

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: P198264

Luminaire Tested: **TT-C1-LED-E1-RW-CG-MS/DIM-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198264
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C1-LED-E1-RW-CG-MS/DIM-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION WITH CLEAR GLASS LENS AND DIMMING OCCUPANCY
SENSOR
Light Source: (168) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3695 lumens
Efficiency: N/A
Efficacy: 81.4 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): 45.4
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

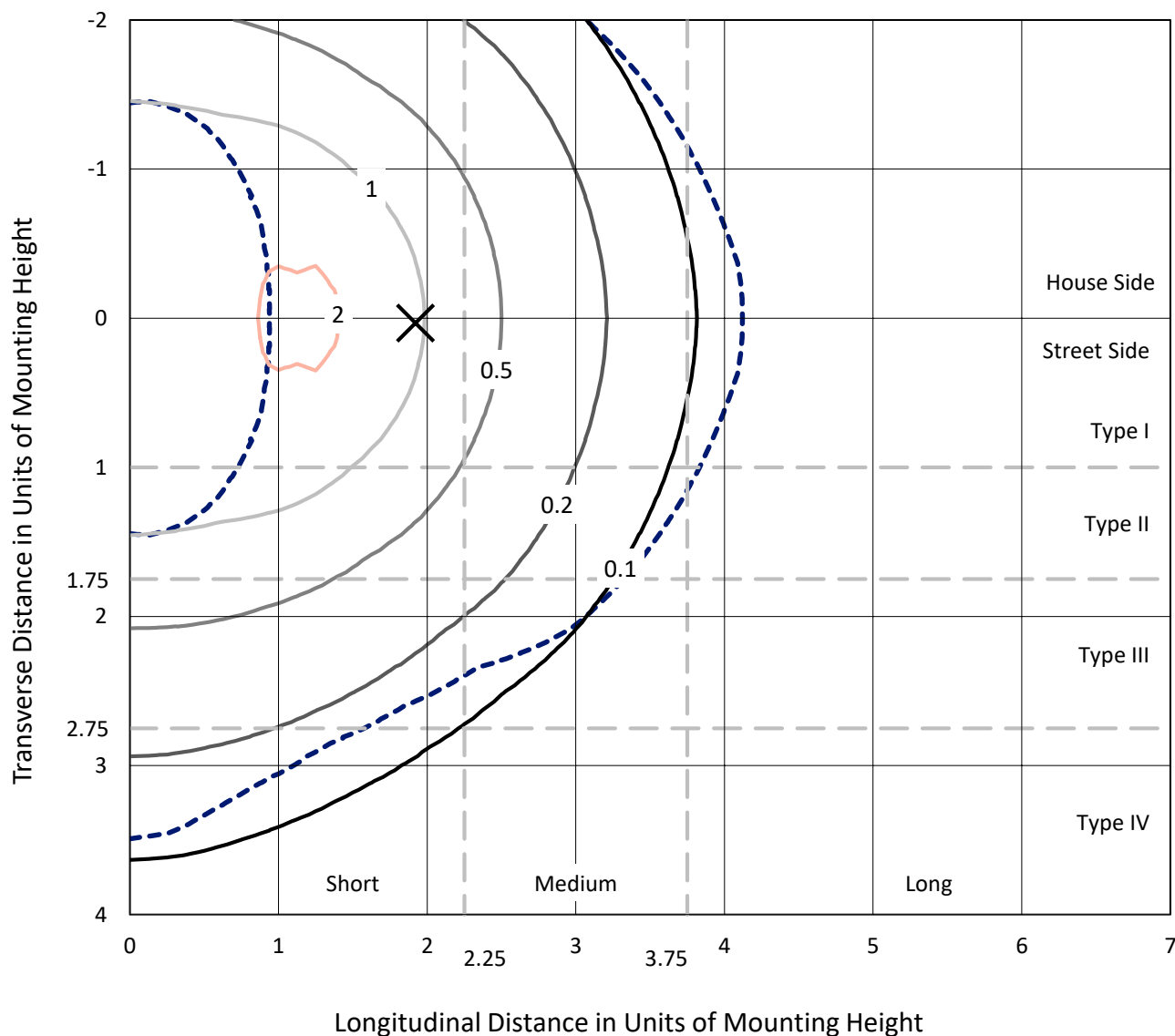


REPORT NUMBER: P198264

CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

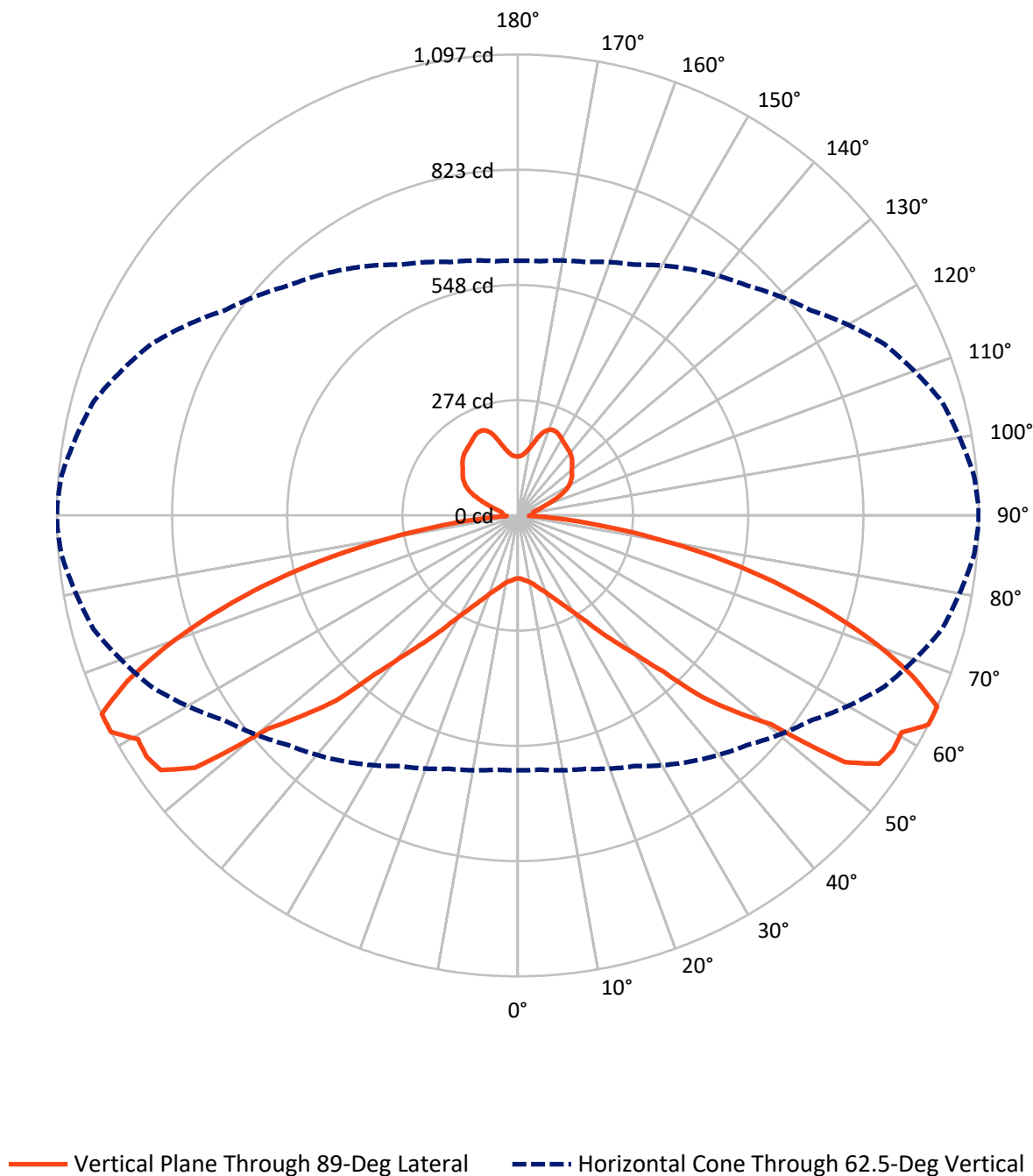


Based on 10 foot mounting height. Maximum calculated value = 2.2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198264

CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198264

CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

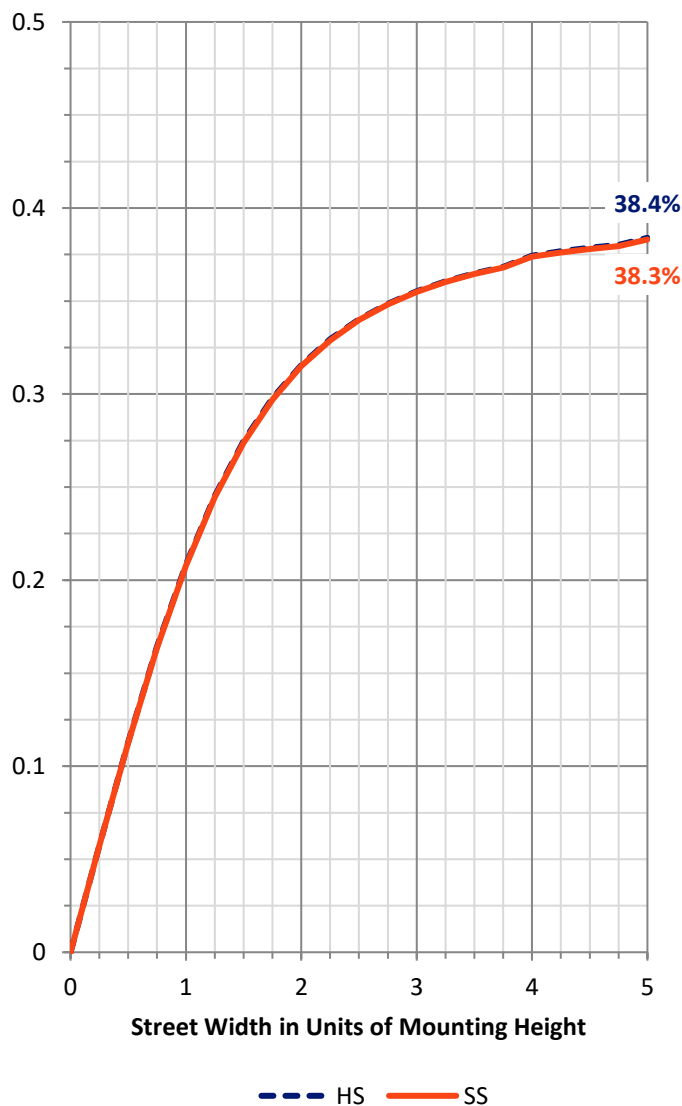
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1434.8	412.7	1847.5
	% Fixture	38.8	11.2	50.0
Street Side	Lumens	1434.8	412.7	1847.5
	% Fixture	38.8	11.2	50.0
Total	Lumens	2869.7	825.3	3695.0
	% Fixture	77.7	22.3	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.0	0.4
10°-20°	51.0	1.4
20°-30°	108.4	2.9
30°-40°	208.4	5.6
40°-50°	385.8	10.4
50°-60°	651.8	17.6
60°-70°	787.2	21.3
70°-80°	542.0	14.7
80°-90°	120.0	3.2
90°-100°	38.4	1.0
100°-110°	59.5	1.6
110°-120°	119.6	3.2
120°-130°	148.9	4.0
130°-140°	153.3	4.1
140°-150°	136.3	3.7
150°-160°	103.9	2.8
160°-170°	51.8	1.4
170°-180°	13.6	0.4
0°-90°	2869.7	77.7
0°-180°	3695.0	100.0

