

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: P628398

Luminaire Tested: **IFLD-M-SA4B-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628398
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

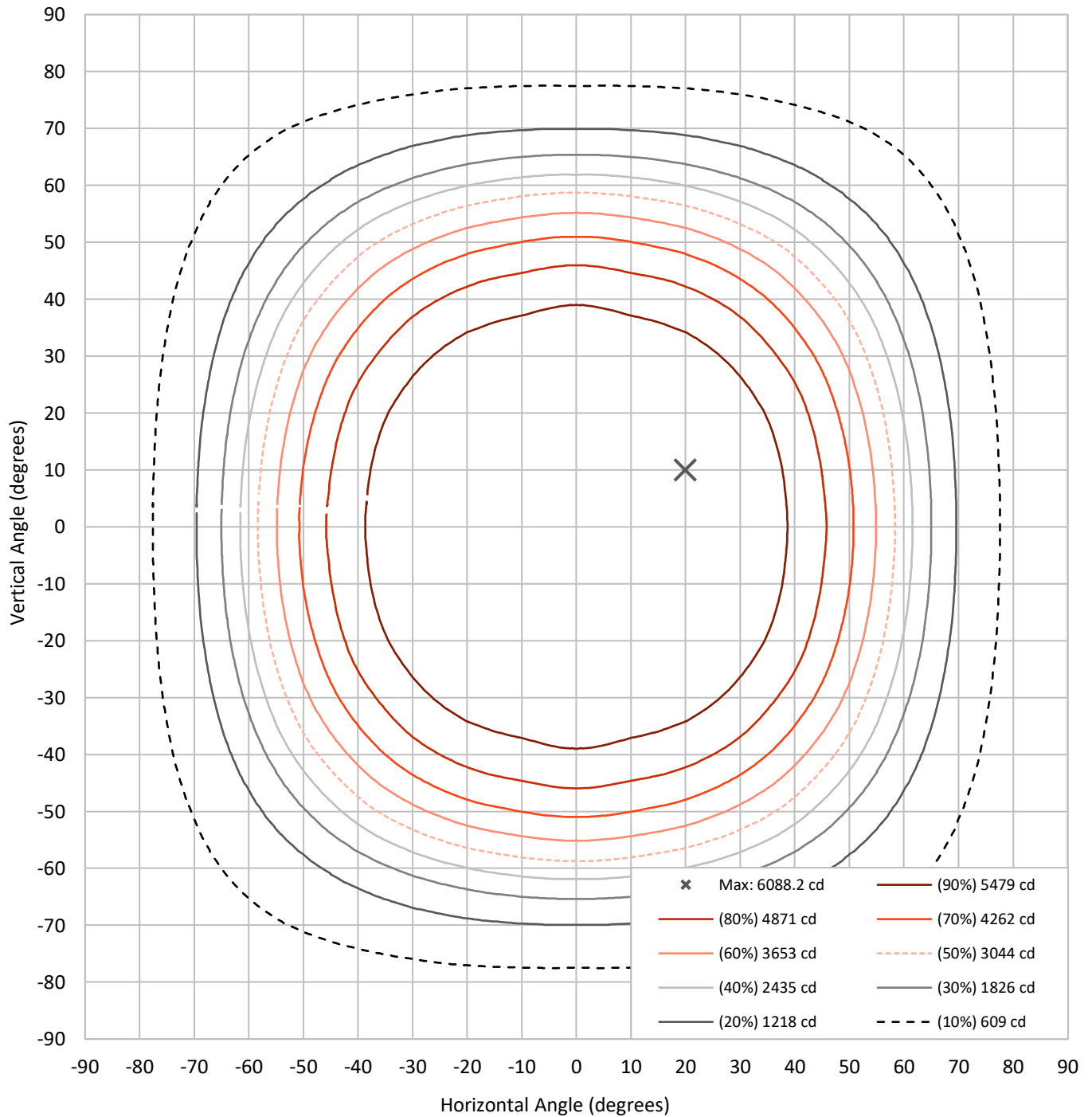
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18677.6 lumens	Max Intensity:	6088.2 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	112.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	11461 lumens	Field Lumens:	13739.8 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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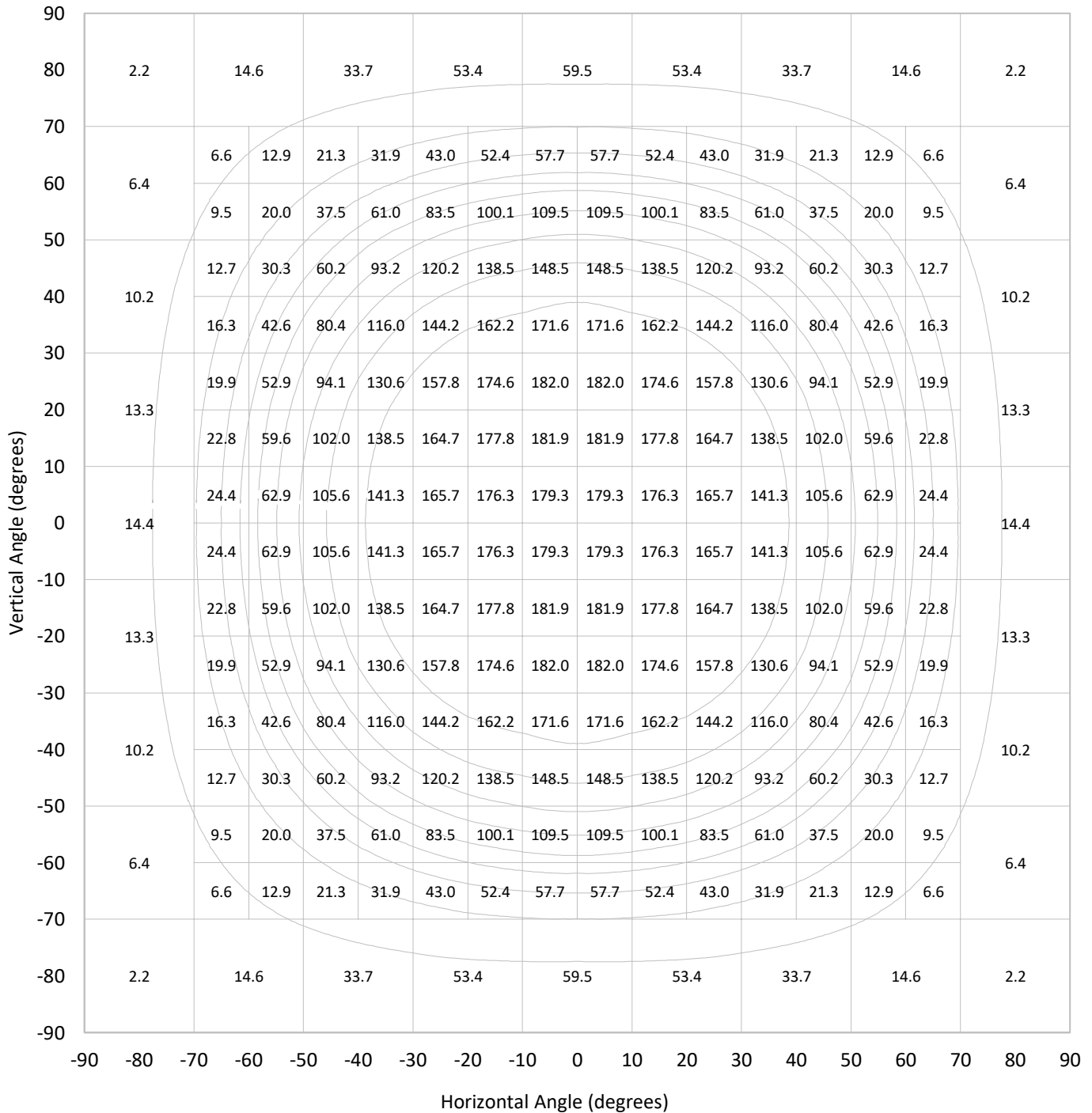
Iso-Candela Plot





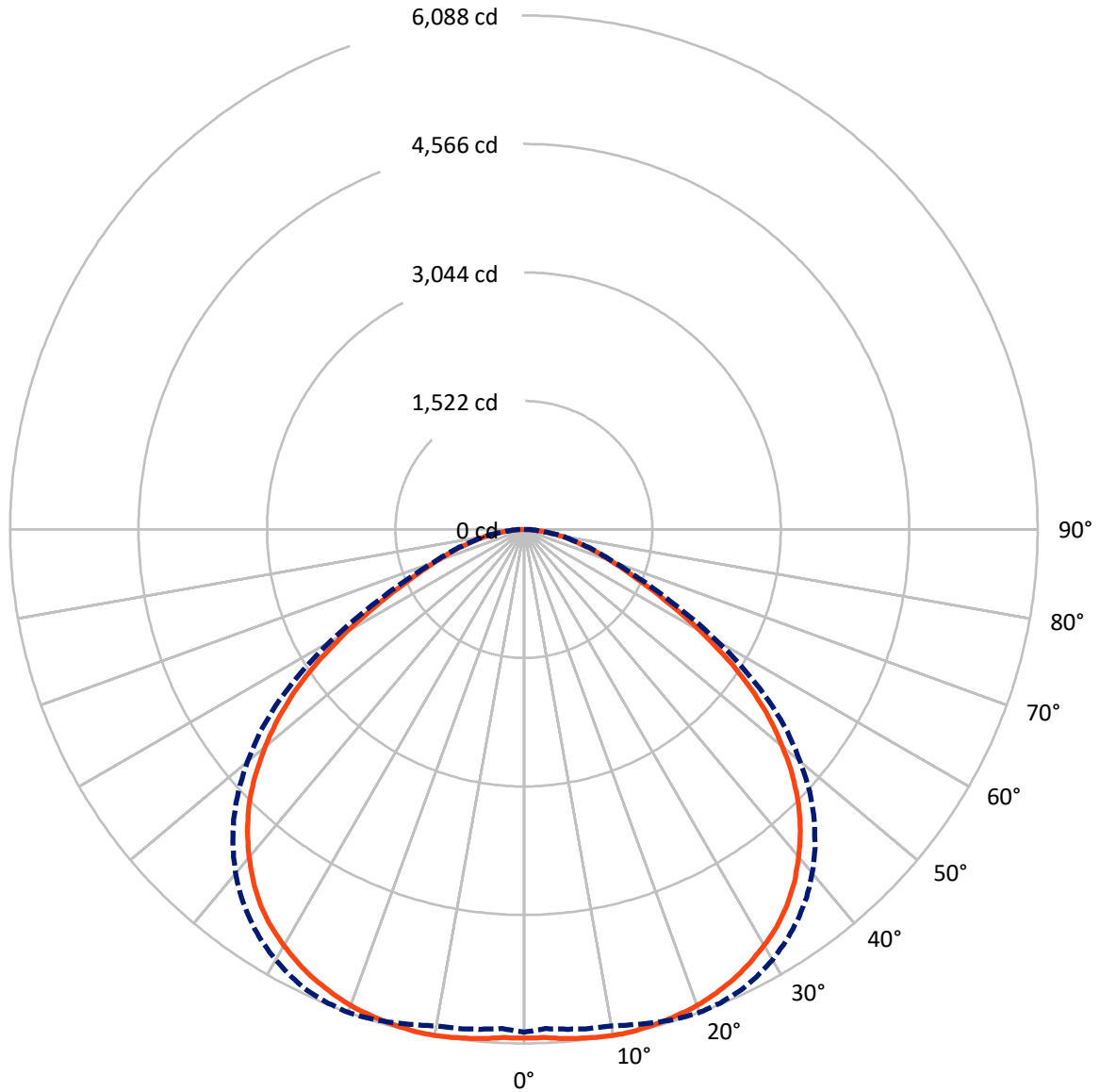
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Lumen Table



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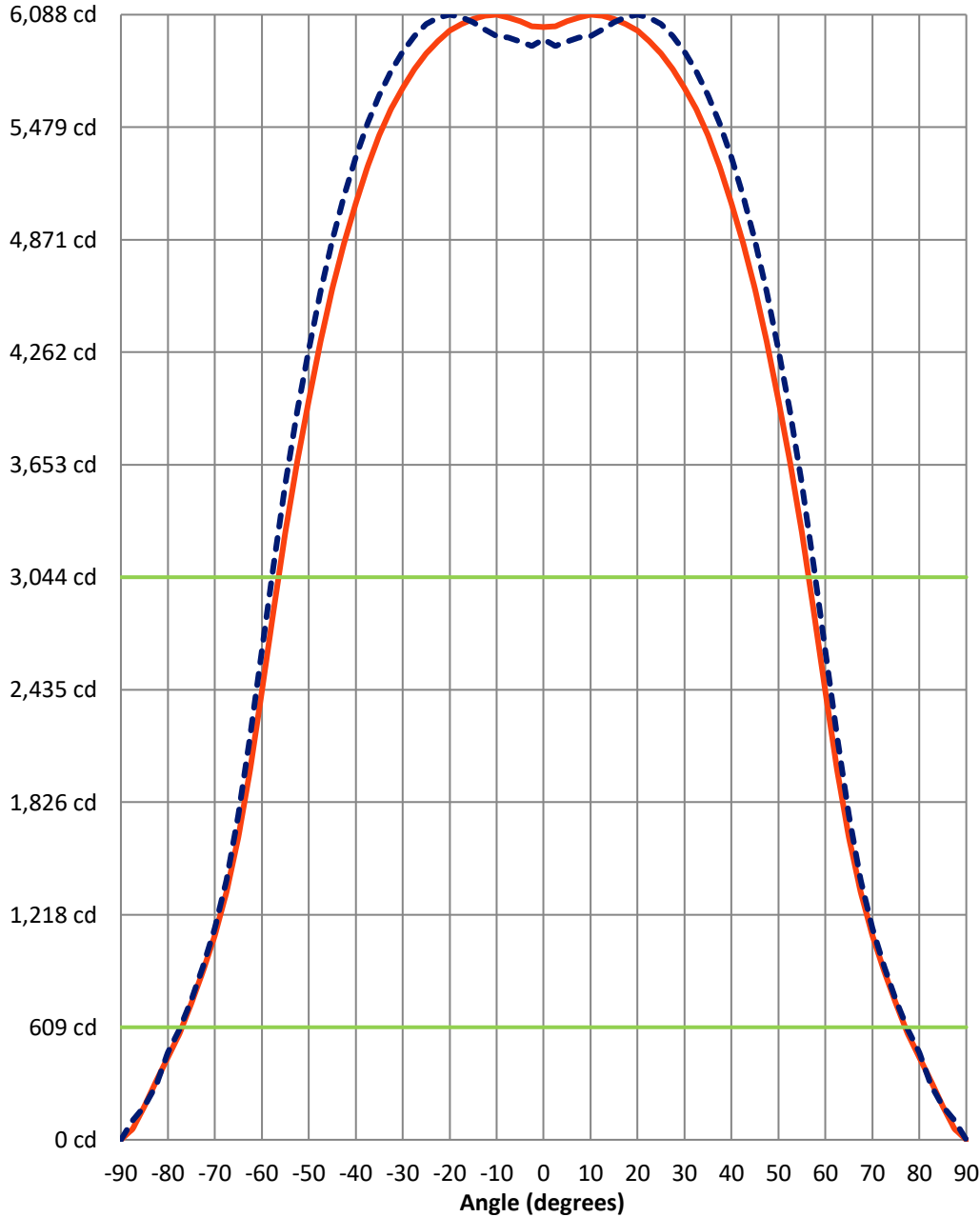
Luminous Intensity Polar Plot



— 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: 11461
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 13739.8
 Efficiency: 73.6%

Spill:
 Lumens: 4937.9
 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°	49.1	53.1	55.0	57.0	59.0	60.9	62.9	60.9	59.0	59.0	57.0
85°	131.7	135.6	137.6	151.3	165.1	172.9	182.8	180.8	180.8	178.8	176.9
82.5°	263.3	275.1	285.0	298.7	306.6	318.4	326.2	320.3	316.4	308.5	302.6
