

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P198452

Luminaire Tested: **TT-C4-LED-E1-RW-LWR-LW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198452
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C4-LED-E1-RW-LWR-LW-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4877.3 lumens
Efficiency: N/A
Efficacy: 64.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 75.4
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

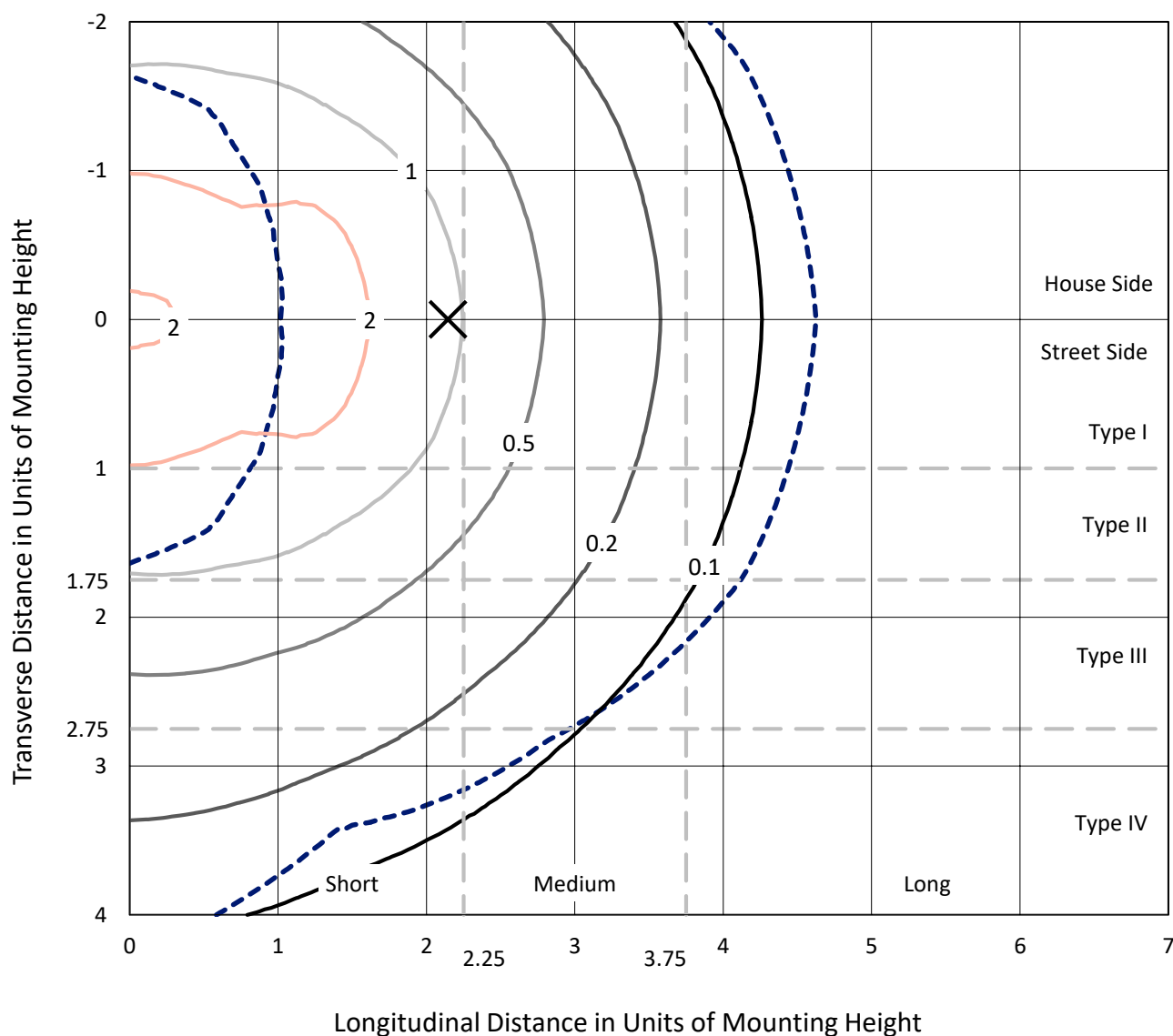


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

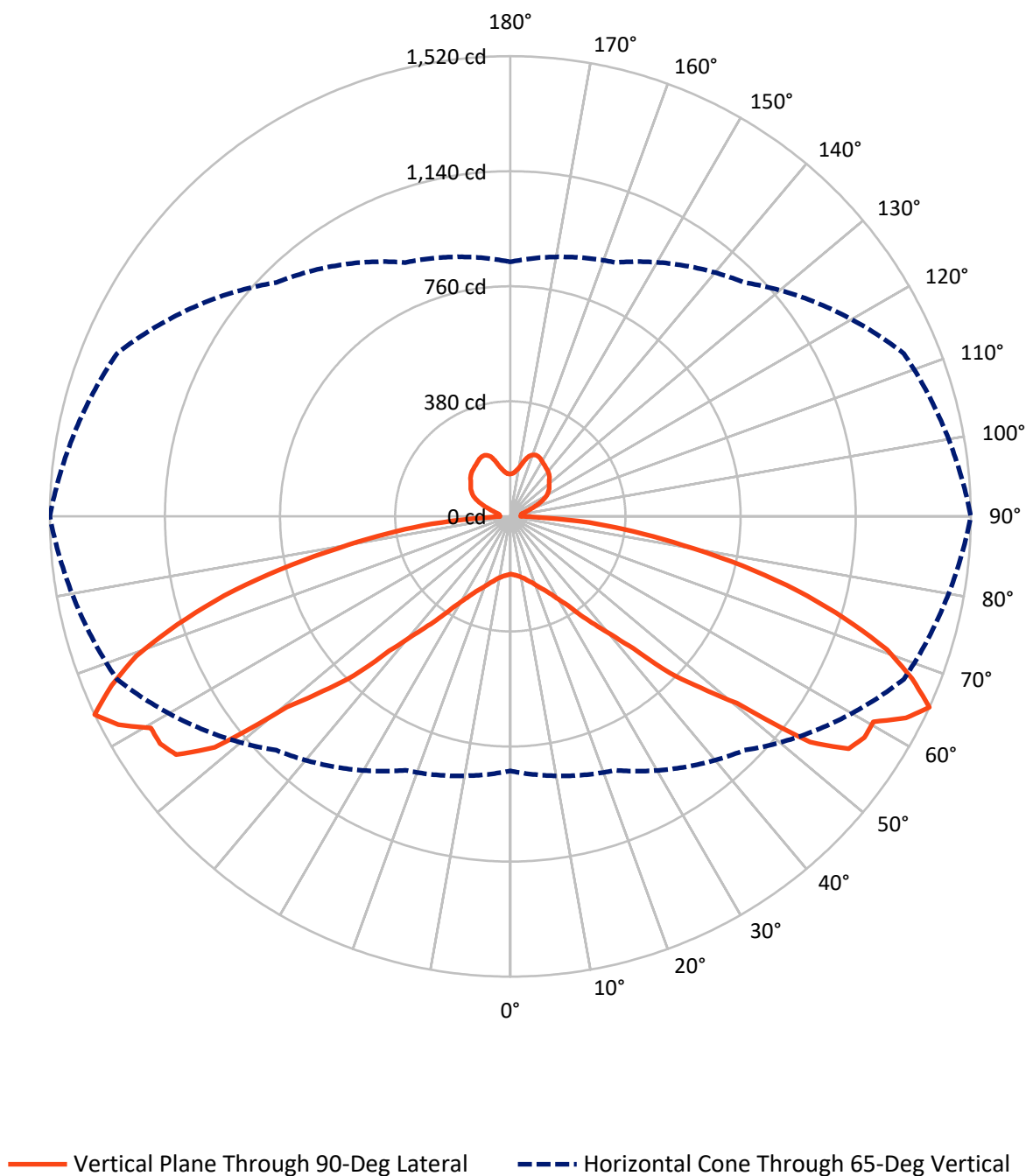


Based on 10 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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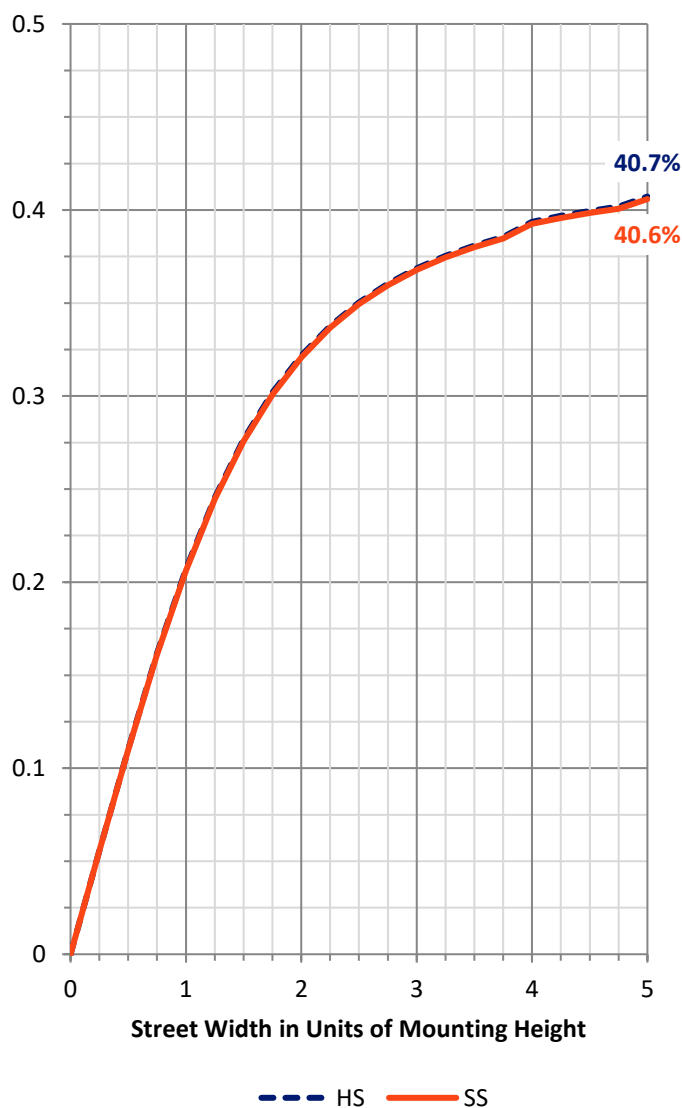
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2027.1	411.6	2438.7
	% Fixture	41.6	8.4	50.0
Street Side	Lumens	2027.1	411.6	2438.7
	% Fixture	41.6	8.4	50.0
Total	Lumens	4054.1	823.2	4877.3
	% Fixture	83.1	16.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.0	0.4
10°-20°	64.7	1.3
20°-30°	135.7	2.8
30°-40°	258.1	5.3
40°-50°	479.7	9.8
50°-60°	850.2	17.4
60°-70°	1104.2	22.6
70°-80°	879.4	18.0
80°-90°	263.1	5.4
90°-100°	38.2	0.8
100°-110°	59.5	1.2
110°-120°	118.9	2.4
120°-130°	148.3	3.0
130°-140°	152.8	3.1
140°-150°	136.2	2.8
150°-160°	103.9	2.1
160°-170°	51.8	1.1
170°-180°	13.6	0.3
0°-90°	4054.1	83.1
0°-180°	4877.3	100.0

