

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: P228216

Luminaire Tested: **ISS-AF-800-LED-E1-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228216
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29762)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-800-LED-E1-SL3-8030
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III W/SPILL CONTROL
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3714 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

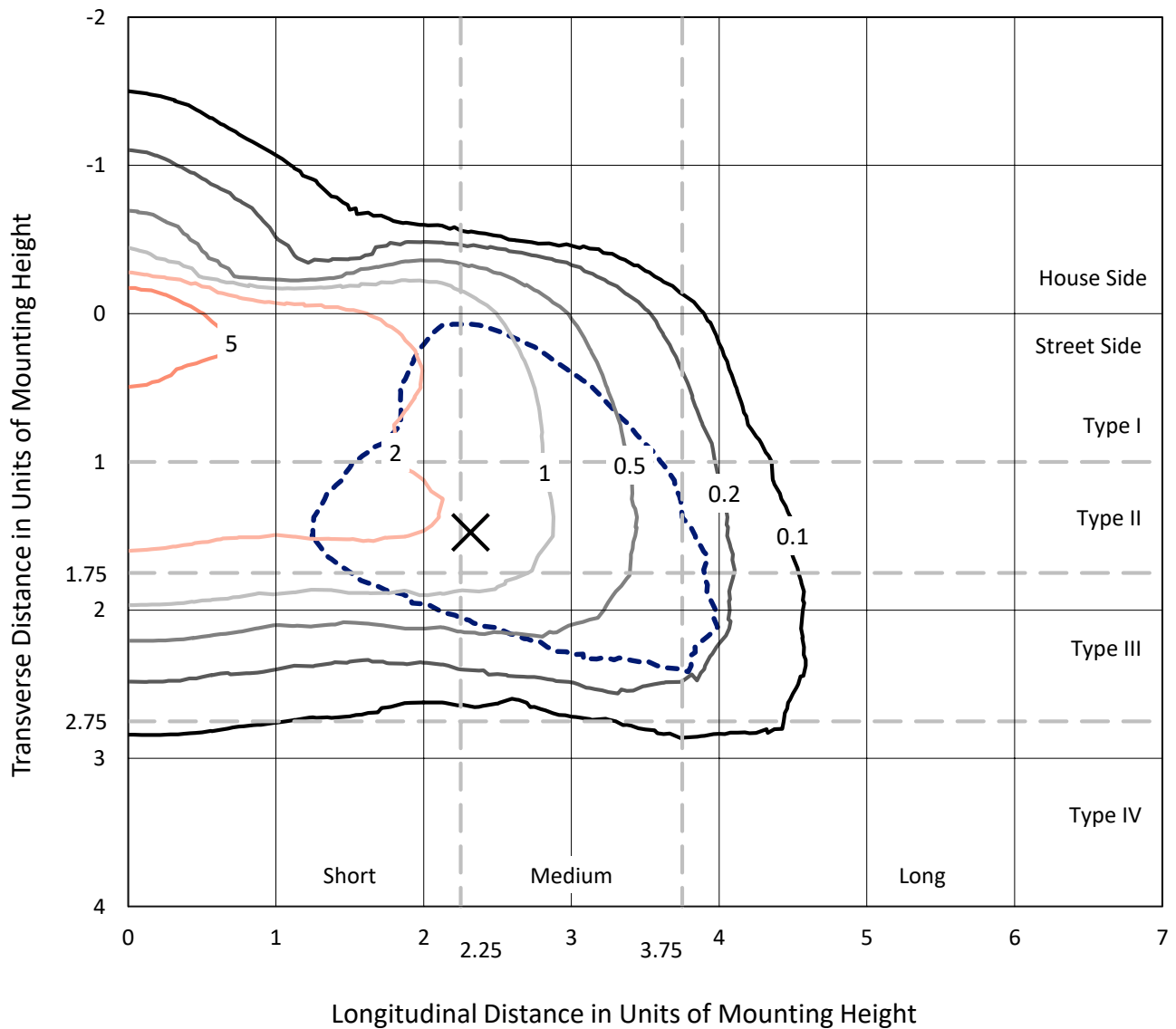
Input Watts (W): 43.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

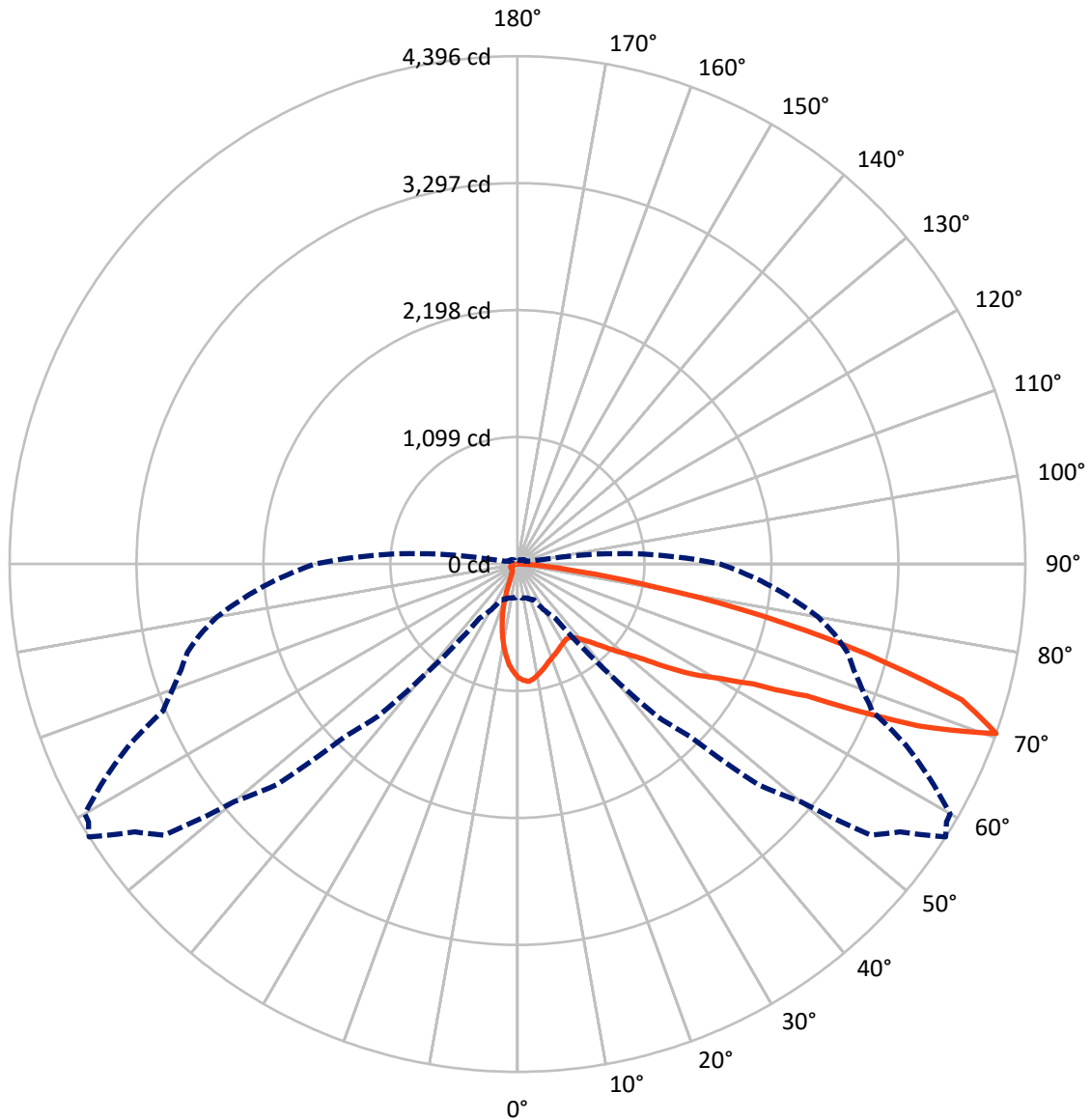
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.8 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	459.6	0.0	459.6
	% Fixture	12.4	0.0	12.4
Street Side	Lumens	3254.4	0.0	3254.4
	% Fixture	87.6	0.0	87.6
Total	Lumens	3714.0	0.0	3714.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.9	2.3
10°-20°	184.3	5.0
20°-30°	231.6	6.2
30°-40°	302.7	8.1
40°-50°	454.1	12.2
50°-60°	717.8	19.3
60°-70°	1034.7	27.9
70°-80°	640.4	17.2
80°-90°	63.5	1.7
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°	3714.0	100.0
0°-180°	3714.0	100.0



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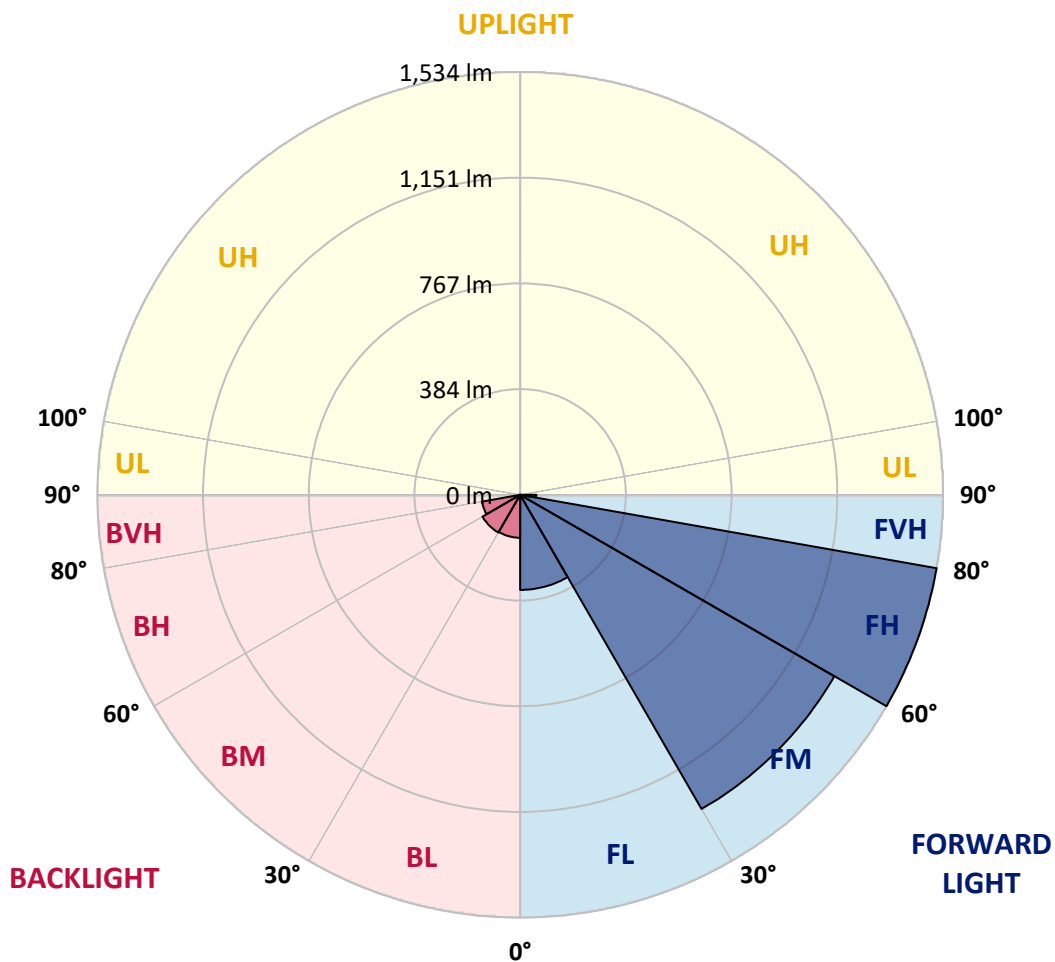
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	344.9	9.3			
FM	(30°-60°)	1316.6	35.4			
FH	(60°-80°)	1534.4	41.3			G1/1800
FVH	(80°-90°)	58.5	1.6			G1/100
BL	(0°-30°)	155.8	4.2	B1/500		
BM	(30°-60°)	158.0	4.3	B0/220		
BH	(60°-80°)	140.7	3.8	B1/500		G1/500
