

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: P628456

Luminaire Tested: **IFLD-M-SA4B-930-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628456
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-930-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

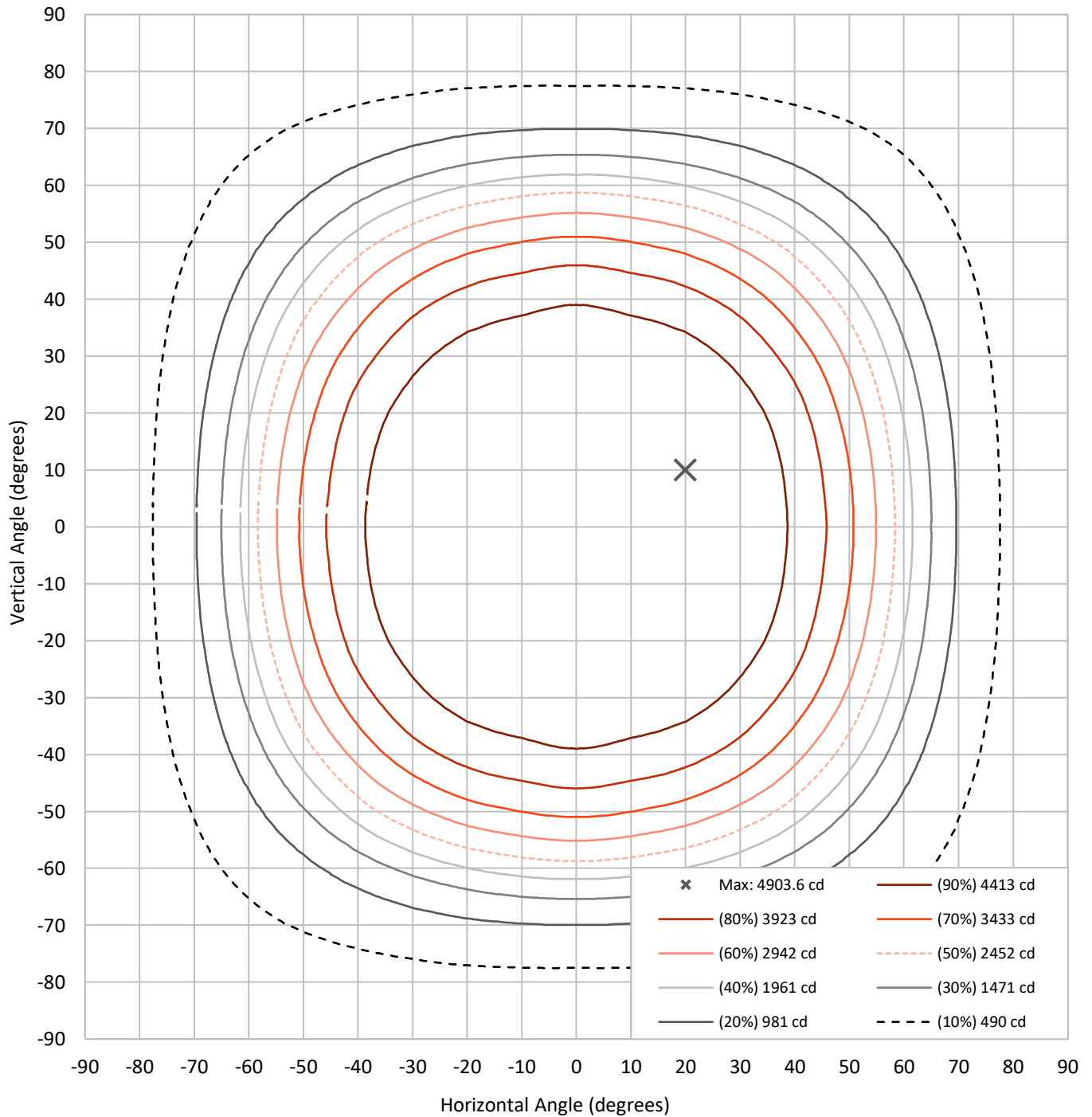
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	15043.6 lumens	Max Intensity:	4903.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	90.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	9231.1 lumens	Field Lumens:	11066.5 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 166.1
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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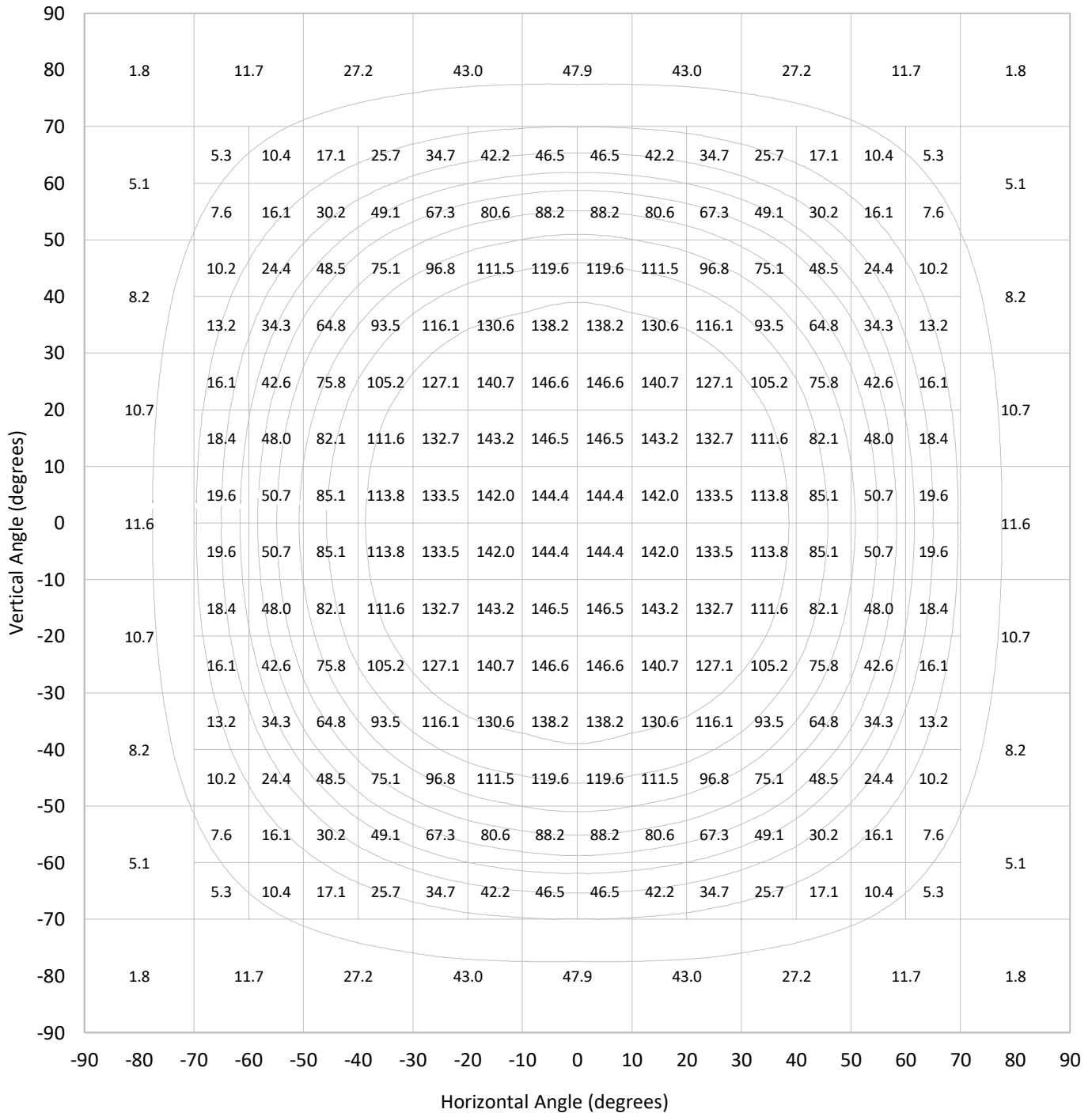
Iso-Candela Plot





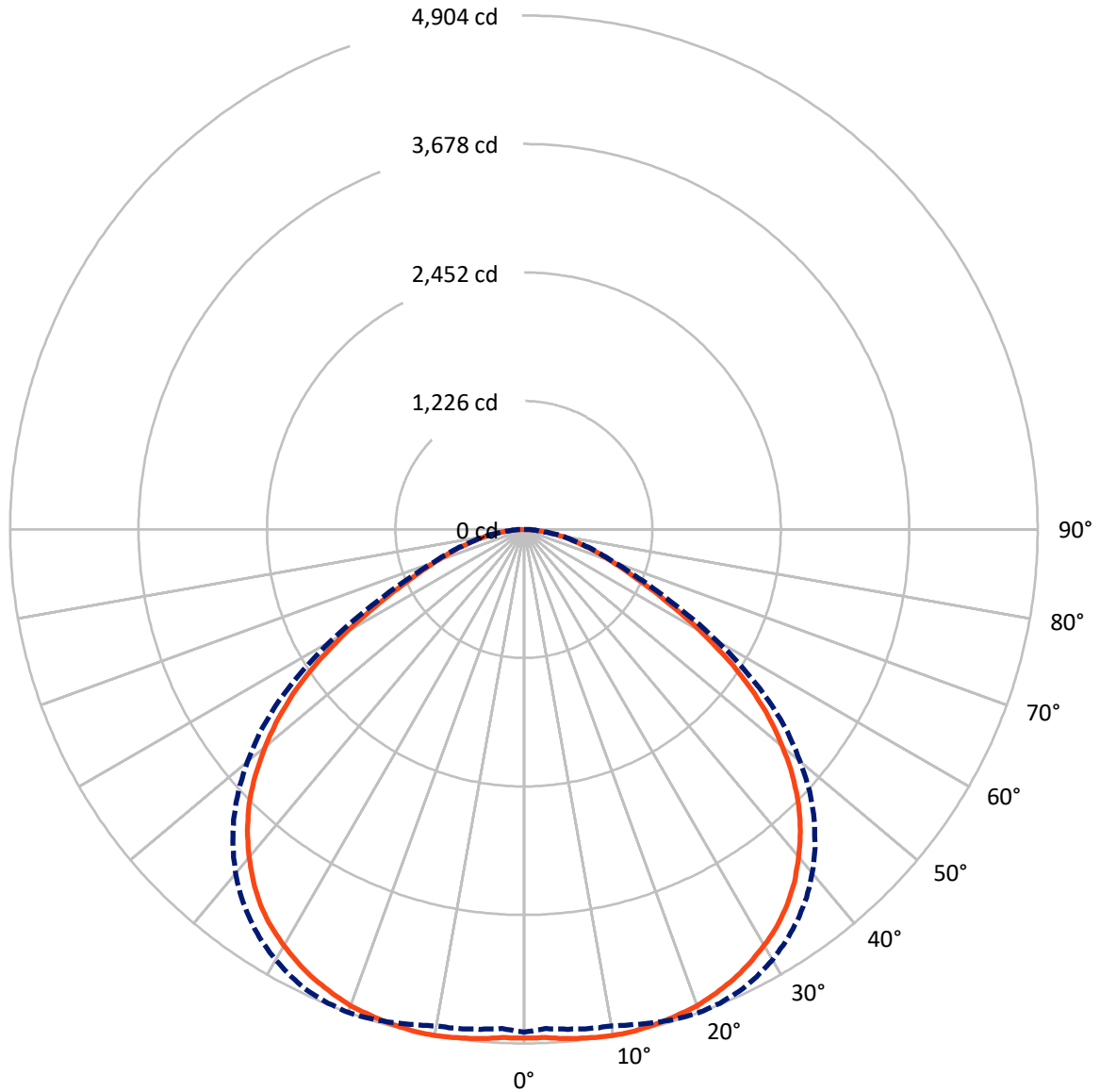
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Lumen Table



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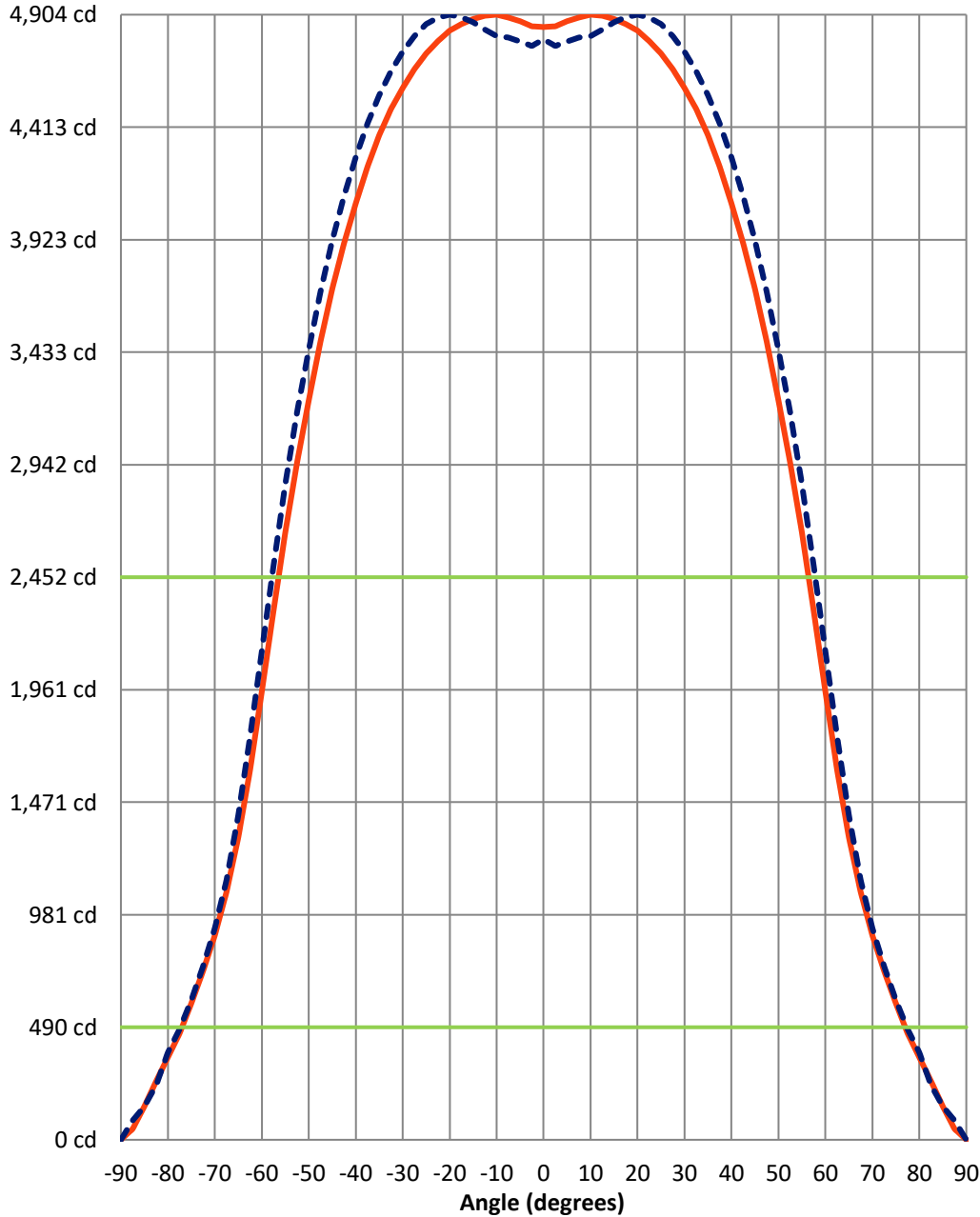
Luminous Intensity Polar Plot



— 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: 9231.1
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 11066.5
 Efficiency: 73.6%

Spill:
 Lumens: 3977.1
 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°	39.6	42.7	44.3	45.9	47.5	49.1	50.7	49.1	47.5	47.5	45.9
85°	106.0	109.2	110.8	121.9	133.0	139.3	147.2	145.6	145.6	144.0	142.5
