

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: P821131

Luminaire Tested: **TT-D2-830-24VDC-CQ**

Issue Date: 2/18/2020



Test Information

Test Method: LM-79-08
Report Number: P821131
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-473-17)
Test Lab: INNOVATIONS CENTER
Issue Date: 2/18/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-D2-830-24VDC-CQ
Description: TOPTIER LED PARKING GARAGE LUMINAIRE
3000K, 80 CRI LEDS AND CONCENTRATED DISTRIBUTION
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

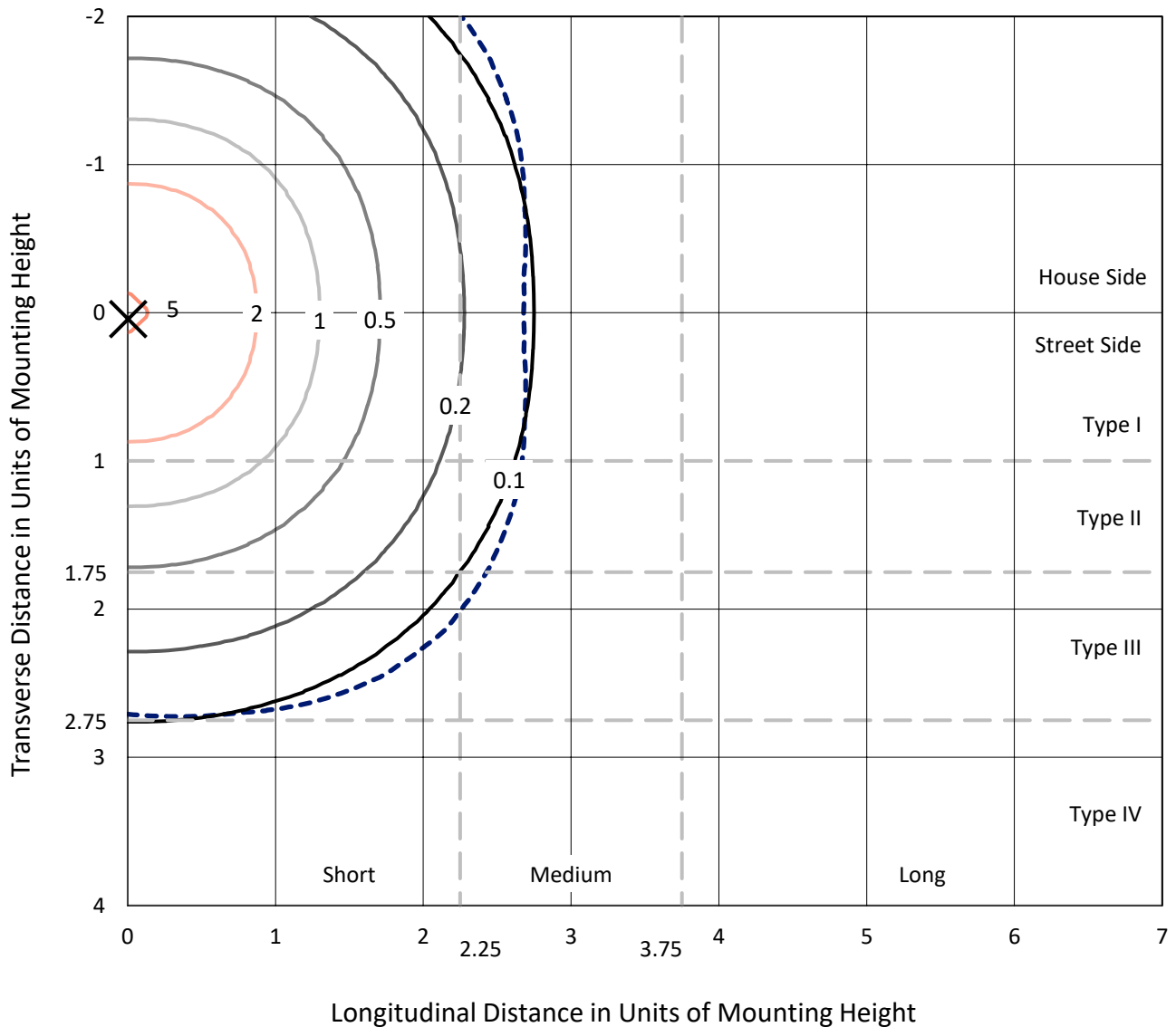
Lumens per Lamp: N/A
Luminaire Lumens: 4640 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G1

