

CATALOG#:	
PROJECT:	
TYPE:	

# MAL08 AREA LIGHT

Medium Size: 100W/140W/180W



### Large Size: 250W/300W/400W















### **Construction:**

- The rugged, one-piece die-cast aluminum housing features a complete heat sink hat optimizes heat dissipation through convection cooling management.
- Low profile, 3G vibration rated compact design minimizes wind load requirements
- Housing is completely sealed against moisture and environmental contaminants.

### **OPTICS:**

- Available in IES Type II, III, IV, V distributions
- Light engines are available in adjustable color temperature (3000K&4000K&5000K) configurations.
- Scalable Lumen Packages from 6,600 to 61,000 Lumens replaces up to 1000W
   Metal Halide.
- Optics is precisely designed to shape the distribution, maximizing efficiency and application spacing.

### **ELECTRICAL:**

- Universal 120-277 VAC or 347-480 VAC input voltage
- 10KA(@120-277V) or 20KA(@347-480V) surge protection
- 0-10V dimming driver standard for 10% to 100% dimming
- Power adjustable: 100%, 80%, 60%, 40%.
- THD: ≤20%
- Power Factor: ≥90%

### CONTROLS:

- Optional Occupancy sensor or Microwave sensor.
- Optional Bluetooth sensor or Bluetooth controller.
- Optional NEMA 3-pin photocell or 7-pin photocell.

### **Ambient Temperature:**

- Ambient operating temperature -40°C to 45°C (-40°F to 113°F).
- The ambient temperature of 400W is: -40°C to 40°C

#### INSTALLATION:

- Suitable for mounting heights ranging from 26-50' in area lighting applications
- Round pole, Square pole, slipfitter, wall mount and yoke are available.
- The design can be operated by one person to install the whole lamp

#### LIFESPAN:

Estimated 100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

### FINISH:

• It's available in black or optional dark bronze, silvery gray or white.



### **CERTIFICATIONS:**

- UL wet location listed
- DesignLights Consortium™ Qualified. Note:
   DesignLights Consortium™ Qualified and classified for
   DLC Premium, refer to www.designlights.org for details.

### NOTE:

Actual performance may differ as a result of enduser environment and application. All values are design or typical values, measured under laboratory conditions at 25C(±5C) specifications subject to change without notice.



CATALOG#:	MAL08
PROJECT:	AREA LIGHT
TYPE:	ANLA LIGITI

# Structural Design



# PERFORMANCE DATA

	MAL08100W								
SETTING	SYSTEM	DIST.TYPE	CRI	300	00K	400	00K	500	00K
SETTING	WATTS	DIST.TTE	CRI	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
		2	70	14500lm	145 lm/W	15800lm	158 lm/W	15000lm	150 lm/W
100%	100W	3	70	14500lm	145 lm/W	15800lm	158 lm/W	15000lm	150 lm/W
100%	10000	4	70	14500lm	145 lm/W	15800lm	158 lm/W	15000lm	150 lm/W
		5	70	15100lm	151 lm/W	16000lm	160 lm/W	15600lm	156 lm/W
		2	70	12000lm	150 lm/W	13000lm	163 lm/W	12500lm	156 lm/W
80%	80W	3	70	12000lm	150 lm/W	13000lm	163 lm/W	12500lm	156 lm/W
00%	8000	4	70	12000lm	150 lm/W	13000lm	163 lm/W	12500lm	156 lm/W
		5	70	12500lm	156 lm/W	13300lm	166 lm/W	12800lm	160 lm/W
		2	70	9300lm	155 lm/W	10000lm	167 lm/W	9600lm	160 lm/W
60%	60W	3	70	9300lm	155 lm/W	10000lm	167 lm/W	9600lm	160 lm/W
60%	6000	4	70	9300lm	155 lm/W	10000lm	167 lm/W	9600lm	160 lm/W
		5	70	9600lm	160 lm/W	10200lm	170 lm/W	9850lm	164 lm/W
		2	70	6400lm	160 lm/W	6800lm	170 lm/W	6560lm	164 lm/W
40%	40W	3	70	6400lm	160 lm/W	6800lm	170 lm/W	6560lm	164 lm/W
40%	4000	4	70	6400lm	160 lm/W	6800lm	170 lm/W	6560lm	164 lm/W
		5	70	6560lm	164 lm/W	7000lm	175 lm/W	6700lm	168 lm/W



