

PROJECT NAME: _____ CAT. #: _____
 NOTES: _____ FIXTURE SCHEDULE: _____

M Series



125/150W
STRAIGHT ARM



200/250/320W
FLEXIBLE ARM WITH C-MAX



125/150W
KNUCKLE SLIPFITTER



75/100W
TRUNNION



40/55W
FIXED WALL



40/55W VARIABLE
(ADJUSTABLE) WALL WITH C-MAX



40/55W FIXED WALL WITH EM
(BATTERY BACKUP)



Product Description:

The M Series product family provides a slim, clean design with tremendous versatility for outdoor lighting applications. A singular housing thrives as either an Area, Flood or Wall fixture depending on the optics and mounting selected. The standard product is CCT selectable, enabling the customer to choose from 3 color temperatures in a single product. It also includes a controls ready receptacle that allows the customer to add either basic controls, such as an on/off photocell or motion sensor, or network control nodes for grouping and more sophisticated control functions. Beyond the standard features, additional options and accessories include high voltage (277-480V), battery backup, visual comfort lens, back light shield and visors. The M Series family provides a comprehensive site design solution for your outdoor lighting needs.

Installation:

- 6 mountings available - straight arm, flexible arm, knuckle slipfitter, trunnion, variable (adjustable) wall, fixed wall

Construction:

- Die cast aluminum housing with corrosion resistant polyester powder coat finish
- UV stabilized polycarbonate lens

Application:

- Area - 6 optics: Type 3 Medium, Type 4 Narrow, Type 4 Wide, Type 5 Square, Types 3 & 5 Low Glare
- Flood - 3 optics: Narrow 4x4, Concentrated Wide 6x6, and Soft Wide 6x7
- Wall - 4 optics: Type 3 Medium and Low Glare, Type 4 Narrow and Wide

Mounting:

- Arms feature labor saving slot design
- Slipfitter fits 2 3/8" - 3" OD tenons and bull horns
- Round pole adapters for 3", 4" and 5" round poles



Mounting Arms include labor saving slot pattern

Features:

- Covers 3 applications - Area, Flood and Wall
- 4 sizes, 9 wattages – 40/55W, 75/100W, 125/150W and 200/250/320W
- Multiple mounting options for wall, area and flood applications
- Comprehensive range of optic choices for area, flood and wall design requirements
- HV – 277-480V option
- CCT Selection – 3000/4000/5000K
- Compatible with field installable c-Max controls
- Avi-On controls compatible (factory installed)
- TAA Compliant



10-year standard warranty with labor allowance (further details available at www.maxlite.com/warranties)

Warranty Limitations: Product must be rated for application per the Product Data Sheet (PDS); operated ≤16 hrs; in ambient temperatures -4°F to 77°F. If ambient temperatures fall outside the -4°F to 77°F range, product is warrantied for 5 years according to the operating temperature range specified on the PDS. Up to \$25/unit; registration required. Additional coverage may be available for purchase; contact MaxLite. Excludes EM/MS versions: component warranty applies.

M Series

Ordering Information

FAMILY	WATTAGE	VOLTAGE	DISTRIBUTION	-	CCT	COLOR	MOUNTING
M= M Series	40= 40W 55= 55W 75= 75W 100= 100W 125= 125W 150= 150W 200= 200W 250= 250W 320= 320W	U= 120-277V H= 277-480V	3G= Type 3 Low Glare 3M= Type 3 Medium 4N= Type 4 Narrow 4W= Type 4 Wide 5S= Type 5 Square/Flood Soft Wide (6x7) N= Narrow Flood (4x4) W= Flood Concentrated Wide (6x6), Type 5 Low Glare		CS= 3000/4000/5000K	B= Dark Bronze <i>Contact Maxlite for additional finishes</i>	1A= Straight Arm, Pole Mount 1F= Flexible Arm, Pole Mount 2K= Knuckle Slip Fitter T= Trunnion V= Variable (Adjustable) Wall Mount W= Fixed Wall Mount

¹Features labor saving slot pattern
²Covers 2 3/8" - 3" OD

OPTIONS	EM OPTIONS (FACTORY INSTALLED)	OTHER CONTROLS
CR= Controls Ready, C-Max Compatible AV= Avi-on Controls (factory installed)	E0= Battery Backup, 0°C, Wall Applications Only E2= Battery Backup, -20°C, Wall Applications Only	*RPC= 3-pin Twist Lock Receptacle *PR7= 7-pin Twist Lock Receptacle

*Twist Lock Controls ordered separately. c-Max compatibility disabled when twist lock options are chosen.