Input Watts (W): 38
Input Voltage (V): NR
Input Current (A_{in}): 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

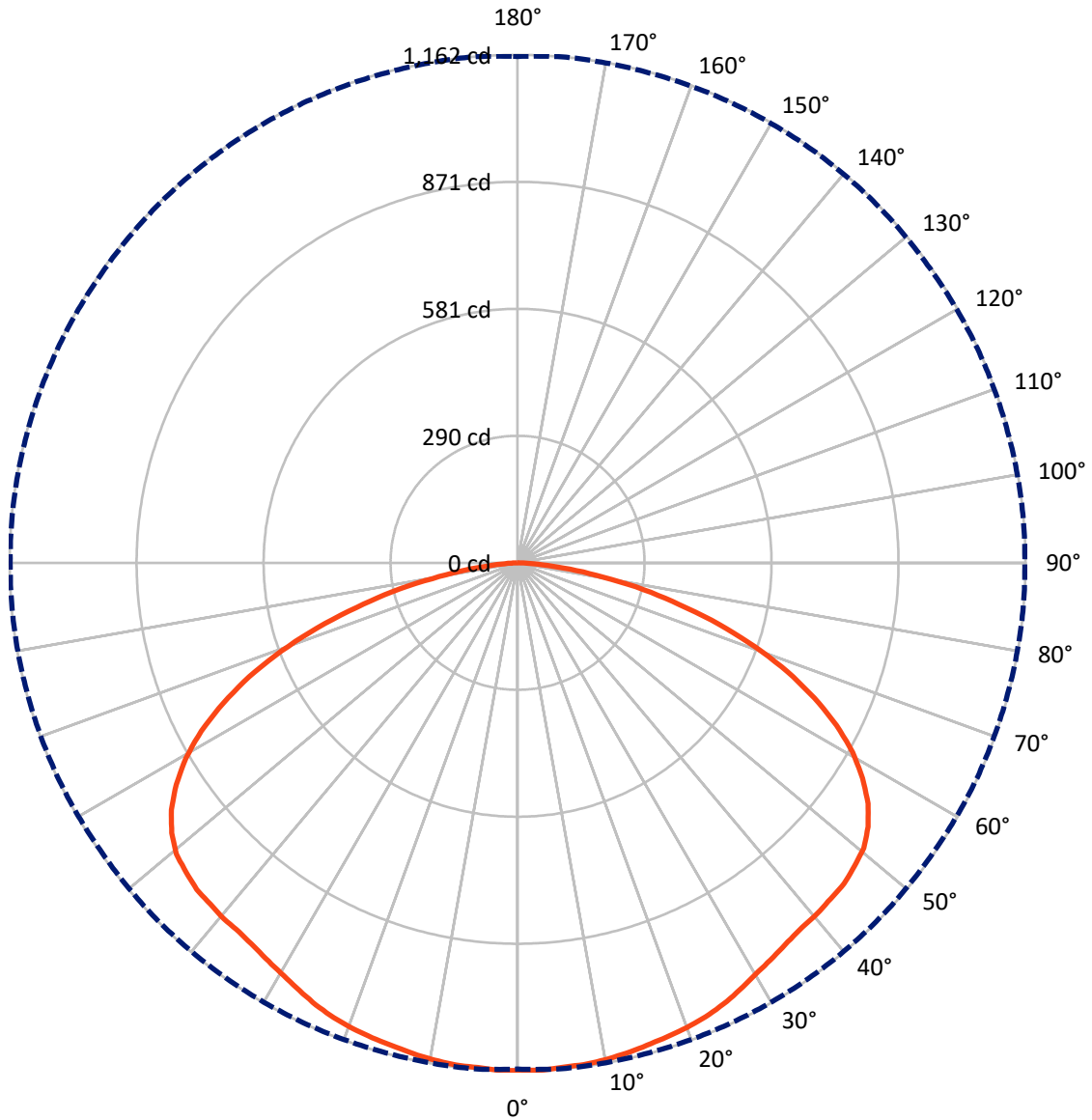
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 5-Deg Lateral - - - Horizontal Cone Through 2.5-Deg Vertical

