

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: P624037

Luminaire Tested: **IFLD-L-SA7D-827-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624037
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-827-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (112) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

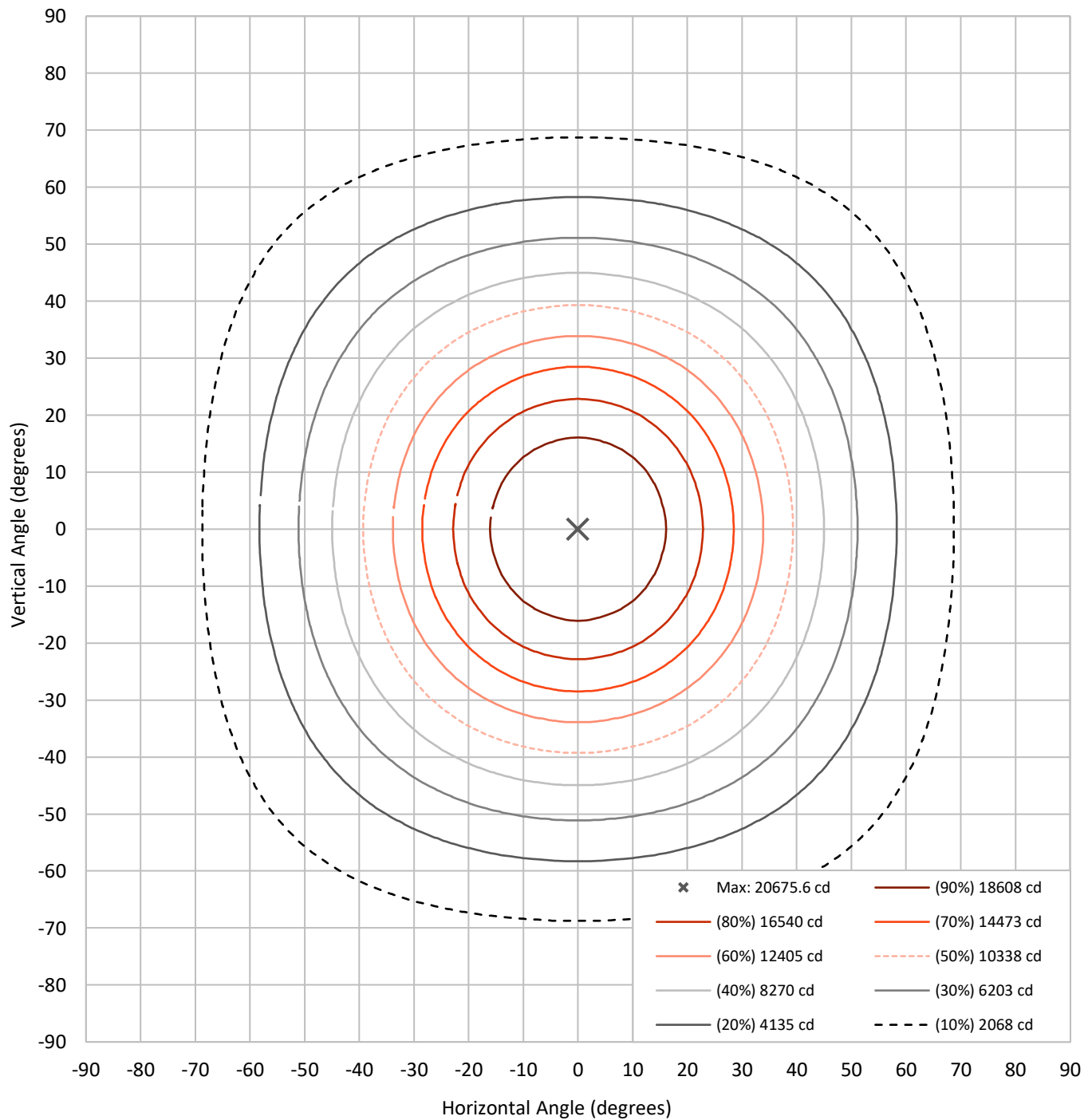
Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	37226.9 lumens	Max Intensity:	20675.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	88.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' 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:	16107.7 lumens	Field Lumens:	26375.8 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	422.6		
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		



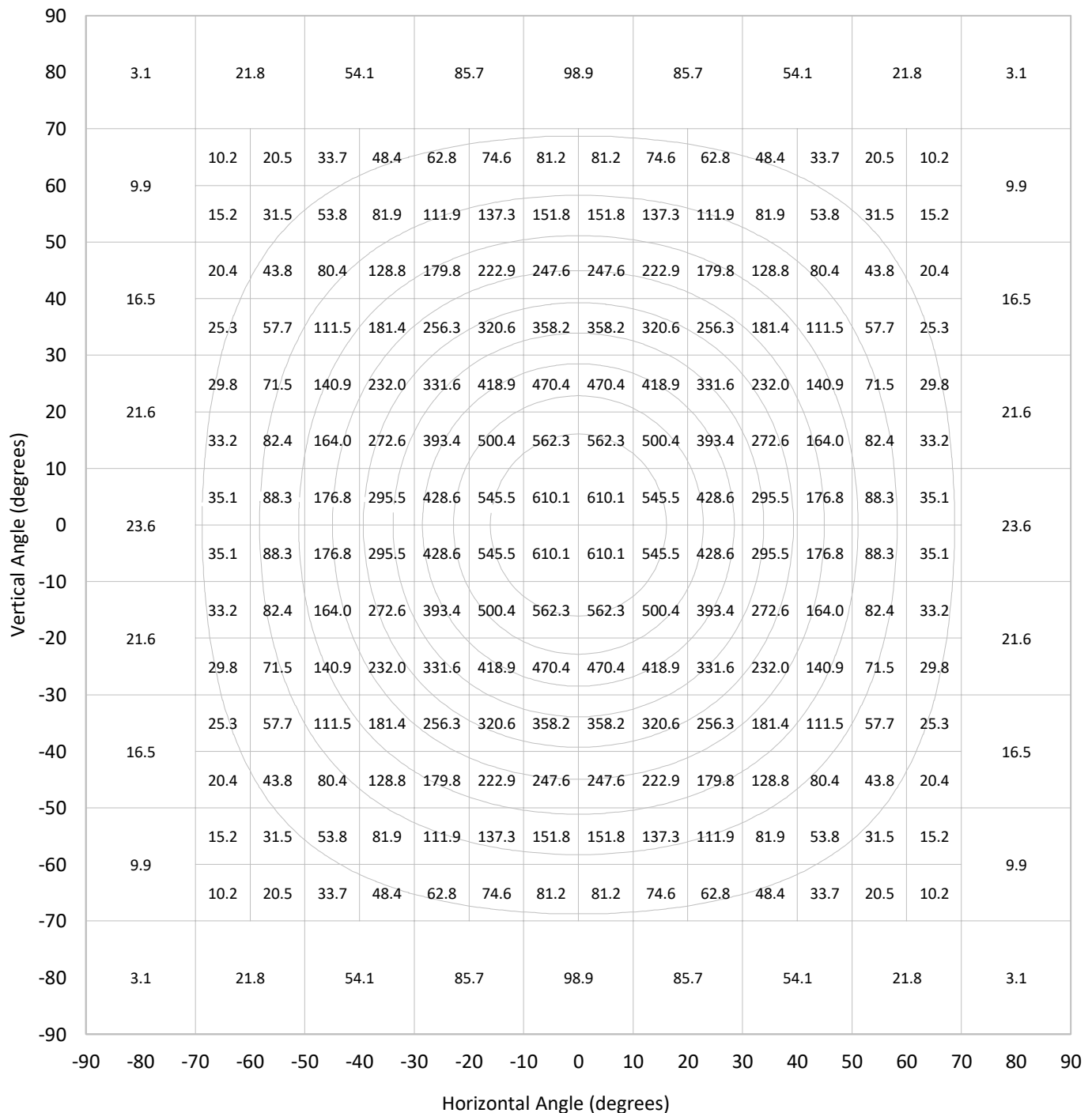
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Iso-Candela Plot



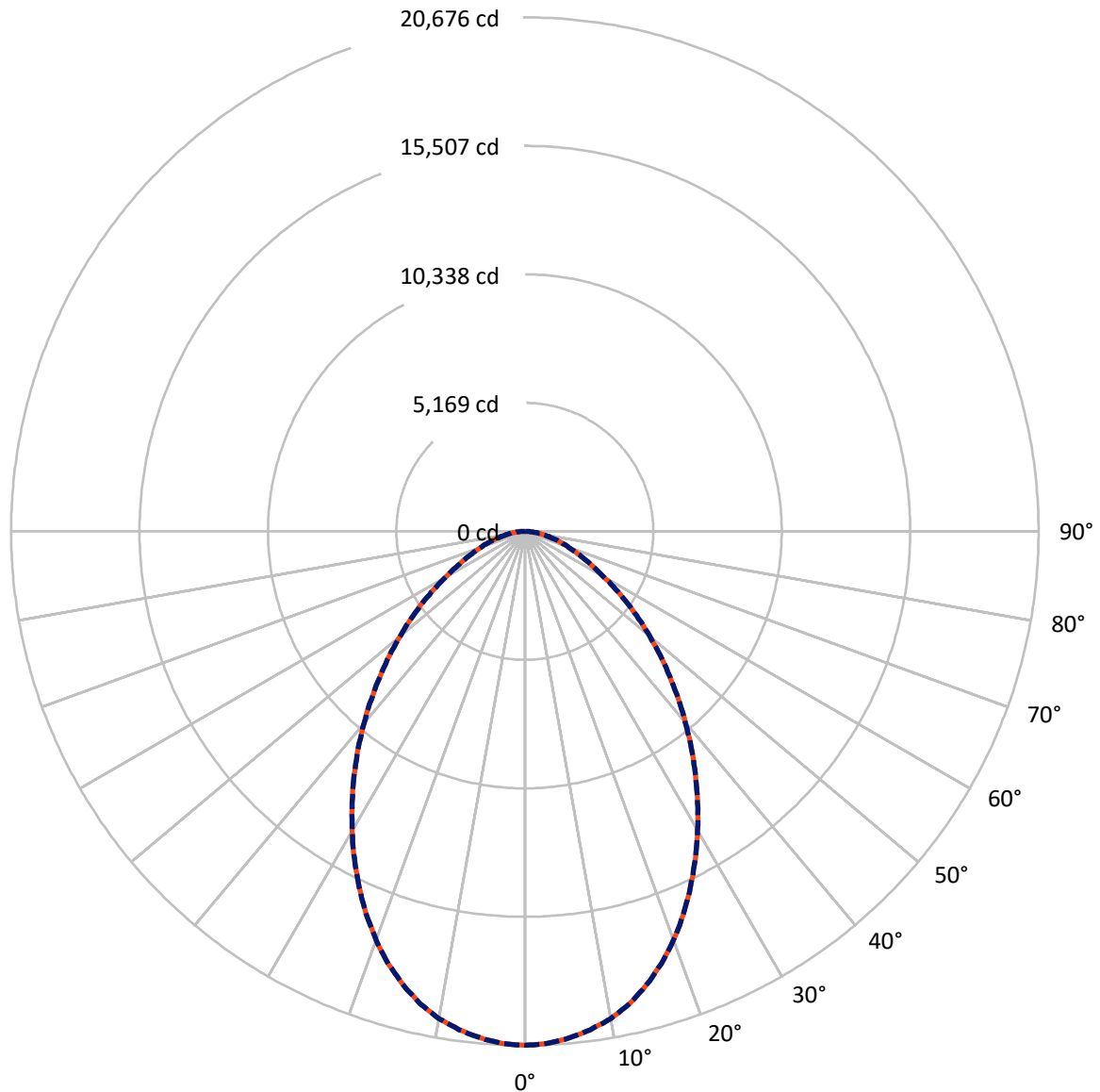
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Lumen Table



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Luminous Intensity Polar Plot

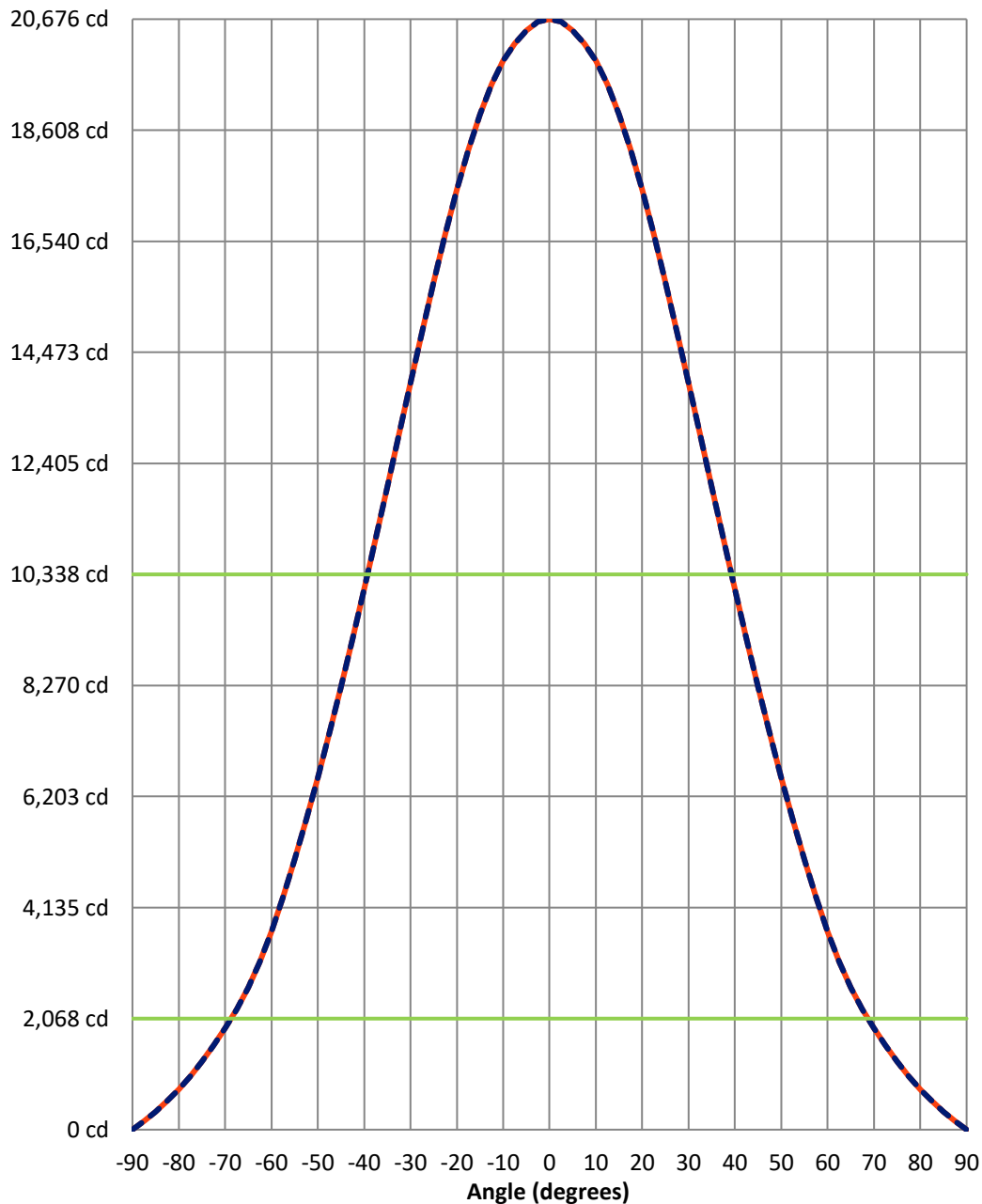


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 16107.7
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 26375.8
Efficiency: 70.9%

Spill:

Lumens: 10851.1
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°	159.1	159.1	159.1	159.1	159.1	159.1	159.1	151.4	151.4	147.5	143.6
