

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: P227963

Luminaire Tested: **ISS-AF-600-LED-E1-T4W-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227963
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29757)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-600-LED-E1-T4W-7050
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 5000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3908 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

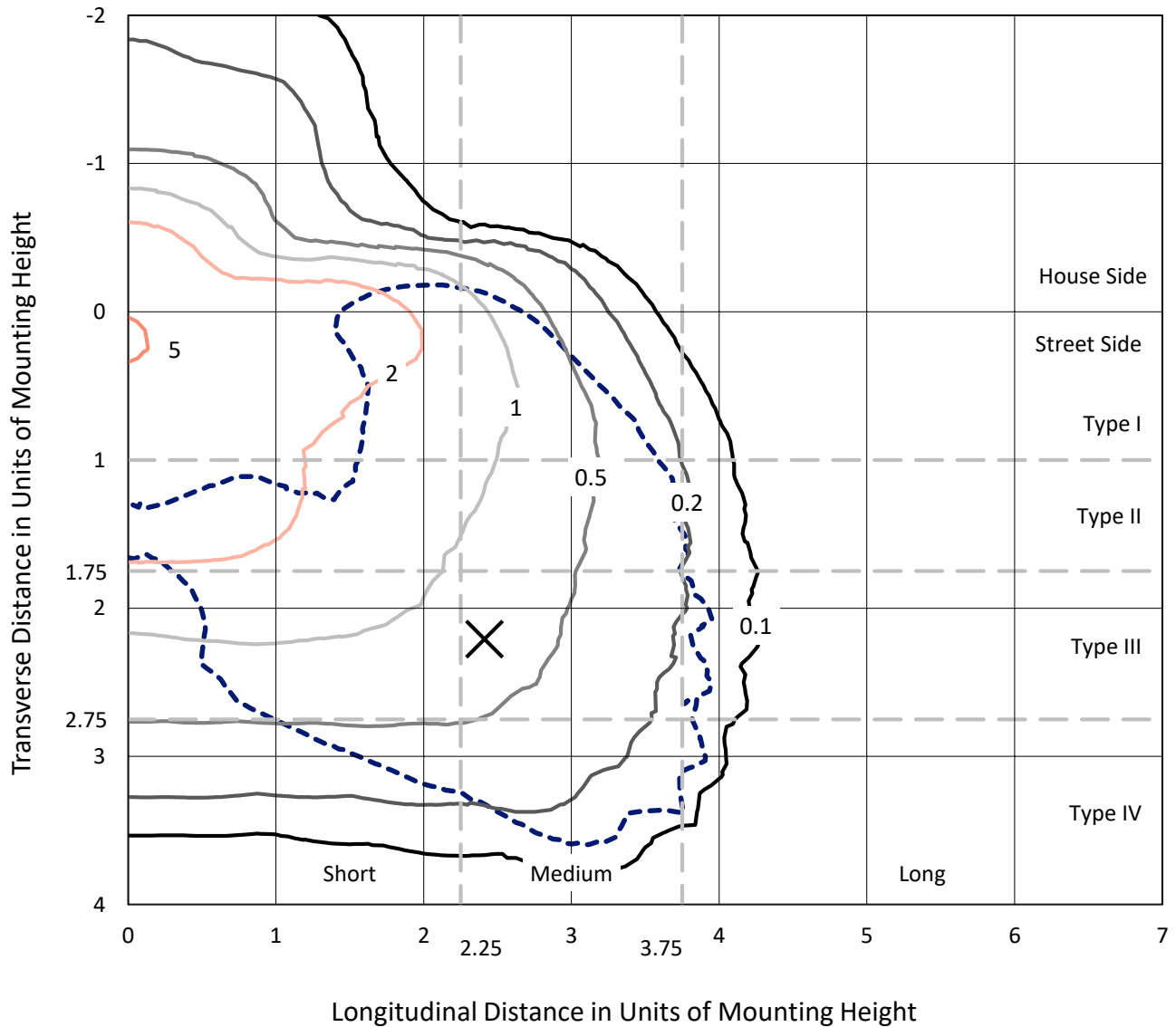
Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

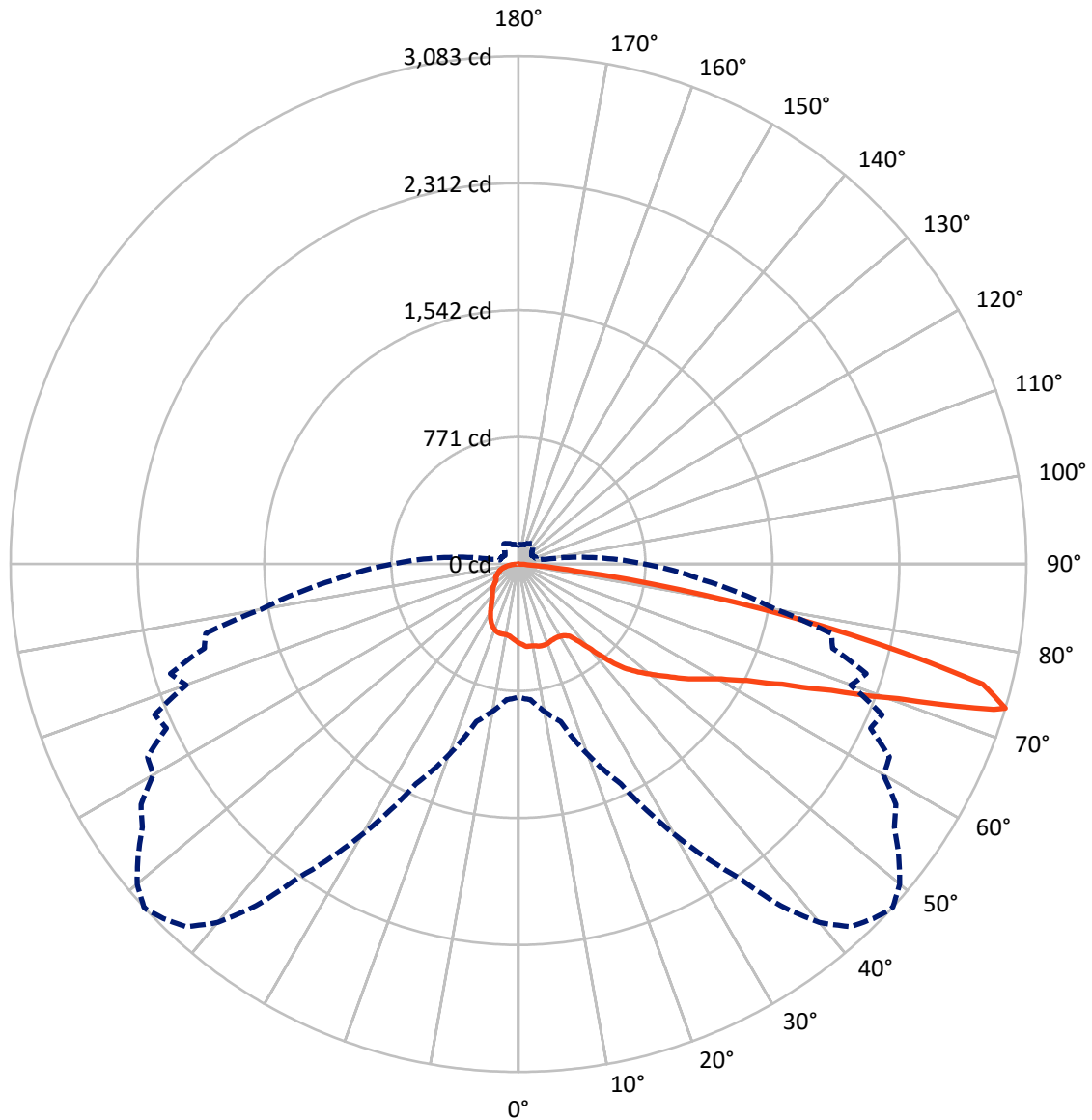
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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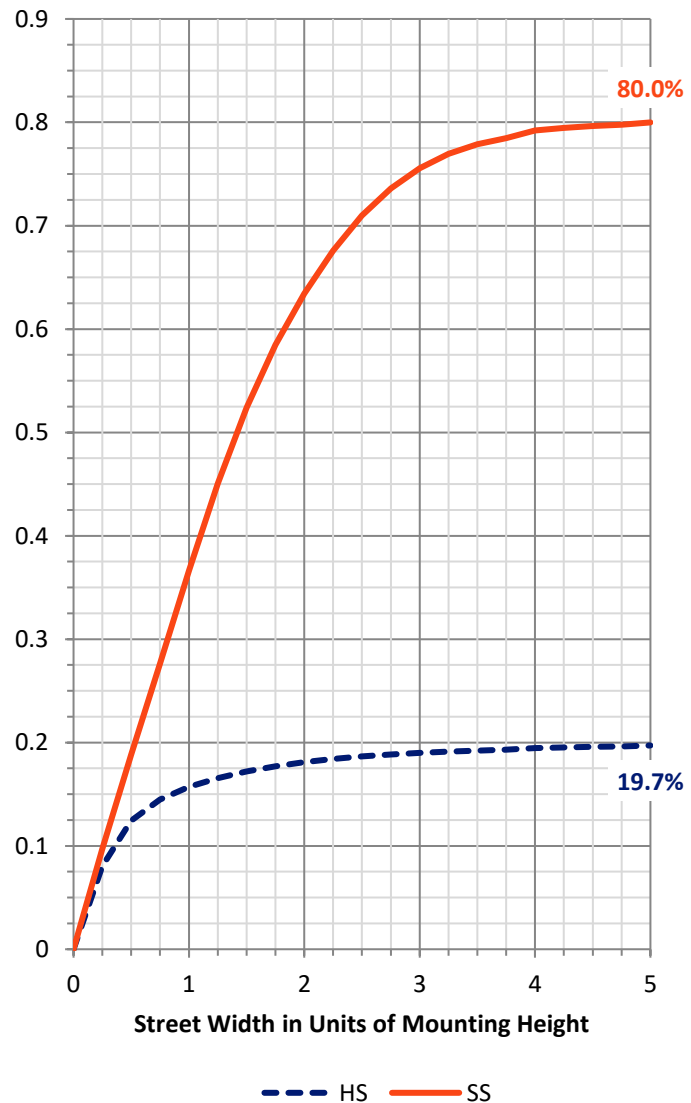
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	780.8	0.0	780.8
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	3127.2	0.0	3127.2
	% Fixture	80.0	0.0	80.0
Total	Lumens	3908.0	0.0	3908.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.7	1.2
10°-20°	136.0	3.5
20°-30°	209.0	5.3
30°-40°	304.9	7.8
40°-50°	502.8	12.9
50°-60°	787.2	20.1
60°-70°	1067.8	27.3
70°-80°	790.7	20.2
80°-90°	63.9	1.6
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°	3908.0	100.0
0°-180°	3908.0	100.0



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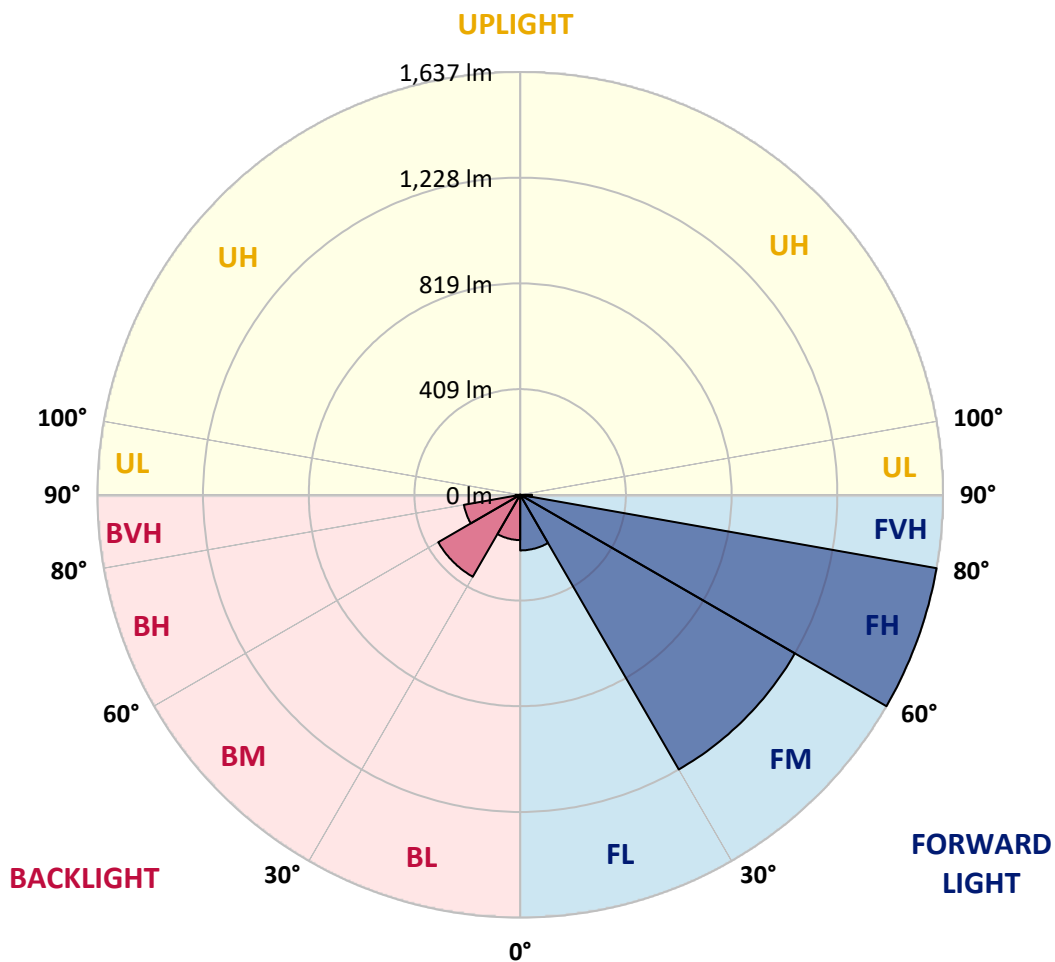
CATALOG NUMBER: ISS-AF-600-LED-E1-T4W-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	215.4	5.5			
FM	(30°-60°)	1228.2	31.4			
FH	(60°-80°)	1637.5	41.9			G1/1800
FVH	(80°-90°)	46.1	1.2			G1/100
BL	(0°-30°)	175.3	4.5	B1/500		
BM	(30°-60°)	366.6	9.4	B1/1000		
BH	(60°-80°)	221.1	5.7	B1/500		G1/500
