

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: P198259

Luminaire Tested: **TT-C1-LED-E1-RW-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198259
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-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
RECTANGULAR DISTRIBUTION
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3555.6 lumens
Efficiency: N/A
Efficacy: 78.3 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

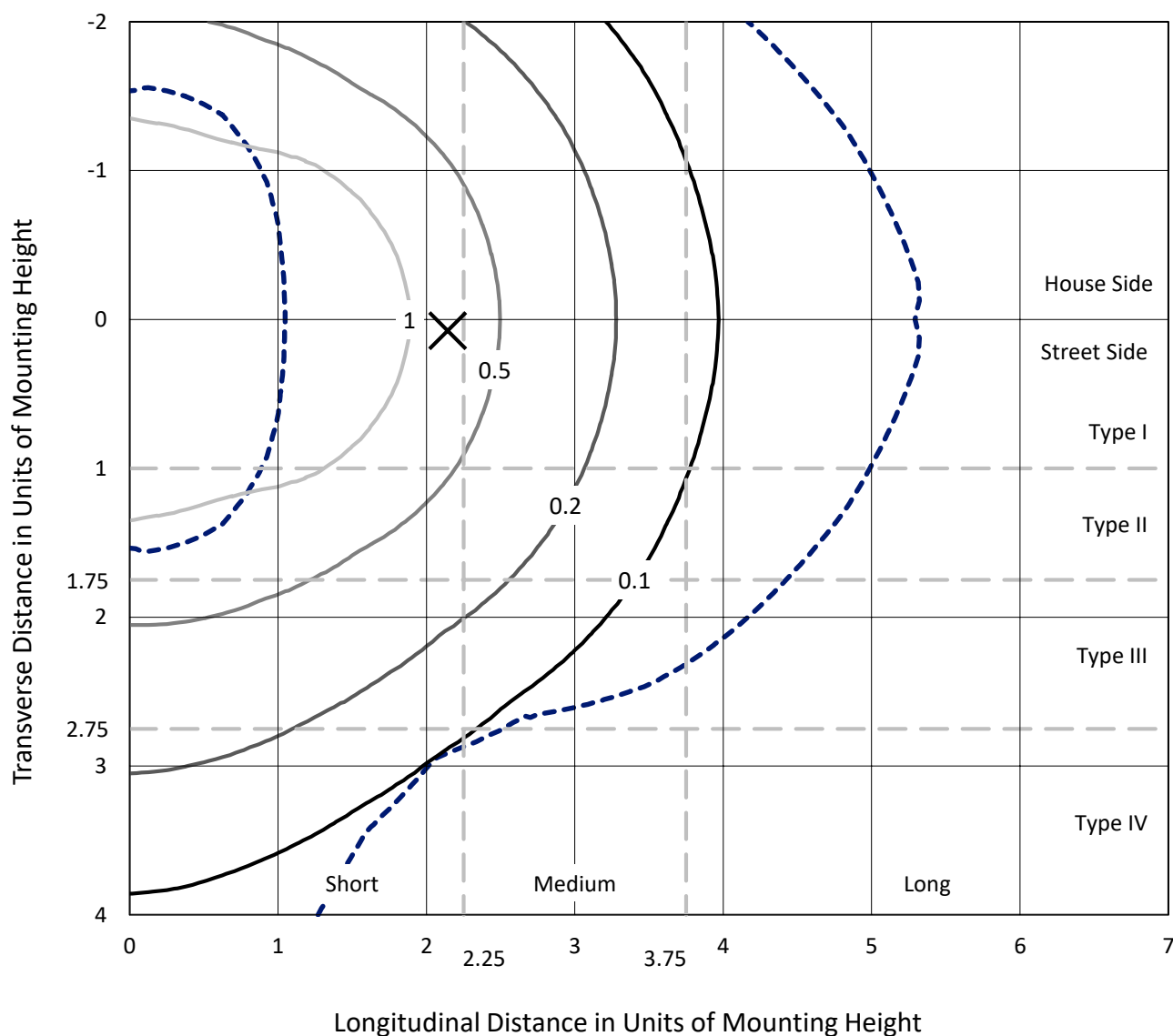


REPORT NUMBER: P198259

CATALOG NUMBER: TT-C1-LED-E1-RW-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

