

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: P228330

Luminaire Tested: **ISS-AF-1200-LED-E1-SL4-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228330  
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-1200-LED-E1-SL4-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) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

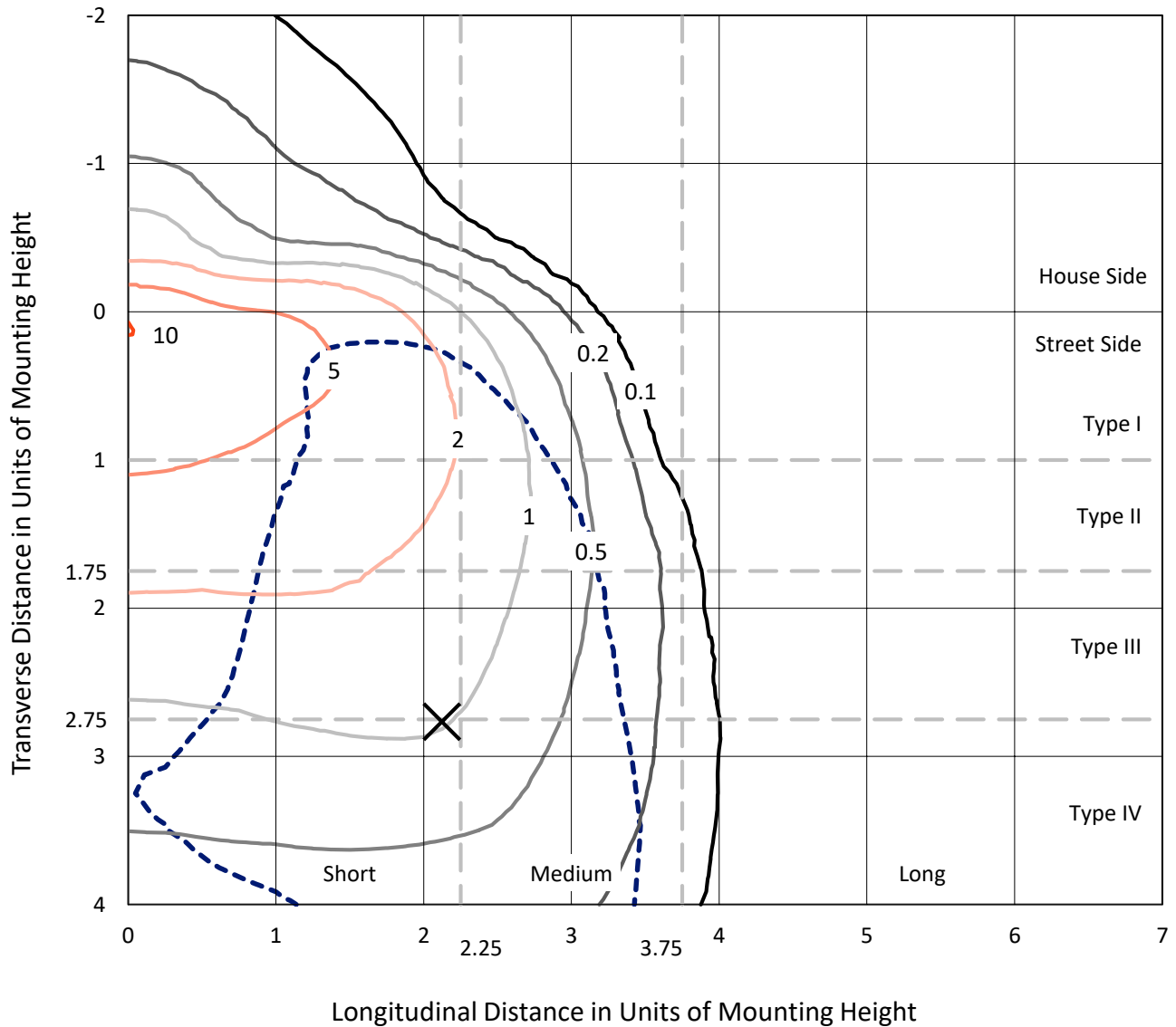
Lumens per Lamp: N/A  
Luminaire Lumens: 7410.4 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G2  
  
Input Watts (W): 82.7  
Input Voltage (V): 120  
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

