

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: P624586

Luminaire Tested: **IFLD-S-SA2E-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624586
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2E-940-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

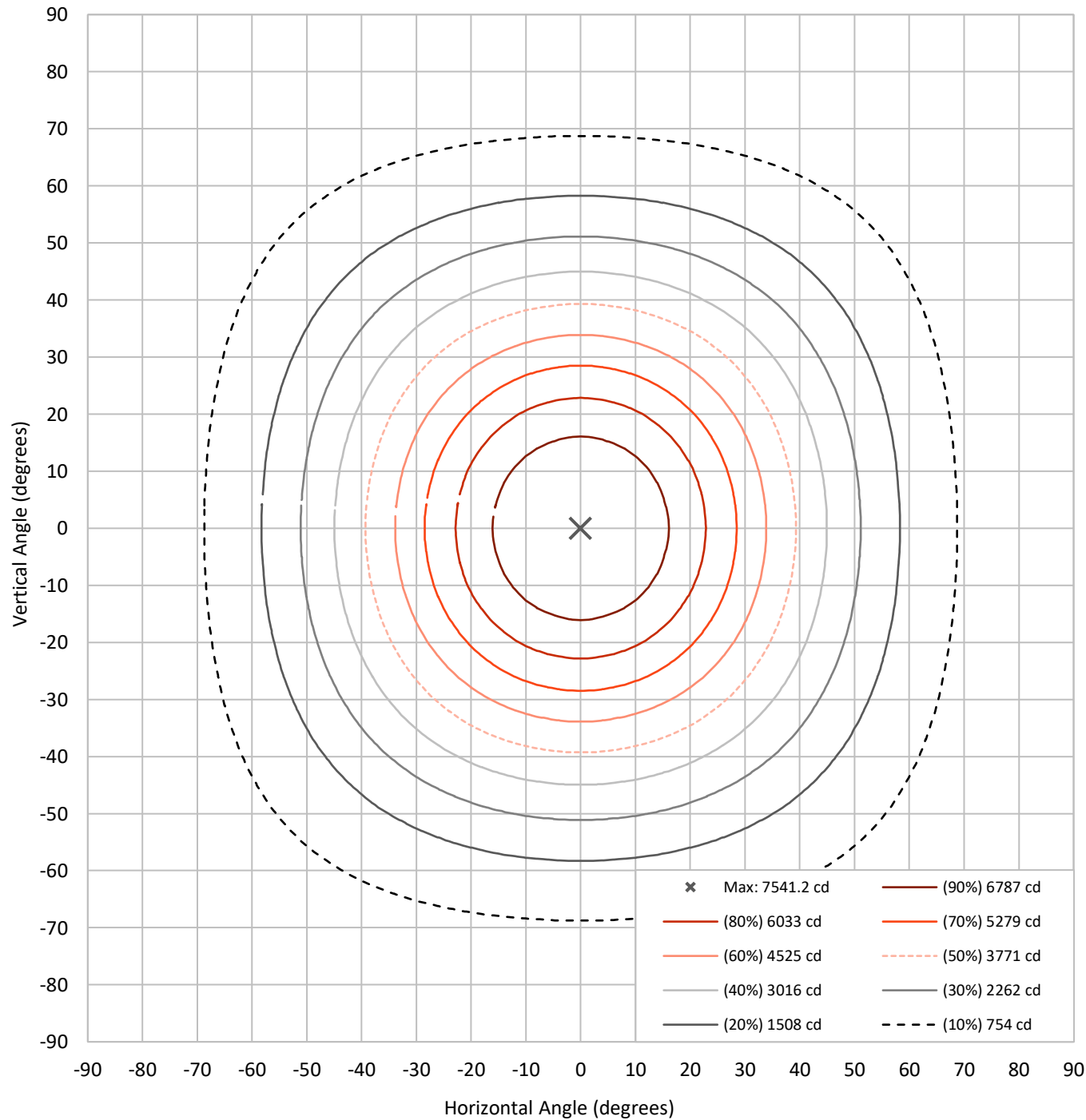
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	13578.1 lumens	Max Intensity:	7541.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	86.9 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	5875.1 lumens	Field Lumens:	9620.3 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	156.2		
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		