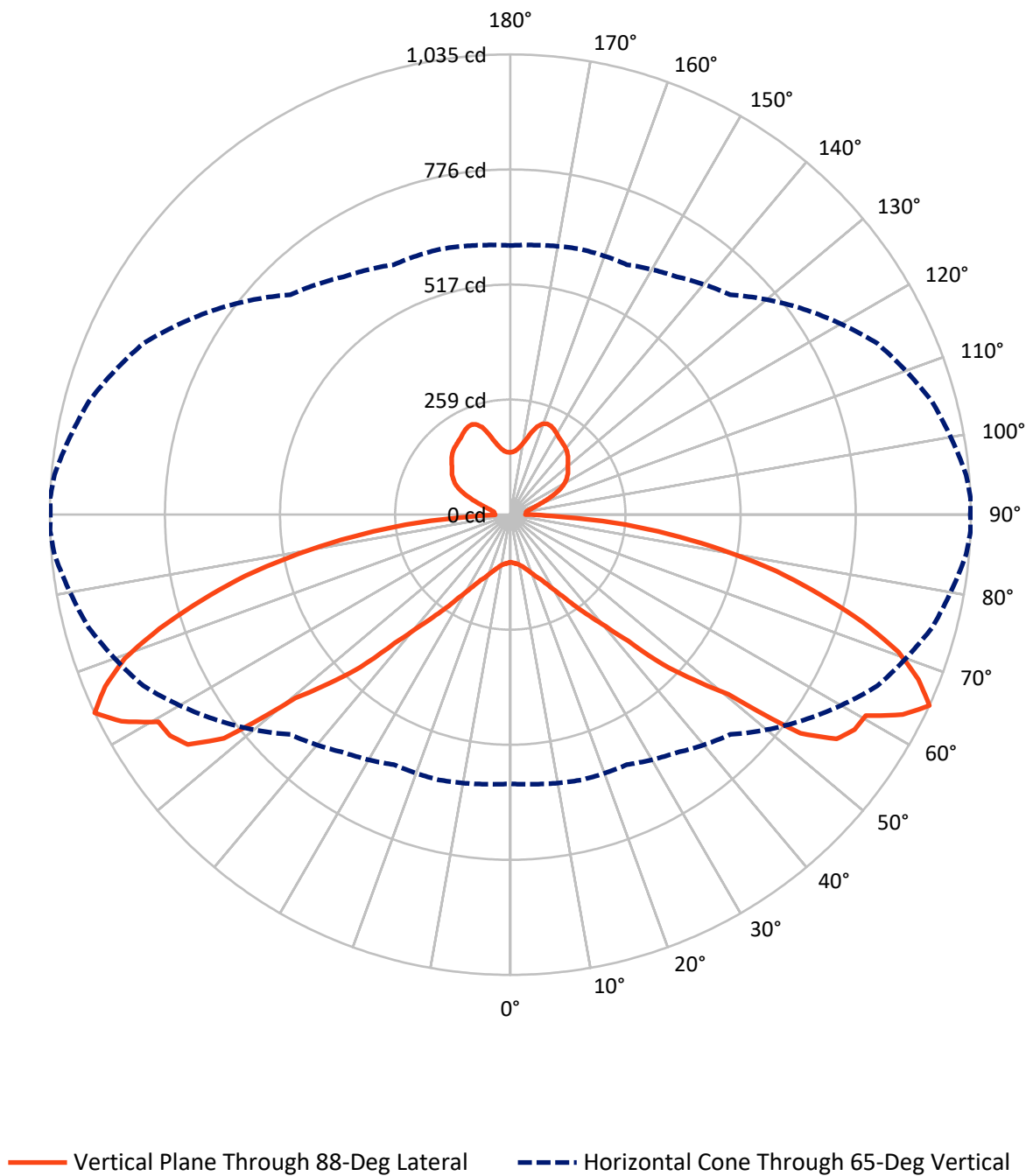


Based on 10 foot mounting height. Maximum calculated value = 1.8 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198259

