

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: P628517

Luminaire Tested: **IFLD-M-SA4E-940-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628517
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-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:	26924.6 lumens	Max Intensity:	8776.3 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	85.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

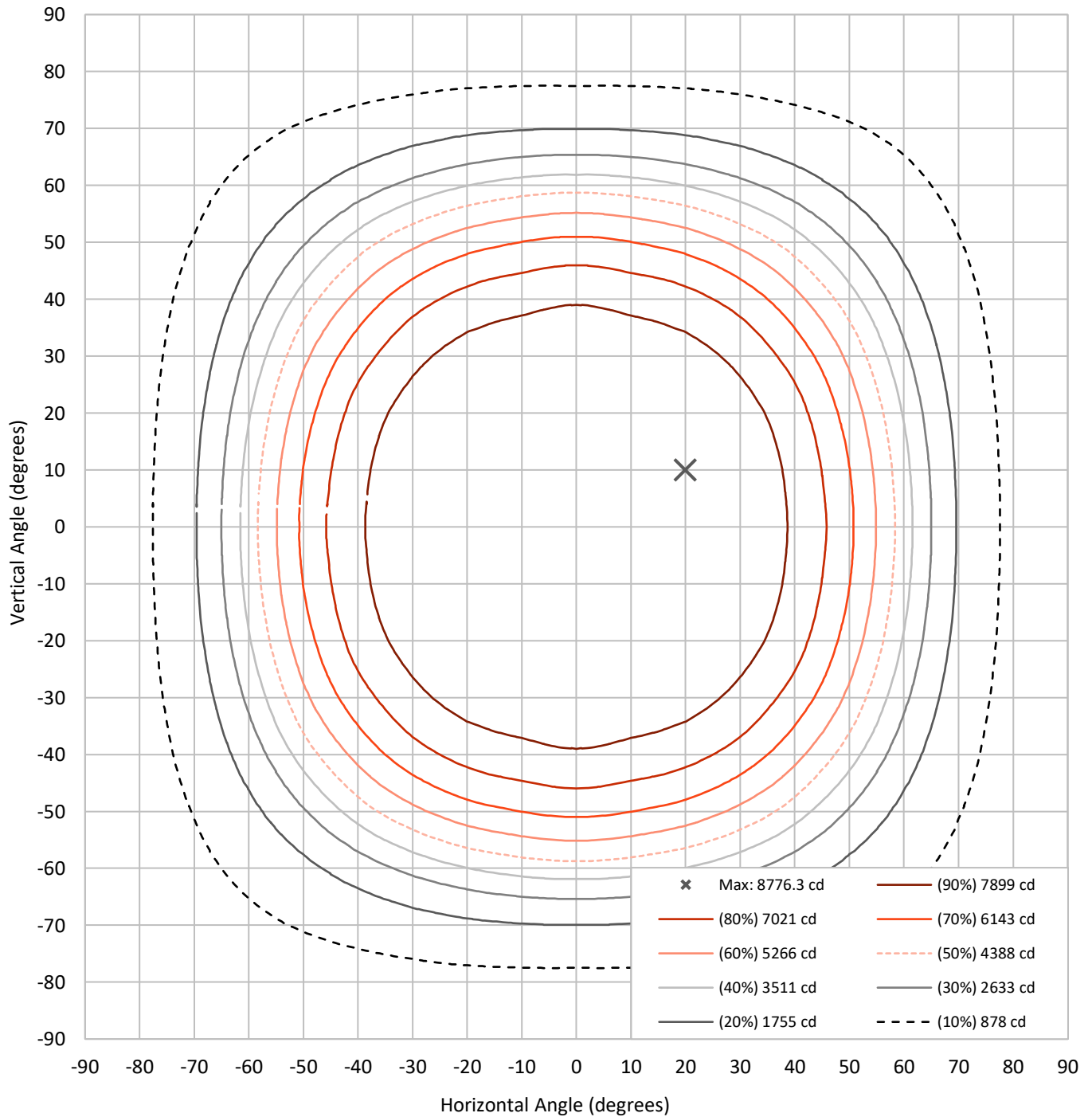
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	16521.5 lumens	Field Lumens:	19806.4 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 314.8
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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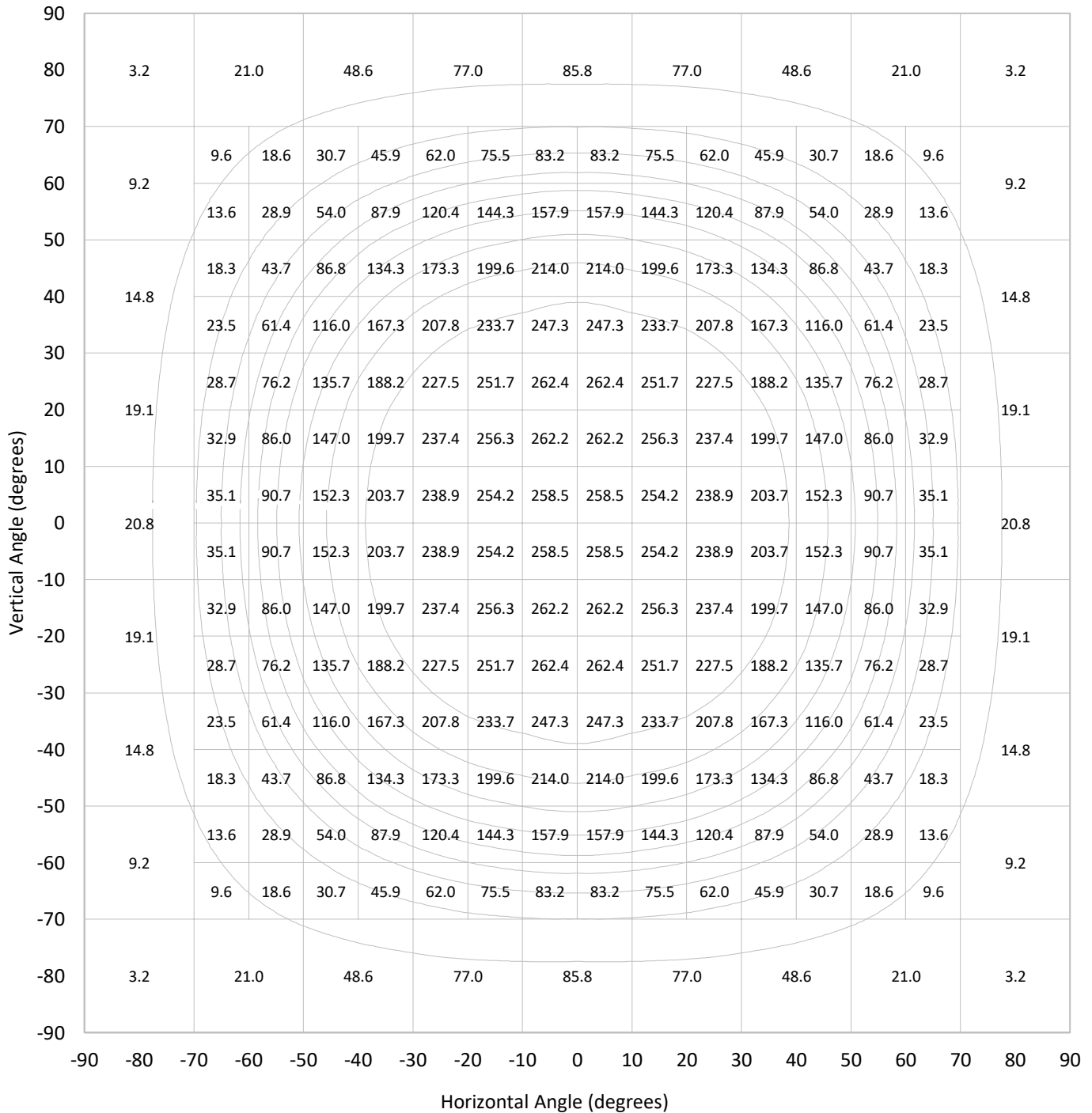
Iso-Candela Plot





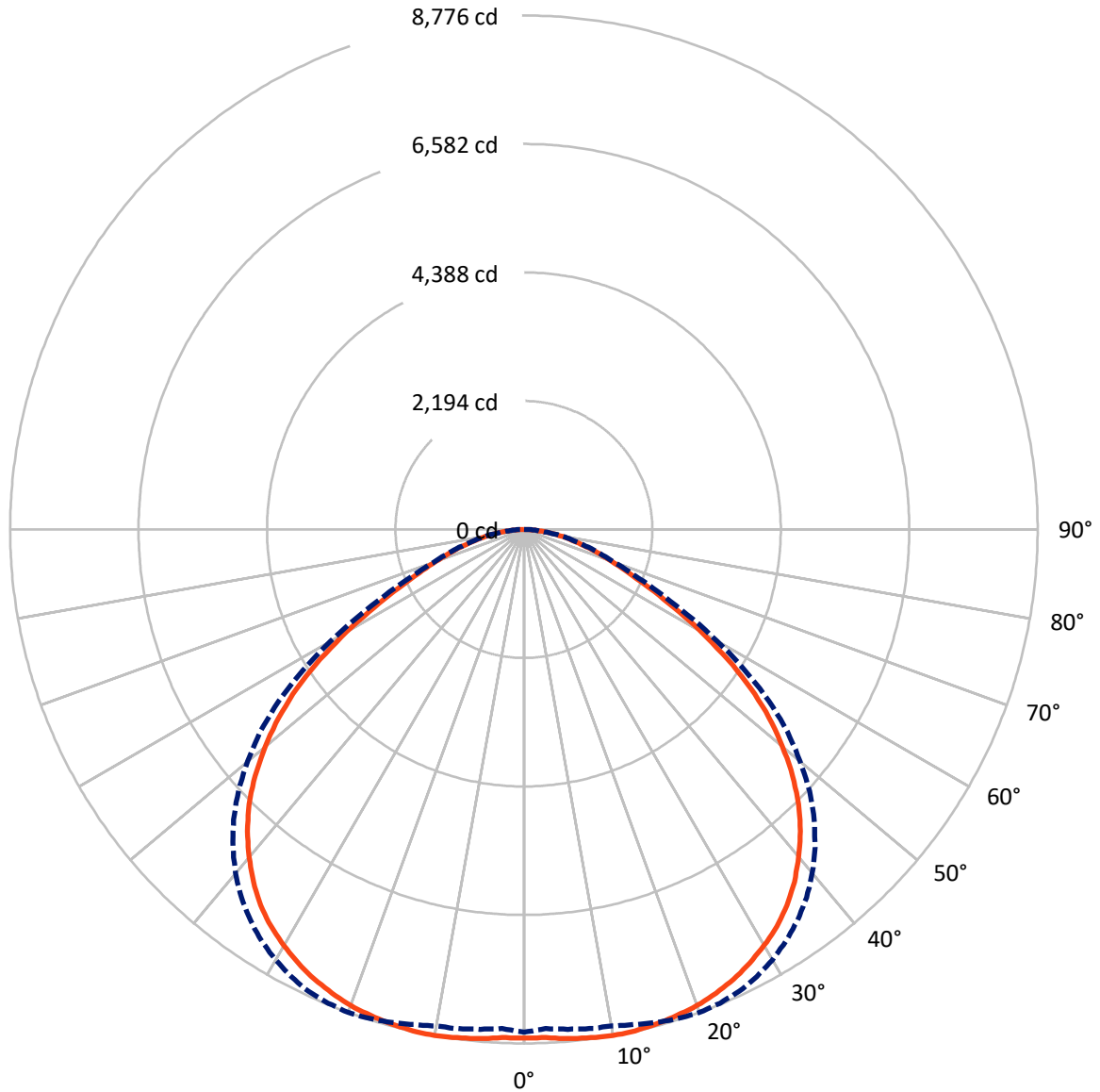
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Lumen Table



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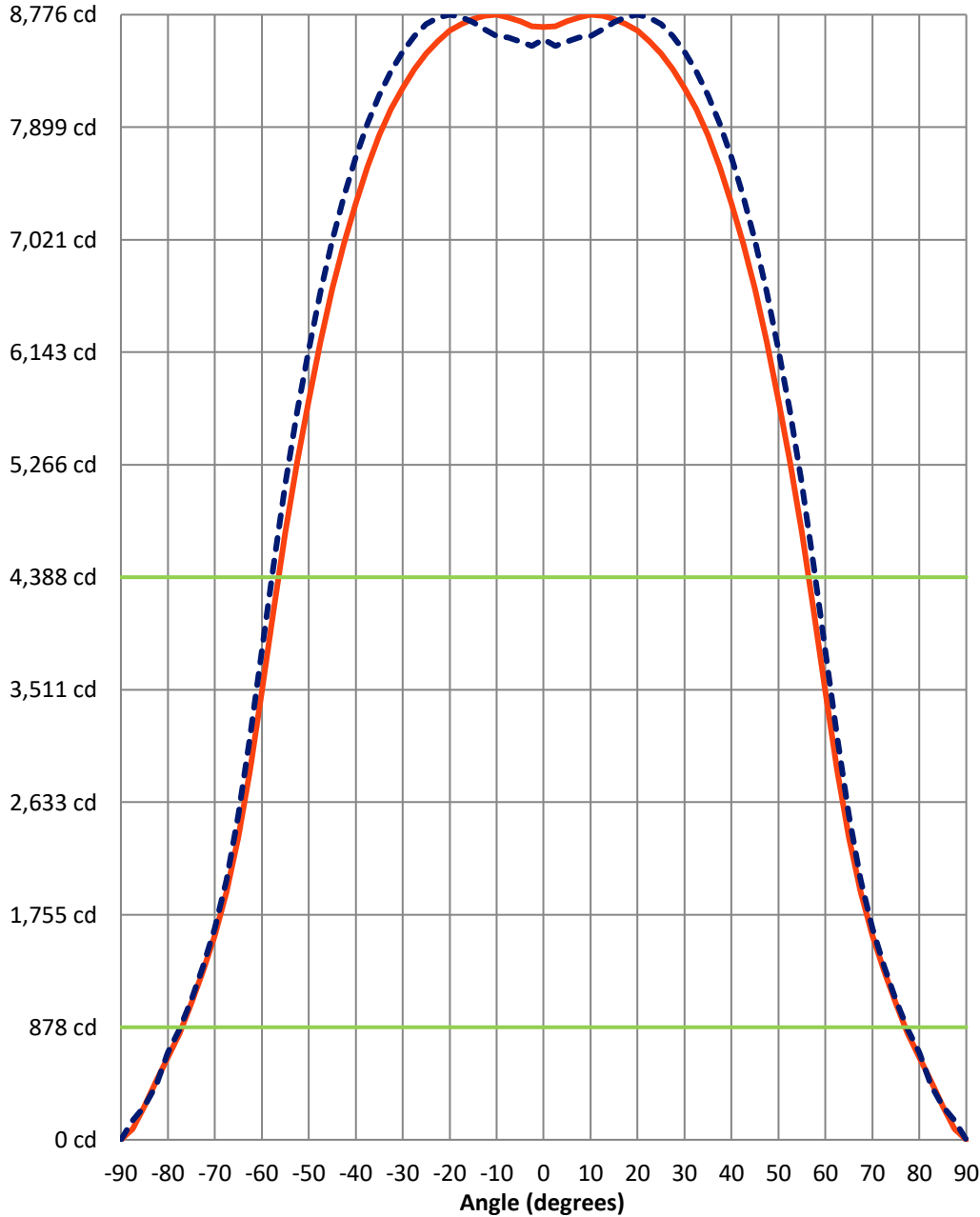
Luminous Intensity Polar Plot



— 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: 16521.5
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 19806.4
 Efficiency: 73.6%

Spill:
 Lumens: 7118.1
 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°	70.8	76.5	79.3	82.2	85.0	87.8	90.7	87.8	85.0	85.0	82.2
85°	189.8	195.5	198.3	218.1	238.0	249.3	263.5	260.6	260.6	257.8	255.0
