

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: SHAPER

Report Number: 18507

Luminaire Tested: **901-MH1/50-120-WH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 18507
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 901-MH1/50-120-WH
Description: BOLLARD LUMINAIRE WITH WHITE INTERIOR AND FROSTED GLASS JAR LENS WITH GUARD
Light Source: ONE VENTURE 50 WATT MH LAMP

MH50W/U. LUMEN RATING = 3400 LMS.

Ballast/Driver: -

Summary

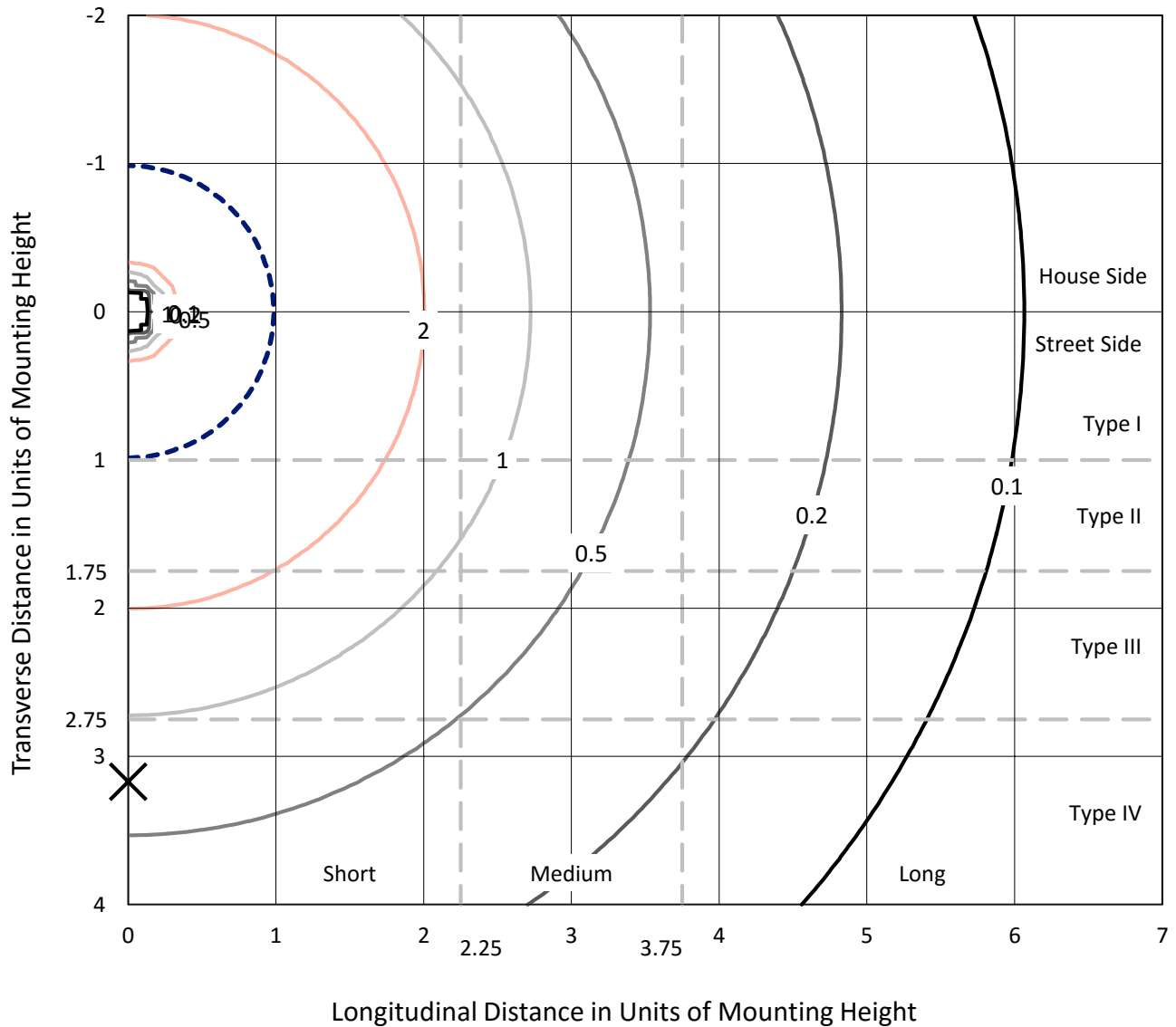
Lumens per Lamp: 3400 (1 lamp)
Luminaire Lumens: 2227.8 lumens
Efficiency: 65.5%
Efficacy: -
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B1 - U4 - G2