BVH	(80°-90°)	17.8	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47°	47.5°
0°	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9
2.5°	508.3	507.0	503.1	501.8	498.0	495.4	494.1	492.8	496.7	494.1	490.2
5°	540.5	538.0	532.8	525.1	517.3	512.2	510.9	508.3	508.3	505.7	503.1
7.5°	563.8	562.5	554.7	543.1	530.2	521.2	516.0	512.2	513.4	510.9	503.1
10°	585.7	583.1	570.2	556.0	536.7	526.3	519.9	513.4	518.6	514.7	504.4
12.5°	602.5	599.9	581.8	563.8	541.8	530.2	523.8	519.9	525.1	522.5	510.9
15°	611.5	608.9	590.8	568.9	545.7	532.8	530.2	527.6	531.5	526.3	516.0
17.5°	606.3	606.3	589.6	566.3	547.0	534.1	530.2	527.6	532.8	527.6	516.0
20°	587.0	589.6	577.9	553.4	539.2	530.2	526.3	521.2	526.3	521.2	513.4
22.5°	562.5	565.0	558.6	536.7	526.3	519.9	518.6	513.4	517.3	513.4	505.7
25°	540.5	540.5	538.0	518.6	517.3	512.2	513.4	510.9	513.4	508.3	503.1
27.5°	541.8	541.8	531.5	512.2	510.9	510.9	510.9	510.9	512.2	508.3	503.1
30°	617.9	620.5	590.8	536.7	517.3	514.7	516.0	514.7	516.0	514.7	508.3
32.5°	732.8	732.8	704.4	620.5	552.1	535.4	528.9	527.6	523.8	522.5	517.3
35°	846.3	845.0	816.6	723.7	637.3	605.0	584.4	565.0	556.0	547.0	538.0
37.5°	941.7	937.9	934.0	828.2	737.9	700.5	676.0	647.6	629.6	614.1	593.4
40°	1030.8	1037.2	1051.4	925.0	838.5	803.7	779.2	743.1	725.0	705.7	681.2
42.5°	1153.3	1162.3	1163.6	1029.5	930.1	906.9	887.6	860.5	841.1	817.9	796.0
45°	1272.0	1273.3	1277.2	1141.7	1042.4	1012.7	998.5	972.7	948.2	918.5	900.5
47.5°	1353.3	1349.4	1366.2	1270.7	1174.0	1140.4	1119.8	1081.1	1043.7	1006.2	979.2
50°	1452.6	1448.7	1448.7	1417.8	1326.2	1287.5	1251.4	1179.1	1139.1	1092.7	1054.0