82.5°	379.6	396.6	410.8	430.6	441.9	458.9	470.3	461.8	456.1	444.8	436.3
80°	674.2	679.9	682.7	685.6	671.4	668.6	662.9	654.4	643.1	628.9	614.7
77.5°	858.4	864.0	869.7	864.0	861.2	858.4	849.9	841.4	830.0	818.7	801.7
75°	1136.0	1136.0	1136.0	1127.5	1121.8	1113.3	1099.2	1085.0	1065.2	1042.5	1017.0
72.5°	1430.6	1427.8	1425.0	1408.0	1393.8	1376.8	1357.0	1340.0	1317.3	1291.8	1257.8
70°	1739.4	1745.1	1747.9	1725.2	1708.2	1685.6	1660.1	1628.9	1594.9	1558.1	1509.9
67.5°	2164.3	2158.7	2153.0	2121.8	2099.2	2068.0	2031.2	1985.9	1934.9	1878.2	1810.2
65°	2691.3	2699.8	2682.8	2651.6	2609.1	2558.1	2501.5	2436.3	2359.8	2274.8	2178.5
62.5°	3328.7	3342.8	3323.0	3283.3	3229.5	3161.5	3082.2	2988.7	2883.9	2764.9	2645.9
60°	4053.9	4051.1	4014.2	3960.4	3889.6	3804.6	3716.8	3614.8	3495.8	3357.0	3212.5
57.5°	4719.6	4714.0	4668.6	4614.8	4544.0	4453.3	4359.8	4252.2	4127.5	3980.2	3813.1
55°	5317.4	5311.7	5266.4	5209.7	5136.1	5045.4	4960.4	4858.4	4736.6	4580.8	4402.3
52.5°	5847.1	5849.9	5810.3	5748.0	5668.6	5580.8	5498.7	5396.7	5280.5	5124.7	4951.9
50°	6334.4	6331.5	6289.0	6232.4	6158.7	6073.7	5991.6	5889.6	5767.8	5617.6	5450.5
47.5°	6787.6	6782.0	6733.8	6671.5	6595.0	6521.3	6444.9	6354.2	6226.7	6076.6	5909.4
45°	7167.2	7155.9	7107.8	7048.3	6974.6	6909.5	6841.5	6773.5	6637.5	6498.7	6340.0
42.5°	7493.0	7490.2	7442.0	7382.5	7308.9	7252.2	7189.9	7104.9	6991.6	6864.1	6708.3