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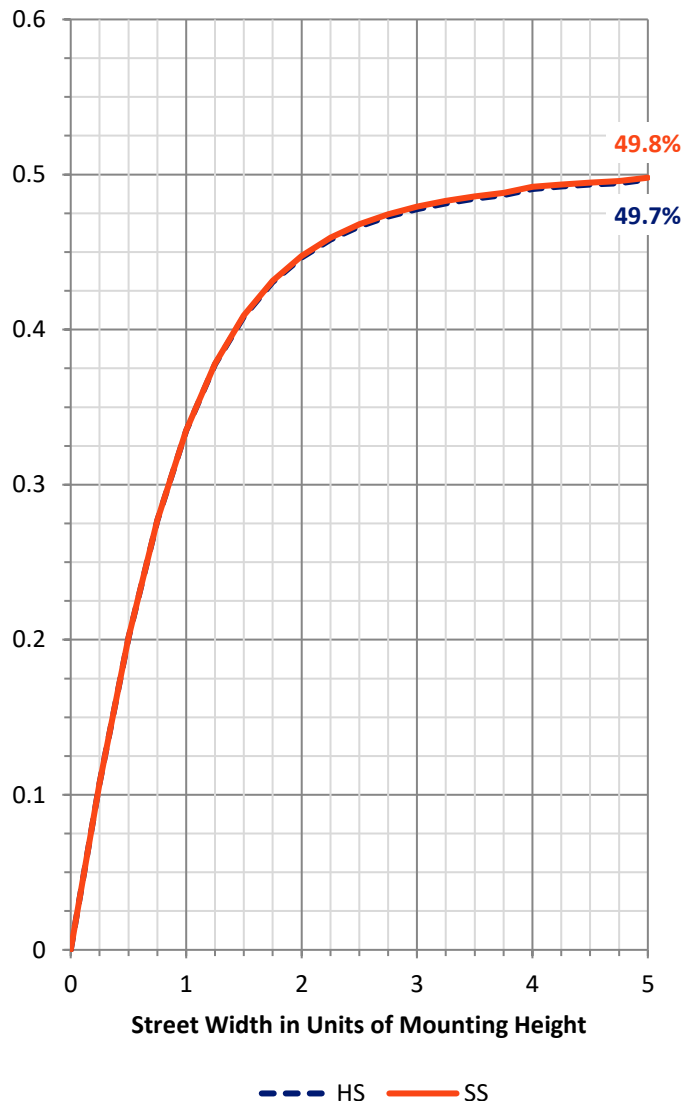
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2320.0	0.0	2320.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	2320.0	0.0	2320.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	4640.0	0.0	4640.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	2.4
10°-20°	323.3	7.0
20°-30°	514.2	11.1
30°-40°	676.4	14.6
40°-50°	827.9	17.8
50°-60°	896.7	19.3
60°-70°	771.4	16.6
70°-80°	433.7	9.3
80°-90°	86.0	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4640.0	100.0
0°-180°	4640.0	100.0

