

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: P623863

Luminaire Tested: **IFLD-L-SA7D-727-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623863
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-727-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (112) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

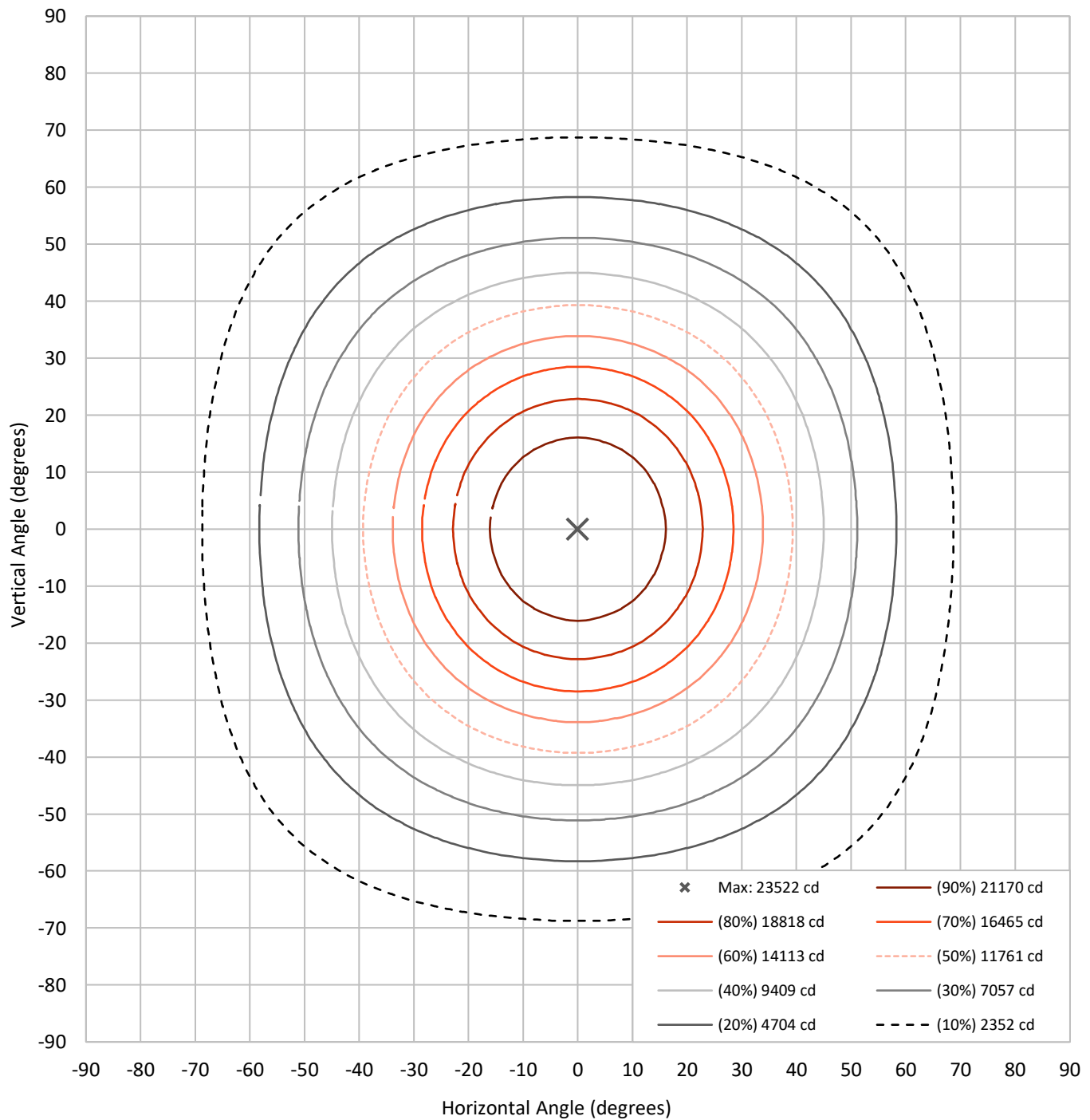
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	42351.8 lumens	Max Intensity:	23522 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	100.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	18325.2 lumens	Field Lumens:	30006.9 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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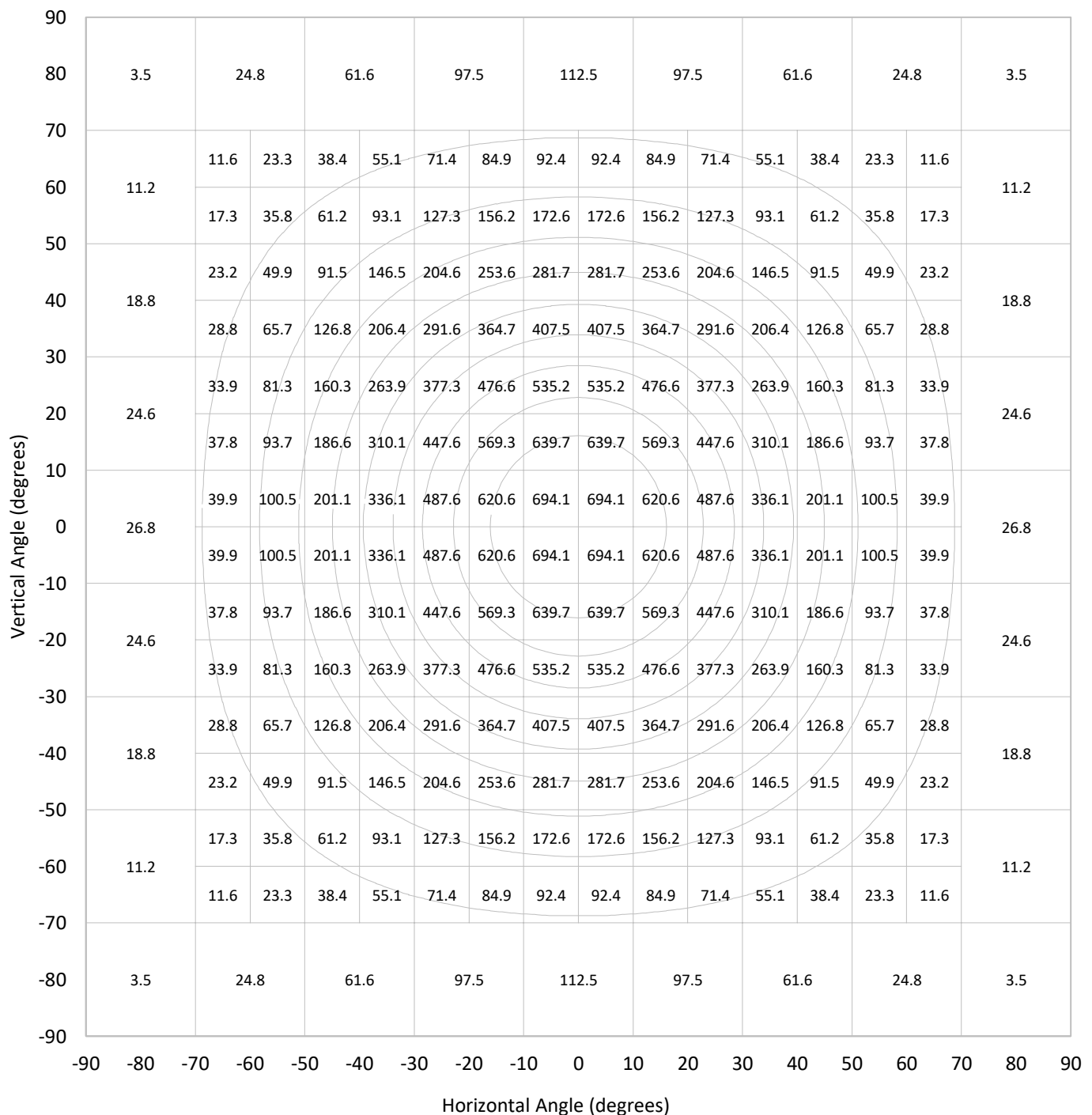
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Iso-Candela Plot



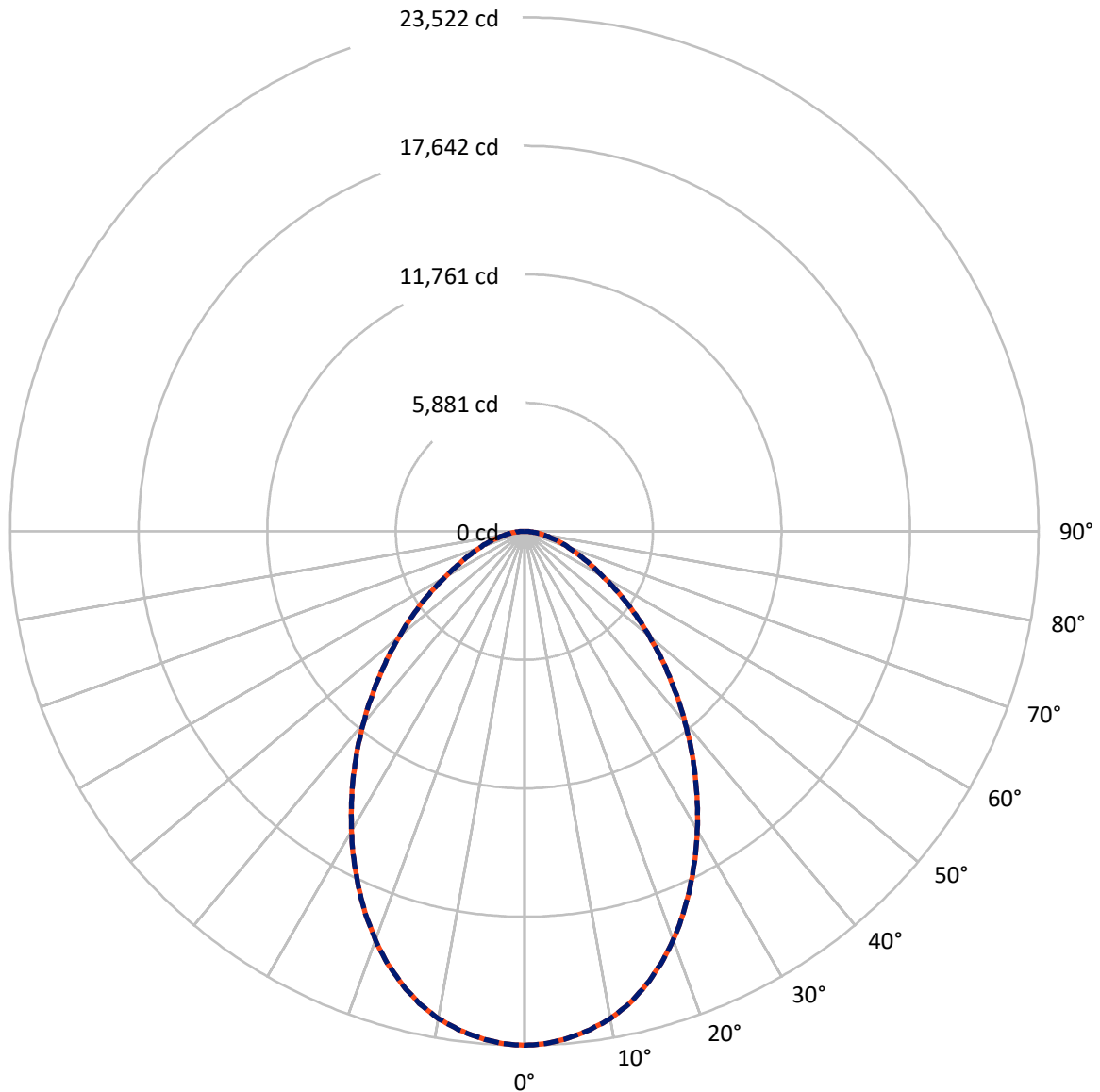
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Lumen Table



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Luminous Intensity Polar Plot

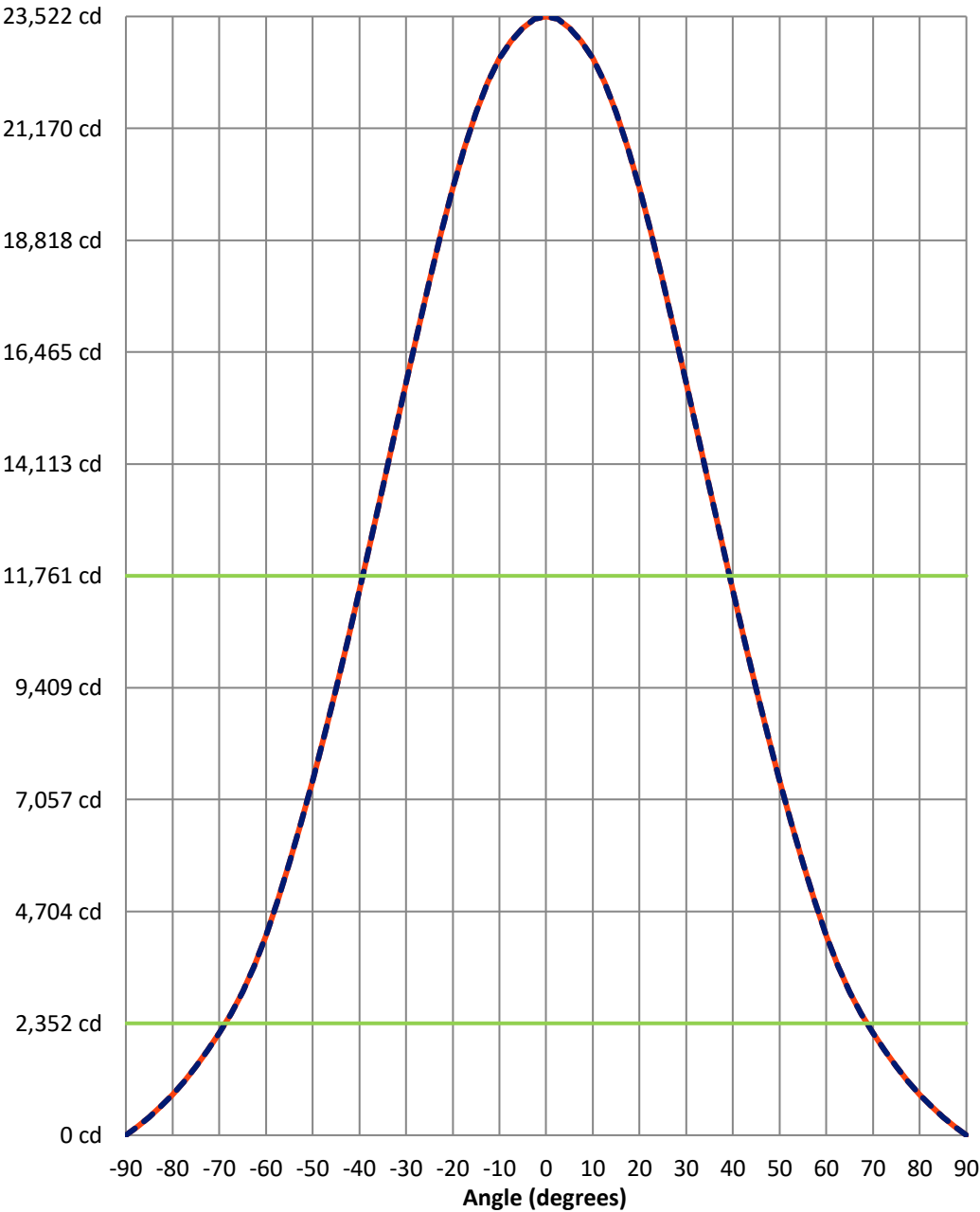


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 78.6°
V Angle: 78.6°
Lumens: 18325.2
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 30006.9
Efficiency: 70.9%

Spill:
Lumens: 12344.9
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°	181.0	181.0	181.0	181.0	181.0	181.0	181.0	172.2	172.2	167.8	163.4
85°	379.7	379.7	379.7	379.7	379.7	370.9	366.5	362.1	357.7	348.8	344.4
