

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: P624066

Luminaire Tested: **IFLD-L-SA7D-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624066
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (112) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

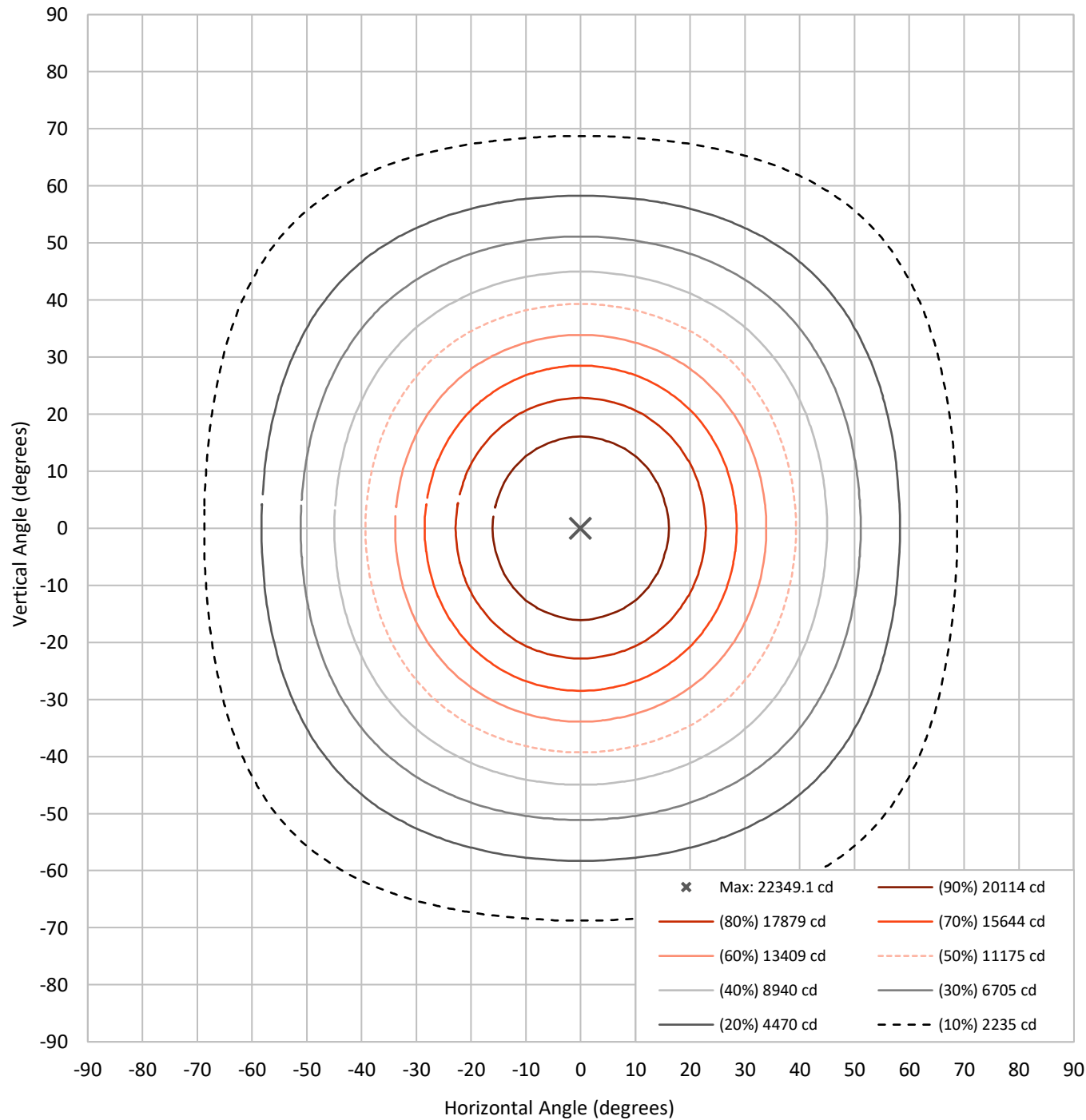
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	40240.1 lumens	Max Intensity:	22349.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	95.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	17411.5 lumens	Field Lumens:	28510.7 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		





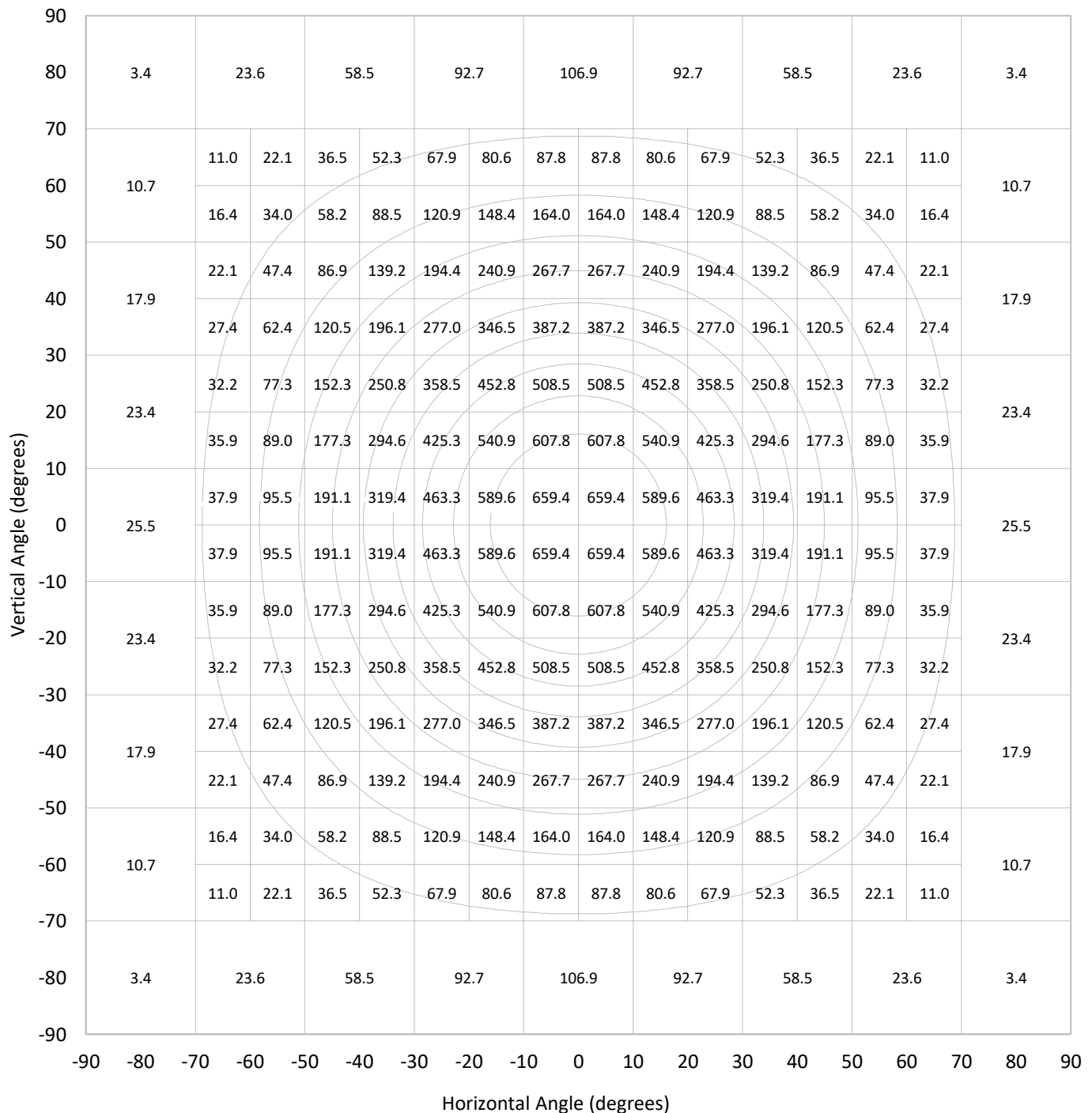
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Iso-Candela Plot



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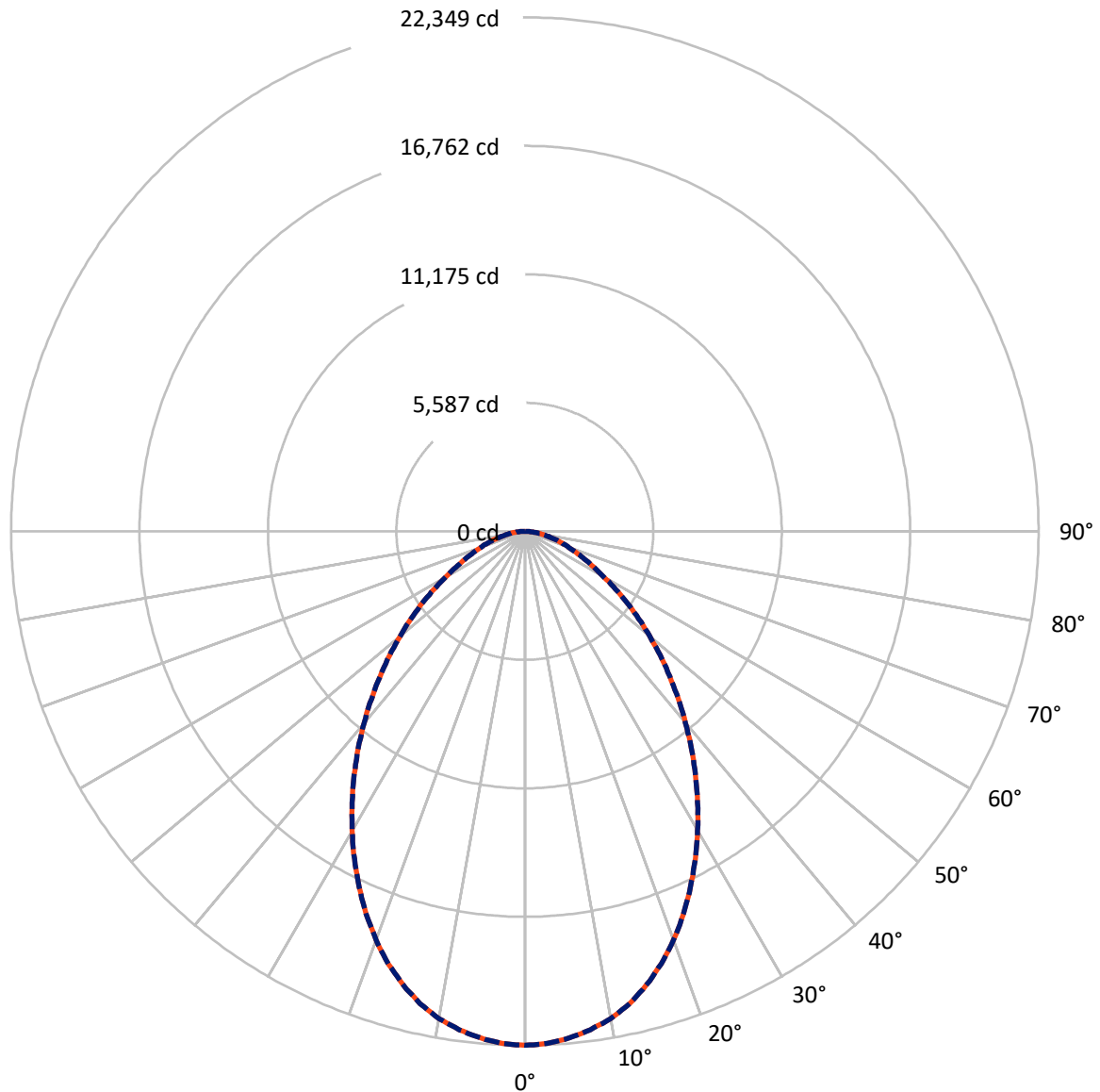
Lumen Table



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Luminous Intensity Polar Plot



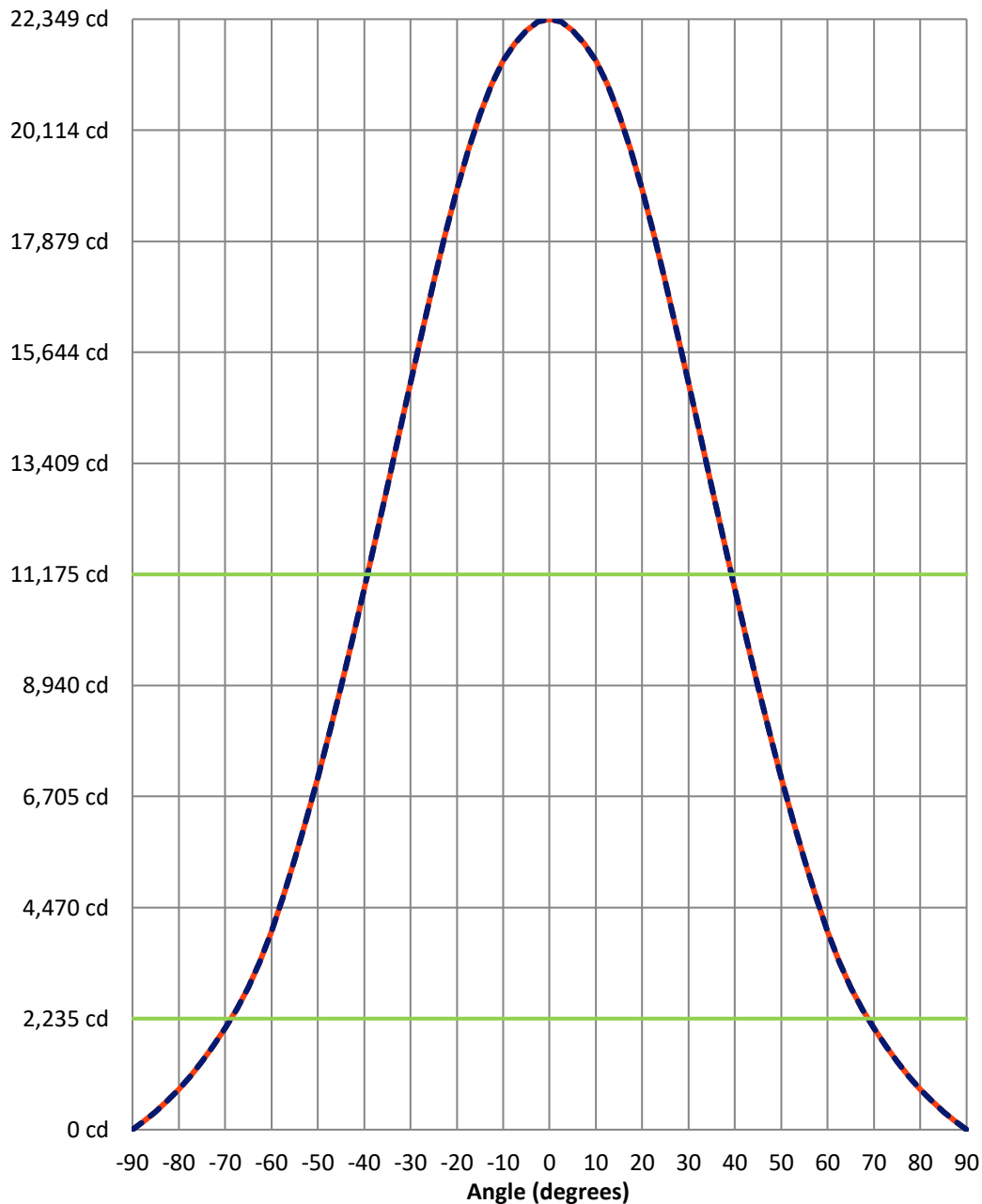
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 17411.5
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 28510.7
Efficiency: 70.9%

Spill:

Lumens: 11729.4
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°	172.0	172.0	172.0	172.0	172.0	172.0	172.0	163.6	163.6	159.4	155.2
85°	360.8	360.8	360.8	360.8	360.8	352.4	348.2	344.0	339.8	331.4	327.2
82.5°	579.0	579.0	579.0	579.0	570.6	562.2	558.0	549.6	541.2	528.6	516.0