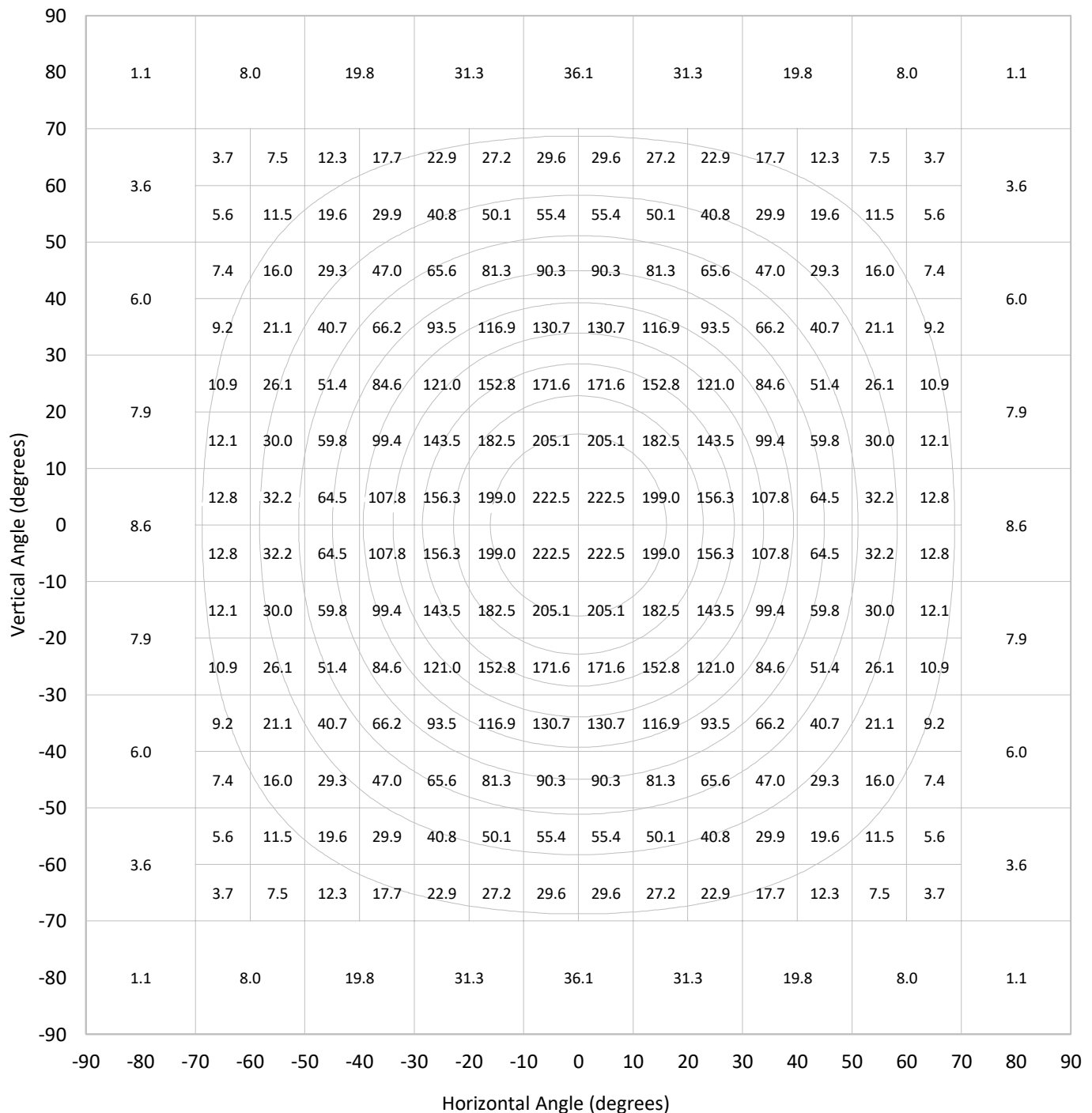
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Iso-Candela Plot



