

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: P628502

Luminaire Tested: **IFLD-S-SA2E-940-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628502
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-940-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	13460.1 lumens	Max Intensity:	4387.5 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	86.2 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		

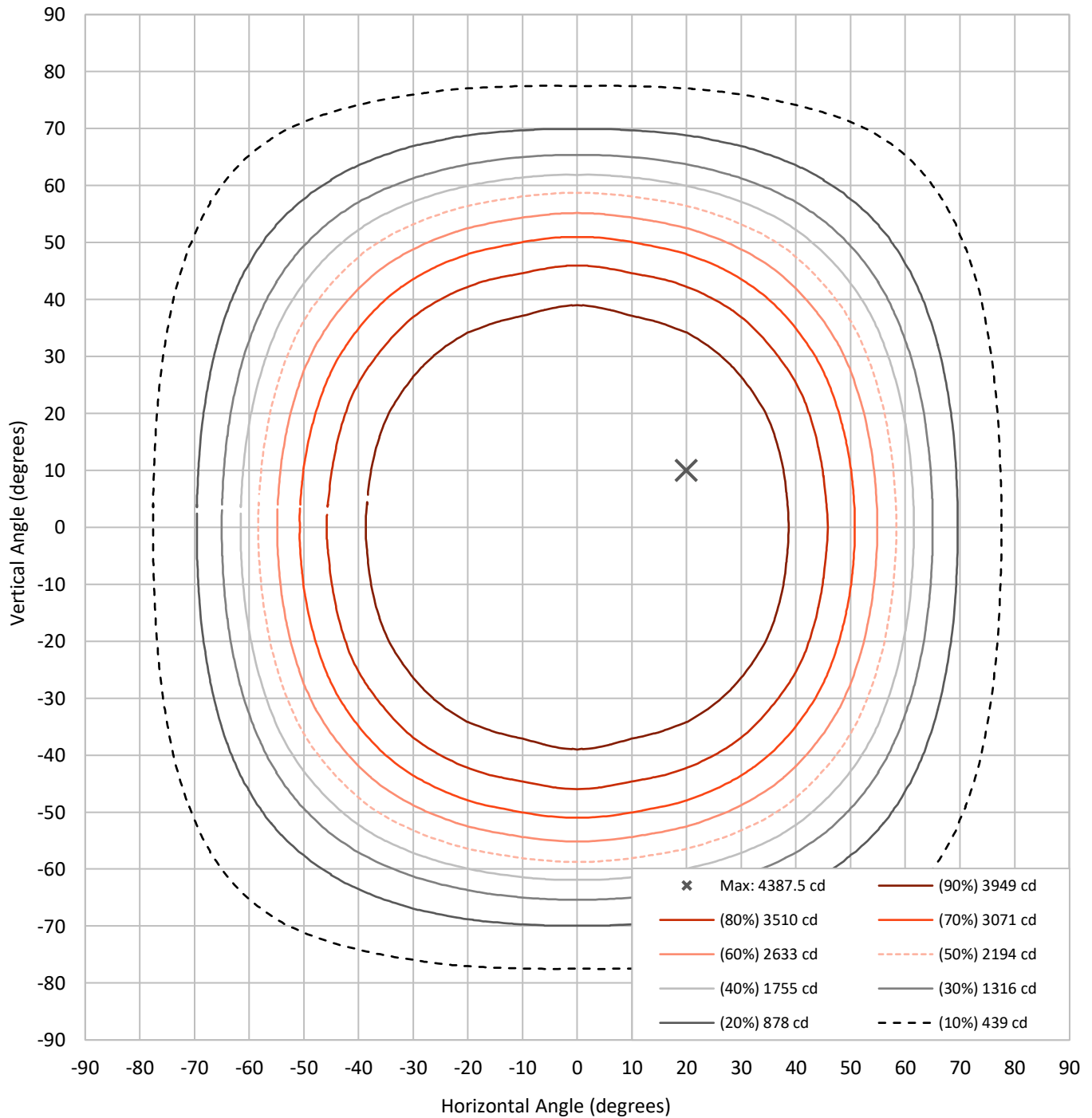
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	8259.4 lumens	Field Lumens:	9901.6 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 156.2
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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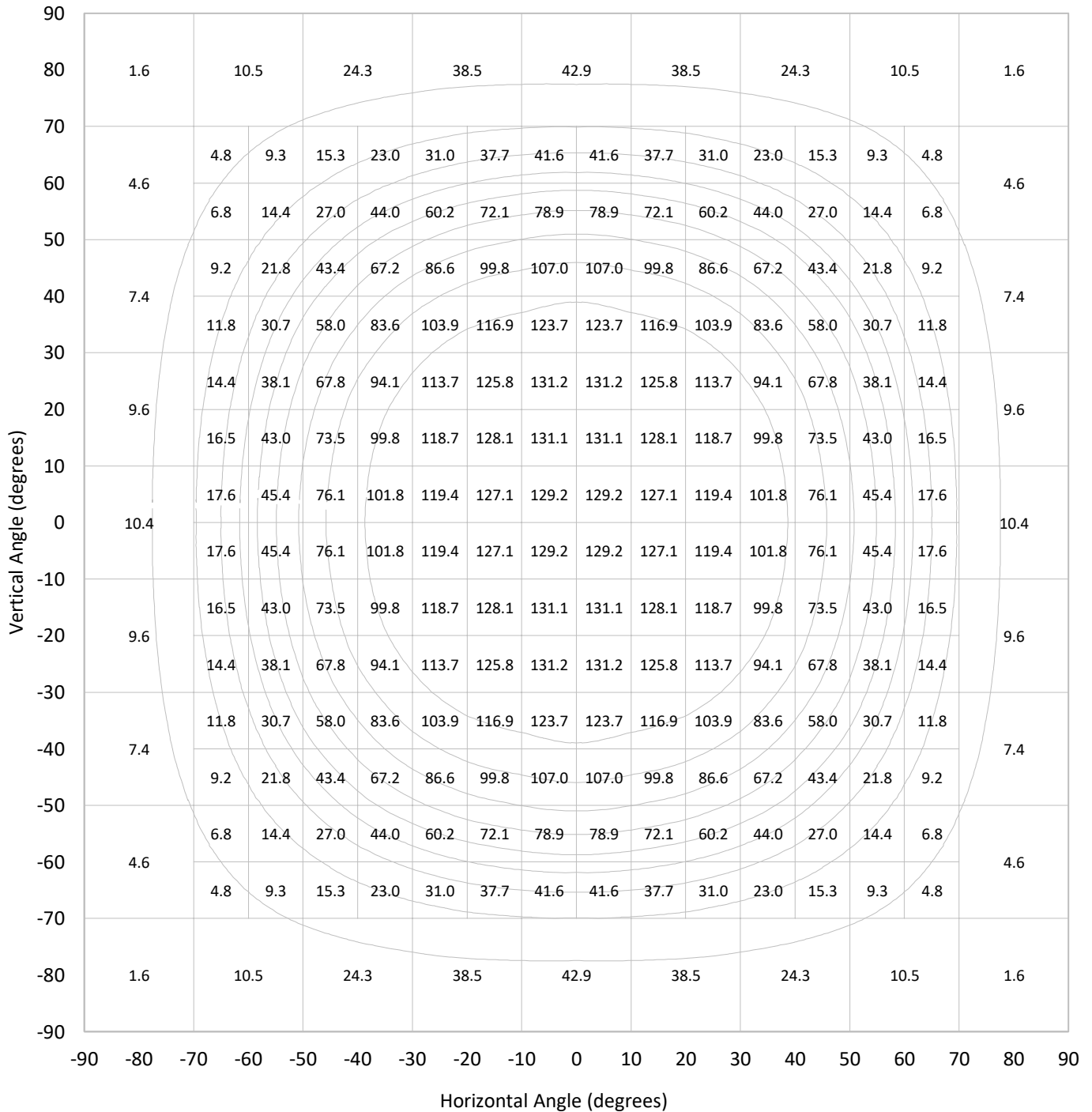
Iso-Candela Plot





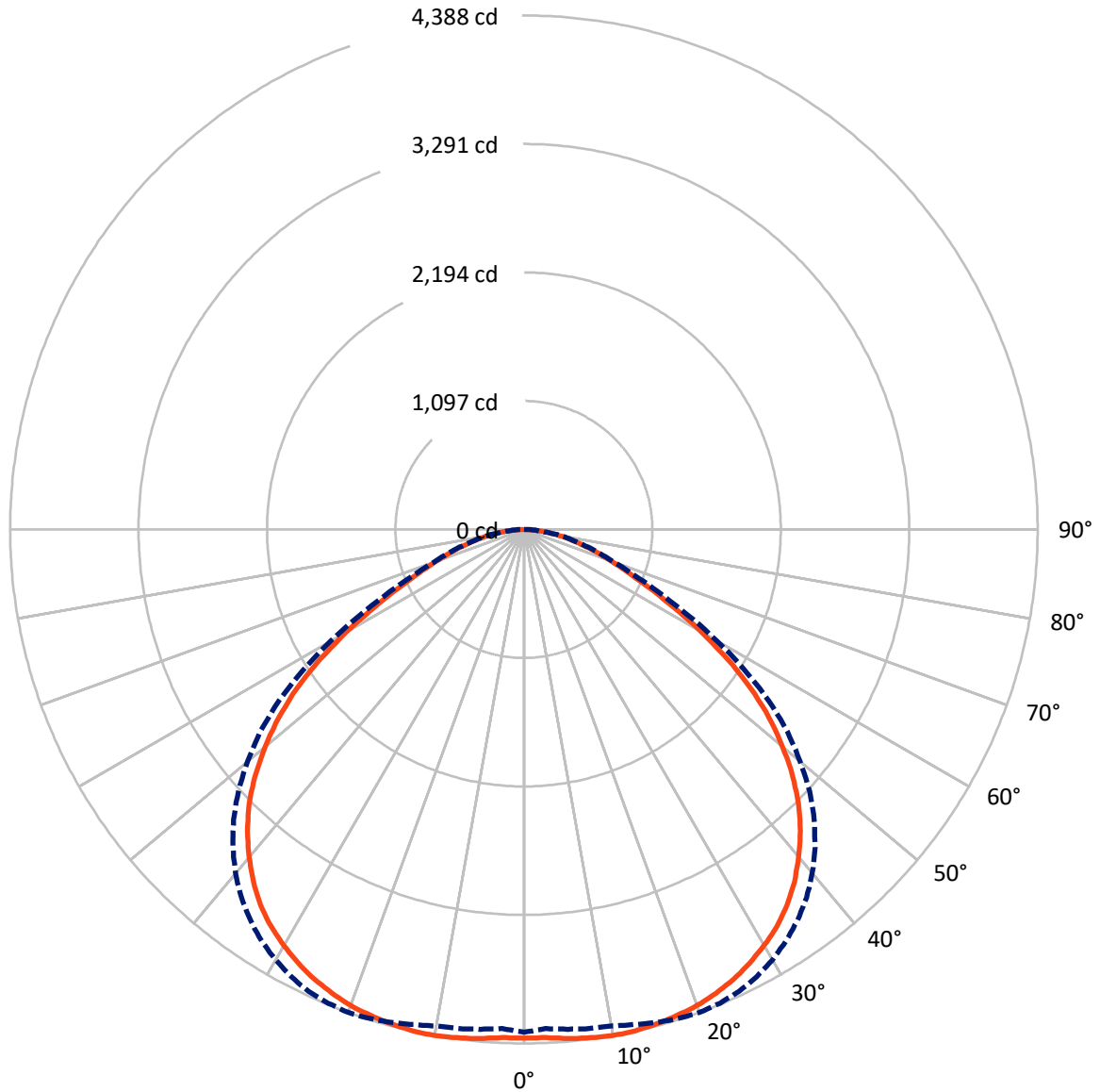
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Lumen Table



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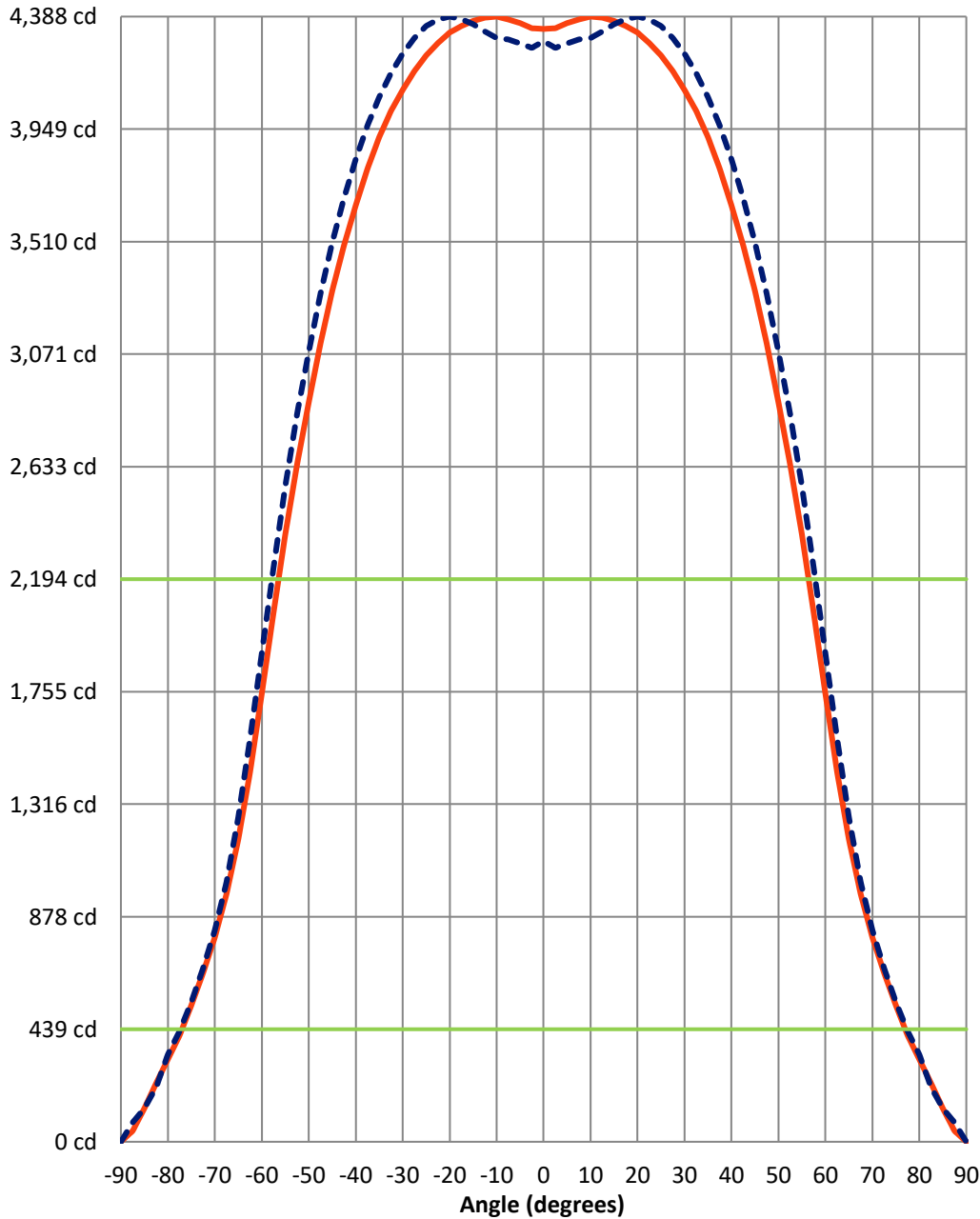
Luminous Intensity Polar Plot



— 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: 8259.4
Efficiency: 61.4%

Field:
H Angle: 154.7°
V Angle: 154°
Lumens: 9901.6
Efficiency: 73.6%

Spill:
Lumens: 3558.5
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	109.0	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	230.8	228.0	222.3	218.1
80°	337.1	339.9	341.3	342.7	335.6	334.2	331.4	327.1	321.5	314.4	307.3
