

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: P628377

Luminaire Tested: **IFLD-L-SA7E-827-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628377
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7E-827-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (112) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	42708 lumens	Max Intensity:	13921.1 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	80.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

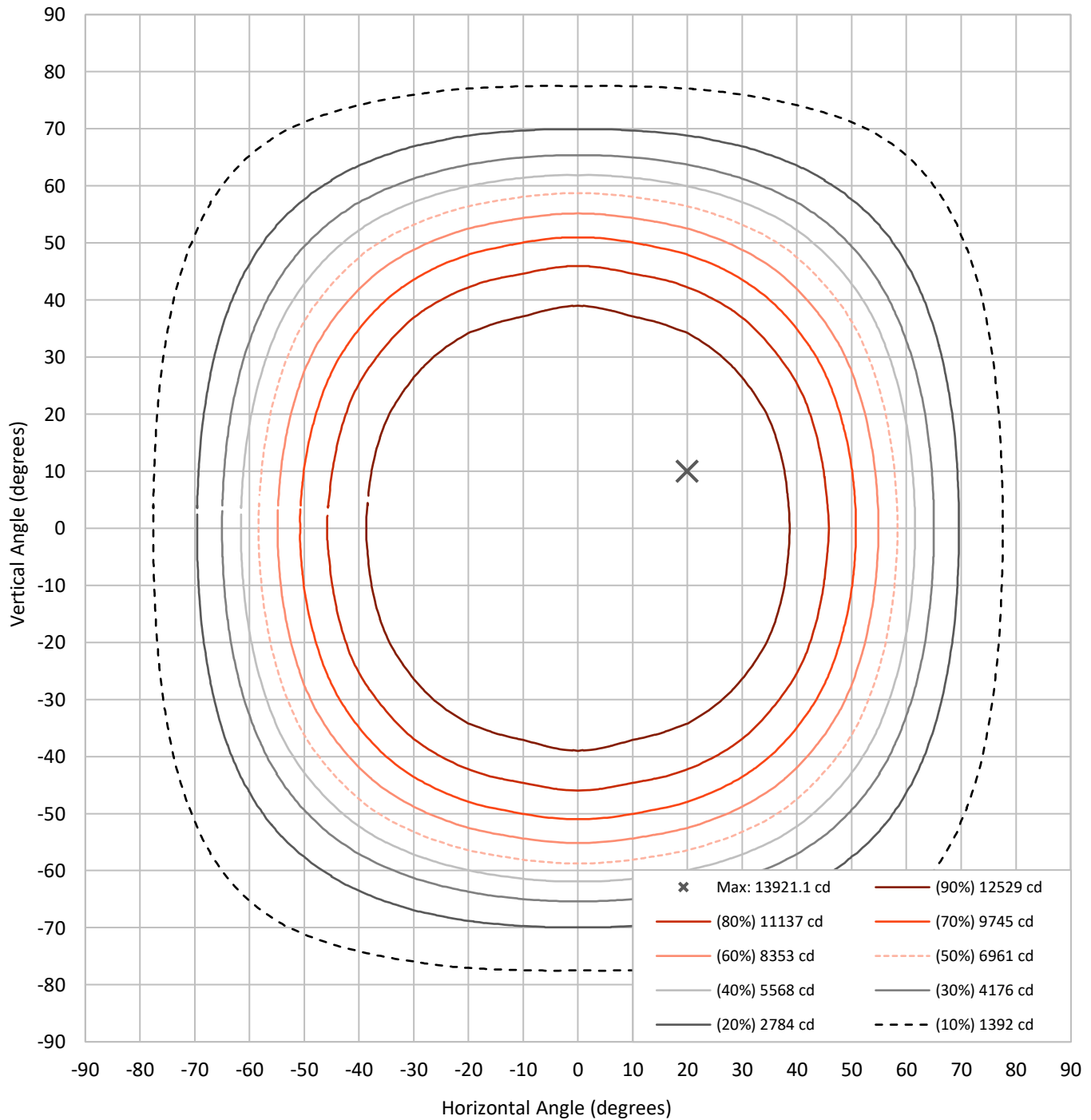
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	26206.5 lumens	Field Lumens:	31417.1 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 532.7
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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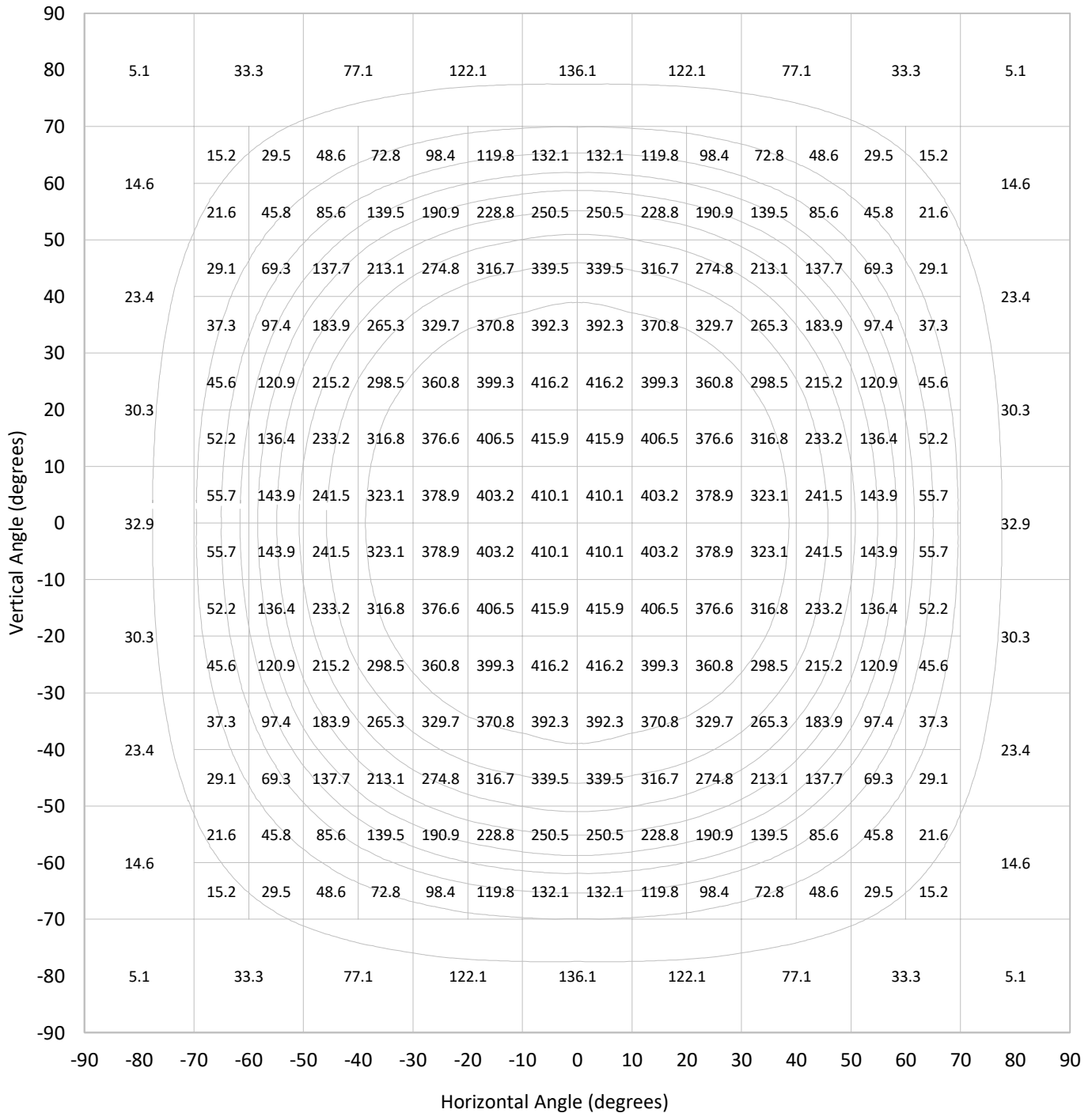
Iso-Candela Plot





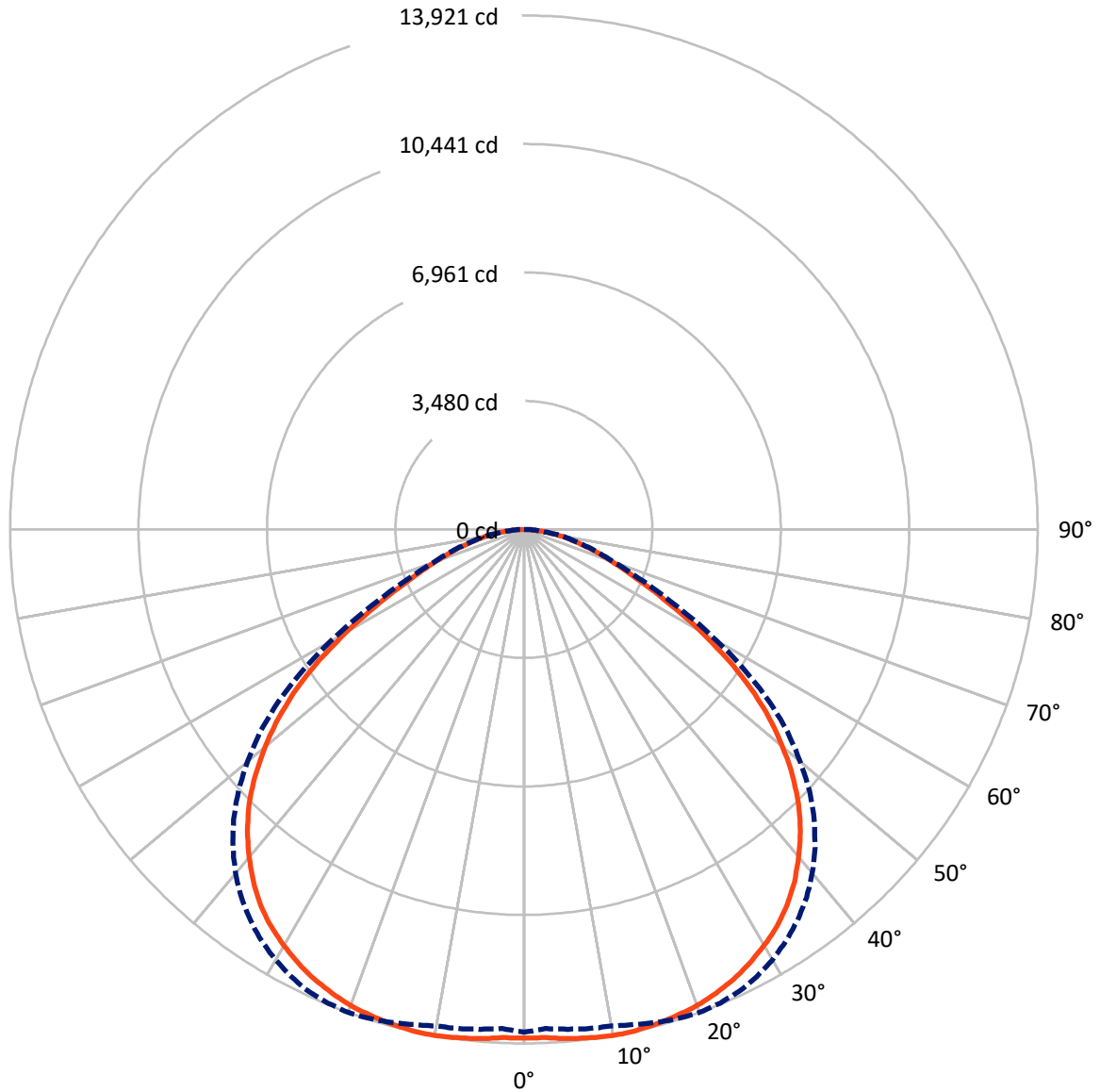
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Lumen Table



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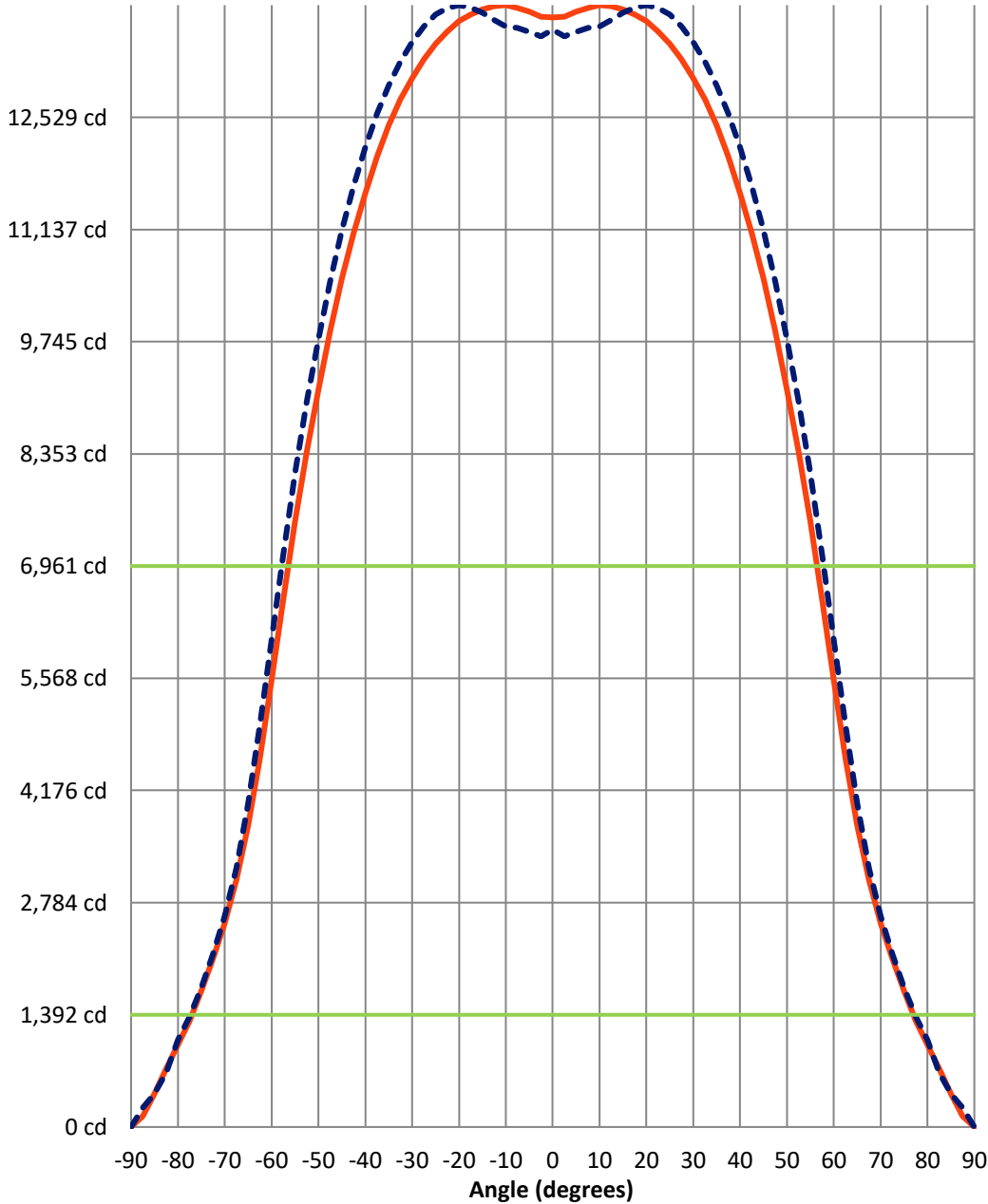
Luminous Intensity Polar Plot



— 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: 26206.5
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 31417.1
 Efficiency: 73.6%

Spill:
 Lumens: 11290.8
 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°	112.3	121.3	125.8	130.3	134.8	139.3	143.8	139.3	134.8	134.8	130.3
85°	301.1	310.1	314.5	346.0	377.5	395.4	417.9	413.4	413.4	408.9	404.4
