

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: P628378

Luminaire Tested: **IFLD-L-SA8A-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628378
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8A-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (128) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	25916.3 lumens	Max Intensity:	8447.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	104.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

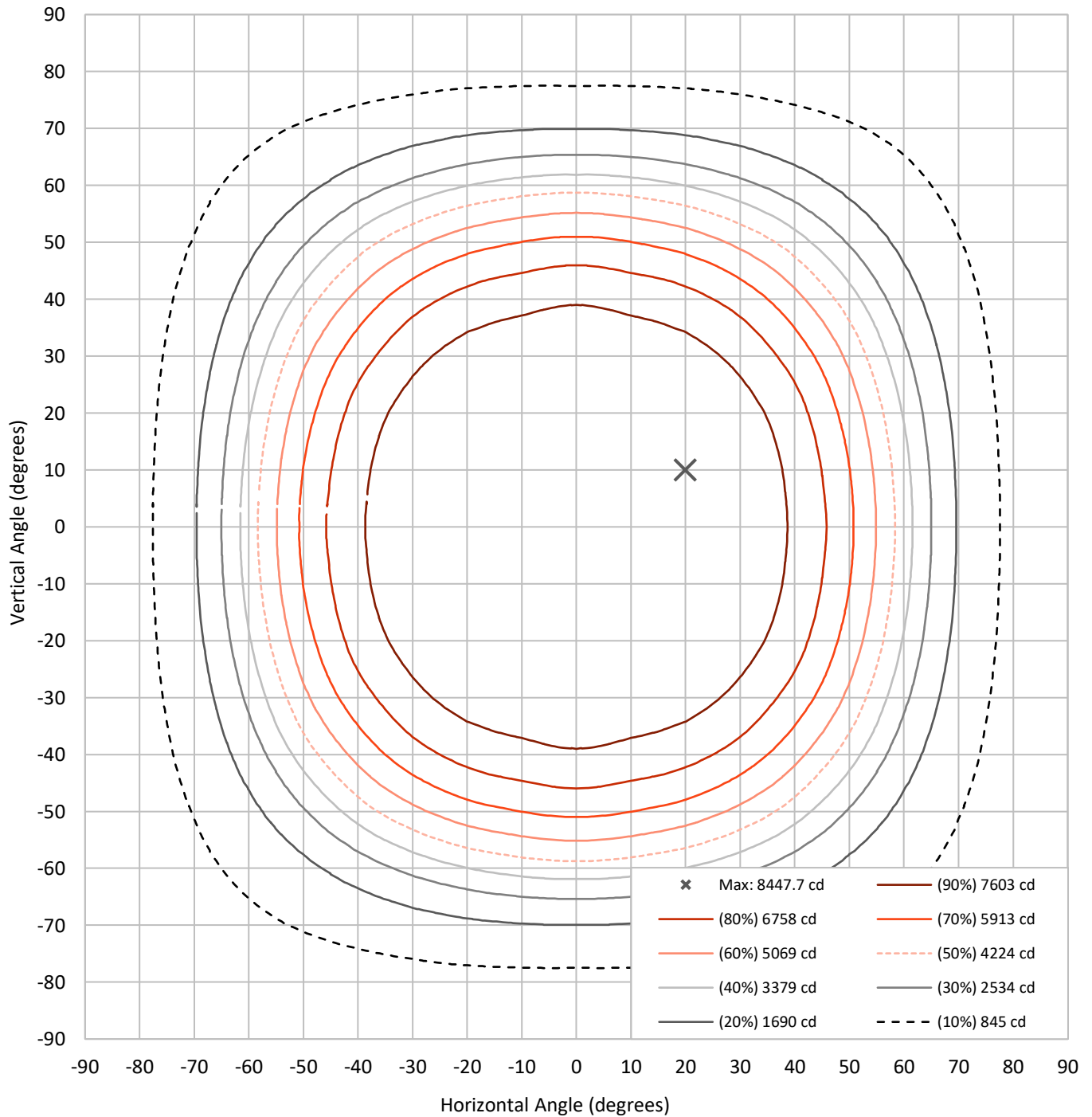
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	15902.8 lumens	Field Lumens:	19064.8 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 247.8
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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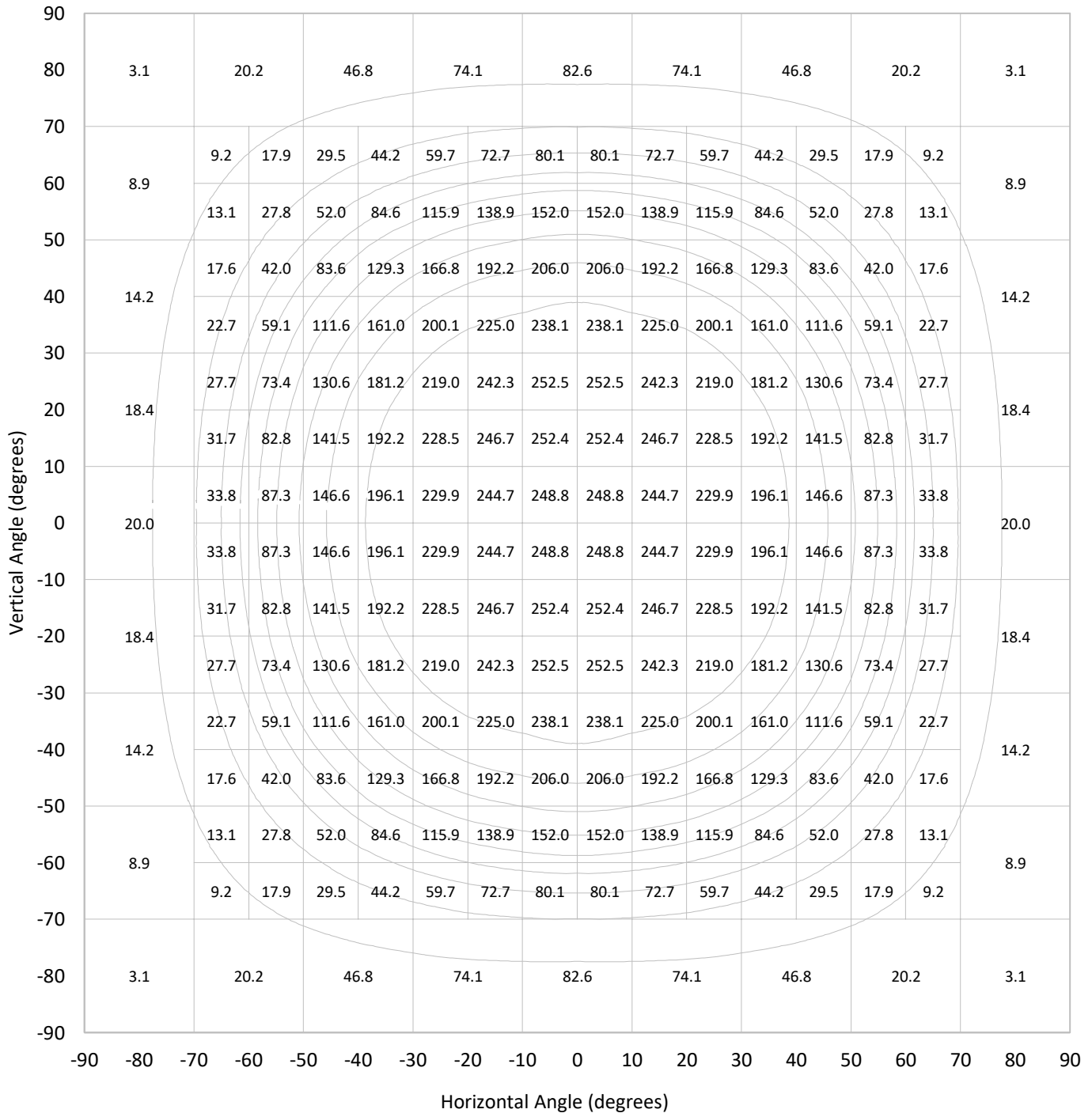
Iso-Candela Plot





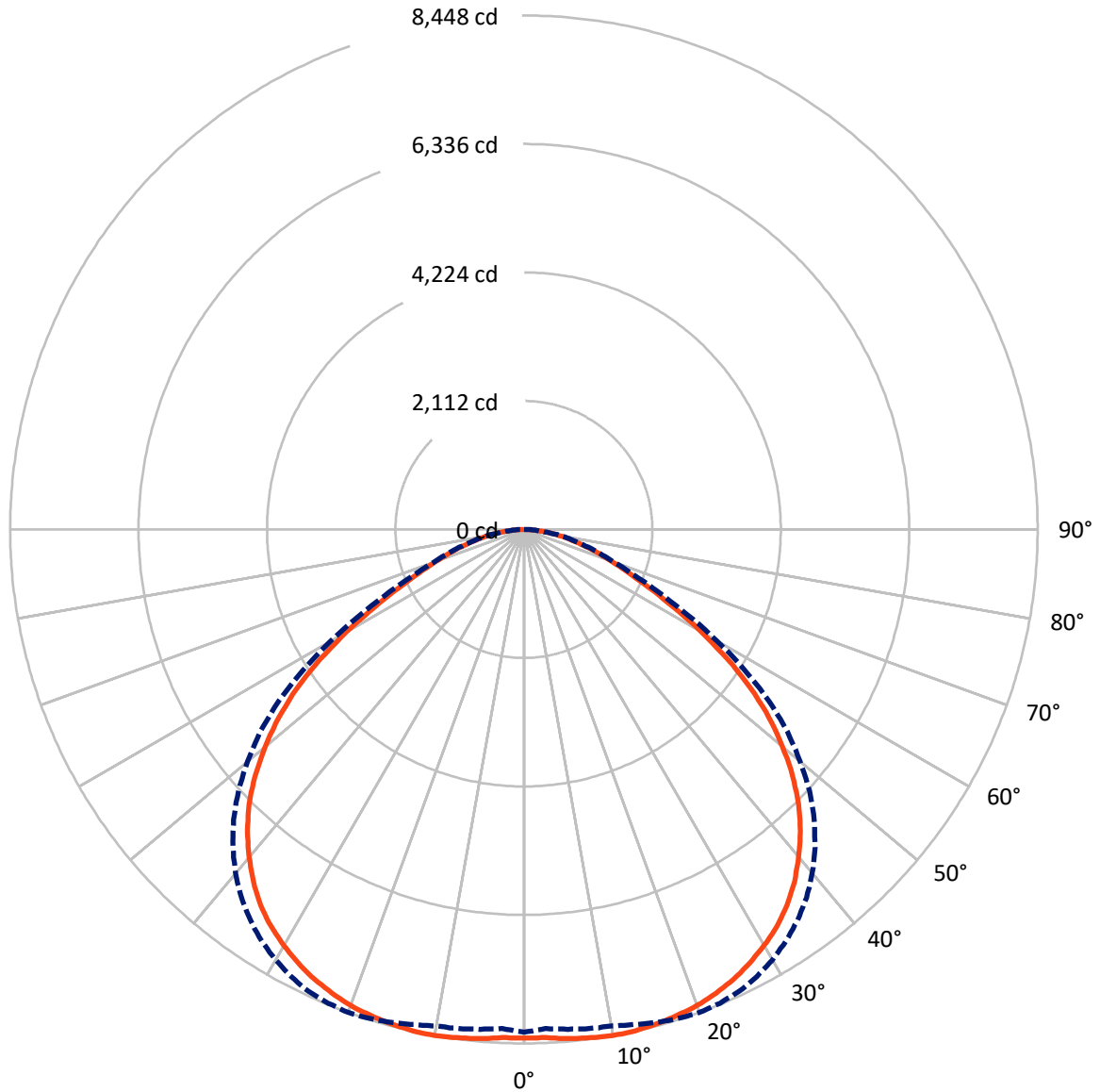
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Lumen Table



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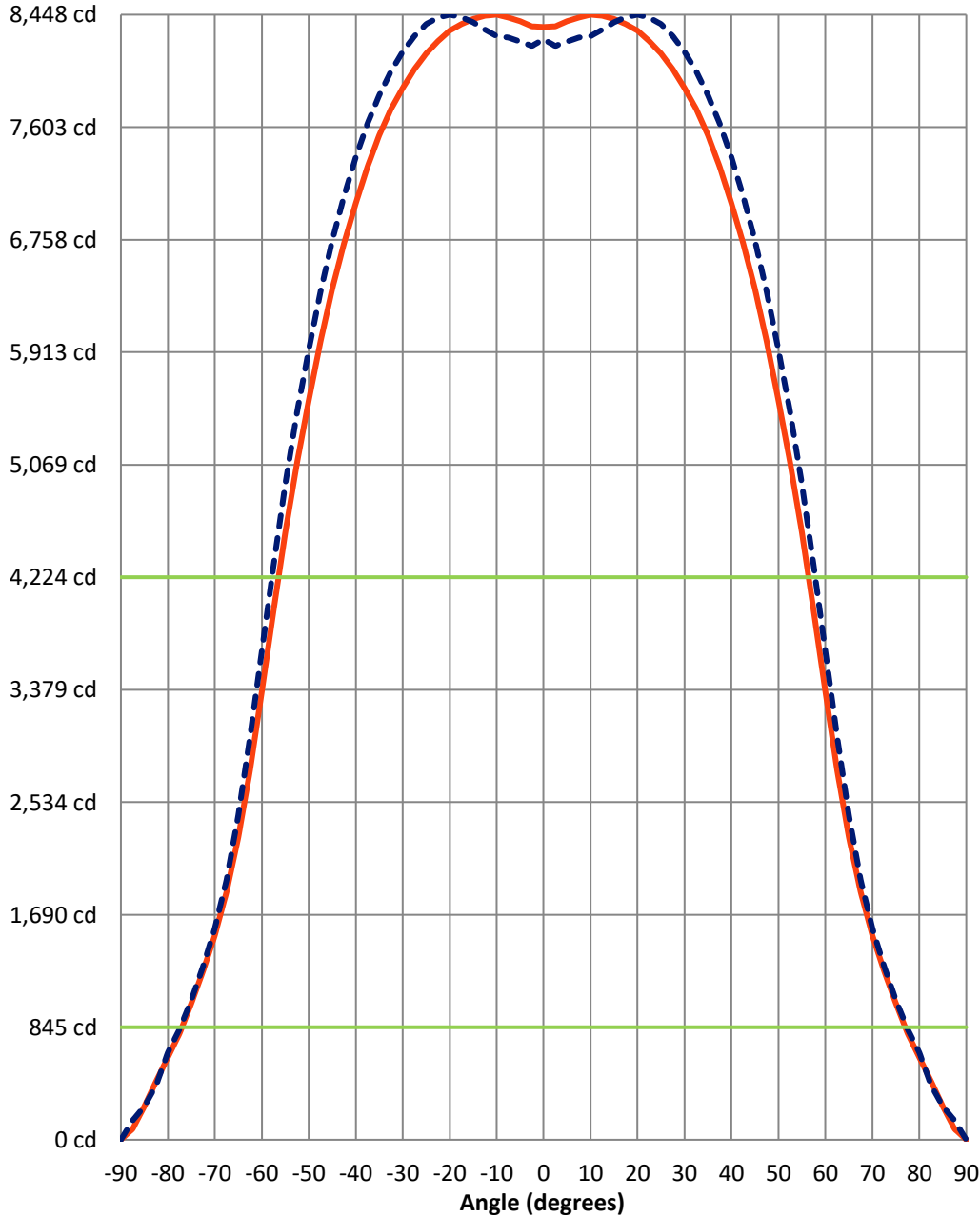
Luminous Intensity Polar Plot



— 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: 15902.8
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 19064.8
 Efficiency: 73.6%

Spill:
 Lumens: 6851.6
 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°	68.2	73.6	76.4	79.1	81.8	84.5	87.3	84.5	81.8	81.8	79.1
