

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: P228354

Luminaire Tested: **ISS-AF-600-LED-E1-SL4-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228354
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: ISS-AF-600-LED-E1-SL4-7030
Description: IMPACT ELITE LED QUATER SPHERE 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: 3059 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

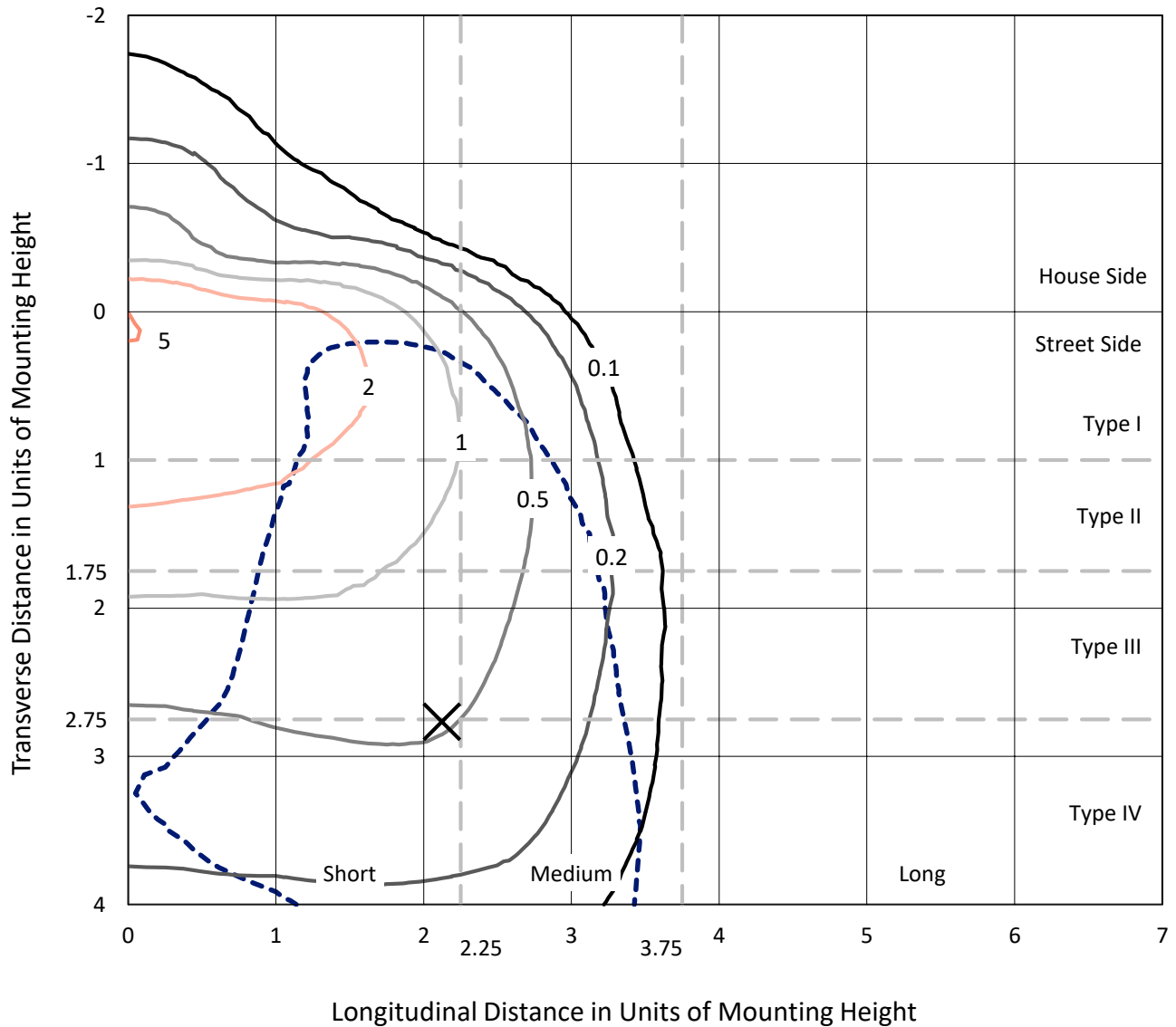
Input Watts (W): 33.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

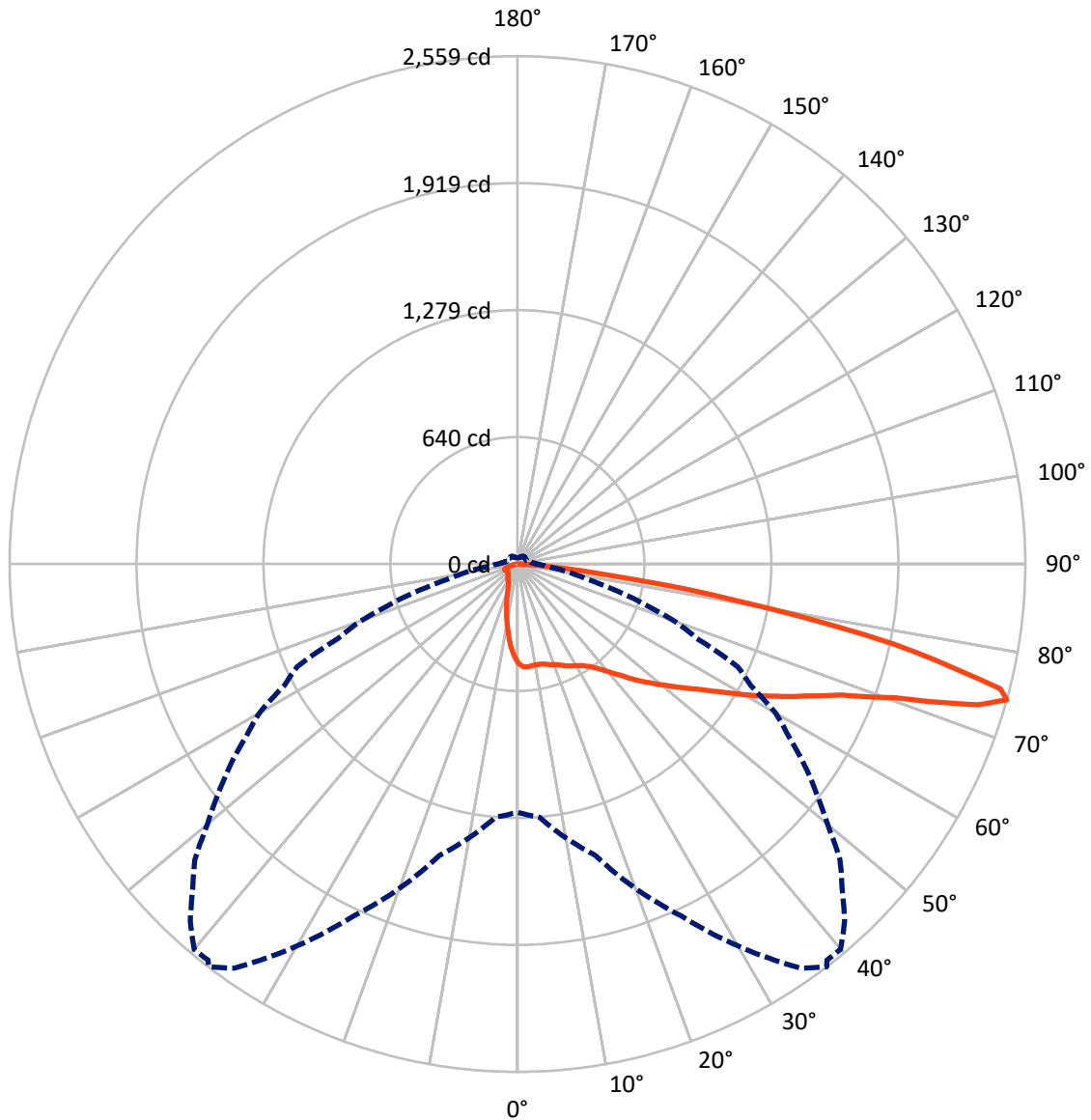
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.3 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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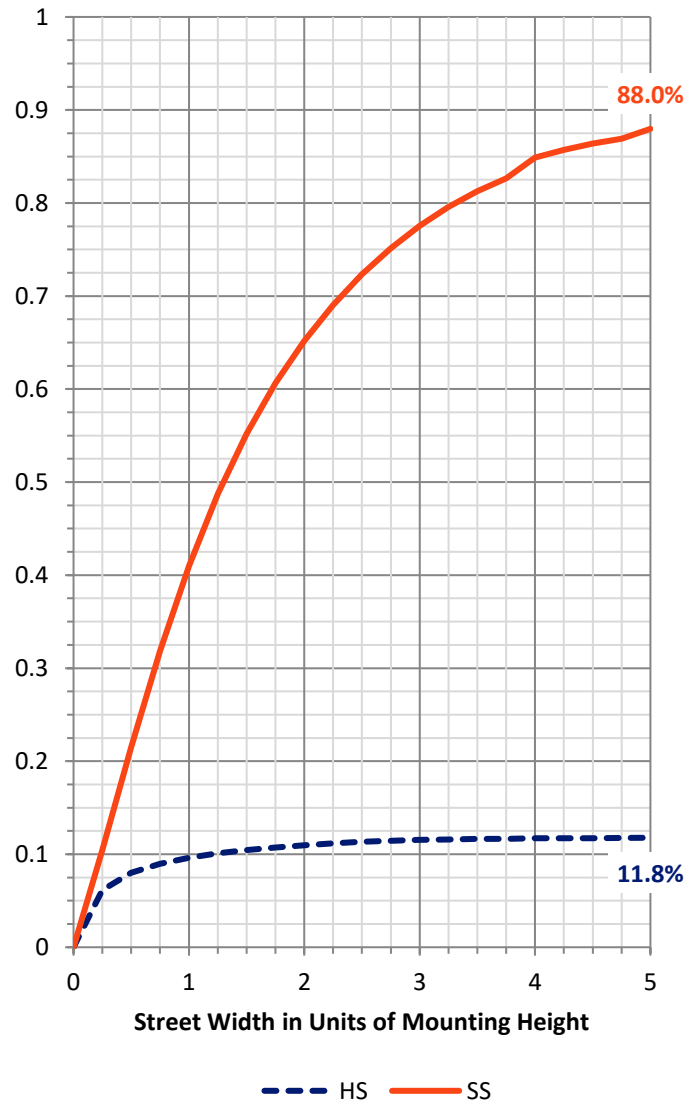
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	362.7	0.0	362.7
	% Fixture	11.9	0.0	11.9
Street Side	Lumens	2696.3	0.0	2696.3
	% Fixture	88.1	0.0	88.1
Total	Lumens	3059.0	0.0	3059.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	1.4
10°-20°	110.7	3.6
20°-30°	171.6	5.6
30°-40°	254.5	8.3
40°-50°	391.5	12.8
50°-60°	578.6	18.9
60°-70°	771.3	25.2
70°-80°	665.8	21.8
80°-90°	71.6	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°	3059.0	100.0
0°-180°	3059.0	100.0



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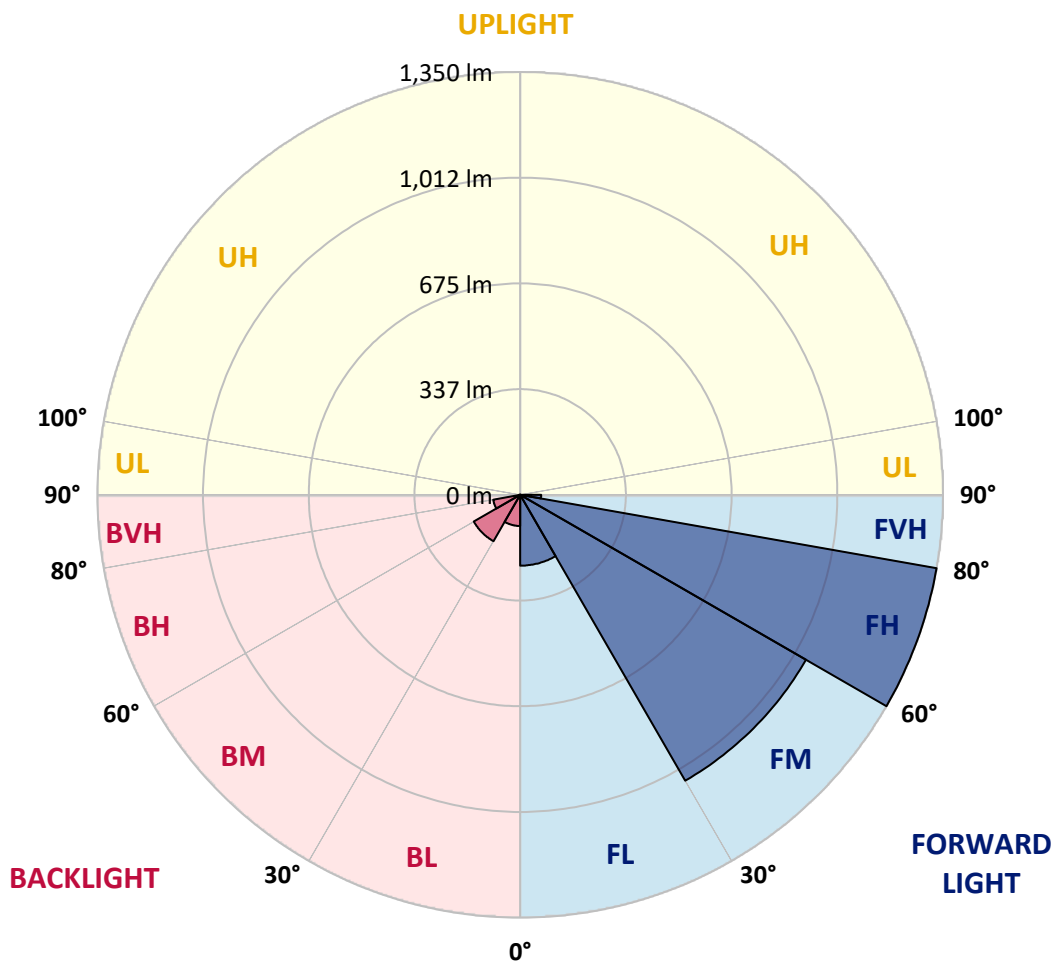
CATALOG NUMBER: ISS-AF-600-LED-E1-SL4-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	226.2	7.4			
FM	(30°-60°)	1053.6	34.4			
FH	(60°-80°)	1349.6	44.1			G1/1800
FVH	(80°-90°)	66.9	2.2			G1/100
BL	(0°-30°)	99.6	3.3	B0/110		
BM	(30°-60°)	171.0	5.6	B0/220		
BH	(60°-80°)	87.5	2.9	B0/110		G0/110
