

LitePro 2.025 Point-By-Point Results

11/13/2022

PROJECT: Blue Ash Storage/Storage GROUP: Blue Ash Storage AREA: New Area GRID: New Grid

DESIGNED BY:

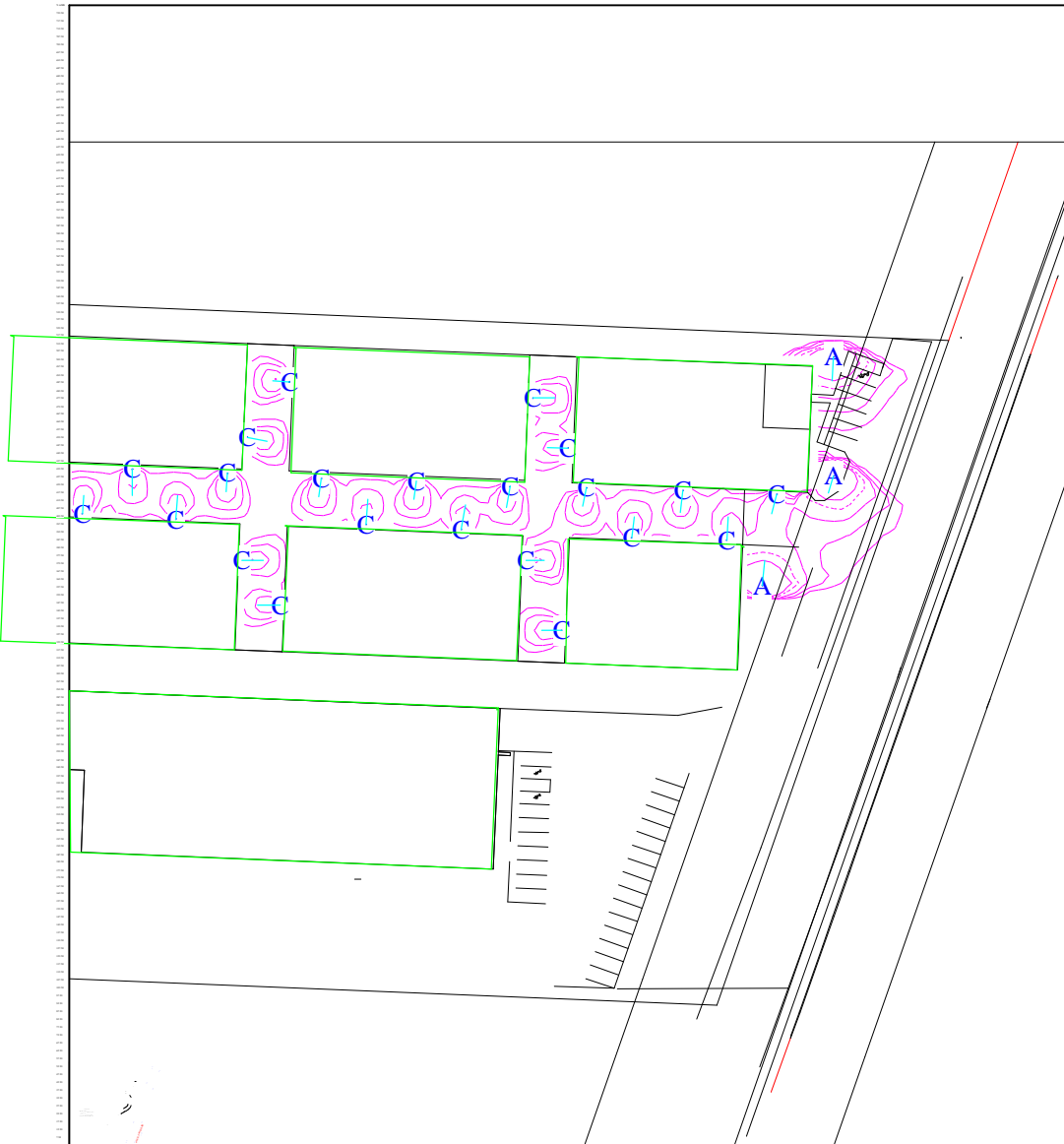
VALUES ARE FC, SCALE: 1 IN= 120.0FT, HORZ GRID (U), HORZ CALC, Z= 0.0

