

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P628182

Luminaire Tested: **IFLD-S-SA2D-727-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628182
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2D-727-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	13460.9 lumens	Max Intensity:	4387.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	108.6 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		

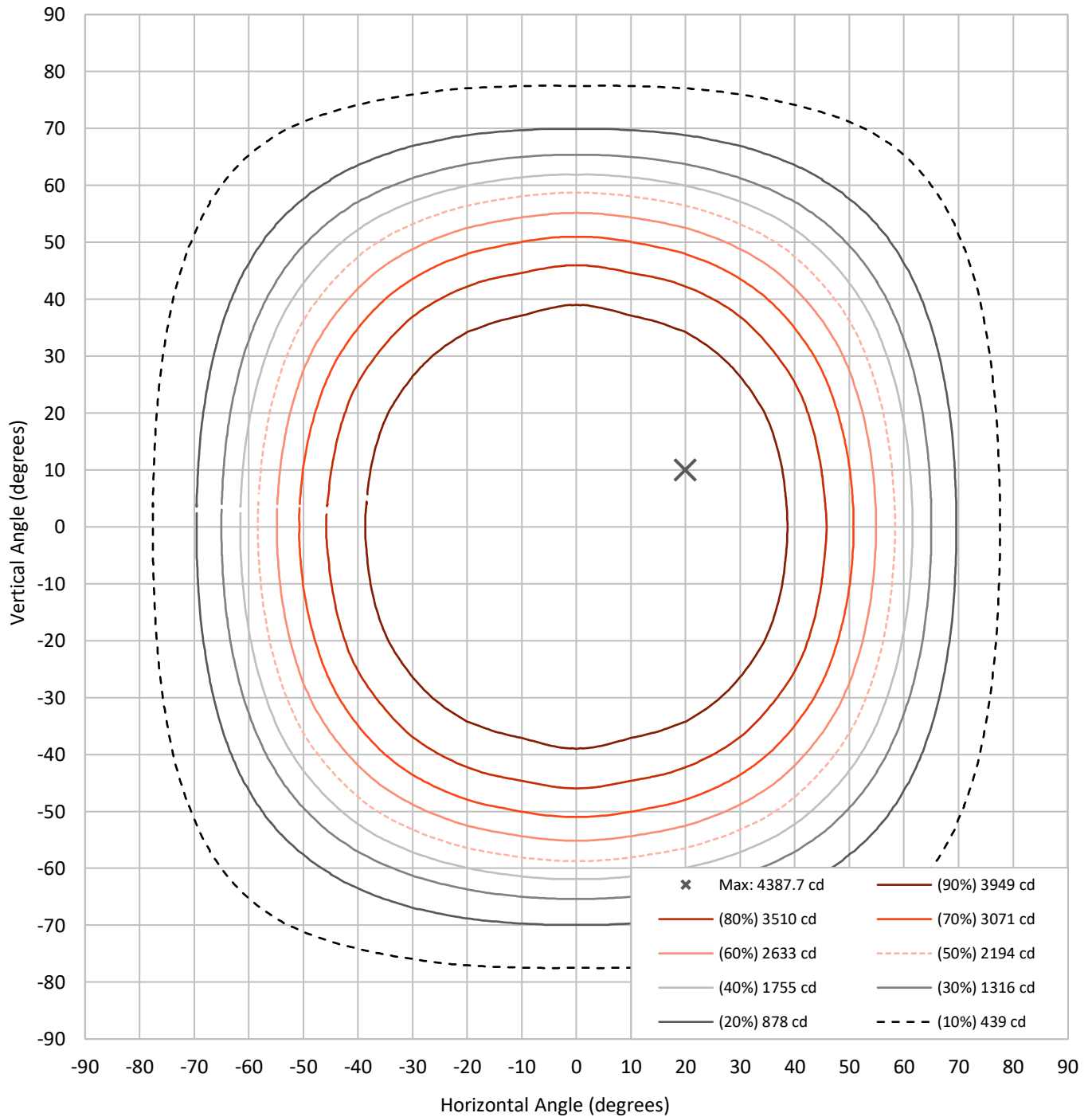
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	8259.9 lumens	Field Lumens:	9902.2 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 123.9
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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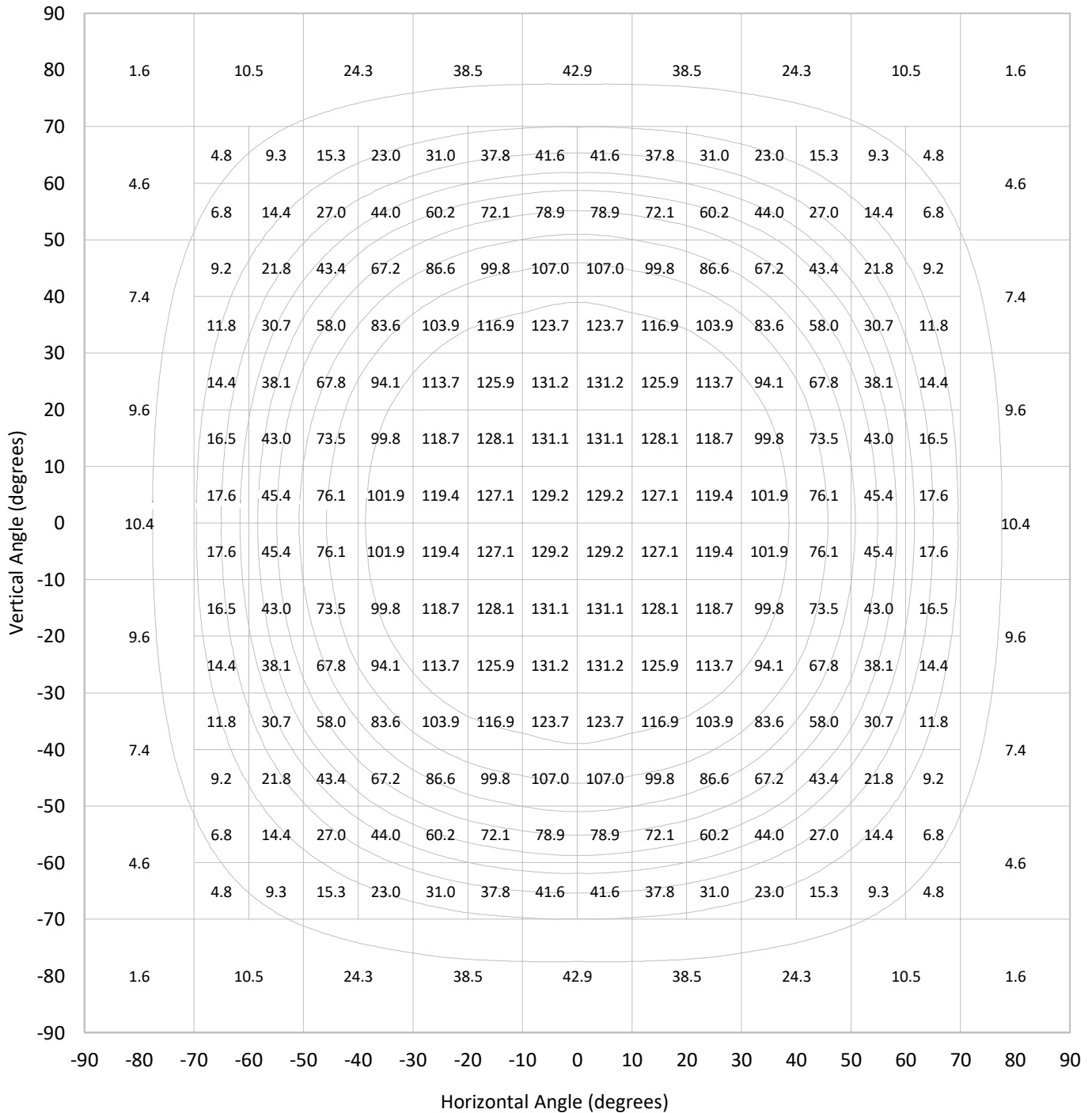
Iso-Candela Plot





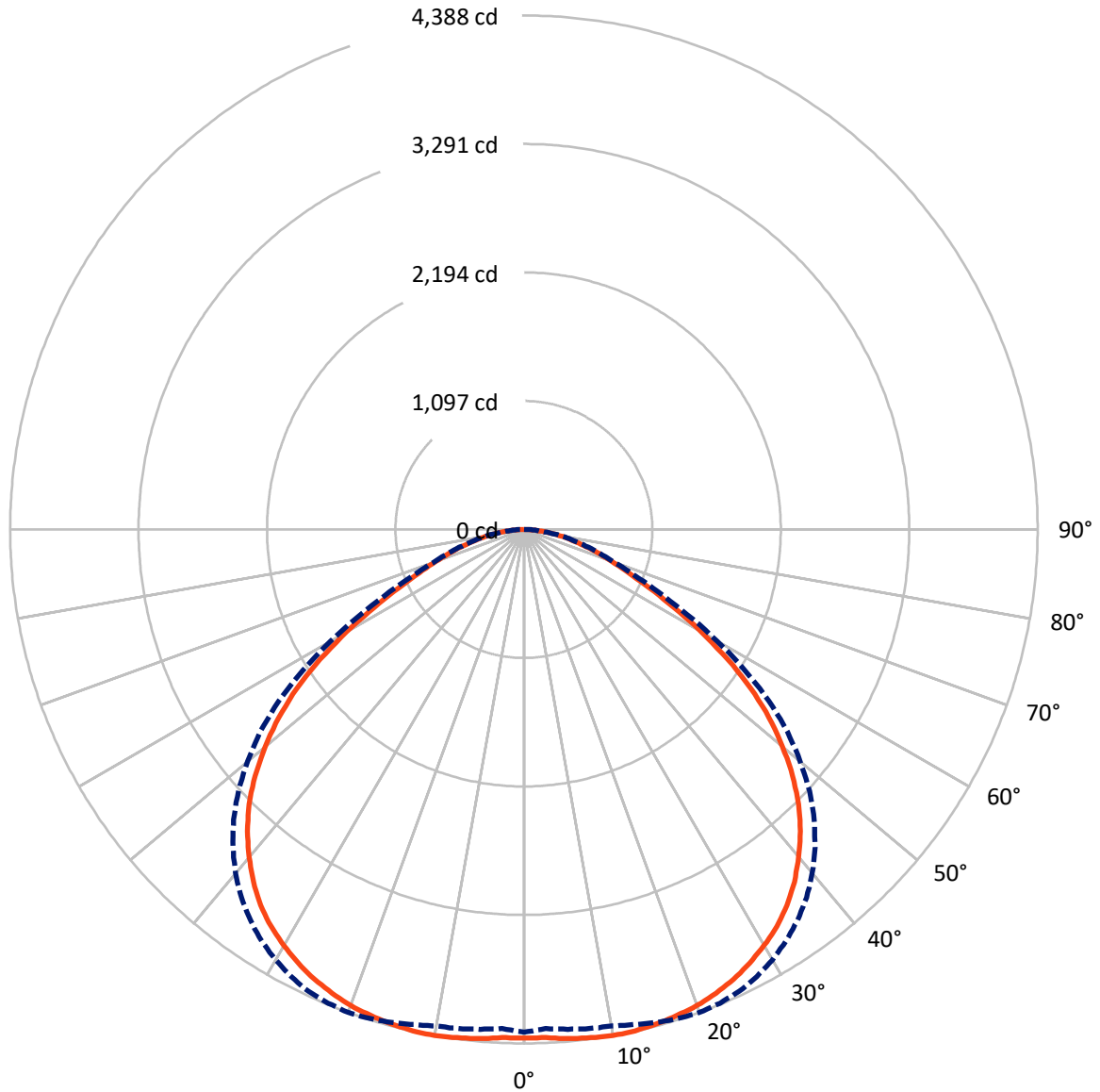
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Lumen Table



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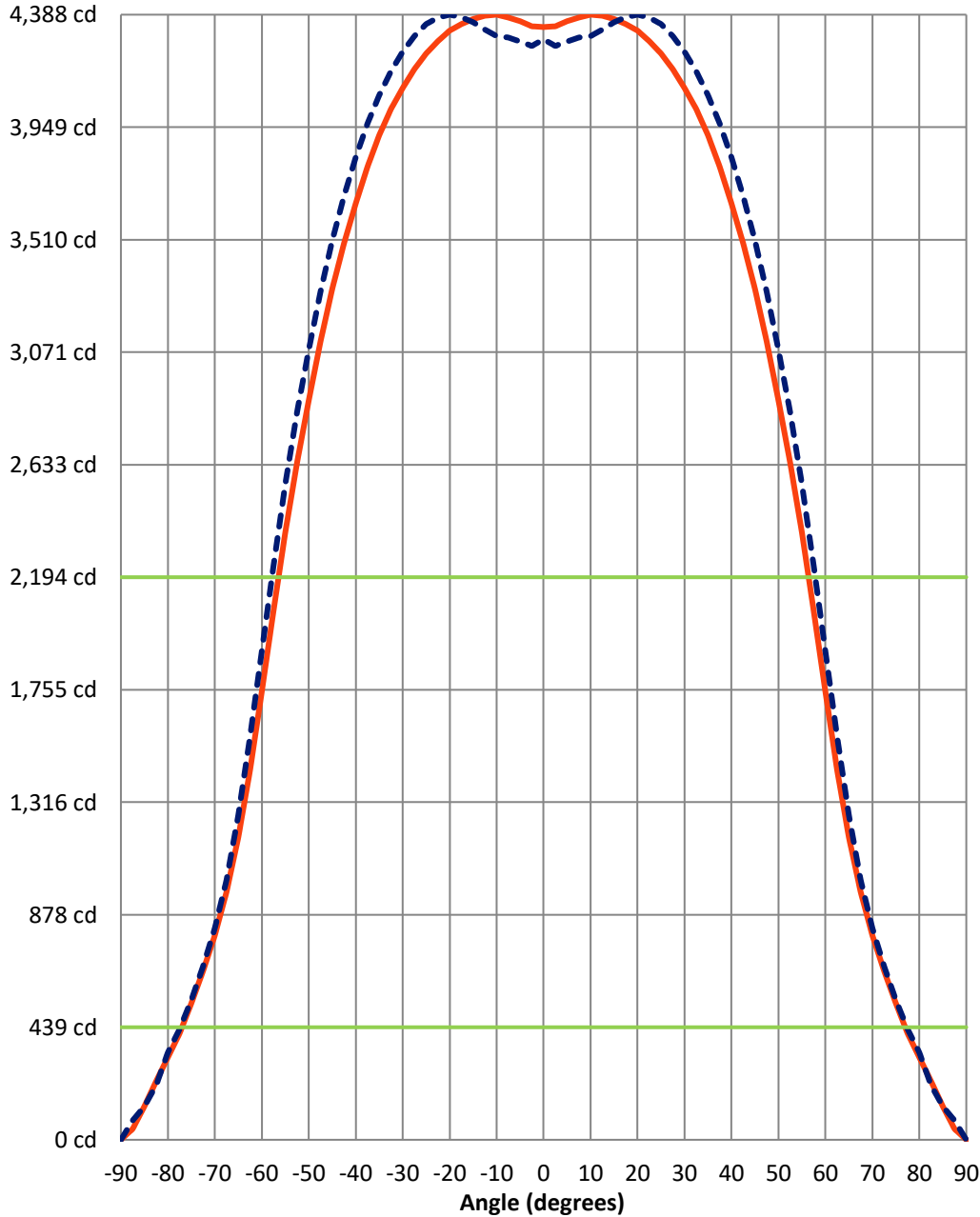
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 8259.9
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 9902.2
 Efficiency: 73.6%

Spill:
 Lumens: 3558.7
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-Deg



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FIELD
 BEAM

CANDELA DISTRIBUTION:

