

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: P624016

Luminaire Tested: **IFLD-S-SA2C-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624016
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA2C-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

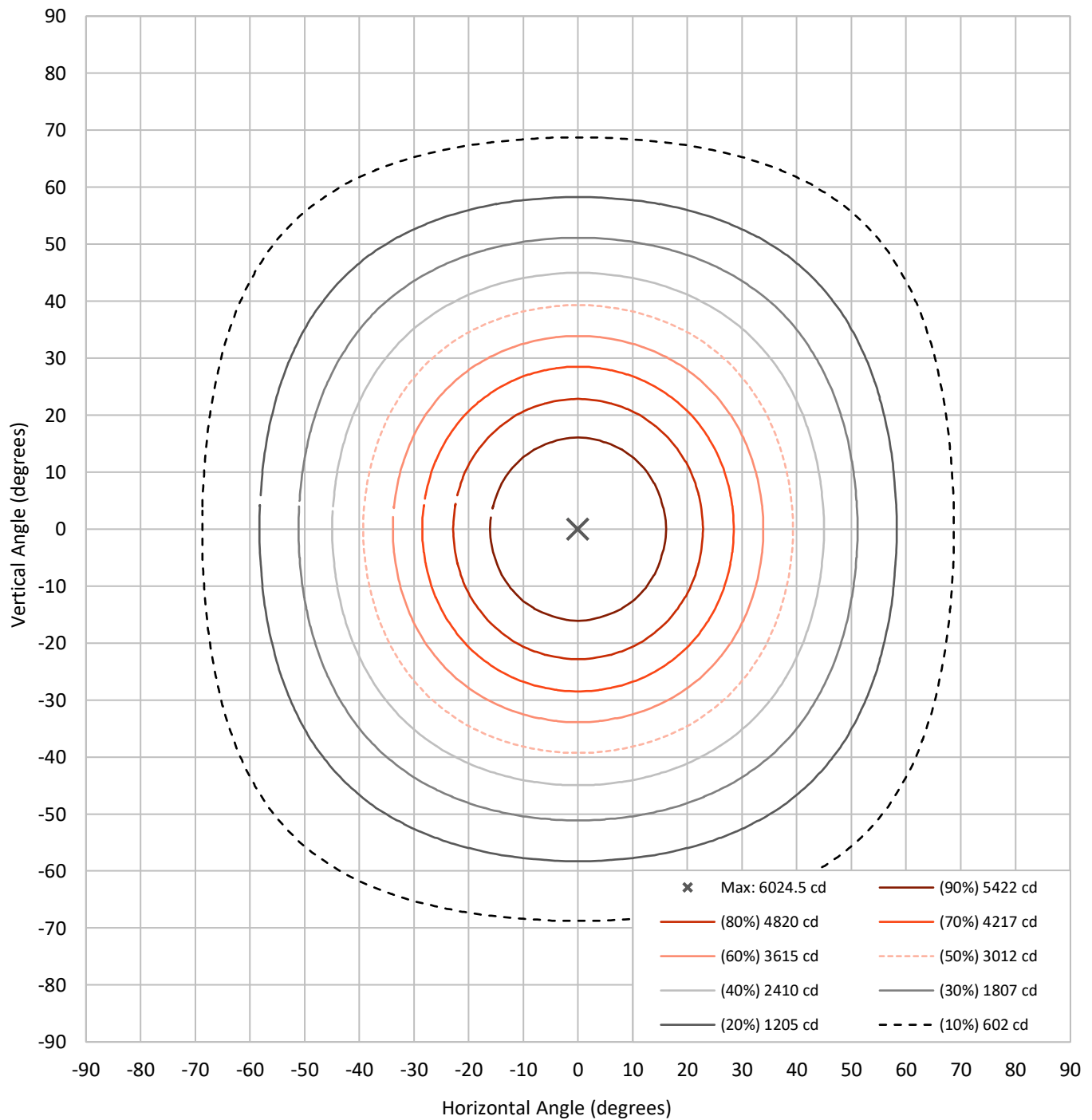
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	10847.3 lumens	Max Intensity:	6024.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	100.3 lumens/watt		
Luminous Opening:	Rectangular (W 1' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	4693.5 lumens	Field Lumens:	7685.5 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	108.2		
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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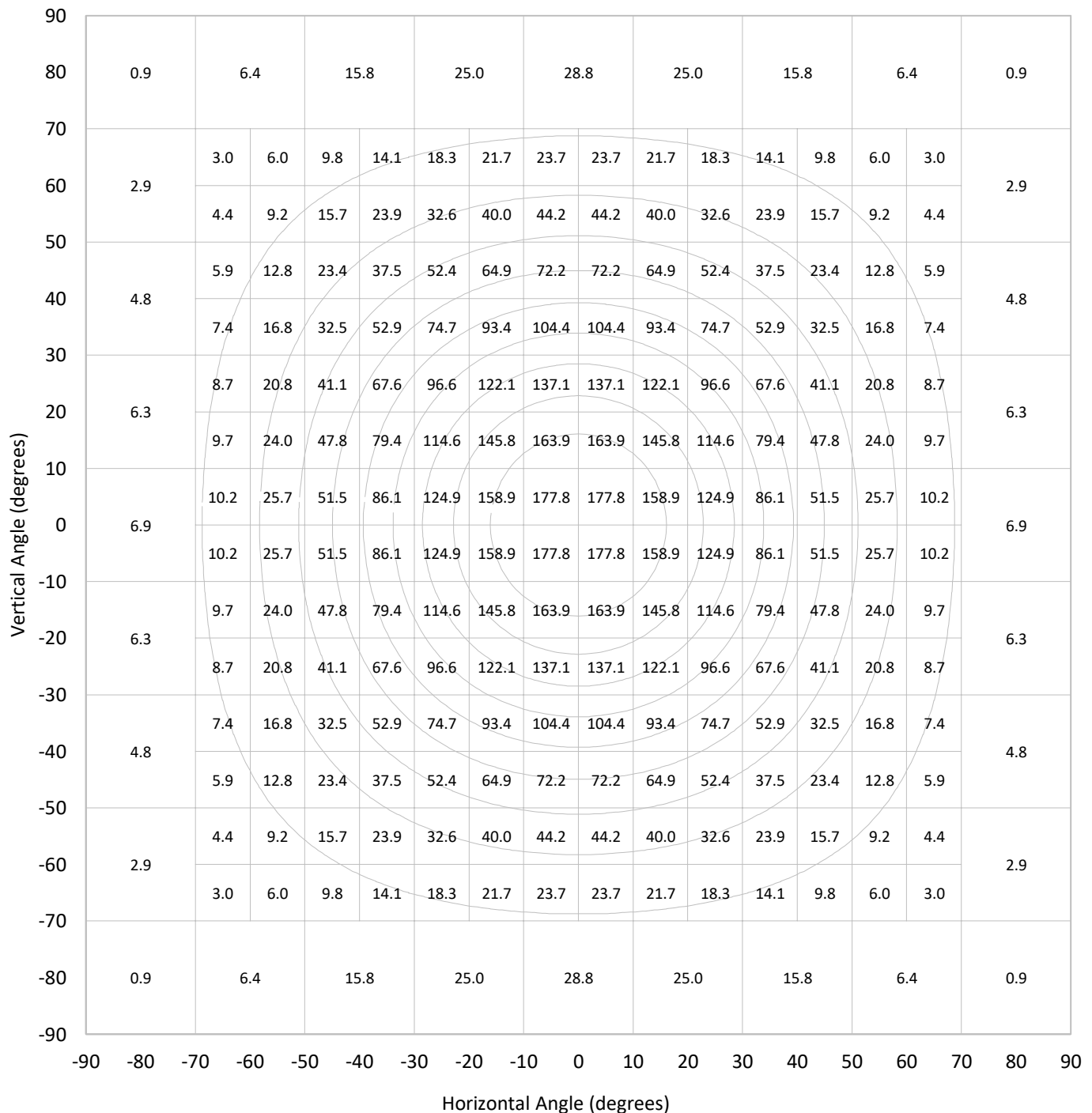
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Iso-Candela Plot



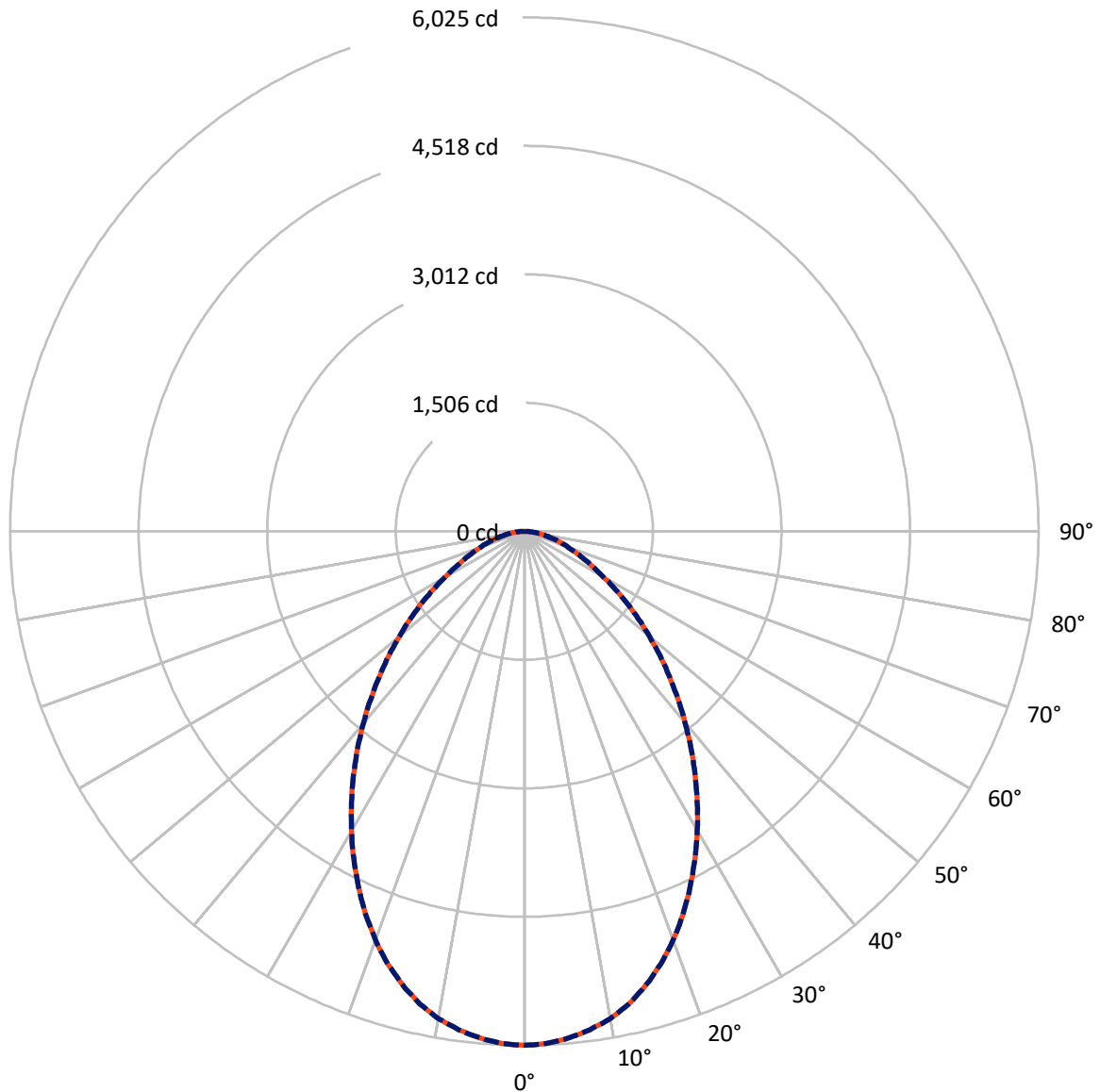
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Lumen Table



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Luminous Intensity Polar Plot

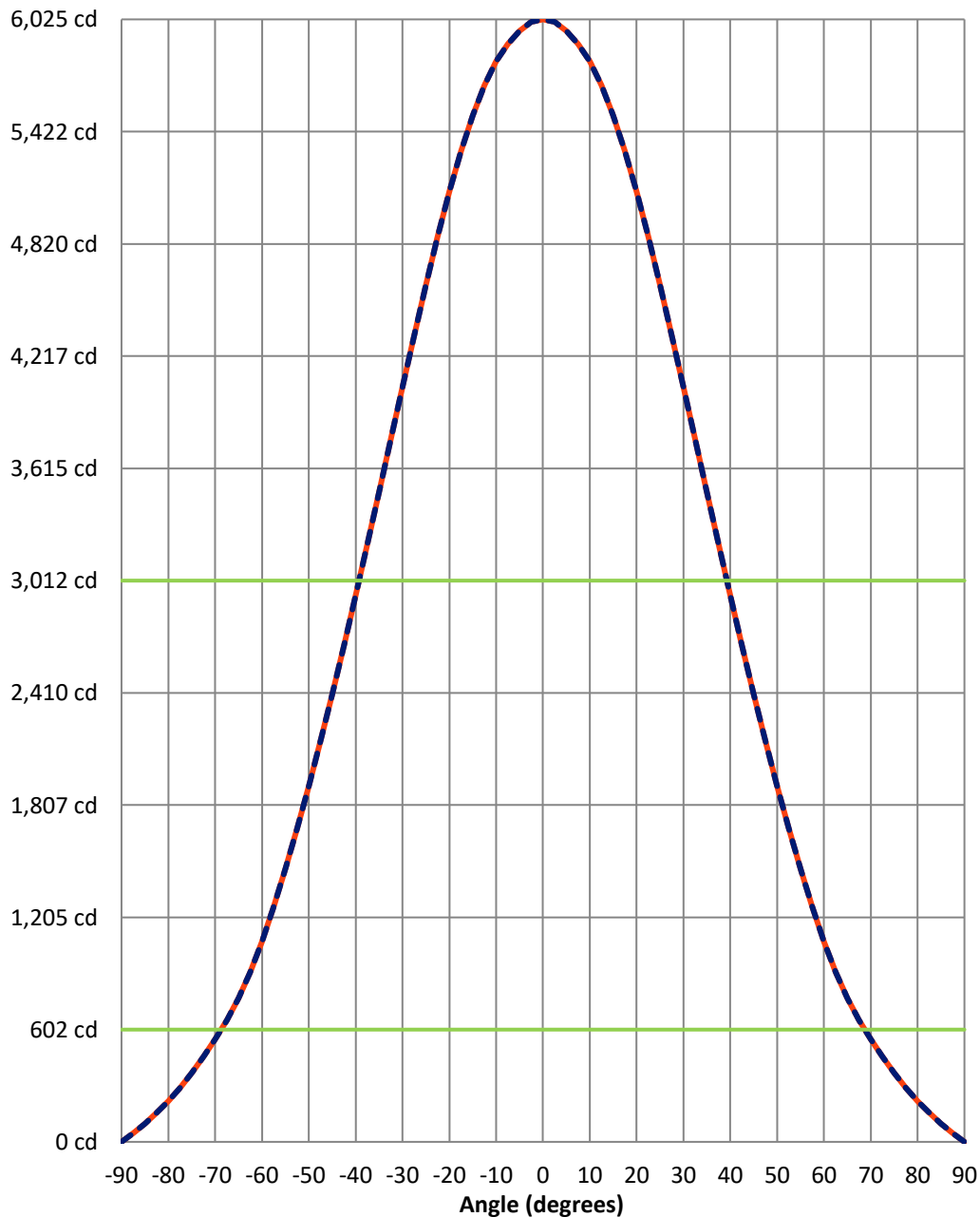


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 4693.5
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 7685.5
Efficiency: 70.9%

Spill:

Lumens: 3161.8
