

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: P628410

Luminaire Tested: **IFLD-L-SA8D-830-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628410
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA8D-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

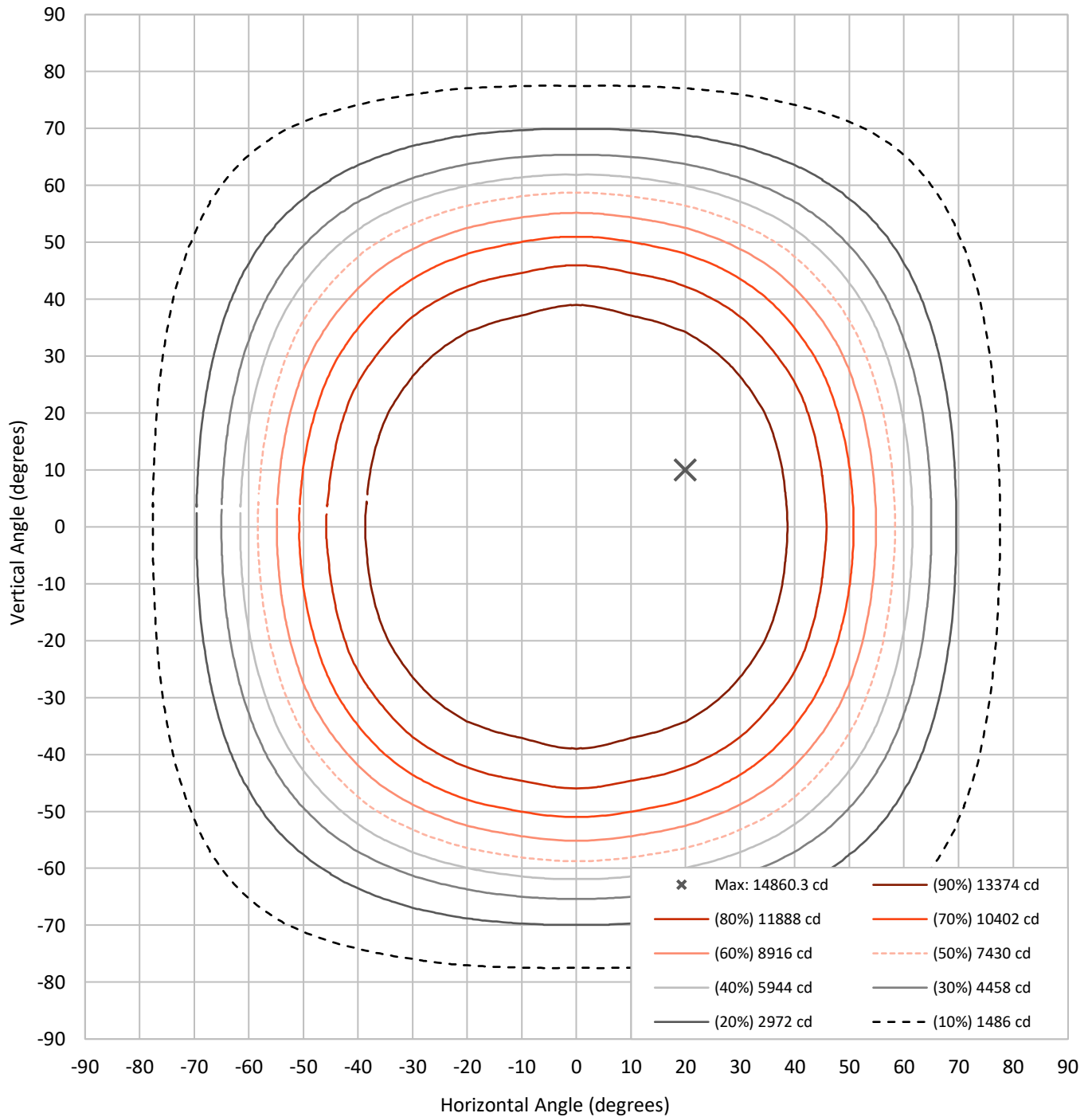
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	45589.3 lumens	Max Intensity:	14860.3 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	93.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	27974.5 lumens	Field Lumens:	33536.7 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 488.3
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



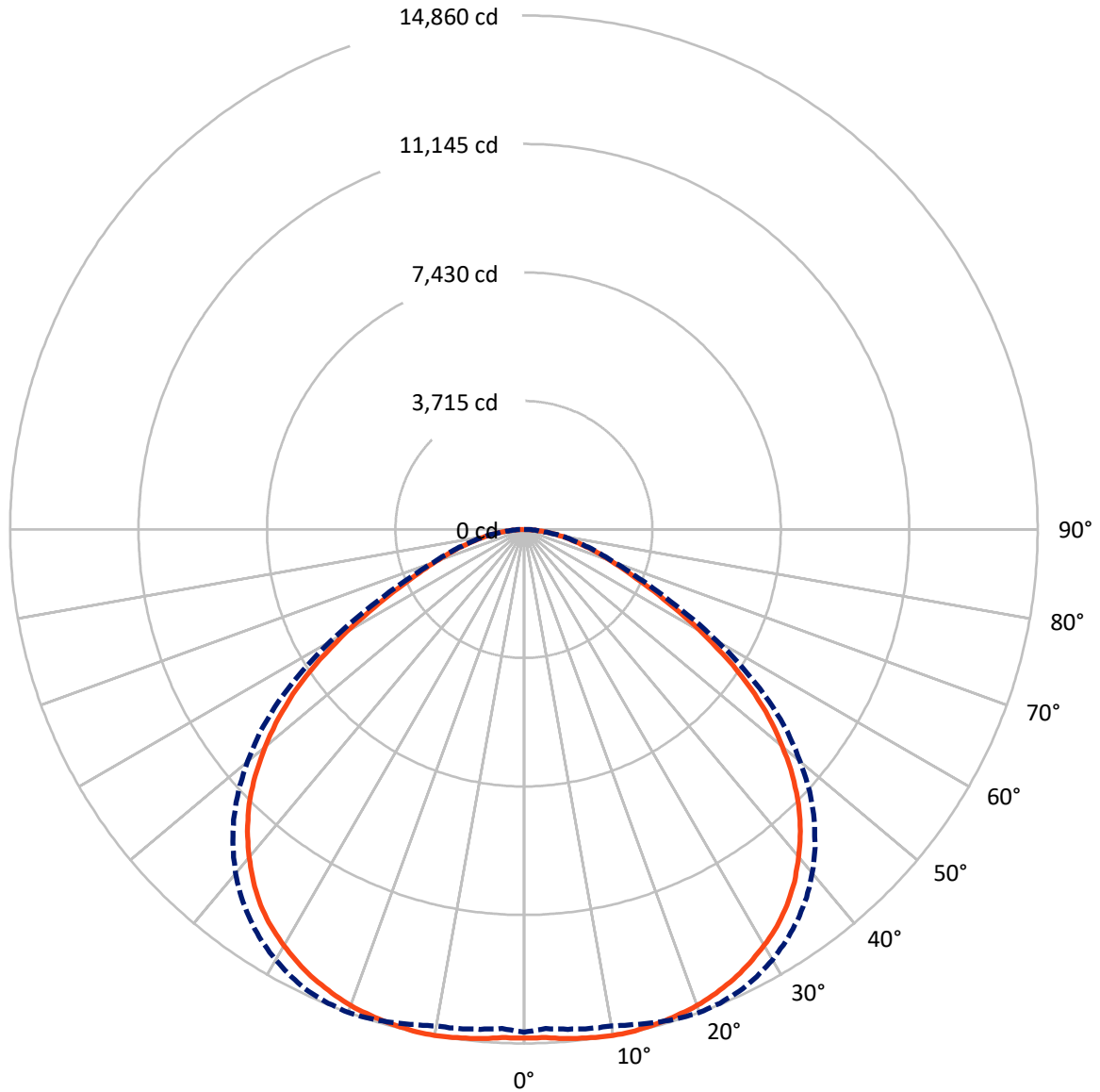
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Iso-Candela Plot



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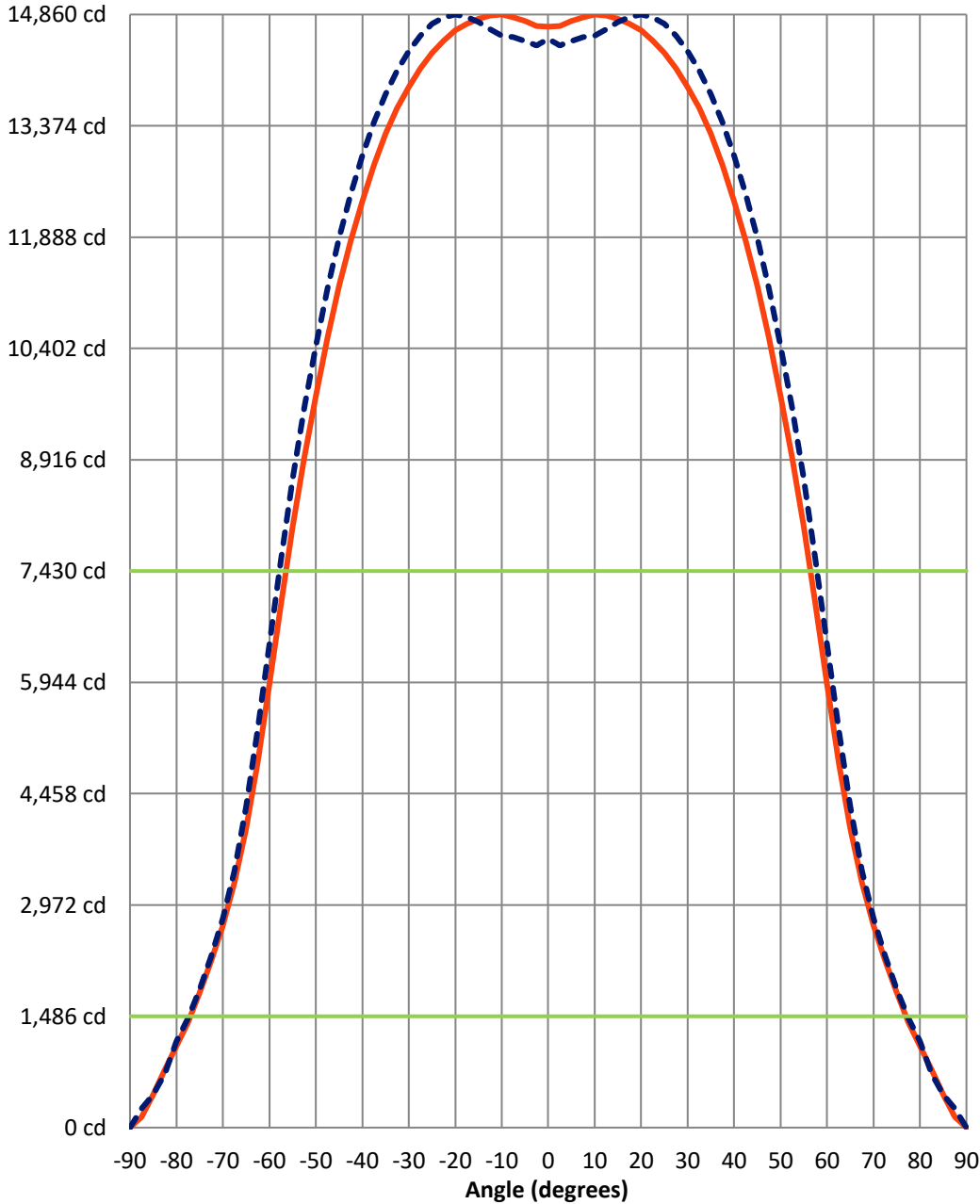
Luminous Intensity Polar Plot



— 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: 27974.5
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 33536.7
 Efficiency: 73.6%

Spill:
 Lumens: 12052.6
 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°	119.9	129.5	134.3	139.1	143.9	148.7	153.5	148.7	143.9	143.9	139.1
85°	321.4	331.0	335.8	369.3	402.9	422.1	446.1	441.3	441.3	436.5	431.7
82.5°	642.8	671.5	695.5	729.1	748.3	777.1	796.3	781.9	772.3	753.1	738.7
80°	1141.6	1151.2	1156.0	1160.8	1136.8	1132.0	1122.4	1108.0	1088.9	1064.9	1040.9
77.5°	1453.4	1463.0	1472.6	1463.0	1458.2	1453.4	1439.0	1424.6	1405.4	1386.3	1357.5
75°	1923.5	1923.5	1923.5	1909.1	1899.5	1885.1	1861.1	1837.1	1803.6	1765.2	1722.0
