

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: P623901

Luminaire Tested: **IFLD-S-SA2D-735-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623901
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2D-735-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

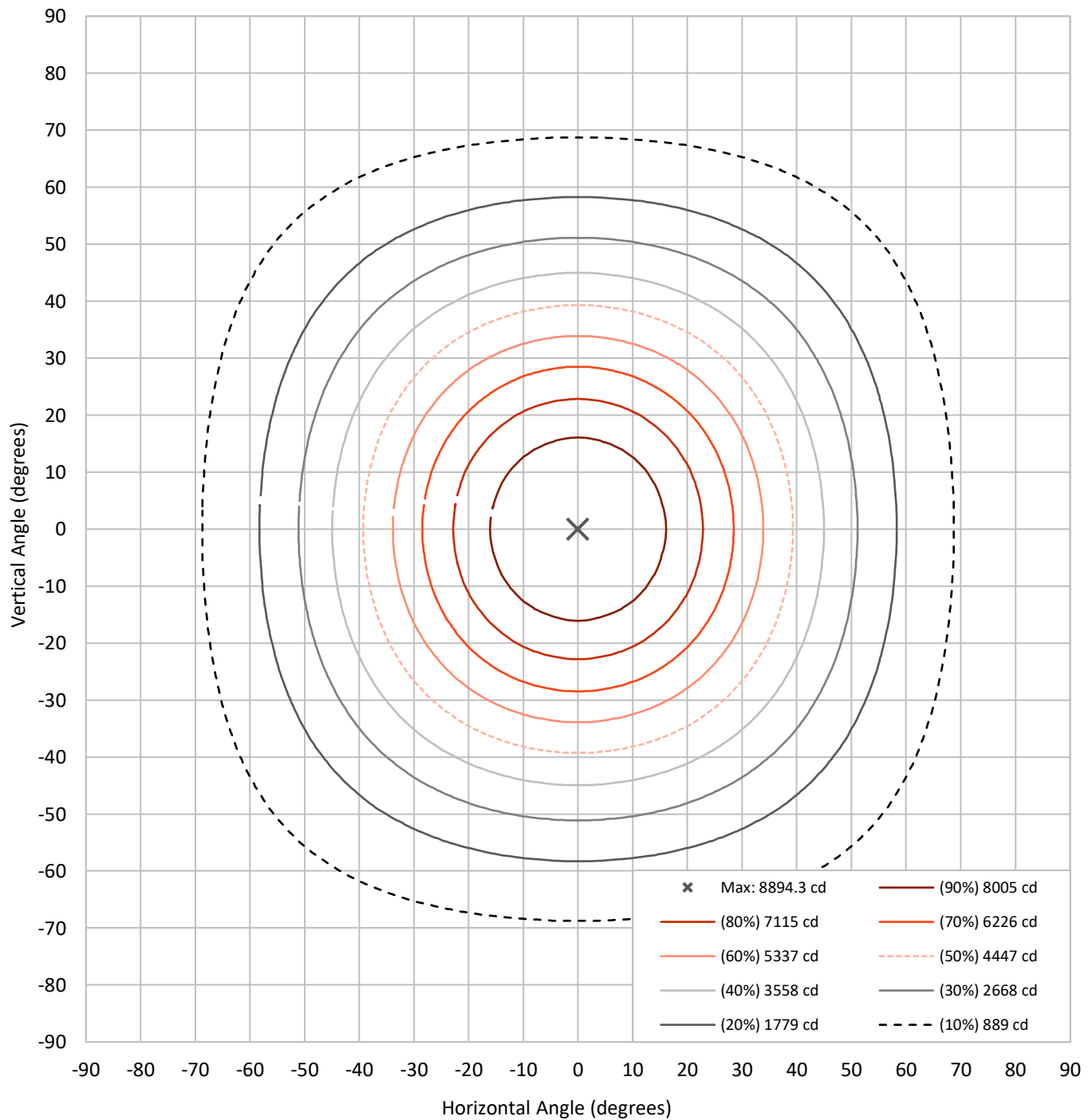
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	16014.3 lumens	Max Intensity:	8894.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	129.3 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:	6929.3 lumens	Field Lumens:	11346.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	123.9		
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		



