

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: P628169

Luminaire Tested: **IFLD-M-SA4E-722-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628169
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-722-U-LAM
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/
Lambertian distribution lens
Light Source: (64) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

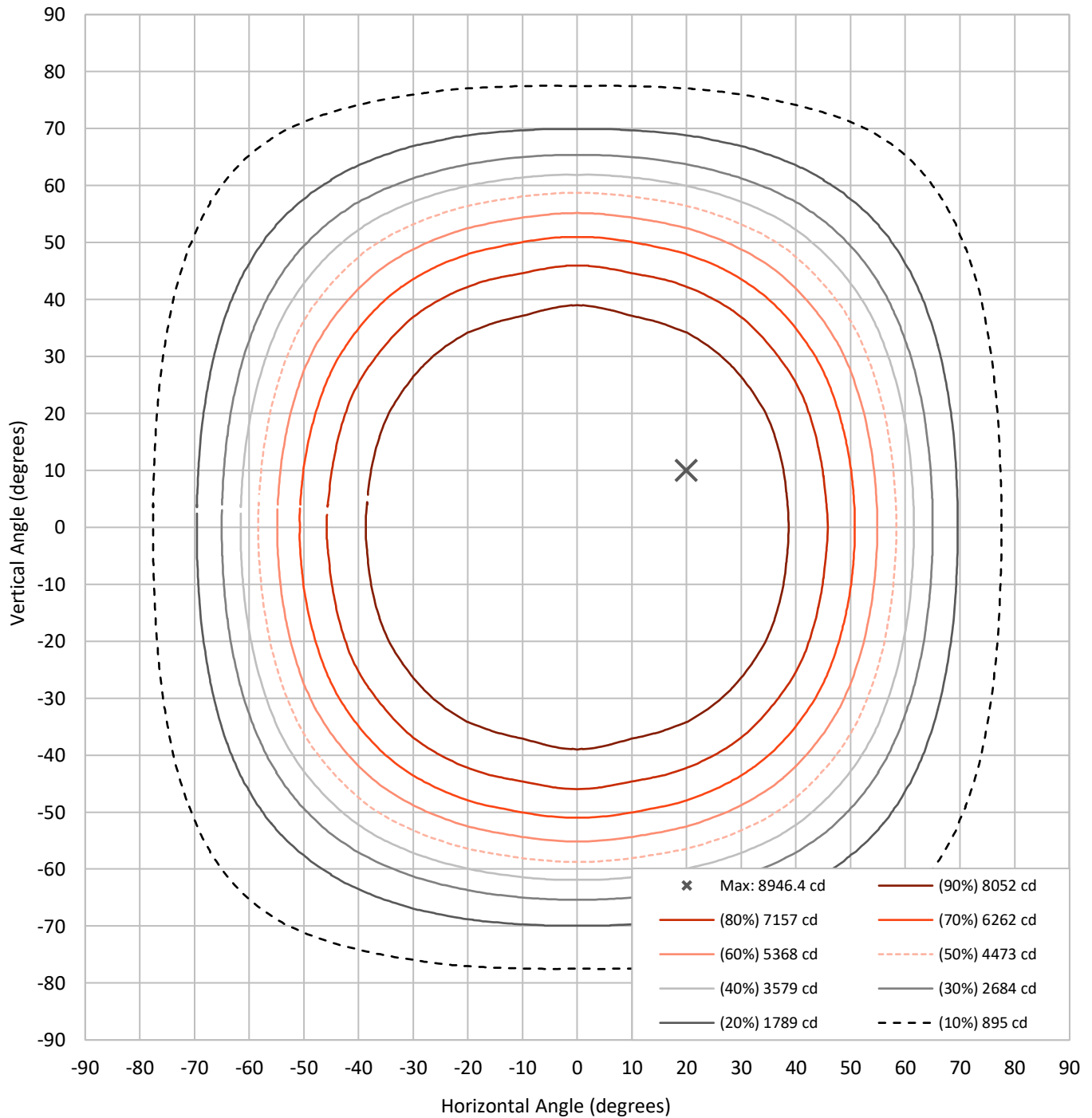
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	27446.2 lumens	Max Intensity:	8946.4 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	87.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	16841.6 lumens	Field Lumens:	20190.2 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 314.8
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



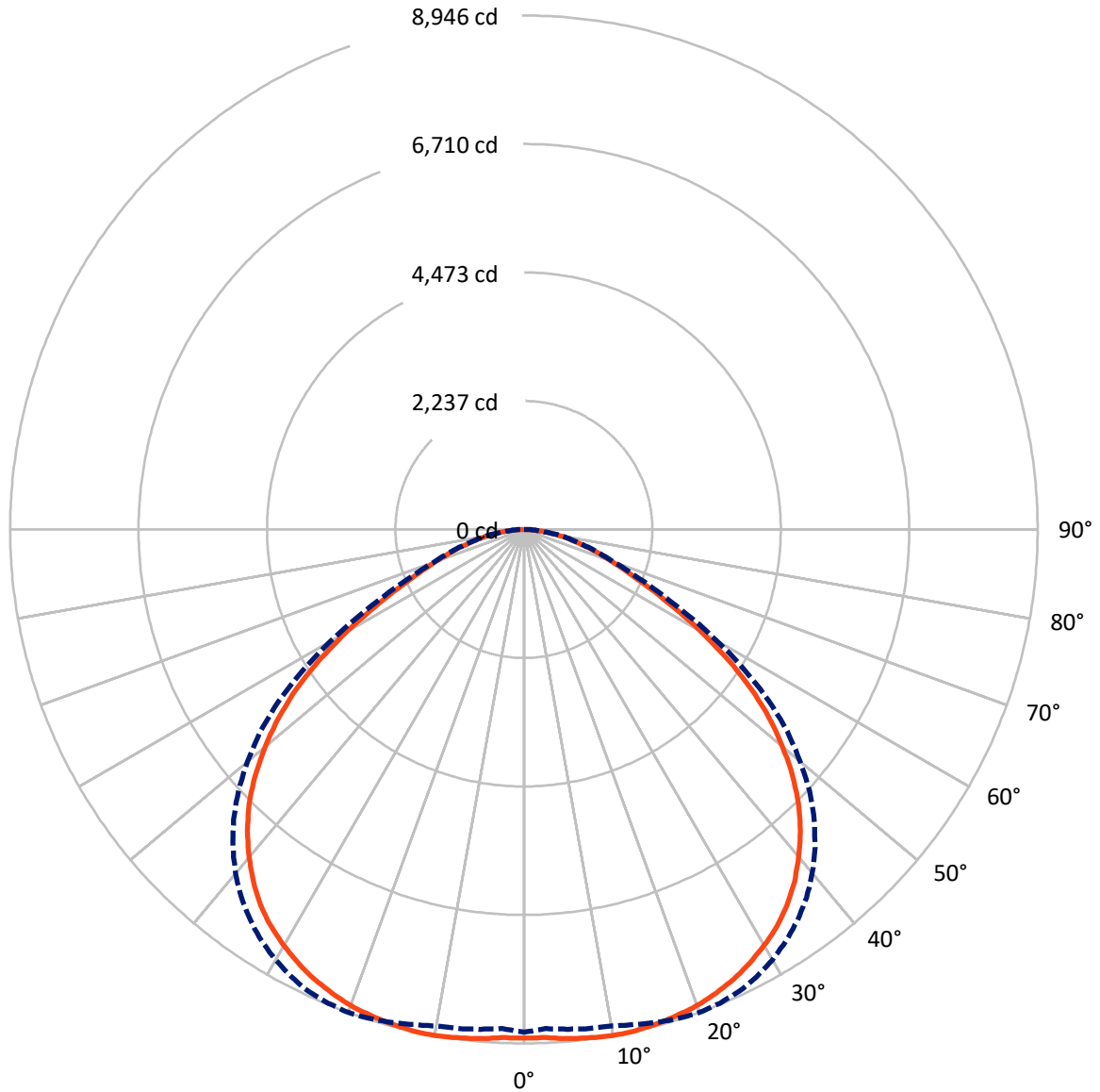
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Iso-Candela Plot



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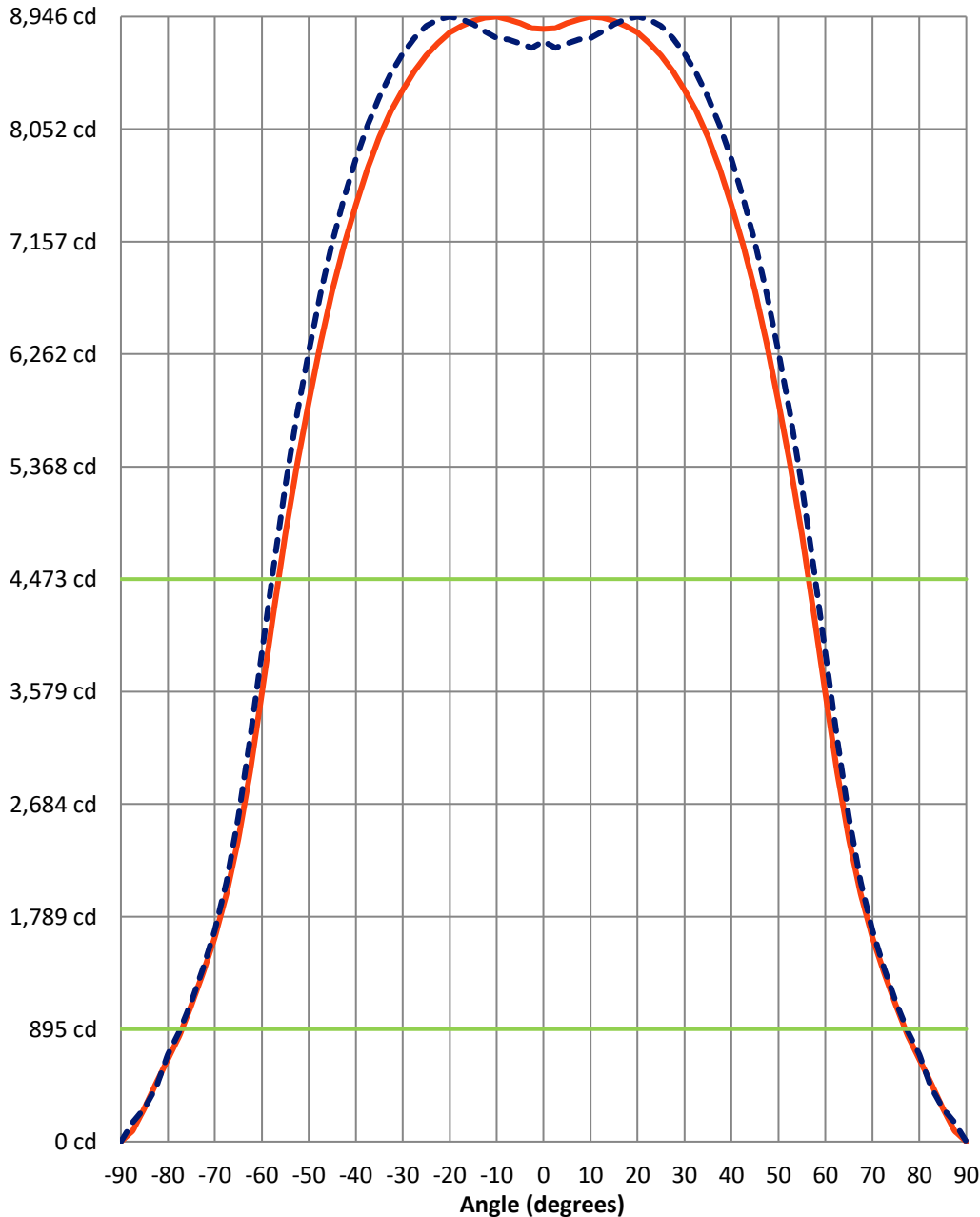
Luminous Intensity Polar Plot



— 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: 16841.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 20190.2
 Efficiency: 73.6%

Spill:
 Lumens: 7256.1
 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°	72.2	78.0	80.9	83.7	86.6	89.5	92.4	89.5	86.6	86.6	83.7
85°	193.5	199.3	202.1	222.4	242.6	254.1	268.6	265.7	265.7	262.8	259.9
82.5°	387.0	404.3	418.7	438.9	450.5	467.8	479.4	470.7	464.9	453.4	444.7
80°	687.3	693.1	696.0	698.8	684.4	681.5	675.7	667.1	655.5	641.1	626.7
77.5°	875.0	880.8	886.6	880.8	877.9	875.0	866.3	857.7	846.1	834.6	817.2
