

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: P624052

Luminaire Tested: **IFLD-S-SA3E-830-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624052
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3E-830-U-77
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 7 distribution lens
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

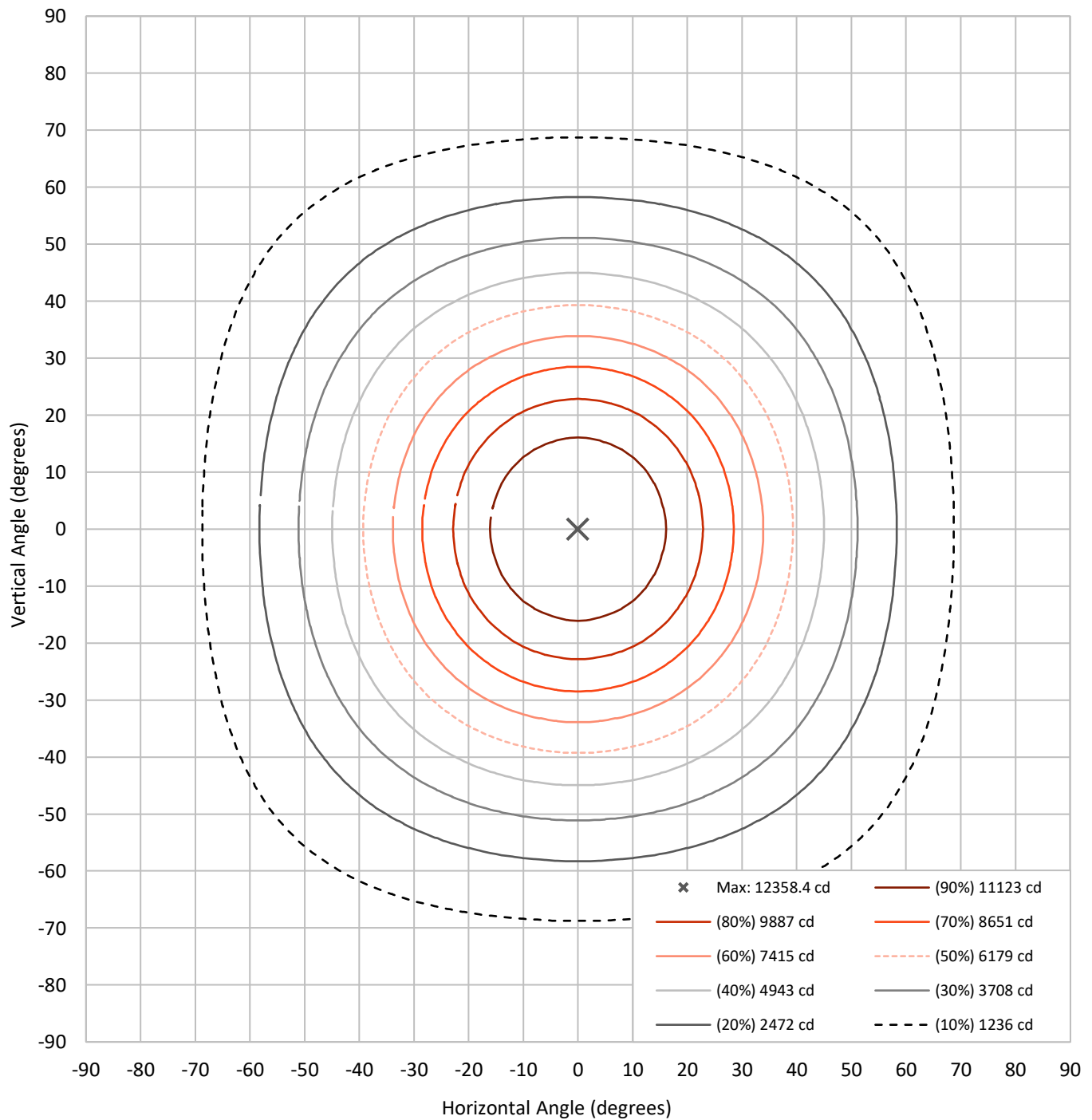