BVH	(80°-90°)	5.1	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	1031.8	1030.5	1027.8	1022.6	1019.9	1022.6	1019.9	1016.0	1010.7	1014.7	1012.0
5°	1029.2	1031.8	1026.5	1022.6	1029.2	1031.8	1026.5	1026.5	1021.2	1026.5	1023.9
7.5°	977.8	979.1	980.4	979.1	996.2	996.2	993.6	996.2	997.5	1000.2	1001.5
10°	913.2	914.5	917.1	921.1	942.2	944.8	946.1	948.8	952.7	955.4	963.3
12.5°	848.6	851.3	856.5	869.7	892.1	894.7	898.7	902.7	909.2	913.2	927.7
15°	794.6	795.9	801.2	815.7	848.6	855.2	857.8	863.1	876.3	876.3	892.1
17.5°	744.5	747.2	751.1	768.2	801.2	811.7	819.6	822.3	839.4	843.4	861.8
20°	706.3	707.6	708.9	724.8	755.1	770.9	777.5	788.0	801.2	811.7	827.5
22.5°	685.2	686.5	683.9	690.5	716.8	736.6	744.5	755.1	760.3	778.8	788.0
25°	686.5	687.9	681.3	677.3	690.5	711.6	718.2	728.7	726.1	752.4	752.4
27.5°	699.7	702.4	695.8	683.9	685.2	702.4	706.3	710.3	702.4	728.7	723.4
30°	726.1	728.7	720.8	711.6	697.1	707.6	707.6	707.6	693.1	715.5	706.3
32.5°	753.7	756.4	753.7	747.2	728.7	731.3	726.1	723.4	703.7	722.1	707.6
35°	794.6	795.9	797.2	797.2	770.9	776.1	761.7	753.7	735.3	749.8	730.0
37.5°	843.4	843.4	852.6	856.5	827.5	827.5	811.7	801.2	784.1	789.3	769.6
40°	886.8	890.8	911.9	923.7	897.4	886.8	873.7	864.4	851.3	851.3	831.5
42.5°	936.9	944.8	969.9	992.3	977.8	961.9	948.8	939.5	933.0	931.6	910.6
45°	998.8	1008.1	1035.7	1056.8	1060.8	1048.9	1038.4	1029.2	1023.9	1021.2	1002.8
47.5°	1068.7	1077.9	1102.9	1128.0	1146.4	1143.8	1131.9	1122.7	1126.7	1124.0	1112.2
50°	1146.4	1151.7	1167.5	1196.5	1238.7	1247.9	1245.3	1238.7	1246.6	1246.6	1236.0
52.5°	1208.4	1212.3	1224.2	1258.4	1328.3	1349.4	1366.5	1379.7	1392.8	1400.8	1394.2