77.5°	429.1	431.9	434.8	431.9	430.5	429.1	424.9	420.6	415.0	409.3	400.8
75°	567.9	567.9	567.9	563.7	560.8	556.6	549.5	542.4	532.5	521.2	508.4
72.5°	715.2	713.8	712.4	703.9	696.8	688.3	678.4	669.9	658.5	645.8	628.8
70°	869.6	872.4	873.8	862.5	854.0	842.7	829.9	814.3	797.3	778.9	754.8
67.5°	1082.0	1079.2	1076.3	1060.8	1049.4	1033.8	1015.4	992.8	967.3	939.0	905.0
65°	1345.4	1349.7	1341.2	1325.6	1304.3	1278.8	1250.5	1218.0	1179.7	1137.2	1089.1
62.5°	1664.1	1671.1	1661.2	1641.4	1614.5	1580.5	1540.8	1494.1	1441.7	1382.2	1322.8
60°	2026.6	2025.2	2006.8	1979.9	1944.5	1902.0	1858.1	1807.1	1747.6	1678.2	1606.0
57.5°	2359.4	2356.6	2333.9	2307.0	2271.6	2226.3	2179.6	2125.7	2063.4	1989.8	1906.2
55°	2658.2	2655.4	2632.8	2604.4	2567.6	2522.3	2479.8	2428.8	2367.9	2290.0	2200.8
52.5°	2923.1	2924.5	2904.7	2873.5	2833.9	2790.0	2748.9	2697.9	2639.8	2561.9	2475.6
50°	3166.7	3165.3	3144.0	3115.7	3078.9	3036.4	2995.3	2944.3	2883.4	2808.4	2724.8
47.5°	3393.3	3390.4	3366.4	3335.2	3297.0	3260.1	3221.9	3176.6	3112.9	3037.8	2954.2
45°	3583.0	3577.4	3553.3	3523.6	3486.7	3454.2	3420.2	3386.2	3318.2	3248.8	3169.5
42.5°	3745.9	3744.5	3720.4	3690.7	3653.9	3625.5	3594.4	3551.9	3495.2	3431.5	3353.6
40°	3901.7	3890.4	3866.3	3838.0	3804.0	3779.9	3748.7	3706.3	3651.0	3588.7	3513.6
37.5°	4017.8	4019.2	3993.7	3962.6	3932.8	3910.2	3881.9	3842.2	3794.1	3733.2	3658.1