BVH	(80°-90°)	4.7	0.2			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-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°	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2
2.5°	527.7	526.6	524.3	523.2	520.9	517.5	520.9	516.3	514.0	516.3	511.7
5°	536.9	535.7	533.4	528.9	526.6	520.9	524.3	518.6	517.5	519.7	514.0
7.5°	538.0	535.7	532.3	526.6	524.3	517.5	519.7	512.9	510.6	512.9	509.5
10°	534.6	533.4	530.0	520.9	518.6	516.3	515.2	510.6	509.5	508.3	507.2
12.5°	528.9	528.9	526.6	523.2	522.0	517.5	518.6	514.0	515.2	512.9	510.6
15°	526.6	525.5	527.7	530.0	530.0	523.2	527.7	524.3	522.0	523.2	519.7
17.5°	524.3	525.5	533.4	538.0	540.3	533.4	540.3	533.4	528.9	534.6	528.9
20°	523.2	526.6	540.3	550.6	551.7	540.3	551.7	540.3	540.3	547.2	536.9
22.5°	528.9	534.6	554.0	565.4	567.7	552.9	566.6	551.7	551.7	557.4	547.2
25°	547.2	552.9	574.6	587.1	584.9	568.9	581.4	566.6	565.4	572.3	558.6
27.5°	571.1	579.1	599.7	611.1	603.1	581.4	599.7	578.0	578.0	588.3	570.0
30°	605.4	611.1	629.4	630.5	620.3	594.0	614.6	590.6	587.1	605.4	582.6
32.5°	643.1	647.7	661.4	653.4	638.5	611.1	635.1	606.6	605.4	624.8	598.6
35°	683.1	687.7	692.2	678.5	664.8	635.1	661.4	632.8	631.7	653.4	628.3
37.5°	724.2	724.2	724.2	708.2	699.1	670.5	694.5	671.7	669.4	692.2	668.2
40°	757.3	759.6	756.2	741.3	736.8	716.2	736.8	716.2	719.6	740.2	720.8
42.5°	784.8	787.0	788.2	775.6	780.2	768.8	784.8	769.9	771.0	793.9	782.5
45°	812.2	811.0	820.2	816.7	830.4	831.6	840.7	835.0	837.3	854.4	851.0
47.5°	840.7	835.0	845.3	860.1	885.3	893.3	899.0	901.3	910.4	918.4	926.4
50°	868.1	862.4	869.3	902.4	942.4	959.5	960.7	972.1	982.4	993.8	1009.8