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°	46.4	46.4	46.4	46.4	46.4	46.4	46.4	44.1	44.1	43.0	41.8
85°	97.3	97.3	97.3	97.3	97.3	95.0	93.9	92.7	91.6	89.3	88.2
82.5°	156.1	156.1	156.1	156.1	153.8	151.5	150.4	148.2	145.9	142.5	139.1
80°	218.3	218.3	218.3	218.3	214.9	212.6	209.2	207.0	203.6	199.0	194.5
77.5°	289.5	289.5	289.5	286.1	283.9	280.5	277.1	272.6	268.0	262.4	255.6
75°	369.8	369.8	369.8	365.3	361.9	358.5	352.9	347.2	340.4	332.5	323.4
72.5°	456.9	456.9	456.9	451.2	447.9	442.2	435.4	427.5	419.6	409.4	398.1
70°	550.8	550.8	550.8	544.0	538.3	532.7	523.6	514.6	503.3	492.0	478.4
67.5°	652.6	652.6	652.6	644.6	637.9	629.9	619.8	608.4	594.9	579.0	563.2
65°	771.3	771.3	766.8	760.0	752.1	740.8	728.3	712.5	695.5	675.2	653.7
62.5°	911.5	911.5	904.8	896.8	886.7	872.0	855.0	834.6	810.9	784.9	758.9
60°	1074.4	1074.4	1066.5	1056.3	1041.6	1023.5	1000.9	974.9	945.5	912.7	881.0
57.5°	1262.1	1262.1	1252.0	1238.4	1220.3	1197.7	1169.4	1136.6	1099.3	1058.6	1019.0
55°	1465.7	1465.7	1453.3	1437.4	1415.9	1388.8	1354.9	1316.4	1271.2	1224.8	1173.9
52.5°	1681.7	1681.7	1667.0	1648.9	1624.0	1592.4	1553.9	1508.7	1456.7	1402.4	1342.4
50°	1909.0	1909.0	1892.1	1871.7	1843.4	1806.1	1762.0	1710.0	1652.3	1589.0	1520.0
47.5°	2152.2	2152.2	2133.0	2109.2	2075.3	2032.3	1980.3	1920.3	1854.7	1783.5	1705.5
45°	2402.1	2402.1	2380.6	2353.5	2316.2	2267.5	2209.9	2152.2	2068.5	1985.9	1895.5