85°	333.8	333.8	333.8	333.8	333.8	326.0	322.1	318.3	314.4	306.6	302.7
82.5°	535.6	535.6	535.6	535.6	527.9	520.1	516.2	508.4	500.7	489.0	477.4
80°	749.1	749.1	749.1	749.1	737.4	729.7	718.0	710.3	698.6	683.1	667.6
77.5°	993.6	993.6	993.6	982.0	974.2	962.6	950.9	935.4	919.9	900.5	877.2
75°	1269.2	1269.2	1269.2	1253.7	1242.0	1230.4	1211.0	1191.6	1168.3	1141.1	1110.0
72.5°	1568.0	1568.0	1568.0	1548.6	1537.0	1517.6	1494.3	1467.1	1440.0	1405.0	1366.2
70°	1890.2	1890.2	1890.2	1866.9	1847.5	1828.1	1797.0	1766.0	1727.2	1688.4	1641.8
67.5°	2239.5	2239.5	2239.5	2212.3	2189.0	2161.9	2126.9	2088.1	2041.6	1987.2	1932.9
65°	2647.0	2647.0	2631.5	2608.2	2581.1	2542.2	2499.5	2445.2	2387.0	2317.1	2243.4
62.5°	3128.3	3128.3	3105.0	3077.9	3042.9	2992.5	2934.3	2864.4	2782.9	2693.6	2604.3
60°	3687.2	3687.2	3660.1	3625.1	3574.7	3512.6	3434.9	3345.7	3244.8	3132.2	3023.5
57.5°	4331.5	4331.5	4296.6	4250.0	4187.9	4110.3	4013.2	3900.7	3772.6	3632.9	3497.0
55°	5030.1	5030.1	4987.5	4933.1	4859.4	4766.2	4649.8	4517.8	4362.6	4203.4	4028.8
52.5°	5771.5	5771.5	5721.0	5658.9	5573.5	5464.9	5332.9	5177.6	4999.1	4812.8	4607.1
50°	6551.6	6551.6	6493.4	6423.5	6326.5	6198.4	6047.0	5868.5	5670.6	5453.2	5216.4
47.5°	7386.1	7386.1	7320.1	7238.6	7122.2	6974.7	6796.1	6590.4	6365.3	6120.8	5853.0
45°	8243.9	8243.9	8170.1	8077.0	7948.9	7782.0	7584.0	7386.1	7098.9	6815.5	6505.0
42.5°	9136.5	9136.5	9051.2	8946.4	8798.9	8616.5	8391.3	8135.2	7851.8	7533.6	7195.9
