

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: P628183

Luminaire Tested: **IFLD-S-SA2E-727-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628183
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-727-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (32) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

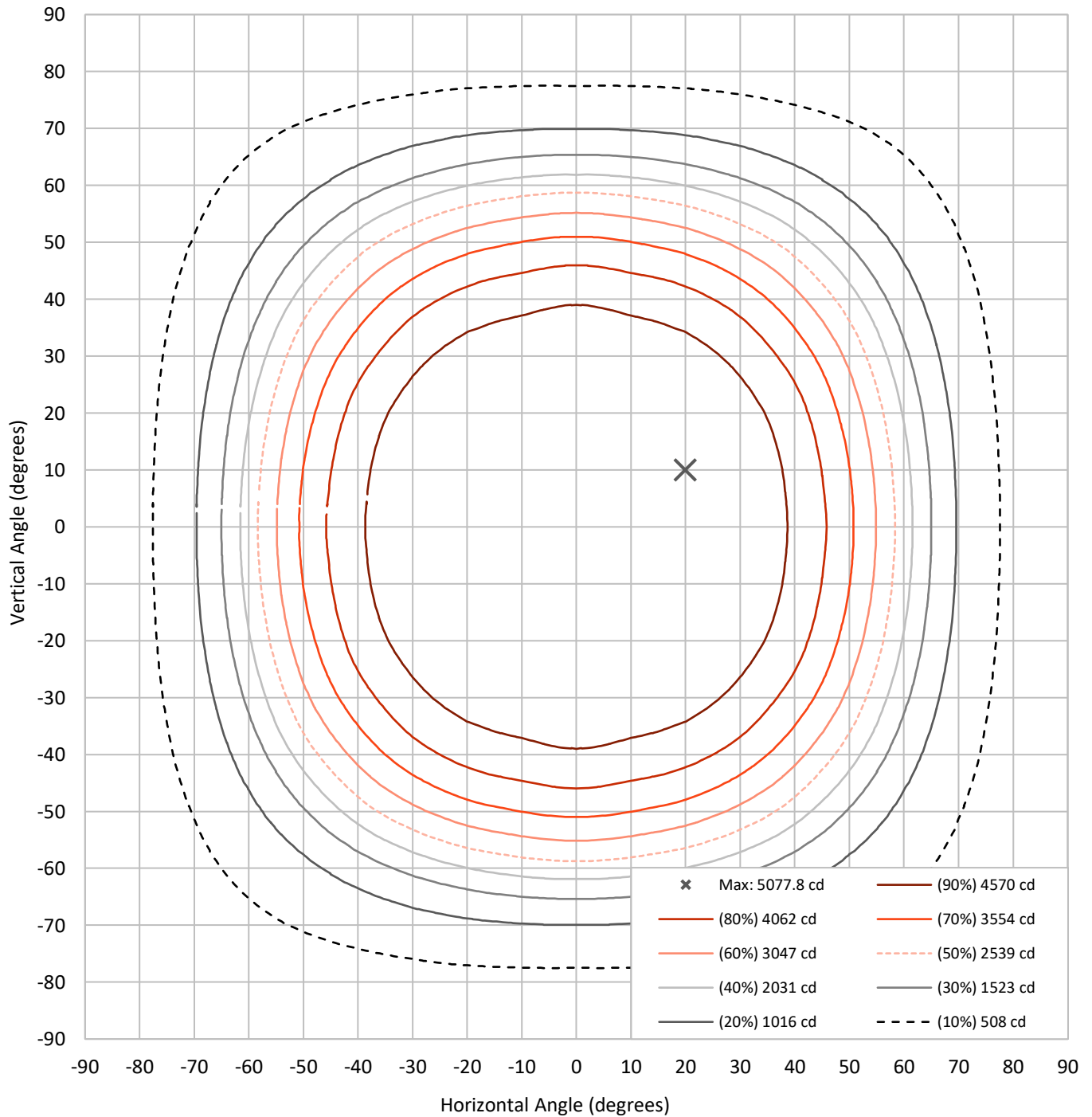
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	15578.1 lumens	Max Intensity:	5077.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	99.7 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:	9559 lumens	Field Lumens:	11459.6 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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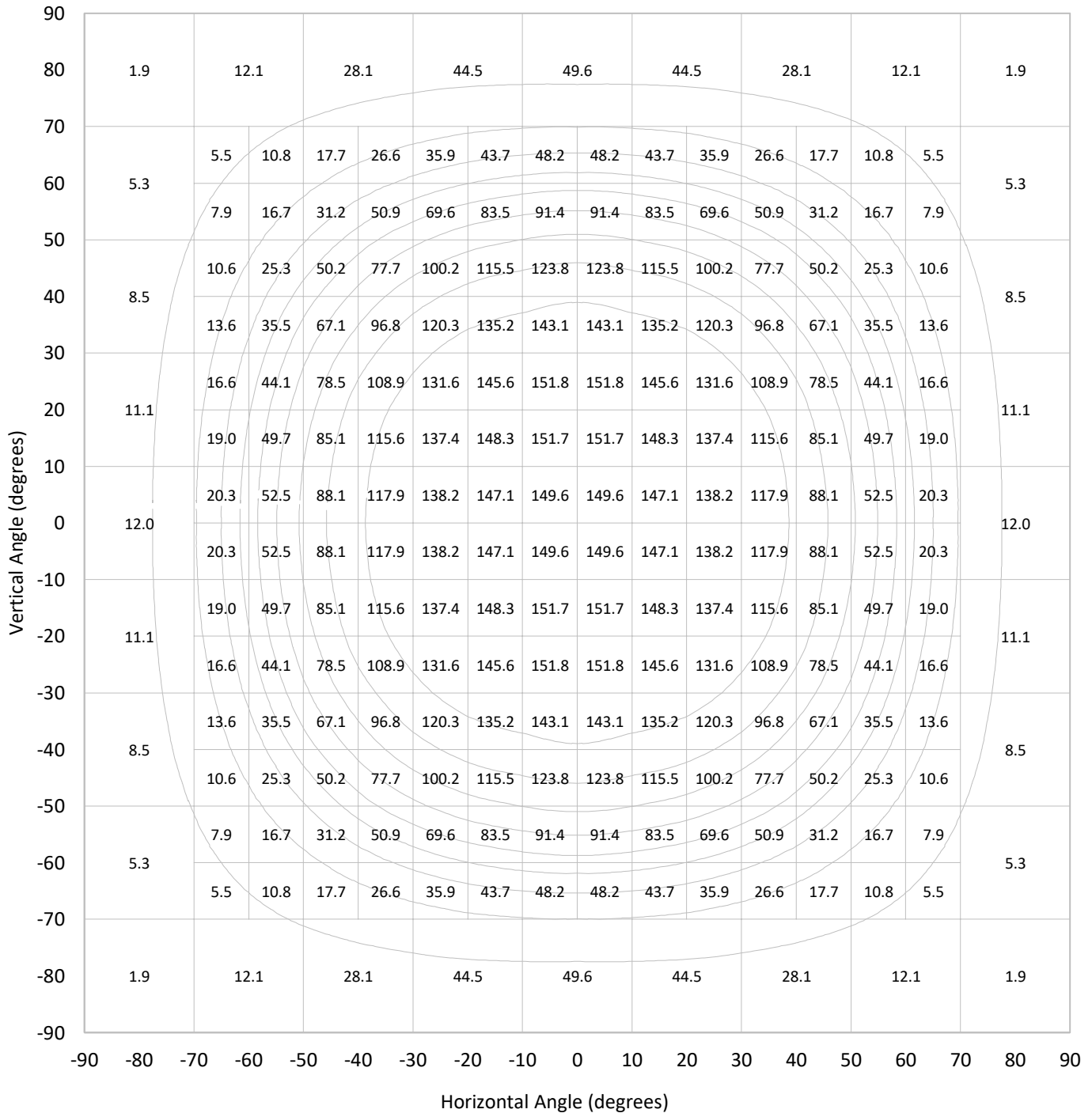
Iso-Candela Plot





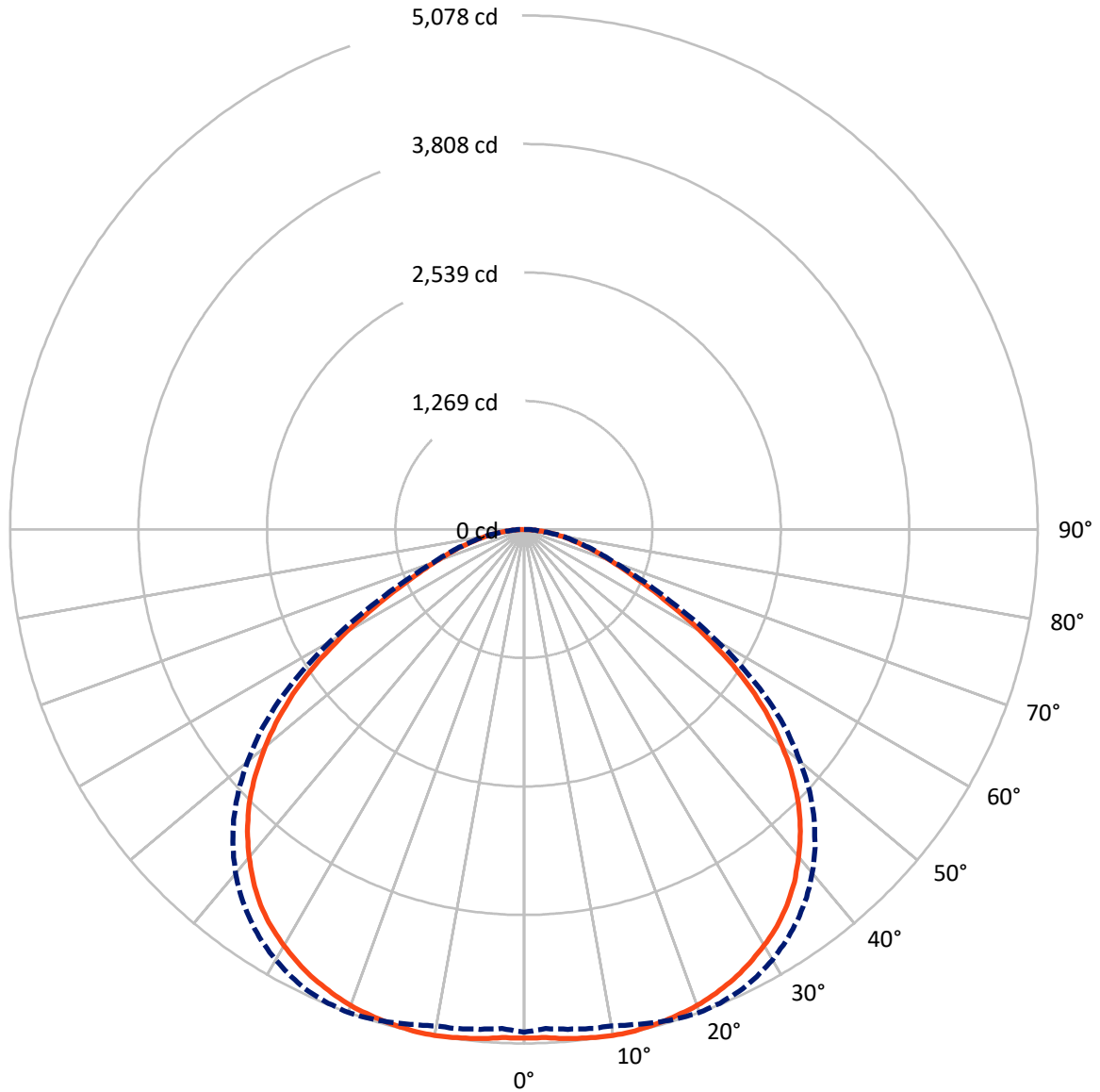
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Lumen Table



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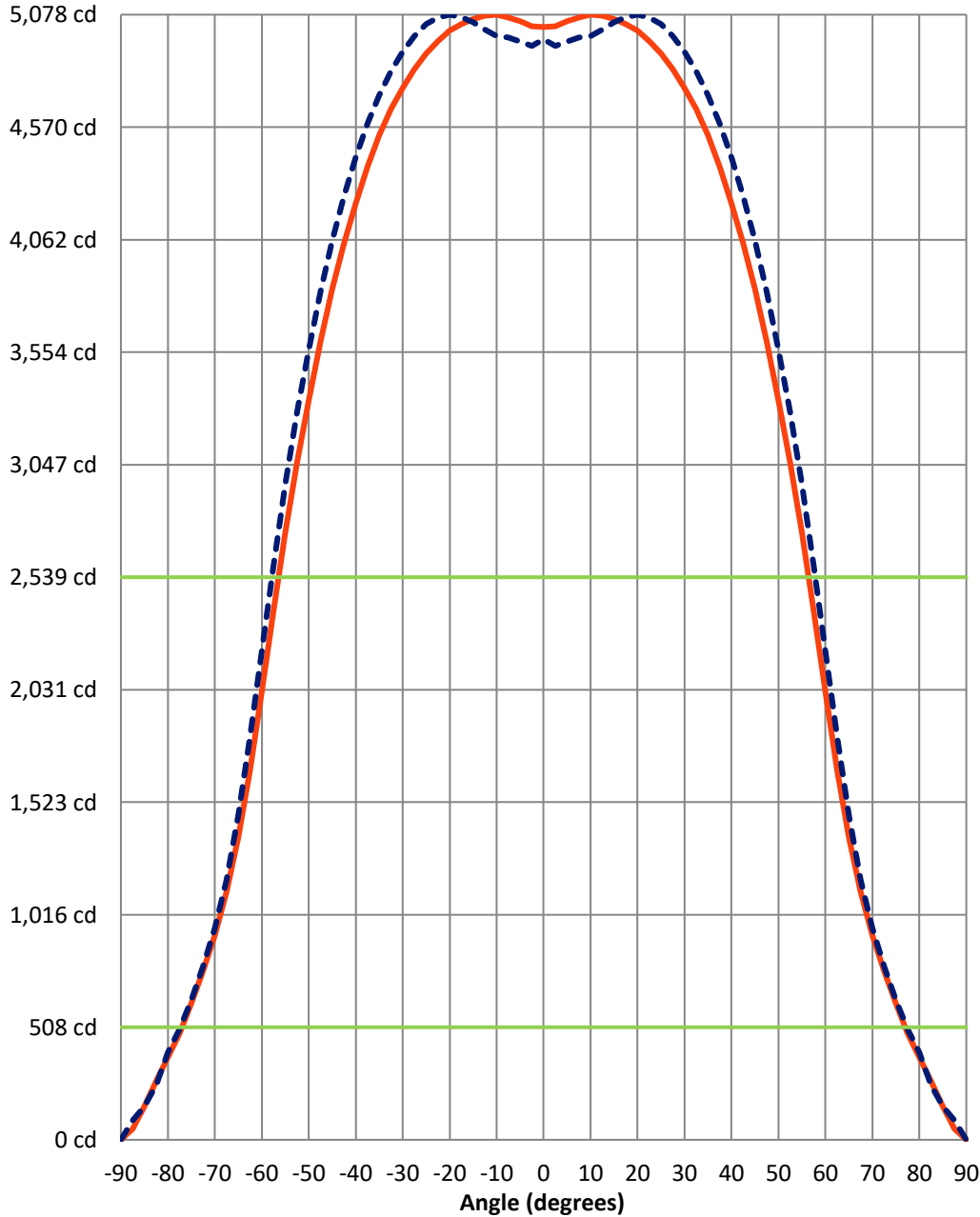
Luminous Intensity Polar Plot



— 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: 9559
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 11459.6
 Efficiency: 73.6%

Spill:
 Lumens: 4118.4
 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°	41.0	44.3	45.9	47.5	49.2	50.8	52.5	50.8	49.2	49.2	47.5
85°	109.8	113.1	114.7	126.2	137.7	144.2	152.4	150.8	150.8	149.2	147.5
