

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: P198460

Luminaire Tested: **TT-C4-LED-E1-RW-SG-MS/DIM-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198460
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-SG-MS/DIM-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH SOFTENING GLASS LENS AND DIMMING OCCUPANCY
SENSOR
Light Source: (160) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6286.8 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U4 - G3

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



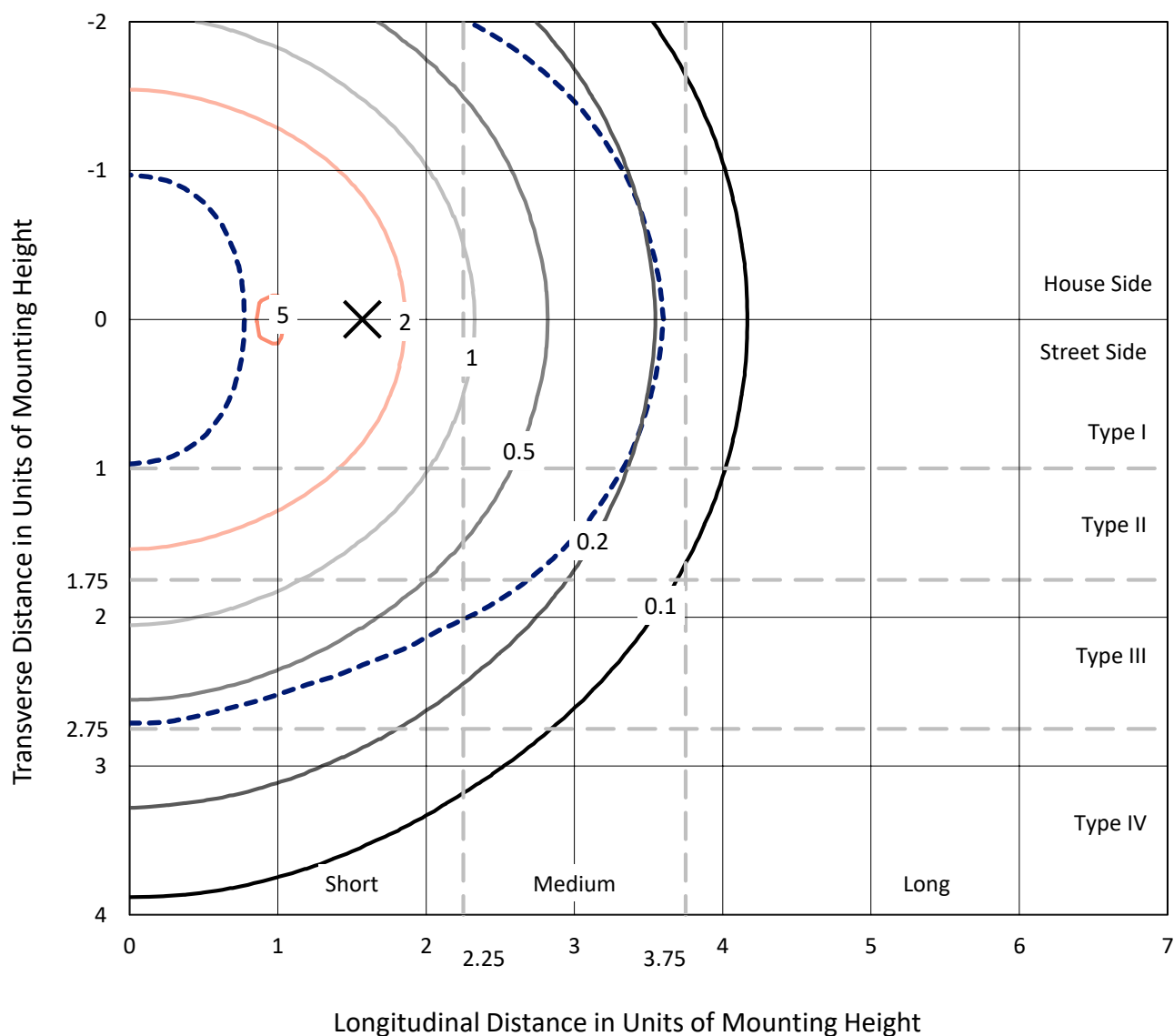
REPORT NUMBER: P198460

CATALOG NUMBER: TT-C4-LED-E1-RW-SG-MS/DIM-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