80°	809.7	809.7	809.7	809.7	797.1	788.7	776.2	767.8	755.2	738.4	721.6
77.5°	1074.0	1074.0	1074.0	1061.4	1053.1	1040.5	1027.9	1011.1	994.3	973.3	948.2
75°	1371.9	1371.9	1371.9	1355.1	1342.5	1330.0	1309.0	1288.0	1262.8	1233.5	1199.9
72.5°	1695.0	1695.0	1695.0	1674.0	1661.4	1640.4	1615.2	1585.9	1556.5	1518.8	1476.8
70°	2043.2	2043.2	2043.2	2018.0	1997.0	1976.1	1942.5	1908.9	1867.0	1825.0	1774.7
67.5°	2420.8	2420.8	2420.8	2391.4	2366.2	2336.9	2299.1	2257.1	2206.8	2148.1	2089.3
65°	2861.3	2861.3	2844.5	2819.3	2790.0	2748.0	2701.9	2643.1	2580.2	2504.7	2425.0
62.5°	3381.5	3381.5	3356.4	3327.0	3289.2	3234.7	3171.8	3096.2	3008.1	2911.6	2815.1
60°	3985.7	3985.7	3956.3	3918.5	3864.0	3796.9	3713.0	3616.5	3507.4	3385.7	3268.2
57.5°	4682.1	4682.1	4644.4	4594.0	4526.9	4443.0	4338.1	4216.4	4078.0	3926.9	3780.1
55°	5437.3	5437.3	5391.1	5332.4	5252.7	5152.0	5026.1	4883.5	4715.7	4543.7	4354.9
52.5°	6238.6	6238.6	6184.1	6117.0	6024.7	5907.2	5764.5	5596.7	5403.7	5202.3	4980.0
50°	7081.9	7081.9	7019.0	6943.5	6838.6	6700.1	6536.5	6343.5	6129.5	5894.6	5638.7
47.5°	7983.9	7983.9	7912.6	7824.5	7698.6	7539.2	7346.2	7123.9	6880.5	6616.2	6326.7
45°	8911.1	8911.1	8831.4	8730.7	8592.3	8411.9	8197.9	7983.9	7673.5	7367.2	7031.6
42.5°	9876.1	9876.1	9783.8	9670.5	9511.1	9313.9	9070.5	8793.6	8487.4	8143.4	7778.4
40°	10878.8	10878.8	10773.9	10643.8	10467.6	10241.1	9968.4	9657.9	9313.9	8932.1	8529.3