52.5°	1540.3	1526.1	1535.2	1553.2	1486.2	1437.1	1373.9	1292.6	1239.7	1183.0	1134.0
55°	1660.3	1586.8	1607.4	1670.6	1644.8	1568.7	1484.9	1398.4	1337.8	1273.3	1228.1
57.5°	1619.0	1568.7	1629.3	1740.3	1739.0	1668.1	1597.1	1491.3	1430.7	1370.0	1314.6
60°	1470.7	1496.5	1628.1	1788.0	1794.5	1739.0	1681.0	1582.9	1535.2	1472.0	1416.5
62.5°	1355.9	1393.3	1573.9	1784.2	1857.7	1806.1	1758.4	1700.3	1666.8	1613.9	1557.1
65°	1349.4	1371.3	1546.8	1780.3	1946.7	1919.6	1897.7	1870.6	1864.1	1825.4	1759.6
67.5°	1411.3	1432.0	1593.2	1879.6	2078.3	2066.7	2098.9	2093.8	2122.2	2102.8	2048.6
70°	1290.1	1301.7	1500.3	1914.5	2378.9	2430.5	2502.7	2498.9	2559.5	2513.0	2449.8
72.5°	905.6	928.8	1104.3	1581.6	2385.3	2661.4	2829.1	2971.0	3036.8	3048.4	3018.7
73°	808.9	826.9	989.5	1473.3	2320.8	2615.0	2840.7	2986.5	3044.5	3080.7	3083.2
75°	281.2	290.3	432.2	892.7	1855.1	2282.1	2572.4	2704.0	2689.8	2795.6	2911.7
77.5°	90.3	91.6	112.2	230.9	895.3	1416.5	1740.3	1861.6	1791.9	1906.7	2061.5
80°	55.5	58.1	73.5	104.5	234.8	429.6	727.6	910.8	873.4	980.4	1145.6
82.5°	33.5	34.8	45.2	64.5	94.2	104.5	136.7	185.8	228.3	274.8	359.9
85°	15.5	16.8	21.9	29.7	38.7	40.0	38.7	36.1	41.3	47.7	55.5
87.5°	0.0	0.0	1.3	2.6	1.3	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9
2.5°	494.1	490.2	490.2	485.1	487.6	482.5	485.1	479.9	482.5	476.0	479.9
5°	501.8	495.4	495.4	487.6	488.9	479.9	483.8	473.5	478.6	467.0	474.7
7.5°	505.7	494.1	499.3	485.1	491.5	476.0	483.8	467.0	477.3	459.3	472.2
10°	510.9	494.1	503.1	487.6	495.4	477.3	487.6	467.0	479.9	458.0	469.6
12.5°	518.6	500.5	508.3	490.2	500.5	479.9	490.2	469.6	482.5	458.0	472.2
15°	523.8	505.7	513.4	495.4	503.1	479.9	492.8	468.3	482.5	456.7	472.2