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	22251.6 lumens	Max Intensity:	12358.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	95.9 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	9628 lumens	Field Lumens:	15765.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%
Input Watts (W):	232.1		
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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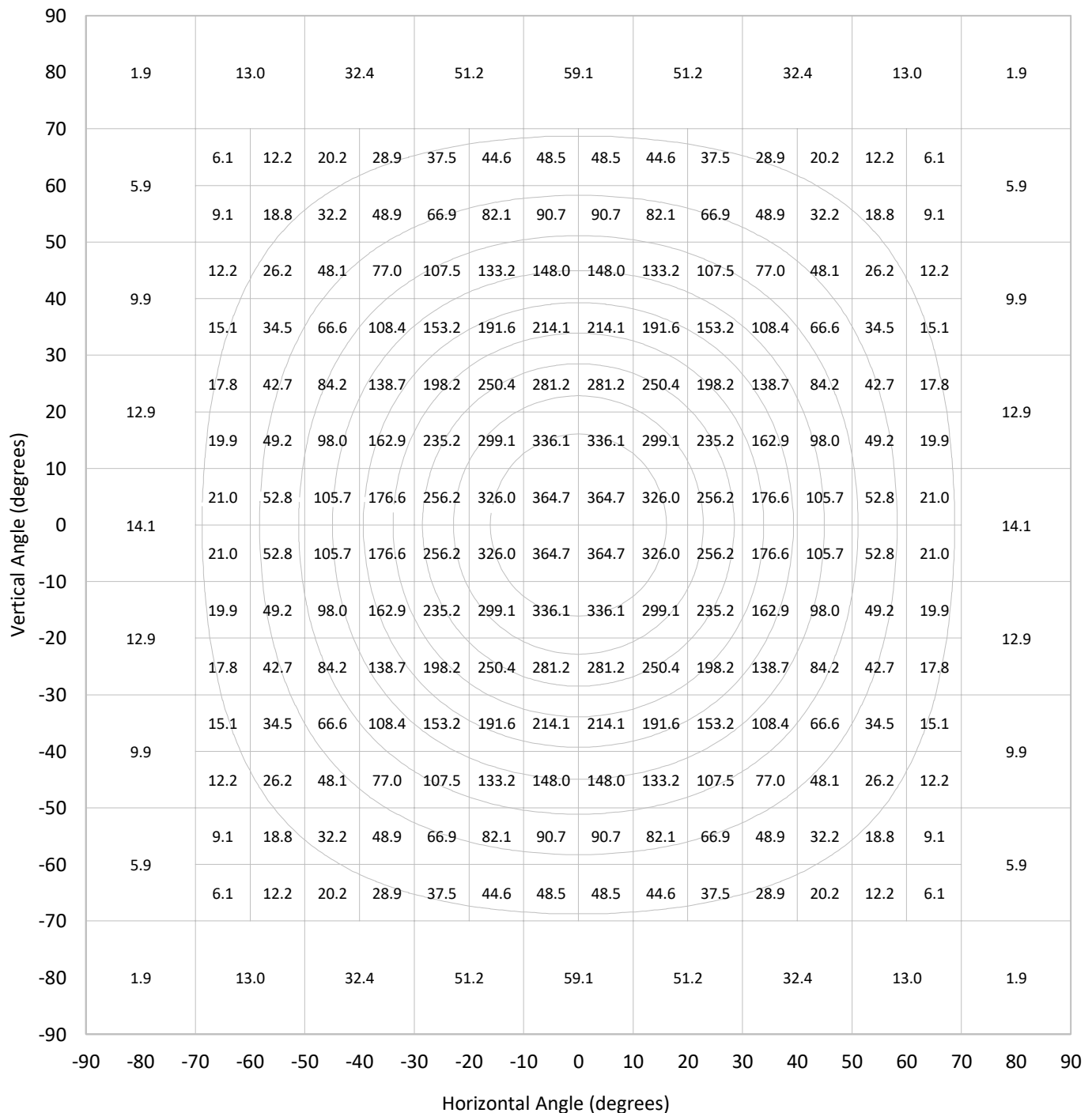
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Iso-Candela Plot