Input Watts (W): 0
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

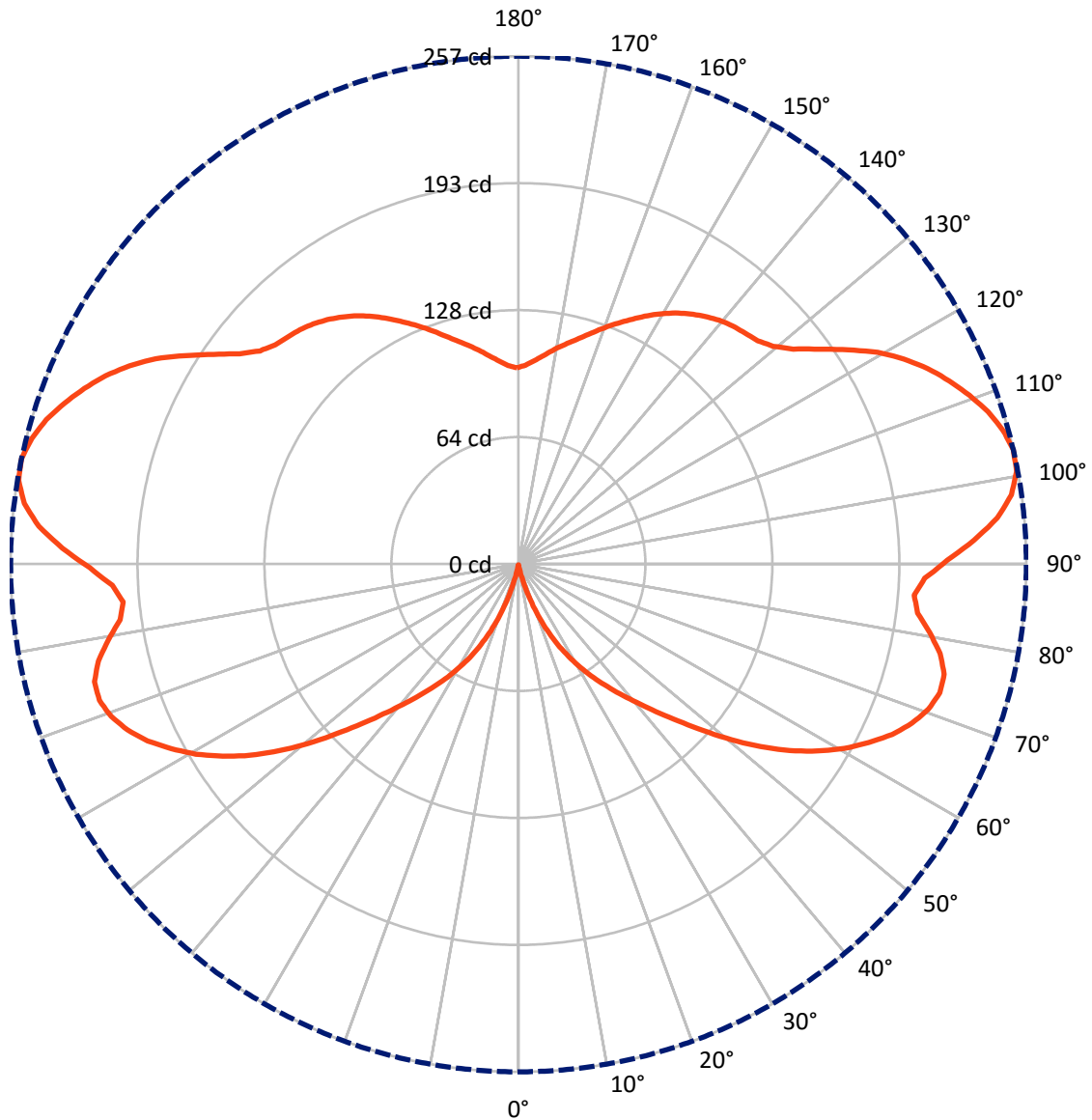
× Max cd
 - - - 1/2 Max cd



Based on 3 foot mounting height. Maximum calculated value = 4.6 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 102.5-Deg Vertical

