

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: P624067

Luminaire Tested: **IFLD-L-SA7E-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624067
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7E-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

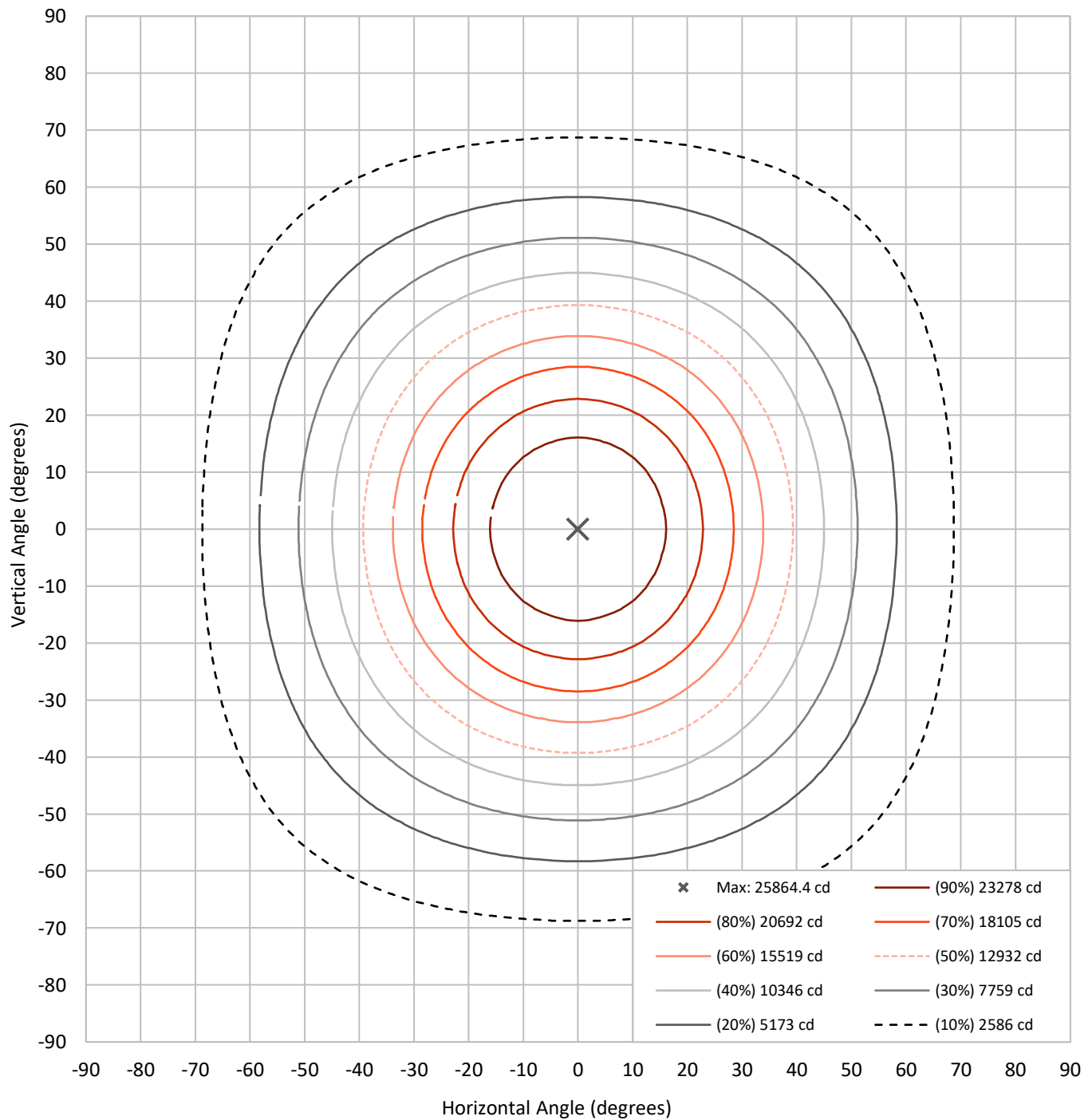
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	46569.4 lumens	Max Intensity:	25864.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	87.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	20150.1 lumens	Field Lumens:	32995.1 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	532.7		
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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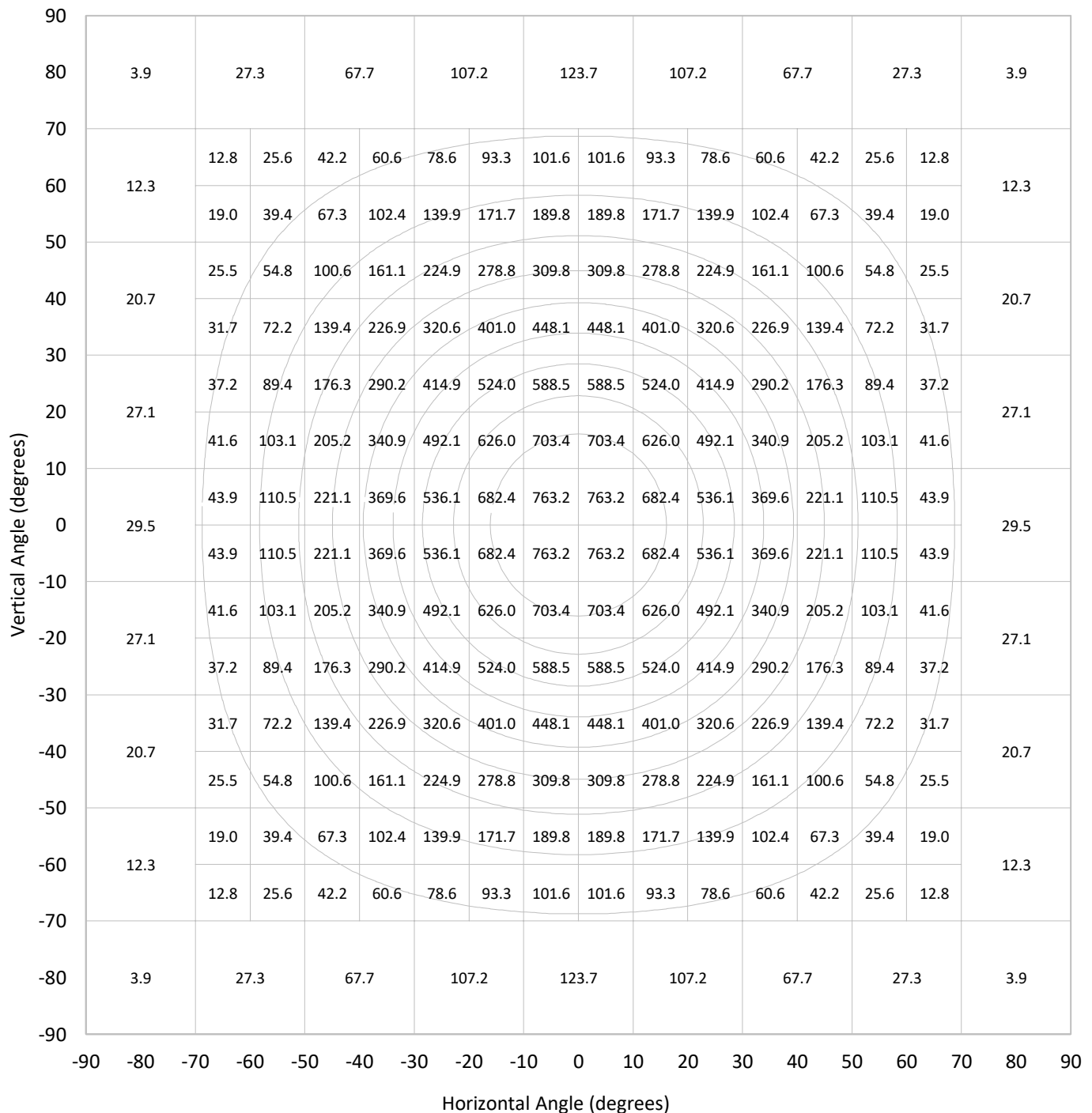
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Iso-Candela Plot



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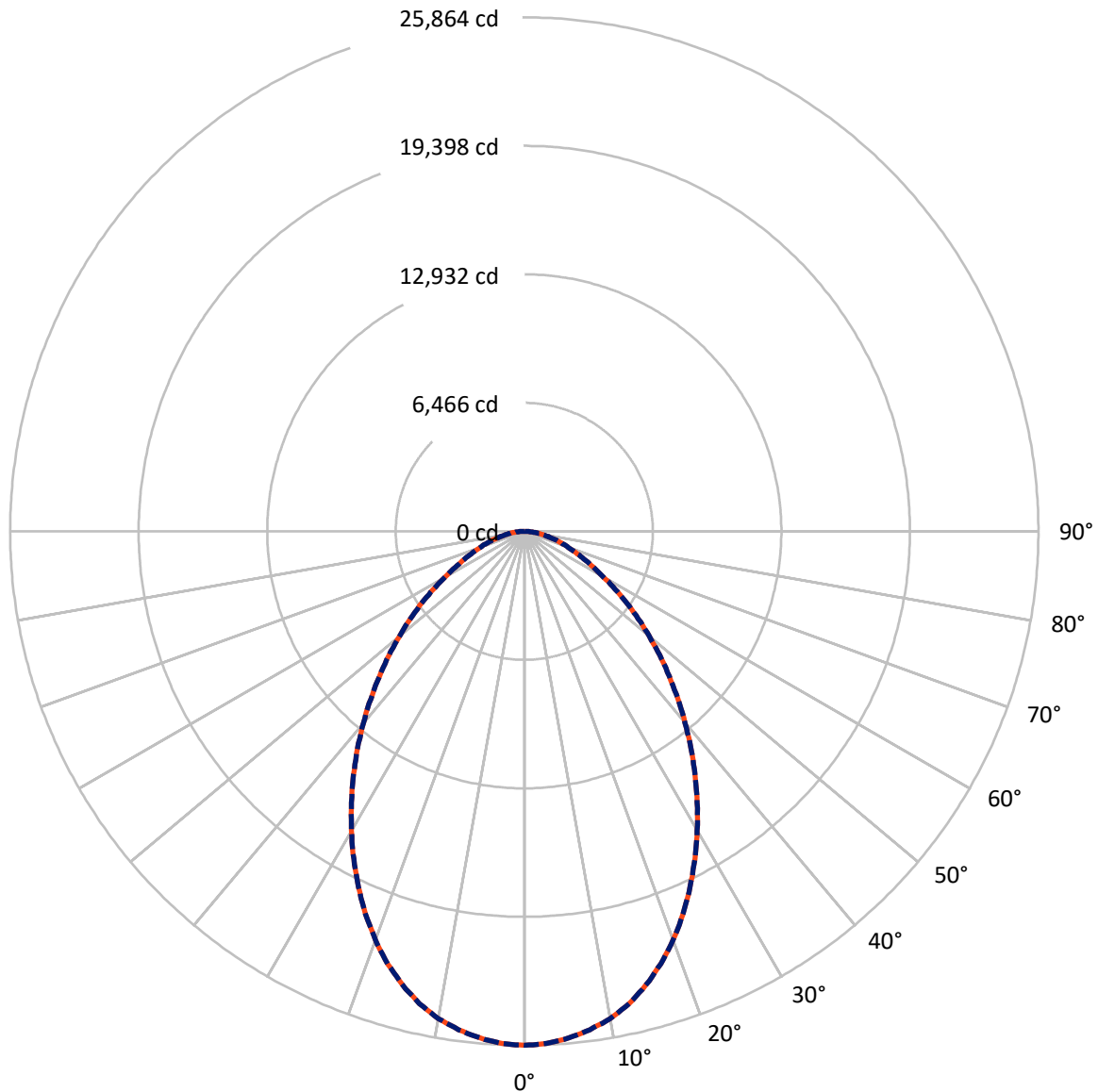
Lumen Table



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Luminous Intensity Polar Plot



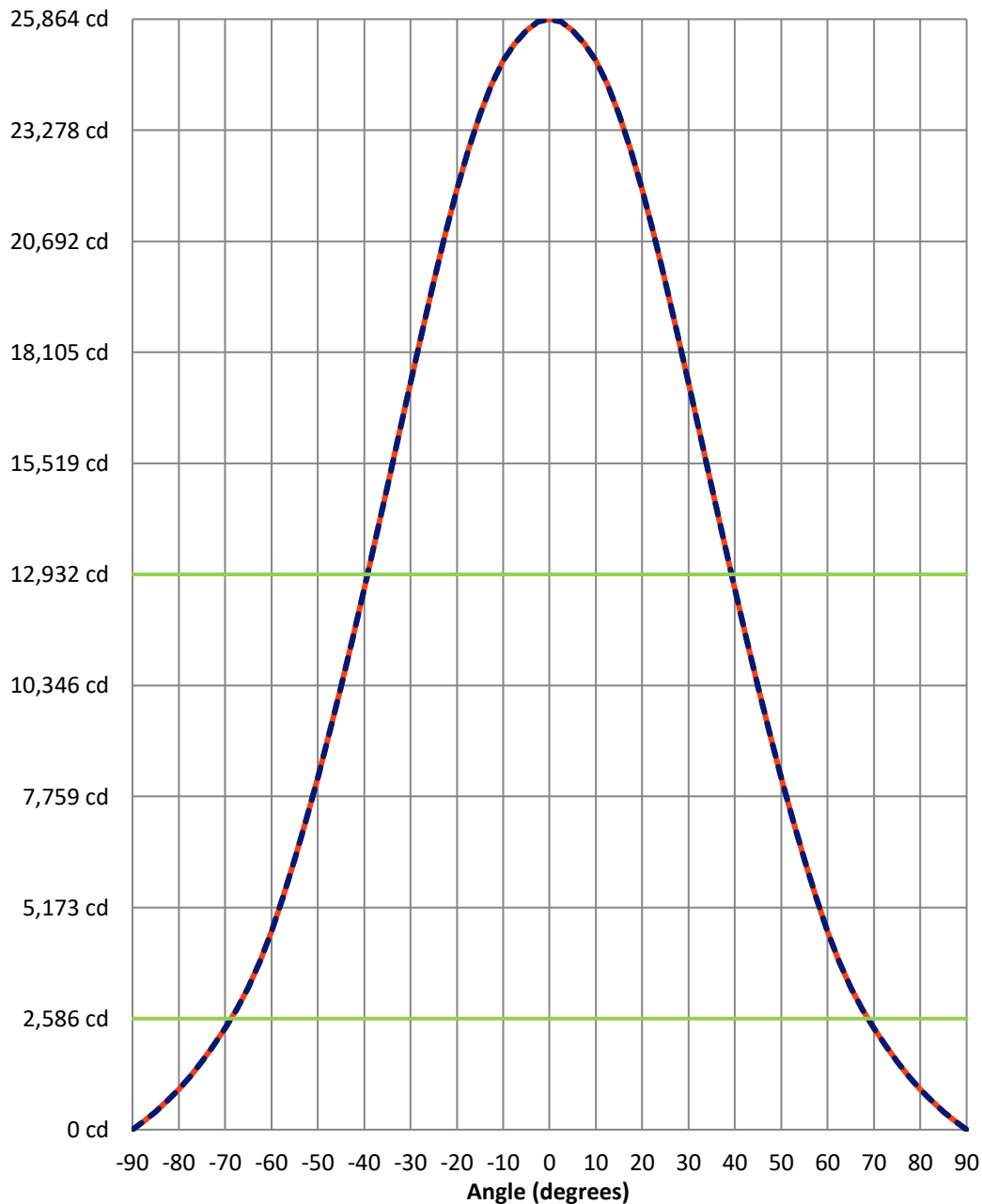
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 20150.1
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 32995.1
Efficiency: 70.9%

Spill:

Lumens: 13574.3
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°	199.1	199.1	199.1	199.1	199.1	199.1	199.1	189.4	189.4	184.5	179.6
85°	417.6	417.6	417.6	417.6	417.6	407.8	403.0	398.1	393.3	383.6	378.7
