

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: P628241

Luminaire Tested: **IFLD-S-SA2E-735-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628241
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-735-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

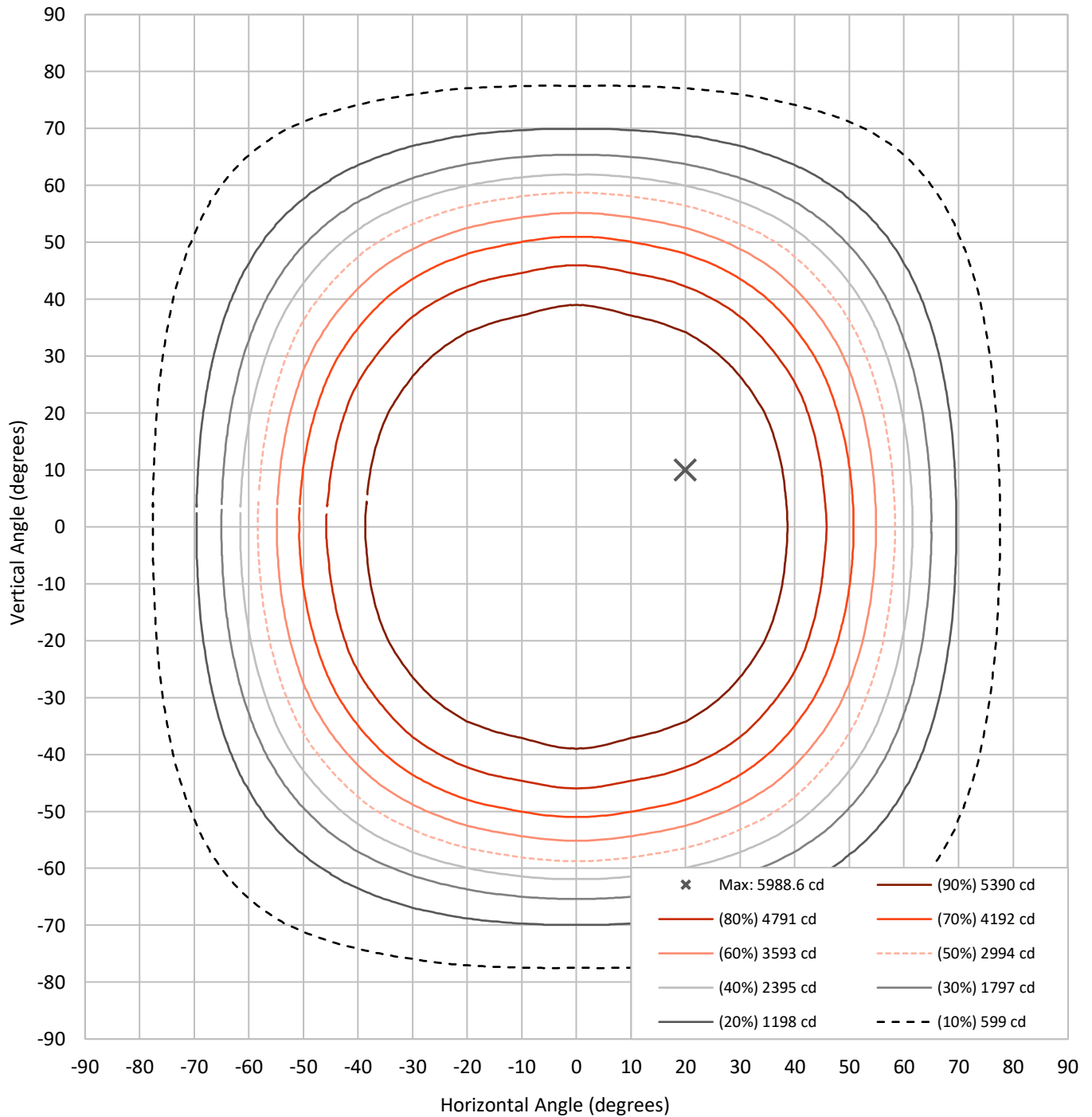
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18372.2 lumens	Max Intensity:	5988.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	117.6 lumens/watt		
Luminous Opening:	Rectangular (W 1' 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:	11273.5 lumens	Field Lumens:	13515 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%
Input Watts (W):	156.2		
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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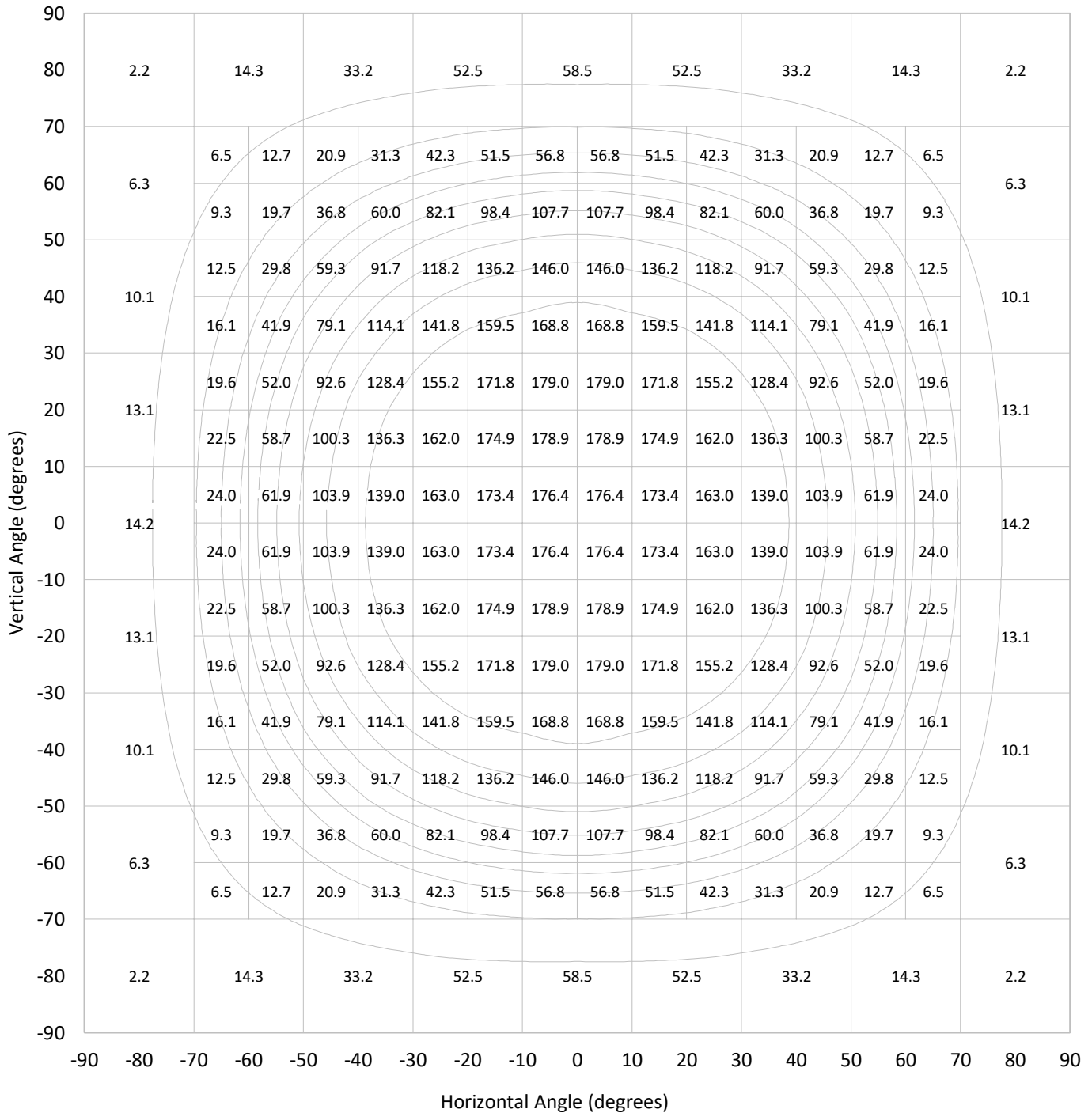
Iso-Candela Plot





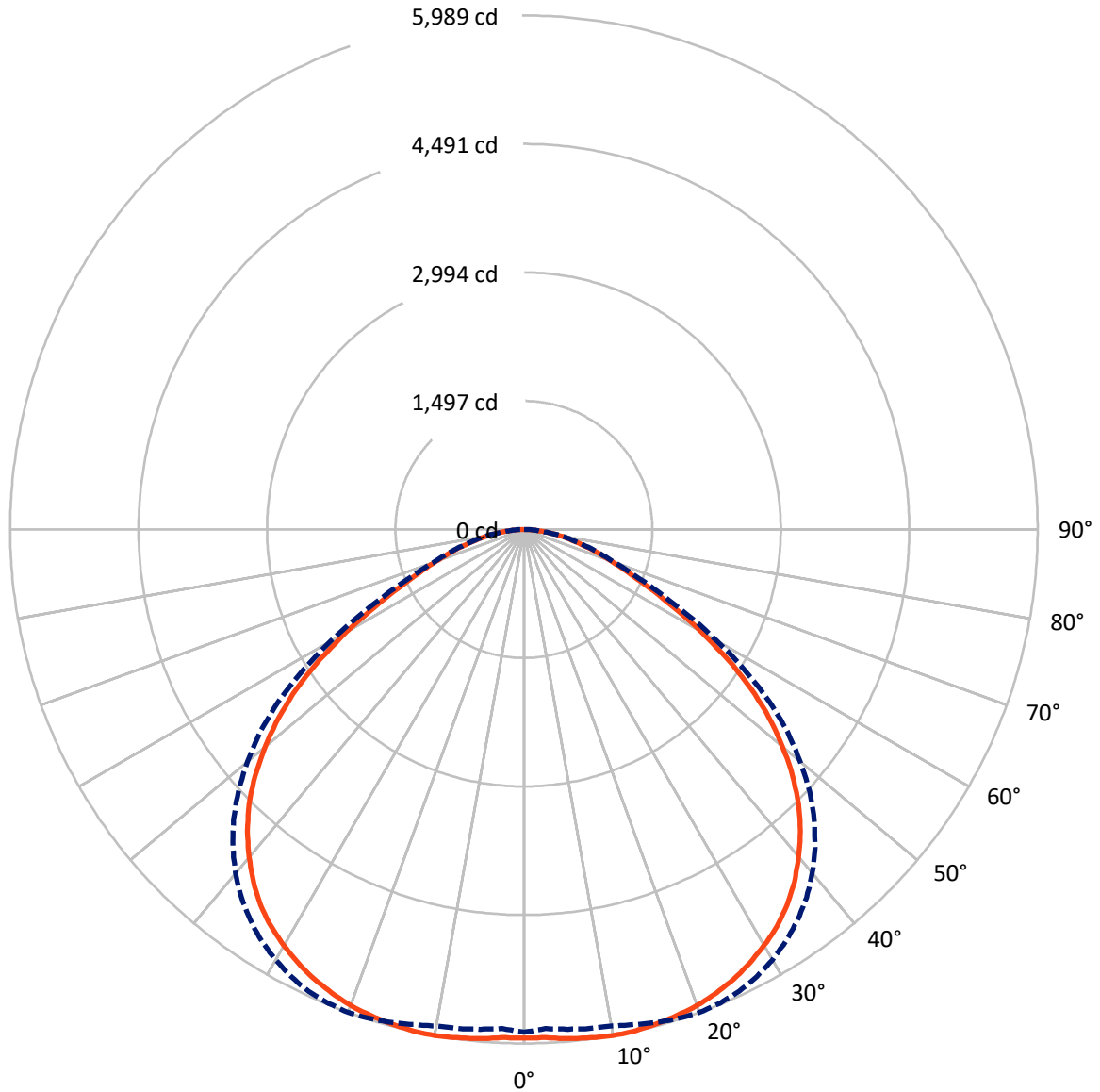
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Lumen Table



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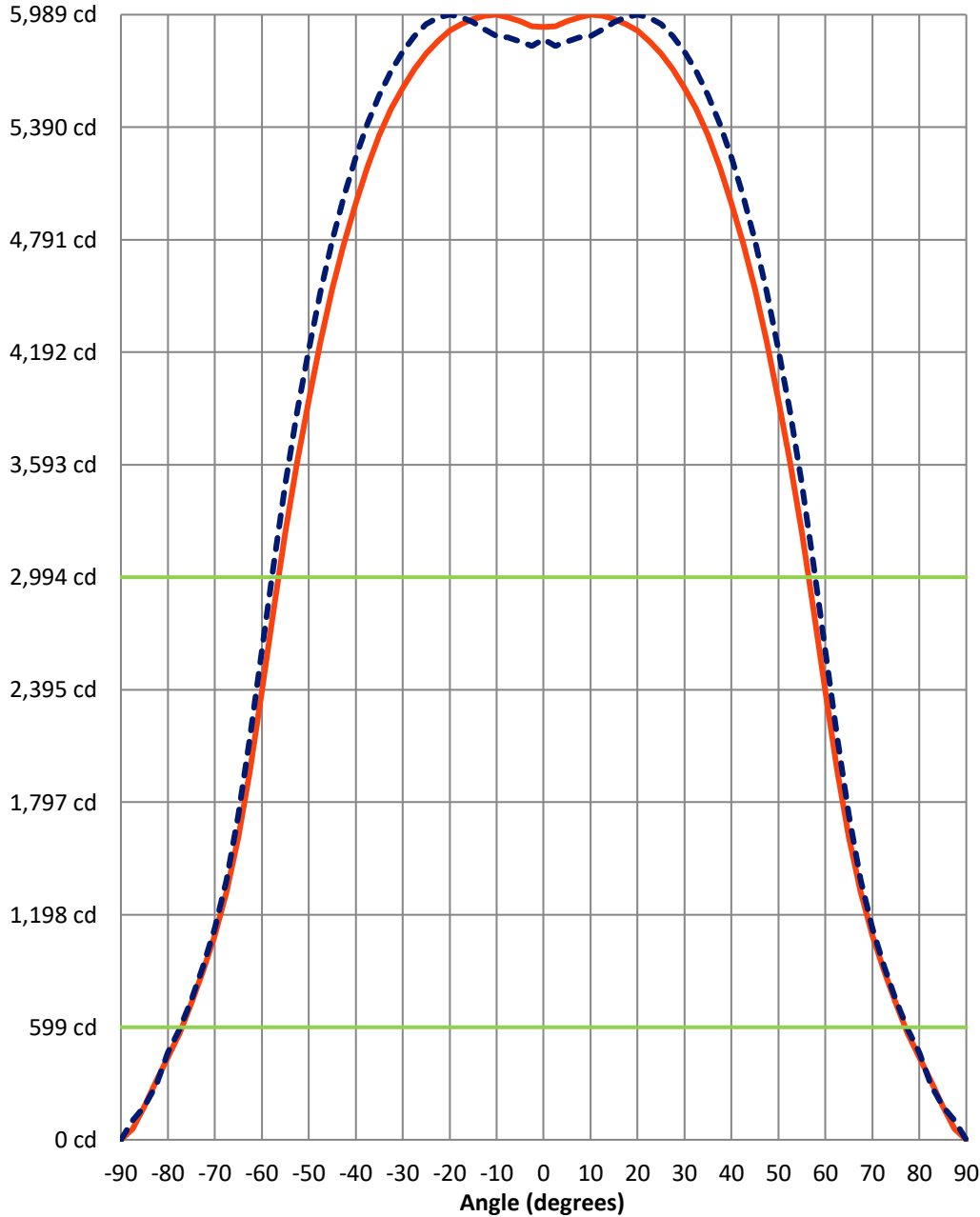
Luminous Intensity Polar Plot



— 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: 11273.5
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 13515
 Efficiency: 73.6%

Spill:
 Lumens: 4857.1
 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°	48.3	52.2	54.1	56.1	58.0	59.9	61.9	59.9	58.0	58.0	56.1