80°	467.7	471.6	473.6	475.6	465.7	463.8	459.9	454.0	446.1	436.3	426.4
77.5°	595.5	599.4	603.3	599.4	597.4	595.5	589.6	583.7	575.8	567.9	556.1
75°	788.0	788.0	788.0	782.1	778.2	772.3	762.5	752.7	738.9	723.2	705.5
72.5°	992.4	990.5	988.5	976.7	966.9	955.1	941.3	929.5	913.8	896.1	872.5
70°	1206.6	1210.6	1212.5	1196.8	1185.0	1169.3	1151.6	1130.0	1106.4	1080.9	1047.4
67.5°	1501.4	1497.5	1493.5	1471.9	1456.2	1434.6	1409.0	1377.6	1342.2	1302.9	1255.8
65°	1866.9	1872.8	1861.0	1839.4	1809.9	1774.6	1735.3	1690.1	1637.0	1578.0	1511.2
62.5°	2309.1	2318.9	2305.2	2277.7	2240.3	2193.2	2138.1	2073.3	2000.6	1918.0	1835.5
60°	2812.2	2810.2	2784.7	2747.3	2698.2	2639.2	2578.3	2507.6	2425.0	2328.7	2228.5
57.5°	3274.0	3270.1	3238.6	3201.3	3152.2	3089.3	3024.4	2949.7	2863.3	2761.1	2645.1
55°	3688.7	3684.7	3653.3	3614.0	3562.9	3500.0	3441.0	3370.3	3285.8	3177.7	3053.9
52.5°	4056.1	4058.1	4030.6	3987.4	3932.3	3871.4	3814.4	3743.7	3663.1	3555.0	3435.1
50°	4394.2	4392.2	4362.7	4323.4	4272.3	4213.4	4156.4	4085.6	4001.1	3897.0	3781.0
47.5°	4708.6	4704.7	4671.3	4628.0	4575.0	4523.9	4470.8	4407.9	4319.5	4215.3	4099.4
45°	4971.9	4964.1	4930.7	4889.4	4838.3	4793.1	4745.9	4698.8	4604.4	4508.1	4398.1
42.5°	5197.9	5196.0	5162.5	5121.3	5070.2	5030.9	4987.6	4928.7	4850.1	4761.7	4653.6
40°	5414.1	5398.4	5365.0	5325.7	5278.5	5245.1	5201.9	5142.9	5066.3	4979.8	4875.6
