

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: P624017

Luminaire Tested: **IFLD-S-SA2D-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624017
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2D-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (32) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

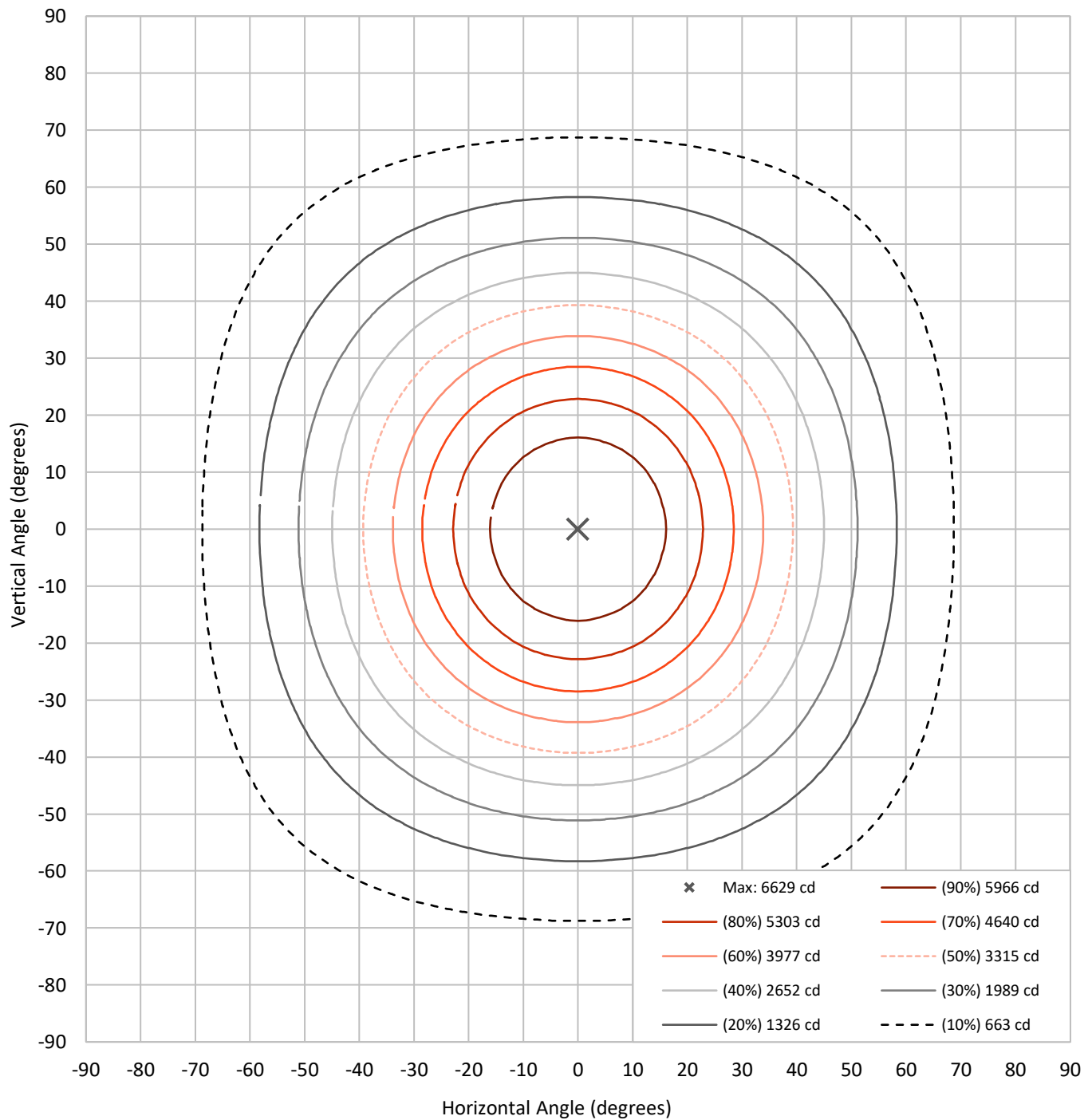
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	11935.7 lumens	Max Intensity:	6629 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	96.3 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	5164.5 lumens	Field Lumens:	8456.6 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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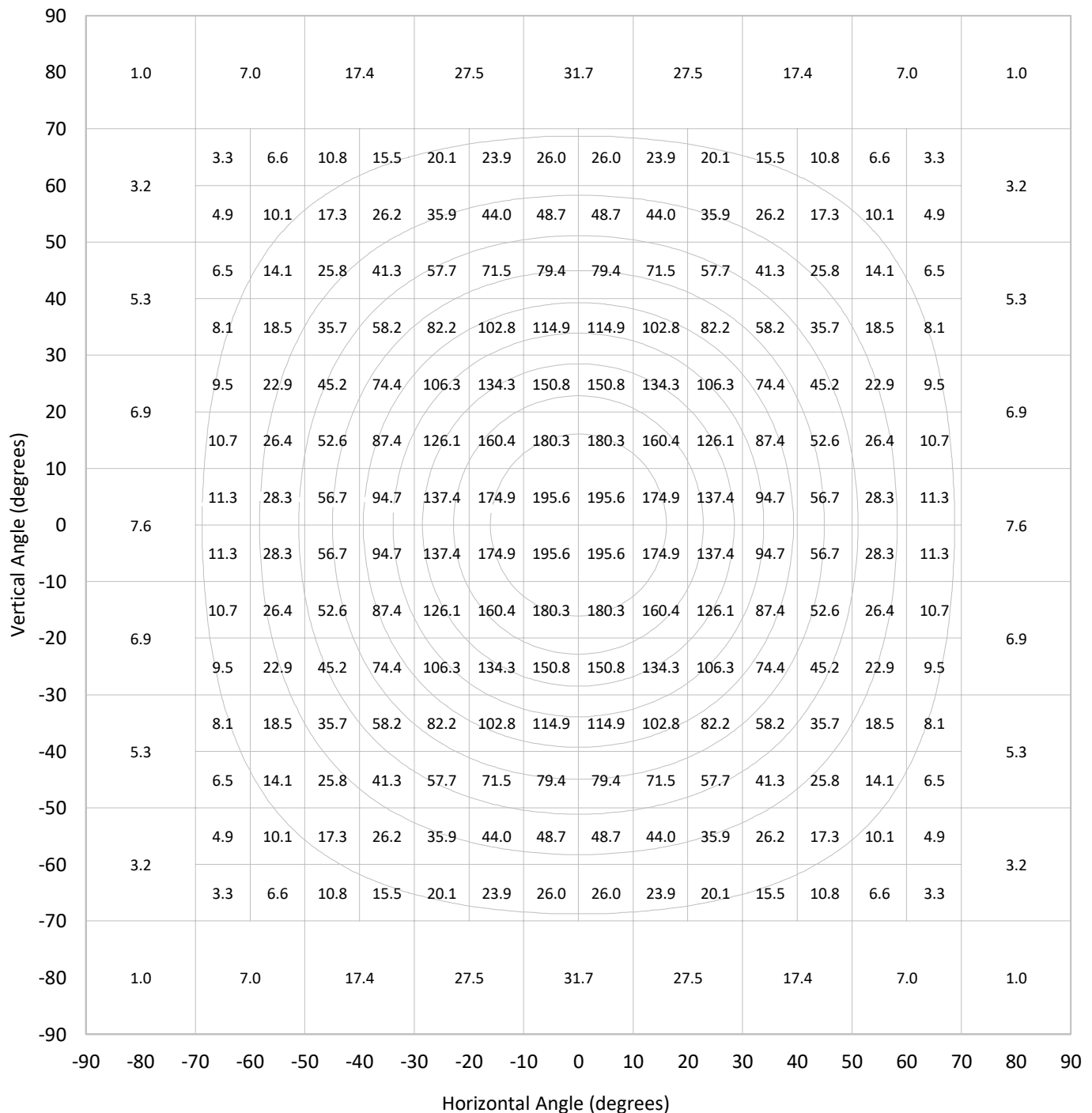
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Iso-Candela Plot



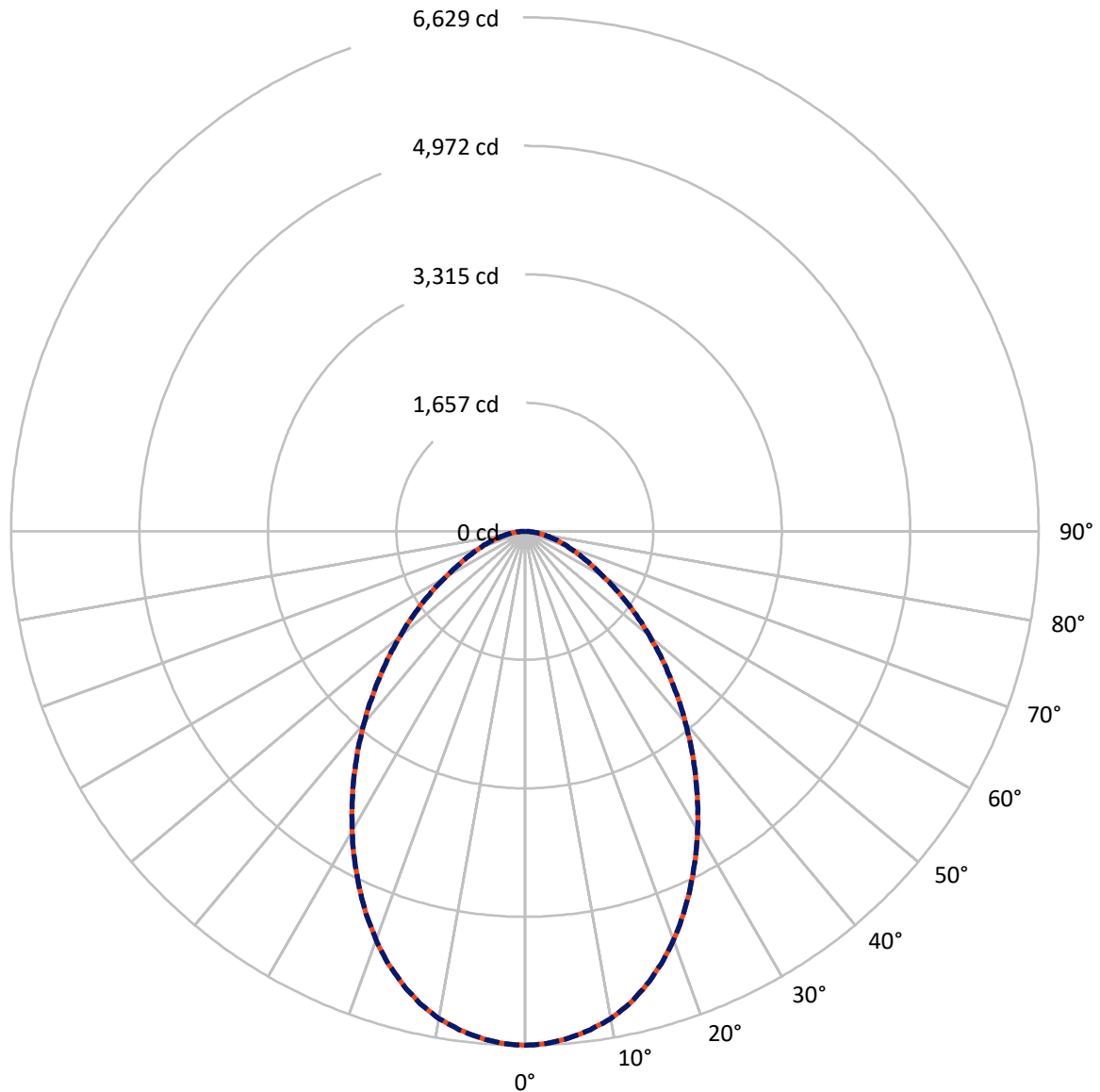
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Lumen Table



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Luminous Intensity Polar Plot

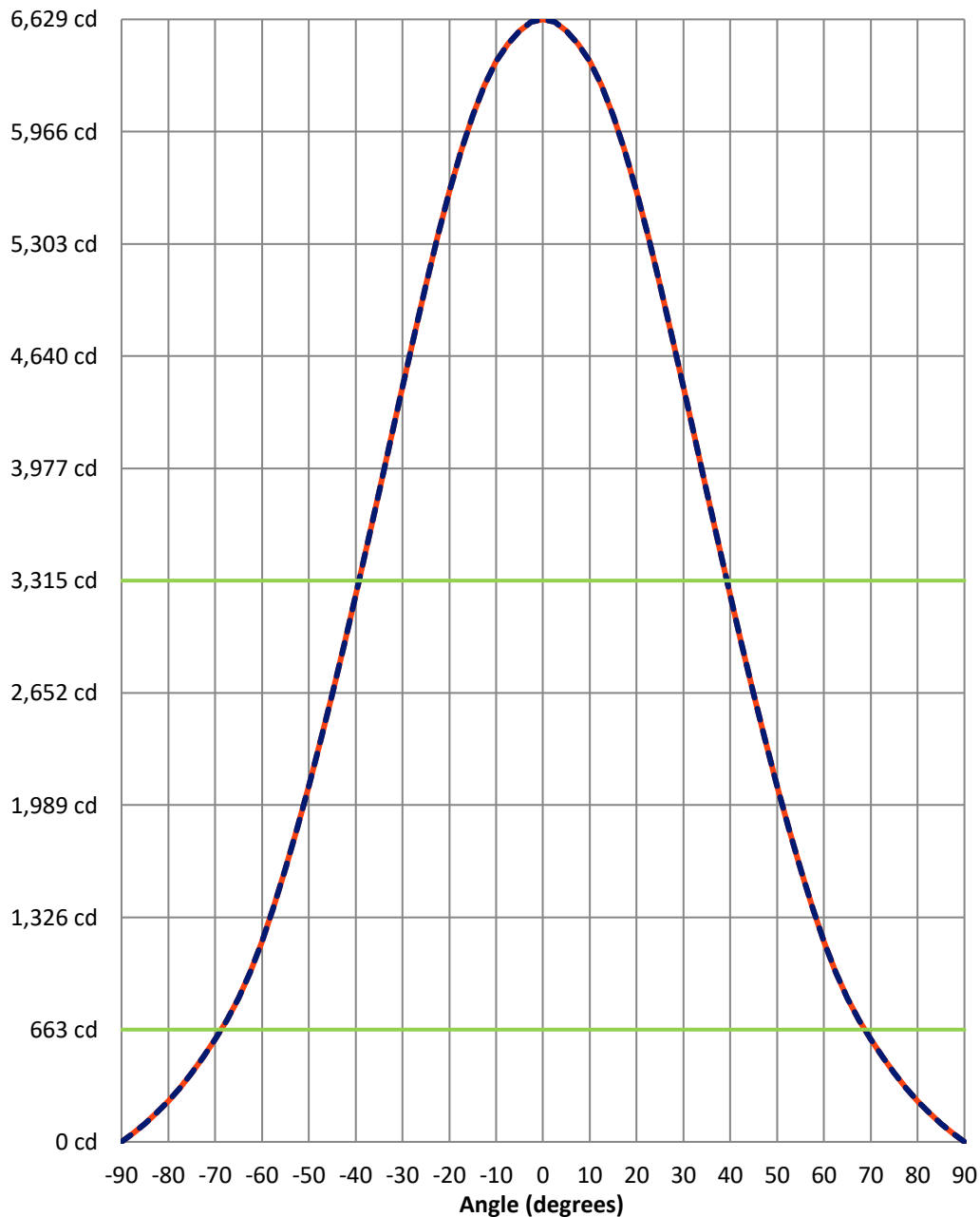


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle:	78.6°
V Angle:	78.6°
Lumens:	5164.5
Efficiency:	43.3%

Field:

H Angle:	137.5°
V Angle:	137.5°
Lumens:	8456.6
Efficiency:	70.9%

Spill:

Lumens:	3479.1