52.5°	896.7	892.1	899.0	945.8	1009.8	1033.8	1030.3	1049.8	1064.6	1077.2	1103.5
55°	926.4	921.8	928.7	998.4	1081.7	1114.9	1111.4	1138.9	1167.4	1172.0	1201.7
57.5°	955.0	949.2	968.7	1060.0	1167.4	1217.7	1201.7	1244.0	1271.4	1269.1	1310.2
60°	985.8	981.2	1012.1	1135.4	1274.8	1339.9	1315.9	1371.9	1391.3	1383.3	1422.2
62.5°	1015.5	1014.4	1065.8	1223.4	1405.0	1467.8	1446.1	1495.3	1509.0	1498.7	1518.1
65°	1042.9	1049.8	1124.0	1311.3	1530.7	1602.6	1572.9	1622.1	1638.0	1630.0	1663.2
67.5°	1088.6	1096.6	1196.0	1423.3	1686.0	1760.3	1735.1	1786.5	1810.5	1808.2	1844.8
70°	1156.0	1170.8	1302.2	1582.1	1922.5	2017.3	2003.6	2066.4	2124.7	2120.1	2156.6
72.5°	1273.7	1297.6	1477.0	1828.8	2310.9	2426.2	2410.2	2445.6	2435.4	2352.0	2284.6
74°	1250.8	1280.5	1520.4	1957.9	2485.6	2558.7	2532.5	2533.6	2439.9	2313.1	2204.6
75°	1167.4	1198.3	1457.6	1941.9	2473.1	2513.0	2475.3	2428.5	2315.4	2186.3	2052.7
77.5°	800.7	840.7	1071.5	1568.4	1991.0	1936.2	1927.0	1837.9	1688.3	1543.2	1371.9
80°	410.1	438.6	554.0	820.2	1181.1	1126.3	1144.6	1072.6	948.1	843.0	668.2
82.5°	98.2	105.1	163.3	317.6	511.7	468.3	475.2	420.4	348.4	284.4	220.5
85°	51.4	58.3	80.0	88.0	134.8	139.4	135.9	131.4	107.4	90.2	78.8
87.5°	0.0	0.0	0.0	2.3	1.1	0.0	1.1	0.0	0.0	1.1	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



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CANDELA DISTRIBUTION (continued):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2
2.5°	515.2	512.9	515.2	508.3	511.7	506.0	508.3	502.6	504.9	500.3	501.5
5°	517.5	511.7	515.2	509.5	510.6	506.0	504.9	502.6	501.5	498.0	495.8
7.5°	511.7	507.2	506.0	503.7	500.3	501.5	496.9	495.8	492.3	492.3	485.5
