

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: P228311

Luminaire Tested: **ISS-AF-800-LED-E1-SL4-8030-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29763)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-800-LED-E1-SL4-8030-ULG
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV W/SPILL CONTROL, WITH UPLIGHT
GLOW
Light Source: (16) 3000K CCT, 80 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4956.2 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U5 - G1

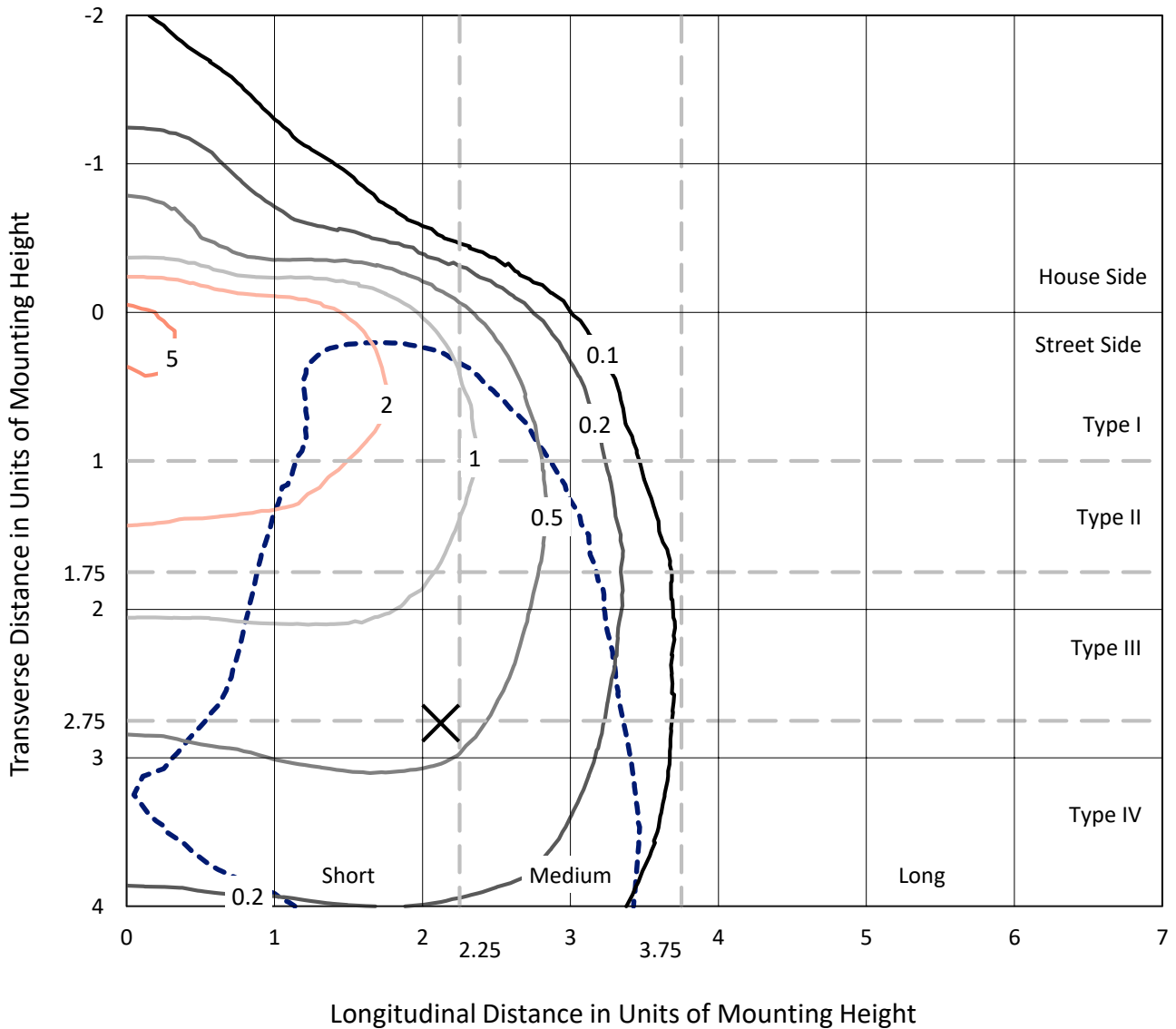
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