85°	129.5	133.4	135.3	148.8	162.4	170.1	179.8	177.8	177.8	175.9	174.0
82.5°	259.0	270.6	280.3	293.8	301.6	313.2	320.9	315.1	311.2	303.5	297.7
80°	460.1	463.9	465.9	467.8	458.1	456.2	452.3	446.5	438.8	429.1	419.5
77.5°	585.7	589.6	593.4	589.6	587.6	585.7	579.9	574.1	566.4	558.7	547.1
75°	775.2	775.2	775.2	769.4	765.5	759.7	750.0	740.4	726.8	711.4	694.0
72.5°	976.2	974.3	972.3	960.7	951.1	939.5	925.9	914.3	898.9	881.5	858.3
70°	1186.9	1190.8	1192.7	1177.2	1165.6	1150.2	1132.8	1111.5	1088.3	1063.2	1030.3
67.5°	1476.8	1473.0	1469.1	1447.9	1432.4	1411.1	1386.0	1355.1	1320.3	1281.6	1235.2
65°	1836.4	1842.2	1830.6	1809.3	1780.3	1745.5	1706.9	1662.4	1610.2	1552.2	1486.5
62.5°	2271.3	2281.0	2267.5	2240.4	2203.7	2157.3	2103.2	2039.4	1967.8	1886.7	1805.5
60°	2766.2	2764.3	2739.1	2702.4	2654.1	2596.1	2536.2	2466.6	2385.4	2290.7	2192.1
57.5°	3220.5	3216.6	3185.7	3148.9	3100.6	3038.8	2975.0	2901.5	2816.5	2715.9	2601.9
55°	3628.3	3624.5	3593.5	3554.9	3504.6	3442.8	3384.8	3315.2	3232.1	3125.7	3004.0
52.5°	3989.8	3991.7	3964.7	3922.2	3868.0	3808.1	3752.0	3682.5	3603.2	3496.9	3379.0
50°	4322.3	4320.4	4291.4	4252.7	4202.4	4144.5	4088.4	4018.8	3935.7	3833.2	3719.2
47.5°	4631.6	4627.7	4594.9	4552.3	4500.1	4449.9	4397.7	4335.8	4248.8	4146.4	4032.3
45°	4890.6	4882.9	4850.0	4809.4	4759.2	4714.7	4668.3	4621.9	4529.1	4434.4	4326.2