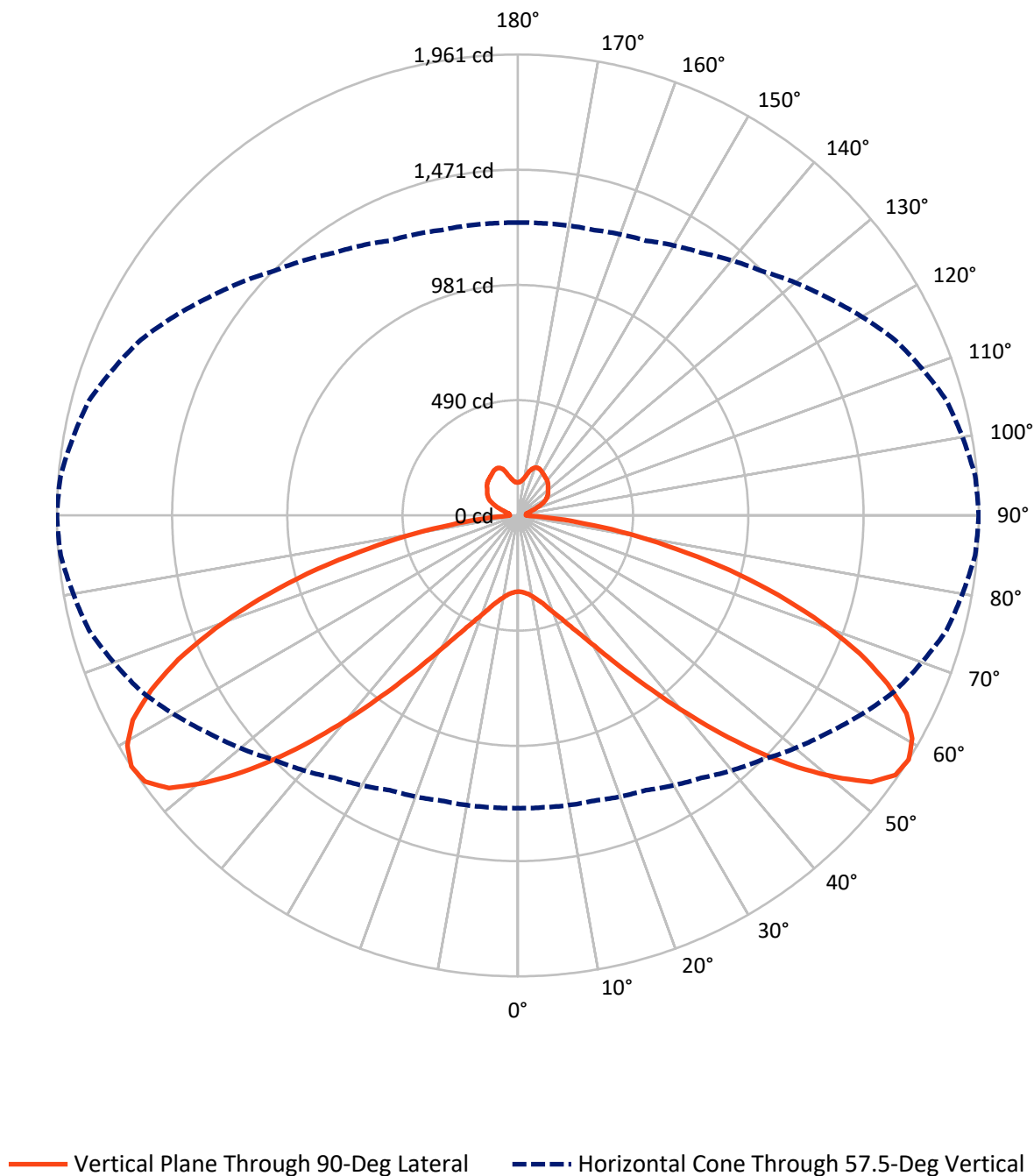


Based on 10 foot mounting height. Maximum calculated value = 5.1 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P198460