85°	182.7	188.2	190.9	210.0	229.1	240.0	253.6	250.9	250.9	248.1	245.4
82.5°	365.4	381.8	395.4	414.5	425.4	441.7	452.7	444.5	439.0	428.1	419.9
80°	649.0	654.4	657.2	659.9	646.3	643.5	638.1	629.9	619.0	605.4	591.7
77.5°	826.2	831.7	837.1	831.7	829.0	826.2	818.0	809.9	799.0	788.1	771.7
75°	1093.5	1093.5	1093.5	1085.3	1079.8	1071.6	1058.0	1044.4	1025.3	1003.5	978.9
72.5°	1377.0	1374.3	1371.6	1355.2	1341.6	1325.2	1306.1	1289.8	1268.0	1243.4	1210.7
70°	1674.3	1679.7	1682.4	1660.6	1644.3	1622.5	1597.9	1567.9	1535.2	1499.8	1453.4
67.5°	2083.3	2077.8	2072.4	2042.4	2020.6	1990.6	1955.1	1911.5	1862.4	1807.9	1742.4
65°	2590.5	2598.7	2582.3	2552.3	2511.4	2462.3	2407.8	2345.1	2271.4	2189.6	2096.9
62.5°	3204.0	3217.6	3198.6	3160.4	3108.6	3043.1	2966.8	2876.8	2775.9	2661.4	2546.8
60°	3902.1	3899.4	3863.9	3812.1	3743.9	3662.1	3577.6	3479.4	3364.9	3231.3	3092.2
57.5°	4542.9	4537.4	4493.8	4442.0	4373.8	4286.6	4196.6	4093.0	3973.0	3831.2	3670.3
55°	5118.2	5112.8	5069.2	5014.6	4943.7	4856.5	4774.7	4676.5	4559.2	4409.3	4237.5
52.5°	5628.2	5630.9	5592.7	5532.7	5456.4	5371.8	5292.8	5194.6	5082.8	4932.8	4766.5
50°	6097.2	6094.4	6053.5	5999.0	5928.1	5846.3	5767.2	5669.1	5551.8	5407.3	5246.4
47.5°	6533.5	6528.0	6481.6	6421.7	6348.0	6277.1	6203.5	6116.3	5993.5	5849.0	5688.1
45°	6898.9	6887.9	6841.6	6784.3	6713.4	6650.7	6585.3	6519.8	6388.9	6255.3	6102.6
42.5°	7212.4	7209.7	7163.4	7106.1	7035.2	6980.7	6920.7	6838.9	6729.8	6607.1	6457.1
