

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: P624046

Luminaire Tested: **IFLD-S-SA2D-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624046
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2D-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

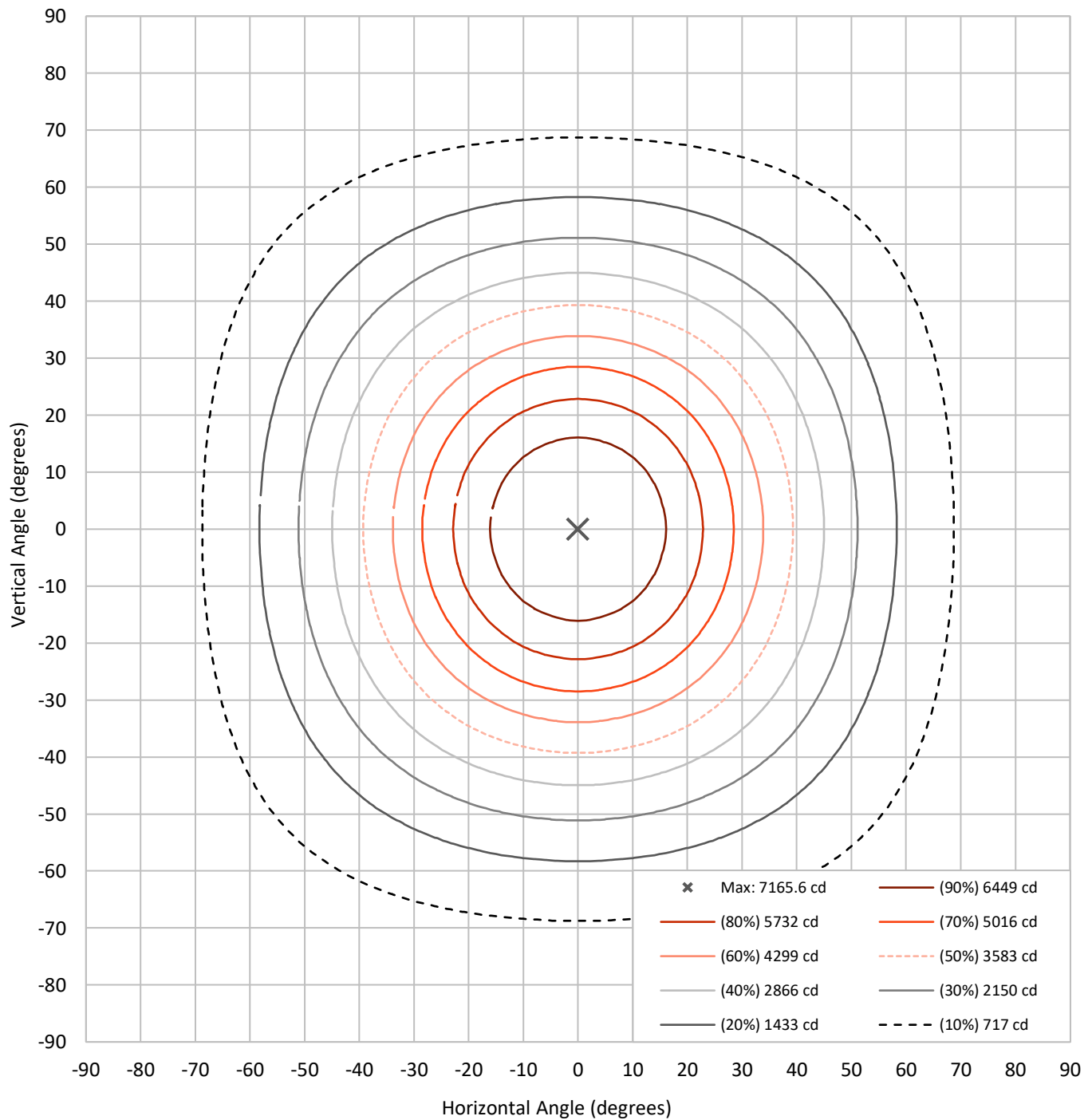
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	12901.8 lumens	Max Intensity:	7165.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	104.1 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	5582.5 lumens	Field Lumens:	9141.1 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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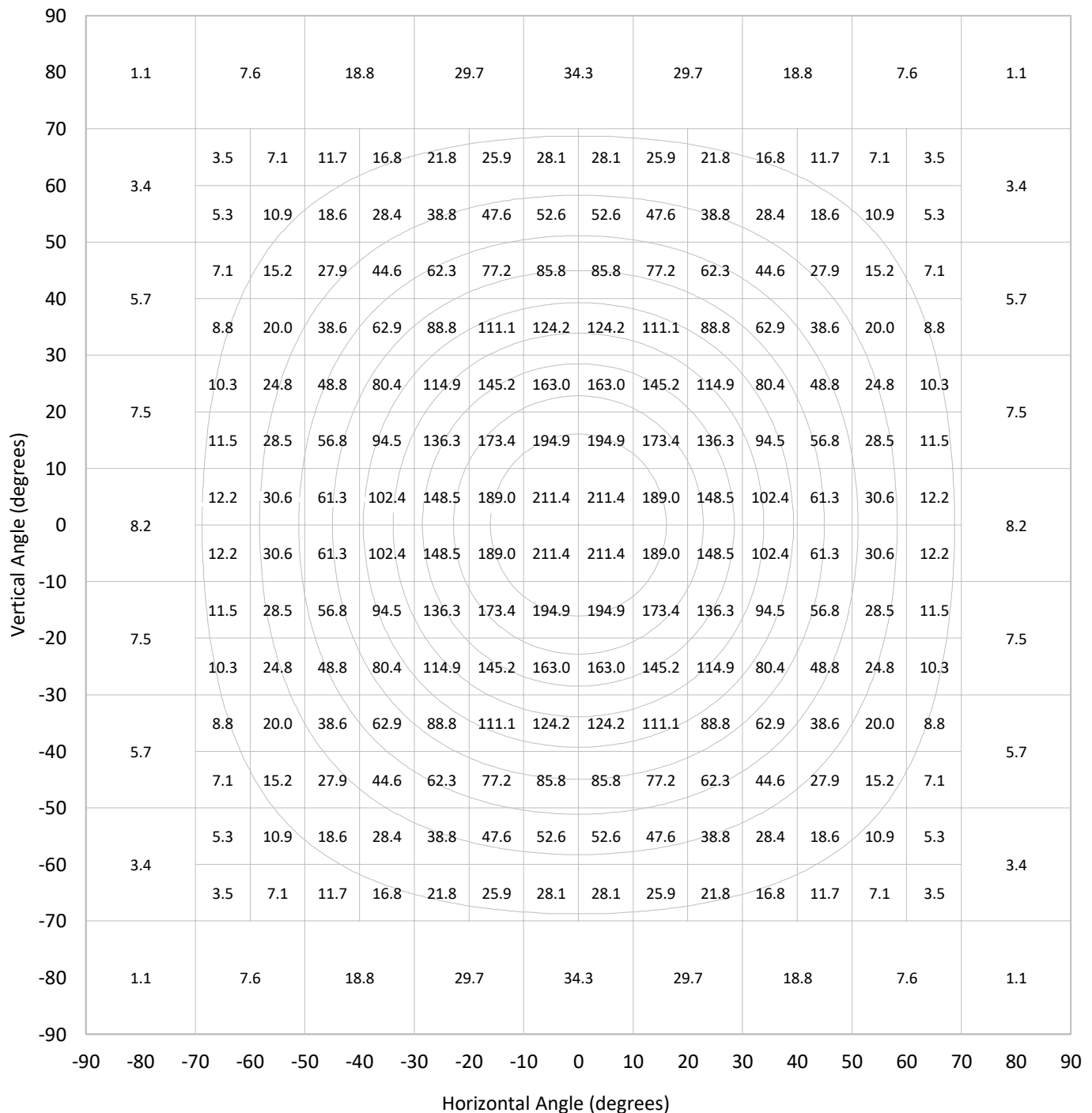
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Iso-Candela Plot



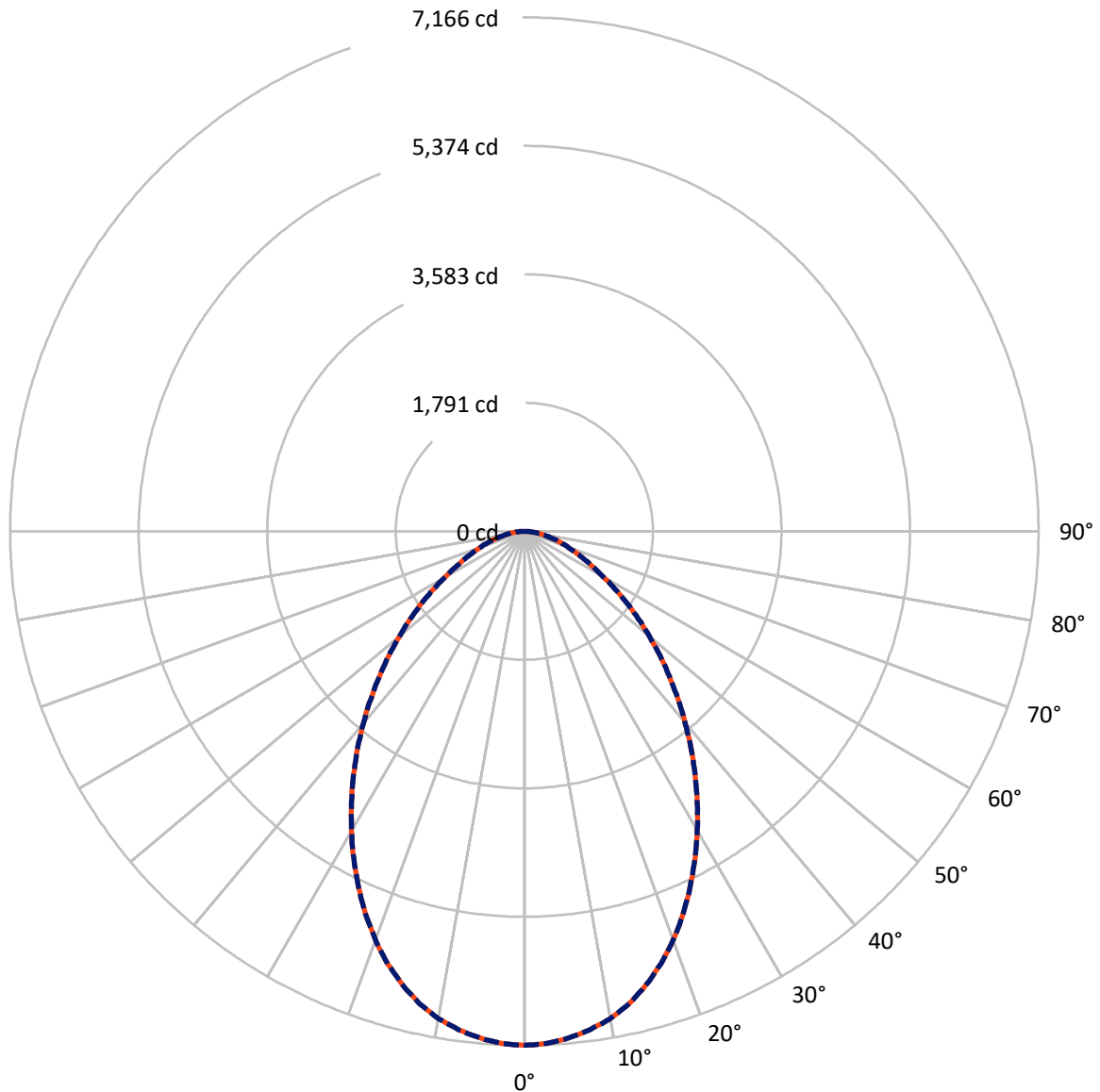
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Lumen Table



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Luminous Intensity Polar Plot

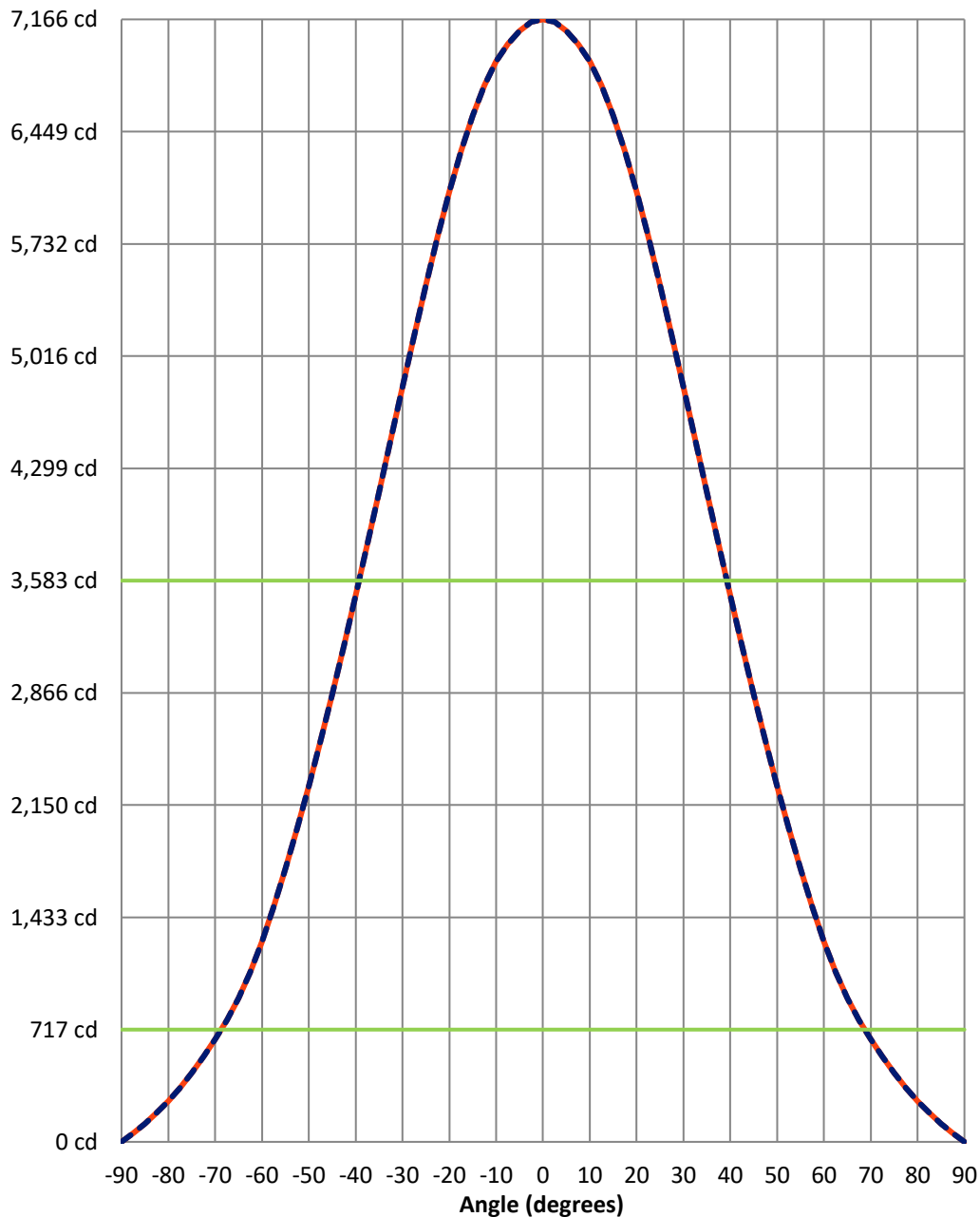


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 5582.5
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 9141.1
Efficiency: 70.9%

Spill:

Lumens: 3760.7
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°	55.2	55.2	55.2	55.2	55.2	55.2	55.2	52.5	52.5	51.1	49.8
85°	115.7	115.7	115.7	115.7	115.7	113.0	111.6	110.3	109.0	106.3	104.9
