

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: P624059

Luminaire Tested: **IFLD-M-SA4B-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624059
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

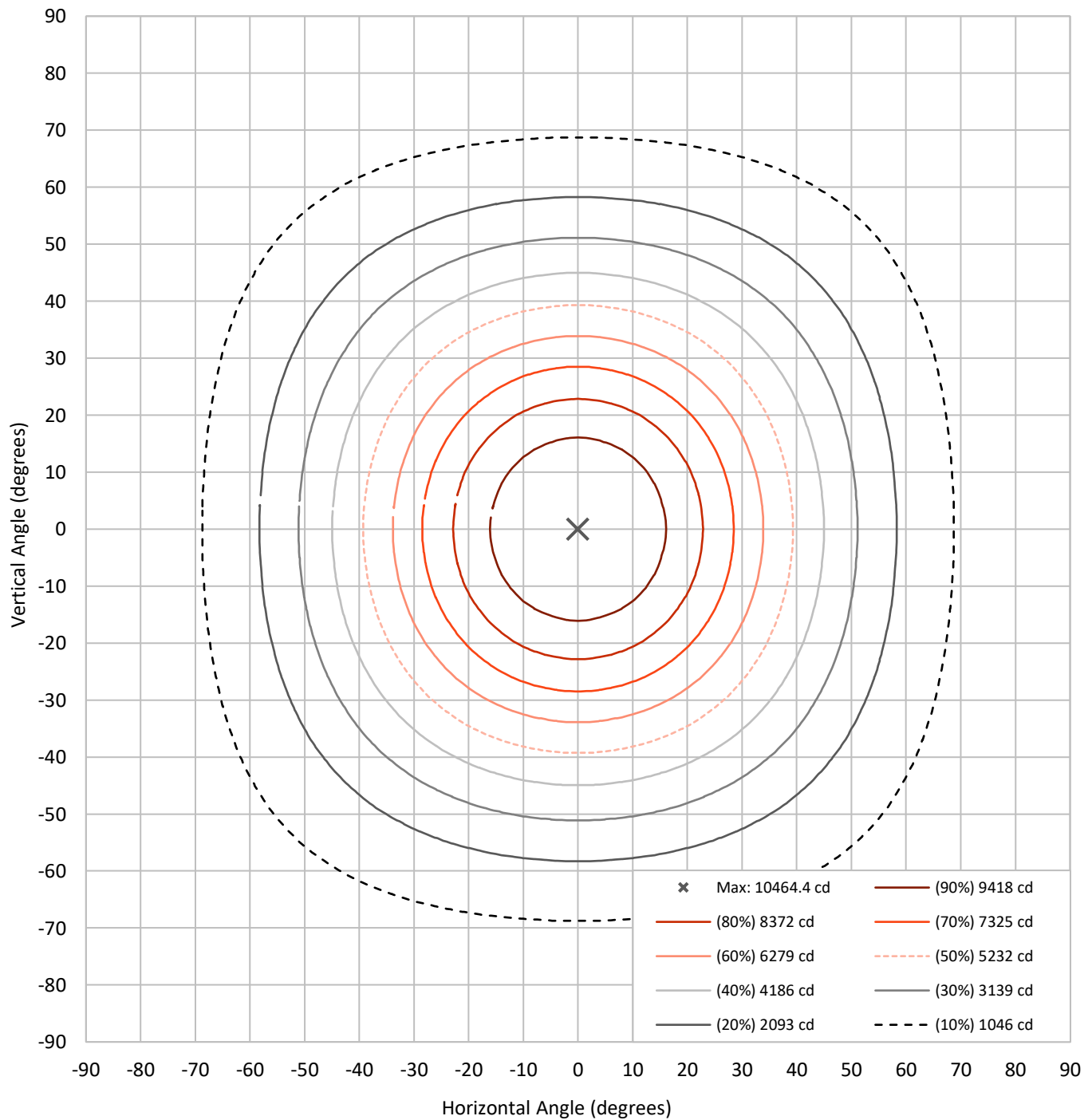
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18841.3 lumens	Max Intensity:	10464.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	113.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8152.4 lumens	Field Lumens:	13349.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	166.1		
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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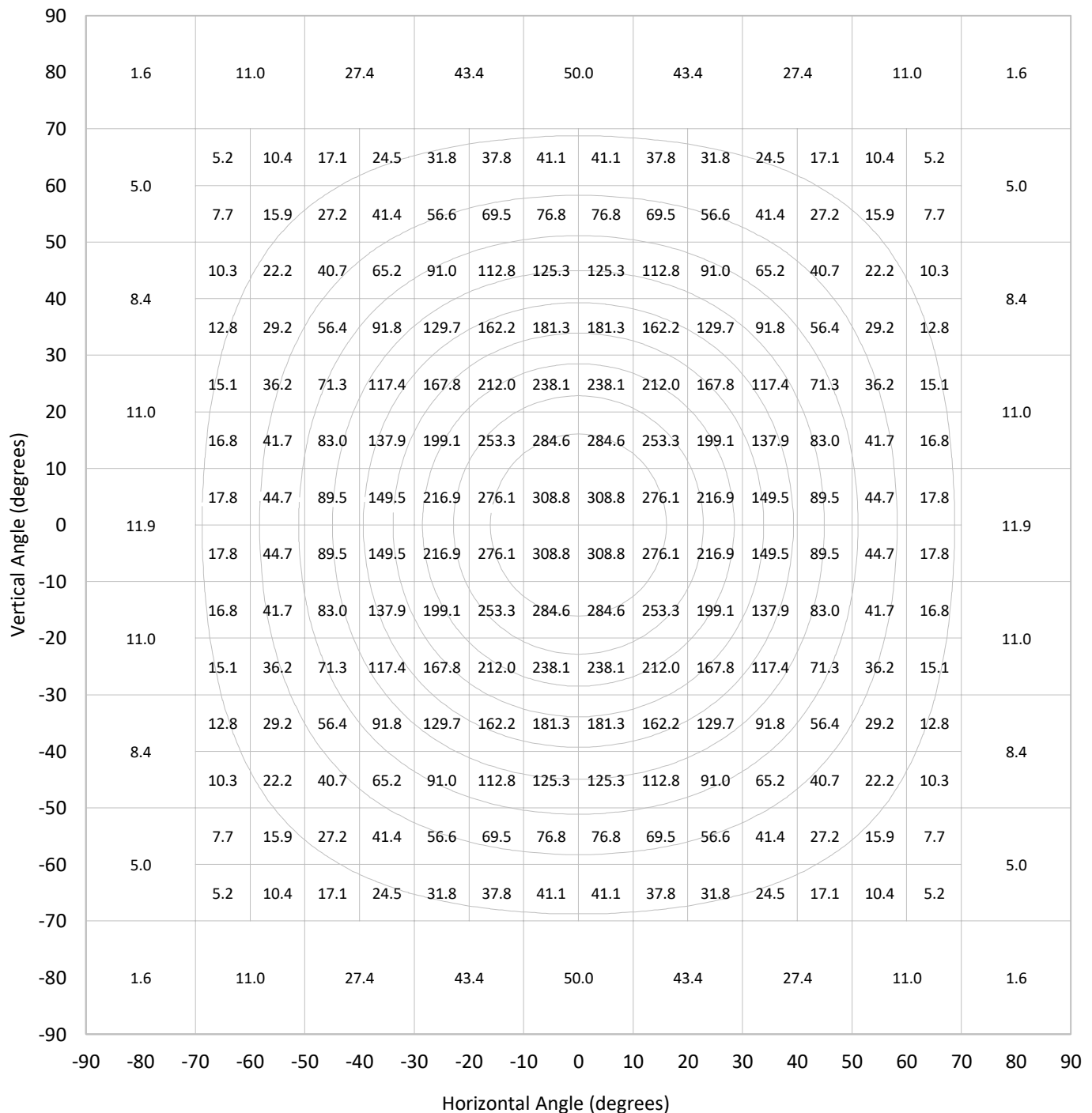
CATALOG NUMBER: IFLD-M-SA4B-830-U-77

Iso-Candela Plot



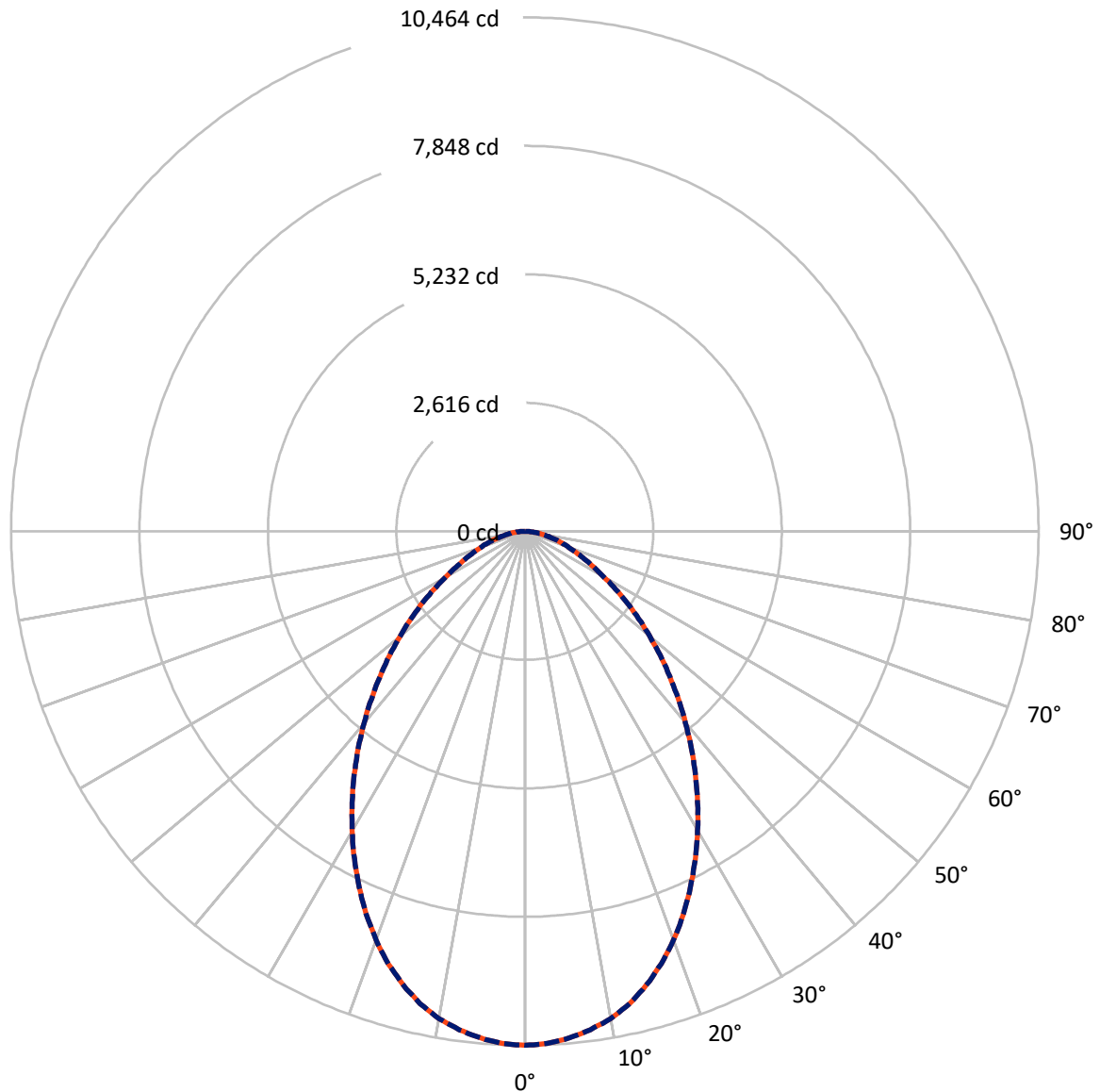
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Lumen Table



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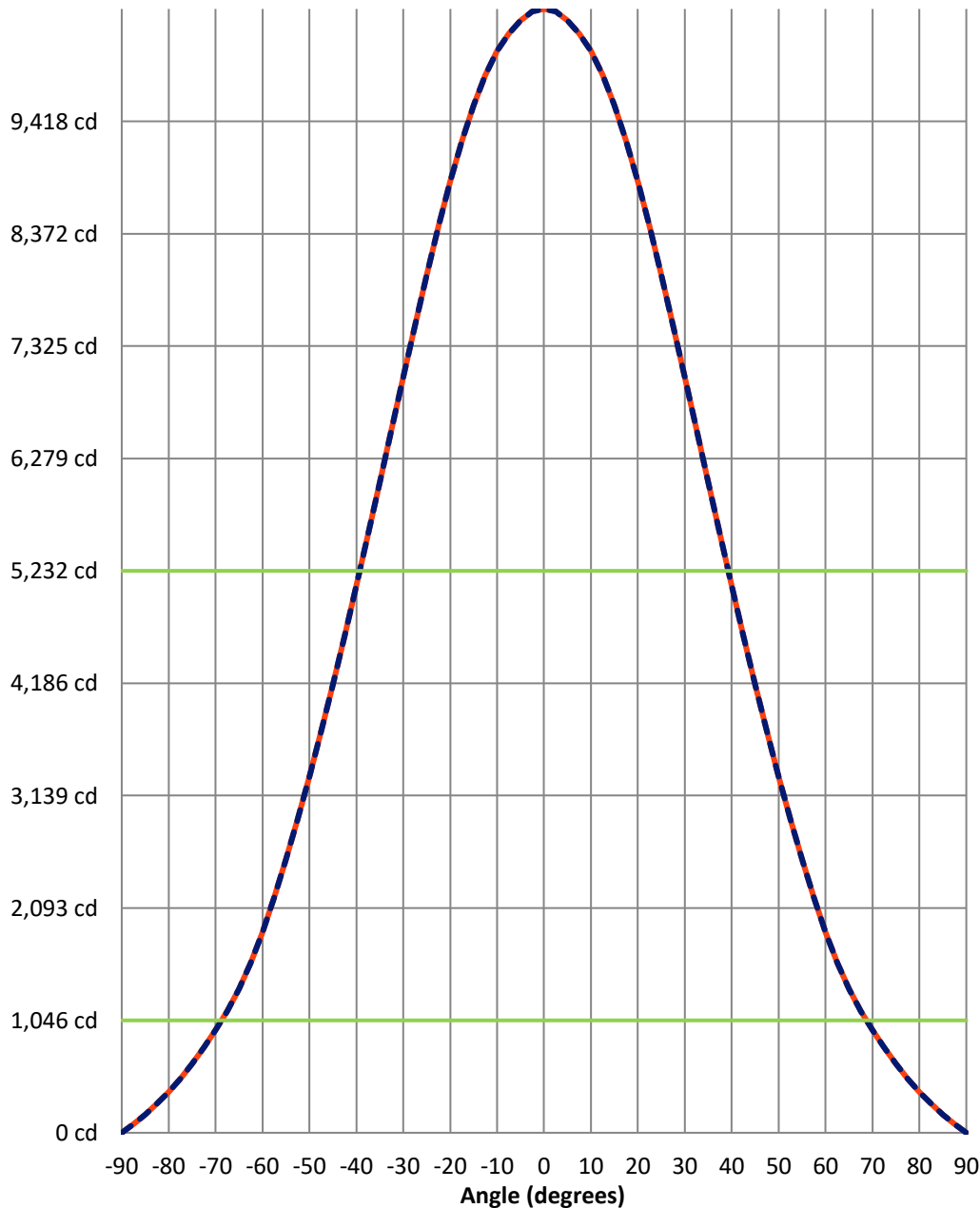
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 8152.4
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 13349.4
Efficiency: 70.9%

Spill:

Lumens: 5492
Efficiency: 29.1%

— Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-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°	80.5	80.5	80.5	80.5	80.5	80.5	80.5	76.6	76.6	74.6	72.7
