

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: P623943

Luminaire Tested: **IFLD-M-SA4B-740-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623943
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4B-740-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (64) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

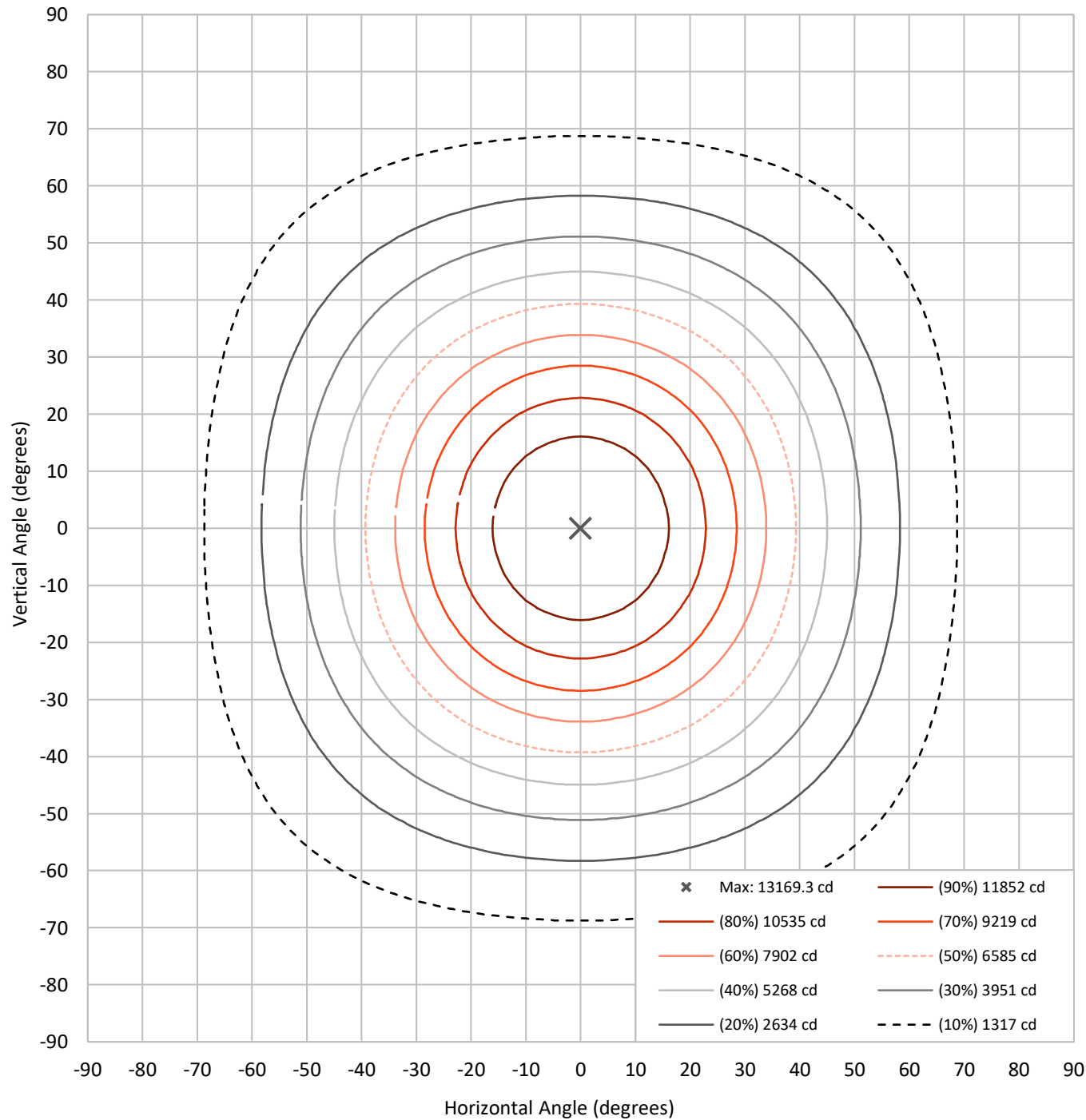
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	23711.7 lumens	Max Intensity:	13169.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	142.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	10259.8 lumens	Field Lumens:	16800.1 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	166.1		
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		





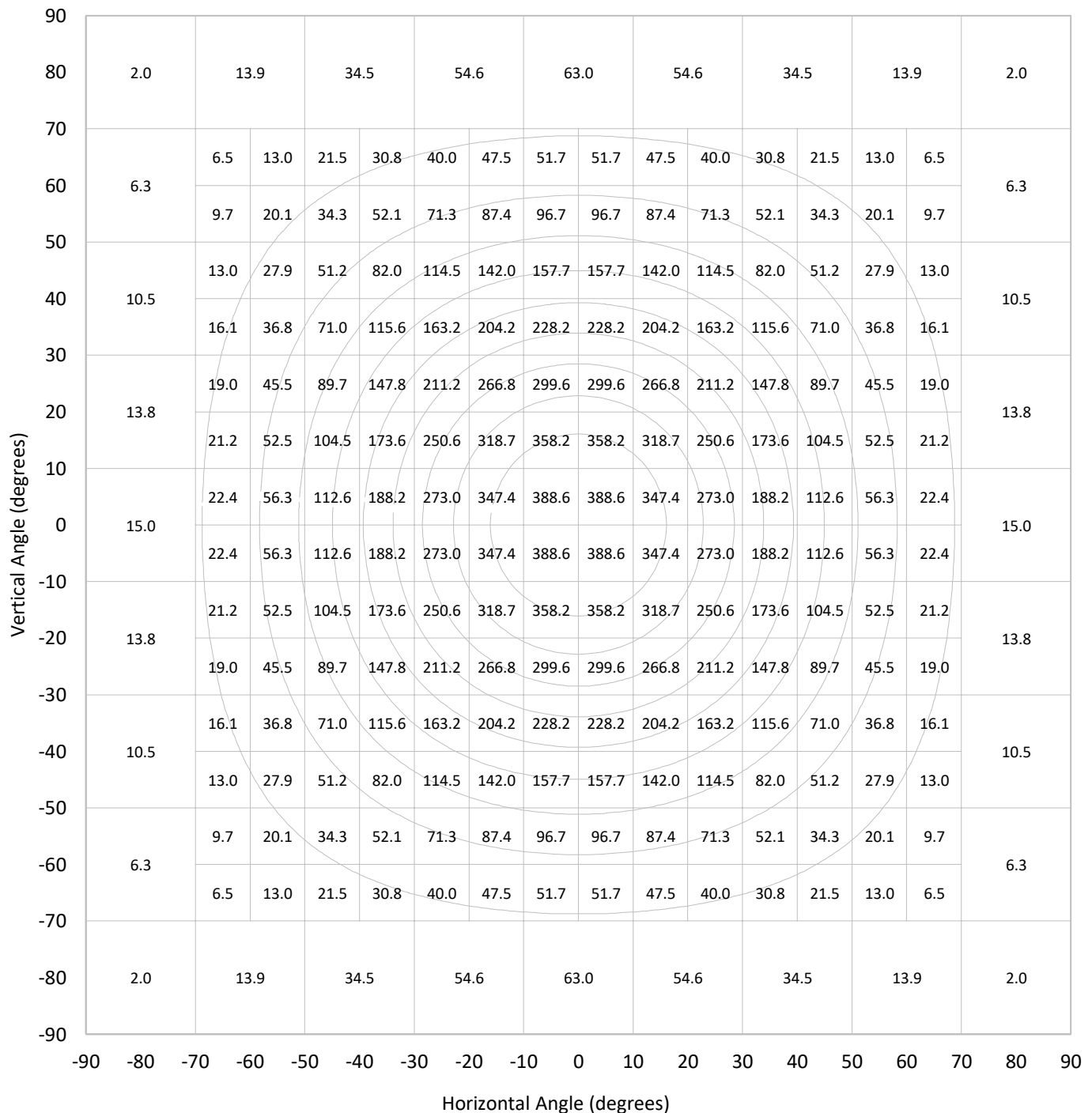
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Iso-Candela Plot



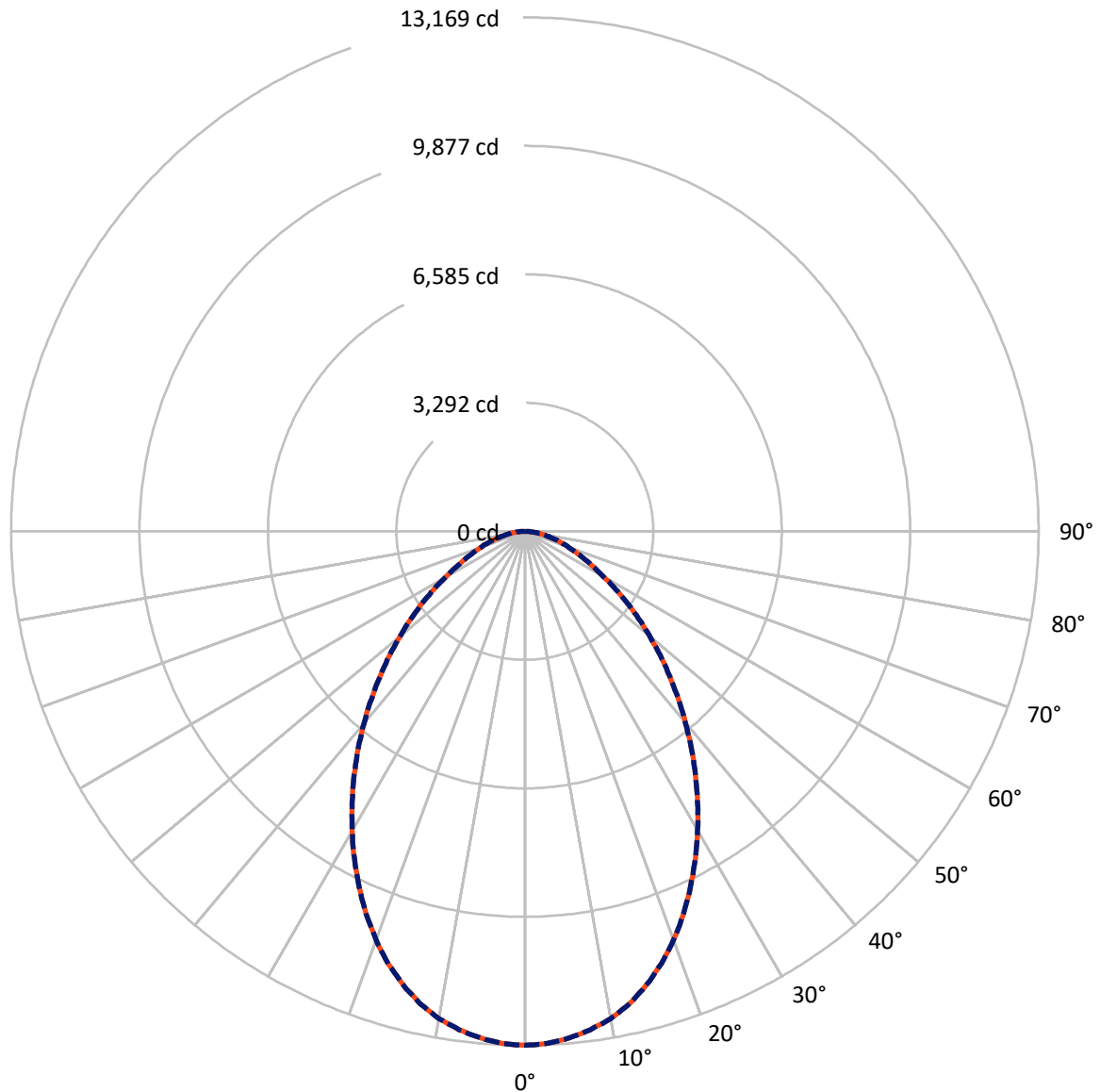
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Lumen Table



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Luminous Intensity Polar Plot

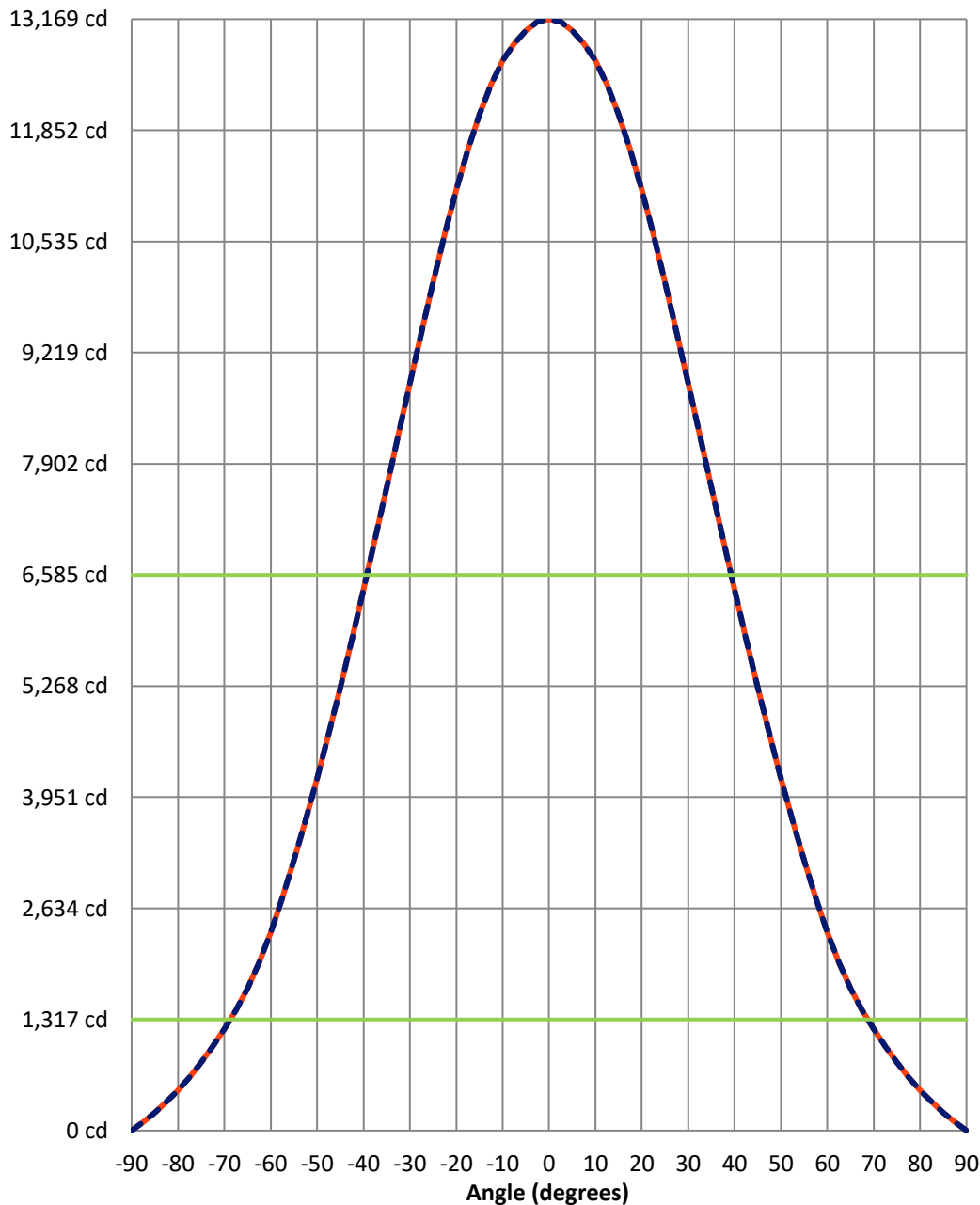


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 10259.8
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 16800.1
Efficiency: 70.9%

Spill:

Lumens: 6911.6
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°	101.4	101.4	101.4	101.4	101.4	101.4	101.4	96.4	96.4	93.9	91.5
