

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: P624014

Luminaire Tested: **IFLD-S-SA2A-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624014
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2A-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

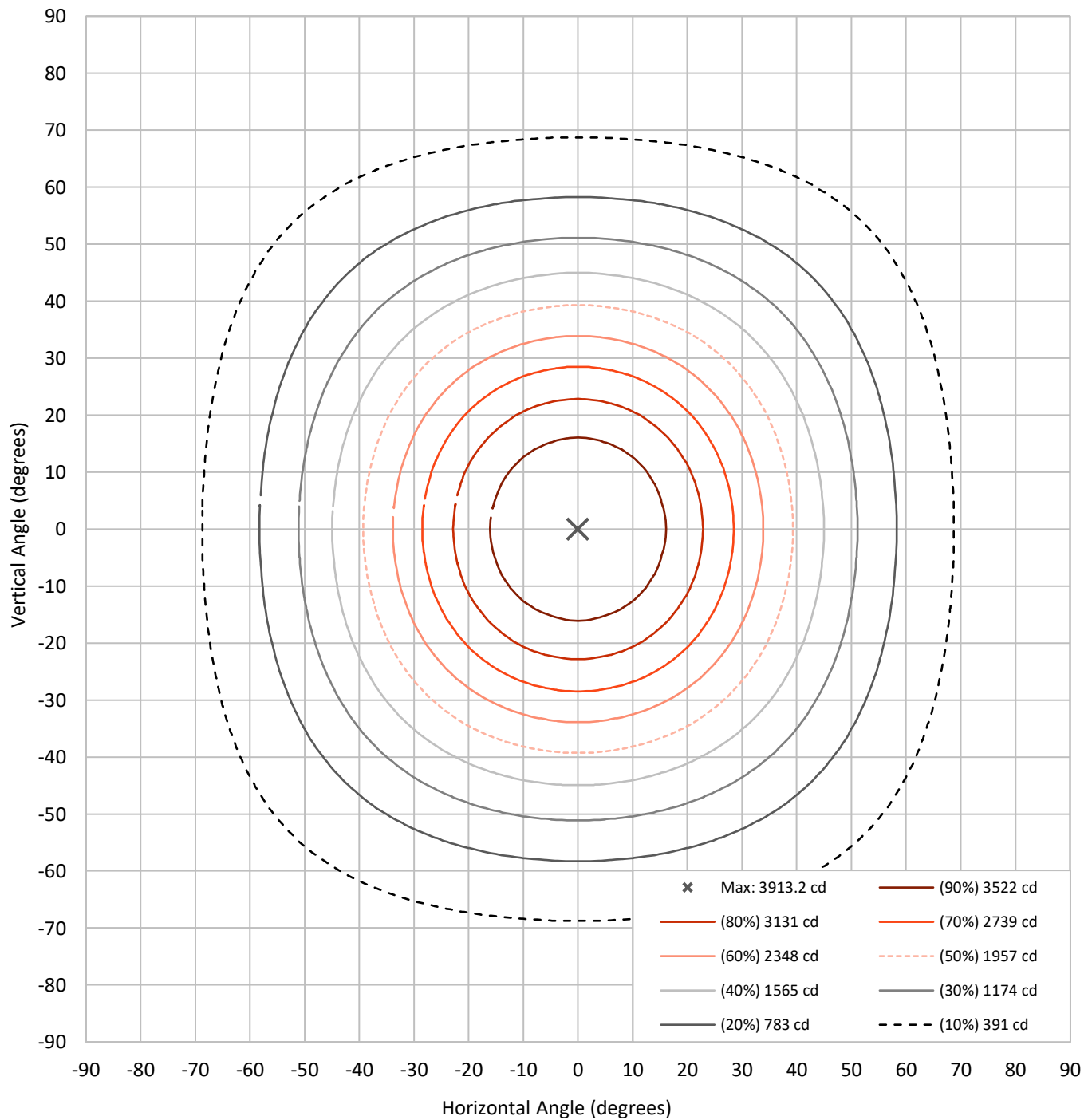
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	7045.8 lumens	Max Intensity:	3913.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	110.4 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	3048.6 lumens	Field Lumens:	4992 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	63.8		
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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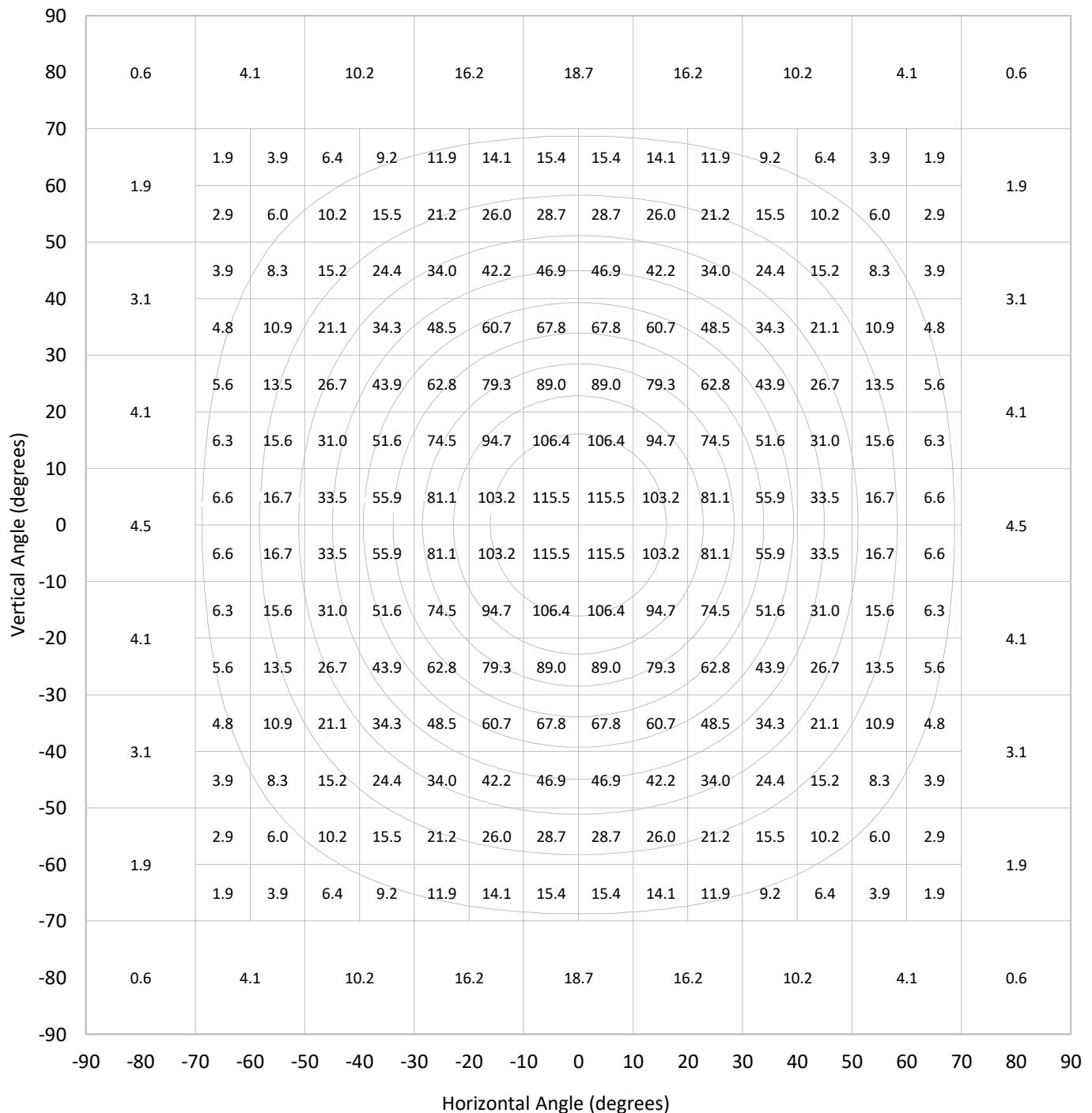
CATALOG NUMBER: IFLD-S-SA2A-827-U-77

Iso-Candela Plot



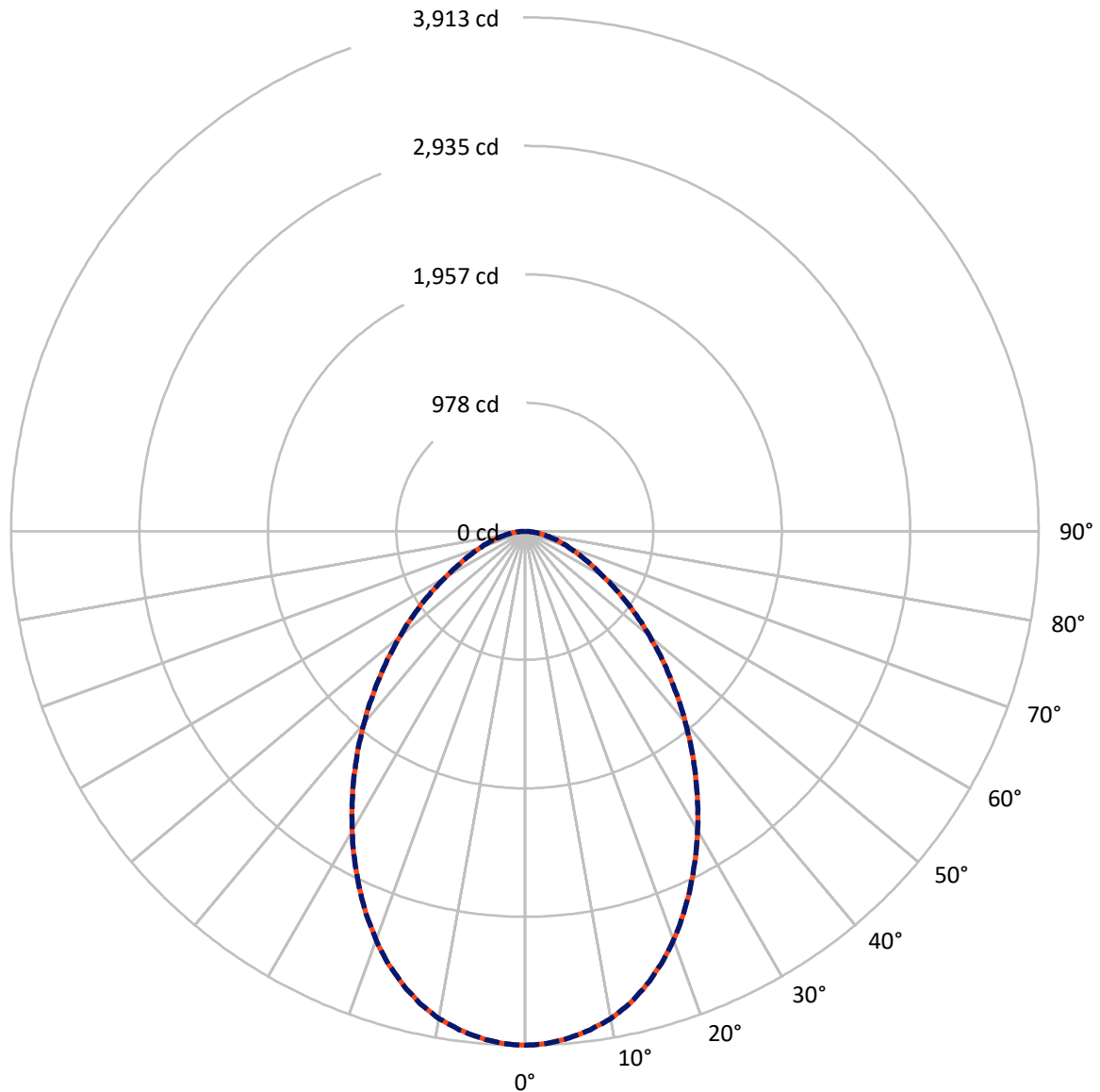
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Lumen Table



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Luminous Intensity Polar Plot

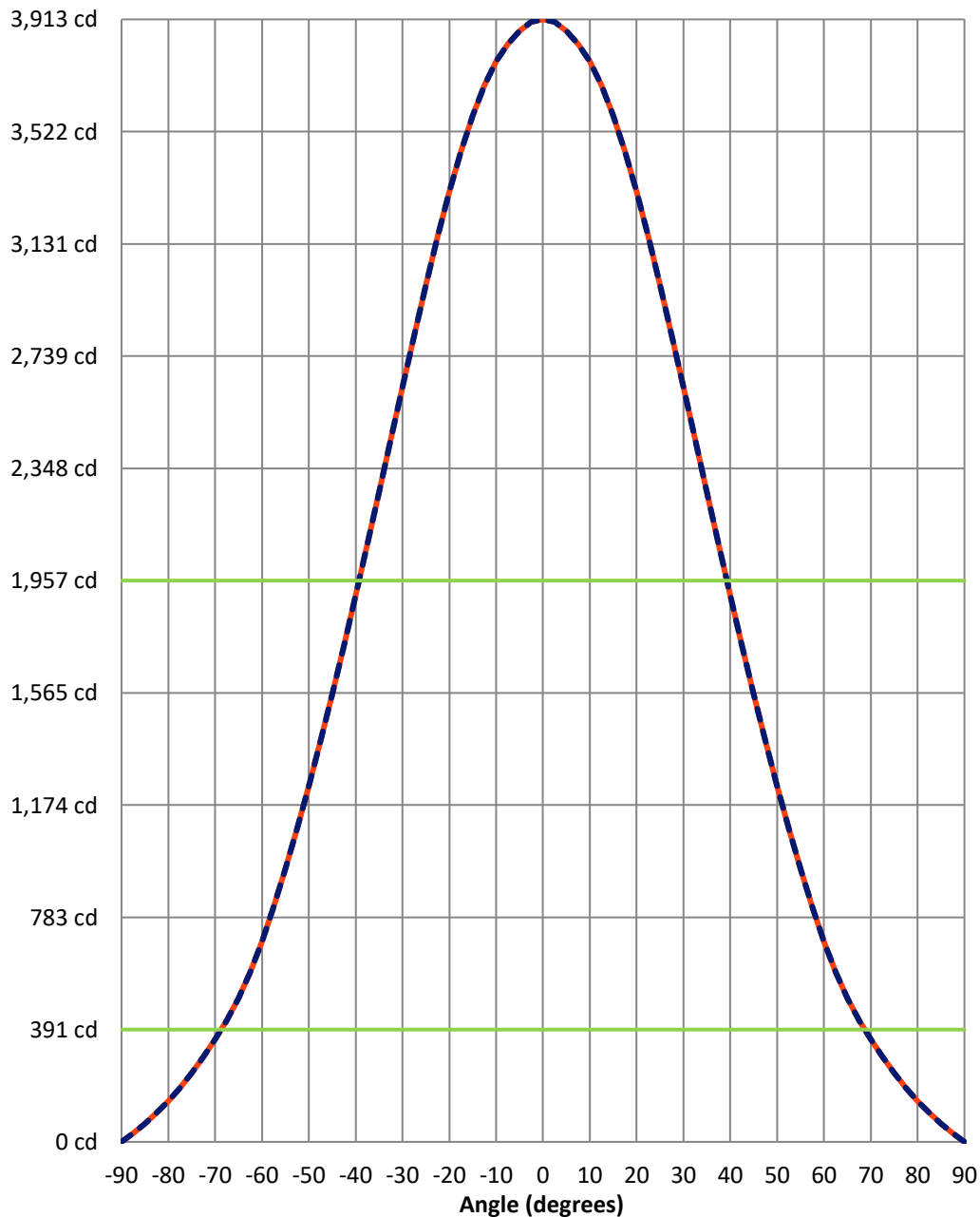


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 3048.6
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 4992
Efficiency: 70.9%

Spill:

Lumens: 2053.7
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°	30.1	30.1	30.1	30.1	30.1	30.1	30.1	28.6	28.6	27.9	27.2