85°	168.9	168.9	168.9	168.9	168.9	165.0	163.0	161.1	159.1	155.2	153.2
82.5°	271.1	271.1	271.1	271.1	267.2	263.2	261.3	257.3	253.4	247.5	241.6
80°	379.1	379.1	379.1	379.1	373.2	369.3	363.4	359.5	353.6	345.7	337.9
77.5°	502.9	502.9	502.9	497.0	493.1	487.2	481.3	473.4	465.6	455.7	444.0
75°	642.4	642.4	642.4	634.5	628.6	622.7	612.9	603.1	591.3	577.5	561.8
72.5°	793.6	793.6	793.6	783.8	777.9	768.1	756.3	742.5	728.8	711.1	691.5
70°	956.7	956.7	956.7	944.9	935.1	925.2	909.5	893.8	874.2	854.5	830.9
67.5°	1133.5	1133.5	1133.5	1119.7	1107.9	1094.2	1076.5	1056.8	1033.3	1005.8	978.3
65°	1339.7	1339.7	1331.9	1320.1	1306.3	1286.7	1265.1	1237.6	1208.1	1172.7	1135.4
62.5°	1583.3	1583.3	1571.5	1557.8	1540.1	1514.6	1485.1	1449.7	1408.5	1363.3	1318.1
60°	1866.2	1866.2	1852.4	1834.7	1809.2	1777.8	1738.5	1693.3	1642.2	1585.3	1530.3
57.5°	2192.3	2192.3	2174.6	2151.0	2119.6	2080.3	2031.2	1974.2	1909.4	1838.7	1769.9
55°	2545.9	2545.9	2524.3	2496.8	2459.4	2412.3	2353.4	2286.6	2208.0	2127.4	2039.0
52.5°	2921.1	2921.1	2895.5	2864.1	2820.9	2765.9	2699.1	2620.5	2530.1	2435.9	2331.7
50°	3315.9	3315.9	3286.4	3251.1	3202.0	3137.1	3060.5	2970.2	2870.0	2760.0	2640.2
47.5°	3738.3	3738.3	3704.9	3663.6	3604.7	3530.0	3439.7	3335.5	3221.6	3097.9	2962.3
45°	4172.4	4172.4	4135.1	4087.9	4023.1	3938.6	3838.4	3738.3	3592.9	3449.5	3292.3
42.5°	4624.2	4624.2	4581.0	4527.9	4453.3	4361.0	4247.0	4117.4	3974.0	3812.9	3642.0