CATALOG NUMBER: TT-C4-LED-E1-RW-SG-MS/DIM-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198460

CATALOG NUMBER: TT-C4-LED-E1-RW-SG-MS/DIM-UPL

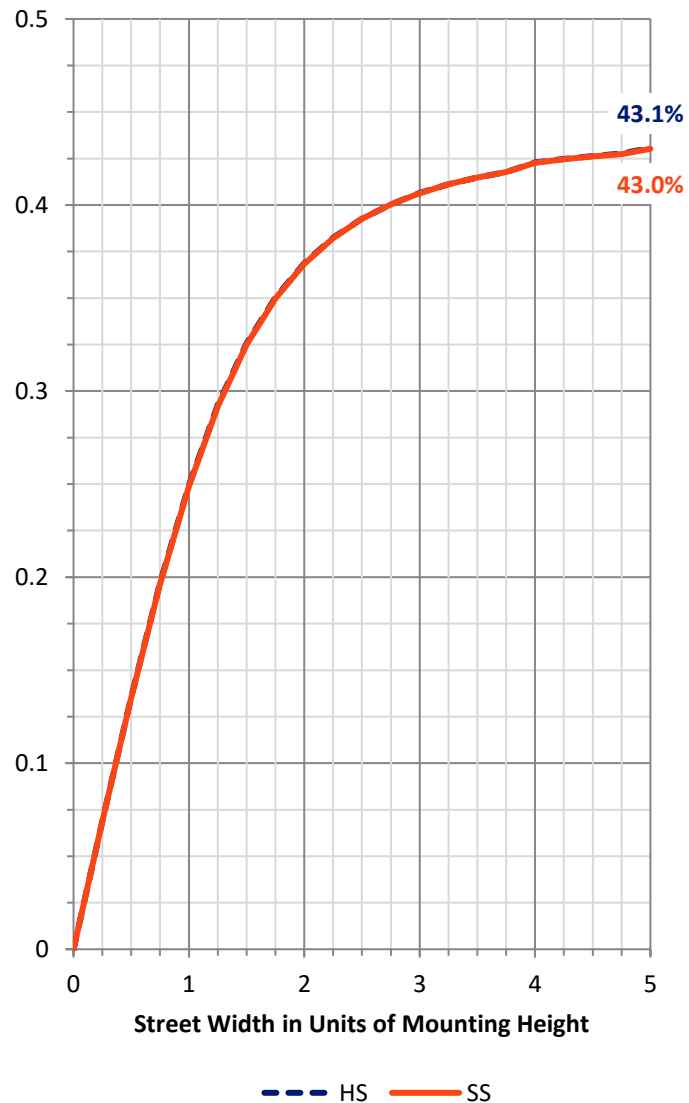
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2730.7	412.7	3143.4
	% Fixture	43.4	6.6	50.0
Street Side	Lumens	2730.7	412.7	3143.4
	% Fixture	43.4	6.6	50.0
Total	Lumens	5461.5	825.3	6286.8
	% Fixture	86.9	13.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.2	0.5
10°-20°	111.4	1.8
20°-30°	243.1	3.9
30°-40°	488.0	7.8
40°-50°	911.2	14.5
50°-60°	1342.1	21.3
60°-70°	1352.0	21.5
70°-80°	807.1	12.8
80°-90°	174.5	2.8
90°-100°	38.4	0.6
100°-110°	59.5	0.9
110°-120°	119.6	1.9
120°-130°	148.9	2.4
130°-140°	153.3	2.4
140°-150°	136.3	2.2
150°-160°	103.9	1.7
160°-170°	51.8	0.8
170°-180°	13.6	0.2
0°-90°	5461.5	86.9
0°-180°	6286.8	100.0

