

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: P228336

Luminaire Tested: **ISS-AF-1000-LED-E1-SL4-8030-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228336  
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-1000-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**

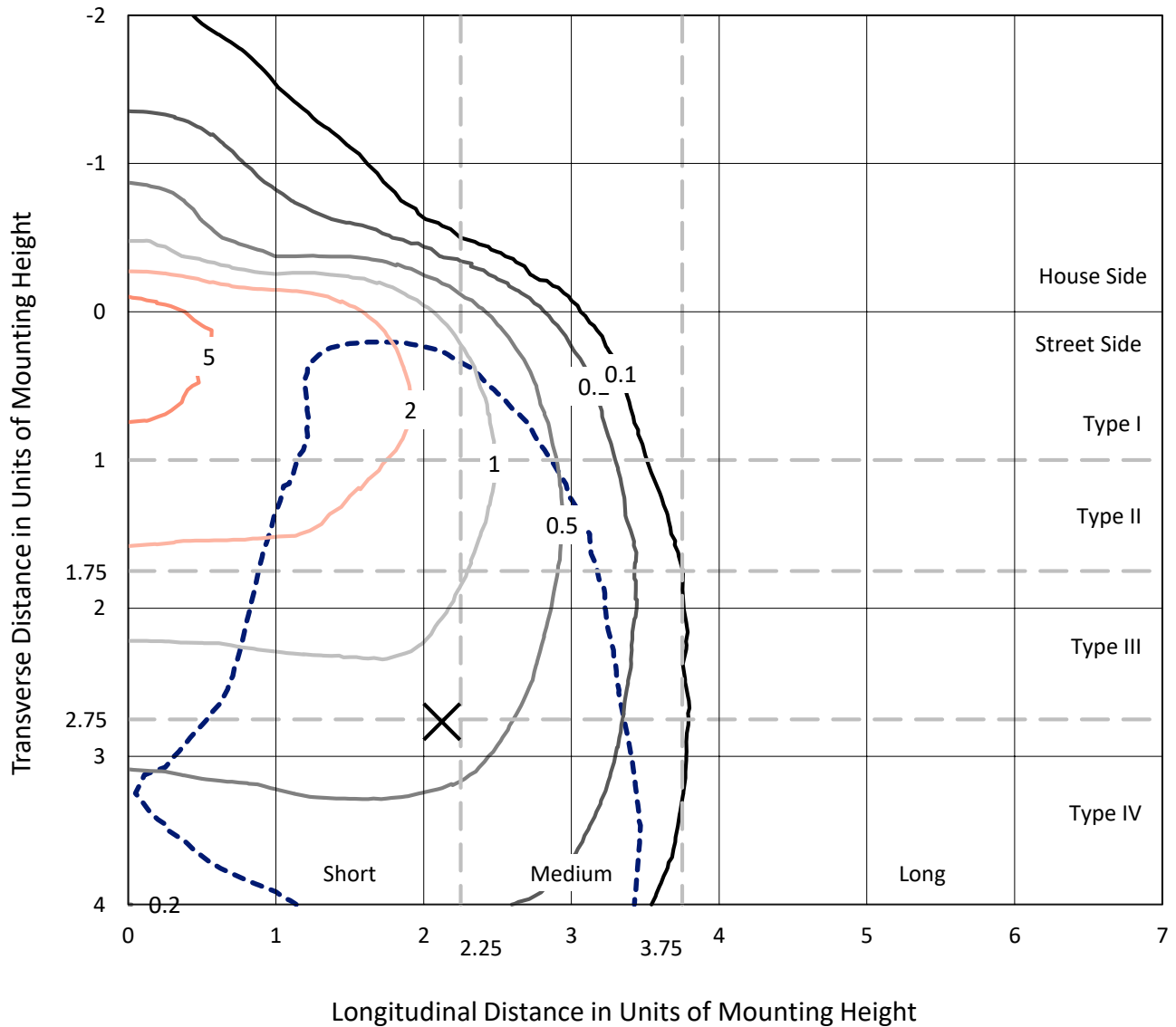
Lumens per Lamp: N/A  
Luminaire Lumens: 5598.2 lumens  
Efficiency: N/A  
Efficacy: 78.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G2  
  
Input Watts (W): 71.3  
Input Voltage (V): 120  
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

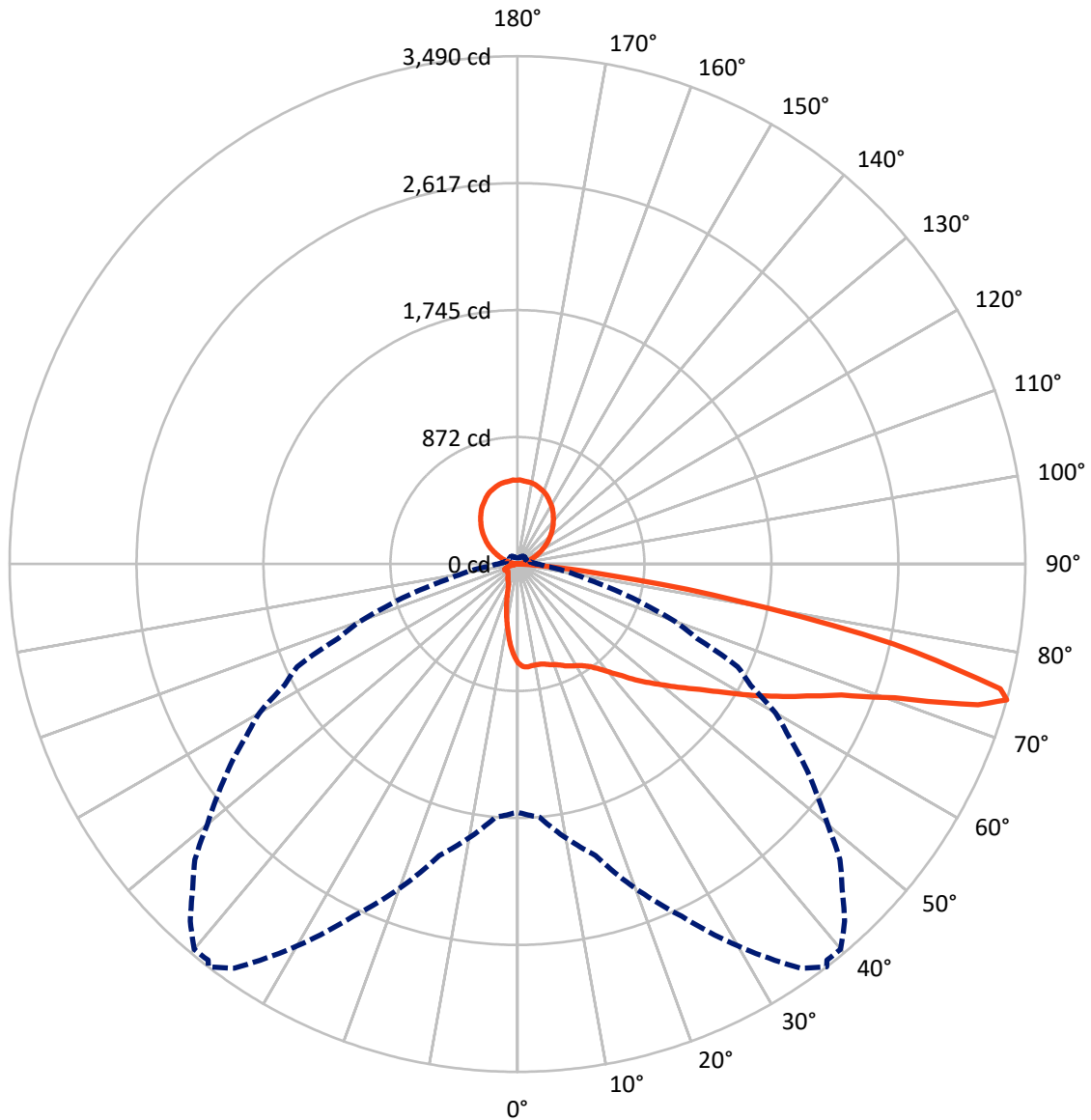
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 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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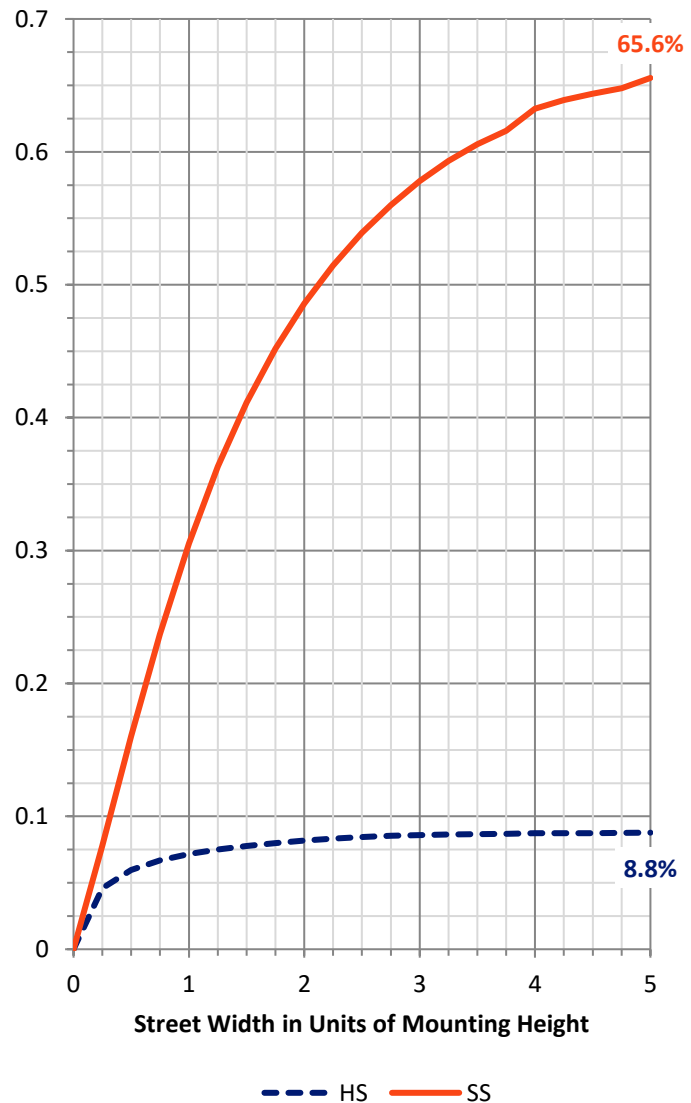
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	494.7	713.1	1207.8
	% Fixture	8.8	12.7	21.6
<b>Street Side</b>	Lumens	3677.3	713.1	4390.4
	% Fixture	65.7	12.7	78.4
<b>Total</b>	Lumens	4172.0	1426.2	5598.2
	% Fixture	74.5	25.5	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.3	1.1
10°-20°	151.0	2.7
20°-30°	234.0	4.2
30°-40°	347.1	6.2
40°-50°	533.9	9.5
50°-60°	789.2	14.1
60°-70°	1051.9	18.8
70°-80°	908.0	16.2
80°-90°	97.7	1.7
90°-100°	4.7	0.1
100°-110°	69.0	1.2
110°-120°	153.0	2.7
120°-130°	223.9	4.0
130°-140°	265.6	4.7
140°-150°	269.3	4.8
150°-160°	231.1	4.1
160°-170°	155.1	2.8
170°-180°	54.3	1.0
0°-90°	4172.0	74.5
0°-180°	5598.2	100.0



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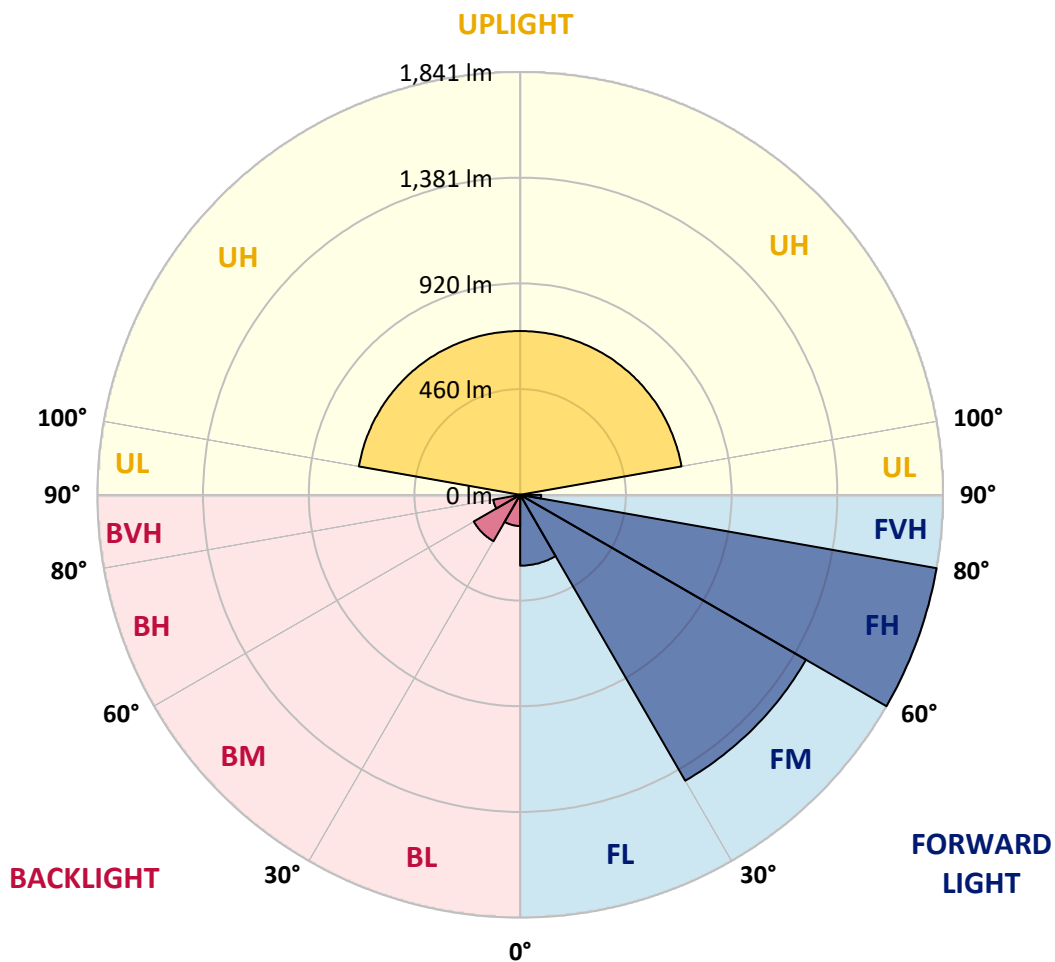
CATALOG NUMBER: ISS-AF-1000-LED-E1-SL4-8030-ULG

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	308.4	5.5			
FM	(30°-60°)	1436.9	25.7			
FH	(60°-80°)	1840.7	32.9			G2/5000
FVH	(80°-90°)	91.2	1.6			G1/100
BL	(0°-30°)	135.8	2.4	B1/500		
BM	(30°-60°)	233.2	4.2	B1/1000		
BH	(60°-80°)	119.3	2.1	B1/500		G1/500
BVH	(80°-90°)	6.4	0.1			G0/10
UL	(90°-100°)	4.7	0.1		U1/10	
