

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: EPHESUS

Report Number: P628600

Luminaire Tested: **EPH-VN-06-E-940-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628600
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-06-E-940-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (96) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

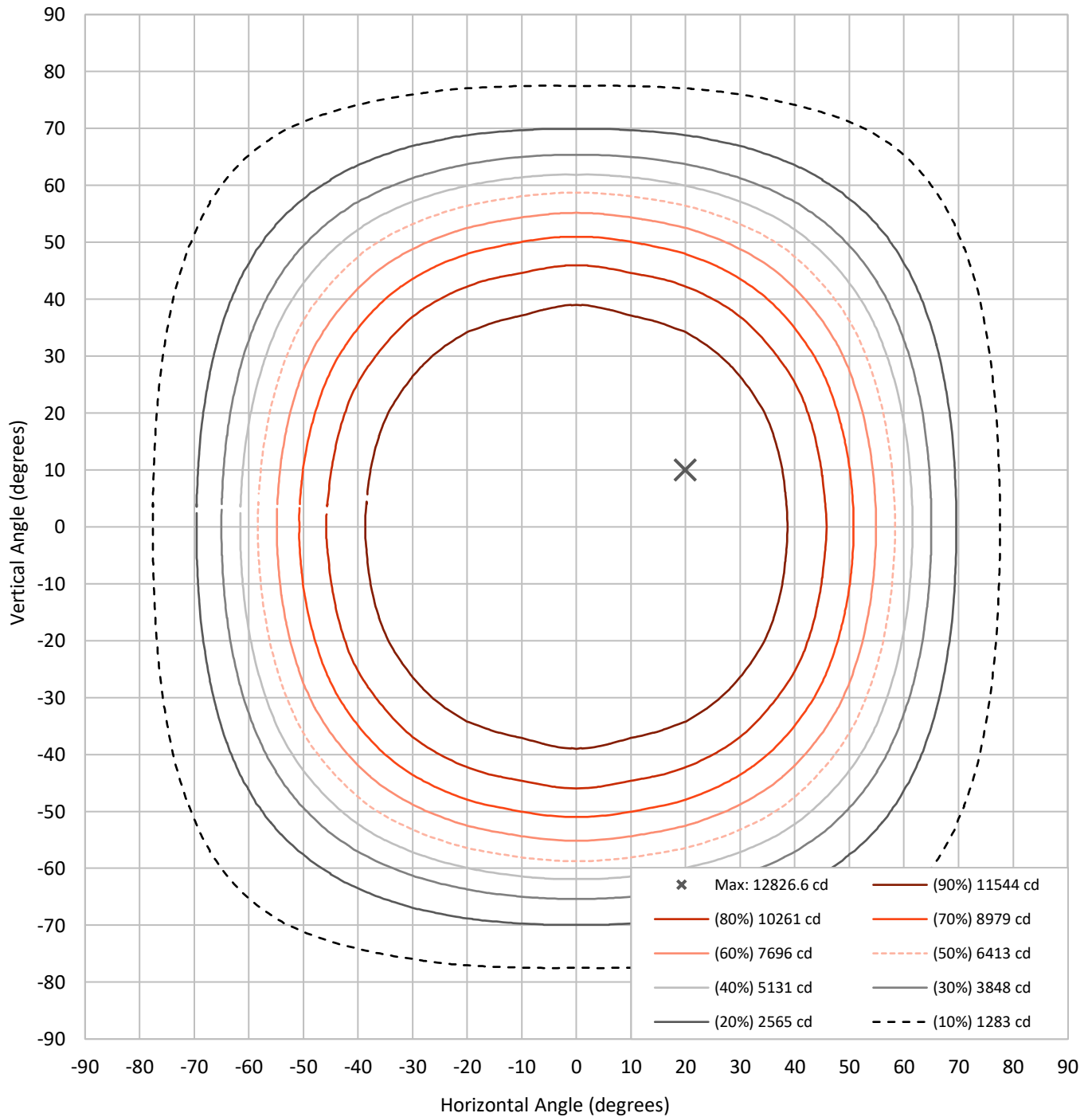
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	39350.3 lumens	Max Intensity:	12826.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	84.8 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	24146.1 lumens	Field Lumens:	28947.1 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 464.2
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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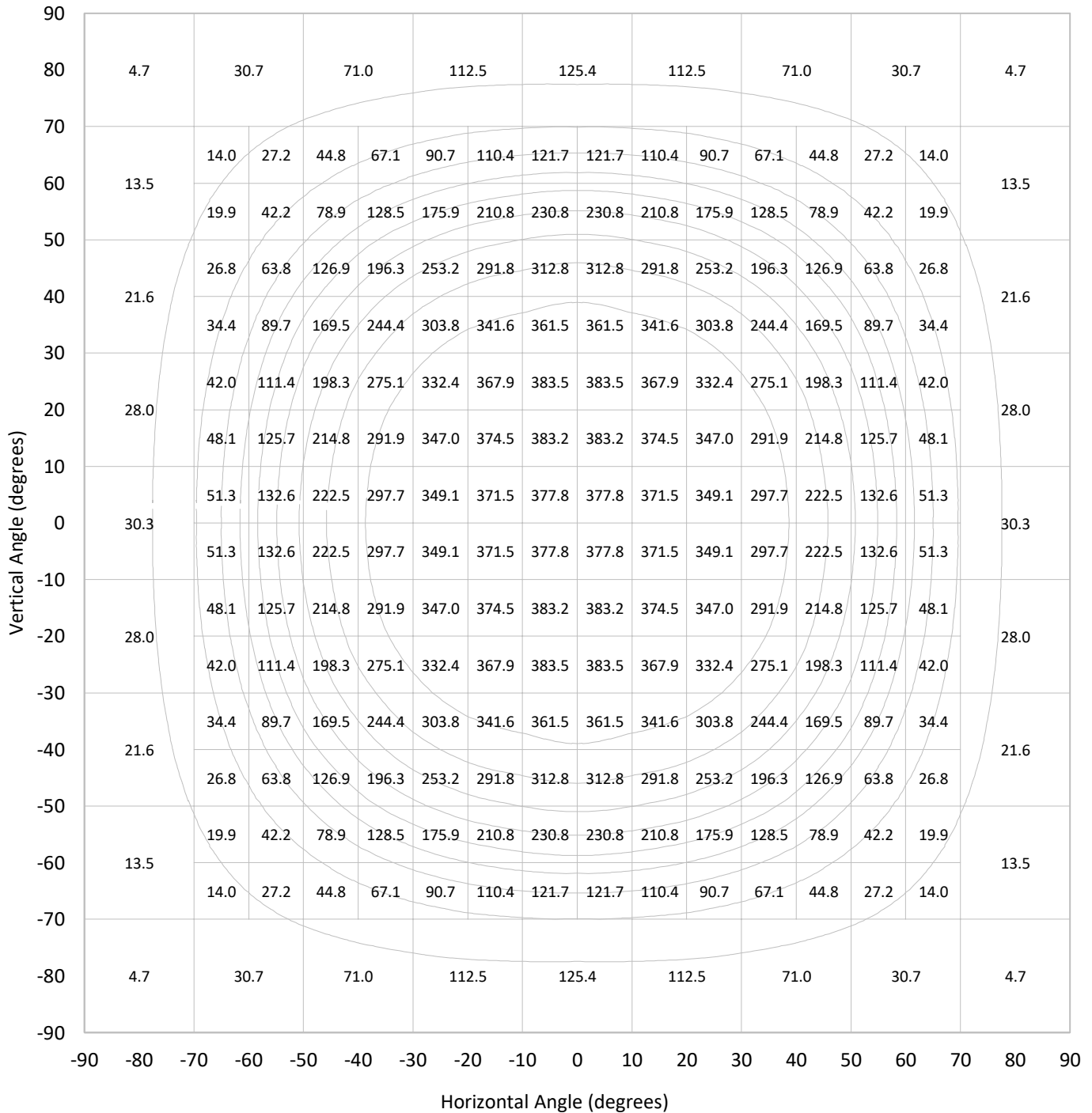
Iso-Candela Plot





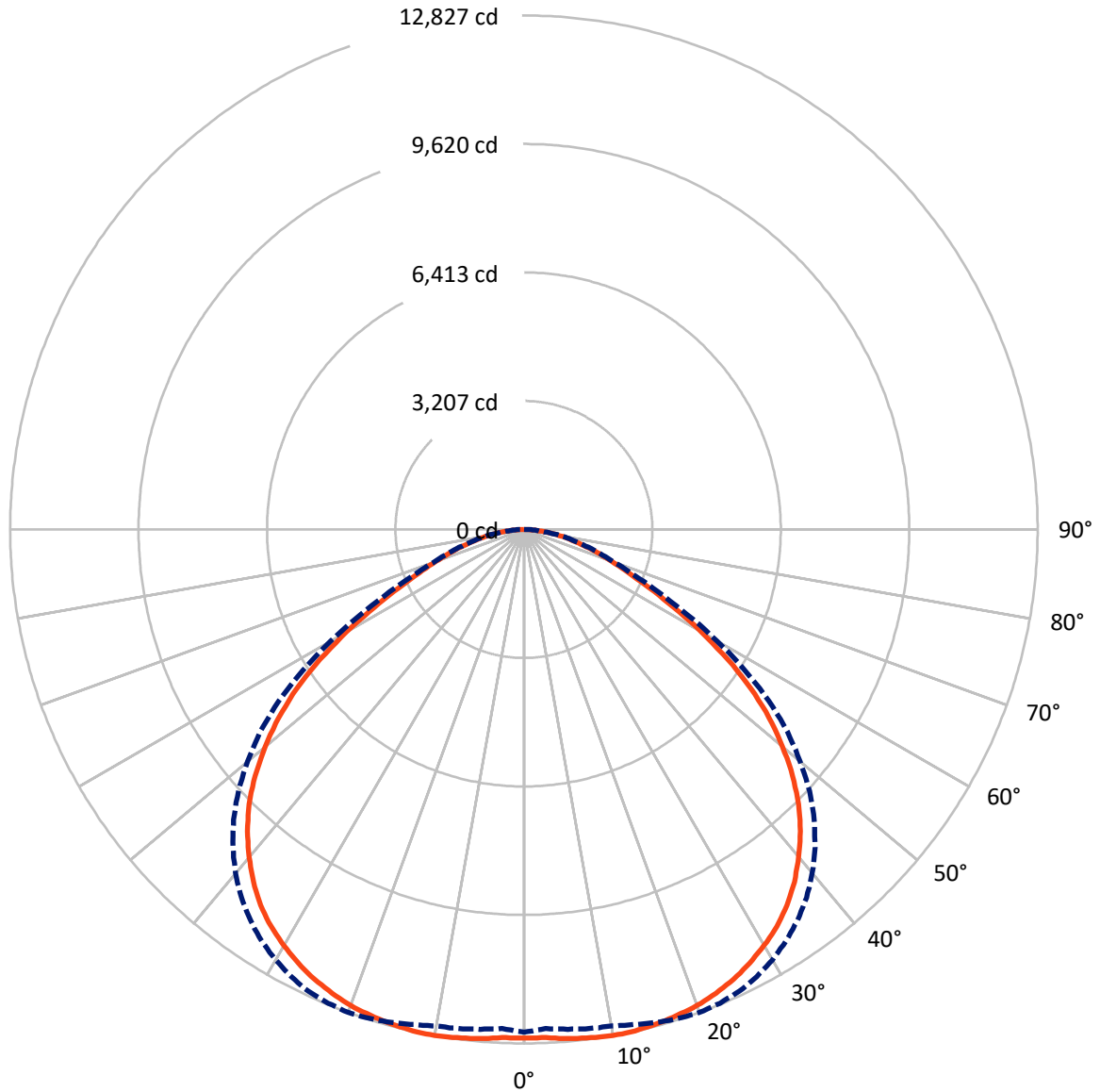
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Lumen Table



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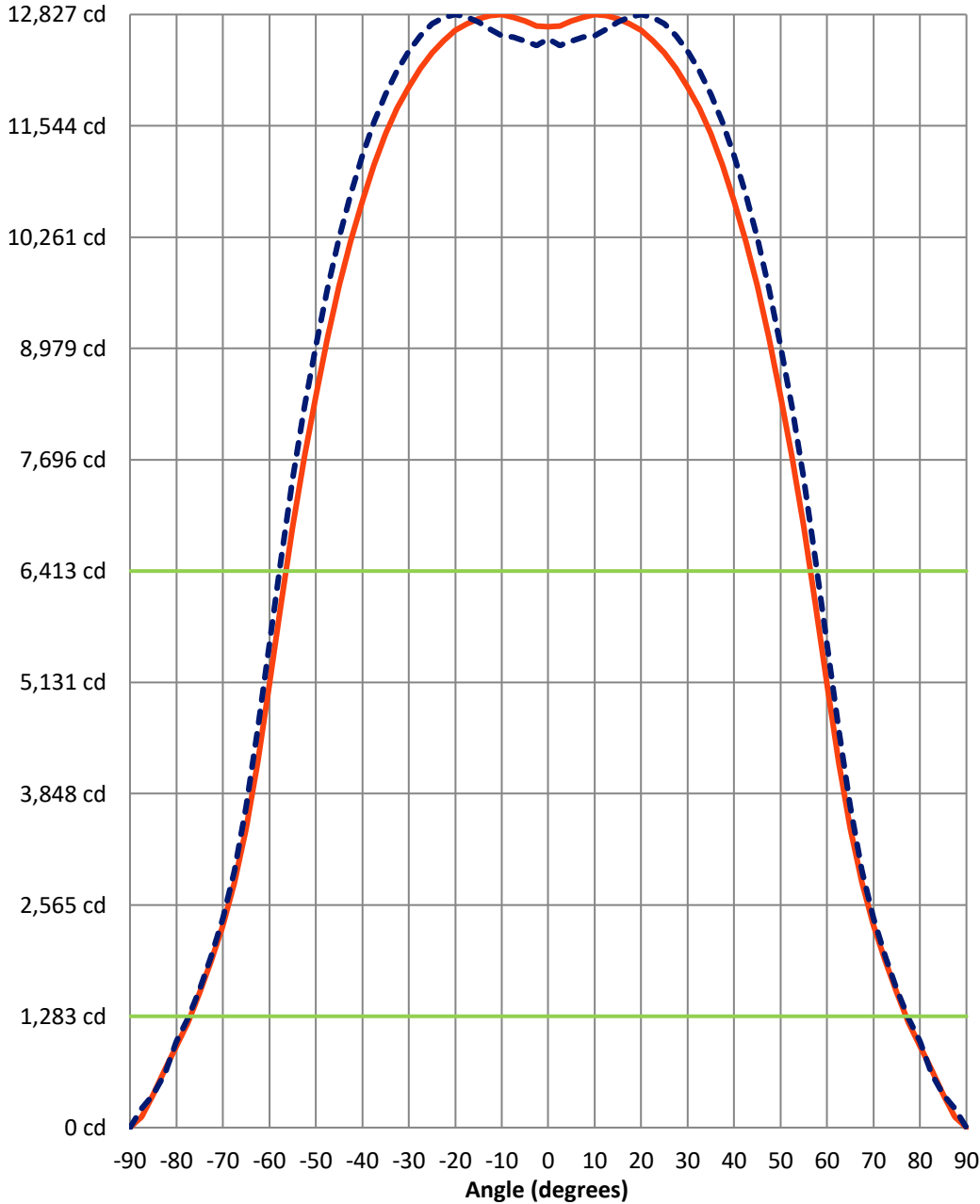
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 24146.1
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 28947.1
 Efficiency: 73.6%

Spill:
 Lumens: 10403.2
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-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°	103.5	111.8	115.9	120.1	124.2	128.3	132.5	128.3	124.2	124.2	120.1
