

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: P198278

Luminaire Tested: **TT-C1-LED-E1-WQ-CG-8030-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198278
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND SCALED
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C1-LED-E1-WQ-CG-8030-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
WIDE DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: (168) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3795.3 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U4 - G1

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



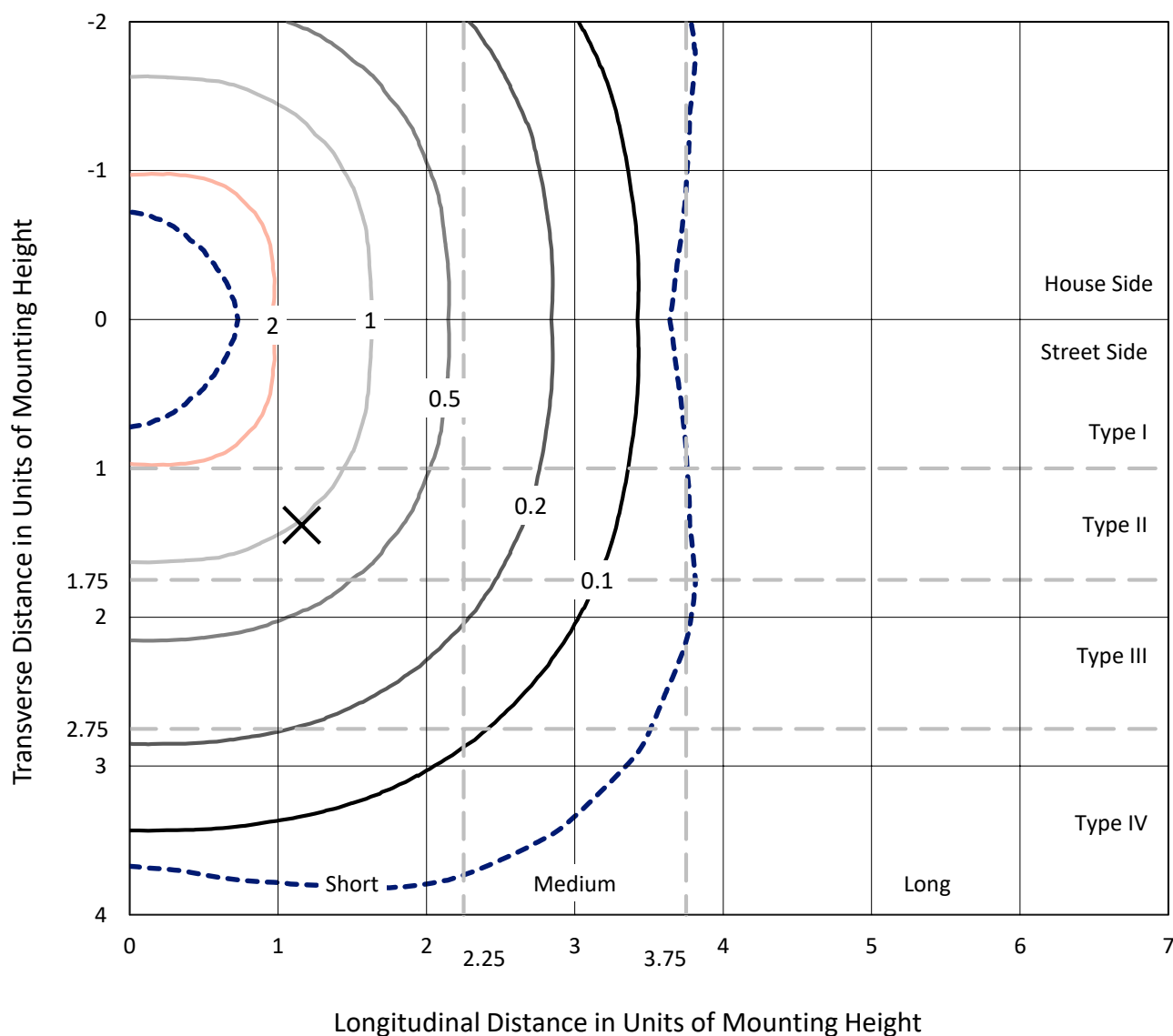
REPORT NUMBER: P198278

CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

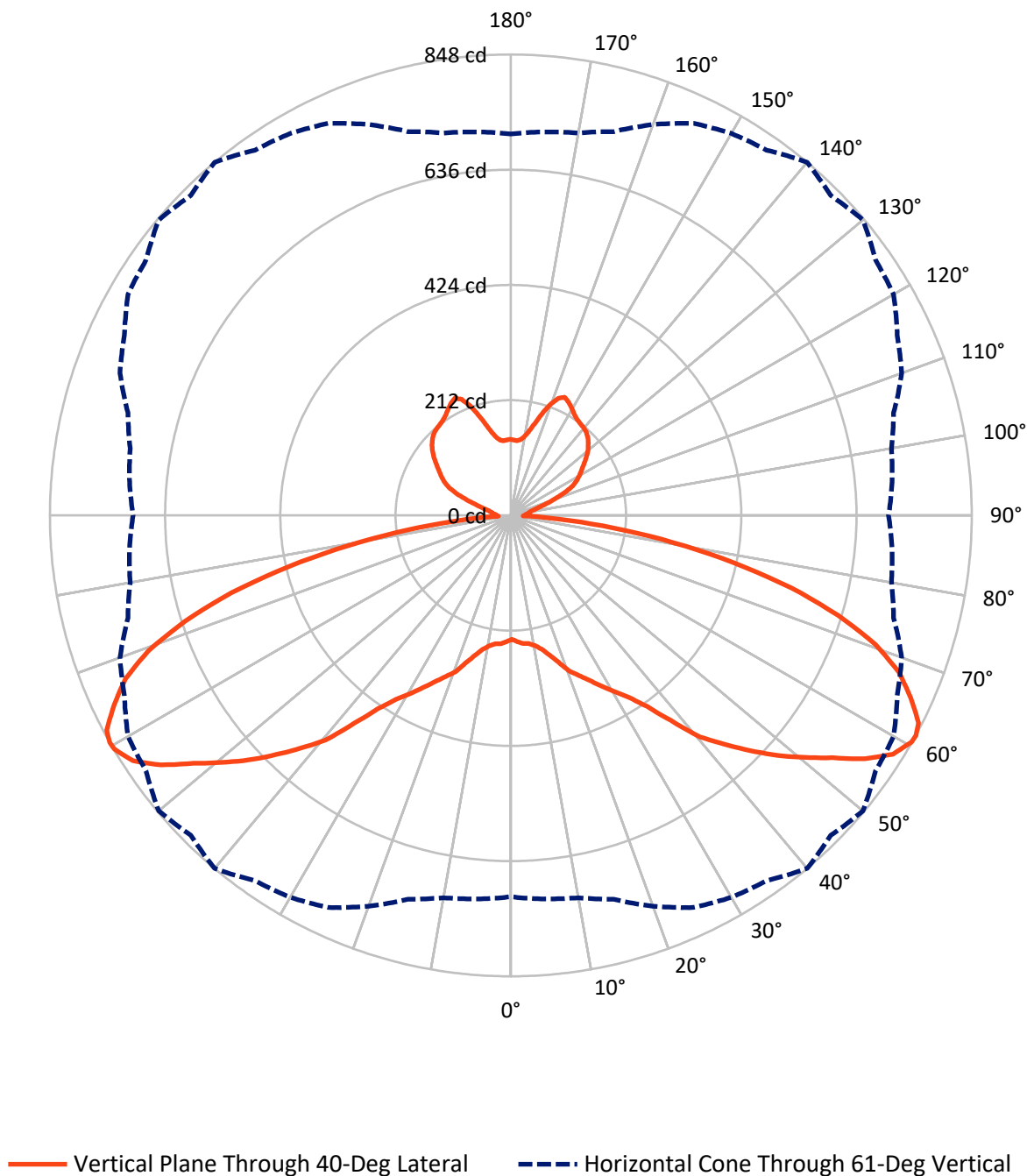


Based on 10 foot mounting height. Maximum calculated value = 2.5 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P198278

CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

Luminous Intensity Polar Plot



REPORT NUMBER: P198278

CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

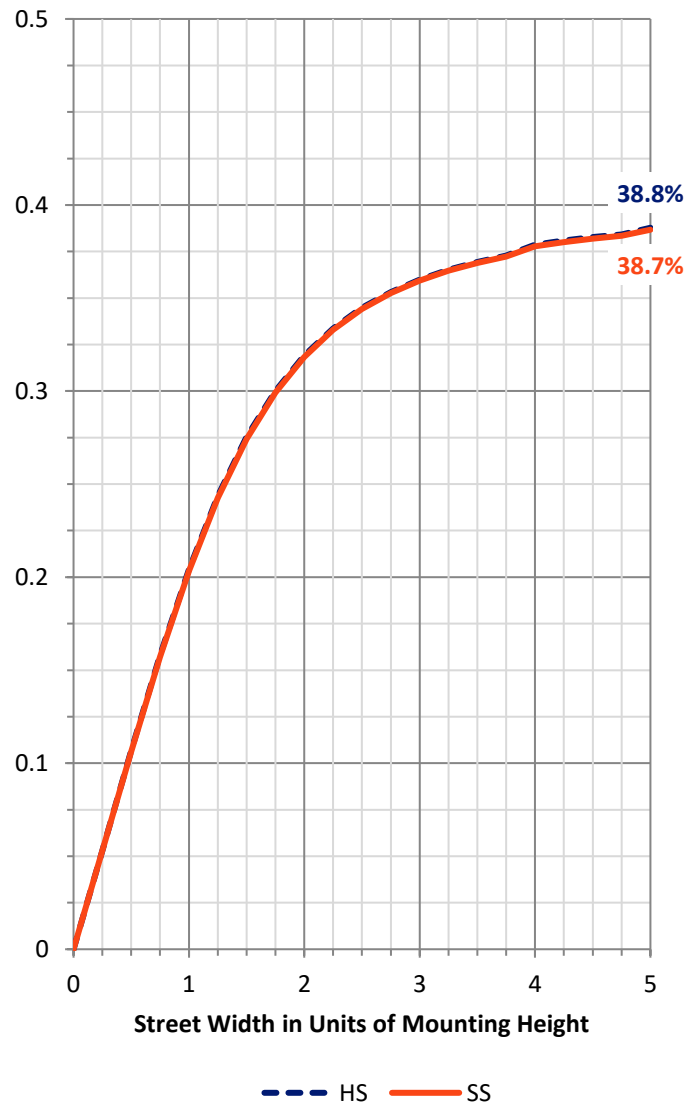
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1485.6	412.0	1897.6
	% Fixture	39.1	10.9	50.0
Street Side	Lumens	1485.6	412.0	1897.6
	% Fixture	39.1	10.9	50.0
Total	Lumens	2971.3	824.0	3795.3
	% Fixture	78.3	21.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.7	0.6
10°-20°	76.7	2.0
20°-30°	155.6	4.1
30°-40°	270.6	7.1
40°-50°	455.4	12.0
50°-60°	656.2	17.3
60°-70°	728.1	19.2
70°-80°	494.5	13.0
80°-90°	111.5	2.9
90°-100°	38.3	1.0
100°-110°	59.4	1.6
110°-120°	119.3	3.1
120°-130°	148.7	3.9
130°-140°	153.2	4.0
140°-150°	136.0	3.6
150°-160°	103.7	2.7
160°-170°	51.8	1.4
170°-180°	13.6	0.4
0°-90°	2971.3	78.3
0°-180°	3795.3	100.0

