

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: P624542

Luminaire Tested: **IFLD-M-SA4D-930-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624542
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-930-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

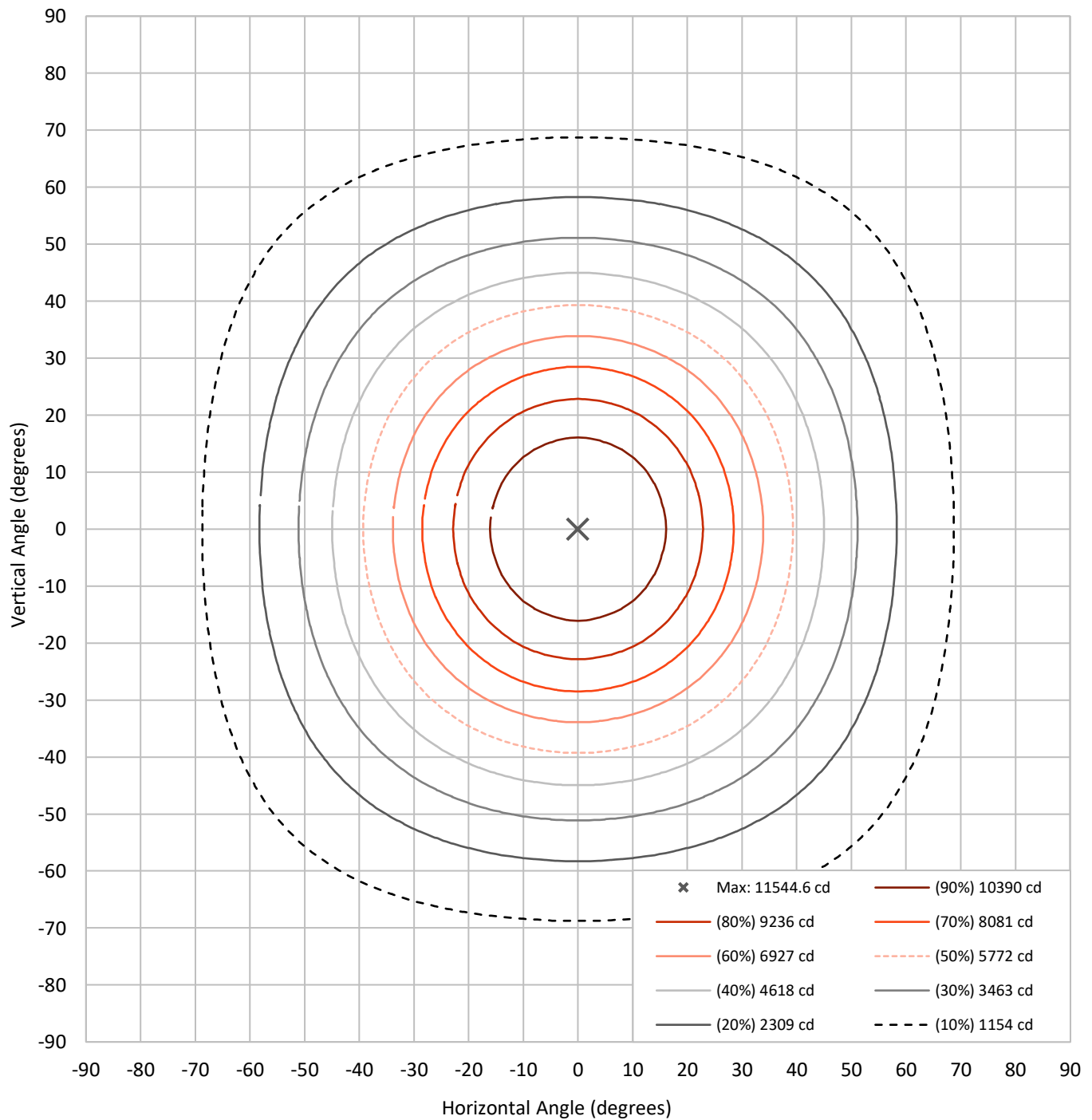
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	20786.4 lumens	Max Intensity:	11544.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	83.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8994 lumens	Field Lumens:	14727.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	249.7		
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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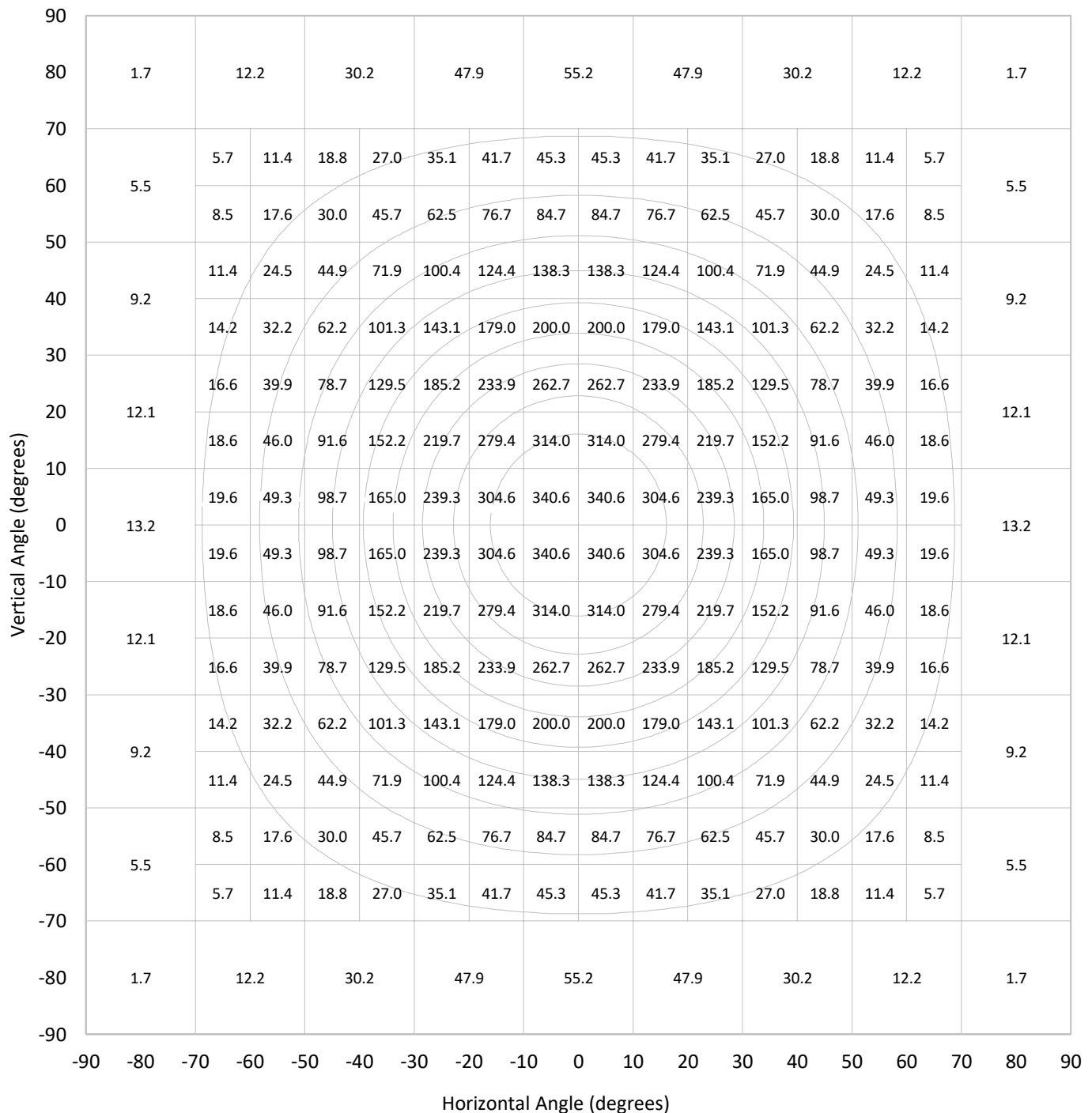
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Iso-Candela Plot



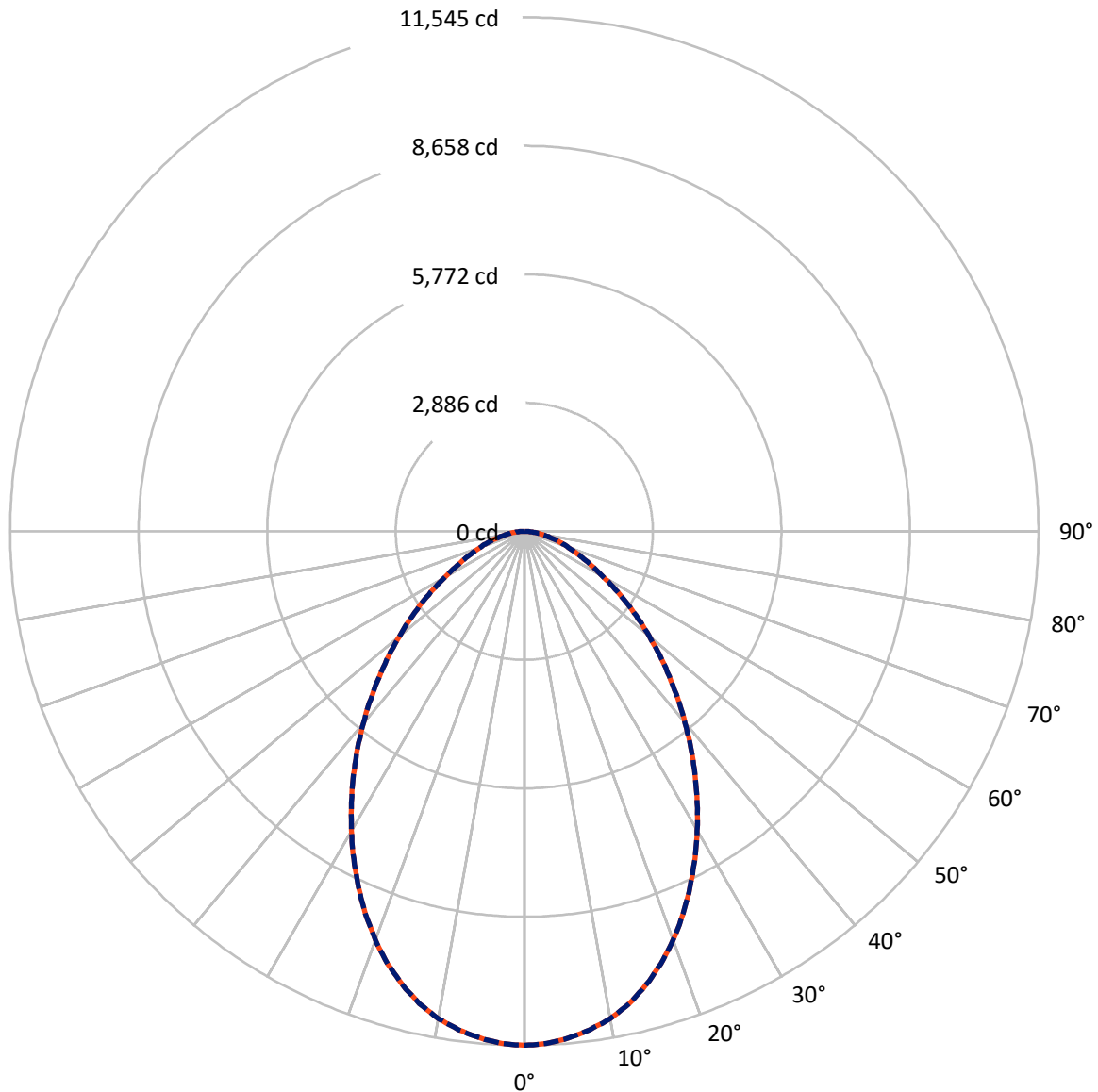
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Lumen Table



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Luminous Intensity Polar Plot

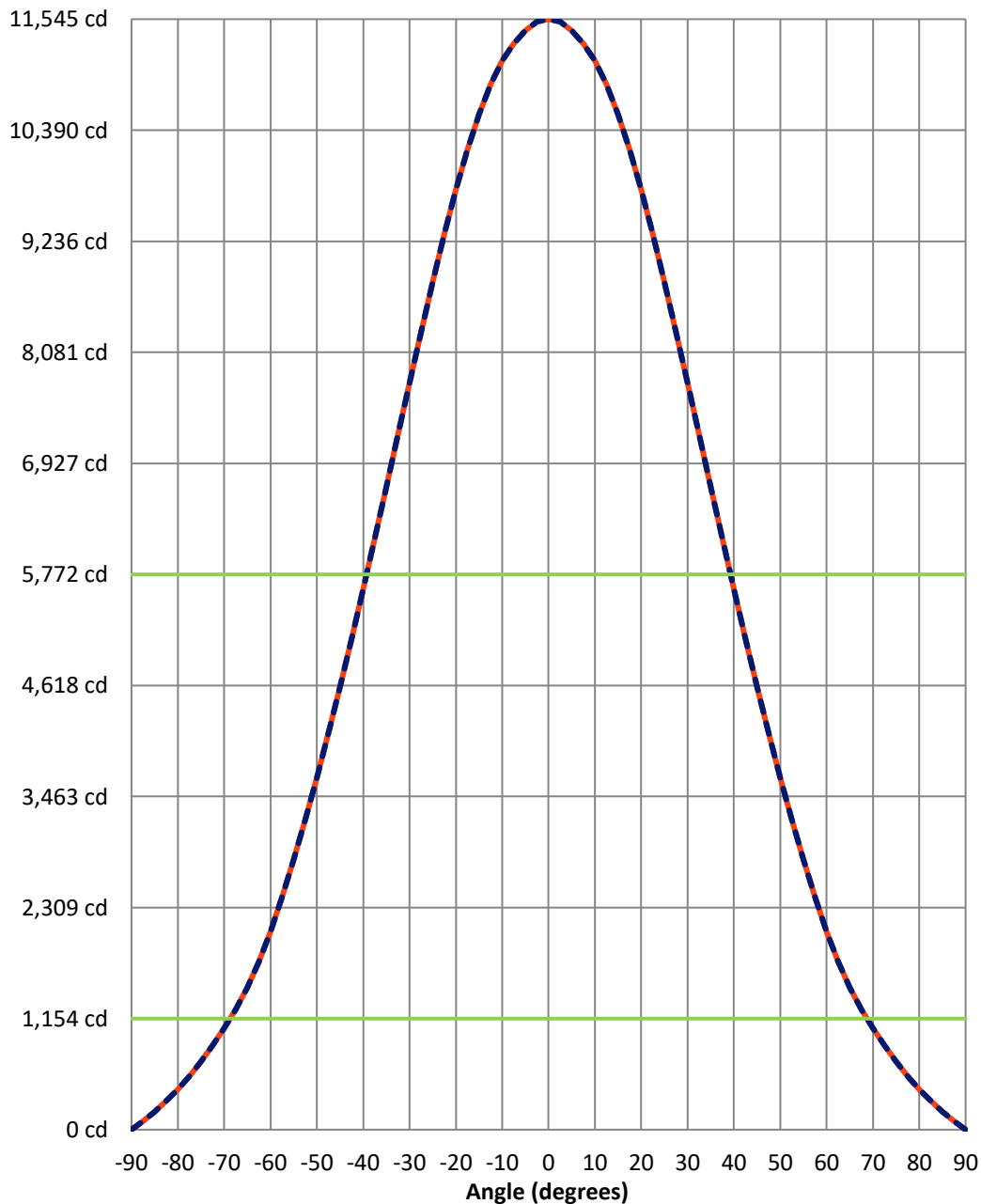


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 8994
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 14727.4
Efficiency: 70.9%

Spill:

Lumens: 6058.9
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°	88.9	88.9	88.9	88.9	88.9	88.9	88.9	84.5	84.5	82.4	80.2