85°	277.4	285.7	289.8	318.8	347.8	364.3	385.0	380.9	376.8	376.8	372.6
82.5°	554.8	579.6	600.3	629.3	645.9	670.7	687.3	674.9	666.6	650.0	637.6
80°	985.4	993.7	997.8	1001.9	981.2	977.1	968.8	956.4	939.8	919.1	898.4
77.5°	1254.5	1262.8	1271.1	1262.8	1258.6	1254.5	1242.1	1229.7	1213.1	1196.5	1171.7
75°	1660.3	1660.3	1660.3	1647.8	1639.6	1627.1	1606.4	1585.7	1556.7	1523.6	1486.4
72.5°	2090.8	2086.7	2082.6	2057.7	2037.0	2012.2	1983.2	1958.4	1925.2	1888.0	1838.3
70°	2542.1	2550.4	2554.6	2521.4	2496.6	2463.5	2426.2	2380.7	2331.0	2277.2	2206.8
67.5°	3163.2	3154.9	3146.6	3101.1	3068.0	3022.4	2968.6	2902.3	2827.8	2745.0	2645.6
65°	3933.3	3945.7	3920.8	3875.3	3813.2	3738.7	3655.9	3560.6	3448.9	3324.6	3183.9
62.5°	4864.8	4885.5	4856.6	4798.6	4719.9	4620.6	4504.6	4368.0	4214.8	4040.9	3867.0
60°	5924.7	5920.6	5866.8	5788.1	5684.6	5560.4	5432.1	5283.0	5109.1	4906.2	4695.1
57.5°	6897.7	6889.4	6823.2	6744.5	6641.0	6508.5	6371.9	6214.6	6032.4	5817.1	5572.8
55°	7771.3	7763.0	7696.8	7614.0	7506.3	7373.8	7249.6	7100.6	6922.6	6694.8	6434.0
52.5°	8545.5	8549.7	8491.7	8400.6	8284.7	8156.4	8036.3	7887.2	7717.5	7489.8	7237.2
50°	9257.7	9253.5	9191.4	9108.6	9001.0	8876.8	8756.7	8607.7	8429.6	8210.2	7965.9
47.5°	9920.1	9911.8	9841.5	9750.4	9638.6	9530.9	9419.1	9286.7	9100.3	8880.9	8636.6
45°	10474.9	10458.4	10388.0	10301.0	10193.4	10098.2	9998.8	9899.4	9700.7	9497.8	9266.0
42.5°	10951.1	10946.9	10876.5	10789.6	10681.9	10599.1	10508.0	10383.8	10218.2	10031.9	9804.2