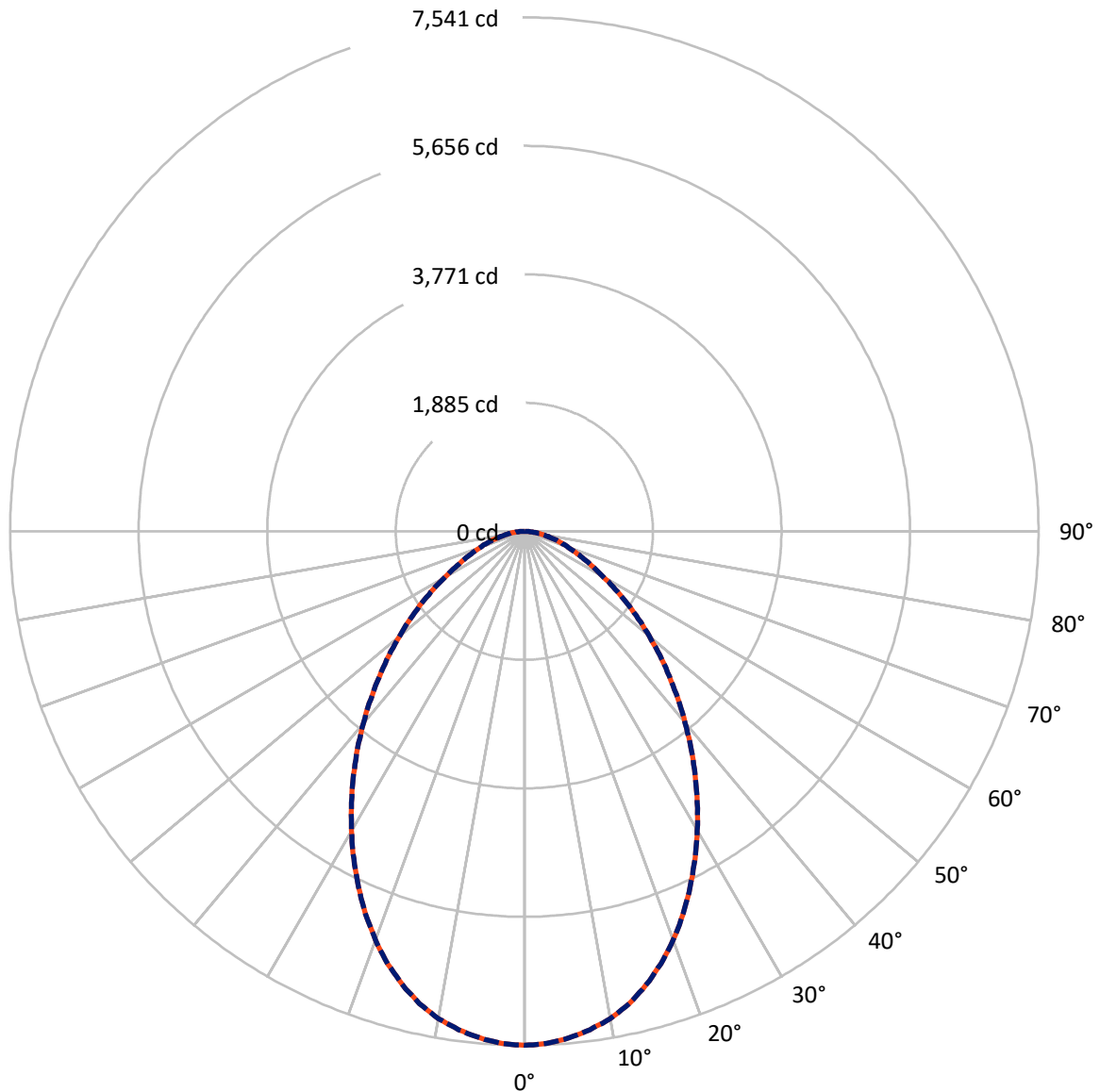
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Lumen Table



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Luminous Intensity Polar Plot