40°	5093.7	5093.7	5044.6	4983.7	4901.2	4795.1	4667.4	4522.0	4361.0	4182.2	3993.6
37.5°	5573.0	5573.0	5518.0	5451.2	5358.9	5241.0	5097.6	4936.5	4755.8	4557.4	4349.2
35°	6056.2	6056.2	5995.3	5922.7	5820.5	5690.9	5535.7	5356.9	5156.5	4940.5	4706.7
32.5°	6549.3	6549.3	6482.5	6400.0	6284.1	6140.7	5969.8	5775.3	5573.0	5321.6	5066.2
30°	7036.5	7036.5	6963.8	6873.4	6749.7	6592.5	6405.9	6191.8	5954.1	5696.8	5421.7
27.5°	7515.8	7496.1	7435.3	7339.0	7203.5	7036.5	6834.1	6602.3	6345.0	6062.1	5767.5
25°	7987.2	7965.6	7898.8	7792.8	7647.4	7464.7	7246.7	6999.2	6722.2	6423.6	6101.4
22.5°	8439.1	8415.5	8344.8	8230.8	8075.6	7877.2	7643.5	7378.3	7083.6	6763.4	6423.6
20°	8857.5	8831.9	8759.3	8639.4	8478.3	8268.2	8020.6	7735.8	7421.5	7083.6	6722.2
17.5°	9234.6	9209.1	9132.5	9008.7	8857.5	8623.7	8368.3	8067.8	7735.8	7378.3	6999.2
15°	9566.6	9539.1	9460.5	9336.8	9163.9	8943.9	8674.8	8368.3	8020.6	7643.5	7246.7
12.5°	9849.5	9822.0	9741.5	9617.7	9438.9	9218.9	8943.9	8623.7	8268.2	7877.2	7464.7
10°	10073.4	10045.9	9969.3	9851.5	9666.8	9438.9	9163.9	8857.5	8478.3	8075.6	7647.4
7.5°	10234.5	10209.0	10138.3	10020.4	9851.5	9617.7	9336.8	9008.7	8639.4	8230.8	7792.8
5°	10356.3	10326.8	10256.1	10138.3	9969.3	9741.5	9460.5	9132.5	8759.3	8344.8	7898.8
2.5°	10440.8	10405.4	10326.8	10209.0	10045.9	9822.0	9539.1	9209.1	8831.9	8415.5	7965.6
