

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: P624210

Luminaire Tested: **EPH-VN-03-E-930-U-77**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624210  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-03-E-930-U-77  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 7 distribution lens  
Light Source: (48) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

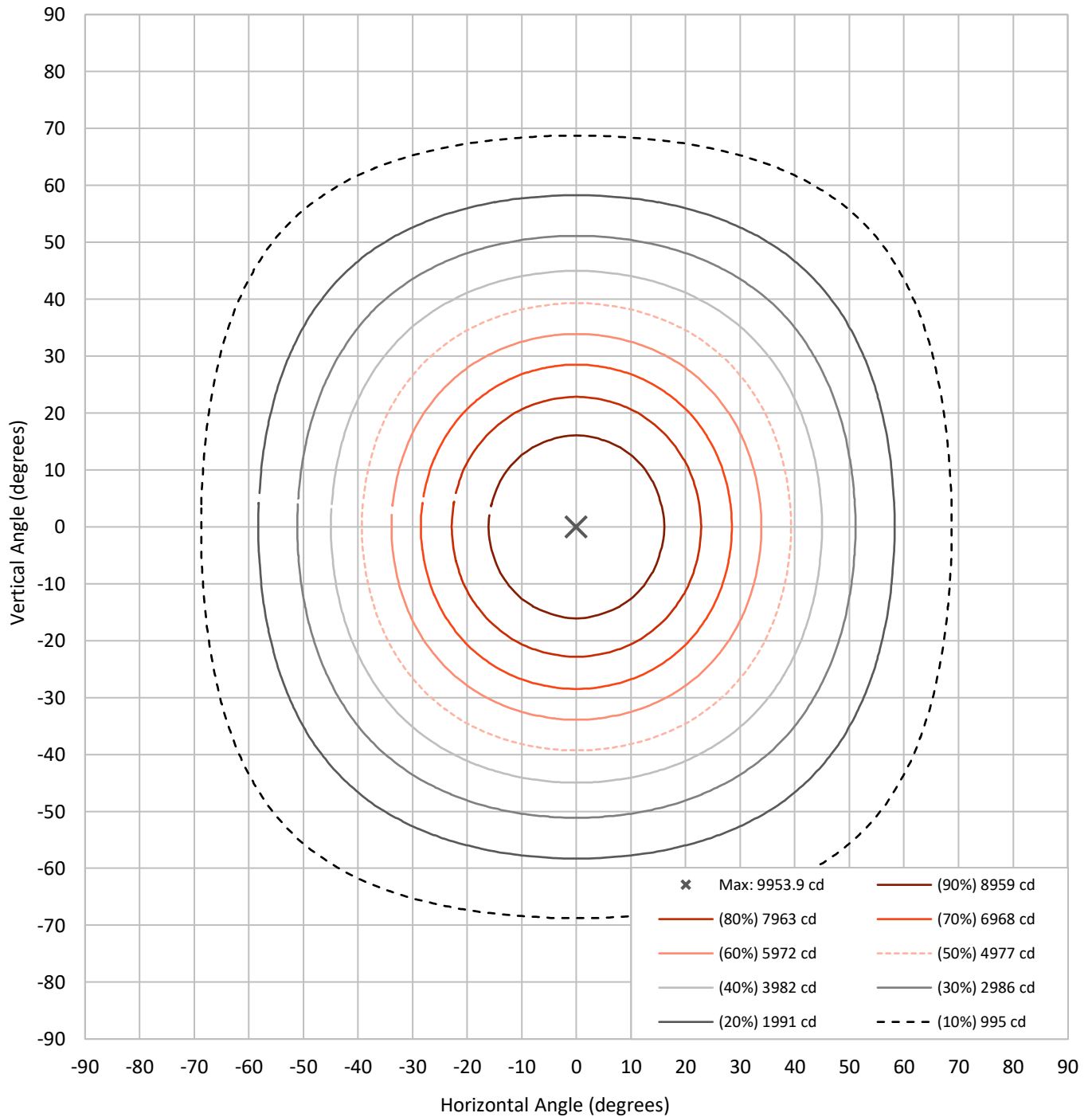
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	17922.2 lumens	Max Intensity:	9953.9 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	77.2 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	7754.8 lumens	Field Lumens:	12698.2 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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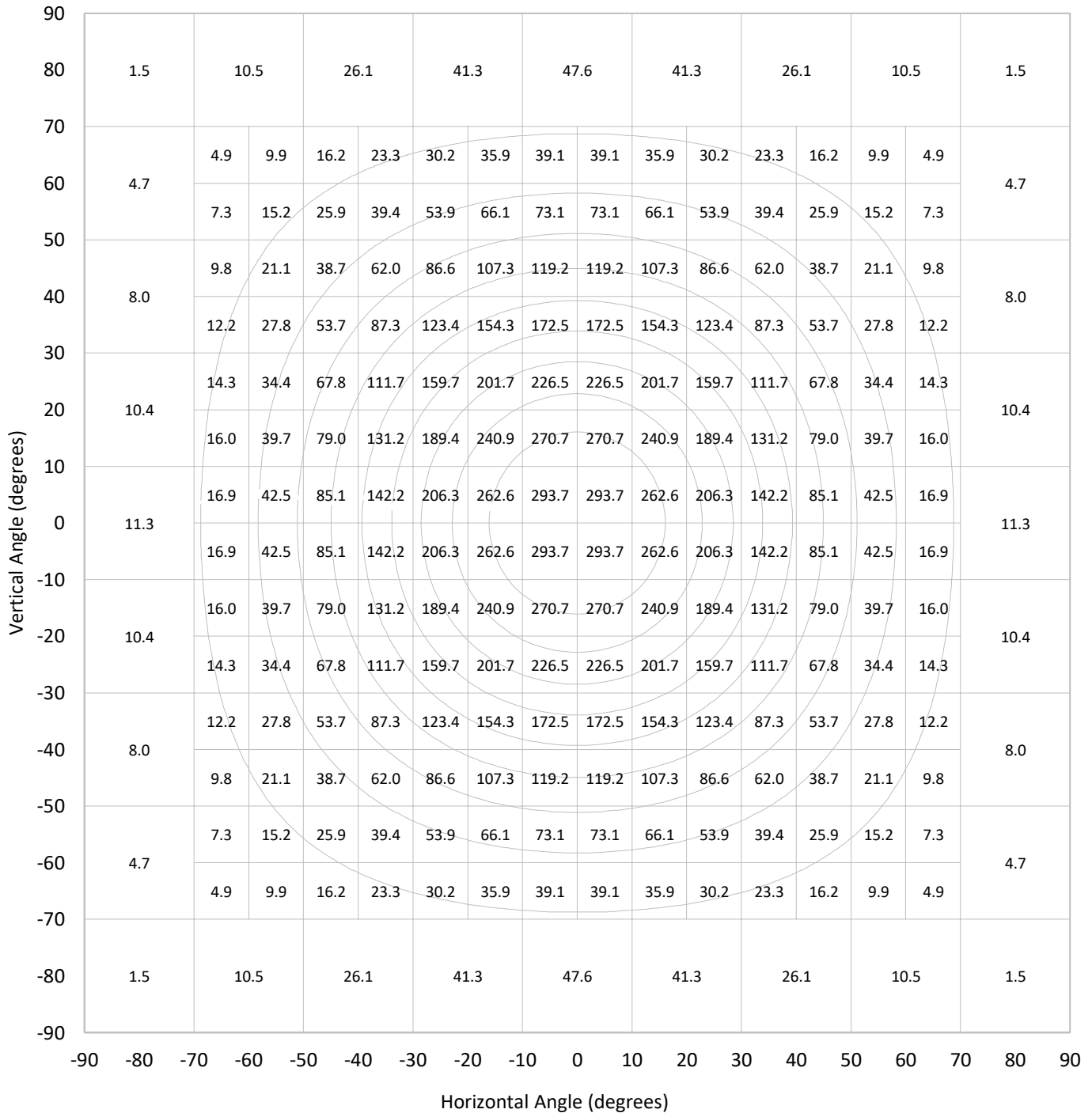
### Iso-Candela Plot





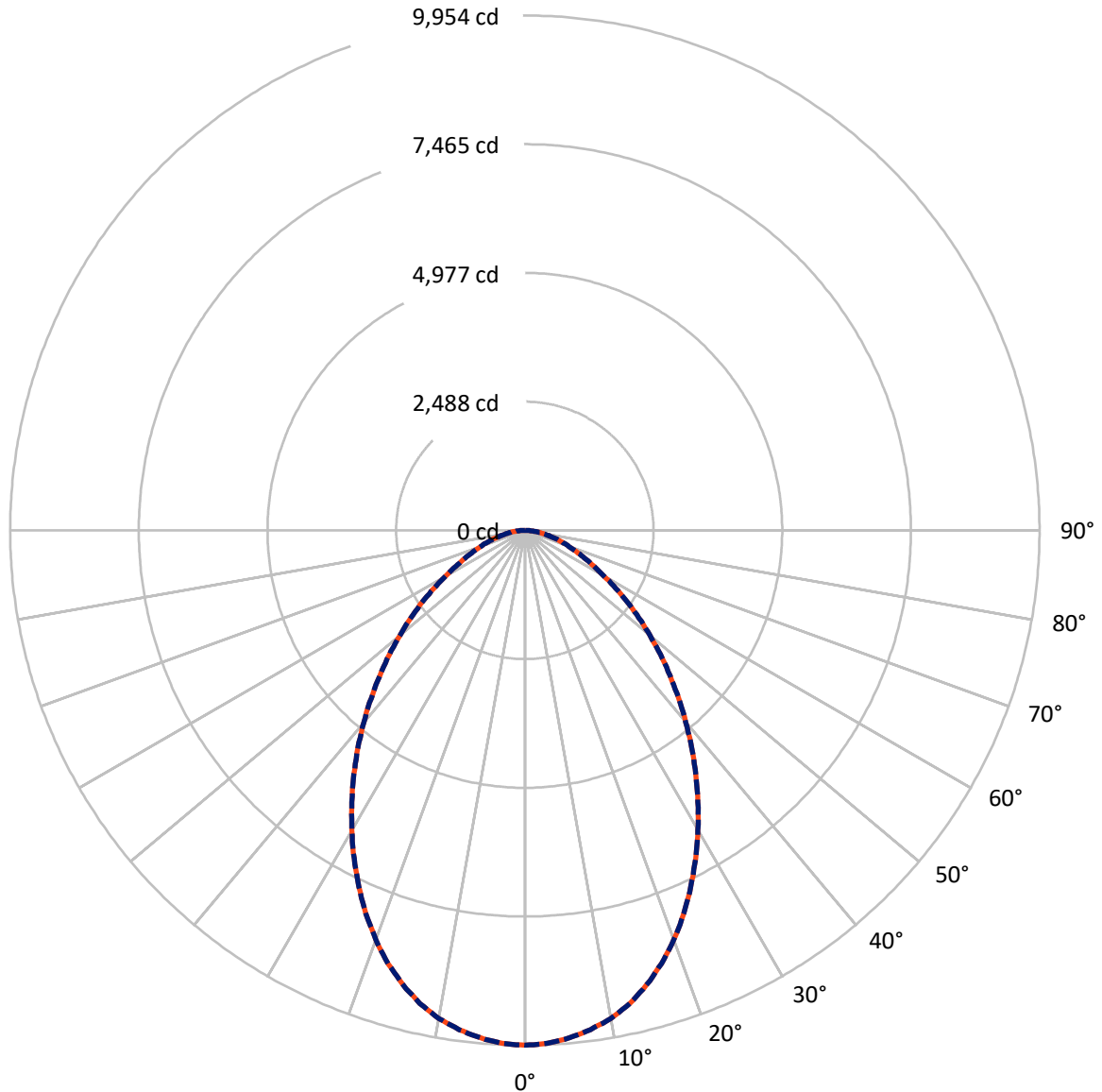
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### Lumen Table



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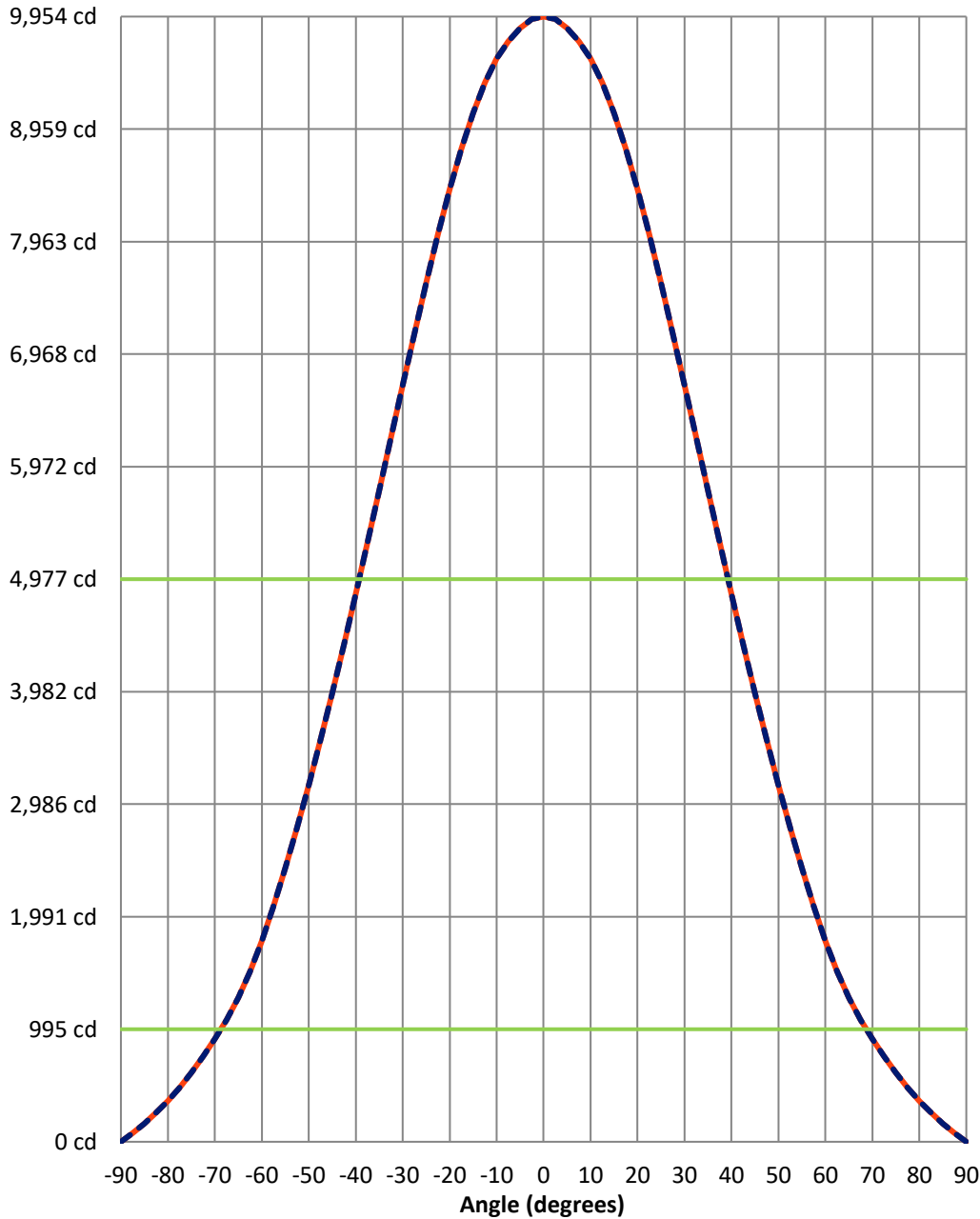
### Luminous Intensity Polar Plot



— 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: 7754.8  
 Efficiency: 43.3%

**Field:**  
 H Angle: 137.5°  
 V Angle: 137.5°  
 Lumens: 12698.2  
 Efficiency: 70.9%

**Spill:**  
 Lumens: 5224  
 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°	76.6	76.6	76.6	76.6	76.6	76.6	76.6	72.9	72.9	71.0	69.1
