

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: P628402

Luminaire Tested: **IFLD-L-SA7A-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628402
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7A-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (112) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

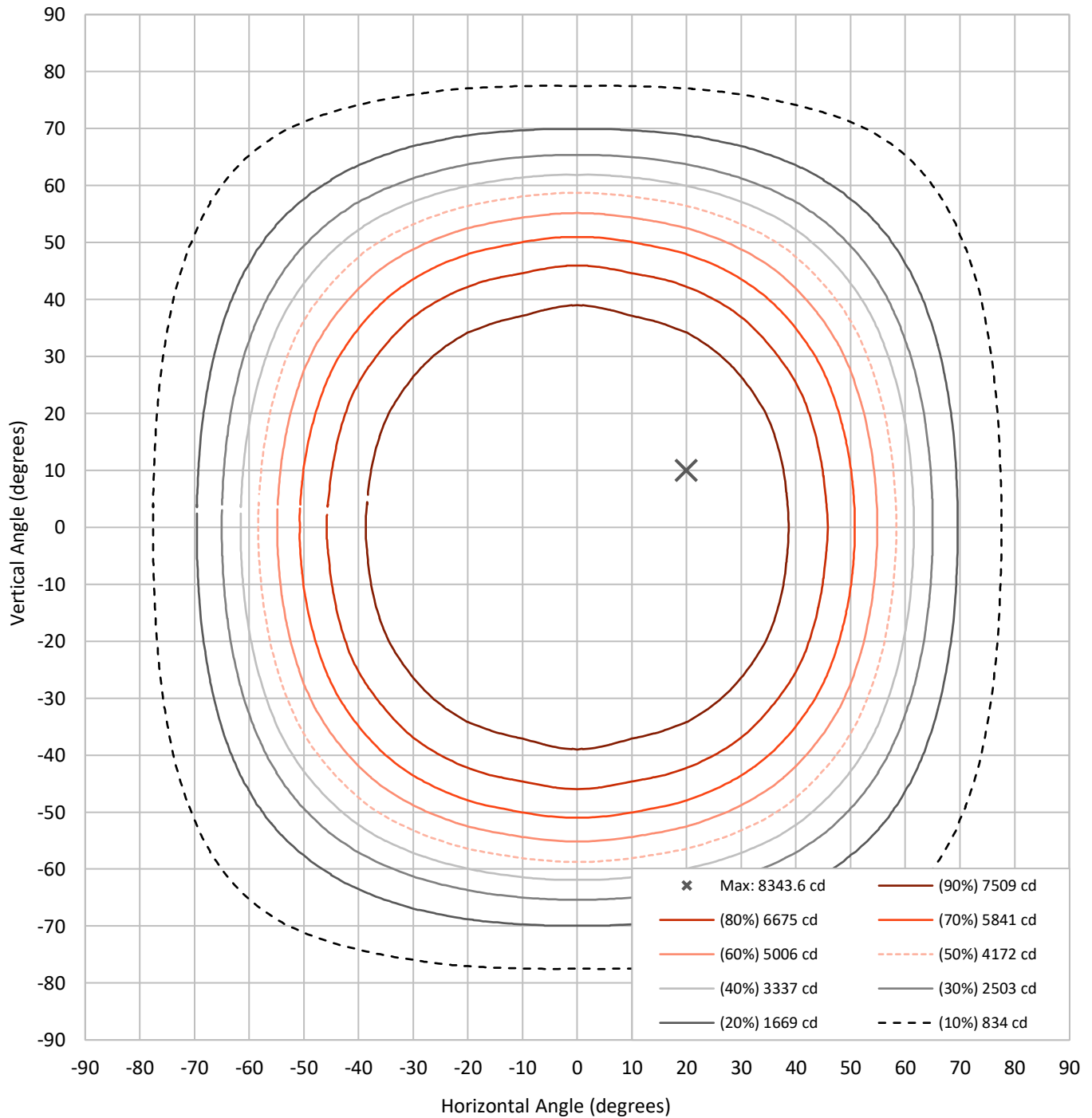
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	25596.9 lumens	Max Intensity:	8343.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	117.6 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:	15706.8 lumens	Field Lumens:	18829.8 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%
Input Watts (W):	217.6		
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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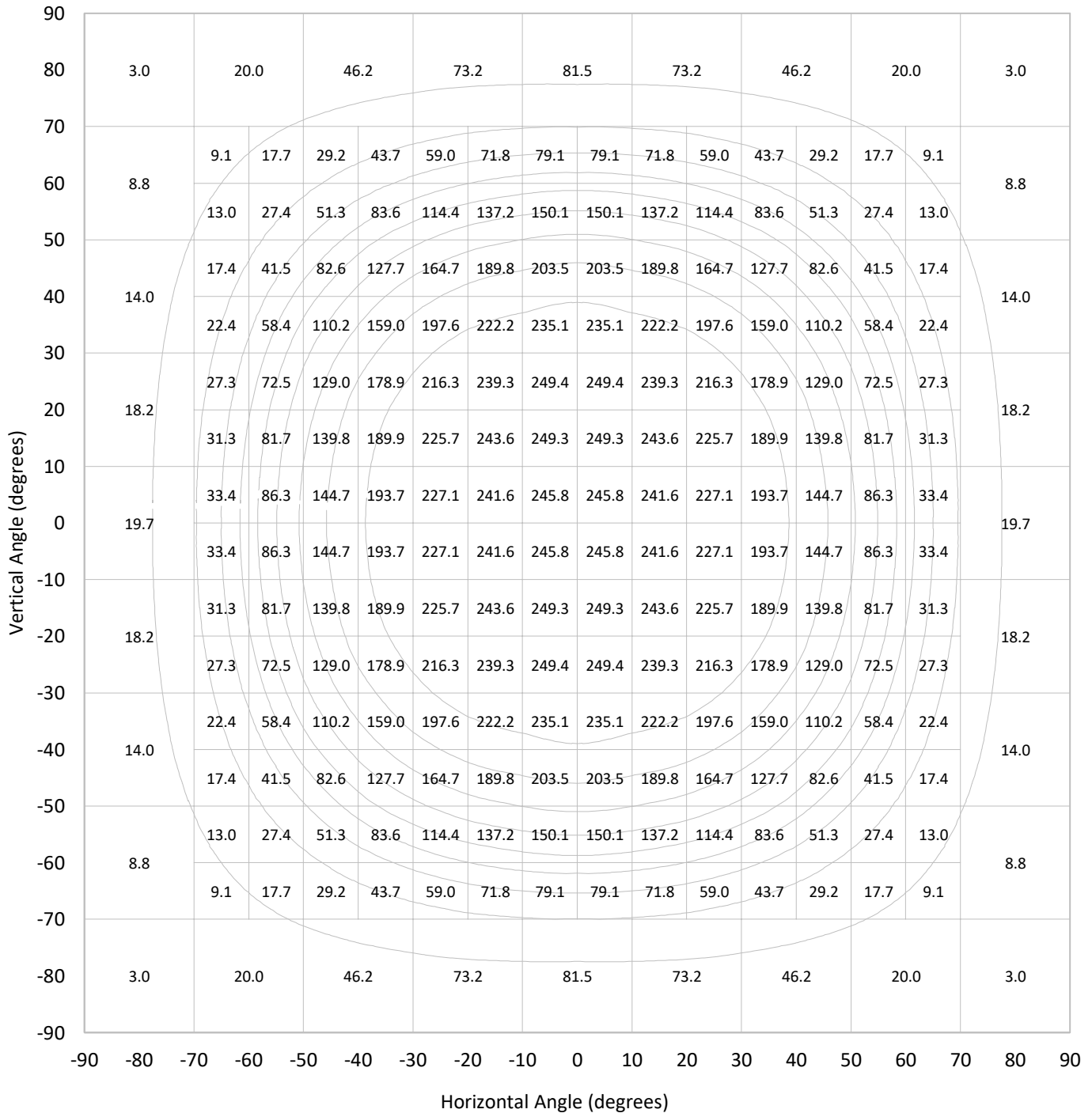
Iso-Candela Plot





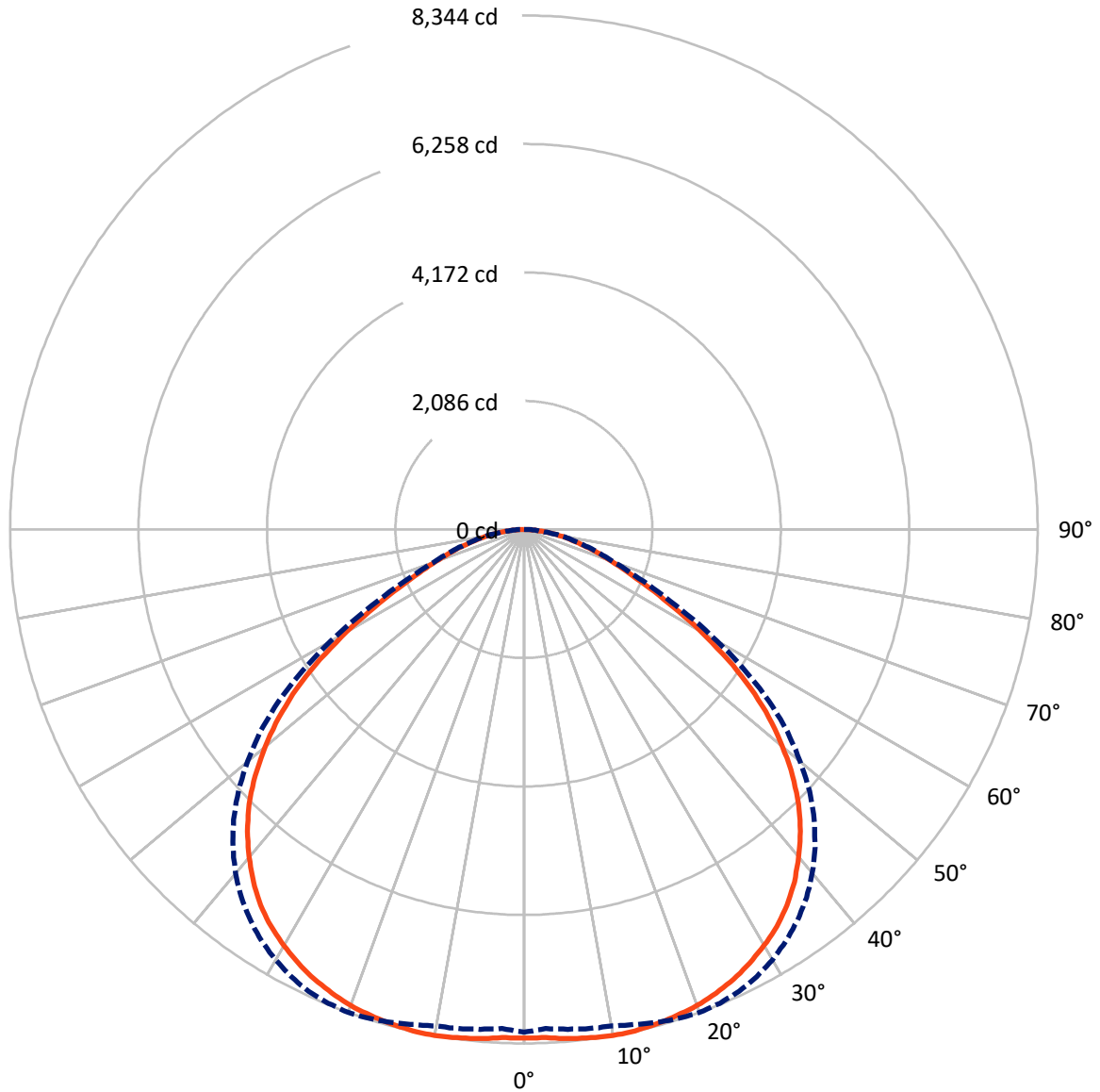
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Lumen Table



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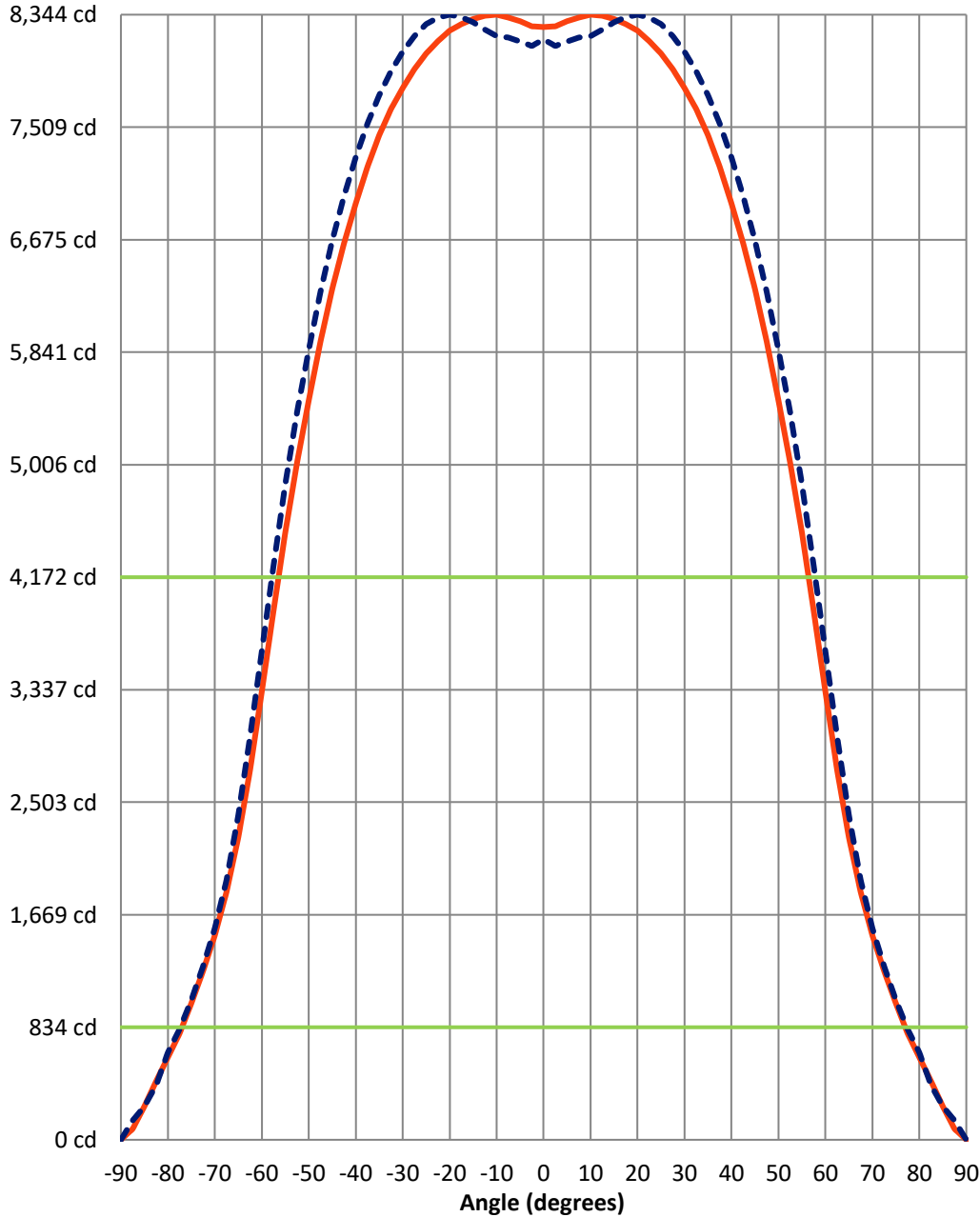
Luminous Intensity Polar Plot



— 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: 15706.8
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 18829.8
 Efficiency: 73.6%

Spill:
 Lumens: 6767.1
 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°	67.3	72.7	75.4	78.1	80.8	83.5	86.2	83.5	80.8	80.8	78.1