75°	1158.0	1158.0	1158.0	1149.3	1143.6	1134.9	1120.5	1106.0	1085.8	1062.7	1036.7
72.5°	1458.3	1455.4	1452.6	1435.2	1420.8	1403.5	1383.3	1365.9	1342.8	1316.8	1282.2
70°	1773.1	1778.9	1781.8	1758.7	1741.3	1718.2	1692.2	1660.5	1625.8	1588.3	1539.2
67.5°	2206.3	2200.5	2194.7	2163.0	2139.9	2108.1	2070.5	2024.3	1972.4	1914.6	1845.3
65°	2743.4	2752.1	2734.7	2703.0	2659.7	2607.7	2549.9	2483.5	2405.5	2318.9	2220.7
62.5°	3393.2	3407.6	3387.4	3346.9	3292.1	3222.8	3141.9	3046.6	2939.8	2818.5	2697.2
60°	4132.4	4129.5	4092.0	4037.1	3964.9	3878.3	3788.8	3684.8	3563.5	3422.0	3274.8
57.5°	4811.1	4805.3	4759.1	4704.2	4632.0	4539.6	4444.3	4334.6	4207.5	4057.3	3887.0
55°	5420.4	5414.6	5368.4	5310.6	5235.6	5143.2	5056.5	4952.6	4828.4	4669.6	4487.6
52.5°	5960.4	5963.3	5922.9	5859.3	5778.5	5688.9	5605.2	5501.2	5382.8	5224.0	5047.9
50°	6457.1	6454.2	6410.9	6353.1	6278.1	6191.4	6107.7	6003.7	5879.5	5726.5	5556.1
47.5°	6919.1	6913.4	6864.3	6800.7	6722.8	6647.7	6569.7	6477.3	6347.4	6194.3	6023.9
45°	7306.1	7294.6	7245.5	7184.8	7109.7	7043.3	6974.0	6904.7	6766.1	6624.6	6462.9
42.5°	7638.2	7635.3	7586.2	7525.6	7450.5	7392.7	7329.2	7242.6	7127.1	6997.1	6838.3
40°	7955.9	7932.8	7883.7	7825.9	7756.6	7707.5	7644.0	7557.3	7444.7	7317.7	7164.6
37.5°	8192.7	8195.5	8143.6	8080.0	8019.4	7973.2	7915.4	7834.6	7736.4	7612.2	7459.2
35°	8417.9	8403.5	8360.1	8305.3	8250.4	8198.4	8137.8	8068.5	7987.6	7872.1	7727.7
32.5°	8565.2	8585.4	8533.4	8475.7	8443.9	8403.5	8339.9	8267.7	8195.5	8080.0	7950.1
30°	8726.9	8709.6	8669.1	8620.0	8596.9	8571.0	8516.1	8446.8	8363.0	8259.1	8137.8