Coefficient of Utilization



REPORT NUMBER: P198278

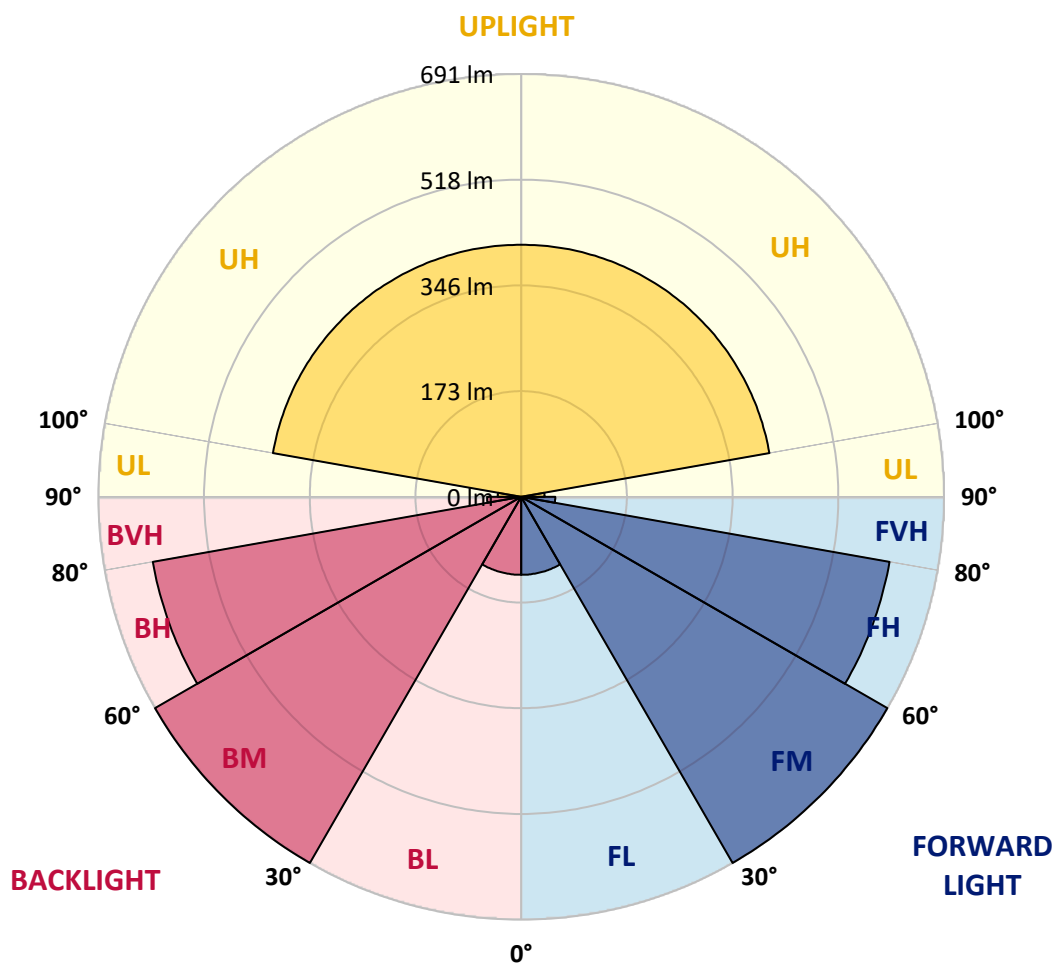
CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	127.5	3.4			
FM	(30°-60°)	691.1	18.2			
FH	(60°-80°)	611.3	16.1			G0/660
FVH	(80°-90°)	55.7	1.5			G1/100
BL	(0°-30°)	127.5	3.4	B1/500		
BM	(30°-60°)	691.1	18.2	B1/1000		
BH	(60°-80°)	611.3	16.1	B2/1000		G0/660
BVH	(80°-90°)	55.7	1.5			G1/100
UL	(90°-100°)	38.3	1.0		U2/50	
UH	(100°-180°)	412.0	10.9		U3/500	

