

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: P628513

Luminaire Tested: **IFLD-M-SA4A-940-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628513
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4A-940-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

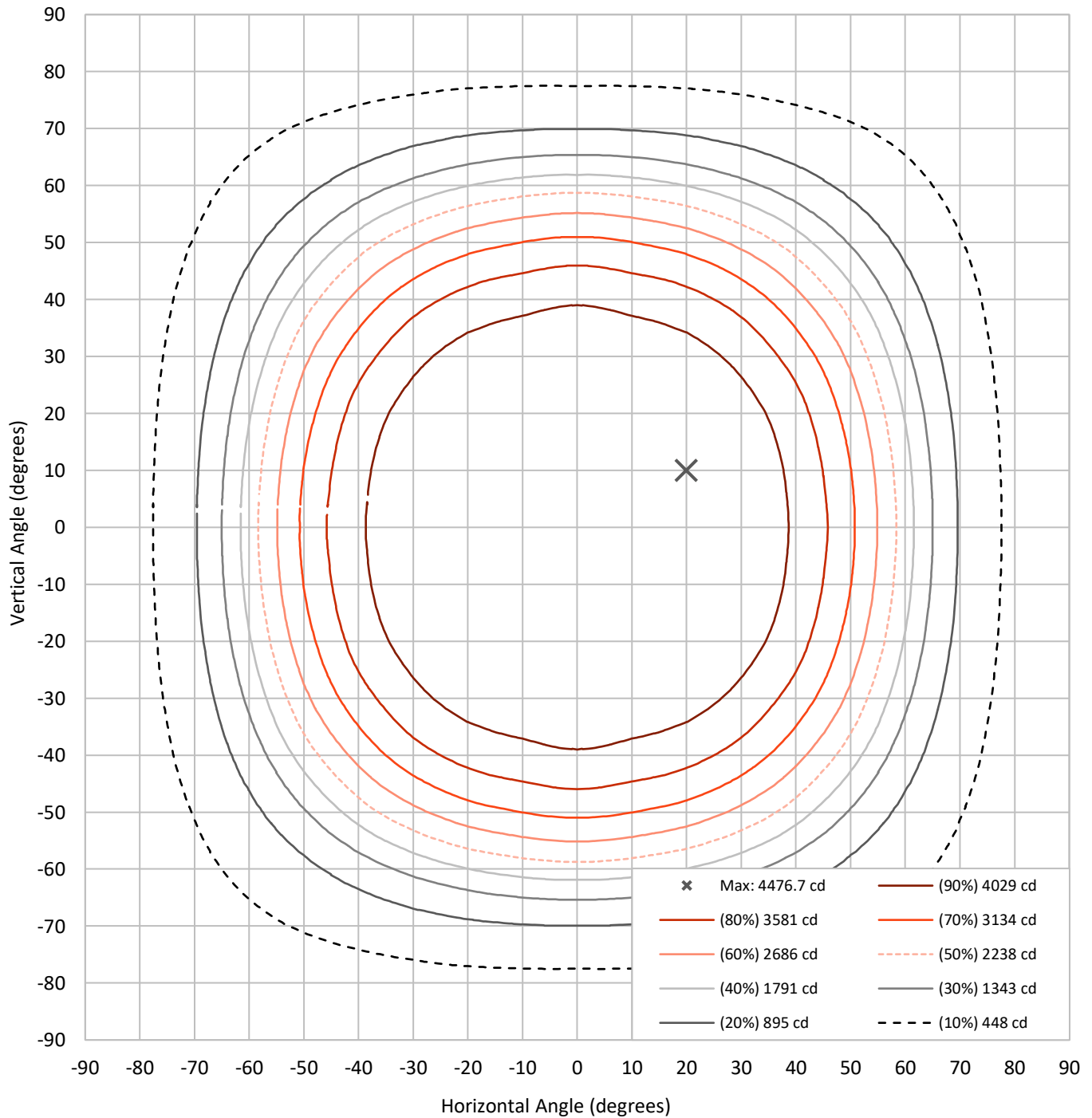
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	13733.8 lumens	Max Intensity:	4476.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	106.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	8427.3 lumens	Field Lumens:	10102.9 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 128.6
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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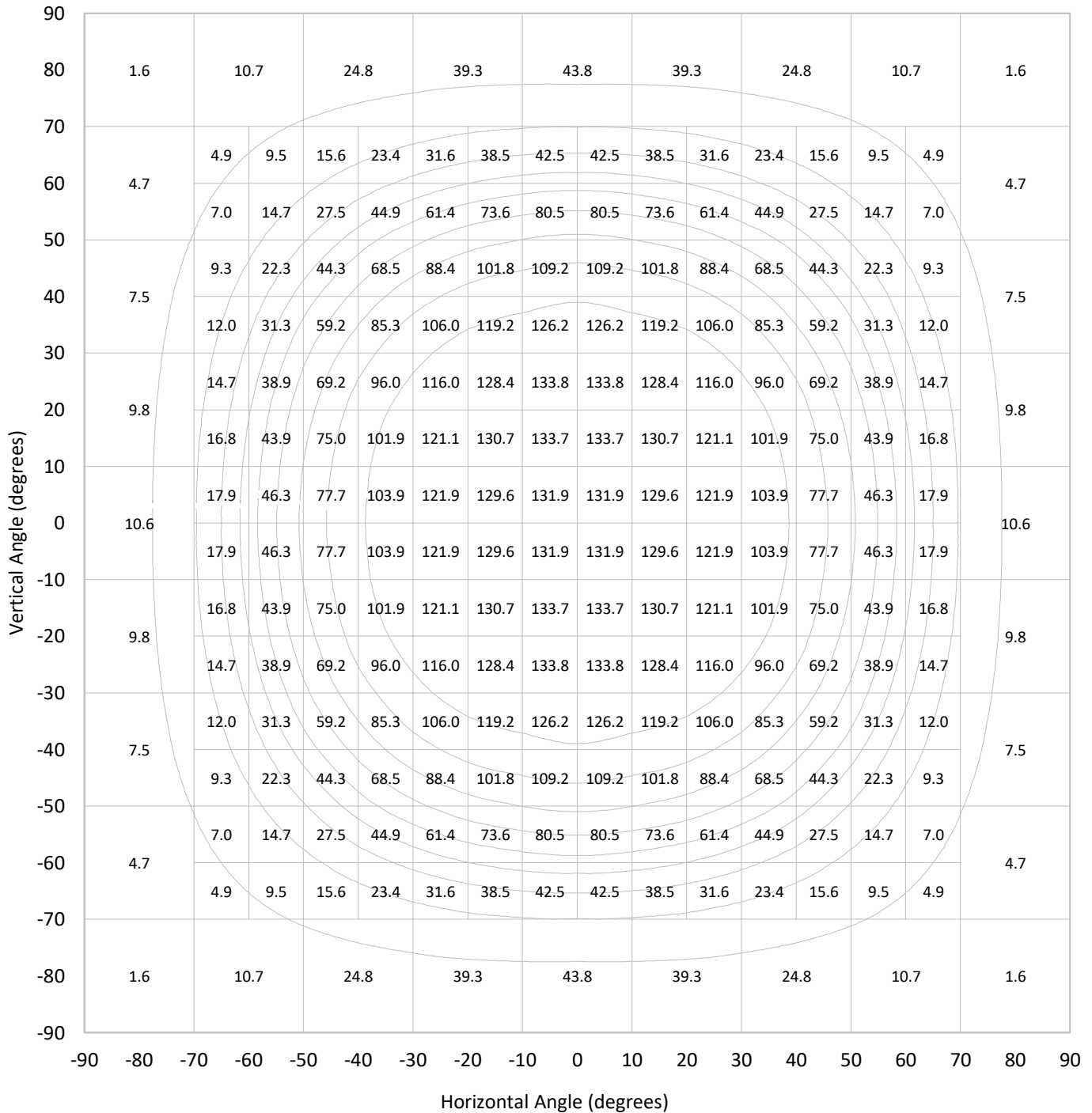
Iso-Candela Plot





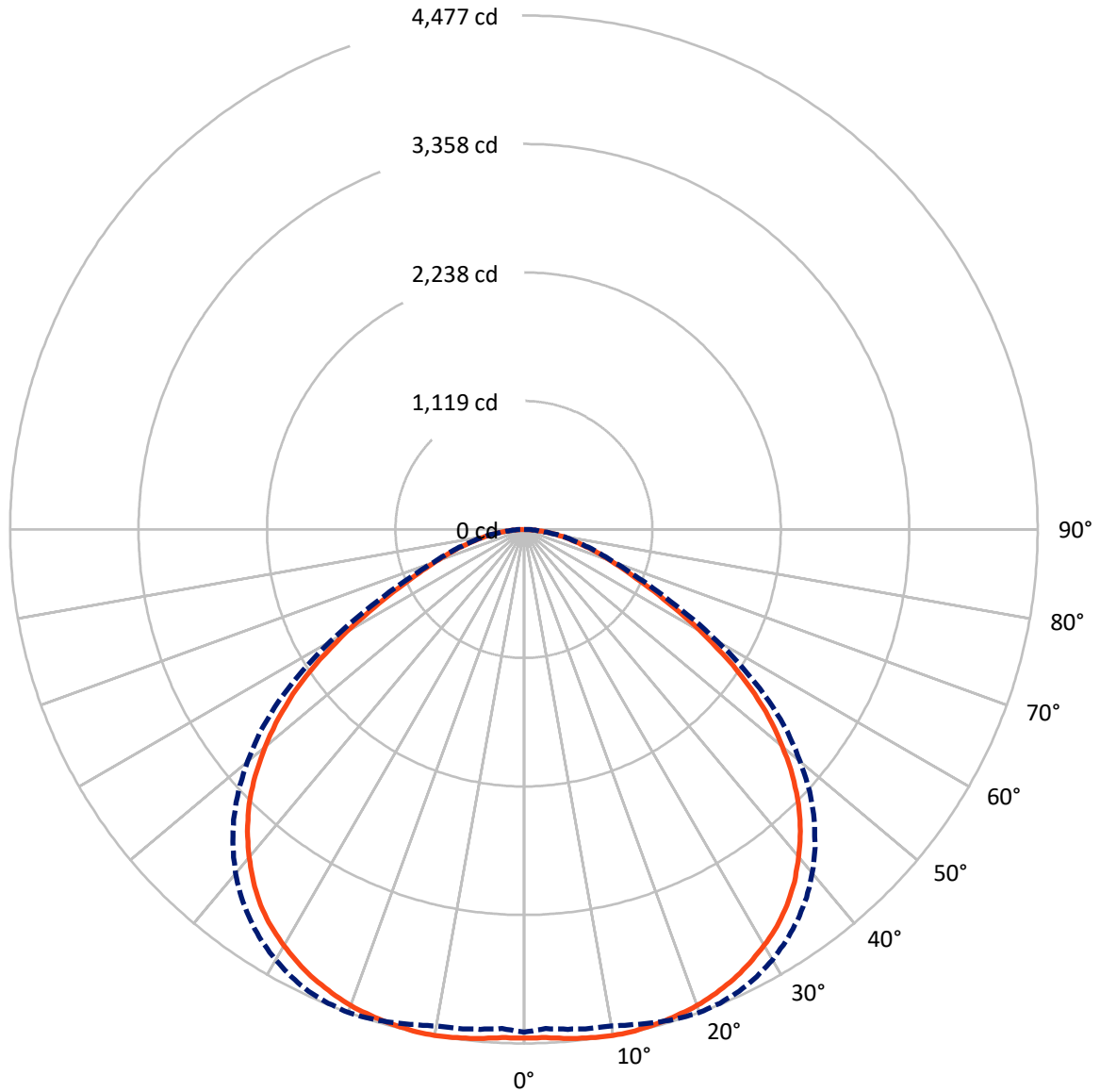
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Lumen Table



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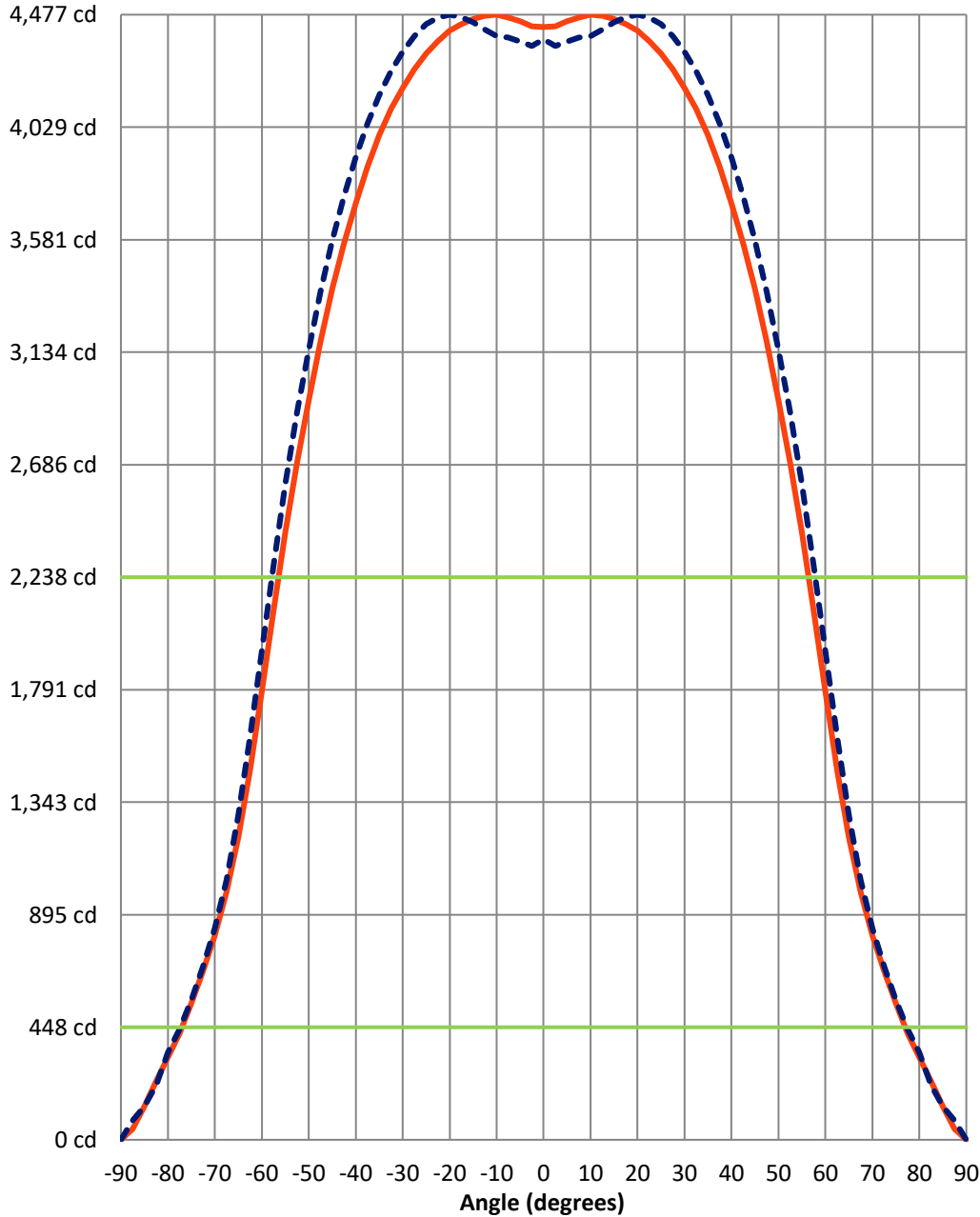
Luminous Intensity Polar Plot



— 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: 8427.3
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 10102.9
 Efficiency: 73.6%

Spill:
 Lumens: 3630.8
 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°	36.1	39.0	40.5	41.9	43.4	44.8	46.2	44.8	43.4	43.4	41.9
