

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: LUMIERE

Report Number: H45041

Luminaire Tested: **501-12-20MR16-12-CS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: H45041
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 501-12-20MR16-12-CS
Description: LUMIERE 12 IN TAHOE BOLLARD
WITH ACRYLIC CONICAL PRISYM DIFFUSION LENS
Light Source: BI PIN MR16 HALOGEN INCANDESCENT LAMP
20W MR16 BAB 36° 20 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 240 (1 lamp)
Luminaire Lumens: 40.4 lumens
Efficiency: 16.8%
Efficacy: 2.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.19' x L: 0.19' x H: 0.1')
IES Classification: Type V - Short - Cutoff
BUG Rating: B0 - U2 - G0

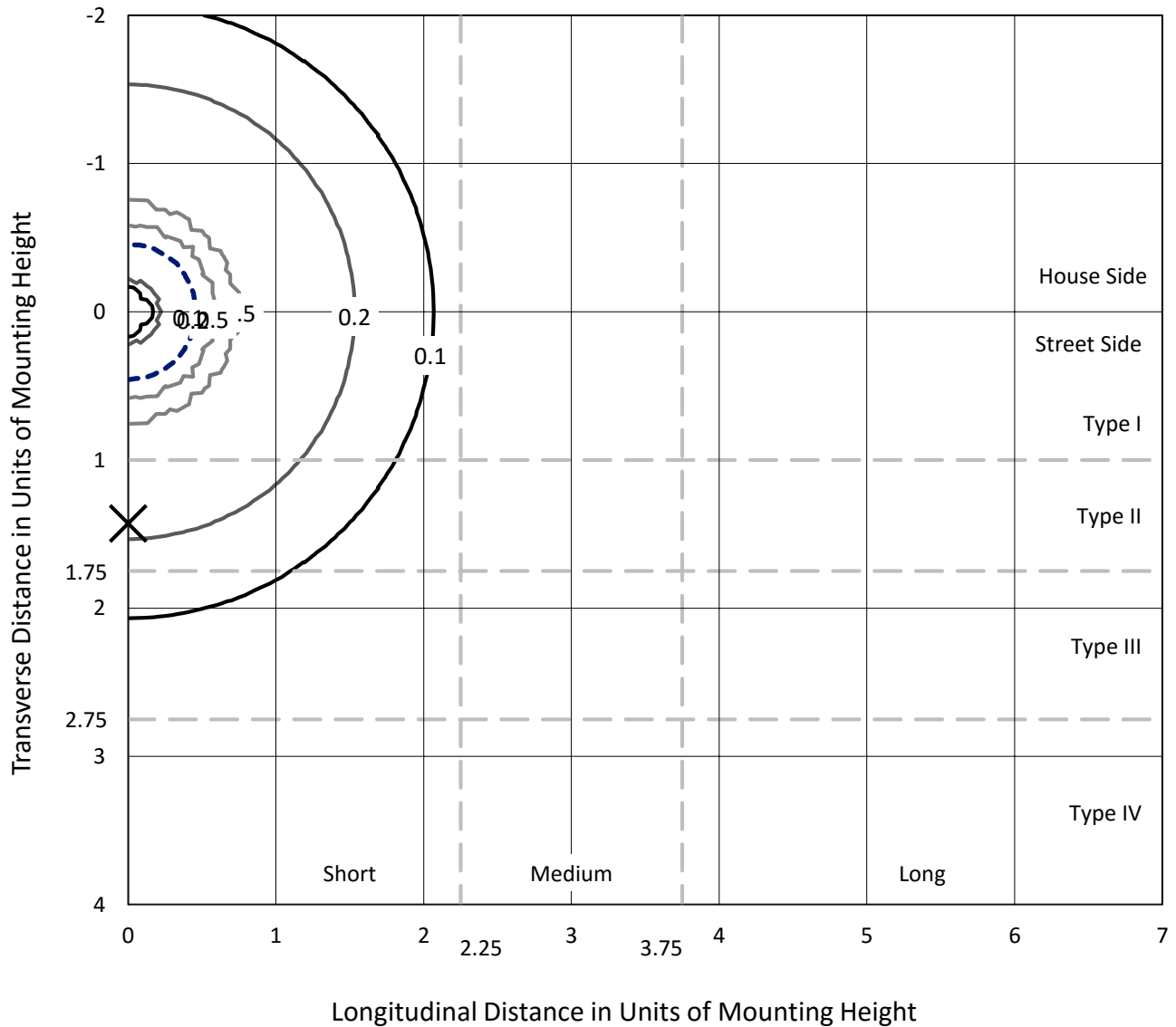
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