82.5°	670.0	670.0	670.0	670.0	660.3	650.6	645.8	636.0	626.3	611.8	597.2
80°	937.1	937.1	937.1	937.1	922.5	912.8	898.2	888.5	874.0	854.5	835.1
77.5°	1243.0	1243.0	1243.0	1228.4	1218.7	1204.1	1189.6	1170.1	1150.7	1126.4	1097.3
75°	1587.7	1587.7	1587.7	1568.3	1553.7	1539.1	1514.9	1490.6	1461.5	1427.5	1388.6
72.5°	1961.6	1961.6	1961.6	1937.3	1922.7	1898.4	1869.3	1835.3	1801.3	1757.6	1709.1
70°	2364.5	2364.5	2364.5	2335.4	2311.1	2286.9	2248.0	2209.2	2160.6	2112.1	2053.8
67.5°	2801.5	2801.5	2801.5	2767.5	2738.4	2704.4	2660.7	2612.2	2553.9	2485.9	2418.0
65°	3311.3	3311.3	3291.9	3262.8	3228.8	3180.2	3126.8	3058.9	2986.0	2898.6	2806.4
62.5°	3913.4	3913.4	3884.3	3850.3	3806.6	3743.5	3670.6	3583.2	3481.3	3369.6	3257.9
60°	4612.6	4612.6	4578.6	4534.9	4471.8	4394.1	4297.0	4185.3	4059.1	3918.3	3782.3
57.5°	5418.6	5418.6	5374.9	5316.6	5238.9	5141.8	5020.4	4879.6	4719.4	4544.6	4374.7
55°	6292.5	6292.5	6239.1	6171.1	6078.9	5962.4	5816.7	5651.6	5457.4	5258.3	5039.8
52.5°	7219.9	7219.9	7156.8	7079.1	6972.3	6836.3	6671.2	6477.0	6253.7	6020.6	5763.3
50°	8195.8	8195.8	8123.0	8035.6	7914.2	7754.0	7564.6	7341.3	7093.6	6821.7	6525.6
47.5°	9239.7	9239.7	9157.2	9055.2	8909.5	8725.0	8501.7	8244.4	7962.7	7656.9	7321.8
45°	10312.7	10312.7	10220.5	10104.0	9943.7	9734.9	9487.3	9239.7	8880.4	8526.0	8137.5
42.5°	11429.5	11429.5	11322.6	11191.5	11007.0	10778.8	10497.2	10176.8	9822.3	9424.2	9001.8