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°	51.0	51.0	51.0	51.0	51.0	51.0	51.0	48.5	48.5	47.3	46.0
85°	107.0	107.0	107.0	107.0	107.0	104.5	103.3	102.0	100.8	98.3	97.1
82.5°	171.7	171.7	171.7	171.7	169.2	166.8	165.5	163.0	160.5	156.8	153.1
80°	240.2	240.2	240.2	240.2	236.4	234.0	230.2	227.7	224.0	219.0	214.0
77.5°	318.6	318.6	318.6	314.8	312.3	308.6	304.9	299.9	294.9	288.7	281.2
75°	406.9	406.9	406.9	401.9	398.2	394.5	388.3	382.0	374.6	365.9	355.9
72.5°	502.7	502.7	502.7	496.5	492.8	486.6	479.1	470.4	461.7	450.5	438.0
70°	606.0	606.0	606.0	598.6	592.3	586.1	576.2	566.2	553.8	541.3	526.4
67.5°	718.0	718.0	718.0	709.3	701.9	693.1	681.9	669.5	654.6	637.1	619.7
65°	848.7	848.7	843.7	836.2	827.5	815.1	801.4	784.0	765.3	742.9	719.3
62.5°	1003.0	1003.0	995.5	986.8	975.6	959.4	940.8	918.4	892.2	863.6	835.0
60°	1182.2	1182.2	1173.5	1162.3	1146.1	1126.2	1101.3	1072.7	1040.3	1004.2	969.4
57.5°	1388.8	1388.8	1377.6	1362.6	1342.7	1317.8	1286.7	1250.6	1209.6	1164.8	1121.2
55°	1612.8	1612.8	1599.1	1581.7	1558.0	1528.1	1490.8	1448.5	1398.7	1347.7	1291.7
52.5°	1850.4	1850.4	1834.3	1814.4	1787.0	1752.1	1709.8	1660.1	1602.8	1543.1	1477.1
50°	2100.6	2100.6	2081.9	2059.5	2028.4	1987.3	1938.8	1881.6	1818.1	1748.4	1672.5
47.5°	2368.1	2368.1	2347.0	2320.8	2283.5	2236.2	2179.0	2113.0	2040.8	1962.4	1876.6
45°	2643.1	2643.1	2619.5	2589.6	2548.6	2495.1	2431.6	2368.1	2276.0	2185.2	2085.6