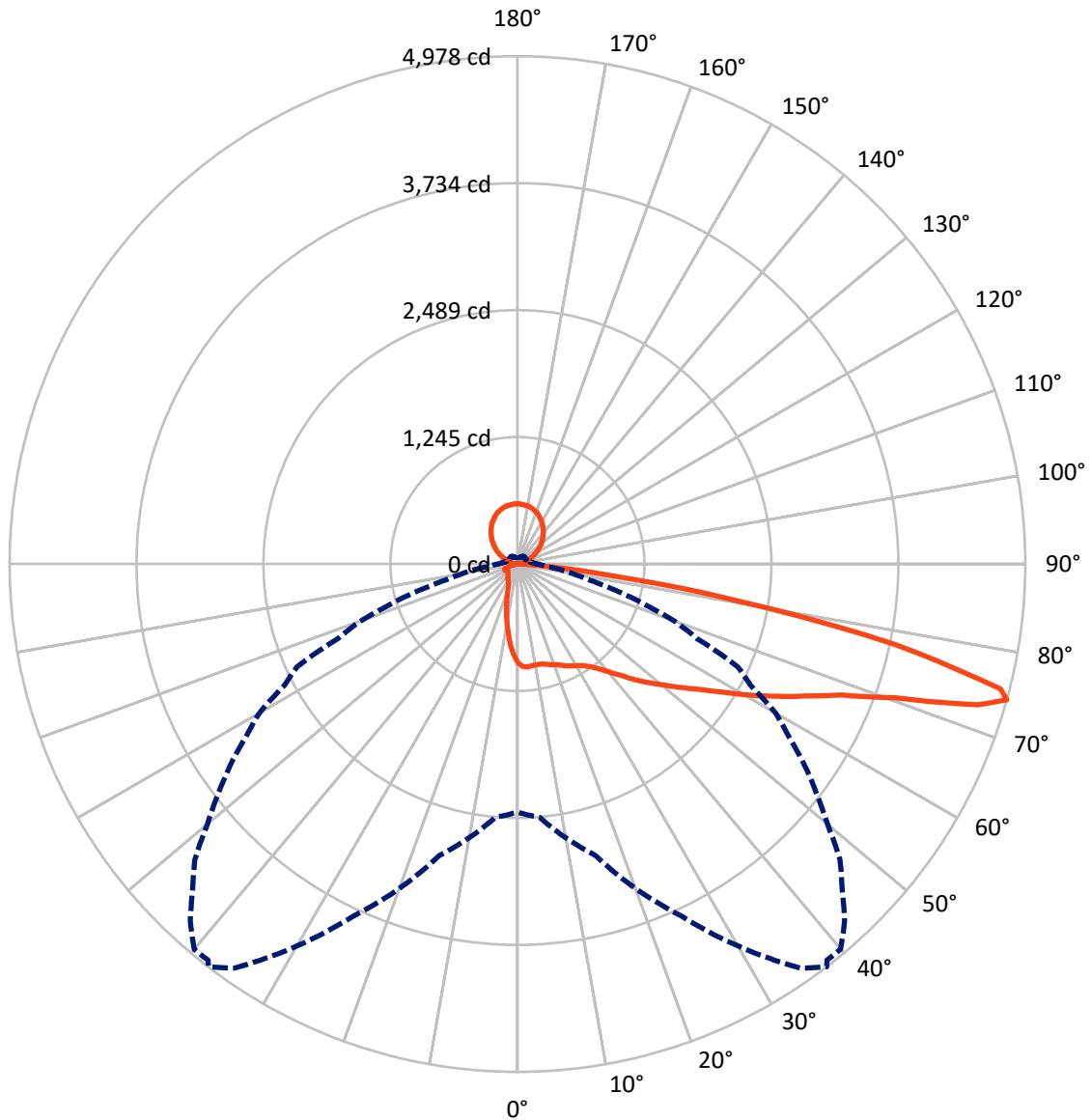
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.2 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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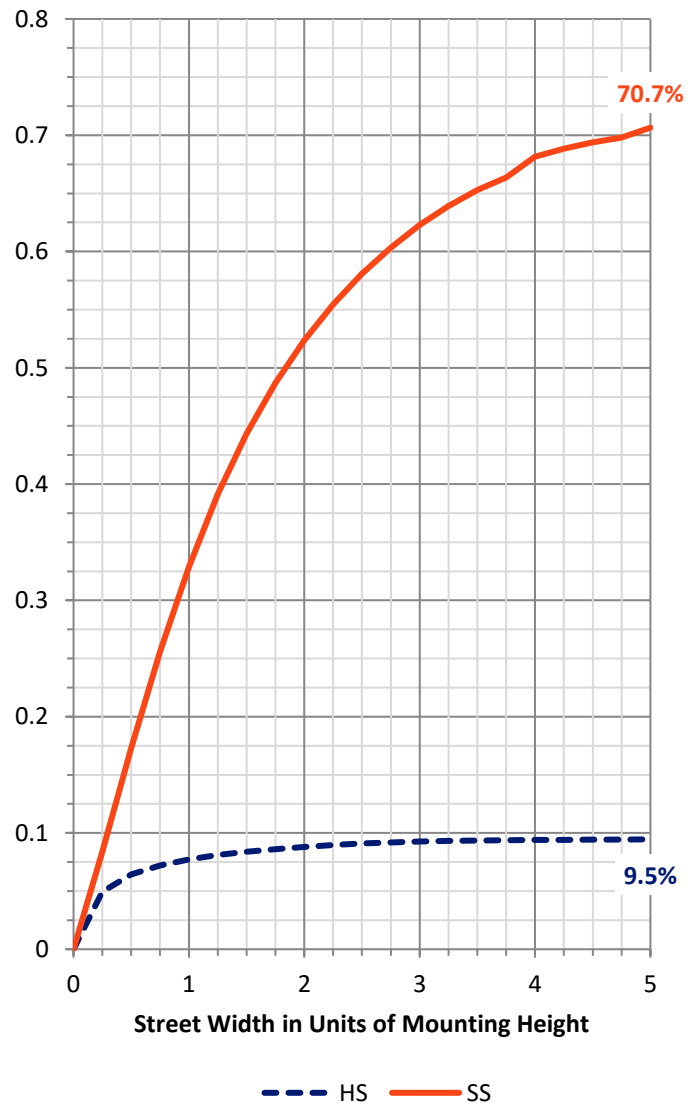
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	705.6	729.4	1435.1
	% Fixture	9.5	9.8	19.4
<b>Street Side</b>	Lumens	5245.8	729.4	5975.3
	% Fixture	70.8	9.8	80.6
<b>Total</b>	Lumens	5951.5	1458.9	7410.4
	% Fixture	80.3	19.7	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.6	1.1
10°-20°	215.4	2.9
20°-30°	333.8	4.5
30°-40°	495.1	6.7
40°-50°	761.6	10.3
50°-60°	1125.8	15.2
60°-70°	1500.6	20.3
70°-80°	1295.3	17.5
80°-90°	139.3	1.9
90°-100°	4.8	0.1
100°-110°	70.6	1.0
110°-120°	156.6	2.1
120°-130°	229.0	3.1
130°-140°	271.7	3.7
140°-150°	275.5	3.7
150°-160°	236.4	3.2
160°-170°	158.7	2.1
170°-180°	55.6	0.8
0°-90°	5951.5	80.3
0°-180°	7410.4	100.0