40°	12589.9	12589.9	12468.5	12318.0	12114.1	11851.9	11536.3	11177.0	10778.8	10337.0	9870.9
37.5°	13774.6	13774.6	13638.6	13473.6	13245.4	12954.0	12599.6	12201.5	11754.8	11264.4	10749.7
35°	14969.0	14969.0	14818.5	14638.8	14386.4	14065.9	13682.3	13240.5	12745.3	12211.2	11633.4
32.5°	16187.7	16187.7	16022.6	15818.7	15532.2	15177.8	14755.4	14274.7	13774.6	13153.1	12521.9
30°	17391.8	17391.8	17212.2	16988.8	16682.9	16294.5	15833.2	15304.0	14716.5	14080.5	13400.7
27.5°	18576.5	18528.0	18377.4	18139.5	17804.5	17391.8	16891.7	16318.8	15682.7	14983.6	14255.3
25°	19741.8	19688.4	19523.3	19261.1	18901.8	18450.3	17911.3	17299.6	16615.0	15876.9	15080.7
22.5°	20858.5	20800.3	20625.5	20343.9	19960.3	19469.9	18892.1	18236.6	17508.3	16716.9	15876.9
20°	21892.7	21829.6	21649.9	21353.8	20955.6	20436.1	19824.3	19120.3	18343.5	17508.3	16615.0
17.5°	22824.9	22761.8	22572.5	22266.6	21892.7	21314.9	20683.7	19940.9	19120.3	18236.6	17299.6
15°	23645.5	23577.5	23383.3	23077.4	22650.1	22106.3	21441.2	20683.7	19824.3	18892.1	17911.3
12.5°	24344.7	24276.7	24077.6	23771.7	23329.9	22786.1	22106.3	21314.9	20436.1	19469.9	18450.3
10°	24898.2	24830.2	24640.8	24349.5	23893.1	23329.9	22650.1	21892.7	20955.6	19960.3	18901.8
7.5°	25296.3	25233.2	25058.4	24767.1	24349.5	23771.7	23077.4	22266.6	21353.8	20343.9	19261.1
5°	25597.3	25524.5	25349.7	25058.4	24640.8	24077.6	23383.3	22572.5	21649.9	20625.5	19523.3
2.5°	25806.1	25718.7	25524.5	25233.2	24830.2	24276.7	23577.5	22761.8	21829.6	20800.3	19688.4
