

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: P628408

Luminaire Tested: **IFLD-L-SA8B-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628408
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8B-830-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (128) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

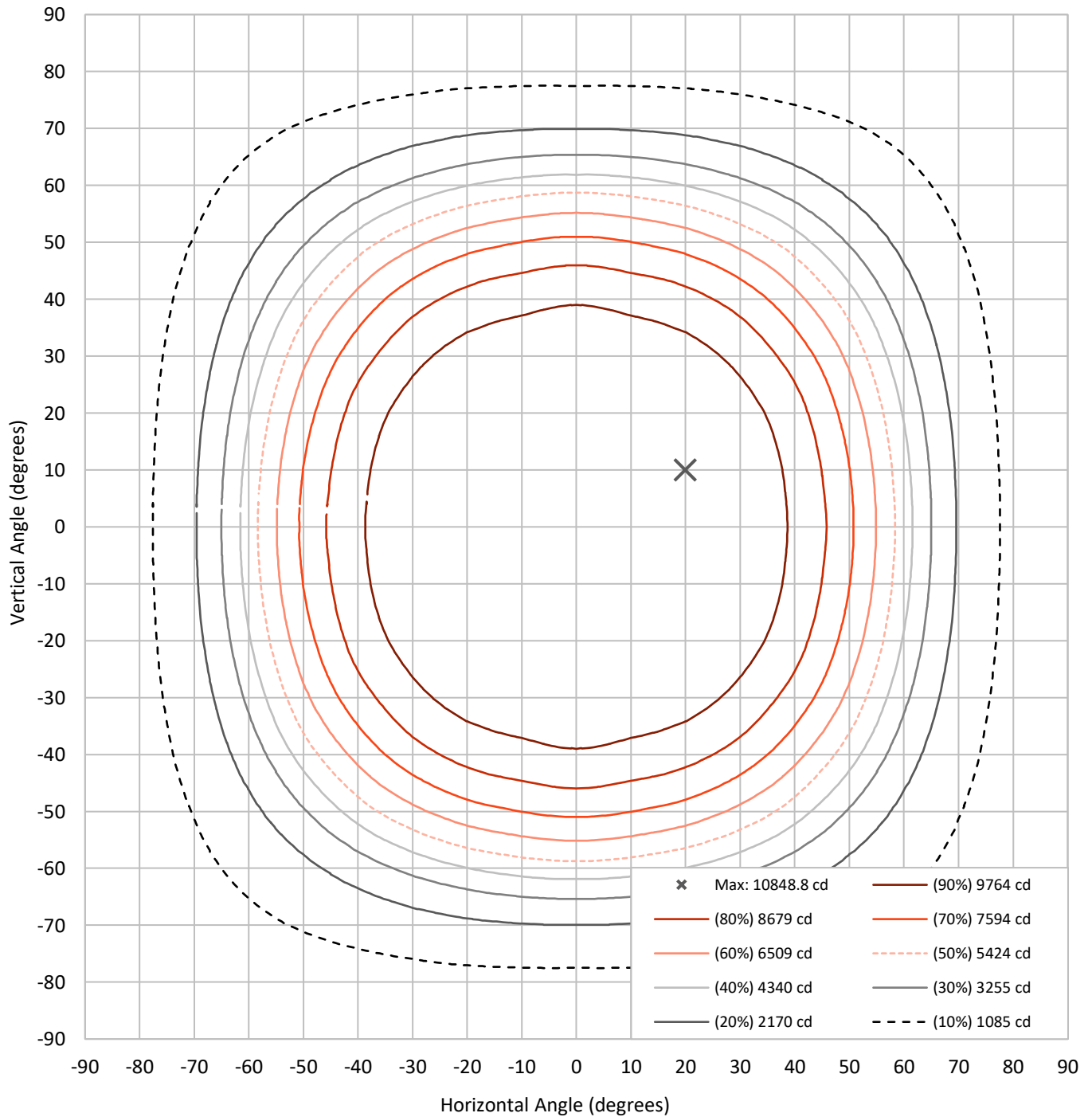
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	33282.5 lumens	Max Intensity:	10848.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	104.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	20422.8 lumens	Field Lumens:	24483.5 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 320
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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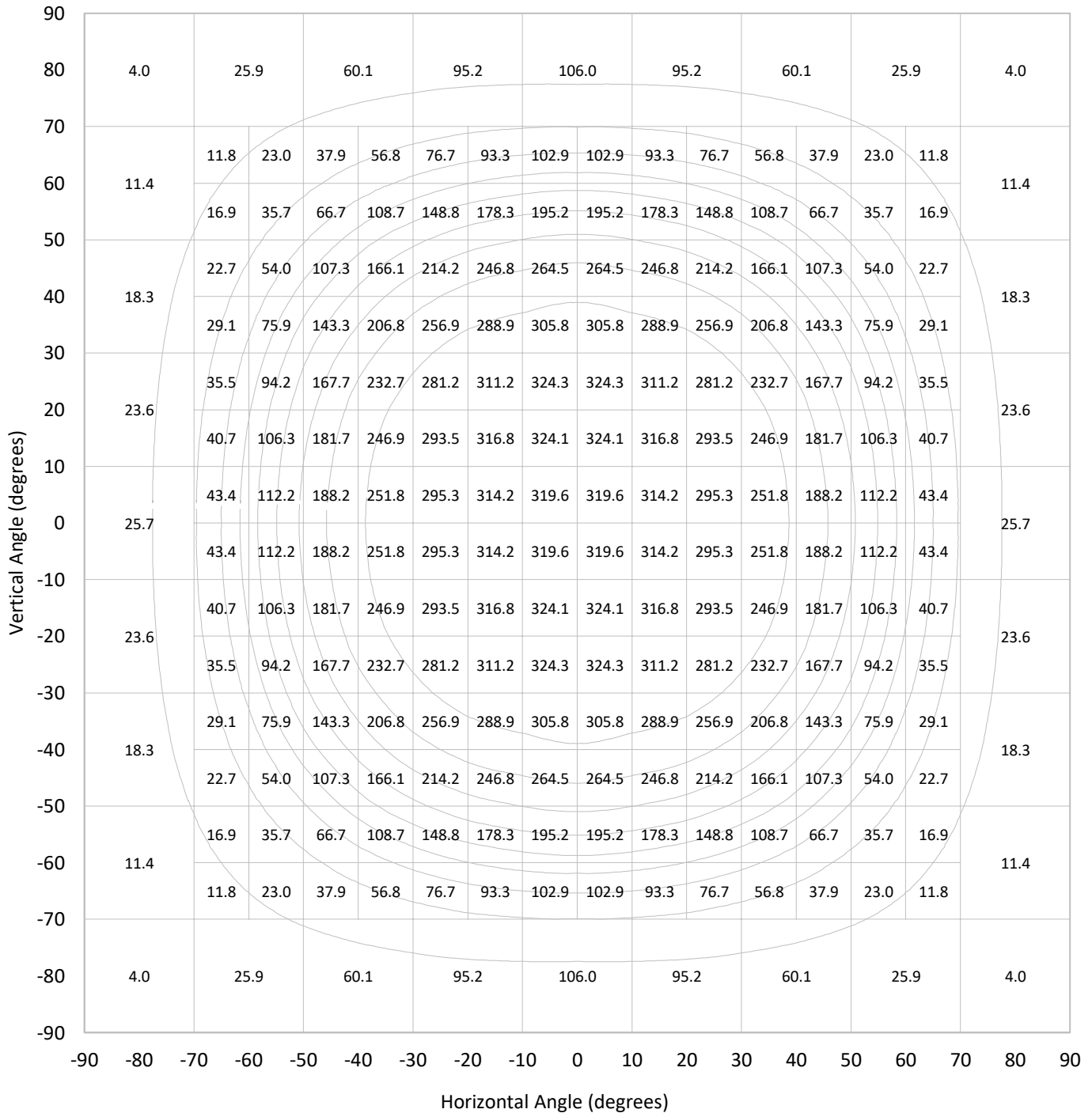
Iso-Candela Plot





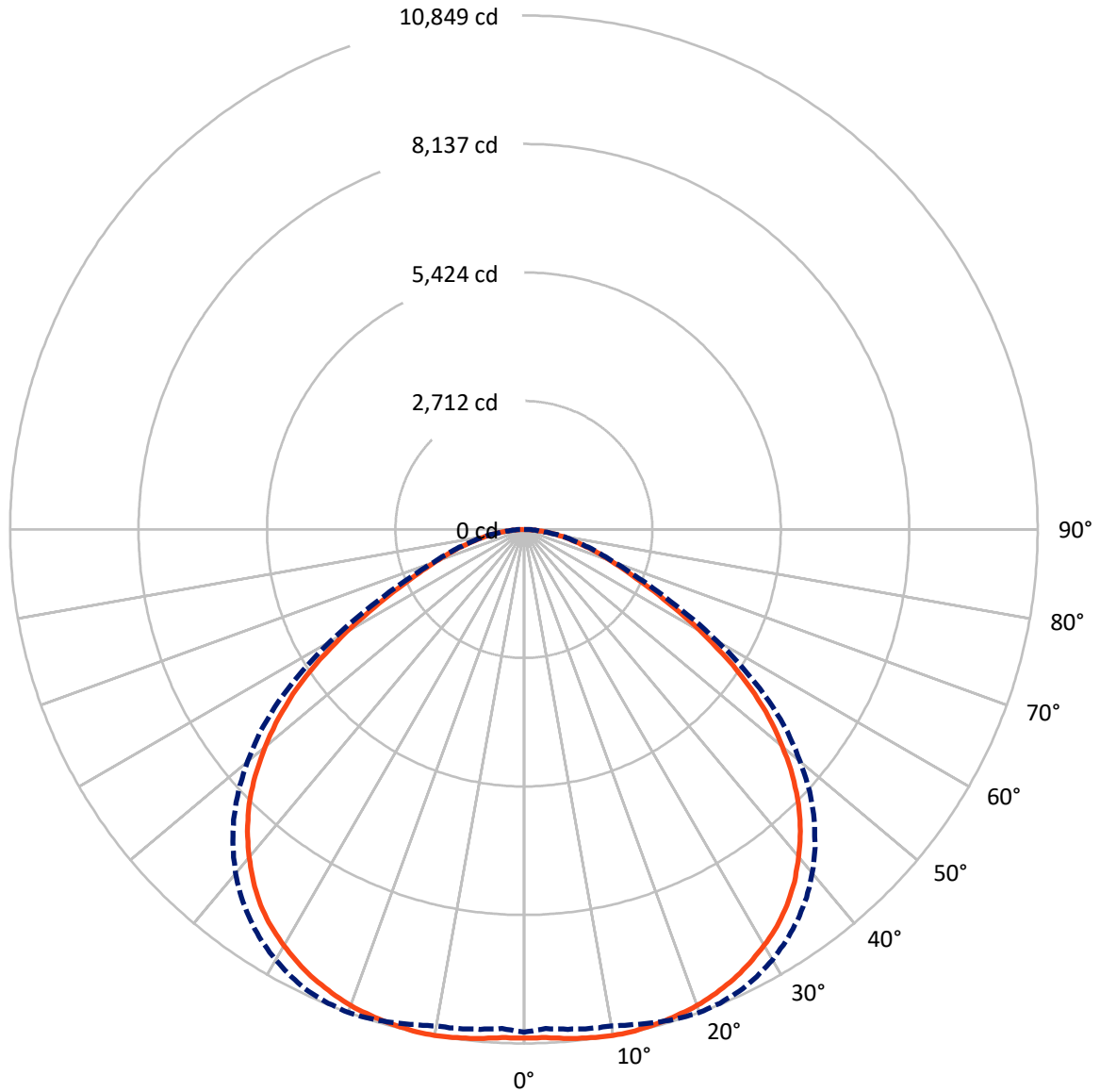
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Lumen Table



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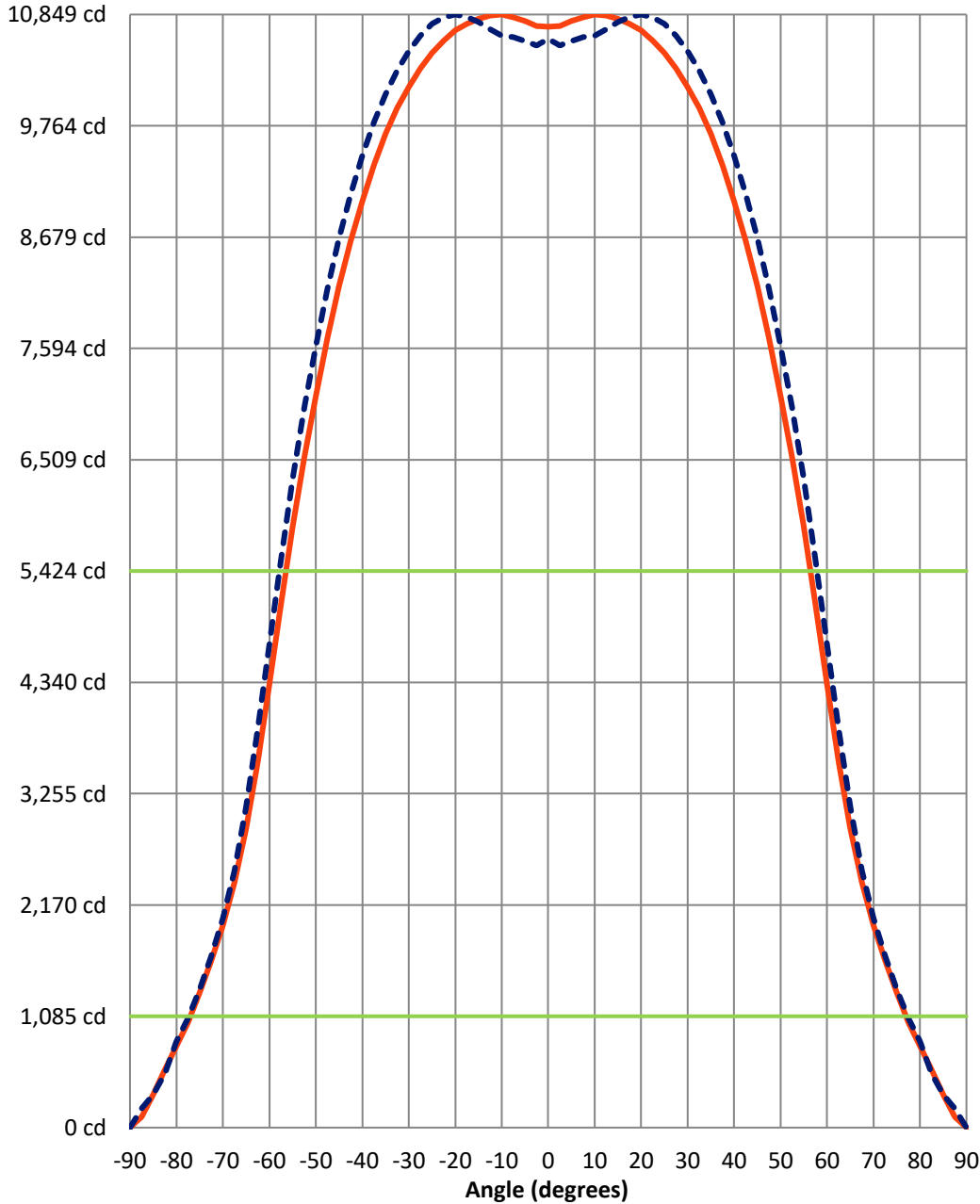
Luminous Intensity Polar Plot



— 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: 20422.8
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 24483.5
 Efficiency: 73.6%

Spill:
 Lumens: 8799
 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°	87.5	94.6	98.1	101.6	105.1	108.6	112.1	108.6	105.1	105.1	101.6
85°	234.6	241.6	245.1	269.6	294.2	308.2	325.7	322.2	318.7	318.7	315.2