82.5°	602.1	629.1	651.6	683.0	701.0	728.0	745.9	732.5	723.5	705.5	692.0
80°	1069.5	1078.5	1083.0	1087.4	1065.0	1060.5	1051.5	1038.0	1020.0	997.6	975.1
77.5°	1361.6	1370.5	1379.5	1370.5	1366.0	1361.6	1348.1	1334.6	1316.6	1298.6	1271.7
75°	1801.9	1801.9	1801.9	1788.4	1779.5	1766.0	1743.5	1721.0	1689.6	1653.6	1613.2
72.5°	2269.3	2264.8	2260.3	2233.3	2210.8	2183.9	2152.4	2125.5	2089.5	2049.1	1995.1
70°	2759.1	2768.0	2772.5	2736.6	2709.6	2673.7	2633.2	2583.8	2529.9	2471.5	2395.1
67.5°	3433.1	3424.1	3415.1	3365.7	3329.7	3280.3	3221.9	3150.0	3069.1	2979.2	2871.4
65°	4268.9	4282.4	4255.4	4206.0	4138.6	4057.7	3967.8	3864.5	3743.1	3608.3	3455.6
62.5°	5279.9	5302.4	5271.0	5208.0	5122.7	5014.8	4889.0	4740.7	4574.5	4385.7	4197.0
60°	6430.3	6425.8	6367.4	6282.0	6169.7	6034.9	5895.6	5733.8	5545.1	5324.9	5095.7
57.5°	7486.3	7477.3	7405.4	7320.0	7207.7	7063.9	6915.6	6744.8	6547.1	6313.5	6048.3
55°	8434.4	8425.4	8353.5	8263.7	8146.8	8003.0	7868.2	7706.5	7513.2	7266.1	6983.0
52.5°	9274.7	9279.2	9216.3	9117.5	8991.6	8852.3	8722.0	8560.3	8376.0	8128.9	7854.8
50°	10047.6	10043.1	9975.7	9885.9	9769.0	9634.2	9503.9	9342.1	9148.9	8910.7	8645.6
47.5°	10766.6	10757.6	10681.2	10582.4	10461.0	10344.2	10222.9	10079.1	9876.9	9638.7	9373.6
45°	11368.7	11350.8	11274.4	11180.0	11063.2	10959.8	10852.0	10744.1	10528.4	10308.2	10056.6
42.5°	11885.5	11881.0	11804.6	11710.2	11593.4	11503.5	11404.7	11269.9	11090.1	10887.9	10640.8