82.5°	609.4	609.4	609.4	609.4	600.5	591.7	587.3	578.4	569.6	556.4	543.1
80°	852.2	852.2	852.2	852.2	839.0	830.1	816.9	808.1	794.8	777.1	759.5
77.5°	1130.4	1130.4	1130.4	1117.2	1108.3	1095.1	1081.8	1064.2	1046.5	1024.4	997.9
75°	1443.9	1443.9	1443.9	1426.2	1413.0	1399.8	1377.7	1355.6	1329.1	1298.2	1262.9
72.5°	1783.9	1783.9	1783.9	1761.8	1748.6	1726.5	1700.0	1669.1	1638.2	1598.5	1554.3
70°	2150.4	2150.4	2150.4	2123.9	2101.8	2079.8	2044.4	2009.1	1964.9	1920.8	1867.8
67.5°	2547.8	2547.8	2547.8	2516.9	2490.4	2459.5	2419.8	2375.6	2322.6	2260.8	2199.0
65°	3011.5	3011.5	2993.8	2967.3	2936.4	2892.2	2843.7	2781.8	2715.6	2636.1	2552.2
62.5°	3559.0	3559.0	3532.5	3501.6	3461.8	3404.4	3338.2	3258.7	3166.0	3064.4	2962.9
60°	4194.8	4194.8	4163.9	4124.2	4066.8	3996.1	3907.8	3806.3	3691.5	3563.4	3439.8
57.5°	4927.8	4927.8	4888.1	4835.1	4764.4	4676.1	4565.7	4437.7	4292.0	4133.0	3978.5
55°	5722.6	5722.6	5674.1	5612.2	5528.4	5422.4	5289.9	5139.8	4963.2	4782.1	4583.4
52.5°	6566.0	6566.0	6508.6	6438.0	6340.8	6217.2	6067.1	5890.4	5687.3	5475.4	5241.3
50°	7453.6	7453.6	7387.3	7307.8	7197.5	7051.7	6879.5	6676.4	6451.2	6203.9	5934.6
47.5°	8402.9	8402.9	8327.9	8235.1	8102.7	7934.9	7731.7	7497.7	7241.6	6963.4	6658.7
45°	9378.8	9378.8	9294.9	9188.9	9043.2	8853.3	8628.1	8402.9	8076.2	7753.8	7400.6
42.5°	10394.4	10394.4	10297.2	10178.0	10010.2	9802.7	9546.6	9255.1	8932.8	8570.7	8186.6