UH	(100°-180°)	713.1	12.7		U4/1000	

**BUG Rating: B1-U5-G2**

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°	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8
2.5°	719.8	718.2	715.1	713.5	710.4	705.7	710.4	704.2	701.1	704.2	697.9
5°	732.2	730.7	727.5	721.3	718.2	710.4	715.1	707.3	705.7	708.8	701.1
7.5°	733.8	730.7	726.0	718.2	715.1	705.7	708.8	699.5	696.4	699.5	694.8
10°	729.1	727.5	722.9	710.4	707.3	704.2	702.6	696.4	694.8	693.3	691.7
12.5°	721.3	721.3	718.2	713.5	712.0	705.7	707.3	701.1	702.6	699.5	696.4
15°	718.2	716.6	719.8	722.9	722.9	713.5	719.8	715.1	712.0	713.5	708.8
17.5°	715.1	716.6	727.5	733.8	736.9	727.5	736.9	727.5	721.3	729.1	721.3
20°	713.5	718.2	736.9	750.9	752.5	736.9	752.5	736.9	736.9	746.2	732.2
22.5°	721.3	729.1	755.6	771.2	774.3	754.0	772.7	752.5	752.5	760.3	746.2
25°	746.2	754.0	783.6	800.8	797.6	775.8	793.0	772.7	771.2	780.5	761.8
27.5°	779.0	789.9	817.9	833.5	822.6	793.0	817.9	788.3	788.3	802.3	777.4
30°	825.7	833.5	858.4	860.0	845.9	810.1	838.2	805.4	800.8	825.7	794.5
32.5°	877.1	883.3	902.0	891.1	870.9	833.5	866.2	827.2	825.7	852.2	816.3
35°	931.6	937.9	944.1	925.4	906.7	866.2	902.0	863.1	861.5	891.1	856.8
37.5°	987.7	987.7	987.7	965.9	953.4	914.5	947.2	916.0	912.9	944.1	911.4
40°	1032.9	1036.0	1031.3	1011.1	1004.8	976.8	1004.8	976.8	981.5	1009.5	983.0
42.5°	1070.3	1073.4	1075.0	1057.8	1064.0	1048.5	1070.3	1050.0	1051.6	1082.7	1067.2
45°	1107.7	1106.1	1118.6	1113.9	1132.6	1134.2	1146.6	1138.8	1141.9	1165.3	1160.6
47.5°	1146.6	1138.8	1152.8	1173.1	1207.4	1218.3	1226.1	1229.2	1241.7	1252.6	1263.5
50°	1184.0	1176.2	1185.6	1230.7	1285.3	1308.6	1310.2	1325.8	1339.8	1355.4	1377.2
52.5°	1223.0	1216.7	1226.1	1289.9	1377.2	1409.9	1405.2	1431.7	1452.0	1469.1	1504.9
55°	1263.5	1257.2	1266.6	1361.6	1475.3	1520.5	1515.8	1553.2	1592.2	1598.4	1638.9
57.5°	1302.4	1294.6	1321.1	1445.7	1592.2	1660.7	1638.9	1696.6	1733.9	1730.8	1786.9
60°	1344.5	1338.2	1380.3	1548.6	1738.6	1827.4	1794.7	1871.0	1897.5	1886.6	1939.6