Coefficient of Utilization



REPORT NUMBER: P198460

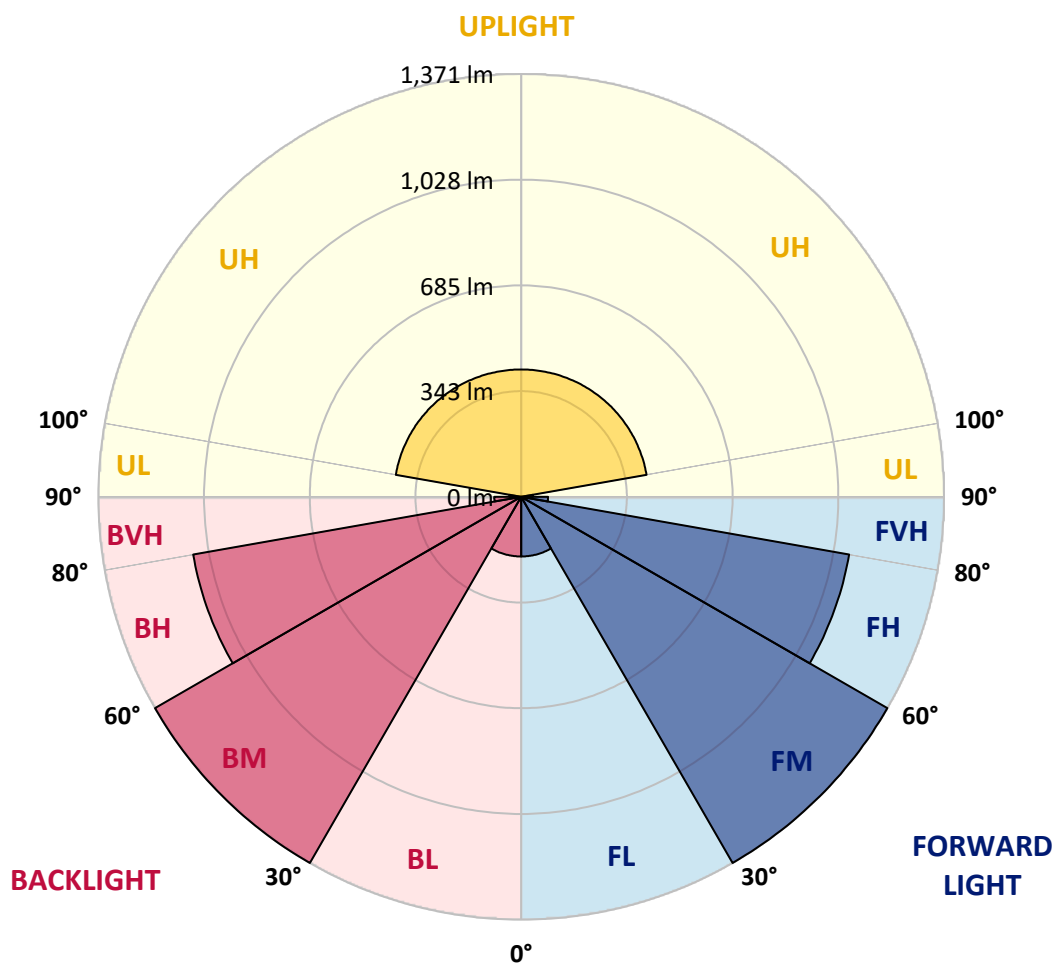
CATALOG NUMBER: TT-C4-LED-E1-RW-SG-MS/DIM-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	193.4	3.1			
FM	(30°-60°)	1370.6	21.8			
FH	(60°-80°)	1079.5	17.2			G1/1800
FVH	(80°-90°)	87.2	1.4			G1/100
BL	(0°-30°)	193.4	3.1	B1/500		
BM	(30°-60°)	1370.6	21.8	B2/2500		
BH	(60°-80°)	1079.5	17.2	B3/2500		G3/2500
BVH	(80°-90°)	87.2	1.4			G1/100
UL	(90°-100°)	38.4	0.6		U2/50	
UH	(100°-180°)	412.7	6.6		U3/500	

