

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: P624513

Luminaire Tested: **IFLD-M-SA4D-927-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624513
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-927-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

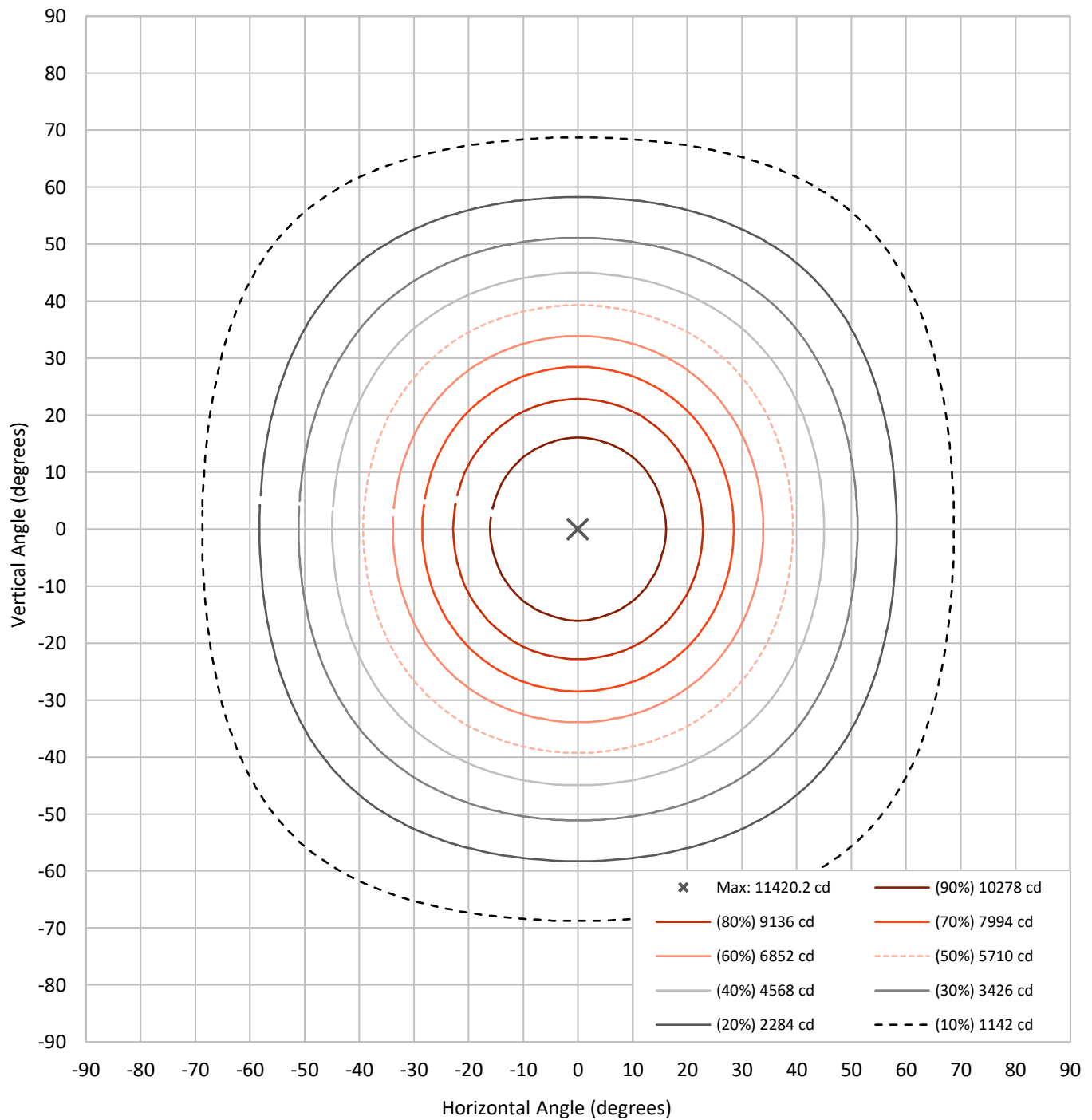
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	20562.2 lumens	Max Intensity:	11420.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	82.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8897.1 lumens	Field Lumens:	14568.7 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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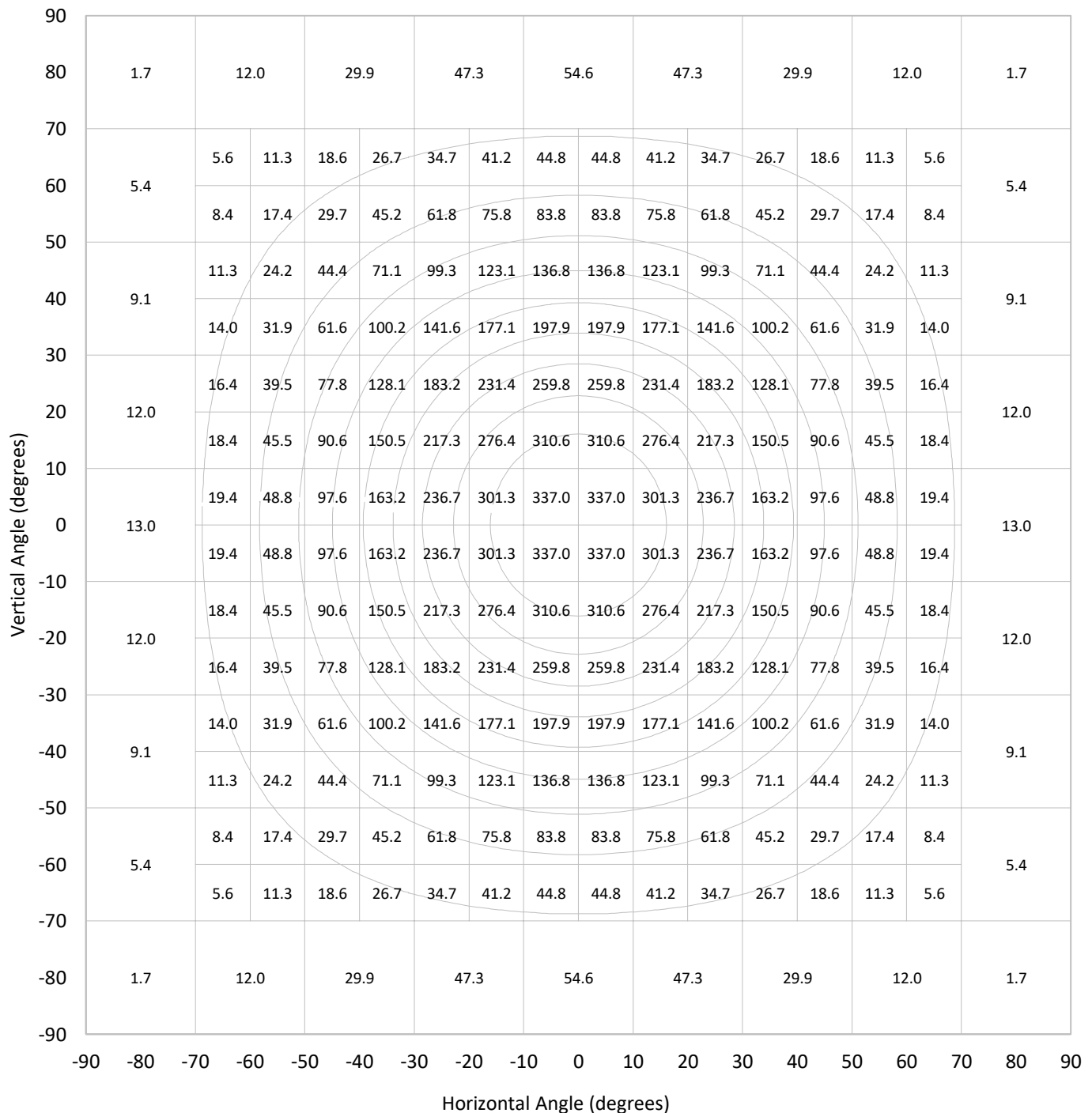
CATALOG NUMBER: IFLD-M-SA4D-927-U-77

Iso-Candela Plot



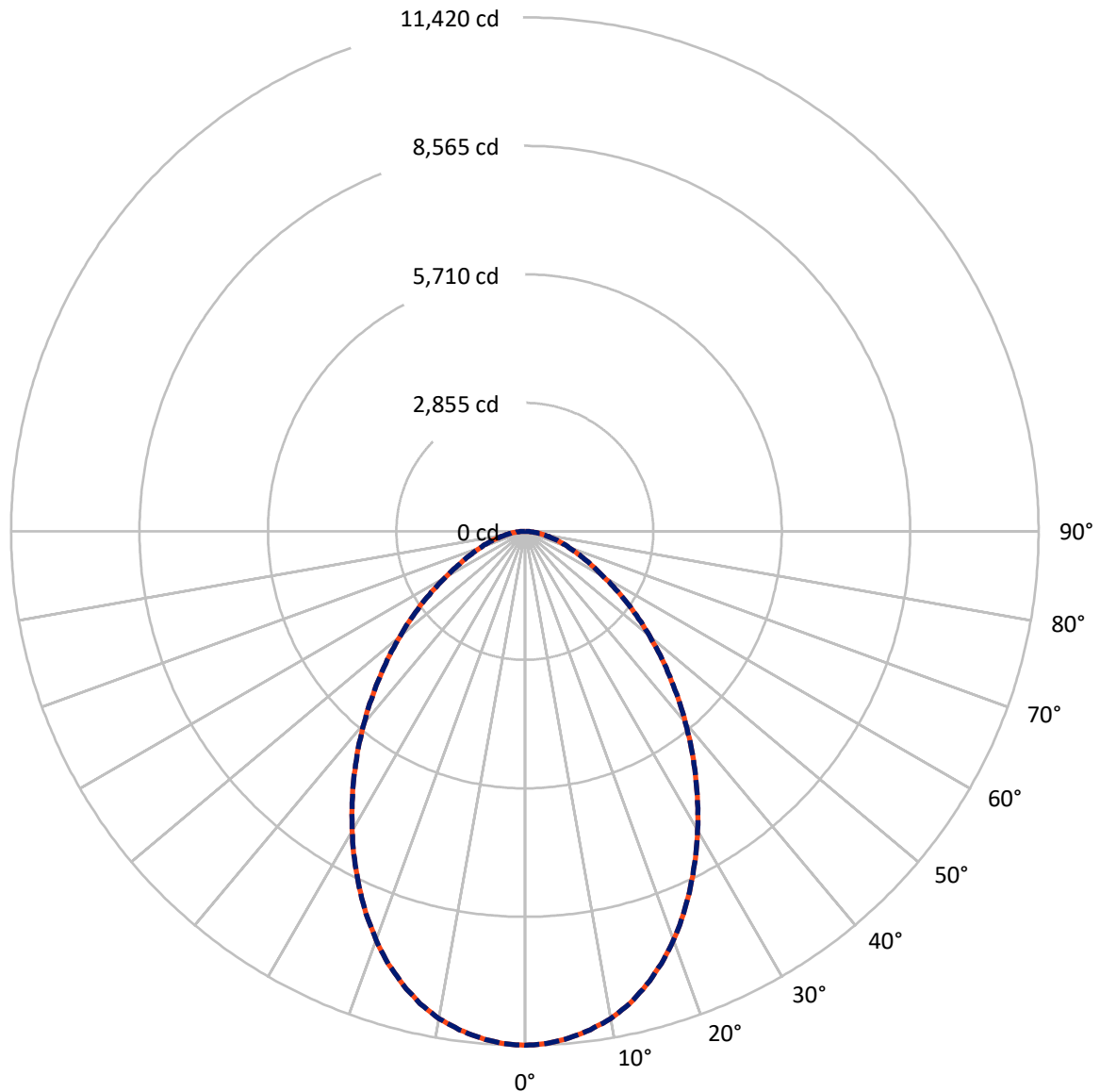
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Lumen Table



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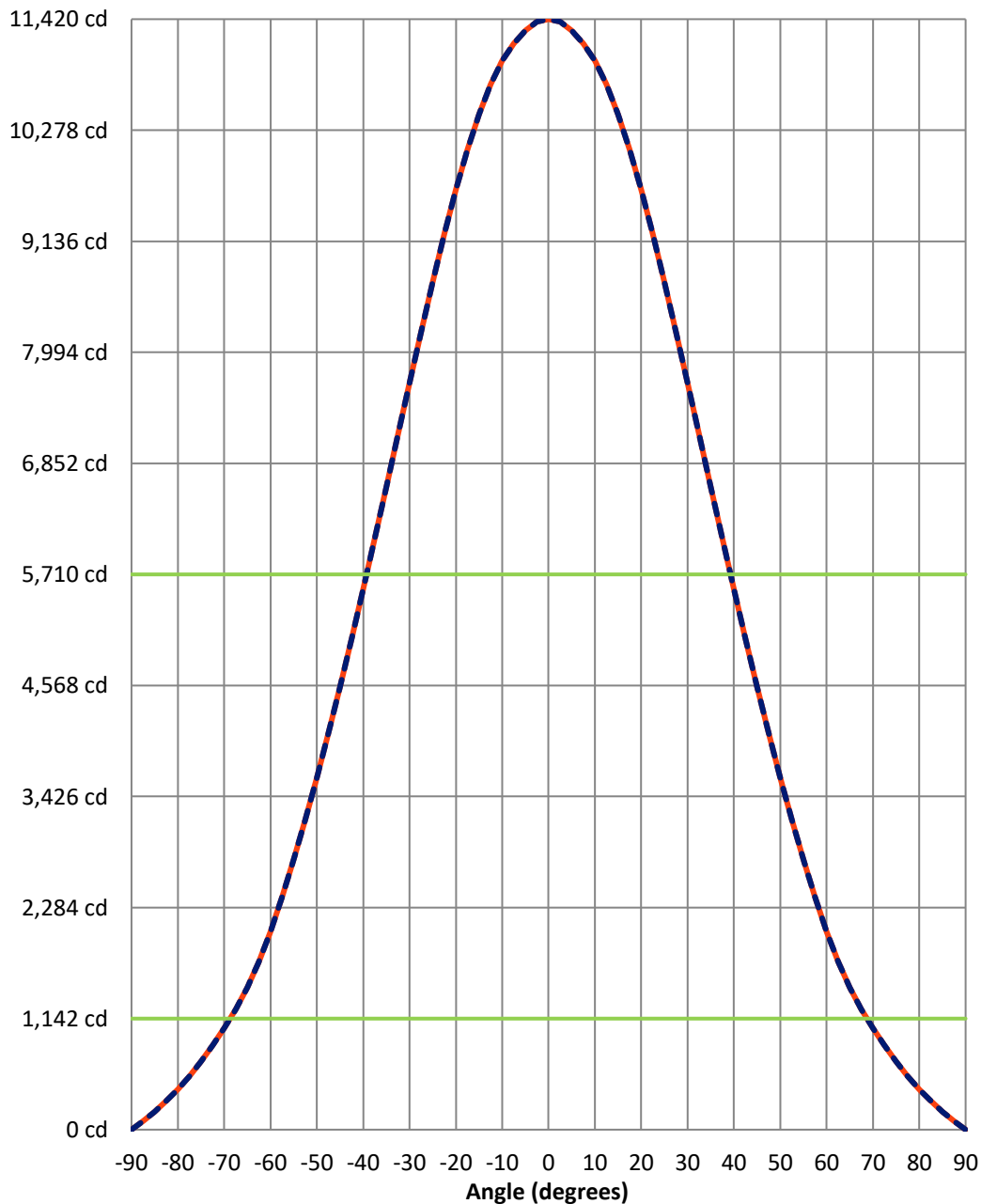
Luminous Intensity Polar Plot



— 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: 8897.1
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 14568.7
Efficiency: 70.9%

Spill:

Lumens: 5993.6
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°	87.9	87.9	87.9	87.9	87.9	87.9	87.9	83.6	83.6	81.5	79.3
85°	184.4	184.4	184.4	184.4	184.4	180.1	177.9	175.8	173.6	169.4	167.2