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	35.4	38.2	39.7	41.1	42.5	43.9	45.3	43.9	42.5	42.5	41.1
85°	94.9	97.7	99.1	109.1	119.0	124.6	131.7	130.3	130.3	128.9	127.5
82.5°	189.8	198.3	205.4	215.3	220.9	229.4	235.1	230.9	228.0	222.4	218.1
80°	337.1	339.9	341.3	342.7	335.7	334.2	331.4	327.2	321.5	314.4	307.3
77.5°	429.1	432.0	434.8	432.0	430.6	429.1	424.9	420.6	415.0	409.3	400.8
75°	567.9	567.9	567.9	563.7	560.9	556.6	549.5	542.4	532.5	521.2	508.5
72.5°	715.2	713.8	712.4	703.9	696.8	688.3	678.4	669.9	658.6	645.8	628.8
70°	869.6	872.4	873.9	862.5	854.0	842.7	830.0	814.4	797.4	779.0	754.9
67.5°	1082.1	1079.2	1076.4	1060.8	1049.5	1033.9	1015.5	992.8	967.3	939.0	905.0
65°	1345.5	1349.7	1341.2	1325.7	1304.4	1278.9	1250.6	1218.0	1179.8	1137.3	1089.1
62.5°	1664.2	1671.2	1661.3	1641.5	1614.6	1580.6	1540.9	1494.2	1441.8	1382.3	1322.8
60°	2026.7	2025.3	2006.9	1980.0	1944.6	1902.1	1858.2	1807.2	1747.7	1678.3	1606.1
57.5°	2359.6	2356.7	2334.1	2307.2	2271.7	2226.4	2179.7	2125.9	2063.6	1989.9	1906.3
55°	2658.4	2655.6	2632.9	2604.6	2567.8	2522.4	2479.9	2429.0	2368.1	2290.2	2200.9
52.5°	2923.2	2924.7	2904.8	2873.7	2834.0	2790.1	2749.0	2698.1	2640.0	2562.1	2475.7
50°	3166.9	3165.4	3144.2	3115.9	3079.0	3036.6	2995.5	2944.5	2883.6	2808.5	2725.0
47.5°	3393.5	3390.6	3366.5	3335.4	3297.1	3260.3	3222.1	3176.8	3113.0	3038.0	2954.4
45°	3583.2	3577.6	3553.5	3523.8	3486.9	3454.4	3420.4	3386.4	3318.4	3249.0	3169.7