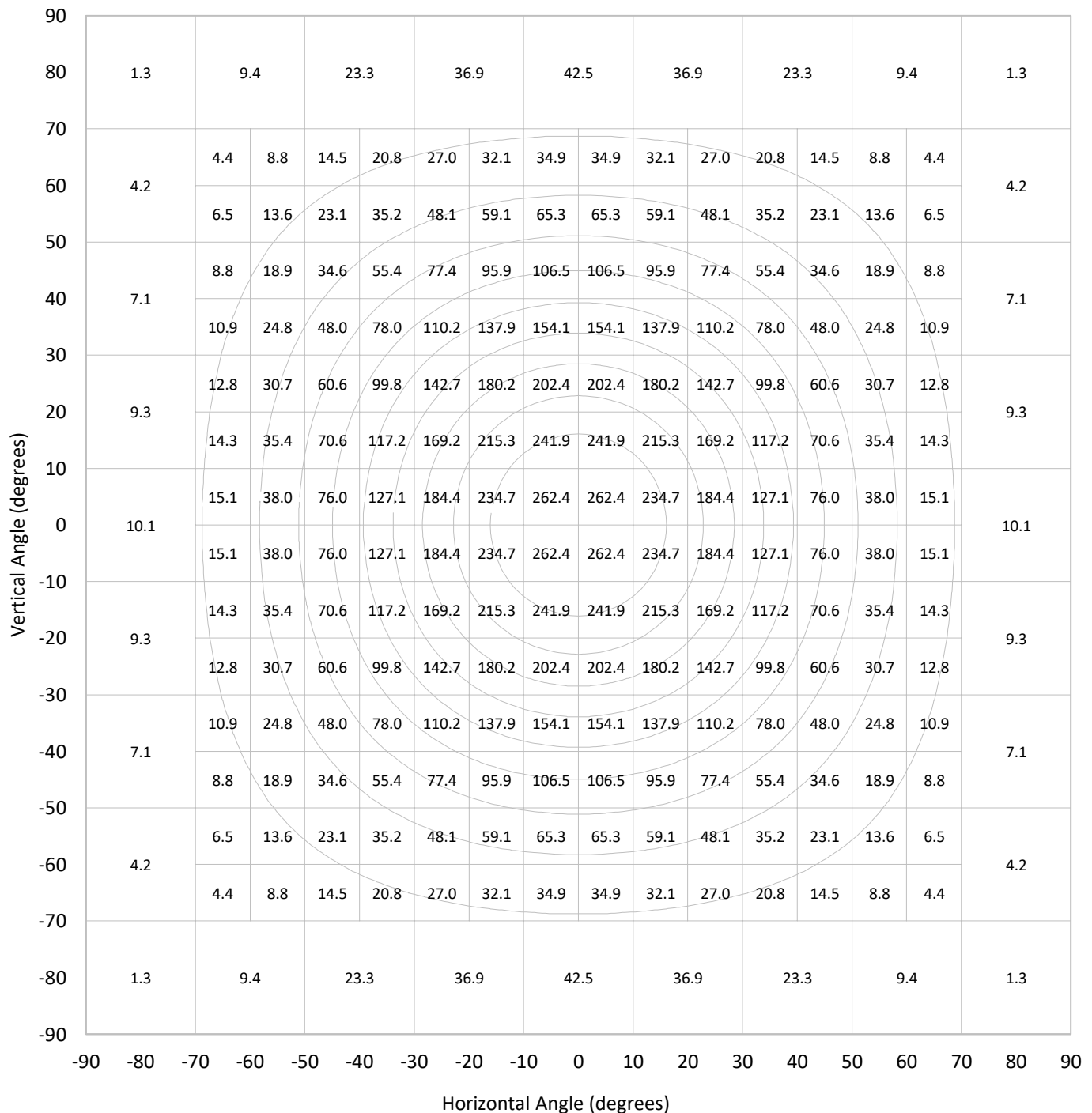
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Iso-Candela Plot