CATALOG NUMBER: TT-C1-LED-E1-RW-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198259

CATALOG NUMBER: TT-C1-LED-E1-RW-8030-UPL

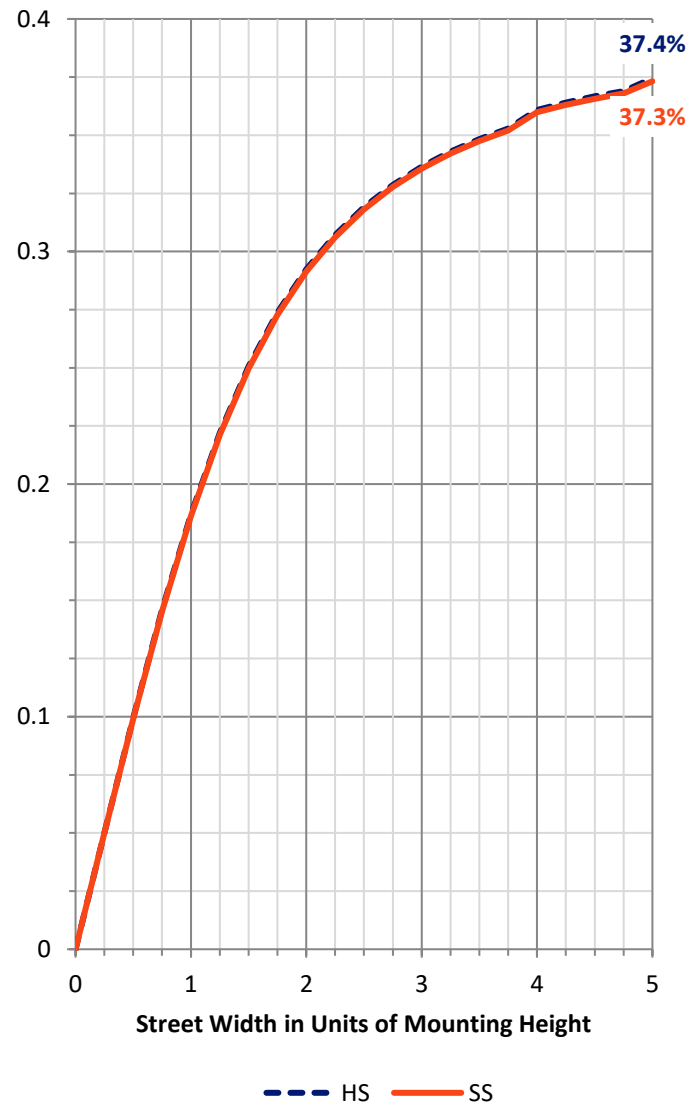
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1365.1	412.7	1777.8
	% Fixture	38.4	11.6	50.0
Street Side	Lumens	1365.1	412.7	1777.8
	% Fixture	38.4	11.6	50.0
Total	Lumens	2730.2	825.3	3555.6
	% Fixture	76.8	23.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.7	0.3
10°-20°	37.1	1.0
20°-30°	82.0	2.3
30°-40°	163.4	4.6
40°-50°	312.7	8.8
50°-60°	559.7	15.7
60°-70°	741.7	20.9
70°-80°	618.9	17.4
80°-90°	204.1	5.7
90°-100°	38.4	1.1
100°-110°	59.5	1.7
110°-120°	119.6	3.4
120°-130°	148.9	4.2
130°-140°	153.3	4.3
140°-150°	136.3	3.8
150°-160°	103.9	2.9
160°-170°	51.8	1.5
170°-180°	13.6	0.4
0°-90°	2730.2	76.8
0°-180°	3555.6	100.0

