







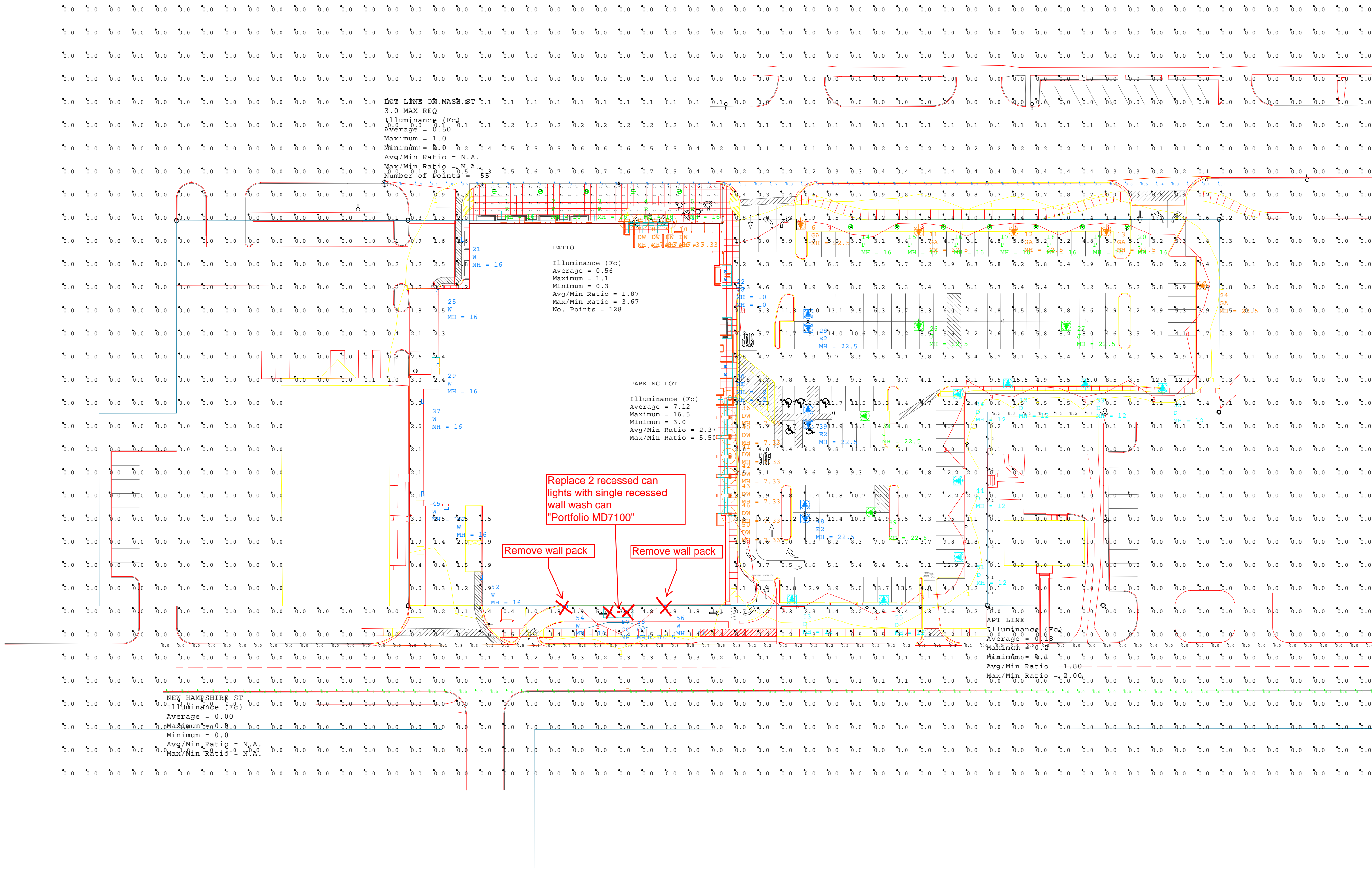
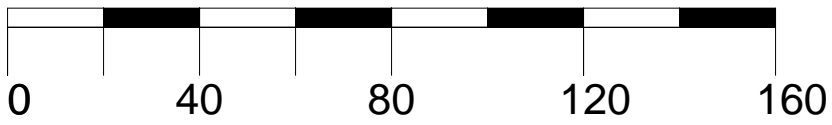


Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLD	LDD	LLF	Description	
	5	GA	SINGLE	30000	0.800	1.000	0.800	GSM-AM-400-MP-XX-SL-FG-XX-X	Lum. Watts Lum. Lumens
	9	W	SINGLE	N.A.	0.960	0.950	0.912	IST-A02-LED-E1-BL3	
	12	P	SINGLE	N.A.	0.960	0.900	0.864	GAR-50-LED-E1-5-CC	
	8	D	SINGLE	22000	0.800	1.000	0.800	GSM-AM-250-MP-XX-SL-FG	
	3	E2	BACK-BACK	40000	0.800	1.000	0.800	GSM-XX-400-MP-XX-4S-FG-XX-X	
	4	J	SINGLE	40000	0.800	1.000	0.800	GSM-XX-400-MP-XX-1F-FG-XX-HS	
	11	DW	SINGLE	2400	0.850	0.900	0.765	676-WP-CF1/32	
	6	CC	SINGLE	9000	0.740	1.000	0.740	MD7100E-7750LI with MCP100/U/MED/830PB	

Calculation Summary									
Label	Description	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
APT LINE	2 MAX REQ	Illuminance	Fc	0.18	0.2	0.1	1.80	2.00	
General Area		Illuminance	Fc	1.13	33.2	0.0	N.A.	N.A.	
LOT LINE ON MASS ST	3.0 MAX REQ	Illuminance	Fc	0.50	1.0	0.0	N.A.	N.A.	
NEW HAMPSHIRE ST	.2 MAX REQ	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.	
PATIO		Illuminance	Fc	0.56	1.1	0.3	1.87	3.67	
R-Zoned Property Line	1 MAX REQ.	Illuminance	Fc	0.18	0.9	0.0	N.A.	N.A.	
PARKING LOT		Illuminance	Fc	7.12	16.5	3.0	2.37	5.50	
PATIO		Illuminance	Fc	0.56	1.1	0.3	1.87	3.67	



Luminaire Location Summary						
LumNo	Label	X	Y	Z	Orient	Tilt
1	P	-153	267	16	0	0
2	P	-123	267	16	0	0
3	P	-93	267	16	0	0
4	P	-63	267	16	0	0
5	P	-33	267	16	0	0
6	GA	45.5	250	22.5	270	0
7	DW	-67	249	7.33	90	0
8	DW	-58	249	7.33	90	0
9	DW	-49	249	7.33	90	0
10	DW	-40	249	7.33	90	0
11	GA	122	245.5	22.5	270	0
12	GA	183.5	245.5	22.5	270	0
13	GA	243.5	245.5	22.5	270	0
14	P	78	244	16	0	0
15	P	108	244	16	0	0
16	P	138	244	16	0	0
17	P	168	244	16	0	0
18	P	198	244	16	0	0
19	P	228	244	16	0	0
20	P	257	244	16	0	0
21	W	-174	236	16	180	0
22	CC	-3	215	10	0	0
23	CC	-3	210	10	0	0
24	GA	310	206	22.5	180	0
25	W	-190	202	16	180	0
26	J	122	184.5	22.5	270	0
27	J	217.5	184.5	22.5	270	0
28	E2	50.5	183	22.5	90	0
29	W	-190	154	16	180	0
30	CC	-3	153.5	12	0	0
31	CC	-3	148.5	12	0	0
32	D	180	138	12	90	0
33	D	230	138	12	90	0
34	D	152	135.5	12	180	0
35	D	280	135	12	90	0
36	DW	0.5	133	7.33	0	0
37	W	-200	131	16	180	0
38	J	91.5	121.5	22.5	180	0
39	E2	50.5	121	22.5	90	0
40	DW	0.5	120.5	7.33	0	0
41	DW	0.5	108	7.33	0	0
42	DW	0.5	95.5	7.33	0	0
43	DW	0.5	82.5	7.33	0	0
44	D	152	79.5	12	180	0
45	W	-200	71	16	180	0
46	DW	0.5	70	7.33	0	0
47	W	-184	61	16	270	0
48	E2	48.5	59.5	22.5	90	0
49	J	95.5	59	22.5	180	0
50	DW	0.5	57.5	7.33	0	0
51	D	162.5	30	12	180	0
52	W	-162	17	16	180	0
53	D	40	-2	12	90	0
54	W	-107	-3	16	270	0
55	D	99.5	-2.5	12	90	0
56	W	-42	-3	16	270	0
57	CC	-77.5	-5.5	10.5	0	0
58	CC	-67.5	-5.5	10.5	0	0



COOPER Lighting
Customer First Center
770-486-4599 fax
e-mail:
applications@cooperlighting.com
Applications Engineering
1121 Highway 74 South
Peachtree City, Georgia 30269

COOPER Lighting

PROJECT:
DILLONS #43
LAWRENCE, KS

CLIENT:
Cooper Direct
Andy Wortmann

PROJECT #:
1001557 H

DATE:
4/20/2011

REVISIONS:
■
■
■
■
■

SCALE:
1" = 40'

DRAWING:
CA

Single recessed
can, directed to
wash wall



Screen wall 2'6": to
3'-6" above
illuminated
pavement below
canopy

DESCRIPTION

Recessed open wall wash with 7 inch aperture for vertical ED17P protected medium base metal halide lamp. Universal input electronic ballast features end of life shutdown. Fixture is suitable for commercial construction. Insulation must be kept 3" from top and sides of housing. Medium beam distribution with 45° cutoff and low aperture brightness. Universal housing also accepts reflectors for PAR lamps, open wall wash and lens applications.