Coefficient of Utilization



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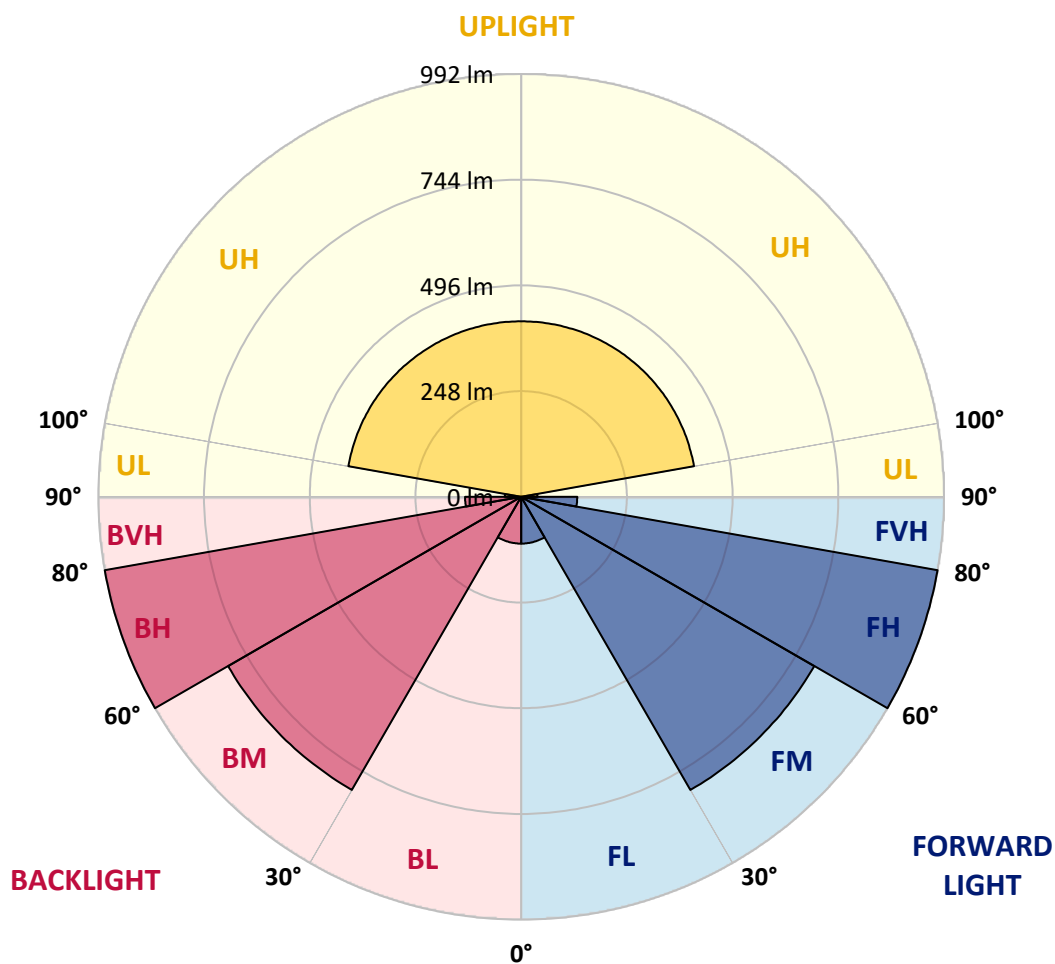
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	109.7	2.2			
FM	(30°-60°)	794.0	16.3			
FH	(60°-80°)	991.8	20.3			G1/1800
FVH	(80°-90°)	131.6	2.7			G2/225
BL	(0°-30°)	109.7	2.2	B0/110		
BM	(30°-60°)	794.0	16.3	B1/1000		
BH	(60°-80°)	991.8	20.3	B2/1000		G2/1000
BVH	(80°-90°)	131.6	2.7			G2/225
UL	(90°-100°)	38.2	0.8		U2/50	
UH	(100°-180°)	411.6	8.4		U3/500	