40°	11406.5	11373.4	11303.0	11220.2	11120.8	11050.4	10959.3	10835.1	10673.7	10491.5	10272.0
37.5°	11746.0	11750.1	11675.6	11584.5	11497.6	11431.3	11348.5	11232.6	11091.8	10913.8	10694.4
35°	12068.9	12048.2	11986.1	11907.5	11828.8	11754.3	11667.3	11568.0	11452.0	11286.4	11079.4
32.5°	12280.1	12309.1	12234.5	12151.7	12106.2	12048.2	11957.1	11853.6	11750.1	11584.5	11398.2
30°	12511.9	12487.1	12429.1	12358.8	12325.6	12288.4	12209.7	12110.3	11990.3	11841.2	11667.3
27.5°	12673.4	12661.0	12590.6	12524.4	12507.8	12474.7	12412.6	12325.6	12205.6	12060.6	11899.2
25°	12743.8	12752.1	12685.8	12648.6	12648.6	12627.9	12578.2	12503.7	12383.6	12251.1	12093.8
22.5°	12776.9	12768.6	12723.1	12714.8	12735.5	12719.0	12698.3	12632.0	12524.4	12416.7	12284.2
20°	12797.6	12739.7	12698.3	12731.4	12756.2	12752.1	12735.5	12694.1	12644.4	12553.3	12437.4
17.5°	12752.1	12714.8	12665.1	12714.8	12768.6	12772.8	12756.2	12731.4	12719.0	12661.0	12557.5
15°	12640.3	12611.3	12619.6	12669.3	12731.4	12752.1	12764.5	12793.5	12776.9	12731.4	12640.3
12.5°	12565.8	12528.5	12565.8	12615.4	12648.6	12661.0	12760.4	12814.2	12814.2	12772.8	12714.8
10°	12545.1	12470.5	12520.2	12565.8	12582.3	12656.9	12739.7	12797.6	12826.6	12793.5	12719.0
7.5°	12503.7	12454.0	12474.7	12495.4	12590.6	12644.4	12690.0	12752.1	12793.5	12789.3	12723.1
5°	12483.0	12420.9	12429.1	12516.1	12582.3	12619.6	12636.1	12690.0	12752.1	12764.5	12714.8
2.5°	12429.1	12400.2	12462.3	12470.5	12520.2	12549.2	12565.8	12615.4	12694.1	12723.1	12702.4