SPECIFICATION FEATURES

Plaster Frame / Collar

Die cast aluminum collar accommodates ceiling materials up to 1-1/2" thick. Stilts adjust quickly and accurately to accept reflectors for ED17P, PAR lamps, open, open wall wash and lens applications.

Socket Cap

Die cast aluminum socket cap reduces lamp base temperatures for longer life.

Conduit Fittings

Die cast aluminum conduit fittings secure flex to socket housing and junction box.

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above the ceiling.

Junction Box

(6) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring.

Reflector

Spun 0.050" thick aluminum reflector provides medium beam distribution with 45° lamp and lamp image cutoff. Patented GRUVI™ specular clear kicker optic provides smooth vertical illumination with no striations or flashback. Self flanged standard with optional white painted flange. Also available with polymer trim ring. Trim ring may be interchanged with metal trim ring available in various finishes or removed for rimless installation, see accessories. Available in all Portfolio Alzak® finishes.

Trim Retention

Keyholes align reflector to preinstalled machine screws that pull flange tight to the finished ceiling surface. Mounting screws can be relocated in 15° increments. Markings show correct orientation relative to wall(s).

Socket

Pulse rated E26 medium base protected socket prevents use with

lamps not suitable for open fixture use.

Insulation Detector

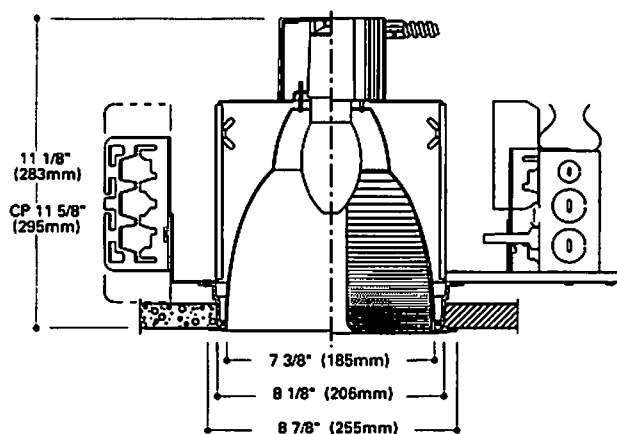
Self resetting detector opens circuit if insulation is improperly installed.

Ballast

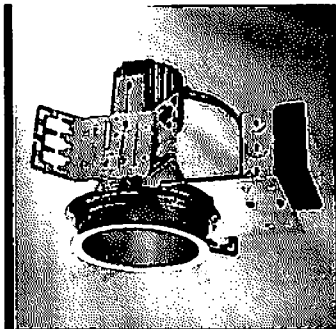
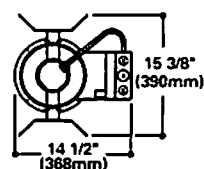
Universal input (except 150 watt) 120/277V electronic ballast provides noise free operation, improved efficiency and increased lamp life as compared with magnetic ballast. Regulated output power over a wide range of ANSI lamp voltages results in excellent color stability over time. End of lamp life shutdown - reset power to restore output.

Code Compliance

Thermally protected and cULus damp location listed. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 non consumer limits.



TOP VIEW



MD750
MD770
MD7100
MD7150

7710/7711
7720/7721
7730/7731

Metal Halide
ED17P

7 Inch
Open Wall Wash

Energy Data	
50W	
120V Input Power: 60W	277V Input Power: 60W
120V Input Current: 0.51A	277V Input Current: 0.22A
Minimum Starting Temp: -15°C, +5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
70W	
120V Input Power: 85W	277V Input Power: 84W
120V Input Current: 0.72A	277V Input Current: 0.81A
Minimum Starting Temp: -20°C, -5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
100W	
120V Input Power: 115W	277V Input Power: 113W
120V Input Current: 0.96A	277V Input Current: 0.42A
Minimum Starting Temp: -20°C, -5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
150W	
120V Input Power: 165W	277V Input Power: 161W
120V Input Current: 1.38A	277V Input Current: 0.59A
Minimum Starting Temp: -30°C, -20°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	

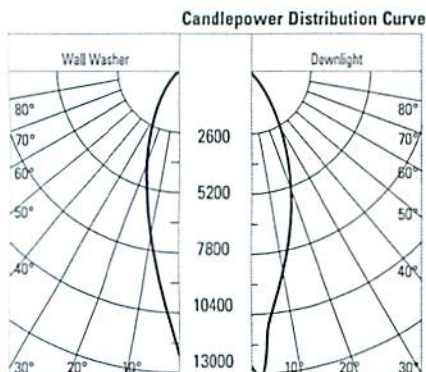
ORDERING INFORMATION

SAMPLE NUMBER: MD770E = 7" universal housing with UNV 120/277V electronic ballast for a 70W ED17P MH lamp
7711LI = 7" single open wall wash reflector, self flanged, specular clear low iridescent
(Order universal housing and trim separately)

Housing	Wattage	Ballast	Trim	Finish	Options	Accessories
MD7 = 7" universal MH housing MD7CP = 7" universal MH housing, CCEA listed for City of Chicago plenum requirements 50 = 50W MH lamp 70 = 70W MH lamp 100 = 100W MH lamp 150 = 150W MH lamp		E = Electronic, UNV 120/277V 50/60Hz ¹ 1E = Electronic, 120V 50/60Hz ² 2E = Electronic, 277V 50/60Hz ² 7710 = 7" single open wall wash, white polymer trim ring 7711 = 7" single open wall wash, self flanged 7720 = 7" double open wall wash, white polymer trim ring 7721 = 7" double open wall wash, self flanged 7730 = 7" corner open wall wash, white polymer trim ring 7731 = 7" corner open wall wash, self flanged		Alzak® Finishes LI = Specular clear, low iridescent H = Semi specular clear WMH = Warm haze G = Gold WH = Wheat GP = Graphite GPH = Graphite haze K = Cognac KH = Cognac Haze B = Black	WF = White painted flange (self flanged only) HB26 = Bar hanger, 26" long, pair HB50 = Bar hanger, 50" long, pair RMB22 = Bar hanger for wooden joists, 22" long, pair TRM7* = Metal trim ring, specify finish TRR7 = Rimless trim ring H347 = 347V stepdown transformer, 75VA H347200 = 347V stepdown transformer, 200VA	

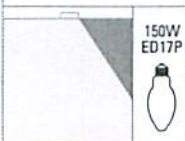
1. Not available with 150 watt
2. Available with 150 watt only

PHOTOMETRICS



Spacing Criteria = 0.4
Efficiency = 52.6%

Test No. H38038
MD71001E 7710LI
Lamp = 150W ED17P



Single Unit Footcandles

2'6" from wall
(distance from fixture along wall)

DD	1'	2'	3'	4'	5'	6'
1	33	23	10	4	1	1
2	51	39	18	6	2	1
3	53	40	20	8	3	1
4	47	37	21	9	3	1
5	41	34	20	10	4	1
6	34	30	19	11	6	2
7	28	25	17	11	6	3
8	22	20	15	10	6	4
9	18	16	13	9	6	4
10	15	14	11	8	5	3

Multiple Unit Footcandles

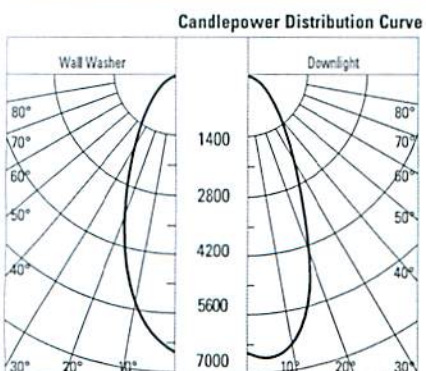
2'6" from wall
(spacing between fixtures)