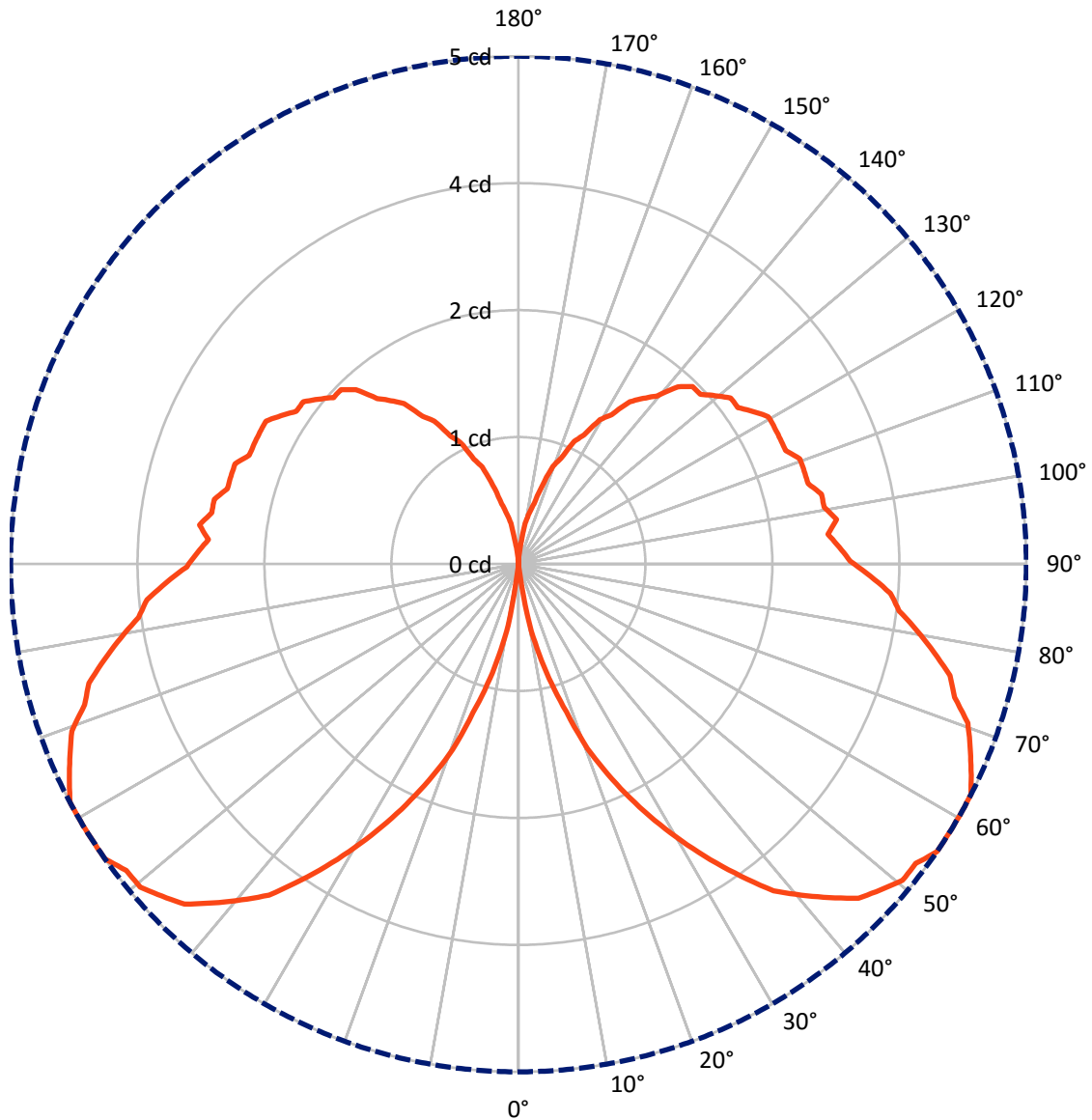
✕ Max cd
 - - - 1/2 Max cd



Based on 2 foot mounting height. Maximum calculated value = 0.5 fc
 Type V - Short - Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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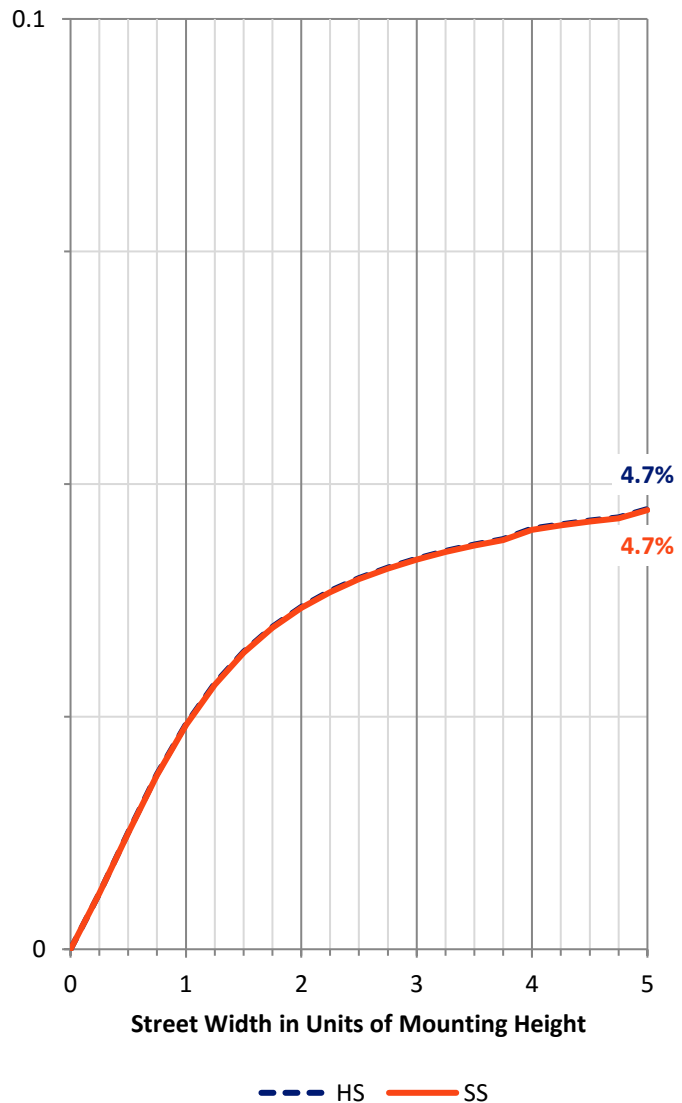
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12.5	7.7	20.2
	% Lamp	5.2	3.2	8.4
Street Side	Lumens	12.5	7.7	20.2
	% Lamp	5.2	3.2	8.4
Total	Lumens	24.9	15.4	40.4
	% Lamp	10.4	6.4	16.8

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	0.0	0.0	0.0
10°-20°	0.4	0.9	0.2
20°-30°	1.2	2.9	0.5
30°-40°	2.3	5.8	1.0
40°-50°	3.5	8.7	1.5
50°-60°	4.4	10.8	1.8
60°-70°	4.8	11.8	2.0
70°-80°	4.5	11.2	1.9
80°-90°	3.9	9.6	1.6
90°-100°	3.4	8.3	1.4
100°-110°	3.1	7.7	1.3
110°-120°	2.8	6.9	1.2
120°-130°	2.4	5.9	1.0
130°-140°	1.8	4.5	0.8
140°-150°	1.2	2.9	0.5
150°-160°	0.6	1.5	0.2
160°-170°	0.2	0.5	0.1
170°-180°	0.0	0.0	0.0
0°-90°	24.9	61.8	10.4
0°-180°	40.4	100.0	16.8