Product Video:

<https://youtu.be/9v0Bgk9qBws>



c-Max Installation Video:

https://youtu.be/NyXByIJZD_w



Accessories

MODEL NUMBER (FIELD INSTALLABLE)	ORDER CODE	DESCRIPTION	IMAGE
RPA3-B	106239	3" Round pole adaptor, Labor saving slotted drill pattern, Bronze	
RPA4-B	106240	4" Round pole adaptor, Labor saving slotted drill pattern, Bronze	
RPA5-B	106241	5" Round pole adaptor, Labor saving slotted drill pattern, Bronze	
CN-RDPCB	105569	c-Max Photocell node round, Bronze, IP66, Used with control ready fixtures	
CN-RDMSB	105566	c-Max Control node round, PIR Motion sensor/photocell, Bronze, IP66, Used with control ready fixtures*	
CN-REMOTE	105567	c-Max Remote Control, at least 1 per project to program motion sensor (CN-RDMSB)	
NN-RDB	105897	Network Node Round, Bronze**	
NN-RDMPB	108255	Network Node Round, PIR Motion Sensor, Photocell, Bronze**	
MBLS40-55W	106258	M Series Back Light Shield 40/55W ¹	
MBLS75-100W	106303	M Series Back Light Shield 75/100W ¹	
MBLS125W+	106304	M Series Back Light Shield 125W+, order 1 for 125/150W, 2 for 200W+ versions ¹	
MVCL40-55W	106305	M Series Visual Comfort Lens 40/55W ¹	
MVCL75-100W	106306	M Series Visual Comfort Lens 75/100W ¹	
MVCL125W+	106307	M Series Visual Comfort Lens 125W+, order 1 for 125/150W, 2 for 200W+ versions ¹	
MVISOR40-55W	106321	M Series - top/bottom Visor 40/55W, Bronze ¹	
MVISOR75-100W	106322	M Series - top/bottom Visor 75/100W, Bronze ¹	
MVISOR125-150W	106323	M Series - top/bottom Visor 125/150W, Bronze ¹	
MVISOR200-320W	106324	M Series - top/bottom Visor 200/250/320W, Bronze ¹	

¹Requires at least 1 remote control (CN-REMOTE) per project to program
²Requires c-Max Ann