55°	1265.0	1265.0	1266.3	1309.8	1413.9	1448.2	1486.4	1514.1	1531.2	1562.8	1576.0
57.5°	1357.3	1350.7	1349.4	1395.5	1516.7	1552.3	1607.6	1647.2	1670.9	1735.5	1734.1
60°	1330.9	1333.6	1381.0	1516.7	1727.6	1759.2	1809.3	1851.4	1896.2	1943.7	1947.6
62.5°	1147.7	1154.3	1225.5	1428.4	1862.0	2026.7	2180.9	2298.1	2364.0	2406.2	2348.2
65°	803.8	819.6	915.8	1163.6	1714.4	1968.7	2212.5	2483.9	2692.1	3015.0	3108.5
67.5°	400.6	412.5	428.3	610.1	1280.8	1637.9	1974.0	2344.3	2621.0	3095.4	3360.2
70°	287.3	292.5	304.4	342.6	573.2	857.8	1253.2	1782.9	2108.4	2823.9	3198.2
72.5°	222.7	228.0	243.8	297.8	379.5	419.0	498.1	814.4	1211.0	1950.3	2456.3
75°	172.6	180.5	202.9	268.8	365.0	387.4	391.4	420.4	479.7	865.8	1377.0
77.5°	121.2	122.5	145.0	231.9	354.5	398.0	391.4	391.4	399.3	441.4	589.0
80°	80.4	81.7	96.2	160.8	311.0	362.4	400.6	382.1	383.5	390.1	400.6
82.5°	42.2	44.8	56.7	97.5	181.8	245.1	333.4	347.9	342.6	349.2	346.6
85°	11.9	11.9	19.8	36.9	89.6	94.9	147.6	201.6	205.6	233.2	249.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	5.3	11.9	13.2
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):

	52.5°	55°	57.5°	59°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	1014.7	1009.4	1008.1	1005.4	1006.8	1002.8	1001.5	996.2	996.2	993.6	990.9
5°	1021.2	1016.0	1021.2	1012.0	1013.3	1009.4	1002.8	1002.8	997.5	993.6	985.7
7.5°	1002.8	1002.8	1004.1	998.8	1000.2	998.8	990.9	989.6	981.7	981.7	972.5
10°	968.5	968.5	973.8	969.9	971.2	969.9	965.9	964.6	961.9	961.9	947.5
12.5°	929.0	936.9	944.8	940.9	940.9	943.5	943.5	944.8	943.5	942.2	930.3