DD	3'	4'	5'	6'
1	41	32	41	35
2	63	58	63	54
3	69	61	69	58
4	65	62	65	53
5	62	58	62	49
6	56	56	56	45
7	50	51	50	40
8	44	45	44	35
9	38	39	38	30
10	33	34	33	26

4' from wall
(spacing between fixtures)

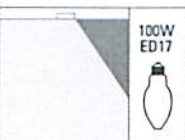
DD	4'	5'	6'	7'
1	12	10	12	9
2	22	20	22	16
3	29	28	29	22
4	31	30	31	23
5	31	31	31	24
6	30	30	30	22
7	31	29	31	22
8	29	29	29	21
9	27	28	27	20
10	26	27	26	19

PHOTOMETRICS



Efficiency = 53.0%

Test No. H38035
MD7100E 7710LI
Lamp = 100W ED17



Single Unit Footcandles

2'6" from wall
(distance from fixture along wall)

DD	1'	2'	3'	4'	5'	6'
1	26	18	7	3	0	0
2	37	29	13	4	1	1
3	39	30	14	6	2	1
4	36	28	16	6	2	1
5	32	26	16	8	3	1
6	26	23	15	8	4	2
7	21	19	14	8	5	2
8	17	15	12	8	5	3
9	13	12	10	7	5	3
10	11	10	8	6	4	3

Multiple Unit Footcandles

2'6" from wall
(spacing between fixtures)

DD	3'	4'	5'	6'
1	31	24	31	27
2	46	43	46	40
3	50	45	50	42
4	49	46	49	40
5	49	46	49	39
6	44	44	44	35
7	39	40	39	30
8	34	35	34	26
9	29	30	29	23
10	25	26	25	20

4' from wall
(spacing between fixtures)

DD	4'	5'	6'	7'
1	9	8	9	7
2	16	15	16	13
3	22	21	22	16
4	22	22	22	17
5	23	23	23	17
6	23	23	23	17
7	23	22	23	17
8	23	23	23	16
9	22	22	22	16
10	20	21	20	15

DESCRIPTION

Recessed open wall wash with 7 inch aperture for vertical ED17P protected medium base metal halide lamp. Universal input electronic ballast features end of life shutdown. Fixture is suitable for commercial construction. Insulation must be kept 3" from top and sides of housing. Medium beam distribution with 45° cutoff and low aperture brightness. Universal housing also accepts reflectors for PAR lamps, open wall wash and lens applications.

SPECIFICATION FEATURES

Plaster Frame / Collar

Die cast aluminum collar accommodates ceiling materials up to 1-1/2" thick. Stilts adjust quickly and accurately to accept reflectors for ED17P, PAR lamps, open, open wall wash and lens applications.

Socket Cap

Die cast aluminum socket cap reduces lamp base temperatures for longer life.

Conduit Fittings

Die cast aluminum conduit fittings secure flex to socket housing and junction box.

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 5" vertically from above the ceiling.

Junction Box

(6) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG (four in, four out) 90°C conductors and feed thru branch wiring.

Reflector

Spun 0.050" thick aluminum reflector provides medium beam distribution with 45° lamp and lamp image cutoff. Patented GRUVI™ specular clear kicker optic provides smooth vertical illumination with no striations or flashback. Self flanged standard with optional white painted flange. Also available with polymer trim ring. Trim ring may be interchanged with metal trim ring available in various finishes or removed for rimless installation, see accessories. Available in all Portfolio Alzak® finishes.

Trim Retention

Keyholes align reflector to preinstalled machine screws that pull flange tight to the finished ceiling surface. Mounting screws can be relocated in 15° increments. Markings show correct orientation relative to wall(s).

Socket

Pulse rated E26 medium base protected socket prevents use with

lamps not suitable for open fixture use.

Insulation Detector

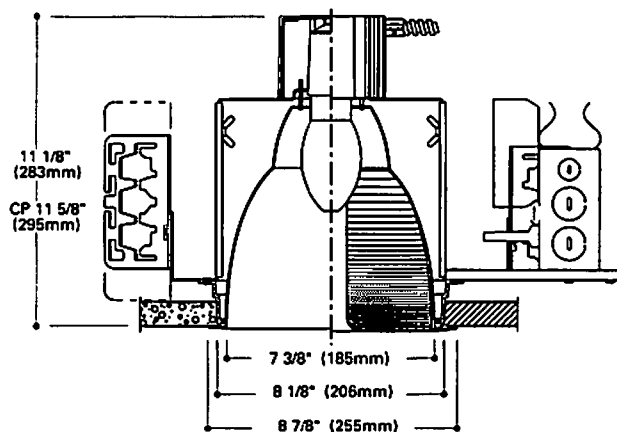
Self resetting detector opens circuit if insulation is improperly installed.

Ballast

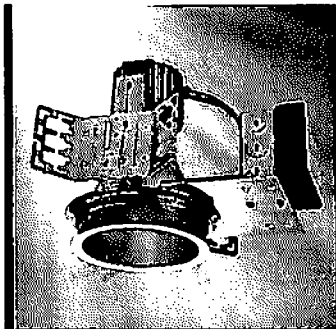
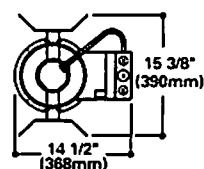
Universal input (except 150 watt) 120/277V electronic ballast provides noise free operation, improved efficiency and increased lamp life as compared with magnetic ballast. Regulated output power over a wide range of ANSI lamp voltages results in excellent color stability over time. End of lamp life shutdown - reset power to restore output.

Code Compliance

Thermally protected and cULus damp location listed. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 non consumer limits.



TOP VIEW



**MD750
MD770
MD7100
MD7150**

**7710/7711
7720/7721
7730/7731**

**Metal Halide
ED17P**

**7 Inch
Open Wall Wash**

Energy Data	
50W	
120V Input Power: 60W	277V Input Power: 60W
120V Input Current: 0.51A	277V Input Current: 0.22A
Minimum Starting Temp: -15°C, +5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
70W	
120V Input Power: 85W	277V Input Power: 84W
120V Input Current: 0.72A	277V Input Current: 0.81A
Minimum Starting Temp: -20°C, -5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
100W	
120V Input Power: 115W	277V Input Power: 113W
120V Input Current: 0.96A	277V Input Current: 0.42A
Minimum Starting Temp: -20°C, -5°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	
150W	
120V Input Power: 165W	277V Input Power: 161W
120V Input Current: 1.38A	277V Input Current: 0.59A
Minimum Starting Temp: -30°C, -20°F	
THD: <20%	Power Factor: >0.90
Sound Rating: A	

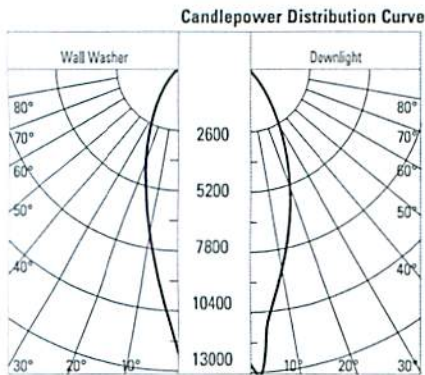
ORDERING INFORMATION

SAMPLE NUMBER: MD770E = 7" universal housing with UNV 120/277V electronic ballast for a 70W ED17P MH lamp
7711LI = 7" single open wall wash reflector, self flanged, specular clear low iridescent
(Order universal housing and trim separately)

Housing	Wattage	Ballast	Trim	Finish	Options	Accessories
MD7 = 7" universal MH housing MD7CP = 7" universal MH housing, CCEA listed for City of Chicago plenum requirements 50 = 50W MH lamp 70 = 70W MH lamp 100 = 100W MH lamp 150 = 150W MH lamp		E = Electronic, UNV 120/277V 50/60Hz ¹ 1E = Electronic, 120V 50/60Hz ² 2E = Electronic, 277V 50/60Hz ² 7710 = 7" single open wall wash, white polymer trim ring 7711 = 7" single open wall wash, self flanged 7720 = 7" double open wall wash, white polymer trim ring 7721 = 7" double open wall wash, self flanged 7730 = 7" corner open wall wash, white polymer trim ring 7731 = 7" corner open wall wash, self flanged		Alzak® Finishes LI = Specular clear, low iridescent H = Semi specular clear WMH = Warm haze G = Gold WH = Wheat GP = Graphite GPH = Graphite haze K = Cognac KH = Cognac Haze B = Black	WF = White painted flange (self flanged only) HB26 = Bar hanger, 26" long, pair HB50 = Bar hanger, 50" long, pair RMB22 = Bar hanger for wooden joists, 22" long, pair TRM7* = Metal trim ring, specify finish TRR7 = Rimless trim ring H347 = 347V stepdown transformer, 75VA H347200 = 347V stepdown transformer, 200VA	