62.5°	1385.0	1383.4	1453.5	1668.5	1916.2	2001.9	1972.3	2039.3	2058.0	2044.0	2070.5
65°	1422.4	1431.7	1533.0	1788.5	2087.6	2185.7	2145.2	2212.2	2234.0	2223.1	2268.3
67.5°	1484.7	1495.6	1631.1	1941.1	2299.5	2400.7	2366.5	2436.6	2469.3	2466.2	2516.0
70°	1576.6	1596.9	1776.0	2157.7	2622.0	2751.3	2732.6	2818.2	2897.7	2891.5	2941.3
72.5°	1737.1	1769.8	2014.4	2494.2	3151.6	3309.0	3287.2	3335.5	3321.5	3207.7	3115.8
74°	1705.9	1746.4	2073.6	2670.2	3390.0	3489.7	3453.9	3455.4	3327.7	3154.8	3006.8
75°	1592.2	1634.2	1987.9	2648.4	3372.9	3427.4	3376.0	3312.1	3157.9	2981.8	2799.6
77.5°	1092.1	1146.6	1461.3	2139.0	2715.4	2640.6	2628.2	2506.7	2302.6	2104.7	1871.0
80°	559.3	598.2	755.6	1118.6	1610.9	1536.1	1561.0	1462.9	1293.1	1149.7	911.4
82.5°	134.0	143.3	222.8	433.1	697.9	638.7	648.1	573.3	475.2	387.9	300.7
85°	70.1	79.5	109.1	120.0	183.8	190.1	185.4	179.2	146.4	123.1	107.5
87.5°	0.0	0.0	0.0	3.1	1.6	0.0	1.6	0.0	0.0	1.6	3.1
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°	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8
2.5°	702.6	699.5	702.6	693.3	697.9	690.2	693.3	685.5	688.6	682.4	683.9
5°	705.7	697.9	702.6	694.8	696.4	690.2	688.6	685.5	683.9	679.2	676.1
7.5°	697.9	691.7	690.2	687.0	682.4	683.9	677.7	676.1	671.5	671.5	662.1
10°	690.2	691.7	682.4	685.5	677.7	679.2	668.3	671.5	663.7	669.9	655.9
12.5°	696.4	697.9	690.2	694.8	680.8	683.9	674.6	679.2	668.3	676.1	659.0
15°	710.4	708.8	705.7	705.7	691.7	697.9	687.0	690.2	679.2	688.6	669.9
17.5°	722.9	721.3	716.6	715.1	705.7	707.3	696.4	702.6	690.2	697.9	679.2
20°	736.9	729.1	727.5	726.0	715.1	715.1	707.3	710.4	697.9	707.3	685.5
22.5°	747.8	741.6	740.0	733.8	726.0	729.1	718.2	719.8	707.3	716.6	697.9
25°	764.9	757.1	757.1	747.8	743.1	741.6	735.3	740.0	727.5	733.8	716.6
27.5°	788.3	771.2	777.4	768.0	764.9	763.4	760.3	763.4	754.0	758.7	741.6
30°	810.1	788.3	797.6	785.2	791.4	785.2	789.9	785.2	785.2	785.2	777.4
32.5°	839.7	813.2	831.9	813.2	825.7	816.3	831.9	822.6	828.8	827.2	824.1