40°	10064.2	10064.2	9967.1	9846.8	9683.8	9474.2	9221.9	8934.7	8616.5	8263.3	7890.7
37.5°	11011.2	11011.2	10902.5	10770.6	10588.1	10355.3	10071.9	9753.7	9396.6	9004.6	8593.2
35°	11966.0	11966.0	11845.7	11702.1	11500.2	11244.1	10937.5	10584.3	10188.4	9761.4	9299.6
32.5°	12940.2	12940.2	12808.2	12645.2	12416.2	12132.9	11795.2	11411.0	11011.2	10514.4	10009.8
30°	13902.8	13902.8	13759.2	13580.6	13336.1	13025.6	12656.9	12233.8	11764.2	11255.7	10712.3
27.5°	14849.8	14811.0	14690.7	14500.5	14232.7	13902.8	13503.0	13045.0	12536.6	11977.6	11395.5
25°	15781.3	15738.6	15606.6	15397.1	15109.8	14748.9	14318.1	13829.0	13281.8	12691.8	12055.3
22.5°	16674.0	16627.4	16487.7	16262.6	15956.0	15564.0	15102.1	14578.1	13995.9	13363.3	12691.8
20°	17500.7	17450.3	17306.7	17069.9	16751.6	16336.3	15847.3	15284.5	14663.5	13995.9	13281.8
17.5°	18245.9	18195.5	18044.1	17799.6	17500.7	17038.8	16534.3	15940.4	15284.5	14578.1	13829.0
15°	18901.9	18847.5	18692.3	18447.8	18106.2	17671.5	17139.8	16534.3	15847.3	15102.1	14318.1
12.5°	19460.8	19406.4	19247.3	19002.8	18649.6	18214.9	17671.5	17038.8	16336.3	15564.0	14748.9
10°	19903.2	19848.9	19697.5	19464.6	19099.8	18649.6	18106.2	17500.7	16751.6	15956.0	15109.8
7.5°	20221.5	20171.0	20031.3	19798.4	19464.6	19002.8	18447.8	17799.6	17069.9	16262.6	15397.1
5°	20462.1	20403.9	20264.2	20031.3	19697.5	19247.3	18692.3	18044.1	17306.7	16487.7	15606.6