82.5°	469.2	490.3	507.8	532.3	546.3	567.3	581.3	570.8	549.8	549.8	539.3
80°	833.4	840.4	843.9	847.5	829.9	826.4	819.4	808.9	777.4	777.4	759.9
77.5°	1061.1	1068.1	1075.1	1068.1	1064.6	1061.1	1050.6	1040.1	1012.0	1012.0	991.0
75°	1404.2	1404.2	1404.2	1393.7	1386.7	1376.2	1358.7	1341.2	1288.7	1288.7	1257.2
72.5°	1768.4	1764.9	1761.4	1740.4	1722.9	1701.9	1677.4	1656.4	1596.8	1596.8	1554.8
70°	2150.1	2157.1	2160.6	2132.6	2111.6	2083.6	2052.1	2013.6	1926.0	1926.0	1866.5
67.5°	2675.4	2668.4	2661.4	2622.9	2594.9	2556.4	2510.8	2454.8	2321.7	2321.7	2237.7
65°	3326.8	3337.3	3316.3	3277.7	3225.2	3162.2	3092.1	3011.6	2812.0	2812.0	2692.9
62.5°	4114.7	4132.2	4107.7	4058.7	3992.1	3908.1	3810.0	3694.5	3417.8	3417.8	3270.7
60°	5011.2	5007.7	4962.1	4895.6	4808.1	4703.0	4594.4	4468.4	4149.7	4149.7	3971.1
57.5°	5834.1	5827.1	5771.1	5704.5	5617.0	5504.9	5389.4	5256.3	4920.1	4920.1	4713.5
55°	6573.0	6566.0	6510.0	6439.9	6348.9	6236.8	6131.8	6005.7	5662.5	5662.5	5441.9
52.5°	7227.8	7231.3	7182.3	7105.3	7007.2	6898.7	6797.1	6671.0	6334.9	6334.9	6121.3
50°	7830.2	7826.7	7774.1	7704.1	7613.0	7508.0	7406.4	7280.4	6944.2	6944.2	6737.6
47.5°	8390.5	8383.5	8323.9	8246.9	8152.3	8061.3	7966.7	7854.7	7511.5	7511.5	7304.9
45°	8859.7	8845.7	8786.2	8712.6	8621.6	8541.0	8457.0	8373.0	8033.3	8033.3	7837.2
42.5°	9262.4	9258.9	9199.4	9125.9	9034.8	8964.8	8887.7	8782.7	8485.0	8485.0	8292.4