35°	881.8	850.6	877.1	852.2	874.0	861.5	883.3	878.7	891.1	884.9	891.1
37.5°	937.9	905.1	936.3	912.9	939.4	920.7	951.9	948.8	975.2	965.9	975.2
40°	1008.0	984.6	1008.0	990.8	1018.9	1011.1	1043.8	1045.4	1075.0	1070.3	1081.2
42.5°	1085.9	1068.7	1092.1	1082.7	1110.8	1117.0	1154.4	1163.8	1191.8	1199.6	1201.1
45°	1170.0	1166.9	1185.6	1194.9	1223.0	1241.7	1274.4	1297.7	1328.9	1346.0	1342.9
47.5°	1268.1	1280.6	1293.1	1316.4	1341.4	1380.3	1413.0	1442.6	1478.5	1489.4	1494.0
50°	1378.7	1400.6	1411.5	1444.2	1469.1	1517.4	1562.6	1600.0	1638.9	1634.2	1637.4
52.5°	1495.6	1523.6	1539.2	1578.2	1610.9	1667.0	1705.9	1741.7	1790.0	1777.6	1772.9
55°	1624.9	1667.0	1679.4	1723.0	1751.1	1808.7	1843.0	1905.3	1925.6	1913.1	1886.6
57.5°	1762.0	1811.8	1825.9	1885.1	1899.1	1961.4	1991.0	2033.1	2050.2	2030.0	1995.7
60°	1917.8	1963.0	1973.9	2026.8	2045.5	2103.2	2125.0	2162.4	2174.8	2125.0	2076.7
62.5°	2073.6	2120.3	2126.5	2173.3	2192.0	2241.8	2266.8	2288.6	2282.3	2209.1	2148.4
65°	2251.2	2296.4	2311.9	2358.7	2369.6	2407.0	2427.2	2402.3	2388.3	2277.7	2209.1
67.5°	2533.2	2581.4	2587.7	2598.6	2597.0	2578.3	2569.0	2483.3	2421.0	2216.9	2118.8
70°	2903.9	2868.1	2798.0	2717.0	2657.8	2551.8	2489.5	2313.5	2182.6	1953.6	1788.5
72.5°	2970.9	2854.1	2681.2	2542.5	2399.2	2232.5	2098.5	1832.1	1648.3	1408.3	1233.9
74°	2780.9	2590.8	2408.5	2213.8	2048.6	1805.6	1670.1	1333.6	1151.3	908.3	696.4
75°	2551.8	2329.1	2123.4	1875.7	1721.5	1430.2	1302.4	939.4	757.1	539.0	363.0
77.5°	1628.0	1361.6	1165.3	878.7	758.7	523.5	383.2	238.4	176.0	154.2	134.0
80°	730.7	520.3	412.8	285.1	238.4	182.3	154.2	124.6	113.7	99.7	95.0
82.5°	233.7	186.9	177.6	158.9	158.9	127.7	109.1	85.7	77.9	67.0	60.8
85°	101.3	95.0	98.1	90.4	91.9	70.1	56.1	42.1	42.1	29.6	26.5
87.5°	3.1	0.0	1.6	0.0	3.1	0.0	1.6	0.0	1.6	0.0	1.6
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°	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°	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8