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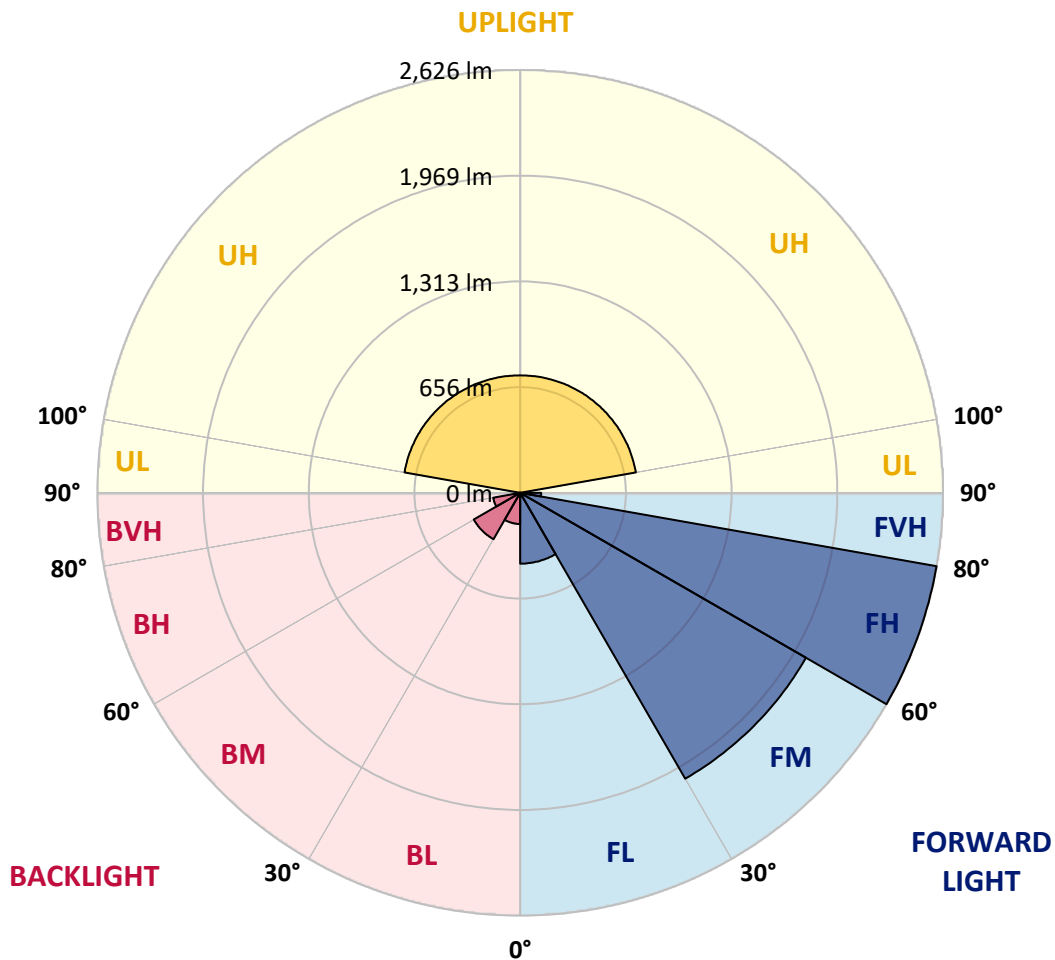
CATALOG NUMBER: ISS-AF-1200-LED-E1-SL4-ULG

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	440.0	5.9			
FM	(30°-60°)	2049.9	27.7			
FH	(60°-80°)	2625.8	35.4			G2/5000
FVH	(80°-90°)	130.2	1.8			G2/225
BL	(0°-30°)	193.7	2.6	B1/500		
BM	(30°-60°)	332.6	4.5	B1/1000		
BH	(60°-80°)	170.1	2.3	B1/500		G1/500
BVH	(80°-90°)	9.2	0.1			G0/10
UL	(90°-100°)	4.8	0.1		U1/10	
UH	(100°-180°)	729.4	9.8		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°	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2
2.5°	1026.7	1024.5	1020.1	1017.8	1013.4	1006.8	1013.4	1004.5	1000.0	1004.5	995.6
5°	1044.5	1042.3	1037.9	1029.0	1024.5	1013.4	1020.1	1008.9	1006.8	1011.2	1000.0
7.5°	1046.8	1042.3	1035.6	1024.5	1020.1	1006.8	1011.2	997.9	993.4	997.9	991.2
10°	1040.1	1037.9	1031.2	1013.4	1008.9	1004.5	1002.3	993.4	991.2	989.0	986.7
12.5°	1029.0	1029.0	1024.5	1017.8	1015.7	1006.8	1008.9	1000.0	1002.3	997.9	993.4
15°	1024.5	1022.3	1026.7	1031.2	1031.2	1017.8	1026.7	1020.1	1015.7	1017.8	1011.2
17.5°	1020.1	1022.3	1037.9	1046.8	1051.2	1037.9	1051.2	1037.9	1029.0	1040.1	1029.0
20°	1017.8	1024.5	1051.2	1071.2	1073.4	1051.2	1073.4	1051.2	1051.2	1064.6	1044.5
22.5°	1029.0	1040.1	1077.9	1100.1	1104.6	1075.6	1102.3	1073.4	1073.4	1084.5	1064.6
25°	1064.6	1075.6	1117.9	1142.3	1137.8	1106.7	1131.2	1102.3	1100.1	1113.4	1086.8
27.5°	1111.2	1126.8	1166.8	1189.0	1173.4	1131.2	1166.8	1124.5	1124.5	1144.6	1109.0
30°	1177.9	1189.0	1224.6	1226.7	1206.8	1155.6	1195.6	1149.0	1142.3	1177.9	1133.4
32.5°	1251.2	1260.1	1286.8	1271.2	1242.4	1189.0	1235.6	1180.1	1177.9	1215.7	1164.5
35°	1329.0	1337.9	1346.8	1320.1	1293.4	1235.6	1286.8	1231.2	1229.0	1271.2	1222.3
37.5°	1409.0	1409.0	1409.0	1377.9	1360.1	1304.6	1351.2	1306.8	1302.3	1346.8	1300.1
40°	1473.5	1477.9	1471.2	1442.4	1433.5	1393.5	1433.5	1393.5	1400.1	1440.1	1402.4
42.5°	1526.8	1531.3	1533.5	1509.1	1518.0	1495.7	1526.8	1497.9	1500.2	1544.6	1522.4
45°	1580.2	1577.9	1595.7	1589.1	1615.6	1617.9	1635.7	1624.5	1629.0	1662.4	1655.7
47.5°	1635.7	1624.5	1644.6	1673.4	1722.3	1737.9	1749.0	1753.4	1771.2	1786.8	1802.3
50°	1689.0	1677.9	1691.2	1755.7	1833.5	1866.8	1869.0	1891.2	1911.3	1933.5	1964.6
52.5°	1744.6	1735.7	1749.0	1840.2	1964.6	2011.3	2004.6	2042.4	2071.3	2095.7	2146.9
55°	1802.3	1793.5	1806.8	1942.4	2104.6	2169.1	2162.4	2215.7	2271.3	2280.2	2338.0
57.5°	1858.0	1846.8	1884.6	2062.4	2271.3	2369.1	2338.0	2420.2	2473.6	2469.1	2549.1
60°	1917.9	1909.0	1969.1	2209.1	2480.2	2606.9	2560.2	2669.1	2706.9	2691.4	2766.9
62.5°	1975.7	1973.5	2073.5	2380.2	2733.5	2855.8	2813.6	2909.2	2935.8	2915.8	2953.6
65°	2029.0	2042.4	2186.9	2551.3	2978.0	3118.1	3060.3	3155.8	3186.9	3171.4	3235.8
67.5°	2117.9	2133.6	2326.9	2769.1	3280.3	3424.7	3375.8	3475.9	3522.5	3518.1	3589.2
70°	2249.1	2278.0	2533.5	3078.1	3740.3	3924.8	3898.2	4020.3	4133.6	4124.8	4195.9
72.5°	2478.0	2524.6	2873.6	3558.1	4496.0	4720.4	4689.3	4758.2	4738.2	4576.0	4444.8
74°	2433.5	2491.3	2958.1	3809.3	4836.0	4978.2	4927.0	4929.3	4747.1	4500.4	4289.2
75°	2271.3	2331.3	2835.8	3778.1	4811.6	4889.3	4816.0	4724.8	4504.9	4253.7	3993.7
77.5°	1558.0	1635.7	2084.7	3051.4	3873.7	3767.0	3749.2	3575.8	3284.7	3002.5	2669.1
80°	797.8	853.4	1077.9	1595.7	2298.0	2191.3	2226.9	2086.8	1844.6	1640.1	1300.1
82.5°	191.1	204.5	317.8	617.9	995.6	911.1	924.5	817.8	677.8	553.4	428.9
85°	100.0	113.3	155.6	171.1	262.3	271.2	264.4	255.5	208.9	175.5	153.3
87.5°	0.0	0.0	0.0	4.4	2.3	0.0	2.3	0.0	0.0	2.3	4.4
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	3.1	4.1	5.3	5.6	6.6	8.0	9.2	10.2
100°	8.2	8.2	10.2	14.3	22.5	24.6	25.0	26.6	28.6	30.7	31.2
102.5°	28.6	28.6	32.7	38.9	46.0	47.3	47.6	48.6	49.9	51.1	51.4
105°	55.2	55.2	57.3	62.4	67.5	68.5	68.7	69.6	70.6	71.6	71.8
107.5°	79.8	78.8	81.8	85.9	90.0	90.8	90.9	91.6	92.3	93.1	93.6