85°	186.4	186.4	186.4	186.4	186.4	182.0	179.9	177.7	175.5	171.2	169.0
82.5°	299.1	299.1	299.1	299.1	294.7	290.4	288.2	283.9	279.6	273.1	266.6
80°	418.3	418.3	418.3	418.3	411.8	407.4	400.9	396.6	390.1	381.4	372.8
77.5°	554.8	554.8	554.8	548.3	544.0	537.5	531.0	522.3	513.6	502.8	489.8
75°	708.7	708.7	708.7	700.0	693.5	687.0	676.2	665.3	652.3	637.2	619.8
72.5°	875.5	875.5	875.5	864.7	858.2	847.4	834.4	819.2	804.0	784.5	762.9
70°	1055.4	1055.4	1055.4	1042.4	1031.6	1020.7	1003.4	986.1	964.4	942.7	916.7
67.5°	1250.5	1250.5	1250.5	1235.3	1222.3	1207.1	1187.6	1165.9	1139.9	1109.6	1079.3
65°	1478.0	1478.0	1469.4	1456.4	1441.2	1419.5	1395.7	1365.3	1332.8	1293.8	1252.6
62.5°	1746.8	1746.8	1733.8	1718.6	1699.1	1670.9	1638.4	1599.4	1553.9	1504.0	1454.2
60°	2058.8	2058.8	2043.7	2024.2	1996.0	1961.3	1918.0	1868.1	1811.8	1748.9	1688.2
57.5°	2418.6	2418.6	2399.1	2373.1	2338.4	2295.1	2240.9	2178.0	2106.5	2028.5	1952.6
55°	2808.7	2808.7	2784.8	2754.5	2713.3	2661.3	2596.3	2522.6	2435.9	2347.1	2249.5
52.5°	3222.6	3222.6	3194.4	3159.8	3112.1	3051.4	2977.7	2891.0	2791.3	2687.3	2572.5
50°	3658.2	3658.2	3625.7	3586.7	3532.5	3461.0	3376.5	3276.8	3166.3	3044.9	2912.7
47.5°	4124.2	4124.2	4087.3	4041.8	3976.8	3894.4	3794.7	3679.9	3554.2	3417.7	3268.1
45°	4603.1	4603.1	4561.9	4509.9	4438.4	4345.2	4234.7	4124.2	3963.8	3805.6	3632.2
42.5°	5101.6	5101.6	5053.9	4995.4	4913.0	4811.2	4685.5	4542.4	4384.2	4206.5	4018.0