Computed in accordance with IES recommendations

Statistics

GROUP	MIN	MAX	AVE	AVE/MIN	MAX/MIN
(+)	0.00	30.06	0.83	N/A	N/A
(*)	0.00	0.04	0.00	N/A	N/A

CONTOUR LEVELS: - = 7.00 -- = 4.00 .. = 2.00 -. = 1.00 -.. = 0.50



Photometric Data Summary

LUMINAIRE: WGH150S
 WGH MID-SIZE SERIES - CAST
 ALUMINUM HOUSING. BOROSILICATE
BALLAST: STD
BALLAST FACTOR: 1.00
LAMP: C150S55/M
LUMENS PER LAMP: 16000
WATTS: 188
CUTOFF TYPE: Noncutoff
RANGE CLASS: Very Short Range
LUMINOUS OPENING IN FEET
 LENGTH: 0.33
 WIDTH: 0.92
 HEIGHT: 0.52

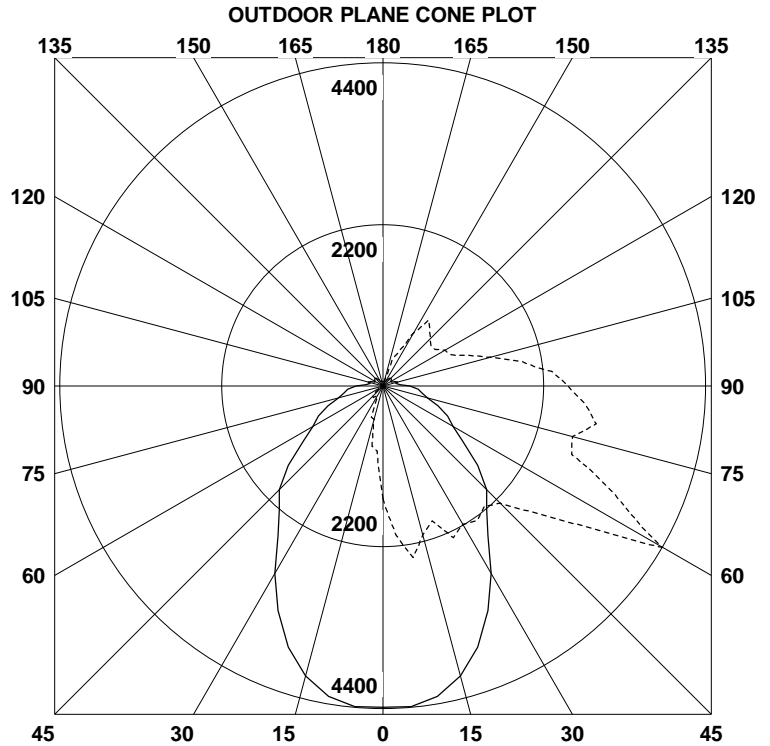
TEST #HP09709A
DATE: 11/13/2012
TOTAL LUMINAIRE EFFICIENCY = 51.9%

ZONAL LUMENS

ZONE	LUMENS	% LAMP	% FIXTURE
0-30	1111	6.9	13.4
0-40	1766	11.0	21.3
0-60	3428	21.4	41.3
0-90	6259	39.1	75.3
90-120	1386	8.7	16.7
90-130	1615	10.1	19.4
90-150	1980	12.4	23.8
90-180	2049	12.8	24.7
0-180	8308	51.9	100.0

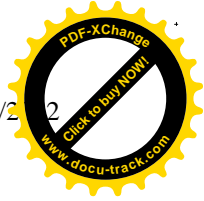
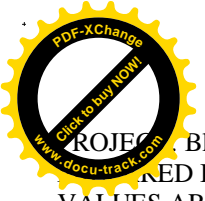
CANDELA SUMMARY

ANGLE	0.0	45.0	90.0	135.0	180.0
0.0	1532	1532	1532	1532	1532
15.0	2109	2334	1440	807	461
30.0	2174	1717	1032	336	152
45.0	2282	1660	538	157	198
60.0	4377	1991	370	152	59
75.0	2700	1897	177	41	10
90.0	2545	1221	64	30	10
105.0	1523	748	61	18	9
120.0	986	567	60	9	8
135.0	923	605	34	5	6
150.0	819	378	12	4	5
165.0	91	27	3	3	3
180.0	0	0	0	0	0



Vert. Plane Through 5.0-185.0 Horiz. -----
 Horiz. Cone Through 60.0 Vert. _____
 Max Candelas = 4385 @ 5.0H,60.0V

THIS REPORT IS BASED ON IES TEST DATA FOR A SPECIFIC LAMP/BALLAST COMBINATION. EXTRAPOLATION OF THESE DATA FOR OTHER LAMP/BALLAST COMBINATIONS MAY PRODUCE ERRONEOUS RESULTS. THE BALLAST FACTOR MUST BE APPLIED TO THE LUMEN OUTPUT RATING ASSIGNED TO THE LAMP(S) OR TO THE CANDELA VALUES SHOWN.