0°	10464.4	10440.8	10356.3	10234.5	10073.4	9849.5	9566.6	9234.6	8857.5	8439.1	7987.2

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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°	70.7	70.7	68.8	66.8	64.8	60.9	58.9	57.0	55.0	51.1	49.1
85°	149.3	145.4	141.4	137.5	131.6	127.7	121.8	117.9	112.0	106.1	100.2
82.5°	235.7	229.8	222.0	216.1	208.2	198.4	190.5	180.7	170.9	163.0	153.2
80°	330.0	320.2	310.4	300.6	288.8	277.0	265.2	253.4	239.7	225.9	212.2
77.5°	432.2	418.4	404.7	389.0	375.2	359.5	343.8	328.1	310.4	292.7	275.0
75°	546.1	528.4	508.8	489.1	471.5	449.8	428.2	406.6	383.1	361.4	337.9
72.5°	669.9	648.3	624.7	601.1	575.6	548.1	520.6	491.1	463.6	436.1	406.6
70°	803.4	777.9	748.4	719.0	687.5	654.1	620.8	585.4	550.0	514.7	479.3
67.5°	946.8	915.4	880.1	844.7	805.4	766.1	726.8	685.6	642.4	599.1	557.9
65°	1100.1	1060.8	1019.5	974.3	929.2	884.0	836.8	787.7	738.6	687.5	642.4
62.5°	1271.0	1221.9	1168.8	1113.8	1062.7	1007.7	956.7	895.8	836.8	779.9	722.9
60°	1469.4	1404.5	1339.7	1271.0	1206.1	1135.4	1072.6	1005.8	939.0	874.2	807.4
57.5°	1691.3	1608.8	1530.3	1447.8	1361.3	1282.8	1202.2	1121.7	1047.0	970.4	897.7
55°	1942.8	1842.6	1744.4	1642.2	1542.1	1443.8	1341.7	1251.3	1159.0	1072.6	988.1
52.5°	2217.8	2103.9	1982.1	1866.2	1738.5	1616.7	1502.8	1388.8	1280.8	1176.7	1080.4
50°	2512.5	2378.9	2239.4	2098.0	1952.6	1809.2	1671.7	1538.1	1412.4	1290.6	1176.7