85°	160.7	160.7	160.7	160.7	160.7	157.0	155.1	153.2	151.4	147.6	145.7
82.5°	257.9	257.9	257.9	257.9	254.1	250.4	248.5	244.8	241.0	235.4	229.8
80°	360.6	360.6	360.6	360.6	355.0	351.3	345.7	341.9	336.3	328.9	321.4
77.5°	478.4	478.4	478.4	472.7	469.0	463.4	457.8	450.3	442.9	433.5	422.3
75°	611.0	611.0	611.0	603.5	597.9	592.3	583.0	573.7	562.4	549.4	534.4
72.5°	754.9	754.9	754.9	745.6	740.0	730.6	719.4	706.3	693.2	676.4	657.7
70°	910.0	910.0	910.0	898.8	889.4	880.1	865.2	850.2	831.5	812.8	790.4
67.5°	1078.2	1078.2	1078.2	1065.1	1053.9	1040.8	1024.0	1005.3	982.9	956.7	930.6
65°	1274.4	1274.4	1266.9	1255.7	1242.6	1223.9	1203.4	1177.2	1149.2	1115.5	1080.0
62.5°	1506.1	1506.1	1494.9	1481.8	1465.0	1440.7	1412.6	1379.0	1339.8	1296.8	1253.8
60°	1775.1	1775.1	1762.1	1745.2	1721.0	1691.1	1653.7	1610.7	1562.1	1507.9	1455.6
57.5°	2085.3	2085.3	2068.5	2046.1	2016.2	1978.8	1932.1	1877.9	1816.3	1749.0	1683.6
55°	2421.7	2421.7	2401.1	2375.0	2339.5	2294.6	2238.6	2175.0	2100.3	2023.7	1939.6
52.5°	2778.6	2778.6	2754.3	2724.4	2683.3	2631.0	2567.4	2492.7	2406.7	2317.0	2218.0
50°	3154.2	3154.2	3126.1	3092.5	3045.8	2984.1	2911.2	2825.3	2730.0	2625.3	2511.4
47.5°	3555.9	3555.9	3524.1	3484.9	3428.8	3357.8	3271.9	3172.8	3064.5	2946.7	2817.8
45°	3968.9	3968.9	3933.3	3888.5	3826.8	3746.5	3651.2	3555.9	3417.6	3281.2	3131.7