40°	11449.7	11449.7	11339.3	11202.4	11017.0	10778.5	10491.5	10164.7	9802.7	9400.8	8976.9
37.5°	12527.1	12527.1	12403.5	12253.3	12045.8	11780.9	11458.5	11096.4	10690.2	10244.2	9776.2
35°	13613.3	13613.3	13476.5	13313.1	13083.5	12792.0	12443.2	12041.4	11591.0	11105.3	10579.8
32.5°	14721.7	14721.7	14571.5	14386.1	14125.6	13803.2	13419.1	12981.9	12527.1	11961.9	11387.9
30°	15816.7	15816.7	15653.4	15450.2	15172.1	14818.8	14399.3	13918.0	13383.7	12805.3	12187.1
27.5°	16894.1	16850.0	16713.1	16496.7	16192.1	15816.7	15361.9	14840.9	14262.4	13626.6	12964.2
25°	17953.9	17905.3	17755.2	17516.7	17190.0	16779.3	16289.2	15732.8	15110.2	14439.1	13714.9
22.5°	18969.5	18916.5	18757.5	18501.4	18152.6	17706.6	17181.2	16585.1	15922.7	15203.0	14439.1
20°	19910.0	19852.6	19689.2	19419.9	19057.8	18585.3	18029.0	17388.7	16682.2	15922.7	15110.2
17.5°	20757.8	20700.4	20528.2	20250.0	19910.0	19384.6	18810.5	18134.9	17388.7	16585.1	15732.8
15°	21504.0	21442.2	21265.6	20987.4	20598.8	20104.3	19499.4	18810.5	18029.0	17181.2	16289.2
12.5°	22139.9	22078.1	21897.0	21618.9	21217.0	20722.5	20104.3	19384.6	18585.3	17706.6	16779.3
10°	22643.3	22581.5	22409.3	22144.3	21729.2	21217.0	20598.8	19910.0	19057.8	18152.6	17190.0
7.5°	23005.4	22948.0	22789.0	22524.1	22144.3	21618.9	20987.4	20250.0	19419.9	18501.4	17516.7
5°	23279.1	23212.9	23053.9	22789.0	22409.3	21897.0	21265.6	20528.2	19689.2	18757.5	17755.2
2.5°	23469.0	23389.5	23212.9	22948.0	22581.5	22078.1	21442.2	20700.4	19852.6	18916.5	17905.3