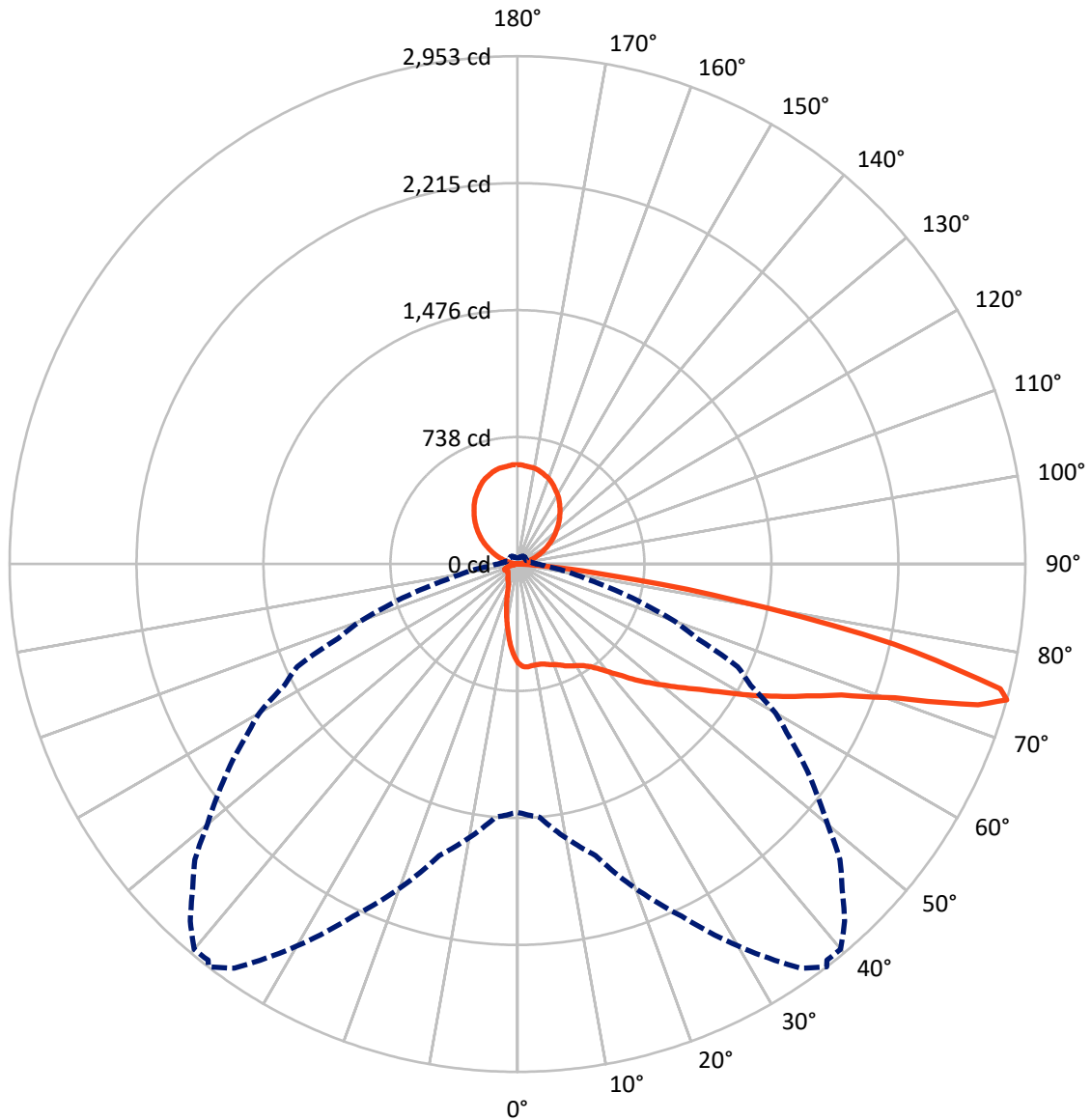


Based on 10 foot mounting height. Maximum calculated value = 6.1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 37.5-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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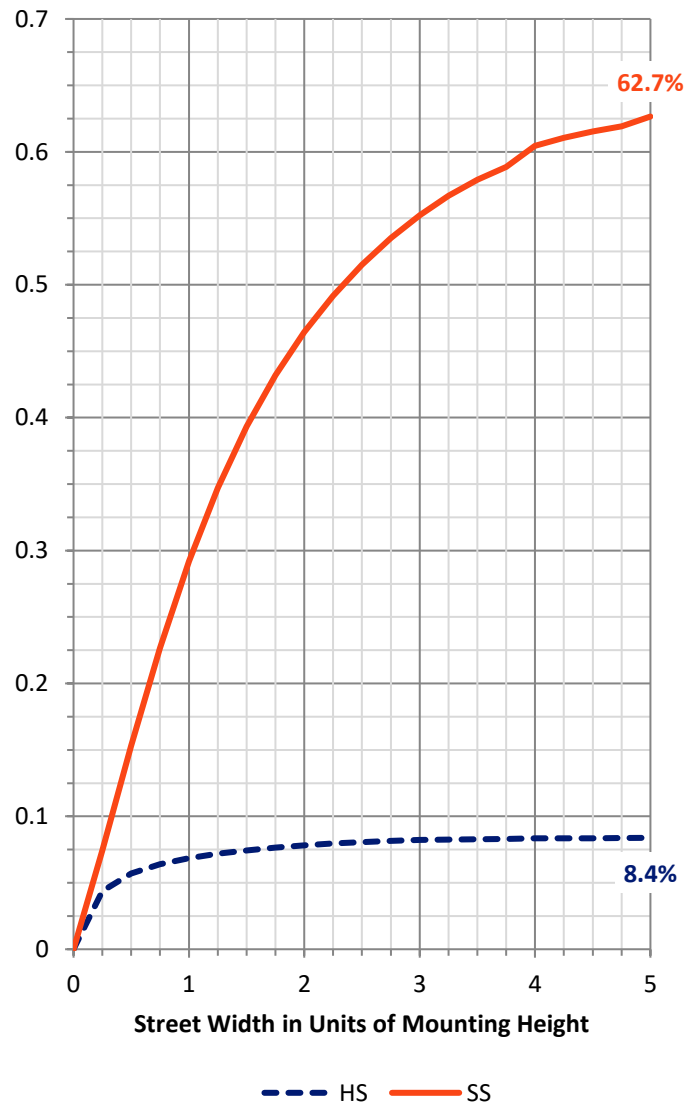
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	418.6	713.1	1131.7
	% Fixture	8.4	14.4	22.8
Street Side	Lumens	3111.4	713.1	3824.5
	% Fixture	62.8	14.4	77.2
Total	Lumens	3530.0	1426.2	4956.2
	% Fixture	71.2	28.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	1.0
10°-20°	127.8	2.6
20°-30°	198.0	4.0
30°-40°	293.7	5.9
40°-50°	451.7	9.1
50°-60°	667.7	13.5
60°-70°	890.1	18.0
70°-80°	768.3	15.5
80°-90°	82.6	1.7
90°-100°	4.7	0.1
100°-110°	69.0	1.4
110°-120°	153.0	3.1
120°-130°	223.9	4.5
130°-140°	265.6	5.4
140°-150°	269.3	5.4
150°-160°	231.1	4.7
160°-170°	155.1	3.1
170°-180°	54.3	1.1
0°-90°	3530.0	71.2
0°-180°	4956.2	100.0



