

MANTA

Architectural High-Performance Outdoor Emergency Wall Pack

NATURE'S ELEGANCE. UNWAVERING LIGHT.

The Manta Series scales the graceful, scalloped silhouette of the Ray into a larger, more powerful wall pack design. Purpose-built for demanding outdoor applications, its softly contoured profile blends seamlessly with architectural surroundings while delivering unwavering emergency illumination, engineered to thrive outdoors. With expanded capacity and performance, the Manta Series offers tailored solutions that unite form and function in perfect motion.

A DISTINCT ADVANTAGE

The Manta Series incorporates a field-selectable four-setting reduced power selector, giving designers and installers the ability to fine-tune lumen output in the field. This flexibility supports application-specific performance, compliance needs, and energy efficiency.

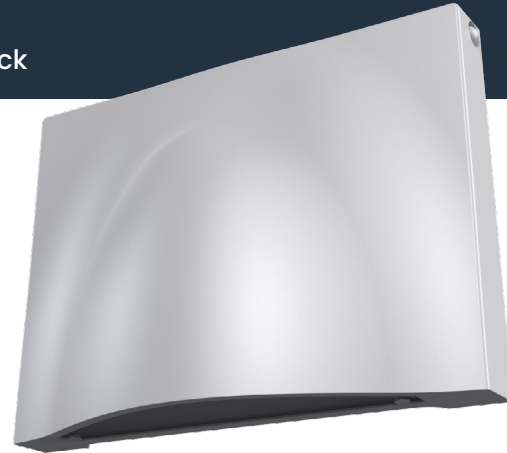
A single model can cover multiple applications: for example, a 25W unit can be configured to operate at 20W, 15W, or 10W, reducing inventory requirements and expanding design versatility without sacrificing reliability.

The high-performance Manta is available in multiple configurations:

- **AC Operation (MAN-AC)** – Purpose-built for general lighting and/or for lighting sustained by a remote AC line voltage emergency power supply, or as a normally-off luminaire powered by a remote AC supply. Available in 25W/3,200 lm, 55W/7,000 lm, 75W/9,000 lm, and 100W/13,000 lm models. Features field-selectable color temperature (3000K, 4000K, 5000K), CRI 80+
- **Self-Contained Battery Backup (MAN-EM)** – Provides both general lighting and emergency operation, or emergency-only operation. Available across all AC lumen packages, 12W, 1500lm emergency backup. Specification-grade self-test and self-diagnostics come standard, ensuring performance when it matters most.
- **AC and EM shared feature** – Both configurations include a field-selectable photocell for dusk-to-dawn operation

CONSTRUCTION

- IP65 wet location listed for indoor and outdoor applications
- Rugged die-cast aluminum construction with hinged access
- Durable UV-resistant outdoor powder coat finish, available in Bronze, White, or Black
- IK10 impact protection rating
- Quick-Fit cleat pre-gasketed mounting plate for ease of installation
- One-piece UV-resistant polycarbonate optic lens assembly
- Dark Sky compliant 90° full cut-off with optimized optical distribution
- Long-life silicone rubber seal
- Externally accessible sealed switches for Manual Test or Automatic Self-Test function selection (EM models) and CCT color select switches
- Sealed manual Push-to-Test switch and status indicator



- Wall mounts to a 4 1/2" square wet-location box (4.75" centers), 4" round wet-location box (3.5" or 2.75" centers), single-gang wet-location or indoor switch box (3.3" centers), or a 3" octagonal box (3.5" centers)
- Top and side surface-mount 3/4" NPT conduit entries

ELECTRICAL

- Field-selectable universal 120–277 VAC, 60 Hz input
- Available as AC-only (MAN-AC) or self-contained battery backup (MAN-EM)
- Available in four model sizes:
 - 25W & 55W in an 8.25"H × 11.125"W × 4.5"D housing
 - 75W & 100W in a 9.5"H × 13"W × 5.25"D housing
- **0–10V dimming or optional power-select module** – Each model includes standard 0–10V dimming capability, or can be configured with the provided power-select module as an alternative. The module allows field adjustment to three reduced wattage levels for added range versatility and application-specific lumen output fine-tuning. Default factory setting is full model wattage. Field-selectable settings are:
 - 25W model: 25W, 20W, 15W, 10W
 - 55W model: 55W, 50W, 45W, 40W
 - 75W model: 75W, 65W, 55W, 45W
 - 100W model: 100W, 90W, 80W, 70W
- EM and AC models feature field-selectable internal photocell for dusk-to-dawn operation; with photocell off, units may be configured for remote switching or continuous operation
- Self-Test / Self-Diagnostics are provided as standard but can be defeated via the slide selector for manual test operation only
- Field-selectable color temperature: 3000K, 4000K, 5000K, CRI 80+
- Manta-EM emergency mode (12W, 1500 lm) includes a 9.6V 3200 mAh high-temperature, long-life, maintenance-free Lithium Iron Phosphate (LiFePO₄) battery with environmentally friendly end-of-life cycling
- Brownout sensing ensures emergency illumination during low line voltage conditions
- Self-compensating, microprocessor-controlled solid-state charger provides extended float life and rapid recharge
- Zero-current LVCO ensures positive charge acceptance after extended discharge
- Recharge time: 24 hours; emergency discharge time: 90 minutes
- Ambient temperature range: -4°F (-20°C) to 122°F (50°C)