85°	96.8	99.7	101.2	111.3	121.4	127.2	134.4	132.9	132.9	131.5	130.1
82.5°	193.6	202.3	209.5	219.6	225.4	234.1	239.9	235.5	232.6	226.9	222.5
80°	343.9	346.8	348.2	349.7	342.5	341.0	338.1	333.8	328.0	320.8	313.6
77.5°	437.8	440.7	443.6	440.7	439.3	437.8	433.5	429.2	423.4	417.6	408.9
75°	579.5	579.5	579.5	575.1	572.2	567.9	560.7	553.4	543.3	531.8	518.8
72.5°	729.7	728.3	726.8	718.2	710.9	702.3	692.2	683.5	671.9	658.9	641.6
70°	887.2	890.1	891.6	880.0	871.3	859.8	846.8	830.9	813.5	794.8	770.2
67.5°	1104.0	1101.1	1098.2	1082.3	1070.8	1054.9	1036.1	1013.0	986.9	958.0	923.4
65°	1372.8	1377.1	1368.4	1352.5	1330.9	1304.9	1276.0	1242.7	1203.7	1160.3	1111.2
62.5°	1697.9	1705.1	1695.0	1674.8	1647.3	1612.6	1572.2	1524.5	1471.0	1410.3	1349.6
60°	2067.8	2066.4	2047.6	2020.1	1984.0	1940.7	1895.9	1843.8	1783.2	1712.3	1638.6
57.5°	2407.4	2404.5	2381.4	2353.9	2317.8	2271.6	2223.9	2169.0	2105.4	2030.2	1945.0
55°	2712.3	2709.4	2686.3	2657.4	2619.8	2573.6	2530.2	2478.2	2416.1	2336.6	2245.6
52.5°	2982.5	2984.0	2963.7	2931.9	2891.5	2846.7	2804.8	2752.8	2693.5	2614.0	2525.9
50°	3231.1	3229.6	3207.9	3179.0	3141.5	3098.1	3056.2	3004.2	2942.1	2865.5	2780.2
47.5°	3462.3	3459.4	3434.8	3403.0	3364.0	3326.4	3287.4	3241.2	3176.1	3099.6	3014.3
45°	3655.9	3650.1	3625.5	3595.2	3557.6	3524.4	3489.7	3455.0	3385.7	3314.9	3233.9
42.5°	3822.1	3820.6	3796.1	3765.7	3728.1	3699.2	3667.5	3624.1	3566.3	3501.3	3421.8