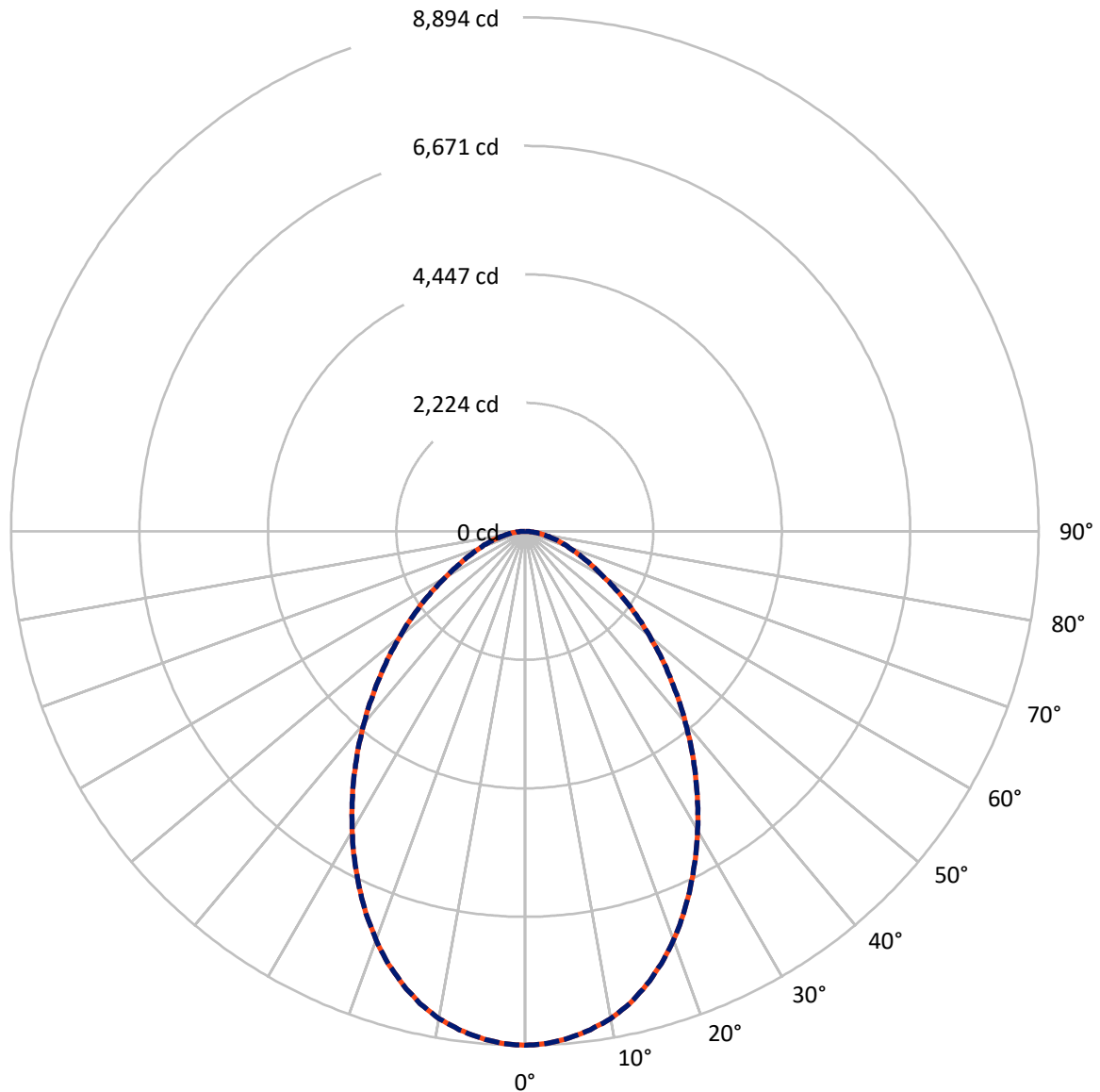
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Lumen Table



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Luminous Intensity Polar Plot