42.5°	3746.1	3744.7	3720.6	3690.9	3654.1	3625.7	3594.6	3552.1	3495.4	3431.7	3353.8
40°	3901.9	3890.6	3866.5	3838.2	3804.2	3780.1	3749.0	3706.5	3651.2	3588.9	3513.8
37.5°	4018.0	4019.5	3994.0	3962.8	3933.1	3910.4	3882.1	3842.4	3794.3	3733.4	3658.3
35°	4128.5	4121.4	4100.2	4073.3	4046.4	4020.9	3991.1	3957.1	3917.5	3860.8	3790.0
32.5°	4200.8	4210.7	4185.2	4156.8	4141.3	4121.4	4090.3	4054.9	4019.5	3962.8	3899.1
30°	4280.1	4271.6	4251.7	4227.7	4216.3	4203.6	4176.7	4142.7	4101.6	4050.6	3991.1
27.5°	4335.3	4331.0	4307.0	4284.3	4278.6	4267.3	4246.1	4216.3	4175.3	4125.7	4070.5
25°	4359.4	4362.2	4339.5	4326.8	4326.8	4319.7	4302.7	4277.2	4236.2	4190.8	4137.0
22.5°	4370.7	4367.9	4352.3	4349.5	4356.5	4350.9	4343.8	4321.1	4284.3	4247.5	4202.2
20°	4377.8	4358.0	4343.8	4355.1	4363.6	4362.2	4356.5	4342.4	4325.4	4294.2	4254.6
17.5°	4362.2	4349.5	4332.5	4349.5	4367.9	4369.3	4363.6	4355.1	4350.9	4331.0	4295.6
15°	4324.0	4314.1	4316.9	4333.9	4355.1	4362.2	4366.5	4376.4	4370.7	4355.1	4324.0
12.5°	4298.5	4285.7	4298.5	4315.5	4326.8	4331.0	4365.0	4383.5	4383.5	4369.3	4349.5
10°	4291.4	4265.9	4282.9	4298.5	4304.1	4329.6	4358.0	4377.8	4387.7	4376.4	4350.9
7.5°	4277.2	4260.2	4267.3	4274.4	4307.0	4325.4	4341.0	4362.2	4376.4	4375.0	4352.3
5°	4270.1	4248.9	4251.7	4281.5	4304.1	4316.9	4322.6	4341.0	4362.2	4366.5	4349.5
