

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: P198343

Luminaire Tested: **TT-C2-LED-E1-WQ-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198343
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-WQ-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4593.3 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - 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



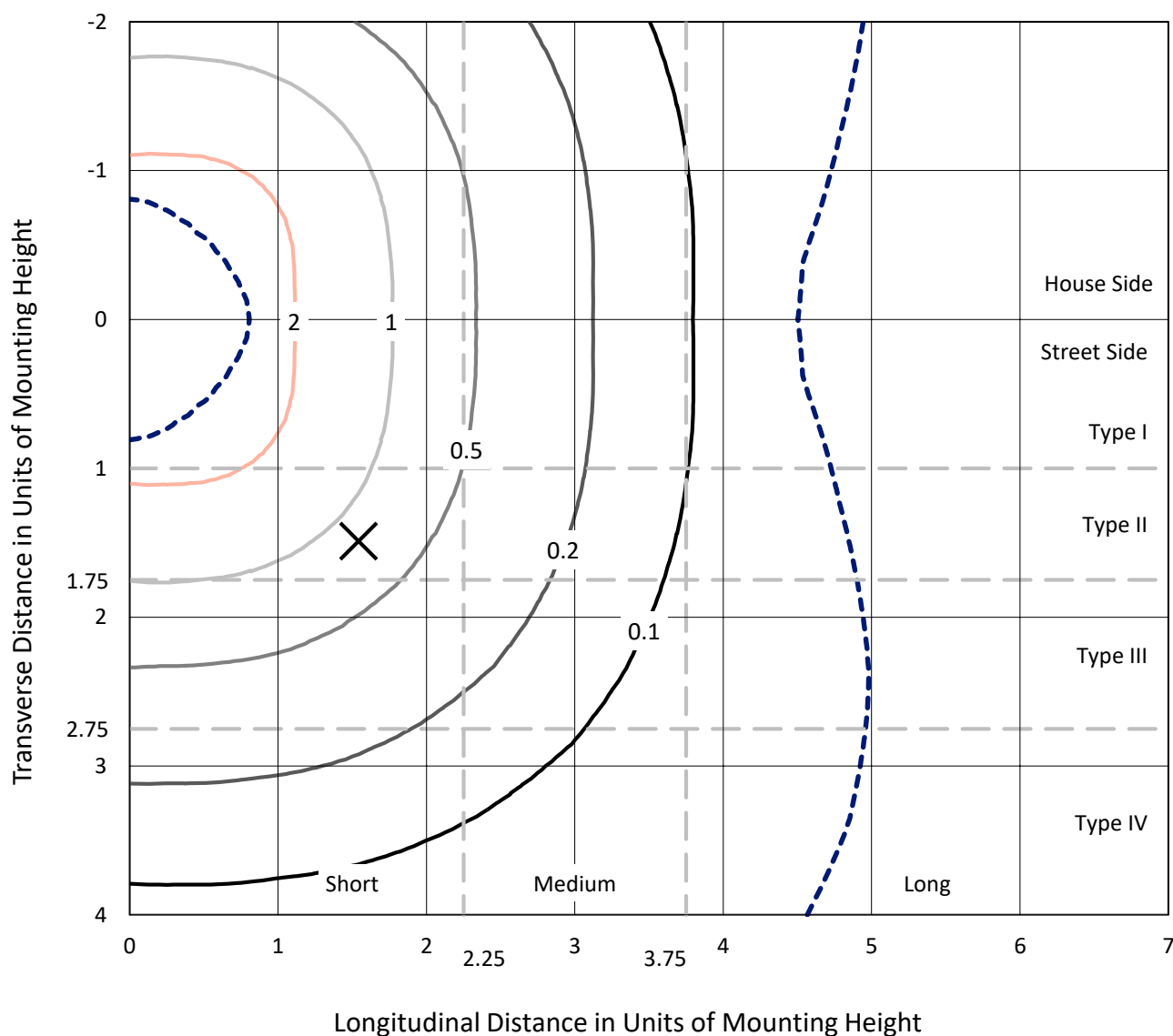
REPORT NUMBER: P198343

CATALOG NUMBER: TT-C2-LED-E1-WQ-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