2.5°	677.7	680.8	679.2	673.0	671.5	666.8	655.9	657.4	651.2	655.9	648.1
5°	671.5	669.9	663.7	655.9	648.1	638.7	631.0	627.8	621.6	618.5	613.8
7.5°	662.1	655.9	645.0	632.5	621.6	609.1	602.9	592.0	588.9	578.0	576.4
10°	659.0	648.1	635.6	620.0	601.4	582.7	581.1	562.4	560.8	543.7	539.0
12.5°	665.2	651.2	635.6	616.9	595.1	568.6	568.6	540.6	539.0	515.7	507.9
15°	677.7	660.6	640.3	618.5	590.4	557.7	556.2	523.5	520.3	492.3	483.0
17.5°	688.6	665.2	646.5	616.9	584.2	546.8	539.0	506.3	500.1	467.4	454.9
20°	696.4	669.9	648.1	613.8	573.3	529.7	518.8	484.5	470.5	437.8	420.6
22.5°	705.7	680.8	651.2	612.3	567.1	515.7	492.3	461.1	440.9	406.6	383.2
25°	719.8	697.9	662.1	616.9	562.4	501.6	470.5	437.8	409.7	375.5	341.2
27.5°	741.6	719.8	677.7	623.2	560.8	487.6	453.4	412.8	378.6	341.2	302.2
30°	772.7	749.4	704.2	640.3	562.4	476.7	434.7	391.0	350.5	306.9	266.4
32.5°	813.2	794.5	738.4	659.0	568.6	467.4	417.5	367.7	317.8	275.7	239.9
35°	869.3	856.8	786.7	694.8	584.2	462.7	400.4	345.9	289.8	247.7	208.8
37.5°	951.9	934.7	856.8	746.2	609.1	459.6	387.9	319.4	266.4	221.2	188.5
40°	1056.3	1032.9	939.4	808.6	648.1	461.1	377.0	299.1	246.1	197.9	171.4
42.5°	1180.9	1146.6	1040.7	884.9	687.0	464.3	370.8	280.4	230.6	179.2	158.9
45°	1321.1	1282.2	1160.6	979.9	743.1	472.0	366.1	264.8	216.5	165.1	151.1
47.5°	1458.2	1419.3	1283.7	1075.0	800.8	486.1	369.2	255.5	207.2	157.3	141.8
50°	1592.2	1551.7	1392.8	1160.6	850.6	504.8	381.7	257.1	205.6	154.2	137.1
52.5°	1710.6	1660.7	1486.2	1227.6	886.4	517.2	392.6	261.7	207.2	152.7	135.5
55°	1829.0	1765.1	1561.0	1280.6	908.3	518.8	392.6	263.3	208.8	152.7	134.0
57.5°	1917.8	1844.6	1618.7	1311.8	916.0	511.0	383.2	255.5	199.4	151.1	130.9
60°	1973.9	1896.0	1659.2	1332.0	905.1	478.3	333.4	225.9	176.0	140.2	121.5
62.5°	2020.6	1941.1	1671.6	1297.7	813.2	380.1	260.2	183.8	146.4	124.6	112.2
65°	2031.5	1936.5	1584.4	1146.6	635.6	263.3	188.5	144.9	120.0	110.6	101.3
67.5°	1866.4	1752.6	1332.0	897.4	433.1	180.7	140.2	118.4	102.8	98.1	95.0