42.5°	5112.9	5111.0	5078.1	5037.5	4987.3	4948.6	4906.1	4848.1	4770.8	4683.8	4577.5
40°	5325.5	5310.1	5277.2	5238.6	5192.2	5159.3	5116.8	5058.8	4983.4	4898.3	4795.9
37.5°	5484.1	5486.0	5451.2	5408.7	5368.1	5337.1	5298.5	5244.4	5178.6	5095.5	4993.1
35°	5634.8	5625.2	5596.2	5559.4	5522.7	5487.9	5447.3	5400.9	5346.8	5269.5	5172.8
32.5°	5733.4	5746.9	5712.2	5673.5	5652.2	5625.2	5582.6	5534.3	5486.0	5408.7	5321.7
30°	5841.7	5830.1	5803.0	5770.1	5754.7	5737.3	5700.6	5654.2	5598.1	5528.5	5447.3
27.5°	5917.1	5911.3	5878.4	5847.5	5839.7	5824.3	5795.3	5754.7	5698.6	5631.0	5555.6
25°	5949.9	5953.8	5922.9	5905.5	5905.5	5895.8	5872.6	5837.8	5781.7	5719.9	5646.4
22.5°	5965.4	5961.5	5940.3	5936.4	5946.1	5938.3	5928.7	5897.7	5847.5	5797.2	5735.4
20°	5975.0	5948.0	5928.7	5944.1	5955.7	5953.8	5946.1	5926.7	5903.5	5861.0	5806.9
17.5°	5953.8	5936.4	5913.2	5936.4	5961.5	5963.5	5955.7	5944.1	5938.3	5911.3	5862.9
15°	5901.6	5888.1	5891.9	5915.1	5944.1	5953.8	5959.6	5973.1	5965.4	5944.1	5901.6
12.5°	5866.8	5849.4	5866.8	5890.0	5905.5	5911.3	5957.7	5982.8	5982.8	5963.5	5936.4
10°	5857.1	5822.3	5845.5	5866.8	5874.5	5909.3	5948.0	5975.0	5988.6	5973.1	5938.3
7.5°	5837.8	5814.6	5824.3	5833.9	5878.4	5903.5	5924.8	5953.8	5973.1	5971.2	5940.3
5°	5828.1	5799.1	5803.0	5843.6	5874.5	5891.9	5899.7	5924.8	5953.8	5959.6	5936.4
2.5°	5803.0	5789.5	5818.5	5822.3	5845.5	5859.1	5866.8	5890.0	5926.7	5940.3	5930.6
