

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: P228417

Luminaire Tested: **ISC-AF-1000-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228417
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29763)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISC-AF-1000-LED-E1-SL4-7030
Description: IMPACT ELITE LED CYLINDER LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV W/SPILL CONTROL
Light Source: (16) 3000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4526 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

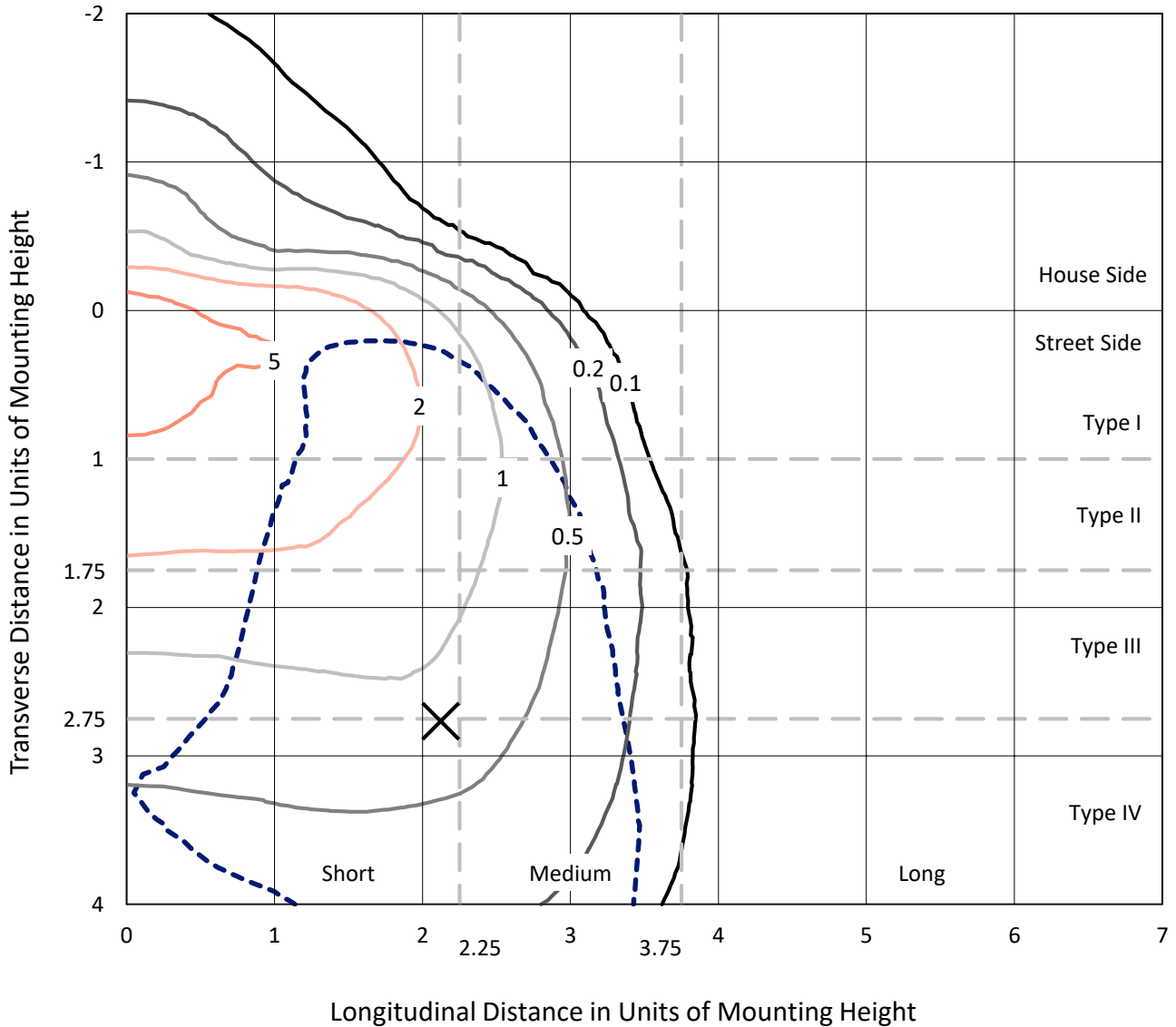
Input Watts (W): 54.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

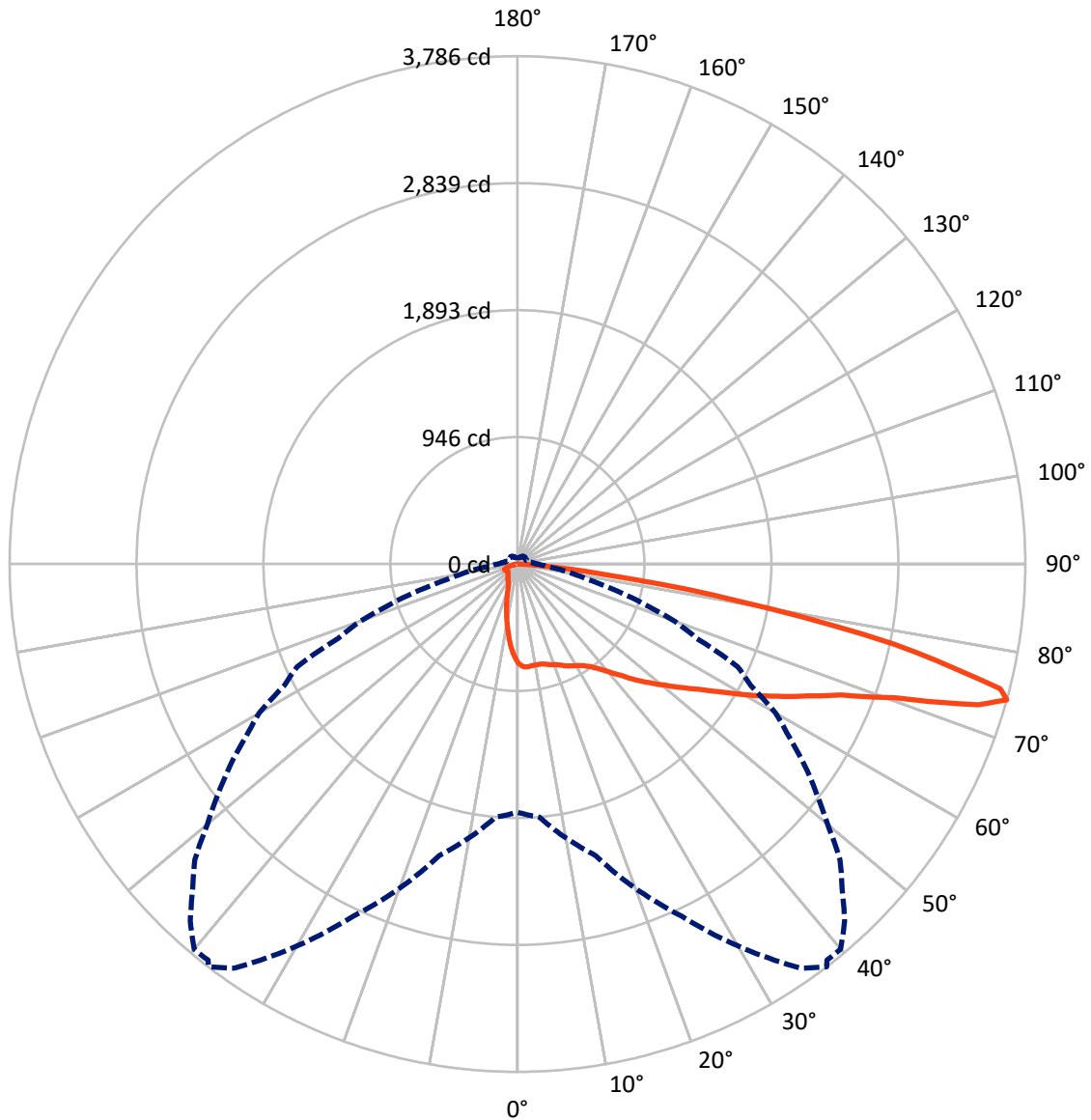
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.8 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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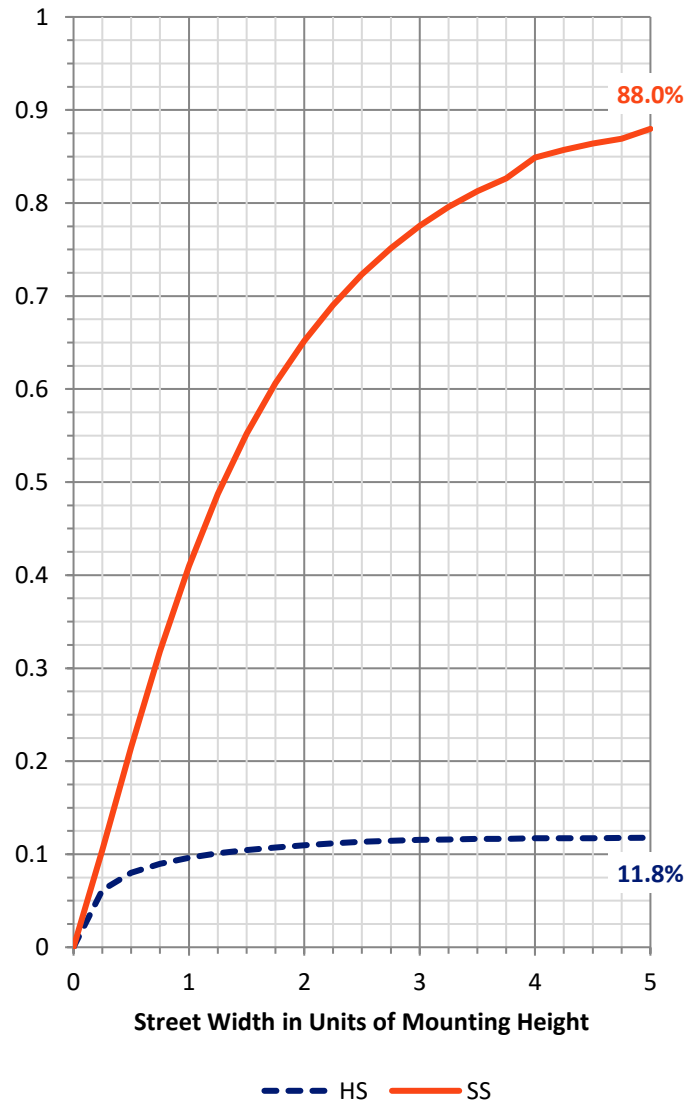
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	536.7	0.0	536.7
	% Fixture	11.9	0.0	11.9
Street Side	Lumens	3989.3	0.0	3989.3
	% Fixture	88.1	0.0	88.1
Total	Lumens	4526.0	0.0	4526.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.3	1.4
10°-20°	163.8	3.6
20°-30°	253.8	5.6
30°-40°	376.5	8.3
40°-50°	579.2	12.8
50°-60°	856.1	18.9
60°-70°	1141.2	25.2
70°-80°	985.1	21.8
80°-90°	106.0	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4526.0	100.0
0°-180°	4526.0	100.0



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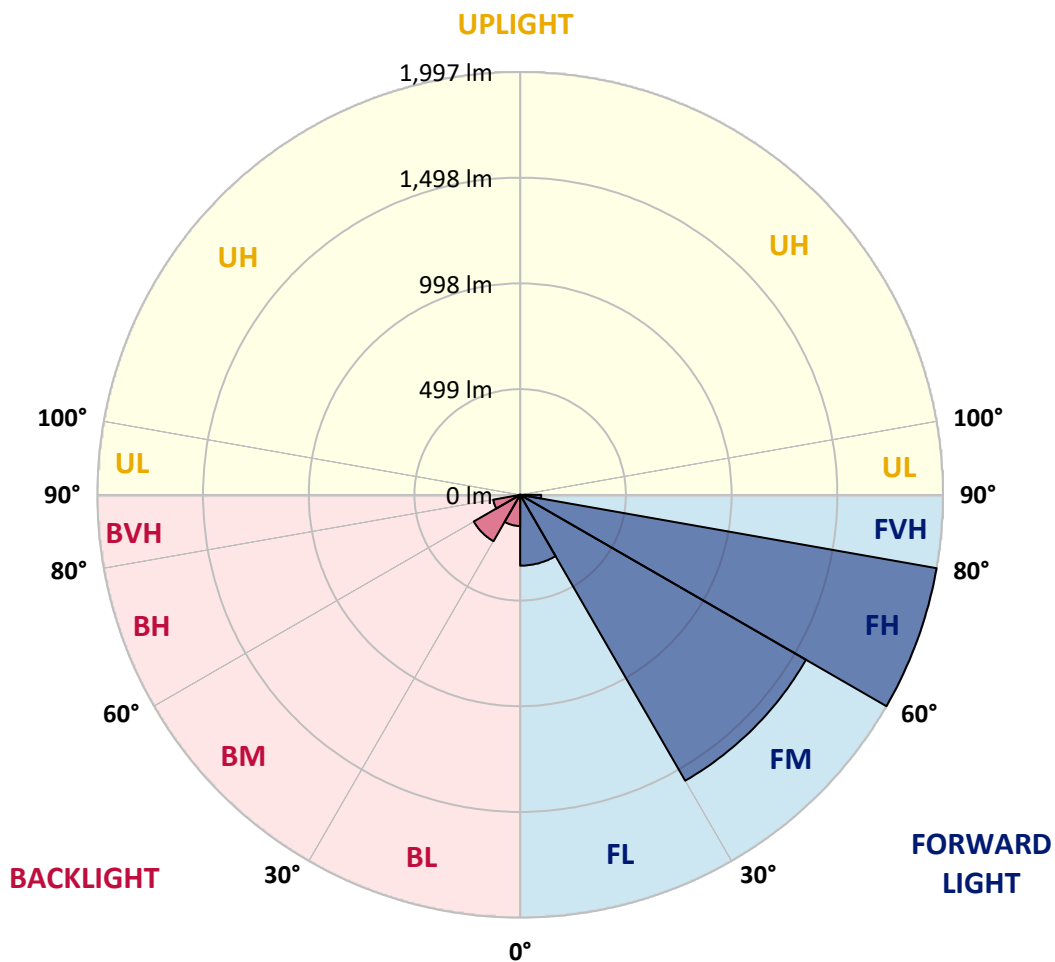
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	334.6	7.4			
FM (30°-60°)	1558.9	34.4			
FH (60°-80°)	1996.9	44.1			G2/5000
FVH (80°-90°)	99.0	2.2			G1/100
BL (0°-30°)	147.3	3.3	B1/500		