82.5°	212.1	221.6	229.5	240.6	246.9	256.4	262.8	258.0	254.8	248.5	243.8
80°	376.7	379.9	381.5	383.0	375.1	373.5	370.4	365.6	359.3	351.4	343.5
77.5°	479.6	482.8	485.9	482.8	481.2	479.6	474.9	470.1	463.8	457.4	447.9
75°	634.7	634.7	634.7	630.0	626.8	622.1	614.1	606.2	595.1	582.5	568.2
72.5°	799.3	797.7	796.2	786.7	778.8	769.3	758.2	748.7	736.0	721.8	702.8
70°	971.9	975.0	976.6	963.9	954.4	941.8	927.5	910.1	891.1	870.6	843.7
67.5°	1209.3	1206.1	1203.0	1185.5	1172.9	1155.5	1134.9	1109.6	1081.1	1049.4	1011.4
65°	1503.7	1508.4	1498.9	1481.5	1457.8	1429.3	1397.6	1361.2	1318.5	1271.0	1217.2
62.5°	1859.8	1867.7	1856.7	1834.5	1804.4	1766.4	1722.1	1669.9	1611.3	1544.8	1478.4
60°	2265.0	2263.5	2242.9	2212.8	2173.2	2125.7	2076.7	2019.7	1953.2	1875.7	1794.9
57.5°	2637.0	2633.8	2608.5	2578.4	2538.9	2488.2	2436.0	2375.8	2306.2	2223.9	2130.5
55°	2971.0	2967.8	2942.5	2910.8	2869.7	2819.0	2771.5	2714.6	2646.5	2559.4	2459.7
52.5°	3267.0	3268.6	3246.4	3211.6	3167.3	3118.2	3072.3	3015.3	2950.4	2863.3	2766.8
50°	3539.2	3537.6	3513.9	3482.2	3441.1	3393.6	3347.7	3290.7	3222.7	3138.8	3045.4
47.5°	3792.5	3789.3	3762.4	3727.6	3684.8	3643.7	3600.9	3550.3	3479.1	3395.2	3301.8
45°	4004.6	3998.2	3971.3	3938.1	3896.9	3860.5	3822.5	3784.6	3708.6	3631.0	3542.4
42.5°	4186.6	4185.0	4158.1	4124.9	4083.7	4052.1	4017.2	3969.7	3906.4	3835.2	3748.2