0°	25864.4	25806.1	25597.3	25296.3	24898.2	24344.7	23645.5	22824.9	21892.7	20858.5	19741.8

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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°	174.8	174.8	169.9	165.1	160.2	150.5	145.7	140.8	135.9	126.2	121.4
85°	369.0	359.3	349.6	339.9	325.3	315.6	301.0	291.3	276.8	262.2	247.6
82.5°	582.6	568.1	548.7	534.1	514.7	490.4	471.0	446.7	422.4	403.0	378.7
80°	815.7	791.4	767.1	742.9	713.7	684.6	655.5	626.3	592.4	558.4	524.4
77.5°	1068.2	1034.2	1000.2	961.4	927.4	888.5	849.7	810.8	767.1	723.4	679.7
75°	1349.8	1306.1	1257.5	1209.0	1165.3	1111.9	1058.5	1005.1	946.8	893.4	835.1
72.5°	1655.7	1602.3	1544.0	1485.7	1422.6	1354.6	1286.7	1213.8	1145.9	1077.9	1005.1
70°	1985.8	1922.7	1849.9	1777.1	1699.4	1616.8	1534.3	1446.9	1359.5	1272.1	1184.7
67.5°	2340.3	2262.6	2175.2	2087.8	1990.7	1893.6	1796.5	1694.5	1587.7	1480.9	1378.9
65°	2719.0	2621.9	2519.9	2408.2	2296.6	2184.9	2068.4	1947.0	1825.6	1699.4	1587.7
62.5°	3141.4	3020.0	2888.9	2753.0	2626.7	2490.8	2364.5	2214.0	2068.4	1927.6	1786.8
60°	3631.8	3471.6	3311.3	3141.4	2981.2	2806.4	2651.0	2485.9	2320.9	2160.6	1995.5
57.5°	4180.4	3976.5	3782.3	3578.4	3364.7	3170.5	2971.5	2772.4	2587.9	2398.5	2218.9
55°	4801.9	4554.3	4311.5	4059.1	3811.4	3568.7	3316.2	3092.8	2864.6	2651.0	2442.2
52.5°	5481.7	5200.1	4899.0	4612.6	4297.0	3995.9	3714.3	3432.7	3165.7	2908.3	2670.4
50°	6210.0	5879.8	5535.1	5185.5	4826.2	4471.8	4131.9	3801.7	3491.0	3190.0	2908.3
