

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: P623848

Luminaire Tested: **IFLD-S-SA3D-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623848
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3D-727-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (48) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

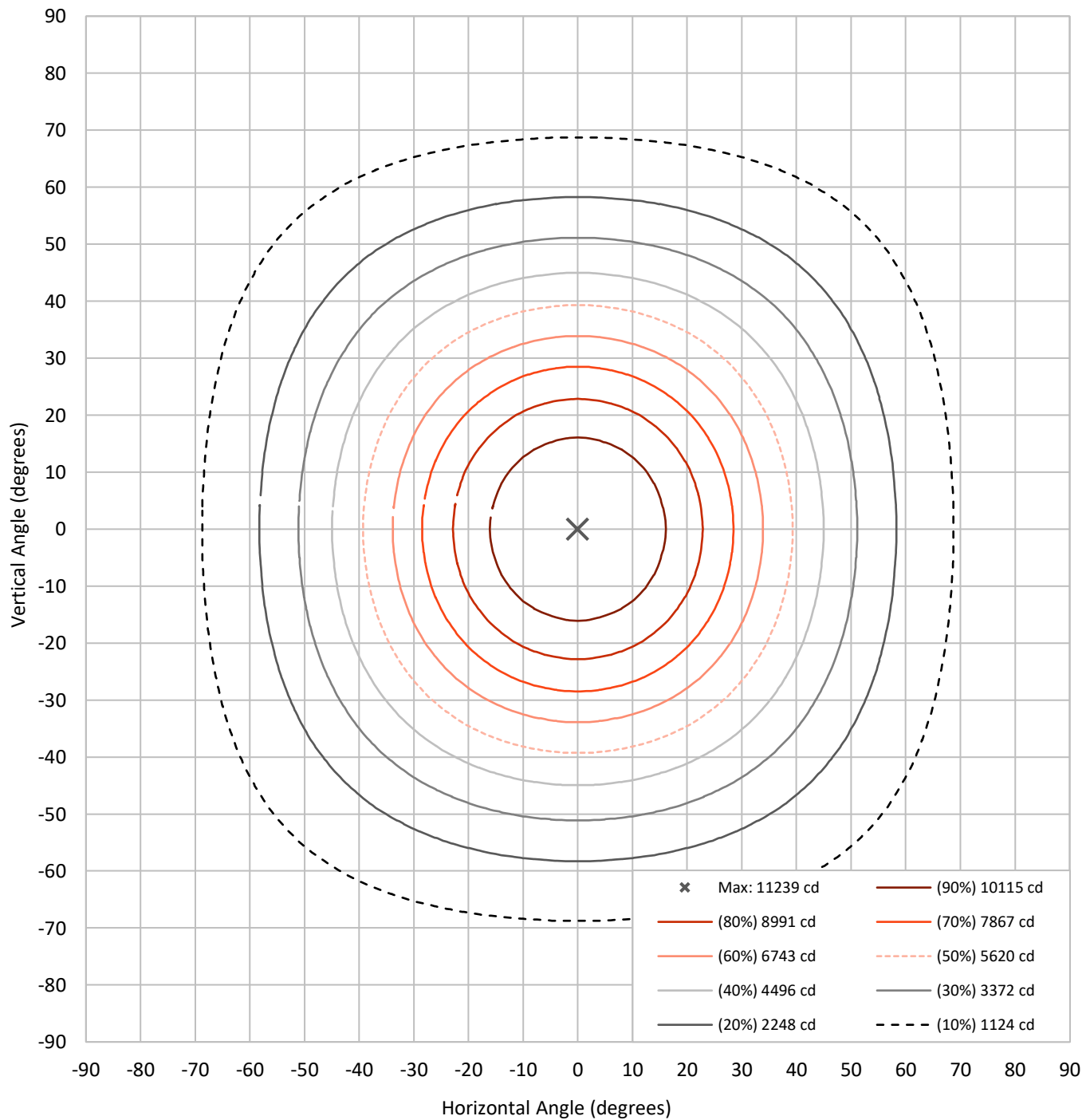
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	20236.1 lumens	Max Intensity:	11239 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	109.9 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	8755.9 lumens	Field Lumens:	14337.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	184.1		
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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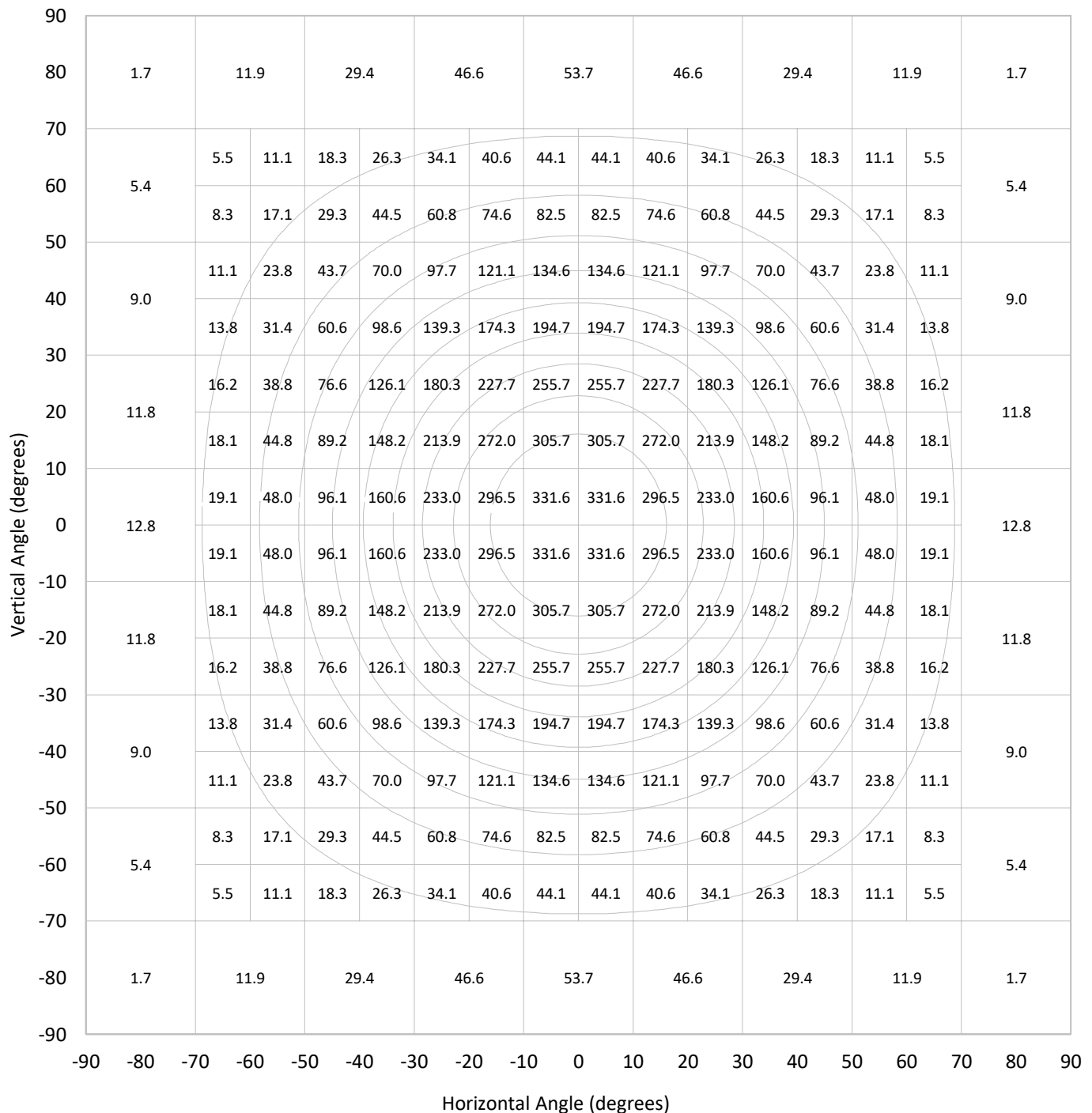
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Iso-Candela Plot



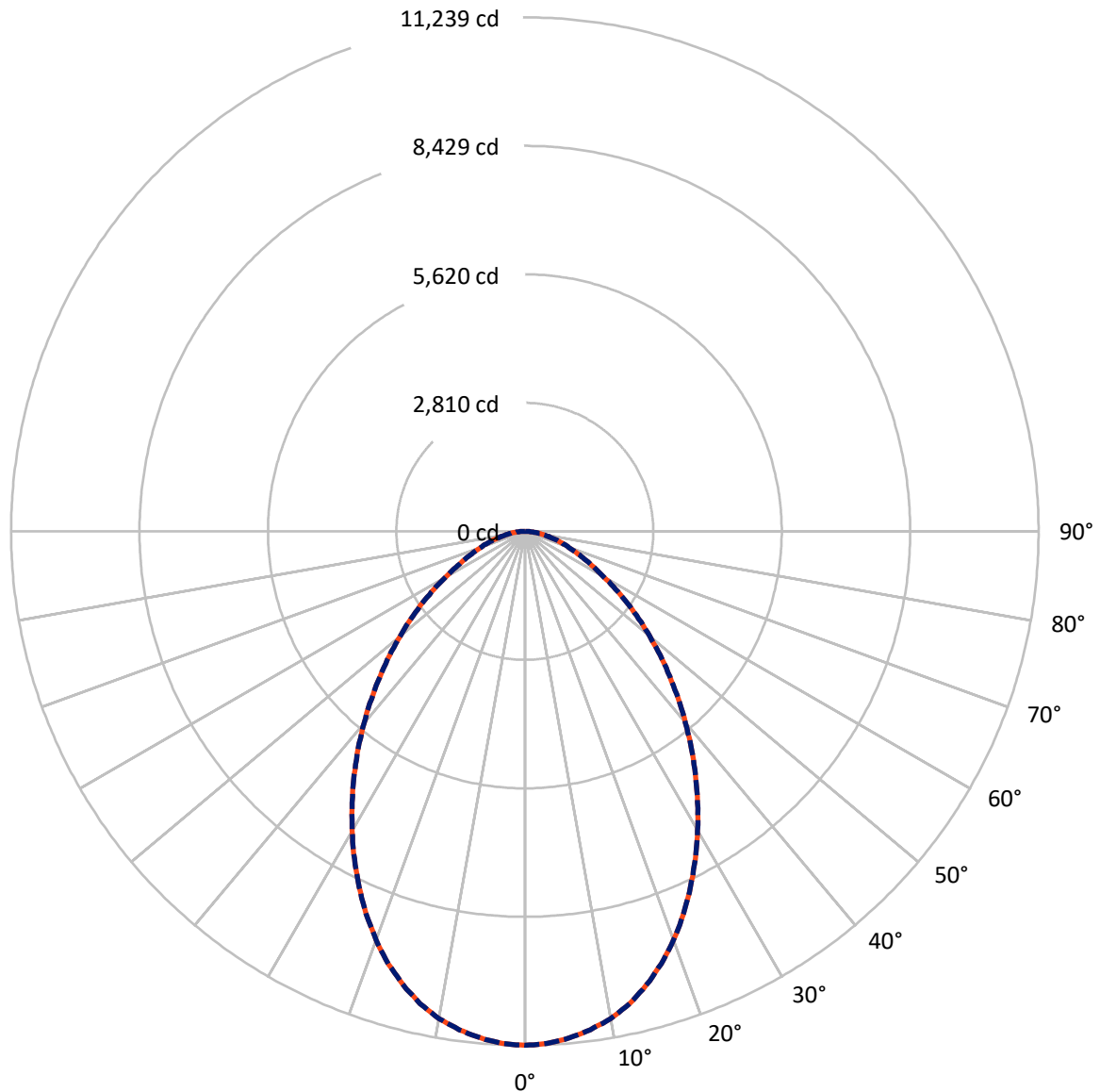
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Lumen Table



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Luminous Intensity Polar Plot

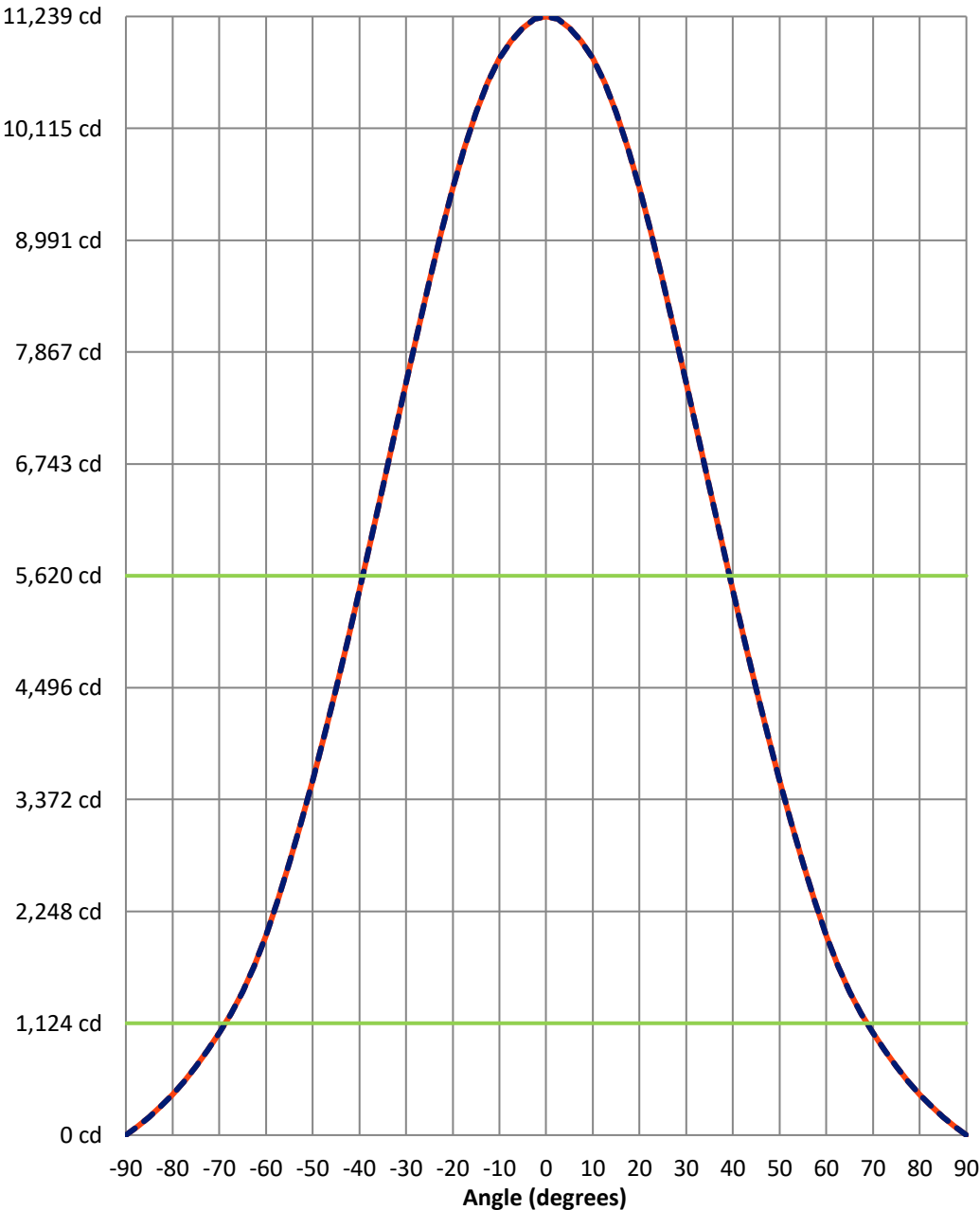


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 8755.9
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 14337.6
Efficiency: 70.9%

Spill:
Lumens: 5898.5
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°	86.5	86.5	86.5	86.5	86.5	86.5	86.5	82.3	82.3	80.2	78.1