0°	23522.0	23469.0	23279.1	23005.4	22643.3	22139.9	21504.0	20757.8	19910.0	18969.5	17953.9

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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°	159.0	159.0	154.5	150.1	145.7	136.9	132.5	128.1	123.6	114.8	110.4
85°	335.6	326.8	317.9	309.1	295.8	287.0	273.8	264.9	251.7	238.4	225.2
82.5°	529.9	516.6	499.0	485.7	468.1	446.0	428.3	406.2	384.2	366.5	344.4
80°	741.8	719.7	697.7	675.6	649.1	622.6	596.1	569.6	538.7	507.8	476.9
77.5°	971.4	940.5	909.6	874.3	843.4	808.1	772.7	737.4	697.7	657.9	618.2
75°	1227.5	1187.8	1143.6	1099.5	1059.7	1011.2	962.6	914.0	861.0	812.5	759.5
72.5°	1505.7	1457.2	1404.2	1351.2	1293.8	1232.0	1170.1	1103.9	1042.1	980.3	914.0
70°	1806.0	1748.6	1682.3	1616.1	1545.5	1470.4	1395.3	1315.9	1236.4	1156.9	1077.4
67.5°	2128.3	2057.7	1978.2	1898.7	1810.4	1722.1	1633.8	1541.0	1443.9	1346.8	1254.0
65°	2472.7	2384.4	2291.7	2190.1	2088.6	1987.0	1881.1	1770.7	1660.3	1545.5	1443.9
62.5°	2856.9	2746.5	2627.3	2503.7	2388.8	2265.2	2150.4	2013.5	1881.1	1753.0	1624.9
60°	3302.9	3157.2	3011.5	2856.9	2711.2	2552.2	2410.9	2260.8	2110.7	1964.9	1814.8
57.5°	3801.8	3616.4	3439.8	3254.3	3060.0	2883.4	2702.4	2521.3	2353.5	2181.3	2017.9
55°	4367.0	4141.8	3921.1	3691.5	3466.3	3245.5	3015.9	2812.7	2605.2	2410.9	2221.1
52.5°	4985.2	4729.1	4455.4	4194.8	3907.8	3634.1	3377.9	3121.8	2879.0	2645.0	2428.6