BM (30°-60°)	253.0	5.6	B1/1000		
BH (60°-80°)	129.4	2.9	B1/500		G1/500
BVH (80°-90°)	7.0	0.2			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-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°	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6
2.5°	780.8	779.1	775.8	774.1	770.7	765.6	770.7	763.9	760.5	763.9	757.2
5°	794.3	792.7	789.3	782.5	779.1	770.7	775.8	767.3	765.6	769.0	760.5
7.5°	796.0	792.7	787.6	779.1	775.8	765.6	769.0	758.9	755.5	758.9	753.8
10°	791.0	789.3	784.2	770.7	767.3	763.9	762.2	755.5	753.8	752.1	750.4
12.5°	782.5	782.5	779.1	774.1	772.4	765.6	767.3	760.5	762.2	758.9	755.5
15°	779.1	777.4	780.8	784.2	784.2	774.1	780.8	775.8	772.4	774.1	769.0
17.5°	775.8	777.4	789.3	796.0	799.4	789.3	799.4	789.3	782.5	791.0	782.5
20°	774.1	779.1	799.4	814.6	816.3	799.4	816.3	799.4	799.4	809.6	794.3
22.5°	782.5	791.0	819.7	836.6	840.0	818.0	838.3	816.3	816.3	824.8	809.6
25°	809.6	818.0	850.1	868.7	865.3	841.7	860.3	838.3	836.6	846.7	826.5
27.5°	845.0	856.9	887.3	904.2	892.4	860.3	887.3	855.2	855.2	870.4	843.4
30°	895.8	904.2	931.2	932.9	917.7	878.8	909.3	873.8	868.7	895.8	861.9
32.5°	951.5	958.3	978.6	966.7	944.8	904.2	939.7	897.4	895.8	924.5	885.6
35°	1010.7	1017.4	1024.2	1003.9	983.6	939.7	978.6	936.3	934.6	966.7	929.6
37.5°	1071.5	1071.5	1071.5	1047.9	1034.3	992.1	1027.6	993.8	990.4	1024.2	988.7
40°	1120.5	1123.9	1118.8	1096.9	1090.1	1059.7	1090.1	1059.7	1064.8	1095.2	1066.5
42.5°	1161.1	1164.5	1166.2	1147.6	1154.3	1137.4	1161.1	1139.1	1140.8	1174.6	1157.7
45°	1201.7	1200.0	1213.5	1208.4	1228.7	1230.4	1243.9	1235.5	1238.8	1264.2	1259.1
47.5°	1243.9	1235.5	1250.7	1272.6	1309.8	1321.7	1330.1	1333.5	1347.0	1358.8	1370.7