40°	9647.6	9619.6	9560.1	9490.0	9406.0	9346.5	9269.4	9164.4	8873.7	8873.7	8688.1
37.5°	9934.8	9938.3	9875.3	9798.2	9724.7	9668.6	9598.6	9500.6	9230.9	9230.9	9045.3
35°	10207.9	10190.4	10137.9	10071.4	10004.8	9941.8	9868.2	9784.2	9546.1	9546.1	9371.0
32.5°	10386.5	10411.0	10348.0	10278.0	10239.4	10190.4	10113.4	10025.8	9798.2	9798.2	9640.6
30°	10582.6	10561.6	10512.6	10453.1	10425.0	10393.5	10327.0	10242.9	10015.3	10015.3	9868.2
27.5°	10719.2	10708.7	10649.2	10593.1	10579.1	10551.1	10498.6	10425.0	10200.9	10200.9	10064.4
25°	10778.7	10785.7	10729.7	10698.2	10698.2	10680.7	10638.7	10575.6	10362.0	10362.0	10228.9
22.5°	10806.7	10799.7	10761.2	10754.2	10771.7	10757.7	10740.2	10684.2	10502.1	10502.1	10390.0
20°	10824.3	10775.2	10740.2	10768.2	10789.2	10785.7	10771.7	10736.7	10617.6	10617.6	10519.6
17.5°	10785.7	10754.2	10712.2	10754.2	10799.7	10803.2	10789.2	10768.2	10708.7	10708.7	10621.1
15°	10691.2	10666.7	10673.7	10715.7	10768.2	10785.7	10796.2	10820.8	10768.2	10768.2	10691.2
12.5°	10628.2	10596.6	10628.2	10670.2	10698.2	10708.7	10792.7	10838.3	10803.2	10803.2	10754.2
10°	10610.6	10547.6	10589.6	10628.2	10642.2	10705.2	10775.2	10824.3	10848.8	10820.8	10757.7
7.5°	10575.6	10533.6	10551.1	10568.6	10649.2	10694.7	10733.2	10785.7	10817.3	10817.3	10761.2
5°	10558.1	10505.6	10512.6	10586.1	10642.2	10673.7	10687.7	10733.2	10796.2	10796.2	10754.2
2.5°	10512.6	10488.1	10540.6	10547.6	10589.6	10614.1	10628.2	10670.2	10761.2	10761.2	10743.7