40°	5619.5	5619.5	5565.3	5498.2	5407.1	5290.1	5149.2	4988.9	4811.2	4613.9	4405.9
37.5°	6148.3	6148.3	6087.6	6014.0	5912.1	5782.1	5623.9	5446.1	5246.8	5027.9	4798.2
35°	6681.4	6681.4	6614.3	6534.1	6421.4	6278.3	6107.1	5909.9	5688.9	5450.5	5192.6
32.5°	7225.4	7225.4	7151.7	7060.7	6932.8	6774.6	6586.1	6371.5	6148.3	5870.9	5589.2
30°	7762.9	7762.9	7682.7	7583.0	7446.5	7273.1	7067.2	6831.0	6568.8	6284.8	5981.4
27.5°	8291.7	8270.0	8202.8	8096.6	7947.1	7762.9	7539.7	7283.9	7000.0	6687.9	6362.9
25°	8811.8	8788.0	8714.3	8597.2	8436.9	8235.3	7994.8	7721.7	7416.1	7086.7	6731.3
22.5°	9310.2	9284.2	9206.2	9080.5	8909.3	8690.4	8432.5	8140.0	7814.9	7461.6	7086.7
20°	9771.9	9743.7	9663.5	9531.3	9353.6	9121.7	8848.6	8534.4	8187.6	7814.9	7416.1
17.5°	10188.0	10159.8	10075.3	9938.7	9771.9	9514.0	9232.2	8900.6	8534.4	8140.0	7721.7
15°	10554.2	10523.9	10437.2	10300.7	10109.9	9867.2	9570.3	9232.2	8848.6	8432.5	7994.8
12.5°	10866.3	10835.9	10747.1	10610.6	10413.3	10170.6	9867.2	9514.0	9121.7	8690.4	8235.3
10°	11113.3	11083.0	10998.5	10868.5	10664.7	10413.3	10109.9	9771.9	9353.6	8909.3	8436.9
7.5°	11291.1	11262.9	11184.9	11054.8	10868.5	10610.6	10300.7	9938.7	9531.3	9080.5	8597.2
5°	11425.4	11392.9	11314.9	11184.9	10998.5	10747.1	10437.2	10075.3	9663.5	9206.2	8714.3
2.5°	11518.6	11479.6	11392.9	11262.9	11083.0	10835.9	10523.9	10159.8	9743.7	9284.2	8788.0