50°	1284.5	1276.0	1286.2	1335.2	1394.3	1419.7	1421.4	1438.3	1453.5	1470.4	1494.0
52.5°	1326.7	1320.0	1330.1	1399.4	1494.0	1529.5	1524.5	1553.2	1575.2	1593.8	1632.6
55°	1370.7	1363.9	1374.0	1477.1	1600.5	1649.5	1644.5	1685.0	1727.3	1734.0	1778.0
57.5°	1412.9	1404.5	1433.2	1568.4	1727.3	1801.6	1778.0	1840.5	1881.1	1877.7	1938.5
60°	1458.6	1451.8	1497.4	1680.0	1886.1	1982.5	1947.0	2029.8	2058.5	2046.7	2104.2
62.5°	1502.5	1500.8	1576.9	1810.1	2078.8	2171.8	2139.7	2212.3	2232.6	2217.4	2246.1
65°	1543.1	1553.2	1663.1	1940.2	2264.7	2371.2	2327.3	2399.9	2423.6	2411.8	2460.8
67.5°	1610.7	1622.5	1769.5	2105.9	2494.6	2604.4	2567.3	2643.3	2678.8	2675.4	2729.5
70°	1710.4	1732.3	1926.7	2340.8	2844.4	2984.7	2964.4	3057.4	3143.6	3136.8	3190.9
72.5°	1884.5	1919.9	2185.3	2705.8	3419.1	3589.8	3566.1	3618.5	3603.3	3479.9	3380.2
74°	1850.7	1894.6	2249.5	2896.8	3677.6	3785.8	3746.9	3748.6	3610.0	3422.4	3261.9
75°	1727.3	1772.9	2156.6	2873.2	3659.1	3718.2	3662.4	3593.1	3425.8	3234.8	3037.1
77.5°	1184.8	1243.9	1585.3	2320.5	2945.8	2864.7	2851.2	2719.4	2498.0	2283.3	2029.8
80°	606.7	649.0	819.7	1213.5	1747.6	1666.4	1693.5	1587.0	1402.8	1247.3	988.7
82.5°	145.3	155.5	241.7	469.8	757.2	692.9	703.1	622.0	515.5	420.8	326.2
85°	76.1	86.2	118.3	130.1	199.4	206.2	201.1	194.4	158.9	133.5	116.6
87.5°	0.0	0.0	0.0	3.4	1.7	0.0	1.7	0.0	0.0	1.7	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6
2.5°	762.2	758.9	762.2	752.1	757.2	748.7	752.1	743.6	747.0	740.3	742.0
5°	765.6	757.2	762.2	753.8	755.5	748.7	747.0	743.6	742.0	736.9	733.5
7.5°	757.2	750.4	748.7	745.3	740.3	742.0	735.2	733.5	728.4	728.4	718.3
10°	748.7	750.4	740.3	743.6	735.2	736.9	725.1	728.4	720.0	726.7	711.5