CATALOG#:	MAL08
PROJECT:	AREA LIGHT
TYPE:	ANEA LIGHT

				MA	L08140W				
0.57711.10	SYSTEM	D.107 TV.05	651	30	00K	400	00K	500	00K
SETTING	WATTS	DIST.TYPE	CRI	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
		2	70	20000lm	147 lm/W	23000lm	164 lm/W	21000lm	150 lm/W
4000/	44004	3	70	20000lm	147 lm/W	23000lm	164 lm/W	21000lm	150 lm/W
100%	140W	4	70	20000lm	147 lm/W	23000lm	164 lm/W	21000lm	150 lm/W
		5	70	21000lm	150 lm/W	23500lm	168 lm/W	21500lm	154 lm/W
		2	70	18000lm	150 lm/W	20000lm	167 lm/W	18500lm	154 lm/W
000/	40004	3	70	18000lm	150 lm/W	20000lm	167 lm/W	18500lm	154 lm/W
80%	120W	4	70	18000lm	150 lm/W	20000lm	167 lm/W	18500lm	154 lm/W
		5	70	18500lm	154 lm/W	20500lm	171 lm/W	19000lm	158 lm/W
		2	70	13800lm	153 lm/W	15200lm	169 lm/W	14200lm	158 lm/W
		3	70	13800lm	153 lm/W	15200lm	169 lm/W	14200lm	158 lm/W
60%	90W	4	70	13800lm	153 lm/W	15200lm	169 lm/W	14200lm	158 lm/W
		5	70	14000lm	156 lm/W	15600lm	172 lm/W	14500lm	161 lm/W
		2	70	9400lm	157 lm/W	10300lm	172 lm/W	9700lm	162 lm/W
		3	70	9400lm	157 lm/W	10300lm	172 lm/W	9700lm	162 lm/W
40%	60W	4	70	9400lm	157 lm/W	10300lm	172 lm/W	9700lm	162 lm/W
		5	70	9600lm	160 lm/W	10500lm	175 lm/W	10000lm	167 lm/W
	•			MA	L08180W				
	SYSTEM			30	00K	400	00K	500	00K
SETTING	WATTS	DIST.TYPE	CRI	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
		2	70	24800lm	138 lm/W	27000lm	150 lm/W	25200lm	140 lm/W
		3	70	24800lm	138 lm/W	27000lm	150 lm/W	25200lm	140 lm/W
100%	180W	4	70	24800lm	138 lm/W	27000lm	150 lm/W	25200lm	140 lm/W
		5	70	25500lm	142 lm/W	28000lm	156 lm/W	26000lm	144 lm/W
		2	70	20200lm	140 lm/W	22000lm	153 lm/W	20600lm	143 lm/W
		3	70	20200lm	140 lm/W	22000lm	153 lm/W	20600lm	143 lm/W
80%	144W	4	70	20200lm	140 lm/W	22000lm	153 lm/W	20600lm	143 lm/W
		5	70	20800lm	144 lm/W	22800lm	158 lm/W	21000lm	146 lm/W
		2	70	15300lm	142 lm/W	16800lm	156 lm/W	15700lm	145 lm/W
		3	70	15300lm	142 lm/W	16800lm	156 lm/W	15700lm	145 lm/W
60%	108W	4	70	15300lm	142 lm/W	16800lm	156 lm/W	15700lm	145 lm/W
	5	70	15800lm	146 lm/W	17300lm	160 lm/W	16200lm	150 lm/W	
		2	70	10500lm	146 lm/W	11500lm	160 lm/W	10800lm	150 lm/W
		3	70	10500lm	146 lm/W	11500lm	160 lm/W	10800lm	150 lm/W
40%	72W	4	70	10500lm	146 lm/W	11500lm	160 lm/W	10800lm	150 lm/W
	5	70		+		164 lm/W	11000lm		



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PROJECT:	AREA LIGHT
TYPE:	AREA LIGHT