0°	10488.1	10453.1	10418.0	10446.1	10516.1	10568.6	10589.6	10652.7	10754.2	10754.2	10715.7



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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°	98.1	94.6	91.0	87.5	91.0	91.0	91.0	87.5	91.0	87.5	87.5
85°	304.7	290.7	280.1	266.1	252.1	241.6	227.6	213.6	210.1	206.6	199.6
82.5°	525.3	507.8	490.3	469.2	448.2	423.7	399.2	371.2	364.2	357.2	346.7
80°	738.9	714.4	689.9	665.4	644.3	619.8	591.8	560.3	539.3	521.8	500.8
77.5°	963.0	928.0	893.0	851.0	826.4	801.9	773.9	742.4	710.9	682.9	651.3
75°	1218.6	1180.1	1145.1	1103.1	1057.6	1012.0	966.5	924.5	879.0	836.9	794.9
72.5°	1502.3	1446.3	1390.2	1337.7	1281.7	1225.7	1166.1	1110.1	1054.1	998.0	938.5
70°	1800.0	1729.9	1659.9	1589.8	1516.3	1442.8	1372.7	1302.7	1232.7	1159.1	1092.6
67.5°	2150.1	2069.6	1978.6	1880.5	1771.9	1677.4	1586.3	1502.3	1418.3	1334.2	1250.2
65°	2587.9	2475.8	2353.3	2220.2	2094.1	1968.0	1835.0	1708.9	1610.9	1512.8	1418.3
62.5°	3127.2	2969.6	2798.0	2626.4	2472.3	2307.7	2153.6	1989.1	1835.0	1694.9	1579.3
60°	3771.5	3557.9	3347.8	3127.2	2913.5	2689.4	2493.3	2290.2	2097.6	1926.0	1757.9
57.5°	4482.4	4233.8	3981.6	3712.0	3421.3	3158.7	2892.5	2626.4	2398.8	2171.2	1982.1
55°	5203.8	4941.1	4657.5	4352.8	4034.1	3698.0	3337.3	3039.6	2728.0	2461.8	2216.7
52.5°	5890.1	5617.0	5322.8	5042.7	4661.0	4275.8	3880.1	3487.9	3123.7	2784.0	2486.3