10°	506.0	507.2	500.3	502.6	496.9	498.0	490.0	492.3	486.6	491.2	480.9
12.5°	510.6	511.7	506.0	509.5	499.2	501.5	494.6	498.0	490.0	495.8	483.2
15°	520.9	519.7	517.5	517.5	507.2	511.7	503.7	506.0	498.0	504.9	491.2
17.5°	530.0	528.9	525.5	524.3	517.5	518.6	510.6	515.2	506.0	511.7	498.0
20°	540.3	534.6	533.4	532.3	524.3	524.3	518.6	520.9	511.7	518.6	502.6
22.5°	548.3	543.7	542.6	538.0	532.3	534.6	526.6	527.7	518.6	525.5	511.7
25°	560.9	555.2	555.2	548.3	544.9	543.7	539.2	542.6	533.4	538.0	525.5
27.5°	578.0	565.4	570.0	563.1	560.9	559.7	557.4	559.7	552.9	556.3	543.7
30°	594.0	578.0	584.9	575.7	580.3	575.7	579.1	575.7	575.7	575.7	570.0
32.5°	615.7	596.3	610.0	596.3	605.4	598.6	610.0	603.1	607.7	606.6	604.3
35°	646.5	623.7	643.1	624.8	640.8	631.7	647.7	644.3	653.4	648.8	653.4
37.5°	687.7	663.7	686.5	669.4	688.8	675.1	697.9	695.7	715.1	708.2	715.1
40°	739.1	721.9	739.1	726.5	747.1	741.3	765.3	766.5	788.2	784.8	792.7
42.5°	796.2	783.6	800.7	793.9	814.5	819.0	846.4	853.3	873.9	879.6	880.7
45°	857.9	855.6	869.3	876.1	896.7	910.4	934.4	951.5	974.4	986.9	984.7
47.5°	929.8	939.0	948.1	965.2	983.5	1012.1	1036.1	1057.8	1084.0	1092.0	1095.5
50°	1010.9	1026.9	1034.9	1058.9	1077.2	1112.6	1145.7	1173.1	1201.7	1198.3	1200.5
52.5°	1096.6	1117.2	1128.6	1157.1	1181.1	1222.2	1250.8	1277.1	1312.5	1303.4	1299.9
55°	1191.4	1222.2	1231.4	1263.4	1283.9	1326.2	1351.3	1397.0	1411.9	1402.7	1383.3
57.5°	1291.9	1328.5	1338.8	1382.2	1392.5	1438.1	1459.8	1490.7	1503.3	1488.4	1463.3
60°	1406.2	1439.3	1447.3	1486.1	1499.8	1542.1	1558.1	1585.5	1594.6	1558.1	1522.7
62.5°	1520.4	1554.7	1559.2	1593.5	1607.2	1643.8	1662.0	1678.0	1673.5	1619.8	1575.2