LitePro 2.025 Point-By-Point Results

11/13/2022

PROJECT: Blue Ash Storage/Storage GROUP: Blue Ash Storage AREA: New Area GRID: New Grid

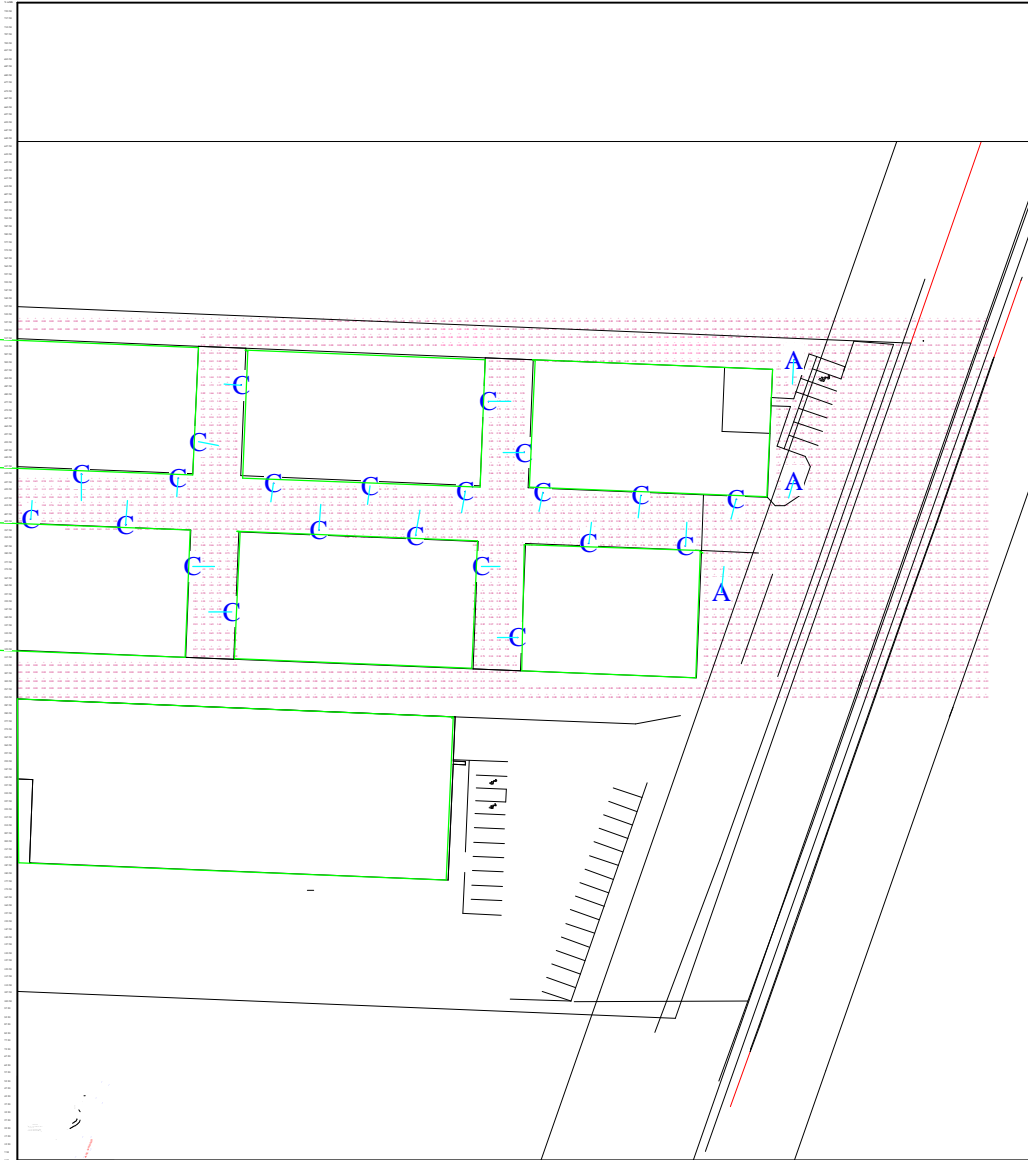
CREATED BY:

VALUES ARE FC, SCALE: 1 IN= 120.0FT, HORZ GRID (U), HORZ CALC, Z= 0.0

Computed in accordance with IES recommendations

Statistics

GROUP	MIN	MAX	AVE	AVE/MIN	MAX/MIN
(+)	0.00	30.06	0.83	N/A	N/A
(*)	0.00	0.04	0.00	N/A	N/A



WGH SERIES

GLASS WALLPACKS

Cat. #		Approvals
Job	Type	



INTENDED USAGE

- Perimeter lighting for safety and security. Use on factories, warehouses, self storage, commercial buildings, etc.