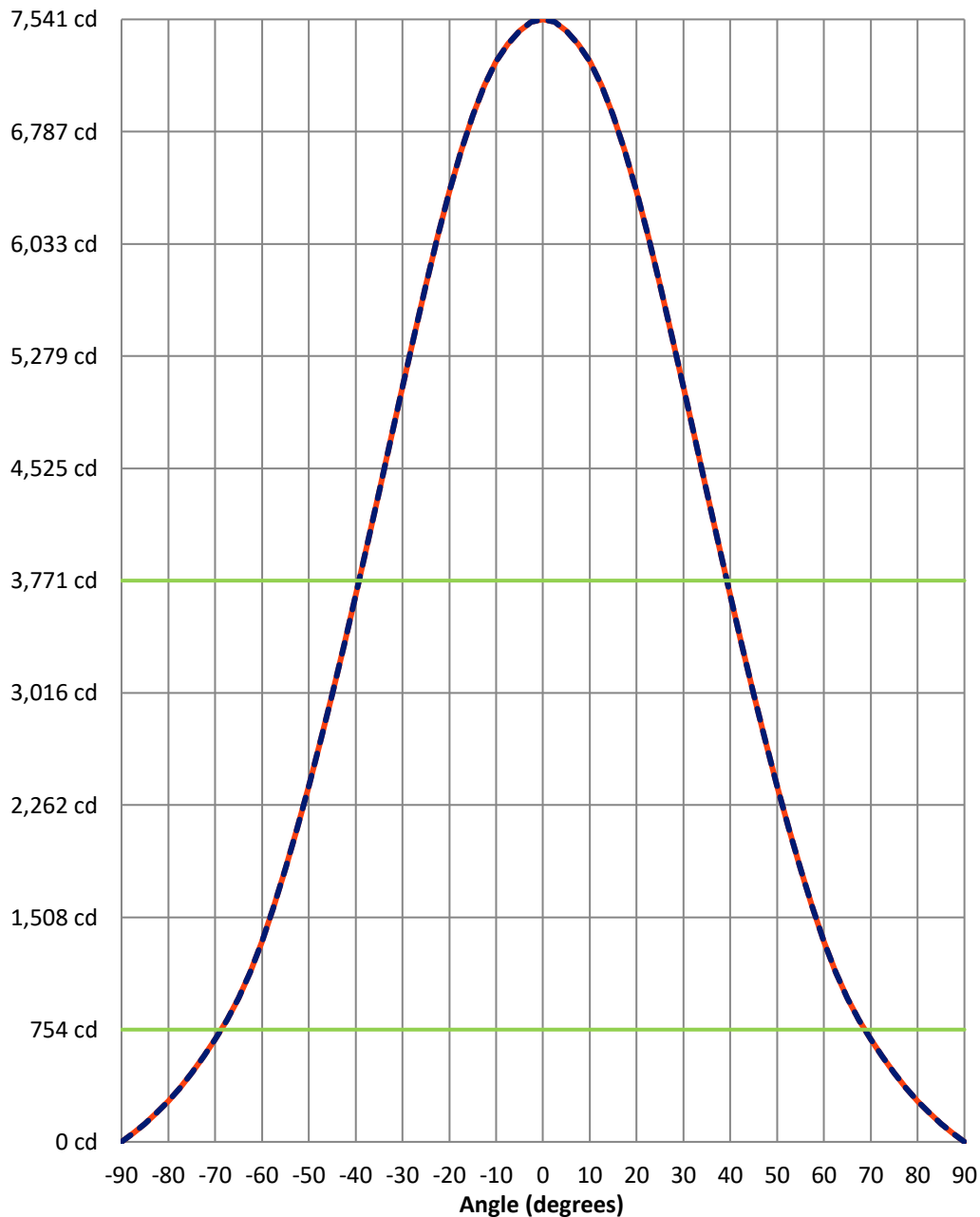


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle:	78.6°
V Angle:	78.6°
Lumens:	5875.1
Efficiency:	43.3%

Field:

H Angle:	137.5°
V Angle:	137.5°
Lumens:	9620.3
Efficiency:	70.9%

Spill:

Lumens:	3957.8
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°	58.0	58.0	58.0	58.0	58.0	58.0	58.0	55.2	55.2	53.8	52.4
85°	121.7	121.7	121.7	121.7	121.7	118.9	117.5	116.1	114.7	111.8	110.4
82.5°	195.4	195.4	195.4	195.4	192.5	189.7	188.3	185.5	182.6	178.4	174.1
80°	273.2	273.2	273.2	273.2	269.0	266.1	261.9	259.1	254.8	249.2	243.5
77.5°	362.4	362.4	362.4	358.2	355.3	351.1	346.8	341.2	335.5	328.4	319.9
75°	462.9	462.9	462.9	457.3	453.0	448.8	441.7	434.6	426.1	416.2	404.9
72.5°	571.9	571.9	571.9	564.8	560.6	553.5	545.0	535.1	525.2	512.5	498.3
70°	689.4	689.4	689.4	680.9	673.9	666.8	655.4	644.1	630.0	615.8	598.8
67.5°	816.8	816.8	816.8	806.9	798.4	788.5	775.8	761.6	744.6	724.8	705.0
65°	965.5	965.5	959.8	951.3	941.4	927.3	911.7	891.9	870.6	845.1	818.2
62.5°	1141.0	1141.0	1132.5	1122.6	1109.9	1091.5	1070.2	1044.8	1015.0	982.5	949.9
60°	1344.9	1344.9	1335.0	1322.2	1303.8	1281.2	1252.9	1220.3	1183.5	1142.4	1102.8
57.5°	1579.9	1579.9	1567.1	1550.1	1527.5	1499.2	1463.8	1422.7	1376.0	1325.1	1275.5
55°	1834.7	1834.7	1819.1	1799.3	1772.4	1738.4	1696.0	1647.8	1591.2	1533.2	1469.4
52.5°	2105.1	2105.1	2086.7	2064.0	2032.9	1993.2	1945.1	1888.5	1823.4	1755.4	1680.4
50°	2389.6	2389.6	2368.4	2342.9	2307.5	2260.8	2205.6	2140.5	2068.3	1989.0	1902.6
47.5°	2694.0	2694.0	2669.9	2640.2	2597.7	2543.9	2478.8	2403.8	2321.7	2232.5	2134.8
45°	3006.8	3006.8	2980.0	2946.0	2899.3	2838.4	2766.2	2694.0	2589.2	2485.9	2372.6
42.5°	3332.4	3332.4	3301.3	3263.1	3209.3	3142.8	3060.6	2967.2	2863.9	2747.8	2624.6
40°	3670.8	3670.8	3635.4	3591.5	3532.1	3455.6	3363.6	3258.8	3142.8	3013.9	2878.0
37.5°	4016.2	4016.2	3976.6	3928.4	3861.9	3777.0	3673.6	3557.5	3427.3	3284.3	3134.3
35°	4364.5	4364.5	4320.6	4268.2	4194.6	4101.1	3989.3	3860.5	3716.1	3560.4	3391.9
32.5°	4719.8	4719.8	4671.7	4612.2	4528.7	4425.3	4302.2	4162.0	4016.2	3835.0	3651.0
30°	5070.9	5070.9	5018.5	4953.4	4864.2	4750.9	4616.4	4462.1	4290.8	4105.4	3907.2
27.5°	5416.3	5402.1	5358.2	5288.9	5191.2	5070.9	4925.1	4758.0	4572.6	4368.7	4156.4
25°	5756.0	5740.5	5692.3	5615.9	5511.1	5379.5	5222.3	5044.0	4844.4	4629.2	4397.0
22.5°	6081.6	6064.7	6013.7	5931.6	5819.8	5676.8	5508.3	5317.2	5104.8	4874.1	4629.2
20°	6383.2	6364.8	6312.4	6226.0	6110.0	5958.5	5780.1	5574.8	5348.3	5104.8	4844.4
17.5°	6655.0	6636.6	6581.4	6492.2	6383.2	6214.7	6030.7	5814.1	5574.8	5317.2	5044.0
15°	6894.2	6874.4	6817.8	6728.6	6604.0	6445.5	6251.5	6030.7	5780.1	5508.3	5222.3
12.5°	7098.1	7078.3	7020.2	6931.0	6802.2	6643.7	6445.5	6214.7	5958.5	5676.8	5379.5
10°	7259.5	7239.7	7184.4	7099.5	6966.4	6802.2	6604.0	6383.2	6110.0	5819.8	5511.1
7.5°	7375.6	7357.2	7306.2	7221.2	7099.5	6931.0	6728.6	6492.2	6226.0	5931.6	5615.9
5°	7463.3	7442.1	7391.1	7306.2	7184.4	7020.2	6817.8	6581.4	6312.4	6013.7	5692.3
2.5°	7524.2	7498.7	7442.1	7357.2	7239.7	7078.3	6874.4	6636.6	6364.8	6064.7	5740.5
0°	7541.2	7524.2	7463.3	7375.6	7259.5	7098.1	6894.2	6655.0	6383.2	6081.6	5756.0