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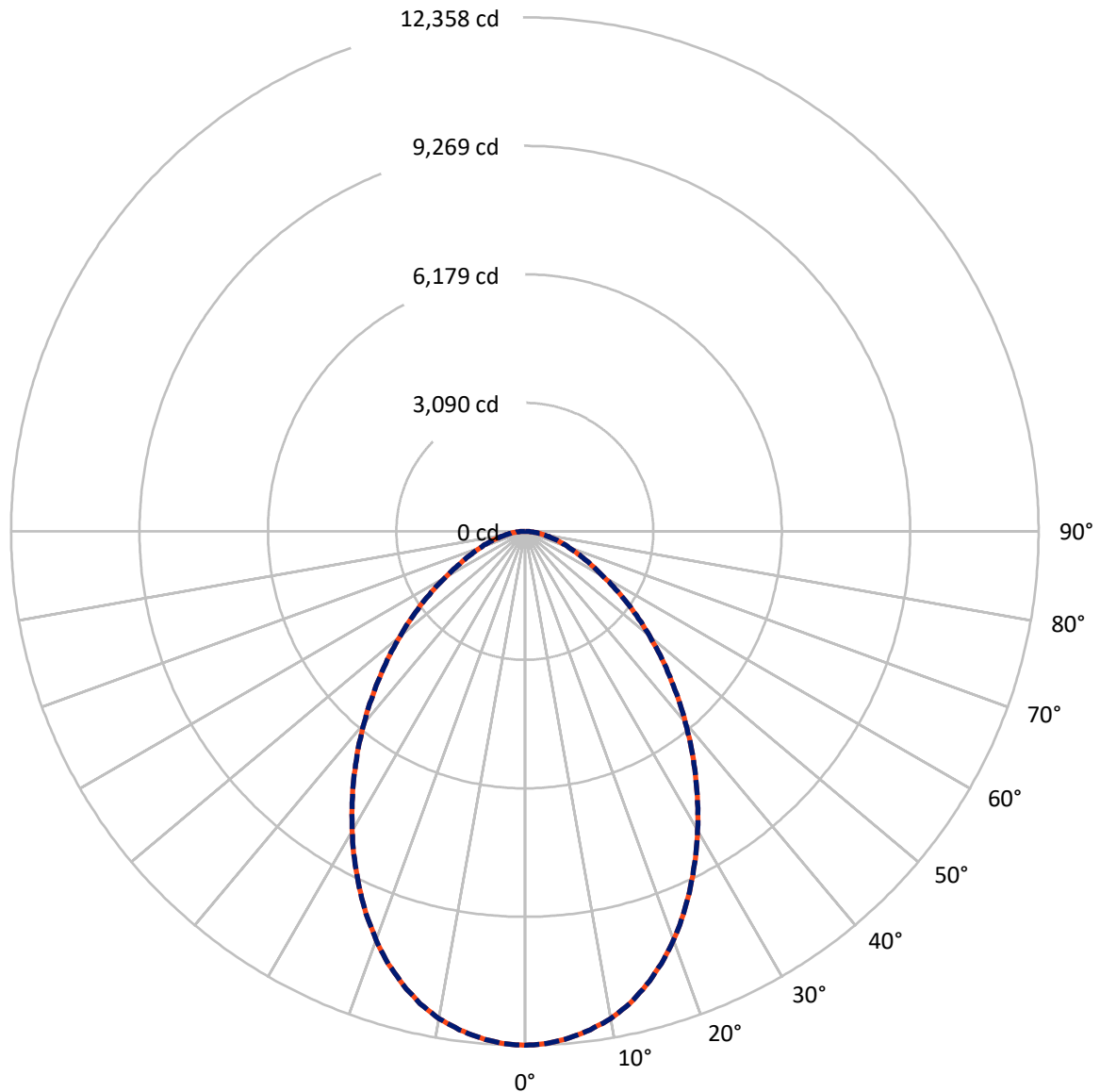
Lumen Table



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Luminous Intensity Polar Plot