ILLUMINATION

- General Illumination (AC operation)
 - Manta-AC** – Available in 25W / 3,200 lm, 55W / 7,000 lm, 75W / 9,000 lm, and 100W / 13,000 lm models. Features field-selectable color temperature (3000K, 4000K, 5000K), CRI 80+
 - For NFPA 101 spacing when powered at full wattage rating from an AC backup supply, see NFPA 101 spacing guides (following)
- Emergency Illumination
 - Manta-EM** – 12W, 1,500 lm. For NFPA 101 emergency mode spacing, see spacing guides (EM Mode) following
- Adjustable Optical Distributions**
 Manta features adjustable head angle settings to provide alternative IES distribution patterns:

MODEL	SETTING	DISTRIBUTION
MAN-25 / MAN-55	Closed (Standard) at 0°	Type II – Full Cutoff
	Open Angle at 5°	Type III – Cutoff
	Open Angle at 10°	Type IV – Semi-Cutoff
MAN-75 / MAN-100	Closed (Standard) at 0°	Type II – Full Cutoff
	Open Angle at 5°	Type IV – Semi-Cutoff

CERTIFICATION

- Tested, Approved, and Listed by the Underwriters Laboratories in compliance with UL924 for EM models and UL 1598 for AC models
- Meets or exceeds all performance standards required by NFPA 101 Life Safety Code, NEC 70, and OSHA
- IP65 certified
- Meets Dark Sky compliance

WARRANTY

- 5 year limited warranty – view complete warranty terms online at www.evenlite.com/terms-warranty.

ORDERING GUIDE

Example: MANTA-25-EM-12-BZ

MODEL	WATTAGE	OPERATION	HOUSING COLOR
MAN	25 25-Watt System	AC AC Only	BZ Bronze
	55 55-Watt System	EM Battery Backup	BK Black
	75 75-Watt System		WH White
	100 100-Watt System		
MAN			

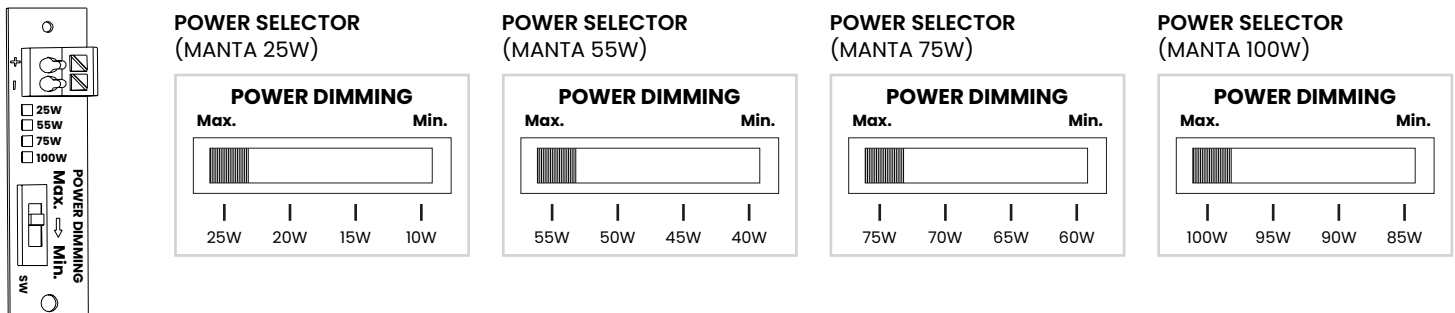
Fill in fields from categories above and complete type and part number.

Type No:

Full Part No:

POWER ADJUSTMENT CHART

If you need to adjust the power, connect the dip dimming module to dimming wire (pink and purple) and toggle the switch accordingly.



LUMEN OUTPUT IN DIMMED SETTINGS

MODEL	NOMINAL SETTING	LUMEN OUTPUT	2 ND SETTING	LUMEN OUTPUT	3 RD SETTING	LUMEN OUTPUT	4 TH SETTING	LUMEN OUTPUT
MAN-25	25W	3,200lm	20W	2,600lm	15W	2,000lm	10W	1,500lm
MAN-55	55W	7,000lm	50W	6,200lm	45W	5,800lm	40W	5,150lm
MAN-75	75W	9,000lm	65W	8,000lm	55W	6,900lm	45W	5,700lm
MAN-100	100W	13,000lm	90W	11,400lm	80W	10,350lm	70W	9,200lm