37.5°	11902.5	11902.5	11785.0	11642.4	11445.2	11193.4	10887.2	10543.1	10157.2	9733.4	9288.7
35°	12934.5	12934.5	12804.5	12649.3	12431.1	12154.2	11822.8	11441.0	11013.0	10551.5	10052.3
32.5°	13987.6	13987.6	13845.0	13668.8	13421.2	13115.0	12749.9	12334.6	11902.5	11365.5	10820.0
30°	15028.1	15028.1	14872.8	14679.9	14415.5	14079.9	13681.3	13224.0	12716.4	12166.8	11579.4
27.5°	16051.8	16009.8	15879.7	15674.2	15384.7	15028.1	14595.9	14100.9	13551.3	12947.1	12317.8
25°	17058.7	17012.5	16869.9	16643.3	16332.9	15942.7	15477.0	14948.4	14356.8	13719.1	13031.0
22.5°	18023.6	17973.3	17822.2	17578.9	17247.5	16823.7	16324.5	15758.1	15128.8	14444.9	13719.1
20°	18917.2	18862.7	18707.5	18451.6	18107.5	17658.6	17130.0	16521.7	15850.4	15128.8	14356.8
17.5°	19722.8	19668.2	19504.6	19240.3	18917.2	18418.0	17872.6	17230.7	16521.7	15758.1	14948.4
15°	20431.8	20373.1	20205.3	19940.9	19571.7	19101.8	18527.1	17872.6	17130.0	16324.5	15477.0
12.5°	21035.9	20977.2	20805.2	20540.9	20159.1	19689.2	19101.8	18418.0	17658.6	16823.7	15942.7
10°	21514.2	21455.5	21291.9	21040.1	20645.8	20159.1	19571.7	18917.2	18107.5	17247.5	16332.9
7.5°	21858.3	21803.7	21652.7	21401.0	21040.1	20540.9	19940.9	19240.3	18451.6	17578.9	16643.3
5°	22118.4	22055.4	21904.4	21652.7	21291.9	20805.2	20205.3	19504.6	18707.5	17822.2	16869.9
2.5°	22298.8	22223.3	22055.4	21803.7	21455.5	20977.2	20373.1	19668.2	18862.7	17973.3	17012.5