40°	7804.6	7782.0	7733.8	7677.2	7609.2	7561.0	7498.7	7413.7	7303.2	7178.6	7028.4
37.5°	8036.9	8039.8	7988.8	7926.5	7867.0	7821.6	7765.0	7685.7	7589.3	7467.5	7317.4
35°	8257.9	8243.7	8201.3	8147.4	8093.6	8042.6	7983.1	7915.1	7835.8	7722.5	7580.8
32.5°	8402.4	8422.2	8371.2	8314.6	8283.4	8243.7	8181.4	8110.6	8039.8	7926.5	7799.0
30°	8561.0	8544.0	8504.4	8456.2	8433.6	8408.1	8354.2	8286.2	8204.1	8102.1	7983.1
27.5°	8671.5	8663.0	8614.9	8569.5	8558.2	8535.5	8493.0	8433.6	8351.4	8252.2	8141.8
25°	8719.7	8725.3	8680.0	8654.5	8654.5	8640.4	8606.4	8555.4	8473.2	8382.6	8274.9
22.5°	8742.3	8736.7	8705.5	8699.8	8714.0	8702.7	8688.5	8643.2	8569.5	8495.9	8405.2
20°	8756.5	8716.8	8688.5	8711.2	8728.2	8725.3	8714.0	8685.7	8651.7	8589.4	8510.0
17.5°	8725.3	8699.8	8665.8	8699.8	8736.7	8739.5	8728.2	8711.2	8702.7	8663.0	8592.2
15°	8648.9	8629.0	8634.7	8668.7	8711.2	8725.3	8733.8	8753.7	8742.3	8711.2	8648.9
12.5°	8597.9	8572.4	8597.9	8631.9	8654.5	8663.0	8731.0	8767.8	8767.8	8739.5	8699.8
10°	8583.7	8532.7	8566.7	8597.9	8609.2	8660.2	8716.8	8756.5	8776.3	8753.7	8702.7
7.5°	8555.4	8521.4	8535.5	8549.7	8614.9	8651.7	8682.8	8725.3	8753.7	8750.8	8705.5
5°	8541.2	8498.7	8504.4	8563.9	8609.2	8634.7	8646.0	8682.8	8725.3	8733.8	8699.8
2.5°	8504.4	8484.5	8527.0	8532.7	8566.7	8586.5	8597.9	8631.9	8685.7	8705.5	8691.3
0°	8484.5	8456.2	8427.9	8450.5	8507.2	8549.7	8566.7	8617.7	8680.0	8699.8	8668.7