42.5°	2929.4	2929.4	2902.0	2868.4	2821.1	2762.6	2690.4	2608.3	2517.5	2415.4	2307.1
40°	3226.8	3226.8	3195.7	3157.1	3104.8	3037.6	2956.7	2864.6	2762.6	2649.4	2529.9
37.5°	3530.4	3530.4	3495.6	3453.3	3394.8	3320.1	3229.3	3127.2	3012.7	2887.0	2755.1
35°	3836.5	3836.5	3798.0	3751.9	3687.2	3605.1	3506.8	3393.5	3266.6	3129.7	2981.6
32.5°	4148.9	4148.9	4106.6	4054.3	3980.9	3890.0	3781.8	3658.6	3530.4	3371.1	3209.3
30°	4457.5	4457.5	4411.5	4354.2	4275.8	4176.3	4058.0	3922.4	3771.8	3608.8	3434.6
27.5°	4761.1	4748.7	4710.1	4649.1	4563.3	4457.5	4329.3	4182.5	4019.5	3840.3	3653.6
25°	5059.8	5046.1	5003.8	4936.6	4844.5	4728.8	4590.7	4433.9	4258.4	4069.2	3865.2
22.5°	5346.0	5331.1	5286.3	5214.1	5115.8	4990.1	4842.0	4674.0	4487.4	4284.5	4069.2
20°	5611.1	5594.9	5548.9	5472.9	5370.9	5237.7	5081.0	4900.5	4701.4	4487.4	4258.4
17.5°	5850.0	5833.8	5785.3	5706.9	5611.1	5463.0	5301.2	5110.8	4900.5	4674.0	4433.9
15°	6060.3	6042.9	5993.1	5914.7	5805.2	5665.8	5495.3	5301.2	5081.0	4842.0	4590.7
12.5°	6239.5	6222.1	6171.1	6092.7	5979.4	5840.0	5665.8	5463.0	5237.7	4990.1	4728.8
10°	6381.4	6363.9	6315.4	6240.7	6123.8	5979.4	5805.2	5611.1	5370.9	5115.8	4844.5
7.5°	6483.4	6467.2	6422.4	6347.8	6240.7	6092.7	5914.7	5706.9	5472.9	5214.1	4936.6
5°	6560.6	6541.9	6497.1	6422.4	6315.4	6171.1	5993.1	5785.3	5548.9	5286.3	5003.8