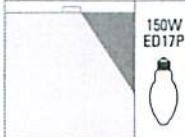
1. Not available with 150 watt
2. Available with 150 watt only

PHOTOMETRICS



Spacing Criteria = 0.4
Efficiency = 52.6%

Test No. H38038
MD71001E 7710LI
Lamp = 150W ED17P



Single Unit Footcandles

2'6" from wall
(distance from fixture along wall)

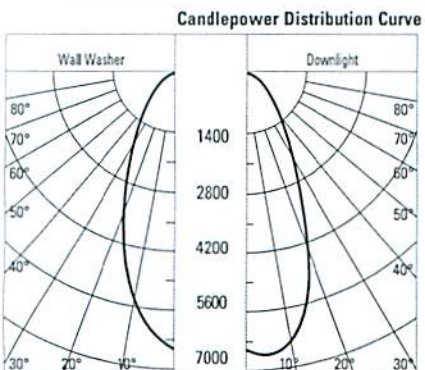
DD	1'	2'	3'	4'	5'	6'
1	33	23	10	4	1	1
2	51	39	18	6	2	1
3	53	40	20	8	3	1
4	47	37	21	9	3	1
5	41	34	20	10	4	1
6	34	30	19	11	6	2
7	28	25	17	11	6	3
8	22	20	15	10	6	4
9	18	16	13	9	6	4
10	15	14	11	8	5	3

Multiple Unit Footcandles

2'6" from wall (spacing between fixtures)
4' from wall (spacing between fixtures)

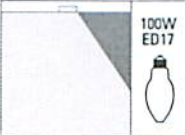
DD	3'	4'	5'	6'
1	41	32	41	35
2	63	58	63	54
3	69	61	69	58
4	65	62	65	53
5	62	58	62	49
6	56	56	56	45
7	50	51	50	40
8	44	45	44	35
9	38	39	38	30
10	33	34	33	26

PHOTOMETRICS



Efficiency = 53.0%

Test No. H38035
MD7100E 7710LI
Lamp = 100W ED17



Single Unit Footcandles

2'6" from wall
(distance from fixture along wall)

DD	1'	2'	3'	4'	5'	6'
1	26	18	7	3	0	0
2	37	29	13	4	1	0
3	39	30	14	6	2	1
4	36	28	16	6	2	1
5	32	26	16	8	3	1
6	26	23	15	8	4	2
7	21	19	14	8	5	2
8	17	15	12	8	5	3
9	13	12	10	7	5	3
10	11	10	8	6	4	3

Multiple Unit Footcandles

2'6" from wall (spacing between fixtures)
4' from wall (spacing between fixtures)

DD	3'	4'	5'	6'
1	31	24	31	27
2	46	43	46	40
3	50	45	50	42
4	49	46	49	40
5	49	46	49	39
6	44	44	44	35
7	39	40	39	30
8	34	35	34	26
9	29	30	29	23
10	25	26	25	20

DESCRIPTION

676-WP Floating Curved Shield Wall Sconce features bronze construction with a fully enclosed lamp compartment.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Material

Solid bronze with open top, sides and bottom.

Finish

Natural bronze or two component polyurethane paint, 2.5 mil nominal thickness for superior protection against fade and wear.

Standard: Natural Bronze (NBZ) [Sustainable Design].

Note: Bronze will weather to a dark bronze patina.

Premium: Black (BK), Grey (GY), White (WH), Dark Platinum (DP), Graphite Metallic (GRM), Silver Metallic (SM), Gold Metallic (GM), Bronze Metallic (BM), Verdigris (VG) or Custom Color (CC).

Optics

Refer to www.shaperlighting.com for complete photometrics.

Ballast

Integral electronic HPF, multi-volt 120/277V (347V Canada), thermally protected with end-of-life circuitry to accommodate the specified lamp wattage.

Lamp/Socket

One (1) 26W (G24q-3) quad CFL or 32W (GX24q-3) triple CFL lamp or one (1) 60W A-19 lamp. CFL socket injection molded plastic. INC socket fired ceramic rated for 660W-250V. Lamps furnished by others.

Installation

Supplied with a universal circular strap for a standard 4" J-box or stucco ring.

Options

Accent Balls (ACB), Floating Cut-Out (FCT), Custom Logos - Contact factory. Energy Star Rating - Contact factory.

Labels

U.L. and C.U.L. listed for wet location.

Modifications

Shaper's skilled craftspeople with their depth of experience offer the designer the flexibility to modify standard exterior wall luminaires for project specific solutions. Contact the factory regarding scale options, unique finishes, mounting, additional materials/colors, or decorative detailing.



676-WP SERIES

Exterior Wall Luminaire
Floating Curved Shield



ORDERING INFORMATION

Sample Number: 676-WP-CFL/1/26-277V-BK

Series	Lamp	Voltage	Finish ^{2, 3}	Options
676-WP =Floating Curved Shield	CFL/1/26 CFL/1/32 INC/1/60	120V 277V ¹ 347V ¹	<u>Standard</u> NBZ =Natural Bronze <u>Premium</u> BK =Black BM =Bronze Metallic CC =Custom Color DP =Dark Platinum GM =Gold Metallic GRM =Graphite Metallic GY =Grey SM =Silver Metallic VG =Verdigris WH =White	ACB =Accent Balls FCT =Floating Cut Out

Notes:

- ¹ Available with CFL only.
- ² Premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear.
- ³ Bronze will weather to a dark bronze patina.

SUSTAINABLE DESIGN

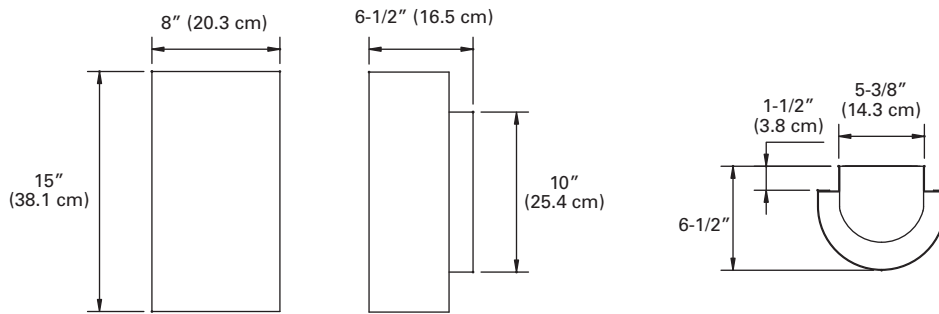
Shaper has a long-standing history of offering environmentally-friendly fixtures. The copper and bronze alloys used in our exterior luminaires feature up to 98% recycled content, contribute less undesirable air emissions compared to painted aluminum and are easy to recycle.

ENERGY STAR

Shaper now offers a wide variety of fixtures that can be provided with an Energy Star Rating.

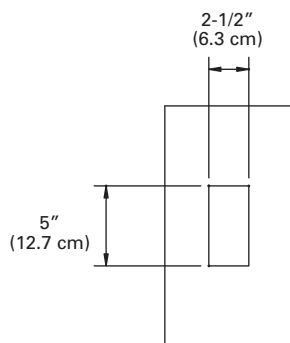
Refer to the Icon Legend
Link on shaperlighting.com.

DIMENSIONS



676-WP STANDARD

STANDARD OPTIONS



FLOATING CUTOUT (FCT)



ACCENT BALLS (ACB)

DESCRIPTION

Galleria's beauty and versatility make it an excellent choice for roadway and general area lighting applications. An aesthetic reveal in the formed aluminum housing gives the Galleria a distinctive look while a variety of mounting options and lamp wattages provide maximum flexibility.

Galleria's superior light distributions makes it the optimum choice for almost any small, medium or large area lighting application.

SPECIFICATION FEATURES

Construction

HOUSING: Formed aluminum housing with stamped reveal has interior-welded seams for structural integrity and is finished in premium TGIC polyester powder coat. U.L. listed and CSA certified for wet locations. **DOOR:** Formed aluminum door has heavy-duty hinges, captive retaining screws and is finished in premium TGIC polyester powder coat. (Spider mount unit has steel door.)

Electrical

BALLAST TRAY: Ballast tray is hard-mounted to housing interior for cooler operation.