37.5°	5575.2	5577.2	5541.8	5498.6	5457.3	5425.9	5386.6	5331.6	5264.7	5180.2	5076.1
35°	5728.5	5718.7	5689.2	5651.9	5614.5	5579.2	5537.9	5490.7	5435.7	5357.1	5258.8
32.5°	5828.7	5842.5	5807.1	5767.8	5746.2	5718.7	5675.5	5626.3	5577.2	5498.6	5410.2
30°	5938.8	5927.0	5899.5	5866.1	5850.4	5832.7	5795.3	5748.2	5691.2	5620.4	5537.9
27.5°	6015.4	6009.5	5976.1	5944.7	5936.8	5921.1	5891.6	5850.4	5793.4	5724.6	5648.0
25°	6048.8	6052.8	6021.3	6003.7	6003.7	5993.8	5970.2	5934.9	5877.9	5815.0	5740.3
22.5°	6064.6	6060.6	6039.0	6035.1	6044.9	6037.1	6027.2	5995.8	5944.7	5893.6	5830.7
20°	6074.4	6046.9	6027.2	6043.0	6054.7	6052.8	6044.9	6025.3	6001.7	5958.5	5903.4
17.5°	6052.8	6035.1	6011.5	6035.1	6060.6	6062.6	6054.7	6043.0	6037.1	6009.5	5960.4
15°	5999.7	5986.0	5989.9	6013.5	6043.0	6052.8	6058.7	6072.4	6064.6	6043.0	5999.7
12.5°	5964.3	5946.7	5964.3	5987.9	6003.7	6009.5	6056.7	6082.3	6082.3	6062.6	6035.1
10°	5954.5	5919.1	5942.7	5964.3	5972.2	6007.6	6046.9	6074.4	6088.2	6072.4	6037.1
7.5°	5934.9	5911.3	5921.1	5930.9	5976.1	6001.7	6023.3	6052.8	6072.4	6070.5	6039.0
5°	5925.0	5895.6	5899.5	5940.8	5972.2	5989.9	5997.8	6023.3	6052.8	6058.7	6035.1
2.5°	5899.5	5885.7	5915.2	5919.1	5942.7	5956.5	5964.3	5987.9	6025.3	6039.0	6029.2
0°	5885.7	5866.1	5846.4	5862.2	5901.5	5930.9	5942.7	5978.1	6021.3	6035.1	6013.5