40°	12379.8	12343.8	12267.4	12177.6	12069.7	11993.3	11894.5	11759.7	11584.4	11386.7	11148.5
37.5°	12748.3	12752.8	12671.9	12573.0	12478.6	12406.7	12316.9	12191.1	12038.3	11845.1	11606.9
35°	13098.8	13076.3	13008.9	12923.5	12838.1	12757.2	12662.9	12555.0	12429.2	12249.5	12024.8
32.5°	13327.9	13359.4	13278.5	13188.6	13139.2	13076.3	12977.4	12865.1	12752.8	12573.0	12370.8
30°	13579.6	13552.6	13489.7	13413.3	13377.4	13336.9	13251.5	13143.7	13013.4	12851.6	12662.9
27.5°	13754.8	13741.3	13664.9	13593.0	13575.1	13539.1	13471.7	13377.4	13247.0	13089.8	12914.5
25°	13831.2	13840.2	13768.3	13727.9	13727.9	13705.4	13651.5	13570.6	13440.3	13296.5	13125.7
22.5°	13867.2	13858.2	13808.7	13799.8	13822.2	13804.2	13781.8	13709.9	13593.0	13476.2	13332.4
20°	13889.6	13826.7	13781.8	13817.7	13844.7	13840.2	13822.2	13777.3	13723.4	13624.5	13498.7
17.5°	13840.2	13799.8	13745.8	13799.8	13858.2	13862.7	13844.7	13817.7	13804.2	13741.3	13629.0
15°	13718.9	13687.4	13696.4	13750.3	13817.7	13840.2	13853.7	13885.1	13867.2	13817.7	13718.9
12.5°	13638.0	13597.5	13638.0	13691.9	13727.9	13741.3	13849.2	13907.6	13907.6	13862.7	13799.8
10°	13615.5	13534.6	13588.6	13638.0	13656.0	13736.8	13826.7	13889.6	13921.1	13885.1	13804.2
7.5°	13570.6	13516.7	13539.1	13561.6	13664.9	13723.4	13772.8	13840.2	13885.1	13880.6	13808.7
5°	13548.1	13480.7	13489.7	13584.1	13656.0	13696.4	13714.4	13772.8	13840.2	13853.7	13799.8
2.5°	13489.7	13458.2	13525.6	13534.6	13588.6	13620.0	13638.0	13691.9	13777.3	13808.7	13786.3