2.5°	20629.0	20559.2	20403.9	20171.0	19848.9	19406.4	18847.5	18195.5	17450.3	16627.4	15738.6
0°	20675.6	20629.0	20462.1	20221.5	19903.2	19460.8	18901.9	18245.9	17500.7	16674.0	15781.3

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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°	139.7	139.7	135.8	132.0	128.1	120.3	116.4	112.6	108.7	100.9	97.0
85°	295.0	287.2	279.5	271.7	260.0	252.3	240.6	232.9	221.2	209.6	197.9
82.5°	465.8	454.1	438.6	426.9	411.4	392.0	376.5	357.1	337.7	322.1	302.7
80°	652.1	632.6	613.2	593.8	570.5	547.3	524.0	500.7	473.5	446.3	419.2
77.5°	853.9	826.7	799.5	768.5	741.3	710.3	679.2	648.2	613.2	578.3	543.4
75°	1079.0	1044.1	1005.3	966.4	931.5	888.8	846.1	803.4	756.9	714.2	667.6
72.5°	1323.5	1280.8	1234.2	1187.7	1137.2	1082.9	1028.5	970.3	916.0	861.6	803.4
70°	1587.4	1537.0	1478.8	1420.6	1358.5	1292.5	1226.5	1156.6	1086.8	1016.9	947.0
67.5°	1870.8	1808.7	1738.8	1669.0	1591.3	1513.7	1436.1	1354.6	1269.2	1183.8	1102.3
65°	2173.5	2095.9	2014.4	1925.1	1835.8	1746.6	1653.4	1556.4	1459.4	1358.5	1269.2
62.5°	2511.2	2414.2	2309.4	2200.7	2099.8	1991.1	1890.2	1769.9	1653.4	1540.9	1428.3
60°	2903.2	2775.1	2647.0	2511.2	2383.1	2243.4	2119.2	1987.2	1855.3	1727.2	1595.2
57.5°	3341.8	3178.8	3023.5	2860.5	2689.7	2534.5	2375.3	2216.2	2068.7	1917.4	1773.7
55°	3838.6	3640.6	3446.6	3244.8	3046.8	2852.7	2650.9	2472.4	2290.0	2119.2	1952.3
52.5°	4382.0	4156.9	3916.2	3687.2	3434.9	3194.3	2969.2	2744.1	2530.6	2324.9	2134.7