42.5°	2662.2	2662.2	2637.4	2606.8	2563.8	2510.7	2445.1	2370.5	2287.9	2195.2	2096.8
40°	2932.5	2932.5	2904.3	2869.2	2821.7	2760.6	2687.1	2603.4	2510.7	2407.8	2299.2
37.5°	3208.5	3208.5	3176.8	3138.4	3085.2	3017.4	2934.8	2842.1	2738.0	2623.8	2503.9
35°	3486.7	3486.7	3451.6	3409.8	3351.0	3276.3	3187.0	3084.1	2968.7	2844.3	2709.7
32.5°	3770.6	3770.6	3732.1	3684.6	3617.9	3535.3	3436.9	3325.0	3208.5	3063.7	2916.7
30°	4051.0	4051.0	4009.2	3957.2	3885.9	3795.4	3688.0	3564.7	3427.9	3279.7	3121.4
27.5°	4327.0	4315.7	4280.6	4225.2	4147.2	4051.0	3934.5	3801.1	3652.9	3490.1	3320.4
25°	4598.4	4586.0	4547.5	4486.4	4402.8	4297.6	4172.0	4029.5	3870.1	3698.2	3512.7
22.5°	4858.5	4845.0	4804.2	4738.6	4649.3	4535.1	4400.5	4247.8	4078.2	3893.8	3698.2
20°	5099.4	5084.7	5042.9	4973.9	4881.1	4760.1	4617.6	4453.6	4272.7	4078.2	3870.1
17.5°	5316.6	5301.9	5257.7	5186.5	5099.4	4964.8	4817.8	4644.8	4453.6	4247.8	4029.5
15°	5507.7	5491.9	5446.6	5375.4	5275.8	5149.2	4994.2	4817.8	4617.6	4400.5	4172.0
12.5°	5670.5	5654.7	5608.3	5537.1	5434.2	5307.5	5149.2	4964.8	4760.1	4535.1	4297.6
10°	5799.5	5783.6	5739.5	5671.7	5565.4	5434.2	5275.8	5099.4	4881.1	4649.3	4402.8
7.5°	5892.2	5877.5	5836.8	5768.9	5671.7	5537.1	5375.4	5186.5	4973.9	4738.6	4486.4
5°	5962.3	5945.4	5904.6	5836.8	5739.5	5608.3	5446.6	5257.7	5042.9	4804.2	4547.5