27.5°	8839.5	8830.9	8781.8	8735.6	8724.0	8700.9	8657.6	8596.9	8513.2	8412.1	8299.5
25°	8888.6	8894.4	8848.2	8822.2	8822.2	8807.8	8773.1	8721.1	8637.4	8545.0	8435.2
22.5°	8911.7	8905.9	8874.2	8868.4	8882.8	8871.3	8856.8	8810.6	8735.6	8660.5	8568.1
20°	8926.2	8885.7	8856.8	8880.0	8897.3	8894.4	8882.8	8854.0	8819.3	8755.8	8674.9
17.5°	8894.4	8868.4	8833.7	8868.4	8905.9	8908.8	8897.3	8880.0	8871.3	8830.9	8758.7
15°	8816.4	8796.2	8802.0	8836.6	8880.0	8894.4	8903.1	8923.3	8911.7	8880.0	8816.4
12.5°	8764.4	8738.4	8764.4	8799.1	8822.2	8830.9	8900.2	8937.7	8937.7	8908.8	8868.4
10°	8750.0	8698.0	8732.7	8764.4	8776.0	8828.0	8885.7	8926.2	8946.4	8923.3	8871.3
7.5°	8721.1	8686.5	8700.9	8715.3	8781.8	8819.3	8851.1	8894.4	8923.3	8920.4	8874.2
5°	8706.7	8663.4	8669.1	8729.8	8776.0	8802.0	8813.5	8851.1	8894.4	8903.1	8868.4
2.5°	8669.1	8648.9	8692.2	8698.0	8732.7	8752.9	8764.4	8799.1	8854.0	8874.2	8859.7
0°	8648.9	8620.0	8591.2	8614.3	8672.0	8715.3	8732.7	8784.7	8848.2	8868.4	8836.6



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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°	80.9	78.0	75.1	72.2	75.1	75.1	75.1	72.2	75.1	72.2	72.2
85°	251.2	239.7	231.0	219.5	207.9	199.3	187.7	176.2	173.3	170.4	164.6
82.5°	433.2	418.7	404.3	387.0	369.6	349.4	329.2	306.1	300.3	294.6	285.9
80°	609.3	589.1	568.9	548.7	531.4	511.1	488.0	462.0	444.7	430.3	413.0
77.5°	794.1	765.3	736.4	701.7	681.5	661.3	638.2	612.2	586.2	563.1	537.1
75°	1005.0	973.2	944.3	909.7	872.1	834.6	797.0	762.4	724.8	690.2	655.5
72.5°	1238.9	1192.7	1146.5	1103.1	1056.9	1010.7	961.6	915.4	869.2	823.0	773.9