Coefficient of Utilization



REPORT NUMBER: P198259

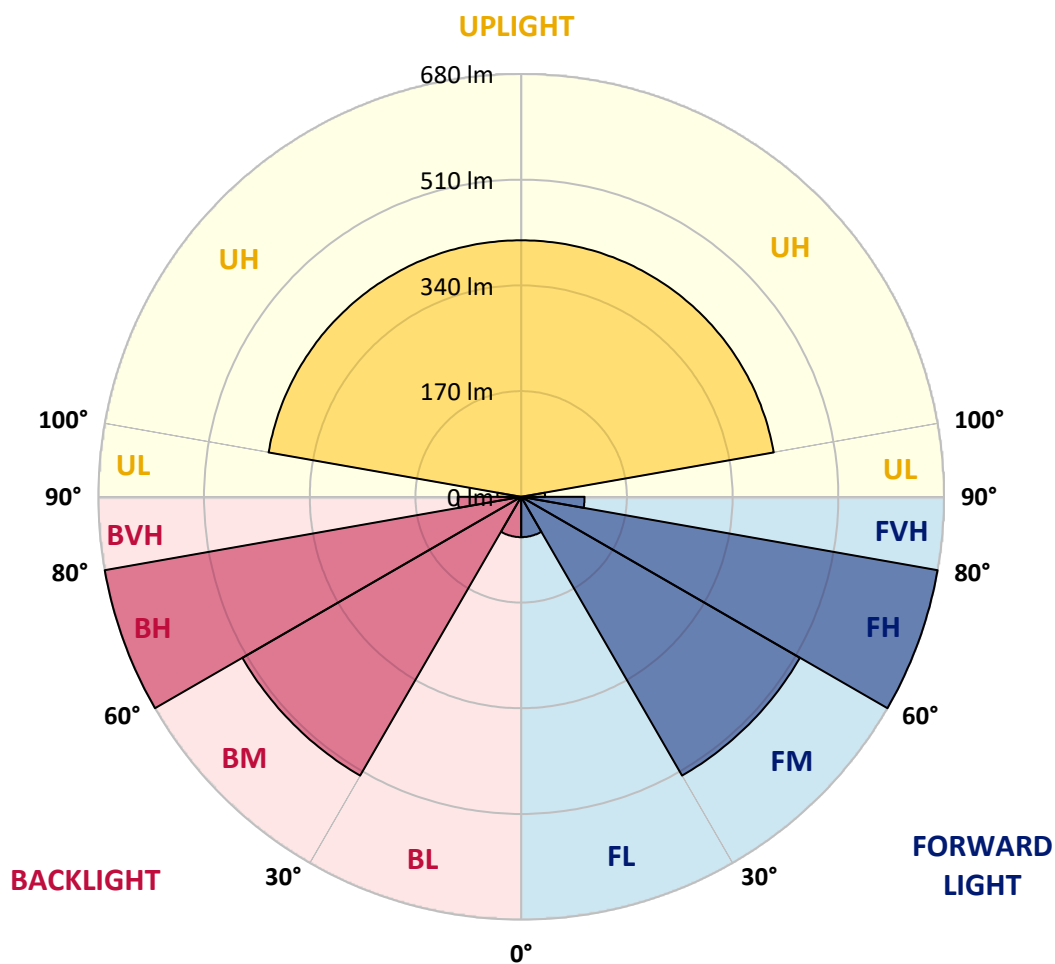
CATALOG NUMBER: TT-C1-LED-E1-RW-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	64.9	1.8			
FM	(30°-60°)	517.9	14.6			
FH	(60°-80°)	680.3	19.1			G1/1800
FVH	(80°-90°)	102.0	2.9			G2/225
BL	(0°-30°)	64.9	1.8	B0/110		
BM	(30°-60°)	517.9	14.6	B1/1000		
BH	(60°-80°)	680.3	19.1	B2/1000		G2/1000
BVH	(80°-90°)	102.0	2.9			G2/225
UL	(90°-100°)	38.4	1.1		U2/50	
UH	(100°-180°)	412.7	11.6		U3/500	