35°	4128.3	4121.2	4100.0	4073.1	4046.1	4020.7	3990.9	3956.9	3917.3	3860.6	3789.8
32.5°	4200.5	4210.4	4184.9	4156.6	4141.0	4121.2	4090.0	4054.6	4019.2	3962.6	3898.9
30°	4279.8	4271.3	4251.5	4227.4	4216.1	4203.3	4176.4	4142.5	4101.4	4050.4	3990.9
27.5°	4335.1	4330.8	4306.7	4284.1	4278.4	4267.1	4245.8	4216.1	4175.0	4125.5	4070.2
25°	4359.1	4362.0	4339.3	4326.6	4326.6	4319.5	4302.5	4277.0	4235.9	4190.6	4136.8
22.5°	4370.5	4367.6	4352.1	4349.2	4356.3	4350.6	4343.6	4320.9	4284.1	4247.3	4201.9
20°	4377.5	4357.7	4343.6	4354.9	4363.4	4362.0	4356.3	4342.1	4325.1	4294.0	4254.3
17.5°	4362.0	4349.2	4332.2	4349.2	4367.6	4369.0	4363.4	4354.9	4350.6	4330.8	4295.4
15°	4323.7	4313.8	4316.6	4333.6	4354.9	4362.0	4366.2	4376.1	4370.5	4354.9	4323.7
12.5°	4298.2	4285.5	4298.2	4315.2	4326.6	4330.8	4364.8	4383.2	4383.2	4369.0	4349.2
10°	4291.2	4265.7	4282.7	4298.2	4303.9	4329.4	4357.7	4377.5	4387.5	4376.1	4350.6
7.5°	4277.0	4260.0	4267.1	4274.2	4306.7	4325.1	4340.7	4362.0	4376.1	4374.7	4352.1
5°	4269.9	4248.7	4251.5	4281.2	4303.9	4316.6	4322.3	4340.7	4362.0	4366.2	4349.2
2.5°	4251.5	4241.6	4262.8	4265.7	4282.7	4292.6	4298.2	4315.2	4342.1	4352.1	4345.0
0°	4241.6	4227.4	4213.3	4224.6	4252.9	4274.2	4282.7	4308.1	4339.3	4349.2	4333.6



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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	117.5	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	161.4	150.1	147.3	144.5	140.2