12.5°	755.5	757.2	748.7	753.8	738.6	742.0	731.8	736.9	725.1	733.5	714.9
15°	770.7	769.0	765.6	765.6	750.4	757.2	745.3	748.7	736.9	747.0	726.7
17.5°	784.2	782.5	777.4	775.8	765.6	767.3	755.5	762.2	748.7	757.2	736.9
20°	799.4	791.0	789.3	787.6	775.8	775.8	767.3	770.7	757.2	767.3	743.6
22.5°	811.2	804.5	802.8	796.0	787.6	791.0	779.1	780.8	767.3	777.4	757.2
25°	829.8	821.4	821.4	811.2	806.2	804.5	797.7	802.8	789.3	796.0	777.4
27.5°	855.2	836.6	843.4	833.2	829.8	828.1	824.8	828.1	818.0	823.1	804.5
30°	878.8	855.2	865.3	851.8	858.6	851.8	856.9	851.8	851.8	851.8	843.4
32.5°	911.0	882.2	902.5	882.2	895.8	885.6	902.5	892.4	899.1	897.4	894.1
35°	956.6	922.8	951.5	924.5	948.1	934.6	958.3	953.2	966.7	960.0	966.7
37.5°	1017.4	981.9	1015.7	990.4	1019.1	998.8	1032.6	1029.3	1058.0	1047.9	1058.0
40°	1093.5	1068.1	1093.5	1074.9	1105.3	1096.9	1132.4	1134.1	1166.2	1161.1	1172.9
42.5°	1178.0	1159.4	1184.8	1174.6	1205.0	1211.8	1252.4	1262.5	1292.9	1301.4	1303.1
45°	1269.3	1265.9	1286.2	1296.3	1326.7	1347.0	1382.5	1407.8	1441.7	1460.2	1456.9
47.5°	1375.7	1389.3	1402.8	1428.1	1455.2	1497.4	1532.9	1565.0	1603.9	1615.7	1620.8
50°	1495.7	1519.4	1531.2	1566.7	1593.8	1646.2	1695.2	1735.7	1778.0	1772.9	1776.3
52.5°	1622.5	1652.9	1669.8	1712.1	1747.6	1808.4	1850.7	1889.5	1941.9	1928.4	1923.3
55°	1762.8	1808.4	1821.9	1869.2	1899.7	1962.2	1999.4	2067.0	2089.0	2075.4	2046.7
57.5°	1911.5	1965.6	1980.8	2045.0	2060.2	2127.8	2159.9	2205.6	2224.2	2202.2	2165.0
60°	2080.5	2129.5	2141.4	2198.8	2219.1	2281.6	2305.3	2345.9	2359.4	2305.3	2252.9
62.5°	2249.5	2300.2	2307.0	2357.7	2378.0	2432.0	2459.1	2482.7	2476.0	2396.6	2330.6