82.5°	295.8	295.8	295.8	295.8	291.6	287.3	285.1	280.8	276.6	270.1	263.7
80°	413.8	413.8	413.8	413.8	407.3	403.0	396.6	392.3	385.9	377.3	368.7
77.5°	548.8	548.8	548.8	542.4	538.1	531.7	525.2	516.7	508.1	497.4	484.5
75°	701.0	701.0	701.0	692.5	686.0	679.6	668.9	658.2	645.3	630.3	613.1
72.5°	866.1	866.1	866.1	855.4	849.0	838.2	825.4	810.4	795.4	776.1	754.6
70°	1044.0	1044.0	1044.0	1031.2	1020.5	1009.7	992.6	975.4	954.0	932.6	906.8
67.5°	1237.0	1237.0	1237.0	1222.0	1209.1	1194.1	1174.8	1153.4	1127.7	1097.6	1067.6
65°	1462.1	1462.1	1453.5	1440.7	1425.6	1404.2	1380.6	1350.6	1318.5	1279.9	1239.1
62.5°	1727.9	1727.9	1715.1	1700.1	1680.8	1652.9	1620.7	1582.1	1537.1	1487.8	1438.5
60°	2036.6	2036.6	2021.6	2002.3	1974.5	1940.2	1897.3	1848.0	1792.2	1730.1	1670.0
57.5°	2392.5	2392.5	2373.2	2347.5	2313.2	2270.3	2216.7	2154.5	2083.8	2006.6	1931.6
55°	2778.4	2778.4	2754.8	2724.8	2684.1	2632.6	2568.3	2495.4	2409.7	2321.8	2225.3
52.5°	3187.9	3187.9	3160.0	3125.7	3078.5	3018.5	2945.6	2859.9	2761.2	2658.3	2544.7
50°	3618.8	3618.8	3586.6	3548.0	3494.4	3423.7	3340.1	3241.5	3132.1	3012.1	2881.3
47.5°	4079.7	4079.7	4043.3	3998.2	3933.9	3852.5	3753.8	3640.2	3515.9	3380.8	3232.9
45°	4553.5	4553.5	4512.8	4461.3	4390.6	4298.4	4189.0	4079.7	3921.1	3764.6	3593.1
42.5°	5046.6	5046.6	4999.4	4941.5	4860.1	4759.3	4634.9	4493.5	4337.0	4161.2	3974.7