2.5°	6011.0	5990.6	5945.4	5877.5	5783.6	5654.7	5491.9	5301.9	5084.7	4845.0	4586.0
0°	6024.5	6011.0	5962.3	5892.2	5799.5	5670.5	5507.7	5316.6	5099.4	4858.5	4598.4

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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°	40.7	40.7	39.6	38.5	37.3	35.1	33.9	32.8	31.7	29.4	28.3
85°	86.0	83.7	81.4	79.2	75.8	73.5	70.1	67.9	64.5	61.1	57.7
82.5°	135.7	132.3	127.8	124.4	119.9	114.2	109.7	104.0	98.4	93.9	88.2
80°	190.0	184.3	178.7	173.0	166.2	159.5	152.7	145.9	138.0	130.1	122.1
77.5°	248.8	240.9	233.0	223.9	216.0	207.0	197.9	188.9	178.7	168.5	158.3
75°	314.4	304.2	292.9	281.6	271.4	259.0	246.5	234.1	220.5	208.1	194.5
72.5°	385.7	373.2	359.6	346.1	331.4	315.5	299.7	282.7	266.9	251.1	234.1
70°	462.6	447.9	430.9	413.9	395.8	376.6	357.4	337.0	316.7	296.3	275.9
67.5°	545.1	527.0	506.7	486.3	463.7	441.1	418.4	394.7	369.8	344.9	321.2
65°	633.3	610.7	587.0	560.9	534.9	508.9	481.8	453.5	425.2	395.8	369.8
62.5°	731.7	703.4	672.9	641.2	611.8	580.2	550.8	515.7	481.8	449.0	416.2
60°	845.9	808.6	771.3	731.7	694.4	653.7	617.5	579.0	540.6	503.3	464.8
57.5°	973.7	926.2	881.0	833.5	783.7	738.5	692.1	645.8	602.8	558.7	516.8
55°	1118.5	1060.8	1004.3	945.5	887.8	831.2	772.4	720.4	667.3	617.5	568.9
52.5°	1276.8	1211.2	1141.1	1074.4	1000.9	930.8	865.2	799.6	737.4	677.4	622.0