70°	1517.4	1392.8	975.2	587.3	241.5	126.2	107.5	98.1	88.8	88.8	84.1
72.5°	978.4	849.1	500.1	250.8	123.1	96.6	87.2	84.1	76.3	77.9	73.2
74°	500.1	389.5	204.1	132.4	101.3	85.7	77.9	76.3	68.5	70.1	65.4
75°	253.9	201.0	143.3	110.6	93.5	81.0	71.7	71.7	62.3	63.9	59.2
77.5°	118.4	113.7	98.1	87.2	79.5	68.5	59.2	57.6	48.3	51.4	45.2
80°	82.6	82.6	76.3	73.2	65.4	56.1	45.2	45.2	35.8	37.4	32.7
82.5°	46.7	43.6	43.6	49.9	51.4	42.1	32.7	31.2	26.5	26.5	21.8
85°	20.3	23.4	28.0	34.3	37.4	32.7	23.4	21.8	14.0	14.0	7.8
87.5°	0.0	1.6	1.6	3.1	6.2	6.2	0.0	3.1	0.0	1.6	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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 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°
680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	680.8	110°	114.0
651.2	643.4	648.1	640.3	643.4	635.6	638.7	634.1	629.4	623.2	621.6	112.5°	136.0
609.1	602.9	601.4	593.6	595.1	588.9	582.7	574.9	565.5	553.1	548.4	115°	158.0
562.4	560.8	549.9	545.3	539.0	532.8	521.9	509.4	490.7	473.6	462.7	117.5°	181.0
521.9	517.2	501.6	493.9	484.5	476.7	461.1	444.0	417.5	391.0	377.0	120°	204.0
487.6	481.4	461.1	451.8	437.8	428.4	409.7	387.9	350.5	313.1	296.0	122.5°	228.0
459.6	450.2	426.9	412.8	394.1	384.8	364.5	333.4	288.2	249.3	225.9	125°	254.0
426.9	414.4	389.5	372.3	353.6	336.5	316.3	283.5	232.1	196.3	172.9	127.5°	277.0
391.0	375.5	349.0	325.6	305.3	289.8	269.5	236.8	185.4	157.3	144.9	130°	301.0
353.6	328.7	305.3	285.1	261.7	246.1	225.9	196.3	157.3	141.8	137.1	132.5°	325.0
314.7	286.7	263.3	243.0	221.2	207.2	190.1	166.7	143.3	138.7	138.7	135°	348.0
275.7	247.7	225.9	205.6	186.9	177.6	162.0	146.4	135.5	137.1	138.7	137.5°	369.0
239.9	211.9	191.6	176.0	158.9	152.7	140.2	130.9	129.3	134.0	135.5	140°	390.0
208.8	183.8	165.1	152.7	138.7	135.5	124.6	120.0	124.6	130.9	129.3	142.5°	412.0
182.3	162.0	143.3	135.5	123.1	121.5	113.7	110.6	116.8	124.6	124.6	145°	433.0
162.0	143.3	129.3	123.1	113.7	112.2	105.9	102.8	107.5	118.4	121.5	147.5°	452.0