47.5°	6967.4	6593.5	6200.3	5802.1	5418.6	4986.4	4578.6	4204.7	3830.9	3491.0	3165.7
45°	7744.3	7321.8	6889.7	6438.2	5986.6	5520.5	5069.0	4612.6	4204.7	3801.7	3432.7
42.5°	8545.4	8069.6	7588.9	7088.8	6588.7	6078.9	5569.1	5069.0	4578.6	4131.9	3714.3
40°	9370.8	8846.4	8297.8	7754.0	7219.9	6637.2	6078.9	5520.5	4986.4	4471.8	3995.9
37.5°	10196.2	9623.3	9030.9	8419.2	7807.4	7219.9	6588.7	5986.6	5418.6	4826.2	4297.0
35°	11026.5	10395.3	9754.4	9089.2	8419.2	7754.0	7088.8	6438.2	5802.1	5185.5	4612.6
32.5°	11861.6	11172.1	10463.2	9754.4	9030.9	8297.8	7588.9	6889.7	6200.3	5535.1	4899.0
30°	12682.1	11934.4	11172.1	10395.3	9623.3	8846.4	8069.6	7321.8	6593.5	5879.8	5200.1
27.5°	13483.3	12682.1	11861.6	11026.5	10196.2	9370.8	8545.4	7744.3	6967.4	6210.0	5481.7
25°	14255.3	13400.7	12521.9	11633.4	10749.7	9870.9	9001.8	8137.5	7321.8	6525.6	5763.3
22.5°	14983.6	14080.5	13153.1	12211.2	11264.4	10337.0	9424.2	8526.0	7656.9	6821.7	6020.6
20°	15682.7	14716.5	13774.6	12745.3	11754.8	10778.8	9822.3	8880.4	7962.7	7093.6	6253.7
17.5°	16318.8	15304.0	14274.7	13240.5	12201.5	11177.0	10176.8	9239.7	8244.4	7341.3	6477.0
15°	16891.7	15833.2	14755.4	13682.3	12599.6	11536.3	10497.2	9487.3	8501.7	7564.6	6671.2
12.5°	17391.8	16294.5	15177.8	14065.9	12954.0	11851.9	10778.8	9734.9	8725.0	7754.0	6836.3
10°	17804.5	16682.9	15532.2	14386.4	13245.4	12114.1	11007.0	9943.7	8909.5	7914.2	6972.3