70°	1484.3	1426.6	1368.8	1311.1	1250.4	1189.8	1132.0	1074.3	1016.5	955.9	901.0
67.5°	1773.1	1706.7	1631.6	1550.7	1461.2	1383.3	1308.2	1238.9	1169.6	1100.2	1030.9
65°	2134.1	2041.7	1940.6	1830.9	1726.9	1622.9	1513.2	1409.2	1328.4	1247.5	1169.6
62.5°	2578.8	2448.8	2307.3	2165.8	2038.8	1903.1	1776.0	1640.3	1513.2	1397.7	1302.4
60°	3110.1	2934.0	2760.7	2578.8	2402.6	2217.8	2056.1	1888.6	1729.8	1588.3	1449.7
57.5°	3696.4	3491.3	3283.4	3061.1	2821.4	2604.8	2385.3	2165.8	1978.1	1790.4	1634.5
55°	4291.3	4074.7	3840.8	3589.5	3326.7	3049.5	2752.1	2506.6	2249.6	2030.1	1828.0
52.5°	4857.3	4632.0	4389.4	4158.4	3843.6	3526.0	3199.7	2876.2	2575.9	2295.8	2050.3
50°	5362.6	5143.2	4909.2	4640.7	4349.0	4011.1	3647.3	3283.4	2928.2	2599.0	2292.9
47.5°	5824.7	5611.0	5377.1	5108.5	4842.8	4467.4	4100.7	3699.3	3303.6	2925.3	2567.2
45°	6257.8	6041.3	5798.7	5541.7	5235.6	4900.6	4522.3	4118.0	3693.5	3269.0	2856.0
42.5°	6650.6	6434.0	6188.5	5922.9	5619.6	5287.5	4920.8	4513.6	4086.2	3624.2	3170.8
40°	6994.2	6783.4	6546.6	6269.4	5986.4	5637.0	5276.0	4889.0	4447.2	3982.3	3482.7
37.5°	7294.6	7098.2	6864.3	6589.9	6289.6	5977.7	5605.2	5218.2	4819.7	4314.4	3803.2
35°	7560.2	7378.3	7138.6	6878.7	6584.2	6255.0	5905.5	5527.2	5096.9	4623.3	4126.7
32.5°	7791.3	7606.4	7387.0	7127.1	6841.2	6532.2	6174.1	5792.9	5385.7	4903.5	4363.4
30°	7987.6	7808.6	7600.7	7355.2	7080.9	6774.8	6425.3	6041.3	5625.4	5146.0	4611.8
27.5°	8158.0	7987.6	7785.5	7557.3	7294.6	7000.0	6647.7	6260.7	5836.2	5374.2	4839.9
25°	8305.3	8140.7	7953.0	7736.4	7476.5	7187.7	6855.6	6451.3	6026.8	5561.9	5033.4