82.5°	219.6	229.5	237.7	249.1	255.7	265.5	272.1	267.2	263.9	257.3	252.4
80°	390.1	393.4	395.0	396.7	388.5	386.8	383.5	378.6	372.1	363.9	355.7
77.5°	496.6	499.9	503.2	499.9	498.3	496.6	491.7	486.8	480.2	473.7	463.9
75°	657.3	657.3	657.3	652.3	649.1	644.2	636.0	627.8	616.3	603.2	588.4
72.5°	827.7	826.1	824.4	814.6	806.4	796.6	785.1	775.3	762.2	747.4	727.7
70°	1006.4	1009.7	1011.3	998.2	988.4	975.2	960.5	942.5	922.8	901.5	873.6
67.5°	1252.2	1249.0	1245.7	1227.7	1214.5	1196.5	1175.2	1149.0	1119.5	1086.7	1047.4
65°	1557.1	1562.0	1552.2	1534.2	1509.6	1480.1	1447.3	1409.6	1365.3	1316.2	1260.4
62.5°	1925.9	1934.1	1922.6	1899.7	1868.5	1829.2	1783.3	1729.2	1668.6	1599.7	1530.9
60°	2345.5	2343.9	2322.6	2291.4	2250.4	2201.3	2150.5	2091.4	2022.6	1942.3	1858.7
57.5°	2730.7	2727.4	2701.2	2670.0	2629.1	2576.6	2522.5	2460.2	2388.1	2302.9	2206.2
55°	3076.5	3073.2	3047.0	3014.2	2971.6	2919.2	2870.0	2811.0	2740.5	2650.4	2547.1
52.5°	3383.0	3384.7	3361.7	3325.7	3279.8	3229.0	3181.4	3122.4	3055.2	2965.1	2865.1
50°	3664.9	3663.3	3638.7	3605.9	3563.3	3514.2	3466.6	3407.6	3337.1	3250.3	3153.6
47.5°	3927.2	3923.9	3896.1	3860.0	3815.7	3773.1	3728.9	3676.4	3602.7	3515.8	3419.1
45°	4146.8	4140.3	4112.4	4078.0	4035.4	3997.7	3958.3	3919.0	3840.3	3760.0	3668.2
42.5°	4335.3	4333.7	4305.8	4271.4	4228.8	4196.0	4159.9	4110.8	4045.2	3971.4	3881.3