Coefficient of Utilization



REPORT NUMBER: P198264

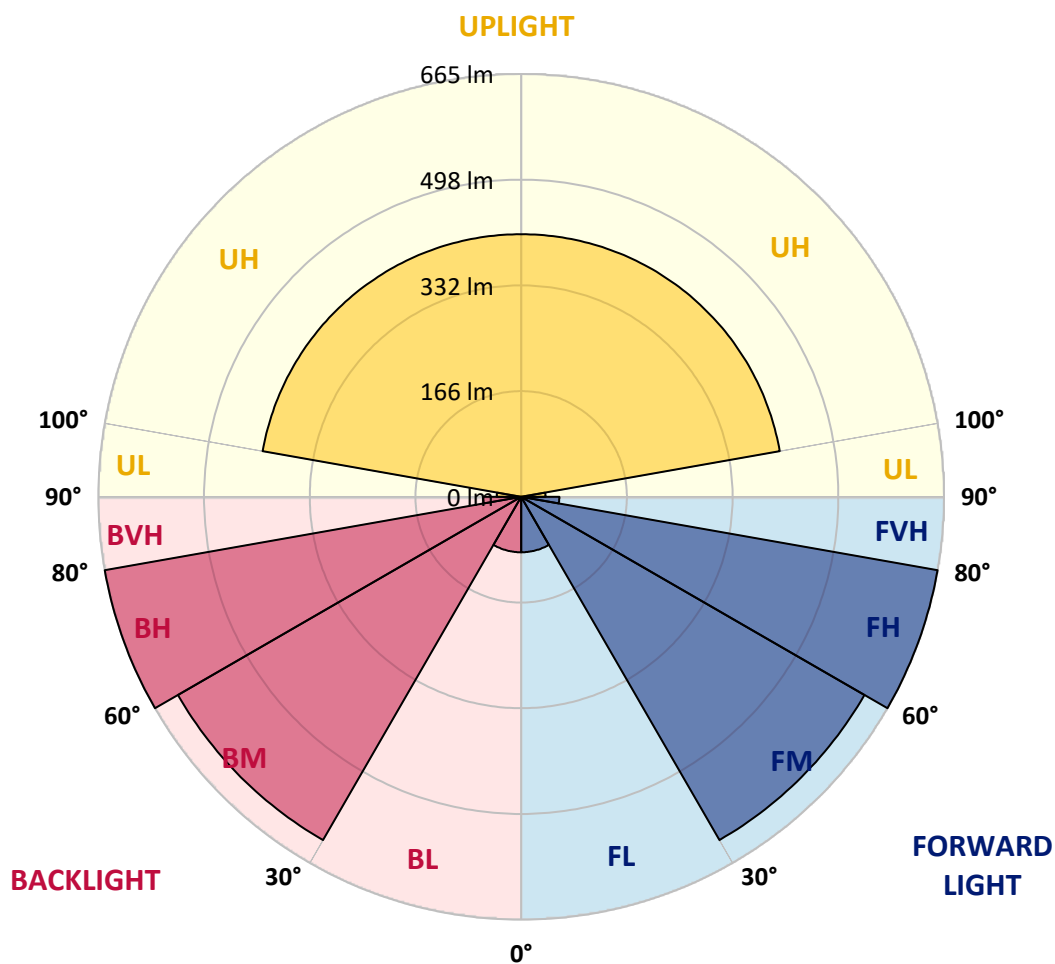
CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	87.2	2.4			
FM	(30°-60°)	623.0	16.9			
FH	(60°-80°)	664.6	18.0			G1/1800
FVH	(80°-90°)	60.0	1.6			G1/100
BL	(0°-30°)	87.2	2.4	B0/110		
BM	(30°-60°)	623.0	16.9	B1/1000		
BH	(60°-80°)	664.6	18.0	B2/1000		G2/1000
BVH	(80°-90°)	60.0	1.6			G1/100
UL	(90°-100°)	38.4	1.0		U2/50	
UH	(100°-180°)	412.7	11.2		U3/500	