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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	37.5°	38°	40°	42.5°	45°	47.5°
110°	103.3	104.3	105.4	108.4	112.5	113.0	113.1	113.5	114.1	114.6	115.1
112.5°	126.8	126.8	128.9	132.0	135.0	135.5	135.6	136.1	136.6	137.1	137.6
115°	149.4	150.4	152.4	154.5	157.5	158.0	158.1	158.6	159.1	159.6	160.1
117.5°	172.9	173.9	175.9	178.0	181.1	181.6	181.7	182.1	182.6	183.1	183.3
120°	197.4	199.5	200.5	202.5	205.6	205.8	205.9	206.1	206.4	206.6	207.1
122.5°	224.0	225.0	226.1	228.1	231.2	231.4	231.5	231.7	232.0	232.2	232.4
125°	249.6	251.6	252.7	253.7	256.8	257.0	257.1	257.3	257.6	257.8	258.0
127.5°	273.1	275.2	276.2	278.2	280.3	280.8	280.9	281.3	281.8	282.3	282.8
130°	296.7	298.7	299.7	300.7	304.8	305.0	305.1	305.4	305.7	305.9	306.4
132.5°	320.2	321.2	324.3	325.3	328.4	328.6	328.7	328.9	329.2	329.4	330.2
135°	343.7	344.7	346.8	348.8	352.9	352.9	352.9	352.9	352.9	352.9	353.7
137.5°	367.2	368.3	371.3	372.4	375.4	375.4	375.4	375.4	375.4	375.4	375.9
140°	390.8	391.8	393.8	394.9	396.9	397.1	397.2	397.4	397.7	397.9	398.1
142.5°	413.3	415.3	417.4	416.3	419.4	419.4	419.4	419.4	419.4	419.4	419.9
145°	434.8	435.8	437.8	437.8	440.9	441.1	441.2	441.4	441.7	441.9	442.4
147.5°	454.2	454.2	457.3	458.3	462.4	462.6	462.7	462.9	463.2	463.4	463.6
150°	471.6	472.6	474.6	475.7	479.8	480.0	480.1	480.3	480.6	480.8	481.0
152.5°	490.0	491.0	494.1	493.1	496.1	496.3	496.4	496.6	496.9	497.2	497.4
155°	510.5	511.5	513.5	512.5	514.5	514.5	514.5	514.5	514.5	514.5	514.7
157.5°	524.8	526.8	528.9	527.8	530.9	530.9	530.9	530.9	530.9	530.9	530.9
160°	537.0	539.1	541.1	541.1	544.2	544.2	544.2	544.2	544.2	544.2	544.2
162.5°	547.3	548.3	551.4	550.3	553.4	553.4	553.4	553.4	553.4	553.4	553.6
165°	558.5	559.6	561.6	560.6	564.7	564.7	564.7	564.7	564.7	564.7	564.9
167.5°	567.7	568.8	571.8	570.8	573.9	573.7	573.6	573.4	573.1	572.9	572.9
170°	574.9	575.9	579.0	578.0	580.0	579.8	579.7	579.5	579.2	579.0	578.8
172.5°	578.0	579.0	582.1	580.0	582.1	581.9	581.8	581.5	581.2	581.0	581.2
175°	580.0	582.1	583.1	582.1	585.1	585.1	585.1	585.1	585.1	585.1	585.3
177.5°	585.1	586.2	588.2	587.2	591.3	591.1	591.0	590.8	590.4	590.2	590.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2





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**CANDELA DISTRIBUTION (continued):**