40°	4515.6	4502.5	4474.6	4441.9	4402.5	4374.7	4338.6	4289.4	4225.5	4153.4	4066.5
37.5°	4650.0	4651.7	4622.2	4586.1	4551.7	4525.5	4492.7	4446.8	4391.0	4320.6	4233.7
35°	4777.9	4769.7	4745.1	4713.9	4682.8	4653.3	4618.9	4579.5	4533.6	4468.1	4386.1
32.5°	4861.5	4872.9	4843.4	4810.6	4792.6	4769.7	4733.6	4692.6	4651.7	4586.1	4512.3
30°	4953.2	4943.4	4920.5	4892.6	4879.5	4864.7	4833.6	4794.3	4746.7	4687.7	4618.9
27.5°	5017.2	5012.3	4984.4	4958.2	4951.6	4938.5	4913.9	4879.5	4832.0	4774.6	4710.7
25°	5045.0	5048.3	5022.1	5007.3	5007.3	4999.1	4979.5	4950.0	4902.4	4850.0	4787.7
22.5°	5058.1	5054.9	5036.8	5033.6	5041.8	5035.2	5027.0	5000.8	4958.2	4915.5	4863.1
20°	5066.3	5043.4	5027.0	5040.1	5050.0	5048.3	5041.8	5025.4	5005.7	4969.6	4923.7
17.5°	5048.3	5033.6	5013.9	5033.6	5054.9	5056.5	5050.0	5040.1	5035.2	5012.3	4971.3
15°	5004.1	4992.6	4995.9	5015.5	5040.1	5048.3	5053.2	5064.7	5058.1	5040.1	5004.1
12.5°	4974.6	4959.8	4974.6	4994.2	5007.3	5012.3	5051.6	5072.9	5072.9	5056.5	5033.6
10°	4966.4	4936.9	4956.5	4974.6	4981.1	5010.6	5043.4	5066.3	5077.8	5064.7	5035.2
7.5°	4950.0	4930.3	4938.5	4946.7	4984.4	5005.7	5023.7	5048.3	5064.7	5063.1	5036.8
5°	4941.8	4917.2	4920.5	4954.9	4981.1	4995.9	5002.4	5023.7	5048.3	5053.2	5033.6
2.5°	4920.5	4909.0	4933.6	4936.9	4956.5	4968.0	4974.6	4994.2	5025.4	5036.8	5028.6