85°	181.4	181.4	181.4	181.4	181.4	177.2	175.1	173.0	170.9	166.7	164.6
82.5°	291.2	291.2	291.2	291.2	286.9	282.7	280.6	276.4	272.2	265.8	259.5
80°	407.2	407.2	407.2	407.2	400.9	396.6	390.3	386.1	379.8	371.3	362.9
77.5°	540.1	540.1	540.1	533.8	529.6	523.2	516.9	508.5	500.0	489.5	476.8
75°	689.9	689.9	689.9	681.5	675.1	668.8	658.3	647.7	635.1	620.3	603.4
72.5°	852.4	852.4	852.4	841.8	835.5	824.9	812.3	797.5	782.7	763.8	742.7
70°	1027.5	1027.5	1027.5	1014.8	1004.3	993.7	976.8	960.0	938.9	917.8	892.5
67.5°	1217.4	1217.4	1217.4	1202.6	1189.9	1175.2	1156.2	1135.1	1109.8	1080.2	1050.7
65°	1438.9	1438.9	1430.5	1417.8	1403.0	1381.9	1358.7	1329.2	1297.5	1259.6	1219.5
62.5°	1700.5	1700.5	1687.9	1673.1	1654.1	1626.7	1595.0	1557.0	1512.7	1464.2	1415.7
60°	2004.3	2004.3	1989.6	1970.6	1943.1	1909.4	1867.2	1818.7	1763.8	1702.6	1643.5
57.5°	2354.6	2354.6	2335.6	2310.2	2276.5	2234.3	2181.5	2120.4	2050.7	1974.8	1900.9
55°	2734.3	2734.3	2711.1	2681.6	2641.5	2590.9	2527.6	2455.8	2371.4	2284.9	2190.0
52.5°	3137.3	3137.3	3109.9	3076.1	3029.7	2970.6	2898.9	2814.5	2717.4	2616.2	2504.4
50°	3561.4	3561.4	3529.7	3491.7	3439.0	3369.4	3287.1	3190.0	3082.4	2964.3	2835.6
47.5°	4015.0	4015.0	3979.1	3934.8	3871.5	3791.3	3694.3	3582.5	3460.1	3327.2	3181.6
45°	4481.2	4481.2	4441.2	4390.5	4320.9	4230.2	4122.6	4015.0	3858.9	3704.8	3536.0