M Series

Specifications

	M40	M55	M75	M100	M125	M150	M200	M250	M320
	DETAILS								
Nominal Wattage (W)	40	55	75	100	125	150	200	250	320
CCT	Selectable between 3000K, 4000K or 5000K								
CRI	≥70 (80 available as a special)								
Lumens Type 3G	5,050 - 5,350	6,890 - 7,290	9,470 - 10,030	12,160 - 12,880	18,050 - 19,120	20,350 - 21,550	28,050 - 29,720	35,210 - 37,300	44,440 - 47,070
BUG Rating	B2-U0-G0	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B4-U0-G1	B4-U0-G1	B5-U0-G1
Lumens Type 3M	4970 - 5,260	6,770 - 7,170	9,310 - 9,860	11,960 - 12,670	17,750 - 18,800	20,010 - 21,200	27,590 - 29,220	34,630 - 36,690	43,700 - 46,290
BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4 ²	B4-U0-G5 ³
Lumens Type 4N	4,850 - 5,140	6,620 - 7,010	9,100 - 9,640	11,680 - 12,380	17,340 - 18,370	19,550 - 20,710	26,950 - 28,550	33,830 - 35,840	42,690 - 45,230
BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5
Lumens Type 4W	4,830 - 5,120	6,590 - 6,980	9,060 - 9,590	11,630 - 12,330	17,270 - 18,290	19,470 - 20,620	26,840 - 28,430	33,690 - 35,690	42,510 - 45,040
BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G2 ¹	B2-U0-G3	B2-U0-G5	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
Lumens Type 5S	5,080 - 5,380	6,930 - 7,350	9,530 - 10,100	12,260 - 12,990	18,300 - 19,390	20,620 - 21,840	28,440 - 30,130	35,680 - 37,800	45,050 - 47,730
BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4
Flood Beam Spread	6x7 (113°x123.5°)								
Lumens Type N	4,870 - 5,160	6,650 - 7,040	9,140 - 9,680	11,740 - 12,440	17,420 - 18,460	19,640 - 20,810	27,090 - 28,690	34,000 - 36,020	45,900 - 45,450
Flood Beam Spread	4x4 (25°x25°)								
Lumens Type W (5G)	5,140 - 5,450	7,010 - 7,430	9,640 - 10,210	12,380 - 13,120	18,380 - 19,470	20,720 - 21,950	28,560 - 30,260	35,860 - 37,980	45,240 - 47,930
BUG Rating	B2-U0-G0	B3-U0-G0	B3-U0-G1	B3-U0-G1	B4-U0-G1	B4-U0-G1	B5-U0-G1	B5-U0-G1	B5-U0-G1
Flood Beam Spread	6x6 (96°x106°)								
Efficacy (lm/W)	122 - 144	124 - 145	125 - 146	124 - 146	131 - 154	134 - 157	135 - 159	134 - 157	133 - 156
Dimming	0-10V and High-end trim (with controls)								
Power Factor	≥0.90								
Input Voltage	120-277V, 277-480V option								
Surge Protection	Standard: 6kV, Special order for 20kA				Std: 120-277V 10kA, 277-480V 20kA; Special order 120-277V 20k				
Housing & Mounting	Die Cast Aluminum with corrosion resistant powder coat finish								
Lens	UV stabilized polycarbonate								
EPA (sq ft) - 0° (Horizontal) / 90° (Vertical)	0.19/0.81		0.24/1.32		0.25/2.05		0.41/3.13		
Operating Temperature	-40°F to 104°F (-40°C to 40°C)								
Listings	DLC Premium, FCC, cULus, RoHS, T24 Compliant								
Environment	Wet listed, IP66				Wet listed, IP65				
Warranty	10 Years								

¹ 3K is B1-U0-G2

² 4K is B3-U0-G5

³ 3K is B3-U0-G5



M Series

DLC Listings

WATTAGE	PRIMARY USE	PRODUCT ID
M40, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	PR3VMOTQ
M40, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PIO7T85U
M40, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	PWBY8U3Y
M40, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PVPBCQE5
M40, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	P96QU0VW
M40, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	P9IRR02R
M55, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	PLY8SMJW
M55, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PCM4IUV
M55, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	PRL20GOP
M55, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PI1H22M
M55, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	PCHRAFPG
M55, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	P2RPWQKA
M75, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	P5Z7GVDA
M75, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PS6Q8ZSD
M75, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	PFZRYV0Q
M75, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PNT3M0UF
M75, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	PDCS2GG3
M75, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PA6WVV7E
M100, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	PIHUT8TL
M100, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PMOYGRV3
M100, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	PQU5CN6B
M100, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PTF38DFA
M100, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	POSEKAA3
M100, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	P4OHSIJE
M125, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	PE7Y2CCZ
M125, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PNSSDTTC
M125, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	P3RX1423
M125, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PL1332KS
M125, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	PTJQVGWC
M125, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PML6UAPM
M150, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	PXM73I9X
M150, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	P6JGV1PU
M150, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	PHMB25J1
M150, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PSJ9VTV4
M150, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	PWIFLPWO
M150, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PFSQ4DFD
M200, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	P14PJ14H
M200, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PRTH0HOP
M200, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	PLP5YZO5
M200, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	P7E6DQVK