BUG Rating: B2-U4-G2

Type IV Short



REPORT NUMBER: P198264

CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
0°	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8	149.8
2.5°	151.0	151.0	151.0	151.0	151.7	151.7	151.7	151.7	151.7	151.7	151.0
5°	153.5	152.9	153.5	154.2	154.2	154.8	154.8	154.8	154.8	154.2	154.2
7.5°	156.7	156.7	157.3	157.9	158.5	157.9	157.9	157.3	157.3	157.3	157.3
10°	162.3	161.7	162.3	162.9	162.3	162.3	162.3	162.3	162.3	162.3	161.7
12.5°	168.6	168.6	168.6	168.6	167.9	168.6	167.9	168.6	168.6	168.6	167.9
15°	177.3	177.3	177.3	176.7	176.1	176.1	176.1	176.1	176.1	176.1	176.7
17.5°	189.3	188.6	188.0	186.7	186.1	185.5	185.5	185.5	186.1	186.1	186.1
20°	203.0	201.8	200.5	199.9	199.3	198.0	197.4	198.0	198.7	198.7	196.8
22.5°	220.0	218.1	216.2	215.6	213.1	212.4	211.8	211.2	211.2	211.8	211.2
25°	235.6	236.3	234.4	231.2	230.6	229.4	227.5	228.1	227.5	228.1	227.5
27.5°	255.1	256.3	254.4	251.3	249.4	247.5	246.3	246.3	246.9	248.8	246.9
30°	277.0	277.6	275.7	273.2	270.1	267.6	267.0	270.1	270.1	272.6	271.3
32.5°	300.2	299.5	297.0	296.4	292.7	292.7	293.3	295.8	300.2	302.1	301.4
35°	328.4	324.6	324.0	321.5	318.3	318.3	322.1	328.4	336.5	341.5	342.2
37.5°	354.1	352.8	352.2	348.4	346.5	350.3	357.8	369.1	376.0	386.0	386.0
40°	380.4	383.5	380.4	376.6	378.5	384.1	396.7	411.1	426.8	437.4	437.4
42.5°	406.1	411.7	408.6	405.5	410.5	423.6	439.3	463.7	495.1	508.9	508.2
45°	433.7	438.0	434.9	435.5	446.2	462.5	492.6	545.2	589.1	617.3	617.9
47.5°	463.7	464.4	462.5	465.6	481.3	512.6	553.3	617.9	661.1	695.0	697.5
50°	493.8	490.7	490.1	497.6	525.8	565.3	623.5	686.2	754.5	779.6	781.4
52.5°	520.8	517.0	519.5	532.0	569.0	617.9	690.6	797.1	896.1	970.1	975.1
55°	546.5	542.1	548.3	568.4	617.3	683.1	773.9	906.8	990.8	1039.0	1043.4
57.5°	568.4	567.1	577.2	602.2	662.4	742.6	842.2	950.6	1012.7	1049.0	1053.4
60°	590.3	590.3	603.5	636.1	703.1	776.4	855.4	950.0	1013.9	1044.6	1049.0
62.5°	606.0	607.2	624.2	658.0	715.0	772.7	851.0	963.2	1045.3	1089.8	1096.7
65°	614.8	617.3	635.4	658.0	710.0	768.9	879.2	973.8	1041.5	1088.5	1096.7
67.5°	616.0	621.0	629.8	646.7	690.6	740.7	834.1	911.2	967.6	1003.3	1008.9
70°	610.4	608.5	607.9	612.3	634.2	670.5	752.6	813.4	869.2	891.7	896.1
72.5°	582.2	581.5	559.6	545.8	551.5	576.5	649.2	696.2	732.6	761.4	764.5
75°	525.8	520.8	484.4	456.2	450.6	473.1	527.7	562.1	594.7	621.7	628.5
77.5°	438.7	426.1	389.2	355.9	345.3	362.2	402.9	426.8	450.6	481.9	481.9
80°	318.3	312.1	280.1	253.2	242.5	252.5	281.4	291.4	303.9	332.1	332.8
82.5°	205.5	198.7	177.3	160.4	151.0	157.3	169.2	173.6	184.2	201.2	200.5
85°	100.3	100.3	89.6	80.2	71.4	72.7	80.2	82.7	91.5	95.9	94.6
87.5°	25.1	27.6	24.4	22.6	20.1	20.1	22.6	22.6	27.6	27.6	26.3
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	38.2
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	48.8
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	66.0	60.0	59.0	59.8
110°	86.0	86.0	89.0	85.0	86.0	87.0	84.0	84.0	78.0	74.0	74.8