2.5°	4251.7	4241.8	4263.1	4265.9	4282.9	4292.8	4298.5	4315.5	4342.4	4352.3	4345.2
0°	4241.8	4227.7	4213.5	4224.8	4253.2	4274.4	4282.9	4308.4	4339.5	4349.5	4333.9



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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	39.7	38.2	36.8	35.4	36.8	36.8	36.8	35.4	36.8	35.4	35.4
85°	123.2	117.6	113.3	107.6	102.0	97.7	92.1	86.4	85.0	83.6	80.7
82.5°	212.4	205.4	198.3	189.8	181.3	171.4	161.5	150.1	147.3	144.5	140.2
80°	298.8	288.9	279.0	269.1	260.6	250.7	239.4	226.6	218.1	211.0	202.5
77.5°	389.5	375.3	361.2	344.2	334.2	324.3	313.0	300.3	287.5	276.2	263.4
75°	492.9	477.3	463.1	446.1	427.7	409.3	390.9	373.9	355.5	338.5	321.5
72.5°	607.6	584.9	562.3	541.0	518.4	495.7	471.6	449.0	426.3	403.6	379.6
70°	728.0	699.7	671.3	643.0	613.3	583.5	555.2	526.9	498.5	468.8	441.9
67.5°	869.6	837.0	800.2	760.6	716.6	678.4	641.6	607.6	573.6	539.6	505.6
65°	1046.6	1001.3	951.8	897.9	846.9	796.0	742.1	691.2	651.5	611.8	573.6
62.5°	1264.8	1201.0	1131.6	1062.2	999.9	933.3	871.0	804.5	742.1	685.5	638.8
60°	1525.4	1439.0	1354.0	1264.8	1178.4	1087.7	1008.4	926.3	848.4	779.0	711.0
57.5°	1812.9	1712.3	1610.3	1501.3	1383.7	1277.5	1169.9	1062.2	970.2	878.1	801.6
55°	2104.6	1998.4	1883.7	1760.5	1631.6	1495.6	1349.7	1229.3	1103.3	995.7	896.5
52.5°	2382.2	2271.7	2152.8	2039.5	1885.1	1729.3	1569.3	1410.6	1263.3	1126.0	1005.6