0°	22349.1	22298.8	22118.4	21858.3	21514.2	21035.9	20431.8	19722.8	18917.2	18023.6	17058.7

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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°	151.0	151.0	146.8	142.6	138.4	130.1	125.9	121.7	117.5	109.1	104.9
85°	318.9	310.5	302.1	293.7	281.1	272.7	260.1	251.7	239.1	226.6	214.0
82.5°	503.5	490.9	474.1	461.5	444.7	423.7	407.0	386.0	365.0	348.2	327.2
80°	704.8	683.9	662.9	641.9	616.7	591.6	566.4	541.2	511.8	482.5	453.1
77.5°	923.0	893.6	864.3	830.7	801.3	767.8	734.2	700.6	662.9	625.1	587.4
75°	1166.3	1128.6	1086.6	1044.7	1006.9	960.8	914.6	868.5	818.1	772.0	721.6
72.5°	1430.6	1384.5	1334.2	1283.8	1229.3	1170.5	1111.8	1048.9	990.1	931.4	868.5
70°	1715.9	1661.4	1598.5	1535.5	1468.4	1397.1	1325.8	1250.2	1174.7	1099.2	1023.7
67.5°	2022.2	1955.1	1879.6	1804.0	1720.1	1636.2	1552.3	1464.2	1371.9	1279.6	1191.5
65°	2349.4	2265.5	2177.4	2080.9	1984.4	1887.9	1787.3	1682.4	1577.5	1468.4	1371.9
62.5°	2714.5	2609.6	2496.3	2378.8	2269.7	2152.3	2043.2	1913.1	1787.3	1665.6	1543.9
60°	3138.2	2999.7	2861.3	2714.5	2576.0	2425.0	2290.7	2148.1	2005.4	1867.0	1724.3
57.5°	3612.3	3436.1	3268.2	3092.0	2907.4	2739.6	2567.6	2395.6	2236.2	2072.5	1917.3
55°	4149.3	3935.3	3725.6	3507.4	3293.4	3083.7	2865.5	2672.5	2475.3	2290.7	2110.3
52.5°	4736.7	4493.3	4233.2	3985.7	3713.0	3452.8	3209.5	2966.2	2735.4	2513.1	2307.5
50°	5366.0	5080.7	4782.8	4480.7	4170.3	3864.0	3570.3	3285.0	3016.5	2756.4	2513.1