40°	7512.4	7490.6	7444.2	7389.7	7324.2	7277.9	7217.9	7136.1	7029.7	6909.8	6765.2
37.5°	7736.0	7738.7	7689.6	7629.6	7572.4	7528.7	7474.2	7397.9	7305.1	7187.9	7043.4
35°	7948.7	7935.0	7894.1	7842.3	7790.5	7741.4	7684.2	7618.7	7542.4	7433.3	7297.0
32.5°	8087.7	8106.8	8057.7	8003.2	7973.2	7935.0	7875.1	7806.9	7738.7	7629.6	7506.9
30°	8240.4	8224.1	8185.9	8139.6	8117.7	8093.2	8041.4	7975.9	7896.9	7798.7	7684.2
27.5°	8346.8	8338.6	8292.3	8248.6	8237.7	8215.9	8175.0	8117.7	8038.7	7943.2	7836.9
25°	8393.1	8398.6	8355.0	8330.4	8330.4	8316.8	8284.1	8235.0	8155.9	8068.7	7965.0
22.5°	8415.0	8409.5	8379.5	8374.1	8387.7	8376.8	8363.2	8319.5	8248.6	8177.7	8090.5
20°	8428.6	8390.4	8363.2	8385.0	8401.3	8398.6	8387.7	8360.4	8327.7	8267.7	8191.4
17.5°	8398.6	8374.1	8341.3	8374.1	8409.5	8412.2	8401.3	8385.0	8376.8	8338.6	8270.4
15°	8325.0	8305.9	8311.3	8344.1	8385.0	8398.6	8406.8	8425.9	8415.0	8385.0	8325.0
12.5°	8275.9	8251.4	8275.9	8308.6	8330.4	8338.6	8404.1	8439.5	8439.5	8412.2	8374.1
10°	8262.3	8213.2	8245.9	8275.9	8286.8	8335.9	8390.4	8428.6	8447.7	8425.9	8376.8
7.5°	8235.0	8202.3	8215.9	8229.5	8292.3	8327.7	8357.7	8398.6	8425.9	8423.1	8379.5
5°	8221.4	8180.5	8185.9	8243.2	8286.8	8311.3	8322.2	8357.7	8398.6	8406.8	8374.1
2.5°	8185.9	8166.8	8207.7	8213.2	8245.9	8265.0	8275.9	8308.6	8360.4	8379.5	8365.9