15°	896.1	907.9	915.8	914.5	915.8	922.4	925.1	926.4	930.3	929.0	918.5
17.5°	865.8	878.9	885.5	890.8	894.7	900.0	907.9	911.9	917.1	915.8	905.3
20°	838.1	849.9	861.8	868.4	869.7	880.2	889.5	901.3	904.0	906.6	893.4
22.5°	809.1	819.6	843.4	839.4	848.6	868.4	873.7	890.8	890.8	900.0	881.6
25°	784.1	785.4	822.3	815.7	823.6	859.2	863.1	893.4	885.5	898.7	877.6
27.5°	759.0	757.7	802.5	794.6	803.8	852.6	855.2	897.4	889.5	905.3	877.6
30°	740.6	736.6	788.0	772.2	785.4	846.0	847.3	901.3	894.7	915.8	886.8
32.5°	736.6	730.0	774.8	763.0	776.1	839.4	847.3	915.8	907.9	934.3	897.4
35°	753.7	743.2	781.4	770.9	781.4	842.0	853.9	938.2	929.0	959.3	922.4
37.5°	785.4	777.5	809.1	798.5	806.5	860.5	871.0	967.2	965.9	1002.8	960.6
40°	840.7	832.8	857.8	843.4	849.9	900.0	905.3	1008.1	1012.0	1056.8	1014.7
42.5°	915.8	902.7	922.4	905.3	914.5	959.3	954.0	1058.1	1070.0	1131.9	1083.2
45°	1012.0	994.9	1006.8	988.3	994.9	1033.1	1018.6	1125.3	1137.2	1213.6	1170.2
47.5°	1117.4	1096.4	1110.9	1087.1	1091.1	1131.9	1105.6	1205.7	1224.2	1320.4	1278.2
50°	1243.9	1216.3	1221.5	1199.1	1201.8	1242.6	1213.6	1304.6	1327.0	1433.7	1396.8
52.5°	1406.0	1366.5	1366.5	1336.2	1337.5	1378.4	1342.8	1421.8	1446.9	1554.9	1529.9
55°	1619.5	1587.9	1581.3	1549.7	1539.1	1547.0	1497.0	1552.3	1580.0	1681.4	1661.7
57.5°	1789.5	1785.5	1805.3	1760.5	1750.0	1752.6	1689.3	1693.3	1724.9	1804.0	1810.6
60°	1996.4	2003.0	2005.6	1968.7	1964.7	1927.9	1863.3	1852.7	1892.3	1946.3	1967.4
62.5°	2325.8	2319.2	2286.3	2258.6	2233.6	2134.7	2099.2	2041.2	2096.5	2126.8	2170.3
65°	3033.4	2964.9	2754.1	2772.5	2706.6	2491.8	2461.5	2344.3	2431.2	2432.5	2514.2