40°	3981.0	3969.5	3944.9	3916.0	3881.3	3856.8	3825.0	3781.6	3725.3	3661.7	3585.1
37.5°	4099.5	4101.0	4074.9	4043.2	4012.8	3989.7	3960.8	3920.3	3871.2	3809.1	3732.5
35°	4212.2	4205.0	4183.3	4155.9	4128.4	4102.4	4072.1	4037.4	3996.9	3939.1	3866.9
32.5°	4285.9	4296.0	4270.0	4241.1	4225.2	4205.0	4173.2	4137.1	4101.0	4043.2	3978.1
30°	4366.8	4358.2	4337.9	4313.4	4301.8	4288.8	4261.4	4226.7	4184.8	4132.7	4072.1
27.5°	4423.2	4418.9	4394.3	4371.2	4365.4	4353.8	4332.2	4301.8	4259.9	4209.3	4153.0
25°	4447.8	4450.7	4427.5	4414.5	4414.5	4407.3	4390.0	4364.0	4322.0	4275.8	4220.9
22.5°	4459.3	4456.4	4440.5	4437.6	4444.9	4439.1	4431.9	4408.7	4371.2	4333.6	4287.4
20°	4466.5	4446.3	4431.9	4443.4	4452.1	4450.7	4444.9	4430.4	4413.1	4381.3	4340.8
17.5°	4450.7	4437.6	4420.3	4437.6	4456.4	4457.9	4452.1	4443.4	4439.1	4418.9	4382.7
15°	4411.6	4401.5	4404.4	4421.8	4443.4	4450.7	4455.0	4465.1	4459.3	4443.4	4411.6
12.5°	4385.6	4372.6	4385.6	4403.0	4414.5	4418.9	4453.5	4472.3	4472.3	4457.9	4437.6
10°	4378.4	4352.4	4369.7	4385.6	4391.4	4417.4	4446.3	4466.5	4476.7	4465.1	4439.1
7.5°	4364.0	4346.6	4353.8	4361.1	4394.3	4413.1	4429.0	4450.7	4465.1	4463.7	4440.5
5°	4356.7	4335.1	4337.9	4368.3	4391.4	4404.4	4410.2	4429.0	4450.7	4455.0	4437.6
2.5°	4337.9	4327.8	4349.5	4352.4	4369.7	4379.8	4385.6	4403.0	4430.4	4440.5	4433.3