17.5°	522.5	505.7	513.4	492.8	501.8	478.6	491.5	467.0	479.9	452.8	469.6
20°	517.3	503.1	508.3	490.2	498.0	474.7	486.4	461.8	476.0	448.9	465.7
22.5°	510.9	496.7	503.1	486.4	494.1	470.9	481.2	459.3	473.5	446.4	461.8
25°	507.0	495.4	499.3	482.5	492.8	472.2	482.5	458.0	473.5	446.4	464.4
27.5°	505.7	495.4	503.1	487.6	496.7	478.6	488.9	467.0	479.9	451.5	469.6
30°	513.4	504.4	510.9	498.0	505.7	487.6	498.0	477.3	490.2	463.1	483.8
32.5°	522.5	513.4	519.9	508.3	519.9	501.8	514.7	494.1	509.6	482.5	501.8
35°	541.8	531.5	540.5	527.6	540.5	526.3	540.5	518.6	538.0	510.9	531.5
37.5°	592.1	563.8	572.8	558.6	571.5	553.4	577.9	556.0	577.9	552.1	580.5
40°	672.1	621.8	630.8	601.2	620.5	593.4	623.1	606.3	636.0	603.7	639.9
42.5°	776.6	728.9	719.9	674.7	691.5	659.2	688.9	659.2	699.2	668.3	713.4
45°	872.1	821.8	807.6	763.7	775.3	732.8	770.2	728.9	781.8	745.7	802.4
47.5°	950.8	891.4	879.8	829.5	850.2	810.2	856.6	812.7	877.2	841.1	906.9
50°	1023.0	949.5	946.9	892.7	927.6	887.6	953.4	923.7	986.9	950.8	1028.2
52.5°	1105.6	1012.7	1025.6	976.6	1032.0	998.5	1074.6	1032.0	1114.6	1075.9	1161.1
55°	1193.3	1095.3	1128.8	1099.1	1164.9	1143.0	1207.5	1168.8	1250.1	1211.4	1301.7
57.5°	1290.1	1206.2	1265.6	1251.4	1309.4	1282.3	1354.6	1319.7	1401.0	1368.8	1459.1
60°	1416.5	1361.0	1419.1	1417.8	1468.1	1466.8	1513.2	1492.6	1570.0	1555.8	1638.4
62.5°	1580.3	1536.5	1598.4	1581.6	1642.2	1631.9	1688.7	1688.7	1744.2	1763.5	1846.1
65°	1800.9	1742.9	1816.4	1790.6	1851.2	1853.8	1889.9	1896.4	1963.5	1985.4	2056.4
67.5°	2100.2	2033.1	2091.2	2042.2	2111.8	2108.0	2138.9	2151.8	2160.9	2213.7	2221.5
70°	2531.1	2430.5	2483.4	2416.3	2429.2	2438.2	2380.2	2422.7	2319.5	2403.4	2289.9