WATTAGE	PRIMARY USE	PRODUCT ID
M200, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	PBIEFS7V
M200, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PV8Q3L9O
M250, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	PCQW4VUX
M250, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PT0JUAW4
M250, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	PTZ6CK9L
M250, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PXYC8361
M250, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	PH3RU51J
M250, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PE0M6MSO
M320, 3G lens	Outdoor Pole/Arm-Mounted Area & Roadway	POFOOQ18
M320, 3M lens	Outdoor Pole/Arm-Mounted Area & Roadway	PWNT7RTQ
M320, 4N lens	Outdoor Pole/Arm-Mounted Area & Roadway	P6I9ZGT8
M320, 4W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PBN5XXBB
M320, 5S lens	Outdoor Pole/Arm-Mounted Area & Roadway	POKYKDCW
M320, W lens	Outdoor Pole/Arm-Mounted Area & Roadway	PQ4VAAGG
M40, 3G lens	Outdoor Full-Cutoff Wall-Mounted	P5Y151JQ
M40, 3M lens	Outdoor Full-Cutoff Wall-Mounted	PKURGJ38
M40, 4N lens	Outdoor Full-Cutoff Wall-Mounted	PLD07NKW
M40, 4W lens	Outdoor Full-Cutoff Wall-Mounted	P4NIBPXX
M55, 3G lens	Outdoor Full-Cutoff Wall-Mounted	PWG0XLZH
M55, 3M lens	Outdoor Full-Cutoff Wall-Mounted	P91SSRKF
M55, 4N lens	Outdoor Full-Cutoff Wall-Mounted	PGIFUBRK
M55, 4W lens	Outdoor Full-Cutoff Wall-Mounted	P3G4C0V1
M75, 3G lens	Outdoor Full-Cutoff Wall-Mounted	PN6T11KE
M75, 3M lens	Outdoor Full-Cutoff Wall-Mounted	P0QJEATU
M75, 4N lens	Outdoor Full-Cutoff Wall-Mounted	PU4WUWJ3
M75, 4W lens	Outdoor Full-Cutoff Wall-Mounted	P26EHA8E
M100, 3G lens	Outdoor Full-Cutoff Wall-Mounted	P5GDOKB8
M100, 3M lens	Outdoor Full-Cutoff Wall-Mounted	P37EVAVN
M100, 4N lens	Outdoor Full-Cutoff Wall-Mounted	PPVFERNP
M100, 4W lens	Outdoor Full-Cutoff Wall-Mounted	PRO3KZ3Z
M125, 3G lens	Outdoor Full-Cutoff Wall-Mounted	PI826IXI
M125, 3M lens	Outdoor Full-Cutoff Wall-Mounted	P6GH02CN
M125, 4N lens	Outdoor Full-Cutoff Wall-Mounted	PXWE8IQW
M125, 4W lens	Outdoor Full-Cutoff Wall-Mounted	PH6YCJQG
M150, 3G lens	Outdoor Full-Cutoff Wall-Mounted	PVZ943MM
M150, 3M lens	Outdoor Full-Cutoff Wall-Mounted	PPDKSK5W
M150, 4N lens	Outdoor Full-Cutoff Wall-Mounted	P1G5I0JU
M150, 4W lens	Outdoor Full-Cutoff Wall-Mounted	PICFYMI6
M200, 3G lens	Outdoor Full-Cutoff Wall-Mounted	P9XV6Y1B
M200, 3M lens	Outdoor Full-Cutoff Wall-Mounted	PHDN00TV