40°	5558.9	5558.9	5505.3	5438.9	5348.8	5233.1	5093.7	4935.1	4759.3	4564.2	4358.4
37.5°	6082.0	6082.0	6022.0	5949.1	5848.4	5719.7	5563.2	5387.4	5190.2	4973.7	4746.4
35°	6609.4	6609.4	6543.0	6463.6	6352.2	6210.7	6041.3	5846.2	5627.5	5391.7	5136.6
32.5°	7147.5	7147.5	7074.6	6984.6	6858.1	6701.6	6515.1	6302.8	6082.0	5807.6	5528.9
30°	7679.2	7679.2	7599.9	7501.2	7366.2	7194.7	6991.0	6757.3	6497.9	6217.1	5917.0
27.5°	8202.3	8180.8	8114.4	8009.3	7861.4	7679.2	7458.4	7205.4	6924.6	6615.8	6294.3
25°	8716.8	8693.2	8620.3	8504.6	8345.9	8146.5	7908.6	7638.4	7336.2	7010.3	6658.7
22.5°	9209.9	9184.1	9107.0	8982.6	8813.3	8596.7	8341.6	8052.2	7730.6	7381.2	7010.3
20°	9666.5	9638.6	9559.3	9428.5	9252.7	9023.4	8753.2	8442.4	8099.4	7730.6	7336.2
17.5°	10078.1	10050.2	9966.6	9831.6	9666.5	9411.4	9132.7	8804.7	8442.4	8052.2	7638.4
15°	10440.4	10410.4	10324.7	10189.6	10000.9	9760.8	9467.1	9132.7	8753.2	8341.6	7908.6
12.5°	10749.1	10719.1	10631.2	10496.2	10301.1	10061.0	9760.8	9411.4	9023.4	8596.7	8146.5
10°	10993.5	10963.5	10879.9	10751.3	10549.8	10301.1	10000.9	9666.5	9252.7	8813.3	8345.9
7.5°	11169.3	11141.5	11064.3	10935.6	10751.3	10496.2	10189.6	9831.6	9428.5	8982.6	8504.6
5°	11302.2	11270.1	11192.9	11064.3	10879.9	10631.2	10324.7	9966.6	9559.3	9107.0	8620.3
2.5°	11394.4	11355.8	11270.1	11141.5	10963.5	10719.1	10410.4	10050.2	9638.6	9184.1	8693.2