67.5°	3734.5	3868.9	3739.7	3742.4	3593.5	3204.7	3111.2	2877.9	2926.7	2870.0	2912.2
70°	3854.4	4042.8	4396.0	4332.7	4324.8	4025.7	3710.8	3322.0	3175.7	3054.5	2957.0
72.5°	3316.7	3505.2	4023.1	3879.4	3933.4	4024.4	3696.3	3405.0	3078.2	2924.1	2713.2
75°	2333.7	2605.2	3130.9	3055.8	3095.4	3245.6	2963.6	2929.3	2551.1	2448.4	2124.2
77.5°	1250.5	1586.6	2175.6	2083.3	2100.5	2186.1	1892.3	1831.7	1466.6	1365.2	997.5
80°	562.7	780.1	1221.5	1118.8	1088.5	1039.7	765.6	603.5	369.0	245.1	170.0
82.5°	372.9	387.4	541.6	469.1	438.8	362.4	234.6	138.4	109.4	92.2	88.3
85°	250.4	229.3	228.0	201.6	187.1	147.6	109.4	68.5	56.7	47.4	43.5
87.5°	14.5	9.2	13.2	14.5	10.5	9.2	6.6	0.0	1.3	0.0	1.3
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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	984.4	984.4	983.0	973.8	968.5	965.9	956.7	955.4	951.4	950.1	950.1
5°	983.0	977.8	971.2	958.0	944.8	933.0	929.0	919.8	913.2	905.3	905.3
7.5°	964.6	959.3	944.8	925.1	907.9	890.8	881.6	868.4	857.8	847.3	844.7
10°	943.5	935.6	915.8	889.5	867.1	836.8	824.9	807.8	795.9	780.1	764.3
12.5°	921.1	915.8	892.1	861.8	827.5	789.3	770.9	747.2	731.3	712.9	689.2
15°	911.9	901.3	871.0	832.8	790.6	744.5	718.2	693.1	669.4	648.3	616.7
17.5°	900.0	886.8	852.6	807.8	755.1	699.7	665.5	637.8	606.2	583.8	548.2
20°	886.8	867.1	830.2	776.1	716.8	651.0	607.5	579.8	537.6	515.2	473.1
22.5°	876.3	851.3	806.5	745.8	674.7	600.9	549.5	517.9	470.4	444.1	391.4
25°	873.7	843.4	789.3	720.8	639.1	552.1	490.2	458.6	399.3	369.0	307.0
27.5°	875.0	839.4	778.8	699.7	607.5	508.6	434.9	398.0	322.8	291.2	220.1