CONSTRUCTION

- Borosilicate glass refractor softens lamp image and provides uniform distribution – 4 times spacing to mounting height.
- Cast aluminum frame holds lens and seals to housing gasket with two stainless steel screws.
- Door assembly hinges to side on mid-size units; hinges down on large units
- Cast aluminum housing with 1/2" conduit entries, button photocontrol can be field installed
- All units have dark bronze powder paint finish, Quad-Tap® ballasts and lamps included

ELECTRICAL

- WGH mid-size is 150w HPS/PS and 84w CFL; large size handles 250-400w PS and HPS; 150P unit includes medium base lamp; All other HID units include mogul base lamp
- 84w (2x42wCFL) is available with 180° motion sensor factory wired to control one lamp providing 50% energy savings

LISTINGS

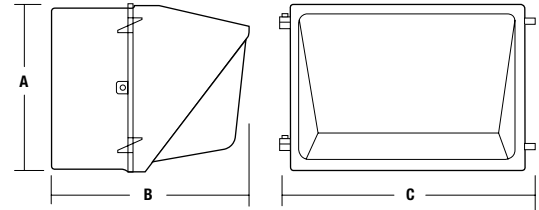
- Listed to UL 1598 for use in wet locations



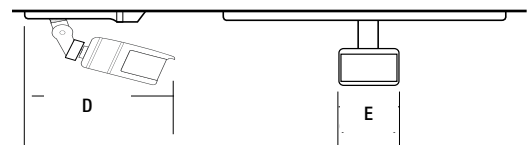
MID-SIZE



LARGE



	A	B	C	D	E
MID-SIZE	9"	7 1/4"	13"	6.5"	2.5"
	229 mm	184 mm	330 mm	165mm	63.5mm
LARGE	9"	13"	17"	-	-
	229 mm	330 mm	432 mm	-	-



ORDERING INFORMATION

Catalog Number ¹	Wattage/Source	Voltage	Finish	Weight	
				lbs	kg
MID-SIZE SERIES					
WGH-150P	150w/PS	120, 208, 240, 277V	Bronze	19	8.6
WGH-150S	150w/HPS	120, 208, 240, 277V	Bronze	18	8.2
WGH-150S120	150w/HPS	120V	Bronze	15	6.8
WGH-84F²	2x42w/CFL	120, 208, 240, 277V	Bronze	10	4.5
WGH-84F-MS42³	2x42w/CFL	120V	Bronze	11	5.0
LARGE SERIES					
WGH-250P	250w/PS	120, 208, 240, 277V	Bronze	34	15.4
WGH-320P	320w/PS	120, 208, 240, 277V	Bronze	37	16.8
WGH-400P	400w/PS	120, 208, 240, 277V	Bronze	37	16.8
WGH-250S	250w/HPS	120, 208, 240, 277V	Bronze	36	16.3
WGH-400S	400w/HPS	120, 208, 240, 277V	Bronze	40	18.1



WGH-84F-MS42

¹ Lamp included on all units.

² Lamps are 3500K 4-Pin (single two lamp ballast).

³ Unit has individual lamp ballasts, lamps are 3500K, can be easily wired for motion control of both lamps if desired. Sensor has 180° detection range with adjustable time-on and sensitivity settings.

ACCESSORIES

(order as separate part #)

Catalog Number	Description
PBT-1	Photocontrol, 120 volt
PBT-234	Photocontrol, 208, 240, 277 volt
SM106-GUARD	Wire Guard for MID-SIZE fixtures
SM708-GUARD	Wire Guard for LARGE fixtures
SM106-SHIELD	Polycarbonate Shield for MID-SIZE fixtures
SM106VISOR	Top visor for MID-SIZE fixtures
SM708VISOR	Top visor for LARGE fixtures

PHOTOMETRIC REPORTS

Catalog Number	Report #
WGH150S	HP09709.IES
WGH400S	HP09706.IES
WGH84F	WGH84F.IES

Due to our continued efforts to improve our products, product specifications are subject to change without notice.