0°	11420.2	11394.4	11302.2	11169.3	10993.5	10749.1	10440.4	10078.1	9666.5	9209.9	8716.8

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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°	77.2	77.2	75.0	72.9	70.7	66.5	64.3	62.2	60.0	55.7	53.6
85°	162.9	158.6	154.4	150.1	143.6	139.3	132.9	128.6	122.2	115.8	109.3
82.5°	257.3	250.8	242.3	235.8	227.2	216.5	208.0	197.2	186.5	177.9	167.2
80°	360.2	349.4	338.7	328.0	315.1	302.3	289.4	276.6	261.5	246.5	231.5
77.5°	471.6	456.6	441.6	424.5	409.5	392.3	375.2	358.0	338.7	319.4	300.1
75°	596.0	576.7	555.3	533.8	514.5	490.9	467.4	443.8	418.0	394.5	368.7
72.5°	731.0	707.5	681.7	656.0	628.1	598.1	568.1	536.0	505.9	475.9	443.8
70°	876.8	849.0	816.8	784.6	750.3	713.9	677.4	638.9	600.3	561.7	523.1
67.5°	1033.3	999.0	960.4	921.8	879.0	836.1	793.2	748.2	701.0	653.9	608.8
65°	1200.5	1157.7	1112.6	1063.3	1014.0	964.7	913.3	859.7	806.1	750.3	701.0
62.5°	1387.1	1333.5	1275.6	1215.5	1159.8	1099.8	1044.0	977.6	913.3	851.1	788.9
60°	1603.6	1532.8	1462.1	1387.1	1316.3	1239.1	1170.5	1097.6	1024.7	954.0	881.1
57.5°	1845.8	1755.8	1670.0	1580.0	1485.7	1399.9	1312.0	1224.1	1142.7	1059.0	979.7
55°	2120.2	2010.9	1903.7	1792.2	1682.9	1575.7	1464.2	1365.6	1264.9	1170.5	1078.3
52.5°	2420.4	2296.0	2163.1	2036.6	1897.3	1764.4	1640.0	1515.7	1397.8	1284.2	1179.1
50°	2742.0	2596.2	2444.0	2289.6	2131.0	1974.5	1824.4	1678.6	1541.4	1408.5	1284.2