50°	2630.1	2522.4	2407.7	2276.0	2133.0	1967.2	1788.8	1610.3	1436.1	1274.7	1124.5
47.5°	2856.7	2751.9	2637.2	2505.4	2375.1	2191.0	2011.1	1814.3	1620.2	1434.7	1259.1
45°	3069.1	2962.9	2843.9	2717.9	2567.8	2403.5	2217.9	2019.6	1811.4	1603.3	1400.7
42.5°	3261.7	3155.5	3035.1	2904.8	2756.1	2593.2	2413.4	2213.7	2004.1	1777.5	1555.1
40°	3430.3	3326.9	3210.8	3074.8	2936.0	2764.6	2587.6	2397.8	2181.1	1953.1	1708.1
37.5°	3577.6	3481.3	3366.5	3232.0	3084.7	2931.7	2749.0	2559.3	2363.8	2116.0	1865.3
35°	3707.9	3618.7	3501.1	3373.6	3229.2	3067.7	2896.3	2710.8	2499.8	2267.5	2023.9
32.5°	3821.2	3730.5	3622.9	3495.4	3355.2	3203.7	3028.1	2841.1	2641.4	2404.9	2140.0
30°	3917.5	3829.7	3727.7	3607.3	3472.8	3322.6	3151.3	2962.9	2759.0	2523.8	2261.8
27.5°	4001.1	3917.5	3818.3	3706.5	3577.6	3433.1	3260.3	3070.5	2862.3	2635.7	2373.7
25°	4073.3	3992.6	3900.5	3794.3	3666.8	3525.2	3362.3	3164.0	2955.8	2727.8	2468.6
22.5°	4138.4	4060.5	3968.5	3865.1	3749.0	3607.3	3443.0	3246.2	3035.1	2809.9	2555.0
20°	4196.5	4124.3	4033.6	3927.4	3811.3	3668.2	3505.3	3318.4	3105.9	2885.0	2632.9
17.5°	4243.2	4179.5	4088.9	3977.0	3860.8	3722.0	3563.4	3392.0	3166.9	2948.7	2698.1
15°	4275.8	4213.5	4131.4	4018.0	3904.7	3767.4	3608.7	3431.7	3222.1	2999.7	2751.9
12.5°	4298.5	4231.9	4155.4	4050.6	3937.3	3801.4	3647.0	3472.8	3268.8	3045.0	2798.6