0°	13458.2	13413.3	13368.4	13404.3	13494.2	13561.6	13588.6	13669.4	13768.3	13799.8	13750.3



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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°	125.8	121.3	116.8	112.3	116.8	116.8	116.8	112.3	116.8	112.3	112.3
85°	390.9	373.0	359.5	341.5	323.5	310.1	292.1	274.1	269.6	265.1	256.1
82.5°	674.0	651.6	629.1	602.1	575.2	543.7	512.3	476.3	467.3	458.3	444.9
80°	948.1	916.7	885.2	853.8	826.8	795.4	759.4	719.0	692.0	669.5	642.6
77.5°	1235.7	1190.8	1145.9	1091.9	1060.5	1029.0	993.1	952.6	912.2	876.2	835.8
75°	1563.8	1514.3	1469.4	1415.5	1357.1	1298.6	1240.2	1186.3	1127.9	1074.0	1020.0
72.5°	1927.7	1855.8	1783.9	1716.5	1644.6	1572.7	1496.4	1424.5	1352.6	1280.7	1204.3
70°	2309.7	2219.8	2130.0	2040.1	1945.7	1851.4	1761.5	1671.6	1581.7	1487.4	1402.0
67.5°	2759.1	2655.7	2538.9	2413.0	2273.7	2152.4	2035.6	1927.7	1819.9	1712.1	1604.2
65°	3320.7	3177.0	3019.7	2848.9	2687.2	2525.4	2354.6	2192.9	2067.0	1941.2	1819.9
62.5°	4012.8	3810.5	3590.4	3370.2	3172.5	2961.3	2763.5	2552.3	2354.6	2174.9	2026.6
60°	4839.6	4565.5	4295.9	4012.8	3738.7	3451.1	3199.4	2938.8	2691.6	2471.5	2255.8
57.5°	5751.8	5432.7	5109.2	4763.2	4390.2	4053.2	3711.7	3370.2	3078.1	2786.0	2543.4
55°	6677.4	6340.4	5976.4	5585.5	5176.6	4745.2	4282.4	3900.4	3500.5	3159.0	2844.4
52.5°	7558.2	7207.7	6830.2	6470.7	5980.9	5486.6	4978.9	4475.6	4008.3	3572.4	3190.4
50°	8344.6	8003.0	7639.1	7221.2	6767.3	6241.6	5675.4	5109.2	4556.5	4044.2	3567.9