REPORT NUMBER: P198264

CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	89°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	102.0	105.0	100.0	95.0	94.2
115°	121.0	122.0	128.0	128.0	129.0	124.0	121.0	125.0	123.0	116.0	113.6
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	138.0	141.0	139.0	133.0	129.8
120°	152.0	153.0	155.0	149.0	149.0	147.0	150.0	153.0	148.0	145.0	142.6
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	159.0	162.0	155.0	153.0	150.6
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.0	168.0	163.0	160.0	158.4
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	176.0	175.0	173.0	166.0	163.6
130°	187.0	188.0	191.0	179.0	186.0	186.0	183.0	183.0	184.0	171.0	169.4
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	190.0	192.0	192.0	179.0	176.6
135°	210.0	210.0	209.0	192.0	199.0	201.0	196.0	201.0	199.0	185.0	184.2
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	203.0	210.0	204.0	191.0	190.2
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	201.8
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	239.0	229.0	212.0	204.0	205.6
150°	224.0	221.0	220.0	214.0	222.0	235.0	242.0	232.0	214.0	210.0	210.8
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	242.0	235.0	219.0	215.0	215.8
155°	208.0	207.0	219.0	224.0	237.0	243.0	238.0	234.0	224.0	220.0	219.2
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	228.0	229.0	226.0	222.0	219.6
160°	199.0	198.0	210.0	213.0	219.0	219.0	215.0	219.0	221.0	218.0	215.6
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	191.6
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	160.0	165.0	168.0	172.0	173.6
170°	142.0	141.0	145.0	144.0	147.0	147.0	148.0	152.0	155.0	159.0	159.8
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	141.0	145.0	146.0	149.0	150.6
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.0	141.0	141.0	143.0	143.8
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

REPORT NUMBER: P198264

CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

CANDELA DISTRIBUTION (continued):

	90°
0°	149.8
2.5°	151.0
5°	154.2
7.5°	157.3
10°	161.7
12.5°	168.6
15°	176.1
17.5°	186.7
20°	198.7
22.5°	211.2
25°	227.5
27.5°	248.8
30°	272.6
32.5°	300.8
35°	339.7
37.5°	386.0
40°	438.0
42.5°	508.9
45°	619.1
47.5°	695.0
50°	779.6
52.5°	972.0
55°	1042.8
57.5°	1054.0
60°	1050.3
62.5°	1096.7
65°	1095.4
67.5°	1007.7
70°	898.0
72.5°	769.5
75°	631.0
77.5°	478.8
80°	345.9
82.5°	201.8
85°	95.9
87.5°	28.8
90°	34.0
92.5°	36.0
95°	38.0
97.5°	36.0
100°	37.0
102.5°	41.0
105°	49.0
107.5°	60.0
110°	75.0

REPORT NUMBER: P198264

CATALOG NUMBER: TT-C1-LED-E1-RW-CG-MS/DIM-UPL

CANDELA DISTRIBUTION (continued):

	90°
112.5°	94.0
115°	113.0
117.5°	129.0
120°	142.0
122.5°	150.0
125°	158.0
127.5°	163.0
130°	169.0
132.5°	176.0
135°	184.0
137.5°	190.0
140°	195.0
142.5°	198.0
145°	202.0
147.5°	206.0
150°	211.0
152.5°	216.0
155°	219.0
157.5°	219.0
160°	215.0
162.5°	207.0
165°	192.0
167.5°	174.0
170°	160.0
172.5°	151.0
175°	144.0
177.5°	141.0
180°	140.0

(END OF REPORT)