85°	63.2	63.2	63.2	63.2	63.2	61.7	61.0	60.2	59.5	58.0	57.3
82.5°	101.4	101.4	101.4	101.4	99.9	98.4	97.7	96.2	94.8	92.6	90.4
80°	141.8	141.8	141.8	141.8	139.6	138.1	135.9	134.4	132.2	129.3	126.4
77.5°	188.1	188.1	188.1	185.9	184.4	182.2	180.0	177.0	174.1	170.4	166.0
75°	240.2	240.2	240.2	237.3	235.1	232.9	229.2	225.5	221.1	216.0	210.1
72.5°	296.8	296.8	296.8	293.1	290.9	287.2	282.8	277.7	272.5	265.9	258.6
70°	357.7	357.7	357.7	353.3	349.7	346.0	340.1	334.2	326.9	319.5	310.7
67.5°	423.9	423.9	423.9	418.7	414.3	409.2	402.6	395.2	386.4	376.1	365.8
65°	501.0	501.0	498.1	493.6	488.5	481.2	473.1	462.8	451.8	438.6	424.6
62.5°	592.1	592.1	587.7	582.5	575.9	566.4	555.4	542.1	526.7	509.8	492.9
60°	697.9	697.9	692.7	686.1	676.6	664.8	650.1	633.2	614.1	592.8	572.2
57.5°	819.8	819.8	813.2	804.4	792.6	777.9	759.6	738.3	714.0	687.6	661.9
55°	952.0	952.0	944.0	933.7	919.7	902.1	880.0	855.1	825.7	795.6	762.5
52.5°	1092.3	1092.3	1082.8	1071.0	1054.9	1034.3	1009.3	980.0	946.2	910.9	872.0
50°	1240.0	1240.0	1229.0	1215.8	1197.4	1173.1	1144.5	1110.7	1073.2	1032.1	987.3
47.5°	1397.9	1397.9	1385.4	1370.0	1348.0	1320.1	1286.3	1247.3	1204.7	1158.5	1107.8
45°	1560.3	1560.3	1546.3	1528.7	1504.5	1472.9	1435.4	1397.9	1343.6	1289.9	1231.2