50°	4964.2	4700.2	4424.7	4145.2	3858.0	3574.7	3303.0	3039.0	2790.6	2550.0	2324.9
47.5°	5569.6	5270.8	4956.4	4638.1	4331.5	3986.1	3660.1	3361.2	3062.3	2790.6	2530.6
45°	6190.7	5853.0	5507.5	5146.6	4785.6	4413.0	4052.1	3687.2	3361.2	3039.0	2744.1
42.5°	6831.1	6450.7	6066.4	5666.7	5266.9	4859.4	4451.8	4052.1	3660.1	3303.0	2969.2
40°	7490.9	7071.7	6633.1	6198.4	5771.5	5305.7	4859.4	4413.0	3986.1	3574.7	3194.3
37.5°	8150.7	7692.7	7219.2	6730.1	6241.1	5771.5	5266.9	4785.6	4331.5	3858.0	3434.9
35°	8814.4	8309.8	7797.5	7265.8	6730.1	6198.4	5666.7	5146.6	4638.1	4145.2	3687.2
32.5°	9482.0	8930.8	8364.2	7797.5	7219.2	6633.1	6066.4	5507.5	4956.4	4424.7	3916.2
30°	10137.9	9540.2	8930.8	8309.8	7692.7	7071.7	6450.7	5853.0	5270.8	4700.2	4156.9
27.5°	10778.3	10137.9	9482.0	8814.4	8150.7	7490.9	6831.1	6190.7	5569.6	4964.2	4382.0
25°	11395.5	10712.3	10009.8	9299.6	8593.2	7890.7	7195.9	6505.0	5853.0	5216.4	4607.1
22.5°	11977.6	11255.7	10514.4	9761.4	9004.6	8263.3	7533.6	6815.5	6120.8	5453.2	4812.8
20°	12536.6	11764.2	11011.2	10188.4	9396.6	8616.5	7851.8	7098.9	6365.3	5670.6	4999.1
17.5°	13045.0	12233.8	11411.0	10584.3	9753.7	8934.7	8135.2	7386.1	6590.4	5868.5	5177.6
15°	13503.0	12656.9	11795.2	10937.5	10071.9	9221.9	8391.3	7584.0	6796.1	6047.0	5332.9
12.5°	13902.8	13025.6	12132.9	11244.1	10355.3	9474.2	8616.5	7782.0	6974.7	6198.4	5464.9
10°	14232.7	13336.1	12416.2	11500.2	10588.1	9683.8	8798.9	7948.9	7122.2	6326.5	5573.5