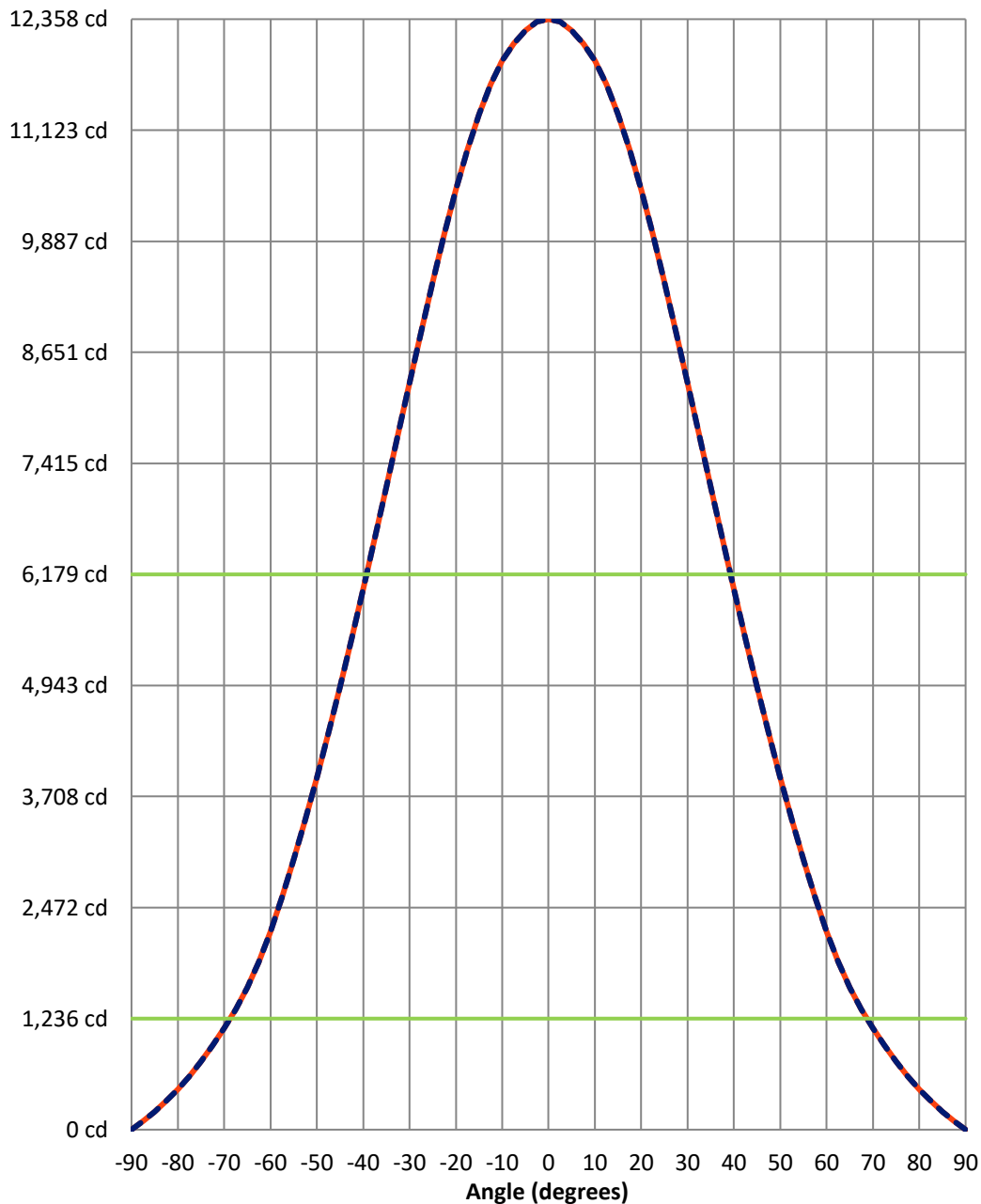


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:

H Angle: 78.6°
V Angle: 78.6°
Lumens: 9628
Efficiency: 43.3%

Field:

H Angle: 137.5°
V Angle: 137.5°
Lumens: 15765.6
Efficiency: 70.9%

Spill:

Lumens: 6486
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°	95.1	95.1	95.1	95.1	95.1	95.1	95.1	90.5	90.5	88.2	85.8
85°	199.5	199.5	199.5	199.5	199.5	194.9	192.6	190.2	187.9	183.3	181.0
82.5°	320.2	320.2	320.2	320.2	315.5	310.9	308.6	303.9	299.3	292.3	285.4
80°	447.8	447.8	447.8	447.8	440.8	436.2	429.2	424.6	417.6	408.3	399.0
77.5°	593.9	593.9	593.9	586.9	582.3	575.3	568.4	559.1	549.8	538.2	524.3
75°	758.6	758.6	758.6	749.3	742.4	735.4	723.8	712.2	698.3	682.1	663.5
72.5°	937.3	937.3	937.3	925.7	918.7	907.1	893.2	876.9	860.7	839.8	816.6
70°	1129.8	1129.8	1129.8	1115.9	1104.3	1092.7	1074.1	1055.6	1032.4	1009.2	981.3
67.5°	1338.6	1338.6	1338.6	1322.4	1308.5	1292.2	1271.3	1248.1	1220.3	1187.8	1155.3
65°	1582.2	1582.2	1572.9	1559.0	1542.8	1519.6	1494.0	1461.6	1426.8	1385.0	1340.9
62.5°	1869.9	1869.9	1856.0	1839.7	1818.8	1788.7	1753.9	1712.1	1663.4	1610.0	1556.7
60°	2204.0	2204.0	2187.7	2166.8	2136.7	2099.6	2053.2	1999.8	1939.5	1872.2	1807.2
57.5°	2589.1	2589.1	2568.2	2540.3	2503.2	2456.8	2398.8	2331.6	2255.0	2171.5	2090.3
55°	3006.7	3006.7	2981.1	2948.7	2904.6	2848.9	2779.3	2700.4	2607.6	2512.5	2408.1
52.5°	3449.8	3449.8	3419.6	3382.5	3331.5	3266.5	3187.6	3094.8	2988.1	2876.7	2753.8
50°	3916.1	3916.1	3881.3	3839.5	3781.5	3705.0	3614.5	3507.8	3389.5	3259.5	3118.0
47.5°	4414.9	4414.9	4375.4	4326.7	4257.1	4169.0	4062.2	3939.3	3804.7	3658.6	3498.5
45°	4927.6	4927.6	4883.5	4827.8	4751.3	4651.5	4533.2	4414.9	4243.2	4073.8	3888.2
42.5°	5461.2	5461.2	5410.1	5347.5	5259.3	5150.3	5015.7	4862.6	4693.3	4503.0	4301.2
40°	6015.6	6015.6	5957.6	5885.7	5788.3	5663.0	5512.2	5340.5	5150.3	4939.2	4716.5
37.5°	6581.7	6581.7	6516.7	6437.9	6328.8	6189.6	6020.3	5830.0	5616.6	5382.3	5136.4
35°	7152.4	7152.4	7080.5	6994.7	6874.0	6720.9	6537.6	6326.5	6089.9	5834.7	5558.6
32.5°	7734.7	7734.7	7655.8	7558.4	7421.5	7252.2	7050.3	6820.7	6581.7	6284.8	5983.2
30°	8310.1	8310.1	8224.2	8117.5	7971.4	7785.8	7565.4	7312.5	7031.8	6727.9	6403.1
27.5°	8876.1	8852.9	8781.0	8667.3	8507.3	8310.1	8071.1	7797.4	7493.4	7159.4	6811.4
25°	9432.9	9407.4	9328.5	9203.3	9031.6	8815.8	8558.3	8266.0	7938.9	7586.2	7205.8
22.5°	9966.5	9938.7	9855.2	9720.6	9537.3	9303.0	9026.9	8713.7	8365.7	7987.6	7586.2
20°	10460.7	10430.5	10344.7	10203.2	10012.9	9764.7	9472.4	9136.0	8764.8	8365.7	7938.9
17.5°	10906.1	10875.9	10785.5	10639.3	10460.7	10184.6	9883.0	9528.0	9136.0	8713.7	8266.0
15°	11298.2	11265.7	11172.9	11026.7	10822.6	10562.7	10244.9	9883.0	9472.4	9026.9	8558.3
12.5°	11632.2	11599.8	11504.6	11358.5	11147.4	10887.5	10562.7	10184.6	9764.7	9303.0	8815.8
10°	11896.7	11864.2	11773.8	11634.6	11416.5	11147.4	10822.6	10460.7	10012.9	9537.3	9031.6
7.5°	12087.0	12056.8	11973.3	11834.1	11634.6	11358.5	11026.7	10639.3	10203.2	9720.6	9203.3
5°	12230.8	12196.0	12112.5	11973.3	11773.8	11504.6	11172.9	10785.5	10344.7	9855.2	9328.5
2.5°	12330.5	12288.8	12196.0	12056.8	11864.2	11599.8	11265.7	10875.9	10430.5	9938.7	9407.4
0°	12358.4	12330.5	12230.8	12087.0	11896.7	11632.2	11298.2	10906.1	10460.7	9966.5	9432.9

