

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: P624060

Luminaire Tested: **IFLD-M-SA4C-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624060
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4C-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

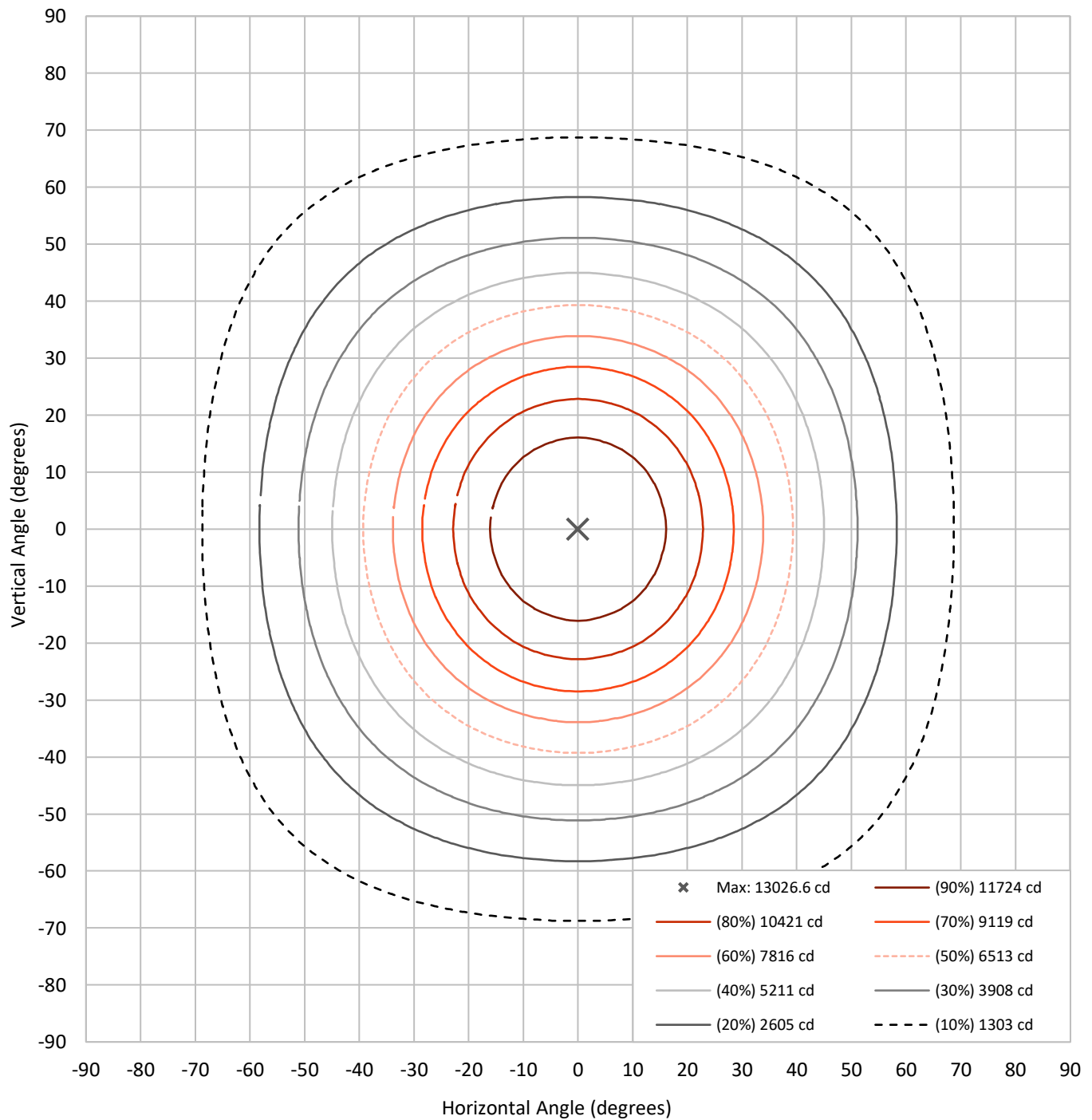
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23454.6 lumens	Max Intensity:	13026.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	107.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' 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:	10148.6 lumens	Field Lumens:	16617.9 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	218.1		
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		



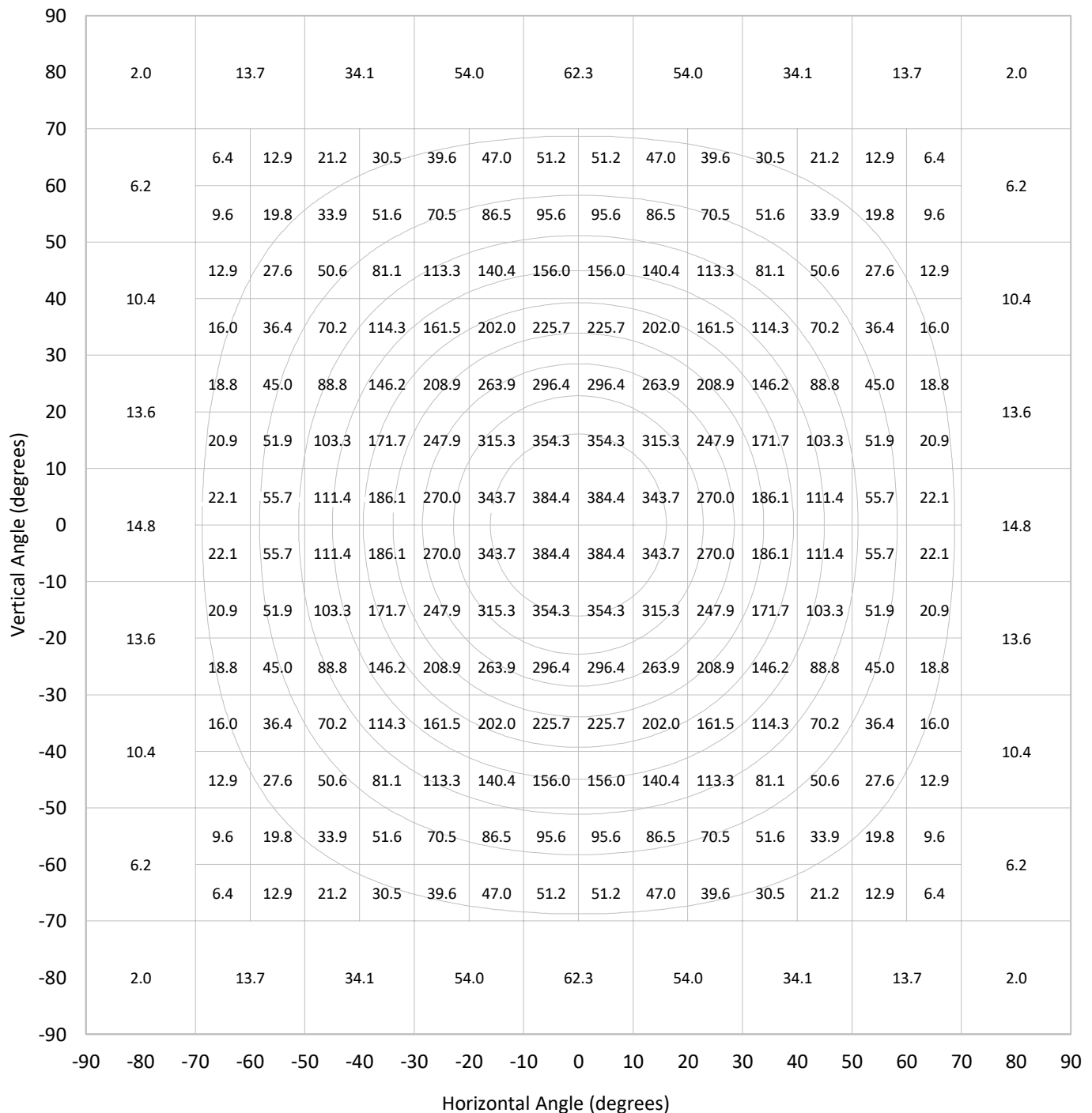
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Iso-Candela Plot



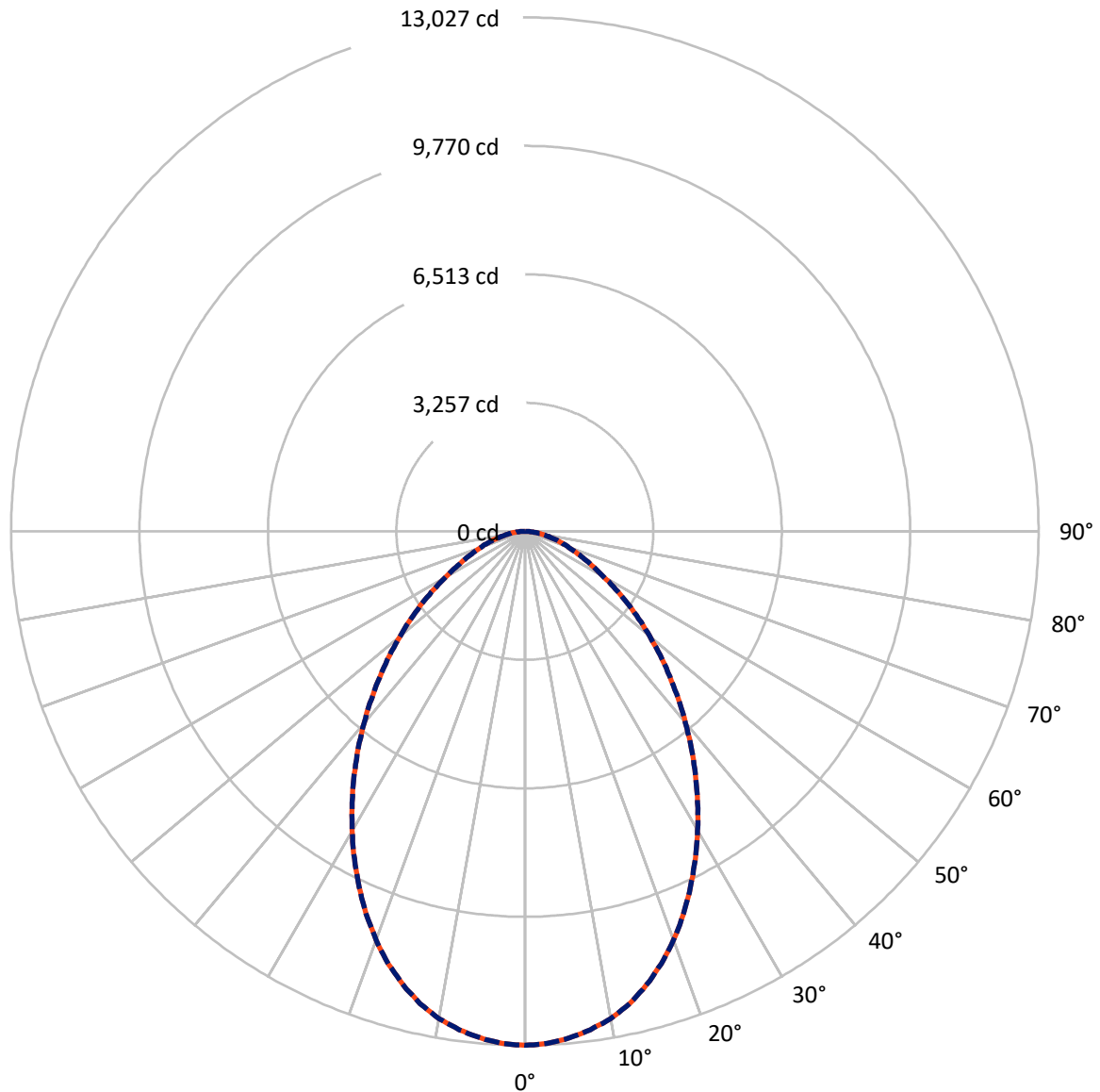
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Lumen Table



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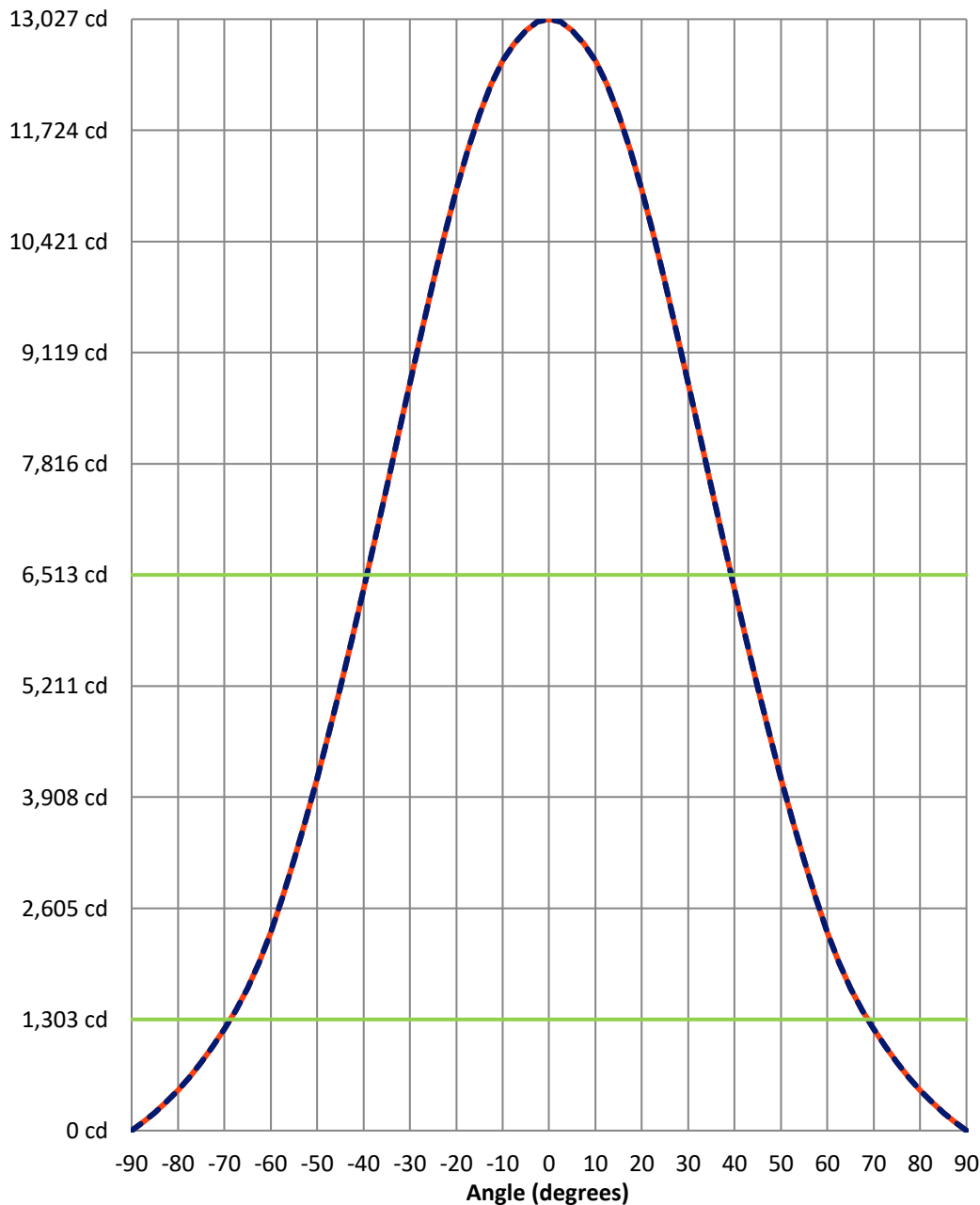
Luminous Intensity Polar Plot



— 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: 10148.6
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 16617.9
Efficiency: 70.9%

Spill:

Lumens: 6836.7
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°	100.3	100.3	100.3	100.3	100.3	100.3	100.3	95.4	95.4	92.9	90.5