				MA	L08250W				
CETTING	SYSTEM	DIST TVDE	CDI	30	00K	400	00K	500	00K
SETTING	WATTS	DIST.TYPE	CRI	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
		2	70	33500lm	134 lm/W	37000lm	148 lm/W	34500lm	138 lm/W
1000/	25014	3	70	33500lm	134 lm/W	37000lm	148 lm/W	34500lm	138 lm/W
100%	250W	4	70	33500lm	134 lm/W	37000lm	148 lm/W	34500lm	138 lm/W
		5	70	34500lm	138 lm/W	38000lm	152 lm/W	35500lm	142 lm/W
		2	70	27500lm	138 lm/W	30400lm	152 lm/W	28400lm	142 lm/W
000/	20014	3	70	27500lm	138 lm/W	30400lm	152 lm/W	28400lm	142 lm/W
80%	200W	4	70	27500lm	138 lm/W	30400lm	152 lm/W	28400lm	142 lm/W
		5	70	28000lm	140 lm/W	31000lm	155 lm/W	28800lm	144 lm/W
		2	70	21300lm	142 lm/W	23200lm	155 lm/W	21800lm	145 lm/W
100/	45004	3	70	21300lm	142 lm/W	23200lm	155 lm/W	21800lm	145 lm/W
60%	150W	4	70	21300lm	142 lm/W	23200lm	155 lm/W	21800lm	145 lm/W
		5	70	21800lm	145 lm/W	23800lm	159 lm/W	22500lm	150 lm/W
		2	70	14500lm	145 lm/W	16000lm	160 lm/W	14800lm	148 lm/W
100/	40011	3	70	14500lm	145 lm/W	16000lm	160 lm/W	14800lm	148 lm/W
40%	100W	4	70	14500lm	145 lm/W	16000lm	160 lm/W	14800lm	148 lm/W
		5	70	15000lm	150 lm/W	16500lm	165 lm/W	15500lm	155 lm/W
				MA	L08300W				
	SYSTEM			30	00K	400	00K	500	00K
SETTING	WATTS	DIST.TYPE	CRI	LUMENS	LPW	LUMENS	LPW	LUMENS	LPW
		2	70	41000lm	137 lm/W	45000lm	150 lm/W	42000lm	140 lm/W
		3	70	41000lm	137 lm/W	45000lm	150 lm/W	42000lm	140 lm/W
100%	300W	4	70	41000lm	137 lm/W	45000lm	150 lm/W	42000lm	140 lm/W
		5	70	42500lm	142 lm/W	46000lm	153 lm/W	43500lm	145 lm/W
		2	70	33600lm	140 lm/W	37000lm	154 lm/W	34500lm	144 lm/W
		3	70	33600lm	140 lm/W	37000lm	154 lm/W	34500lm	144 lm/W
80%	240W	4	70	33600lm	140 lm/W	37000lm	154 lm/W	34500lm	144 lm/W
		5	70	34500lm	144 lm/W	38000lm	158 lm/W	35500lm	148 lm/W
		2	70	26000lm	144 lm/W	28600lm	159 lm/W	26600lm	148 lm/W
		3	70	26000lm	144 lm/W	28600lm	159 lm/W	26600lm	148 lm/W
60%	180W	4	70	26000lm	144 lm/W	28600lm	159 lm/W	26600lm	148 lm/W
		5	70	26600lm	148 lm/W	29700lm	165 lm/W	27500lm	153 lm/W
		2	70	18000lm	150 lm/W	20000lm	167 lm/W	18500lm	154 lm/W
		3	70	18000lm	150 lm/W	20000lm	167 lm/W	18500lm	154 lm/W
40%	120W	4	70	18000lm	150 lm/W	20000lm	167 lm/W	18500lm	154 lm/W
		5	70	18500lm	154 lm/W	20800lm	173 lm/W	19000lm	158 lm/W



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PROJECT:	AREA LIGHT
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	MAL08400W								
SETTING	SYSTEM	DIST.TYPE	CPI	40	00K	500	00K		
SETTING	WATTS	DIST.TTPE	CRI	LUMENS	LPW	LUMENS	LPW		
		2	70	60500lm	151 lm/W	60000lm	150 lm/W		
LV1	400W	3	70	60500lm	151 lm/W	60000lm	150 lm/W		
LVI	40000	4	70	60500lm	151 lm/W	60000lm	150 lm/W		
		5	70	61000lm	153 lm/W	60800lm	152 lm/W		
		2	70	56000lm	156 lm/W	55000lm	153 lm/W		
LV2	360W	3	70	56000lm	156 lm/W	55000lm	153 lm/W		
LVZ	36000	4	70	56000lm	156 lm/W	55000lm	153 lm/W		
		5	70	56500lm	157 lm/W	55500lm	154 lm/W		
		2	70	51000lm	159 lm/W	50000lm	156 lm/W		
LV3	320W	3	70	51000lm	159 lm/W	50000lm	156 lm/W		
LV3	32000	4	70	51000lm	159 lm/W	50000lm	156 lm/W		
		5	70	51500lm	161 lm/W	50500lm	159 lm/W		
		2	70	47000lm	162 lm/W	46000lm	159 lm/W		
LV4	300W	3	70	47000lm	162 lm/W	46000lm	159 lm/W		
LV4	30000	4	70	47000lm	162 lm/W	46000lm	159 lm/W		
		5	70	47500lm	164 lm/W	46500lm	160 lm/W		