7.5°	18139.5	16988.8	15818.7	14638.8	13473.6	12318.0	11191.5	10104.0	9055.2	8035.6	7079.1
5°	18377.4	17212.2	16022.6	14818.5	13638.6	12468.5	11322.6	10220.5	9157.2	8123.0	7156.8
2.5°	18528.0	17391.8	16187.7	14969.0	13774.6	12589.9	11429.5	10312.7	9239.7	8195.8	7219.9
0°	18576.5	17391.8	16187.7	14969.0	13774.6	12589.9	11429.5	10312.7	9239.7	8195.8	7219.9

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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°	116.5	106.8	97.1	92.3	82.5	77.7	68.0	58.3	53.4	43.7	34.0
85°	233.1	213.6	199.1	184.5	169.9	150.5	135.9	121.4	102.0	87.4	68.0
82.5°	354.4	330.2	305.9	281.6	257.3	233.1	203.9	179.6	155.4	131.1	102.0
80°	490.4	451.5	417.6	383.6	349.6	315.6	276.8	242.8	203.9	169.9	135.9
77.5°	631.2	587.5	538.9	490.4	441.8	398.1	349.6	305.9	262.2	213.6	169.9
75°	781.7	723.4	670.0	606.9	548.7	485.5	427.3	369.0	315.6	262.2	203.9
72.5°	937.1	864.2	791.4	723.4	650.6	577.8	509.8	437.0	369.0	305.9	242.8
70°	1097.3	1009.9	922.5	840.0	757.4	670.0	592.4	509.8	427.3	349.6	276.8
67.5°	1267.2	1165.3	1063.3	956.5	864.2	767.1	670.0	577.8	485.5	398.1	315.6
65°	1451.7	1330.4	1204.1	1092.5	971.1	864.2	757.4	650.6	548.7	441.8	349.6
62.5°	1641.1	1500.3	1359.5	1218.7	1092.5	956.5	840.0	723.4	606.9	490.4	383.6
60°	1835.3	1675.1	1514.9	1359.5	1204.1	1063.3	922.5	791.4	670.0	538.9	417.6
57.5°	2034.4	1854.7	1675.1	1500.3	1330.4	1165.3	1009.9	864.2	723.4	587.5	451.5
55°	2238.3	2034.4	1835.3	1641.1	1451.7	1267.2	1097.3	937.1	781.7	631.2	490.4