82.5°	185.6	185.6	185.6	185.6	182.9	180.2	178.9	176.2	173.5	169.5	165.5
80°	259.6	259.6	259.6	259.6	255.6	252.9	248.9	246.2	242.1	236.7	231.4
77.5°	344.4	344.4	344.4	340.3	337.6	333.6	329.6	324.2	318.8	312.1	304.0
75°	439.9	439.9	439.9	434.5	430.4	426.4	419.7	413.0	404.9	395.5	384.7
72.5°	543.4	543.4	543.4	536.7	532.7	526.0	517.9	508.5	499.0	486.9	473.5
70°	655.1	655.1	655.1	647.0	640.3	633.6	622.8	612.0	598.6	585.1	569.0
67.5°	776.1	776.1	776.1	766.7	758.7	749.2	737.1	723.7	707.5	688.7	669.9
65°	917.4	917.4	912.0	903.9	894.5	881.1	866.3	847.4	827.3	803.0	777.5
62.5°	1084.2	1084.2	1076.1	1066.7	1054.6	1037.1	1016.9	992.7	964.5	933.5	902.6
60°	1277.9	1277.9	1268.5	1256.4	1238.9	1217.4	1190.4	1159.5	1124.5	1085.5	1047.9
57.5°	1501.2	1501.2	1489.1	1472.9	1451.4	1424.5	1390.9	1351.9	1307.5	1259.1	1212.0
55°	1743.3	1743.3	1728.5	1709.7	1684.1	1651.8	1611.5	1565.7	1511.9	1456.8	1396.3
52.5°	2000.2	2000.2	1982.7	1961.2	1931.6	1894.0	1848.2	1794.4	1732.5	1668.0	1596.7
50°	2270.6	2270.6	2250.4	2226.2	2192.6	2148.2	2095.7	2033.9	1965.3	1889.9	1807.9
47.5°	2559.8	2559.8	2536.9	2508.7	2468.3	2417.2	2355.3	2284.0	2206.0	2121.3	2028.5
45°	2857.1	2857.1	2831.5	2799.2	2754.8	2697.0	2628.4	2559.8	2460.3	2362.1	2254.5
42.5°	3166.5	3166.5	3136.9	3100.5	3049.4	2986.2	2908.2	2819.4	2721.2	2610.9	2493.9