50°	1446.5	1369.6	1289.3	1207.8	1124.2	1041.6	962.4	885.5	813.1	743.0	677.4
47.5°	1622.9	1535.8	1444.2	1351.5	1262.1	1161.5	1066.5	979.4	892.3	813.1	737.4
45°	1803.9	1705.5	1604.8	1499.6	1394.5	1285.9	1180.7	1074.4	979.4	885.5	799.6
42.5°	1990.5	1879.6	1767.7	1651.2	1534.7	1415.9	1297.2	1180.7	1066.5	962.4	865.2
40°	2182.7	2060.6	1932.8	1806.1	1681.7	1546.0	1415.9	1285.9	1161.5	1041.6	930.8
37.5°	2375.0	2241.5	2103.6	1961.1	1818.6	1681.7	1534.7	1394.5	1262.1	1124.2	1000.9
35°	2568.4	2421.3	2272.1	2117.1	1961.1	1806.1	1651.2	1499.6	1351.5	1207.8	1074.4
32.5°	2762.9	2602.3	2437.2	2272.1	2103.6	1932.8	1767.7	1604.8	1444.2	1289.3	1141.1
30°	2954.0	2779.9	2602.3	2421.3	2241.5	2060.6	1879.6	1705.5	1535.8	1369.6	1211.2
27.5°	3140.6	2954.0	2762.9	2568.4	2375.0	2182.7	1990.5	1803.9	1622.9	1446.5	1276.8
25°	3320.4	3121.4	2916.7	2709.7	2503.9	2299.2	2096.8	1895.5	1705.5	1520.0	1342.4
22.5°	3490.1	3279.7	3063.7	2844.3	2623.8	2407.8	2195.2	1985.9	1783.5	1589.0	1402.4
20°	3652.9	3427.9	3208.5	2968.7	2738.0	2510.7	2287.9	2068.5	1854.7	1652.3	1456.7
17.5°	3801.1	3564.7	3325.0	3084.1	2842.1	2603.4	2370.5	2152.2	1920.3	1710.0	1508.7
15°	3934.5	3688.0	3436.9	3187.0	2934.8	2687.1	2445.1	2209.9	1980.3	1762.0	1553.9
12.5°	4051.0	3795.4	3535.3	3276.3	3017.4	2760.6	2510.7	2267.5	2032.3	1806.1	1592.4