30°	876.3	840.7	768.2	681.3	578.5	463.8	376.9	333.4	243.8	216.1	152.9
32.5°	889.5	846.0	765.6	666.8	552.1	419.0	311.0	271.5	172.6	156.8	113.3
35°	905.3	863.1	770.9	664.1	532.4	374.2	243.8	202.9	123.9	119.9	92.2
37.5°	938.2	889.5	792.0	670.7	520.5	328.1	181.8	155.5	97.5	100.1	80.4
40°	988.3	934.3	826.2	690.5	519.2	282.0	134.4	121.2	84.3	87.0	73.8
42.5°	1055.5	996.2	878.9	732.7	525.8	238.5	108.1	104.1	77.7	80.4	71.2
45°	1143.8	1083.2	952.7	786.7	544.2	202.9	94.9	94.9	75.1	77.7	69.8
47.5°	1255.8	1188.6	1043.6	859.2	573.2	183.2	89.6	90.9	73.8	77.7	69.8
50°	1382.3	1308.5	1159.6	952.7	618.0	177.9	90.9	90.9	75.1	77.7	69.8
52.5°	1514.1	1445.6	1284.8	1059.5	680.0	189.8	93.6	92.2	75.1	77.7	68.5
55°	1648.5	1586.6	1423.2	1184.6	765.6	231.9	100.1	96.2	75.1	77.7	69.8
57.5°	1782.9	1739.4	1568.1	1319.1	872.3	308.4	126.5	112.0	83.0	84.3	71.2
60°	1934.4	1902.8	1731.5	1495.6	1023.9	426.9	185.8	141.0	98.8	93.6	76.4
62.5°	2130.8	2122.9	1987.1	1750.0	1267.7	598.3	263.5	171.3	106.7	97.5	81.7
65°	2477.3	2498.4	2369.3	2047.8	1429.7	602.2	257.0	150.2	100.1	92.2	80.4
67.5°	2825.2	2763.3	2431.2	2003.0	1290.1	400.6	163.4	117.3	88.3	85.7	75.1
70°	2812.1	2643.4	2204.6	1751.3	1018.6	217.4	118.6	97.5	79.1	79.1	71.2
72.5°	2522.2	2271.8	1802.7	1386.3	680.0	138.4	100.1	85.7	72.5	71.2	65.9
75°	1898.9	1603.7	1158.3	798.5	303.1	89.6	76.4	69.8	63.3	63.3	58.0
77.5°	893.4	503.4	279.4	185.8	101.5	60.6	52.7	52.7	51.4	52.7	47.4
80°	121.2	109.4	93.6	81.7	61.9	42.2	38.2	39.5	38.2	39.5	35.6
82.5°	73.8	65.9	54.0	51.4	38.2	29.0	27.7	29.0	26.4	27.7	21.1