72.5°	2996.8	2882.0	2790.4	2723.3	2590.4	2571.1	2402.1	2438.2	2218.9	2291.2	2061.5
73°	3021.3	2910.4	2786.5	2716.9	2559.5	2538.8	2358.2	2389.2	2146.7	2215.0	1973.8
75°	2746.5	2776.2	2478.2	2506.6	2233.1	2265.3	1982.8	2018.9	1720.9	1772.5	1461.6
77.5°	1851.2	1950.6	1616.4	1741.6	1402.3	1527.4	1144.3	1155.9	843.7	788.2	535.4
80°	917.2	1002.4	710.8	776.6	521.2	512.2	312.2	259.3	220.6	225.8	232.2
82.5°	264.5	298.0	184.5	183.2	130.3	123.8	123.8	131.6	134.2	149.6	145.8
85°	50.3	60.6	52.9	71.0	63.2	69.7	64.5	74.8	69.7	86.4	74.8
87.5°	1.3	0.0	1.3	3.9	3.9	9.0	6.5	10.3	10.3	18.1	16.8
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°	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9
2.5°	474.7	481.2	478.6	476.0	473.5	472.2	467.0	469.6	463.1	468.3	463.1
5°	464.4	472.2	468.3	463.1	460.6	458.0	448.9	455.4	445.1	454.1	446.4
7.5°	452.8	465.7	461.8	456.7	451.5	448.9	430.9	445.1	429.6	442.5	429.6
10°	448.9	463.1	458.0	451.5	446.4	443.8	421.9	438.6	421.9	436.0	419.3
12.5°	446.4	463.1	455.4	448.9	443.8	439.9	415.4	436.0	414.1	434.8	415.4
15°	443.8	463.1	452.8	445.1	439.9	436.0	410.2	433.5	408.9	432.2	410.2
17.5°	441.2	459.3	450.2	441.2	436.0	433.5	405.1	429.6	403.8	429.6	407.7
20°	437.3	455.4	445.1	436.0	430.9	427.0	398.6	424.4	397.3	423.1	398.6
22.5°	432.2	451.5	442.5	433.5	428.3	421.9	390.9	418.0	389.6	415.4	392.2
25°	433.5	454.1	442.5	433.5	425.7	419.3	385.7	415.4	383.1	408.9	383.1
27.5°	439.9	458.0	446.4	438.6	428.3	420.6	385.7	412.8	380.6	402.5	375.4
30°	452.8	470.9	460.6	448.9	439.9	429.6	392.2	414.1	380.6	394.8	367.7
32.5°	474.7	491.5	481.2	472.2	461.8	446.4	405.1	420.6	383.1	389.6	361.2