40°	4360.7	4348.0	4321.1	4289.5	4251.5	4224.6	4189.8	4142.3	4080.5	4010.9	3927.0
37.5°	4490.5	4492.1	4463.6	4428.8	4395.5	4370.2	4338.6	4294.2	4240.4	4172.4	4088.5
35°	4614.0	4606.0	4582.3	4552.2	4522.2	4493.7	4460.4	4422.4	4378.1	4314.8	4235.7
32.5°	4694.7	4705.8	4677.3	4645.6	4628.2	4606.0	4571.2	4531.7	4492.1	4428.8	4357.5
30°	4783.3	4773.8	4751.7	4724.8	4712.1	4697.9	4667.8	4629.8	4583.9	4526.9	4460.4
27.5°	4845.1	4840.3	4813.4	4788.1	4781.7	4769.1	4745.3	4712.1	4666.2	4610.8	4549.1
25°	4872.0	4875.1	4849.8	4835.6	4835.6	4827.6	4808.7	4780.2	4734.3	4683.6	4623.5
22.5°	4884.6	4881.5	4864.1	4860.9	4868.8	4862.5	4854.6	4829.2	4788.1	4746.9	4696.3
20°	4892.5	4870.4	4854.6	4867.2	4876.7	4875.1	4868.8	4853.0	4834.0	4799.2	4754.8
17.5°	4875.1	4860.9	4841.9	4860.9	4881.5	4883.0	4876.7	4867.2	4862.5	4840.3	4800.7
15°	4832.4	4821.3	4824.5	4843.5	4867.2	4875.1	4879.9	4891.0	4884.6	4867.2	4832.4
12.5°	4803.9	4789.7	4803.9	4822.9	4835.6	4840.3	4878.3	4898.9	4898.9	4883.0	4860.9
10°	4796.0	4767.5	4786.5	4803.9	4810.2	4838.7	4870.4	4892.5	4903.6	4891.0	4862.5
7.5°	4780.2	4761.2	4769.1	4777.0	4813.4	4834.0	4851.4	4875.1	4891.0	4889.4	4864.1
5°	4772.2	4748.5	4751.7	4784.9	4810.2	4824.5	4830.8	4851.4	4875.1	4879.9	4860.9
2.5°	4751.7	4740.6	4764.3	4767.5	4786.5	4797.6	4803.9	4822.9	4853.0	4864.1	4856.1