85°	180.4	185.8	188.5	207.4	226.2	237.0	250.5	247.8	247.8	245.1	242.4
82.5°	360.9	377.0	390.5	409.4	420.1	436.3	447.1	439.0	433.6	422.8	414.8
80°	641.0	646.4	649.1	651.8	638.3	635.6	630.2	622.1	611.4	597.9	584.4
77.5°	816.0	821.4	826.8	821.4	818.7	816.0	808.0	799.9	789.1	778.3	762.2
75°	1080.0	1080.0	1080.0	1071.9	1066.5	1058.4	1045.0	1031.5	1012.6	991.1	966.9
72.5°	1360.1	1357.4	1354.7	1338.5	1325.1	1308.9	1290.0	1273.9	1252.3	1228.1	1195.8
70°	1653.6	1659.0	1661.7	1640.2	1624.0	1602.5	1578.2	1548.6	1516.3	1481.3	1435.5
67.5°	2057.6	2052.2	2046.8	2017.2	1995.7	1966.0	1931.0	1887.9	1839.5	1785.6	1721.0
65°	2558.5	2566.6	2550.5	2520.8	2480.4	2432.0	2378.1	2316.2	2243.4	2162.6	2071.1
62.5°	3164.5	3178.0	3159.1	3121.4	3070.3	3005.6	2930.2	2841.3	2741.7	2628.6	2515.5
60°	3854.0	3851.3	3816.3	3765.1	3697.8	3617.0	3533.5	3436.5	3323.4	3191.5	3054.1
57.5°	4486.9	4481.5	4438.4	4387.2	4319.9	4233.7	4144.9	4042.5	3924.0	3784.0	3625.1
55°	5055.2	5049.8	5006.7	4952.8	4882.8	4796.6	4715.8	4618.9	4503.0	4354.9	4185.2
52.5°	5558.8	5561.5	5523.8	5464.5	5389.1	5305.6	5227.5	5130.6	5020.1	4872.0	4707.7
50°	6022.0	6019.3	5978.9	5925.1	5855.0	5774.2	5696.1	5599.2	5483.4	5340.6	5181.7
47.5°	6452.9	6447.5	6401.8	6342.5	6269.8	6199.8	6127.1	6040.9	5919.7	5776.9	5618.0
45°	6813.8	6803.0	6757.3	6700.7	6630.7	6568.7	6504.1	6439.5	6310.2	6178.2	6027.4