22.5°	8438.1	8279.3	8091.6	7880.8	7644.0	7355.2	7020.2	6618.8	6188.5	5729.4	5209.6
20°	8556.5	8409.2	8224.4	8007.8	7771.0	7479.4	7147.3	6766.1	6332.9	5882.4	5368.4
17.5°	8651.8	8521.9	8337.0	8108.9	7872.1	7589.1	7265.7	6916.3	6457.1	6012.4	5501.2
15°	8718.2	8591.2	8423.7	8192.7	7961.6	7681.5	7358.1	6997.1	6569.7	6116.3	5611.0
12.5°	8764.4	8628.7	8472.8	8259.1	8028.1	7750.8	7436.1	7080.9	6665.0	6208.7	5706.3
10°	8776.0	8651.8	8495.9	8305.3	8080.0	7811.5	7502.5	7150.2	6743.0	6280.9	5784.2
7.5°	8781.8	8663.4	8521.9	8339.9	8117.6	7857.7	7551.6	7205.0	6800.7	6341.6	5842.0
5°	8778.9	8666.3	8539.2	8363.0	8140.7	7883.7	7583.3	7242.6	6841.2	6382.0	5885.3
2.5°	8770.2	8669.1	8550.7	8380.4	8166.7	7912.5	7615.1	7285.9	6884.5	6416.7	5920.0
0°	8793.3	8706.7	8556.5	8374.6	8172.4	7912.5	7612.2	7291.7	6890.3	6413.8	5917.1



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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°	72.2	69.3	69.3	66.4	63.5	60.6	54.9	52.0	46.2	37.5	28.9
85°	155.9	147.3	138.6	132.8	127.1	121.3	112.6	104.0	92.4	75.1	57.8
82.5°	274.3	257.0	239.7	219.5	202.1	184.8	170.4	155.9	138.6	112.6	86.6
80°	392.7	366.7	340.8	311.9	285.9	257.0	231.0	207.9	184.8	150.2	115.5
77.5°	511.1	476.5	438.9	404.3	366.7	329.2	291.7	259.9	225.2	184.8	144.4
75°	620.9	580.4	545.8	496.7	450.5	401.4	352.3	309.0	265.7	216.6	173.3
72.5°	730.6	678.6	629.5	583.3	531.4	470.7	415.8	361.0	306.1	248.3	196.4
70°	840.3	776.8	716.2	661.3	603.5	542.9	476.5	413.0	346.5	277.2	216.6
67.5°	953.0	880.8	811.5	742.2	675.7	606.4	537.1	464.9	387.0	306.1	239.7