85°	210.3	210.3	210.3	210.3	210.3	205.4	203.0	200.5	198.1	193.2	190.7
82.5°	337.5	337.5	337.5	337.5	332.6	327.7	325.2	320.3	315.5	308.1	300.8
80°	472.0	472.0	472.0	472.0	464.6	459.7	452.4	447.5	440.2	430.4	420.6
77.5°	626.0	626.0	626.0	618.7	613.8	606.5	599.1	589.3	579.6	567.3	552.7
75°	799.6	799.6	799.6	789.9	782.5	775.2	763.0	750.7	736.1	718.9	699.4
72.5°	987.9	987.9	987.9	975.7	968.4	956.1	941.5	924.4	907.2	885.2	860.8
70°	1190.9	1190.9	1190.9	1176.2	1164.0	1151.8	1132.2	1112.6	1088.2	1063.7	1034.4
67.5°	1411.0	1411.0	1411.0	1393.9	1379.2	1362.1	1340.1	1315.6	1286.3	1252.0	1217.8
65°	1667.8	1667.8	1658.0	1643.3	1626.2	1601.7	1574.8	1540.6	1503.9	1459.9	1413.4
62.5°	1971.0	1971.0	1956.3	1939.2	1917.2	1885.4	1848.7	1804.7	1753.3	1697.1	1640.9
60°	2323.1	2323.1	2306.0	2284.0	2252.2	2213.1	2164.2	2107.9	2044.3	1973.4	1905.0
57.5°	2729.0	2729.0	2707.0	2677.7	2638.6	2589.7	2528.5	2457.6	2376.9	2288.9	2203.3
55°	3169.2	3169.2	3142.3	3108.1	3061.6	3002.9	2929.6	2846.4	2748.6	2648.3	2538.3
52.5°	3636.3	3636.3	3604.5	3565.4	3511.6	3443.1	3360.0	3262.1	3149.7	3032.3	2902.7
50°	4127.8	4127.8	4091.1	4047.1	3986.0	3905.3	3809.9	3697.4	3572.7	3435.8	3286.6
47.5°	4653.6	4653.6	4612.0	4560.6	4487.3	4394.4	4281.9	4152.3	4010.4	3856.4	3687.6
45°	5194.0	5194.0	5147.5	5088.8	5008.1	4903.0	4778.3	4653.6	4472.6	4294.1	4098.5
42.5°	5756.4	5756.4	5702.6	5636.6	5543.7	5428.7	5286.9	5125.5	4947.0	4746.5	4533.7