72.5°	2422.3	2417.6	2412.8	2384.0	2360.0	2331.2	2297.6	2268.9	2230.5	2187.3	2129.7
70°	2945.2	2954.8	2959.6	2921.2	2892.4	2854.1	2810.9	2758.1	2700.6	2638.2	2556.7
67.5°	3664.7	3655.1	3645.5	3592.8	3554.4	3501.6	3439.3	3362.5	3276.2	3180.2	3065.1
65°	4556.9	4571.3	4542.5	4489.7	4417.8	4331.4	4235.5	4125.2	3995.7	3851.8	3688.7
62.5°	5636.2	5660.1	5626.6	5559.4	5468.3	5353.1	5218.8	5060.5	4883.1	4681.6	4480.1
60°	6864.1	6859.3	6797.0	6705.8	6585.9	6442.0	6293.3	6120.6	5919.2	5684.1	5439.5
57.5°	7991.4	7981.8	7905.0	7813.9	7694.0	7540.5	7382.2	7199.9	6988.8	6739.4	6456.4
55°	9003.5	8993.9	8917.1	8821.2	8696.5	8543.0	8399.1	8226.4	8020.1	7756.3	7454.1
52.5°	9900.4	9905.2	9838.1	9732.6	9598.3	9449.6	9310.5	9137.8	8941.1	8677.3	8384.7
50°	10725.5	10720.7	10648.7	10552.8	10428.1	10284.2	10145.1	9972.4	9766.1	9511.9	9228.9
47.5°	11493.0	11483.4	11401.8	11296.3	11166.8	11042.1	10912.6	10759.1	10543.2	10289.0	10006.0
45°	12135.7	12116.5	12035.0	11934.3	11809.5	11699.2	11584.1	11469.0	11238.7	11003.7	10735.1
42.5°	12687.3	12682.6	12601.0	12500.3	12375.6	12279.6	12174.1	12030.2	11838.3	11622.5	11358.7
40°	13215.0	13176.6	13095.1	12999.1	12884.0	12802.5	12696.9	12553.0	12366.0	12154.9	11900.7
37.5°	13608.3	13613.1	13526.8	13421.2	13320.5	13243.8	13147.8	13013.5	12850.4	12644.2	12390.0
35°	13982.5	13958.5	13886.5	13795.4	13704.3	13617.9	13517.2	13402.1	13267.8	13075.9	12836.0
32.5°	14227.1	14260.7	14174.3	14078.4	14025.6	13958.5	13853.0	13733.0	13613.1	13421.2	13205.4
30°	14495.7	14466.9	14399.8	14318.2	14279.9	14236.7	14145.6	14030.4	13891.3	13718.6	13517.2
27.5°	14682.8	14668.4	14586.9	14510.1	14490.9	14452.5	14380.6	14279.9	14140.8	13972.9	13785.8