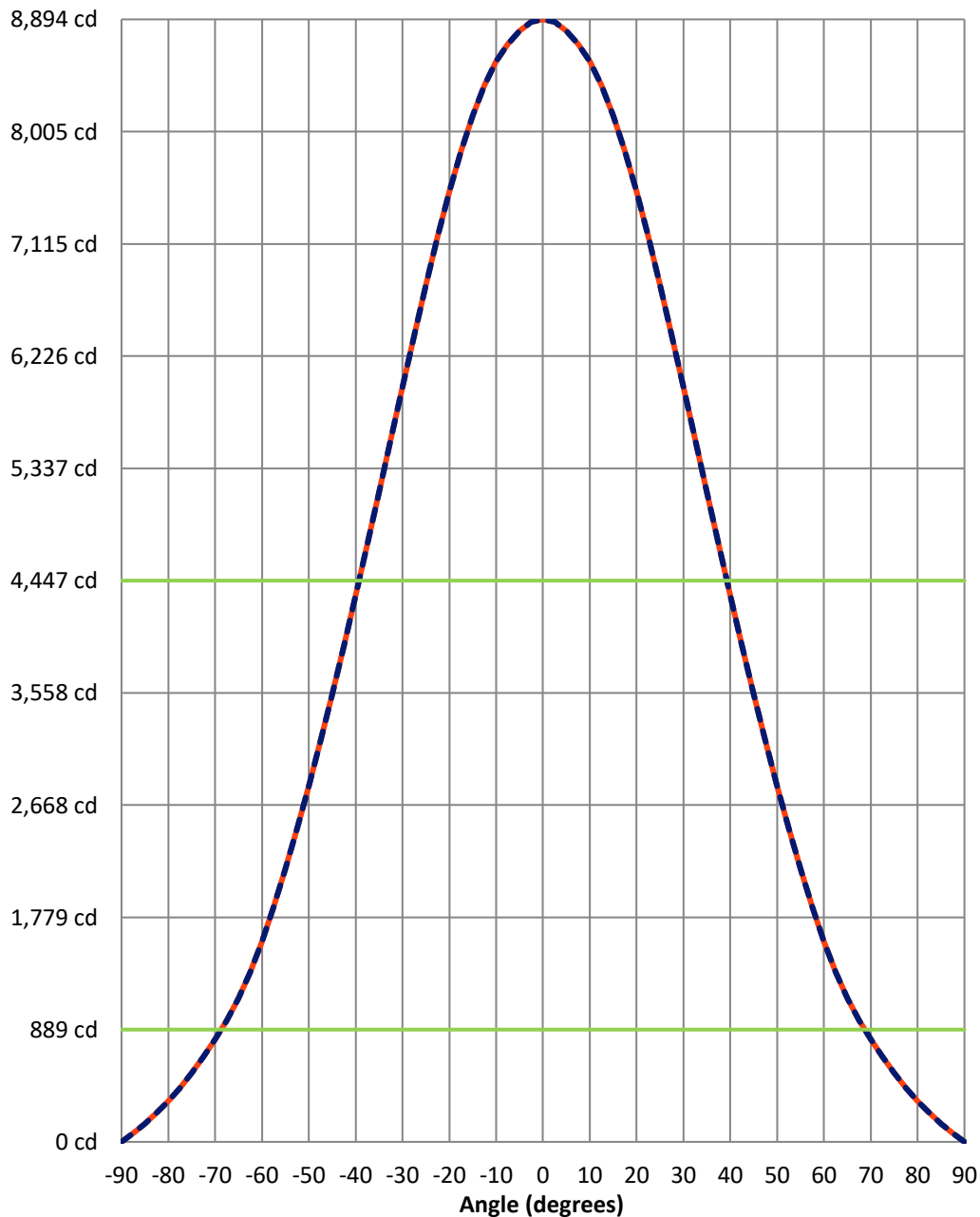


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle:	78.6°
V Angle:	78.6°
Lumens:	6929.3
Efficiency:	43.3%

Field:

H Angle:	137.5°
V Angle:	137.5°
Lumens:	11346.4
Efficiency:	70.9%

Spill:

Lumens:	4667.9
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°	68.5	68.5	68.5	68.5	68.5	68.5	68.5	65.1	65.1	63.4	61.8
85°	143.6	143.6	143.6	143.6	143.6	140.3	138.6	136.9	135.2	131.9	130.2
82.5°	230.4	230.4	230.4	230.4	227.1	223.7	222.1	218.7	215.4	210.4	205.4
80°	322.2	322.2	322.2	322.2	317.2	313.9	308.9	305.5	300.5	293.9	287.2
77.5°	427.4	427.4	427.4	422.4	419.1	414.1	409.1	402.4	395.7	387.4	377.3
75°	546.0	546.0	546.0	539.3	534.3	529.3	520.9	512.6	502.6	490.9	477.5
72.5°	674.5	674.5	674.5	666.2	661.2	652.8	642.8	631.1	619.4	604.4	587.7
70°	813.1	813.1	813.1	803.1	794.8	786.4	773.1	759.7	743.0	726.3	706.3
67.5°	963.4	963.4	963.4	951.7	941.7	930.0	915.0	898.3	878.2	854.9	831.5
65°	1138.7	1138.7	1132.0	1122.0	1110.3	1093.6	1075.3	1051.9	1026.8	996.8	965.1
62.5°	1345.7	1345.7	1335.7	1324.0	1309.0	1287.3	1262.3	1232.2	1197.1	1158.7	1120.3
60°	1586.2	1586.2	1574.5	1559.5	1537.8	1511.0	1477.6	1439.2	1395.8	1347.4	1300.7
57.5°	1863.3	1863.3	1848.3	1828.3	1801.6	1768.2	1726.4	1678.0	1622.9	1562.8	1504.4
55°	2163.9	2163.9	2145.5	2122.1	2090.4	2050.3	2000.3	1943.5	1876.7	1808.2	1733.1
52.5°	2482.8	2482.8	2461.1	2434.4	2397.6	2350.9	2294.1	2227.3	2150.5	2070.4	1981.9
50°	2818.4	2818.4	2793.3	2763.3	2721.5	2666.4	2601.3	2524.5	2439.4	2345.9	2244.0
47.5°	3177.4	3177.4	3149.0	3113.9	3063.8	3000.4	2923.6	2835.1	2738.2	2633.1	2517.8
45°	3546.4	3546.4	3514.6	3474.6	3419.5	3347.7	3262.5	3177.4	3053.8	2931.9	2798.4
42.5°	3930.4	3930.4	3893.6	3848.6	3785.1	3706.6	3609.8	3499.6	3377.7	3240.8	3095.6
40°	4329.4	4329.4	4287.7	4235.9	4165.8	4075.6	3967.1	3843.6	3706.6	3554.7	3394.4
37.5°	4736.8	4736.8	4690.1	4633.3	4554.8	4454.7	4332.8	4195.9	4042.2	3873.6	3696.6
35°	5147.6	5147.6	5095.8	5034.0	4947.2	4837.0	4705.1	4553.2	4382.9	4199.2	4000.5
32.5°	5566.6	5566.6	5509.9	5439.8	5341.2	5219.4	5074.1	4908.8	4736.8	4523.1	4306.1
30°	5980.7	5980.7	5918.9	5842.1	5737.0	5603.4	5444.8	5262.8	5060.7	4842.0	4608.3
27.5°	6388.1	6371.4	6319.7	6237.9	6122.6	5980.7	5808.7	5611.7	5393.0	5152.6	4902.1
25°	6788.8	6770.5	6713.7	6623.5	6500.0	6344.7	6159.4	5949.0	5713.6	5459.8	5186.0
22.5°	7172.9	7152.8	7092.7	6995.9	6864.0	6695.3	6496.6	6271.2	6020.8	5748.6	5459.8
20°	7528.5	7506.8	7445.0	7343.2	7206.3	7027.6	6817.2	6575.1	6308.0	6020.8	5713.6
17.5°	7849.1	7827.4	7762.3	7657.1	7528.5	7329.8	7112.8	6857.3	6575.1	6271.2	5949.0
15°	8131.2	8107.9	8041.1	7935.9	7789.0	7602.0	7373.2	7112.8	6817.2	6496.6	6159.4
12.5°	8371.7	8348.3	8279.8	8174.7	8022.7	7835.7	7602.0	7329.8	7027.6	6695.3	6344.7
10°	8562.0	8538.6	8473.5	8373.3	8216.4	8022.7	7789.0	7528.5	7206.3	6864.0	6500.0
7.5°	8698.9	8677.2	8617.1	8516.9	8373.3	8174.7	7935.9	7657.1	7343.2	6995.9	6623.5
5°	8802.5	8777.4	8717.3	8617.1	8473.5	8279.8	8041.1	7762.3	7445.0	7092.7	6713.7
2.5°	8874.2	8844.2	8777.4	8677.2	8538.6	8348.3	8107.9	7827.4	7506.8	7152.8	6770.5
0°	8894.3	8874.2	8802.5	8698.9	8562.0	8371.7	8131.2	7849.1	7528.5	7172.9	6788.8