0°	11544.6	11518.6	11425.4	11291.1	11113.3	10866.3	10554.2	10188.0	9771.9	9310.2	8811.8

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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°	78.0	78.0	75.9	73.7	71.5	67.2	65.0	62.8	60.7	56.3	54.2
85°	164.7	160.4	156.0	151.7	145.2	140.9	134.4	130.0	123.5	117.0	110.5
82.5°	260.1	253.6	244.9	238.4	229.7	218.9	210.2	199.4	188.5	179.9	169.0
80°	364.1	353.3	342.4	331.6	318.6	305.6	292.6	279.6	264.4	249.2	234.1
77.5°	476.8	461.6	446.4	429.1	413.9	396.6	379.3	361.9	342.4	322.9	303.4
75°	602.5	583.0	561.3	539.6	520.1	496.3	472.4	448.6	422.6	398.8	372.8
72.5°	739.0	715.2	689.2	663.2	635.0	604.6	574.3	541.8	511.5	481.1	448.6
70°	886.4	858.2	825.7	793.2	758.5	721.7	684.8	645.8	606.8	567.8	528.8
67.5°	1044.6	1009.9	970.9	931.9	888.5	845.2	801.9	756.3	708.7	661.0	615.5
65°	1213.6	1170.3	1124.8	1074.9	1025.1	975.2	923.2	869.0	814.9	758.5	708.7
62.5°	1402.2	1348.0	1289.5	1228.8	1172.4	1111.8	1055.4	988.2	923.2	860.4	797.5
60°	1621.1	1549.5	1478.0	1402.2	1330.7	1252.6	1183.3	1109.6	1035.9	964.4	890.7
57.5°	1866.0	1774.9	1688.2	1597.2	1501.9	1415.2	1326.3	1237.5	1155.1	1070.6	990.4
55°	2143.4	2032.8	1924.5	1811.8	1701.2	1592.9	1480.2	1380.5	1278.6	1183.3	1090.1
52.5°	2446.8	2321.1	2186.7	2058.8	1918.0	1783.6	1657.9	1532.2	1413.0	1298.1	1192.0
