

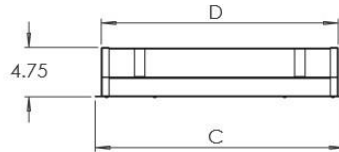
PROJECT:

NOTES:

ORDERING INFORMATION:

EXAMPLE MRGA2- M - 22 - F - 40 - 9 - 40 - H5 - M4 - MV - AM - CL6 - DM
 SERIES SECURITY NOM. LENGTH MOUNTING LUMENS CRI KELVINS DIFFUSER 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
 MRGA2

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
12" x 48"		
30	3,000	30
40	4,000	43
50	5,000	56
24" x 24"		
30	3,000	27
40	4,000	39
50	5,000	52
24" x 48"		
40	4,000	35
60	6,000	53
80	8,000	74

*Other lumen packages available

CRI
 BLANK 80 CRI
 9 90 CRI

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

DIFFUSER
 H5 White Opal Underlay
 A1 Acrylic K12 (1/8")
 L1 Frosted Acrylic (1/8")

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

OPTIONS
 AM Anti-Microbial Paint
 EM Emergency Power Pack
 CC COI Compliant
 NLA Amber LED night light (500 lumens)
 NLR Red LED night light (500 lumens)
 SD Stainless Steel Door

CONTROLS
 BLANK None
 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 behavioral healthcare applications
- > Features modern square or rectangle lens with rounded edges for visual comfort and efficiency
- > 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
- > IP65 for recessed applications*
- > Anti-ligature
- > 100% made in Canada
- > COI compliant LED boards

* 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 14-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 as luminaire suitable for dry or damp locations.

Warranty – 5-year limited warranty

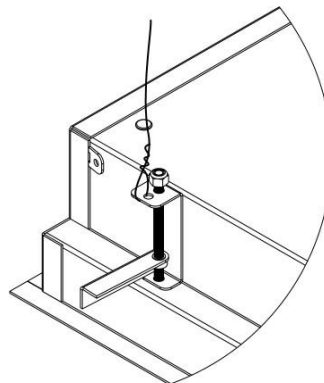
LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
12" x 48"			
30	3,004	30	100
40	4,100	43	95
50	5,096	56	91
24" x 24"			
30	3,012	27	111
40	4,027	39	103
50	5,092	52	97
24" x 48"			
40	4,084	35	116
60	6,020	53	113
80	8,081	74	109

*Results based on 4000K, 80 CRI, 0.125" Clear Polycarbonate Lens and White Opal Diffuser (H5)

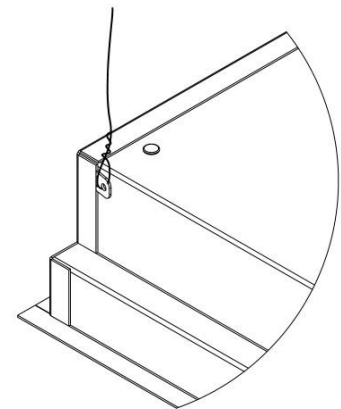
MULTIPLIER TABLE	
COLOR TEMPERATURE	
CCT/CRI	CONVERSION FACTOR
3000K / 80 CRI	0.95
3500K / 80 CRI	0.97
4000K / 80 CRI	1
5000K / 80 CRI	1.03

FIXTURE DETAILS

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



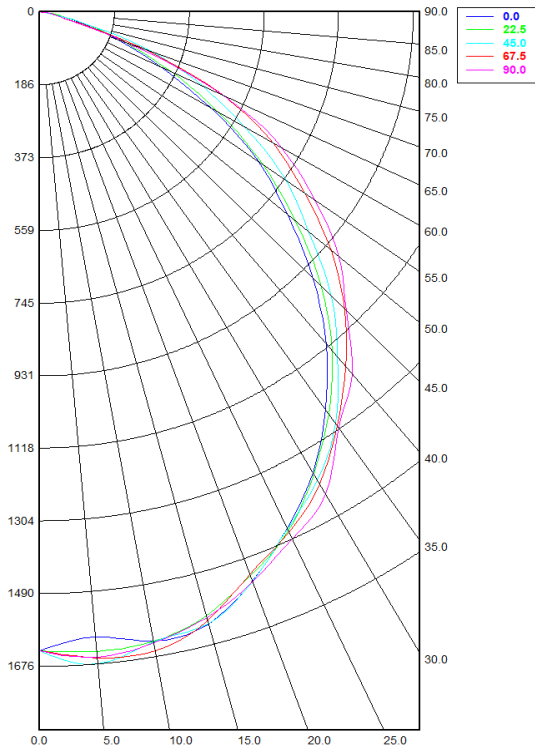
Plaster ceiling / Flange



T-Bar

PHOTOMETRY

MRGA2-M-24-F-40-40-H5-M4-MVOLT, 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%