42.5°	4966.5	4966.5	4920.1	4863.1	4782.9	4683.8	4561.4	4422.2	4268.2	4095.2	3911.6
40°	5470.7	5470.7	5418.0	5352.6	5264.0	5150.1	5012.9	4856.8	4683.8	4491.8	4289.3
37.5°	5985.5	5985.5	5926.5	5854.7	5755.6	5629.0	5475.0	5302.0	5107.9	4894.8	4671.1
35°	6504.6	6504.6	6439.2	6361.1	6251.4	6112.1	5945.5	5753.5	5538.3	5306.2	5055.1
32.5°	7034.1	7034.1	6962.4	6873.8	6749.3	6595.3	6411.7	6202.9	5985.5	5715.5	5441.2
30°	7557.4	7557.4	7479.3	7382.2	7249.3	7080.5	6880.1	6650.1	6394.8	6118.5	5823.1
27.5°	8072.2	8051.1	7985.6	7882.3	7736.7	7557.4	7340.0	7091.1	6814.7	6510.9	6194.4
25°	8578.5	8555.3	8483.6	8369.6	8213.5	8017.3	7783.1	7517.3	7219.8	6899.1	6553.1
22.5°	9063.8	9038.4	8962.5	8840.1	8673.4	8460.4	8209.3	7924.5	7608.0	7264.1	6899.1
20°	9513.2	9485.7	9407.7	9279.0	9106.0	8880.2	8614.4	8308.5	7970.9	7608.0	7219.8
17.5°	9918.2	9890.8	9808.5	9675.6	9513.2	9262.1	8987.8	8665.0	8308.5	7924.5	7517.3
15°	10274.8	10245.3	10160.9	10027.9	9842.3	9606.0	9316.9	8987.8	8614.4	8209.3	7783.1
12.5°	10578.6	10549.1	10462.6	10329.7	10137.7	9901.4	9606.0	9262.1	8880.2	8460.4	8017.3
10°	10819.1	10789.6	10707.3	10580.7	10382.4	10137.7	9842.3	9513.2	9106.0	8673.4	8213.5
7.5°	10992.1	10964.7	10888.8	10762.2	10580.7	10329.7	10027.9	9675.6	9279.0	8840.1	8369.6
5°	11122.9	11091.3	11015.3	10888.8	10707.3	10462.6	10160.9	9808.5	9407.7	8962.5	8483.6