40°	6340.9	6340.9	6279.7	6203.9	6101.2	5969.2	5810.2	5629.3	5428.7	5206.2	4971.5
37.5°	6937.5	6937.5	6869.1	6785.9	6671.0	6524.3	6345.8	6145.2	5920.3	5673.3	5414.1
35°	7539.1	7539.1	7463.3	7372.8	7245.7	7084.3	6891.1	6668.6	6419.1	6150.1	5859.1
32.5°	8152.9	8152.9	8069.8	7967.1	7822.8	7644.3	7431.5	7189.4	6937.5	6624.5	6306.6
30°	8759.4	8759.4	8668.9	8556.4	8402.3	8206.7	7974.4	7707.8	7412.0	7091.6	6749.3
27.5°	9356.0	9331.6	9255.8	9135.9	8967.2	8759.4	8507.5	8218.9	7898.6	7546.4	7179.6
25°	9942.9	9916.0	9832.9	9700.8	9519.9	9292.5	9021.0	8712.9	8368.1	7996.4	7595.4
22.5°	10505.4	10476.0	10388.0	10246.2	10053.0	9806.0	9515.0	9184.9	8818.0	8419.5	7996.4
20°	11026.2	10994.4	10904.0	10754.8	10554.3	10292.6	9984.5	9629.9	9238.7	8818.0	8368.1
17.5°	11495.7	11464.0	11368.6	11214.5	11026.2	10735.2	10417.3	10043.2	9629.9	9184.9	8712.9
15°	11909.0	11874.8	11777.0	11622.9	11407.7	11133.8	10798.8	10417.3	9984.5	9515.0	9021.0
12.5°	12261.1	12226.9	12126.7	11972.6	11750.1	11476.2	11133.8	10735.2	10292.6	9806.0	9292.5
10°	12539.9	12505.7	12410.3	12263.6	12033.7	11750.1	11407.7	11026.2	10554.3	10053.0	9519.9
7.5°	12740.4	12708.7	12620.6	12473.9	12263.6	11972.6	11622.9	11214.5	10754.8	10246.2	9700.8
5°	12892.1	12855.4	12767.3	12620.6	12410.3	12126.7	11777.0	11368.6	10904.0	10388.0	9832.9
2.5°	12997.2	12953.2	12855.4	12708.7	12505.7	12226.9	11874.8	11464.0	10994.4	10476.0	9916.0