25°	14764.3	14773.9	14697.2	14654.0	14654.0	14630.0	14572.5	14486.1	14347.0	14193.5	14011.2
22.5°	14802.7	14793.1	14740.3	14730.8	14754.7	14735.6	14711.6	14634.8	14510.1	14385.4	14231.9
20°	14826.7	14759.5	14711.6	14749.9	14778.7	14773.9	14754.7	14706.8	14649.2	14543.7	14409.4
17.5°	14773.9	14730.8	14673.2	14730.8	14793.1	14797.9	14778.7	14749.9	14735.6	14668.4	14548.5
15°	14644.4	14610.8	14620.4	14678.0	14749.9	14773.9	14788.3	14821.9	14802.7	14749.9	14644.4
12.5°	14558.1	14514.9	14558.1	14615.6	14654.0	14668.4	14783.5	14845.9	14845.9	14797.9	14730.8
10°	14534.1	14447.7	14505.3	14558.1	14577.3	14663.6	14759.5	14826.7	14860.3	14821.9	14735.6
7.5°	14486.1	14428.6	14452.5	14476.5	14586.9	14649.2	14702.0	14773.9	14821.9	14817.1	14740.3
5°	14462.1	14390.2	14399.8	14500.5	14577.3	14620.4	14639.6	14702.0	14773.9	14788.3	14730.8
2.5°	14399.8	14366.2	14438.2	14447.7	14505.3	14538.9	14558.1	14615.6	14706.8	14740.3	14716.4
0°	14366.2	14318.2	14270.3	14308.6	14404.6	14476.5	14505.3	14591.7	14697.2	14730.8	14678.0



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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°	134.3	129.5	124.7	119.9	124.7	124.7	124.7	119.9	124.7	119.9	119.9
85°	417.3	398.1	383.7	364.6	345.4	331.0	311.8	292.6	287.8	283.0	273.4
82.5°	719.5	695.5	671.5	642.8	614.0	580.4	546.8	508.5	498.9	489.3	474.9
80°	1012.1	978.5	945.0	911.4	882.6	849.0	810.6	767.5	738.7	714.7	685.9
77.5°	1319.1	1271.1	1223.2	1165.6	1132.0	1098.5	1060.1	1016.9	973.7	935.4	892.2
75°	1669.3	1616.5	1568.5	1511.0	1448.6	1386.3	1323.9	1266.3	1204.0	1146.4	1088.9
72.5°	2057.8	1981.0	1904.3	1832.4	1755.6	1678.9	1597.3	1520.6	1443.8	1367.1	1285.5