10°	4147.2	3885.9	3617.9	3351.0	3085.2	2821.7	2563.8	2316.2	2075.3	1843.4	1624.0
7.5°	4225.2	3957.2	3684.6	3409.8	3138.4	2869.2	2606.8	2353.5	2109.2	1871.7	1648.9
5°	4280.6	4009.2	3732.1	3451.6	3176.8	2904.3	2637.4	2380.6	2133.0	1892.1	1667.0
2.5°	4315.7	4051.0	3770.6	3486.7	3208.5	2932.5	2662.2	2402.1	2152.2	1909.0	1681.7
0°	4327.0	4051.0	3770.6	3486.7	3208.5	2932.5	2662.2	2402.1	2152.2	1909.0	1681.7

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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°	27.1	24.9	22.6	21.5	19.2	18.1	15.8	13.6	12.4	10.2	7.9
85°	54.3	49.8	46.4	43.0	39.6	35.1	31.7	28.3	23.7	20.4	15.8
82.5°	82.6	76.9	71.2	65.6	59.9	54.3	47.5	41.8	36.2	30.5	23.7
80°	114.2	105.2	97.3	89.3	81.4	73.5	64.5	56.5	47.5	39.6	31.7
77.5°	147.0	136.8	125.5	114.2	102.9	92.7	81.4	71.2	61.1	49.8	39.6
75°	182.1	168.5	156.1	141.4	127.8	113.1	99.5	86.0	73.5	61.1	47.5
72.5°	218.3	201.3	184.3	168.5	151.5	134.6	118.7	101.8	86.0	71.2	56.5
70°	255.6	235.2	214.9	195.7	176.4	156.1	138.0	118.7	99.5	81.4	64.5
67.5°	295.2	271.4	247.7	222.8	201.3	178.7	156.1	134.6	113.1	92.7	73.5
65°	338.2	309.9	280.5	254.5	226.2	201.3	176.4	151.5	127.8	102.9	81.4
62.5°	382.3	349.5	316.7	283.9	254.5	222.8	195.7	168.5	141.4	114.2	89.3
60°	427.5	390.2	352.9	316.7	280.5	247.7	214.9	184.3	156.1	125.5	97.3