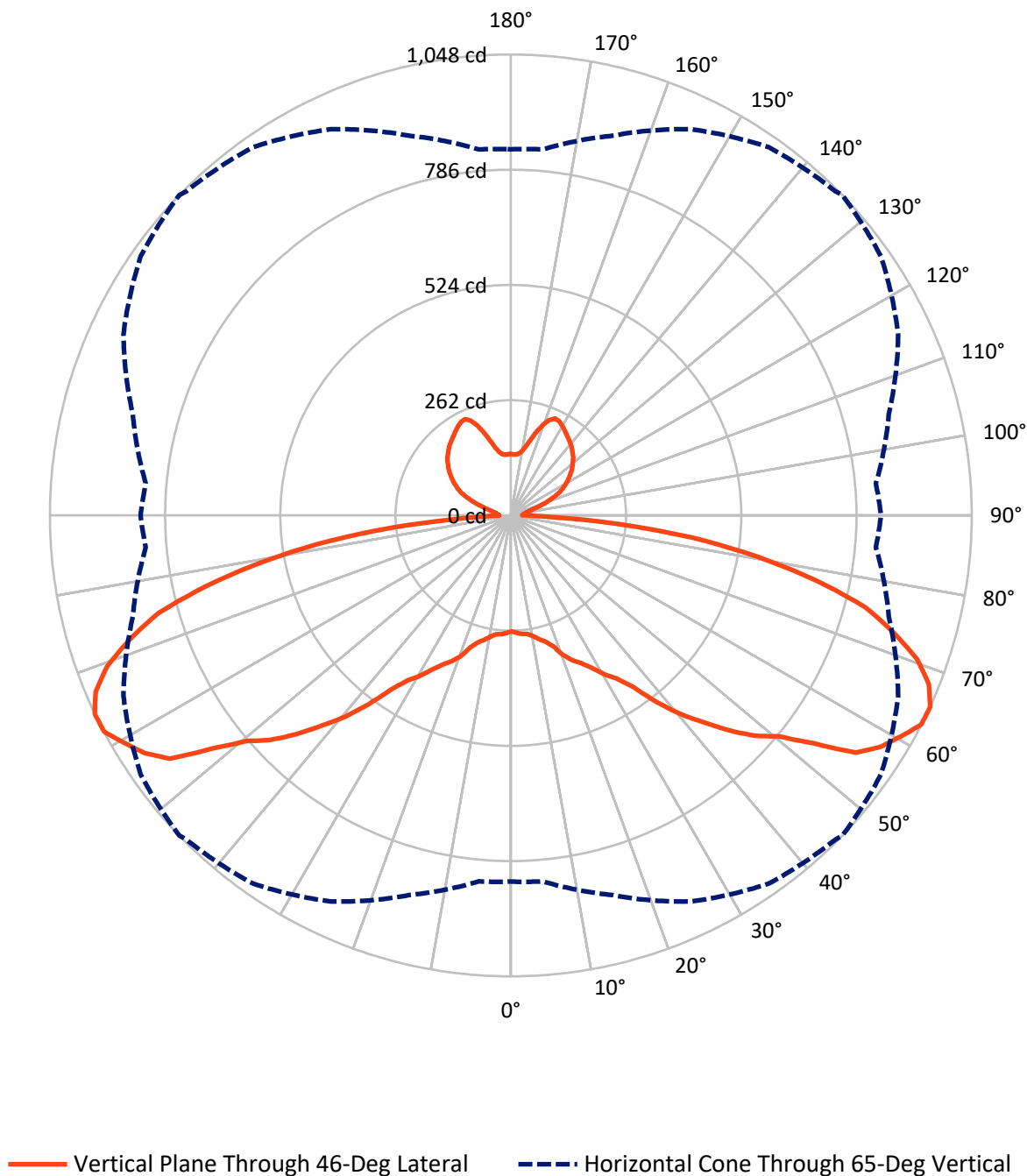


Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P198343

CATALOG NUMBER: TT-C2-LED-E1-WQ-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198343