2.5°	6614.1	6591.7	6541.9	6467.2	6363.9	6222.1	6042.9	5833.8	5594.9	5331.1	5046.1
0°	6629.0	6614.1	6560.6	6483.4	6381.4	6239.5	6060.3	5850.0	5611.1	5346.0	5059.8

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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°	44.8	44.8	43.6	42.3	41.1	38.6	37.3	36.1	34.8	32.4	31.1
85°	94.6	92.1	89.6	87.1	83.4	80.9	77.2	74.7	70.9	67.2	63.5
82.5°	149.3	145.6	140.6	136.9	131.9	125.7	120.7	114.5	108.3	103.3	97.1
80°	209.1	202.8	196.6	190.4	182.9	175.5	168.0	160.5	151.8	143.1	134.4
77.5°	273.8	265.1	256.3	246.4	237.7	227.7	217.8	207.8	196.6	185.4	174.2
75°	345.9	334.7	322.3	309.9	298.7	285.0	271.3	257.6	242.7	229.0	214.0
72.5°	424.3	410.7	395.7	380.8	364.6	347.2	329.8	311.1	293.7	276.3	257.6
70°	509.0	492.8	474.1	455.5	435.5	414.4	393.2	370.8	348.4	326.0	303.6
67.5°	599.8	579.9	557.5	535.1	510.2	485.3	460.4	434.3	406.9	379.5	353.4
65°	696.9	672.0	645.9	617.2	588.6	560.0	530.1	499.0	467.9	435.5	406.9
62.5°	805.1	774.0	740.4	705.6	673.2	638.4	606.0	567.5	530.1	494.0	457.9
60°	930.8	889.8	848.7	805.1	764.1	719.3	679.5	637.1	594.8	553.8	511.5
57.5°	1071.4	1019.2	969.4	917.1	862.4	812.6	761.6	710.6	663.3	614.7	568.7
55°	1230.7	1167.3	1105.0	1040.3	976.9	914.6	849.9	792.7	734.2	679.5	625.9
52.5°	1404.9	1332.8	1255.6	1182.2	1101.3	1024.2	952.0	879.8	811.4	745.4	684.4