42.5°	4398.6	4398.6	4357.5	4307.1	4236.1	4148.2	4039.9	3916.5	3780.1	3626.9	3464.3
40°	4845.2	4845.2	4798.5	4740.6	4662.1	4561.2	4439.7	4301.5	4148.2	3978.2	3798.8
37.5°	5301.1	5301.1	5248.8	5185.3	5097.5	4985.4	4849.0	4695.7	4523.8	4335.1	4137.0
35°	5760.8	5760.8	5702.9	5633.8	5536.6	5413.3	5265.6	5095.6	4905.0	4699.5	4477.1
32.5°	6229.8	6229.8	6166.3	6087.8	5977.6	5841.2	5678.6	5493.6	5301.1	5062.0	4819.1
30°	6693.2	6693.2	6624.1	6538.1	6420.4	6270.9	6093.4	5889.7	5663.7	5418.9	5157.3
27.5°	7149.2	7130.5	7072.6	6981.0	6852.1	6693.2	6500.8	6280.3	6035.5	5766.4	5486.1
25°	7597.6	7577.1	7513.5	7412.6	7274.4	7100.6	6893.2	6657.7	6394.3	6110.2	5803.8
22.5°	8027.4	8005.0	7937.7	7829.3	7681.7	7493.0	7270.6	7018.4	6738.1	6433.5	6110.2
20°	8425.4	8401.1	8332.0	8218.0	8064.8	7864.8	7629.4	7358.4	7059.5	6738.1	6394.3
17.5°	8784.2	8759.9	8687.0	8569.3	8425.4	8203.0	7960.1	7674.2	7358.4	7018.4	6657.7
15°	9100.0	9073.8	8999.1	8881.3	8716.9	8507.6	8251.6	7960.1	7629.4	7270.6	6893.2
12.5°	9369.0	9342.9	9266.3	9148.5	8978.5	8769.2	8507.6	8203.0	7864.8	7493.0	7100.6
10°	9582.1	9555.9	9483.0	9370.9	9195.3	8978.5	8716.9	8425.4	8064.8	7681.7	7274.4
7.5°	9735.3	9711.0	9643.7	9531.6	9370.9	9148.5	8881.3	8569.3	8218.0	7829.3	7412.6
5°	9851.1	9823.1	9755.8	9643.7	9483.0	9266.3	8999.1	8687.0	8332.0	7937.7	7513.5