CATALOG NUMBER: TT-C2-LED-E1-WQ-8030-UPL

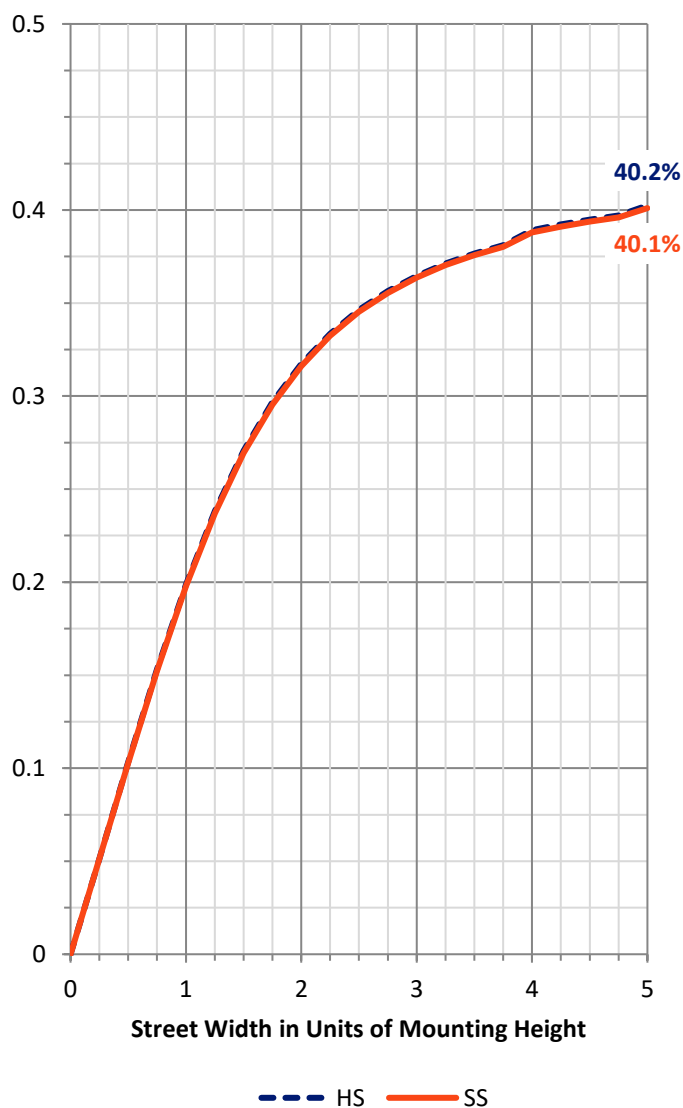
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1884.0	412.6	2296.6
	% Fixture	41.0	9.0	50.0
Street Side	Lumens	1884.0	412.6	2296.6
	% Fixture	41.0	9.0	50.0
Total	Lumens	3768.0	825.3	4593.3
	% Fixture	82.0	18.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.1	0.6
10°-20°	86.9	1.9
20°-30°	174.9	3.8
30°-40°	304.5	6.6
40°-50°	514.9	11.2
50°-60°	767.5	16.7
60°-70°	918.6	20.0
70°-80°	743.7	16.2
80°-90°	231.0	5.0
90°-100°	38.4	0.8
100°-110°	59.5	1.3
110°-120°	119.6	2.6
120°-130°	148.9	3.2
130°-140°	153.3	3.3
140°-150°	136.3	3.0
150°-160°	103.9	2.3
160°-170°	51.8	1.1
170°-180°	13.6	0.3
0°-90°	3768.0	82.0
0°-180°	4593.3	100.0