50°	1591.6	1507.0	1418.6	1329.0	1236.9	1146.1	1059.0	974.4	894.7	817.6	745.4
47.5°	1785.7	1689.9	1589.1	1487.1	1388.8	1278.0	1173.5	1077.7	981.8	894.7	811.4
45°	1984.8	1876.6	1765.8	1650.1	1534.4	1414.9	1299.2	1182.2	1077.7	974.4	879.8
42.5°	2190.2	2068.2	1945.0	1816.8	1688.7	1558.0	1427.3	1299.2	1173.5	1059.0	952.0
40°	2401.7	2267.3	2126.7	1987.3	1850.4	1701.1	1558.0	1414.9	1278.0	1146.1	1024.2
37.5°	2613.3	2466.4	2314.6	2157.8	2001.0	1850.4	1688.7	1534.4	1388.8	1236.9	1101.3
35°	2826.1	2664.3	2500.0	2329.5	2157.8	1987.3	1816.8	1650.1	1487.1	1329.0	1182.2
32.5°	3040.1	2863.4	2681.7	2500.0	2314.6	2126.7	1945.0	1765.8	1589.1	1418.6	1255.6
30°	3250.4	3058.8	2863.4	2664.3	2466.4	2267.3	2068.2	1876.6	1689.9	1507.0	1332.8
27.5°	3455.7	3250.4	3040.1	2826.1	2613.3	2401.7	2190.2	1984.8	1785.7	1591.6	1404.9
25°	3653.6	3434.6	3209.3	2981.6	2755.1	2529.9	2307.1	2085.6	1876.6	1672.5	1477.1
22.5°	3840.3	3608.8	3371.1	3129.7	2887.0	2649.4	2415.4	2185.2	1962.4	1748.4	1543.1
20°	4019.5	3771.8	3530.4	3266.6	3012.7	2762.6	2517.5	2276.0	2040.8	1818.1	1602.8
17.5°	4182.5	3922.4	3658.6	3393.5	3127.2	2864.6	2608.3	2368.1	2113.0	1881.6	1660.1
15°	4329.3	4058.0	3781.8	3506.8	3229.3	2956.7	2690.4	2431.6	2179.0	1938.8	1709.8
12.5°	4457.5	4176.3	3890.0	3605.1	3320.1	3037.6	2762.6	2495.1	2236.2	1987.3	1752.1