47.5°	2818.9	2667.7	2508.5	2347.5	2192.3	2017.4	1852.4	1701.2	1549.9	1412.4	1280.8
45°	3133.2	2962.3	2787.5	2604.8	2422.1	2233.5	2050.8	1866.2	1701.2	1538.1	1388.8
42.5°	3457.3	3264.8	3070.4	2868.0	2665.7	2459.4	2253.2	2050.8	1852.4	1671.7	1502.8
40°	3791.3	3579.1	3357.2	3137.1	2921.1	2685.3	2459.4	2233.5	2017.4	1809.2	1616.7
37.5°	4125.2	3893.4	3653.8	3406.3	3158.8	2921.1	2665.7	2422.1	2192.3	1952.6	1738.5
35°	4461.2	4205.8	3946.5	3677.4	3406.3	3137.1	2868.0	2604.8	2347.5	2098.0	1866.2
32.5°	4799.0	4520.1	4233.3	3946.5	3653.8	3357.2	3070.4	2787.5	2508.5	2239.4	1982.1
30°	5131.0	4828.5	4520.1	4205.8	3893.4	3579.1	3264.8	2962.3	2667.7	2378.9	2103.9
27.5°	5455.1	5131.0	4799.0	4461.2	4125.2	3791.3	3457.3	3133.2	2818.9	2512.5	2217.8
25°	5767.5	5421.7	5066.2	4706.7	4349.2	3993.6	3642.0	3292.3	2962.3	2640.2	2331.7
22.5°	6062.1	5696.8	5321.6	4940.5	4557.4	4182.2	3812.9	3449.5	3097.9	2760.0	2435.9
20°	6345.0	5954.1	5573.0	5156.5	4755.8	4361.0	3974.0	3592.9	3221.6	2870.0	2530.1
17.5°	6602.3	6191.8	5775.3	5356.9	4936.5	4522.0	4117.4	3738.3	3335.5	2970.2	2620.5
15°	6834.1	6405.9	5969.8	5535.7	5097.6	4667.4	4247.0	3838.4	3439.7	3060.5	2699.1
12.5°	7036.5	6592.5	6140.7	5690.9	5241.0	4795.1	4361.0	3938.6	3530.0	3137.1	2765.9
10°	7203.5	6749.7	6284.1	5820.5	5358.9	4901.2	4453.3	4023.1	3604.7	3202.0	2820.9