LUMEN OUTPUT CHARTS

AC MODELS

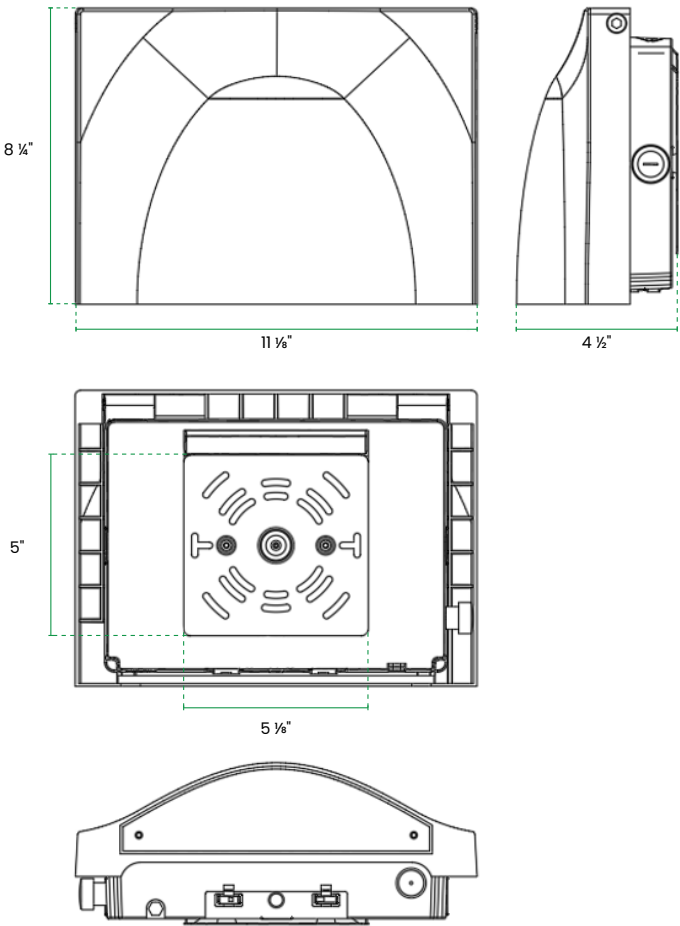
MODEL	WATTAGE	LUMEN OUTPUT AC OPERATION
MAN-25-AC	25W	3200 lm
MAN-55-AC	55W	7000 lm
MAN-75-AC	75W	9000 lm
MAN-100-AC	100W	13000 lm

EM MODELS

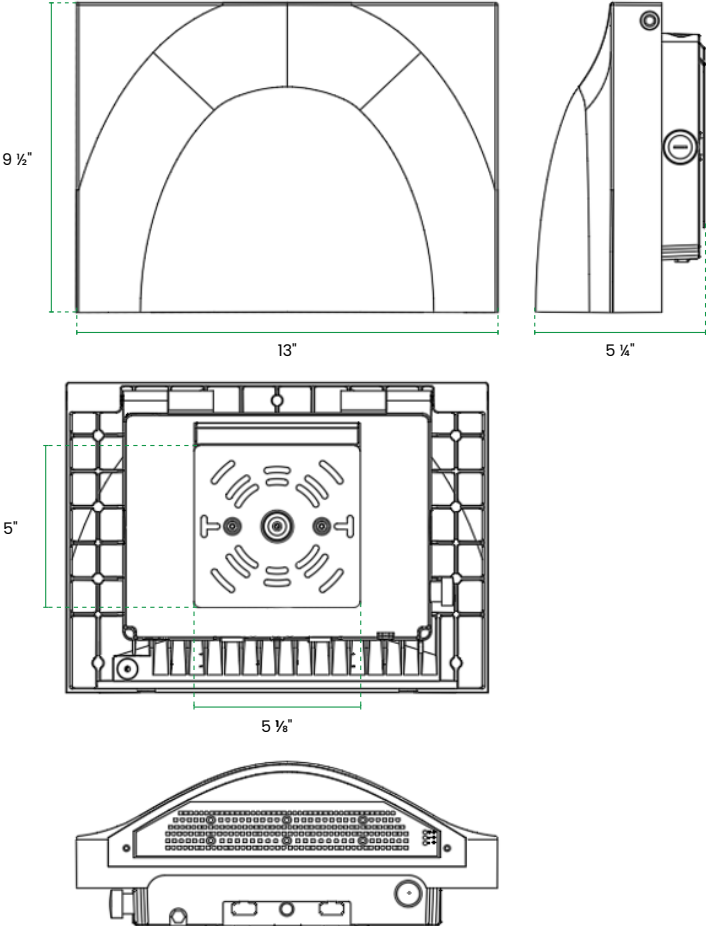
MODEL	WATTAGE	LUMEN OUTPUT AC OPERATION	LUMEN OUTPUT EM OPERATION
MAN-25-EM	25W	3200 lm	1500 lm
MAN-55-EM	55W	7000 lm	1500 lm
MAN-75-EM	75W	9000 lm	1500 lm
MAN-100-EM	100W	13000 lm	1500 lm