Optical

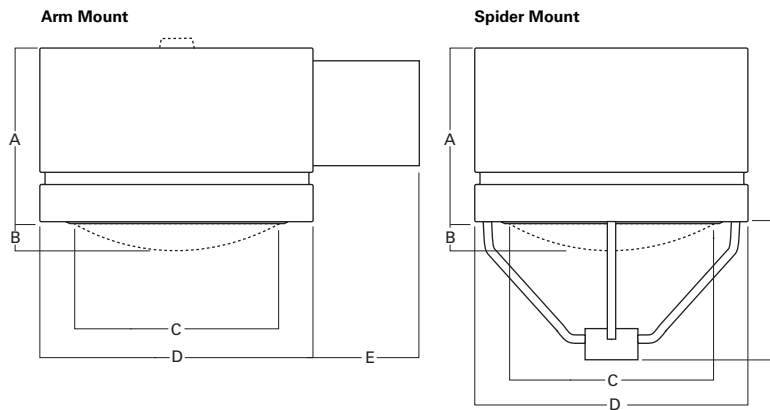
REFLECTOR: Choice of 14 high efficiency optical systems utilizing horizontal and vertical lamp orientations. Optional high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a thick gauge aluminum housing for superior protection. All segment faces are clean of rivet heads, tabs or other means of attachment which may cause streaking in the light distribution. Standard with mogul-base socket. All optical modules feature quick disconnect wiring

plugs and are field rotatable in 90° increments. **LENS:** Convex tempered glass lens or flat glass.

Mounting

Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during assembly. Specify arm-included mounting for contractor-friendly single carton packaging of housing and arm.

DIMENSIONS



Fixture	A	B	C	D	E	F
GSS	9-1/4" 235mm	1-1/2" 38mm	12-7/8" 327mm	15-5/8" 397mm	6" or 9" 152mm or 229mm	3-1/4" 337mm
GSM	11" 279mm	3-1/2" 89mm	19-1/4" 480mm	21-3/4" 552mm	6" or 14" 152mm or 356mm	15" or 16" 381mm or 406mm
GSL	14-1/2" 368mm	4-1/4" 108mm	25-7/8" 657mm	27" 686mm	6" or 14" 152mm or 356mm	18-3/4" or 19-3/4" 476mm or 502mm

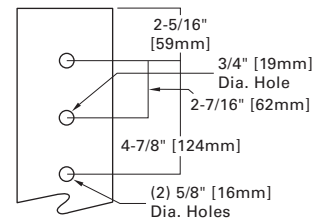
NOTE: Top cap used on GSM with 1000W flat glass vertically lamped optics only.

WATTAGE TABLE

Fixture	Lamp Type	Wattage
GSS (Galleria Small)	Pulse Start Metal Halide (MP)	70, 100, 150W
	High Pressure Sodium (HPS)	70, 100, 150W
	Metal Halide (MH)	175W
GSM (Galleria Medium)	Pulse Start Metal Halide (MP)	70, 100, 150, 175, 200, 250, 320, 350, 400, 450, 750, 875, 1000W
	High Pressure Sodium (HPS)	70, 100, 150, 250, 400, 750, 1000W
	Metal Halide (MH)	175, 250, 400, 1000W
GSL (Galleria Large)	Pulse Start Metal Halide (MP)	250, 320, 350, 400, 450, 750, 1000W
	High Pressure Sodium (HPS)	250, 400, 750, 1000W
	Metal Halide (MH)	250, 400, 1000W

ARM DRILLING

TYPE "M"



GSS/GSM/GSL GALLERIA SQUARE

70 - 1000W

Pulse Start Metal Halide

High Pressure Sodium

Metal Halide

ARCHITECTURAL
AREA LUMINAIRE



NOTE: In all flat glass configurations only.

ENERGY DATA

CWA Ballast Input Watts

150W MP HPF (185 Watts)
175W MP HPF (198 Watts) G
250W MP HPF (283 Watts) G
250W HPS HPF (295 Watts)
400W MP HPF (452 Watts) G
400W HPS HPF (457 Watts)
750W MP HPF (820 Watts)
1000W MH HPF (1080 Watts)
1000W HPS HPF (1100 Watts)

EPA

Effective Projected Area: (Sq. Ft.)

[Without Arm]

GSS: 1.20 **GSM:** 2.40 **GSL:** 3.90

[Spider Mount]

GSS: 1.53 **GSM:** 2.86 **GSL:** 4.45

SHIPPING DATA

Approximate Net Weight:

36 lbs. (16 kgs.)

79 lbs. (36 kgs.)

88 lbs. (40 kgs.)



MOUNTING CONFIGURATIONS

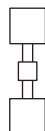
Wall Mount



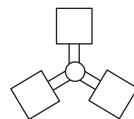
Arm Mount Single



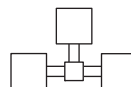
Arm Mount 2 @ 180°



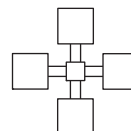
Arm Mount 2 @ 90°

Arm Mount 3 @ 120°
(Round Pole Only)

Arm Mount 3 @ 90°



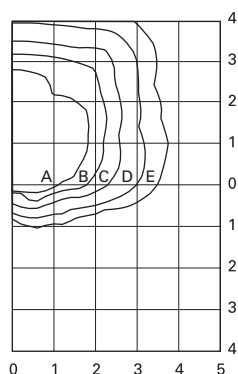
Arm Mount 4 @ 90°



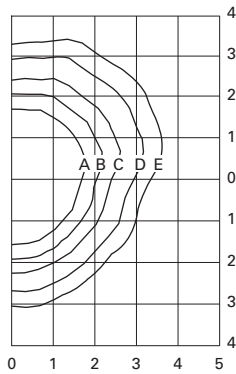
E.P.A. TABLE

	Single [w/arm where applicable]	2 @ 180°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
GSS	1.7	3.4	3.4	4.6	4.6	5.2
GSM	2.9	5.8	6.8	9.2	9.2	10.4
GSL	4.4	8.8	9.8	13.7	13.7	15.6

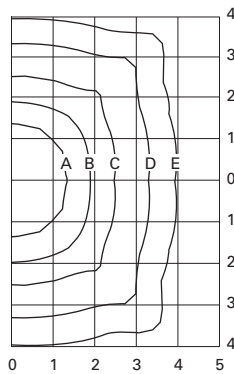
PHOTOMETRICS



GSM-XX-1000-MH-SL-FG
1000-Watt MH
110,000-Lumen Clear Lamp
Spill Light Eliminator
Flat Glass



GSM-XX-1000-MH-3V-FG
1000-Watt MH
110,000-Lumen Clear Lamp
Type III Vertical
Flat Glass



GSM-XX-1000-MH-AS-SG
1000-Watt MH
110,000-Lumen Clear Lamp
Area Square
Flat Glass

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
1000W [SL] / 400W [AR]					
25'	2.88	1.44	0.72	0.29	0.14
30'	2.00	1.00	0.50	0.20	0.10
35'	1.46	0.73	0.37	0.15	0.07
1000W [3V/AS]					
30'	3.50	2.00	1.00	0.50	0.20
35'	2.60	0.73	0.37	0.18	0.07
40'	2.00	1.00	0.50	0.20	0.10

ORDERING INFORMATION

Sample Number: GSM-AM-400-MP-MT-3V-SG-BK-L

--	--	--	--	--	--	--	--	--	--

Product Family

GSS=Galleria Square Small
GSM=Galleria Square Medium
GSL=Galleria Square Large

Mounting Method

AM= Arm Mount¹
AIR= Arm Included for² Round Pole
AIS= Arm Included for² Square Pole
SM1= Spider Mount³ (2 3/8" OD Tenon)
SM2= Spider Mount (3" OD Tenon)
SM3= Spider Mount⁴ (3 1/2" OD Tenon)

Lamp ⁵**Wattage**

MP
70=70W
100=100W
150=150W
175=175W
200=200W
250=250W
320=320W
350=350W
400=400W⁶
450=450W
750=750W
875=875W
1000=1000W⁷
HPS
70=70W
100=100W
150=150W
250=250W
400=400W
750=750W
1000=1000W⁷
MH ⁸
175=175W
250=250W
400=400W
1000=1000W⁷

Lamp Type

MP=Pulse Start Metal Halide
HPS=High Pressure Sodium
MH= Metal Halide⁸

Voltage ⁹

120= 120V
208= 208V
240= 240V
277= 277V
347= 347V
480= 480V
MT= Multi-Tap¹⁰
TT= Triple-Tap¹⁰
5T= 5-Tap¹¹

Distribution**Horizontal Lamp**

1F=Type I Formed¹²
2F=Type II Formed
2S=Type II Segmented¹³
3F= Type III Formed
3S= Type III Segmented¹³
4S= Type IV Segmented¹³
5S= Type V Segmented¹³
FT= Forward Throw
SL= Spill Light Eliminator¹⁴
CA= Cutoff Asymetric with EHS ¹⁵