47.5°	9063.5	8731.0	8367.0	7949.1	7535.7	6951.6	6380.9	5756.3	5140.6	4552.0	3994.8
45°	9737.6	9400.5	9023.1	8623.2	8146.8	7625.6	7036.9	6407.8	5747.3	5086.7	4444.1
42.5°	10348.7	10011.7	9629.7	9216.3	8744.5	8227.7	7657.0	7023.5	6358.4	5639.4	4933.9
40°	10883.4	10555.4	10186.9	9755.5	9315.2	8771.4	8209.8	7607.6	6920.1	6196.6	5419.2
37.5°	11350.8	11045.2	10681.2	10254.3	9787.0	9301.7	8722.0	8119.9	7499.8	6713.4	5918.0
35°	11764.2	11481.1	11108.1	10703.7	10245.3	9733.1	9189.4	8600.7	7931.2	7194.2	6421.3
32.5°	12123.7	11836.1	11494.6	11090.1	10645.3	10164.5	9607.3	9014.1	8380.5	7630.1	6789.8
30°	12429.2	12150.6	11827.1	11445.1	11018.2	10541.9	9998.2	9400.5	8753.5	8007.5	7176.2
27.5°	12694.3	12429.2	12114.7	11759.7	11350.8	10892.4	10344.2	9742.1	9081.5	8362.5	7531.2
25°	12923.5	12667.4	12375.3	12038.3	11633.9	11184.5	10667.7	10038.6	9378.1	8654.6	7832.3
22.5°	13130.2	12883.1	12591.0	12263.0	11894.5	11445.1	10923.9	10299.3	9629.7	8915.2	8106.4
20°	13314.4	13085.3	12797.7	12460.7	12092.2	11638.3	11121.6	10528.4	9854.4	9153.4	8353.5
17.5°	13462.7	13260.5	12972.9	12617.9	12249.5	11809.1	11305.8	10762.1	10047.6	9355.6	8560.3
15°	13566.1	13368.4	13107.7	12748.3	12388.8	11952.9	11449.6	10887.9	10222.9	9517.4	8731.0
12.5°	13638.0	13426.8	13184.1	12851.6	12492.1	12060.7	11570.9	11018.2	10371.2	9661.2	8879.3
10°	13656.0	13462.7	13220.1	12923.5	12573.0	12155.1	11674.3	11126.1	10492.5	9773.5	9000.6