42.5°	1729.2	1729.2	1713.1	1693.2	1665.3	1630.8	1588.2	1539.7	1486.1	1425.8	1361.9
40°	1904.8	1904.8	1886.4	1863.7	1832.8	1793.1	1745.4	1691.0	1630.8	1564.0	1493.4
37.5°	2084.0	2084.0	2063.5	2038.5	2004.0	1959.9	1906.3	1846.0	1778.5	1704.3	1626.4
35°	2264.8	2264.8	2242.0	2214.8	2176.6	2128.1	2070.1	2003.2	1928.3	1847.5	1760.1
32.5°	2449.1	2449.1	2424.2	2393.3	2350.0	2296.3	2232.4	2159.7	2084.0	1990.0	1894.5
30°	2631.3	2631.3	2604.1	2570.3	2524.1	2465.3	2395.5	2315.4	2226.6	2130.3	2027.5
27.5°	2810.6	2803.2	2780.4	2744.4	2693.8	2631.3	2555.7	2469.0	2372.7	2267.0	2156.8
25°	2986.9	2978.8	2953.8	2914.1	2859.8	2791.5	2709.9	2617.4	2513.8	2402.1	2281.7
22.5°	3155.8	3147.0	3120.6	3078.0	3019.9	2945.7	2858.3	2759.1	2649.0	2529.2	2402.1
20°	3312.3	3302.7	3275.6	3230.8	3170.5	3091.9	2999.4	2892.8	2775.3	2649.0	2513.8
17.5°	3453.3	3443.8	3415.1	3368.9	3312.3	3224.9	3129.4	3017.0	2892.8	2759.1	2617.4
15°	3577.5	3567.2	3537.8	3491.5	3426.9	3344.6	3244.0	3129.4	2999.4	2858.3	2709.9
12.5°	3683.3	3673.0	3642.9	3596.6	3529.7	3447.5	3344.6	3224.9	3091.9	2945.7	2791.5
10°	3767.0	3756.7	3728.1	3684.0	3614.9	3529.7	3426.9	3312.3	3170.5	3019.9	2859.8
7.5°	3827.2	3817.7	3791.2	3747.2	3684.0	3596.6	3491.5	3368.9	3230.8	3078.0	2914.1
5°	3872.8	3861.8	3835.3	3791.2	3728.1	3642.9	3537.8	3415.1	3275.6	3120.6	2953.8