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2
2.5°	1002.3	997.9	1002.3	989.0	995.6	984.5	989.0	977.8	982.3	973.4	975.7
5°	1006.8	995.6	1002.3	991.2	993.4	984.5	982.3	977.8	975.7	968.9	964.5
7.5°	995.6	986.7	984.5	980.1	973.4	975.7	966.8	964.5	957.9	957.9	944.5
10°	984.5	986.7	973.4	977.8	966.8	968.9	953.4	957.9	946.7	955.6	935.6
12.5°	993.4	995.6	984.5	991.2	971.2	975.7	962.3	968.9	953.4	964.5	940.1
15°	1013.4	1011.2	1006.8	1006.8	986.7	995.6	980.1	984.5	968.9	982.3	955.6
17.5°	1031.2	1029.0	1022.3	1020.1	1006.8	1008.9	993.4	1002.3	984.5	995.6	968.9
20°	1051.2	1040.1	1037.9	1035.6	1020.1	1020.1	1008.9	1013.4	995.6	1008.9	977.8
22.5°	1066.7	1057.8	1055.7	1046.8	1035.6	1040.1	1024.5	1026.7	1008.9	1022.3	995.6
25°	1091.2	1080.1	1080.1	1066.7	1060.1	1057.8	1048.9	1055.7	1037.9	1046.8	1022.3
27.5°	1124.5	1100.1	1109.0	1095.7	1091.2	1089.0	1084.5	1089.0	1075.6	1082.3	1057.8
30°	1155.6	1124.5	1137.8	1120.1	1129.0	1120.1	1126.8	1120.1	1120.1	1120.1	1109.0
32.5°	1197.9	1160.1	1186.7	1160.1	1177.9	1164.5	1186.7	1173.4	1182.3	1180.1	1175.7
35°	1257.9	1213.4	1251.2	1215.7	1246.8	1229.0	1260.1	1253.4	1271.2	1262.3	1271.2
37.5°	1337.9	1291.3	1335.7	1302.3	1340.1	1313.5	1357.9	1353.5	1391.2	1377.9	1391.2
40°	1437.9	1404.6	1437.9	1413.4	1453.4	1442.4	1489.0	1491.3	1533.5	1526.8	1542.4
42.5°	1549.1	1524.6	1558.0	1544.6	1584.6	1593.5	1646.8	1660.1	1700.1	1711.3	1713.4
45°	1669.0	1664.5	1691.2	1704.5	1744.6	1771.2	1817.9	1851.2	1895.7	1920.2	1915.7
47.5°	1809.1	1826.8	1844.6	1877.9	1913.5	1969.1	2015.7	2058.0	2109.1	2124.7	2131.3
50°	1966.8	1997.9	2013.5	2060.2	2095.7	2164.7	2229.1	2282.4	2338.0	2331.3	2335.8
52.5°	2133.6	2173.6	2195.8	2251.3	2298.0	2378.0	2433.5	2484.6	2553.6	2535.8	2529.1
55°	2318.0	2378.0	2395.8	2457.9	2497.9	2580.2	2629.1	2718.0	2746.9	2729.1	2691.4
57.5°	2513.6	2584.7	2604.6	2689.1	2709.1	2798.0	2840.2	2900.3	2924.7	2895.8	2846.9
60°	2735.8	2800.2	2815.8	2891.4	2918.1	3000.2	3031.4	3084.7	3102.5	3031.4	2962.5
62.5°	2958.1	3024.7	3033.6	3100.3	3127.0	3198.1	3233.6	3264.7	3255.8	3151.4	3064.8
65°	3211.3	3275.8	3298.1	3364.7	3380.3	3433.6	3462.5	3427.0	3406.9	3249.2	3151.4
67.5°	3613.7	3682.5	3691.4	3707.0	3704.7	3678.1	3664.7	3542.5	3453.6	3162.5	3022.5
70°	4142.5	4091.5	3991.5	3875.9	3791.5	3640.3	3551.4	3300.2	3113.6	2786.9	2551.3
72.5°	4238.2	4071.4	3824.8	3627.0	3422.5	3184.8	2993.6	2613.5	2351.4	2009.1	1760.2
74°	3967.0	3695.9	3435.9	3158.1	2922.5	2575.8	2382.5	1902.4	1642.3	1295.7	993.4
75°	3640.3	3322.5	3029.2	2675.8	2455.8	2040.2	1858.0	1340.1	1080.1	769.0	517.8
77.5°	2322.4	1942.4	1662.4	1253.4	1082.3	746.8	546.7	340.0	251.1	220.0	191.1
80°	1042.3	742.3	588.9	406.7	340.0	260.0	220.0	177.8	162.2	142.2	135.5
82.5°	333.4	266.7	253.4	226.7	226.7	182.2	155.6	122.2	111.1	95.5	86.6
85°	144.4	135.5	140.0	128.9	131.1	100.0	80.0	60.0	60.0	42.2	37.7
87.5°	4.4	0.0	2.3	0.0	4.4	0.0	2.3	0.0	2.3	0.0	2.3
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°	11.3	12.3	13.3	11.8	10.2	8.7	7.2	6.6	6.1	5.6	5.1
100°	31.7	32.2	32.7	32.2	31.7	31.2	30.7	29.9	29.2	28.4	27.6
102.5°	51.7	52.0	52.2	52.0	51.7	51.4	51.1	50.6	50.1	49.6	49.1
105°	72.1	72.4	72.6	72.6	72.6	72.6	72.6	72.1	71.6	71.1	70.6
107.5°	94.1	94.6	95.1	94.9	94.6	94.3	94.1	93.9	93.6	93.3	93.1



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**CANDELA DISTRIBUTION (continued):**

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
110°	115.6	116.1	116.6	116.6	116.6	116.6	116.6	116.4	116.1	115.8	115.6
112.5°	138.1	138.6	139.1	139.1	139.1	139.1	139.1	138.9	138.6	138.3	138.1
115°	160.6	161.1	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6	161.6
117.5°	183.6	183.9	184.1	184.3	184.6	184.9	185.2	184.9	184.6	184.3	184.1
120°	207.7	208.2	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7	208.7
122.5°	232.7	233.0	233.2	233.2	233.2	233.2	233.2	233.4	233.7	234.1	234.3
125°	258.3	258.6	258.8	259.0	259.3	259.6	259.8	259.8	259.8	259.8	259.8
127.5°	283.4	283.9	284.4	284.2	283.9	283.6	283.4	283.6	283.9	284.2	284.4
130°	306.9	307.4	307.9	307.9	307.9	307.9	307.9	308.1	308.4	308.7	308.9
132.5°	330.9	331.6	332.5	332.5	332.5	332.5	332.5	332.7	333.0	333.3	333.5
135°	354.5	355.2	356.0	356.0	356.0	356.0	356.0	356.2	356.5	356.8	357.0
137.5°	376.4	377.0	377.5	377.5	377.5	377.5	377.5	377.7	378.0	378.3	378.5
140°	398.4	398.7	399.0	399.0	399.0	399.0	399.0	399.5	400.0	400.5	401.0
142.5°	420.4	420.9	421.5	421.5	421.5	421.5	421.5	421.7	422.0	422.3	422.5
145°	442.9	443.4	444.0	443.8	443.4	443.1	442.9	443.1	443.4	443.8	444.0
147.5°	463.9	464.2	464.4	463.9	463.4	462.9	462.4	462.6	462.9	463.2	463.4
150°	481.3	481.6	481.8	481.3	480.8	480.3	479.8	479.8	479.8	479.8	479.8
152.5°	497.7	498.0	498.2	498.0	497.7	497.4	497.2	497.2	497.2	497.2	497.2
155°	515.1	515.4	515.6	515.4	515.1	514.7	514.5	514.7	515.1	515.4	515.6
157.5°	530.9	530.9	530.9	530.4	529.9	529.4	528.9	529.1	529.4	529.7	529.9
160°	544.2	544.2	544.2	543.7	543.2	542.7	542.2	542.2	542.2	542.2	542.2
162.5°	553.9	554.2	554.4	553.9	553.4	552.9	552.4	551.9	551.4	550.9	550.3
165°	565.2	565.5	565.7	564.9	564.2	563.4	562.6	562.1	561.6	561.1	560.6
167.5°	572.9	572.9	572.9	572.3	571.8	571.3	570.8	571.0	571.3	571.6	571.8
170°	578.5	578.2	578.0	577.8	577.5	577.1	576.9	577.5	578.0	578.5	579.0
172.5°	581.5	581.9	582.1	581.5	581.0	580.5	580.0	580.2	580.5	580.8	581.0
175°	585.6	585.9	586.2	585.3	584.6	583.9	583.1	582.6	582.1	581.5	581.0
177.5°	590.2	590.2	590.2	589.4	588.7	588.0	587.2	587.2	587.2	587.2	587.2
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2