0°	4327.8	4313.4	4298.9	4310.5	4339.4	4361.1	4369.7	4395.7	4427.5	4437.6	4421.8



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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°	40.5	39.0	37.6	36.1	37.6	37.6	37.6	36.1	37.6	36.1	36.1
85°	125.7	119.9	115.6	109.8	104.0	99.7	93.9	88.1	86.7	85.3	82.4
82.5°	216.8	209.5	202.3	193.6	185.0	174.8	164.7	153.2	150.3	147.4	143.1
80°	304.9	294.8	284.7	274.6	265.9	255.8	244.2	231.2	222.5	215.3	206.6
77.5°	397.4	382.9	368.5	351.1	341.0	330.9	319.3	306.3	293.3	281.8	268.8
75°	502.9	487.0	472.5	455.2	436.4	417.6	398.8	381.5	362.7	345.4	328.0
72.5°	619.9	596.8	573.7	552.0	528.9	505.8	481.2	458.1	435.0	411.8	387.3
70°	742.7	713.8	684.9	656.0	625.7	595.3	566.4	537.5	508.6	478.3	450.8
67.5°	887.2	854.0	816.4	776.0	731.2	692.2	654.6	619.9	585.2	550.6	515.9
65°	1067.9	1021.6	971.1	916.1	864.1	812.1	757.2	705.2	664.7	624.2	585.2
62.5°	1290.4	1225.4	1154.6	1083.8	1020.2	952.3	888.7	820.8	757.2	699.4	651.7
60°	1556.3	1468.1	1381.4	1290.4	1202.3	1109.8	1028.9	945.0	865.6	794.8	725.4
57.5°	1849.6	1747.0	1643.0	1531.7	1411.8	1303.4	1193.6	1083.8	989.8	895.9	817.9
55°	2147.3	2038.9	1921.9	1796.2	1664.7	1525.9	1377.1	1254.3	1125.7	1015.8	914.7
52.5°	2430.5	2317.8	2196.4	2080.8	1923.3	1764.4	1601.1	1439.2	1289.0	1148.8	1026.0
50°	2683.4	2573.6	2456.5	2322.1	2176.2	2007.1	1825.1	1643.0	1465.2	1300.5	1147.3