50°	2771.8	2624.5	2470.6	2314.6	2154.2	1996.0	1844.3	1696.9	1558.2	1423.8	1298.1
47.5°	3109.9	2943.0	2767.5	2589.8	2418.6	2225.7	2043.7	1876.8	1709.9	1558.2	1413.0
45°	3456.7	3268.1	3075.2	2873.7	2672.1	2464.1	2262.5	2058.8	1876.8	1696.9	1532.2
42.5°	3814.3	3601.9	3387.3	3164.1	2940.9	2713.3	2485.8	2262.5	2043.7	1844.3	1657.9
40°	4182.7	3948.6	3703.7	3461.0	3222.6	2962.5	2713.3	2464.1	2225.7	1996.0	1783.6
37.5°	4551.1	4295.4	4031.0	3757.9	3484.8	3222.6	2940.9	2672.1	2418.6	2154.2	1918.0
35°	4921.7	4640.0	4353.9	4057.0	3757.9	3461.0	3164.1	2873.7	2589.8	2314.6	2058.8
32.5°	5294.4	4986.7	4670.3	4353.9	4031.0	3703.7	3387.3	3075.2	2767.5	2470.6	2186.7
30°	5660.7	5327.0	4986.7	4640.0	4295.4	3948.6	3601.9	3268.1	2943.0	2624.5	2321.1
27.5°	6018.3	5660.7	5294.4	4921.7	4551.1	4182.7	3814.3	3456.7	3109.9	2771.8	2446.8
25°	6362.9	5981.4	5589.2	5192.6	4798.2	4405.9	4018.0	3632.2	3268.1	2912.7	2572.5
22.5°	6687.9	6284.8	5870.9	5450.5	5027.9	4613.9	4206.5	3805.6	3417.7	3044.9	2687.3
20°	7000.0	6568.8	6148.3	5688.9	5246.8	4811.2	4384.2	3963.8	3554.2	3166.3	2791.3
17.5°	7283.9	6831.0	6371.5	5909.9	5446.1	4988.9	4542.4	4124.2	3679.9	3276.8	2891.0
15°	7539.7	7067.2	6586.1	6107.1	5623.9	5149.2	4685.5	4234.7	3794.7	3376.5	2977.7
12.5°	7762.9	7273.1	6774.6	6278.3	5782.1	5290.1	4811.2	4345.2	3894.4	3461.0	3051.4
10°	7947.1	7446.5	6932.8	6421.4	5912.1	5407.1	4913.0	4438.4	3976.8	3532.5	3112.1