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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°	79.3	76.5	73.7	70.8	73.7	73.7	73.7	70.8	73.7	70.8	70.8
85°	246.5	235.1	226.6	215.3	204.0	195.5	184.1	172.8	170.0	167.1	161.5
82.5°	424.9	410.8	396.6	379.6	362.6	342.8	323.0	300.3	294.6	289.0	280.5
80°	597.7	577.9	558.1	538.3	521.3	501.4	478.8	453.3	436.3	422.1	405.1
77.5°	779.0	750.7	722.4	688.4	668.6	648.7	626.1	600.6	575.1	552.4	526.9
75°	985.9	954.7	926.4	892.4	855.5	818.7	781.9	747.9	711.1	677.1	643.1
72.5°	1215.3	1170.0	1124.7	1082.2	1036.8	991.5	943.4	898.0	852.7	807.4	759.2
70°	1456.1	1399.5	1342.8	1286.1	1226.6	1167.2	1110.5	1053.8	997.2	937.7	883.9
67.5°	1739.4	1674.2	1600.6	1521.3	1433.4	1357.0	1283.3	1215.3	1147.3	1079.3	1011.3
65°	2093.5	2002.9	1903.7	1796.1	1694.1	1592.1	1484.4	1382.5	1303.1	1223.8	1147.3
62.5°	2529.8	2402.3	2263.5	2124.7	2000.0	1866.9	1742.2	1609.1	1484.4	1371.1	1277.6
60°	3051.0	2878.2	2708.3	2529.8	2357.0	2175.7	2017.0	1852.7	1696.9	1558.1	1422.1
57.5°	3626.1	3425.0	3221.0	3002.9	2767.7	2555.3	2340.0	2124.7	1940.5	1756.4	1603.4
55°	4209.7	3997.2	3767.8	3521.3	3263.5	2991.5	2699.8	2459.0	2206.8	1991.5	1793.2
52.5°	4764.9	4544.0	4306.0	4079.4	3770.6	3459.0	3138.9	2821.6	2526.9	2252.2	2011.4
50°	5260.7	5045.4	4815.9	4552.5	4266.4	3934.9	3578.0	3221.0	2872.6	2549.6	2249.3