0°	4740.6	4724.8	4708.9	4721.6	4753.3	4777.0	4786.5	4815.0	4849.8	4860.9	4843.5



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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°	44.3	42.7	41.2	39.6	41.2	41.2	41.2	39.6	41.2	39.6	39.6
85°	137.7	131.4	126.6	120.3	114.0	109.2	102.9	96.6	95.0	93.4	90.2
82.5°	237.4	229.5	221.6	212.1	202.6	191.5	180.4	167.8	164.6	161.4	156.7
80°	334.0	322.9	311.8	300.7	291.2	280.2	267.5	253.3	243.8	235.8	226.3
77.5°	435.3	419.5	403.6	384.6	373.5	362.5	349.8	335.6	321.3	308.7	294.4
75°	550.8	533.4	517.6	498.6	478.0	457.4	436.9	417.9	397.3	378.3	359.3
72.5°	679.0	653.7	628.4	604.6	579.3	554.0	527.1	501.8	476.4	451.1	424.2
70°	813.6	781.9	750.3	718.6	685.4	652.1	620.5	588.8	557.2	523.9	493.8
67.5°	971.9	935.5	894.3	850.0	800.9	758.2	717.0	679.0	641.0	603.1	565.1
65°	1169.7	1119.1	1063.7	1003.5	946.5	889.6	829.4	772.4	728.1	683.8	641.0
62.5°	1413.5	1342.2	1264.7	1187.1	1117.5	1043.1	973.4	899.1	829.4	766.1	713.9
60°	1704.7	1608.2	1513.2	1413.5	1316.9	1215.6	1127.0	1035.2	948.1	870.6	794.6
57.5°	2026.0	1913.6	1799.7	1677.8	1546.4	1427.7	1307.4	1187.1	1084.2	981.4	895.9
55°	2352.1	2233.4	2105.2	1967.5	1823.4	1671.5	1508.4	1373.9	1233.0	1112.7	1001.9
52.5°	2662.3	2538.9	2405.9	2279.3	2106.8	1932.6	1753.8	1576.5	1411.9	1258.4	1123.8
50°	2939.3	2819.0	2690.8	2543.6	2383.7	2198.6	1999.1	1799.7	1605.0	1424.6	1256.8