80°	298.8	288.9	279.0	269.1	260.6	250.7	239.3	226.6	218.1	211.0	202.5
77.5°	389.5	375.3	361.1	344.1	334.2	324.3	313.0	300.2	287.5	276.2	263.4
75°	492.8	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	562.2	541.0	518.3	495.7	471.6	448.9	426.3	403.6	379.5
70°	727.9	699.6	671.3	643.0	613.2	583.5	555.2	526.8	498.5	468.8	441.9
67.5°	869.6	837.0	800.2	760.5	716.6	678.4	641.5	607.6	573.6	539.6	505.6
65°	1046.6	1001.3	951.7	897.9	846.9	795.9	742.1	691.1	651.5	611.8	573.6
62.5°	1264.7	1201.0	1131.6	1062.2	999.9	933.3	871.0	804.4	742.1	685.5	638.7
60°	1525.3	1438.9	1353.9	1264.7	1178.3	1087.7	1008.4	926.2	848.3	778.9	710.9
57.5°	1812.8	1712.2	1610.2	1501.2	1383.6	1277.4	1169.8	1062.2	970.1	878.1	801.6
55°	2104.5	1998.3	1883.6	1760.4	1631.5	1495.5	1349.7	1229.3	1103.2	995.6	896.5
52.5°	2382.1	2271.6	2152.7	2039.4	1885.0	1729.2	1569.2	1410.6	1263.3	1125.9	1005.5
50°	2629.9	2522.3	2407.6	2275.9	2132.8	1967.1	1788.7	1610.2	1436.0	1274.6	1124.5
47.5°	2856.5	2751.7	2637.0	2505.3	2375.0	2190.9	2011.0	1814.2	1620.2	1434.6	1259.0
45°	3069.0	2962.7	2843.8	2717.7	2567.6	2403.3	2217.8	2019.5	1811.3	1603.2	1400.6
42.5°	3261.6	3155.3	3035.0	2904.7	2756.0	2593.1	2413.2	2213.6	2004.0	1777.4	1555.0
40°	3430.1	3326.7	3210.6	3074.6	2935.8	2764.5	2587.4	2397.7	2181.0	1953.0	1708.0
37.5°	3577.4	3481.1	3366.4	3231.8	3084.5	2931.6	2748.9	2559.1	2363.7	2115.8	1865.2