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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°	83.5	83.5	81.2	78.9	76.6	71.9	69.6	67.3	65.0	60.3	58.0
85°	176.3	171.7	167.0	162.4	155.4	150.8	143.8	139.2	132.2	125.3	118.3
82.5°	278.4	271.4	262.2	255.2	245.9	234.3	225.0	213.4	201.8	192.6	181.0
80°	389.8	378.2	366.6	355.0	341.0	327.1	313.2	299.3	283.0	266.8	250.6
77.5°	510.4	494.1	477.9	459.4	443.1	424.6	406.0	387.4	366.6	345.7	324.8
75°	644.9	624.1	600.9	577.7	556.8	531.3	505.7	480.2	452.4	426.9	399.0
72.5°	791.1	765.6	737.7	709.9	679.7	647.3	614.8	580.0	547.5	515.0	480.2
70°	948.9	918.7	883.9	849.1	812.0	772.5	733.1	691.3	649.6	607.8	566.1
67.5°	1118.2	1081.1	1039.3	997.6	951.2	904.8	858.4	809.7	758.6	707.6	658.9
65°	1299.2	1252.8	1204.1	1150.7	1097.3	1044.0	988.3	930.3	872.3	812.0	758.6
62.5°	1501.0	1443.0	1380.4	1315.4	1255.1	1190.1	1129.8	1057.9	988.3	921.0	853.7
60°	1735.3	1658.8	1582.2	1501.0	1424.5	1340.9	1266.7	1187.8	1108.9	1032.4	953.5
57.5°	1997.5	1900.0	1807.2	1709.8	1607.7	1514.9	1419.8	1324.7	1236.5	1146.1	1060.2
55°	2294.4	2176.1	2060.1	1939.5	1821.2	1705.2	1584.5	1477.8	1368.8	1266.7	1166.9
52.5°	2619.2	2484.7	2340.8	2204.0	2053.2	1909.3	1774.8	1640.2	1512.6	1389.7	1276.0
50°	2967.2	2809.5	2644.7	2477.7	2306.0	2136.7	1974.3	1816.5	1668.0	1524.2	1389.7
47.5°	3329.1	3150.5	2962.6	2772.3	2589.1	2382.6	2187.7	2009.1	1830.4	1668.0	1512.6
45°	3700.3	3498.5	3292.0	3076.3	2860.5	2637.8	2422.0	2204.0	2009.1	1816.5	1640.2
42.5°	4083.1	3855.8	3626.1	3387.1	3148.2	2904.6	2661.0	2422.0	2187.7	1974.3	1774.8
40°	4477.5	4227.0	3964.8	3705.0	3449.8	3171.4	2904.6	2637.8	2382.6	2136.7	1909.3
37.5°	4871.9	4598.1	4315.1	4022.8	3730.5	3449.8	3148.2	2860.5	2589.1	2306.0	2053.2
35°	5268.6	4967.0	4660.8	4343.0	4022.8	3705.0	3387.1	3076.3	2772.3	2477.7	2204.0
32.5°	5667.6	5338.2	4999.5	4660.8	4315.1	3964.8	3626.1	3292.0	2962.6	2644.7	2340.8
30°	6059.7	5702.4	5338.2	4967.0	4598.1	4227.0	3855.8	3498.5	3150.5	2809.5	2484.7
27.5°	6442.5	6059.7	5667.6	5268.6	4871.9	4477.5	4083.1	3700.3	3329.1	2967.2	2619.2
25°	6811.4	6403.1	5983.2	5558.6	5136.4	4716.5	4301.2	3888.2	3498.5	3118.0	2753.8
22.5°	7159.4	6727.9	6284.8	5834.7	5382.3	4939.2	4503.0	4073.8	3658.6	3259.5	2876.7
20°	7493.4	7031.8	6581.7	6089.9	5616.6	5150.3	4693.3	4243.2	3804.7	3389.5	2988.1
17.5°	7797.4	7312.5	6820.7	6326.5	5830.0	5340.5	4862.6	4414.9	3939.3	3507.8	3094.8
15°	8071.1	7565.4	7050.3	6537.6	6020.3	5512.2	5015.7	4533.2	4062.2	3614.5	3187.6
12.5°	8310.1	7785.8	7252.2	6720.9	6189.6	5663.0	5150.3	4651.5	4169.0	3705.0	3266.5
10°	8507.3	7971.4	7421.5	6874.0	6328.8	5788.3	5259.3	4751.3	4257.1	3781.5	3331.5
7.5°	8667.3	8117.5	7558.4	6994.7	6437.9	5885.7	5347.5	4827.8	4326.7	3839.5	3382.5
5°	8781.0	8224.2	7655.8	7080.5	6516.7	5957.6	5410.1	4883.5	4375.4	3881.3	3419.6
2.5°	8852.9	8310.1	7734.7	7152.4	6581.7	6015.6	5461.2	4927.6	4414.9	3916.1	3449.8
0°	8876.1	8310.1	7734.7	7152.4	6581.7	6015.6	5461.2	4927.6	4414.9	3916.1	3449.8