47.5°	3192.6	3075.4	2947.2	2800.0	2654.4	2448.6	2247.6	2027.6	1810.8	1603.4	1407.1
45°	3430.0	3311.3	3178.3	3037.5	2869.7	2686.1	2478.7	2257.1	2024.4	1791.8	1565.4
42.5°	3645.3	3526.6	3392.0	3246.4	3080.2	2898.2	2697.2	2474.0	2239.7	1986.5	1738.0
40°	3833.6	3718.1	3588.3	3436.3	3281.2	3089.7	2891.8	2679.7	2437.6	2182.7	1908.9
37.5°	3998.2	3890.6	3762.4	3612.0	3447.4	3276.5	3072.3	2860.2	2641.8	2364.8	2084.6
35°	4143.9	4044.1	3912.8	3770.3	3608.9	3428.4	3236.9	3029.5	2793.7	2534.1	2261.9
32.5°	4270.5	4169.2	4048.9	3906.4	3749.7	3580.4	3384.1	3175.2	2952.0	2687.7	2391.7
30°	4378.1	4280.0	4166.0	4031.5	3881.1	3713.3	3521.8	3311.3	3083.4	2820.6	2527.8
27.5°	4471.5	4378.1	4267.3	4142.3	3998.2	3836.8	3643.7	3431.6	3198.9	2945.7	2652.8
25°	4552.2	4462.0	4359.1	4240.4	4098.0	3939.7	3757.6	3536.1	3303.4	3048.5	2758.9
22.5°	4625.0	4538.0	4435.1	4319.6	4189.8	4031.5	3847.9	3627.9	3392.0	3140.3	2855.4
20°	4689.9	4609.2	4507.9	4389.2	4259.4	4099.5	3917.5	3708.6	3471.2	3224.2	2942.5
17.5°	4742.2	4670.9	4569.6	4444.6	4314.8	4159.7	3982.4	3790.9	3539.2	3295.5	3015.3
15°	4778.6	4708.9	4617.1	4490.5	4363.9	4210.3	4033.1	3835.2	3600.9	3352.4	3075.4
12.5°	4803.9	4729.5	4644.0	4526.9	4400.3	4248.3	4075.8	3881.1	3653.2	3403.1	3127.7
10°	4810.2	4742.2	4656.7	4552.2	4428.8	4281.6	4112.2	3919.1	3695.9	3442.7	3170.4