BUG @5000K

SYSTEM WATTS	VOLTAGE	DIST.TYPE	В	U	G
		2	3	0	3
100W	120-277V/347-480V	3	3	0	3
10000	120-2// 0/34/-4800	4	3	0	2
		5	4	0	2
		2	3	0	3
140W	120-277V/347-480V	3	3	0	3
14000	120-2// 1/34/-4800	4	3	0	3
		5	4	0	2
	120-277V/347-480V	2	4	0	3
180W		3	3	0	3
18000		4	3	0	3
		5	4	0	2
	120-277V/347-480V	2	4	0	4
250W		3	4	0	4
23000		4	4	0	3
		5	5	0	3
		2	5	0	4
300W	120-277V/347-480V	3	4	0	4
30000	120-2// 1/34/-4800	4	4	0	4
		5	5	0	4
		2	5	0	4
400W	120-277V/347-480V	3	5	0	5
40000	120-2// 1/34/-4800	4	5	0	5
		5	5	0	4



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# **ELECTRICAL DATA**

Number Of Drivers	Driver Current (mA)	Nominal Power (W)	INPUT VOLTAGE (V)	CURRENT (Amps)
		100	120	0.83
	850	100	208	0.48
4	850	100	240	0.42
1		100	277	0.36
	0500	100	347	0.29
	2520	100	480	0.21
		140	120	1.17
		140	208	0.67
	4000	140	240	0.58
1	1200	140	277	0.51
		140	347	0.40
		140	480	0.29
		180	120	1.50
	960	180	208	0.87
		180	240	0.75
1		180	277	0.65
		180	347	0.52
		180	480	0.38
		250	120	2.08
		250	208	1.20
	1200	250	240	1.04
1		250	277	0.90
		250	347	0.72
		250	480	0.52
		300	120	2.50
		300	208	1.44
		300	240	1.25
1	1500	300	277	1.08
		300	347	0.86
		300	480	0.63
		400	120	3.33
		400	208	1.92
		400	240	1.67
1	1460	400	277	1.44
		400	347	1.15
		400	480	0.83



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### **MOUNTING**

- Standard versatile mounting arm accommodates multiple drilling patterns as well as square and round poles
- Optional for cast aluminum slipfitter mounting adapter (Compatible with more MESTER mounting adaptors such as Tenon, suits for various application)

### **Mounting Options**



Arm Mount (4" and 5" Square and Round poles) Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.



Slipfitter Mount
An optional cast aluminum mast arm
adapter secures fixture head to nominal
2-3/8"O.D. horizontal steel tenon arm.



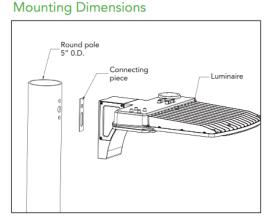
Wall Mount
Wall Mount is easy to install for direct
wall mounting with 1/2' conduit wiring or
standard J-box mounting

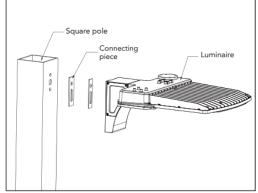


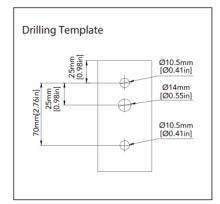
Yoke Mount
Die-cast aluminum trunnion is easily
adapted to many surfaces and allows
easy fixture aiming angles.



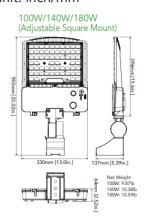
Adjustable Arm Mount Standard versatile mounting arm is simple to install and can be used with existing poles for retrofit installations.