DIMENSIONS

25W & 55W MODELS



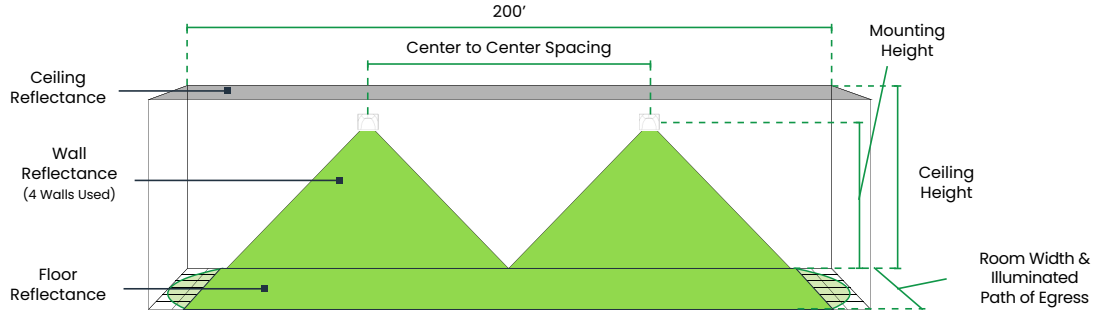
75W & 100W MODELS



SPACING GUIDES – Enclosed Corridor (AC Models & EM Models in General Lighting Mode)

Note: Spacing charts are for general guidance based on NFPA 101: 1 fc avg, 0.1 fc min, 40:1 max/min uniformity. Unless otherwise noted, reflectance values are Ceiling 80% / Walls 50% / Floor 20%. Performance may vary by installation and environment.

ENCLOSED CORRIDOR SPACING DIAGRAM



MAN-25-AC/EM (Wall Mount – Enclosed Corridor)

Room Dimensions: 200' x 6' x Ceiling Height
 Reflectance: 80% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	9'	39'	0°	8.69 Fc	0.94 Fc	36.52 Fc
9'	11'	47'	0°	6.43 Fc	0.62 Fc	38.08 Fc
10'	12'	52'	0°	5.41 Fc	0.50 Fc	38.92 Fc
12'	14'	62'	0°	3.98 Fc	0.36 Fc	37.97 Fc
14'	16'	71'	0°	3.00 Fc	0.27 Fc	37.89 Fc
16'	18'	81'	0°	2.35 Fc	0.20 Fc	39.75 Fc
18'	20'	89'	0°	1.89 Fc	0.16 Fc	39.38 Fc
20'	22'	100'	0°	1.52 Fc	0.13 Fc	39.31 Fc

MAN-55-AC/EM (Wall Mount – Enclosed Corridor)

Room Dimensions: 200' x 6' x Ceiling Height
 Reflectance: 80% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	9'	40'	0°	17.31 Fc	1.76 Fc	39.64 Fc
9'	11'	48'	0°	12.99 Fc	1.21 Fc	39.77 Fc
10'	12'	52'	0°	11.04 Fc	1.00 Fc	39.57 Fc
12'	14'	62'	0°	8.14 Fc	0.73 Fc	38.12 Fc
14'	16'	72'	0°	6.06 Fc	0.52 Fc	39.83 Fc
16'	18'	81'	0°	4.80 Fc	0.41 Fc	39.49 Fc
18'	20'	89'	0°	3.85 Fc	0.34 Fc	37.62 Fc
20'	22'	100'	0°	3.10 Fc	0.26 Fc	39.85 Fc

MAN-75-AC/EM (Wall Mount – Enclosed Corridor)

Room Dimensions: 200' x 6' x Ceiling Height
 Reflectance: 80% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	9'	40'	0°	22.91 Fc	2.33 Fc	39.49 Fc
9'	11'	48'	0°	17.08 Fc	1.61 Fc	39.31 Fc
10'	12'	52'	0°	14.57 Fc	1.36 Fc	38.40 Fc
12'	14'	62'	0°	10.62 Fc	0.96 Fc	38.04 Fc
14'	16'	72'	0°	7.88 Fc	0.68 Fc	39.87 Fc
16'	18'	81'	0°	6.23 Fc	0.53 Fc	39.91 Fc
18'	20'	89'	0°	4.97 Fc	0.43 Fc	38.77 Fc
20'	22'	100'	0°	4.01 Fc	0.34 Fc	39.71 Fc

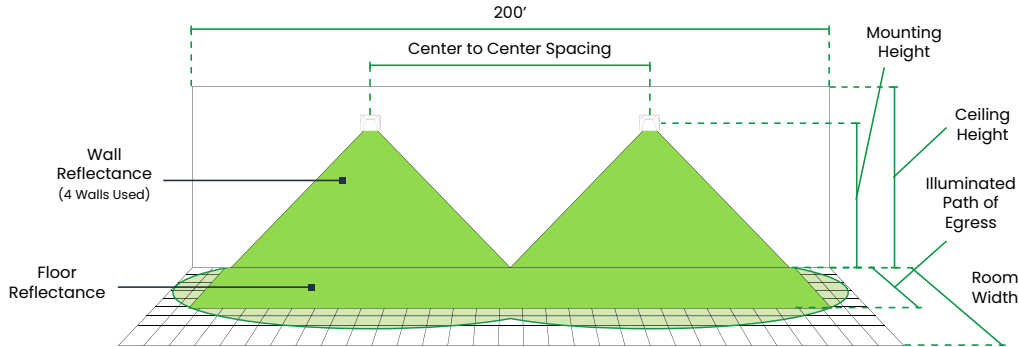
MAN-100-AC/EM (Wall Mount – Enclosed Corridor)

