

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: P198333

Luminaire Tested: **TT-C2-LED-E1-RW-LWR-LW-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198333
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-C2-LED-E1-RW-LWR-LW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4275.6 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 51.4
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



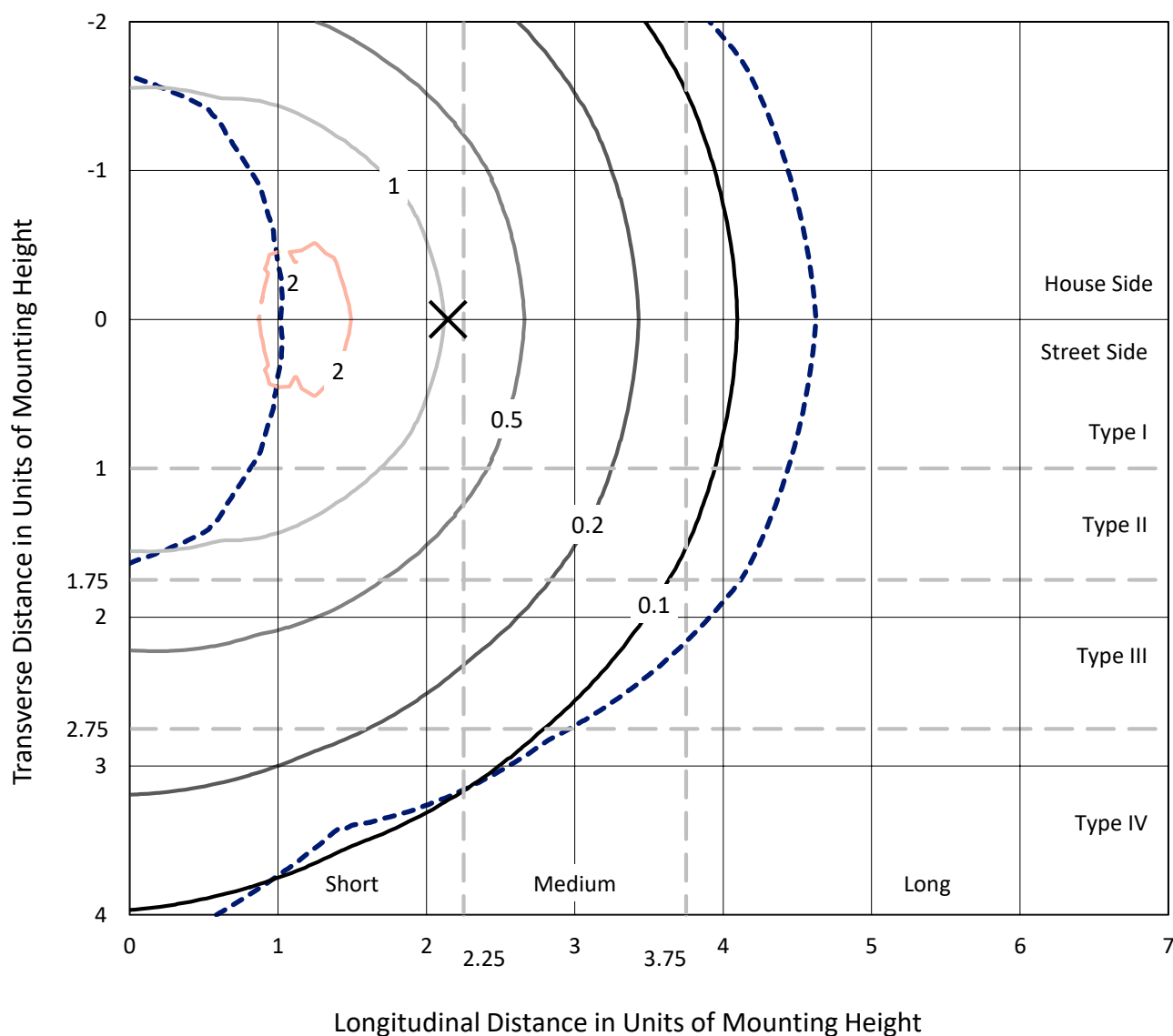
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