0°	13026.6	12997.2	12892.1	12740.4	12539.9	12261.1	11909.0	11495.7	11026.2	10505.4	9942.9

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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°	88.0	88.0	85.6	83.1	80.7	75.8	73.4	70.9	68.5	63.6	61.1
85°	185.8	181.0	176.1	171.2	163.8	158.9	151.6	146.7	139.4	132.1	124.7
82.5°	293.4	286.1	276.3	269.0	259.2	247.0	237.2	225.0	212.7	203.0	190.7
80°	410.8	398.6	386.4	374.1	359.5	344.8	330.1	315.5	298.3	281.2	264.1
77.5°	538.0	520.9	503.7	484.2	467.1	447.5	427.9	408.4	386.4	364.4	342.4
75°	679.8	657.8	633.4	608.9	586.9	560.0	533.1	506.2	476.8	450.0	420.6
72.5°	833.9	807.0	777.6	748.3	716.5	682.3	648.0	611.3	577.1	542.9	506.2
70°	1000.2	968.4	931.7	895.0	855.9	814.3	772.7	728.7	684.7	640.7	596.7
67.5°	1178.7	1139.5	1095.5	1051.5	1002.6	953.7	904.8	853.4	799.6	745.8	694.5
65°	1369.4	1320.5	1269.2	1212.9	1156.7	1100.4	1041.7	980.6	919.5	855.9	799.6
62.5°	1582.2	1521.0	1455.0	1386.5	1323.0	1254.5	1190.9	1115.1	1041.7	970.8	899.9
60°	1829.1	1748.4	1667.8	1582.2	1501.5	1413.4	1335.2	1252.0	1168.9	1088.2	1005.1
57.5°	2105.5	2002.8	1905.0	1802.2	1694.6	1596.8	1496.6	1396.3	1303.4	1208.0	1117.5
55°	2418.5	2293.8	2171.5	2044.3	1919.6	1797.4	1670.2	1557.7	1442.8	1335.2	1230.0
52.5°	2760.8	2619.0	2467.4	2323.1	2164.2	2012.5	1870.7	1728.9	1594.4	1464.8	1345.0