0°	8166.8	8139.6	8112.3	8134.1	8188.6	8229.5	8245.9	8295.0	8355.0	8374.1	8344.1



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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°	76.4	73.6	70.9	68.2	70.9	70.9	70.9	68.2	70.9	68.2	68.2
85°	237.2	226.3	218.1	207.2	196.3	188.2	177.2	166.3	163.6	160.9	155.4
82.5°	409.0	395.4	381.8	365.4	349.0	329.9	310.9	289.0	283.6	278.1	270.0
80°	575.4	556.3	537.2	518.1	501.7	482.6	460.8	436.3	419.9	406.3	389.9
77.5°	749.9	722.6	695.3	662.6	643.5	624.4	602.6	578.1	553.5	531.7	507.2
75°	948.9	918.9	891.7	858.9	823.5	788.1	752.6	719.9	684.4	651.7	619.0
72.5°	1169.8	1126.2	1082.5	1041.6	998.0	954.4	908.0	864.4	820.8	777.1	730.8
70°	1401.6	1347.0	1292.5	1238.0	1180.7	1123.4	1068.9	1014.4	959.8	902.6	850.8
67.5°	1674.3	1611.5	1540.7	1464.3	1379.8	1306.1	1235.2	1169.8	1104.4	1038.9	973.5
65°	2015.1	1927.9	1832.4	1728.8	1630.6	1532.5	1428.9	1330.7	1254.3	1178.0	1104.4
62.5°	2435.0	2312.3	2178.7	2045.1	1925.1	1797.0	1677.0	1548.8	1428.9	1319.8	1229.8
60°	2936.8	2770.4	2606.8	2435.0	2268.7	2094.2	1941.5	1783.3	1633.4	1499.8	1368.9
57.5°	3490.3	3296.7	3100.4	2890.4	2664.1	2459.6	2252.4	2045.1	1867.9	1690.6	1543.4
55°	4052.1	3847.5	3626.7	3389.4	3141.3	2879.5	2598.7	2366.9	2124.2	1917.0	1726.1
52.5°	4586.5	4373.8	4144.8	3926.6	3629.4	3329.4	3021.3	2715.9	2432.3	2167.8	1936.0
50°	5063.7	4856.5	4635.6	4382.0	4106.6	3787.6	3444.0	3100.4	2765.0	2454.1	2165.1