7.5°	14500.5	13580.6	12645.2	11702.1	10770.6	9846.8	8946.4	8077.0	7238.6	6423.5	5658.9
5°	14690.7	13759.2	12808.2	11845.7	10902.5	9967.1	9051.2	8170.1	7320.1	6493.4	5721.0
2.5°	14811.0	13902.8	12940.2	11966.0	11011.2	10064.2	9136.5	8243.9	7386.1	6551.6	5771.5
0°	14849.8	13902.8	12940.2	11966.0	11011.2	10064.2	9136.5	8243.9	7386.1	6551.6	5771.5

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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°	93.2	85.4	77.6	73.7	66.0	62.1	54.3	46.6	42.7	34.9	27.2
85°	186.3	170.8	159.1	147.5	135.8	120.3	108.7	97.0	81.5	69.9	54.3
82.5°	283.3	263.9	244.5	225.1	205.7	186.3	163.0	143.6	124.2	104.8	81.5
80°	392.0	361.0	333.8	306.6	279.5	252.3	221.2	194.1	163.0	135.8	108.7
77.5°	504.6	469.6	430.8	392.0	353.2	318.3	279.5	244.5	209.6	170.8	135.8
75°	624.9	578.3	535.6	485.2	438.6	388.1	341.6	295.0	252.3	209.6	163.0
72.5°	749.1	690.9	632.6	578.3	520.1	461.9	407.5	349.3	295.0	244.5	194.1
70°	877.2	807.3	737.4	671.5	605.5	535.6	473.5	407.5	341.6	279.5	221.2
67.5°	1013.0	931.5	850.0	764.6	690.9	613.2	535.6	461.9	388.1	318.3	252.3
65°	1160.5	1063.5	962.6	873.3	776.3	690.9	605.5	520.1	438.6	353.2	279.5
62.5°	1311.9	1199.3	1086.8	974.2	873.3	764.6	671.5	578.3	485.2	392.0	306.6
60°	1467.1	1339.0	1211.0	1086.8	962.6	850.0	737.4	632.6	535.6	430.8	333.8
57.5°	1626.3	1482.7	1339.0	1199.3	1063.5	931.5	807.3	690.9	578.3	469.6	361.0