47.5°	5714.0	5504.3	5274.9	5011.4	4750.8	4382.5	4022.7	3628.9	3240.8	2869.7	2518.5
45°	6138.9	5926.4	5688.5	5436.3	5136.1	4807.4	4436.3	4039.7	3623.3	3206.8	2801.7
42.5°	6524.2	6311.7	6070.9	5810.3	5512.8	5187.0	4827.3	4427.8	4008.6	3555.3	3110.5
40°	6861.3	6654.5	6422.2	6150.2	5872.6	5529.8	5175.7	4796.1	4362.7	3906.6	3416.5
37.5°	7155.9	6963.3	6733.8	6464.7	6170.1	5864.1	5498.7	5119.1	4728.1	4232.4	3730.9
35°	7416.5	7238.1	7002.9	6748.0	6459.0	6136.1	5793.3	5422.2	5000.1	4535.5	4048.2
32.5°	7643.2	7461.9	7246.6	6991.6	6711.1	6408.0	6056.7	5682.8	5283.4	4810.3	4280.5
30°	7835.8	7660.2	7456.2	7215.4	6946.3	6646.0	6303.2	5926.4	5518.5	5048.2	4524.1
27.5°	8003.0	7835.8	7637.5	7413.7	7155.9	6867.0	6521.3	6141.7	5725.3	5272.0	4747.9
25°	8147.4	7986.0	7801.8	7589.3	7334.4	7051.1	6725.3	6328.7	5912.3	5456.2	4937.7
22.5°	8277.7	8121.9	7937.8	7731.0	7498.7	7215.4	6886.8	6493.0	6070.9	5620.5	5110.6
20°	8393.9	8249.4	8068.1	7855.6	7623.3	7337.2	7011.4	6637.5	6212.6	5770.6	5266.4
17.5°	8487.4	8359.9	8178.6	7954.8	7722.5	7444.9	7127.6	6784.8	6334.4	5898.1	5396.7
15°	8552.5	8427.9	8263.6	8036.9	7810.3	7535.5	7218.2	6864.1	6444.9	6000.1	5504.3
12.5°	8597.9	8464.7	8311.7	8102.1	7875.5	7603.5	7294.7	6946.3	6538.3	6090.7	5597.8
10°	8609.2	8487.4	8334.4	8147.4	7926.5	7663.0	7359.9	7014.3	6614.8	6161.6	5674.3
7.5°	8614.9	8498.7	8359.9	8181.4	7963.3	7708.3	7408.0	7068.1	6671.5	6221.1	5731.0