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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°	60.1	60.1	58.4	56.8	55.1	51.8	50.1	48.4	46.8	43.4	41.7
85°	126.9	123.6	120.2	116.9	111.9	108.5	103.5	100.2	95.2	90.2	85.2
82.5°	200.4	195.4	188.7	183.7	177.0	168.6	162.0	153.6	145.3	138.6	130.2
80°	280.5	272.2	263.8	255.5	245.4	235.4	225.4	215.4	203.7	192.0	180.3
77.5°	367.3	355.6	344.0	330.6	318.9	305.5	292.2	278.8	263.8	248.8	233.8
75°	464.2	449.1	432.4	415.7	400.7	382.4	364.0	345.6	325.6	307.2	287.2
72.5°	569.4	551.0	531.0	510.9	489.2	465.8	442.5	417.4	394.0	370.7	345.6
70°	682.9	661.2	636.1	611.1	584.4	556.0	527.6	497.6	467.5	437.5	407.4
67.5°	804.8	778.1	748.0	718.0	684.6	651.2	617.8	582.7	546.0	509.2	474.2
65°	935.0	901.6	866.6	828.2	789.7	751.3	711.3	669.5	627.8	584.4	546.0
62.5°	1080.3	1038.5	993.4	946.7	903.3	856.5	813.1	761.4	711.3	662.9	614.4
60°	1248.9	1193.8	1138.7	1080.3	1025.2	965.1	911.6	854.9	798.1	743.0	686.2
57.5°	1437.6	1367.5	1300.7	1230.5	1157.1	1090.3	1021.8	953.4	889.9	824.8	763.0
55°	1651.3	1566.1	1482.7	1395.8	1310.7	1227.2	1140.4	1063.6	985.1	911.6	839.8
52.5°	1885.0	1788.2	1684.7	1586.2	1477.6	1374.1	1277.3	1180.5	1088.6	1000.1	918.3
50°	2135.5	2022.0	1903.4	1783.2	1659.6	1537.8	1420.9	1307.3	1200.5	1097.0	1000.1
47.5°	2396.0	2267.4	2132.2	1995.2	1863.3	1714.7	1574.5	1445.9	1317.4	1200.5	1088.6
45°	2663.1	2517.8	2369.2	2214.0	2058.7	1898.4	1743.1	1586.2	1445.9	1307.3	1180.5
42.5°	2938.6	2775.0	2609.7	2437.7	2265.7	2090.4	1915.1	1743.1	1574.5	1420.9	1277.3
40°	3222.4	3042.1	2853.5	2666.4	2482.8	2282.4	2090.4	1898.4	1714.7	1537.8	1374.1
37.5°	3506.3	3309.3	3105.6	2895.2	2684.8	2482.8	2265.7	2058.7	1863.3	1659.6	1477.6
35°	3791.8	3574.7	3354.3	3125.6	2895.2	2666.4	2437.7	2214.0	1995.2	1783.2	1586.2
32.5°	4079.0	3841.9	3598.1	3354.3	3105.6	2853.5	2609.7	2369.2	2132.2	1903.4	1684.7
30°	4361.2	4104.0	3841.9	3574.7	3309.3	3042.1	2775.0	2517.8	2267.4	2022.0	1788.2
27.5°	4636.6	4361.2	4079.0	3791.8	3506.3	3222.4	2938.6	2663.1	2396.0	2135.5	1885.0
25°	4902.1	4608.3	4306.1	4000.5	3696.6	3394.4	3095.6	2798.4	2517.8	2244.0	1981.9
22.5°	5152.6	4842.0	4523.1	4199.2	3873.6	3554.7	3240.8	2931.9	2633.1	2345.9	2070.4
20°	5393.0	5060.7	4736.8	4382.9	4042.2	3706.6	3377.7	3053.8	2738.2	2439.4	2150.5
17.5°	5611.7	5262.8	4908.8	4553.2	4195.9	3843.6	3499.6	3177.4	2835.1	2524.5	2227.3
15°	5808.7	5444.8	5074.1	4705.1	4332.8	3967.1	3609.8	3262.5	2923.6	2601.3	2294.1
12.5°	5980.7	5603.4	5219.4	4837.0	4454.7	4075.6	3706.6	3347.7	3000.4	2666.4	2350.9
10°	6122.6	5737.0	5341.2	4947.2	4554.8	4165.8	3785.1	3419.5	3063.8	2721.5	2397.6
7.5°	6237.9	5842.1	5439.8	5034.0	4633.3	4235.9	3848.6	3474.6	3113.9	2763.3	2434.4
5°	6319.7	5918.9	5509.9	5095.8	4690.1	4287.7	3893.6	3514.6	3149.0	2793.3	2461.1
2.5°	6371.4	5980.7	5566.6	5147.6	4736.8	4329.4	3930.4	3546.4	3177.4	2818.4	2482.8
0°	6388.1	5980.7	5566.6	5147.6	4736.8	4329.4	3930.4	3546.4	3177.4	2818.4	2482.8