10°	4563.3	4275.8	3980.9	3687.2	3394.8	3104.8	2821.1	2548.6	2283.5	2028.4	1787.0
7.5°	4649.1	4354.2	4054.3	3751.9	3453.3	3157.1	2868.4	2589.6	2320.8	2059.5	1814.4
5°	4710.1	4411.5	4106.6	3798.0	3495.6	3195.7	2902.0	2619.5	2347.0	2081.9	1834.3
2.5°	4748.7	4457.5	4148.9	3836.5	3530.4	3226.8	2929.4	2643.1	2368.1	2100.6	1850.4
0°	4761.1	4457.5	4148.9	3836.5	3530.4	3226.8	2929.4	2643.1	2368.1	2100.6	1850.4

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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°	29.9	27.4	24.9	23.6	21.2	19.9	17.4	14.9	13.7	11.2	8.7
85°	59.7	54.8	51.0	47.3	43.6	38.6	34.8	31.1	26.1	22.4	17.4
82.5°	90.8	84.6	78.4	72.2	66.0	59.7	52.3	46.0	39.8	33.6	26.1
80°	125.7	115.7	107.0	98.3	89.6	80.9	70.9	62.2	52.3	43.6	34.8
77.5°	161.8	150.6	138.1	125.7	113.2	102.0	89.6	78.4	67.2	54.8	43.6
75°	200.4	185.4	171.7	155.6	140.6	124.4	109.5	94.6	80.9	67.2	52.3
72.5°	240.2	221.5	202.8	185.4	166.8	148.1	130.7	112.0	94.6	78.4	62.2
70°	281.2	258.8	236.4	215.3	194.1	171.7	151.8	130.7	109.5	89.6	70.9
67.5°	324.8	298.7	272.5	245.1	221.5	196.6	171.7	148.1	124.4	102.0	80.9
65°	372.1	341.0	308.6	280.0	248.9	221.5	194.1	166.8	140.6	113.2	89.6
62.5°	420.6	384.5	348.4	312.3	280.0	245.1	215.3	185.4	155.6	125.7	98.3
60°	470.4	429.3	388.3	348.4	308.6	272.5	236.4	202.8	171.7	138.1	107.0
57.5°	521.4	475.4	429.3	384.5	341.0	298.7	258.8	221.5	185.4	150.6	115.7