50°	3127.6	2961.4	2787.7	2611.7	2430.7	2252.2	2081.0	1914.7	1758.2	1606.6	1464.8
47.5°	3509.1	3320.8	3122.8	2922.2	2729.0	2511.4	2306.0	2117.7	1929.4	1758.2	1594.4
45°	3900.4	3687.6	3470.0	3242.6	3015.2	2780.4	2553.0	2323.1	2117.7	1914.7	1728.9
42.5°	4303.9	4064.2	3822.1	3570.3	3318.4	3061.6	2804.9	2553.0	2306.0	2081.0	1870.7
40°	4719.6	4455.5	4179.2	3905.3	3636.3	3342.8	3061.6	2780.4	2511.4	2252.2	2012.5
37.5°	5135.3	4846.7	4548.4	4240.3	3932.2	3636.3	3318.4	3015.2	2729.0	2430.7	2164.2
35°	5553.5	5235.6	4912.8	4577.8	4240.3	3905.3	3570.3	3242.6	2922.2	2611.7	2323.1
32.5°	5974.1	5626.8	5269.8	4912.8	4548.4	4179.2	3822.1	3470.0	3122.8	2787.7	2467.4
30°	6387.3	6010.7	5626.8	5235.6	4846.7	4455.5	4064.2	3687.6	3320.8	2961.4	2619.0
27.5°	6790.8	6387.3	5974.1	5553.5	5135.3	4719.6	4303.9	3900.4	3509.1	3127.6	2760.8
25°	7179.6	6749.3	6306.6	5859.1	5414.1	4971.5	4533.7	4098.5	3687.6	3286.6	2902.7
22.5°	7546.4	7091.6	6624.5	6150.1	5673.3	5206.2	4746.5	4294.1	3856.4	3435.8	3032.3
20°	7898.6	7412.0	6937.5	6419.1	5920.3	5428.7	4947.0	4472.6	4010.4	3572.7	3149.7
17.5°	8218.9	7707.8	7189.4	6668.6	6145.2	5629.3	5125.5	4653.6	4152.3	3697.4	3262.1
15°	8507.5	7974.4	7431.5	6891.1	6345.8	5810.2	5286.9	4778.3	4281.9	3809.9	3360.0
12.5°	8759.4	8206.7	7644.3	7084.3	6524.3	5969.2	5428.7	4903.0	4394.4	3905.3	3443.1
10°	8967.2	8402.3	7822.8	7245.7	6671.0	6101.2	5543.7	5008.1	4487.3	3986.0	3511.6