2.5°	11213.7	11175.7	11091.3	10964.7	10789.6	10549.1	10245.3	9890.8	9485.7	9038.4	8555.3
0°	11239.0	11213.7	11122.9	10992.1	10819.1	10578.6	10274.8	9918.2	9513.2	9063.8	8578.5

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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°	76.0	76.0	73.8	71.7	69.6	65.4	63.3	61.2	59.1	54.9	52.7
85°	160.3	156.1	151.9	147.7	141.4	137.1	130.8	126.6	120.3	113.9	107.6
82.5°	253.2	246.8	238.4	232.1	223.6	213.1	204.7	194.1	183.6	175.1	164.6
80°	354.4	343.9	333.4	322.8	310.1	297.5	284.8	272.2	257.4	242.6	227.9
77.5°	464.2	449.4	434.6	417.7	403.0	386.1	369.2	352.3	333.4	314.4	295.4
75°	586.5	567.5	546.4	525.3	506.4	483.1	459.9	436.7	411.4	388.2	362.9
72.5°	719.4	696.2	670.9	645.6	618.2	588.6	559.1	527.5	497.9	468.4	436.7
70°	862.9	835.5	803.8	772.2	738.4	702.6	666.7	628.7	590.7	552.8	514.8
67.5°	1016.9	983.2	945.2	907.2	865.0	822.8	780.6	736.3	689.9	643.5	599.2
65°	1181.5	1139.3	1095.0	1046.5	997.9	949.4	898.8	846.0	793.3	738.4	689.9
62.5°	1365.1	1312.3	1255.3	1196.3	1141.4	1082.3	1027.5	962.1	898.8	837.6	776.4
60°	1578.1	1508.5	1438.9	1365.1	1295.4	1219.5	1152.0	1080.2	1008.5	938.9	867.1
57.5°	1816.6	1727.9	1643.5	1554.9	1462.1	1377.7	1291.2	1204.7	1124.5	1042.2	964.2
55°	2086.6	1979.0	1873.5	1763.8	1656.2	1550.7	1441.0	1344.0	1244.8	1152.0	1061.2
52.5°	2382.0	2259.6	2128.8	2004.3	1867.2	1736.4	1614.0	1491.6	1375.6	1263.8	1160.4