2.5°	9931.5	9897.8	9823.1	9711.0	9555.9	9342.9	9073.8	8759.9	8401.1	8005.0	7577.1
0°	9953.9	9931.5	9851.1	9735.3	9582.1	9369.0	9100.0	8784.2	8425.4	8027.4	7597.6



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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°	67.3	67.3	65.4	63.5	61.7	57.9	56.1	54.2	52.3	48.6	46.7
85°	142.0	138.3	134.5	130.8	125.2	121.5	115.9	112.1	106.5	100.9	95.3
82.5°	224.2	218.6	211.1	205.5	198.1	188.7	181.3	171.9	162.6	155.1	145.7
80°	313.9	304.6	295.2	285.9	274.7	263.5	252.3	241.0	228.0	214.9	201.8
77.5°	411.1	398.0	384.9	370.0	356.9	341.9	327.0	312.1	295.2	278.4	261.6
75°	519.5	502.6	484.0	465.3	448.5	427.9	407.3	386.8	364.4	343.8	321.4
72.5°	637.2	616.6	594.2	571.8	547.5	521.3	495.2	467.1	441.0	414.8	386.8
70°	764.2	740.0	711.9	683.9	654.0	622.2	590.5	556.8	523.2	489.6	455.9
67.5°	900.7	870.8	837.1	803.5	766.1	728.7	691.4	652.1	611.0	569.9	530.7
65°	1046.4	1009.0	969.8	926.8	883.8	840.9	796.0	749.3	702.6	654.0	611.0
62.5°	1209.0	1162.3	1111.8	1059.5	1010.9	958.6	910.0	852.1	796.0	741.8	687.6
60°	1397.7	1336.0	1274.4	1209.0	1147.3	1080.0	1020.2	956.7	893.2	831.5	768.0
57.5°	1608.8	1530.4	1455.6	1377.1	1294.9	1220.2	1143.6	1067.0	996.0	923.1	853.9
55°	1848.0	1752.7	1659.3	1562.1	1466.8	1373.4	1276.2	1190.3	1102.5	1020.2	939.9
52.5°	2109.6	2001.2	1885.4	1775.1	1653.7	1537.8	1429.5	1321.1	1218.3	1119.3	1027.7