7.5°	9135.9	8556.4	7967.1	7372.8	6785.9	6203.9	5636.6	5088.8	4560.6	4047.1	3565.4
5°	9255.8	8668.9	8069.8	7463.3	6869.1	6279.7	5702.6	5147.5	4612.0	4091.1	3604.5
2.5°	9331.6	8759.4	8152.9	7539.1	6937.5	6340.9	5756.4	5194.0	4653.6	4127.8	3636.3
0°	9356.0	8759.4	8152.9	7539.1	6937.5	6340.9	5756.4	5194.0	4653.6	4127.8	3636.3

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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°	58.7	53.8	48.9	46.5	41.6	39.1	34.2	29.3	26.9	22.0	17.1
85°	117.4	107.6	100.3	92.9	85.6	75.8	68.5	61.1	51.4	44.0	34.2
82.5°	178.5	166.3	154.1	141.8	129.6	117.4	102.7	90.5	78.3	66.0	51.4
80°	247.0	227.4	210.3	193.2	176.1	158.9	139.4	122.3	102.7	85.6	68.5
77.5°	317.9	295.9	271.4	247.0	222.5	200.5	176.1	154.1	132.1	107.6	85.6
75°	393.7	364.4	337.5	305.7	276.3	244.5	215.2	185.8	158.9	132.1	102.7
72.5°	472.0	435.3	398.6	364.4	327.7	291.0	256.8	220.1	185.8	154.1	122.3
70°	552.7	508.6	464.6	423.1	381.5	337.5	298.3	256.8	215.2	176.1	139.4
67.5°	638.2	586.9	535.5	481.7	435.3	386.4	337.5	291.0	244.5	200.5	158.9
65°	731.2	670.0	606.5	550.2	489.1	435.3	381.5	327.7	276.3	222.5	176.1
62.5°	826.5	755.6	684.7	613.8	550.2	481.7	423.1	364.4	305.7	247.0	193.2
60°	924.4	843.7	763.0	684.7	606.5	535.5	464.6	398.6	337.5	271.4	210.3
57.5°	1024.6	934.1	843.7	755.6	670.0	586.9	508.6	435.3	364.4	295.9	227.4
55°	1127.3	1024.6	924.4	826.5	731.2	638.2	552.7	472.0	393.7	317.9	247.0