47.5°	3076.4	2911.3	2737.7	2561.9	2392.5	2201.7	2021.6	1856.6	1691.5	1541.4	1397.8
45°	3419.4	3232.9	3042.1	2842.7	2643.3	2437.5	2238.2	2036.6	1856.6	1678.6	1515.7
42.5°	3773.1	3563.0	3350.8	3130.0	2909.2	2684.1	2459.0	2238.2	2021.6	1824.4	1640.0
40°	4137.6	3906.0	3663.8	3423.7	3187.9	2930.6	2684.1	2437.5	2201.7	1974.5	1764.4
37.5°	4502.0	4249.1	3987.5	3717.4	3447.3	3187.9	2909.2	2643.3	2392.5	2131.0	1897.3
35°	4868.6	4589.9	4306.9	4013.2	3717.4	3423.7	3130.0	2842.7	2561.9	2289.6	2036.6
32.5°	5237.4	4932.9	4619.9	4306.9	3987.5	3663.8	3350.8	3042.1	2737.7	2444.0	2163.1
30°	5599.7	5269.5	4932.9	4589.9	4249.1	3906.0	3563.0	3232.9	2911.3	2596.2	2296.0
27.5°	5953.4	5599.7	5237.4	4868.6	4502.0	4137.6	3773.1	3419.4	3076.4	2742.0	2420.4
25°	6294.3	5917.0	5528.9	5136.6	4746.4	4358.4	3974.7	3593.1	3232.9	2881.3	2544.7
22.5°	6615.8	6217.1	5807.6	5391.7	4973.7	4564.2	4161.2	3764.6	3380.8	3012.1	2658.3
20°	6924.6	6497.9	6082.0	5627.5	5190.2	4759.3	4337.0	3921.1	3515.9	3132.1	2761.2
17.5°	7205.4	6757.3	6302.8	5846.2	5387.4	4935.1	4493.5	4079.7	3640.2	3241.5	2859.9
15°	7458.4	6991.0	6515.1	6041.3	5563.2	5093.7	4634.9	4189.0	3753.8	3340.1	2945.6
12.5°	7679.2	7194.7	6701.6	6210.7	5719.7	5233.1	4759.3	4298.4	3852.5	3423.7	3018.5
10°	7861.4	7366.2	6858.1	6352.2	5848.4	5348.8	4860.1	4390.6	3933.9	3494.4	3078.5