BUG Rating: B2-U4-G1

Type V Short



REPORT NUMBER: P198278

CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	227.9	227.9	227.9	227.9	227.9	227.9	227.9	227.9	227.9	227.9	227.9
2.5°	233.3	233.3	233.3	233.3	233.3	232.7	233.3	232.7	232.7	232.7	232.7
5°	235.1	235.7	235.7	235.7	235.7	236.3	236.3	236.9	236.9	236.9	236.9
7.5°	236.9	236.9	236.9	236.9	236.9	236.9	237.5	237.5	238.1	238.1	238.7
10°	244.1	244.1	244.7	244.7	244.1	244.1	244.1	243.5	243.5	242.9	242.9
12.5°	254.3	254.3	254.9	255.5	255.5	254.9	254.3	253.1	252.5	252.5	252.5
15°	262.1	262.7	263.9	265.1	265.7	265.7	266.3	266.3	266.3	265.7	265.1
17.5°	277.1	277.1	277.7	278.3	278.3	278.9	280.1	281.3	283.7	284.3	282.5
20°	298.7	299.3	301.1	300.5	300.5	301.7	302.9	303.5	305.3	306.5	306.5
22.5°	314.9	316.1	318.5	318.5	317.9	318.5	319.7	319.7	319.7	319.1	320.3
25°	327.5	328.7	330.5	330.5	331.7	334.7	338.3	337.7	335.9	335.9	335.3
27.5°	344.3	344.9	346.1	346.1	347.9	349.7	352.1	354.5	355.7	355.1	353.9
30°	365.3	366.5	367.7	365.9	368.9	370.7	371.9	371.9	376.7	379.1	374.9
32.5°	380.9	383.3	385.7	387.5	393.5	396.5	394.7	396.5	398.9	401.3	401.3
35°	406.7	409.1	410.9	412.1	418.1	422.3	427.1	431.9	431.3	429.5	433.1
37.5°	443.9	446.3	448.1	450.5	458.3	461.3	464.9	475.1	478.7	473.9	476.3
40°	483.5	487.7	493.7	500.9	512.3	515.9	521.9	529.1	535.7	538.1	532.1
42.5°	517.7	522.5	523.7	535.1	548.9	559.6	568.0	569.8	575.8	581.2	577.0
45°	554.2	558.4	561.4	571.0	578.8	593.8	607.6	614.2	617.2	616.6	621.4
47.5°	588.4	593.2	597.4	607.6	617.2	629.8	638.8	654.4	659.8	652.6	660.4
50°	609.4	615.4	620.8	640.0	656.8	670.0	677.2	690.4	700.0	695.2	697.0
52.5°	644.2	646.6	650.8	661.6	683.8	714.4	721.6	728.8	740.8	746.8	736.0
55°	688.6	695.2	701.2	715.0	726.4	749.2	782.2	791.2	790.6	809.2	792.4
57.5°	698.2	707.8	719.8	745.0	767.2	780.4	801.4	826.6	829.0	830.2	832.6
60°	699.4	705.4	713.2	734.2	773.2	797.2	809.2	825.4	847.0	831.4	847.6
61°	701.8	708.4	714.4	731.2	765.4	796.0	811.6	820.6	848.2	832.6	845.8
62.5°	697.6	705.4	714.4	730.6	753.4	784.6	814.6	814.6	842.2	832.0	839.2
65°	672.4	679.6	697.0	718.0	745.6	761.8	793.0	812.8	808.6	826.6	808.6
67.5°	629.8	635.8	650.8	675.4	705.4	728.2	742.6	774.4	770.2	788.8	768.4
70°	569.8	577.6	596.2	613.0	641.2	665.2	684.4	703.6	712.0	710.2	711.4
72.5°	497.9	503.3	520.1	538.7	560.8	587.8	605.2	617.2	630.4	629.8	632.2
75°	414.5	419.3	433.7	447.5	469.1	490.1	509.9	522.5	533.3	532.7	530.3
77.5°	319.7	325.1	341.3	353.3	363.5	386.9	401.9	410.3	419.3	419.3	420.5
80°	223.1	226.7	239.3	251.9	261.5	272.9	292.1	293.9	304.1	301.7	304.1
82.5°	134.4	136.8	146.4	153.6	160.2	171.0	180.0	183.6	189.5	187.1	190.7
85°	60.6	61.8	67.8	72.0	75.0	81.0	85.8	87.6	90.6	90.0	92.4
87.5°	12.6	13.8	15.6	16.8	17.4	19.8	21.6	21.6	22.8	22.8	23.4
90°	36.0	36.0	36.0	36.0	35.0	34.0	31.0	29.0	27.0	26.0	26.0
92.5°	40.0	39.0	39.0	38.0	36.0	34.0	32.0	29.0	27.0	27.0	27.0
95°	44.0	43.0	42.0	41.0	38.0	36.0	34.0	32.0	31.0	30.0	30.0
97.5°	42.0	42.0	41.0	40.0	38.0	37.0	36.0	35.0	34.0	33.0	32.0
100°	45.0	45.0	45.0	44.0	42.0	40.0	39.0	38.0	36.0	36.0	35.0
102.5°	51.0	51.0	50.0	49.0	47.0	46.0	45.0	44.0	42.0	42.0	42.0
105°	60.0	60.0	59.0	57.0	55.0	54.0	53.0	53.0	51.0	52.0	52.0
107.5°	72.0	72.0	72.0	70.0	68.0	67.0	66.0	66.0	66.0	68.0	68.0