7.5°	8096.6	7583.0	7060.7	6534.1	6014.0	5498.2	4995.4	4509.9	4041.8	3586.7	3159.8
5°	8202.8	7682.7	7151.7	6614.3	6087.6	5565.3	5053.9	4561.9	4087.3	3625.7	3194.4
2.5°	8270.0	7762.9	7225.4	6681.4	6148.3	5619.5	5101.6	4603.1	4124.2	3658.2	3222.6
0°	8291.7	7762.9	7225.4	6681.4	6148.3	5619.5	5101.6	4603.1	4124.2	3658.2	3222.6

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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°	52.0	47.7	43.3	41.2	36.8	34.7	30.3	26.0	23.8	19.5	15.2
85°	104.0	95.4	88.9	82.4	75.9	67.2	60.7	54.2	45.5	39.0	30.3
82.5°	158.2	147.4	136.5	125.7	114.9	104.0	91.0	80.2	69.4	58.5	45.5
80°	218.9	201.5	186.4	171.2	156.0	140.9	123.5	108.4	91.0	75.9	60.7
77.5°	281.7	262.2	240.6	218.9	197.2	177.7	156.0	136.5	117.0	95.4	75.9
75°	348.9	322.9	299.1	270.9	244.9	216.7	190.7	164.7	140.9	117.0	91.0
72.5°	418.3	385.8	353.3	322.9	290.4	257.9	227.6	195.0	164.7	136.5	108.4
70°	489.8	450.8	411.8	374.9	338.1	299.1	264.4	227.6	190.7	156.0	123.5
67.5°	565.6	520.1	474.6	426.9	385.8	342.4	299.1	257.9	216.7	177.7	140.9
65°	648.0	593.8	537.5	487.6	433.4	385.8	338.1	290.4	244.9	197.2	156.0
62.5°	732.5	669.7	606.8	544.0	487.6	426.9	374.9	322.9	270.9	218.9	171.2
60°	819.2	747.7	676.2	606.8	537.5	474.6	411.8	353.3	299.1	240.6	186.4
57.5°	908.1	827.9	747.7	669.7	593.8	520.1	450.8	385.8	322.9	262.2	201.5