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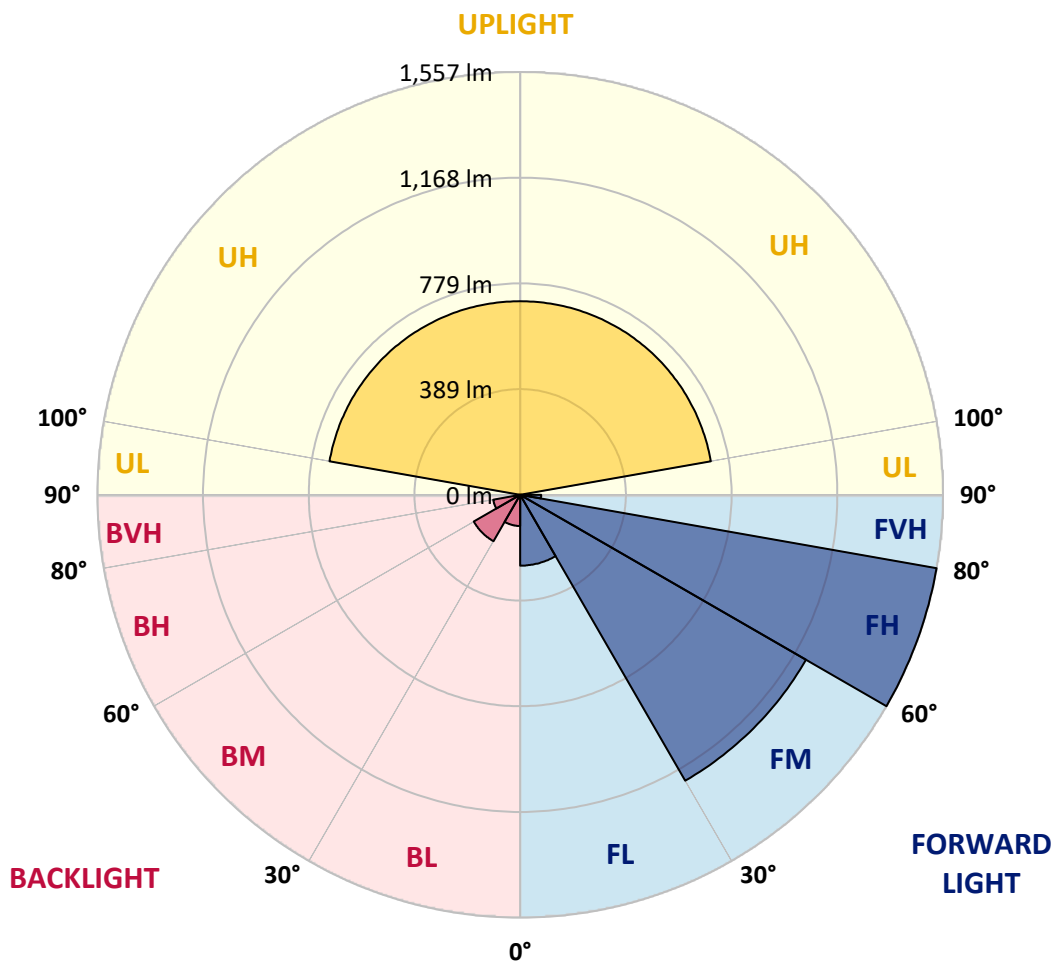
CATALOG NUMBER: ISS-AF-800-LED-E1-SL4-8030-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	261.0	5.3			
FM	(30°-60°)	1215.8	24.5			
FH	(60°-80°)	1557.4	31.4			G1/1800
FVH	(80°-90°)	77.2	1.6			G1/100
BL	(0°-30°)	114.9	2.3	B1/500		
BM	(30°-60°)	197.3	4.0	B0/220		
BH	(60°-80°)	100.9	2.0	B0/110		G0/110
BVH	(80°-90°)	5.4	0.1			G0/10
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	713.1	14.4		U4/1000	