85°	212.6	212.6	212.6	212.6	212.6	207.7	205.2	202.7	200.2	195.3	192.8
82.5°	341.2	341.2	341.2	341.2	336.2	331.3	328.8	323.9	318.9	311.5	304.1
80°	477.1	477.1	477.1	477.1	469.7	464.8	457.4	452.4	445.0	435.1	425.2
77.5°	632.9	632.9	632.9	625.5	620.5	613.1	605.7	595.8	585.9	573.5	558.7
75°	808.4	808.4	808.4	798.5	791.1	783.7	771.3	759.0	744.1	726.8	707.0
72.5°	998.8	998.8	998.8	986.4	979.0	966.6	951.8	934.5	917.2	894.9	870.2
70°	1204.0	1204.0	1204.0	1189.1	1176.8	1164.4	1144.6	1124.8	1100.1	1075.4	1045.7
67.5°	1426.5	1426.5	1426.5	1409.1	1394.3	1377.0	1354.8	1330.0	1300.4	1265.8	1231.1
65°	1686.0	1686.0	1676.1	1661.3	1644.0	1619.3	1592.1	1557.5	1520.4	1475.9	1428.9
62.5°	1992.6	1992.6	1977.7	1960.4	1938.2	1906.1	1869.0	1824.5	1772.6	1715.7	1658.8
60°	2348.6	2348.6	2331.3	2309.0	2276.9	2237.3	2187.9	2131.0	2066.7	1995.1	1925.8
57.5°	2759.0	2759.0	2736.7	2707.0	2667.5	2618.0	2556.2	2484.5	2403.0	2314.0	2227.4
55°	3204.0	3204.0	3176.8	3142.1	3095.2	3035.8	2961.7	2877.6	2778.7	2677.4	2566.1
52.5°	3676.1	3676.1	3644.0	3604.4	3550.1	3480.8	3396.8	3297.9	3184.2	3065.5	2934.5
50°	4173.1	4173.1	4136.0	4091.5	4029.7	3948.1	3851.7	3737.9	3611.9	3473.4	3322.6
47.5°	4704.6	4704.6	4662.5	4610.6	4536.5	4442.5	4328.8	4197.8	4054.4	3898.6	3728.1
45°	5250.9	5250.9	5204.0	5144.6	5063.0	4956.7	4830.7	4704.6	4521.6	4341.2	4143.4
42.5°	5819.5	5819.5	5765.1	5698.4	5604.4	5488.3	5344.9	5181.7	5001.2	4798.5	4583.4