42.5°	7123.5	7120.8	7075.1	7018.5	6948.5	6894.6	6835.4	6754.6	6646.8	6525.6	6377.5
40°	7419.8	7398.2	7352.5	7298.6	7234.0	7188.2	7128.9	7048.1	6943.1	6824.6	6681.9
37.5°	7640.6	7643.3	7594.9	7535.6	7479.0	7436.0	7382.1	7306.7	7215.1	7099.3	6956.6
35°	7850.7	7837.2	7796.8	7745.7	7694.5	7646.0	7589.5	7524.8	7449.4	7341.7	7207.0
32.5°	7988.1	8006.9	7958.4	7904.6	7874.9	7837.2	7778.0	7710.7	7643.3	7535.6	7414.4
30°	8138.9	8122.7	8085.0	8039.2	8017.7	7993.4	7942.3	7877.6	7799.5	7702.6	7589.5
27.5°	8243.9	8235.8	8190.1	8147.0	8136.2	8114.6	8074.2	8017.7	7939.6	7845.3	7740.3
25°	8289.7	8295.1	8252.0	8227.8	8227.8	8214.3	8182.0	8133.5	8055.4	7969.2	7866.9
22.5°	8311.2	8305.9	8276.2	8270.8	8284.3	8273.5	8260.1	8217.0	8147.0	8076.9	7990.8
20°	8324.7	8287.0	8260.1	8281.6	8297.8	8295.1	8284.3	8257.4	8225.1	8165.8	8090.4
17.5°	8295.1	8270.8	8238.5	8270.8	8305.9	8308.6	8297.8	8281.6	8273.5	8235.8	8168.5
15°	8222.4	8203.5	8208.9	8241.2	8281.6	8295.1	8303.2	8322.0	8311.2	8281.6	8222.4
12.5°	8173.9	8149.7	8173.9	8206.2	8227.8	8235.8	8300.5	8335.5	8335.5	8308.6	8270.8
10°	8160.4	8111.9	8144.3	8173.9	8184.7	8233.1	8287.0	8324.7	8343.6	8322.0	8273.5
7.5°	8133.5	8101.2	8114.6	8128.1	8190.1	8225.1	8254.7	8295.1	8322.0	8319.3	8276.2
5°	8120.0	8079.6	8085.0	8141.6	8184.7	8208.9	8219.7	8254.7	8295.1	8303.2	8270.8
2.5°	8085.0	8066.2	8106.6	8111.9	8144.3	8163.1	8173.9	8206.2	8257.4	8276.2	8262.8