0°	12400.2	12358.8	12317.3	12350.5	12433.3	12495.4	12520.2	12594.7	12685.8	12714.8	12669.3



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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°	115.9	111.8	107.6	103.5	107.6	107.6	107.6	103.5	107.6	103.5	103.5
85°	360.2	343.6	331.2	314.7	298.1	285.7	269.1	252.6	248.4	244.3	236.0
82.5°	621.0	600.3	579.6	554.8	530.0	501.0	472.0	438.9	430.6	422.3	409.9
80°	873.6	844.6	815.6	786.7	761.8	732.8	699.7	662.4	637.6	616.9	592.1
77.5°	1138.6	1097.2	1055.8	1006.1	977.1	948.1	915.0	877.7	840.5	807.4	770.1
75°	1440.8	1395.3	1353.9	1304.2	1250.4	1196.5	1142.7	1093.0	1039.2	989.5	939.8
72.5°	1776.2	1709.9	1643.7	1581.6	1515.3	1449.1	1378.7	1312.5	1246.2	1180.0	1109.6
70°	2128.1	2045.3	1962.5	1879.7	1792.7	1705.8	1623.0	1540.2	1457.4	1370.4	1291.8
67.5°	2542.1	2446.9	2339.3	2223.3	2095.0	1983.2	1875.5	1776.2	1676.8	1577.4	1478.1
65°	3059.7	2927.2	2782.3	2624.9	2475.9	2326.8	2169.5	2020.5	1904.5	1788.6	1676.8
62.5°	3697.3	3511.0	3308.1	3105.2	2923.0	2728.4	2546.3	2351.7	2169.5	2003.9	1867.3
60°	4459.1	4206.5	3958.1	3697.3	3444.7	3179.7	2947.9	2707.7	2480.0	2277.2	2078.4
57.5°	5299.6	5005.6	4707.5	4388.7	4045.1	3734.5	3419.9	3105.2	2836.1	2567.0	2343.4
55°	6152.5	5841.9	5506.6	5146.4	4769.6	4372.1	3945.7	3593.8	3225.3	2910.6	2620.8
52.5°	6964.0	6641.0	6293.2	5962.0	5510.7	5055.3	4587.4	4123.7	3693.1	3291.5	2939.6