50°	2698.5	2555.0	2405.2	2253.3	2097.2	1943.1	1795.5	1652.0	1517.0	1386.1	1263.8
47.5°	3027.6	2865.1	2694.2	2521.2	2354.6	2166.8	1989.6	1827.1	1664.6	1517.0	1375.6
45°	3365.2	3181.6	2993.8	2797.6	2601.4	2398.9	2202.6	2004.3	1827.1	1652.0	1491.6
42.5°	3713.3	3506.5	3297.6	3080.3	2863.0	2641.5	2420.0	2202.6	1989.6	1795.5	1614.0
40°	4071.9	3844.1	3605.7	3369.4	3137.3	2884.1	2641.5	2398.9	2166.8	1943.1	1736.4
37.5°	4430.6	4181.7	3924.3	3658.4	3392.6	3137.3	2863.0	2601.4	2354.6	2097.2	1867.2
35°	4791.4	4517.1	4238.6	3949.6	3658.4	3369.4	3080.3	2797.6	2521.2	2253.3	2004.3
32.5°	5154.3	4854.7	4546.7	4238.6	3924.3	3605.7	3297.6	2993.8	2694.2	2405.2	2128.8
30°	5510.8	5185.9	4854.7	4517.1	4181.7	3844.1	3506.5	3181.6	2865.1	2555.0	2259.6
27.5°	5859.0	5510.8	5154.3	4791.4	4430.6	4071.9	3713.3	3365.2	3027.6	2698.5	2382.0
25°	6194.4	5823.1	5441.2	5055.1	4671.1	4289.3	3911.6	3536.0	3181.6	2835.6	2504.4
22.5°	6510.9	6118.5	5715.5	5306.2	4894.8	4491.8	4095.2	3704.8	3327.2	2964.3	2616.2
20°	6814.7	6394.8	5985.5	5538.3	5107.9	4683.8	4268.2	3858.9	3460.1	3082.4	2717.4
17.5°	7091.1	6650.1	6202.9	5753.5	5302.0	4856.8	4422.2	4015.0	3582.5	3190.0	2814.5
15°	7340.0	6880.1	6411.7	5945.5	5475.0	5012.9	4561.4	4122.6	3694.3	3287.1	2898.9
12.5°	7557.4	7080.5	6595.3	6112.1	5629.0	5150.1	4683.8	4230.2	3791.3	3369.4	2970.6
10°	7736.7	7249.3	6749.3	6251.4	5755.6	5264.0	4782.9	4320.9	3871.5	3439.0	3029.7