65°	1650.6	1683.7	1695.2	1729.4	1737.4	1764.8	1779.7	1761.4	1751.1	1670.0	1619.8
67.5°	1857.4	1892.8	1897.3	1905.3	1904.2	1890.5	1883.6	1820.8	1775.1	1625.5	1553.5
70°	2129.2	2103.0	2051.6	1992.2	1948.7	1871.1	1825.4	1696.3	1600.3	1432.4	1311.3
72.5°	2178.3	2092.7	1965.9	1864.2	1759.1	1636.9	1538.7	1343.3	1208.5	1032.6	904.7
74°	2039.0	1899.6	1766.0	1623.2	1502.1	1323.9	1224.5	977.8	844.2	666.0	510.6
75°	1871.1	1707.7	1556.9	1375.3	1262.2	1048.6	955.0	688.8	555.2	395.2	266.2
77.5°	1193.7	998.4	854.4	644.3	556.3	383.8	281.0	174.8	129.1	113.1	98.2
80°	535.7	381.5	302.7	209.0	174.8	133.6	113.1	91.4	83.4	73.1	69.7
82.5°	171.3	137.1	130.2	116.5	116.5	93.7	80.0	62.8	57.1	49.1	44.5
85°	74.2	69.7	72.0	66.3	67.4	51.4	41.1	30.8	30.8	21.7	19.4
87.5°	2.3	0.0	1.1	0.0	2.3	0.0	1.1	0.0	1.1	0.0	1.1
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°	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2
2.5°	496.9	499.2	498.0	493.5	492.3	488.9	480.9	482.0	477.5	480.9	475.2
5°	492.3	491.2	486.6	480.9	475.2	468.3	462.6	460.3	455.8	453.5	450.1
7.5°	485.5	480.9	472.9	463.8	455.8	446.6	442.1	434.1	431.8	423.8	422.6
10°	483.2	475.2	466.1	454.6	440.9	427.2	426.1	412.4	411.2	398.7	395.2
12.5°	487.8	477.5	466.1	452.3	436.4	416.9	416.9	396.4	395.2	378.1	372.4
15°	496.9	484.3	469.5	453.5	432.9	408.9	407.8	383.8	381.5	361.0	354.1
17.5°	504.9	487.8	474.1	452.3	428.4	400.9	395.2	371.2	366.7	342.7	333.5
20°	510.6	491.2	475.2	450.1	420.4	388.4	380.4	355.3	345.0	321.0	308.4
22.5°	517.5	499.2	477.5	448.9	415.8	378.1	361.0	338.1	323.3	298.1	281.0
25°	527.7	511.7	485.5	452.3	412.4	367.8	345.0	321.0	300.4	275.3	250.2