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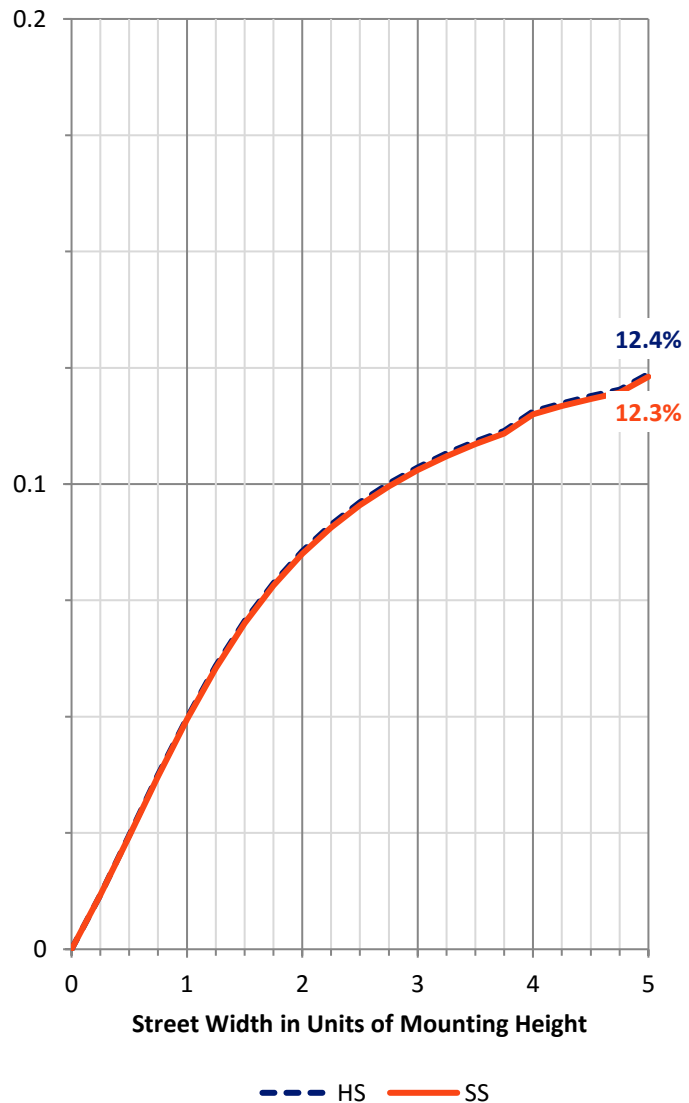
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	485.9	628.0	1113.9
	% Lamp	14.3	18.5	32.8
Street Side	Lumens	485.9	628.0	1113.9
	% Lamp	14.3	18.5	32.8
Total	Lumens	971.8	1255.9	2227.8
	% Lamp	28.6	36.9	65.5

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.1	0.0	0.0
10°-20°	3.5	0.2	0.1
20°-30°	20.4	0.9	0.6
30°-40°	47.7	2.1	1.4
40°-50°	88.9	4.0	2.6
50°-60°	149.1	6.7	4.4
60°-70°	205.1	9.2	6.0
70°-80°	232.3	10.4	6.8
80°-90°	224.6	10.1	6.6
90°-100°	262.4	11.8	7.7
100°-110°	267.3	12.0	7.9
110°-120°	227.1	10.2	6.7
120°-130°	169.1	7.6	5.0
130°-140°	127.0	5.7	3.7
140°-150°	96.4	4.3	2.8
150°-160°	63.1	2.8	1.9
160°-170°	33.6	1.5	1.0
170°-180°	10.1	0.5	0.3
0°-90°	971.8	43.6	28.6
0°-180°	2227.8	100.0	65.5