Room Dimensions: 200' x 6' x Ceiling Height
 Reflectance: 80% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	9'	37'	0°	33.16 Fc	3.56 Fc	37.05 Fc
9'	11'	48'	0°	24.23 Fc	2.28 Fc	39.72 Fc
10'	12'	52'	0°	20.60 Fc	1.91 Fc	39.04 Fc
12'	14'	62'	0°	15.08 Fc	1.35 Fc	38.62 Fc
14'	16'	71'	0°	11.34 Fc	1.00 Fc	38.86 Fc
16'	18'	80'	0°	9.00 Fc	0.79 Fc	38.23 Fc
18'	20'	89'	0°	7.09 Fc	0.62 Fc	38.42 Fc
20'	22'	99'	0°	5.78 Fc	0.50 Fc	38.48 Fc

SPACING GUIDES – Open Room (AC Models & EM Models in General Lighting Mode)

OPEN ROOM SPACING DIAGRAM



MAN-25-AC/EM (Wall Mount – Open Room)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	8.37 Fc	0.88 Fc	35.89 Fc
9'	N/A	41'	0°	5.92 Fc	0.55 Fc	38.55 Fc
10'	N/A	46'	0°	4.86 Fc	0.43 Fc	39.56 Fc
12'	N/A	56'	0°	3.38 Fc	0.29 Fc	39.31 Fc
14'	N/A	66'	0°	2.46 Fc	0.21 Fc	39.05 Fc
16'	N/A	76'	0°	1.88 Fc	0.16 Fc	39.00 Fc
18'	N/A	84'	0°	1.51 Fc	0.13 Fc	37.31 Fc
20'	N/A	94'	0°	1.21 Fc	0.10 Fc	38.90 Fc

MAN-55-AC/EM (Wall Mount – Open Room)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	17.11 Fc	1.83 Fc	34.99 Fc
9'	N/A	41'	0°	12.11 Fc	1.14 Fc	37.75 Fc
10'	N/A	46'	0°	9.94 Fc	0.90 Fc	38.44 Fc
12'	N/A	56'	0°	6.90 Fc	0.60 Fc	38.55 Fc
14'	N/A	66'	0°	5.02 Fc	0.43 Fc	38.70 Fc
16'	N/A	76'	0°	3.84 Fc	0.32 Fc	39.56 Fc
18'	N/A	86'	0°	3.01 Fc	0.25 Fc	39.36 Fc
20'	N/A	96'	0°	2.42 Fc	0.20 Fc	39.45 Fc

MAN-75-AC/EM (Wall Mount – Open Room)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	22.39 Fc	2.26 Fc	37.27 Fc
9'	N/A	41'	0°	15.70 Fc	1.42 Fc	39.51 Fc
10'	N/A	45'	0°	13.10 Fc	1.22 Fc	36.82 Fc
12'	N/A	56'	0°	8.88 Fc	0.75 Fc	39.95 Fc
14'	N/A	66'	0°	6.45 Fc	0.54 Fc	39.81 Fc
16'	N/A	76'	0°	4.92 Fc	0.41 Fc	39.76 Fc
18'	N/A	85'	0°	3.89 Fc	0.33 Fc	38.36 Fc
20'	N/A	95'	0°	3.12 Fc	0.26 Fc	39.04 Fc

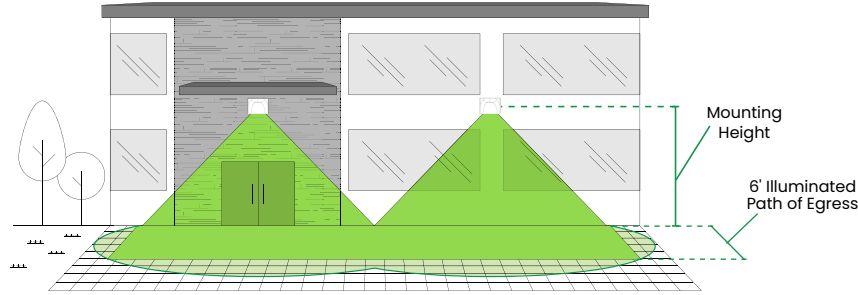
MAN-100-AC/EM (Wall Mount – Open Room)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	31.81 Fc	3.25 Fc	37.26 Fc
9'	N/A	41'	0°	22.36 Fc	2.04 Fc	39.56 Fc
10'	N/A	45'	0°	18.69 Fc	1.76 Fc	36.73 Fc
12'	N/A	56'	0°	12.70 Fc	1.08 Fc	39.91 Fc
14'	N/A	66'	0°	9.23 Fc	0.78 Fc	39.67 Fc
16'	N/A	75'	0°	7.16 Fc	0.61 Fc	38.48 Fc
18'	N/A	85'	0°	5.58 Fc	0.47 Fc	38.77 Fc
20'	N/A	95'	0°	4.47 Fc	0.38 Fc	38.42 Fc