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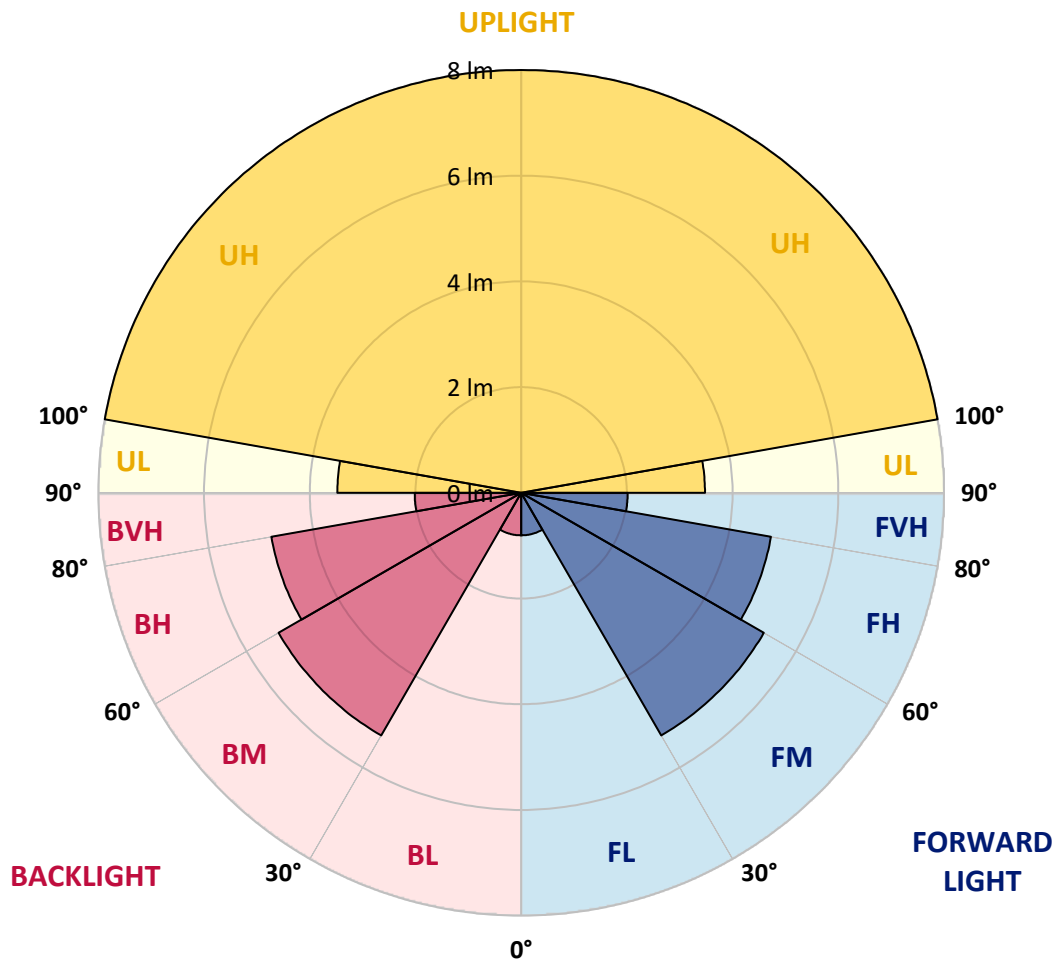
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	0.8	0.3			
FM (30°-60°)	5.1	2.1			
FH (60°-80°)	4.6	1.9			G0/660
FVH (80°-90°)	1.9	0.8			G0/10
BL (0°-30°)	0.8	0.3	B0/110		
BM (30°-60°)	5.1	2.1	B0/220		
BH (60°-80°)	4.6	1.9	B0/110		G0/660
BVH (80°-90°)	1.9	0.8			G0/10
UL (90°-100°)	3.4	1.4		U1/10	
UH (100°-180°)	7.7	3.2		U1/10	
Trapped Light	199.6	83.2			

BUG Rating: B0-U2-G0

Type V Short



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CANDELA DISTRIBUTION (FULL):

	0°
0°	0.0
2.5°	0.0
5°	0.0
7.5°	0.1
10°	0.6
12.5°	0.9
15°	1.2
17.5°	1.5
20°	1.9
22.5°	2.2
25°	2.5
27.5°	2.8
30°	3.1
32.5°	3.4
35°	3.7
37.5°	4.0
40°	4.2
42.5°	4.4
45°	4.6
47.5°	4.7
50°	4.8
52.5°	4.8
55°	4.9
57.5°	4.9
60°	4.9
62.5°	4.9
65°	4.8
67.5°	4.7
70°	4.6
72.5°	4.4
75°	4.3
77.5°	4.1
80°	3.9
82.5°	3.7
85°	3.6
87.5°	3.4
90°	3.2
92.5°	3.1
95°	3.0
97.5°	3.1
100°	3.0
102.5°	3.0
105°	2.9
107.5°	2.9
110°	2.9

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CANDELA DISTRIBUTION (continued):

	0°
112.5°	2.8
115°	2.8
117.5°	2.8
120°	2.8
122.5°	2.7
125°	2.6
127.5°	2.6
130°	2.5
132.5°	2.4
135°	2.4
137.5°	2.3
140°	2.1
142.5°	2.0
145°	1.9
147.5°	1.7
150°	1.6
152.5°	1.4
155°	1.3
157.5°	1.1
160°	1.0
162.5°	0.8
165°	0.6
167.5°	0.5
170°	0.4
172.5°	0.2
175°	0.1
177.5°	0.0
180°	0.0

(END OF REPORT)