50°	2389.9	2262.8	2130.2	1995.6	1857.4	1721.0	1590.2	1463.1	1343.5	1227.7	1119.3
47.5°	2681.4	2537.5	2386.2	2232.9	2085.3	1919.0	1762.1	1618.2	1474.3	1343.5	1218.3
45°	2980.4	2817.8	2651.5	2477.7	2304.0	2124.6	1950.8	1775.1	1618.2	1463.1	1321.1
42.5°	3288.7	3105.6	2920.6	2728.1	2535.7	2339.5	2143.3	1950.8	1762.1	1590.2	1429.5
40°	3606.3	3404.5	3193.4	2984.1	2778.6	2554.3	2339.5	2124.6	1919.0	1721.0	1537.8
37.5°	3924.0	3703.5	3475.5	3240.1	3004.7	2778.6	2535.7	2304.0	2085.3	1857.4	1653.7
35°	4243.5	4000.6	3754.0	3498.0	3240.1	2984.1	2728.1	2477.7	2232.9	1995.6	1775.1
32.5°	4564.9	4299.6	4026.8	3754.0	3475.5	3193.4	2920.6	2651.5	2386.2	2130.2	1885.4
30°	4880.7	4593.0	4299.6	4000.6	3703.5	3404.5	3105.6	2817.8	2537.5	2262.8	2001.2
27.5°	5189.0	4880.7	4564.9	4243.5	3924.0	3606.3	3288.7	2980.4	2681.4	2389.9	2109.6
25°	5486.1	5157.3	4819.1	4477.1	4137.0	3798.8	3464.3	3131.7	2817.8	2511.4	2218.0
22.5°	5766.4	5418.9	5062.0	4699.5	4335.1	3978.2	3626.9	3281.2	2946.7	2625.3	2317.0
20°	6035.5	5663.7	5301.1	4905.0	4523.8	4148.2	3780.1	3417.6	3064.5	2730.0	2406.7
17.5°	6280.3	5889.7	5493.6	5095.6	4695.7	4301.5	3916.5	3555.9	3172.8	2825.3	2492.7
15°	6500.8	6093.4	5678.6	5265.6	4849.0	4439.7	4039.9	3651.2	3271.9	2911.2	2567.4
12.5°	6693.2	6270.9	5841.2	5413.3	4985.4	4561.2	4148.2	3746.5	3357.8	2984.1	2631.0
10°	6852.1	6420.4	5977.6	5536.6	5097.5	4662.1	4236.1	3826.8	3428.8	3045.8	2683.3