0°	5789.5	5770.1	5750.8	5766.3	5804.9	5833.9	5845.5	5880.3	5922.9	5936.4	5915.1



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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°	54.1	52.2	50.3	48.3	50.3	50.3	50.3	48.3	50.3	48.3	48.3
85°	168.2	160.4	154.6	146.9	139.2	133.4	125.6	117.9	116.0	114.0	110.2
82.5°	290.0	280.3	270.6	259.0	247.4	233.9	220.4	204.9	201.0	197.2	191.4
80°	407.9	394.3	380.8	367.3	355.7	342.1	326.7	309.3	297.7	288.0	276.4
77.5°	531.6	512.3	492.9	469.7	456.2	442.7	427.2	409.8	392.4	376.9	359.5
75°	672.7	651.4	632.1	608.9	583.8	558.7	533.5	510.3	485.2	462.0	438.8
72.5°	829.3	798.3	767.4	738.4	707.5	676.6	643.7	612.8	581.8	550.9	518.1
70°	993.6	954.9	916.3	877.6	837.0	796.4	757.8	719.1	680.4	639.8	603.1
67.5°	1186.9	1142.4	1092.2	1038.0	978.1	925.9	875.7	829.3	782.9	736.5	690.1
65°	1428.5	1366.7	1299.0	1225.6	1156.0	1086.4	1012.9	943.3	889.2	835.1	782.9
62.5°	1726.2	1639.2	1544.5	1449.8	1364.7	1273.9	1188.8	1098.0	1012.9	935.6	871.8
60°	2081.9	1964.0	1848.0	1726.2	1608.3	1484.6	1376.3	1264.2	1157.9	1063.2	970.4
57.5°	2474.3	2337.1	2197.9	2049.0	1888.6	1743.6	1596.7	1449.8	1324.1	1198.5	1094.1
55°	2872.5	2727.5	2571.0	2402.8	2226.9	2041.3	1842.2	1677.9	1505.8	1358.9	1223.6
52.5°	3251.4	3100.6	2938.2	2783.6	2572.9	2360.3	2141.8	1925.3	1724.3	1536.8	1372.5
50°	3589.7	3442.8	3286.2	3106.4	2911.2	2685.0	2441.4	2197.9	1960.1	1739.7	1534.8
