

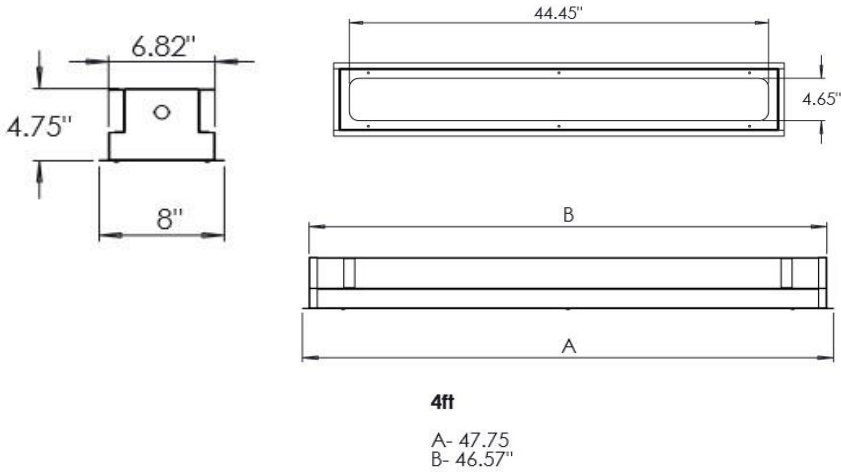
PROJECT:

NOTES:

ORDERING INFORMATION:

**EXAMPLE** MRGAL - M - 4F - 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



MADE IN CANADA  
FAIT AU CANADA

ORDERING INFORMATION

**SERIES**  
MRGAL

**VOLTAGE**  
 MV 120-277  
 347 347V

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

**DIFFUSER**  
 H5 White Opal Flexilume  
 A0 Acrylic K12  
 L1 Frosted Acrylic

**NOMINAL LENGTH**  
 (X)F Number of feet (length)\*  
 \*Minimum of 2ft and maximum of 8ft  
 (If not standard 4ft, contact manufacture for shop drawing and lumen outputs)

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

**MOUNTING**  
 T T-Bar  
 F Flange

**VOLTAGE**  
 MV 120-277  
 347 347V

**LUMENS**

Lumen Package*	Nom. Lumens	Wattage
4 FT		
20	2,000	18
40	4,000	41
60	6,000	59

**OPTIONS**  
 AM Anti-Microbial Paint  
 EM Emergency Power Pack  
 CC COI Compliant  
 RF RFI Filter (available in 120-277V)  
 NL Amber LED night light

\*Other lumen packages available

**CRI**  
 BLANK 80 CRI  
 9 90 CRI

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

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

**DRIVER**  
 BLANK Non-dimming applications  
 DM Dimming applications  
 Click on the following link for special driver options:  
<https://bit.ly/2Eq26qU>

FEATURES

- > Specification-grade patient room LED luminaire for anti-vandal behavioral healthcare applications
- > Features modern 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\*
- > Efficacies up to 120 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

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

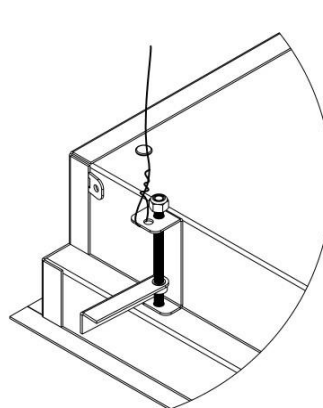
LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
4 FT			
20	2,151	18	120
40	4,050	41	99
60	6,066	59	103

\*Results based on 4000K, 80 CRI, M4 (0.250" clear poly lens) and H5 white opal diffuser

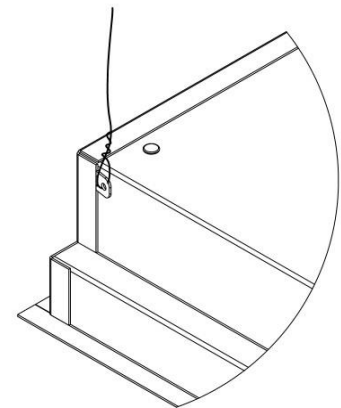
MULTIPLIER TABLE	
COLOR TEMPERATURE	
CCT/CRI	CONVERSION FACTOR
3000K / 80 CRI	0.95
3500K / 80 CRI	0.97
4000K / 80 CRI	1
5000K / 80 CRI	1.03