35°	3707.7	3618.4	3500.9	3373.4	3229.0	3067.5	2896.2	2710.6	2499.6	2267.4	2023.8
32.5°	3821.0	3730.3	3622.7	3495.2	3355.0	3203.5	3027.9	2840.9	2641.3	2404.7	2139.9
30°	3917.3	3829.5	3727.5	3607.1	3472.6	3322.5	3151.1	2962.7	2758.8	2523.7	2261.7
27.5°	4000.8	3917.3	3818.1	3706.3	3577.4	3432.9	3260.1	3070.4	2862.2	2635.6	2373.6
25°	4073.1	3992.3	3900.3	3794.1	3666.6	3525.0	3362.1	3163.8	2955.7	2727.6	2468.5
22.5°	4138.2	4060.3	3968.3	3864.9	3748.7	3607.1	3442.8	3246.0	3035.0	2809.8	2554.9
20°	4196.3	4124.0	4033.4	3927.2	3811.1	3668.0	3505.2	3318.2	3105.8	2884.8	2632.8
17.5°	4243.0	4179.3	4088.6	3976.8	3860.6	3721.8	3563.2	3391.9	3166.7	2948.6	2697.9
15°	4275.6	4213.3	4131.1	4017.8	3904.5	3767.2	3608.5	3431.5	3221.9	2999.6	2751.7
12.5°	4298.2	4231.7	4155.2	4050.4	3937.1	3801.1	3646.8	3472.6	3268.6	3044.9	2798.5
10°	4303.9	4243.0	4166.5	4073.1	3962.6	3830.9	3679.3	3506.6	3306.9	3080.3	2836.7
7.5°	4306.7	4248.7	4179.3	4090.0	3981.0	3853.5	3703.4	3533.5	3335.2	3110.0	2865.0
5°	4305.3	4250.1	4187.8	4101.4	3992.3	3866.3	3719.0	3551.9	3355.0	3129.9	2886.3
2.5°	4301.1	4251.5	4193.4	4109.9	4005.1	3880.4	3734.6	3573.1	3376.3	3146.8	2903.3
0°	4312.4	4269.9	4196.3	4107.0	4007.9	3880.4	3733.2	3576.0	3379.1	3145.4	2901.8



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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	126.0	117.5	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	126.0	113.3	102.0	90.6	73.6	56.6