7.5°	13664.9	13480.7	13260.5	12977.4	12631.4	12227.0	11750.7	11211.5	10582.4	9867.9	9090.5
5°	13660.5	13485.2	13287.5	13013.4	12667.4	12267.4	11800.1	11269.9	10645.3	9930.8	9157.9
2.5°	13647.0	13489.7	13305.5	13040.3	12707.8	12312.4	11849.5	11337.3	10712.7	9984.7	9211.8
0°	13682.9	13548.1	13314.4	13031.4	12716.8	12312.4	11845.1	11346.3	10721.7	9980.2	9207.3



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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°	112.3	107.8	107.8	103.4	98.9	94.4	85.4	80.9	71.9	58.4	44.9
85°	242.7	229.2	215.7	206.7	197.7	188.7	175.2	161.8	143.8	116.8	89.9
82.5°	426.9	399.9	373.0	341.5	314.5	287.6	265.1	242.7	215.7	175.2	134.8
80°	611.1	570.7	530.2	485.3	444.9	399.9	359.5	323.5	287.6	233.7	179.7
77.5°	795.4	741.4	683.0	629.1	570.7	512.3	453.9	404.4	350.5	287.6	224.7
75°	966.1	903.2	849.3	772.9	701.0	624.6	548.2	480.8	413.4	337.0	269.6
72.5°	1136.9	1056.0	979.6	907.7	826.8	732.5	647.1	561.7	476.3	386.4	305.6
70°	1307.6	1208.8	1114.4	1029.0	939.2	844.8	741.4	642.6	539.2	431.4	337.0
67.5°	1482.9	1370.5	1262.7	1154.8	1051.5	943.6	835.8	723.5	602.1	476.3	373.0
65°	1676.1	1536.8	1406.5	1285.2	1163.8	1047.0	925.7	804.3	669.5	525.7	404.4
62.5°	1869.3	1716.5	1563.8	1411.0	1276.2	1145.9	1015.5	880.7	732.5	579.7	435.9
60°	2076.0	1900.8	1725.5	1554.8	1388.5	1244.7	1100.9	957.1	799.9	629.1	467.3
57.5°	2305.2	2094.0	1896.3	1703.1	1514.3	1343.6	1186.3	1033.5	858.3	678.5	503.3