M Series

DLC Listings

WATTAGE	PRIMARY USE	PRODUCT ID
M200, 4N lens	Outdoor Full-Cutoff Wall-Mounted	P9NV5H5K
M200, 4W lens	Outdoor Full-Cutoff Wall-Mounted	PBTXV4DQ
M250, 3G lens	Outdoor Full-Cutoff Wall-Mounted	PRFIHADG
M250, 3M lens	Outdoor Full-Cutoff Wall-Mounted	PCH7IS3Q
M250, 4N lens	Outdoor Full-Cutoff Wall-Mounted	PHR4UK3U
M250, 4W lens	Outdoor Full-Cutoff Wall-Mounted	PLF547FE
M320, 3G lens	Outdoor Full-Cutoff Wall-Mounted	PPZXJYBX
M320, 3M lens	Outdoor Full-Cutoff Wall-Mounted	PKB73CAI
M320, 4N lens	Outdoor Full-Cutoff Wall-Mounted	PPF38F78
M320, 4W lens	Outdoor Full-Cutoff Wall-Mounted	PR25RP61
M40, 5S lens	Architectural Flood and Spot	P9082B3M
M40, N lens	Architectural Flood and Spot	PIZVRDRB
M40, W lens	Architectural Flood and Spot	P03KCLIO
M55, 5S lens	Architectural Flood and Spot	P1WEFKCO
M55, N lens	Architectural Flood and Spot	PLLZ8GZF
M55, W lens	Architectural Flood and Spot	P57QBIY2
M75, 5S lens	Architectural Flood and Spot	P5VKKGAD
M75, N lens	Architectural Flood and Spot	PNHUVEF6
M75, W lens	Architectural Flood and Spot	P18P7JWP
M100, 5S lens	Architectural Flood and Spot	PB5RHZ5S
M100, N lens	Architectural Flood and Spot	PP0RFF6Y
M100, W lens	Architectural Flood and Spot	PNSQCL5Y
M125, 5S lens	Architectural Flood and Spot	P8C38AL4
M125, N lens	Architectural Flood and Spot	P7ZAR4NT
M125, W lens	Architectural Flood and Spot	PVSQOL93
M150, 5S lens	Architectural Flood and Spot	P33TW4E4
M150, N lens	Architectural Flood and Spot	PTNZAYPW
M150, W lens	Architectural Flood and Spot	P1APKWTX
M200, 5S lens	Architectural Flood and Spot	PQDK7DDB
M200, N lens	Architectural Flood and Spot	P3NO2N9W
M200, W lens	Architectural Flood and Spot	PQ5DLK2C
M250, 5S lens	Architectural Flood and Spot	PVO7HW7C
M250, N lens	Architectural Flood and Spot	P1W75AHC
M250, W lens	Architectural Flood and Spot	P95PFAQ5
M320, 5S lens	Architectural Flood and Spot	PIF8M3ZI
M320, N lens	Architectural Flood and Spot	POFV7KLU
M320, W lens	Architectural Flood and Spot	PA6BSOOQ



M Series

Dimensions



40W/55W



75W/100W



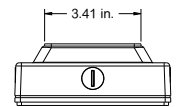
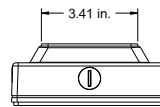
125W/150W



200W/250W/320W



Battery Backup Box



Fixed Wall Mount Bracket

M Series

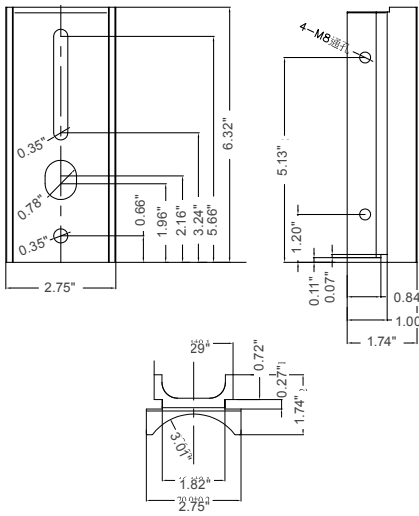
Mounting



Flexible (Adjustable) Square Arm



Straight Square Arm



Round Pole Adapter (RPA) 3"



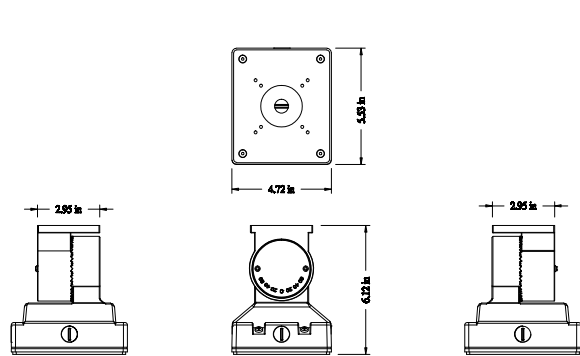
Round Pole Adapter (RPA) 4"