35°	503.1	523.8	518.6	512.2	499.3	472.2	427.0	429.6	388.3	384.4	352.2
37.5°	549.6	577.9	576.7	575.4	561.2	512.2	451.5	447.7	393.5	380.6	340.6
40°	610.2	643.7	652.8	661.8	632.1	559.9	479.9	465.7	396.0	372.8	322.5
42.5°	681.2	726.3	753.4	770.2	716.0	612.8	512.2	486.4	396.0	361.2	301.9
45°	768.9	821.8	873.4	891.4	808.9	669.5	545.7	503.1	390.9	343.2	274.8
47.5°	876.0	937.9	1008.8	1017.9	909.5	730.2	568.9	514.7	374.1	318.6	250.3
50°	994.6	1069.5	1174.0	1167.5	1016.6	793.4	584.4	522.5	344.4	290.3	220.6
52.5°	1127.5	1221.7	1370.0	1340.4	1146.9	872.1	598.6	532.8	308.3	256.7	190.9
55°	1293.9	1406.2	1591.9	1528.7	1291.4	958.5	619.2	534.1	260.6	216.7	169.0
57.5°	1473.3	1593.2	1830.6	1715.8	1426.8	1025.6	610.2	492.8	212.9	183.2	152.2
60°	1688.7	1834.5	2069.3	1889.9	1540.3	1048.8	547.0	406.4	181.9	165.1	144.5
62.5°	1929.9	2074.4	2265.3	2011.2	1604.8	1010.1	406.4	281.2	156.1	147.1	132.9
65°	2186.7	2323.4	2359.5	2021.5	1562.3	839.8	251.6	184.5	135.5	131.6	122.6
67.5°	2422.7	2435.6	2270.5	1853.8	1355.9	585.7	171.6	147.1	125.1	123.8	118.7
70°	2483.4	2260.2	1887.4	1443.6	979.2	348.3	139.3	127.7	120.0	120.0	116.1
72.5°	2074.4	1720.9	1261.7	874.7	534.1	185.8	118.7	116.1	113.5	113.5	110.9
73°	1945.4	1585.5	1130.1	763.7	451.5	166.4	116.1	113.5	112.2	110.9	109.7
75°	1292.6	995.9	641.2	387.0	210.3	120.0	103.2	103.2	101.9	103.2	101.9
77.5°	498.0	375.4	247.7	166.4	120.0	94.2	87.7	89.0	87.7	90.3	89.0
80°	219.3	216.7	163.8	117.4	87.7	71.0	71.0	71.0	72.2	73.5	73.5
82.5°	149.6	126.4	96.8	72.2	52.9	51.6	52.9	52.9	54.2	55.5	54.2
85°	82.6	69.7	51.6	32.3	28.4	34.8	34.8	34.8	33.5	33.5	32.3
87.5°	25.8	19.4	14.2	3.9	6.5	6.5	9.0	7.7	7.7	9.0	9.0