7.5°	7339.0	6873.4	6400.0	5922.7	5451.2	4983.7	4527.9	4087.9	3663.6	3251.1	2864.1
5°	7435.3	6963.8	6482.5	5995.3	5518.0	5044.6	4581.0	4135.1	3704.9	3286.4	2895.5
2.5°	7496.1	7036.5	6549.3	6056.2	5573.0	5093.7	4624.2	4172.4	3738.3	3315.9	2921.1
0°	7515.8	7036.5	6549.3	6056.2	5573.0	5093.7	4624.2	4172.4	3738.3	3315.9	2921.1

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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°	47.1	43.2	39.3	37.3	33.4	31.4	27.5	23.6	21.6	17.7	13.8
85°	94.3	86.4	80.5	74.6	68.8	60.9	55.0	49.1	41.3	35.4	27.5
82.5°	143.4	133.6	123.8	113.9	104.1	94.3	82.5	72.7	62.9	53.0	41.3
80°	198.4	182.7	168.9	155.2	141.4	127.7	112.0	98.2	82.5	68.8	55.0
77.5°	255.4	237.7	218.0	198.4	178.8	161.1	141.4	123.8	106.1	86.4	68.8
75°	316.3	292.7	271.1	245.5	222.0	196.4	172.9	149.3	127.7	106.1	82.5
72.5°	379.1	349.7	320.2	292.7	263.2	233.8	206.3	176.8	149.3	123.8	98.2
70°	444.0	408.6	373.2	339.8	306.4	271.1	239.7	206.3	172.9	141.4	112.0
67.5°	512.7	471.5	430.2	387.0	349.7	310.4	271.1	233.8	196.4	161.1	127.7
65°	587.4	538.2	487.2	442.0	392.9	349.7	306.4	263.2	222.0	178.8	141.4
62.5°	664.0	607.0	550.0	493.1	442.0	387.0	339.8	292.7	245.5	198.4	155.2
60°	742.5	677.7	612.9	550.0	487.2	430.2	373.2	320.2	271.1	218.0	168.9
57.5°	823.1	750.4	677.7	607.0	538.2	471.5	408.6	349.7	292.7	237.7	182.7