57.5°	473.9	432.0	390.2	349.5	309.9	271.4	235.2	201.3	168.5	136.8	105.2
55°	521.4	473.9	427.5	382.3	338.2	295.2	255.6	218.3	182.1	147.0	114.2
52.5°	568.9	516.8	464.8	416.2	369.8	321.2	275.9	234.1	194.5	158.3	122.1
50°	617.5	558.7	503.3	449.0	395.8	344.9	296.3	251.1	208.1	168.5	130.1
47.5°	667.3	602.8	540.6	481.8	425.2	369.8	316.7	266.9	220.5	178.7	138.0
45°	720.4	645.8	579.0	515.7	453.5	394.7	337.0	282.7	234.1	188.9	145.9
42.5°	772.4	692.1	617.5	550.8	481.8	418.4	357.4	299.7	246.5	197.9	152.7
40°	831.2	738.5	653.7	580.2	508.9	441.1	376.6	315.5	259.0	207.0	159.5
37.5°	887.8	783.7	694.4	611.8	534.9	463.7	395.8	331.4	271.4	216.0	166.2
35°	945.5	833.5	731.7	641.2	560.9	486.3	413.9	346.1	281.6	223.9	173.0
32.5°	1004.3	881.0	771.3	672.9	587.0	506.7	430.9	359.6	292.9	233.0	178.7
30°	1060.8	926.2	808.6	703.4	610.7	527.0	447.9	373.2	304.2	240.9	184.3
27.5°	1118.5	973.7	845.9	731.7	633.3	545.1	462.6	385.7	314.4	248.8	190.0
25°	1173.9	1019.0	881.0	758.9	653.7	563.2	478.4	398.1	323.4	255.6	194.5
22.5°	1224.8	1058.6	912.7	784.9	675.2	579.0	492.0	409.4	332.5	262.4	199.0
20°	1271.2	1099.3	945.5	810.9	695.5	594.9	503.3	419.6	340.4	268.0	203.6
17.5°	1316.4	1136.6	974.9	834.6	712.5	608.4	514.6	427.5	347.2	272.6	207.0
15°	1354.9	1169.4	1000.9	855.0	728.3	619.8	523.6	435.4	352.9	277.1	209.2
12.5°	1388.8	1197.7	1023.5	872.0	740.8	629.9	532.7	442.2	358.5	280.5	212.6