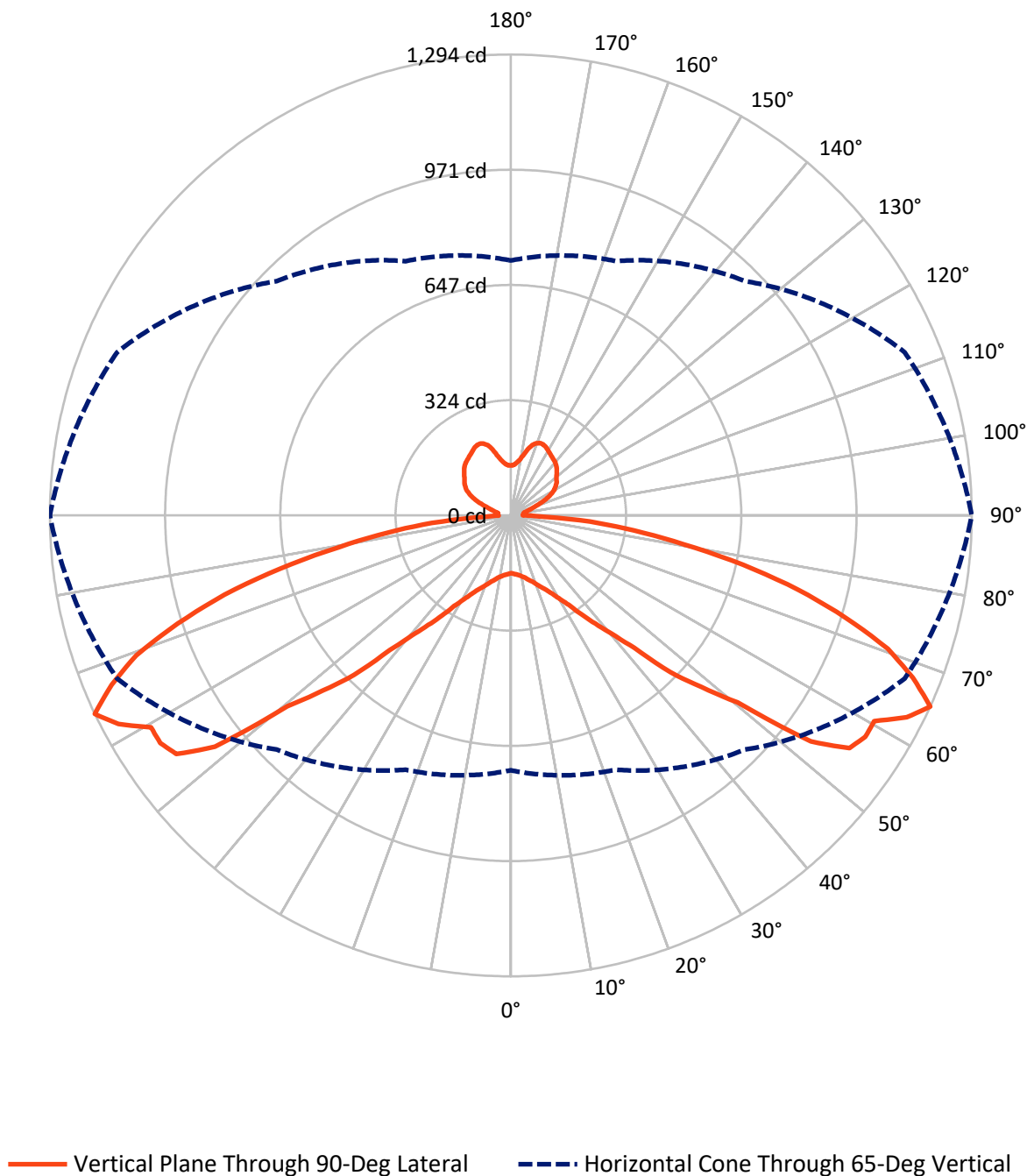


Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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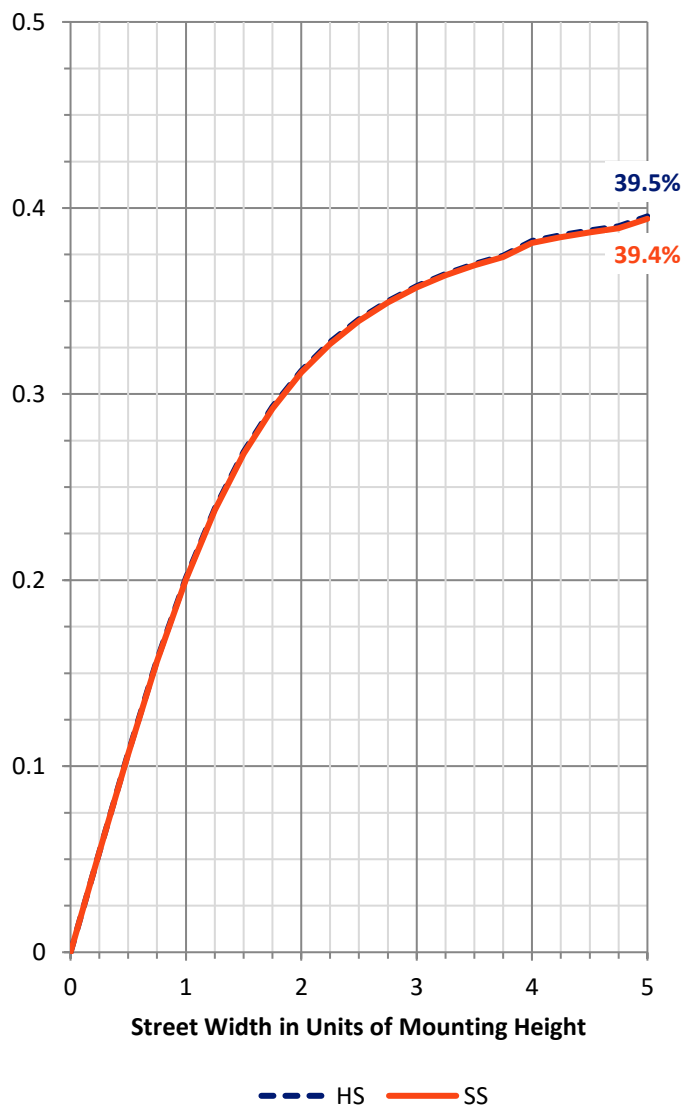
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1726.2	411.6	2137.8
	% Fixture	40.4	9.6	50.0
Street Side	Lumens	1726.2	411.6	2137.8
	% Fixture	40.4	9.6	50.0
Total	Lumens	3452.4	823.2	4275.6
	% Fixture	80.7	19.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.2	0.4
10°-20°	55.0	1.3
20°-30°	115.6	2.7
30°-40°	219.7	5.1
40°-50°	408.4	9.6
50°-60°	723.8	16.9
60°-70°	940.1	22.0
70°-80°	748.8	17.5
80°-90°	224.7	5.3
90°-100°	38.2	0.9
100°-110°	59.5	1.4
110°-120°	118.9	2.8
120°-130°	148.3	3.5
130°-140°	152.8	3.6
140°-150°	136.2	3.2
150°-160°	103.9	2.4
160°-170°	51.8	1.2
170°-180°	13.6	0.3
0°-90°	3452.4	80.7
0°-180°	4275.6	100.0