7.5°	6981.0	6538.1	6087.8	5633.8	5185.3	4740.6	4307.1	3888.5	3484.9	3092.5	2724.4
5°	7072.6	6624.1	6166.3	5702.9	5248.8	4798.5	4357.5	3933.3	3524.1	3126.1	2754.3
2.5°	7130.5	6693.2	6229.8	5760.8	5301.1	4845.2	4398.6	3968.9	3555.9	3154.2	2778.6
0°	7149.2	6693.2	6229.8	5760.8	5301.1	4845.2	4398.6	3968.9	3555.9	3154.2	2778.6





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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°	44.8	41.1	37.4	35.5	31.8	29.9	26.2	22.4	20.6	16.8	13.1
85°	89.7	82.2	76.6	71.0	65.4	57.9	52.3	46.7	39.2	33.6	26.2
82.5°	136.4	127.1	117.7	108.4	99.0	89.7	78.5	69.1	59.8	50.5	39.2
80°	188.7	173.8	160.7	147.6	134.5	121.5	106.5	93.4	78.5	65.4	52.3
77.5°	242.9	226.1	207.4	188.7	170.0	153.2	134.5	117.7	100.9	82.2	65.4
75°	300.8	278.4	257.9	233.6	211.1	186.9	164.4	142.0	121.5	100.9	78.5
72.5°	360.6	332.6	304.6	278.4	250.4	222.4	196.2	168.2	142.0	117.7	93.4
70°	422.3	388.7	355.0	323.3	291.5	257.9	228.0	196.2	164.4	134.5	106.5
67.5°	487.7	448.5	409.2	368.1	332.6	295.2	257.9	222.4	186.9	153.2	121.5
65°	558.7	512.0	463.4	420.4	373.7	332.6	291.5	250.4	211.1	170.0	134.5
62.5°	631.6	577.4	523.2	469.0	420.4	368.1	323.3	278.4	233.6	188.7	147.6
60°	706.3	644.7	583.0	523.2	463.4	409.2	355.0	304.6	257.9	207.4	160.7
57.5°	782.9	713.8	644.7	577.4	512.0	448.5	388.7	332.6	278.4	226.1	173.8