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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°	51.0	51.0	49.5	48.1	46.7	43.9	42.5	41.1	39.6	36.8	35.4
85°	107.6	104.8	101.9	99.1	94.8	92.0	87.8	84.9	80.7	76.4	72.2
82.5°	169.9	165.6	160.0	155.7	150.1	143.0	137.3	130.2	123.2	117.5	110.4
80°	237.8	230.8	223.7	216.6	208.1	199.6	191.1	182.6	172.7	162.8	152.9
77.5°	311.4	301.5	291.6	280.3	270.4	259.1	247.7	236.4	223.7	210.9	198.2
75°	393.6	380.8	366.7	352.5	339.8	324.2	308.6	293.0	276.1	260.5	243.5
72.5°	482.7	467.2	450.2	433.2	414.8	395.0	375.1	353.9	334.1	314.3	293.0
70°	579.0	560.6	539.4	518.1	495.5	471.4	447.3	421.9	396.4	370.9	345.4
67.5°	682.3	659.7	634.2	608.7	580.4	552.1	523.8	494.1	462.9	431.8	402.0
65°	792.8	764.5	734.7	702.2	669.6	637.0	603.1	567.7	532.3	495.5	462.9
62.5°	915.9	880.5	842.3	802.7	765.9	726.2	689.4	645.5	603.1	562.0	521.0
60°	1058.9	1012.2	965.5	915.9	869.2	818.2	772.9	724.8	676.7	630.0	581.8
57.5°	1218.9	1159.4	1102.8	1043.3	981.0	924.4	866.4	808.3	754.5	699.3	647.0
55°	1400.1	1327.9	1257.1	1183.5	1111.3	1040.5	966.9	901.8	835.2	772.9	712.1
52.5°	1598.3	1516.2	1428.4	1344.9	1252.9	1165.1	1083.0	1000.9	923.0	848.0	778.6
50°	1810.6	1714.4	1613.8	1511.9	1407.2	1303.8	1204.7	1108.5	1017.9	930.1	848.0
47.5°	2031.5	1922.5	1807.8	1691.7	1579.9	1453.9	1335.0	1226.0	1117.0	1017.9	923.0
45°	2258.0	2134.8	2008.8	1877.2	1745.5	1609.6	1477.9	1344.9	1226.0	1108.5	1000.9
42.5°	2491.6	2352.8	2212.7	2066.9	1921.0	1772.4	1623.8	1477.9	1335.0	1204.7	1083.0
40°	2732.2	2579.3	2419.4	2260.8	2105.1	1935.2	1772.4	1609.6	1453.9	1303.8	1165.1
37.5°	2972.9	2805.8	2633.1	2454.7	2276.4	2105.1	1921.0	1745.5	1579.9	1407.2	1252.9
35°	3214.9	3030.9	2844.0	2650.1	2454.7	2260.8	2066.9	1877.2	1691.7	1511.9	1344.9
32.5°	3458.4	3257.4	3050.7	2844.0	2633.1	2419.4	2212.7	2008.8	1807.8	1613.8	1428.4
30°	3697.7	3479.7	3257.4	3030.9	2805.8	2579.3	2352.8	2134.8	1922.5	1714.4	1516.2
27.5°	3931.3	3697.7	3458.4	3214.9	2972.9	2732.2	2491.6	2258.0	2031.5	1810.6	1598.3
25°	4156.4	3907.2	3651.0	3391.9	3134.3	2878.0	2624.6	2372.6	2134.8	1902.6	1680.4
22.5°	4368.7	4105.4	3835.0	3560.4	3284.3	3013.9	2747.8	2485.9	2232.5	1989.0	1755.4
20°	4572.6	4290.8	4016.2	3716.1	3427.3	3142.8	2863.9	2589.2	2321.7	2068.3	1823.4
17.5°	4758.0	4462.1	4162.0	3860.5	3557.5	3258.8	2967.2	2694.0	2403.8	2140.5	1888.5
15°	4925.1	4616.4	4302.2	3989.3	3673.6	3363.6	3060.6	2766.2	2478.8	2205.6	1945.1
12.5°	5070.9	4750.9	4425.3	4101.1	3777.0	3455.6	3142.8	2838.4	2543.9	2260.8	1993.2
10°	5191.2	4864.2	4528.7	4194.6	3861.9	3532.1	3209.3	2899.3	2597.7	2307.5	2032.9
7.5°	5288.9	4953.4	4612.2	4268.2	3928.4	3591.5	3263.1	2946.0	2640.2	2342.9	2064.0
5°	5358.2	5018.5	4671.7	4320.6	3976.6	3635.4	3301.3	2980.0	2669.9	2368.4	2086.7
2.5°	5402.1	5070.9	4719.8	4364.5	4016.2	3670.8	3332.4	3006.8	2694.0	2389.6	2105.1
0°	5416.3	5070.9	4719.8	4364.5	4016.2	3670.8	3332.4	3006.8	2694.0	2389.6	2105.1