50°	7688.5	7373.8	7038.5	6653.4	6235.3	5750.9	5229.2	4707.5	4198.2	3726.3	3287.4
47.5°	8351.0	8044.6	7709.2	7324.2	6943.3	6405.0	5879.2	5303.7	4736.5	4194.1	3680.7
45°	8972.0	8661.5	8313.7	7945.2	7506.3	7026.1	6483.7	5904.0	5295.4	4686.8	4094.7
42.5°	9535.1	9224.6	8872.6	8491.7	8057.0	7580.9	7055.0	6471.3	5858.5	5196.1	4546.0
40°	10027.8	9725.5	9386.0	8988.6	8582.8	8081.8	7564.3	7009.5	6376.0	5709.5	4993.2
37.5°	10458.4	10176.8	9841.5	9448.1	9017.5	8570.4	8036.3	7481.5	6910.1	6185.6	5452.8
35°	10839.3	10578.4	10234.8	9862.2	9439.8	8967.9	8466.9	7924.5	7307.6	6628.6	5916.5
32.5°	11170.5	10905.5	10590.8	10218.2	9808.3	9365.3	8851.9	8305.4	7721.6	7030.2	6256.0
30°	11452.0	11195.3	10897.2	10545.3	10152.0	9713.1	9212.1	8661.5	8065.3	7378.0	6612.0
27.5°	11696.3	11452.0	11162.2	10835.1	10458.4	10036.1	9530.9	8976.1	8367.5	7705.1	6939.1
25°	11907.5	11671.5	11402.3	11091.8	10719.2	10305.2	9829.0	9249.4	8640.8	7974.2	7216.5
22.5°	12097.9	11870.2	11601.1	11298.8	10959.3	10545.3	10065.0	9489.5	8872.6	8214.3	7469.1
20°	12267.7	12056.5	11791.5	11481.0	11141.5	10723.3	10247.2	9700.7	9079.6	8433.8	7696.8
17.5°	12404.3	12218.0	11953.0	11625.9	11286.4	10880.7	10417.0	9916.0	9257.7	8620.1	7887.2
15°	12499.5	12317.3	12077.2	11746.0	11414.8	11013.2	10549.4	10031.9	9419.1	8769.1	8044.6
12.5°	12565.8	12371.2	12147.6	11841.2	11510.0	11112.5	10661.2	10152.0	9555.8	8901.6	8181.2
10°	12582.3	12404.3	12180.7	11907.5	11584.5	11199.5	10756.5	10251.3	9667.6	9005.1	8293.0