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**CANDELA DISTRIBUTION (continued):**

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2
2.5°	966.8	971.2	968.9	960.0	957.9	951.2	935.6	937.8	928.9	935.6	924.5
5°	957.9	955.6	946.7	935.6	924.5	911.1	900.1	895.6	886.7	882.3	875.6
7.5°	944.5	935.6	920.0	902.3	886.7	869.0	860.1	844.5	840.0	824.5	822.2
10°	940.1	924.5	906.7	884.5	857.8	831.1	829.0	802.3	800.0	775.6	769.0
12.5°	949.0	928.9	906.7	880.0	848.9	811.2	811.2	771.2	769.0	735.6	724.6
15°	966.8	942.3	913.4	882.3	842.3	795.7	793.4	746.8	742.3	702.3	689.0
17.5°	982.3	949.0	922.3	880.0	833.4	780.1	769.0	722.3	713.4	666.8	649.0
20°	993.4	955.6	924.5	875.6	817.8	755.7	740.1	691.2	671.2	624.5	600.1
22.5°	1006.8	971.2	928.9	873.4	808.9	735.6	702.3	657.9	628.9	580.0	546.7
25°	1026.7	995.6	944.5	880.0	802.3	715.7	671.2	624.5	584.5	535.6	486.7
27.5°	1057.8	1026.7	966.8	888.9	800.0	695.6	646.7	588.9	540.0	486.7	431.2
30°	1102.3	1069.0	1004.5	913.4	802.3	680.1	620.0	557.8	500.0	437.8	380.0
32.5°	1160.1	1133.4	1053.4	940.1	811.2	666.8	595.6	524.5	453.4	393.3	342.3
35°	1240.1	1222.3	1122.3	991.2	833.4	660.0	571.1	493.4	413.4	353.3	297.8
37.5°	1357.9	1333.4	1222.3	1064.6	869.0	655.6	553.4	455.6	380.0	315.6	268.9
40°	1506.8	1473.5	1340.1	1153.5	924.5	657.9	537.9	426.7	351.2	282.2	244.5
42.5°	1684.6	1635.7	1484.6	1262.3	980.1	662.3	529.0	400.1	328.9	255.5	226.7
45°	1884.6	1829.0	1655.7	1397.9	1060.1	673.4	522.2	377.8	308.9	235.6	215.5
47.5°	2080.2	2024.6	1831.3	1533.5	1142.3	693.4	526.7	364.5	295.5	224.4	202.2
50°	2271.3	2213.6	1986.9	1655.7	1213.4	720.1	544.5	366.7	293.4	220.0	195.6
52.5°	2440.2	2369.1	2120.2	1751.3	1264.6	737.9	560.1	373.4	295.5	217.8	193.3
55°	2609.1	2518.0	2226.9	1826.8	1295.7	740.1	560.1	375.6	297.8	217.8	191.1
57.5°	2735.8	2631.3	2309.1	1871.3	1306.8	729.0	546.7	364.5	284.5	215.5	186.7
60°	2815.8	2704.7	2366.9	1900.1	1291.3	682.3	475.6	322.2	251.1	200.0	173.4
62.5°	2882.5	2769.1	2384.6	1851.2	1160.1	542.3	371.1	262.3	208.9	177.8	160.0
65°	2898.0	2762.5	2260.2	1635.7	906.7	375.6	268.9	206.6	171.1	157.8	144.4
67.5°	2662.4	2500.2	1900.1	1280.1	617.9	257.8	200.0	168.9	146.7	140.0	135.5
70°	2164.7	1986.9	1391.2	837.9	344.4	180.0	153.3	140.0	126.6	126.6	120.0
72.5°	1395.7	1211.2	713.4	357.8	175.5	137.8	124.5	120.0	108.9	111.1	104.4
74°	713.4	555.6	291.1	188.9	144.4	122.2	111.1	108.9	97.8	100.0	93.3
75°	362.2	286.7	204.5	157.8	133.4	115.6	102.2	102.2	88.9	91.1	84.5
77.5°	168.9	162.2	140.0	124.5	113.3	97.8	84.5	82.2	68.8	73.3	64.4
80°	117.7	117.7	108.9	104.4	93.3	80.0	64.4	64.4	51.1	53.3	46.6
82.5°	66.7	62.2	62.2	71.1	73.3	60.0	46.6	44.5	37.7	37.7	31.1
85°	28.8	33.3	40.0	48.9	53.3	46.6	33.3	31.1	20.0	20.0	11.2
87.5°	0.0	2.3	2.3	4.4	8.9	8.9	0.0	4.4	0.0	2.3	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°	4.9	4.6	4.1	4.1	4.1	4.6	4.9	5.1	5.6	6.1	6.6
100°	27.4	27.1	26.6	25.6	26.6	27.1	27.4	27.6	28.4	29.2	29.9
102.5°	49.3	49.6	50.1	49.1	50.1	49.6	49.3	49.1	49.6	50.1	50.6
105°	71.1	71.6	72.6	70.6	72.6	71.6	71.1	70.6	71.1	71.6	72.1
107.5°	93.3	93.6	94.1	93.1	94.1	93.6	93.3	93.1	93.3	93.6	93.9