10°	4304.1	4243.2	4166.8	4073.3	3962.8	3831.1	3679.6	3506.8	3307.1	3080.5	2836.9
7.5°	4307.0	4248.9	4179.5	4090.3	3981.2	3853.8	3703.6	3533.7	3335.4	3110.2	2865.2
5°	4305.6	4250.3	4188.0	4101.6	3992.6	3866.5	3719.2	3552.1	3355.2	3130.0	2886.4
2.5°	4301.3	4251.7	4193.7	4110.1	4005.3	3880.7	3734.8	3573.3	3376.5	3147.0	2903.4
0°	4312.6	4270.1	4196.5	4107.3	4008.1	3880.7	3733.4	3576.2	3379.3	3145.6	2902.0



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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	35.4	34.0	34.0	32.6	31.2	29.7	26.9	25.5	22.7	18.4	14.2
85°	76.5	72.2	68.0	65.1	62.3	59.5	55.2	51.0	45.3	36.8	28.3
82.5°	134.5	126.1	117.6	107.6	99.1	90.6	83.6	76.5	68.0	55.2	42.5
80°	192.6	179.9	167.1	153.0	140.2	126.1	113.3	102.0	90.6	73.6	56.7
77.5°	250.7	233.7	215.3	198.3	179.9	161.5	143.0	127.5	110.5	90.6	70.8
75°	304.5	284.7	267.7	243.6	220.9	196.9	172.8	151.5	130.3	106.2	85.0
72.5°	358.3	332.8	308.8	286.1	260.6	230.9	203.9	177.0	150.1	121.8	96.3
70°	412.1	381.0	351.2	324.3	296.0	266.3	233.7	202.5	170.0	136.0	106.2
67.5°	467.4	432.0	398.0	364.0	331.4	297.4	263.4	228.0	189.8	150.1	117.6
65°	528.3	484.4	443.3	405.1	366.8	330.0	291.8	253.5	211.0	165.7	127.5
62.5°	589.2	541.0	492.9	444.7	402.2	361.2	320.1	277.6	230.9	182.7	137.4
60°	654.3	599.1	543.9	490.0	437.6	392.3	347.0	301.7	252.1	198.3	147.3
57.5°	726.6	660.0	597.7	536.8	477.3	423.5	373.9	325.7	270.5	213.9	158.6