Outdoor Lighting

Hubbell Outdoor Lighting • 701 Millennium Drive • Greenville, SC 29607 • PHONE: 864-678-1000

For more information visit our web site: www.hubbelloutdoor.com

Photometric Data Summary

LUMINAIRE: MSV-A0400S-VWxx
 MAGNUSQUARE II - MSV SERIES -
 Flat and convex glass lens.
BALLAST: STD. REF. BALLA
BALLAST FACTOR: 0.95
LAMP: C400S51
LUMENS PER LAMP: 50000
WATTS: 465
CUTOFF TYPE: Semicutoff
RANGE CLASS: Short Range
LUMINOUS OPENING IN FEET
 LENGTH: 0.00
 WIDTH: -1.53
 HEIGHT: 0.30

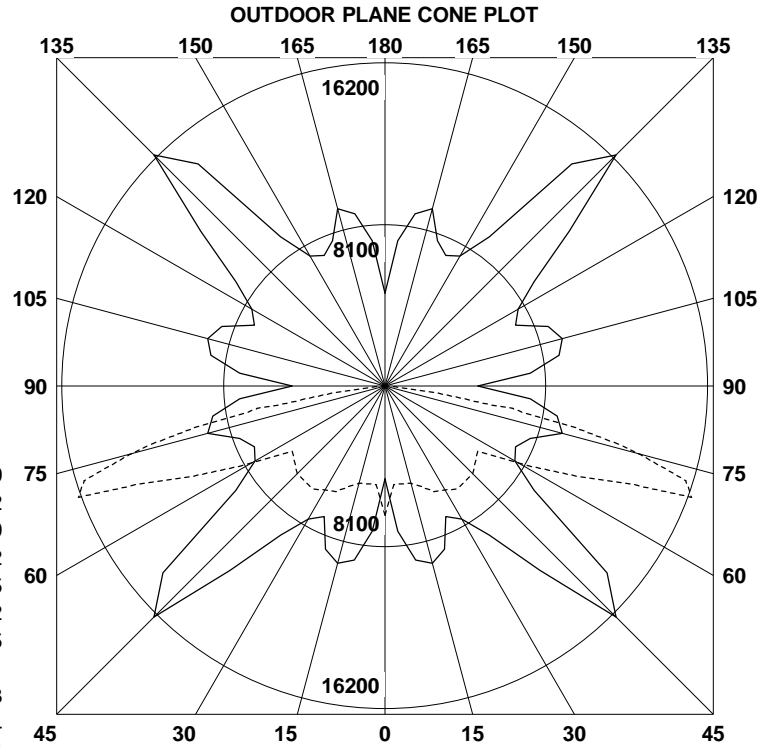
TEST #HP07064
 DATE: 11/13/2012
TOTAL LUMINAIRE EFFICIENCY = 65.8%

ZONAL LUMENS

ZONE	LUMENS	% LAMP	% FIXTURE
0-30	4419	8.8	13.4
0-40	8104	16.2	24.6
0-60	17822	35.6	54.2
0-90	32816	65.6	99.8
90-120	76	0.2	0.2
90-130	76	0.2	0.2
90-150	76	0.2	0.2
90-180	76	0.2	0.2
0-180	32892	65.8	100.0

CANDELA SUMMARY

ANGLE	0.0	45.0	90.0	135.0	180.0
0.0	6482	6482	6482	6482	6482
15.0	4880	5047	4880	5047	4880
35.0	5662	6322	5662	6322	5662
55.0	5275	5677	5275	5677	5275
70.0	4642	16360	4642	16360	4642
75.0	2865	13262	2865	13262	2865
80.0	1271	6505	1271	6505	1271
85.0	293	471	293	471	293
95.0	44	35	44	35	44
115.0	0	0	0	0	0
180.0	0	0	0	0	0



Vert. Plane Through 45.0-225.0 Horiz. -----
 Horiz. Cone Through 70.0 Vert. _____
 Max Candelas = 16360 @ 45.0H,70.0V

THIS REPORT IS BASED ON IES TEST DATA FOR A SPECIFIC LAMP/BALLAST COMBINATION. EXTRAPOLATION OF THESE DATA FOR OTHER LAMP/BALLAST COMBINATIONS MAY PRODUCE ERRONEOUS RESULTS. THE BALLAST FACTOR MUST BE APPLIED TO THE LUMEN OUTPUT RATING ASSIGNED TO THE LAMP(S) OR TO THE CANDELA VALUES SHOWN.