55°	999.1	908.1	819.2	732.5	648.0	565.6	489.8	418.3	348.9	281.7	218.9
52.5°	1090.1	990.4	890.7	797.5	708.7	615.5	528.8	448.6	372.8	303.4	234.1
50°	1183.3	1070.6	964.4	860.4	758.5	661.0	567.8	481.1	398.8	322.9	249.2
47.5°	1278.6	1155.1	1035.9	923.2	814.9	708.7	606.8	511.5	422.6	342.4	264.4
45°	1380.5	1237.5	1109.6	988.2	869.0	756.3	645.8	541.8	448.6	361.9	279.6
42.5°	1480.2	1326.3	1183.3	1055.4	923.2	801.9	684.8	574.3	472.4	379.3	292.6
40°	1592.9	1415.2	1252.6	1111.8	975.2	845.2	721.7	604.6	496.3	396.6	305.6
37.5°	1701.2	1501.9	1330.7	1172.4	1025.1	888.5	758.5	635.0	520.1	413.9	318.6
35°	1811.8	1597.2	1402.2	1228.8	1074.9	931.9	793.2	663.2	539.6	429.1	331.6
32.5°	1924.5	1688.2	1478.0	1289.5	1124.8	970.9	825.7	689.2	561.3	446.4	342.4
30°	2032.8	1774.9	1549.5	1348.0	1170.3	1009.9	858.2	715.2	583.0	461.6	353.3
27.5°	2143.4	1866.0	1621.1	1402.2	1213.6	1044.6	886.4	739.0	602.5	476.8	364.1
25°	2249.5	1952.6	1688.2	1454.2	1252.6	1079.3	916.7	762.9	619.8	489.8	372.8
22.5°	2347.1	2028.5	1748.9	1504.0	1293.8	1109.6	942.7	784.5	637.2	502.8	381.4
20°	2435.9	2106.5	1811.8	1553.9	1332.8	1139.9	964.4	804.0	652.3	513.6	390.1
17.5°	2522.6	2178.0	1868.1	1599.4	1365.3	1165.9	986.1	819.2	665.3	522.3	396.6
15°	2596.3	2240.9	1918.0	1638.4	1395.7	1187.6	1003.4	834.4	676.2	531.0	400.9
12.5°	2661.3	2295.1	1961.3	1670.9	1419.5	1207.1	1020.7	847.4	687.0	537.5	407.4