55°	861.4	782.9	706.3	631.6	558.7	487.7	422.3	360.6	300.8	242.9	188.7
52.5°	939.9	853.9	768.0	687.6	611.0	530.7	455.9	386.8	321.4	261.6	201.8
50°	1020.2	923.1	831.5	741.8	654.0	569.9	489.6	414.8	343.8	278.4	214.9
47.5°	1102.5	996.0	893.2	796.0	702.6	611.0	523.2	441.0	364.4	295.2	228.0
45°	1190.3	1067.0	956.7	852.1	749.3	652.1	556.8	467.1	386.8	312.1	241.0
42.5°	1276.2	1143.6	1020.2	910.0	796.0	691.4	590.5	495.2	407.3	327.0	252.3
40°	1373.4	1220.2	1080.0	958.6	840.9	728.7	622.2	521.3	427.9	341.9	263.5
37.5°	1466.8	1294.9	1147.3	1010.9	883.8	766.1	654.0	547.5	448.5	356.9	274.7
35°	1562.1	1377.1	1209.0	1059.5	926.8	803.5	683.9	571.8	465.3	370.0	285.9
32.5°	1659.3	1455.6	1274.4	1111.8	969.8	837.1	711.9	594.2	484.0	384.9	295.2
30°	1752.7	1530.4	1336.0	1162.3	1009.0	870.8	740.0	616.6	502.6	398.0	304.6
27.5°	1848.0	1608.8	1397.7	1209.0	1046.4	900.7	764.2	637.2	519.5	411.1	313.9
25°	1939.6	1683.6	1455.6	1253.8	1080.0	930.6	790.4	657.7	534.4	422.3	321.4
22.5°	2023.7	1749.0	1507.9	1296.8	1115.5	956.7	812.8	676.4	549.4	433.5	328.9
20°	2100.3	1816.3	1562.1	1339.8	1149.2	982.9	831.5	693.2	562.4	442.9	336.3
17.5°	2175.0	1877.9	1610.7	1379.0	1177.2	1005.3	850.2	706.3	573.7	450.3	341.9
15°	2238.6	1932.1	1653.7	1412.6	1203.4	1024.0	865.2	719.4	583.0	457.8	345.7
12.5°	2294.6	1978.8	1691.1	1440.7	1223.9	1040.8	880.1	730.6	592.3	463.4	351.3