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°	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9	479.9
2.5°	468.3	464.4	468.3	461.8	467.0	461.8	465.7	465.7	464.4	464.4	464.4
5°	452.8	446.4	452.8	448.9	452.8	447.7	451.5	452.8	454.1	458.0	456.7
7.5°	441.2	428.3	442.5	429.6	441.2	429.6	439.9	441.2	445.1	450.2	454.1
10°	436.0	419.3	436.0	420.6	434.8	421.9	434.8	436.0	439.9	446.4	452.8
12.5°	433.5	415.4	433.5	418.0	433.5	420.6	433.5	437.3	439.9	445.1	452.8
15°	430.9	412.8	433.5	416.7	433.5	420.6	434.8	437.3	441.2	446.4	452.8
17.5°	429.6	408.9	430.9	415.4	430.9	418.0	433.5	433.5	438.6	445.1	448.9
20°	424.4	405.1	424.4	408.9	424.4	412.8	425.7	425.7	430.9	433.5	439.9
22.5°	416.7	396.0	414.1	399.9	414.1	402.5	412.8	412.8	416.7	420.6	424.4
25°	405.1	385.7	401.2	388.3	398.6	388.3	396.0	394.8	397.3	399.9	402.5
27.5°	392.2	372.8	385.7	371.5	378.0	367.7	372.8	370.2	371.5	372.8	374.1
30°	378.0	358.6	365.1	352.2	353.5	343.2	345.7	341.9	340.6	339.3	336.7
32.5°	362.5	341.9	341.9	329.0	326.4	317.4	317.4	312.2	308.3	303.2	298.0
35°	343.2	325.1	316.1	305.7	300.6	291.6	290.3	283.8	274.8	265.8	260.6
37.5°	323.8	303.2	290.3	279.9	274.8	268.3	267.0	261.9	251.6	241.2	233.5
40°	298.0	277.4	263.2	259.3	255.4	250.3	251.6	245.1	234.8	223.2	216.7
42.5°	272.2	254.1	242.5	241.2	238.7	237.4	238.7	233.5	221.9	211.6	203.8
45°	250.3	232.2	220.6	219.3	218.0	223.2	224.5	223.2	210.3	200.0	189.6
47.5°	228.3	206.4	198.7	196.1	197.4	205.1	207.7	211.6	200.0	188.3	174.2
50°	202.5	181.9	179.3	176.7	178.0	184.5	190.9	198.7	188.3	171.6	152.2
52.5°	179.3	161.3	162.5	160.0	162.5	167.7	172.9	185.8	172.9	156.1	147.1
55°	161.3	147.1	149.6	147.1	149.6	156.1	160.0	170.3	170.3	166.4	158.7