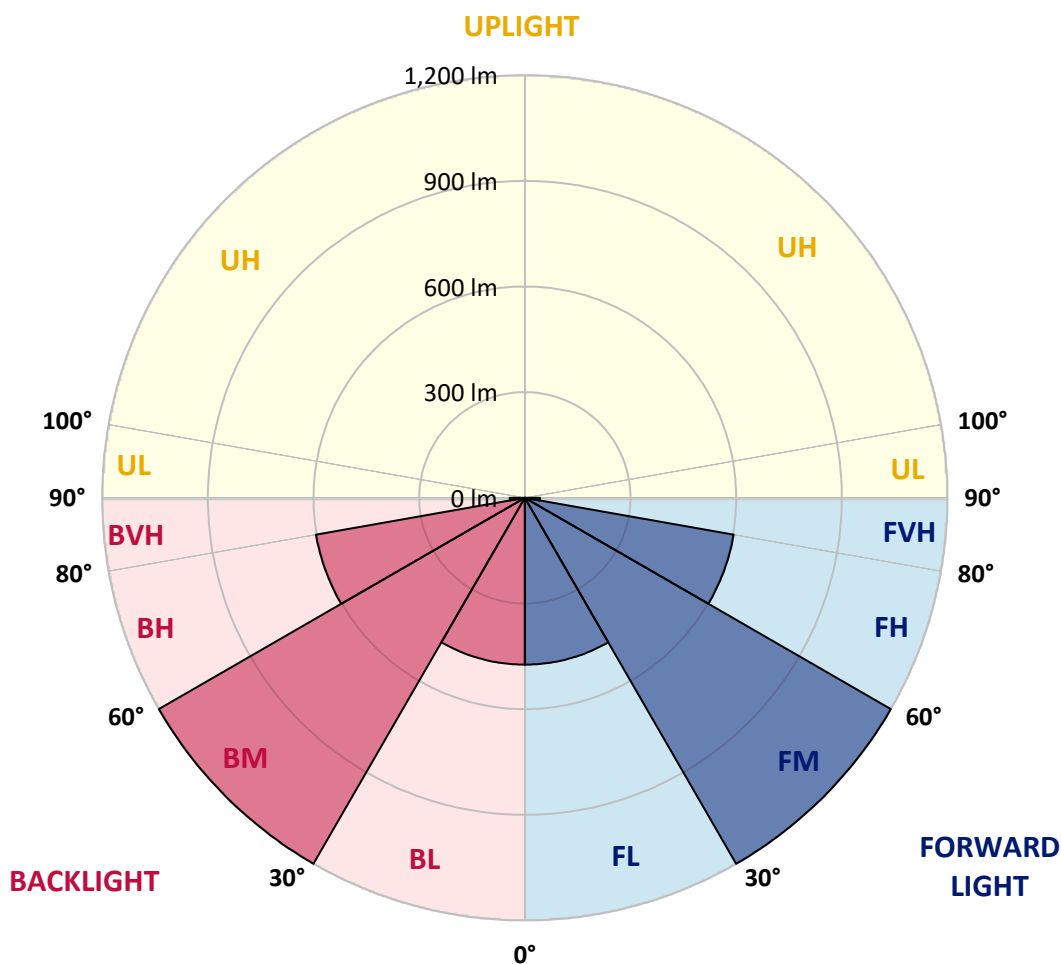


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	474.0	10.2			
FM (30°-60°)	1200.5	25.9			
FH (60°-80°)	602.6	13.0			G0/660
FVH (80°-90°)	43.0	0.9			G1/100
BL (0°-30°)	474.0	10.2	B1/500		
BM (30°-60°)	1200.5	25.9	B2/2500		
BH (60°-80°)	602.6	13.0	B2/1000		G0/660
BVH (80°-90°)	43.0	0.9			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1160.8	1160.8	1160.8	1160.8	1160.8	1160.8	1160.8	1160.8	1160.8	1160.8	1160.8
2.5°	1157.8	1161.5	1160.1	1160.1	1160.1	1160.1	1158.6	1160.1	1160.1	1160.8	1160.1
5°	1158.6	1157.8	1157.8	1158.6	1158.6	1159.3	1157.8	1158.6	1159.3	1159.3	1160.1
7.5°	1156.4	1157.1	1155.6	1157.1	1155.6	1156.4	1156.4	1157.1	1156.4	1157.1	1158.6
10°	1151.9	1152.7	1151.9	1151.9	1151.9	1153.4	1150.5	1152.7	1151.9	1152.7	1151.9
12.5°	1143.8	1147.5	1146.0	1147.5	1147.5	1147.5	1145.3	1146.8	1147.5	1147.5	1147.5
15°	1140.1	1140.9	1138.6	1141.6	1142.3	1143.1	1140.1	1141.6	1141.6	1142.3	1143.1
17.5°	1132.0	1135.7	1134.9	1137.2	1136.4	1138.6	1137.9	1137.2	1136.4	1137.9	1136.4
20°	1126.1	1129.8	1129.0	1131.3	1132.0	1134.2	1132.0	1132.0	1129.8	1130.5	1132.7
22.5°	1120.2	1121.7	1121.7	1123.9	1123.9	1126.1	1123.9	1123.1	1123.1	1122.4	1124.6
25°	1110.6	1111.3	1110.6	1112.8	1114.3	1115.7	1115.0	1113.5	1112.8	1112.8	1112.1
27.5°	1095.1	1098.0	1099.5	1102.5	1103.2	1105.4	1102.5	1102.5	1101.0	1099.5	1100.2
30°	1083.3	1084.7	1084.7	1091.4	1091.4	1095.1	1091.4	1090.6	1089.9	1089.2	1087.7
32.5°	1072.2	1074.4	1076.6	1081.8	1085.5	1087.0	1084.7	1083.3	1079.6	1077.4	1076.6
35°	1063.3	1064.1	1068.5	1075.9	1080.3	1084.0	1081.0	1077.4	1072.2	1068.5	1071.4