65°	2442.2	2491.2	2508.1	2558.8	2570.6	2611.2	2633.2	2606.1	2590.9	2470.9	2396.6
67.5°	2748.1	2800.5	2807.2	2819.1	2817.4	2797.1	2787.0	2694.0	2626.4	2405.0	2298.5
70°	3150.3	3111.5	3035.4	2947.5	2883.3	2768.4	2700.8	2509.8	2367.8	2119.4	1940.2
72.5°	3223.0	3096.3	2908.7	2758.2	2602.7	2421.9	2276.6	1987.6	1788.1	1527.8	1338.6
74°	3016.8	2810.6	2612.9	2401.6	2222.5	1958.8	1811.8	1446.7	1249.0	985.3	755.5
75°	2768.4	2526.7	2303.6	2034.9	1867.6	1551.5	1412.9	1019.1	821.4	584.8	393.8
77.5°	1766.1	1477.1	1264.2	953.2	823.1	567.9	415.8	258.6	191.0	167.3	145.3
80°	792.7	564.5	447.9	309.3	258.6	197.7	167.3	135.2	123.4	108.2	103.1
82.5°	253.5	202.8	192.7	172.4	172.4	138.6	118.3	93.0	84.5	72.7	65.9
85°	109.9	103.1	106.5	98.0	99.7	76.1	60.8	45.6	45.6	32.1	28.7
87.5°	3.4	0.0	1.7	0.0	3.4	0.0	1.7	0.0	1.7	0.0	1.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6
2.5°	735.2	738.6	736.9	730.1	728.4	723.4	711.5	713.2	706.5	711.5	703.1
5°	728.4	726.7	720.0	711.5	703.1	692.9	684.5	681.1	674.3	671.0	665.9
7.5°	718.3	711.5	699.7	686.2	674.3	660.8	654.1	642.2	638.9	627.0	625.3
10°	714.9	703.1	689.6	672.7	652.4	632.1	630.4	610.1	608.4	589.8	584.8
12.5°	721.7	706.5	689.6	669.3	645.6	616.9	616.9	586.5	584.8	559.4	551.0
15°	735.2	716.6	694.6	671.0	640.5	605.1	603.4	567.9	564.5	534.1	523.9
17.5°	747.0	721.7	701.4	669.3	633.8	593.2	584.8	549.3	542.5	507.0	493.5
20°	755.5	726.7	703.1	665.9	622.0	574.6	562.8	525.6	510.4	474.9	456.3
22.5°	765.6	738.6	706.5	664.2	615.2	559.4	534.1	500.3	478.3	441.1	415.8
25°	780.8	757.2	718.3	669.3	610.1	544.2	510.4	474.9	444.5	407.3	370.1
27.5°	804.5	780.8	735.2	676.0	608.4	529.0	491.8	447.9	410.7	370.1	327.9
30°	838.3	812.9	763.9	694.6	610.1	517.2	471.5	424.2	380.3	332.9	289.0