Coefficient of Utilization



REPORT NUMBER: P198343

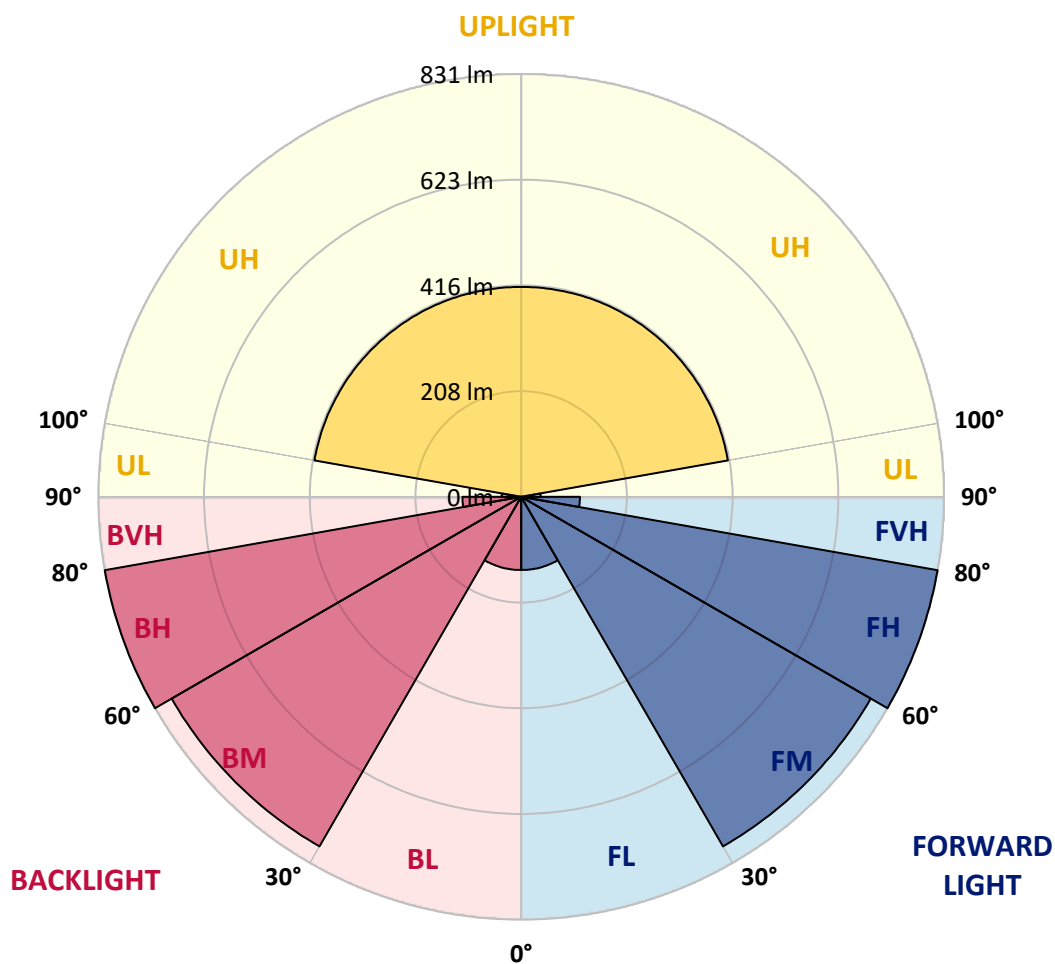
CATALOG NUMBER: TT-C2-LED-E1-WQ-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	143.9	3.1			
FM	(30°-60°)	793.5	17.3			
FH	(60°-80°)	831.1	18.1			G1/1800
FVH	(80°-90°)	115.5	2.5			G2/225
BL	(0°-30°)	143.9	3.1	B1/500		
BM	(30°-60°)	793.5	17.3	B1/1000		
BH	(60°-80°)	831.1	18.1	B2/1000		G1/1800
BVH	(80°-90°)	115.5	2.5			G2/225
UL	(90°-100°)	38.4	0.8		U2/50	
UH	(100°-180°)	412.6	9.0		U3/500	