Round Pole Adapter (RPA) 5"



Slipfitter Arm (fits 2 3/8"-3" OD)



Variable (adjustable) Wall Mount

M Series

ISOFOOTCANDLE:

Each gridline represents one mounting height.
For mounting heights other than noted multiply FC by the below factor.

$$\frac{(\text{Chart's Mtg Height})^2}{(\text{Actual Mtg Height})^2}$$

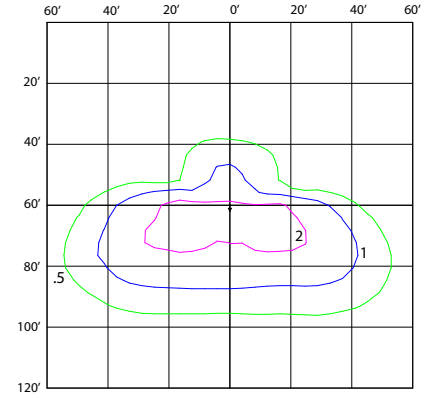
LEGEND

- 0.5 fc
- 1 fc
- 2 fc
- 5 fc
- 10 fc
- 20 fc

55W - 20' MOUNTING HEIGHT:



3G (TYPE 3 LOW GLARE)



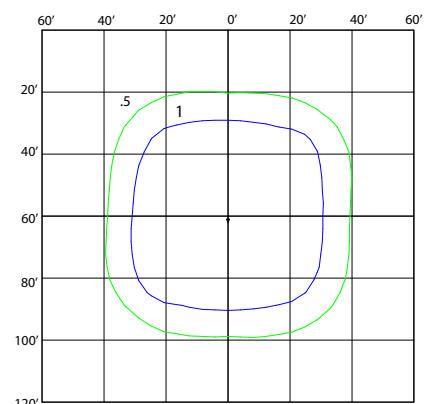
3M (TYPE 3 MEDIUM)



4N (TYPE 4 NARROW)



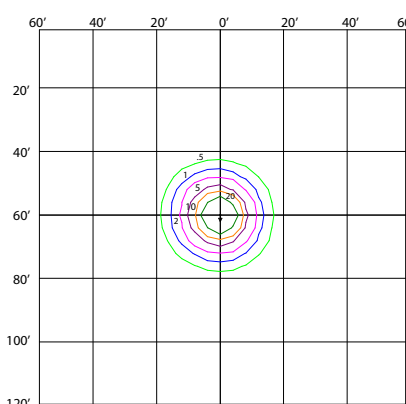
4W (TYPE 4 WIDE)



5S (TYPE 5 SQUARE/WIDE 6X7)



W (WIDE 6X6/TYPE 5 LOW GLARE)



N (NARROW 4X4)

M Series

100W - 25' MOUNTING HEIGHT:



3G (TYPE 3 LOW GLARE)



3M (TYPE 3 MEDIUM)



4N (TYPE 4 NARROW)



4W (TYPE 4 WIDE)



5S (TYPE 5 SQUARE/WIDE 6X7)



W (WIDE 6X6/TYPER 5 LOW GLARE)



N (NARROW 4X4)

M Series

150W - 30' MOUNTING HEIGHT:



3G (TYPE 3 LOW GLARE)



3M (TYPE 3 MEDIUM)



4N (TYPE 4 NARROW)



4W (TYPE 4 WIDE)



5S (TYPE 5 SQUARE/WIDE 6X7)



W (WIDE 6X6/TYPE 5 LOW GLARE)



N (NARROW 4X4)

M Series

320W - 40' MOUNTING HEIGHT:



3G (TYPE 3 LOW GLARE)



3M (TYPE 3 MEDIUM)



4N (TYPE 4 NARROW)



4W (TYPE 4 WIDE)



5S (TYPE 5 SQUARE/WIDE 6X7)



W (WIDE 6X6/TYPE 5 LOW GLARE)



N (NARROW 4X4)