7.5°	4813.4	4748.5	4670.9	4571.2	4449.3	4306.9	4139.1	3949.2	3727.6	3475.9	3202.1
5°	4811.8	4750.1	4680.4	4583.9	4462.0	4321.1	4156.5	3969.7	3749.7	3498.1	3225.8
2.5°	4807.1	4751.7	4686.8	4593.4	4476.3	4337.0	4173.9	3993.5	3773.5	3517.1	3244.8
0°	4819.7	4772.2	4689.9	4590.2	4479.4	4337.0	4172.4	3996.7	3776.6	3515.5	3243.2



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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°	39.6	38.0	38.0	36.4	34.8	33.2	30.1	28.5	25.3	20.6	15.8
85°	85.5	80.7	76.0	72.8	69.6	66.5	61.7	57.0	50.7	41.2	31.7
82.5°	150.4	140.9	131.4	120.3	110.8	101.3	93.4	85.5	76.0	61.7	47.5
80°	215.3	201.0	186.8	170.9	156.7	140.9	126.6	114.0	101.3	82.3	63.3
77.5°	280.2	261.2	240.6	221.6	201.0	180.4	159.9	142.5	123.5	101.3	79.1
75°	340.3	318.1	299.2	272.2	246.9	220.0	193.1	169.4	145.6	118.7	95.0
72.5°	400.5	372.0	345.1	319.7	291.2	258.0	227.9	197.9	167.8	136.1	107.6
70°	460.6	425.8	392.5	362.5	330.8	297.6	261.2	226.3	189.9	152.0	118.7
67.5°	522.3	482.8	444.8	406.8	370.4	332.4	294.4	254.8	212.1	167.8	131.4
65°	590.4	541.3	495.4	452.7	410.0	368.8	326.1	283.3	235.8	185.2	142.5
62.5°	658.5	604.6	550.8	497.0	449.5	403.6	357.7	310.2	258.0	204.2	153.5
60°	731.3	669.5	607.8	547.7	489.1	438.4	387.8	337.1	281.7	221.6	164.6
57.5°	812.0	737.6	668.0	599.9	533.4	473.3	417.9	364.1	302.3	239.0	177.3