Vertical Lamp

AR= Area Round
AS= Area Square
3V= Type III Vertical
RW= Rectangular Wide¹⁶

Lens Type

FG= Flat Glass¹⁷
SG=Sag Glass

Color ¹⁸

AP=Grey
BZ=Bronze
BK=Black
WH=White
DP= Dark Platinum
GM= Graphite Metallic

Options ¹⁹

F= Single Fuse (120, 277 or 347V)
FF= Double Fuse (208, 240 or 480V)
L= Lamp Included
EM= Quartz Restrike w/²⁰ Delay
Q= Quartz Restrike²⁰
R= NEMA Twistlock Photocontrol Receptacle
EHS= External Adjustable House Side Shield
HS= House Side Shield²¹
VS=Vandal Shield²²

Accessories ²³

GSM-EXTHS=External House Side Shield - 2.24 EPA
GSL-EXTHS=External House Side Shield - 2.46 EPA
MA1004XX=14" Arm for Square Pole. 1.0 EPA¹⁵
MA1005XX=6" Arm for Square Pole. 0.5 EPA¹⁵
MA1006XX= Direct Mount Kit for Square Pole¹⁵
MA1007XX= 14" Arm for Round Pole. 1.0 EPA¹⁵
MA1008XX= 6" Arm for Round Pole. 0.5 EPA¹⁵
MA1009XX= Direct Mount Kit for Round Pole¹⁵
MA1021XX= 6" Arm for Square Pole. 0.5 EPA³
MA1022XX= 6" Arm for Round Pole. 0.5 EPA³
MA1023XX= 9" Arm for Square Pole. 0.5 EPA³
MA1024XX= 9" Arm for Round Pole. 0.5 EPA³
MA1029XX= Wall Mount Bracket with 10" Arm
MA1046XX= Wall Mount Bracket³
MA1208XX= 11 1/2" Arm and Round Pole Adapter - .0.8 EPA
OA1066XX= Mast Arm Adapter
MA1010XX= Single Tenon Adapter for 3 1/2" O.D. Tenon
MA1011XX= 2@180° Tenon Adapter for 3 1/2" O.D. Tenon
MA1012XX=3@120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1013XX=4@90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1014XX=2@90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1015XX=2@120° Tenon Adapter for 3 1/2" O.D. Tenon
MA1016XX=3@90° Tenon Adapter for 3 1/2" O.D. Tenon
MA1017XX=Single Tenon Adapter for 2 3/8" O.D. Tenon
MA1018XX=2@180° Tenon Adapter for 2 3/8" O.D. Tenon
MA1019XX=3@120° Tenon Adapter for 2 3/8" O.D. Tenon
MA1045XX=4@90° Tenon Adapter for 2 3/8" O.D. Tenon
MA1048XX=2@90° Tenon Adapter for 2 3/8" O.D. Tenon
MA1049XX=3@90° Tenon Adapter for 2 3/8" O.D. Tenon
MA1060=House Side Shield for GSS (Field Installed)²⁴
MA1061=House Side Shield for GSM (Field Installed)²⁴
MA1062=House Side Shield for GSL (Field Installed)²⁴
OA/RA1016=NEMA Twistlock Photocontrol - Multi-Tap
OA/RA1027=NEMA Twistlock Photocontrol - 480V
OA/RA1201=NEMA Twistlock Photocontrol - 347V

- Notes:**
- 1 Arm not included. See Accessories.
 - 2 Arm length varies based on housing size: 9" for GSS, 11-1/2" for GSM and 14" for GSL.
 - 3 Available on GSS housing only.
 - 4 Available on GSL housing only.
 - 5 Standard with medium-base sockets in GSS housing. Mogul-base sockets in GSM and GSL housings. Wattage availability varies by housing size - see Wattage Table.
 - 6 Requires reduced envelope ED-28 lamp when used with GSM housing and flat glass vertically lamped optics.
 - 7 Requires reduced envelope BT-37 lamp when used with GSM housing.
 - 8 175, 250 and 400W MH available for non-US markets only.
 - 9 Products also available in non-US voltages and 50Hz for international markets. Consult factory for availability and ordering information.
 - 10 Multi-Tap ballast is 120/208/240/277V wired 277V. Triple-Tap ballast is 120/277/347V wired 347V.
 - 11 5-Tap ballast is 120/208/240/277/480V wired 480V. Only available in 400-1000W.
 - 12 Medium housing fixture only.
 - 13 Maximum wattage on segmented optical distributions is 400W. 400W Metal Halide lamp must use reduced envelope ED-28 lamp. Not available in GSL housing.
 - 14 Must use reduced envelope lamp, not available in GSL housing.
 - 15 Available on GSM and GSL housings only.
 - 16 RW optic not available with flat glass.
 - 17 1000W GSL with flat glass requires BT-37 lamp and is not available in AS, RW, SL or 3V distributions.
 - 18 Other finish colors available, including a full line of RAL color matches. Consult your Cooper Lighting Representative.
 - 19 Add as suffix in the order shown.
 - 20 Quartz options not available with SL optics.
 - 21 House side shield not available with 5S, RW, AS, AR, SL and CA optics.
 - 22 Arm mount only, 400W Maximum.
 - 23 Order separately, replace XX with color suffix.
 - 24 Compatible with sag lens vertical optics only.

3/15/11

DESCRIPTION

The GAR Generation Series provides an updated styling and smooth exterior appearance make it the perfect choice to add a contemporary feel to any setting. Refractive globe provides superior photometrics, maximum pole spacing, excellent roadway illumination and uniformity.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

HOUSING: Heavy-duty cast aluminum housing and removable door 3.5G vibration tested to ensure strength of construction and longevity in application. A single quarter turn fastener on the removable door provides toolless access to the ballast, terminal block and the optional internally mounted photocontrol receptacle for ease of installation and maintenance.

CAGE ASSEMBLIES: Cage assembly uprights and medallions are manufactured of heavy-duty cast aluminum and mounted to the exterior of the base housing via four (4) stainless steel fasteners. Cage rings constructed of extruded aluminum and finished to match housing.

TOPS AND FINIALS: Choose from six (6) spun aluminum or acrylic tops and four (4) cast aluminum finials for customized fixture style. All hard mount tops are made of heavy-duty spun aluminum. Select spun top styles offer top access for toolless entrance into the source compartment. Top and refractive lens are injection molded acrylic.

TWISTLOCK GLOBE: The optional twistlock assembly offers ease of maintenance through instant access to the LED module by twisting the top refractor assembly and lifting it from the mating lock plate.

Optical

REFRACTIVE GLOBE: High efficiency refractive optical systems constructed of lighting grade acrylic, or optional polycarbonate. The globes are precisely designed utilizing a combination of refractive and reflective prisms to create Type III or Type V distributions while maintaining a consistent exterior form. Lighting grade acrylic ensures long lasting optical clarity and resistance to the gradual discoloration that results from exposure to sunlight or UV radiating sources.

Electrical

LED DRIVER: Assembly mounted to a toolless removable tray with quick disconnects for ease of installation and maintenance.

LED LIGHT ENGINE: Solid state LED engine provides even and

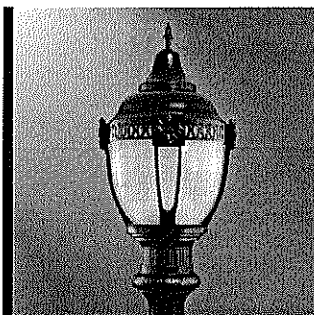
uniform illumination without the pixilation common to LED applications. Thermal management incorporates both conduction and natural convection to transfer heat rapidly away from the LED source and retain optimal efficiency and light output. The LED replacement module is backwards compatible with existing Generation Series luminaire installations enabling retrofit opportunities.

Mounting

Base casting slipfits over a standard 3" O.D. tenon and secured via four (4) stainless steel allen head fasteners. 3.5G vibration tested.

Finish

Cast and spun components finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult the McGraw-Edison Architectural Color brochure for a complete selection of standard colors including black, bronze, grey, white, dark platinum, graphite metallic, and hartford green. RAL and custom color matches available.