BUG Rating: B1-U5-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	38°	40°	42.5°	45°	47.5°
0°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0
2.5°	609.0	607.7	605.0	603.7	601.1	597.1	601.1	595.8	593.2	595.8	590.5
5°	619.5	618.2	615.6	610.3	607.7	601.1	605.0	598.4	597.1	599.8	593.2
7.5°	620.9	618.2	614.3	607.7	605.0	597.1	599.8	591.9	589.2	591.9	587.9
10°	616.9	615.6	611.6	601.1	598.4	595.8	594.5	589.2	587.9	586.6	585.3
12.5°	610.3	610.3	607.7	603.7	602.4	597.1	598.4	593.2	594.5	591.9	589.2
15°	607.7	606.4	609.0	611.6	611.6	603.7	609.0	605.0	602.4	603.7	599.8
17.5°	605.0	606.4	615.6	620.9	623.5	615.6	623.5	615.6	610.3	616.9	610.3
20°	603.7	607.7	623.5	635.4	636.7	623.5	636.7	623.5	623.5	631.4	619.5
22.5°	610.3	616.9	639.3	652.5	655.1	638.0	653.8	636.7	636.7	643.3	631.4
25°	631.4	638.0	663.0	677.5	674.9	656.4	670.9	653.8	652.5	660.4	644.6
27.5°	659.1	668.3	692.0	705.2	696.0	670.9	692.0	667.0	667.0	678.9	657.8
30°	698.6	705.2	726.3	727.6	715.8	685.4	709.2	681.5	677.5	698.6	672.3
32.5°	742.1	747.4	763.2	754.0	736.9	705.2	732.9	699.9	698.6	721.0	690.7
35°	788.3	793.5	798.8	783.0	767.2	732.9	763.2	730.3	728.9	754.0	725.0
37.5°	835.7	835.7	835.7	817.3	806.7	773.8	801.4	775.1	772.4	798.8	771.1
40°	873.9	876.6	872.6	855.5	850.2	826.5	850.2	826.5	830.4	854.2	831.8
42.5°	905.6	908.2	909.5	895.0	900.3	887.1	905.6	888.4	889.8	916.1	902.9
45°	937.2	935.9	946.4	942.5	958.3	959.6	970.2	963.6	966.2	986.0	982.0
47.5°	970.2	963.6	975.4	992.6	1021.6	1030.8	1037.4	1040.0	1050.6	1059.8	1069.0
50°	1001.8	995.2	1003.1	1041.4	1087.5	1107.3	1108.6	1121.8	1133.6	1146.8	1165.3
52.5°	1034.8	1029.5	1037.4	1091.4	1165.3	1192.9	1189.0	1211.4	1228.5	1243.0	1273.4
55°	1069.0	1063.8	1071.7	1152.1	1248.3	1286.5	1282.6	1314.2	1347.2	1352.4	1386.7
57.5°	1102.0	1095.4	1117.8	1223.3	1347.2	1405.2	1386.7	1435.5	1467.1	1464.5	1511.9
60°	1137.6	1132.3	1167.9	1310.3	1471.1	1546.2	1518.5	1583.1	1605.5	1596.3	1641.1
62.5°	1171.9	1170.5	1229.9	1411.8	1621.3	1693.8	1668.8	1725.5	1741.3	1729.4	1751.8
65°	1203.5	1211.4	1297.1	1513.3	1766.3	1849.4	1815.1	1871.8	1890.3	1881.0	1919.3
67.5°	1256.2	1265.4	1380.1	1642.4	1945.6	2031.3	2002.3	2061.6	2089.3	2086.7	2128.8
70°	1334.0	1351.1	1502.7	1825.7	2218.5	2327.9	2312.1	2384.6	2451.8	2446.5	2488.7
72.5°	1469.8	1497.4	1704.4	2110.4	2666.7	2799.8	2781.3	2822.2	2810.3	2714.1	2636.3
74°	1443.4	1477.7	1754.5	2259.3	2868.3	2952.7	2922.4	2923.7	2815.6	2669.3	2544.1
75°	1347.2	1382.8	1682.0	2240.9	2853.8	2900.0	2856.5	2802.4	2671.9	2523.0	2368.8
77.5°	924.0	970.2	1236.4	1809.8	2297.6	2234.3	2223.8	2120.9	1948.3	1780.8	1583.1
80°	473.2	506.2	639.3	946.4	1363.0	1299.7	1320.8	1237.8	1094.1	972.8	771.1
82.5°	113.4	121.3	188.5	366.5	590.5	540.4	548.4	485.1	402.0	328.2	254.4
85°	59.3	67.2	92.3	101.5	155.5	160.8	156.9	151.6	123.9	104.1	91.0
87.5°	0.0	0.0	0.0	2.6	1.3	0.0	1.3	0.0	0.0	1.3	2.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	2.0	2.0	2.0	3.0	4.0	5.2	5.5	6.5	7.8	9.0	10.0
100°	8.0	8.0	10.0	14.0	22.0	24.0	24.4	26.0	28.0	30.0	30.5
102.5°	28.0	28.0	32.0	38.0	45.0	46.2	46.5	47.5	48.8	50.0	50.2
105°	54.0	54.0	56.0	61.0	66.0	67.0	67.2	68.0	69.0	70.0	70.2
107.5°	78.0	77.0	80.0	84.0	88.0	88.8	88.9	89.5	90.2	91.0	91.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	37.5°	38°	40°	42.5°	45°	47.5°
110°	101.0	102.0	103.0	106.0	110.0	110.5	110.6	111.0	111.5	112.0	112.5
112.5°	124.0	124.0	126.0	129.0	132.0	132.5	132.6	133.0	133.5	134.0	134.5
115°	146.0	147.0	149.0	151.0	154.0	154.5	154.6	155.0	155.5	156.0	156.5
117.5°	169.0	170.0	172.0	174.0	177.0	177.5	177.6	178.0	178.5	179.0	179.2
120°	193.0	195.0	196.0	198.0	201.0	201.2	201.3	201.5	201.8	202.0	202.5
122.5°	219.0	220.0	221.0	223.0	226.0	226.2	226.3	226.5	226.8	227.0	227.2
125°	244.0	246.0	247.0	248.0	251.0	251.2	251.3	251.5	251.8	252.0	252.2
127.5°	267.0	269.0	270.0	272.0	274.0	274.5	274.6	275.0	275.5	276.0	276.5
130°	290.0	292.0	293.0	294.0	298.0	298.2	298.3	298.5	298.8	299.0	299.5
132.5°	313.0	314.0	317.0	318.0	321.0	321.2	321.3	321.5	321.8	322.0	322.8
135°	336.0	337.0	339.0	341.0	345.0	345.0	345.0	345.0	345.0	345.0	345.8
137.5°	359.0	360.0	363.0	364.0	367.0	367.0	367.0	367.0	367.0	367.0	367.5
140°	382.0	383.0	385.0	386.0	388.0	388.2	388.3	388.5	388.8	389.0	389.2
142.5°	404.0	406.0	408.0	407.0	410.0	410.0	410.0	410.0	410.0	410.0	410.5
145°	425.0	426.0	428.0	428.0	431.0	431.2	431.3	431.5	431.8	432.0	432.5
147.5°	444.0	444.0	447.0	448.0	452.0	452.2	452.3	452.5	452.8	453.0	453.2
150°	461.0	462.0	464.0	465.0	469.0	469.2	469.3	469.5	469.8	470.0	470.2
152.5°	479.0	480.0	483.0	482.0	485.0	485.2	485.3	485.5	485.8	486.0	486.2
155°	499.0	500.0	502.0	501.0	503.0	503.0	503.0	503.0	503.0	503.0	503.2
157.5°	513.0	515.0	517.0	516.0	519.0	519.0	519.0	519.0	519.0	519.0	519.0
160°	525.0	527.0	529.0	529.0	532.0	532.0	532.0	532.0	532.0	532.0	532.0
162.5°	535.0	536.0	539.0	538.0	541.0	541.0	541.0	541.0	541.0	541.0	541.2
165°	546.0	547.0	549.0	548.0	552.0	552.0	552.0	552.0	552.0	552.0	552.2
167.5°	555.0	556.0	559.0	558.0	561.0	560.8	560.7	560.5	560.2	560.0	560.0
170°	562.0	563.0	566.0	565.0	567.0	566.8	566.7	566.5	566.2	566.0	565.8
172.5°	565.0	566.0	569.0	567.0	569.0	568.8	568.7	568.5	568.2	568.0	568.2
175°	567.0	569.0	570.0	569.0	572.0	572.0	572.0	572.0	572.0	572.0	572.2
177.5°	572.0	573.0	575.0	574.0	578.0	577.8	577.7	577.5	577.2	577.0	577.0
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0