Coefficient of Utilization



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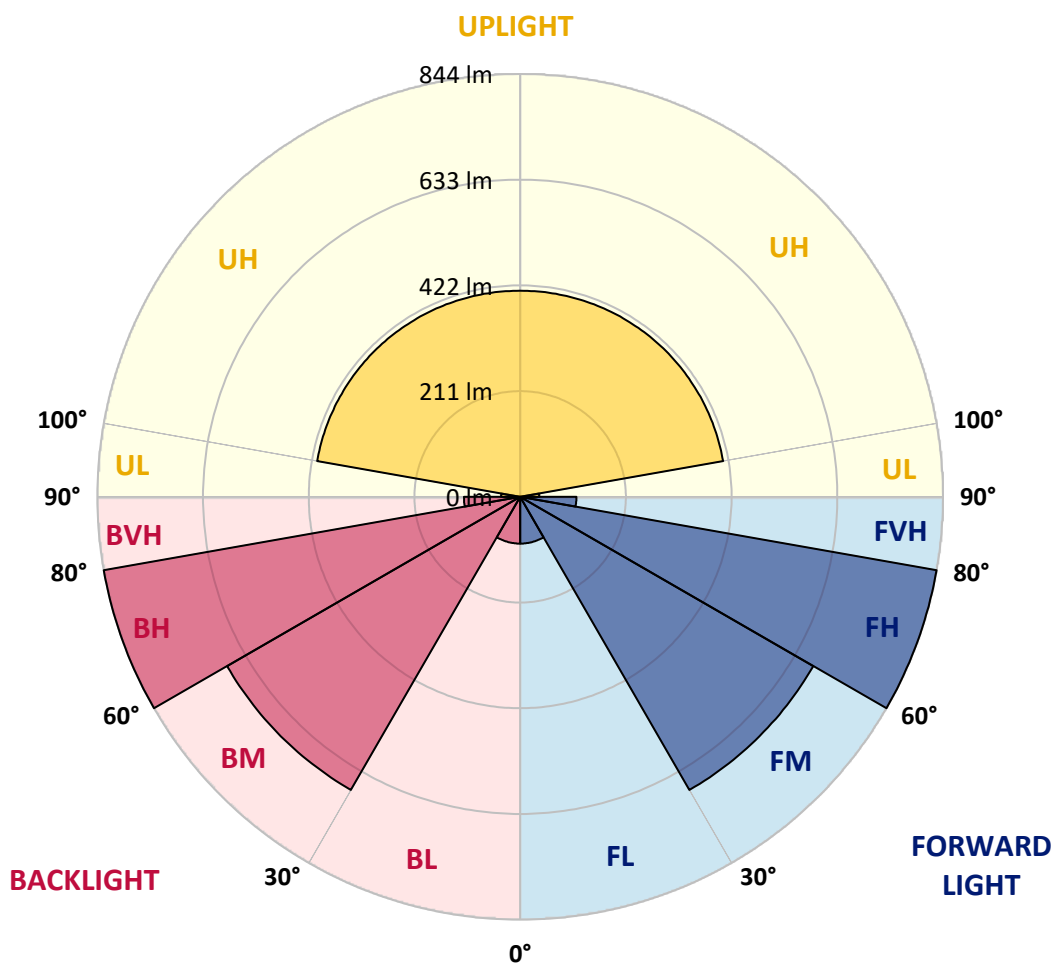
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	93.4	2.2			
FM	(30°-60°)	676.0	15.8			
FH	(60°-80°)	844.4	19.8			G1/1800
FVH	(80°-90°)	112.3	2.6			G2/225
BL	(0°-30°)	93.4	2.2	B0/110		
BM	(30°-60°)	676.0	15.8	B1/1000		
BH	(60°-80°)	844.4	19.8	B2/1000		G2/1000
BVH	(80°-90°)	112.3	2.6			G2/225
UL	(90°-100°)	38.2	0.9		U2/50	
UH	(100°-180°)	411.6	9.6		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°	162.0	162.0	162.0	162.0	162.0
2.5°	163.5	163.5	164.3	164.3	164.3
5°	166.6	166.6	167.3	167.3	166.6
7.5°	170.4	171.9	171.1	169.6	169.6
10°	176.4	177.2	175.7	174.9	174.2
12.5°	184.0	184.8	181.8	181.0	179.5
15°	194.7	193.9	190.9	187.9	187.9
17.5°	209.1	204.6	199.3	197.0	195.5
20°	225.9	219.8	212.9	207.6	206.9
22.5°	244.9	236.5	227.4	219.8	219.0
25°	263.1	256.3	244.9	235.0	232.0
27.5°	282.9	277.6	263.1	251.7	249.5
30°	305.7	301.2	284.4	273.8	273.0
32.5°	332.4	326.3	308.0	300.4	299.7
35°	364.3	352.9	336.9	331.6	340.7
37.5°	394.7	381.8	368.9	378.0	385.6
40°	421.3	413.0	406.9	425.9	436.5
42.5°	447.2	442.6	447.2	475.3	508.0
45°	474.6	476.1	492.8	569.6	628.2
47.5°	506.5	507.3	546.8	664.7	720.2
50°	541.5	540.7	610.7	736.2	825.2
52.5°	575.7	578.8	674.6	889.8	1054.9
55°	606.1	622.9	761.3	1044.2	1153.7
57.5°	632.8	664.7	842.7	1089.8	1173.5
60°	661.7	714.9	899.7	1099.0	1172.7
62.5°	689.8	754.5	911.9	1139.3	1248.0
65°	715.7	772.7	930.1	1197.1	1294.4
67.5°	737.0	781.8	930.1	1146.9	1217.6
70°	754.5	770.4	876.1	1056.4	1123.3
72.5°	750.6	723.3	787.2	945.3	984.1
75°	714.9	640.4	693.6	795.5	834.3
77.5°	625.2	536.2	565.1	641.1	666.2
80°	495.1	418.3	435.0	483.7	491.3
82.5°	349.1	300.4	306.5	343.8	349.1
85°	205.3	184.8	178.7	212.2	222.8
87.5°	60.8	53.2	52.5	63.9	70.7
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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CATALOG NUMBER: TT-C2-LED-E1-RW-LWR-LW-UPL

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)