SPACING GUIDES – Outdoor (AC Models & EM Models in General Lighting Mode)

OUTDOOR SPACING DIAGRAM



MAN-25-AC/EM (Wall Mount – Outdoor)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	8.14 Fc	0.86 Fc	36.06 Fc
9'	N/A	41'	0°	5.76 Fc	0.53 Fc	39.30 Fc
10'	N/A	46'	0°	4.72 Fc	0.42 Fc	39.67 Fc
12'	N/A	55'	0°	3.35 Fc	0.30 Fc	37.40 Fc
14'	N/A	65'	0°	2.45 Fc	0.22 Fc	36.73 Fc
16'	N/A	75'	0°	1.87 Fc	0.16 Fc	38.31 Fc
18'	N/A	85'	0°	1.47 Fc	0.12 Fc	39.83 Fc
20'	N/A	94'	0°	1.19 Fc	0.10 Fc	38.40 Fc
22'	N/A	100'	0°	1.02 Fc	0.10 Fc	31.50 Fc
24'	N/A	93'	0°	1.00 Fc	0.15 Fc	17.53 Fc

MAN-55-AC/EM (Wall Mount – Outdoor)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	16.65 Fc	1.79 Fc	35.12 Fc
9'	N/A	41'	0°	11.77 Fc	1.11 Fc	38.03 Fc
10'	N/A	46'	0°	9.65 Fc	0.87 Fc	38.83 Fc
12'	N/A	56'	0°	6.73 Fc	0.59 Fc	38.53 Fc
14'	N/A	66'	0°	4.92 Fc	0.42 Fc	39.00 Fc
16'	N/A	76'	0°	3.76 Fc	0.32 Fc	38.84 Fc
18'	N/A	86'	0°	2.96 Fc	0.25 Fc	38.72 Fc
20'	N/A	96'	0°	2.38 Fc	0.20 Fc	38.85 Fc
22'	N/A	106'	0°	1.96 Fc	0.16 Fc	40.00 Fc
24'	N/A	115'	0°	1.65 Fc	0.14 Fc	38.07 Fc

MAN-75-AC/EM (Wall Mount – Outdoor)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	21.81 Fc	2.20 Fc	37.52 Fc
9'	N/A	40'	0°	15.63 Fc	1.53 Fc	35.97 Fc
10'	N/A	45'	0°	12.75 Fc	1.20 Fc	36.61 Fc
12'	N/A	55'	0°	8.83 Fc	0.79 Fc	37.27 Fc
14'	N/A	66'	0°	6.33 Fc	0.53 Fc	39.94 Fc
16'	N/A	75'	0°	4.90 Fc	0.42 Fc	38.12 Fc
18'	N/A	85'	0°	3.82 Fc	0.33 Fc	37.79 Fc
20'	N/A	95'	0°	3.07 Fc	0.26 Fc	38.46 Fc
22'	N/A	105'	0°	2.52 Fc	0.21 Fc	39.41 Fc
24'	N/A	115'	0°	2.10 Fc	0.18 Fc	38.06 Fc
26'	N/A	124'	0°	1.80 Fc	0.15 Fc	38.73 Fc
28'	N/A	134'	0°	1.54 Fc	0.13 Fc	38.38 Fc
30'	N/A	144'	0°	1.33 Fc	0.11 Fc	39.36 Fc

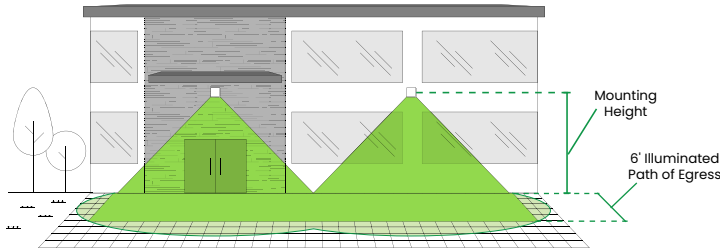
MAN-100-AC/EM (Wall Mount – Outdoor)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE ≥ 1.0 Fc	MINIMUM ≥ 0.1 Fc	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	30.96 Fc	3.17 Fc	37.46 Fc
9'	N/A	40'	0°	22.26 Fc	2.20 Fc	35.99 Fc
10'	N/A	45'	0°	18.19 Fc	1.72 Fc	36.74 Fc
12'	N/A	56'	0°	12.39 Fc	1.06 Fc	39.97 Fc
14'	N/A	65'	0°	9.18 Fc	0.81 Fc	37.59 Fc
16'	N/A	75'	0°	7.01 Fc	0.60 Fc	38.40 Fc
18'	N/A	86'	0°	5.42 Fc	0.45 Fc	39.84 Fc
20'	N/A	95'	0°	4.40 Fc	0.37 Fc	38.89 Fc
22'	N/A	105'	0°	3.62 Fc	0.31 Fc	38.16 Fc
24'	N/A	115'	0°	3.02 Fc	0.25 Fc	39.40 Fc
26'	N/A	126'	0°	2.54 Fc	0.21 Fc	39.81 Fc
28'	N/A	136'	0°	2.18 Fc	0.18 Fc	39.89 Fc
30'	N/A	144'	0°	1.91 Fc	0.16 Fc	38.88 Fc