85°	35.6	31.6	25.0	23.7	19.8	17.1	14.5	17.1	13.2	14.5	9.2
87.5°	0.0	2.6	1.3	2.6	2.6	2.6	0.0	2.6	0.0	2.6	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



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CANDELA DISTRIBUTION (continued):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	943.5	939.5	938.2	933.0	931.6	926.4	925.1	919.8	910.6	906.6	900.0
5°	893.4	886.8	881.6	878.9	868.4	863.1	855.2	844.7	824.9	815.7	799.9
7.5°	823.6	822.3	806.5	801.2	788.0	778.8	766.9	749.8	720.8	703.7	678.6
10°	747.2	741.9	723.4	712.9	695.8	682.6	666.8	641.7	596.9	561.4	523.1
12.5°	676.0	660.2	639.1	623.3	602.2	583.8	565.3	527.1	455.9	398.0	345.2
15°	602.2	578.5	556.1	529.7	507.3	478.3	457.3	407.2	313.6	242.5	209.5
17.5°	527.1	494.2	469.1	433.5	408.5	369.0	346.6	285.9	205.6	173.9	163.4
20°	448.0	404.5	376.9	333.4	308.4	258.3	241.1	197.7	158.1	146.3	143.6
22.5°	363.7	311.0	280.7	233.2	216.1	185.8	172.6	151.5	133.1	127.8	130.5
25°	275.4	218.7	199.0	164.7	158.1	142.3	137.0	126.5	117.3	117.3	121.2
27.5°	196.3	152.9	147.6	126.5	125.2	117.3	113.3	108.1	105.4	108.1	113.3
30°	143.6	116.0	116.0	104.1	104.1	98.8	97.5	94.9	94.9	100.1	105.4
32.5°	113.3	94.9	97.5	88.3	89.6	85.7	87.0	85.7	87.0	90.9	94.9
35°	94.9	81.7	85.7	77.7	80.4	76.4	79.1	79.1	81.7	83.0	84.3
37.5°	84.3	75.1	77.7	72.5	75.1	71.2	75.1	75.1	76.4	76.4	76.4
40°	77.7	69.8	73.8	68.5	72.5	68.5	72.5	72.5	71.2	69.8	71.2
42.5°	73.8	68.5	72.5	67.2	71.2	67.2	69.8	68.5	65.9	65.9	65.9
45°	72.5	67.2	69.8	65.9	68.5	64.6	67.2	65.9	61.9	60.6	63.3
47.5°	72.5	65.9	69.8	64.6	67.2	63.3	65.9	61.9	58.0	58.0	61.9