7.5°	7882.3	7382.2	6873.8	6361.1	5854.7	5352.6	4863.1	4390.5	3934.8	3491.7	3076.1
5°	7985.6	7479.3	6962.4	6439.2	5926.5	5418.0	4920.1	4441.2	3979.1	3529.7	3109.9
2.5°	8051.1	7557.4	7034.1	6504.6	5985.5	5470.7	4966.5	4481.2	4015.0	3561.4	3137.3
0°	8072.2	7557.4	7034.1	6504.6	5985.5	5470.7	4966.5	4481.2	4015.0	3561.4	3137.3

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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°	50.6	46.4	42.2	40.1	35.9	33.8	29.5	25.3	23.2	19.0	14.8
85°	101.3	92.8	86.5	80.2	73.8	65.4	59.1	52.7	44.3	38.0	29.5
82.5°	154.0	143.5	132.9	122.4	111.8	101.3	88.6	78.1	67.5	57.0	44.3
80°	213.1	196.2	181.4	166.7	151.9	137.1	120.3	105.5	88.6	73.8	59.1
77.5°	274.3	255.3	234.2	213.1	192.0	173.0	151.9	132.9	113.9	92.8	73.8
75°	339.7	314.4	291.2	263.7	238.4	211.0	185.7	160.3	137.1	113.9	88.6
72.5°	407.2	375.5	343.9	314.4	282.7	251.1	221.5	189.9	160.3	132.9	105.5
70°	476.8	438.8	400.9	365.0	329.1	291.2	257.4	221.5	185.7	151.9	120.3
67.5°	550.7	506.4	462.0	415.6	375.5	333.4	291.2	251.1	211.0	173.0	137.1
65°	630.8	578.1	523.2	474.7	422.0	375.5	329.1	282.7	238.4	192.0	151.9
62.5°	713.1	651.9	590.7	529.6	474.7	415.6	365.0	314.4	263.7	213.1	166.7
60°	797.5	727.9	658.3	590.7	523.2	462.0	400.9	343.9	291.2	234.2	181.4
57.5°	884.0	805.9	727.9	651.9	578.1	506.4	438.8	375.5	314.4	255.3	196.2