50°	5647.6	5347.3	5033.8	4715.9	4389.1	4066.8	3757.7	3457.4	3174.8	2901.1	2645.0
47.5°	6336.4	5996.4	5638.7	5276.7	4927.8	4534.8	4163.9	3823.9	3483.9	3174.8	2879.0
45°	7042.9	6658.7	6265.8	5855.1	5444.5	5020.6	4609.9	4194.8	3823.9	3457.4	3121.8
42.5°	7771.5	7338.8	6901.6	6446.8	5992.0	5528.4	5064.7	4609.9	4163.9	3757.7	3377.9
40°	8522.1	8045.3	7546.3	7051.7	6566.0	6036.1	5528.4	5020.6	4534.8	4066.8	3634.1
37.5°	9272.8	8751.8	8213.0	7656.7	7100.3	6566.0	5992.0	5444.5	4927.8	4389.1	3907.8
35°	10027.9	9453.8	8871.0	8266.0	7656.7	7051.7	6446.8	5855.1	5276.7	4715.9	4194.8
32.5°	10787.3	10160.3	9515.7	8871.0	8213.0	7546.3	6901.6	6265.8	5638.7	5033.8	4455.4
30°	11533.6	10853.6	10160.3	9453.8	8751.8	8045.3	7338.8	6658.7	5996.4	5347.3	4729.1
27.5°	12262.2	11533.6	10787.3	10027.9	9272.8	8522.1	7771.5	7042.9	6336.4	5647.6	4985.2
25°	12964.2	12187.1	11387.9	10579.8	9776.2	8976.9	8186.6	7400.6	6658.7	5934.6	5241.3
22.5°	13626.6	12805.3	11961.9	11105.3	10244.2	9400.8	8570.7	7753.8	6963.4	6203.9	5475.4
20°	14262.4	13383.7	12527.1	11591.0	10690.2	9802.7	8932.8	8076.2	7241.6	6451.2	5687.3
17.5°	14840.9	13918.0	12981.9	12041.4	11096.4	10164.7	9255.1	8402.9	7497.7	6676.4	5890.4
15°	15361.9	14399.3	13419.1	12443.2	11458.5	10491.5	9546.6	8628.1	7731.7	6879.5	6067.1
12.5°	15816.7	14818.8	13803.2	12792.0	11780.9	10778.5	9802.7	8853.3	7934.9	7051.7	6217.2
10°	16192.1	15172.1	14125.6	13083.5	12045.8	11017.0	10010.2	9043.2	8102.7	7197.5	6340.8