50°	6503.0	6236.8	5953.2	5627.5	5273.8	4864.1	4422.9	3981.6	3550.9	3151.7	2780.5
47.5°	7063.3	6804.1	6520.5	6194.8	5872.6	5417.4	4972.6	4485.9	4006.1	3547.4	3113.2
45°	7588.5	7325.9	7031.7	6720.1	6348.9	5942.7	5483.9	4993.7	4478.9	3964.1	3463.3
42.5°	8064.8	7802.1	7504.5	7182.3	6814.6	6411.9	5967.2	5473.4	4955.1	4394.8	3845.0
40°	8481.5	8225.9	7938.7	7602.5	7259.4	6835.6	6397.9	5928.7	5392.9	4829.1	4223.2
37.5°	8845.7	8607.6	8323.9	7991.2	7627.1	7248.9	6797.1	6327.9	5844.6	5231.8	4612.0
35°	9167.9	8947.3	8656.6	8341.4	7984.2	7585.0	7161.3	6702.6	6180.8	5606.5	5004.2
32.5°	9448.0	9223.9	8957.8	8642.6	8295.9	7921.2	7487.0	7024.7	6531.0	5946.2	5291.3
30°	9686.1	9469.0	9216.9	8919.2	8586.6	8215.4	7791.6	7325.9	6821.6	6240.3	5592.5
27.5°	9892.8	9686.1	9441.0	9164.4	8845.7	8488.5	8061.3	7592.0	7077.3	6517.0	5869.1
25°	10071.4	9871.7	9644.1	9381.5	9066.3	8716.1	8313.4	7823.2	7308.4	6744.6	6103.7
22.5°	10232.4	10039.8	9812.2	9556.6	9269.4	8919.2	8513.0	8026.3	7504.5	6947.7	6317.4
20°	10376.0	10197.4	9973.3	9710.7	9423.5	9069.8	8667.1	8204.9	7679.6	7133.3	6510.0
17.5°	10491.6	10334.0	10109.9	9833.2	9546.1	9202.9	8810.7	8387.0	7830.2	7290.9	6671.0
15°	10572.1	10418.0	10214.9	9934.8	9654.6	9315.0	8922.7	8485.0	7966.7	7416.9	6804.1
12.5°	10628.2	10463.6	10274.5	10015.3	9735.2	9399.0	9017.3	8586.6	8082.3	7529.0	6919.7
10°	10642.2	10491.6	10302.5	10071.4	9798.2	9472.5	9097.8	8670.6	8176.8	7616.5	7014.2