2.5°	3904.4	3891.2	3861.8	3817.7	3756.7	3673.0	3567.2	3443.8	3302.7	3147.0	2978.8
0°	3913.2	3904.4	3872.8	3827.2	3767.0	3683.3	3577.5	3453.3	3312.3	3155.8	2986.9

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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°	26.4	26.4	25.7	25.0	24.2	22.8	22.0	21.3	20.6	19.1	18.4
85°	55.8	54.4	52.9	51.4	49.2	47.7	45.5	44.1	41.9	39.7	37.5
82.5°	88.2	85.9	83.0	80.8	77.9	74.2	71.3	67.6	63.9	61.0	57.3
80°	123.4	119.7	116.1	112.4	108.0	103.6	99.2	94.8	89.6	84.5	79.3
77.5°	161.6	156.5	151.3	145.4	140.3	134.4	128.6	122.7	116.1	109.5	102.8
75°	204.2	197.6	190.3	182.9	176.3	168.2	160.1	152.1	143.2	135.2	126.4
72.5°	250.5	242.4	233.6	224.8	215.2	205.0	194.7	183.6	173.4	163.1	152.1
70°	300.4	290.9	279.9	268.9	257.1	244.6	232.1	218.9	205.7	192.5	179.2
67.5°	354.1	342.3	329.1	315.9	301.2	286.5	271.8	256.4	240.2	224.1	208.6
65°	411.4	396.7	381.3	364.4	347.5	330.6	312.9	294.6	276.2	257.1	240.2
62.5°	475.3	456.9	437.1	416.5	397.4	376.8	357.7	335.0	312.9	291.6	270.3
60°	549.5	525.2	501.0	475.3	451.0	424.6	401.1	376.1	351.1	326.9	301.9
57.5°	632.5	601.6	572.2	541.4	509.1	479.7	449.6	419.5	391.5	362.9	335.7
55°	726.5	689.1	652.3	614.1	576.7	539.9	501.7	467.9	433.4	401.1	369.5
52.5°	829.4	786.8	741.2	697.9	650.1	604.6	562.0	519.4	479.0	440.0	404.0