BUG Rating: B2-U4-G2

Type IV Short



REPORT NUMBER: P198259

CATALOG NUMBER: TT-C1-LED-E1-RW-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	88°
0°	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7
2.5°	107.8	107.8	107.8	107.8	108.3	108.3	108.3	108.3	108.3	108.3	108.3
5°	109.4	109.4	110.0	110.0	110.5	110.5	110.5	110.5	110.0	110.0	110.0
7.5°	112.1	112.6	113.2	113.2	113.2	112.6	112.1	112.1	111.6	111.6	111.6
10°	116.9	116.9	117.5	117.5	116.9	116.4	115.9	115.3	115.3	115.3	114.8
12.5°	122.8	122.8	123.4	122.8	121.8	121.2	120.1	119.6	119.6	119.1	119.1
15°	130.9	131.9	131.9	130.3	128.7	127.1	126.6	125.5	125.5	125.5	125.5
17.5°	143.2	142.7	140.5	138.9	137.8	135.2	134.1	133.6	132.5	132.5	132.5
20°	157.2	156.1	153.4	151.3	149.1	145.9	143.7	142.7	142.1	141.6	141.6
22.5°	172.7	171.1	167.3	165.7	161.4	158.2	155.5	153.4	151.8	151.3	152.3
25°	188.8	188.8	185.6	181.3	177.0	172.2	168.4	165.7	163.6	163.1	162.5
27.5°	206.0	207.0	202.7	198.5	193.6	187.2	183.4	179.7	179.1	178.6	178.1
30°	224.2	226.3	222.0	217.8	211.3	204.9	200.1	198.5	196.8	197.9	197.9
32.5°	246.7	247.8	243.0	239.7	231.2	224.7	220.4	219.4	219.9	219.4	221.0
35°	273.0	271.4	267.6	261.2	253.7	247.8	244.6	246.7	252.6	254.8	253.7
37.5°	302.0	296.1	293.9	285.9	278.9	274.1	275.1	280.5	285.3	289.1	288.0
40°	323.4	324.5	318.6	311.1	304.6	303.6	309.5	316.4	325.6	328.8	329.9
42.5°	345.4	351.8	344.9	337.4	334.1	336.3	344.9	358.8	379.2	389.9	388.3
45°	370.6	377.6	370.1	364.2	363.6	371.7	390.5	426.9	457.0	478.4	480.6
47.5°	396.9	402.3	395.3	391.5	396.9	412.5	444.6	493.4	525.6	550.8	555.1
50°	430.2	428.0	422.6	422.1	433.9	462.3	505.8	555.1	613.1	629.7	635.0
52.5°	462.9	454.8	453.8	456.4	477.4	509.5	567.5	664.5	749.8	809.9	816.3
55°	493.4	484.3	486.5	493.4	522.9	571.8	652.2	770.7	845.3	887.7	889.8
57.5°	521.3	516.0	520.8	530.5	574.4	637.2	722.5	820.1	876.4	906.4	911.8
60°	549.8	548.7	554.6	572.3	619.5	675.3	746.6	833.0	889.3	912.3	917.7
62.5°	576.6	580.3	587.8	605.0	641.5	684.9	754.1	859.8	944.0	980.5	989.6
65°	605.0	608.2	617.3	620.0	652.7	698.9	805.1	910.2	981.0	1028.2	1034.6
67.5°	630.7	635.0	631.8	629.7	658.1	698.9	794.9	887.1	946.1	982.1	989.0
70°	655.4	650.6	637.7	621.1	629.1	657.0	745.0	824.9	884.4	918.2	925.2
72.5°	661.9	655.4	621.1	583.0	571.2	592.1	673.1	743.9	792.7	824.4	828.7
75°	645.2	631.8	573.9	521.3	498.8	519.7	587.3	647.9	682.2	716.6	719.2
77.5°	578.7	570.1	505.8	442.0	416.7	432.3	488.6	531.5	571.2	604.5	610.9
80°	475.2	467.7	410.8	358.8	325.0	335.8	377.1	411.4	449.5	475.7	483.8
82.5°	349.7	348.6	307.9	259.1	235.5	234.4	265.5	299.3	328.2	353.5	358.8
85°	219.9	219.9	192.0	162.5	137.8	138.4	157.2	181.8	218.3	234.4	236.0
87.5°	74.6	70.8	66.0	53.6	42.9	38.6	41.3	47.2	71.9	89.0	92.3
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	38.4
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	48.6
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	66.0	60.0	59.0	59.6
110°	86.0	86.0	89.0	85.0	86.0	87.0	84.0	84.0	78.0	74.0	74.6