7.5°	16496.7	15450.2	14386.1	13313.1	12253.3	11202.4	10178.0	9188.9	8235.1	7307.8	6438.0
5°	16713.1	15653.4	14571.5	13476.5	12403.5	11339.3	10297.2	9294.9	8327.9	7387.3	6508.6
2.5°	16850.0	15816.7	14721.7	13613.3	12527.1	11449.7	10394.4	9378.8	8402.9	7453.6	6566.0
0°	16894.1	15816.7	14721.7	13613.3	12527.1	11449.7	10394.4	9378.8	8402.9	7453.6	6566.0

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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°	106.0	97.1	88.3	83.9	75.1	70.6	61.8	53.0	48.6	39.7	30.9
85°	211.9	194.3	181.0	167.8	154.5	136.9	123.6	110.4	92.7	79.5	61.8
82.5°	322.3	300.3	278.2	256.1	234.0	211.9	185.5	163.4	141.3	119.2	92.7
80°	446.0	410.7	379.7	348.8	317.9	287.0	251.7	220.8	185.5	154.5	123.6
77.5°	574.0	534.3	490.1	446.0	401.8	362.1	317.9	278.2	238.4	194.3	154.5
75°	710.9	657.9	609.4	552.0	499.0	441.6	388.6	335.6	287.0	238.4	185.5
72.5°	852.2	786.0	719.7	657.9	591.7	525.5	463.6	397.4	335.6	278.2	220.8
70°	997.9	918.4	839.0	763.9	688.8	609.4	538.7	463.6	388.6	317.9	251.7
67.5°	1152.5	1059.7	967.0	869.9	786.0	697.7	609.4	525.5	441.6	362.1	287.0
65°	1320.3	1209.9	1095.1	993.5	883.1	786.0	688.8	591.7	499.0	401.8	317.9
62.5°	1492.5	1364.4	1236.4	1108.3	993.5	869.9	763.9	657.9	552.0	446.0	348.8
60°	1669.1	1523.4	1377.7	1236.4	1095.1	967.0	839.0	719.7	609.4	490.1	379.7
57.5°	1850.1	1686.8	1523.4	1364.4	1209.9	1059.7	918.4	786.0	657.9	534.3	410.7