40°	6410.4	6410.4	6348.6	6271.9	6168.1	6034.6	5873.9	5691.0	5488.3	5263.3	5026.0
37.5°	7013.6	7013.6	6944.4	6860.3	6744.1	6595.8	6415.3	6212.6	5985.2	5735.5	5473.4
35°	7621.8	7621.8	7545.1	7453.6	7325.1	7161.9	6966.6	6741.7	6489.5	6217.5	5923.4
32.5°	8242.3	8242.3	8158.2	8054.4	7908.5	7728.1	7513.0	7268.2	7013.6	6697.2	6375.8
30°	8855.4	8855.4	8763.9	8650.2	8494.4	8296.7	8061.8	7792.3	7493.2	7169.3	6823.2
27.5°	9458.6	9433.9	9357.2	9236.1	9065.5	8855.4	8600.7	8309.0	7985.2	7629.2	7258.3
25°	10051.9	10024.7	9940.7	9807.2	9624.2	9394.3	9119.9	8808.4	8459.8	8084.0	7678.6
22.5°	10620.5	10590.8	10501.8	10358.5	10163.2	9913.5	9619.3	9285.5	8914.7	8511.7	8084.0
20°	11147.1	11114.9	11023.5	10872.7	10670.0	10405.4	10093.9	9735.5	9339.9	8914.7	8459.8
17.5°	11621.7	11589.6	11493.2	11337.4	11147.1	10852.9	10531.5	10153.3	9735.5	9285.5	8808.4
15°	12039.5	12004.9	11906.0	11750.3	11532.7	11255.9	10917.2	10531.5	10093.9	9619.3	9119.9
12.5°	12395.5	12360.9	12259.6	12103.8	11878.9	11602.0	11255.9	10852.9	10405.4	9913.5	9394.3
10°	12677.4	12642.8	12546.3	12398.0	12165.6	11878.9	11532.7	11147.1	10670.0	10163.2	9624.2
7.5°	12880.1	12848.0	12759.0	12610.6	12398.0	12103.8	11750.3	11337.4	10872.7	10358.5	9807.2
5°	13033.4	12996.3	12907.3	12759.0	12546.3	12259.6	11906.0	11493.2	11023.5	10501.8	9940.7