55°	573.7	521.4	470.4	420.6	372.1	324.8	281.2	240.2	200.4	161.8	125.7
52.5°	625.9	568.7	511.5	457.9	406.9	353.4	303.6	257.6	214.0	174.2	134.4
50°	679.5	614.7	553.8	494.0	435.5	379.5	326.0	276.3	229.0	185.4	143.1
47.5°	734.2	663.3	594.8	530.1	467.9	406.9	348.4	293.7	242.7	196.6	151.8
45°	792.7	710.6	637.1	567.5	499.0	434.3	370.8	311.1	257.6	207.8	160.5
42.5°	849.9	761.6	679.5	606.0	530.1	460.4	393.2	329.8	271.3	217.8	168.0
40°	914.6	812.6	719.3	638.4	560.0	485.3	414.4	347.2	285.0	227.7	175.5
37.5°	976.9	862.4	764.1	673.2	588.6	510.2	435.5	364.6	298.7	237.7	182.9
35°	1040.3	917.1	805.1	705.6	617.2	535.1	455.5	380.8	309.9	246.4	190.4
32.5°	1105.0	969.4	848.7	740.4	645.9	557.5	474.1	395.7	322.3	256.3	196.6
30°	1167.3	1019.2	889.8	774.0	672.0	579.9	492.8	410.7	334.7	265.1	202.8
27.5°	1230.7	1071.4	930.8	805.1	696.9	599.8	509.0	424.3	345.9	273.8	209.1
25°	1291.7	1121.2	969.4	835.0	719.3	619.7	526.4	438.0	355.9	281.2	214.0
22.5°	1347.7	1164.8	1004.2	863.6	742.9	637.1	541.3	450.5	365.9	288.7	219.0
20°	1398.7	1209.6	1040.3	892.2	765.3	654.6	553.8	461.7	374.6	294.9	224.0
17.5°	1448.5	1250.6	1072.7	918.4	784.0	669.5	566.2	470.4	382.0	299.9	227.7
15°	1490.8	1286.7	1101.3	940.8	801.4	681.9	576.2	479.1	388.3	304.9	230.2
12.5°	1528.1	1317.8	1126.2	959.4	815.1	693.1	586.1	486.6	394.5	308.6	234.0