50°	939.5	889.6	837.4	784.5	730.2	676.6	625.1	575.2	528.2	482.6	440.0
47.5°	1054.1	997.6	938.1	877.8	819.8	754.4	692.7	636.2	579.6	528.2	479.0
45°	1171.7	1107.8	1042.4	974.1	905.8	835.2	766.9	697.9	636.2	575.2	519.4
42.5°	1292.9	1220.9	1148.2	1072.5	996.8	919.7	842.6	766.9	692.7	625.1	562.0
40°	1417.8	1338.4	1255.4	1173.1	1092.3	1004.2	919.7	835.2	754.4	676.6	604.6
37.5°	1542.7	1456.0	1366.3	1273.8	1181.2	1092.3	996.8	905.8	819.8	730.2	650.1
35°	1668.3	1572.8	1475.8	1375.2	1273.8	1173.1	1072.5	974.1	877.8	784.5	697.9
32.5°	1794.6	1690.3	1583.1	1475.8	1366.3	1255.4	1148.2	1042.4	938.1	837.4	741.2
30°	1918.8	1805.6	1690.3	1572.8	1456.0	1338.4	1220.9	1107.8	997.6	889.6	786.8
27.5°	2040.0	1918.8	1794.6	1668.3	1542.7	1417.8	1292.9	1171.7	1054.1	939.5	829.4
25°	2156.8	2027.5	1894.5	1760.1	1626.4	1493.4	1361.9	1231.2	1107.8	987.3	872.0
22.5°	2267.0	2130.3	1990.0	1847.5	1704.3	1564.0	1425.8	1289.9	1158.5	1032.1	910.9
20°	2372.7	2226.6	2084.0	1928.3	1778.5	1630.8	1486.1	1343.6	1204.7	1073.2	946.2
17.5°	2469.0	2315.4	2159.7	2003.2	1846.0	1691.0	1539.7	1397.9	1247.3	1110.7	980.0
15°	2555.7	2395.5	2232.4	2070.1	1906.3	1745.4	1588.2	1435.4	1286.3	1144.5	1009.3
12.5°	2631.3	2465.3	2296.3	2128.1	1959.9	1793.1	1630.8	1472.9	1320.1	1173.1	1034.3