7.5°	8009.3	7501.2	6984.6	6463.6	5949.1	5438.9	4941.5	4461.3	3998.2	3548.0	3125.7
5°	8114.4	7599.9	7074.6	6543.0	6022.0	5505.3	4999.4	4512.8	4043.3	3586.6	3160.0
2.5°	8180.8	7679.2	7147.5	6609.4	6082.0	5558.9	5046.6	4553.5	4079.7	3618.8	3187.9
0°	8202.3	7679.2	7147.5	6609.4	6082.0	5558.9	5046.6	4553.5	4079.7	3618.8	3187.9

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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°	51.5	47.2	42.9	40.7	36.4	34.3	30.0	25.7	23.6	19.3	15.0
85°	102.9	94.3	87.9	81.5	75.0	66.5	60.0	53.6	45.0	38.6	30.0
82.5°	156.5	145.8	135.1	124.3	113.6	102.9	90.0	79.3	68.6	57.9	45.0
80°	216.5	199.4	184.4	169.4	154.4	139.3	122.2	107.2	90.0	75.0	60.0
77.5°	278.7	259.4	238.0	216.5	195.1	175.8	154.4	135.1	115.8	94.3	75.0
75°	345.2	319.4	295.8	268.0	242.3	214.4	188.7	162.9	139.3	115.8	90.0
72.5°	413.8	381.6	349.4	319.4	287.3	255.1	225.1	192.9	162.9	135.1	107.2
70°	484.5	445.9	407.3	370.9	334.4	295.8	261.5	225.1	188.7	154.4	122.2
67.5°	559.5	514.5	469.5	422.3	381.6	338.7	295.8	255.1	214.4	175.8	139.3
65°	641.0	587.4	531.7	482.4	428.8	381.6	334.4	287.3	242.3	195.1	154.4
62.5°	724.6	662.4	600.3	538.1	482.4	422.3	370.9	319.4	268.0	216.5	169.4
60°	810.4	739.6	668.9	600.3	531.7	469.5	407.3	349.4	295.8	238.0	184.4
57.5°	898.3	818.9	739.6	662.4	587.4	514.5	445.9	381.6	319.4	259.4	199.4