0°	8066.2	8039.2	8012.3	8033.8	8087.7	8128.1	8144.3	8192.7	8252.0	8270.8	8241.2



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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°	75.4	72.7	70.0	67.3	70.0	70.0	70.0	67.3	70.0	67.3	67.3
85°	234.3	223.5	215.5	204.7	193.9	185.8	175.1	164.3	161.6	158.9	153.5
82.5°	404.0	390.5	377.0	360.9	344.7	325.9	307.0	285.5	280.1	274.7	266.6
80°	568.3	549.4	530.6	511.7	495.6	476.7	455.2	430.9	414.8	401.3	385.1
77.5°	740.6	713.7	686.8	654.5	635.6	616.7	595.2	571.0	546.7	525.2	500.9
75°	937.2	907.6	880.7	848.4	813.3	778.3	743.3	711.0	676.0	643.7	611.4
72.5°	1155.4	1112.3	1069.2	1028.8	985.7	942.6	896.8	853.7	810.7	767.6	721.8
70°	1384.3	1330.4	1276.6	1222.7	1166.2	1109.6	1055.7	1001.9	948.0	891.5	840.3
67.5°	1653.6	1591.7	1521.7	1446.3	1362.8	1290.0	1220.0	1155.4	1090.8	1026.1	961.5
65°	1990.3	1904.1	1809.8	1707.5	1610.5	1513.6	1411.2	1314.3	1238.9	1163.5	1090.8
62.5°	2405.0	2283.8	2151.9	2019.9	1901.4	1774.8	1656.3	1529.7	1411.2	1303.5	1214.6
60°	2900.6	2736.3	2574.7	2405.0	2240.8	2068.4	1917.6	1761.4	1613.2	1481.3	1352.0
57.5°	3447.3	3256.1	3062.2	2854.8	2631.3	2429.3	2224.6	2019.9	1844.8	1669.8	1524.4
55°	4002.1	3800.1	3582.0	3347.7	3102.6	2844.0	2566.6	2337.7	2098.0	1893.3	1704.8
52.5°	4530.0	4319.9	4093.7	3878.2	3584.7	3288.4	2984.1	2682.4	2402.3	2141.1	1912.2
50°	5001.3	4796.6	4578.5	4328.0	4056.0	3740.9	3401.5	3062.2	2730.9	2423.9	2138.4