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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°	55.0	53.1	51.1	49.1	51.1	51.1	51.1	49.1	51.1	49.1	49.1
85°	171.0	163.1	157.2	149.4	141.5	135.6	127.7	119.9	117.9	115.9	112.0
82.5°	294.8	285.0	275.1	263.3	251.5	237.8	224.0	208.3	204.4	200.4	194.6
80°	414.7	400.9	387.1	373.4	361.6	347.8	332.1	314.4	302.6	292.8	281.0
77.5°	540.4	520.8	501.1	477.5	463.8	450.0	434.3	416.6	398.9	383.2	365.5
75°	683.9	662.3	642.6	619.0	593.5	567.9	542.4	518.8	493.3	469.7	446.1
72.5°	843.1	811.6	780.2	750.7	719.3	687.8	654.4	623.0	591.5	560.1	526.7
70°	1010.1	970.8	931.5	892.2	850.9	809.7	770.4	731.1	691.7	650.5	613.1
67.5°	1206.6	1161.4	1110.3	1055.3	994.4	941.3	890.2	843.1	795.9	748.7	701.6
65°	1452.3	1389.4	1320.6	1245.9	1175.2	1104.4	1029.8	959.0	904.0	849.0	795.9
62.5°	1754.9	1666.5	1570.2	1473.9	1387.4	1295.1	1208.6	1116.2	1029.8	951.2	886.3
60°	2116.5	1996.6	1878.7	1754.9	1635.0	1509.3	1399.2	1285.2	1177.1	1080.9	986.5
57.5°	2515.4	2375.9	2234.4	2083.1	1920.0	1772.6	1623.2	1473.9	1346.2	1218.4	1112.3
55°	2920.3	2772.9	2613.7	2442.7	2263.9	2075.2	1872.8	1705.8	1530.9	1381.5	1244.0
52.5°	3305.4	3152.2	2987.1	2829.9	2615.7	2399.5	2177.4	1957.3	1752.9	1562.3	1395.3
50°	3649.4	3500.0	3340.8	3158.1	2959.6	2729.6	2482.0	2234.4	1992.7	1768.7	1560.4
47.5°	3963.8	3818.4	3659.2	3476.4	3295.6	3040.1	2790.6	2517.4	2248.2	1990.7	1747.1