47.5°	6020.5	5697.4	5357.6	5013.6	4682.1	4308.7	3956.3	3633.3	3310.2	3016.5	2735.4
45°	6691.7	6326.7	5953.3	5563.2	5173.0	4770.2	4380.0	3985.7	3633.3	3285.0	2966.2
42.5°	7384.0	6972.8	6557.5	6125.3	5693.2	5252.7	4812.2	4380.0	3956.3	3570.3	3209.5
40°	8097.2	7644.1	7170.0	6700.1	6238.6	5735.2	5252.7	4770.2	4308.7	3864.0	3452.8
37.5°	8810.4	8315.4	7803.5	7274.9	6746.3	6238.6	5693.2	5173.0	4682.1	4170.3	3713.0
35°	9527.8	8982.4	8428.6	7853.9	7274.9	6700.1	6125.3	5563.2	5013.6	4480.7	3985.7
32.5°	10249.5	9653.7	9041.2	8428.6	7803.5	7170.0	6557.5	5953.3	5357.6	4782.8	4233.2
30°	10958.5	10312.4	9653.7	8982.4	8315.4	7644.1	6972.8	6326.7	5697.4	5080.7	4493.3
27.5°	11650.7	10958.5	10249.5	9527.8	8810.4	8097.2	7384.0	6691.7	6020.5	5366.0	4736.7
25°	12317.8	11579.4	10820.0	10052.3	9288.7	8529.3	7778.4	7031.6	6326.7	5638.7	4980.0
22.5°	12947.1	12166.8	11365.5	10551.5	9733.4	8932.1	8143.4	7367.2	6616.2	5894.6	5202.3
20°	13551.3	12716.4	11902.5	11013.0	10157.2	9313.9	8487.4	7673.5	6880.5	6129.5	5403.7
17.5°	14100.9	13224.0	12334.6	11441.0	10543.1	9657.9	8793.6	7983.9	7123.9	6343.5	5596.7
15°	14595.9	13681.3	12749.9	11822.8	10887.2	9968.4	9070.5	8197.9	7346.2	6536.5	5764.5
12.5°	15028.1	14079.9	13115.0	12154.2	11193.4	10241.1	9313.9	8411.9	7539.2	6700.1	5907.2
10°	15384.7	14415.5	13421.2	12431.1	11445.2	10467.6	9511.1	8592.3	7698.6	6838.6	6024.7
7.5°	15674.2	14679.9	13668.8	12649.3	11642.4	10643.8	9670.5	8730.7	7824.5	6943.5	6117.0