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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°	40.1	36.7	33.4	31.7	28.4	26.7	23.4	20.0	18.4	15.0	11.7
85°	80.1	73.5	68.5	63.4	58.4	51.8	46.8	41.7	35.1	30.1	23.4
82.5°	121.9	113.5	105.2	96.8	88.5	80.1	70.1	61.8	53.4	45.1	35.1
80°	168.6	155.3	143.6	131.9	120.2	108.5	95.2	83.5	70.1	58.4	46.8
77.5°	217.1	202.0	185.3	168.6	151.9	136.9	120.2	105.2	90.2	73.5	58.4
75°	268.8	248.8	230.4	208.7	188.7	167.0	146.9	126.9	108.5	90.2	70.1
72.5°	322.2	297.2	272.2	248.8	223.7	198.7	175.3	150.3	126.9	105.2	83.5
70°	377.3	347.3	317.2	288.9	260.5	230.4	203.7	175.3	146.9	120.2	95.2
67.5°	435.8	400.7	365.7	328.9	297.2	263.8	230.4	198.7	167.0	136.9	108.5
65°	499.2	457.5	414.1	375.7	333.9	297.2	260.5	223.7	188.7	151.9	120.2
62.5°	564.3	515.9	467.5	419.1	375.7	328.9	288.9	248.8	208.7	168.6	131.9
60°	631.1	576.0	520.9	467.5	414.1	365.7	317.2	272.2	230.4	185.3	143.6
57.5°	699.6	637.8	576.0	515.9	457.5	400.7	347.3	297.2	248.8	202.0	155.3
55°	769.7	699.6	631.1	564.3	499.2	435.8	377.3	322.2	268.8	217.1	168.6
52.5°	839.8	763.0	686.2	614.4	546.0	474.2	407.4	345.6	287.2	233.8	180.3
50°	911.6	824.8	743.0	662.9	584.4	509.2	437.5	370.7	307.2	248.8	192.0
47.5°	985.1	889.9	798.1	711.3	627.8	546.0	467.5	394.0	325.6	263.8	203.7
45°	1063.6	953.4	854.9	761.4	669.5	582.7	497.6	417.4	345.6	278.8	215.4
42.5°	1140.4	1021.8	911.6	813.1	711.3	617.8	527.6	442.5	364.0	292.2	225.4
40°	1227.2	1090.3	965.1	856.5	751.3	651.2	556.0	465.8	382.4	305.5	235.4
37.5°	1310.7	1157.1	1025.2	903.3	789.7	684.6	584.4	489.2	400.7	318.9	245.4
35°	1395.8	1230.5	1080.3	946.7	828.2	718.0	611.1	510.9	415.7	330.6	255.5
32.5°	1482.7	1300.7	1138.7	993.4	866.6	748.0	636.1	531.0	432.4	344.0	263.8
30°	1566.1	1367.5	1193.8	1038.5	901.6	778.1	661.2	551.0	449.1	355.6	272.2
27.5°	1651.3	1437.6	1248.9	1080.3	935.0	804.8	682.9	569.4	464.2	367.3	280.5