BUG Rating: B2-U4-G2

Type V Short



REPORT NUMBER: P198343

CATALOG NUMBER: TT-C2-LED-E1-WQ-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6	263.6
2.5°	268.2	267.5	267.5	267.5	267.5	267.5	267.5	267.5	267.5	267.5	268.2
5°	272.7	272.7	272.1	271.4	271.4	270.8	270.8	270.8	271.4	272.1	272.1
7.5°	274.7	274.0	274.0	273.4	272.7	272.7	272.1	272.7	273.4	274.0	274.0
10°	278.6	279.2	279.9	280.6	281.2	280.6	279.2	280.6	280.6	279.9	278.6
12.5°	287.7	287.7	289.7	291.6	291.6	291.0	289.0	291.6	291.0	289.0	287.7
15°	300.1	300.7	300.7	302.7	301.4	300.1	298.1	301.4	301.4	300.1	299.4
17.5°	317.7	316.4	314.4	315.7	317.0	317.0	313.1	317.0	314.4	313.1	315.1
20°	337.2	336.5	335.9	337.2	342.4	340.4	338.5	341.1	337.8	333.3	334.6
22.5°	352.2	353.5	355.4	357.4	362.6	361.3	357.4	361.9	356.7	355.4	351.5
25°	371.0	370.4	375.6	375.6	378.8	376.9	372.3	378.8	373.6	375.6	369.7
27.5°	389.9	389.3	393.2	393.2	399.0	398.4	392.5	399.0	393.2	391.9	389.9
30°	411.4	410.1	410.7	415.9	424.4	424.4	419.2	422.5	415.9	409.4	408.8
32.5°	434.2	431.6	435.5	443.9	448.5	447.2	442.0	447.2	445.2	434.2	431.6
35°	456.3	459.6	466.7	473.9	482.3	483.6	479.1	481.7	474.5	466.1	459.6
37.5°	493.4	498.6	507.7	524.7	537.7	541.6	537.7	536.4	526.0	507.1	498.0
40°	545.5	546.8	559.1	584.5	598.2	600.8	593.6	595.6	583.2	562.4	542.9
42.5°	587.8	585.8	608.0	630.8	645.1	650.9	643.1	645.7	628.8	608.6	587.1
45°	622.3	624.2	647.0	669.8	692.6	703.7	697.8	693.2	668.5	645.7	626.8
47.5°	654.2	663.3	678.9	712.1	740.8	753.1	748.6	742.1	716.0	678.3	663.9
50°	694.5	700.4	719.3	762.2	788.9	793.5	789.6	789.6	764.8	721.2	701.7
52.5°	738.2	738.8	766.8	811.1	844.9	863.1	859.9	850.8	811.7	773.3	741.4
55°	790.2	783.1	826.7	872.9	923.7	953.6	952.3	932.8	879.4	828.6	786.3
57.5°	819.5	820.8	860.5	930.2	979.0	987.5	992.0	980.3	939.9	861.8	828.6
60°	826.0	841.7	878.1	954.9	993.3	1018.1	1019.4	999.8	957.5	883.3	848.2
62.5°	828.6	847.5	892.4	953.6	1018.7	1042.8	1047.3	1027.2	958.8	894.4	843.0
65°	832.5	835.1	893.7	968.6	1022.0	1042.8	1048.0	1027.2	971.8	889.8	833.2
67.5°	816.3	809.8	861.2	942.5	994.6	1019.4	1025.2	1000.5	944.5	862.5	818.2
70°	757.7	760.3	817.6	895.0	952.3	975.7	979.7	953.0	894.4	823.4	772.0
72.5°	695.8	702.4	750.5	828.6	880.1	902.8	910.0	882.0	832.5	759.6	706.3
75°	609.9	622.3	668.5	738.8	790.2	824.7	831.9	795.4	736.2	673.1	621.6
77.5°	514.9	523.3	567.6	628.1	683.5	701.1	707.6	690.0	631.4	575.4	527.3
80°	404.9	408.1	453.0	501.2	544.2	558.5	568.3	546.1	506.4	455.7	408.8
82.5°	277.9	282.5	314.4	358.7	396.4	402.3	414.6	396.4	359.3	320.3	285.1
85°	144.5	151.0	175.8	199.8	229.1	236.3	240.2	226.5	207.0	175.1	151.7
87.5°	31.2	34.5	38.4	49.5	59.2	67.7	73.6	61.2	48.8	41.0	31.2
90°	36.0	36.0	36.0	34.0	29.0	26.0	26.0	28.0	32.0	34.0	34.0
92.5°	40.0	39.0	38.0	34.0	29.0	27.0	27.0	28.0	32.0	35.0	36.0
95°	44.0	43.0	41.0	36.0	32.0	30.0	30.0	30.0	34.0	37.0	39.0
97.5°	42.0	42.0	40.0	37.0	35.0	33.0	32.8	33.0	34.0	36.0	36.0
100°	45.0	45.0	44.0	40.0	38.0	36.0	35.8	36.0	38.0	38.0	37.0
102.5°	51.0	51.0	49.0	46.0	44.0	42.0	42.0	43.0	44.0	42.0	41.0
105°	60.0	60.0	57.0	54.0	53.0	52.0	52.0	54.0	53.0	49.0	48.0
107.5°	72.0	72.0	70.0	67.0	66.0	68.0	68.0	68.0	66.0	60.0	59.0
110°	86.0	86.0	89.0	85.0	86.0	87.0	86.8	84.0	84.0	78.0	74.0