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CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0
2.5°	594.5	591.9	594.5	586.6	590.5	583.9	586.6	580.0	582.6	577.4	578.7
5°	597.1	590.5	594.5	587.9	589.2	583.9	582.6	580.0	578.7	574.7	572.1
7.5°	590.5	585.3	583.9	581.3	577.4	578.7	573.4	572.1	568.1	568.1	560.2
10°	583.9	585.3	577.4	580.0	573.4	574.7	565.5	568.1	561.5	566.8	554.9
12.5°	589.2	590.5	583.9	587.9	576.0	578.7	570.8	574.7	565.5	572.1	557.6
15°	601.1	599.8	597.1	597.1	585.3	590.5	581.3	583.9	574.7	582.6	566.8
17.5°	611.6	610.3	606.4	605.0	597.1	598.4	589.2	594.5	583.9	590.5	574.7
20°	623.5	616.9	615.6	614.3	605.0	605.0	598.4	601.1	590.5	598.4	580.0
22.5°	632.7	627.4	626.1	620.9	614.3	616.9	607.7	609.0	598.4	606.4	590.5
25°	647.2	640.6	640.6	632.7	628.8	627.4	622.2	626.1	615.6	620.9	606.4
27.5°	667.0	652.5	657.8	649.9	647.2	645.9	643.3	645.9	638.0	641.9	627.4
30°	685.4	667.0	674.9	664.4	669.6	664.4	668.3	664.4	664.4	664.4	657.8
32.5°	710.5	688.1	703.9	688.1	698.6	690.7	703.9	696.0	701.3	699.9	697.3
35°	746.1	719.7	742.1	721.0	739.5	728.9	747.4	743.4	754.0	748.7	754.0
37.5°	793.5	765.9	792.2	772.4	794.9	779.0	805.4	802.8	825.2	817.3	825.2
40°	852.9	833.1	852.9	838.4	862.1	855.5	883.2	884.5	909.5	905.6	914.8
42.5°	918.8	904.3	924.0	916.1	939.9	945.1	976.8	984.7	1008.4	1015.0	1016.3
45°	989.9	987.3	1003.1	1011.0	1034.8	1050.6	1078.3	1098.0	1124.4	1138.9	1136.3
47.5°	1073.0	1083.5	1094.1	1113.9	1134.9	1167.9	1195.6	1220.6	1250.9	1260.2	1264.1
50°	1166.6	1185.0	1194.3	1221.9	1243.0	1283.9	1322.1	1353.8	1386.7	1382.8	1385.4
52.5°	1265.4	1289.2	1302.4	1335.3	1363.0	1410.4	1443.4	1473.7	1514.6	1504.0	1500.1
55°	1374.9	1410.4	1421.0	1457.9	1481.6	1530.4	1559.4	1612.1	1629.3	1618.7	1596.3
57.5°	1490.8	1533.0	1544.9	1595.0	1606.8	1659.6	1684.6	1720.2	1734.7	1717.6	1688.6
60°	1622.7	1660.9	1670.1	1714.9	1730.8	1779.5	1798.0	1829.6	1840.2	1798.0	1757.1
62.5°	1754.5	1794.0	1799.3	1838.8	1854.7	1896.8	1917.9	1936.4	1931.1	1869.2	1817.8
65°	1904.8	1943.0	1956.2	1995.7	2004.9	2036.6	2053.7	2032.6	2020.8	1927.2	1869.2
67.5°	2143.3	2184.2	2189.5	2198.7	2197.4	2181.6	2173.7	2101.2	2048.4	1875.8	1792.7
70°	2457.1	2426.8	2367.4	2298.9	2248.8	2159.2	2106.4	1957.5	1846.8	1653.0	1513.3
72.5°	2513.7	2414.9	2268.6	2151.3	2030.0	1888.9	1775.6	1550.2	1394.6	1191.6	1044.0
74°	2352.9	2192.1	2037.9	1873.1	1733.4	1527.8	1413.1	1128.4	974.1	768.5	589.2
75°	2159.2	1970.7	1796.7	1587.1	1456.6	1210.1	1102.0	794.9	640.6	456.1	307.1
77.5°	1377.5	1152.1	986.0	743.4	641.9	442.9	324.3	201.7	149.0	130.5	113.4
80°	618.2	440.3	349.3	241.2	201.7	154.2	130.5	105.5	96.2	84.4	80.4
82.5°	197.7	158.2	150.3	134.5	134.5	108.1	92.3	72.5	65.9	56.7	51.4
85°	85.7	80.4	83.0	76.5	77.8	59.3	47.5	35.6	35.6	25.0	22.4
87.5°	2.6	0.0	1.3	0.0	2.6	0.0	1.3	0.0	1.3	0.0	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	11.0	12.0	13.0	11.5	10.0	8.5	7.0	6.5	6.0	5.5	5.0
100°	31.0	31.5	32.0	31.5	31.0	30.5	30.0	29.2	28.5	27.8	27.0
102.5°	50.5	50.8	51.0	50.8	50.5	50.2	50.0	49.5	49.0	48.5	48.0
105°	70.5	70.8	71.0	71.0	71.0	71.0	71.0	70.5	70.0	69.5	69.0
107.5°	92.0	92.5	93.0	92.8	92.5	92.2	92.0	91.8	91.5	91.2	91.0



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CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
110°	113.0	113.5	114.0	114.0	114.0	114.0	114.0	113.8	113.5	113.2	113.0
112.5°	135.0	135.5	136.0	136.0	136.0	136.0	136.0	135.8	135.5	135.2	135.0
115°	157.0	157.5	158.0	158.0	158.0	158.0	158.0	158.0	158.0	158.0	158.0
117.5°	179.5	179.8	180.0	180.2	180.5	180.8	181.0	180.8	180.5	180.2	180.0
120°	203.0	203.5	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0	204.0
122.5°	227.5	227.8	228.0	228.0	228.0	228.0	228.0	228.2	228.5	228.8	229.0
125°	252.5	252.8	253.0	253.2	253.5	253.8	254.0	254.0	254.0	254.0	254.0
127.5°	277.0	277.5	278.0	277.8	277.5	277.2	277.0	277.2	277.5	277.8	278.0
130°	300.0	300.5	301.0	301.0	301.0	301.0	301.0	301.2	301.5	301.8	302.0
132.5°	323.5	324.2	325.0	325.0	325.0	325.0	325.0	325.2	325.5	325.8	326.0
135°	346.5	347.2	348.0	348.0	348.0	348.0	348.0	348.2	348.5	348.8	349.0
137.5°	368.0	368.5	369.0	369.0	369.0	369.0	369.0	369.2	369.5	369.8	370.0
140°	389.5	389.8	390.0	390.0	390.0	390.0	390.0	390.5	391.0	391.5	392.0
142.5°	411.0	411.5	412.0	412.0	412.0	412.0	412.0	412.2	412.5	412.8	413.0
145°	433.0	433.5	434.0	433.8	433.5	433.2	433.0	433.2	433.5	433.8	434.0
147.5°	453.5	453.8	454.0	453.5	453.0	452.5	452.0	452.2	452.5	452.8	453.0
150°	470.5	470.8	471.0	470.5	470.0	469.5	469.0	469.0	469.0	469.0	469.0
152.5°	486.5	486.8	487.0	486.8	486.5	486.2	486.0	486.0	486.0	486.0	486.0
155°	503.5	503.8	504.0	503.8	503.5	503.2	503.0	503.2	503.5	503.8	504.0
157.5°	519.0	519.0	519.0	518.5	518.0	517.5	517.0	517.2	517.5	517.8	518.0
160°	532.0	532.0	532.0	531.5	531.0	530.5	530.0	530.0	530.0	530.0	530.0
162.5°	541.5	541.8	542.0	541.5	541.0	540.5	540.0	539.5	539.0	538.5	538.0
165°	552.5	552.8	553.0	552.2	551.5	550.8	550.0	549.5	549.0	548.5	548.0
167.5°	560.0	560.0	560.0	559.5	559.0	558.5	558.0	558.2	558.5	558.8	559.0
170°	565.5	565.2	565.0	564.8	564.5	564.2	564.0	564.5	565.0	565.5	566.0
172.5°	568.5	568.8	569.0	568.5	568.0	567.5	567.0	567.2	567.5	567.8	568.0
175°	572.5	572.8	573.0	572.2	571.5	570.8	570.0	569.5	569.0	568.5	568.0
177.5°	577.0	577.0	577.0	576.2	575.5	574.8	574.0	574.0	574.0	574.0	574.0
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0