40°	3488.0	3488.0	3454.3	3412.6	3356.1	3283.5	3196.1	3096.5	2986.2	2863.8	2734.7
37.5°	3816.2	3816.2	3778.5	3732.8	3669.5	3588.8	3490.6	3380.3	3256.6	3120.7	2978.1
35°	4147.1	4147.1	4105.4	4055.6	3985.7	3896.9	3790.6	3668.2	3531.0	3383.0	3223.0
32.5°	4484.7	4484.7	4439.0	4382.5	4303.1	4204.9	4087.9	3954.7	3816.2	3644.0	3469.1
30°	4818.3	4818.3	4768.5	4706.6	4621.9	4514.3	4386.5	4239.9	4077.1	3900.9	3712.6
27.5°	5146.5	5133.1	5091.4	5025.4	4932.6	4818.3	4679.7	4521.0	4344.8	4151.1	3949.3
25°	5469.3	5454.5	5408.8	5336.2	5236.6	5111.5	4962.2	4792.7	4603.1	4398.6	4178.0
22.5°	5778.7	5762.6	5714.2	5636.1	5529.9	5394.0	5233.9	5052.3	4850.6	4631.3	4398.6
20°	6065.2	6047.8	5998.0	5915.9	5805.6	5661.7	5492.2	5297.2	5081.9	4850.6	4603.1
17.5°	6323.5	6306.0	6253.6	6168.8	6065.2	5905.2	5730.3	5524.5	5297.2	5052.3	4792.7
15°	6550.8	6532.0	6478.2	6393.5	6275.1	6124.4	5940.1	5730.3	5492.2	5233.9	4962.2
12.5°	6744.5	6725.7	6670.6	6585.8	6463.4	6312.7	6124.4	5905.2	5661.7	5394.0	5111.5
10°	6897.9	6879.1	6826.6	6745.9	6619.4	6463.4	6275.1	6065.2	5805.6	5529.9	5236.6
7.5°	7008.2	6990.7	6942.3	6861.6	6745.9	6585.8	6393.5	6168.8	5915.9	5636.1	5336.2
5°	7091.6	7071.4	7023.0	6942.3	6826.6	6670.6	6478.2	6253.6	5998.0	5714.2	5408.8
2.5°	7149.4	7125.2	7071.4	6990.7	6879.1	6725.7	6532.0	6306.0	6047.8	5762.6	5454.5