Cat. #		Approvals
Job	Type	

APPLICATIONS

- Malls, retail complexes, industrial sites or any large area lighting project where superior performance, design flexibility, and value are a must

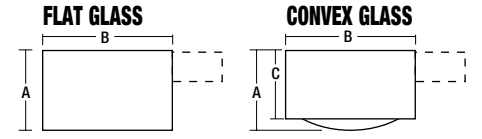
SPECIFICATIONS

- Lightweight, rugged, one-piece formed and welded aluminum for smooth wall construction and weatherproofing. Pre-drilled for arm mounting. Decorative embossed band and reveal colors available
- Extruded aluminum door frame with rigid corner bracing and die cast zinc latches for tool-free entry (flat glass lens). Formed aluminum doorframe (convex lens) with stainless steel, Knurled head thumb screw design for tool-free entry. Quality high temperature rated extruded silicone gasket seals out insects, dirt and moisture. Tempered flat glass lens provides impact and thermal shock resistance and a sharp full cutoff classification. Impact and thermal shock resistant convex lens provides improved light level uniformity and broadened luminaire spacing

- Vertical and horizontal lamp orientations available: IES types I, II, III, IV, and V distributions. V1P, V3P, V5P and H5P reflectors are fully segmented. V4 and H4 reflectors are multi-piece design. H3 and H5 reflectors are hydroformed. All reflectors are rotatable
- Spider mount has four twin-tube arms attaching housing to pole top fitter. Yoke mount has two square arms securing housing to pole top fitter
- Extruded aluminum arms in 4" and 10" lengths along with multiple adapters provide mounting flexibility.
- Mogul porcelain socket, pulse rated, with spring-loaded, nickel-plated center contact and reinforced lamp grip screw shell
- CWA type, HPF ballast, starting rated at -20°F (-40°F for HPS)
- Durable Lektrocote® TGIC thermoset polyester powder coat paint finish assures long life and maintenance-free service

LISTINGS/CERTIFICATIONS

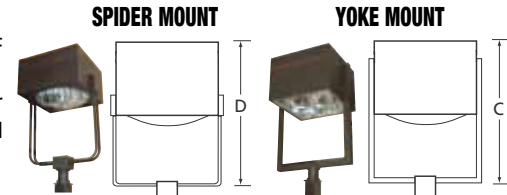
- Listed to UL1598 for use in wet locations
- IDA fixture seal of approval.



	A	B	C	EPA	Weight
FLAT	15"	21"	N/A	2.8 ft. ^{2*}	68 lbs
	381 mm	533 mm		0.35m ²	30.6 kg
CONVEX	14 1/2"	21" sq.	12"	2.4 ft. ²	63 lbs
	368 mm	533 mm	374 mm	0.2m ²	28.6 kg

NOTE: EPA and weight values do not include mounting arm

* With the 4" arm the EPA is 2.8ft.².



	C	D	Flat	EPA	Weight
SPIDER	33 11/16"	36 1/2"	0.5 ft. ²	9 lbs	
	856 mm	928 mm	0.15m ²	4.1 kg	
YOKE	35 3/16"	33 11/16"	1.6 ft. ²	11 lbs	
	894 mm	856 mm	0.49m ²	5.0kg	