52.5°	1230.0	1117.5	1005.1	899.9	799.6	694.5	596.7	506.2	420.6	342.4	264.1
50°	1335.2	1208.0	1088.2	970.8	855.9	745.8	640.7	542.9	450.0	364.4	281.2
47.5°	1442.8	1303.4	1168.9	1041.7	919.5	799.6	684.7	577.1	476.8	386.4	298.3
45°	1557.7	1396.3	1252.0	1115.1	980.6	853.4	728.7	611.3	506.2	408.4	315.5
42.5°	1670.2	1496.6	1335.2	1190.9	1041.7	904.8	772.7	648.0	533.1	427.9	330.1
40°	1797.4	1596.8	1413.4	1254.5	1100.4	953.7	814.3	682.3	560.0	447.5	344.8
37.5°	1919.6	1694.6	1501.5	1323.0	1156.7	1002.6	855.9	716.5	586.9	467.1	359.5
35°	2044.3	1802.2	1582.2	1386.5	1212.9	1051.5	895.0	748.3	608.9	484.2	374.1
32.5°	2171.5	1905.0	1667.8	1455.0	1269.2	1095.5	931.7	777.6	633.4	503.7	386.4
30°	2293.8	2002.8	1748.4	1521.0	1320.5	1139.5	968.4	807.0	657.8	520.9	398.6
27.5°	2418.5	2105.5	1829.1	1582.2	1369.4	1178.7	1000.2	833.9	679.8	538.0	410.8
25°	2538.3	2203.3	1905.0	1640.9	1413.4	1217.8	1034.4	860.8	699.4	552.7	420.6
22.5°	2648.3	2288.9	1973.4	1697.1	1459.9	1252.0	1063.7	885.2	718.9	567.3	430.4
20°	2748.6	2376.9	2044.3	1753.3	1503.9	1286.3	1088.2	907.2	736.1	579.6	440.2
17.5°	2846.4	2457.6	2107.9	1804.7	1540.6	1315.6	1112.6	924.4	750.7	589.3	447.5
15°	2929.6	2528.5	2164.2	1848.7	1574.8	1340.1	1132.2	941.5	763.0	599.1	452.4
12.5°	3002.9	2589.7	2213.1	1885.4	1601.7	1362.1	1151.8	956.1	775.2	606.5	459.7