55°	808.7	726.6	652.9	584.9	519.8	454.6	400.8	351.2	291.8	229.4	171.4
52.5°	895.1	800.2	711.0	634.5	565.1	491.5	426.3	371.1	313.0	245.0	182.7
50°	995.7	875.3	776.1	682.7	604.8	528.3	453.2	393.7	334.2	263.4	194.0
47.5°	1099.0	965.9	841.3	739.3	647.2	563.7	484.4	413.6	354.1	280.4	205.4
45°	1219.4	1052.3	914.9	794.5	688.3	600.5	515.5	434.8	371.1	297.4	216.7
42.5°	1335.6	1154.3	991.4	855.4	735.1	635.9	543.9	457.5	388.1	314.4	226.6
40°	1473.0	1256.3	1065.1	913.5	781.8	669.9	572.2	481.5	403.6	330.0	236.5
37.5°	1604.7	1359.6	1154.3	977.2	827.1	703.9	600.5	504.2	417.8	345.6	249.3
35°	1735.0	1474.4	1239.3	1036.7	873.9	742.1	628.8	525.4	432.0	358.3	260.6
32.5°	1859.6	1582.0	1325.7	1103.3	924.8	777.5	654.3	545.3	446.1	369.7	271.9
30°	1975.7	1684.0	1410.6	1171.3	971.6	810.1	678.4	565.1	463.1	379.6	283.3
27.5°	2082.0	1783.1	1495.6	1235.0	1015.5	839.9	703.9	583.5	477.3	389.5	293.2
25°	2178.3	1872.4	1573.5	1293.1	1055.1	872.4	728.0	601.9	490.0	398.0	301.7
22.5°	2268.9	1954.5	1644.3	1351.2	1103.3	905.0	750.6	618.9	502.8	406.5	310.2
20°	2348.2	2029.6	1712.3	1409.2	1145.8	934.8	770.5	634.5	514.1	412.1	318.7
17.5°	2412.0	2096.1	1773.2	1460.2	1182.6	960.3	787.5	648.7	524.0	419.2	324.3
15°	2468.6	2152.8	1824.2	1504.1	1215.2	981.5	803.0	660.0	532.5	423.5	331.4
12.5°	2516.8	2200.9	1868.1	1542.4	1243.5	999.9	815.8	668.5	539.6	427.7	335.7