10°	1558.0	1342.7	1146.1	975.6	827.5	701.9	592.3	492.8	398.2	312.3	236.4
7.5°	1581.7	1362.6	1162.3	986.8	836.2	709.3	598.6	496.5	401.9	314.8	240.2
5°	1599.1	1377.6	1173.5	995.5	843.7	718.0	606.0	502.7	406.9	318.6	240.2
2.5°	1612.8	1388.8	1182.2	1003.0	848.7	718.0	606.0	502.7	406.9	318.6	240.2
0°	1612.8	1388.8	1182.2	1003.0	848.7	718.0	606.0	502.7	406.9	318.6	240.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	6.2	5.0	2.5	0.0
85°	13.7	8.7	5.0	0.0
82.5°	19.9	13.7	6.2	0.0
80°	26.1	17.4	8.7	0.0
77.5°	33.6	22.4	11.2	0.0
75°	39.8	26.1	13.7	0.0
72.5°	46.0	31.1	14.9	0.0
70°	52.3	34.8	17.4	0.0
67.5°	59.7	38.6	19.9	0.0
65°	66.0	43.6	21.2	0.0
62.5°	72.2	47.3	23.6	0.0
60°	78.4	51.0	24.9	0.0
57.5°	84.6	54.8	27.4	0.0
55°	90.8	59.7	29.9	0.0
52.5°	97.1	63.5	31.1	0.0
50°	103.3	67.2	32.4	0.0
47.5°	108.3	70.9	34.8	0.0
45°	114.5	74.7	36.1	0.0
42.5°	120.7	77.2	37.3	0.0
40°	125.7	80.9	38.6	0.0
37.5°	131.9	83.4	41.1	0.0
35°	136.9	87.1	42.3	0.0
32.5°	140.6	89.6	43.6	0.0
30°	145.6	92.1	44.8	0.0
27.5°	149.3	94.6	44.8	0.0
25°	153.1	97.1	46.0	0.0
22.5°	156.8	98.3	47.3	0.0
20°	160.5	100.8	48.5	0.0
17.5°	163.0	102.0	48.5	0.0
15°	165.5	103.3	51.0	0.0
12.5°	166.8	104.5	51.0	0.0
10°	169.2	107.0	51.0	0.0
7.5°	171.7	107.0	51.0	0.0
5°	171.7	107.0	51.0	0.0
2.5°	171.7	107.0	51.0	0.0
0°	171.7	107.0	51.0	0.0

(END OF REPORT)