47.5°	5432.2	5232.9	5014.8	4764.3	4516.5	4166.4	3824.4	3450.0	3081.0	2728.2	2394.3
45°	5836.2	5634.2	5408.0	5168.3	4882.8	4570.4	4217.6	3840.5	3444.6	3048.7	2663.6
42.5°	6202.5	6000.5	5771.5	5523.8	5241.0	4931.3	4589.2	4209.5	3810.9	3380.0	2957.1
40°	6523.0	6326.4	6105.5	5847.0	5583.0	5257.1	4920.5	4559.6	4147.5	3713.9	3248.0
37.5°	6803.0	6619.9	6401.8	6145.9	5865.8	5574.9	5227.5	4866.6	4495.0	4023.7	3547.0
35°	7050.8	6881.2	6657.6	6415.2	6140.5	5833.5	5507.6	5154.8	4753.5	4311.8	3848.6
32.5°	7266.3	7093.9	6889.2	6646.8	6380.2	6092.0	5758.1	5402.6	5022.8	4573.1	4069.4
30°	7449.4	7282.4	7088.5	6859.6	6603.8	6318.3	5992.4	5634.2	5246.4	4799.3	4301.1
27.5°	7608.3	7449.4	7260.9	7048.1	6803.0	6528.3	6199.8	5838.9	5443.0	5012.1	4513.8
25°	7745.7	7592.2	7417.1	7215.1	6972.7	6703.4	6393.7	6016.6	5620.7	5187.1	4694.3
22.5°	7869.6	7721.4	7546.4	7349.8	7128.9	6859.6	6547.2	6172.8	5771.5	5343.3	4858.6
20°	7980.0	7842.6	7670.3	7468.3	7247.4	6975.4	6665.7	6310.2	5906.2	5486.1	5006.7
17.5°	8068.9	7947.7	7775.3	7562.5	7341.7	7077.8	6776.1	6450.2	6022.0	5607.3	5130.6
15°	8130.8	8012.3	7856.1	7640.6	7425.2	7163.9	6862.3	6525.6	6127.1	5704.2	5232.9
12.5°	8173.9	8047.3	7901.9	7702.6	7487.1	7228.6	6935.0	6603.8	6215.9	5790.4	5321.8
10°	8184.7	8068.9	7923.4	7745.7	7535.6	7285.1	6997.0	6668.4	6288.6	5857.7	5394.5
7.5°	8190.1	8079.6	7947.7	7778.0	7570.6	7328.2	7042.7	6719.6	6342.5	5914.3	5448.4