52.5°	2442.2	2218.9	1995.5	1786.8	1587.7	1378.9	1184.7	1005.1	835.1	679.7	524.4
50°	2651.0	2398.5	2160.6	1927.6	1699.4	1480.9	1272.1	1077.9	893.4	723.4	558.4
47.5°	2864.6	2587.9	2320.9	2068.4	1825.6	1587.7	1359.5	1145.9	946.8	767.1	592.4
45°	3092.8	2772.4	2485.9	2214.0	1947.0	1694.5	1446.9	1213.8	1005.1	810.8	626.3
42.5°	3316.2	2971.5	2651.0	2364.5	2068.4	1796.5	1534.3	1286.7	1058.5	849.7	655.5
40°	3568.7	3170.5	2806.4	2490.8	2184.9	1893.6	1616.8	1354.6	1111.9	888.5	684.6
37.5°	3811.4	3364.7	2981.2	2626.7	2296.6	1990.7	1699.4	1422.6	1165.3	927.4	713.7
35°	4059.1	3578.4	3141.4	2753.0	2408.2	2087.8	1777.1	1485.7	1209.0	961.4	742.9
32.5°	4311.5	3782.3	3311.3	2888.9	2519.9	2175.2	1849.9	1544.0	1257.5	1000.2	767.1
30°	4554.3	3976.5	3471.6	3020.0	2621.9	2262.6	1922.7	1602.3	1306.1	1034.2	791.4
27.5°	4801.9	4180.4	3631.8	3141.4	2719.0	2340.3	1985.8	1655.7	1349.8	1068.2	815.7
25°	5039.8	4374.7	3782.3	3257.9	2806.4	2418.0	2053.8	1709.1	1388.6	1097.3	835.1
22.5°	5258.3	4544.6	3918.3	3369.6	2898.6	2485.9	2112.1	1757.6	1427.5	1126.4	854.5
20°	5457.4	4719.4	4059.1	3481.3	2986.0	2553.9	2160.6	1801.3	1461.5	1150.7	874.0
17.5°	5651.6	4879.6	4185.3	3583.2	3058.9	2612.2	2209.2	1835.3	1490.6	1170.1	888.5
15°	5816.7	5020.4	4297.0	3670.6	3126.8	2660.7	2248.0	1869.3	1514.9	1189.6	898.2
12.5°	5962.4	5141.8	4394.1	3743.5	3180.2	2704.4	2286.9	1898.4	1539.1	1204.1	912.8