55°	905.6	823.1	742.5	664.0	587.4	512.7	444.0	379.1	316.3	255.4	198.4
52.5°	988.1	897.7	807.4	722.9	642.4	557.9	479.3	406.6	337.9	275.0	212.2
50°	1072.6	970.4	874.2	779.9	687.5	599.1	514.7	436.1	361.4	292.7	225.9
47.5°	1159.0	1047.0	939.0	836.8	738.6	642.4	550.0	463.6	383.1	310.4	239.7
45°	1251.3	1121.7	1005.8	895.8	787.7	685.6	585.4	491.1	406.6	328.1	253.4
42.5°	1341.7	1202.2	1072.6	956.7	836.8	726.8	620.8	520.6	428.2	343.8	265.2
40°	1443.8	1282.8	1135.4	1007.7	884.0	766.1	654.1	548.1	449.8	359.5	277.0
37.5°	1542.1	1361.3	1206.1	1062.7	929.2	805.4	687.5	575.6	471.5	375.2	288.8
35°	1642.2	1447.8	1271.0	1113.8	974.3	844.7	719.0	601.1	489.1	389.0	300.6
32.5°	1744.4	1530.3	1339.7	1168.8	1019.5	880.1	748.4	624.7	508.8	404.7	310.4
30°	1842.6	1608.8	1404.5	1221.9	1060.8	915.4	777.9	648.3	528.4	418.4	320.2
27.5°	1942.8	1691.3	1469.4	1271.0	1100.1	946.8	803.4	669.9	546.1	432.2	330.0
25°	2039.0	1769.9	1530.3	1318.1	1135.4	978.3	830.9	691.5	561.8	444.0	337.9
22.5°	2127.4	1838.7	1585.3	1363.3	1172.7	1005.8	854.5	711.1	577.5	455.7	345.7
20°	2208.0	1909.4	1642.2	1408.5	1208.1	1033.3	874.2	728.8	591.3	465.6	353.6
17.5°	2286.6	1974.2	1693.3	1449.7	1237.6	1056.8	893.8	742.5	603.1	473.4	359.5
15°	2353.4	2031.2	1738.5	1485.1	1265.1	1076.5	909.5	756.3	612.9	481.3	363.4
12.5°	2412.3	2080.3	1777.8	1514.6	1286.7	1094.2	925.2	768.1	622.7	487.2	369.3