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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°	55.7	51.0	46.4	44.1	39.4	37.1	32.5	27.8	25.5	20.9	16.2
85°	111.4	102.1	95.1	88.2	81.2	71.9	65.0	58.0	48.7	41.8	32.5
82.5°	169.4	157.8	146.2	134.6	123.0	111.4	97.4	85.8	74.2	62.6	48.7
80°	234.3	215.8	199.5	183.3	167.0	150.8	132.2	116.0	97.4	81.2	65.0
77.5°	301.6	280.7	257.5	234.3	211.1	190.2	167.0	146.2	125.3	102.1	81.2
75°	373.5	345.7	320.2	290.0	262.2	232.0	204.2	176.3	150.8	125.3	97.4
72.5°	447.8	413.0	378.2	345.7	310.9	276.1	243.6	208.8	176.3	146.2	116.0
70°	524.3	482.6	440.8	401.4	361.9	320.2	283.0	243.6	204.2	167.0	132.2
67.5°	605.5	556.8	508.1	457.0	413.0	366.6	320.2	276.1	232.0	190.2	150.8
65°	693.7	635.7	575.3	522.0	464.0	413.0	361.9	310.9	262.2	211.1	167.0
62.5°	784.1	716.9	649.6	582.3	522.0	457.0	401.4	345.7	290.0	234.3	183.3
60°	876.9	800.4	723.8	649.6	575.3	508.1	440.8	378.2	320.2	257.5	199.5
57.5°	972.1	886.2	800.4	716.9	635.7	556.8	482.6	413.0	345.7	280.7	215.8
55°	1069.5	972.1	876.9	784.1	693.7	605.5	524.3	447.8	373.5	301.6	234.3
52.5°	1166.9	1060.2	953.5	853.7	758.6	658.9	566.1	480.2	399.0	324.8	250.6
50°	1266.7	1146.1	1032.4	921.0	812.0	707.6	607.8	515.0	426.9	345.7	266.8
47.5°	1368.8	1236.5	1108.9	988.3	872.3	758.6	649.6	547.5	452.4	366.6	283.0
45°	1477.8	1324.7	1187.8	1057.9	930.3	809.7	691.3	580.0	480.2	387.4	299.3
42.5°	1584.5	1419.8	1266.7	1129.8	988.3	858.4	733.1	614.8	505.7	406.0	313.2
40°	1705.2	1514.9	1340.9	1190.1	1044.0	904.8	772.5	647.3	531.3	424.6	327.1
37.5°	1821.2	1607.7	1424.5	1255.1	1097.3	951.2	812.0	679.7	556.8	443.1	341.0
35°	1939.5	1709.8	1501.0	1315.4	1150.7	997.6	849.1	709.9	577.7	459.4	355.0
32.5°	2060.1	1807.2	1582.2	1380.4	1204.1	1039.3	883.9	737.7	600.9	477.9	366.6
30°	2176.1	1900.0	1658.8	1443.0	1252.8	1081.1	918.7	765.6	624.1	494.1	378.2
27.5°	2294.4	1997.5	1735.3	1501.0	1299.2	1118.2	948.9	791.1	644.9	510.4	389.8
25°	2408.1	2090.3	1807.2	1556.7	1340.9	1155.3	981.3	816.6	663.5	524.3	399.0
22.5°	2512.5	2171.5	1872.2	1610.0	1385.0	1187.8	1009.2	839.8	682.1	538.2	408.3
20°	2607.6	2255.0	1939.5	1663.4	1426.8	1220.3	1032.4	860.7	698.3	549.8	417.6
17.5°	2700.4	2331.6	1999.8	1712.1	1461.6	1248.1	1055.6	876.9	712.2	559.1	424.6
15°	2779.3	2398.8	2053.2	1753.9	1494.0	1271.3	1074.1	893.2	723.8	568.4	429.2
12.5°	2848.9	2456.8	2099.6	1788.7	1519.6	1292.2	1092.7	907.1	735.4	575.3	436.2
10°	2904.6	2503.2	2136.7	1818.8	1542.8	1308.5	1104.3	918.7	742.4	582.3	440.8
7.5°	2948.7	2540.3	2166.8	1839.7	1559.0	1322.4	1115.9	925.7	749.3	586.9	447.8
5°	2981.1	2568.2	2187.7	1856.0	1572.9	1338.6	1129.8	937.3	758.6	593.9	447.8
2.5°	3006.7	2589.1	2204.0	1869.9	1582.2	1338.6	1129.8	937.3	758.6	593.9	447.8
0°	3006.7	2589.1	2204.0	1869.9	1582.2	1338.6	1129.8	937.3	758.6	593.9	447.8