0°	7165.6	7149.4	7091.6	7008.2	6897.9	6744.5	6550.8	6323.5	6065.2	5778.7	5469.3

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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°	48.4	48.4	47.1	45.7	44.4	41.7	40.4	39.0	37.7	35.0	33.6
85°	102.2	99.5	96.9	94.2	90.1	87.4	83.4	80.7	76.7	72.6	68.6
82.5°	161.4	157.4	152.0	148.0	142.6	135.9	130.5	123.8	117.0	111.6	104.9
80°	226.0	219.3	212.5	205.8	197.7	189.7	181.6	173.5	164.1	154.7	145.3
77.5°	295.9	286.5	277.1	266.3	256.9	246.2	235.4	224.6	212.5	200.4	188.3
75°	373.9	361.8	348.4	334.9	322.8	308.0	293.2	278.4	262.3	247.5	231.4
72.5°	458.7	443.9	427.8	411.6	394.1	375.3	356.5	336.3	317.5	298.6	278.4
70°	550.2	532.7	512.5	492.3	470.8	447.9	425.1	400.9	376.6	352.4	328.2
67.5°	648.4	626.8	602.6	578.4	551.5	524.6	497.7	469.5	439.9	410.3	382.0
65°	753.3	726.4	698.1	667.2	636.3	605.3	573.0	539.4	505.8	470.8	439.9
62.5°	870.3	836.7	800.4	762.7	727.7	690.1	655.1	613.4	573.0	534.0	495.0
60°	1006.2	961.8	917.4	870.3	825.9	777.5	734.4	688.7	643.0	598.6	552.9
57.5°	1158.2	1101.7	1047.9	991.4	932.2	878.4	823.2	768.1	717.0	664.5	614.7
55°	1330.3	1261.7	1194.5	1124.5	1055.9	988.7	918.7	856.9	793.6	734.4	676.6
52.5°	1518.7	1440.6	1357.2	1277.9	1190.4	1107.1	1029.0	951.0	877.0	805.7	739.8
50°	1720.4	1629.0	1533.5	1436.6	1337.1	1238.9	1144.7	1053.2	967.2	883.8	805.7