65°	1077.1	987.6	903.9	825.9	747.9	672.9	594.9	516.9	430.3	337.9	259.9
62.5°	1201.3	1103.1	1005.0	906.8	820.1	736.4	652.6	566.0	470.7	372.5	280.1
60°	1334.2	1221.5	1108.9	999.2	892.3	799.9	707.5	615.1	514.0	404.3	300.3
57.5°	1481.4	1345.7	1218.6	1094.5	973.2	863.4	762.4	664.2	551.6	436.1	323.4
55°	1648.9	1481.4	1331.3	1192.7	1059.8	927.0	817.2	716.2	594.9	467.8	349.4
52.5°	1825.1	1631.6	1449.7	1293.7	1152.2	1002.1	869.2	756.6	638.2	499.6	372.5
50°	2030.1	1784.7	1582.5	1391.9	1233.1	1077.1	924.1	802.8	681.5	537.1	395.6
47.5°	2240.9	1969.5	1715.3	1507.4	1319.7	1149.3	987.6	843.2	721.9	571.8	418.7
45°	2486.4	2145.6	1865.5	1620.0	1403.5	1224.4	1051.2	886.6	756.6	606.4	441.8
42.5°	2723.2	2353.5	2021.5	1744.2	1498.8	1296.6	1108.9	932.8	791.3	641.1	462.0
40°	3003.3	2561.5	2171.6	1862.6	1594.1	1365.9	1166.7	981.8	823.0	672.9	482.3
37.5°	3271.9	2772.3	2353.5	1992.6	1686.5	1435.2	1224.4	1028.1	851.9	704.6	508.3
35°	3537.5	3006.2	2526.8	2113.9	1781.8	1513.2	1282.2	1071.4	880.8	730.6	531.4
32.5°	3791.7	3225.7	2703.0	2249.6	1885.7	1585.4	1334.2	1111.8	909.7	753.7	554.5
30°	4028.5	3433.6	2876.2	2388.2	1981.0	1651.8	1383.3	1152.2	944.3	773.9	577.6
27.5°	4245.0	3635.7	3049.5	2518.2	2070.5	1712.5	1435.2	1189.8	973.2	794.1	597.8
25°	4441.4	3817.7	3208.3	2636.6	2151.4	1778.9	1484.3	1227.3	999.2	811.5	615.1
22.5°	4626.2	3985.1	3352.7	2755.0	2249.6	1845.3	1530.5	1262.0	1025.2	828.8	632.4
20°	4788.0	4138.2	3491.3	2873.3	2336.2	1905.9	1571.0	1293.7	1048.3	840.3	649.8
17.5°	4917.9	4273.9	3615.5	2977.3	2411.3	1957.9	1605.6	1322.6	1068.5	854.8	661.3