REPORT NUMBER: P198278

CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	86.0	86.0	87.0	89.0	86.0	85.0	85.0	86.0	86.0	87.0	86.0
112.5°	101.0	102.0	104.0	108.0	106.0	107.0	107.0	110.0	108.0	107.0	103.0
115°	121.0	122.0	123.0	128.0	126.0	128.0	127.0	129.0	126.0	124.0	120.0
117.5°	140.0	141.0	141.0	144.0	141.0	141.0	140.0	141.0	138.0	136.0	135.0
120°	152.0	153.0	154.0	155.0	151.0	149.0	147.0	149.0	147.0	147.0	148.0
122.5°	161.0	162.0	163.0	164.0	159.0	154.0	153.0	155.0	156.0	158.0	158.0
125°	169.0	169.0	170.0	172.0	168.0	163.0	160.0	165.0	166.0	168.0	167.0
127.5°	177.0	177.0	179.0	181.0	177.0	171.0	170.0	176.0	177.0	178.0	175.0
130°	187.0	188.0	190.0	191.0	185.0	179.0	179.0	186.0	187.0	186.0	183.0
132.5°	198.0	199.0	200.0	201.0	193.0	186.0	187.0	193.0	195.0	195.0	191.0
135°	210.0	210.0	211.0	209.0	199.0	192.0	193.0	199.0	202.0	201.0	197.0
137.5°	221.0	219.0	217.0	213.0	203.0	197.0	198.0	205.0	207.0	208.0	203.0
140°	229.0	226.0	222.0	216.0	205.0	200.0	201.0	207.0	210.0	213.0	212.0
142.5°	235.0	231.0	225.0	218.0	206.0	201.0	202.0	208.0	212.0	218.0	218.0
145°	235.0	230.0	225.0	218.0	207.0	202.0	204.0	211.0	215.0	223.0	225.0
147.5°	230.0	227.0	223.0	219.0	210.0	207.0	209.0	216.0	220.0	229.0	233.0
150°	224.0	221.0	219.0	220.0	215.0	214.0	216.0	222.0	227.0	235.0	239.0
152.5°	216.0	214.0	216.0	221.0	220.0	220.0	224.0	230.0	234.0	241.0	241.0
155°	208.0	207.0	211.0	219.0	222.0	224.0	229.0	237.0	239.0	243.0	239.0
157.5°	203.0	203.0	207.0	216.0	220.0	224.0	229.0	234.0	232.0	235.0	230.0
160°	199.0	198.0	203.0	210.0	212.0	213.0	216.0	219.0	216.0	219.0	216.0
162.5°	185.0	184.0	188.0	193.0	194.0	193.0	196.0	198.0	195.0	198.0	196.0
165°	169.0	167.0	169.0	173.0	173.0	173.0	175.0	176.0	174.0	177.0	175.0
167.5°	154.0	152.0	153.0	156.0	156.0	155.0	157.0	159.0	157.0	159.0	158.0
170°	142.0	141.0	142.0	145.0	144.0	144.0	146.0	147.0	146.0	147.0	147.0
172.5°	137.0	135.0	136.0	139.0	139.0	138.0	140.0	141.0	140.0	141.0	140.0
175°	136.0	134.0	135.0	137.0	137.0	137.0	138.0	139.0	138.0	139.0	138.0
177.5°	137.0	136.0	136.0	139.0	138.0	138.0	139.0	140.0	139.0	139.0	138.0
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: P198278

CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	227.9	227.9	227.9	227.9	227.9	227.9	227.9	227.9
2.5°	232.7	233.3	232.7	232.7	232.7	233.3	232.7	233.3
5°	236.9	236.9	236.9	236.3	235.7	235.7	235.7	235.1
7.5°	239.3	239.3	238.7	238.1	237.5	238.1	238.1	238.1
10°	244.1	245.3	245.9	245.9	245.3	245.3	245.3	244.7
12.5°	252.5	253.1	254.9	255.5	256.1	255.5	253.7	253.1
15°	263.9	263.9	264.5	265.7	265.7	263.3	261.5	260.9
17.5°	280.1	279.5	278.3	278.3	278.9	277.7	275.9	275.9
20°	304.7	302.3	301.1	299.3	301.1	301.1	297.5	295.7
22.5°	322.1	319.7	316.7	314.9	317.3	319.1	314.9	312.5
25°	337.1	337.7	332.9	330.5	331.1	332.3	326.9	326.3
27.5°	352.7	353.9	351.5	347.3	346.1	348.5	344.3	343.1
30°	371.9	371.3	372.5	367.1	364.7	366.5	365.9	362.9
32.5°	397.1	394.1	395.3	390.5	385.7	385.7	382.1	378.5
35°	431.9	425.3	422.3	419.3	410.3	410.9	407.9	404.9
37.5°	477.5	467.3	458.9	460.7	447.5	446.3	444.5	440.3
40°	529.7	524.9	515.3	509.9	496.1	489.5	487.1	479.3
42.5°	568.6	569.8	555.4	545.9	535.1	523.7	522.5	514.7
45°	610.6	606.4	593.2	577.6	572.8	559.0	557.2	549.5
47.5°	652.6	638.2	630.4	614.2	606.4	589.0	590.2	583.0
50°	692.2	675.4	668.2	649.0	637.0	619.6	615.4	603.4
52.5°	734.2	718.6	707.2	682.6	665.2	652.0	644.8	640.0
55°	790.6	775.0	749.2	726.4	712.0	690.4	688.0	679.6
57.5°	817.0	805.6	777.4	761.2	735.4	713.2	706.0	689.2
60°	820.0	815.2	785.2	769.6	731.8	713.8	704.8	694.6
61°	819.4	813.4	784.6	765.4	729.4	711.4	704.2	695.2
62.5°	817.0	809.8	778.0	758.2	724.6	707.2	701.2	688.0
65°	809.2	789.4	761.8	743.8	707.2	691.6	677.2	664.0
67.5°	775.0	737.8	726.4	703.6	666.4	649.0	635.8	624.4
70°	701.8	677.2	665.2	637.0	607.0	592.6	577.6	563.2
72.5°	616.0	599.8	589.6	555.4	533.3	518.9	505.1	491.3
75°	520.1	508.1	489.5	463.7	443.9	429.5	416.9	410.3
77.5°	408.5	400.7	386.3	360.5	349.7	337.1	324.5	314.3
80°	293.9	287.9	276.5	257.9	248.9	236.3	227.3	218.9
82.5°	183.0	178.2	171.6	157.8	154.2	146.4	138.0	132.0
85°	87.6	84.6	82.2	73.2	72.6	66.0	63.0	59.4
87.5°	22.8	22.2	21.0	18.0	17.4	15.6	14.4	12.6
90°	28.0	30.0	32.0	33.0	34.0	34.0	34.0	34.0
92.5°	28.0	30.0	32.0	33.0	35.0	36.0	36.0	36.0
95°	30.0	32.0	34.0	35.0	37.0	38.0	39.0	38.0
97.5°	33.0	34.0	34.0	35.0	36.0	36.0	36.0	36.0
100°	36.0	37.0	38.0	38.0	38.0	38.0	37.0	37.0
102.5°	43.0	44.0	44.0	42.0	42.0	41.0	41.0	41.0
105°	54.0	54.0	53.0	51.0	49.0	48.0	48.0	49.0
107.5°	68.0	68.0	66.0	63.0	60.0	59.0	59.0	60.0