0°	4909.0	4892.6	4876.2	4889.3	4922.1	4946.7	4956.5	4986.0	5022.1	5033.6	5015.5



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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°	45.9	44.3	42.6	41.0	42.6	42.6	42.6	41.0	42.6	41.0	41.0
85°	142.6	136.0	131.1	124.6	118.0	113.1	106.5	100.0	98.3	96.7	93.4
82.5°	245.9	237.7	229.5	219.6	209.8	198.3	186.9	173.7	170.5	167.2	162.3
80°	345.8	334.4	322.9	311.4	301.6	290.1	277.0	262.3	252.4	244.2	234.4
77.5°	450.7	434.4	418.0	398.3	386.8	375.3	362.2	347.5	332.7	319.6	304.9
75°	570.4	552.4	536.0	516.3	495.0	473.7	452.4	432.7	411.4	391.7	372.1
72.5°	703.2	676.9	650.7	626.1	599.9	573.7	545.8	519.6	493.4	467.1	439.3
70°	842.5	809.7	776.9	744.1	709.7	675.3	642.5	609.7	577.0	542.5	511.4
67.5°	1006.4	968.7	926.1	880.2	829.4	785.1	742.5	703.2	663.8	624.5	585.1
65°	1211.3	1158.8	1101.5	1039.2	980.2	921.2	858.9	799.9	754.0	708.1	663.8
62.5°	1463.7	1389.9	1309.6	1229.3	1157.2	1080.1	1008.0	931.0	858.9	793.3	739.2
60°	1765.3	1665.3	1566.9	1463.7	1363.7	1258.8	1167.0	1071.9	981.8	901.5	822.8
57.5°	2098.0	1981.6	1863.6	1737.4	1601.4	1478.4	1353.9	1229.3	1122.8	1016.2	927.7
55°	2435.6	2312.7	2180.0	2037.4	1888.2	1730.9	1562.0	1422.7	1276.8	1152.3	1037.5
52.5°	2756.9	2629.1	2491.4	2360.3	2181.6	2001.3	1816.1	1632.5	1462.0	1303.1	1163.7
50°	3043.7	2919.2	2786.4	2634.0	2468.4	2276.7	2070.1	1863.6	1662.0	1475.2	1301.4