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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°	115.8	116.1	116.6	115.6	116.6	116.1	115.8	115.6	115.8	116.1	116.4	0°
112.5°	138.6	139.1	140.1	138.1	140.1	139.1	138.6	138.1	138.3	138.6	138.9	2.5°
115°	162.1	162.6	163.7	162.6	163.7	162.6	162.1	161.6	161.6	161.6	161.6	5°
117.5°	184.6	185.2	186.2	184.1	186.2	185.2	184.6	184.1	184.3	184.6	184.9	7.5°
120°	209.2	209.7	210.7	208.7	210.7	209.7	209.2	208.7	208.7	208.7	208.7	10°
122.5°	235.3	236.3	238.3	237.3	238.3	236.3	235.3	234.3	234.1	233.7	233.4	12.5°
125°	260.6	261.4	262.9	261.9	262.9	261.4	260.6	259.8	259.8	259.8	259.8	15°
127.5°	285.2	285.9	287.4	284.4	287.4	285.9	285.2	284.4	284.2	283.9	283.6	17.5°
130°	309.7	310.5	312.0	310.0	312.0	310.5	309.7	308.9	308.7	308.4	308.1	20°
132.5°	334.3	335.0	336.6	334.5	336.6	335.0	334.3	333.5	333.3	333.0	332.7	22.5°
135°	357.5	358.0	359.1	358.0	359.1	358.0	357.5	357.0	356.8	356.5	356.2	25°
137.5°	379.5	380.5	382.6	380.5	382.6	380.5	379.5	378.5	378.3	378.0	377.7	27.5°
140°	402.0	403.0	405.1	403.0	405.1	403.0	402.0	401.0	400.5	400.0	399.5	30°
142.5°	423.3	424.0	425.5	424.5	425.5	424.0	423.3	422.5	422.3	422.0	421.7	32.5°
145°	444.8	445.5	447.0	445.0	447.0	445.5	444.8	444.0	443.8	443.4	443.1	35°
147.5°	464.2	464.9	466.5	463.4	466.5	464.9	464.2	463.4	463.2	462.9	462.6	37.5°
150°	480.8	481.8	483.9	480.8	483.9	481.8	480.8	479.8	479.8	479.8	479.8	40°
152.5°	498.0	498.7	500.2	497.2	500.2	498.7	498.0	497.2	497.2	497.2	497.2	42.5°
155°	516.4	517.1	518.6	516.6	518.6	517.1	516.4	515.6	515.4	515.1	514.7	45°
157.5°	531.1	532.4	535.0	531.9	535.0	532.4	531.1	529.9	529.7	529.4	529.1	47.5°
160°	543.0	543.7	545.2	543.2	545.2	543.7	543.0	542.2	542.2	542.2	542.2	50°
162.5°	550.9	551.4	552.4	549.3	552.4	551.4	550.9	550.3	550.9	551.4	551.9	52.5°
165°	561.1	561.6	562.6	560.6	562.6	561.6	561.1	560.6	561.1	561.6	562.1	55°
167.5°	572.9	573.9	575.9	573.9	575.9	573.9	572.9	571.8	571.6	571.3	571.0	57.5°
170°	580.2	581.5	584.1	582.1	584.1	581.5	580.2	579.0	578.5	578.0	577.5	60°
172.5°	581.9	582.6	584.1	581.0	584.1	582.6	581.9	581.0	580.8	580.5	580.2	62.5°
175°	581.9	582.6	584.1	581.0	584.1	582.6	581.9	581.0	581.5	582.1	582.6	65°
177.5°	588.0	588.7	590.2	587.2	590.2	588.7	588.0	587.2	587.2	587.2	587.2	67.5°
180°	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	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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REPORT NUMBER: P  
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**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°	110°	115°
971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	971.2	110°	116.6
928.9	917.9	924.5	913.4	917.9	906.7	911.1	904.5	897.8	888.9	886.7	112.5°	139.1
869.0	860.1	857.8	846.7	848.9	840.0	831.1	820.1	806.7	789.0	782.3	115°	161.6
802.3	800.0	784.5	777.9	769.0	760.1	744.5	726.7	700.1	675.7	660.0	117.5°	185.2
744.5	737.9	715.7	704.5	691.2	680.1	657.9	633.4	595.6	557.8	537.9	120°	208.7
695.6	686.7	657.9	644.5	624.5	611.2	584.5	553.4	500.0	446.7	422.3	122.5°	233.2
655.6	642.3	609.0	588.9	562.3	548.9	520.1	475.6	411.1	355.6	322.2	125°	259.8
609.0	591.2	555.6	531.1	504.5	480.1	451.1	404.5	331.1	280.0	246.7	127.5°	283.4
557.8	535.6	497.9	464.5	435.6	413.4	384.5	337.8	264.4	224.4	206.6	130°	307.9
504.5	468.9	435.6	406.7	373.4	351.2	322.2	280.0	224.4	202.2	195.6	132.5°	332.5
449.0	408.9	375.6	346.7	315.6	295.5	271.2	237.8	204.5	197.8	197.8	135°	356.0
393.3	353.3	322.2	293.4	266.7	253.4	231.1	208.9	193.3	195.6	197.8	137.5°	377.5
342.3	302.3	273.3	251.1	226.7	217.8	200.0	186.7	184.4	191.1	193.3	140°	399.0
297.8	262.3	235.6	217.8	197.8	193.3	177.8	171.1	177.8	186.7	184.4	142.5°	421.5
260.0	231.1	204.5	193.3	175.5	173.4	162.2	157.8	166.6	177.8	177.8	145°	442.9
231.1	204.5	184.4	175.5	162.2	160.0	151.1	146.7	153.3	168.9	173.4	147.5°	462.4
206.6	191.1	171.1	162.2	153.3	148.9	144.4	140.0	142.2	162.2	164.5	150°	479.8
191.1	180.0	162.2	157.8	146.7	144.4	137.8	133.4	135.5	151.1	157.8	152.5°	497.2
180.0	171.1	155.6	153.3	142.2	140.0	133.4	128.9	131.1	144.4	151.1	155°	514.5
171.1	162.2	148.9	144.4	137.8	135.5	131.1	126.6	126.6	140.0	146.7	157.5°	528.9
166.6	157.8	144.4	140.0	133.4	131.1	126.6	122.2	124.5	135.5	140.0	160°	542.2
164.5	153.3	142.2	135.5	131.1	126.6	122.2	117.7	120.0	131.1	135.5	162.5°	552.4
164.5	151.1	142.2	135.5	128.9	122.2	120.0	113.3	117.7	126.6	133.4	165°	562.6
164.5	151.1	142.2	135.5	131.1	124.5	120.0	115.6	117.7	126.6	133.4	167.5°	570.8
160.0	148.9	144.4	137.8	135.5	128.9	126.6	122.2	122.2	133.4	144.4	170°	576.9
153.3	146.7	144.4	140.0	140.0	135.5	135.5	131.1	131.1	144.4	155.6	172.5°	580.0
144.4	140.0	142.2	140.0	140.0	140.0	137.8	137.8	137.8	148.9	162.2	175°	583.1
135.5	133.4	135.5	135.5	137.8	135.5	137.8	135.5	135.5	146.7	160.0	177.5°	587.2
122.2	122.2	124.5	122.2	124.5	124.5	126.6	126.6	126.6	133.4	146.7	180°	589.2
106.7	104.4	106.7	104.4	108.9	104.4	108.9	111.1	108.9	111.1	117.7		
95.5	93.3	95.5	93.3	97.8	93.3	95.5	95.5	93.3	75.6	64.4		
86.6	84.5	86.6	84.5	88.9	84.5	88.9	86.6	82.2	55.5	53.3		
68.8	62.2	68.8	62.2	66.7	60.0	64.4	55.5	42.2	40.0	40.0		
51.1	44.5	48.9	42.2	40.0	31.1	33.3	31.1	28.8	31.1	31.1		
31.1	22.2	26.7	20.0	24.4	17.8	22.2	20.0	17.8	17.8	17.8		
15.5	11.2	15.5	8.9	13.3	8.9	11.2	11.2	6.6	6.6	6.6		
2.3	0.0	4.4	0.0	4.4	0.0	2.3	2.3	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		
7.2	8.7	10.2	11.8	13.3	12.3	11.3	9.2	4.1	3.1	2.0		
30.7	31.2	31.7	32.2	32.7	32.2	31.7	30.7	22.5	14.3	10.2		
51.1	51.4	51.7	52.0	52.2	52.0	51.7	51.1	46.0	38.9	32.7		
72.6	72.6	72.6	72.6	72.6	72.4	72.1	71.6	67.5	62.4	57.3		
94.1	94.3	94.6	94.9	95.1	94.6	94.1	93.1	90.0	85.9	81.8		