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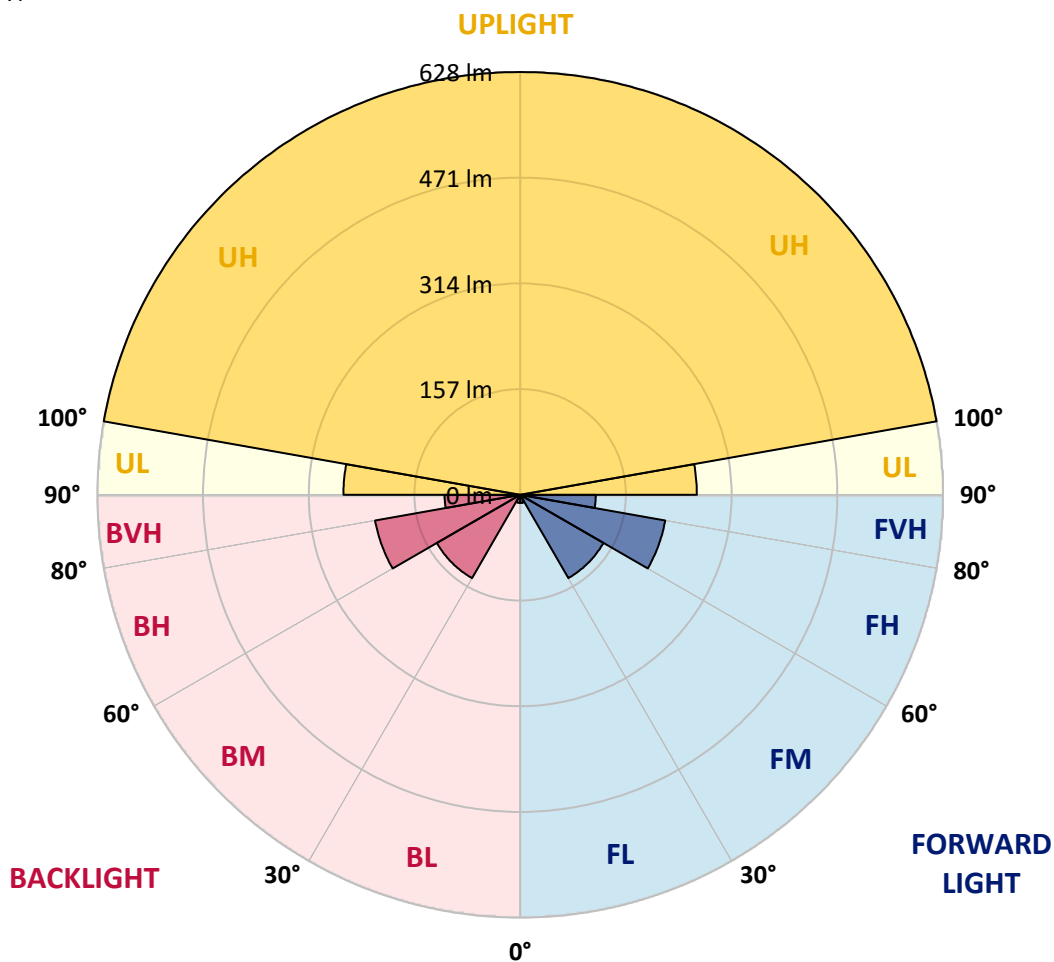
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	12.0	0.4			
FM (30°-60°)	142.9	4.2			
FH (60°-80°)	218.7	6.4			G0/660
FVH (80°-90°)	112.3	3.3			G2/225
BL (0°-30°)	12.0	0.4	B0/110		
BM (30°-60°)	142.9	4.2	B0/220		
BH (60°-80°)	218.7	6.4	B1/500		G0/660
BVH (80°-90°)	112.3	3.3			G2/225
UL (90°-100°)	262.4	7.7		U3/500	
UH (100°-180°)	628.0	18.5		U4/1000	
Trapped Light	1172.2	34.5			

BUG Rating: B1-U4-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°
0°	0.5
2.5°	0.5
5°	0.5
7.5°	0.5
10°	1.1
12.5°	3.8
15°	9.3
17.5°	17.2
20°	26.2
22.5°	34.9
25°	43.3
27.5°	51.7
30°	59.4
32.5°	67.4
35°	75.0
37.5°	83.3
40°	92.0
42.5°	102.0
45°	113.1
47.5°	125.7
50°	139.7
52.5°	153.3
55°	166.6
57.5°	178.4
60°	189.4
62.5°	198.8
65°	207.7
67.5°	214.7
70°	219.9
72.5°	222.8
75°	222.4
77.5°	218.0
80°	210.9
82.5°	203.4
85°	200.7
87.5°	205.6
90°	216.8
92.5°	230.7
95°	243.3
97.5°	251.7
100°	256.2
102.5°	256.8
105°	254.1
107.5°	249.6
110°	243.5

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CANDELA DISTRIBUTION (continued):

	0°
112.5°	236.8
115°	229.4
117.5°	220.8
120°	210.8
122.5°	198.8
125°	187.0
127.5°	176.5
130°	169.4
132.5°	165.5
135°	163.6
137.5°	162.0
140°	159.7
142.5°	156.8
145°	153.4
147.5°	149.7
150°	145.3
152.5°	140.6
155°	135.6
157.5°	130.9
160°	126.2
162.5°	121.4
165°	117.2
167.5°	113.5
170°	110.0
172.5°	106.3
175°	103.1
177.5°	100.5
180°	99.2

(END OF REPORT)