55°	2565.8	2305.2	2071.5	1855.8	1649.1	1442.4	1271.7	1114.4	925.7	728.0	543.7
52.5°	2839.9	2538.9	2255.8	2013.1	1792.9	1559.3	1352.6	1177.3	993.1	777.4	579.7
50°	3159.0	2777.0	2462.5	2165.9	1918.8	1676.1	1437.9	1249.2	1060.5	835.8	615.6
47.5°	3487.0	3064.6	2669.2	2345.6	2053.6	1788.4	1536.8	1312.1	1123.4	889.7	651.6
45°	3869.0	3338.7	2902.8	2520.9	2183.9	1905.3	1635.7	1379.5	1177.3	943.6	687.5
42.5°	4237.4	3662.3	3145.5	2714.1	2332.2	2017.6	1725.5	1451.4	1231.2	997.6	719.0
40°	4673.3	3985.8	3379.2	2898.4	2480.5	2125.5	1815.4	1527.8	1280.7	1047.0	750.4
37.5°	5091.2	4313.8	3662.3	3100.6	2624.2	2233.3	1905.3	1599.7	1325.6	1096.4	790.9
35°	5504.6	4677.8	3931.9	3289.3	2772.5	2354.6	1995.1	1667.1	1370.5	1136.9	826.8
32.5°	5900.1	5019.3	4206.0	3500.5	2934.3	2467.0	2076.0	1730.0	1415.5	1172.8	862.8
30°	6268.5	5342.9	4475.6	3716.2	3082.6	2570.3	2152.4	1792.9	1469.4	1204.3	898.7
27.5°	6605.5	5657.4	4745.2	3918.4	3221.9	2664.7	2233.3	1851.4	1514.3	1235.7	930.2
25°	6911.1	5940.5	4992.4	4102.6	3347.7	2768.0	2309.7	1909.8	1554.8	1262.7	957.1
22.5°	7198.7	6201.1	5217.0	4286.9	3500.5	2871.4	2381.6	1963.7	1595.2	1289.7	984.1
20°	7450.3	6439.3	5432.7	4471.1	3635.3	2965.8	2444.5	2013.1	1631.2	1307.6	1011.1
17.5°	7652.5	6650.5	5625.9	4632.9	3752.1	3046.6	2498.4	2058.1	1662.6	1330.1	1029.0
15°	7832.3	6830.2	5787.7	4772.2	3855.5	3114.0	2547.9	2094.0	1689.6	1343.6	1051.5
12.5°	7985.1	6983.0	5927.0	4893.5	3945.4	3172.5	2588.3	2121.0	1712.1	1357.1	1065.0