55°	972.6	884.0	797.5	713.1	630.8	550.7	476.8	407.2	339.7	274.3	213.1
52.5°	1061.2	964.2	867.1	776.4	689.9	599.2	514.8	436.7	362.9	295.4	227.9
50°	1152.0	1042.2	938.9	837.6	738.4	643.5	552.8	468.4	388.2	314.4	242.6
47.5°	1244.8	1124.5	1008.5	898.8	793.3	689.9	590.7	497.9	411.4	333.4	257.4
45°	1344.0	1204.7	1080.2	962.1	846.0	736.3	628.7	527.5	436.7	352.3	272.2
42.5°	1441.0	1291.2	1152.0	1027.5	898.8	780.6	666.7	559.1	459.9	369.2	284.8
40°	1550.7	1377.7	1219.5	1082.3	949.4	822.8	702.6	588.6	483.1	386.1	297.5
37.5°	1656.2	1462.1	1295.4	1141.4	997.9	865.0	738.4	618.2	506.4	403.0	310.1
35°	1763.8	1554.9	1365.1	1196.3	1046.5	907.2	772.2	645.6	525.3	417.7	322.8
32.5°	1873.5	1643.5	1438.9	1255.3	1095.0	945.2	803.8	670.9	546.4	434.6	333.4
30°	1979.0	1727.9	1508.5	1312.3	1139.3	983.2	835.5	696.2	567.5	449.4	343.9
27.5°	2086.6	1816.6	1578.1	1365.1	1181.5	1016.9	862.9	719.4	586.5	464.2	354.4
25°	2190.0	1900.9	1643.5	1415.7	1219.5	1050.7	892.5	742.7	603.4	476.8	362.9
22.5°	2284.9	1974.8	1702.6	1464.2	1259.6	1080.2	917.8	763.8	620.3	489.5	371.3
20°	2371.4	2050.7	1763.8	1512.7	1297.5	1109.8	938.9	782.7	635.1	500.0	379.8
17.5°	2455.8	2120.4	1818.7	1557.0	1329.2	1135.1	960.0	797.5	647.7	508.5	386.1
15°	2527.6	2181.5	1867.2	1595.0	1358.7	1156.2	976.8	812.3	658.3	516.9	390.3
12.5°	2590.9	2234.3	1909.4	1626.7	1381.9	1175.2	993.7	824.9	668.8	523.2	396.6