70°	2465.5	2369.6	2273.6	2177.7	2077.0	1976.3	1880.3	1784.4	1688.4	1587.7	1496.6
67.5°	2945.2	2834.9	2710.2	2575.8	2427.1	2297.6	2172.9	2057.8	1942.7	1827.6	1712.4
65°	3544.8	3391.3	3223.4	3041.1	2868.4	2695.8	2513.5	2340.8	2206.5	2072.2	1942.7
62.5°	4283.5	4067.6	3832.6	3597.5	3386.5	3161.0	2950.0	2724.5	2513.5	2321.6	2163.3
60°	5166.1	4873.5	4585.7	4283.5	3990.9	3683.9	3415.3	3137.1	2873.2	2638.2	2408.0
57.5°	6139.8	5799.2	5453.9	5084.5	4686.4	4326.6	3962.1	3597.5	3285.8	2974.0	2714.9
55°	7127.9	6768.2	6379.7	5962.3	5525.8	5065.3	4571.3	4163.6	3736.7	3372.1	3036.3
52.5°	8068.1	7694.0	7291.0	6907.3	6384.4	5856.8	5314.8	4777.5	4278.7	3813.4	3405.7
50°	8907.5	8543.0	8154.4	7708.3	7223.9	6662.7	6058.3	5453.9	4863.9	4317.1	3808.6
47.5°	9675.0	9320.0	8931.5	8485.4	8044.1	7420.5	6811.4	6144.6	5487.5	4859.1	4264.3
45°	10394.5	10034.8	9631.8	9204.9	8696.5	8140.0	7511.7	6840.1	6135.0	5429.9	4744.0
42.5°	11046.9	10687.1	10279.4	9838.1	9334.4	8782.8	8173.6	7497.3	6787.4	6019.9	5266.8
40°	11617.7	11267.5	10874.2	10413.7	9943.6	9363.2	8763.6	8120.9	7387.0	6614.7	5784.9
37.5°	12116.5	11790.4	11401.8	10946.1	10447.3	9929.2	9310.5	8667.7	8005.7	7166.3	6317.3
35°	12557.8	12255.6	11857.5	11425.8	10936.5	10389.7	9809.3	9180.9	8466.2	7679.6	6854.5
32.5°	12941.6	12634.6	12270.0	11838.3	11363.5	10850.2	10255.4	9622.2	8945.9	8144.8	7247.9
30°	13267.8	12970.4	12625.0	12217.3	11761.6	11253.1	10672.7	10034.8	9344.0	8547.8	7660.4
27.5°	13550.8	13267.8	12932.0	12553.0	12116.5	11627.3	11042.1	10399.3	9694.2	8926.7	8039.3
25°	13795.4	13522.0	13210.2	12850.4	12418.7	11939.1	11387.4	10715.9	10010.8	9238.5	8360.7