10°	8110.9	7104.3	6043.9	4987.9	4017.3	3217.4	2619.8	2147.9	1730.0	1370.5	1078.5
7.5°	8205.3	7194.2	6129.2	5068.7	4075.7	3248.9	2646.7	2165.9	1748.0	1379.5	1100.9
5°	8277.2	7270.6	6196.6	5122.7	4120.6	3293.8	2678.2	2188.4	1766.0	1388.5	1100.9
2.5°	8331.1	7333.5	6250.6	5167.6	4156.6	3284.8	2678.2	2183.9	1766.0	1388.5	1096.4
0°	8322.1	7338.0	6246.1	5167.6	4156.6	3275.8	2678.2	2179.4	1766.0	1388.5	1096.4



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	31.5	22.5	9.0	0.0
85°	67.4	44.9	22.5	0.0
82.5°	98.9	62.9	31.5	0.0
80°	130.3	85.4	40.4	0.0
77.5°	166.3	107.8	53.9	0.0
75°	197.7	125.8	62.9	0.0
72.5°	229.2	148.3	71.9	0.0
70°	256.1	166.3	80.9	0.0
67.5°	283.1	188.7	94.4	0.0
65°	305.6	206.7	103.4	0.0
62.5°	323.5	229.2	112.3	0.0
60°	346.0	247.1	121.3	0.0
57.5°	364.0	260.6	130.3	0.0
55°	382.0	269.6	139.3	0.0
52.5°	399.9	283.1	148.3	0.0
50°	417.9	296.6	157.3	0.0
47.5°	435.9	305.6	161.8	0.0
45°	462.8	319.0	170.8	0.0
42.5°	485.3	328.0	179.7	0.0
40°	507.8	337.0	184.2	0.0
37.5°	530.2	346.0	193.2	0.0
35°	552.7	355.0	197.7	0.0
32.5°	570.7	364.0	202.2	0.0
30°	588.7	373.0	206.7	0.0
27.5°	606.6	377.5	211.2	0.0
25°	620.1	386.4	215.7	0.0
22.5°	633.6	390.9	220.2	0.0
20°	642.6	395.4	224.7	0.0
17.5°	656.1	399.9	229.2	0.0
15°	660.6	404.4	238.2	0.0
12.5°	669.5	408.9	238.2	0.0
10°	674.0	413.4	238.2	0.0
7.5°	683.0	413.4	238.2	0.0
5°	678.5	413.4	238.2	0.0
2.5°	678.5	413.4	238.2	0.0
0°	674.0	413.4	238.2	0.0

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