47.5°	3306.0	3184.7	3051.9	2899.5	2748.7	2535.6	2327.5	2099.6	1875.1	1660.4	1457.1
45°	3551.8	3428.9	3291.2	3145.4	2971.6	2781.5	2566.8	2337.3	2096.4	1855.4	1621.0
42.5°	3774.8	3651.8	3512.5	3361.7	3189.6	3001.1	2793.0	2561.9	2319.3	2057.0	1799.7
40°	3969.8	3850.2	3715.8	3558.4	3397.8	3199.5	2994.6	2774.9	2524.2	2260.3	1976.7
37.5°	4140.3	4028.8	3896.1	3740.3	3569.9	3392.9	3181.4	2961.8	2735.6	2448.8	2158.6
35°	4291.1	4187.8	4051.8	3904.2	3737.1	3550.2	3351.9	3137.2	2892.9	2624.1	2342.2
32.5°	4422.2	4317.3	4192.7	4045.2	3882.9	3707.6	3504.3	3288.0	3056.9	2783.1	2476.6
30°	4533.6	4432.0	4314.0	4174.7	4019.0	3845.2	3646.9	3428.9	3192.9	2920.8	2617.6
27.5°	4630.4	4533.6	4418.9	4289.4	4140.3	3973.1	3773.1	3553.5	3312.5	3050.3	2747.1
25°	4713.9	4620.5	4514.0	4391.0	4243.5	4079.6	3891.1	3661.7	3420.7	3156.8	2856.9
22.5°	4789.3	4699.2	4592.7	4473.0	4338.6	4174.7	3984.6	3756.7	3512.5	3251.9	2956.9
20°	4856.5	4773.0	4668.1	4545.1	4410.7	4245.2	4056.7	3840.3	3594.5	3338.8	3047.0
17.5°	4910.6	4836.9	4732.0	4602.5	4468.1	4307.5	4123.9	3925.6	3664.9	3412.5	3122.4
15°	4948.3	4876.2	4781.1	4650.0	4518.9	4359.9	4176.3	3971.4	3728.9	3471.5	3184.7
12.5°	4974.6	4897.5	4809.0	4687.7	4556.6	4399.2	4220.6	4019.0	3783.0	3524.0	3238.8
10°	4981.1	4910.6	4822.1	4713.9	4586.1	4433.7	4258.3	4058.3	3827.2	3565.0	3283.0