7.5°	10649.2	10505.6	10334.0	10113.4	9843.7	9528.6	9157.4	8737.1	8246.9	7690.1	7084.3
5°	10645.7	10509.1	10355.0	10141.4	9871.7	9560.1	9195.9	8782.7	8295.9	7739.1	7136.8
2.5°	10635.2	10512.6	10369.0	10162.4	9903.3	9595.1	9234.4	8835.2	8348.4	7781.1	7178.8
0°	10663.2	10558.1	10376.0	10155.4	9910.3	9595.1	9230.9	8842.2	8355.4	7777.6	7175.3



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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°	87.5	84.0	84.0	80.5	77.0	73.5	66.5	63.0	56.0	45.5	35.0
85°	189.1	178.6	168.1	161.1	154.1	147.1	136.6	126.1	112.1	91.0	70.0
82.5°	332.7	311.7	290.7	266.1	245.1	224.1	206.6	189.1	168.1	136.6	105.1
80°	476.3	444.7	413.2	378.2	346.7	311.7	280.1	252.1	224.1	182.1	140.1
77.5°	619.8	577.8	532.3	490.3	444.7	399.2	353.7	315.2	273.1	224.1	175.1
75°	752.9	703.9	661.9	602.3	546.3	486.8	427.2	374.7	322.2	262.6	210.1
72.5°	886.0	822.9	763.4	707.4	644.3	570.8	504.3	437.7	371.2	301.2	238.1
70°	1019.0	942.0	868.5	801.9	731.9	658.4	577.8	500.8	420.2	336.2	262.6
67.5°	1155.6	1068.1	984.0	900.0	819.4	735.4	651.3	563.8	469.2	371.2	290.7
65°	1306.2	1197.6	1096.1	1001.5	907.0	815.9	721.4	626.8	521.8	409.7	315.2
62.5°	1456.8	1337.7	1218.6	1099.6	994.5	893.0	791.4	686.4	570.8	451.7	339.7
60°	1617.9	1481.3	1344.7	1211.6	1082.1	970.0	858.0	745.9	623.3	490.3	364.2
57.5°	1796.5	1631.9	1477.8	1327.2	1180.1	1047.1	924.5	805.4	668.9	528.8	392.2
55°	1999.6	1796.5	1614.4	1446.3	1285.2	1124.1	991.0	868.5	721.4	567.3	423.7