47.5°	2914.6	2807.7	2690.6	2556.2	2423.3	2235.4	2051.9	1851.1	1653.1	1463.8	1284.6
45°	3131.4	3023.0	2901.6	2773.0	2619.8	2452.2	2262.9	2060.6	1848.2	1635.8	1429.1
42.5°	3327.9	3219.5	3096.7	2963.7	2812.0	2645.8	2462.3	2258.6	2044.7	1813.5	1586.6
40°	3499.8	3394.3	3275.9	3137.1	2995.5	2820.7	2640.0	2446.4	2225.3	1992.7	1742.7
37.5°	3650.1	3551.9	3434.8	3297.5	3147.2	2991.2	2804.8	2611.1	2411.7	2158.9	1903.1
35°	3783.1	3692.0	3572.1	3442.0	3294.6	3129.9	2955.1	2765.8	2550.5	2313.5	2064.9
32.5°	3898.7	3806.2	3696.4	3566.3	3423.2	3268.6	3089.4	2898.7	2695.0	2453.6	2183.4
30°	3996.9	3907.3	3803.3	3680.5	3543.2	3390.0	3215.2	3023.0	2814.9	2575.0	2307.7
27.5°	4082.2	3996.9	3895.8	3781.6	3650.1	3502.7	3326.4	3132.8	2920.4	2689.2	2421.8
25°	4155.9	4073.5	3979.6	3871.2	3741.1	3596.6	3430.5	3228.2	3015.8	2783.1	2518.7
22.5°	4222.3	4142.9	4048.9	3943.5	3825.0	3680.5	3512.8	3312.0	3096.7	2866.9	2606.8
20°	4281.6	4207.9	4115.4	4007.0	3888.5	3742.6	3576.4	3385.7	3168.9	2943.5	2686.3
17.5°	4329.3	4264.2	4171.8	4057.6	3939.1	3797.5	3635.7	3460.8	3231.1	3008.5	2752.8
15°	4362.5	4298.9	4215.1	4099.5	3983.9	3843.7	3681.9	3501.3	3287.4	3060.5	2807.7
12.5°	4385.6	4317.7	4239.7	4132.7	4017.1	3878.4	3720.9	3543.2	3335.1	3106.8	2855.4
10°	4391.4	4329.3	4251.2	4155.9	4043.2	3908.8	3754.2	3577.9	3374.1	3142.9	2894.4