55°	1789.3	1626.3	1467.1	1311.9	1160.5	1013.0	877.2	749.1	624.9	504.6	392.0
52.5°	1952.3	1773.7	1595.2	1428.3	1269.2	1102.3	947.0	803.4	667.6	543.4	419.2
50°	2119.2	1917.4	1727.2	1540.9	1358.5	1183.8	1016.9	861.6	714.2	578.3	446.3
47.5°	2290.0	2068.7	1855.3	1653.4	1459.4	1269.2	1086.8	916.0	756.9	613.2	473.5
45°	2472.4	2216.2	1987.2	1769.9	1556.4	1354.6	1156.6	970.3	803.4	648.2	500.7
42.5°	2650.9	2375.3	2119.2	1890.2	1653.4	1436.1	1226.5	1028.5	846.1	679.2	524.0
40°	2852.7	2534.5	2243.4	1991.1	1746.6	1513.7	1292.5	1082.9	888.8	710.3	547.3
37.5°	3046.8	2689.7	2383.1	2099.8	1835.8	1591.3	1358.5	1137.2	931.5	741.3	570.5
35°	3244.8	2860.5	2511.2	2200.7	1925.1	1669.0	1420.6	1187.7	966.4	768.5	593.8
32.5°	3446.6	3023.5	2647.0	2309.4	2014.4	1738.8	1478.8	1234.2	1005.3	799.5	613.2
30°	3640.6	3178.8	2775.1	2414.2	2095.9	1808.7	1537.0	1280.8	1044.1	826.7	632.6
27.5°	3838.6	3341.8	2903.2	2511.2	2173.5	1870.8	1587.4	1323.5	1079.0	853.9	652.1
25°	4028.8	3497.0	3023.5	2604.3	2243.4	1932.9	1641.8	1366.2	1110.0	877.2	667.6
22.5°	4203.4	3632.9	3132.2	2693.6	2317.1	1987.2	1688.4	1405.0	1141.1	900.5	683.1
20°	4362.6	3772.6	3244.8	2782.9	2387.0	2041.6	1727.2	1440.0	1168.3	919.9	698.6
17.5°	4517.8	3900.7	3345.7	2864.4	2445.2	2088.1	1766.0	1467.1	1191.6	935.4	710.3
15°	4649.8	4013.2	3434.9	2934.3	2499.5	2126.9	1797.0	1494.3	1211.0	950.9	718.0
12.5°	4766.2	4110.3	3512.6	2992.5	2542.2	2161.9	1828.1	1517.6	1230.4	962.6	729.7