77.5°	250.7	233.7	215.3	198.3	179.9	161.4	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	308.7	286.1	260.6	230.8	203.9	177.0	150.1	121.8	96.3
70°	412.1	381.0	351.2	324.3	296.0	266.2	233.7	202.5	169.9	136.0	106.2
67.5°	467.4	431.9	398.0	364.0	331.4	297.4	263.4	228.0	189.8	150.1	117.5
65°	528.3	484.3	443.3	405.0	366.8	330.0	291.7	253.5	211.0	165.7	127.5
62.5°	589.1	541.0	492.8	444.7	402.2	361.1	320.1	277.6	230.8	182.7	137.4
60°	654.3	599.1	543.8	490.0	437.6	392.3	347.0	301.7	252.1	198.3	147.3
57.5°	726.5	660.0	597.6	536.7	477.3	423.5	373.9	325.7	270.5	213.8	158.6
55°	808.7	726.5	652.9	584.9	519.8	454.6	400.8	351.2	291.7	229.4	171.4
52.5°	895.1	800.2	710.9	634.5	565.1	491.4	426.3	371.1	313.0	245.0	182.7
50°	995.6	875.2	776.1	682.6	604.7	528.3	453.2	393.7	334.2	263.4	194.0
47.5°	1099.0	965.9	841.2	739.3	647.2	563.7	484.3	413.5	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°	1335.5	1154.2	991.4	855.4	735.0	635.9	543.8	457.4	388.0	314.4	226.6
40°	1472.9	1256.2	1065.0	913.5	781.8	669.9	572.2	481.5	403.6	330.0	236.5
37.5°	1604.6	1359.6	1154.2	977.2	827.1	703.9	600.5	504.2	417.8	345.6	249.3
35°	1734.9	1474.3	1239.2	1036.7	873.8	742.1	628.8	525.4	431.9	358.3	260.6
32.5°	1859.5	1581.9	1325.6	1103.2	924.8	777.5	654.3	545.2	446.1	369.6	271.9
30°	1975.6	1683.9	1410.6	1171.2	971.5	810.1	678.4	565.1	463.1	379.5	283.2