REPORT NUMBER: P198259

CATALOG NUMBER: TT-C1-LED-E1-RW-8030-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	88°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	102.0	105.0	100.0	95.0	94.4
115°	121.0	122.0	128.0	128.0	129.0	124.0	121.0	125.0	123.0	116.0	114.2
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	138.0	141.0	139.0	133.0	130.6
120°	152.0	153.0	155.0	149.0	149.0	147.0	150.0	153.0	148.0	145.0	143.2
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	159.0	162.0	155.0	153.0	151.2
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.0	168.0	163.0	160.0	158.8
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	176.0	175.0	173.0	166.0	164.2
130°	187.0	188.0	191.0	179.0	186.0	186.0	183.0	183.0	184.0	171.0	169.8
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	190.0	192.0	192.0	179.0	177.2
135°	210.0	210.0	209.0	192.0	199.0	201.0	196.0	201.0	199.0	185.0	184.4
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	203.0	210.0	204.0	191.0	190.4
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	201.6
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	239.0	229.0	212.0	204.0	205.2
150°	224.0	221.0	220.0	214.0	222.0	235.0	242.0	232.0	214.0	210.0	210.6
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	242.0	235.0	219.0	215.0	215.6
155°	208.0	207.0	219.0	224.0	237.0	243.0	238.0	234.0	224.0	220.0	219.4
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	228.0	229.0	226.0	222.0	220.2
160°	199.0	198.0	210.0	213.0	219.0	219.0	215.0	219.0	221.0	218.0	216.2
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	191.2
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	160.0	165.0	168.0	172.0	173.2
170°	142.0	141.0	145.0	144.0	147.0	147.0	148.0	152.0	155.0	159.0	159.6
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	141.0	145.0	146.0	149.0	150.2
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.0	141.0	141.0	143.0	143.6
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: P198259

CATALOG NUMBER: TT-C1-LED-E1-RW-8030-UPL

CANDELA DISTRIBUTION (continued):

	90°
0°	106.7
2.5°	108.3
5°	110.0
7.5°	111.6
10°	114.8
12.5°	119.6
15°	125.0
17.5°	132.5
20°	141.6
22.5°	151.8
25°	162.5
27.5°	178.6
30°	197.4
32.5°	220.4
35°	254.2
37.5°	289.1
40°	332.5
42.5°	392.6
45°	475.2
47.5°	555.1
50°	629.1
52.5°	802.9
55°	892.0
57.5°	911.3
60°	916.1
62.5°	984.7
65°	1033.6
67.5°	988.5
70°	923.6
72.5°	825.4
75°	723.5
77.5°	610.9
80°	477.4
82.5°	358.8
85°	232.2
87.5°	89.6
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: P198259

CATALOG NUMBER: TT-C1-LED-E1-RW-8030-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)