BUG Rating: B2-U4-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	190.3	190.3	190.3	190.3	190.3
2.5°	192.1	192.1	192.9	192.9	192.9
5°	195.6	195.6	196.5	196.5	195.6
7.5°	200.1	201.9	201.0	199.2	199.2
10°	207.2	208.1	206.3	205.4	204.6
12.5°	216.2	217.1	213.5	212.6	210.8
15°	228.7	227.8	224.2	220.6	220.6
17.5°	245.6	240.3	234.0	231.4	229.6
20°	265.3	258.2	250.1	243.9	243.0
22.5°	287.6	277.8	267.1	258.2	257.3
25°	309.1	301.0	287.6	276.0	272.4
27.5°	332.3	326.0	309.1	295.7	293.0
30°	359.1	353.7	334.1	321.6	320.7
32.5°	390.4	383.2	361.8	352.8	351.9
35°	427.9	414.5	395.7	389.5	400.2
37.5°	463.6	448.4	433.2	443.9	452.9
40°	494.9	485.0	477.9	500.2	512.7
42.5°	525.2	519.9	525.2	558.3	596.7
45°	557.4	559.2	578.8	669.0	737.8
47.5°	594.9	595.8	642.3	780.7	845.9
50°	636.0	635.1	717.3	864.7	969.2
52.5°	676.2	679.8	792.3	1045.1	1238.9
55°	711.9	731.6	894.2	1226.4	1355.1
57.5°	743.2	780.7	989.7	1280.0	1378.3
60°	777.1	839.7	1056.7	1290.8	1377.4
62.5°	810.2	886.1	1071.0	1338.1	1465.8
65°	840.6	907.5	1092.5	1406.0	1520.3
67.5°	865.6	918.3	1092.5	1347.0	1430.1
70°	886.1	904.9	1029.0	1240.7	1319.3
72.5°	881.6	849.5	924.5	1110.3	1155.9
75°	839.7	752.1	814.7	934.3	979.9
77.5°	734.3	629.7	663.7	753.0	782.5
80°	581.5	491.3	510.9	568.1	577.0
82.5°	410.0	352.8	360.0	403.8	410.0
85°	241.2	217.1	209.9	249.2	261.7
87.5°	71.5	62.5	61.6	75.0	83.1
90°	36.0	34.5	26.0	32.5	34.0
92.5°	40.0	35.0	27.0	32.5	36.0
95°	44.0	37.0	30.0	34.5	38.0
97.5°	42.0	37.5	33.0	34.5	36.0
100°	45.0	41.0	36.0	38.0	37.0
102.5°	51.0	46.5	42.0	43.0	41.0
105°	60.0	54.5	52.0	52.0	49.0
107.5°	72.0	67.5	68.0	64.5	60.0
110°	86.0	85.5	87.0	82.5	75.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.0	106.5	107.0	104.0	94.0
115°	121.0	127.0	124.0	124.5	113.0
117.5°	140.0	141.0	136.0	140.0	129.0
120°	152.0	150.0	147.0	150.5	142.0
122.5°	161.0	156.5	158.0	159.0	150.0
125°	169.0	165.5	168.0	166.0	158.0
127.5°	177.0	174.0	178.0	174.0	163.0
130°	187.0	182.0	186.0	182.0	169.0
132.5°	198.0	189.5	195.0	190.5	176.0
135°	210.0	195.5	201.0	200.0	184.0
137.5°	221.0	200.0	208.0	208.5	190.0
140°	229.0	202.5	213.0	215.5	195.0
142.5°	235.0	203.5	218.0	220.0	198.0
145°	235.0	204.5	223.0	222.0	202.0
147.5°	230.0	208.5	229.0	223.5	206.0
150°	224.0	214.5	235.0	226.0	211.0
152.5°	216.0	220.0	241.0	229.0	216.0
155°	208.0	223.0	243.0	230.5	219.0
157.5°	203.0	222.0	235.0	227.5	219.0
160°	199.0	212.5	219.0	219.0	215.0
162.5°	185.0	193.5	198.0	200.5	207.0
165°	169.0	173.0	177.0	181.0	192.0
167.5°	154.0	155.5	159.0	164.5	174.0
170°	142.0	144.0	147.0	152.0	160.0
172.5°	137.0	138.5	141.0	144.5	151.0
175°	136.0	137.0	139.0	140.5	144.0
177.5°	137.0	138.0	139.0	139.0	141.0
180°	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)