7.5°	4984.4	4917.2	4836.9	4733.6	4607.4	4459.9	4286.1	4089.5	3860.0	3599.4	3315.8
5°	4982.8	4918.8	4846.7	4746.7	4620.5	4474.6	4304.2	4110.8	3882.9	3622.3	3340.4
2.5°	4977.8	4920.5	4853.3	4756.6	4635.3	4491.0	4322.2	4135.4	3907.5	3642.0	3360.1
0°	4990.9	4941.8	4856.5	4753.3	4638.5	4491.0	4320.6	4138.6	3910.8	3640.4	3358.4



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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°	41.0	39.3	39.3	37.7	36.1	34.4	31.1	29.5	26.2	21.3	16.4
85°	88.5	83.6	78.7	75.4	72.1	68.8	63.9	59.0	52.5	42.6	32.8
82.5°	155.7	145.9	136.0	124.6	114.7	104.9	96.7	88.5	78.7	63.9	49.2
80°	222.9	208.2	193.4	177.0	162.3	145.9	131.1	118.0	104.9	85.2	65.6
77.5°	290.1	270.4	249.1	229.5	208.2	186.9	165.5	147.5	127.8	104.9	82.0
75°	352.4	329.5	309.8	281.9	255.7	227.8	200.0	175.4	150.8	122.9	98.3
72.5°	414.7	385.2	357.3	331.1	301.6	267.2	236.0	204.9	173.7	141.0	111.5
70°	477.0	440.9	406.5	375.3	342.6	308.1	270.4	234.4	196.7	157.4	122.9
67.5°	540.9	499.9	460.6	421.2	383.5	344.2	304.9	263.9	219.6	173.7	136.0
65°	611.4	560.6	513.0	468.8	424.5	381.9	337.6	293.4	244.2	191.8	147.5
62.5°	681.9	626.1	570.4	514.7	465.5	418.0	370.4	321.3	267.2	211.4	159.0
60°	757.2	693.3	629.4	567.1	506.5	454.0	401.6	349.1	291.8	229.5	170.5
57.5°	840.8	763.8	691.7	621.2	552.4	490.1	432.7	377.0	313.1	247.5	183.6
55°	935.9	840.8	755.6	676.9	601.5	526.1	463.9	406.5	337.6	265.5	198.3