2.5°	13139.7	13095.2	12996.3	12848.0	12642.8	12360.9	12004.9	11589.6	11114.9	10590.8	10024.7
0°	13169.3	13139.7	13033.4	12880.1	12677.4	12395.5	12039.5	11621.7	11147.1	10620.5	10051.9

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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°	89.0	89.0	86.5	84.1	81.6	76.6	74.2	71.7	69.2	64.3	61.8
85°	187.9	182.9	178.0	173.1	165.6	160.7	153.3	148.3	140.9	133.5	126.1
82.5°	296.7	289.2	279.4	271.9	262.1	249.7	239.8	227.4	215.1	205.2	192.8
80°	415.3	403.0	390.6	378.2	363.4	348.6	333.7	318.9	301.6	284.3	267.0
77.5°	543.9	526.6	509.3	489.5	472.2	452.4	432.6	412.9	390.6	368.4	346.1
75°	687.3	665.0	640.3	615.6	593.3	566.1	538.9	511.7	482.1	454.9	425.2
72.5°	843.0	815.8	786.2	756.5	724.4	689.7	655.1	618.0	583.4	548.8	511.7
70°	1011.1	979.0	941.9	904.8	865.3	823.2	781.2	736.7	692.2	647.7	603.2
67.5°	1191.6	1152.0	1107.5	1063.0	1013.6	964.2	914.7	862.8	808.4	754.0	702.1
65°	1384.4	1335.0	1283.1	1226.2	1169.3	1112.5	1053.2	991.3	929.5	865.3	808.4
62.5°	1599.5	1537.7	1471.0	1401.7	1337.5	1268.2	1204.0	1127.3	1053.2	981.5	909.8
60°	1849.2	1767.6	1686.0	1599.5	1517.9	1428.9	1349.8	1265.8	1181.7	1100.1	1016.1
57.5°	2128.6	2024.7	1925.8	1822.0	1713.2	1614.3	1513.0	1411.6	1317.7	1221.3	1129.8
55°	2445.0	2318.9	2195.3	2066.7	1940.7	1817.1	1688.5	1574.8	1458.6	1349.8	1243.5
52.5°	2791.1	2647.7	2494.4	2348.6	2187.9	2034.6	1891.2	1747.8	1611.9	1480.8	1359.7