27.5°	543.7	527.7	496.9	456.9	411.2	357.5	332.4	302.7	277.6	250.2	221.6
30°	566.6	549.4	516.3	469.5	412.4	349.5	318.7	286.7	257.0	225.0	195.3
32.5°	596.3	582.6	541.4	483.2	416.9	342.7	306.1	269.6	233.0	202.2	175.9
35°	637.4	628.3	576.9	509.5	428.4	339.3	293.6	253.6	212.5	181.6	153.1
37.5°	697.9	685.4	628.3	547.2	446.6	337.0	284.4	234.2	195.3	162.2	138.2
40°	774.5	757.3	688.8	592.8	475.2	338.1	276.4	219.3	180.5	145.1	125.7
42.5°	865.9	840.7	763.0	648.8	503.7	340.4	271.9	205.6	169.1	131.4	116.5
45°	968.7	940.1	851.0	718.5	544.9	346.1	268.4	194.2	158.8	121.1	110.8
47.5°	1069.2	1040.6	941.2	788.2	587.1	356.4	270.7	187.3	151.9	115.4	103.9
50°	1167.4	1137.7	1021.2	851.0	623.7	370.1	279.9	188.5	150.8	113.1	100.5
52.5°	1254.2	1217.7	1089.7	900.1	650.0	379.2	287.9	191.9	151.9	111.9	99.4
55°	1341.0	1294.2	1144.6	939.0	666.0	380.4	287.9	193.0	153.1	111.9	98.2
57.5°	1406.2	1352.5	1186.8	961.8	671.7	374.7	281.0	187.3	146.2	110.8	96.0
60°	1447.3	1390.2	1216.5	976.7	663.7	350.7	244.4	165.6	129.1	102.8	89.1
62.5°	1481.5	1423.3	1225.7	951.5	596.3	278.7	190.8	134.8	107.4	91.4	82.2
65°	1489.5	1419.9	1161.7	840.7	466.1	193.0	138.2	106.2	88.0	81.1	74.2
67.5°	1368.5	1285.1	976.7	658.0	317.6	132.5	102.8	86.8	75.4	72.0	69.7
70°	1112.6	1021.2	715.1	430.6	177.1	92.5	78.8	72.0	65.1	65.1	61.7
72.5°	717.4	622.5	366.7	183.9	90.2	70.8	64.0	61.7	56.0	57.1	53.7
74°	366.7	285.6	149.6	97.1	74.2	62.8	57.1	56.0	50.3	51.4	48.0
75°	186.2	147.4	105.1	81.1	68.5	59.4	52.5	52.5	45.7	46.8	43.4
77.5°	86.8	83.4	72.0	64.0	58.3	50.3	43.4	42.3	35.4	37.7	33.1
80°	60.5	60.5	56.0	53.7	48.0	41.1	33.1	33.1	26.3	27.4	24.0