47.5°	1930.3	1826.7	1717.7	1607.4	1501.2	1381.5	1268.5	1164.9	1061.3	967.2	877.0
45°	2145.5	2028.5	1908.8	1783.7	1658.6	1529.4	1404.3	1277.9	1164.9	1053.2	951.0
42.5°	2367.4	2235.6	2102.5	1963.9	1825.4	1684.1	1542.9	1404.3	1268.5	1144.7	1029.0
40°	2596.1	2450.8	2298.8	2148.2	2000.2	1838.8	1684.1	1529.4	1381.5	1238.9	1107.1
37.5°	2824.8	2666.1	2502.0	2332.5	2163.0	2000.2	1825.4	1658.6	1501.2	1337.1	1190.4
35°	3054.8	2879.9	2702.4	2518.1	2332.5	2148.2	1963.9	1783.7	1607.4	1436.6	1277.9
32.5°	3286.2	3095.2	2898.8	2702.4	2502.0	2298.8	2102.5	1908.8	1717.7	1533.5	1357.2
30°	3513.5	3306.4	3095.2	2879.9	2666.1	2450.8	2235.6	2028.5	1826.7	1629.0	1440.6
27.5°	3735.5	3513.5	3286.2	3054.8	2824.8	2596.1	2367.4	2145.5	1930.3	1720.4	1518.7
25°	3949.3	3712.6	3469.1	3223.0	2978.1	2734.7	2493.9	2254.5	2028.5	1807.9	1596.7
22.5°	4151.1	3900.9	3644.0	3383.0	3120.7	2863.8	2610.9	2362.1	2121.3	1889.9	1668.0
20°	4344.8	4077.1	3816.2	3531.0	3256.6	2986.2	2721.2	2460.3	2206.0	1965.3	1732.5
17.5°	4521.0	4239.9	3954.7	3668.2	3380.3	3096.5	2819.4	2559.8	2284.0	2033.9	1794.4
15°	4679.7	4386.5	4087.9	3790.6	3490.6	3196.1	2908.2	2628.4	2355.3	2095.7	1848.2
12.5°	4818.3	4514.3	4204.9	3896.9	3588.8	3283.5	2986.2	2697.0	2417.2	2148.2	1894.0
10°	4932.6	4621.9	4303.1	3985.7	3669.5	3356.1	3049.4	2754.8	2468.3	2192.6	1931.6