10°	1415.9	1220.3	1041.6	886.7	752.1	637.9	538.3	447.9	361.9	283.9	214.9
7.5°	1437.4	1238.4	1056.3	896.8	760.0	644.6	544.0	451.2	365.3	286.1	218.3
5°	1453.3	1252.0	1066.5	904.8	766.8	652.6	550.8	456.9	369.8	289.5	218.3
2.5°	1465.7	1262.1	1074.4	911.5	771.3	652.6	550.8	456.9	369.8	289.5	218.3
0°	1465.7	1262.1	1074.4	911.5	771.3	652.6	550.8	456.9	369.8	289.5	218.3

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	5.7	4.5	2.3	0.0
85°	12.4	7.9	4.5	0.0
82.5°	18.1	12.4	5.7	0.0
80°	23.7	15.8	7.9	0.0
77.5°	30.5	20.4	10.2	0.0
75°	36.2	23.7	12.4	0.0
72.5°	41.8	28.3	13.6	0.0
70°	47.5	31.7	15.8	0.0
67.5°	54.3	35.1	18.1	0.0
65°	59.9	39.6	19.2	0.0
62.5°	65.6	43.0	21.5	0.0
60°	71.2	46.4	22.6	0.0
57.5°	76.9	49.8	24.9	0.0
55°	82.6	54.3	27.1	0.0
52.5°	88.2	57.7	28.3	0.0
50°	93.9	61.1	29.4	0.0
47.5°	98.4	64.5	31.7	0.0
45°	104.0	67.9	32.8	0.0
42.5°	109.7	70.1	33.9	0.0
40°	114.2	73.5	35.1	0.0
37.5°	119.9	75.8	37.3	0.0
35°	124.4	79.2	38.5	0.0
32.5°	127.8	81.4	39.6	0.0
30°	132.3	83.7	40.7	0.0
27.5°	135.7	86.0	40.7	0.0
25°	139.1	88.2	41.8	0.0
22.5°	142.5	89.3	43.0	0.0
20°	145.9	91.6	44.1	0.0
17.5°	148.2	92.7	44.1	0.0
15°	150.4	93.9	46.4	0.0
12.5°	151.5	95.0	46.4	0.0
10°	153.8	97.3	46.4	0.0
7.5°	156.1	97.3	46.4	0.0
5°	156.1	97.3	46.4	0.0
2.5°	156.1	97.3	46.4	0.0
0°	156.1	97.3	46.4	0.0

(END OF REPORT)