52.5°	2213.2	1978.6	1757.9	1568.8	1397.2	1215.1	1054.1	917.5	773.9	605.8	451.7
50°	2461.8	2164.2	1919.0	1687.9	1495.3	1306.2	1120.6	973.5	826.4	651.3	479.8
47.5°	2717.4	2388.3	2080.1	1828.0	1600.4	1393.7	1197.6	1022.5	875.5	693.4	507.8
45°	3015.1	2601.9	2262.2	1964.5	1701.9	1484.8	1274.7	1075.1	917.5	735.4	535.8
42.5°	3302.3	2854.0	2451.3	2115.1	1817.5	1572.3	1344.7	1131.1	959.5	777.4	560.3
40°	3641.9	3106.2	2633.4	2258.7	1933.0	1656.4	1414.8	1190.6	998.0	815.9	584.8
37.5°	3967.6	3361.8	2854.0	2416.3	2045.1	1740.4	1484.8	1246.7	1033.0	854.5	616.3
35°	4289.8	3645.4	3064.1	2563.4	2160.6	1835.0	1554.8	1299.2	1068.1	886.0	644.3
32.5°	4597.9	3911.6	3277.7	2728.0	2286.7	1922.5	1617.9	1348.2	1103.1	914.0	672.4
30°	4885.1	4163.7	3487.9	2896.0	2402.3	2003.1	1677.4	1397.2	1145.1	938.5	700.4
27.5°	5147.7	4408.8	3698.0	3053.6	2510.8	2076.6	1740.4	1442.8	1180.1	963.0	724.9
25°	5385.9	4629.5	3890.6	3197.2	2608.9	2157.1	1800.0	1488.3	1211.6	984.0	745.9
22.5°	5610.0	4832.6	4065.7	3340.8	2728.0	2237.7	1856.0	1530.3	1243.2	1005.0	766.9
20°	5806.1	5018.2	4233.8	3484.4	2833.0	2311.2	1905.0	1568.8	1271.2	1019.0	787.9
17.5°	5963.7	5182.8	4384.3	3610.4	2924.1	2374.3	1947.0	1603.9	1295.7	1036.6	801.9
15°	6103.7	5322.8	4510.4	3719.0	3004.6	2426.8	1985.6	1631.9	1316.7	1047.1	819.4
12.5°	6222.8	5441.9	4619.0	3813.5	3074.6	2472.3	2017.1	1652.9	1334.2	1057.6	829.9
10°	6320.9	5536.4	4710.0	3887.1	3130.7	2507.3	2041.6	1673.9	1348.2	1068.1	840.4