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**TION (continued):**

**CANDELA DISTRIBUTION (con**

117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°		175°	180°
116.6	116.6	116.6	116.6	116.1	115.6	114.6	112.5	108.4	105.4	0°	971.2	971.2
139.1	139.1	139.1	139.1	138.6	138.1	137.1	135.0	132.0	128.9	2.5°	880.0	882.3
161.6	161.6	161.6	161.6	161.1	160.6	159.6	157.5	154.5	152.4	5°	771.2	777.9
184.9	184.6	184.3	184.1	183.9	183.6	183.1	181.1	178.0	175.9	7.5°	651.2	655.6
208.7	208.7	208.7	208.7	208.2	207.7	206.6	205.6	202.5	200.5	10°	524.5	529.0
233.2	233.2	233.2	233.2	233.0	232.7	232.2	231.2	228.1	226.1	12.5°	404.5	408.9
259.6	259.3	259.0	258.8	258.6	258.3	257.8	256.8	253.7	252.7	15°	304.4	300.0
283.6	283.9	284.2	284.4	283.9	283.4	282.3	280.3	278.2	276.2	17.5°	233.3	228.9
307.9	307.9	307.9	307.9	307.4	306.9	305.9	304.8	300.7	299.7	20°	197.8	197.8
332.5	332.5	332.5	332.5	331.6	330.9	329.4	328.4	325.3	324.3	22.5°	193.3	191.1
356.0	356.0	356.0	356.0	355.2	354.5	352.9	352.9	348.8	346.8	25°	195.6	193.3
377.5	377.5	377.5	377.5	377.0	376.4	375.4	375.4	372.4	371.3	27.5°	195.6	193.3
399.0	399.0	399.0	399.0	398.7	398.4	397.9	396.9	394.9	393.8	30°	191.1	188.9
421.5	421.5	421.5	421.5	420.9	420.4	419.4	419.4	416.3	417.4	32.5°	184.4	182.2
443.1	443.4	443.8	444.0	443.4	442.9	441.9	440.9	437.8	437.8	35°	177.8	177.8
462.9	463.4	463.9	464.4	464.2	463.9	463.4	462.4	458.3	457.3	37.5°	173.4	175.5
480.3	480.8	481.3	481.8	481.6	481.3	480.8	479.8	475.7	474.6	40°	166.6	168.9
497.4	497.7	498.0	498.2	498.0	497.7	497.2	496.1	493.1	494.1	42.5°	160.0	162.2
514.7	515.1	515.4	515.6	515.4	515.1	514.5	514.5	512.5	513.5	45°	153.3	155.6
529.4	529.9	530.4	530.9	530.9	530.9	530.9	530.9	527.8	528.9	47.5°	146.7	146.7
542.7	543.2	543.7	544.2	544.2	544.2	544.2	544.2	541.1	541.1	50°	137.8	137.8
552.9	553.4	553.9	554.4	554.2	553.9	553.4	553.4	550.3	551.4	52.5°	135.5	135.5
563.4	564.2	564.9	565.7	565.5	565.2	564.7	564.7	560.6	561.6	55°	135.5	135.5
571.3	571.8	572.3	572.9	572.9	572.9	572.9	573.9	570.8	571.8	57.5°	140.0	140.0
577.1	577.5	577.8	578.0	578.2	578.5	579.0	580.0	578.0	579.0	60°	153.3	155.6
580.5	581.0	581.5	582.1	581.9	581.5	581.0	582.1	580.0	582.1	62.5°	180.0	182.2
583.9	584.6	585.3	586.2	585.9	585.6	585.1	585.1	582.1	583.1	65°	206.6	211.1
588.0	588.7	589.4	590.2	590.2	590.2	590.2	591.3	587.2	588.2	67.5°	208.9	215.5
589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	589.2	70°	202.2	208.9
										72.5°	140.0	140.0
										74°	62.2	60.0
										75°	53.3	51.1
										77.5°	40.0	40.0
										80°	28.8	26.7
										82.5°	15.5	15.5
										85°	4.4	4.4
										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°	8.2	8.2
										102.5°	28.6	28.6
										105°	55.2	55.2
										107.5°	78.8	79.8



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**CANDELA DISTRIBUTION (continued):**

	175°	180°
110°	104.3	103.3
112.5°	126.8	126.8
115°	150.4	149.4
117.5°	173.9	172.9
120°	199.5	197.4
122.5°	225.0	224.0
125°	251.6	249.6
127.5°	275.2	273.1
130°	298.7	296.7
132.5°	321.2	320.2
135°	344.7	343.7
137.5°	368.3	367.2
140°	391.8	390.8
142.5°	415.3	413.3
145°	435.8	434.8
147.5°	454.2	454.2
150°	472.6	471.6
152.5°	491.0	490.0
155°	511.5	510.5
157.5°	526.8	524.8
160°	539.1	537.0
162.5°	548.3	547.3
165°	559.6	558.5
167.5°	568.8	567.7
170°	575.9	574.9
172.5°	579.0	578.0
175°	582.1	580.0
177.5°	586.2	585.1
180°	589.2	589.2

(END OF REPORT)

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report