57.5°	148.4	138.0	140.6	138.0	141.9	147.1	150.9	172.9	185.8	175.4	160.0
60°	140.6	131.6	132.9	130.3	132.9	140.6	148.4	174.2	194.8	174.2	162.5
62.5°	129.0	121.3	120.0	120.0	122.6	135.5	139.3	162.5	192.2	172.9	163.8
65°	121.3	114.8	113.5	112.2	114.8	123.8	127.7	150.9	185.8	163.8	148.4
67.5°	117.4	112.2	109.7	107.1	109.7	117.4	121.3	141.9	175.4	156.1	139.3
70°	113.5	108.4	107.1	104.5	105.8	110.9	116.1	130.3	166.4	147.1	130.3
72.5°	108.4	103.2	101.9	98.0	99.3	104.5	107.1	122.6	154.8	138.0	121.3
73°	107.1	101.9	100.6	96.8	98.0	101.9	104.5	120.0	152.2	136.7	120.0
75°	100.6	95.5	94.2	91.6	92.9	92.9	95.5	109.7	144.5	129.0	112.2
77.5°	89.0	85.1	83.9	81.3	80.0	78.7	82.6	96.8	131.6	116.1	90.3
80°	73.5	69.7	68.4	63.2	63.2	63.2	68.4	82.6	98.0	83.9	69.7
82.5°	54.2	51.6	51.6	47.7	46.4	45.2	49.0	56.8	77.4	65.8	54.2
85°	32.3	31.0	32.3	28.4	29.7	28.4	32.3	40.0	42.6	33.5	25.8
87.5°	7.7	9.0	9.0	9.0	7.7	7.7	6.5	5.2	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°	479.9	479.9
2.5°	463.1	461.8
5°	456.7	456.7
7.5°	454.1	454.1
10°	455.4	455.4
12.5°	455.4	458.0
15°	459.3	458.0
17.5°	455.4	455.4
20°	445.1	447.7
22.5°	430.9	430.9
25°	407.7	408.9
27.5°	376.7	379.3
30°	338.0	340.6
32.5°	294.1	296.7
35°	259.3	260.6
37.5°	236.1	236.1
40°	216.7	216.7
42.5°	198.7	197.4
45°	180.6	178.0
47.5°	162.5	161.3
50°	147.1	147.1
52.5°	149.6	149.6
55°	161.3	161.3
57.5°	162.5	161.3
60°	176.7	175.4
62.5°	184.5	188.3
65°	161.3	156.1
67.5°	153.5	145.8
70°	138.0	126.4
72.5°	122.6	116.1
73°	118.7	113.5
75°	105.8	103.2
77.5°	80.0	78.7
80°	67.1	65.8
82.5°	45.2	42.6
85°	19.4	18.1
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)