47.5°	5500.0	5298.2	5077.3	4823.7	4572.9	4218.4	3872.1	3493.1	3119.5	2762.3	2424.1
45°	5909.0	5704.5	5475.5	5232.8	4943.7	4627.4	4270.2	3888.4	3487.6	3086.8	2696.8
42.5°	6279.9	6075.4	5843.6	5592.7	5306.4	4992.8	4646.5	4262.0	3858.4	3422.2	2994.0
40°	6604.4	6405.3	6181.7	5919.9	5652.7	5322.7	4981.9	4616.5	4199.3	3760.3	3288.5
37.5°	6887.9	6702.5	6481.6	6222.6	5939.0	5644.5	5292.8	4927.4	4551.1	4073.9	3591.2
35°	7138.8	6967.0	6740.7	6495.3	6217.1	5906.3	5576.3	5219.1	4812.8	4365.6	3896.6
32.5°	7357.0	7182.4	6975.2	6729.8	6459.8	6168.1	5829.9	5470.0	5085.5	4630.1	4120.2
30°	7542.4	7373.3	7177.0	6945.2	6686.2	6397.1	6067.2	5704.5	5311.8	4859.2	4354.7
27.5°	7703.3	7542.4	7351.5	7136.1	6887.9	6609.8	6277.1	5911.7	5510.9	5074.6	4570.1
25°	7842.3	7686.9	7509.7	7305.1	7059.7	6787.1	6473.5	6091.7	5690.9	5251.9	4752.8
22.5°	7967.8	7817.8	7640.5	7441.5	7217.9	6945.2	6628.9	6249.9	5843.6	5410.0	4919.2
20°	8079.6	7940.5	7766.0	7561.5	7337.9	7062.5	6748.9	6388.9	5979.9	5554.5	5069.2
17.5°	8169.5	8046.8	7872.3	7656.9	7433.3	7166.1	6860.7	6530.7	6097.2	5677.2	5194.6
15°	8232.3	8112.3	7954.1	7736.0	7517.8	7253.3	6947.9	6607.1	6203.5	5775.4	5298.2
12.5°	8275.9	8147.7	8000.5	7798.7	7580.6	7318.8	7021.6	6686.2	6293.5	5862.7	5388.2
10°	8286.8	8169.5	8022.3	7842.3	7629.6	7376.0	7084.3	6751.6	6367.1	5930.8	5461.8
7.5°	8292.3	8180.5	8046.8	7875.1	7665.1	7419.7	7130.6	6803.4	6421.7	5988.1	5516.4