45°	4258.6	4111.2	3946.1	3771.2	3562.9	3334.9	3077.5	2802.4	2513.5	2224.6	1943.6
42.5°	4525.8	4378.4	4211.4	4030.6	3824.3	3598.3	3348.7	3071.6	2780.7	2466.3	2157.8
40°	4759.7	4616.2	4455.1	4266.4	4073.8	3836.0	3590.4	3327.1	3026.4	2710.0	2370.0
37.5°	4964.1	4830.4	4671.3	4484.6	4280.2	4067.9	3814.4	3551.1	3279.9	2936.0	2588.2
35°	5144.9	5021.1	4857.9	4681.1	4480.6	4256.6	4018.8	3761.4	3468.6	3146.3	2808.3
32.5°	5302.1	5176.3	5027.0	4850.1	4655.5	4445.3	4201.6	3942.2	3665.1	3336.9	2969.4
30°	5435.7	5313.9	5172.4	5005.3	4818.6	4610.3	4372.5	4111.2	3828.2	3502.0	3138.4
27.5°	5551.7	5435.7	5298.1	5142.9	4964.1	4763.6	4523.9	4260.5	3971.6	3657.2	3293.7
25°	5651.9	5539.9	5412.1	5264.7	5087.9	4891.4	4665.4	4390.2	4101.3	3785.0	3425.3
22.5°	5742.3	5634.2	5506.5	5363.0	5201.9	5005.3	4777.4	4504.2	4211.4	3898.9	3545.2
20°	5822.9	5722.6	5596.9	5449.5	5288.3	5089.8	4863.8	4604.4	4309.7	4003.1	3653.3
17.5°	5887.7	5799.3	5673.5	5518.2	5357.1	5164.5	4944.4	4706.6	4394.2	4091.5	3743.7
15°	5932.9	5846.4	5732.5	5575.2	5418.0	5227.4	5007.3	4761.7	4470.8	4162.3	3818.4
12.5°	5964.3	5872.0	5765.9	5620.4	5463.2	5274.6	5060.4	4818.6	4535.7	4225.2	3883.2
10°	5972.2	5887.7	5781.6	5651.9	5498.6	5315.8	5105.6	4865.8	4588.7	4274.3	3936.3
7.5°	5976.1	5895.6	5799.3	5675.5	5524.1	5347.3	5139.0	4903.1	4628.0	4315.6	3975.6