**GAR
GENERATION
SERIES LED**

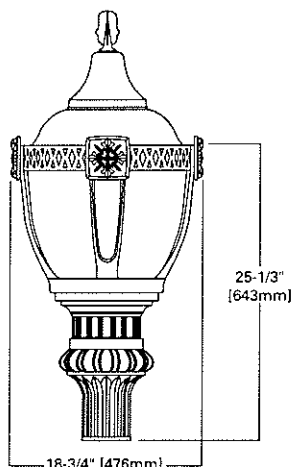
**58W
LED**

**DECORATIVE POST TOP
LUMINAIRE**

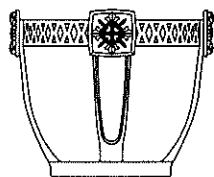
IS THIS
AVAILABLE
IN NON-
LED

**GENERATION
SERIES**

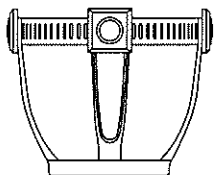
DIMENSIONS



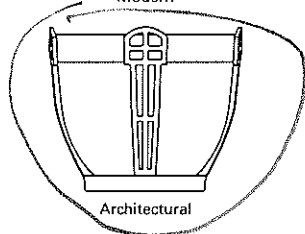
CAGE TYPE



Classical

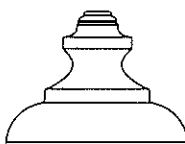
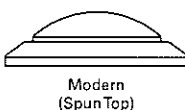
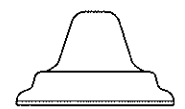
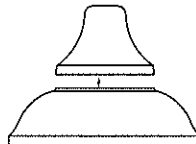
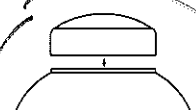


Modern

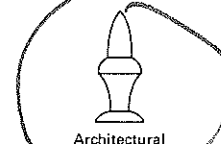


Architectural

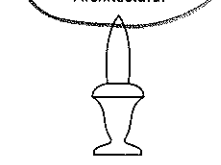
TOP TYPE

Acorn
(Glow Top)Modern
(Spun Top)Victorian
(Glow Top)Classical
(Spun Top)Nostalgic
(Spun Top / Top Access)Architectural
(Spun Top / Top Access)

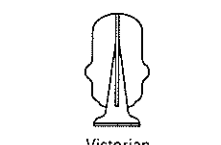
FINIAL TYPE



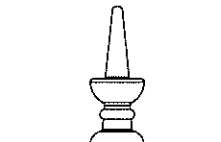
Architectural



Modern

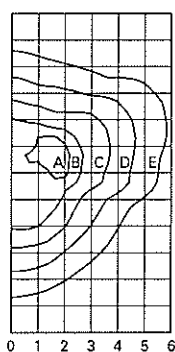
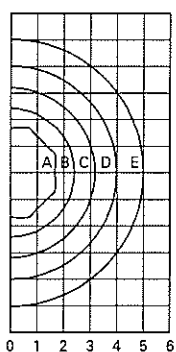
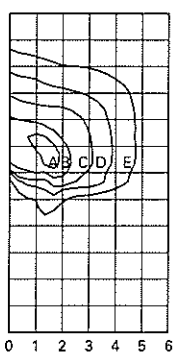


Victorian



Nostalgic

PHOTOMETRICS

GAR-50-LED-E1-3
58-Watt LED
4,880-Source Lumens
Type IIIGAR-50-LED-E1-5
58-Watt LED
4,880-Source Lumens
Type VGAR-50-LED-E1-3-SH
58-Watt LED ¹
4,880-Source Lumens ¹
Type III w/House Side Switching

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
10'	1.00	0.50	0.20	0.10	0.05
12'	0.69	0.35	0.14	0.07	0.04
15'	0.44	0.22	0.09	0.05	0.02

¹ 29W/2,440 Source Lumens after switching.

ORDERING INFORMATION

Sample Number: GAR-50-LED-E1-3-CXA-BZ

Sample Number: GAR-50-LED-E1-3-CXA-BZ									
Product Family GAR: Acorn Base		Refractor Type 3: Type III 5: Type V		Cage Type A: Architectural C: Classical M: Modern X: None		Color ² AP: Grey BZ: Bronze BK: Black GN: Hartford Green WH: White DP: Dark Platinum GM: Graphite Metallic		Options ³ A: Twistlock Refractor B: Decorative Brass Banding ⁴ P: Polycarbonate Refractor R: NEMA Twistlock Photocontrol Receptacle G: Gold Cage and Finial D: Downlight Reflector 2L: Bi-Level Switching Capable SH: Street Side/House Side Switching Capable 8030: 80 CRI/3000K CCT ⁵	
Lumen Package 50: 5000 Lumens		Top Type A: Acorn C: Classical M: Modern N: Nostalgic (Top Access) R: Architectural (Top Access) V: Victorian		Finial Type A: Architectural M: Modern N: Nostalgic V: Victorian X: None		Accessories ⁶ MA1252: 10kV Circuit Module Replacement GLR-50-E1: 5000 Lumen LED Replacement Module with 120-277 Universal Driver GLR-50-E1-2L: 5000 Lumen LED Replacement Module with 120-277 Universal Driver and Bi-Level Switching Capable GLR-50-E1-SH: 5000 Lumen LED Replacement Module with 120-277 Universal Driver and Street Side/House Side Switching Capable			
Lamp Type LED: Solid State Light Emitting Diodes									
Voltage E1: Electronic (120 - 277V)									

Notes: 1 LED Module nominal source lumens prior to optical and configuration losses based on 65 CRI/5000K package at 25 °C ambient. Refer to IES files for delivered lumens by configuration. 2 Other finish colors available, including a full line of RAL color matches. Consult your Cooper Lighting Representative. 3 Add as suffix in the order shown. 4 When brass banding is chosen, finial finished in gold. 5 Apply a 0.77 lumen multiplier. 6 Order separately.

DESCRIPTION

The IMPACT Elite Trapezoid cutoff wall luminaire makes an ideal complement to site design. Rugged construction and full cutoff classified optics provide facade and security lighting for light restricted zones surrounding schools, office complexes, apartments, and recreational facilities. U.L. and cUL Listed for wet locations in down mount applications and damp locations in up mounted applications.

SPECIFICATION FEATURES

Construction

Two-piece die-cast aluminum housing and removable hinged door frame nests securely for precise tolerance control and repeatability. Hinged door frame inset for clean mating with housing surface and secured via two [2] captive stainless steel fasteners. Optional tamper resistant torx-head fasteners [TR] offer vandal resistant access to the electrical compartment. 1/8" clear, heat and impact resistant tempered flat glass lens combine with molded silicone gasket to seal the integrated optical assembly, while ensuring peak optical performance.

Electrical

Integral hard mount electrical components are secured and grounded within the die-cast aluminum housing for optimal heat sinking and extended component life. Minimum starting temperatures are -40°C (-40°F) for HPS and -30°C (-22°F) for MP. Compact fluorescent luminaires

feature electronic universal 120-277V high efficiency 50/60Hz ballast with -18°C (-0°F) minimum starting temperature. Available in 50-175W HID or 26-84W CF. Emergency power pack available for 26-64W CF.

Optical

Premium anodized 95% reflective aluminum optical assemblies provide high efficiency Type II distribution. Optional silk screened house side flat glass shield provides decreased wall brightness. All Impact Elite Wall Series luminaires classify as IESNA full cutoff in downlight applications. Available with 10% or 50% uplight options for architectural highlighting of building details.

Mounting

Gasketed and zinc plated rigid steel mounting attachment fits directly to 4" j-box or wall with the Impact Elite "Hook-N-Lock" system for fast installation and mounting in both

traditional downlighting [wet location] or inverted uplighting [damp location] mounting positions. Secured via two [2] captive corrosion resistant allen head set screws concealed from view, but accessible from bottom of fixture.

Finish

Housing and door are protected with 5-stage premium TGIC polyester powder coat paint. Premium TGIC powder coat finishes withstand extreme climate changes while providing optimal color and gloss retention over the fixture's installed life. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult McGraw-Edison Architectural Colors Brochure for complete selection.

IMPACT™



IST IMPACT ELITE TRAPEZOID

50 - 175W

Pulse Start Metal Halide

Metal Halide

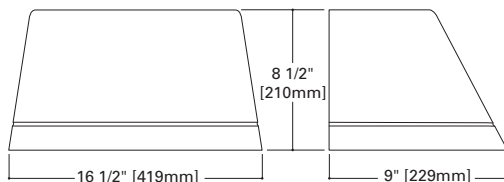
High Pressure Sodium

26 - 84W

Compact Fluorescent

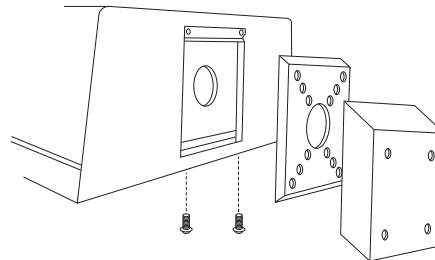
FULL CUTOFF
WALL MOUNT LUMINAIRE

STANDARD DIMENSIONS

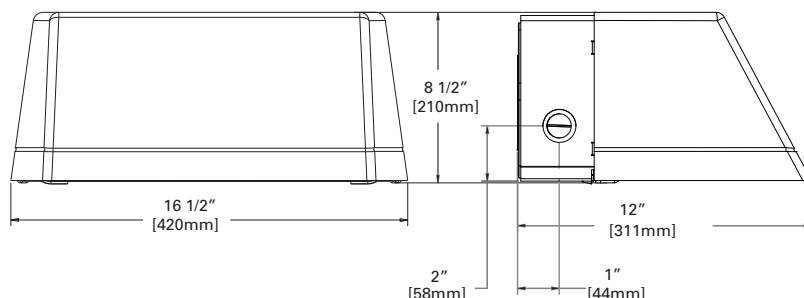


HOOK-N-LOCK MOUNTING

(Mounting attachment included. J-Box not included.)