10°	2459.4	2119.6	1809.2	1540.1	1306.3	1107.9	935.1	777.9	628.6	493.1	373.2
7.5°	2496.8	2151.0	1834.7	1557.8	1320.1	1119.7	944.9	783.8	634.5	497.0	379.1
5°	2524.3	2174.6	1852.4	1571.5	1331.9	1133.5	956.7	793.6	642.4	502.9	379.1
2.5°	2545.9	2192.3	1866.2	1583.3	1339.7	1133.5	956.7	793.6	642.4	502.9	379.1
0°	2545.9	2192.3	1866.2	1583.3	1339.7	1133.5	956.7	793.6	642.4	502.9	379.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.8	7.9	3.9	0.0
85°	21.6	13.8	7.9	0.0
82.5°	31.4	21.6	9.8	0.0
80°	41.3	27.5	13.8	0.0
77.5°	53.0	35.4	17.7	0.0
75°	62.9	41.3	21.6	0.0
72.5°	72.7	49.1	23.6	0.0
70°	82.5	55.0	27.5	0.0
67.5°	94.3	60.9	31.4	0.0
65°	104.1	68.8	33.4	0.0
62.5°	113.9	74.6	37.3	0.0
60°	123.8	80.5	39.3	0.0
57.5°	133.6	86.4	43.2	0.0
55°	143.4	94.3	47.1	0.0
52.5°	153.2	100.2	49.1	0.0
50°	163.0	106.1	51.1	0.0
47.5°	170.9	112.0	55.0	0.0
45°	180.7	117.9	57.0	0.0
42.5°	190.5	121.8	58.9	0.0
40°	198.4	127.7	60.9	0.0
37.5°	208.2	131.6	64.8	0.0
35°	216.1	137.5	66.8	0.0
32.5°	222.0	141.4	68.8	0.0
30°	229.8	145.4	70.7	0.0
27.5°	235.7	149.3	70.7	0.0
25°	241.6	153.2	72.7	0.0
22.5°	247.5	155.2	74.6	0.0
20°	253.4	159.1	76.6	0.0
17.5°	257.3	161.1	76.6	0.0
15°	261.3	163.0	80.5	0.0
12.5°	263.2	165.0	80.5	0.0
10°	267.2	168.9	80.5	0.0
7.5°	271.1	168.9	80.5	0.0
5°	271.1	168.9	80.5	0.0
2.5°	271.1	168.9	80.5	0.0
0°	271.1	168.9	80.5	0.0

(END OF REPORT)