REPORT NUMBER: P198278

CATALOG NUMBER: TT-C1-LED-E1-WQ-CG-8030-UPL

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
110°	84.0	83.0	84.0	81.0	78.0	76.0	74.0	75.0
112.5°	102.0	102.0	105.0	103.0	100.0	98.0	95.0	94.0
115°	121.0	123.0	125.0	124.0	123.0	121.0	116.0	113.0
117.5°	138.0	140.0	141.0	139.0	139.0	139.0	133.0	129.0
120°	150.0	151.0	153.0	148.0	148.0	148.0	145.0	142.0
122.5°	159.0	160.0	162.0	156.0	155.0	156.0	153.0	150.0
125°	167.0	167.0	168.0	164.0	163.0	164.0	160.0	158.0
127.5°	176.0	175.0	175.0	173.0	173.0	173.0	166.0	163.0
130°	183.0	182.0	183.0	181.0	184.0	181.0	171.0	169.0
132.5°	190.0	189.0	192.0	189.0	192.0	190.0	179.0	176.0
135°	196.0	197.0	201.0	199.0	199.0	195.0	185.0	184.0
137.5°	203.0	205.0	210.0	207.0	204.0	198.0	191.0	190.0
140°	212.0	214.0	217.0	214.0	209.0	202.0	195.0	195.0
142.5°	220.0	222.0	223.0	217.0	211.0	204.0	198.0	198.0
145°	230.0	230.0	227.0	217.0	211.0	205.0	201.0	202.0
147.5°	239.0	236.0	229.0	218.0	212.0	207.0	204.0	206.0
150°	242.0	240.0	232.0	220.0	214.0	211.0	210.0	211.0
152.5°	242.0	241.0	235.0	223.0	219.0	217.0	215.0	216.0
155°	238.0	237.0	234.0	227.0	224.0	223.0	220.0	219.0
157.5°	228.0	229.0	229.0	226.0	226.0	225.0	222.0	219.0
160°	215.0	217.0	219.0	219.0	221.0	222.0	218.0	215.0
162.5°	196.0	199.0	200.0	201.0	204.0	208.0	207.0	207.0
165°	176.0	179.0	181.0	181.0	185.0	189.0	190.0	192.0
167.5°	160.0	163.0	165.0	164.0	168.0	171.0	172.0	174.0
170°	148.0	150.0	152.0	152.0	155.0	158.0	159.0	160.0
172.5°	141.0	144.0	145.0	144.0	146.0	149.0	149.0	151.0
175°	138.0	140.0	141.0	140.0	141.0	143.0	143.0	144.0
177.5°	138.0	140.0	140.0	138.0	140.0	141.0	141.0	141.0
180°	140.0	140.0	140.0	140.0	140.0	140.0	140.0	140.0

(END OF REPORT)