37.5°	1056.7	1057.4	1064.1	1073.7	1081.8	1084.7	1080.3	1074.4	1066.3	1061.8	1060.4
40°	1050.8	1055.2	1062.6	1075.9	1084.7	1089.2	1085.5	1077.4	1065.5	1056.7	1055.9
42.5°	1047.8	1050.0	1061.1	1076.6	1089.2	1095.1	1089.9	1078.8	1064.1	1053.7	1053.0
45°	1040.4	1047.1	1057.4	1077.4	1091.4	1098.8	1091.4	1077.4	1059.6	1047.8	1045.6
47.5°	1034.5	1036.7	1053.0	1075.9	1092.9	1098.8	1091.4	1073.7	1051.5	1036.0	1034.5
50°	1020.5	1025.7	1041.9	1066.3	1086.2	1092.1	1083.3	1059.6	1034.5	1017.5	1014.6
52.5°	999.1	1003.5	1022.7	1053.0	1072.2	1078.8	1065.5	1040.4	1010.9	990.2	990.2
55°	965.8	972.5	992.4	1023.4	1047.8	1053.7	1038.2	1011.6	978.4	957.7	957.0
57.5°	926.0	930.4	951.8	985.8	1009.4	1018.3	1002.8	973.2	940.0	915.6	913.4
60°	874.3	880.2	903.1	935.6	959.9	967.3	954.0	924.5	890.5	864.7	864.7
62.5°	812.3	818.9	841.8	875.0	900.1	911.2	892.7	864.7	829.2	804.1	801.9
65°	739.9	745.8	766.5	801.2	827.0	835.2	821.1	791.6	757.6	734.0	731.8
67.5°	658.7	666.8	687.5	717.0	739.2	749.5	740.6	714.0	678.6	654.2	652.0
70°	570.8	576.7	592.9	620.3	645.4	652.8	639.5	621.7	588.5	566.4	563.4
72.5°	477.0	482.2	495.5	521.3	539.0	548.6	541.3	518.4	491.8	473.3	476.3
75°	382.5	381.8	396.5	415.0	431.2	437.9	432.7	417.9	393.6	378.1	377.3
77.5°	288.0	295.4	300.5	316.0	329.3	334.5	327.1	315.3	296.8	284.3	286.5
80°	202.3	197.9	207.5	217.1	226.0	231.1	226.7	220.0	207.5	197.9	196.4
82.5°	124.1	120.4	124.8	133.7	139.6	141.0	141.8	133.7	128.5	121.1	122.6
85°	54.6	55.4	59.1	65.0	65.7	66.5	66.5	65.0	59.1	58.3	56.9
87.5°	13.3	13.3	14.0	16.2	16.2	17.0	17.0	14.8	14.0	12.6	13.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)