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CANDELA DISTRIBUTION (continued):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0
2.5°	573.4	576.0	574.7	569.4	568.1	564.2	554.9	556.3	551.0	554.9	548.4
5°	568.1	566.8	561.5	554.9	548.4	540.4	533.9	531.2	525.9	523.3	519.4
7.5°	560.2	554.9	545.7	535.2	525.9	515.4	510.1	500.9	498.3	489.0	487.7
10°	557.6	548.4	537.8	524.6	508.8	493.0	491.7	475.9	474.5	460.0	456.1
12.5°	562.9	551.0	537.8	522.0	503.5	481.1	481.1	457.4	456.1	436.3	429.7
15°	573.4	558.9	541.8	523.3	499.6	471.9	470.6	442.9	440.3	416.5	408.6
17.5°	582.6	562.9	547.0	522.0	494.3	462.7	456.1	428.4	423.1	395.5	384.9
20°	589.2	566.8	548.4	519.4	485.1	448.2	439.0	410.0	398.1	370.4	355.9
22.5°	597.1	576.0	551.0	518.0	479.8	436.3	416.5	390.2	373.0	344.0	324.3
25°	609.0	590.5	560.2	522.0	475.9	424.5	398.1	370.4	346.7	317.7	288.7
27.5°	627.4	609.0	573.4	527.3	474.5	412.6	383.6	349.3	320.3	288.7	255.7
30°	653.8	634.0	595.8	541.8	475.9	403.4	367.8	330.9	296.6	259.7	225.4
32.5°	688.1	672.3	624.8	557.6	481.1	395.5	353.3	311.1	268.9	233.3	203.0
35°	735.5	725.0	665.7	587.9	494.3	391.5	338.8	292.6	245.2	209.6	176.6
37.5°	805.4	790.9	725.0	631.4	515.4	388.9	328.2	270.2	225.4	187.2	159.5
40°	893.7	873.9	794.9	684.1	548.4	390.2	319.0	253.1	208.3	167.4	145.0
42.5°	999.2	970.2	880.5	748.7	581.3	392.8	313.7	237.3	195.1	151.6	134.5
45°	1117.8	1084.9	982.0	829.1	628.8	399.4	309.8	224.1	183.2	139.7	127.9
47.5°	1233.8	1200.9	1086.2	909.5	677.5	411.3	312.4	216.2	175.3	133.1	120.0
50°	1347.2	1312.9	1178.4	982.0	719.7	427.1	323.0	217.5	174.0	130.5	116.0
52.5°	1447.4	1405.2	1257.5	1038.7	750.0	437.6	332.2	221.5	175.3	129.2	114.7
55°	1547.5	1493.5	1320.8	1083.5	768.5	439.0	332.2	222.8	176.6	129.2	113.4
57.5°	1622.7	1560.7	1369.6	1109.9	775.1	432.4	324.3	216.2	168.7	127.9	110.7
60°	1670.1	1604.2	1403.9	1127.0	765.9	404.7	282.1	191.1	149.0	118.6	102.8
62.5°	1709.7	1642.4	1414.4	1098.0	688.1	321.6	220.1	155.5	123.9	105.5	94.9
65°	1718.9	1638.5	1340.6	970.2	537.8	222.8	159.5	122.6	101.5	93.6	85.7
67.5°	1579.2	1482.9	1127.0	759.3	366.5	152.9	118.6	100.2	87.0	83.0	80.4
70°	1283.9	1178.4	825.2	496.9	204.3	106.8	91.0	83.0	75.1	75.1	71.2
72.5°	827.8	718.4	423.1	212.2	104.1	81.7	73.8	71.2	64.6	65.9	62.0
74°	423.1	329.5	172.7	112.0	85.7	72.5	65.9	64.6	58.0	59.3	55.4
75°	214.9	170.0	121.3	93.6	79.1	68.5	60.6	60.6	52.7	54.0	50.1
77.5°	100.2	96.2	83.0	73.8	67.2	58.0	50.1	48.8	40.9	43.5	38.2
80°	69.9	69.9	64.6	62.0	55.4	47.5	38.2	38.2	30.3	31.6	27.7
82.5°	39.5	36.9	36.9	42.2	43.5	35.6	27.7	26.4	22.4	22.4	18.5
85°	17.1	19.8	23.7	29.0	31.6	27.7	19.8	18.5	11.9	11.9	6.6
87.5°	0.0	1.3	1.3	2.6	5.3	5.3	0.0	2.6	0.0	1.3	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
97.5°	4.8	4.5	4.0	4.0	4.0	4.5	4.8	5.0	5.5	6.0	6.5
100°	26.8	26.5	26.0	25.0	26.0	26.5	26.8	27.0	27.8	28.5	29.2
102.5°	48.2	48.5	49.0	48.0	49.0	48.5	48.2	48.0	48.5	49.0	49.5
105°	69.5	70.0	71.0	69.0	71.0	70.0	69.5	69.0	69.5	70.0	70.5
107.5°	91.2	91.5	92.0	91.0	92.0	91.5	91.2	91.0	91.2	91.5	91.8