82.5°	34.3	32.0	32.0	36.6	37.7	30.8	24.0	22.8	19.4	19.4	16.0
85°	14.8	17.1	20.6	25.1	27.4	24.0	17.1	16.0	10.3	10.3	5.7
87.5°	0.0	1.1	1.1	2.3	4.6	4.6	0.0	2.3	0.0	1.1	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°	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2	499.2
2.5°	477.5	471.8	475.2	469.5	471.8	466.1	468.3	464.9	461.5	456.9	455.8
5°	446.6	442.1	440.9	435.2	436.4	431.8	427.2	421.5	414.7	405.5	402.1
7.5°	412.4	411.2	403.2	399.8	395.2	390.7	382.7	373.5	359.8	347.3	339.3
10°	382.7	379.2	367.8	362.1	355.3	349.5	338.1	325.6	306.1	286.7	276.4
12.5°	357.5	353.0	338.1	331.3	321.0	314.1	300.4	284.4	257.0	229.6	217.0
15°	337.0	330.1	313.0	302.7	289.0	282.1	267.3	244.4	211.3	182.8	165.6
17.5°	313.0	303.8	285.6	273.0	259.3	246.7	231.9	207.9	170.2	143.9	126.8
20°	286.7	275.3	255.9	238.7	223.9	212.5	197.6	173.6	135.9	115.4	106.2
22.5°	259.3	241.0	223.9	209.0	191.9	180.5	165.6	143.9	115.4	103.9	100.5
25°	230.7	210.2	193.0	178.2	162.2	151.9	139.4	122.2	105.1	101.7	101.7
27.5°	202.2	181.6	165.6	150.8	137.1	130.2	118.8	107.4	99.4	100.5	101.7
30°	175.9	155.4	140.5	129.1	116.5	111.9	102.8	96.0	94.8	98.2	99.4
32.5°	153.1	134.8	121.1	111.9	101.7	99.4	91.4	88.0	91.4	96.0	94.8
35°	133.6	118.8	105.1	99.4	90.2	89.1	83.4	81.1	85.7	91.4	91.4
37.5°	118.8	105.1	94.8	90.2	83.4	82.2	77.7	75.4	78.8	86.8	89.1
40°	106.2	98.2	88.0	83.4	78.8	76.5	74.2	72.0	73.1	83.4	84.5
42.5°	98.2	92.5	83.4	81.1	75.4	74.2	70.8	68.5	69.7	77.7	81.1
45°	92.5	88.0	80.0	78.8	73.1	72.0	68.5	66.3	67.4	74.2	77.7
47.5°	88.0	83.4	76.5	74.2	70.8	69.7	67.4	65.1	65.1	72.0	75.4
50°	85.7	81.1	74.2	72.0	68.5	67.4	65.1	62.8	64.0	69.7	72.0