25°	1733.1	1504.4	1300.7	1120.3	965.1	831.5	706.3	587.7	477.5	377.3	287.2
22.5°	1808.2	1562.8	1347.4	1158.7	996.8	854.9	726.3	604.4	490.9	387.4	293.9
20°	1876.7	1622.9	1395.8	1197.1	1026.8	878.2	743.0	619.4	502.6	395.7	300.5
17.5°	1943.5	1678.0	1439.2	1232.2	1051.9	898.3	759.7	631.1	512.6	402.4	305.5
15°	2000.3	1726.4	1477.6	1262.3	1075.3	915.0	773.1	642.8	520.9	409.1	308.9
12.5°	2050.3	1768.2	1511.0	1287.3	1093.6	930.0	786.4	652.8	529.3	414.1	313.9
10°	2090.4	1801.6	1537.8	1309.0	1110.3	941.7	794.8	661.2	534.3	419.1	317.2
7.5°	2122.1	1828.3	1559.5	1324.0	1122.0	951.7	803.1	666.2	539.3	422.4	322.2
5°	2145.5	1848.3	1574.5	1335.7	1132.0	963.4	813.1	674.5	546.0	427.4	322.2
2.5°	2163.9	1863.3	1586.2	1345.7	1138.7	963.4	813.1	674.5	546.0	427.4	322.2
0°	2163.9	1863.3	1586.2	1345.7	1138.7	963.4	813.1	674.5	546.0	427.4	322.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.3	6.7	3.3	0.0
85°	18.4	11.7	6.7	0.0
82.5°	26.7	18.4	8.3	0.0
80°	35.1	23.4	11.7	0.0
77.5°	45.1	30.1	15.0	0.0
75°	53.4	35.1	18.4	0.0
72.5°	61.8	41.7	20.0	0.0
70°	70.1	46.8	23.4	0.0
67.5°	80.1	51.8	26.7	0.0
65°	88.5	58.4	28.4	0.0
62.5°	96.8	63.4	31.7	0.0
60°	105.2	68.5	33.4	0.0
57.5°	113.5	73.5	36.7	0.0
55°	121.9	80.1	40.1	0.0
52.5°	130.2	85.2	41.7	0.0
50°	138.6	90.2	43.4	0.0
47.5°	145.3	95.2	46.8	0.0
45°	153.6	100.2	48.4	0.0
42.5°	162.0	103.5	50.1	0.0
40°	168.6	108.5	51.8	0.0
37.5°	177.0	111.9	55.1	0.0
35°	183.7	116.9	56.8	0.0
32.5°	188.7	120.2	58.4	0.0
30°	195.4	123.6	60.1	0.0
27.5°	200.4	126.9	60.1	0.0
25°	205.4	130.2	61.8	0.0
22.5°	210.4	131.9	63.4	0.0
20°	215.4	135.2	65.1	0.0
17.5°	218.7	136.9	65.1	0.0
15°	222.1	138.6	68.5	0.0
12.5°	223.7	140.3	68.5	0.0
10°	227.1	143.6	68.5	0.0
7.5°	230.4	143.6	68.5	0.0
5°	230.4	143.6	68.5	0.0
2.5°	230.4	143.6	68.5	0.0
0°	230.4	143.6	68.5	0.0

(END OF REPORT)