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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°	34.0	31.1	28.3	26.9	24.1	22.7	19.8	17.0	15.6	12.7	9.9
85°	68.0	62.3	58.0	53.8	49.5	43.9	39.6	35.4	29.7	25.5	19.8
82.5°	103.3	96.3	89.2	82.1	75.0	68.0	59.5	52.4	45.3	38.2	29.7
80°	143.0	131.7	121.7	111.8	101.9	92.0	80.7	70.8	59.5	49.5	39.6
77.5°	184.0	171.3	157.1	143.0	128.8	116.1	101.9	89.2	76.4	62.3	49.5
75°	227.9	210.9	195.4	177.0	160.0	141.6	124.6	107.6	92.0	76.4	59.5
72.5°	273.2	252.0	230.8	210.9	189.7	168.5	148.6	127.4	107.6	89.2	70.8
70°	319.9	294.5	269.0	244.9	220.8	195.4	172.7	148.6	124.6	101.9	80.7
67.5°	369.5	339.8	310.0	278.9	252.0	223.7	195.4	168.5	141.6	116.1	92.0
65°	423.3	387.9	351.1	318.5	283.1	252.0	220.8	189.7	160.0	128.8	101.9
62.5°	478.5	437.4	396.4	355.3	318.5	278.9	244.9	210.9	177.0	143.0	111.8
60°	535.1	488.4	441.7	396.4	351.1	310.0	269.0	230.8	195.4	157.1	121.7
57.5°	593.2	540.8	488.4	437.4	387.9	339.8	294.5	252.0	210.9	171.3	131.7
55°	652.6	593.2	535.1	478.5	423.3	369.5	319.9	273.2	227.9	184.0	143.0
52.5°	712.1	647.0	581.8	521.0	462.9	402.0	345.4	293.0	243.5	198.2	152.9
50°	772.9	699.3	630.0	562.0	495.5	431.8	370.9	314.3	260.5	210.9	162.8
47.5°	835.2	754.5	676.7	603.1	532.3	462.9	396.4	334.1	276.1	223.7	172.7
45°	901.8	808.3	724.8	645.5	567.7	494.1	421.9	353.9	293.0	236.4	182.6
42.5°	966.9	866.4	772.9	689.4	603.1	523.8	447.3	375.1	308.6	247.7	191.1
40°	1040.5	924.4	818.2	726.2	637.0	552.1	471.4	395.0	324.2	259.1	199.6
37.5°	1111.3	981.0	869.2	765.9	669.6	580.4	495.5	414.8	339.8	270.4	208.1
35°	1183.5	1043.3	915.9	802.7	702.2	608.7	518.1	433.2	352.5	280.3	216.6
32.5°	1257.1	1102.8	965.5	842.3	734.7	634.2	539.4	450.2	366.7	291.6	223.7
30°	1327.9	1159.4	1012.2	880.5	764.5	659.7	560.6	467.2	380.8	301.5	230.8
27.5°	1400.1	1218.9	1058.9	915.9	792.8	682.3	579.0	482.7	393.6	311.4	237.8