50°	3161.9	2993.8	2818.3	2640.3	2457.4	2276.9	2103.8	1935.7	1777.5	1624.2	1480.8
47.5°	3547.6	3357.2	3157.0	2954.3	2759.0	2538.9	2331.3	2140.9	1950.6	1777.5	1611.9
45°	3943.1	3728.1	3508.0	3278.1	3048.2	2810.9	2581.0	2348.6	2140.9	1935.7	1747.8
42.5°	4351.0	4108.8	3864.0	3609.4	3354.8	3095.2	2835.6	2581.0	2331.3	2103.8	1891.2
40°	4771.3	4504.3	4225.0	3948.1	3676.1	3379.5	3095.2	2810.9	2538.9	2276.9	2034.6
37.5°	5191.6	4899.9	4598.3	4286.8	3975.3	3676.1	3354.8	3048.2	2759.0	2457.4	2187.9
35°	5614.3	5293.0	4966.6	4627.9	4286.8	3948.1	3609.4	3278.1	2954.3	2640.3	2348.6
32.5°	6039.6	5688.5	5327.6	4966.6	4598.3	4225.0	3864.0	3508.0	3157.0	2818.3	2494.4
30°	6457.4	6076.6	5688.5	5293.0	4899.9	4504.3	4108.8	3728.1	3357.2	2993.8	2647.7
27.5°	6865.3	6457.4	6039.6	5614.3	5191.6	4771.3	4351.0	3943.1	3547.6	3161.9	2791.1
25°	7258.3	6823.2	6375.8	5923.4	5473.4	5026.0	4583.4	4143.4	3728.1	3322.6	2934.5
22.5°	7629.2	7169.3	6697.2	6217.5	5735.5	5263.3	4798.5	4341.2	3898.6	3473.4	3065.5
20°	7985.2	7493.2	7013.6	6489.5	5985.2	5488.3	5001.2	4521.6	4054.4	3611.9	3184.2
17.5°	8309.0	7792.3	7268.2	6741.7	6212.6	5691.0	5181.7	4704.6	4197.8	3737.9	3297.9
15°	8600.7	8061.8	7513.0	6966.6	6415.3	5873.9	5344.9	4830.7	4328.8	3851.7	3396.8
12.5°	8855.4	8296.7	7728.1	7161.9	6595.8	6034.6	5488.3	4956.7	4442.5	3948.1	3480.8
10°	9065.5	8494.4	7908.5	7325.1	6744.1	6168.1	5604.4	5063.0	4536.5	4029.7	3550.1