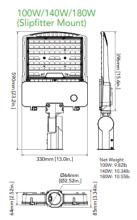


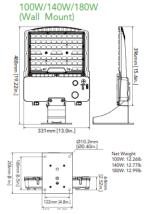


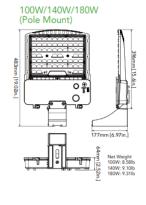


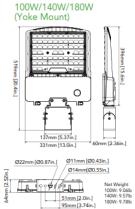
# DIMENSION unit: inch/mm





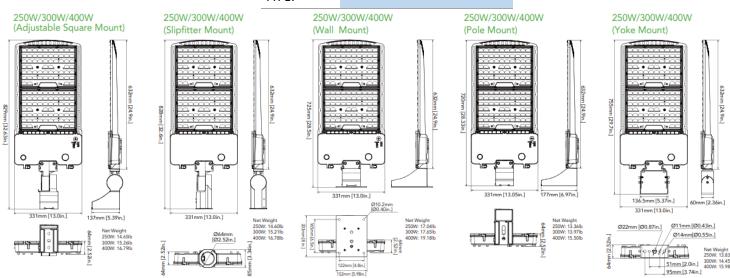








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ТҮРЕ:	AREA LIGHT



## **EPA OF AREA LIGHT**

Item	-		<b>*</b>				
	1	2 @90°	2 @120°	2@180°	3 @90°	3 @120°	4 @90°
100W/140W/180W	0.3632	0.6849	0.8861	0.7264	1.0481	1.2078	1.0481
250W/300W/400W	0.4758	0.8091	1.059	0.9516	1.2849	1.3923	1.2849

## **PHOTOMETRICS**

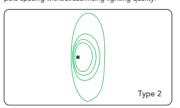
Mester offers a complete set of optical systems to meet every site lighting requirement. These systems provide remarkable flexibility in precisely matching light distribution patterns to specific site requirements.

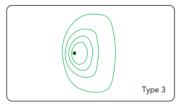
Type 2 optics are ideal for applications where there is a need to space the luminaires farther apart along a road or pathway. The light distribution pattern is optimized for elongated areas, allowing for greater pole spacing without sacrificing lighting quality.

Type 3 optics produce an asymmetrical pattern that directs the majority of the light forward and equally on both sides of the luminaire. In a back-to-back configuration, it creates a rectangular pattern which can extend pole spacings.

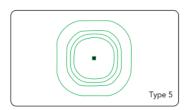
Type 4 is suitable for applications where light is primarily required forward with minimal backlight. Typical installations include perimeter poles.

Type 5 optics produce a symmetrical square distribution pattern that distributes light equally on all sides of the luminaire. Type 5 luminaires is universal for most area lighting applications









ORDERING GUIDE Example: MAL08 140W 27V XXK Y Y Y Y Y										
Fixture Type	Wattage	Voltage	ССТ	Finish	Photocell (Option)	Sensor (Option)	Mounting	Photometry	CCT and Power Adjustable	Internal Code
MAL08	<b>100</b> 100W	<b>27V</b> 120-277V	DDK1	<b>D</b> Dark Bronze	<b>P0</b> 120-277V Photocell	M With Sensor	SQ Square Pole Mount	T2 TYPE II	AD¹	Blank
Area Light Series	<b>140</b> 140W	<b>48V</b> 347-480V	Adjustable color	<b>B</b> Black	P3 347V Photocell	Blank Without Sensor	SP Slipfitter Mount	T3 TYPE III	With adjustment dial	Alphanumeric
	<b>180</b> 180W		temperature	W White	P4 480V Photocell		WM Wall Mount	T4 TYPE IV	Blank	
	<b>250</b> 250W			<b>SG</b> Silver Gray	Blank Without Photocell		YK Yoke Mount	T5 TYPE V	Without adjustment dial	
	<b>300</b> 300W						SQA Adjustable			
	<b>400</b> 400W						Square Mount			

Note: Only 400W suit for 4000K, 5000K adjustable and other wattage suit for 3000K, 4000K and 5000K andjustable.



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### ACCESSORIES(Optional)

AL08 series features a backlight control which provides reduced pixilation and increased visual comfort without compromising performance. External Glare Shield: sold separately or as an accessory.