5°	8612.0	8501.5	8376.9	8204.1	7986.0	7733.8	7439.2	7104.9	6711.1	6260.7	5773.5
2.5°	8603.5	8504.4	8388.2	8221.1	8011.4	7762.2	7470.4	7147.4	6753.6	6294.7	5807.5
0°	8626.2	8541.2	8393.9	8215.4	8017.1	7762.2	7467.5	7153.1	6759.3	6291.9	5804.6



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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°	70.8	68.0	68.0	65.2	62.3	59.5	53.8	51.0	45.3	36.8	28.3
85°	153.0	144.5	136.0	130.3	124.6	119.0	110.5	102.0	90.7	73.7	56.7
82.5°	269.1	252.1	235.1	215.3	198.3	181.3	167.1	153.0	136.0	110.5	85.0
80°	385.3	359.8	334.3	306.0	280.5	252.1	226.6	204.0	181.3	147.3	113.3
77.5°	501.4	467.4	430.6	396.6	359.8	323.0	286.1	255.0	221.0	181.3	141.6
75°	609.1	569.4	535.4	487.3	441.9	393.8	345.6	303.1	260.6	212.5	170.0
72.5°	716.7	665.7	617.6	572.2	521.3	461.8	407.9	354.1	300.3	243.6	192.6
70°	824.4	762.1	702.6	648.7	592.1	532.6	467.4	405.1	339.9	272.0	212.5
67.5°	934.9	864.0	796.0	728.1	662.9	594.9	526.9	456.1	379.6	300.3	235.1
65°	1056.7	968.9	886.7	810.2	733.7	660.1	583.6	507.1	422.1	331.4	255.0
62.5°	1178.5	1082.2	985.9	889.5	804.5	722.4	640.2	555.2	461.8	365.4	274.8
60°	1308.8	1198.3	1087.8	980.2	875.4	784.7	694.1	603.4	504.3	396.6	294.6
57.5°	1453.3	1320.1	1195.5	1073.7	954.7	847.0	747.9	651.6	541.1	427.8	317.3
55°	1617.6	1453.3	1306.0	1170.0	1039.7	909.4	801.7	702.6	583.6	458.9	342.8