22.5°	14016.0	13752.2	13440.4	13090.3	12696.9	12217.3	11660.8	10994.1	10279.4	9516.7	8653.3
20°	14212.7	13968.1	13661.1	13301.3	12908.0	12423.5	11871.9	11238.7	10519.2	9770.9	8917.1
17.5°	14371.0	14155.1	13848.2	13469.2	13075.9	12605.8	12068.6	11488.2	10725.5	9986.8	9137.8
15°	14481.3	14270.3	13992.1	13608.3	13224.6	12759.3	12222.1	11622.5	10912.6	10159.5	9320.0
12.5°	14558.1	14332.6	14073.6	13718.6	13334.9	12874.4	12351.6	11761.6	11070.9	10313.0	9478.3
10°	14577.3	14371.0	14112.0	13795.4	13421.2	12975.2	12461.9	11876.7	11200.4	10432.9	9607.8
7.5°	14586.9	14390.2	14155.1	13853.0	13483.6	13051.9	12543.4	11967.8	11296.3	10533.6	9703.8
5°	14582.1	14395.0	14183.9	13891.3	13522.0	13095.1	12596.2	12030.2	11363.5	10600.8	9775.7
2.5°	14567.7	14399.8	14203.1	13920.1	13565.2	13143.0	12649.0	12102.1	11435.4	10658.3	9833.3
0°	14606.0	14462.1	14212.7	13910.5	13574.7	13143.0	12644.2	12111.7	11445.0	10653.5	9828.5



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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°	119.9	115.1	115.1	110.3	105.5	100.7	91.1	86.3	76.7	62.4	48.0
85°	259.0	244.6	230.2	220.6	211.1	201.5	187.1	172.7	153.5	124.7	95.9
82.5°	455.7	426.9	398.1	364.6	335.8	307.0	283.0	259.0	230.2	187.1	143.9
80°	652.4	609.2	566.0	518.0	474.9	426.9	383.7	345.4	307.0	249.4	191.9
77.5°	849.0	791.5	729.1	671.5	609.2	546.8	484.5	431.7	374.1	307.0	239.8
75°	1031.3	964.1	906.6	825.0	748.3	666.7	585.2	513.3	441.3	359.8	287.8
72.5°	1213.6	1127.2	1045.7	968.9	882.6	781.9	690.7	599.6	508.5	412.5	326.2
70°	1395.8	1290.3	1189.6	1098.5	1002.5	901.8	791.5	685.9	575.6	460.5	359.8
67.5°	1582.9	1463.0	1347.9	1232.8	1122.4	1007.3	892.2	772.3	642.8	508.5	398.1