10°	2713.3	2338.4	1996.0	1699.1	1441.2	1222.3	1031.6	858.2	693.5	544.0	411.8
7.5°	2754.5	2373.1	2024.2	1718.6	1456.4	1235.3	1042.4	864.7	700.0	548.3	418.3
5°	2784.8	2399.1	2043.7	1733.8	1469.4	1250.5	1055.4	875.5	708.7	554.8	418.3
2.5°	2808.7	2418.6	2058.8	1746.8	1478.0	1250.5	1055.4	875.5	708.7	554.8	418.3
0°	2808.7	2418.6	2058.8	1746.8	1478.0	1250.5	1055.4	875.5	708.7	554.8	418.3

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.8	8.7	4.3	0.0
85°	23.8	15.2	8.7	0.0
82.5°	34.7	23.8	10.8	0.0
80°	45.5	30.3	15.2	0.0
77.5°	58.5	39.0	19.5	0.0
75°	69.4	45.5	23.8	0.0
72.5°	80.2	54.2	26.0	0.0
70°	91.0	60.7	30.3	0.0
67.5°	104.0	67.2	34.7	0.0
65°	114.9	75.9	36.8	0.0
62.5°	125.7	82.4	41.2	0.0
60°	136.5	88.9	43.3	0.0
57.5°	147.4	95.4	47.7	0.0
55°	158.2	104.0	52.0	0.0
52.5°	169.0	110.5	54.2	0.0
50°	179.9	117.0	56.3	0.0
47.5°	188.5	123.5	60.7	0.0
45°	199.4	130.0	62.8	0.0
42.5°	210.2	134.4	65.0	0.0
40°	218.9	140.9	67.2	0.0
37.5°	229.7	145.2	71.5	0.0
35°	238.4	151.7	73.7	0.0
32.5°	244.9	156.0	75.9	0.0
30°	253.6	160.4	78.0	0.0
27.5°	260.1	164.7	78.0	0.0
25°	266.6	169.0	80.2	0.0
22.5°	273.1	171.2	82.4	0.0
20°	279.6	175.5	84.5	0.0
17.5°	283.9	177.7	84.5	0.0
15°	288.2	179.9	88.9	0.0
12.5°	290.4	182.0	88.9	0.0
10°	294.7	186.4	88.9	0.0
7.5°	299.1	186.4	88.9	0.0
5°	299.1	186.4	88.9	0.0
2.5°	299.1	186.4	88.9	0.0
0°	299.1	186.4	88.9	0.0

(END OF REPORT)