52.5°	1790.4	1600.6	1422.1	1269.1	1130.3	983.0	852.7	742.2	626.1	490.1	365.4
50°	1991.5	1750.7	1552.4	1365.5	1209.6	1056.7	906.5	787.5	668.6	526.9	388.1
47.5°	2198.3	1932.0	1682.7	1478.8	1294.6	1127.5	968.9	827.2	708.2	560.9	410.8
45°	2439.1	2104.8	1830.1	1589.3	1376.8	1201.2	1031.2	869.7	742.2	594.9	433.4
42.5°	2671.4	2308.8	1983.0	1711.1	1470.3	1272.0	1087.8	915.0	776.2	628.9	453.3
40°	2946.2	2512.8	2130.3	1827.2	1563.8	1340.0	1144.5	963.2	807.4	660.1	473.1
37.5°	3209.7	2719.6	2308.8	1954.7	1654.4	1408.0	1201.2	1008.5	835.7	691.2	498.6
35°	3470.3	2949.1	2478.8	2073.7	1747.9	1484.4	1257.8	1051.0	864.0	716.7	521.3
32.5°	3719.6	3164.4	2651.6	2206.8	1849.9	1555.3	1308.8	1090.7	892.4	739.4	543.9
30°	3951.9	3368.3	2821.6	2342.8	1943.4	1620.4	1357.0	1130.3	926.4	759.2	566.6
27.5°	4164.4	3566.6	2991.5	2470.3	2031.2	1679.9	1408.0	1167.2	954.7	779.0	586.4
25°	4357.0	3745.1	3147.4	2586.4	2110.5	1745.1	1456.1	1204.0	980.2	796.0	603.4
22.5°	4538.3	3909.4	3289.0	2702.6	2206.8	1810.2	1501.4	1238.0	1005.7	813.0	620.4
20°	4697.0	4059.5	3425.0	2818.7	2291.8	1869.7	1541.1	1269.1	1028.3	824.4	637.4
17.5°	4824.4	4192.7	3546.8	2920.7	2365.5	1920.7	1575.1	1297.5	1048.2	838.5	648.7
15°	4937.7	4306.0	3648.8	3008.5	2430.6	1963.2	1606.3	1320.1	1065.2	847.0	662.9
12.5°	5034.1	4402.3	3736.6	3085.0	2487.3	2000.0	1631.8	1337.1	1079.3	855.5	671.4
10°	5113.4	4478.8	3810.3	3144.5	2532.6	2028.4	1651.6	1354.1	1090.7	864.0	679.9