7.5°	9236.1	8650.2	8054.4	7453.6	6860.3	6271.9	5698.4	5144.6	4610.6	4091.5	3604.4
5°	9357.2	8763.9	8158.2	7545.1	6944.4	6348.6	5765.1	5204.0	4662.5	4136.0	3644.0
2.5°	9433.9	8855.4	8242.3	7621.8	7013.6	6410.4	5819.5	5250.9	4704.6	4173.1	3676.1
0°	9458.6	8855.4	8242.3	7621.8	7013.6	6410.4	5819.5	5250.9	4704.6	4173.1	3676.1

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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°	59.3	54.4	49.4	47.0	42.0	39.6	34.6	29.7	27.2	22.2	17.3
85°	118.7	108.8	101.4	93.9	86.5	76.6	69.2	61.8	51.9	44.5	34.6
82.5°	180.5	168.1	155.7	143.4	131.0	118.7	103.8	91.5	79.1	66.7	51.9
80°	249.7	229.9	212.6	195.3	178.0	160.7	140.9	123.6	103.8	86.5	69.2
77.5°	321.4	299.1	274.4	249.7	225.0	202.7	178.0	155.7	133.5	108.8	86.5
75°	398.0	368.4	341.2	309.0	279.4	247.2	217.6	187.9	160.7	133.5	103.8
72.5°	477.1	440.0	403.0	368.4	331.3	294.2	259.6	222.5	187.9	155.7	123.6
70°	558.7	514.2	469.7	427.7	385.7	341.2	301.6	259.6	217.6	178.0	140.9
67.5°	645.2	593.3	541.4	487.0	440.0	390.6	341.2	294.2	247.2	202.7	160.7
65°	739.2	677.4	613.1	556.2	494.4	440.0	385.7	331.3	279.4	225.0	178.0
62.5°	835.6	763.9	692.2	620.5	556.2	487.0	427.7	368.4	309.0	249.7	195.3
60°	934.5	852.9	771.3	692.2	613.1	541.4	469.7	403.0	341.2	274.4	212.6
57.5°	1035.8	944.4	852.9	763.9	677.4	593.3	514.2	440.0	368.4	299.1	229.9