7.5°	4394.3	4335.1	4264.2	4173.2	4061.9	3931.9	3778.7	3605.3	3403.0	3173.3	2923.3
5°	4392.9	4336.5	4272.9	4184.8	4073.5	3944.9	3794.6	3624.1	3423.2	3193.5	2944.9
2.5°	4388.5	4337.9	4278.7	4193.4	4086.5	3959.3	3810.5	3645.8	3444.9	3210.8	2962.3
0°	4400.1	4356.7	4281.6	4190.5	4089.4	3959.3	3809.1	3648.7	3447.8	3209.4	2960.8



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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°	36.1	34.7	34.7	33.2	31.8	30.3	27.5	26.0	23.1	18.8	14.5
85°	78.0	73.7	69.4	66.5	63.6	60.7	56.4	52.0	46.2	37.6	28.9
82.5°	137.3	128.6	119.9	109.8	101.2	92.5	85.3	78.0	69.4	56.4	43.4
80°	196.5	183.5	170.5	156.1	143.1	128.6	115.6	104.0	92.5	75.1	57.8
77.5°	255.8	238.4	219.6	202.3	183.5	164.7	145.9	130.1	112.7	92.5	72.3
75°	310.7	290.4	273.1	248.5	225.4	200.9	176.3	154.6	132.9	108.4	86.7
72.5°	365.6	339.6	315.0	291.9	265.9	235.5	208.1	180.6	153.2	124.3	98.3
70°	420.5	388.7	358.4	330.9	302.0	271.7	238.4	206.6	173.4	138.7	108.4
67.5°	476.9	440.7	406.0	371.4	338.1	303.5	268.8	232.6	193.6	153.2	119.9
65°	539.0	494.2	452.3	413.3	374.3	336.7	297.7	258.7	215.3	169.1	130.1
62.5°	601.1	552.0	502.9	453.7	410.4	368.5	326.6	283.2	235.5	186.4	140.2
60°	667.6	611.2	554.9	500.0	446.5	400.3	354.0	307.8	257.2	202.3	150.3
57.5°	741.3	673.4	609.8	547.7	487.0	432.1	381.5	332.4	276.0	218.2	161.8