ORDERING EXAMPLE: MSV-A4-P1K-V5P-F-5-DB-RPA4

ORDERING INFORMATION

MSV	-	-	-	-	-	-	-	-	-
SERIES	SOURCE/WATTAGE	LAMP ORIENT./DISTR.	LENS	COLOR	OPTIONS				
MSV M-Pulsive	METAL HALIDE	V1P Vert. I - segmented	F Flat glass	DB Dark Bronze (textured)	F(X)⁶ Fusing (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, 6-347)				
MOUNT	H1K 1000w (BT-37)	V3P Vert. III - segmented	C⁸ Convex glass	BL Black (textured)	PR(X)¹² Photo cell receptacle (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, 6-347)				
A4 Arm mount (includes 4" rigid arm)	SUPER METAL HALIDE	V4⁶ Vert. IV - multi-piece		WH White (textured)	P(X)^{4,5} Photo button (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 6-347)				
A10¹¹ Arm mount (includes 10" rigid arm)	MS1K 1000w (BT-37)	V5P Vert. V (square) - segmented		GR Gray (textured)	RPA2 Round pole adapter (2 3/4 - 3 1/8")				
WB Wall bracket (arm not required or included)	PULSE START METAL HALIDE	H3^{2,12} Horiz. III - hydroformed		PS Platinum Silver (smooth)	RPA3 Round pole adapter (3 1/4 - 3 3/4")				
WBA4 Wall bracket with 4" rigid arm	P17 175w (ED-28)	H4² Horiz. IV - multi-piece		RD Red (smooth) (premium color)	RPA4 Round pole adapter (3 7/8 - 4 1/2")				
WBA10 Wall bracket with 10" rigid arm	P25 250w (ED28)	H5^{2,12} Horiz. V (square) - hydroformed		FG Forest Green (textured, premium color)	RPA5 Round pole adapter (5")				
0 No arm or wall bracket (only order without arm or wall bracket when they are ordered as an accessory)	P32 320w (ED28)	H5P² Horiz. V (square) - segmented		CC Custom Color (consult factory)	RPA6 Round pole adapter (6")				
ST Spider mount (2 3/8" tenon)	P35 350w (ED28)		VOLTAGE		QZ⁵ Quartz RS with lamp				
YT Yoke mount (2 3/8" tenon)	P40 400w (ED-37)		1¹⁰ 120V	Q³ Quad-Tap® 120/208/240/277V	VG Polycarbonate vandal guard				
	P45 450w (BT-37)		2¹⁰ 208V	5 480V	R(XX)⁷ Reveal (EB option must be chosen also); Replace XX with color				
	P75 750w (BT-37)		3¹⁰ 240V	T³ Tri-Tap® 120/277/347V	EB Embossed band				
	P1K 1000w (BT-37)		4¹⁰ 277V	E 50Hz 220/240V	L Lamp				
	HIGH PRESSURE SODIUM		F¹⁰ 347V	V^{3,9} Five-Tap 120/208/240/277/480V					
	S25 250w (ED-18)			0 No Ballast					
	S40 400w (ED-18)								
	S60¹ 600w (T-14)								
	S75¹ 750w (BT-37)								
	S1K 1000w (ED-37)								

1 Must specify Q, 5, or T voltage. Available voltage tap on ballast may vary from catalog; **Must specify wiring prep with options**
 2 Flat lens configurations only for horizontal lamp orientation
 3 Factory wired for highest voltage unless specified
 4 400w maximum
 5 Not available with 50 Hz ballast, 600w and 750w HPS, and convex lens with 1000w HPS

6 Not available with convex lens and 1000w HPS or 1000w with yoke or spider mount
 7 Reveal selection requires EB - embossed band option
 8 Vertical lamp only
 9 Only available with 400w, 350w, 320w, and 250w
 10 Only available with 1000w PSMH, 600w HPS, and 750w HPS
 11 Required for 90° configurations
 12 Not available with 1000w yoke or spider mount

NOTE: All poles to be drilled with #2 pattern

SPECIFICATIONS

HOUSING Die-formed rectilinear housing to have continuous corner welds creating a seamless one-piece enclosure. Housing material to be heavy gauge low copper aluminum alloy. Door assembly to recess completely within luminaire housing creating evenly spaced reveal and floating door appearance.

DOOR/LENS **FLAT LENS DESIGN:** Extruded aluminum doorframe for tempered flat glass lens design to have 45° miter cut corners with internal corner key brackets for rigid support. Finish to be anodized with natural aluminum color. Tool-free entry design provided by corrosion-resistant, spring-loaded die cast zinc thumb latches (one per corner). Extruded silicone gasket profile to positively seal tempered glass lens to doorframe and doorframe to luminaire housing ensuring a contaminant free environment. Complete removal of the door assembly is achievable without tools. **CONVEX LENS DESIGN:** Die formed aluminum doorframe with impact and thermal-shock resistant convex lens, vulcanized one-piece extruded silicone gasket, and tool-free entry with two Knurled head stainless steel screws. Two additional corrosion-resistant treated screws provide door hinging and two additional points of attachment for equal gasket compression. Matching TGIC thermoset polyester powder paint finish to match the luminaire housing color.

MOUNTING The luminaire housing shall attach to all mounting hardware via two 1/2" diameter bolts/rods. Mounting options to include rigid arm assemblies, knuckled arm assemblies for flat surfaces, knuckled arm assemblies for 2 3/8" OD tenon, wall bracket adapter, and round pole adapters ensuring maximum luminaire versatility. All mounting accessories should include gasket between the housing and accessory.

OPTICS The luminaire should be available in both vertical and horizontal lamp orientations. All optical assemblies are to be field rotatable in 90° increments. All flat glass configurations are to be IES – Full Cutoff classified. Internal house side shielding to be available with horizontal Type III distribution and field installable.

ELECTRICAL Available HID wattage range of 250 to 1000 watts from Metal Halide, Pulse Start Metal Halide, High Output Super Metal Halide, and High Pressure Sodium sources. Additional options include fusing, photocell cell control, and quartz restrike lamp.