32.5°	882.2	861.9	801.1	714.9	616.9	507.0	452.9	398.9	344.8	299.1	260.3
35°	943.1	929.6	853.5	753.8	633.8	502.0	434.4	375.2	314.4	268.7	226.5
37.5°	1032.6	1014.1	929.6	809.6	660.8	498.6	420.8	346.5	289.0	240.0	204.5
40°	1145.9	1120.5	1019.1	877.2	703.1	500.3	409.0	324.5	267.0	214.6	185.9
42.5°	1281.1	1243.9	1129.0	960.0	745.3	503.6	402.2	304.2	250.1	194.4	172.4
45°	1433.2	1390.9	1259.1	1063.1	806.2	512.1	397.2	287.3	234.9	179.2	163.9
47.5°	1581.9	1539.7	1392.6	1166.2	868.7	527.3	400.6	277.2	224.8	170.7	153.8
50°	1727.3	1683.3	1510.9	1259.1	922.8	547.6	414.1	278.9	223.1	167.3	148.7
52.5°	1855.7	1801.6	1612.4	1331.8	961.7	561.1	425.9	283.9	224.8	165.6	147.0
55°	1984.2	1914.9	1693.5	1389.3	985.3	562.8	425.9	285.6	226.5	165.6	145.3
57.5°	2080.5	2001.1	1756.0	1423.1	993.8	554.4	415.8	277.2	216.3	163.9	142.0
60°	2141.4	2056.8	1800.0	1445.0	981.9	518.9	361.7	245.1	191.0	152.1	131.8
62.5°	2192.1	2105.9	1813.5	1407.8	882.2	412.4	282.2	199.4	158.9	135.2	121.7
65°	2203.9	2100.8	1718.8	1243.9	689.6	285.6	204.5	157.2	130.1	120.0	109.9
67.5°	2024.7	1901.4	1445.0	973.5	469.8	196.1	152.1	128.4	111.5	106.5	103.1
70°	1646.2	1510.9	1058.0	637.2	262.0	136.9	116.6	106.5	96.3	96.3	91.3
72.5°	1061.4	921.1	542.5	272.1	133.5	104.8	94.6	91.3	82.8	84.5	79.4
74°	542.5	422.5	221.4	143.7	109.9	93.0	84.5	82.8	74.4	76.1	71.0
75°	275.5	218.0	155.5	120.0	101.4	87.9	77.7	77.7	67.6	69.3	64.2
77.5°	128.4	123.4	106.5	94.6	86.2	74.4	64.2	62.5	52.4	55.8	49.0
80°	89.6	89.6	82.8	79.4	71.0	60.8	49.0	49.0	38.9	40.6	35.5
82.5°	50.7	47.3	47.3	54.1	55.8	45.6	35.5	33.8	28.7	28.7	23.7
85°	22.0	25.4	30.4	37.2	40.6	35.5	25.4	23.7	15.2	15.2	8.5