7.5°	5025.4	4706.6	4382.5	4055.6	3732.8	3412.6	3100.5	2799.2	2508.7	2226.2	1961.2
5°	5091.4	4768.5	4439.0	4105.4	3778.5	3454.3	3136.9	2831.5	2536.9	2250.4	1982.7
2.5°	5133.1	4818.3	4484.7	4147.1	3816.2	3488.0	3166.5	2857.1	2559.8	2270.6	2000.2
0°	5146.5	4818.3	4484.7	4147.1	3816.2	3488.0	3166.5	2857.1	2559.8	2270.6	2000.2

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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°	32.3	29.6	26.9	25.6	22.9	21.5	18.8	16.1	14.8	12.1	9.4
85°	64.6	59.2	55.2	51.1	47.1	41.7	37.7	33.6	28.2	24.2	18.8
82.5°	98.2	91.5	84.7	78.0	71.3	64.6	56.5	49.8	43.0	36.3	28.2
80°	135.9	125.1	115.7	106.3	96.9	87.4	76.7	67.3	56.5	47.1	37.7
77.5°	174.9	162.8	149.3	135.9	122.4	110.3	96.9	84.7	72.6	59.2	47.1
75°	216.6	200.4	185.6	168.1	152.0	134.5	118.4	102.2	87.4	72.6	56.5
72.5°	259.6	239.4	219.3	200.4	180.2	160.1	141.2	121.1	102.2	84.7	67.3
70°	304.0	279.8	255.6	232.7	209.8	185.6	164.1	141.2	118.4	96.9	76.7
67.5°	351.1	322.8	294.6	265.0	239.4	212.5	185.6	160.1	134.5	110.3	87.4
65°	402.2	368.6	333.6	302.7	269.0	239.4	209.8	180.2	152.0	122.4	96.9
62.5°	454.7	415.6	376.6	337.6	302.7	265.0	232.7	200.4	168.1	135.9	106.3
60°	508.5	464.1	419.7	376.6	333.6	294.6	255.6	219.3	185.6	149.3	115.7
57.5°	563.6	513.8	464.1	415.6	368.6	322.8	279.8	239.4	200.4	162.8	125.1