10°	2641.5	2276.5	1943.1	1654.1	1403.0	1189.9	1004.3	835.5	675.1	529.6	400.9
7.5°	2681.6	2310.2	1970.6	1673.1	1417.8	1202.6	1014.8	841.8	681.5	533.8	407.2
5°	2711.1	2335.6	1989.6	1687.9	1430.5	1217.4	1027.5	852.4	689.9	540.1	407.2
2.5°	2734.3	2354.6	2004.3	1700.5	1438.9	1217.4	1027.5	852.4	689.9	540.1	407.2
0°	2734.3	2354.6	2004.3	1700.5	1438.9	1217.4	1027.5	852.4	689.9	540.1	407.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	10.5	8.4	4.2	0.0
85°	23.2	14.8	8.4	0.0
82.5°	33.8	23.2	10.5	0.0
80°	44.3	29.5	14.8	0.0
77.5°	57.0	38.0	19.0	0.0
75°	67.5	44.3	23.2	0.0
72.5°	78.1	52.7	25.3	0.0
70°	88.6	59.1	29.5	0.0
67.5°	101.3	65.4	33.8	0.0
65°	111.8	73.8	35.9	0.0
62.5°	122.4	80.2	40.1	0.0
60°	132.9	86.5	42.2	0.0
57.5°	143.5	92.8	46.4	0.0
55°	154.0	101.3	50.6	0.0
52.5°	164.6	107.6	52.7	0.0
50°	175.1	113.9	54.9	0.0
47.5°	183.6	120.3	59.1	0.0
45°	194.1	126.6	61.2	0.0
42.5°	204.7	130.8	63.3	0.0
40°	213.1	137.1	65.4	0.0
37.5°	223.6	141.4	69.6	0.0
35°	232.1	147.7	71.7	0.0
32.5°	238.4	151.9	73.8	0.0
30°	246.8	156.1	76.0	0.0
27.5°	253.2	160.3	76.0	0.0
25°	259.5	164.6	78.1	0.0
22.5°	265.8	166.7	80.2	0.0
20°	272.2	170.9	82.3	0.0
17.5°	276.4	173.0	82.3	0.0
15°	280.6	175.1	86.5	0.0
12.5°	282.7	177.2	86.5	0.0
10°	286.9	181.4	86.5	0.0
7.5°	291.2	181.4	86.5	0.0
5°	291.2	181.4	86.5	0.0
2.5°	291.2	181.4	86.5	0.0
0°	291.2	181.4	86.5	0.0

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