5°	8187.4	8082.3	7963.8	7799.5	7592.2	7352.5	7072.4	6754.6	6380.2	5952.0	5488.8
2.5°	8179.3	8085.0	7974.6	7815.7	7616.4	7379.4	7102.0	6795.0	6420.6	5984.3	5521.1
0°	8200.8	8120.0	7980.0	7810.3	7621.8	7379.4	7099.3	6800.4	6426.0	5981.6	5518.4



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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°	67.3	64.6	64.6	61.9	59.3	56.6	51.2	48.5	43.1	35.0	26.9
85°	145.4	137.4	129.3	123.9	118.5	113.1	105.0	97.0	86.2	70.0	53.9
82.5°	255.9	239.7	223.5	204.7	188.5	172.4	158.9	145.4	129.3	105.0	80.8
80°	366.3	342.0	317.8	290.9	266.6	239.7	215.5	193.9	172.4	140.0	107.7
77.5°	476.7	444.4	409.4	377.0	342.0	307.0	272.0	242.4	210.1	172.4	134.7
75°	579.0	541.3	509.0	463.2	420.1	374.4	328.6	288.2	247.8	202.0	161.6
72.5°	681.4	632.9	587.1	544.0	495.6	439.0	387.8	336.7	285.5	231.6	183.1
70°	783.7	724.5	667.9	616.7	562.9	506.3	444.4	385.1	323.2	258.5	202.0
67.5°	888.8	821.4	756.8	692.2	630.2	565.6	500.9	433.6	360.9	285.5	223.5
65°	1004.6	921.1	843.0	770.3	697.5	627.5	554.8	482.1	401.3	315.1	242.4
62.5°	1120.4	1028.8	937.2	845.7	764.9	686.8	608.7	527.9	439.0	347.4	261.2
60°	1244.3	1139.2	1034.2	931.9	832.2	746.0	659.8	573.7	479.4	377.0	280.1
57.5°	1381.6	1255.0	1136.5	1020.7	907.6	805.3	711.0	619.4	514.4	406.7	301.6
55°	1537.8	1381.6	1241.6	1112.3	988.4	864.5	762.2	667.9	554.8	436.3	325.9