5°	8289.5	8183.2	8063.2	7896.9	7686.9	7444.2	7160.6	6838.9	6459.8	6026.3	5557.3
2.5°	8281.3	8185.9	8074.1	7913.2	7711.4	7471.5	7190.6	6879.8	6500.7	6059.0	5590.0
0°	8303.2	8221.4	8079.6	7907.8	7716.9	7471.5	7187.9	6885.2	6506.2	6056.3	5587.3



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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°	68.2	65.4	65.4	62.7	60.0	57.3	51.8	49.1	43.6	35.4	27.3
85°	147.2	139.1	130.9	125.4	120.0	114.5	106.3	98.2	87.3	70.9	54.5
82.5°	259.0	242.7	226.3	207.2	190.9	174.5	160.9	147.2	130.9	106.3	81.8
80°	370.8	346.3	321.8	294.5	270.0	242.7	218.1	196.3	174.5	141.8	109.1
77.5°	482.6	449.9	414.5	381.8	346.3	310.9	275.4	245.4	212.7	174.5	136.3
75°	586.3	548.1	515.4	469.0	425.4	379.0	332.7	291.8	250.9	204.5	163.6
72.5°	689.9	640.8	594.4	550.8	501.7	444.5	392.7	340.9	289.0	234.5	185.4
70°	793.5	733.5	676.3	624.4	569.9	512.6	449.9	389.9	327.2	261.8	204.5
67.5°	899.9	831.7	766.2	700.8	638.1	572.6	507.2	439.0	365.4	289.0	226.3
65°	1017.1	932.6	853.5	779.9	706.2	635.3	561.7	488.1	406.3	319.0	245.4
62.5°	1134.4	1041.6	948.9	856.2	774.4	695.3	616.3	534.5	444.5	351.8	264.5
60°	1259.8	1153.4	1047.1	943.5	842.6	755.3	668.1	580.8	485.4	381.8	283.6
57.5°	1398.9	1270.7	1150.7	1033.5	918.9	815.3	719.9	627.2	520.8	411.7	305.4
55°	1557.0	1398.9	1257.1	1126.2	1000.7	875.3	771.7	676.3	561.7	441.7	329.9