55°	1139.7	1035.8	934.5	835.6	739.2	645.2	558.7	477.1	398.0	321.4	249.7
52.5°	1243.5	1129.8	1016.1	909.8	808.4	702.1	603.2	511.7	425.2	346.1	267.0
50°	1349.8	1221.3	1100.1	981.5	865.3	754.0	647.7	548.8	454.9	368.4	284.3
47.5°	1458.6	1317.7	1181.7	1053.2	929.5	808.4	692.2	583.4	482.1	390.6	301.6
45°	1574.8	1411.6	1265.8	1127.3	991.3	862.8	736.7	618.0	511.7	412.9	318.9
42.5°	1688.5	1513.0	1349.8	1204.0	1053.2	914.7	781.2	655.1	538.9	432.6	333.7
40°	1817.1	1614.3	1428.9	1268.2	1112.5	964.2	823.2	689.7	566.1	452.4	348.6
37.5°	1940.7	1713.2	1517.9	1337.5	1169.3	1013.6	865.3	724.4	593.3	472.2	363.4
35°	2066.7	1822.0	1599.5	1401.7	1226.2	1063.0	904.8	756.5	615.6	489.5	378.2
32.5°	2195.3	1925.8	1686.0	1471.0	1283.1	1107.5	941.9	786.2	640.3	509.3	390.6
30°	2318.9	2024.7	1767.6	1537.7	1335.0	1152.0	979.0	815.8	665.0	526.6	403.0
27.5°	2445.0	2128.6	1849.2	1599.5	1384.4	1191.6	1011.1	843.0	687.3	543.9	415.3
25°	2566.1	2227.4	1925.8	1658.8	1428.9	1231.1	1045.7	870.2	707.0	558.7	425.2
22.5°	2677.4	2314.0	1995.1	1715.7	1475.9	1265.8	1075.4	894.9	726.8	573.5	435.1
20°	2778.7	2403.0	2066.7	1772.6	1520.4	1300.4	1100.1	917.2	744.1	585.9	445.0
17.5°	2877.6	2484.5	2131.0	1824.5	1557.5	1330.0	1124.8	934.5	759.0	595.8	452.4
15°	2961.7	2556.2	2187.9	1869.0	1592.1	1354.8	1144.6	951.8	771.3	605.7	457.4
12.5°	3035.8	2618.0	2237.3	1906.1	1619.3	1377.0	1164.4	966.6	783.7	613.1	464.8