65°	1789.2	1640.5	1501.4	1371.9	1242.4	1117.6	988.1	858.6	714.7	561.2	431.7
62.5°	1995.4	1832.4	1669.3	1506.2	1362.3	1223.2	1084.1	940.2	781.9	618.8	465.3
60°	2216.1	2029.0	1841.9	1659.7	1482.2	1328.7	1175.2	1021.7	853.8	671.5	498.9
57.5°	2460.7	2235.3	2024.2	1818.0	1616.5	1434.2	1266.3	1103.2	916.2	724.3	537.2
55°	2738.9	2460.7	2211.3	1981.0	1760.4	1539.8	1357.5	1189.6	988.1	777.1	580.4
52.5°	3031.5	2710.2	2408.0	2148.9	1913.9	1664.5	1443.8	1256.7	1060.1	829.8	618.8
50°	3372.1	2964.4	2628.6	2312.0	2048.2	1789.2	1535.0	1333.5	1132.0	892.2	657.2
47.5°	3722.3	3271.4	2849.3	2503.9	2192.1	1909.1	1640.5	1400.6	1199.2	949.8	695.5
45°	4130.0	3564.0	3098.7	2691.0	2331.2	2033.8	1746.0	1472.6	1256.7	1007.3	733.9
42.5°	4523.3	3909.3	3357.7	2897.2	2489.5	2153.7	1841.9	1549.3	1314.3	1064.9	767.5
40°	4988.6	4254.7	3607.1	3093.9	2647.8	2268.9	1937.9	1630.9	1367.1	1117.6	801.1
37.5°	5434.7	4604.9	3909.3	3309.7	2801.3	2384.0	2033.8	1707.6	1415.0	1170.4	844.2
35°	5876.0	4993.4	4197.1	3511.2	2959.6	2513.5	2129.7	1779.6	1463.0	1213.6	882.6
32.5°	6298.1	5357.9	4489.7	3736.7	3132.3	2633.4	2216.1	1846.7	1511.0	1251.9	921.0
30°	6691.4	5703.3	4777.5	3966.9	3290.6	2743.7	2297.6	1913.9	1568.5	1285.5	959.3
27.5°	7051.2	6039.1	5065.3	4182.7	3439.3	2844.5	2384.0	1976.3	1616.5	1319.1	992.9
25°	7377.4	6341.3	5329.2	4379.4	3573.6	2954.8	2465.5	2038.6	1659.7	1347.9	1021.7
22.5°	7684.4	6619.5	5569.0	4576.1	3736.7	3065.1	2542.3	2096.2	1702.8	1376.7	1050.5
20°	7953.0	6873.7	5799.2	4772.7	3880.6	3165.8	2609.4	2148.9	1741.2	1395.8	1079.3
17.5°	8168.8	7099.2	6005.5	4945.4	4005.3	3252.2	2667.0	2196.9	1774.8	1419.8	1098.5