7.5°	6394.4	5606.5	4776.5	3950.1	3176.2	2531.8	2062.6	1687.9	1362.2	1075.1	858.0
5°	6450.4	5666.0	4829.1	3992.1	3211.2	2566.9	2087.1	1705.4	1376.2	1082.1	858.0
2.5°	6492.5	5715.0	4871.1	4027.1	3239.2	2559.9	2087.1	1701.9	1376.2	1082.1	854.5
0°	6485.4	5718.5	4867.6	4027.1	3239.2	2552.9	2087.1	1698.4	1376.2	1082.1	854.5



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	24.5	17.5	7.0	0.0
85°	52.5	35.0	17.5	0.0
82.5°	77.0	49.0	24.5	0.0
80°	101.6	66.5	31.5	0.0
77.5°	129.6	84.0	42.0	0.0
75°	154.1	98.1	49.0	0.0
72.5°	178.6	115.6	56.0	0.0
70°	199.6	129.6	63.0	0.0
67.5°	220.6	147.1	73.5	0.0
65°	238.1	161.1	80.5	0.0
62.5°	252.1	178.6	87.5	0.0
60°	269.6	192.6	94.6	0.0
57.5°	283.7	203.1	101.6	0.0
55°	297.7	210.1	108.6	0.0
52.5°	311.7	220.6	115.6	0.0
50°	325.7	231.1	122.6	0.0
47.5°	339.7	238.1	126.1	0.0
45°	360.7	248.6	133.1	0.0
42.5°	378.2	255.6	140.1	0.0
40°	395.7	262.6	143.6	0.0
37.5°	413.2	269.6	150.6	0.0
35°	430.7	276.6	154.1	0.0
32.5°	444.7	283.7	157.6	0.0
30°	458.7	290.7	161.1	0.0
27.5°	472.8	294.2	164.6	0.0
25°	483.3	301.2	168.1	0.0
22.5°	493.8	304.7	171.6	0.0
20°	500.8	308.2	175.1	0.0
17.5°	511.3	311.7	178.6	0.0
15°	514.8	315.2	185.6	0.0
12.5°	521.8	318.7	185.6	0.0
10°	525.3	322.2	185.6	0.0
7.5°	532.3	322.2	185.6	0.0
5°	528.8	322.2	185.6	0.0
2.5°	528.8	322.2	185.6	0.0
0°	525.3	322.2	185.6	0.0

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