaster ceiling / Flange



T-Bar

PHOTOMETRY

MRGA1-M-24-F-40-40-M4-MV, Total Luminaire Output: 4,113 lumens; 36 watts



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	1,681.65	1,681.65	1,681.65	1,681.65	1,681.65
5.00°	1,642.24	<b>1,685.40</b>	1,644.36	1,653.68	1,684.17
10.00°	1,661.92	1,627.56	1,644.99	1,672.84	1,659.77
15.00°	1,580.30	1,587.99	1,597.92	1,610.64	1,620.21
20.00°	1,547.05	1,536.10	1,552.93	1,540.75	1,545.52
25.00°	1,456.66	1,470.31	1,480.49	1,478.92	1,493.28
30.00°	1,348.08	1,367.28	1,386.58	1,408.04	1,406.31
35.00°	1,255.36	1,257.83	1,284.84	1,296.48	1,309.33
40.00°	1,113.11	1,126.68	1,171.16	1,190.79	1,210.82
45.00°	957.03	986.12	1,022.42	1,079.51	1,094.46
50.00°	814.26	828.88	887.29	950.20	963.64
55.00°	649.91	669.96	732.70	813.52	839.82
60.00°	486.08	513.74	592.85	678.88	693.28
65.00°	343.58	363.75	445.61	501.27	497.38
70.00°	200.20	224.87	296.28	272.26	236.10
75.00°	106.04	122.38	128.57	82.16	64.37
80.00°	41.25	48.04	37.49	35.07	31.80
85.00°	10.81	14.75	13.04	15.00	14.24
90.00°	0.97	1.47	1.48	1.63	1.94

Spacing Criterion:

Two luminaires, plane 0°	1.19
Two luminaires, plane 90°	1.24
Four luminaires	1.32

Zonal Lumen Summary

Zone	Lumens	% Fixture
0.00° - 10.00°	168.04	4.09%
10.00° - 20.00°	450.21	10.95%
20.00° - 30.00°	676.45	16.45%
30.00° - 40.00°	797.13	19.38%
40.00° - 50.00°	790.05	19.21%
50.00° - 60.00°	659.93	16.04%
60.00° - 70.00°	421.06	10.24%
70.00° - 80.00°	131.10	3.19%
80.00° - 90.00°	18.57	0.45%
90.00° - 100.00°	0.43	0.01%
100.00° - 110.00°	0.02	0.00%
110.00° - 120.00°	0.02	0.00%
120.00° - 130.00°	0.03	0.00%
130.00° - 140.00°	0.04	0.00%
140.00° - 150.00°	0.04	0.00%
150.00° - 160.00°	0.05	0.00%
160.00° - 170.00°	0.05	0.00%
170.00° - 180.00°	0.02	0.00%
0.00° - 90.00°	4,112.54	99.98%
90.00° - 180.00°	0.69	0.02%
0.00° - 180.00°	4,113.23	100.00%