47.5°	3899.0	3755.9	3599.3	3419.6	3241.7	2990.4	2744.9	2476.2	2211.4	1958.2	1718.5
45°	4188.9	4043.9	3881.6	3709.5	3504.6	3280.4	3027.2	2756.5	2472.4	2188.2	1911.8
42.5°	4451.8	4306.8	4142.5	3964.7	3761.7	3539.4	3293.9	3021.4	2735.3	2426.0	2122.5
40°	4681.8	4540.7	4382.2	4196.6	4007.2	3773.3	3531.7	3272.6	2976.9	2665.7	2331.3
37.5°	4882.9	4751.4	4594.9	4411.2	4210.2	4001.4	3752.0	3493.0	3226.3	2888.0	2545.8
35°	5060.7	4938.9	4778.5	4604.5	4407.3	4187.0	3953.1	3699.9	3411.8	3094.8	2762.3
32.5°	5215.4	5091.6	4944.7	4770.8	4579.4	4372.6	4132.9	3877.7	3605.1	3282.3	2920.8
30°	5346.8	5227.0	5087.8	4923.5	4739.8	4534.9	4301.0	4043.9	3765.6	3444.7	3087.1
27.5°	5460.9	5346.8	5211.5	5058.8	4882.9	4685.7	4449.9	4190.8	3906.7	3597.4	3239.8
25°	5559.4	5449.3	5323.6	5178.6	5004.7	4811.4	4589.1	4318.4	4034.3	3723.0	3369.3
22.5°	5648.4	5542.0	5416.4	5275.3	5116.8	4923.5	4699.2	4430.5	4142.5	3835.2	3487.2
20°	5727.6	5629.0	5505.3	5360.3	5201.8	5006.6	4784.3	4529.1	4239.2	3937.6	3593.5
17.5°	5791.4	5704.4	5580.7	5428.0	5269.5	5080.0	4863.5	4629.6	4322.3	4024.6	3682.5
15°	5835.9	5750.8	5638.7	5484.1	5329.4	5141.9	4925.4	4683.8	4397.7	4094.2	3755.9
12.5°	5866.8	5775.9	5671.6	5528.5	5373.9	5188.3	4977.6	4739.8	4461.5	4156.1	3819.7
10°	5874.5	5791.4	5687.0	5559.4	5408.7	5228.9	5022.1	4786.2	4513.7	4204.4	3871.9