55°	2035.6	1850.1	1669.1	1492.5	1320.3	1152.5	997.9	852.2	710.9	574.0	446.0
52.5°	2221.1	2017.9	1814.8	1624.9	1443.9	1254.0	1077.4	914.0	759.5	618.2	476.9
50°	2410.9	2181.3	1964.9	1753.0	1545.5	1346.8	1156.9	980.3	812.5	657.9	507.8
47.5°	2605.2	2353.5	2110.7	1881.1	1660.3	1443.9	1236.4	1042.1	861.0	697.7	538.7
45°	2812.7	2521.3	2260.8	2013.5	1770.7	1541.0	1315.9	1103.9	914.0	737.4	569.6
42.5°	3015.9	2702.4	2410.9	2150.4	1881.1	1633.8	1395.3	1170.1	962.6	772.7	596.1
40°	3245.5	2883.4	2552.2	2265.2	1987.0	1722.1	1470.4	1232.0	1011.2	808.1	622.6
37.5°	3466.3	3060.0	2711.2	2388.8	2088.6	1810.4	1545.5	1293.8	1059.7	843.4	649.1
35°	3691.5	3254.3	2856.9	2503.7	2190.1	1898.7	1616.1	1351.2	1099.5	874.3	675.6
32.5°	3921.1	3439.8	3011.5	2627.3	2291.7	1978.2	1682.3	1404.2	1143.6	909.6	697.7
30°	4141.8	3616.4	3157.2	2746.5	2384.4	2057.7	1748.6	1457.2	1187.8	940.5	719.7
27.5°	4367.0	3801.8	3302.9	2856.9	2472.7	2128.3	1806.0	1505.7	1227.5	971.4	741.8
25°	4583.4	3978.5	3439.8	2962.9	2552.2	2199.0	1867.8	1554.3	1262.9	997.9	759.5
22.5°	4782.1	4133.0	3563.4	3064.4	2636.1	2260.8	1920.8	1598.5	1298.2	1024.4	777.1
20°	4963.2	4292.0	3691.5	3166.0	2715.6	2322.6	1964.9	1638.2	1329.1	1046.5	794.8
17.5°	5139.8	4437.7	3806.3	3258.7	2781.8	2375.6	2009.1	1669.1	1355.6	1064.2	808.1
15°	5289.9	4565.7	3907.8	3338.2	2843.7	2419.8	2044.4	1700.0	1377.7	1081.8	816.9
12.5°	5422.4	4676.1	3996.1	3404.4	2892.2	2459.5	2079.8	1726.5	1399.8	1095.1	830.1