FIXTURE DETAILS

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



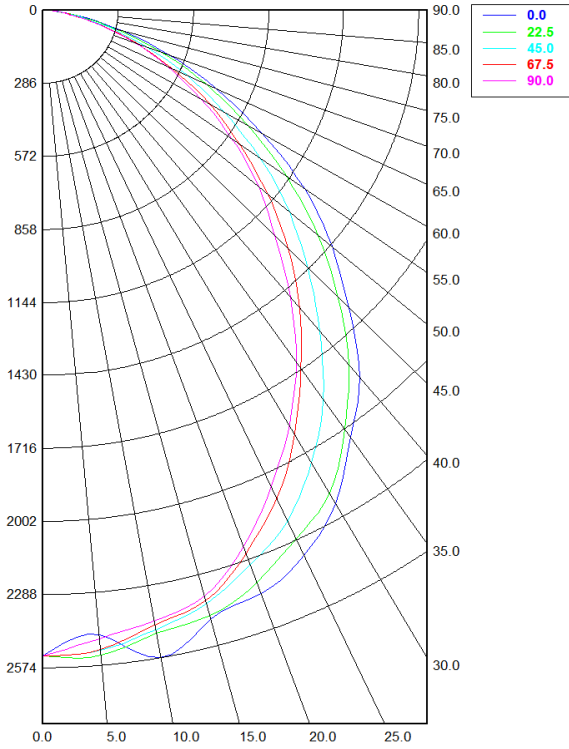
Plaster ceiling / Flange



T-Bar

PHOTOMETRY

MRGAL-60-40-H5-M4-MVOLT, Total Luminaire Output: 6,066 lumens; 59 watts



**Candela Distribution**

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	2,526.90	2,526.90	2,526.90	2,526.90	2,526.90
5.00°	2,454.99	2,534.48	2,515.90	2,511.99	2,469.43
10.00°	<b>2,573.91</b>	2,477.98	2,462.06	2,443.98	2,428.49
15.00°	2,467.37	2,453.73	2,403.88	2,391.76	2,372.87
20.00°	2,429.44	2,381.74	2,307.94	2,260.63	2,233.12
25.00°	2,354.28	2,281.80	2,204.49	2,103.81	2,054.34
30.00°	2,230.50	2,184.84	2,045.32	1,917.49	1,874.12
35.00°	2,042.18	2,002.48	1,861.38	1,712.97	1,684.45
40.00°	1,877.59	1,813.08	1,639.52	1,521.33	1,464.50
45.00°	1,646.68	1,589.75	1,428.67	1,317.09	1,244.63
50.00°	1,436.47	1,369.15	1,221.54	1,110.35	1,069.63
55.00°	1,216.11	1,130.09	1,005.03	908.41	875.16
60.00°	958.68	894.86	793.02	727.04	692.14
65.00°	727.75	680.15	605.49	540.53	520.18
70.00°	508.98	473.73	416.11	376.35	364.86
75.00°	310.23	284.09	254.11	226.10	214.91
80.00°	150.09	139.01	121.55	113.78	106.72
85.00°	46.07	47.40	42.14	39.81	40.66
90.00°	7.16	9.24	7.90	8.73	9.07

**Spacing Criterion:**

Two luminaires, plane 0°	1.29
Two luminaires, plane 90°	1.11
Four luminaires	1.27

**Zonal Lumen Summary**

Zone	Lumens	% Fixture
0.00° - 10.00°	252.45	4.16%
10.00° - 20.00°	678.07	11.18%
20.00° - 30.00°	1,007.74	16.61%
30.00° - 40.00°	1,158.37	19.09%
40.00° - 50.00°	1,112.87	18.34%
50.00° - 60.00°	911.32	15.02%
60.00° - 70.00°	606.22	9.99%
70.00° - 80.00°	279.50	4.61%
80.00° - 90.00°	59.83	0.99%
90.00° - 100.00°	2.33	0.04%
100.00° - 110.00°	0.00	0.00%
110.00° - 120.00°	0.00	0.00%
120.00° - 130.00°	0.00	0.00%
130.00° - 140.00°	0.00	0.00%
140.00° - 150.00°	0.00	0.00%
150.00° - 160.00°	0.00	0.00%
160.00° - 170.00°	0.00	0.00%
170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	6,066.37	100.00%
90.00° - 180.00°	2.33	0.04%
0.00° - 180.00°	6,066.37	100.00%