5°	5974.2	5897.5	5811.1	5691.2	5539.9	5365.0	5160.6	4928.7	4655.5	4343.1	4005.1
2.5°	5968.3	5899.5	5818.9	5703.0	5557.6	5384.6	5182.2	4958.2	4685.0	4366.6	4028.6
0°	5984.0	5925.0	5822.9	5699.0	5561.5	5384.6	5180.2	4962.1	4688.9	4364.7	4026.7



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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°	49.1	47.2	47.2	45.2	43.2	41.3	37.3	35.4	31.4	25.5	19.7
85°	106.1	100.2	94.3	90.4	86.5	82.5	76.6	70.7	62.9	51.1	39.3
82.5°	186.7	174.9	163.1	149.4	137.6	125.8	115.9	106.1	94.3	76.6	59.0
80°	267.3	249.6	231.9	212.2	194.6	174.9	157.2	141.5	125.8	102.2	78.6
77.5°	347.8	324.3	298.7	275.1	249.6	224.0	198.5	176.9	153.3	125.8	98.3
75°	422.5	395.0	371.4	338.0	306.6	273.2	239.8	210.3	180.8	147.4	117.9
72.5°	497.2	461.8	428.4	397.0	361.6	320.3	283.0	245.6	208.3	169.0	133.6
70°	571.9	528.6	487.4	450.0	410.7	369.5	324.3	281.0	235.8	188.7	147.4
67.5°	648.5	599.4	552.2	505.1	459.9	412.7	365.5	316.4	263.3	208.3	163.1
65°	733.0	672.1	615.1	562.0	509.0	457.9	404.8	351.8	292.8	229.9	176.9
62.5°	817.5	750.7	683.9	617.1	558.1	501.1	444.1	385.2	320.3	253.5	190.6
60°	907.9	831.3	754.6	680.0	607.2	544.4	481.5	418.6	349.8	275.1	204.4
57.5°	1008.1	915.8	829.3	744.8	662.3	587.6	518.8	452.0	375.4	296.7	220.1
55°	1122.1	1008.1	906.0	811.6	721.2	630.8	556.1	487.4	404.8	318.4	237.8