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°	
110°	113.2	113.5	114.0	113.0	114.0	113.5	113.2	113.0	113.2	113.5	113.8	0°
112.5°	135.5	136.0	137.0	135.0	137.0	136.0	135.5	135.0	135.2	135.5	135.8	2.5°
115°	158.5	159.0	160.0	159.0	160.0	159.0	158.5	158.0	158.0	158.0	158.0	5°
117.5°	180.5	181.0	182.0	180.0	182.0	181.0	180.5	180.0	180.2	180.5	180.8	7.5°
120°	204.5	205.0	206.0	204.0	206.0	205.0	204.5	204.0	204.0	204.0	204.0	10°
122.5°	230.0	231.0	233.0	232.0	233.0	231.0	230.0	229.0	228.8	228.5	228.2	12.5°
125°	254.8	255.5	257.0	256.0	257.0	255.5	254.8	254.0	254.0	254.0	254.0	15°
127.5°	278.8	279.5	281.0	278.0	281.0	279.5	278.8	278.0	277.8	277.5	277.2	17.5°
130°	302.8	303.5	305.0	303.0	305.0	303.5	302.8	302.0	301.8	301.5	301.2	20°
132.5°	326.8	327.5	329.0	327.0	329.0	327.5	326.8	326.0	325.8	325.5	325.2	22.5°
135°	349.5	350.0	351.0	350.0	351.0	350.0	349.5	349.0	348.8	348.5	348.2	25°
137.5°	371.0	372.0	374.0	372.0	374.0	372.0	371.0	370.0	369.8	369.5	369.2	27.5°
140°	393.0	394.0	396.0	394.0	396.0	394.0	393.0	392.0	391.5	391.0	390.5	30°
142.5°	413.8	414.5	416.0	415.0	416.0	414.5	413.8	413.0	412.8	412.5	412.2	32.5°
145°	434.8	435.5	437.0	435.0	437.0	435.5	434.8	434.0	433.8	433.5	433.2	35°
147.5°	453.8	454.5	456.0	453.0	456.0	454.5	453.8	453.0	452.8	452.5	452.2	37.5°
150°	470.0	471.0	473.0	470.0	473.0	471.0	470.0	469.0	469.0	469.0	469.0	40°
152.5°	486.8	487.5	489.0	486.0	489.0	487.5	486.8	486.0	486.0	486.0	486.0	42.5°
155°	504.8	505.5	507.0	505.0	507.0	505.5	504.8	504.0	503.8	503.5	503.2	45°
157.5°	519.2	520.5	523.0	520.0	523.0	520.5	519.2	518.0	517.8	517.5	517.2	47.5°
160°	530.8	531.5	533.0	531.0	533.0	531.5	530.8	530.0	530.0	530.0	530.0	50°
162.5°	538.5	539.0	540.0	537.0	540.0	539.0	538.5	538.0	538.5	539.0	539.5	52.5°
165°	548.5	549.0	550.0	548.0	550.0	549.0	548.5	548.0	548.5	549.0	549.5	55°
167.5°	560.0	561.0	563.0	561.0	563.0	561.0	560.0	559.0	558.8	558.5	558.2	57.5°
170°	567.2	568.5	571.0	569.0	571.0	568.5	567.2	566.0	565.5	565.0	564.5	60°
172.5°	568.8	569.5	571.0	568.0	571.0	569.5	568.8	568.0	567.8	567.5	567.2	62.5°
175°	568.8	569.5	571.0	568.0	571.0	569.5	568.8	568.0	568.5	569.0	569.5	65°
177.5°	574.8	575.5	577.0	574.0	577.0	575.5	574.8	574.0	574.0	574.0	574.0	67.5°
180°	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	70°
												72.5°
												74°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

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DISTRIBUTION (continued):

CANDELA DISTRIBUTION

115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°	110°	115°
576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	110°	114.0
551.0	544.4	548.4	541.8	544.4	537.8	540.4	536.5	532.5	527.3	525.9	112.5°	136.0
515.4	510.1	508.8	502.2	503.5	498.3	493.0	486.4	478.5	468.0	464.0	115°	158.0
475.9	474.5	465.3	461.4	456.1	450.8	441.6	431.0	415.2	400.7	391.5	117.5°	181.0
441.6	437.6	424.5	417.9	410.0	403.4	390.2	375.7	353.3	330.9	319.0	120°	204.0
412.6	407.3	390.2	382.3	370.4	362.5	346.7	328.2	296.6	265.0	250.5	122.5°	228.0
388.9	381.0	361.2	349.3	333.5	325.6	308.5	282.1	243.9	210.9	191.1	125°	254.0
361.2	350.6	329.5	315.0	299.2	284.7	267.6	239.9	196.4	166.1	146.3	127.5°	277.0
330.9	317.7	295.3	275.5	258.4	245.2	228.0	200.4	156.9	133.1	122.6	130°	301.0
299.2	278.1	258.4	241.2	221.5	208.3	191.1	166.1	133.1	120.0	116.0	132.5°	325.0
266.3	242.5	222.8	205.6	187.2	175.3	160.8	141.0	121.3	117.3	117.3	135°	348.0
233.3	209.6	191.1	174.0	158.2	150.3	137.1	123.9	114.7	116.0	117.3	137.5°	369.0
203.0	179.3	162.1	149.0	134.5	129.2	118.6	110.7	109.4	113.4	114.7	140°	390.0
176.6	155.5	139.7	129.2	117.3	114.7	105.5	101.5	105.5	110.7	109.4	142.5°	412.0
154.2	137.1	121.3	114.7	104.1	102.8	96.2	93.6	98.9	105.5	105.5	145°	433.0
137.1	121.3	109.4	104.1	96.2	94.9	89.6	87.0	91.0	100.2	102.8	147.5°	452.0
122.6	113.4	101.5	96.2	91.0	88.3	85.7	83.0	84.4	96.2	97.5	150°	469.0
113.4	106.8	96.2	93.6	87.0	85.7	81.7	79.1	80.4	89.6	93.6	152.5°	486.0
106.8	101.5	92.3	91.0	84.4	83.0	79.1	76.5	77.8	85.7	89.6	155°	503.0
101.5	96.2	88.3	85.7	81.7	80.4	77.8	75.1	75.1	83.0	87.0	157.5°	517.0
98.9	93.6	85.7	83.0	79.1	77.8	75.1	72.5	73.8	80.4	83.0	160°	530.0
97.5	91.0	84.4	80.4	77.8	75.1	72.5	69.9	71.2	77.8	80.4	162.5°	540.0
97.5	89.6	84.4	80.4	76.5	72.5	71.2	67.2	69.9	75.1	79.1	165°	550.0
97.5	89.6	84.4	80.4	77.8	73.8	71.2	68.5	69.9	75.1	79.1	167.5°	558.0
94.9	88.3	85.7	81.7	80.4	76.5	75.1	72.5	72.5	79.1	85.7	170°	564.0
91.0	87.0	85.7	83.0	83.0	80.4	80.4	77.8	77.8	85.7	92.3	172.5°	567.0
85.7	83.0	84.4	83.0	83.0	83.0	81.7	81.7	81.7	88.3	96.2	175°	570.0
80.4	79.1	80.4	80.4	81.7	80.4	81.7	80.4	80.4	87.0	94.9	177.5°	574.0
72.5	72.5	73.8	72.5	73.8	73.8	75.1	75.1	75.1	79.1	87.0	180°	576.0
63.3	62.0	63.3	62.0	64.6	62.0	64.6	65.9	64.6	65.9	69.9		
56.7	55.4	56.7	55.4	58.0	55.4	56.7	56.7	55.4	44.8	38.2		
51.4	50.1	51.4	50.1	52.7	50.1	52.7	51.4	48.8	33.0	31.6		
40.9	36.9	40.9	36.9	39.5	35.6	38.2	33.0	25.0	23.7	23.7		
30.3	26.4	29.0	25.0	23.7	18.5	19.8	18.5	17.1	18.5	18.5		
18.5	13.2	15.8	11.9	14.5	10.5	13.2	11.9	10.5	10.5	10.5		
9.2	6.6	9.2	5.3	7.9	5.3	6.6	6.6	4.0	4.0	4.0		
1.3	0.0	2.6	0.0	2.6	0.0	1.3	1.3	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
7.0	8.5	10.0	11.5	13.0	12.0	11.0	9.0	4.0	3.0	2.0		
30.0	30.5	31.0	31.5	32.0	31.5	31.0	30.0	22.0	14.0	10.0		
50.0	50.2	50.5	50.8	51.0	50.8	50.5	50.0	45.0	38.0	32.0		
71.0	71.0	71.0	71.0	71.0	70.8	70.5	70.0	66.0	61.0	56.0		
92.0	92.2	92.5	92.8	93.0	92.5	92.0	91.0	88.0	84.0	80.0		