BUG Rating: B3-U4-G3

Type III Short



REPORT NUMBER: P198460

CATALOG NUMBER: TT-C4-LED-E1-RW-SG-MS/DIM-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5	324.5
2.5°	326.9	326.9	326.9	326.9	326.9	325.7	326.9	325.7	325.7	325.7	325.7
5°	330.5	330.5	330.5	331.6	331.6	331.6	331.6	330.5	331.6	330.5	331.6
7.5°	338.7	338.7	338.7	338.7	338.7	338.7	339.9	338.7	339.9	338.7	338.7
10°	349.4	349.4	349.4	349.4	350.6	350.6	350.6	351.8	351.8	351.8	351.8
12.5°	364.8	364.8	364.8	364.8	364.8	364.8	366.0	366.0	367.2	367.2	367.2
15°	384.9	384.9	383.7	383.7	383.7	384.9	384.9	387.3	386.1	386.1	386.1
17.5°	409.8	408.6	408.6	408.6	408.6	408.6	408.6	411.0	411.0	411.0	412.2
20°	437.0	439.4	438.2	435.9	435.9	435.9	437.0	439.4	439.4	443.0	444.2
22.5°	474.9	476.1	473.8	472.6	469.0	469.0	472.6	473.8	478.5	477.3	478.5
25°	515.2	514.0	512.9	510.5	510.5	510.5	512.9	516.4	520.0	523.5	523.5
27.5°	560.2	559.0	557.9	556.7	554.3	557.9	560.2	568.5	570.9	579.2	576.8
30°	610.0	611.2	608.8	607.6	606.4	607.6	617.1	628.9	638.4	644.3	645.5
32.5°	665.6	666.8	665.6	663.3	665.6	671.6	683.4	698.8	717.8	728.4	732.0
35°	727.2	729.6	727.2	729.6	732.0	742.6	763.9	787.6	820.8	830.3	836.2
37.5°	793.6	791.2	790.0	793.6	804.2	826.7	856.3	897.8	932.1	960.6	960.6
40°	859.9	861.1	862.3	862.3	882.4	913.2	961.7	1017.4	1068.3	1105.1	1106.2
42.5°	930.9	930.9	930.9	941.6	966.5	1015.0	1077.8	1159.5	1229.4	1263.8	1268.5
45°	1003.2	1007.9	1010.3	1024.5	1061.2	1122.8	1205.7	1304.0	1392.9	1439.1	1436.7
47.5°	1074.3	1080.2	1084.9	1106.2	1156.0	1222.3	1325.4	1443.8	1544.5	1596.6	1601.3
50°	1147.7	1144.1	1153.6	1179.7	1235.3	1320.6	1430.8	1567.0	1681.9	1745.8	1750.6
52.5°	1196.3	1195.1	1204.5	1231.8	1296.9	1392.9	1519.6	1674.8	1799.1	1865.4	1884.4
55°	1230.6	1229.4	1240.1	1272.1	1343.1	1445.0	1582.4	1745.8	1871.4	1940.1	1949.5
57.5°	1246.0	1247.2	1256.7	1289.8	1363.3	1469.9	1612.0	1769.5	1889.1	1953.1	1961.4
60°	1243.6	1244.8	1253.1	1285.1	1357.3	1460.4	1597.8	1745.8	1859.5	1918.7	1928.2
62.5°	1218.8	1217.6	1224.7	1251.9	1315.9	1411.8	1543.3	1683.0	1790.8	1845.3	1856.0
65°	1166.6	1165.5	1165.5	1189.1	1243.6	1325.4	1449.7	1574.1	1674.8	1726.9	1729.2
67.5°	1081.4	1081.4	1079.0	1093.2	1133.5	1212.8	1319.4	1433.1	1514.9	1563.4	1570.5
70°	966.5	968.8	960.6	968.8	1002.0	1064.8	1159.5	1250.7	1314.7	1370.4	1373.9
72.5°	840.9	831.5	827.9	830.3	855.1	895.4	977.1	1054.1	1113.3	1151.2	1158.4
75°	678.7	678.7	676.3	672.7	687.0	727.2	781.7	844.5	894.2	920.3	929.8
77.5°	520.0	524.7	517.6	517.6	528.2	559.0	606.4	640.8	676.3	694.1	689.3
80°	369.5	368.4	364.8	362.4	374.3	392.0	429.9	450.1	460.7	477.3	484.4
82.5°	228.6	231.0	234.5	223.9	228.6	245.2	265.3	276.0	280.7	287.8	286.6
85°	112.5	113.7	114.9	116.1	116.1	122.0	133.8	138.6	142.1	145.7	143.3
87.5°	41.5	39.1	37.9	37.9	37.9	39.1	45.0	43.8	46.2	46.2	48.6
90°	36.0	36.0	36.0	34.0	29.0	26.0	28.0	32.0	34.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	28.0	32.0	35.0	36.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.0	30.0	34.0	37.0	39.0	38.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.0	33.0	34.0	36.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	36.0	38.0	38.0	37.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	43.0	44.0	42.0	41.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	52.0	54.0	53.0	49.0	48.0	49.0
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	66.0	60.0	59.0	60.0
110°	86.0	86.0	89.0	85.0	86.0	87.0	84.0	84.0	78.0	74.0	75.0