52.5°	1702.1	1521.7	1352.0	1206.6	1074.6	934.5	810.7	705.6	595.2	465.9	347.4
50°	1893.3	1664.4	1475.9	1298.1	1150.0	1004.6	861.8	748.7	635.6	500.9	369.0
47.5°	2089.9	1836.8	1599.8	1405.9	1230.8	1071.9	921.1	786.4	673.3	533.3	390.5
45°	2318.9	2001.1	1739.8	1510.9	1308.9	1141.9	980.3	826.8	705.6	565.6	412.1
42.5°	2539.7	2195.0	1885.2	1626.7	1397.8	1209.3	1034.2	869.9	737.9	597.9	430.9
40°	2800.9	2388.9	2025.3	1737.1	1486.7	1273.9	1088.1	915.7	767.6	627.5	449.8
37.5°	3051.4	2585.5	2195.0	1858.3	1572.8	1338.5	1141.9	958.8	794.5	657.1	474.0
35°	3299.2	2803.6	2356.6	1971.4	1661.7	1411.2	1195.8	999.2	821.4	681.4	495.6
32.5°	3536.2	3008.3	2520.8	2098.0	1758.7	1478.6	1244.3	1036.9	848.4	702.9	517.1
30°	3757.0	3202.2	2682.4	2227.3	1847.5	1540.5	1290.0	1074.6	880.7	721.8	538.6
27.5°	3959.0	3390.8	2844.0	2348.5	1931.0	1597.1	1338.5	1109.6	907.6	740.6	557.5
25°	4142.2	3560.4	2992.2	2458.9	2006.4	1659.0	1384.3	1144.6	931.9	756.8	573.7
22.5°	4314.5	3716.6	3126.8	2569.3	2098.0	1721.0	1427.4	1176.9	956.1	773.0	589.8
20°	4465.3	3859.4	3256.1	2679.7	2178.8	1777.5	1465.1	1206.6	977.6	783.7	606.0
17.5°	4586.5	3986.0	3371.9	2776.7	2248.8	1826.0	1497.4	1233.5	996.5	797.2	616.7
15°	4694.3	4093.7	3468.9	2860.2	2310.8	1866.4	1527.1	1255.0	1012.6	805.3	630.2
12.5°	4785.8	4185.2	3552.3	2932.9	2364.6	1901.4	1551.3	1271.2	1026.1	813.3	638.3
10°	4861.2	4258.0	3622.4	2989.5	2407.7	1928.3	1570.1	1287.4	1036.9	821.4	646.4