10°	6078.9	5238.9	4471.8	3806.6	3228.8	2738.4	2311.1	1922.7	1553.7	1218.7	922.5
7.5°	6171.1	5316.6	4534.9	3850.3	3262.8	2767.5	2335.4	1937.3	1568.3	1228.4	937.1
5°	6239.1	5374.9	4578.6	3884.3	3291.9	2801.5	2364.5	1961.6	1587.7	1243.0	937.1
2.5°	6292.5	5418.6	4612.6	3913.4	3311.3	2801.5	2364.5	1961.6	1587.7	1243.0	937.1
0°	6292.5	5418.6	4612.6	3913.4	3311.3	2801.5	2364.5	1961.6	1587.7	1243.0	937.1

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	24.3	19.4	9.7	0.0
85°	53.4	34.0	19.4	0.0
82.5°	77.7	53.4	24.3	0.0
80°	102.0	68.0	34.0	0.0
77.5°	131.1	87.4	43.7	0.0
75°	155.4	102.0	53.4	0.0
72.5°	179.6	121.4	58.3	0.0
70°	203.9	135.9	68.0	0.0
67.5°	233.1	150.5	77.7	0.0
65°	257.3	169.9	82.5	0.0
62.5°	281.6	184.5	92.3	0.0
60°	305.9	199.1	97.1	0.0
57.5°	330.2	213.6	106.8	0.0
55°	354.4	233.1	116.5	0.0
52.5°	378.7	247.6	121.4	0.0
50°	403.0	262.2	126.2	0.0
47.5°	422.4	276.8	135.9	0.0
45°	446.7	291.3	140.8	0.0
42.5°	471.0	301.0	145.7	0.0
40°	490.4	315.6	150.5	0.0
37.5°	514.7	325.3	160.2	0.0
35°	534.1	339.9	165.1	0.0
32.5°	548.7	349.6	169.9	0.0
30°	568.1	359.3	174.8	0.0
27.5°	582.6	369.0	174.8	0.0
25°	597.2	378.7	179.6	0.0
22.5°	611.8	383.6	184.5	0.0
20°	626.3	393.3	189.4	0.0
17.5°	636.0	398.1	189.4	0.0
15°	645.8	403.0	199.1	0.0
12.5°	650.6	407.8	199.1	0.0
10°	660.3	417.6	199.1	0.0
7.5°	670.0	417.6	199.1	0.0
5°	670.0	417.6	199.1	0.0
2.5°	670.0	417.6	199.1	0.0
0°	670.0	417.6	199.1	0.0

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