144.9	134.0	120.0	113.7	107.5	104.4	101.3	98.1	99.7	113.7	115.3	150°	469.0
134.0	126.2	113.7	110.6	102.8	101.3	96.6	93.5	95.0	105.9	110.6	152.5°	486.0
126.2	120.0	109.1	107.5	99.7	98.1	93.5	90.4	91.9	101.3	105.9	155°	503.0
120.0	113.7	104.4	101.3	96.6	95.0	91.9	88.8	88.8	98.1	102.8	157.5°	517.0
116.8	110.6	101.3	98.1	93.5	91.9	88.8	85.7	87.2	95.0	98.1	160°	530.0
115.3	107.5	99.7	95.0	91.9	88.8	85.7	82.6	84.1	91.9	95.0	162.5°	540.0
115.3	105.9	99.7	95.0	90.4	85.7	84.1	79.5	82.6	88.8	93.5	165°	550.0
115.3	105.9	99.7	95.0	91.9	87.2	84.1	81.0	82.6	88.8	93.5	167.5°	558.0
112.2	104.4	101.3	96.6	95.0	90.4	88.8	85.7	85.7	93.5	101.3	170°	564.0
107.5	102.8	101.3	98.1	98.1	95.0	95.0	91.9	91.9	101.3	109.1	172.5°	567.0
101.3	98.1	99.7	98.1	98.1	98.1	96.6	96.6	96.6	104.4	113.7	175°	570.0
95.0	93.5	95.0	95.0	96.6	95.0	96.6	95.0	95.0	102.8	112.2	177.5°	574.0
85.7	85.7	87.2	85.7	87.2	87.2	88.8	88.8	88.8	93.5	102.8	180°	576.0
74.8	73.2	74.8	73.2	76.3	73.2	76.3	77.9	76.3	77.9	82.6		
67.0	65.4	67.0	65.4	68.5	65.4	67.0	67.0	65.4	53.0	45.2		
60.8	59.2	60.8	59.2	62.3	59.2	62.3	60.8	57.6	38.9	37.4		
48.3	43.6	48.3	43.6	46.7	42.1	45.2	38.9	29.6	28.0	28.0		
35.8	31.2	34.3	29.6	28.0	21.8	23.4	21.8	20.3	21.8	21.8		
21.8	15.6	18.7	14.0	17.1	12.5	15.6	14.0	12.5	12.5	12.5		
10.9	7.8	10.9	6.2	9.3	6.2	7.8	7.8	4.7	4.7	4.7		
1.6	0.0	3.1	0.0	3.1	0.0	1.6	1.6	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		

'228336  
 ISS-AF-1000-LED-E1-SL4-8030-ULG

REPORT NUMBER: P228336  
 CATALOG NUMBER: ISS-AF-10

**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°	680.8	680.8
136.0	136.0	136.0	136.0	135.5	135.0	134.0	132.0	129.0	126.0	2.5°	616.9	618.5
158.0	158.0	158.0	158.0	157.5	157.0	156.0	154.0	151.0	149.0	5°	540.6	545.3
180.8	180.5	180.2	180.0	179.8	179.5	179.0	177.0	174.0	172.0	7.5°	456.5	459.6
204.0	204.0	204.0	204.0	203.5	203.0	202.0	201.0	198.0	196.0	10°	367.7	370.8
228.0	228.0	228.0	228.0	227.8	227.5	227.0	226.0	223.0	221.0	12.5°	283.5	286.7
253.8	253.5	253.2	253.0	252.8	252.5	252.0	251.0	248.0	247.0	15°	213.4	210.3