10°	5528.4	4764.4	4066.8	3461.8	2936.4	2490.4	2101.8	1748.6	1413.0	1108.3	839.0
7.5°	5612.2	4835.1	4124.2	3501.6	2967.3	2516.9	2123.9	1761.8	1426.2	1117.2	852.2
5°	5674.1	4888.1	4163.9	3532.5	2993.8	2547.8	2150.4	1783.9	1443.9	1130.4	852.2
2.5°	5722.6	4927.8	4194.8	3559.0	3011.5	2547.8	2150.4	1783.9	1443.9	1130.4	852.2
0°	5722.6	4927.8	4194.8	3559.0	3011.5	2547.8	2150.4	1783.9	1443.9	1130.4	852.2

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	22.1	17.7	8.8	0.0
85°	48.6	30.9	17.7	0.0
82.5°	70.6	48.6	22.1	0.0
80°	92.7	61.8	30.9	0.0
77.5°	119.2	79.5	39.7	0.0
75°	141.3	92.7	48.6	0.0
72.5°	163.4	110.4	53.0	0.0
70°	185.5	123.6	61.8	0.0
67.5°	211.9	136.9	70.6	0.0
65°	234.0	154.5	75.1	0.0
62.5°	256.1	167.8	83.9	0.0
60°	278.2	181.0	88.3	0.0
57.5°	300.3	194.3	97.1	0.0
55°	322.3	211.9	106.0	0.0
52.5°	344.4	225.2	110.4	0.0
50°	366.5	238.4	114.8	0.0
47.5°	384.2	251.7	123.6	0.0
45°	406.2	264.9	128.1	0.0
42.5°	428.3	273.8	132.5	0.0
40°	446.0	287.0	136.9	0.0
37.5°	468.1	295.8	145.7	0.0
35°	485.7	309.1	150.1	0.0
32.5°	499.0	317.9	154.5	0.0
30°	516.6	326.8	159.0	0.0
27.5°	529.9	335.6	159.0	0.0
25°	543.1	344.4	163.4	0.0
22.5°	556.4	348.8	167.8	0.0
20°	569.6	357.7	172.2	0.0
17.5°	578.4	362.1	172.2	0.0
15°	587.3	366.5	181.0	0.0
12.5°	591.7	370.9	181.0	0.0
10°	600.5	379.7	181.0	0.0
7.5°	609.4	379.7	181.0	0.0
5°	609.4	379.7	181.0	0.0
2.5°	609.4	379.7	181.0	0.0
0°	609.4	379.7	181.0	0.0

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