DIMENSIONS WITH BACK BOX



NOTE: In downlight applications only.

TECHNICAL DATA

UL1598 Listed, CUL Listed
25°C Maximum Ambient Temperature
External Supply Wiring 90°C Minimum
Down Mounted—Wet Location
Up Mounted—Damp Location

ENERGY DATA

High Reactance Ballast Input Watts

50W HPS HPF (66 Watts)
50W MP HPF (72 Watts)
70W HPS HPF (91 Watts)
70W MP HPF (90 Watts)
100W HPS HPF (130 Watts)
100W MP HPF (129 Watts)
150W HPS HPF (190 Watts)
150W MP HPF (185 Watts)

Electronic Ballast Input Watts

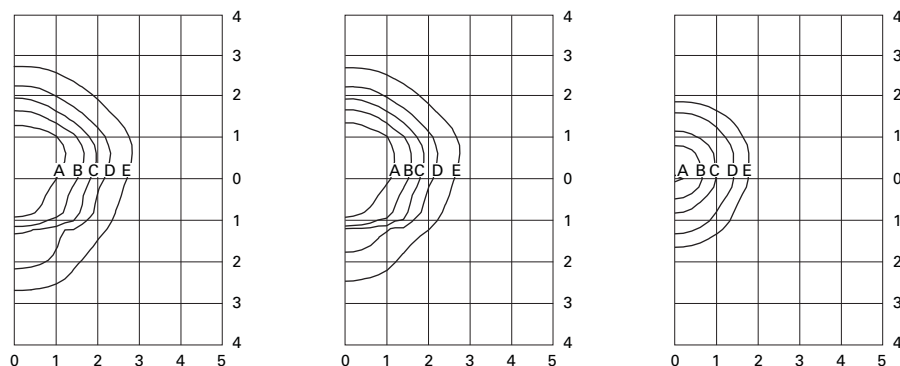
26W CF HPF (29 Watts)
32W CF HPF (36 Watts)
42W CF HPF (46 Watts)
52W CF HPF (55 Watts)

SHIPPING DATA

Approximate Net Weight:
18 lbs. (8 kgs.)



ADH100166 pc
2011-03-24 10:35:20

PHOTOMETRICS (Complete IES files available at www.cooperlighting.com)**IST-150-MP-XX-2S**

150—Watt MP
14,000—Lumen Clear Lamp

IST-150-HPS-XX-2S

150—Watt HP
16,000—Lumen Clear Lamp

IST-42-CF-XX-2S

42—Watt CF
3,200—Lumen Lamp

Footcandle Table

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

Mounting Height	Footcandle Values for Isofootcandle Lines				
	A	B	C	D	E
150-MP / 150-HPS					
10'	7.20	2.88	1.44	0.72	0.29
12'	5.00	2.00	1.00	0.50	0.20
14'	3.65	1.46	0.73	0.37	0.07
42-CF					
18'	2.46	1.23	0.62	0.25	0.12
20'	2.00	1.00	0.50	0.20	0.10
25'	1.28	0.64	0.32	0.13	0.06

ORDERING INFORMATION

Sample Number: IST-100-MP-120-2S-GM

Product Family IST =Impact Elite Small Trapezoid	Lamp Wattage ¹ MP 50=50W ² 70=70W ² 100=100W 150=150W HPS 50=50W ² 70=70W ² 100=100W 150=150W MH 175=175W ¹ CF 26=(1)26W 32=(1) 32W 42=(1) 42W 52=(2) 26W 64=(2) 32W 84=(2) 42W	Lamp Type MP =Pulse Start Metal Halide HPS =High Pressure Sodium MH =Metal Halide ¹ CF =Compact Fluorescent	Voltage ³ 120=120V 208=208V 240=240V 277=277V 347=347V 480=480V DT =Dual-Tap ⁴ MT =Multi-Tap ⁴ TT =Triple-Tap ⁴ E1 =Electronic (120-277V) ⁵	Distribution 2S =Type II Segmented	Colors [add as suffix] AP =Grey BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White	Options F =Single Fuse, Specify Voltage (120, 277, or 347V) ⁶ FF =Double Fuse, Specify Voltage (208, 240 or 480V) ⁶ P =Button Photocontrol (120, 208, 240 or 277V) ⁶ L =Lamp Included TR =Tamper Resistant Fasteners UPL10 =10% Uplight HS =House Side Shield Glass ⁵ PL =Polycarbonate Lens ^{5, 7} Q =Quartz Restrike (1) T4 Lamp ⁸ EM =Emergency Quartz Restrike (1) T4 Lamp with Time Delay Relay ⁸ EM/SC =Emergency Separate Circuit (1) T4 Lamp ^{8, 9} QMR =Quartz Restrike (1) MR16 Lamp ^{10, 11} 2QMR =Quartz Restrike (2) MR16 Lamps ^{10, 11} 2QMR/SC =Quartz Restrike (1) MR16 Lamp and (1) Emergency Separate Circuit MR16 Lamp ^{9, 10, 11} EMMR =Emergency Quartz Restrike (1) MR16 Lamp with Time Delay Relay ^{10, 11} 2EMMR =Emergency Quartz Restrike (2) MR16 Lamps with Time Delay Relay ^{10, 11} EM/SC/MR =Emergency Separate Circuit (1) MR16 Lamp ^{9, 11, 12} 2EM/SC/MR =Emergency Separate Circuit (2) MR16 Lamps ^{9, 11, 12} 2EMMR/SC =Emergency Quartz Restrike with Time Delay Relay (1) MR16 and (1) MR16 Emergency Separate Circuit Lamp ^{9, 10, 11} EM/SC/12V =Emergency Separate Circuit 12V Low Voltage (1) MR16 Lamp ^{9, 13} 2EM/SC/12V =Emergency Separate Circuit 12V Low Voltage (2) MR16 Lamps ^{9, 13} EMI40-XXX =Emergency Cold Temperature (UL924 Listed) Power Pack -18°C/0°F, (1) CF Lamp ¹⁴ CFEM-XXX =Emergency CF Power Pack (UL924 Listed) (1) CF Lamp. 0°C/32°F ¹⁵ 2EM140-XXX =Emergency Cold Temperature power pack (UL924 listed), -18°C/0°F, (2) CF Lamps, with Back Box matching housing finish ^{14, 16} 2CFEM-XXX =Emergency CF power pack (UL924 listed) 0°C/32°F, (2) CF Lamps, with Back Box matching housing finish ^{15, 17}	Accessories ¹⁸ MA1254-XX =Thruway back box - Impact Elite Trapezoid

Notes:

- 1 HID lamps are medium base. 175W MH is available for non-U.S. markets only.
- 2 Not available with 480V.
- 3 Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Representative for availability and ordering information.
- 4 Dual-tap ballast is 120/277V wired 277V. Multi-tap is 120/208/240/277V wired 277V. Triple-tap ballast is 120/277/347V wired 347V.
- 5 Available with CF Option only. In cold temperatures, compact fluorescent lamps produce lower illumination levels.
- 6 Must specify voltage.
- 7 Down lighting position only.
- 8 (1) 120V Lamp, 100W maximum quartz lamp. Utility power may need to cycle to allow HID lamp to cool in warm climates. Not available with CF Option. Lamp supplied by others.
- 9 Leads out of the back of the unit for auxiliary power.
- 10 Not available with CF lamps.
- 11 (1) or (2) 120V Lamps. GU10 base, 50W maximum each. Lamps supplied by others.
- 12 Not Available with 52, 64, 84 CF wattages.
- 13 (1) or (2) 12V bi-pin lamp, socket GU5.3 base, 35W maximum. Power supplied by low voltage DC source (supplied by others). Lamps supplied by others.
- 14 Specify 120 or 277V, (-18°C) minimum temperature. Not available with UPL10.
- 15 Specify 120 or 277V, (0°C) minimum temperature. Not available with UPL10.
- 16 Not available in 84CF configuration.
- 17 Available in 52CF only.
- 18 Order separately. Replace "XX" with color designation.