50°	72.5	65.9	69.8	64.6	67.2	61.9	63.3	59.3	54.0	55.3	60.6
52.5°	73.8	68.5	71.2	65.9	67.2	59.3	61.9	56.7	52.7	54.0	58.0
55°	75.1	68.5	71.2	63.3	64.6	59.3	59.3	56.7	52.7	52.7	56.7
57.5°	75.1	67.2	68.5	61.9	63.3	56.7	58.0	55.3	51.4	50.1	52.7
60°	77.7	69.8	69.8	60.6	61.9	55.3	56.7	54.0	50.1	47.4	48.8
62.5°	80.4	71.2	72.5	63.3	63.3	56.7	58.0	52.7	47.4	44.8	46.1
65°	80.4	71.2	72.5	64.6	64.6	58.0	58.0	52.7	44.8	42.2	42.2
67.5°	76.4	69.8	71.2	64.6	64.6	58.0	58.0	51.4	43.5	39.5	38.2
70°	73.8	67.2	68.5	60.6	61.9	55.3	55.3	48.8	40.8	36.9	34.3
72.5°	67.2	61.9	61.9	56.7	55.3	48.8	48.8	44.8	38.2	32.9	30.3
75°	58.0	52.7	51.4	46.1	46.1	42.2	40.8	36.9	31.6	27.7	26.4
77.5°	47.4	40.8	40.8	34.3	34.3	30.3	31.6	27.7	23.7	22.4	21.1
80°	34.3	27.7	27.7	22.4	22.4	18.4	19.8	18.4	17.1	17.1	15.8
82.5°	21.1	14.5	15.8	11.9	14.5	10.5	11.9	10.5	10.5	9.2	9.2
85°	10.5	5.3	7.9	4.0	6.6	1.3	4.0	2.6	2.6	2.6	2.6
87.5°	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	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°	983.0	983.0
2.5°	893.4	897.4
5°	794.6	795.9
7.5°	674.7	672.0
10°	515.2	508.6
12.5°	332.1	322.8
15°	200.3	197.7
17.5°	160.8	160.8
20°	143.6	143.6
22.5°	133.1	133.1
25°	125.2	126.5
27.5°	118.6	118.6
30°	110.7	110.7
32.5°	97.5	97.5
35°	87.0	85.7
37.5°	77.7	79.1
40°	71.2	72.5
42.5°	68.5	68.5
45°	65.9	65.9
47.5°	65.9	65.9
50°	64.6	65.9
52.5°	63.3	63.3
55°	59.3	60.6
57.5°	55.3	56.7
60°	51.4	51.4
62.5°	46.1	46.1
65°	42.2	42.2
67.5°	36.9	36.9
70°	32.9	32.9
72.5°	29.0	29.0
75°	25.0	25.0
77.5°	21.1	19.8
80°	15.8	15.8
82.5°	9.2	9.2
85°	2.6	2.6
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)