7.5°	5878.4	5799.1	5704.4	5582.6	5433.8	5259.8	5054.9	4823.0	4552.3	4245.0	3910.6
5°	5876.5	5801.1	5716.0	5598.1	5449.3	5277.2	5076.2	4848.1	4579.4	4272.0	3939.6
2.5°	5870.7	5803.0	5723.8	5609.7	5466.7	5296.5	5097.4	4877.1	4608.4	4295.2	3962.7
0°	5886.1	5828.1	5727.6	5605.8	5470.5	5296.5	5095.5	4880.9	4612.3	4293.3	3960.8



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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°	48.3	46.4	46.4	44.5	42.5	40.6	36.7	34.8	30.9	25.1	19.3
85°	104.4	98.6	92.8	88.9	85.1	81.2	75.4	69.6	61.9	50.3	38.7
82.5°	183.6	172.0	160.4	146.9	135.3	123.7	114.0	104.4	92.8	75.4	58.0
80°	262.9	245.5	228.1	208.8	191.4	172.0	154.6	139.2	123.7	100.5	77.3
77.5°	342.1	319.0	293.8	270.6	245.5	220.4	195.2	174.0	150.8	123.7	96.7
75°	415.6	388.5	365.3	332.5	301.6	268.7	235.8	206.8	177.8	145.0	116.0
72.5°	489.1	454.3	421.4	390.5	355.7	315.1	278.4	241.6	204.9	166.2	131.4
70°	562.5	520.0	479.4	442.7	404.0	363.4	319.0	276.4	232.0	185.6	145.0
67.5°	637.9	589.6	543.2	496.8	452.3	405.9	359.5	311.2	259.0	204.9	160.4
65°	721.0	661.1	605.0	552.9	500.7	450.4	398.2	346.0	288.0	226.2	174.0
62.5°	804.1	738.4	672.7	607.0	549.0	492.9	436.9	378.9	315.1	249.4	187.5
60°	893.1	817.7	742.3	668.8	597.3	535.5	473.6	411.7	344.1	270.6	201.0
57.5°	991.7	900.8	815.7	732.6	651.4	578.0	510.3	444.6	369.2	291.9	216.5
55°	1103.8	991.7	891.1	798.3	709.4	620.5	547.1	479.4	398.2	313.2	233.9