7.5°	5172.9	4535.5	3864.1	3195.5	2569.4	2048.2	1668.6	1365.5	1102.0	869.7	694.1
5°	5218.2	4583.6	3906.6	3229.5	2597.8	2076.5	1688.4	1379.6	1113.3	875.4	694.1
2.5°	5252.2	4623.3	3940.6	3257.8	2620.4	2070.9	1688.4	1376.8	1113.3	875.4	691.2
0°	5246.5	4626.1	3937.7	3257.8	2620.4	2065.2	1688.4	1374.0	1113.3	875.4	691.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	19.8	14.2	5.7	0.0
85°	42.5	28.3	14.2	0.0
82.5°	62.3	39.7	19.8	0.0
80°	82.2	53.8	25.5	0.0
77.5°	104.8	68.0	34.0	0.0
75°	124.6	79.3	39.7	0.0
72.5°	144.5	93.5	45.3	0.0
70°	161.5	104.8	51.0	0.0
67.5°	178.5	119.0	59.5	0.0
65°	192.6	130.3	65.2	0.0
62.5°	204.0	144.5	70.8	0.0
60°	218.1	155.8	76.5	0.0
57.5°	229.5	164.3	82.2	0.0
55°	240.8	170.0	87.8	0.0
52.5°	252.1	178.5	93.5	0.0
50°	263.5	187.0	99.2	0.0
47.5°	274.8	192.6	102.0	0.0
45°	291.8	201.1	107.7	0.0
42.5°	306.0	206.8	113.3	0.0
40°	320.1	212.5	116.1	0.0
37.5°	334.3	218.1	121.8	0.0
35°	348.4	223.8	124.6	0.0
32.5°	359.8	229.5	127.5	0.0
30°	371.1	235.1	130.3	0.0
27.5°	382.4	238.0	133.1	0.0
25°	390.9	243.6	136.0	0.0
22.5°	399.4	246.5	138.8	0.0
20°	405.1	249.3	141.6	0.0
17.5°	413.6	252.1	144.5	0.0
15°	416.4	255.0	150.1	0.0
12.5°	422.1	257.8	150.1	0.0
10°	424.9	260.6	150.1	0.0
7.5°	430.6	260.6	150.1	0.0
5°	427.8	260.6	150.1	0.0
2.5°	427.8	260.6	150.1	0.0
0°	424.9	260.6	150.1	0.0

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