27.5°	2081.8	1783.0	1495.5	1234.9	1015.4	839.8	703.9	583.5	477.3	389.5	293.2
25°	2178.1	1872.2	1573.4	1293.0	1055.1	872.4	727.9	601.9	490.0	398.0	301.7
22.5°	2268.8	1954.4	1644.2	1351.1	1103.2	905.0	750.6	618.9	502.8	406.5	310.2
20°	2348.1	2029.4	1712.2	1409.1	1145.7	934.7	770.4	634.5	514.1	412.1	318.7
17.5°	2411.8	2096.0	1773.1	1460.1	1182.5	960.2	787.4	648.6	524.0	419.2	324.3
15°	2468.5	2152.7	1824.1	1504.0	1215.1	981.4	803.0	660.0	532.5	423.5	331.4
12.5°	2516.6	2200.8	1868.0	1542.3	1243.4	999.9	815.7	668.5	539.6	427.7	335.6
10°	2556.3	2239.0	1904.8	1572.0	1266.1	1014.0	825.7	677.0	545.2	431.9	339.9
7.5°	2586.0	2267.4	1931.7	1597.5	1284.5	1023.9	834.2	682.6	550.9	434.8	347.0
5°	2608.7	2291.4	1953.0	1614.5	1298.7	1038.1	844.1	689.7	556.6	437.6	347.0
2.5°	2625.7	2311.3	1970.0	1628.7	1310.0	1035.3	844.1	688.3	556.6	437.6	345.6
0°	2622.8	2312.7	1968.5	1628.7	1310.0	1032.4	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°	109.0	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°	126.0	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	56.6	0.0
40°	160.0	106.2	58.1	0.0
37.5°	167.1	109.0	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	117.5	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	126.0	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°	213.8	130.3	75.1	0.0
2.5°	213.8	130.3	75.1	0.0
0°	212.4	130.3	75.1	0.0

(END OF REPORT)