52.5°	1221.7	1092.2	970.4	866.0	771.3	670.8	581.8	506.5	427.2	334.4	249.4
50°	1358.9	1194.6	1059.3	931.7	825.4	721.0	618.6	537.4	456.2	359.5	264.8
47.5°	1500.0	1318.3	1148.2	1009.1	883.4	769.4	661.1	564.4	483.3	382.7	280.3
45°	1664.4	1436.3	1248.7	1084.4	939.5	819.6	703.6	593.4	506.5	405.9	295.8
42.5°	1822.9	1575.4	1353.1	1167.6	1003.3	867.9	742.3	624.4	529.7	429.1	309.3
40°	2010.4	1714.6	1453.7	1246.8	1067.0	914.3	781.0	657.2	550.9	450.4	322.8
37.5°	2190.1	1855.7	1575.4	1333.8	1128.9	960.7	819.6	688.2	570.2	471.7	340.2
35°	2368.0	2012.3	1691.4	1415.0	1192.7	1012.9	858.3	717.2	589.6	489.1	355.7
32.5°	2538.1	2159.2	1809.3	1505.8	1262.3	1061.2	893.1	744.2	608.9	504.5	371.1
30°	2696.6	2298.4	1925.3	1598.6	1326.1	1105.7	925.9	771.3	632.1	518.1	386.6
27.5°	2841.6	2433.7	2041.3	1685.6	1386.0	1146.3	960.7	796.4	651.4	531.6	400.1
25°	2973.0	2555.5	2147.6	1764.9	1440.1	1190.8	993.6	821.5	668.8	543.2	411.7
22.5°	3096.7	2667.6	2244.3	1844.1	1505.8	1235.2	1024.5	844.7	686.2	554.8	423.3
20°	3205.0	2770.1	2337.1	1923.4	1563.8	1275.8	1051.6	866.0	701.7	562.5	434.9
17.5°	3292.0	2860.9	2420.2	1993.0	1614.1	1310.6	1074.8	885.3	715.2	572.2	442.7
15°	3369.3	2938.2	2489.8	2052.9	1658.6	1339.6	1096.0	900.8	726.8	578.0	452.3
12.5°	3435.0	3004.0	2549.7	2105.1	1697.2	1364.7	1113.4	912.4	736.5	583.8	458.1
10°	3489.2	3056.1	2599.9	2145.7	1728.1	1384.1	1127.0	924.0	744.2	589.6	463.9