External Glare Full Visor

External Glare Shield

Plug-and-Play PIR Sensor

Bluetooth PIR sensor:

MSANT12VPHB01

PIR sensor: MSANT12VPH01





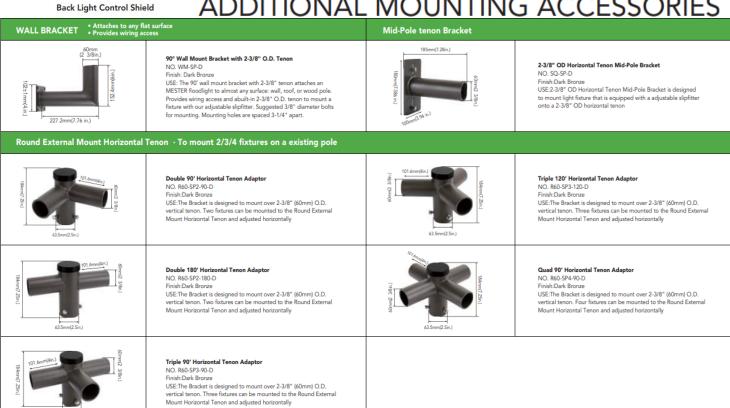
120-277V PIR Sensor PIR sensor: BRI823-B-D Bluetooth PIR sensor: BRI823-B-D-BLE-SR



**NEMA Photocell** 3 pin NEMA Type: MS-PSUNVB1 3 pin NEMA Type(480V): JL-207F 7 pin NEMA Type: JL-241C



# ADDITIONAL MOUNTING ACCESSORIES





CATALOG#:	
PROJECT:	
TYPE:	

# MAL08 AREA LIGHT

POLE BRACKET • For mounting one fixture on an existing pole						
60mm(2 3/8in.) 183 6mm(7 228in.) 183 6mm(7 228in.)	4" Square Pole Mount with 2-3/8" O.D. Tenon No. 45O.SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.	60mm(2 3/8in.)  2225mm(8.76in.)  101.6mm(4.2m.)	4" Round Pole Mount with 2-3/8" O.D. Tenon NO. 4SQR-SP-D Finish-Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.			
60mm(2 3/8in.) 183.6mm(7.228in.) 183.6mm(7.228in.)	5" Square Pole Mount with 2-3/8" O.D. Tenon No. SSQ-SP-D Finish: Dark Bronze USE: For use with square, non-tapered steel and aluminum poles. Furnished with four 5/16" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.	60mm(2 3/8in.) 2225mm(8.76in.) 131.86mm(5.19in.)	5" Round Pole Mount with 2-3/8" O.D. Tenon NO. SSQR-SP-D Finish:Dark Bronze USE: For use with Round, non-tapered steel and aluminum poles. Furnished with three 3/8" hex head stainless-steel bolts. Vertical tenon measures 2-3/8" O.D., and is made of steel tubing. Fixtures mounted to this bracket can be adjusted both vertically and horizontally.			
	Pole Bracket Accessories -Angle-Adjustment Adapter NO. SOA-ALDA Finish: Dark Bronze USE: Durable brackets are engineered to provide versatile mounting options. These arms are made from rugged die-cast aluminum. They allow optimal positioning of the light fixture to maximize the lighting effectiveness vertically and horizontally.	154.5±1mm(6.08 in.)  (vg2.7) Jume9 80.1  63mm(2.48in.)	Pole Bracket accessories-Tenon & Yoke Adaptor NO. SP-TR-D Finish: Dark Bronze USE: The 2-318° OD Tenon Mount Adaptor for Yoke Fixtures is designed to mount MESTER light fixtures that are equipped with a yoke mount onto a 2-3/8° OD tenon. It may be utilized with the Mester Flood Light Series of light fixtures.			
101mm(3.96in.) 0.0: 60mm(2.38in.) 115mm(4.54in.)	Horizontal Wall or Square or Round pole mount with 2-3/8" Tenon Bracket NO, SQ/R-SP-D Finish: Dark Bronze USE: This tenon bracket can be installed onto a wall, square pole, round pole. Provides wiring access and abuilt-in 2-3/8" O.D. tenon to mount a fixture with our adjustable slipfitter. Suggested 3/8" diameter bolts for mounting.		Adjustable Arm Mount Kit NO.:SQADAL08-A Finish: Dark Bronze Description: Adjustable pole mount kit, suitable for 4" & 5" square or round pole			