25°	1469.4	1275.5	1102.8	949.9	818.2	705.0	598.8	498.3	404.9	319.9	243.5
22.5°	1533.2	1325.1	1142.4	982.5	845.1	724.8	615.8	512.5	416.2	328.4	249.2
20°	1591.2	1376.0	1183.5	1015.0	870.6	744.6	630.0	525.2	426.1	335.5	254.8
17.5°	1647.8	1422.7	1220.3	1044.8	891.9	761.6	644.1	535.1	434.6	341.2	259.1
15°	1696.0	1463.8	1252.9	1070.2	911.7	775.8	655.4	545.0	441.7	346.8	261.9
12.5°	1738.4	1499.2	1281.2	1091.5	927.3	788.5	666.8	553.5	448.8	351.1	266.1
10°	1772.4	1527.5	1303.8	1109.9	941.4	798.4	673.9	560.6	453.0	355.3	269.0
7.5°	1799.3	1550.1	1322.2	1122.6	951.3	806.9	680.9	564.8	457.3	358.2	273.2
5°	1819.1	1567.1	1335.0	1132.5	959.8	816.8	689.4	571.9	462.9	362.4	273.2
2.5°	1834.7	1579.9	1344.9	1141.0	965.5	816.8	689.4	571.9	462.9	362.4	273.2
0°	1834.7	1579.9	1344.9	1141.0	965.5	816.8	689.4	571.9	462.9	362.4	273.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	7.1	5.7	2.8	0.0
85°	15.6	9.9	5.7	0.0
82.5°	22.7	15.6	7.1	0.0
80°	29.7	19.8	9.9	0.0
77.5°	38.2	25.5	12.7	0.0
75°	45.3	29.7	15.6	0.0
72.5°	52.4	35.4	17.0	0.0
70°	59.5	39.6	19.8	0.0
67.5°	68.0	43.9	22.7	0.0
65°	75.0	49.5	24.1	0.0
62.5°	82.1	53.8	26.9	0.0
60°	89.2	58.0	28.3	0.0
57.5°	96.3	62.3	31.1	0.0
55°	103.3	68.0	34.0	0.0
52.5°	110.4	72.2	35.4	0.0
50°	117.5	76.4	36.8	0.0
47.5°	123.2	80.7	39.6	0.0
45°	130.2	84.9	41.1	0.0
42.5°	137.3	87.8	42.5	0.0
40°	143.0	92.0	43.9	0.0
37.5°	150.1	94.8	46.7	0.0
35°	155.7	99.1	48.1	0.0
32.5°	160.0	101.9	49.5	0.0
30°	165.6	104.8	51.0	0.0
27.5°	169.9	107.6	51.0	0.0
25°	174.1	110.4	52.4	0.0
22.5°	178.4	111.8	53.8	0.0
20°	182.6	114.7	55.2	0.0
17.5°	185.5	116.1	55.2	0.0
15°	188.3	117.5	58.0	0.0
12.5°	189.7	118.9	58.0	0.0
10°	192.5	121.7	58.0	0.0
7.5°	195.4	121.7	58.0	0.0
5°	195.4	121.7	58.0	0.0
2.5°	195.4	121.7	58.0	0.0
0°	195.4	121.7	58.0	0.0

(END OF REPORT)