52.5°	1035.9	926.1	822.8	734.3	654.0	568.8	493.4	429.4	362.2	283.6	211.4
50°	1152.3	1012.9	898.2	790.0	699.9	611.4	524.5	455.7	386.8	304.9	224.6
47.5°	1271.9	1117.8	973.6	855.6	749.1	652.3	560.6	478.6	409.8	324.5	237.7
45°	1411.2	1217.8	1058.8	919.5	796.6	695.0	596.6	503.2	429.4	344.2	250.8
42.5°	1545.6	1335.8	1147.3	990.0	850.7	735.9	629.4	529.4	449.1	363.9	262.3
40°	1704.6	1453.8	1232.6	1057.2	904.8	775.3	662.2	557.3	467.1	381.9	273.7
37.5°	1857.1	1573.5	1335.8	1131.0	957.2	814.6	695.0	583.5	483.5	399.9	288.5
35°	2007.9	1706.3	1434.2	1199.8	1011.3	858.9	727.7	608.1	499.9	414.7	301.6
32.5°	2152.1	1830.8	1534.2	1276.8	1070.3	899.8	757.2	631.0	516.3	427.8	314.7
30°	2286.5	1948.8	1632.5	1355.5	1124.4	937.5	785.1	654.0	536.0	439.3	327.8
27.5°	2409.4	2063.6	1730.9	1429.3	1175.2	972.0	814.6	675.3	552.4	450.7	339.3
25°	2520.9	2166.8	1821.0	1496.5	1221.1	1009.7	842.5	696.6	567.1	460.6	349.1
22.5°	2625.8	2261.9	1903.0	1563.7	1276.8	1047.4	868.7	716.3	581.9	470.4	359.0
20°	2717.6	2348.8	1981.6	1630.9	1326.0	1081.8	891.7	734.3	595.0	477.0	368.8
17.5°	2791.3	2425.8	2052.1	1689.9	1368.6	1111.3	911.3	750.7	606.5	485.2	375.3
15°	2856.9	2491.4	2111.1	1740.7	1406.3	1135.9	929.3	763.8	616.3	490.1	383.5
12.5°	2912.6	2547.1	2161.9	1784.9	1439.1	1157.2	944.1	773.6	624.5	495.0	388.5
10°	2958.5	2591.4	2204.5	1819.4	1465.3	1173.6	955.6	783.5	631.0	499.9	393.4