15°	5033.4	4389.4	3719.5	3066.8	2477.7	2001.2	1637.4	1345.7	1085.8	863.4	675.7
12.5°	5131.6	4487.6	3809.0	3144.8	2535.5	2038.8	1663.4	1363.0	1100.2	872.1	684.4
10°	5212.5	4565.6	3884.1	3205.4	2581.7	2067.7	1683.6	1380.4	1111.8	880.8	693.1
7.5°	5273.1	4623.3	3938.9	3257.4	2619.2	2087.9	1700.9	1391.9	1123.3	886.6	707.5
5°	5319.3	4672.4	3982.3	3292.1	2648.1	2116.7	1721.1	1406.4	1134.9	892.3	707.5
2.5°	5354.0	4712.9	4016.9	3321.0	2671.2	2111.0	1721.1	1403.5	1134.9	892.3	704.6
0°	5348.2	4715.8	4014.0	3321.0	2671.2	2105.2	1721.1	1400.6	1134.9	892.3	704.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.2	14.4	5.8	0.0
85°	43.3	28.9	14.4	0.0
82.5°	63.5	40.4	20.2	0.0
80°	83.7	54.9	26.0	0.0
77.5°	106.8	69.3	34.7	0.0
75°	127.1	80.9	40.4	0.0
72.5°	147.3	95.3	46.2	0.0
70°	164.6	106.8	52.0	0.0
67.5°	181.9	121.3	60.6	0.0
65°	196.4	132.8	66.4	0.0
62.5°	207.9	147.3	72.2	0.0
60°	222.4	158.8	78.0	0.0
57.5°	233.9	167.5	83.7	0.0
55°	245.5	173.3	89.5	0.0
52.5°	257.0	181.9	95.3	0.0
50°	268.6	190.6	101.1	0.0
47.5°	280.1	196.4	104.0	0.0
45°	297.4	205.0	109.7	0.0
42.5°	311.9	210.8	115.5	0.0
40°	326.3	216.6	118.4	0.0
37.5°	340.8	222.4	124.2	0.0
35°	355.2	228.1	127.1	0.0
32.5°	366.7	233.9	130.0	0.0
30°	378.3	239.7	132.8	0.0
27.5°	389.9	242.6	135.7	0.0
25°	398.5	248.3	138.6	0.0
22.5°	407.2	251.2	141.5	0.0
20°	413.0	254.1	144.4	0.0
17.5°	421.6	257.0	147.3	0.0
15°	424.5	259.9	153.1	0.0
12.5°	430.3	262.8	153.1	0.0
10°	433.2	265.7	153.1	0.0
7.5°	438.9	265.7	153.1	0.0
5°	436.1	265.7	153.1	0.0
2.5°	436.1	265.7	153.1	0.0
0°	433.2	265.7	153.1	0.0

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