55°	988.3	898.3	810.4	724.6	641.0	559.5	484.5	413.8	345.2	278.7	216.5
52.5°	1078.3	979.7	881.1	788.9	701.0	608.8	523.1	443.8	368.7	300.1	231.5
50°	1170.5	1059.0	954.0	851.1	750.3	653.9	561.7	475.9	394.5	319.4	246.5
47.5°	1264.9	1142.7	1024.7	913.3	806.1	701.0	600.3	505.9	418.0	338.7	261.5
45°	1365.6	1224.1	1097.6	977.6	859.7	748.2	638.9	536.0	443.8	358.0	276.6
42.5°	1464.2	1312.0	1170.5	1044.0	913.3	793.2	677.4	568.1	467.4	375.2	289.4
40°	1575.7	1399.9	1239.1	1099.8	964.7	836.1	713.9	598.1	490.9	392.3	302.3
37.5°	1682.9	1485.7	1316.3	1159.8	1014.0	879.0	750.3	628.1	514.5	409.5	315.1
35°	1792.2	1580.0	1387.1	1215.5	1063.3	921.8	784.6	656.0	533.8	424.5	328.0
32.5°	1903.7	1670.0	1462.1	1275.6	1112.6	960.4	816.8	681.7	555.3	441.6	338.7
30°	2010.9	1755.8	1532.8	1333.5	1157.7	999.0	849.0	707.5	576.7	456.6	349.4
27.5°	2120.2	1845.8	1603.6	1387.1	1200.5	1033.3	876.8	731.0	596.0	471.6	360.2
25°	2225.3	1931.6	1670.0	1438.5	1239.1	1067.6	906.8	754.6	613.1	484.5	368.7
22.5°	2321.8	2006.6	1730.1	1487.8	1279.9	1097.6	932.6	776.1	630.3	497.4	377.3
20°	2409.7	2083.8	1792.2	1537.1	1318.5	1127.7	954.0	795.4	645.3	508.1	385.9
17.5°	2495.4	2154.5	1848.0	1582.1	1350.6	1153.4	975.4	810.4	658.2	516.7	392.3
15°	2568.3	2216.7	1897.3	1620.7	1380.6	1174.8	992.6	825.4	668.9	525.2	396.6
12.5°	2632.6	2270.3	1940.2	1652.9	1404.2	1194.1	1009.7	838.2	679.6	531.7	403.0