7.5°	2992.9	2624.1	2235.7	1848.9	1486.6	1185.0	965.4	790.0	637.6	503.2	401.6
5°	3019.2	2652.0	2260.3	1868.5	1503.0	1201.4	976.9	798.2	644.2	506.5	401.6
2.5°	3038.8	2675.0	2279.9	1884.9	1516.1	1198.2	976.9	796.6	644.2	506.5	399.9
0°	3035.5	2676.6	2278.3	1884.9	1516.1	1194.9	976.9	794.9	644.2	506.5	399.9



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	11.5	8.2	3.3	0.0
85°	24.6	16.4	8.2	0.0
82.5°	36.1	22.9	11.5	0.0
80°	47.5	31.1	14.8	0.0
77.5°	60.6	39.3	19.7	0.0
75°	72.1	45.9	22.9	0.0
72.5°	83.6	54.1	26.2	0.0
70°	93.4	60.6	29.5	0.0
67.5°	103.3	68.8	34.4	0.0
65°	111.5	75.4	37.7	0.0
62.5°	118.0	83.6	41.0	0.0
60°	126.2	90.1	44.3	0.0
57.5°	132.8	95.1	47.5	0.0
55°	139.3	98.3	50.8	0.0
52.5°	145.9	103.3	54.1	0.0
50°	152.4	108.2	57.4	0.0
47.5°	159.0	111.5	59.0	0.0
45°	168.8	116.4	62.3	0.0
42.5°	177.0	119.7	65.6	0.0
40°	185.2	122.9	67.2	0.0
37.5°	193.4	126.2	70.5	0.0
35°	201.6	129.5	72.1	0.0
32.5°	208.2	132.8	73.8	0.0
30°	214.7	136.0	75.4	0.0
27.5°	221.3	137.7	77.0	0.0
25°	226.2	141.0	78.7	0.0
22.5°	231.1	142.6	80.3	0.0
20°	234.4	144.2	82.0	0.0
17.5°	239.3	145.9	83.6	0.0
15°	240.9	147.5	86.9	0.0
12.5°	244.2	149.2	86.9	0.0
10°	245.9	150.8	86.9	0.0
7.5°	249.1	150.8	86.9	0.0
5°	247.5	150.8	86.9	0.0
2.5°	247.5	150.8	86.9	0.0
0°	245.9	150.8	86.9	0.0

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