10°	3061.6	2638.6	2252.2	1917.2	1626.2	1379.2	1164.0	968.4	782.5	613.8	464.6
7.5°	3108.1	2677.7	2284.0	1939.2	1643.3	1393.9	1176.2	975.7	789.9	618.7	472.0
5°	3142.3	2707.0	2306.0	1956.3	1658.0	1411.0	1190.9	987.9	799.6	626.0	472.0
2.5°	3169.2	2729.0	2323.1	1971.0	1667.8	1411.0	1190.9	987.9	799.6	626.0	472.0
0°	3169.2	2729.0	2323.1	1971.0	1667.8	1411.0	1190.9	987.9	799.6	626.0	472.0

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.2	9.8	4.9	0.0
85°	26.9	17.1	9.8	0.0
82.5°	39.1	26.9	12.2	0.0
80°	51.4	34.2	17.1	0.0
77.5°	66.0	44.0	22.0	0.0
75°	78.3	51.4	26.9	0.0
72.5°	90.5	61.1	29.3	0.0
70°	102.7	68.5	34.2	0.0
67.5°	117.4	75.8	39.1	0.0
65°	129.6	85.6	41.6	0.0
62.5°	141.8	92.9	46.5	0.0
60°	154.1	100.3	48.9	0.0
57.5°	166.3	107.6	53.8	0.0
55°	178.5	117.4	58.7	0.0
52.5°	190.7	124.7	61.1	0.0
50°	203.0	132.1	63.6	0.0
47.5°	212.7	139.4	68.5	0.0
45°	225.0	146.7	70.9	0.0
42.5°	237.2	151.6	73.4	0.0
40°	247.0	158.9	75.8	0.0
37.5°	259.2	163.8	80.7	0.0
35°	269.0	171.2	83.1	0.0
32.5°	276.3	176.1	85.6	0.0
30°	286.1	181.0	88.0	0.0
27.5°	293.4	185.8	88.0	0.0
25°	300.8	190.7	90.5	0.0
22.5°	308.1	193.2	92.9	0.0
20°	315.5	198.1	95.4	0.0
17.5°	320.3	200.5	95.4	0.0
15°	325.2	203.0	100.3	0.0
12.5°	327.7	205.4	100.3	0.0
10°	332.6	210.3	100.3	0.0
7.5°	337.5	210.3	100.3	0.0
5°	337.5	210.3	100.3	0.0
2.5°	337.5	210.3	100.3	0.0
0°	337.5	210.3	100.3	0.0

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