

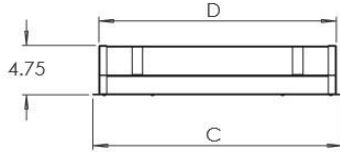
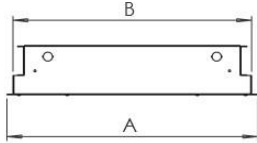
PROJECT:

NOTES:

ORDERING INFORMATION:

**EXAMPLE** MRGA1- M - 24 - F - 10R40E - 9 - 40 - M4 - MV - AM - CL6 - DM  
 SERIES SECURITY NOMINAL LENGTH MOUNTING LUMENS CRI KELVINS LENS VOLTAGE OPTIONS CONTROLS 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"



MADE IN CANADA  
FAIT AU CANADA

ORDERING INFORMATION

**SERIES**

MRGA1
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**SECURITY LEVEL**

H	Heavy (14 gauge)
M	Medium (16 gauge)
L	Light (18 gauge)

**NOMINAL LENGTH**

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

**MOUNTING**

T	T-Bar
F	Flange

LUMENS

Lumen Package*	Nom. Lumens	Wattage
<b>12" x 48"</b>		
30	3,000	29
50	5,000	44
<b>24" x 24"</b>		
30	3,000	28
50	5,000	42
<b>24" x 48"</b>		
40	4,000	36
60	6,000	60

\*Other lumen packages available

**CRI**

BLANK	80 CRI
9	90 CRI

**KELVIN**

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

**LENS**

M1	Clear Polycarbonate (0.125")
M3	Clear Polycarbonate (0.187")
M4	Clear Polycarbonate (0.250")
M5	Clear Polycarbonate (0.375")

**VOLTAGE**

MV	120-277V
347	347V

**OPTIONS**

AM	Anti-Microbial Paint
EM	Emergency Power Pack
PB	Perforated Basket
CC	COI Compliant
RF	RFI Filter (available in 120-277V)
NL	Amber LED night light
NLR	Red LED night light

**CONTROLS**

BLANK	None
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Click on the following link for control options:  
<https://bit.ly/2KzMuAx>

**DRIVER**

BLANK	Non-dimming applications
DM	0-10V Dimming
DA	DALI Driver

Click on the following link for special driver options:  
<https://bit.ly/2FqZ6qU>

FEATURES

- > Specification-grade patient room LED luminaire for anti-vandal 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\*
- > Efficacies up to 117 lm/W
- > 100% made in Canada

\* 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. with continuously welded end plates

**Door Frame** – Single piece precision 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 as luminaire suitable for dry or damp locations.

**Warranty** – 5-year limited warranty

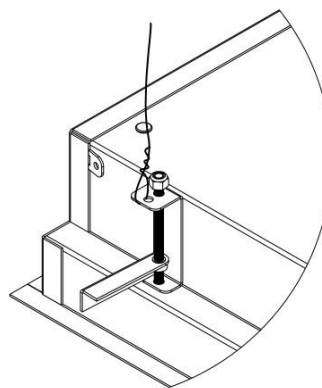
LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
12" x 48"			
30	3,009	29	104
50	4,997	44	114
24" x 24"			
30	3,082	28	110
50	4,910	42	117
24" x 48"			
40	4,113	36	114
60	6,139	60	102

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

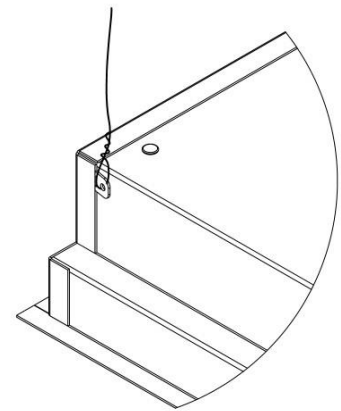
MULTIPLIER TABLE	
COLOR TEMPERATURE	
CCT/CRI	CONVERSION FACTOR
3000K / 80 CRI	0.95
3500K / 80 CRI	0.97
4000K / 80 CRI	1
5000K / 80 CRI	1.03

## FIXTURE DETAILS

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



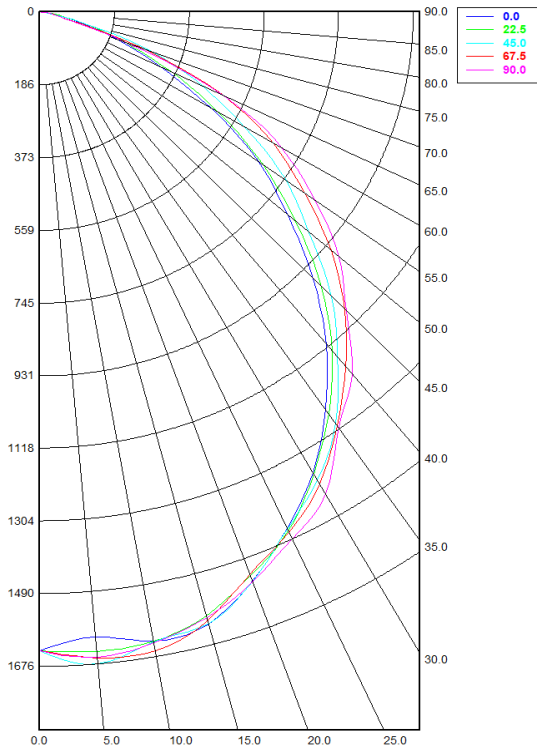
Plaster ceiling / Flange



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	1,685.40	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%