REPORT NUMBER: P198343

CATALOG NUMBER: TT-C2-LED-E1-WQ-8030-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
112.5°	101.0	102.0	108.0	107.0	110.0	107.0	106.2	102.0	105.0	100.0	95.0
115°	121.0	122.0	128.0	128.0	129.0	124.0	123.2	121.0	125.0	123.0	116.0
117.5°	140.0	141.0	144.0	141.0	141.0	136.0	135.8	138.0	141.0	139.0	133.0
120°	152.0	153.0	155.0	149.0	149.0	147.0	147.2	150.0	153.0	148.0	145.0
122.5°	161.0	162.0	164.0	154.0	155.0	158.0	158.0	159.0	162.0	155.0	153.0
125°	169.0	169.0	172.0	163.0	165.0	168.0	167.8	167.0	168.0	163.0	160.0
127.5°	177.0	177.0	181.0	171.0	176.0	178.0	177.4	176.0	175.0	173.0	166.0
130°	187.0	188.0	191.0	179.0	186.0	186.0	185.4	183.0	183.0	184.0	171.0
132.5°	198.0	199.0	201.0	186.0	193.0	195.0	194.2	190.0	192.0	192.0	179.0
135°	210.0	210.0	209.0	192.0	199.0	201.0	200.2	196.0	201.0	199.0	185.0
137.5°	221.0	219.0	213.0	197.0	205.0	208.0	207.0	203.0	210.0	204.0	191.0
140°	229.0	226.0	216.0	200.0	207.0	213.0	212.8	212.0	217.0	209.0	195.0
142.5°	235.0	231.0	218.0	201.0	208.0	218.0	218.0	220.0	223.0	211.0	198.0
145°	235.0	230.0	218.0	202.0	211.0	223.0	223.4	230.0	227.0	211.0	201.0
147.5°	230.0	227.0	219.0	207.0	216.0	229.0	229.8	239.0	229.0	212.0	204.0
150°	224.0	221.0	220.0	214.0	222.0	235.0	235.8	242.0	232.0	214.0	210.0
152.5°	216.0	214.0	221.0	220.0	230.0	241.0	241.0	242.0	235.0	219.0	215.0
155°	208.0	207.0	219.0	224.0	237.0	243.0	242.2	238.0	234.0	224.0	220.0
157.5°	203.0	203.0	216.0	224.0	234.0	235.0	234.0	228.0	229.0	226.0	222.0
160°	199.0	198.0	210.0	213.0	219.0	219.0	218.4	215.0	219.0	221.0	218.0
162.5°	185.0	184.0	193.0	193.0	198.0	198.0	197.6	196.0	200.0	204.0	207.0
165°	169.0	167.0	173.0	173.0	176.0	177.0	176.6	176.0	181.0	185.0	190.0
167.5°	154.0	152.0	156.0	155.0	159.0	159.0	158.8	160.0	165.0	168.0	172.0
170°	142.0	141.0	145.0	144.0	147.0	147.0	147.0	148.0	152.0	155.0	159.0
172.5°	137.0	135.0	139.0	138.0	141.0	141.0	140.8	141.0	145.0	146.0	149.0
175°	136.0	134.0	137.0	137.0	139.0	139.0	138.8	138.0	141.0	141.0	143.0
177.5°	137.0	136.0	139.0	138.0	140.0	139.0	138.8	138.0	140.0	140.0	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: P198343

CATALOG NUMBER: TT-C2-LED-E1-WQ-8030-UPL

CANDELA DISTRIBUTION (continued):

	90°
0°	263.6
2.5°	267.5
5°	272.1
7.5°	274.0
10°	278.6
12.5°	287.1
15°	300.1
17.5°	316.4
20°	333.9
22.5°	349.6
25°	368.4
27.5°	389.9
30°	412.0
32.5°	430.3
35°	455.7
37.5°	497.3
40°	547.4
42.5°	587.8
45°	621.0
47.5°	658.1
50°	695.2
52.5°	742.7
55°	789.6
57.5°	813.7
60°	828.6
62.5°	840.4
65°	841.7
67.5°	807.8
70°	756.4
72.5°	697.8
75°	611.9
77.5°	521.4
80°	404.9
82.5°	284.5
85°	149.1
87.5°	29.3
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: P198343

CATALOG NUMBER: TT-C2-LED-E1-WQ-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)