5°	15879.7	14872.8	13845.0	12804.5	11785.0	10773.9	9783.8	8831.4	7912.6	7019.0	6184.1
2.5°	16009.8	15028.1	13987.6	12934.5	11902.5	10878.8	9876.1	8911.1	7983.9	7081.9	6238.6
0°	16051.8	15028.1	13987.6	12934.5	11902.5	10878.8	9876.1	8911.1	7983.9	7081.9	6238.6

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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°	100.7	92.3	83.9	79.7	71.3	67.1	58.7	50.3	46.1	37.8	29.4
85°	201.4	184.6	172.0	159.4	146.8	130.1	117.5	104.9	88.1	75.5	58.7
82.5°	306.3	285.3	264.3	243.3	222.4	201.4	176.2	155.2	134.3	113.3	88.1
80°	423.7	390.2	360.8	331.4	302.1	272.7	239.1	209.8	176.2	146.8	117.5
77.5°	545.4	507.6	465.7	423.7	381.8	344.0	302.1	264.3	226.6	184.6	146.8
75°	675.5	625.1	579.0	524.4	474.1	419.5	369.2	318.9	272.7	226.6	176.2
72.5°	809.7	746.8	683.9	625.1	562.2	499.3	440.5	377.6	318.9	264.3	209.8
70°	948.2	872.7	797.1	725.8	654.5	579.0	511.8	440.5	369.2	302.1	239.1
67.5°	1095.0	1006.9	918.8	826.5	746.8	662.9	579.0	499.3	419.5	344.0	272.7
65°	1254.4	1149.6	1040.5	944.0	839.1	746.8	654.5	562.2	474.1	381.8	302.1
62.5°	1418.1	1296.4	1174.7	1053.1	944.0	826.5	725.8	625.1	524.4	423.7	331.4
60°	1585.9	1447.4	1309.0	1174.7	1040.5	918.8	797.1	683.9	579.0	465.7	360.8
57.5°	1757.9	1602.7	1447.4	1296.4	1149.6	1006.9	872.7	746.8	625.1	507.6	390.2
55°	1934.1	1757.9	1585.9	1418.1	1254.4	1095.0	948.2	809.7	675.5	545.4	423.7