7.5°	12590.6	12420.9	12218.0	11957.1	11638.3	11265.7	10826.8	10330.0	9750.4	9092.1	8375.8
5°	12586.5	12425.0	12242.8	11990.3	11671.5	11303.0	10872.4	10383.8	9808.3	9150.0	8437.9
2.5°	12574.0	12429.1	12259.4	12015.1	11708.7	11344.4	10917.9	10445.9	9870.4	9199.7	8487.6
0°	12607.2	12483.0	12267.7	12006.8	11717.0	11344.4	10913.8	10454.2	9878.7	9195.6	8483.4



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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°	103.5	99.4	99.4	95.2	91.1	86.9	78.7	74.5	66.2	53.8	41.4
85°	223.6	211.2	198.7	190.5	182.2	173.9	161.5	149.1	132.5	107.6	82.8
82.5°	393.3	368.5	343.6	314.7	289.8	265.0	244.3	223.6	198.7	161.5	124.2
80°	563.1	525.8	488.6	447.2	409.9	368.5	331.2	298.1	265.0	215.3	165.6
77.5°	732.8	683.1	629.3	579.6	525.8	472.0	418.2	372.6	322.9	265.0	207.0
75°	890.2	832.2	782.5	712.1	645.9	575.5	505.1	443.0	380.9	310.5	248.4
72.5°	1047.5	973.0	902.6	836.3	761.8	674.9	596.2	517.5	438.9	356.1	281.5
70°	1204.8	1113.7	1026.8	948.1	865.3	778.4	683.1	592.1	496.8	397.5	310.5
67.5°	1366.3	1262.8	1163.4	1064.1	968.8	869.5	770.1	666.6	554.8	438.9	343.6
65°	1544.3	1416.0	1295.9	1184.1	1072.3	964.7	852.9	741.1	616.9	484.4	372.6
62.5°	1722.4	1581.6	1440.8	1300.0	1175.8	1055.8	935.7	811.5	674.9	534.1	401.6
60°	1912.8	1751.3	1589.9	1432.5	1279.3	1146.9	1014.4	881.9	737.0	579.6	430.6
57.5°	2124.0	1929.4	1747.2	1569.2	1395.3	1237.9	1093.0	952.3	790.8	625.2	463.7