52.5°	1242.0	1110.3	986.5	880.4	784.1	681.9	591.5	514.9	434.3	340.0	253.5
50°	1381.5	1214.5	1076.9	947.2	839.1	733.0	628.9	546.3	463.8	365.5	269.2
47.5°	1525.0	1340.3	1167.3	1025.8	898.1	782.1	672.1	573.8	491.3	389.1	285.0
45°	1692.0	1460.1	1269.5	1102.5	955.1	833.2	715.3	603.3	514.9	412.7	300.7
42.5°	1853.2	1601.6	1375.6	1187.0	1019.9	882.4	754.6	634.8	538.5	436.3	314.4
40°	2043.8	1743.1	1477.8	1267.5	1084.8	929.5	793.9	668.2	560.1	457.9	328.2
37.5°	2226.6	1886.6	1601.6	1356.0	1147.7	976.7	833.2	699.6	579.7	479.5	345.9
35°	2407.4	2045.8	1719.5	1438.5	1212.5	1029.8	872.5	729.1	599.4	497.2	361.6
32.5°	2580.3	2195.1	1839.4	1530.9	1283.3	1078.9	907.9	756.6	619.0	512.9	377.3
30°	2741.4	2336.6	1957.3	1625.2	1348.1	1124.1	941.3	784.1	642.6	526.7	393.0
27.5°	2888.8	2474.2	2075.2	1713.6	1409.0	1165.4	976.7	809.7	662.3	540.4	406.8
25°	3022.5	2598.0	2183.3	1794.2	1464.1	1210.6	1010.1	835.2	680.0	552.2	418.6
22.5°	3148.2	2712.0	2281.6	1874.8	1530.9	1255.8	1041.5	858.8	697.6	564.0	430.4
20°	3258.3	2816.1	2375.9	1955.4	1589.8	1297.0	1069.1	880.4	713.4	571.9	442.2
17.5°	3346.7	2908.5	2460.4	2026.1	1640.9	1332.4	1092.6	900.1	727.1	581.7	450.0
15°	3425.3	2987.1	2531.2	2087.0	1686.1	1361.9	1114.3	915.8	738.9	587.6	459.9
12.5°	3492.1	3053.9	2592.1	2140.1	1725.4	1387.4	1131.9	927.6	748.7	593.5	465.7
10°	3547.2	3107.0	2643.2	2181.4	1756.9	1407.1	1145.7	939.4	756.6	599.4	471.6