87.5°	0.0	1.7	1.7	3.4	6.8	6.8	0.0	3.4	0.0	1.7	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



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CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6	738.6
2.5°	706.5	698.0	703.1	694.6	698.0	689.6	692.9	687.9	682.8	676.0	674.3
5°	660.8	654.1	652.4	643.9	645.6	638.9	632.1	623.6	613.5	600.0	594.9
7.5°	610.1	608.4	596.6	591.5	584.8	578.0	566.2	552.7	532.4	513.8	502.0
10°	566.2	561.1	544.2	535.8	525.6	517.2	500.3	481.7	452.9	424.2	409.0
12.5°	529.0	522.2	500.3	490.1	474.9	464.8	444.5	420.8	380.3	339.7	321.1
15°	498.6	488.4	463.1	447.9	427.6	417.5	395.5	361.7	312.7	270.4	245.1
17.5°	463.1	449.6	422.5	403.9	383.7	365.1	343.1	307.6	251.8	213.0	187.6
20°	424.2	407.3	378.6	353.2	331.3	314.4	292.4	256.9	201.1	170.7	157.2
22.5°	383.7	356.6	331.3	309.3	283.9	267.0	245.1	213.0	170.7	153.8	148.7
25°	341.4	311.0	285.6	263.7	240.0	224.8	206.2	180.8	155.5	150.4	150.4
27.5°	299.1	268.7	245.1	223.1	202.8	192.7	175.8	158.9	147.0	148.7	150.4
30°	260.3	229.9	207.9	191.0	172.4	165.6	152.1	142.0	140.3	145.3	147.0
32.5°	226.5	199.4	179.2	165.6	150.4	147.0	135.2	130.1	135.2	142.0	140.3
35°	197.7	175.8	155.5	147.0	133.5	131.8	123.4	120.0	126.8	135.2	135.2
37.5°	175.8	155.5	140.3	133.5	123.4	121.7	114.9	111.5	116.6	128.4	131.8
40°	157.2	145.3	130.1	123.4	116.6	113.2	109.9	106.5	108.2	123.4	125.1
42.5°	145.3	136.9	123.4	120.0	111.5	109.9	104.8	101.4	103.1	114.9	120.0
45°	136.9	130.1	118.3	116.6	108.2	106.5	101.4	98.0	99.7	109.9	114.9
47.5°	130.1	123.4	113.2	109.9	104.8	103.1	99.7	96.3	96.3	106.5	111.5
50°	126.8	120.0	109.9	106.5	101.4	99.7	96.3	93.0	94.6	103.1	106.5
52.5°	125.1	116.6	108.2	103.1	99.7	96.3	93.0	89.6	91.3	99.7	103.1