7.5°	3529.7	3094.8	2636.7	2180.5	1753.3	1397.6	1138.6	931.7	752.0	593.4	473.6
5°	3560.7	3127.7	2665.7	2203.7	1772.6	1416.9	1152.1	941.4	759.7	597.3	473.6
2.5°	3583.9	3154.7	2688.9	2223.0	1788.1	1413.1	1152.1	939.5	759.7	597.3	471.7
0°	3580.0	3156.7	2686.9	2223.0	1788.1	1409.2	1152.1	937.5	759.7	597.3	471.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	13.5	9.7	3.9	0.0
85°	29.0	19.3	9.7	0.0
82.5°	42.5	27.1	13.5	0.0
80°	56.1	36.7	17.4	0.0
77.5°	71.5	46.4	23.2	0.0
75°	85.1	54.1	27.1	0.0
72.5°	98.6	63.8	30.9	0.0
70°	110.2	71.5	34.8	0.0
67.5°	121.8	81.2	40.6	0.0
65°	131.4	88.9	44.5	0.0
62.5°	139.2	98.6	48.3	0.0
60°	148.8	106.3	52.2	0.0
57.5°	156.6	112.1	56.1	0.0
55°	164.3	116.0	59.9	0.0
52.5°	172.0	121.8	63.8	0.0
50°	179.8	127.6	67.7	0.0
47.5°	187.5	131.4	69.6	0.0
45°	199.1	137.2	73.5	0.0
42.5°	208.8	141.1	77.3	0.0
40°	218.4	145.0	79.3	0.0
37.5°	228.1	148.8	83.1	0.0
35°	237.8	152.7	85.1	0.0
32.5°	245.5	156.6	87.0	0.0
30°	253.2	160.4	88.9	0.0
27.5°	261.0	162.4	90.9	0.0
25°	266.8	166.2	92.8	0.0
22.5°	272.6	168.2	94.7	0.0
20°	276.4	170.1	96.7	0.0
17.5°	282.2	172.0	98.6	0.0
15°	284.2	174.0	102.5	0.0
12.5°	288.0	175.9	102.5	0.0
10°	290.0	177.8	102.5	0.0
7.5°	293.8	177.8	102.5	0.0
5°	291.9	177.8	102.5	0.0
2.5°	291.9	177.8	102.5	0.0
0°	290.0	177.8	102.5	0.0

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