55°	620.1	563.6	508.5	454.7	402.2	351.1	304.0	259.6	216.6	174.9	135.9
52.5°	676.6	614.7	552.9	495.0	439.9	382.0	328.2	278.4	231.4	188.3	145.3
50°	734.4	664.5	598.6	534.0	470.8	410.3	352.4	298.6	247.5	200.4	154.7
47.5°	793.6	717.0	643.0	573.0	505.8	439.9	376.6	317.5	262.3	212.5	164.1
45°	856.9	768.1	688.7	613.4	539.4	469.5	400.9	336.3	278.4	224.6	173.5
42.5°	918.7	823.2	734.4	655.1	573.0	497.7	425.1	356.5	293.2	235.4	181.6
40°	988.7	878.4	777.5	690.1	605.3	524.6	447.9	375.3	308.0	246.2	189.7
37.5°	1055.9	932.2	825.9	727.7	636.3	551.5	470.8	394.1	322.8	256.9	197.7
35°	1124.5	991.4	870.3	762.7	667.2	578.4	492.3	411.6	334.9	266.3	205.8
32.5°	1194.5	1047.9	917.4	800.4	698.1	602.6	512.5	427.8	348.4	277.1	212.5
30°	1261.7	1101.7	961.8	836.7	726.4	626.8	532.7	443.9	361.8	286.5	219.3
27.5°	1330.3	1158.2	1006.2	870.3	753.3	648.4	550.2	458.7	373.9	295.9	226.0
25°	1396.3	1212.0	1047.9	902.6	777.5	669.9	569.0	473.5	384.7	304.0	231.4
22.5°	1456.8	1259.1	1085.5	933.5	803.0	688.7	585.1	486.9	395.5	312.1	236.7
20°	1511.9	1307.5	1124.5	964.5	827.3	707.5	598.6	499.0	404.9	318.8	242.1
17.5°	1565.7	1351.9	1159.5	992.7	847.4	723.7	612.0	508.5	413.0	324.2	246.2
15°	1611.5	1390.9	1190.4	1016.9	866.3	737.1	622.8	517.9	419.7	329.6	248.9
12.5°	1651.8	1424.5	1217.4	1037.1	881.1	749.2	633.6	526.0	426.4	333.6	252.9