55°	125.1	114.9	108.2	103.1	98.0	93.0	91.3	86.2	89.6	96.3	101.4
57.5°	125.1	114.9	108.2	103.1	99.7	94.6	91.3	87.9	89.6	96.3	101.4
60°	121.7	113.2	109.9	104.8	103.1	98.0	96.3	93.0	93.0	101.4	109.9
62.5°	116.6	111.5	109.9	106.5	106.5	103.1	103.1	99.7	99.7	109.9	118.3
65°	109.9	106.5	108.2	106.5	106.5	106.5	104.8	104.8	104.8	113.2	123.4
67.5°	103.1	101.4	103.1	103.1	104.8	103.1	104.8	103.1	103.1	111.5	121.7
70°	93.0	93.0	94.6	93.0	94.6	94.6	96.3	96.3	96.3	101.4	111.5
72.5°	81.1	79.4	81.1	79.4	82.8	79.4	82.8	84.5	82.8	84.5	89.6
74°	72.7	71.0	72.7	71.0	74.4	71.0	72.7	72.7	71.0	57.5	49.0
75°	65.9	64.2	65.9	64.2	67.6	64.2	67.6	65.9	62.5	42.3	40.6
77.5°	52.4	47.3	52.4	47.3	50.7	45.6	49.0	42.3	32.1	30.4	30.4
80°	38.9	33.8	37.2	32.1	30.4	23.7	25.4	23.7	22.0	23.7	23.7
82.5°	23.7	16.9	20.3	15.2	18.6	13.5	16.9	15.2	13.5	13.5	13.5
85°	11.8	8.5	11.8	6.8	10.1	6.8	8.5	8.5	5.1	5.1	5.1
87.5°	1.7	0.0	3.4	0.0	3.4	0.0	1.7	1.7	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	175°	180°
0°	738.6	738.6
2.5°	669.3	671.0
5°	586.5	591.5
7.5°	495.2	498.6
10°	398.9	402.2
12.5°	307.6	311.0
15°	231.5	228.2
17.5°	177.5	174.1
20°	150.4	150.4
22.5°	147.0	145.3
25°	148.7	147.0
27.5°	148.7	147.0
30°	145.3	143.7
32.5°	140.3	138.6
35°	135.2	135.2
37.5°	131.8	133.5
40°	126.8	128.4
42.5°	121.7	123.4
45°	116.6	118.3
47.5°	111.5	111.5
50°	104.8	104.8
52.5°	103.1	103.1
55°	103.1	103.1
57.5°	106.5	106.5
60°	116.6	118.3
62.5°	136.9	138.6
65°	157.2	160.6
67.5°	158.9	163.9
70°	153.8	158.9
72.5°	106.5	106.5
74°	47.3	45.6
75°	40.6	38.9
77.5°	30.4	30.4
80°	22.0	20.3
82.5°	11.8	11.8
85°	3.4	3.4
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)