FINISH TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness. Prior to painting all luminaires and mounting accessories should be thoroughly cleaned with acid and alkaline cleaners followed by the application of a chromate conversion coating.

LISTINGS/CERTIFICATION UL1598 approved and CSA certified for outdoor use in wet locations

MSV EPA VALUES

Mounting Logic for Pole	Configuration	Flat Lens w/ 4" Arm	Flat Lens w/ 10" Arm	Convex Lens w/ 4" Arm	Convex Lens w/ 10" Arm
A	SINGLE	2.8	3	2.5	2.7
B	TWIN AT 90°	N/A	5.3	N/A	4.7
C	TWIN AT 180°	5.6	6	5	5.4
D	TRIPLE AT 90°	N/A	8.6	N/A	7.5
E	TRIPLE AT 120°	8.2	8.4	7.1	7.3
F	QUAD AT 90°	N/A	8.8	N/A	7.7

ACCESSORIES

(Must be ordered separately. For field installation.)

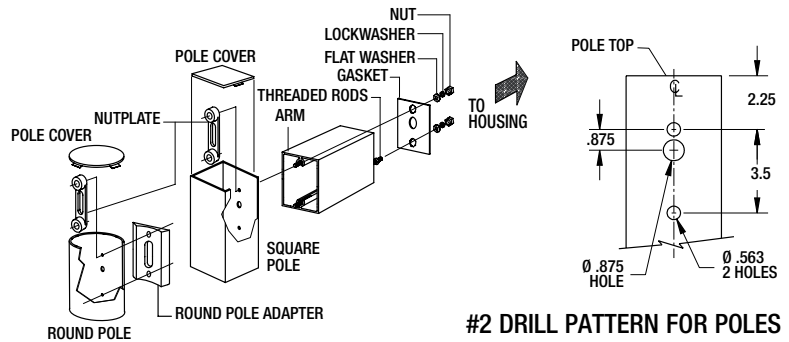
Catalog #	Description
MSV-FGGS-2	Extreme Glare Shield for flat glass units only (mounts to housing); restricts lighting to any one side of fixture; black finish standard
MSV-GS	Glare Shield for sag glass units only; restricts light to any one side of fixture, black finish standard
MSV-PVG	Polycarbonate Vandal Guard
FDMLH	Flush Mount Kit - direct mount luminaire hardware kit
F-RPA2-XX^{1,2}	Round Pole Adapter (2 3/4 - 3 1/8")
F-RPA3-XX^{1,2}	Round Pole Adapter (3 1/4 - 3 3/4")
F-RPA4-XX^{1,2}	Round Pole Adapter (3 7/8 - 4 1/2")
F-RPA5-XX^{1,2}	Round Pole Adapter (5")
F-RPA6-XX^{1,2}	Round Pole Adapter (6")
WB-CR-XX¹	Wall Bracket
ARM-F-K-TA-XX¹	Tenon Arm (single) adjustable (2 3/8" O.D. tenon)
ARM-F-TK-TA-XX¹	Tenon Arm (double 180°) adjustable (2 3/8" O.D. tenon)
ARM-F-K-S-XX^{1,2}	Adjustable Arm
ARM-F-4-S-XX^{1,2}	4" Rigid Straight Arm
ARM-F-10-S-XX^{1,2}	10" Rigid Straight Arm
SSS-490-XX²	Square Pole Tenon Adapter (4 @ 90°) (2 3/8"-2 7/8" OD tenon)
RSS-490-XX²	Round Pole Tenon Adapter (4 @ 90°) (2 3/8"-2 7/8" OD tenon) (requires 4" round pole adapter)
RSS-3120-XX²	Round Pole Tenon Adapter (3 @ 120°) (2 3/8"-2 7/8" OD tenon) (requires 4" round pole adapter)

1 Replace **XX** with color choice, eg.: **DB** for Dark Bronze.

2 When ordering poles, specify Pole Drill Pattern #2.

PHOTOCONTROL EQUIPMENT

CATALOG #	DESCRIPTION
PTL-1	Photocontrol - Twist-Lock Cell (120V)
PTL-8	Photocontrol - Twist-Lock Cell (120-277V)
PTL-5	Photocontrol - Twist-Lock Cell (480V)
PTL-6	Photocontrol - Twist-Lock Cell (347V)
PSC	Shorting Cap - Twist-Lock



#2 DRILL PATTERN FOR POLES

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

SPAULDING
LIGHTING

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For more information visit our web site: www.spauldinglighting.com