REPORT NUMBER: P198460

CATALOG NUMBER: TT-C4-LED-E1-RW-SG-MS/DIM-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	102.0	105.0	100.0	95.0	94.0
115°	121.0	122.0	128.0	128.0	129.0	124.0	121.0	125.0	123.0	116.0	113.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	138.0	141.0	139.0	133.0	129.0
120°	152.0	153.0	155.0	149.0	149.0	147.0	150.0	153.0	148.0	145.0	142.0
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	159.0	162.0	155.0	153.0	150.0
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.0	168.0	163.0	160.0	158.0
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	176.0	175.0	173.0	166.0	163.0
130°	187.0	188.0	191.0	179.0	186.0	186.0	183.0	183.0	184.0	171.0	169.0
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	190.0	192.0	192.0	179.0	176.0
135°	210.0	210.0	209.0	192.0	199.0	201.0	196.0	201.0	199.0	185.0	184.0
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	203.0	210.0	204.0	191.0	190.0
140°	229.0	226.0	216.0	200.0	207.0	213.0	212.0	217.0	209.0	195.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	218.0	220.0	223.0	211.0	198.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	223.0	230.0	227.0	211.0	201.0	202.0
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	239.0	229.0	212.0	204.0	206.0
150°	224.0	221.0	220.0	214.0	222.0	235.0	242.0	232.0	214.0	210.0	211.0
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	242.0	235.0	219.0	215.0	216.0
155°	208.0	207.0	219.0	224.0	237.0	243.0	238.0	234.0	224.0	220.0	219.0
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	228.0	229.0	226.0	222.0	219.0
160°	199.0	198.0	210.0	213.0	219.0	219.0	215.0	219.0	221.0	218.0	215.0
162.5°	185.0	184.0	193.0	193.0	198.0	198.0	196.0	200.0	204.0	207.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	177.0	176.0	181.0	185.0	190.0	192.0
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	160.0	165.0	168.0	172.0	174.0
170°	142.0	141.0	145.0	144.0	147.0	147.0	148.0	152.0	155.0	159.0	160.0
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	141.0	145.0	146.0	149.0	151.0
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.0	141.0	141.0	143.0	144.0
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	138.0	140.0	140.0	141.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)