55°	825.1	741.3	666.2	596.8	530.3	463.9	408.9	358.4	297.7	234.1	174.8
52.5°	913.3	816.4	725.4	647.4	576.6	501.4	435.0	378.6	319.3	250.0	186.4
50°	1015.8	893.0	791.9	696.5	617.0	539.0	462.4	401.7	341.0	268.8	198.0
47.5°	1121.3	985.5	858.3	754.3	660.4	575.1	494.2	421.9	361.3	286.1	209.5
45°	1244.2	1073.6	933.5	810.7	702.3	612.7	526.0	443.6	378.6	303.5	221.1
42.5°	1362.7	1177.7	1011.5	872.8	750.0	648.8	554.9	466.7	395.9	320.8	231.2
40°	1502.8	1281.7	1086.7	932.0	797.6	683.5	583.8	491.3	411.8	336.7	241.3
37.5°	1637.2	1387.2	1177.7	997.1	843.9	718.2	612.7	514.4	426.3	352.6	254.3
35°	1770.1	1504.3	1264.4	1057.8	891.6	757.2	641.6	536.1	440.7	365.6	265.9
32.5°	1897.3	1614.1	1352.5	1125.7	943.6	793.3	667.6	556.3	455.2	377.1	277.4
30°	2015.8	1718.1	1439.2	1195.0	991.3	826.5	692.2	576.6	472.5	387.3	289.0
27.5°	2124.2	1819.3	1525.9	1260.1	1036.1	856.9	718.2	595.3	487.0	397.4	299.1
25°	2222.4	1910.3	1605.4	1319.3	1076.5	890.1	742.7	614.1	500.0	406.0	307.8
22.5°	2314.9	1994.1	1677.7	1378.5	1125.7	923.4	765.9	631.5	513.0	414.7	316.5
20°	2395.8	2070.7	1747.0	1437.8	1169.0	953.7	786.1	647.4	524.5	420.5	325.1
17.5°	2460.9	2138.6	1809.2	1489.8	1206.6	979.7	803.4	661.8	534.7	427.7	330.9
15°	2518.7	2196.4	1861.2	1534.6	1239.8	1001.4	819.3	673.4	543.3	432.1	338.1
12.5°	2567.8	2245.6	1906.0	1573.6	1268.7	1020.2	832.3	682.0	550.6	436.4	342.5