10°	2693.8	2524.1	2350.0	2176.6	2004.0	1832.8	1665.3	1504.5	1348.0	1197.4	1054.9
7.5°	2744.4	2570.3	2393.3	2214.8	2038.5	1863.7	1693.2	1528.7	1370.0	1215.8	1071.0
5°	2780.4	2604.1	2424.2	2242.0	2063.5	1886.4	1713.1	1546.3	1385.4	1229.0	1082.8
2.5°	2803.2	2631.3	2449.1	2264.8	2084.0	1904.8	1729.2	1560.3	1397.9	1240.0	1092.3
0°	2810.6	2631.3	2449.1	2264.8	2084.0	1904.8	1729.2	1560.3	1397.9	1240.0	1092.3

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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°	17.6	16.2	14.7	14.0	12.5	11.8	10.3	8.8	8.1	6.6	5.1
85°	35.3	32.3	30.1	27.9	25.7	22.8	20.6	18.4	15.4	13.2	10.3
82.5°	53.6	50.0	46.3	42.6	38.9	35.3	30.9	27.2	23.5	19.8	15.4
80°	74.2	68.3	63.2	58.0	52.9	47.7	41.9	36.7	30.9	25.7	20.6
77.5°	95.5	88.9	81.5	74.2	66.8	60.2	52.9	46.3	39.7	32.3	25.7
75°	118.3	109.5	101.4	91.8	83.0	73.5	64.6	55.8	47.7	39.7	30.9
72.5°	141.8	130.8	119.7	109.5	98.4	87.4	77.1	66.1	55.8	46.3	36.7
70°	166.0	152.8	139.6	127.1	114.6	101.4	89.6	77.1	64.6	52.9	41.9
67.5°	191.7	176.3	160.9	144.7	130.8	116.1	101.4	87.4	73.5	60.2	47.7
65°	219.6	201.3	182.2	165.3	146.9	130.8	114.6	98.4	83.0	66.8	52.9
62.5°	248.3	227.0	205.7	184.4	165.3	144.7	127.1	109.5	91.8	74.2	58.0
60°	277.7	253.4	229.2	205.7	182.2	160.9	139.6	119.7	101.4	81.5	63.2
57.5°	307.8	280.6	253.4	227.0	201.3	176.3	152.8	130.8	109.5	88.9	68.3