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	11.6	9.3	4.6	0.0
85°	25.5	16.2	9.3	0.0
82.5°	37.1	25.5	11.6	0.0
80°	48.7	32.5	16.2	0.0
77.5°	62.6	41.8	20.9	0.0
75°	74.2	48.7	25.5	0.0
72.5°	85.8	58.0	27.8	0.0
70°	97.4	65.0	32.5	0.0
67.5°	111.4	71.9	37.1	0.0
65°	123.0	81.2	39.4	0.0
62.5°	134.6	88.2	44.1	0.0
60°	146.2	95.1	46.4	0.0
57.5°	157.8	102.1	51.0	0.0
55°	169.4	111.4	55.7	0.0
52.5°	181.0	118.3	58.0	0.0
50°	192.6	125.3	60.3	0.0
47.5°	201.8	132.2	65.0	0.0
45°	213.4	139.2	67.3	0.0
42.5°	225.0	143.8	69.6	0.0
40°	234.3	150.8	71.9	0.0
37.5°	245.9	155.4	76.6	0.0
35°	255.2	162.4	78.9	0.0
32.5°	262.2	167.0	81.2	0.0
30°	271.4	171.7	83.5	0.0
27.5°	278.4	176.3	83.5	0.0
25°	285.4	181.0	85.8	0.0
22.5°	292.3	183.3	88.2	0.0
20°	299.3	187.9	90.5	0.0
17.5°	303.9	190.2	90.5	0.0
15°	308.6	192.6	95.1	0.0
12.5°	310.9	194.9	95.1	0.0
10°	315.5	199.5	95.1	0.0
7.5°	320.2	199.5	95.1	0.0
5°	320.2	199.5	95.1	0.0
2.5°	320.2	199.5	95.1	0.0
0°	320.2	199.5	95.1	0.0

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