10°	4859.4	4187.9	3574.7	3042.9	2581.1	2189.0	1847.5	1537.0	1242.0	974.2	737.4
7.5°	4933.1	4250.0	3625.1	3077.9	2608.2	2212.3	1866.9	1548.6	1253.7	982.0	749.1
5°	4987.5	4296.6	3660.1	3105.0	2631.5	2239.5	1890.2	1568.0	1269.2	993.6	749.1
2.5°	5030.1	4331.5	3687.2	3128.3	2647.0	2239.5	1890.2	1568.0	1269.2	993.6	749.1
0°	5030.1	4331.5	3687.2	3128.3	2647.0	2239.5	1890.2	1568.0	1269.2	993.6	749.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	19.4	15.5	7.8	0.0
85°	42.7	27.2	15.5	0.0
82.5°	62.1	42.7	19.4	0.0
80°	81.5	54.3	27.2	0.0
77.5°	104.8	69.9	34.9	0.0
75°	124.2	81.5	42.7	0.0
72.5°	143.6	97.0	46.6	0.0
70°	163.0	108.7	54.3	0.0
67.5°	186.3	120.3	62.1	0.0
65°	205.7	135.8	66.0	0.0
62.5°	225.1	147.5	73.7	0.0
60°	244.5	159.1	77.6	0.0
57.5°	263.9	170.8	85.4	0.0
55°	283.3	186.3	93.2	0.0
52.5°	302.7	197.9	97.0	0.0
50°	322.1	209.6	100.9	0.0
47.5°	337.7	221.2	108.7	0.0
45°	357.1	232.9	112.6	0.0
42.5°	376.5	240.6	116.4	0.0
40°	392.0	252.3	120.3	0.0
37.5°	411.4	260.0	128.1	0.0
35°	426.9	271.7	132.0	0.0
32.5°	438.6	279.5	135.8	0.0
30°	454.1	287.2	139.7	0.0
27.5°	465.8	295.0	139.7	0.0
25°	477.4	302.7	143.6	0.0
22.5°	489.0	306.6	147.5	0.0
20°	500.7	314.4	151.4	0.0
17.5°	508.4	318.3	151.4	0.0
15°	516.2	322.1	159.1	0.0
12.5°	520.1	326.0	159.1	0.0
10°	527.9	333.8	159.1	0.0
7.5°	535.6	333.8	159.1	0.0
5°	535.6	333.8	159.1	0.0
2.5°	535.6	333.8	159.1	0.0
0°	535.6	333.8	159.1	0.0

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