55°	338.6	307.8	277.7	248.3	219.6	191.7	166.0	141.8	118.3	95.5	74.2
52.5°	369.5	335.7	301.9	270.3	240.2	208.6	179.2	152.1	126.4	102.8	79.3
50°	401.1	362.9	326.9	291.6	257.1	224.1	192.5	163.1	135.2	109.5	84.5
47.5°	433.4	391.5	351.1	312.9	276.2	240.2	205.7	173.4	143.2	116.1	89.6
45°	467.9	419.5	376.1	335.0	294.6	256.4	218.9	183.6	152.1	122.7	94.8
42.5°	501.7	449.6	401.1	357.7	312.9	271.8	232.1	194.7	160.1	128.6	99.2
40°	539.9	479.7	424.6	376.8	330.6	286.5	244.6	205.0	168.2	134.4	103.6
37.5°	576.7	509.1	451.0	397.4	347.5	301.2	257.1	215.2	176.3	140.3	108.0
35°	614.1	541.4	475.3	416.5	364.4	315.9	268.9	224.8	182.9	145.4	112.4
32.5°	652.3	572.2	501.0	437.1	381.3	329.1	279.9	233.6	190.3	151.3	116.1
30°	689.1	601.6	525.2	456.9	396.7	342.3	290.9	242.4	197.6	156.5	119.7
27.5°	726.5	632.5	549.5	475.3	411.4	354.1	300.4	250.5	204.2	161.6	123.4
25°	762.5	661.9	572.2	492.9	424.6	365.8	310.7	258.6	210.1	166.0	126.4
22.5°	795.6	687.6	592.8	509.8	438.6	376.1	319.5	265.9	216.0	170.4	129.3
20°	825.7	714.0	614.1	526.7	451.8	386.4	326.9	272.5	221.1	174.1	132.2
17.5°	855.1	738.3	633.2	542.1	462.8	395.2	334.2	277.7	225.5	177.0	134.4
15°	880.0	759.6	650.1	555.4	473.1	402.6	340.1	282.8	229.2	180.0	135.9
12.5°	902.1	777.9	664.8	566.4	481.2	409.2	346.0	287.2	232.9	182.2	138.1