SPACING GUIDES (EM Models in Emergency Mode)

OUTDOOR SPACING DIAGRAM

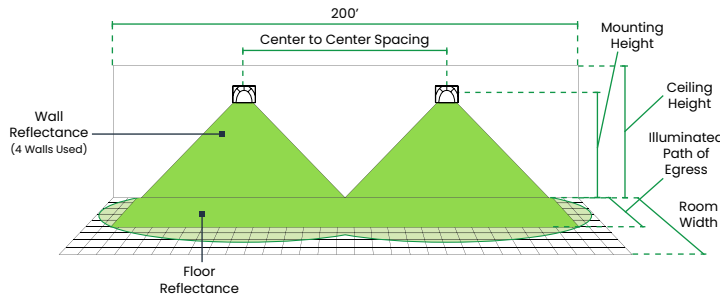


MAN-EM (Wall Mount - Outdoor)

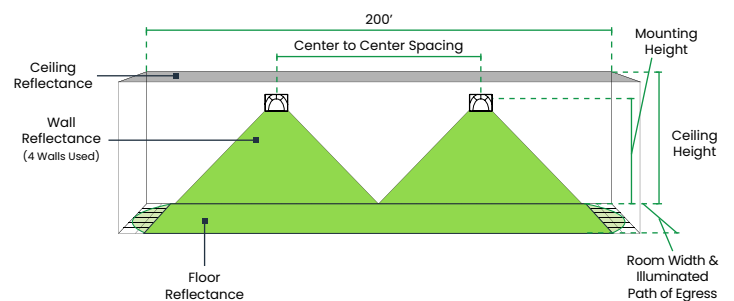
Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE $\geq 1.0 F_c$	MINIMUM $\geq 0.1 F_c$	MAXIMUM / MINIMUM $\leq 40:1$
7.5'	N/A	33'	0°	3.45 Fc	0.36 Fc	36.53 Fc
9'	N/A	41'	0°	2.44 Fc	0.23 Fc	38.39 Fc
10'	N/A	46'	0°	2.00 Fc	0.18 Fc	39.22 Fc
12'	N/A	56'	0°	1.40 Fc	0.12 Fc	39.67 Fc
14'	N/A	64'	0°	1.05 Fc	0.10 Fc	34.30 Fc
16'	N/A	59'	0°	1.00 Fc	0.17 Fc	15.29 Fc
18'	N/A	52'	0°	1.01 Fc	0.32 Fc	6.34 Fc
20'	N/A	47'	0°	1.00 Fc	0.47 Fc	3.47 Fc

INDOOR OPEN ROOM



INDOOR ENCLOSED CORRIDOR



MAN-12-EM (Wall Mount - Indoor)

Room Dimensions: 200' x 30' High Mounting Wall
 Reflectance: 0% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE $\geq 1.0 F_c$	MINIMUM $\geq 0.1 F_c$	MAXIMUM / MINIMUM $\leq 40:1$
7.5	N/A	33	N/A	3.55	0.37	36.19
9	N/A	41	N/A	2.51	0.23	39.09
10	N/A	45	N/A	2.10	0.20	36.05
12	N/A	55	N/A	1.46	0.13	37.23
14	N/A	63	N/A	1.09	0.10	34.80
16	N/A	61	N/A	1.00	0.16	16.50
18	N/A	53	N/A	1.01	0.30	6.87
20	N/A	47	N/A	1.01	0.47	3.51

MAN-12-EM (Wall Mount - Indoor)

Room Dimensions: 200' x 6' x Ceiling Height
 Reflectance: 80% (Ceiling) | 50% (Wall) | 20% (Floor)
 Path of Egress: 6' Wide

MOUNTING HEIGHT	CEILING HEIGHT	SPACING CENTER TO CENTER	ROTATION TILT/ROLL	NFPA 101 REQUIREMENTS		
				AVERAGE $\geq 1.0 F_c$	MINIMUM $\geq 0.1 F_c$	MAXIMUM / MINIMUM $\leq 40:1$
7.5	9	39	N/A	3.68	0.40	36.35
9	11	47	N/A	2.73	0.27	37.19
10	12	52	N/A	2.30	0.21	39.33
12	14	62	N/A	1.69	0.15	38.67
14	16	72	N/A	1.26	0.11	39.27
16	18	78	N/A	1.02	0.10	33.60
18	20	70	N/A	1.02	0.17	15.71
20	22	63	N/A	1.01	0.29	7.48