52.5°	1723.3	1540.7	1368.9	1221.6	1088.0	946.2	820.8	714.4	602.6	471.7	351.8
50°	1917.0	1685.2	1494.3	1314.3	1164.4	1017.1	872.6	758.1	643.5	507.2	373.6
47.5°	2116.0	1859.7	1619.7	1423.4	1246.2	1085.3	932.6	796.2	681.7	539.9	395.4
45°	2347.8	2026.0	1761.5	1529.7	1325.2	1156.2	992.6	837.1	714.4	572.6	417.2
42.5°	2571.4	2222.4	1908.8	1647.0	1415.2	1224.3	1047.1	880.8	747.1	605.4	436.3
40°	2835.9	2418.7	2050.6	1758.8	1505.2	1289.8	1101.6	927.1	777.1	635.3	455.4
37.5°	3089.5	2617.7	2222.4	1881.5	1592.5	1355.2	1156.2	970.7	804.4	665.3	479.9
35°	3340.4	2838.6	2386.0	1996.0	1682.4	1428.9	1210.7	1011.6	831.7	689.9	501.7
32.5°	3580.3	3045.9	2552.3	2124.2	1780.6	1497.0	1259.8	1049.8	858.9	711.7	523.5
30°	3803.9	3242.2	2715.9	2255.1	1870.6	1559.7	1306.1	1088.0	891.7	730.8	545.4
27.5°	4008.4	3433.1	2879.5	2377.8	1955.1	1617.0	1355.2	1123.4	918.9	749.9	564.5
25°	4193.8	3604.9	3029.5	2489.6	2031.5	1679.7	1401.6	1158.9	943.5	766.2	580.8
22.5°	4368.4	3763.0	3165.8	2601.4	2124.2	1742.4	1445.2	1191.6	968.0	782.6	597.2
20°	4521.1	3907.5	3296.7	2713.2	2206.0	1799.7	1483.4	1221.6	989.8	793.5	613.5
17.5°	4643.8	4035.7	3414.0	2811.3	2276.9	1848.8	1516.1	1248.9	1008.9	807.1	624.4
15°	4752.8	4144.8	3512.1	2895.9	2339.6	1889.7	1546.1	1270.7	1025.3	815.3	638.1
12.5°	4845.6	4237.5	3596.7	2969.5	2394.1	1925.1	1570.6	1287.1	1038.9	823.5	646.3
10°	4921.9	4311.1	3667.6	3026.8	2437.8	1952.4	1589.7	1303.4	1049.8	831.7	654.4