10°	919.7	792.6	676.6	575.9	488.5	414.3	349.7	290.9	235.1	184.4	139.6
7.5°	933.7	804.4	686.1	582.5	493.6	418.7	353.3	293.1	237.3	185.9	141.8
5°	944.0	813.2	692.7	587.7	498.1	423.9	357.7	296.8	240.2	188.1	141.8
2.5°	952.0	819.8	697.9	592.1	501.0	423.9	357.7	296.8	240.2	188.1	141.8
0°	952.0	819.8	697.9	592.1	501.0	423.9	357.7	296.8	240.2	188.1	141.8

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	3.7	2.9	1.5	0.0
85°	8.1	5.1	2.9	0.0
82.5°	11.8	8.1	3.7	0.0
80°	15.4	10.3	5.1	0.0
77.5°	19.8	13.2	6.6	0.0
75°	23.5	15.4	8.1	0.0
72.5°	27.2	18.4	8.8	0.0
70°	30.9	20.6	10.3	0.0
67.5°	35.3	22.8	11.8	0.0
65°	38.9	25.7	12.5	0.0
62.5°	42.6	27.9	14.0	0.0
60°	46.3	30.1	14.7	0.0
57.5°	50.0	32.3	16.2	0.0
55°	53.6	35.3	17.6	0.0
52.5°	57.3	37.5	18.4	0.0
50°	61.0	39.7	19.1	0.0
47.5°	63.9	41.9	20.6	0.0
45°	67.6	44.1	21.3	0.0
42.5°	71.3	45.5	22.0	0.0
40°	74.2	47.7	22.8	0.0
37.5°	77.9	49.2	24.2	0.0
35°	80.8	51.4	25.0	0.0
32.5°	83.0	52.9	25.7	0.0
30°	85.9	54.4	26.4	0.0
27.5°	88.2	55.8	26.4	0.0
25°	90.4	57.3	27.2	0.0
22.5°	92.6	58.0	27.9	0.0
20°	94.8	59.5	28.6	0.0
17.5°	96.2	60.2	28.6	0.0
15°	97.7	61.0	30.1	0.0
12.5°	98.4	61.7	30.1	0.0
10°	99.9	63.2	30.1	0.0
7.5°	101.4	63.2	30.1	0.0
5°	101.4	63.2	30.1	0.0
2.5°	101.4	63.2	30.1	0.0
0°	101.4	63.2	30.1	0.0

(END OF REPORT)