10°	2684.1	2313.2	1974.5	1680.8	1425.6	1209.1	1020.5	849.0	686.0	538.1	407.3
7.5°	2724.8	2347.5	2002.3	1700.1	1440.7	1222.0	1031.2	855.4	692.5	542.4	413.8
5°	2754.8	2373.2	2021.6	1715.1	1453.5	1237.0	1044.0	866.1	701.0	548.8	413.8
2.5°	2778.4	2392.5	2036.6	1727.9	1462.1	1237.0	1044.0	866.1	701.0	548.8	413.8
0°	2778.4	2392.5	2036.6	1727.9	1462.1	1237.0	1044.0	866.1	701.0	548.8	413.8

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.7	8.6	4.3	0.0
85°	23.6	15.0	8.6	0.0
82.5°	34.3	23.6	10.7	0.0
80°	45.0	30.0	15.0	0.0
77.5°	57.9	38.6	19.3	0.0
75°	68.6	45.0	23.6	0.0
72.5°	79.3	53.6	25.7	0.0
70°	90.0	60.0	30.0	0.0
67.5°	102.9	66.5	34.3	0.0
65°	113.6	75.0	36.4	0.0
62.5°	124.3	81.5	40.7	0.0
60°	135.1	87.9	42.9	0.0
57.5°	145.8	94.3	47.2	0.0
55°	156.5	102.9	51.5	0.0
52.5°	167.2	109.3	53.6	0.0
50°	177.9	115.8	55.7	0.0
47.5°	186.5	122.2	60.0	0.0
45°	197.2	128.6	62.2	0.0
42.5°	208.0	132.9	64.3	0.0
40°	216.5	139.3	66.5	0.0
37.5°	227.2	143.6	70.7	0.0
35°	235.8	150.1	72.9	0.0
32.5°	242.3	154.4	75.0	0.0
30°	250.8	158.6	77.2	0.0
27.5°	257.3	162.9	77.2	0.0
25°	263.7	167.2	79.3	0.0
22.5°	270.1	169.4	81.5	0.0
20°	276.6	173.6	83.6	0.0
17.5°	280.8	175.8	83.6	0.0
15°	285.1	177.9	87.9	0.0
12.5°	287.3	180.1	87.9	0.0
10°	291.6	184.4	87.9	0.0
7.5°	295.8	184.4	87.9	0.0
5°	295.8	184.4	87.9	0.0
2.5°	295.8	184.4	87.9	0.0
0°	295.8	184.4	87.9	0.0

(END OF REPORT)