10°	2556.4	2239.2	1904.9	1572.1	1266.2	1014.1	825.7	677.0	545.3	432.0	339.9
7.5°	2586.2	2267.5	1931.8	1597.6	1284.6	1024.0	834.2	682.7	550.9	434.8	347.0
5°	2608.8	2291.6	1953.1	1614.6	1298.7	1038.1	844.1	689.7	556.6	437.6	347.0
2.5°	2625.8	2311.4	1970.1	1628.7	1310.1	1035.3	844.1	688.3	556.6	437.6	345.6
0°	2623.0	2312.8	1968.7	1628.7	1310.1	1032.5	844.1	686.9	556.6	437.6	345.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.9	7.1	2.8	0.0
85°	21.2	14.2	7.1	0.0
82.5°	31.2	19.8	9.9	0.0
80°	41.1	26.9	12.7	0.0
77.5°	52.4	34.0	17.0	0.0
75°	62.3	39.7	19.8	0.0
72.5°	72.2	46.7	22.7	0.0
70°	80.7	52.4	25.5	0.0
67.5°	89.2	59.5	29.7	0.0
65°	96.3	65.1	32.6	0.0
62.5°	102.0	72.2	35.4	0.0
60°	109.1	77.9	38.2	0.0
57.5°	114.7	82.1	41.1	0.0
55°	120.4	85.0	43.9	0.0
52.5°	126.1	89.2	46.7	0.0
50°	131.7	93.5	49.6	0.0
47.5°	137.4	96.3	51.0	0.0
45°	145.9	100.6	53.8	0.0
42.5°	153.0	103.4	56.7	0.0
40°	160.0	106.2	58.1	0.0
37.5°	167.1	109.1	60.9	0.0
35°	174.2	111.9	62.3	0.0
32.5°	179.9	114.7	63.7	0.0
30°	185.5	117.6	65.1	0.0
27.5°	191.2	119.0	66.6	0.0
25°	195.4	121.8	68.0	0.0
22.5°	199.7	123.2	69.4	0.0
20°	202.5	124.6	70.8	0.0
17.5°	206.8	126.1	72.2	0.0
15°	208.2	127.5	75.1	0.0
12.5°	211.0	128.9	75.1	0.0
10°	212.4	130.3	75.1	0.0
7.5°	215.3	130.3	75.1	0.0
5°	213.9	130.3	75.1	0.0
2.5°	213.9	130.3	75.1	0.0
0°	212.4	130.3	75.1	0.0

(END OF REPORT)