7.5°	4979.2	4365.6	3719.4	3075.9	2473.2	1971.5	1606.1	1314.3	1060.7	837.1	668.1
5°	5022.8	4412.0	3760.3	3108.6	2500.5	1998.8	1625.2	1328.0	1071.6	842.6	668.1
2.5°	5055.5	4450.2	3793.0	3135.8	2522.3	1993.3	1625.2	1325.2	1071.6	842.6	665.3
0°	5050.1	4452.9	3790.3	3135.8	2522.3	1987.9	1625.2	1322.5	1071.6	842.6	665.3



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	19.1	13.6	5.5	0.0
85°	40.9	27.3	13.6	0.0
82.5°	60.0	38.2	19.1	0.0
80°	79.1	51.8	24.5	0.0
77.5°	100.9	65.4	32.7	0.0
75°	120.0	76.4	38.2	0.0
72.5°	139.1	90.0	43.6	0.0
70°	155.4	100.9	49.1	0.0
67.5°	171.8	114.5	57.3	0.0
65°	185.4	125.4	62.7	0.0
62.5°	196.3	139.1	68.2	0.0
60°	210.0	150.0	73.6	0.0
57.5°	220.9	158.2	79.1	0.0
55°	231.8	163.6	84.5	0.0
52.5°	242.7	171.8	90.0	0.0
50°	253.6	180.0	95.4	0.0
47.5°	264.5	185.4	98.2	0.0
45°	280.9	193.6	103.6	0.0
42.5°	294.5	199.1	109.1	0.0
40°	308.1	204.5	111.8	0.0
37.5°	321.8	210.0	117.3	0.0
35°	335.4	215.4	120.0	0.0
32.5°	346.3	220.9	122.7	0.0
30°	357.2	226.3	125.4	0.0
27.5°	368.1	229.1	128.2	0.0
25°	376.3	234.5	130.9	0.0
22.5°	384.5	237.2	133.6	0.0
20°	389.9	240.0	136.3	0.0
17.5°	398.1	242.7	139.1	0.0
15°	400.8	245.4	144.5	0.0
12.5°	406.3	248.1	144.5	0.0
10°	409.0	250.9	144.5	0.0
7.5°	414.5	250.9	144.5	0.0
5°	411.7	250.9	144.5	0.0
2.5°	411.7	250.9	144.5	0.0
0°	409.0	250.9	144.5	0.0

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