10°	2339.5	2016.2	1721.0	1465.0	1242.6	1053.9	889.4	740.0	597.9	469.0	355.0
7.5°	2375.0	2046.1	1745.2	1481.8	1255.7	1065.1	898.8	745.6	603.5	472.7	360.6
5°	2401.1	2068.5	1762.1	1494.9	1266.9	1078.2	910.0	754.9	611.0	478.4	360.6
2.5°	2421.7	2085.3	1775.1	1506.1	1274.4	1078.2	910.0	754.9	611.0	478.4	360.6
0°	2421.7	2085.3	1775.1	1506.1	1274.4	1078.2	910.0	754.9	611.0	478.4	360.6



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	9.3	7.5	3.7	0.0
85°	20.6	13.1	7.5	0.0
82.5°	29.9	20.6	9.3	0.0
80°	39.2	26.2	13.1	0.0
77.5°	50.5	33.6	16.8	0.0
75°	59.8	39.2	20.6	0.0
72.5°	69.1	46.7	22.4	0.0
70°	78.5	52.3	26.2	0.0
67.5°	89.7	57.9	29.9	0.0
65°	99.0	65.4	31.8	0.0
62.5°	108.4	71.0	35.5	0.0
60°	117.7	76.6	37.4	0.0
57.5°	127.1	82.2	41.1	0.0
55°	136.4	89.7	44.8	0.0
52.5°	145.7	95.3	46.7	0.0
50°	155.1	100.9	48.6	0.0
47.5°	162.6	106.5	52.3	0.0
45°	171.9	112.1	54.2	0.0
42.5°	181.3	115.9	56.1	0.0
40°	188.7	121.5	57.9	0.0
37.5°	198.1	125.2	61.7	0.0
35°	205.5	130.8	63.5	0.0
32.5°	211.1	134.5	65.4	0.0
30°	218.6	138.3	67.3	0.0
27.5°	224.2	142.0	67.3	0.0
25°	229.8	145.7	69.1	0.0
22.5°	235.4	147.6	71.0	0.0
20°	241.0	151.4	72.9	0.0
17.5°	244.8	153.2	72.9	0.0
15°	248.5	155.1	76.6	0.0
12.5°	250.4	157.0	76.6	0.0
10°	254.1	160.7	76.6	0.0
7.5°	257.9	160.7	76.6	0.0
5°	257.9	160.7	76.6	0.0
2.5°	257.9	160.7	76.6	0.0
0°	257.9	160.7	76.6	0.0

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