52.5°	84.5	78.8	73.1	69.7	67.4	65.1	62.8	60.5	61.7	67.4	69.7
55°	84.5	77.7	73.1	69.7	66.3	62.8	61.7	58.3	60.5	65.1	68.5
57.5°	84.5	77.7	73.1	69.7	67.4	64.0	61.7	59.4	60.5	65.1	68.5
60°	82.2	76.5	74.2	70.8	69.7	66.3	65.1	62.8	62.8	68.5	74.2
62.5°	78.8	75.4	74.2	72.0	72.0	69.7	69.7	67.4	67.4	74.2	80.0
65°	74.2	72.0	73.1	72.0	72.0	72.0	70.8	70.8	70.8	76.5	83.4
67.5°	69.7	68.5	69.7	69.7	70.8	69.7	70.8	69.7	69.7	75.4	82.2
70°	62.8	62.8	64.0	62.8	64.0	64.0	65.1	65.1	65.1	68.5	75.4
72.5°	54.8	53.7	54.8	53.7	56.0	53.7	56.0	57.1	56.0	57.1	60.5
74°	49.1	48.0	49.1	48.0	50.3	48.0	49.1	49.1	48.0	38.8	33.1
75°	44.5	43.4	44.5	43.4	45.7	43.4	45.7	44.5	42.3	28.6	27.4
77.5°	35.4	32.0	35.4	32.0	34.3	30.8	33.1	28.6	21.7	20.6	20.6
80°	26.3	22.8	25.1	21.7	20.6	16.0	17.1	16.0	14.8	16.0	16.0
82.5°	16.0	11.4	13.7	10.3	12.6	9.1	11.4	10.3	9.1	9.1	9.1
85°	8.0	5.7	8.0	4.6	6.9	4.6	5.7	5.7	3.4	3.4	3.4
87.5°	1.1	0.0	2.3	0.0	2.3	0.0	1.1	1.1	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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	175°	180°
0°	499.2	499.2
2.5°	452.3	453.5
5°	396.4	399.8
7.5°	334.7	337.0
10°	269.6	271.9
12.5°	207.9	210.2
15°	156.5	154.2
17.5°	119.9	117.7
20°	101.7	101.7
22.5°	99.4	98.2
25°	100.5	99.4
27.5°	100.5	99.4
30°	98.2	97.1
32.5°	94.8	93.7
35°	91.4	91.4
37.5°	89.1	90.2
40°	85.7	86.8
42.5°	82.2	83.4
45°	78.8	80.0
47.5°	75.4	75.4
50°	70.8	70.8
52.5°	69.7	69.7
55°	69.7	69.7
57.5°	72.0	72.0
60°	78.8	80.0
62.5°	92.5	93.7
65°	106.2	108.5
67.5°	107.4	110.8
70°	103.9	107.4
72.5°	72.0	72.0
74°	32.0	30.8
75°	27.4	26.3
77.5°	20.6	20.6
80°	14.8	13.7
82.5°	8.0	8.0
85°	2.3	2.3
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)