7.5°	4917.8	4311.8	3673.5	3037.9	2442.7	1947.2	1586.3	1298.1	1047.7	826.8	659.8
5°	4960.9	4357.6	3713.9	3070.3	2469.7	1974.1	1605.2	1311.6	1058.4	832.2	659.8
2.5°	4993.2	4395.3	3746.3	3097.2	2491.2	1968.7	1605.2	1308.9	1058.4	832.2	657.1
0°	4987.8	4398.0	3743.6	3097.2	2491.2	1963.4	1605.2	1306.2	1058.4	832.2	657.1



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	18.9	13.5	5.4	0.0
85°	40.4	26.9	13.5	0.0
82.5°	59.3	37.7	18.9	0.0
80°	78.1	51.2	24.2	0.0
77.5°	99.6	64.6	32.3	0.0
75°	118.5	75.4	37.7	0.0
72.5°	137.4	88.9	43.1	0.0
70°	153.5	99.6	48.5	0.0
67.5°	169.7	113.1	56.6	0.0
65°	183.1	123.9	61.9	0.0
62.5°	193.9	137.4	67.3	0.0
60°	207.4	148.1	72.7	0.0
57.5°	218.2	156.2	78.1	0.0
55°	228.9	161.6	83.5	0.0
52.5°	239.7	169.7	88.9	0.0
50°	250.5	177.8	94.3	0.0
47.5°	261.2	183.1	97.0	0.0
45°	277.4	191.2	102.3	0.0
42.5°	290.9	196.6	107.7	0.0
40°	304.3	202.0	110.4	0.0
37.5°	317.8	207.4	115.8	0.0
35°	331.3	212.8	118.5	0.0
32.5°	342.0	218.2	121.2	0.0
30°	352.8	223.5	123.9	0.0
27.5°	363.6	226.2	126.6	0.0
25°	371.7	231.6	129.3	0.0
22.5°	379.7	234.3	132.0	0.0
20°	385.1	237.0	134.7	0.0
17.5°	393.2	239.7	137.4	0.0
15°	395.9	242.4	142.7	0.0
12.5°	401.3	245.1	142.7	0.0
10°	404.0	247.8	142.7	0.0
7.5°	409.4	247.8	142.7	0.0
5°	406.7	247.8	142.7	0.0
2.5°	406.7	247.8	142.7	0.0
0°	404.0	247.8	142.7	0.0

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