10°	2608.3	2284.6	1943.5	1604.0	1291.8	1034.6	842.4	690.7	556.3	440.7	346.8
7.5°	2638.6	2313.5	1971.0	1630.0	1310.6	1044.7	851.1	696.5	562.1	443.6	354.0
5°	2661.7	2338.0	1992.7	1647.3	1325.1	1059.2	861.2	703.7	567.9	446.5	354.0
2.5°	2679.1	2358.3	2010.0	1661.8	1336.6	1056.3	861.2	702.3	567.9	446.5	352.6
0°	2676.2	2359.7	2008.6	1661.8	1336.6	1053.4	861.2	700.8	567.9	446.5	352.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.1	7.2	2.9	0.0
85°	21.7	14.5	7.2	0.0
82.5°	31.8	20.2	10.1	0.0
80°	41.9	27.5	13.0	0.0
77.5°	53.5	34.7	17.3	0.0
75°	63.6	40.5	20.2	0.0
72.5°	73.7	47.7	23.1	0.0
70°	82.4	53.5	26.0	0.0
67.5°	91.0	60.7	30.3	0.0
65°	98.3	66.5	33.2	0.0
62.5°	104.0	73.7	36.1	0.0
60°	111.3	79.5	39.0	0.0
57.5°	117.0	83.8	41.9	0.0
55°	122.8	86.7	44.8	0.0
52.5°	128.6	91.0	47.7	0.0
50°	134.4	95.4	50.6	0.0
47.5°	140.2	98.3	52.0	0.0
45°	148.8	102.6	54.9	0.0
42.5°	156.1	105.5	57.8	0.0
40°	163.3	108.4	59.2	0.0
37.5°	170.5	111.3	62.1	0.0
35°	177.7	114.2	63.6	0.0
32.5°	183.5	117.0	65.0	0.0
30°	189.3	119.9	66.5	0.0
27.5°	195.1	121.4	67.9	0.0
25°	199.4	124.3	69.4	0.0
22.5°	203.7	125.7	70.8	0.0
20°	206.6	127.2	72.3	0.0
17.5°	211.0	128.6	73.7	0.0
15°	212.4	130.1	76.6	0.0
12.5°	215.3	131.5	76.6	0.0
10°	216.8	132.9	76.6	0.0
7.5°	219.6	132.9	76.6	0.0
5°	218.2	132.9	76.6	0.0
2.5°	218.2	132.9	76.6	0.0
0°	216.8	132.9	76.6	0.0

(END OF REPORT)