15°	8360.7	7291.0	6178.2	5094.1	4115.6	3324.1	2719.7	2235.3	1803.6	1434.2	1122.4
12.5°	8523.8	7454.1	6326.9	5223.6	4211.5	3386.5	2762.9	2264.1	1827.6	1448.6	1136.8
10°	8658.1	7583.6	6451.6	5324.4	4288.3	3434.5	2796.5	2292.8	1846.7	1463.0	1151.2
7.5°	8758.8	7679.6	6542.7	5410.7	4350.6	3468.0	2825.3	2312.0	1865.9	1472.6	1175.2
5°	8835.6	7761.1	6614.7	5468.3	4398.6	3516.0	2858.9	2336.0	1885.1	1482.2	1175.2
2.5°	8893.1	7828.3	6672.3	5516.2	4437.0	3506.4	2858.9	2331.2	1885.1	1482.2	1170.4
0°	8883.5	7833.1	6667.5	5516.2	4437.0	3496.8	2858.9	2326.4	1885.1	1482.2	1170.4



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	33.6	24.0	9.6	0.0
85°	72.0	48.0	24.0	0.0
82.5°	105.5	67.2	33.6	0.0
80°	139.1	91.1	43.2	0.0
77.5°	177.5	115.1	57.6	0.0
75°	211.1	134.3	67.2	0.0
72.5°	244.6	158.3	76.7	0.0
70°	273.4	177.5	86.3	0.0
67.5°	302.2	201.5	100.7	0.0
65°	326.2	220.6	110.3	0.0
62.5°	345.4	244.6	119.9	0.0
60°	369.3	263.8	129.5	0.0
57.5°	388.5	278.2	139.1	0.0
55°	407.7	287.8	148.7	0.0
52.5°	426.9	302.2	158.3	0.0
50°	446.1	316.6	167.9	0.0
47.5°	465.3	326.2	172.7	0.0
45°	494.1	340.6	182.3	0.0
42.5°	518.0	350.2	191.9	0.0
40°	542.0	359.8	196.7	0.0
37.5°	566.0	369.3	206.3	0.0
35°	590.0	378.9	211.1	0.0
32.5°	609.2	388.5	215.9	0.0
30°	628.4	398.1	220.6	0.0
27.5°	647.6	402.9	225.4	0.0
25°	661.9	412.5	230.2	0.0
22.5°	676.3	417.3	235.0	0.0
20°	685.9	422.1	239.8	0.0
17.5°	700.3	426.9	244.6	0.0
15°	705.1	431.7	254.2	0.0
12.5°	714.7	436.5	254.2	0.0
10°	719.5	441.3	254.2	0.0
7.5°	729.1	441.3	254.2	0.0
5°	724.3	441.3	254.2	0.0
2.5°	724.3	441.3	254.2	0.0
0°	719.5	441.3	254.2	0.0

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