55°	903.8	812.0	729.7	653.7	580.9	508.1	447.9	392.5	326.1	256.4	191.5
52.5°	1000.4	894.3	794.6	709.1	631.6	549.2	476.4	414.7	349.8	273.8	204.2
50°	1112.7	978.2	867.4	762.9	675.9	590.4	506.5	440.0	373.5	294.4	216.8
47.5°	1228.3	1079.5	940.2	826.2	723.4	630.0	541.3	462.2	395.7	313.4	229.5
45°	1362.8	1176.0	1022.5	888.0	769.3	671.1	576.2	485.9	414.7	332.4	242.2
42.5°	1492.6	1290.0	1108.0	956.0	821.5	710.7	607.8	511.3	433.7	351.4	253.3
40°	1646.1	1404.0	1190.3	1020.9	873.7	748.7	639.5	538.2	451.1	368.8	264.3
37.5°	1793.4	1519.5	1290.0	1092.2	924.4	786.7	671.1	563.5	466.9	386.2	278.6
35°	1939.0	1647.7	1385.0	1158.6	976.6	829.4	702.8	587.2	482.8	400.5	291.2
32.5°	2078.3	1768.0	1481.5	1233.0	1033.6	869.0	731.3	609.4	498.6	413.1	303.9
30°	2208.1	1882.0	1576.5	1309.0	1085.8	905.4	758.2	631.6	517.6	424.2	316.6
27.5°	2326.8	1992.8	1671.5	1380.2	1134.9	938.6	786.7	652.1	533.4	435.3	327.6
25°	2434.4	2092.5	1758.5	1445.1	1179.2	975.0	813.6	672.7	547.7	444.8	337.1
22.5°	2535.7	2184.3	1837.7	1510.0	1233.0	1011.4	838.9	691.7	561.9	454.3	346.6
20°	2624.3	2268.2	1913.6	1574.9	1280.5	1044.7	861.1	709.1	574.6	460.6	356.1
17.5°	2695.6	2342.6	1981.7	1631.9	1321.7	1073.2	880.1	724.9	585.6	468.5	362.5
15°	2758.9	2405.9	2038.7	1681.0	1358.1	1096.9	897.5	737.6	595.1	473.3	370.4
12.5°	2812.7	2459.7	2087.8	1723.7	1389.7	1117.5	911.7	747.1	603.1	478.0	375.1