55°	2364.1	2124.0	1908.7	1709.9	1519.5	1329.0	1171.7	1026.8	852.9	670.7	501.0
52.5°	2616.7	2339.3	2078.4	1854.8	1652.0	1436.7	1246.2	1084.8	915.0	716.3	534.1
50°	2910.6	2558.7	2268.9	1995.6	1767.9	1544.3	1324.9	1151.0	977.1	770.1	567.2
47.5°	3212.9	2823.7	2459.3	2161.2	1892.1	1647.8	1416.0	1209.0	1035.1	819.8	600.3
45°	3564.8	3076.2	2674.6	2322.7	2012.2	1755.5	1507.1	1271.1	1084.8	869.5	633.5
42.5°	3904.3	3374.3	2898.2	2500.7	2148.8	1859.0	1589.9	1337.3	1134.4	919.1	662.4
40°	4305.9	3672.4	3113.5	2670.5	2285.4	1958.4	1672.7	1407.7	1180.0	964.7	691.4
37.5°	4690.9	3974.7	3374.3	2856.8	2417.9	2057.7	1755.5	1473.9	1221.4	1010.2	728.7
35°	5071.8	4310.0	3622.7	3030.7	2554.6	2169.5	1838.3	1536.0	1262.8	1047.5	761.8
32.5°	5436.2	4624.7	3875.3	3225.3	2703.6	2273.0	1912.8	1594.0	1304.2	1080.6	794.9
30°	5775.7	4922.8	4123.7	3424.0	2840.2	2368.2	1983.2	1652.0	1353.9	1109.6	828.1
27.5°	6086.2	5212.6	4372.1	3610.3	2968.6	2455.2	2057.7	1705.8	1395.3	1138.6	857.0
25°	6367.8	5473.5	4599.9	3780.1	3084.5	2550.4	2128.1	1759.6	1432.5	1163.4	881.9
22.5°	6632.7	5713.6	4806.9	3949.8	3225.3	2645.6	2194.4	1809.3	1469.8	1188.3	906.7
20°	6864.6	5933.0	5005.6	4119.6	3349.5	2732.6	2252.3	1854.8	1502.9	1204.8	931.6
17.5°	7050.9	6127.6	5183.6	4268.6	3457.1	2807.1	2302.0	1896.3	1531.9	1225.5	948.1
15°	7216.5	6293.2	5332.7	4397.0	3552.4	2869.2	2347.5	1929.4	1556.7	1237.9	968.8
12.5°	7357.3	6434.0	5461.0	4508.8	3635.2	2923.0	2384.8	1954.2	1577.4	1250.4	981.2