PHOTOMETRICS

LEGEND

■ 5 Fc
 ■ 2 Fc
 ■ 1 Fc
 ■ 0.5 Fc
 ■ 0.2 Fc
 ■ 0.1 Fc
 ■ 1 Fc Average

Mounting Height = 12 ft

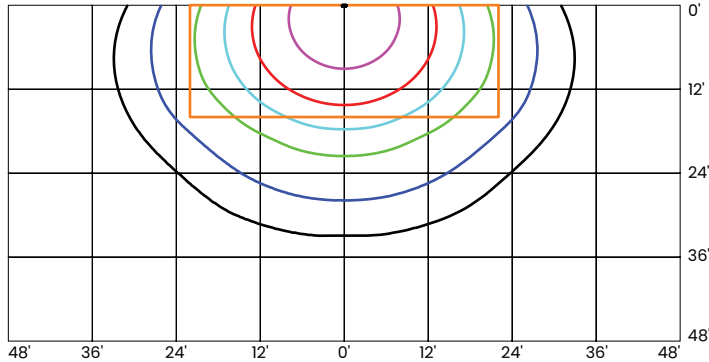
Grid = 12 ft × 12 ft

MAN-25-AC (Outdoor)

Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)

Illuminance (Fc):

Avg: 2.70 Min: 0.3 Max/Min: 35.00

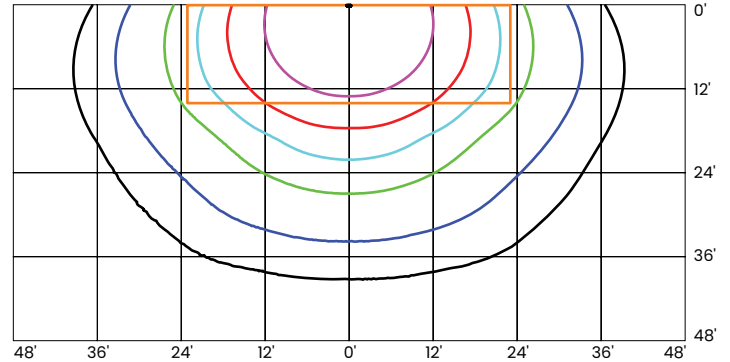


MAN-55-AC (Outdoor)

Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)

Illuminance (Fc):

Avg: 5.74 Min: 0.6 Max/Min: 35.50

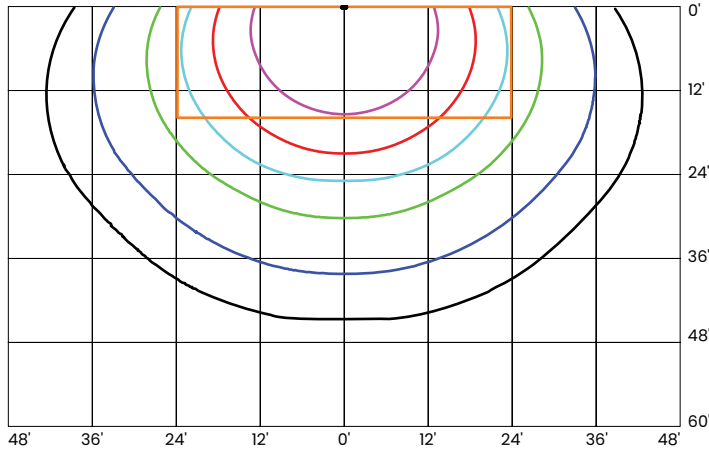


MAN-75-AC (Outdoor)

Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)

Illuminance (Fc):

Avg: 6.71 Min: 0.7 Max/Min: 38.57

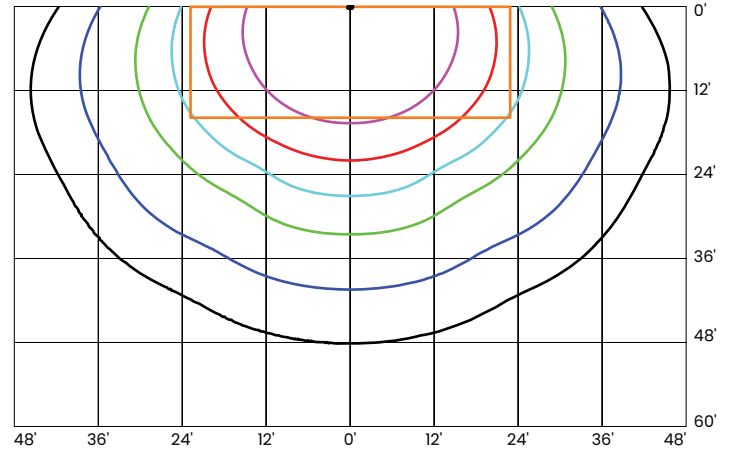


MAN-100-AC (Outdoor)

Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)

Illuminance (Fc):

Avg: 9.84 Min: 1.0 Max/Min: 38.90



MAN-EM (Outdoor)

Reflectance: 0% (Ceiling) | 30% (Wall) | 10% (Floor)

Illuminance (Fc):

Avg: 1.35 Min: 0.2 Max/Min: 24.00