10°	2857.0	2502.5	2128.9	1756.9	1415.1	1133.3	922.8	756.6	609.4	482.8	379.9
7.5°	2890.3	2534.1	2159.0	1785.4	1435.6	1144.4	932.3	762.9	615.7	485.9	387.8
5°	2915.6	2561.0	2182.7	1804.4	1451.5	1160.2	943.4	770.8	622.1	489.1	387.8
2.5°	2934.6	2583.2	2201.7	1820.3	1464.1	1157.1	943.4	769.3	622.1	489.1	386.2
0°	2931.4	2584.8	2200.1	1820.3	1464.1	1153.9	943.4	767.7	622.1	489.1	386.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	11.1	7.9	3.2	0.0
85°	23.7	15.8	7.9	0.0
82.5°	34.8	22.2	11.1	0.0
80°	45.9	30.1	14.2	0.0
77.5°	58.6	38.0	19.0	0.0
75°	69.6	44.3	22.2	0.0
72.5°	80.7	52.2	25.3	0.0
70°	90.2	58.6	28.5	0.0
67.5°	99.7	66.5	33.2	0.0
65°	107.6	72.8	36.4	0.0
62.5°	114.0	80.7	39.6	0.0
60°	121.9	87.1	42.7	0.0
57.5°	128.2	91.8	45.9	0.0
55°	134.5	95.0	49.1	0.0
52.5°	140.9	99.7	52.2	0.0
50°	147.2	104.5	55.4	0.0
47.5°	153.5	107.6	57.0	0.0
45°	163.0	112.4	60.1	0.0
42.5°	170.9	115.5	63.3	0.0
40°	178.9	118.7	64.9	0.0
37.5°	186.8	121.9	68.1	0.0
35°	194.7	125.0	69.6	0.0
32.5°	201.0	128.2	71.2	0.0
30°	207.4	131.4	72.8	0.0
27.5°	213.7	133.0	74.4	0.0
25°	218.4	136.1	76.0	0.0
22.5°	223.2	137.7	77.6	0.0
20°	226.3	139.3	79.1	0.0
17.5°	231.1	140.9	80.7	0.0
15°	232.7	142.5	83.9	0.0
12.5°	235.8	144.0	83.9	0.0
10°	237.4	145.6	83.9	0.0
7.5°	240.6	145.6	83.9	0.0
5°	239.0	145.6	83.9	0.0
2.5°	239.0	145.6	83.9	0.0
0°	237.4	145.6	83.9	0.0

(END OF REPORT)