10°	7473.2	6545.8	5568.7	4595.7	3701.4	2964.4	2413.8	1979.1	1594.0	1262.8	993.7
7.5°	7560.2	6628.6	5647.3	4670.2	3755.2	2993.4	2438.6	1995.6	1610.6	1271.1	1014.4
5°	7626.4	6699.0	5709.5	4719.9	3796.6	3034.8	2467.6	2016.3	1627.1	1279.3	1014.4
2.5°	7676.1	6756.9	5759.1	4761.3	3829.8	3026.5	2467.6	2012.2	1627.1	1279.3	1010.2
0°	7667.8	6761.1	5755.0	4761.3	3829.8	3018.3	2467.6	2008.0	1627.1	1279.3	1010.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	29.0	20.7	8.3	0.0
85°	62.1	41.4	20.7	0.0
82.5°	91.1	58.0	29.0	0.0
80°	120.1	78.7	37.3	0.0
77.5°	153.2	99.4	49.7	0.0
75°	182.2	115.9	58.0	0.0
72.5°	211.2	136.6	66.2	0.0
70°	236.0	153.2	74.5	0.0
67.5°	260.8	173.9	86.9	0.0
65°	281.5	190.5	95.2	0.0
62.5°	298.1	211.2	103.5	0.0
60°	318.8	227.7	111.8	0.0
57.5°	335.4	240.1	120.1	0.0
55°	351.9	248.4	128.3	0.0
52.5°	368.5	260.8	136.6	0.0
50°	385.0	273.3	144.9	0.0
47.5°	401.6	281.5	149.1	0.0
45°	426.4	294.0	157.3	0.0
42.5°	447.2	302.2	165.6	0.0
40°	467.9	310.5	169.8	0.0
37.5°	488.6	318.8	178.0	0.0
35°	509.3	327.1	182.2	0.0
32.5°	525.8	335.4	186.3	0.0
30°	542.4	343.6	190.5	0.0
27.5°	558.9	347.8	194.6	0.0
25°	571.4	356.1	198.7	0.0
22.5°	583.8	360.2	202.9	0.0
20°	592.1	364.3	207.0	0.0
17.5°	604.5	368.5	211.2	0.0
15°	608.6	372.6	219.4	0.0
12.5°	616.9	376.8	219.4	0.0
10°	621.0	380.9	219.4	0.0
7.5°	629.3	380.9	219.4	0.0
5°	625.2	380.9	219.4	0.0
2.5°	625.2	380.9	219.4	0.0
0°	621.0	380.9	219.4	0.0

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