277.2	277.5	277.8	278.0	277.5	277.0	276.0	274.0	272.0	270.0	17.5°	163.6	160.5
301.0	301.0	301.0	301.0	300.5	300.0	299.0	298.0	294.0	293.0	20°	138.7	138.7
325.0	325.0	325.0	325.0	324.2	323.5	322.0	321.0	318.0	317.0	22.5°	135.5	134.0
348.0	348.0	348.0	348.0	347.2	346.5	345.0	345.0	341.0	339.0	25°	137.1	135.5
369.0	369.0	369.0	369.0	368.5	368.0	367.0	367.0	364.0	363.0	27.5°	137.1	135.5
390.0	390.0	390.0	390.0	389.8	389.5	389.0	388.0	386.0	385.0	30°	134.0	132.4
412.0	412.0	412.0	412.0	411.5	411.0	410.0	410.0	407.0	408.0	32.5°	129.3	127.7
433.2	433.5	433.8	434.0	433.5	433.0	432.0	431.0	428.0	428.0	35°	124.6	124.6
452.5	453.0	453.5	454.0	453.8	453.5	453.0	452.0	448.0	447.0	37.5°	121.5	123.1
469.5	470.0	470.5	471.0	470.8	470.5	470.0	469.0	465.0	464.0	40°	116.8	118.4
486.2	486.5	486.8	487.0	486.8	486.5	486.0	485.0	482.0	483.0	42.5°	112.2	113.7
503.2	503.5	503.8	504.0	503.8	503.5	503.0	503.0	501.0	502.0	45°	107.5	109.1
517.5	518.0	518.5	519.0	519.0	519.0	519.0	519.0	516.0	517.0	47.5°	102.8	102.8
530.5	531.0	531.5	532.0	532.0	532.0	532.0	532.0	529.0	529.0	50°	96.6	96.6
540.5	541.0	541.5	542.0	541.8	541.5	541.0	541.0	538.0	539.0	52.5°	95.0	95.0
550.8	551.5	552.2	553.0	552.8	552.5	552.0	552.0	548.0	549.0	55°	95.0	95.0
558.5	559.0	559.5	560.0	560.0	560.0	560.0	561.0	558.0	559.0	57.5°	98.1	98.1
564.2	564.5	564.8	565.0	565.2	565.5	566.0	567.0	565.0	566.0	60°	107.5	109.1
567.5	568.0	568.5	569.0	568.8	568.5	568.0	569.0	567.0	569.0	62.5°	126.2	127.7
570.8	571.5	572.2	573.0	572.8	572.5	572.0	572.0	569.0	570.0	65°	144.9	148.0
574.8	575.5	576.2	577.0	577.0	577.0	577.0	578.0	574.0	575.0	67.5°	146.4	151.1
576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	576.0	70°	141.8	146.4
										72.5°	98.1	98.1
										74°	43.6	42.1
										75°	37.4	35.8
										77.5°	28.0	28.0
										80°	20.3	18.7
										82.5°	10.9	10.9
										85°	3.1	3.1
										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