10°	3095.2	2667.5	2276.9	1938.2	1644.0	1394.3	1176.8	979.0	791.1	620.5	469.7
7.5°	3142.1	2707.0	2309.0	1960.4	1661.3	1409.1	1189.1	986.4	798.5	625.5	477.1
5°	3176.8	2736.7	2331.3	1977.7	1676.1	1426.5	1204.0	998.8	808.4	632.9	477.1
2.5°	3204.0	2759.0	2348.6	1992.6	1686.0	1426.5	1204.0	998.8	808.4	632.9	477.1
0°	3204.0	2759.0	2348.6	1992.6	1686.0	1426.5	1204.0	998.8	808.4	632.9	477.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.4	9.9	4.9	0.0
85°	27.2	17.3	9.9	0.0
82.5°	39.6	27.2	12.4	0.0
80°	51.9	34.6	17.3	0.0
77.5°	66.7	44.5	22.2	0.0
75°	79.1	51.9	27.2	0.0
72.5°	91.5	61.8	29.7	0.0
70°	103.8	69.2	34.6	0.0
67.5°	118.7	76.6	39.6	0.0
65°	131.0	86.5	42.0	0.0
62.5°	143.4	93.9	47.0	0.0
60°	155.7	101.4	49.4	0.0
57.5°	168.1	108.8	54.4	0.0
55°	180.5	118.7	59.3	0.0
52.5°	192.8	126.1	61.8	0.0
50°	205.2	133.5	64.3	0.0
47.5°	215.1	140.9	69.2	0.0
45°	227.4	148.3	71.7	0.0
42.5°	239.8	153.3	74.2	0.0
40°	249.7	160.7	76.6	0.0
37.5°	262.1	165.6	81.6	0.0
35°	271.9	173.1	84.1	0.0
32.5°	279.4	178.0	86.5	0.0
30°	289.2	182.9	89.0	0.0
27.5°	296.7	187.9	89.0	0.0
25°	304.1	192.8	91.5	0.0
22.5°	311.5	195.3	93.9	0.0
20°	318.9	200.2	96.4	0.0
17.5°	323.9	202.7	96.4	0.0
15°	328.8	205.2	101.4	0.0
12.5°	331.3	207.7	101.4	0.0
10°	336.2	212.6	101.4	0.0
7.5°	341.2	212.6	101.4	0.0
5°	341.2	212.6	101.4	0.0
2.5°	341.2	212.6	101.4	0.0
0°	341.2	212.6	101.4	0.0

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