52.5°	2110.3	1917.3	1724.3	1543.9	1371.9	1191.5	1023.7	868.5	721.6	587.4	453.1
50°	2290.7	2072.5	1867.0	1665.6	1468.4	1279.6	1099.2	931.4	772.0	625.1	482.5
47.5°	2475.3	2236.2	2005.4	1787.3	1577.5	1371.9	1174.7	990.1	818.1	662.9	511.8
45°	2672.5	2395.6	2148.1	1913.1	1682.4	1464.2	1250.2	1048.9	868.5	700.6	541.2
42.5°	2865.5	2567.6	2290.7	2043.2	1787.3	1552.3	1325.8	1111.8	914.6	734.2	566.4
40°	3083.7	2739.6	2425.0	2152.3	1887.9	1636.2	1397.1	1170.5	960.8	767.8	591.6
37.5°	3293.4	2907.4	2576.0	2269.7	1984.4	1720.1	1468.4	1229.3	1006.9	801.3	616.7
35°	3507.4	3092.0	2714.5	2378.8	2080.9	1804.0	1535.5	1283.8	1044.7	830.7	641.9
32.5°	3725.6	3268.2	2861.3	2496.3	2177.4	1879.6	1598.5	1334.2	1086.6	864.3	662.9
30°	3935.3	3436.1	2999.7	2609.6	2265.5	1955.1	1661.4	1384.5	1128.6	893.6	683.9
27.5°	4149.3	3612.3	3138.2	2714.5	2349.4	2022.2	1715.9	1430.6	1166.3	923.0	704.8
25°	4354.9	3780.1	3268.2	2815.1	2425.0	2089.3	1774.7	1476.8	1199.9	948.2	721.6
22.5°	4543.7	3926.9	3385.7	2911.6	2504.7	2148.1	1825.0	1518.8	1233.5	973.3	738.4
20°	4715.7	4078.0	3507.4	3008.1	2580.2	2206.8	1867.0	1556.5	1262.8	994.3	755.2
17.5°	4883.5	4216.4	3616.5	3096.2	2643.1	2257.1	1908.9	1585.9	1288.0	1011.1	767.8
15°	5026.1	4338.1	3713.0	3171.8	2701.9	2299.1	1942.5	1615.2	1309.0	1027.9	776.2
12.5°	5152.0	4443.0	3796.9	3234.7	2748.0	2336.9	1976.1	1640.4	1330.0	1040.5	788.7
10°	5252.7	4526.9	3864.0	3289.2	2790.0	2366.2	1997.0	1661.4	1342.5	1053.1	797.1