'228311
 ISS-AF-800-LED-E1-SL4-8030-ULG

REPORT NUMBER: P228311
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TION (continued):

CANDELA DISTRIBUTION (con

117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°		175°	180°
114.0	114.0	114.0	114.0	113.5	113.0	112.0	110.0	106.0	103.0	0°	576.0	576.0
136.0	136.0	136.0	136.0	135.5	135.0	134.0	132.0	129.0	126.0	2.5°	522.0	523.3
158.0	158.0	158.0	158.0	157.5	157.0	156.0	154.0	151.0	149.0	5°	457.4	461.4
180.8	180.5	180.2	180.0	179.8	179.5	179.0	177.0	174.0	172.0	7.5°	386.2	388.9
204.0	204.0	204.0	204.0	203.5	203.0	202.0	201.0	198.0	196.0	10°	311.1	313.7
228.0	228.0	228.0	228.0	227.8	227.5	227.0	226.0	223.0	221.0	12.5°	239.9	242.5
253.8	253.5	253.2	253.0	252.8	252.5	252.0	251.0	248.0	247.0	15°	180.6	178.0
277.2	277.5	277.8	278.0	277.5	277.0	276.0	274.0	272.0	270.0	17.5°	138.4	135.8
301.0	301.0	301.0	301.0	300.5	300.0	299.0	298.0	294.0	293.0	20°	117.3	117.3
325.0	325.0	325.0	325.0	324.2	323.5	322.0	321.0	318.0	317.0	22.5°	114.7	113.4
348.0	348.0	348.0	348.0	347.2	346.5	345.0	345.0	341.0	339.0	25°	116.0	114.7
369.0	369.0	369.0	369.0	368.5	368.0	367.0	367.0	364.0	363.0	27.5°	116.0	114.7
390.0	390.0	390.0	390.0	389.8	389.5	389.0	388.0	386.0	385.0	30°	113.4	112.0
412.0	412.0	412.0	412.0	411.5	411.0	410.0	410.0	407.0	408.0	32.5°	109.4	108.1
433.2	433.5	433.8	434.0	433.5	433.0	432.0	431.0	428.0	428.0	35°	105.5	105.5
452.5	453.0	453.5	454.0	453.8	453.5	453.0	452.0	448.0	447.0	37.5°	102.8	104.1
469.5	470.0	470.5	471.0	470.8	470.5	470.0	469.0	465.0	464.0	40°	98.9	100.2
486.2	486.5	486.8	487.0	486.8	486.5	486.0	485.0	482.0	483.0	42.5°	94.9	96.2
503.2	503.5	503.8	504.0	503.8	503.5	503.0	503.0	501.0	502.0	45°	91.0	92.3
517.5	518.0	518.5	519.0	519.0	519.0	519.0	519.0	516.0	517.0	47.5°	87.0	87.0
530.5	531.0	531.5	532.0	532.0	532.0	532.0	532.0	529.0	529.0	50°	81.7	81.7
540.5	541.0	541.5	542.0	541.8	541.5	541.0	541.0	538.0	539.0	52.5°	80.4	80.4
550.8	551.5	552.2	553.0	552.8	552.5	552.0	552.0	548.0	549.0	55°	80.4	80.4
558.5	559.0	559.5	560.0	560.0	560.0	560.0	561.0	558.0	559.0	57.5°	83.0	83.0
564.2	564.5	564.8	565.0	565.2	565.5	566.0	567.0	565.0	566.0	60°	91.0	92.3
567.5	568.0	568.5	569.0	568.8	568.5	568.0	569.0	567.0	569.0	62.5°	106.8	108.1
570.8	571.5	572.2	573.0	572.8	572.5	572.0	572.0	569.0	570.0	65°	122.6	125.2
574.8	575.5	576.2	577.0	577.0	577.0	577.0	577.0	578.0	574.0	67.5°	123.9	127.9
576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	70°	120.0	123.9
										72.5°	83.0	83.0
										74°	36.9	35.6
										75°	31.6	30.3
										77.5°	23.7	23.7
										80°	17.1	15.8
										82.5°	9.2	9.2
										85°	2.6	2.6
										87.5°	0.0	0.0
										90°	0.0	0.0
										92.5°	0.0	0.0
										95°	1.0	1.0
										97.5°	2.0	2.0
										100°	8.0	8.0
										102.5°	28.0	28.0
										105°	54.0	54.0
										107.5°	77.0	78.0



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CANDELA DISTRIBUTION (continued):

	175°	180°
110°	102.0	101.0
112.5°	124.0	124.0
115°	147.0	146.0
117.5°	170.0	169.0
120°	195.0	193.0
122.5°	220.0	219.0
125°	246.0	244.0
127.5°	269.0	267.0
130°	292.0	290.0
132.5°	314.0	313.0
135°	337.0	336.0
137.5°	360.0	359.0
140°	383.0	382.0
142.5°	406.0	404.0
145°	426.0	425.0
147.5°	444.0	444.0
150°	462.0	461.0
152.5°	480.0	479.0
155°	500.0	499.0
157.5°	515.0	513.0
160°	527.0	525.0
162.5°	536.0	535.0
165°	547.0	546.0
167.5°	556.0	555.0
170°	563.0	562.0
172.5°	566.0	565.0
175°	569.0	567.0
177.5°	573.0	572.0
180°	576.0	576.0

(END OF REPORT)

Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

Scaled Data Report