10°	1684.1	1451.4	1238.9	1054.6	894.5	758.7	640.3	532.7	430.4	337.6	255.6
7.5°	1709.7	1472.9	1256.4	1066.7	903.9	766.7	647.0	536.7	434.5	340.3	259.6
5°	1728.5	1489.1	1268.5	1076.1	912.0	776.1	655.1	543.4	439.9	344.4	259.6
2.5°	1743.3	1501.2	1277.9	1084.2	917.4	776.1	655.1	543.4	439.9	344.4	259.6
0°	1743.3	1501.2	1277.9	1084.2	917.4	776.1	655.1	543.4	439.9	344.4	259.6

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	6.7	5.4	2.7	0.0
85°	14.8	9.4	5.4	0.0
82.5°	21.5	14.8	6.7	0.0
80°	28.2	18.8	9.4	0.0
77.5°	36.3	24.2	12.1	0.0
75°	43.0	28.2	14.8	0.0
72.5°	49.8	33.6	16.1	0.0
70°	56.5	37.7	18.8	0.0
67.5°	64.6	41.7	21.5	0.0
65°	71.3	47.1	22.9	0.0
62.5°	78.0	51.1	25.6	0.0
60°	84.7	55.2	26.9	0.0
57.5°	91.5	59.2	29.6	0.0
55°	98.2	64.6	32.3	0.0
52.5°	104.9	68.6	33.6	0.0
50°	111.6	72.6	35.0	0.0
47.5°	117.0	76.7	37.7	0.0
45°	123.8	80.7	39.0	0.0
42.5°	130.5	83.4	40.4	0.0
40°	135.9	87.4	41.7	0.0
37.5°	142.6	90.1	44.4	0.0
35°	148.0	94.2	45.7	0.0
32.5°	152.0	96.9	47.1	0.0
30°	157.4	99.5	48.4	0.0
27.5°	161.4	102.2	48.4	0.0
25°	165.5	104.9	49.8	0.0
22.5°	169.5	106.3	51.1	0.0
20°	173.5	109.0	52.5	0.0
17.5°	176.2	110.3	52.5	0.0
15°	178.9	111.6	55.2	0.0
12.5°	180.2	113.0	55.2	0.0
10°	182.9	115.7	55.2	0.0
7.5°	185.6	115.7	55.2	0.0
5°	185.6	115.7	55.2	0.0
2.5°	185.6	115.7	55.2	0.0
0°	185.6	115.7	55.2	0.0

(END OF REPORT)