7.5°	5332.4	4594.0	3918.5	3327.0	2819.3	2391.4	2018.0	1674.0	1355.1	1061.4	809.7
5°	5391.1	4644.4	3956.3	3356.4	2844.5	2420.8	2043.2	1695.0	1371.9	1074.0	809.7
2.5°	5437.3	4682.1	3985.7	3381.5	2861.3	2420.8	2043.2	1695.0	1371.9	1074.0	809.7
0°	5437.3	4682.1	3985.7	3381.5	2861.3	2420.8	2043.2	1695.0	1371.9	1074.0	809.7

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	21.0	16.8	8.4	0.0
85°	46.1	29.4	16.8	0.0
82.5°	67.1	46.1	21.0	0.0
80°	88.1	58.7	29.4	0.0
77.5°	113.3	75.5	37.8	0.0
75°	134.3	88.1	46.1	0.0
72.5°	155.2	104.9	50.3	0.0
70°	176.2	117.5	58.7	0.0
67.5°	201.4	130.1	67.1	0.0
65°	222.4	146.8	71.3	0.0
62.5°	243.3	159.4	79.7	0.0
60°	264.3	172.0	83.9	0.0
57.5°	285.3	184.6	92.3	0.0
55°	306.3	201.4	100.7	0.0
52.5°	327.2	214.0	104.9	0.0
50°	348.2	226.6	109.1	0.0
47.5°	365.0	239.1	117.5	0.0
45°	386.0	251.7	121.7	0.0
42.5°	407.0	260.1	125.9	0.0
40°	423.7	272.7	130.1	0.0
37.5°	444.7	281.1	138.4	0.0
35°	461.5	293.7	142.6	0.0
32.5°	474.1	302.1	146.8	0.0
30°	490.9	310.5	151.0	0.0
27.5°	503.5	318.9	151.0	0.0
25°	516.0	327.2	155.2	0.0
22.5°	528.6	331.4	159.4	0.0
20°	541.2	339.8	163.6	0.0
17.5°	549.6	344.0	163.6	0.0
15°	558.0	348.2	172.0	0.0
12.5°	562.2	352.4	172.0	0.0
10°	570.6	360.8	172.0	0.0
7.5°	579.0	360.8	172.0	0.0
5°	579.0	360.8	172.0	0.0
2.5°	579.0	360.8	172.0	0.0
0°	579.0	360.8	172.0	0.0

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