7.5°	3588.4	3146.3	2680.5	2216.7	1782.4	1420.8	1157.5	947.2	764.5	603.3	481.5
5°	3619.9	3179.7	2710.0	2240.3	1802.1	1440.5	1171.3	957.0	772.3	607.2	481.5
2.5°	3643.5	3207.2	2733.6	2260.0	1817.8	1436.6	1171.3	955.1	772.3	607.2	479.5
0°	3639.5	3209.2	2731.6	2260.0	1817.8	1432.6	1171.3	953.1	772.3	607.2	479.5



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	13.8	9.8	3.9	0.0
85°	29.5	19.7	9.8	0.0
82.5°	43.2	27.5	13.8	0.0
80°	57.0	37.3	17.7	0.0
77.5°	72.7	47.2	23.6	0.0
75°	86.5	55.0	27.5	0.0
72.5°	100.2	64.9	31.4	0.0
70°	112.0	72.7	35.4	0.0
67.5°	123.8	82.5	41.3	0.0
65°	133.6	90.4	45.2	0.0
62.5°	141.5	100.2	49.1	0.0
60°	151.3	108.1	53.1	0.0
57.5°	159.2	114.0	57.0	0.0
55°	167.0	117.9	60.9	0.0
52.5°	174.9	123.8	64.9	0.0
50°	182.8	129.7	68.8	0.0
47.5°	190.6	133.6	70.7	0.0
45°	202.4	139.5	74.7	0.0
42.5°	212.2	143.5	78.6	0.0
40°	222.1	147.4	80.6	0.0
37.5°	231.9	151.3	84.5	0.0
35°	241.7	155.2	86.5	0.0
32.5°	249.6	159.2	88.4	0.0
30°	257.4	163.1	90.4	0.0
27.5°	265.3	165.1	92.4	0.0
25°	271.2	169.0	94.3	0.0
22.5°	277.1	171.0	96.3	0.0
20°	281.0	172.9	98.3	0.0
17.5°	286.9	174.9	100.2	0.0
15°	288.9	176.9	104.2	0.0
12.5°	292.8	178.8	104.2	0.0
10°	294.8	180.8	104.2	0.0
7.5°	298.7	180.8	104.2	0.0
5°	296.7	180.8	104.2	0.0
2.5°	296.7	180.8	104.2	0.0
0°	294.8	180.8	104.2	0.0

(END OF REPORT)