

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: P628559

Luminaire Tested: **EPH-VN-07-E-730-U-LAM**

Issue Date: 01/11/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P628559  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 01/11/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-07-E-730-U-LAM  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
LAMBERTIAN distribution lens  
Light Source: (112) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

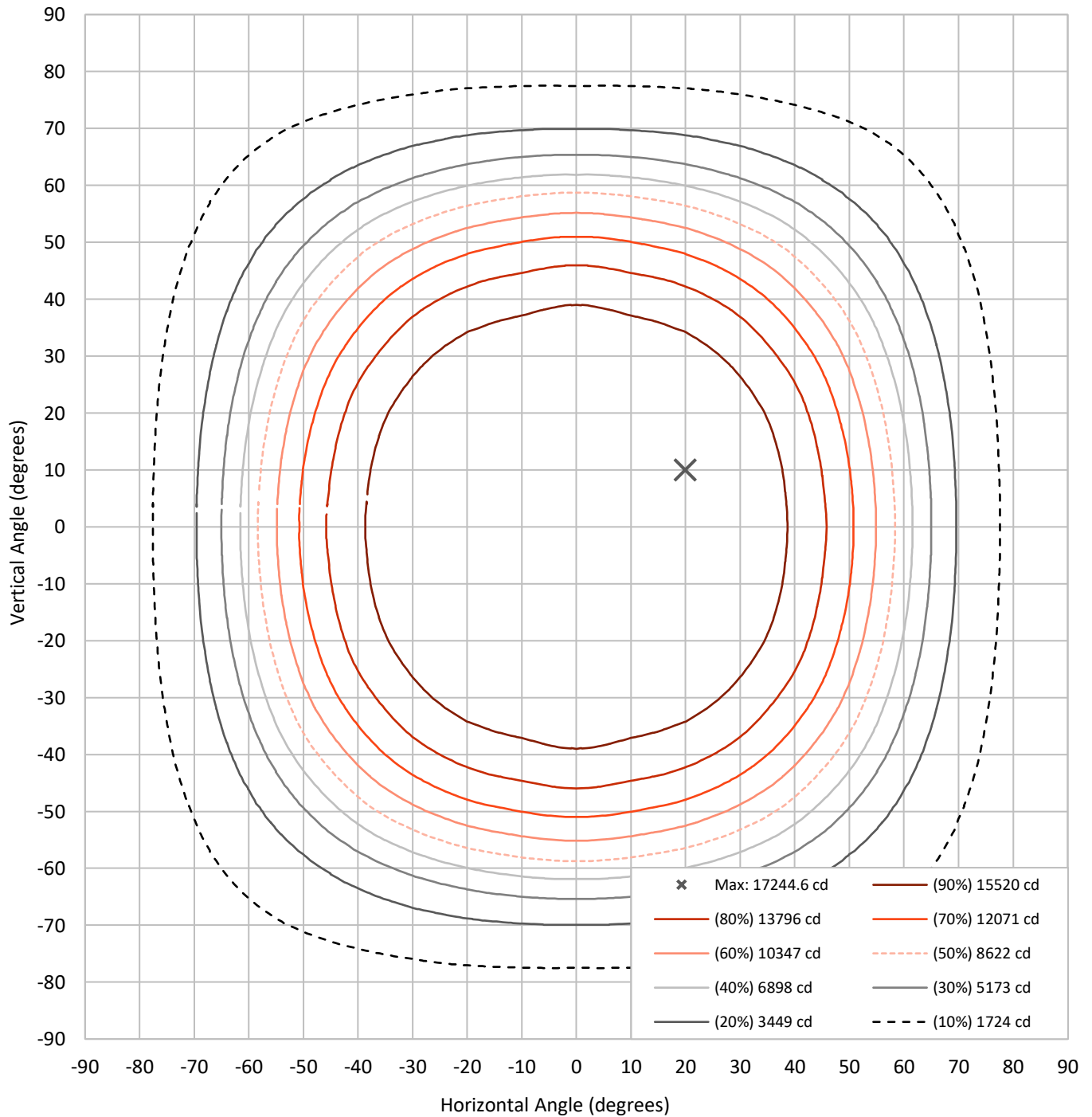
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	52904.2 lumens	Max Intensity:	17244.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	99.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	32463.1 lumens	Field Lumens:	38917.7 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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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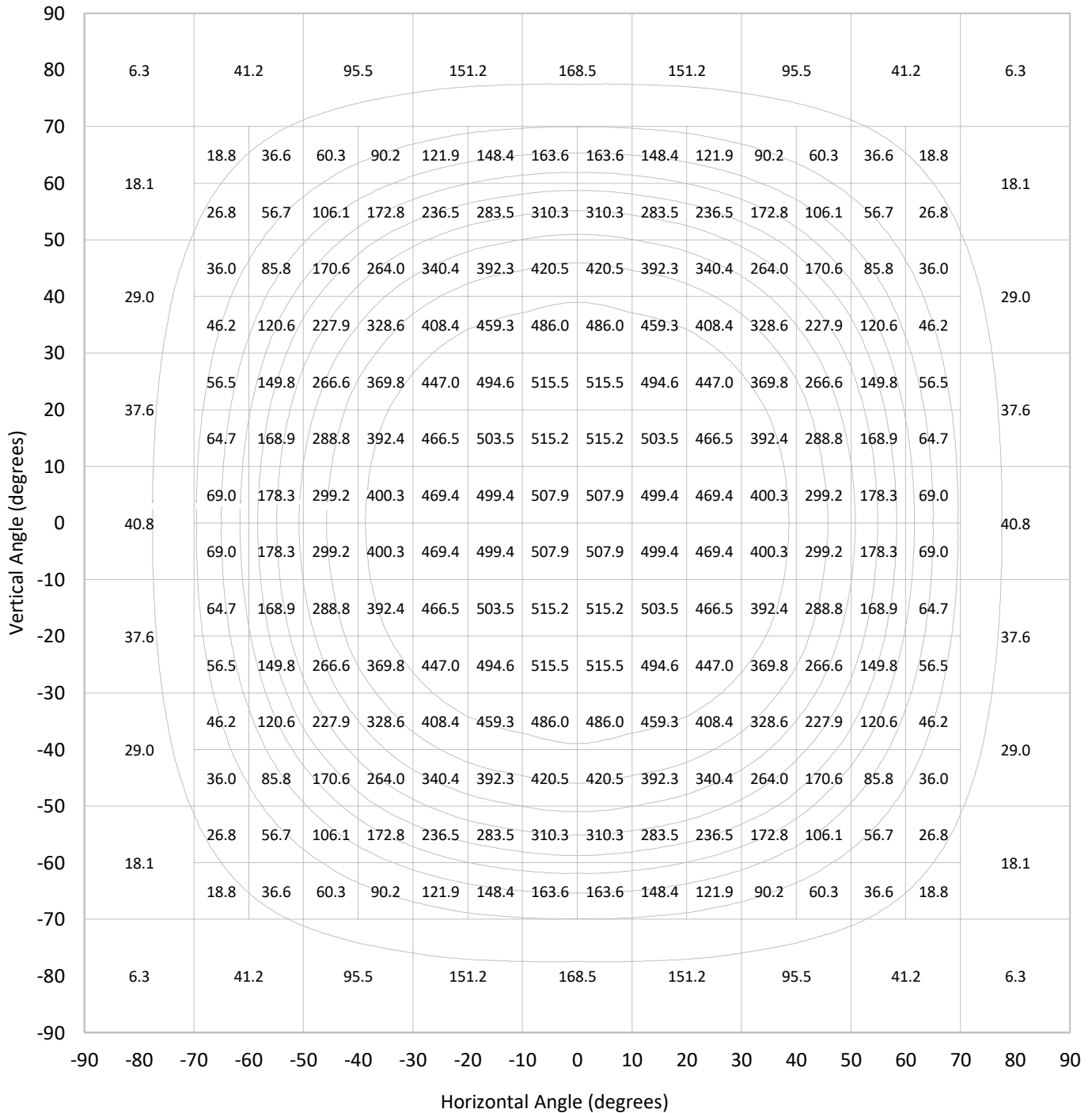
### Iso-Candela Plot





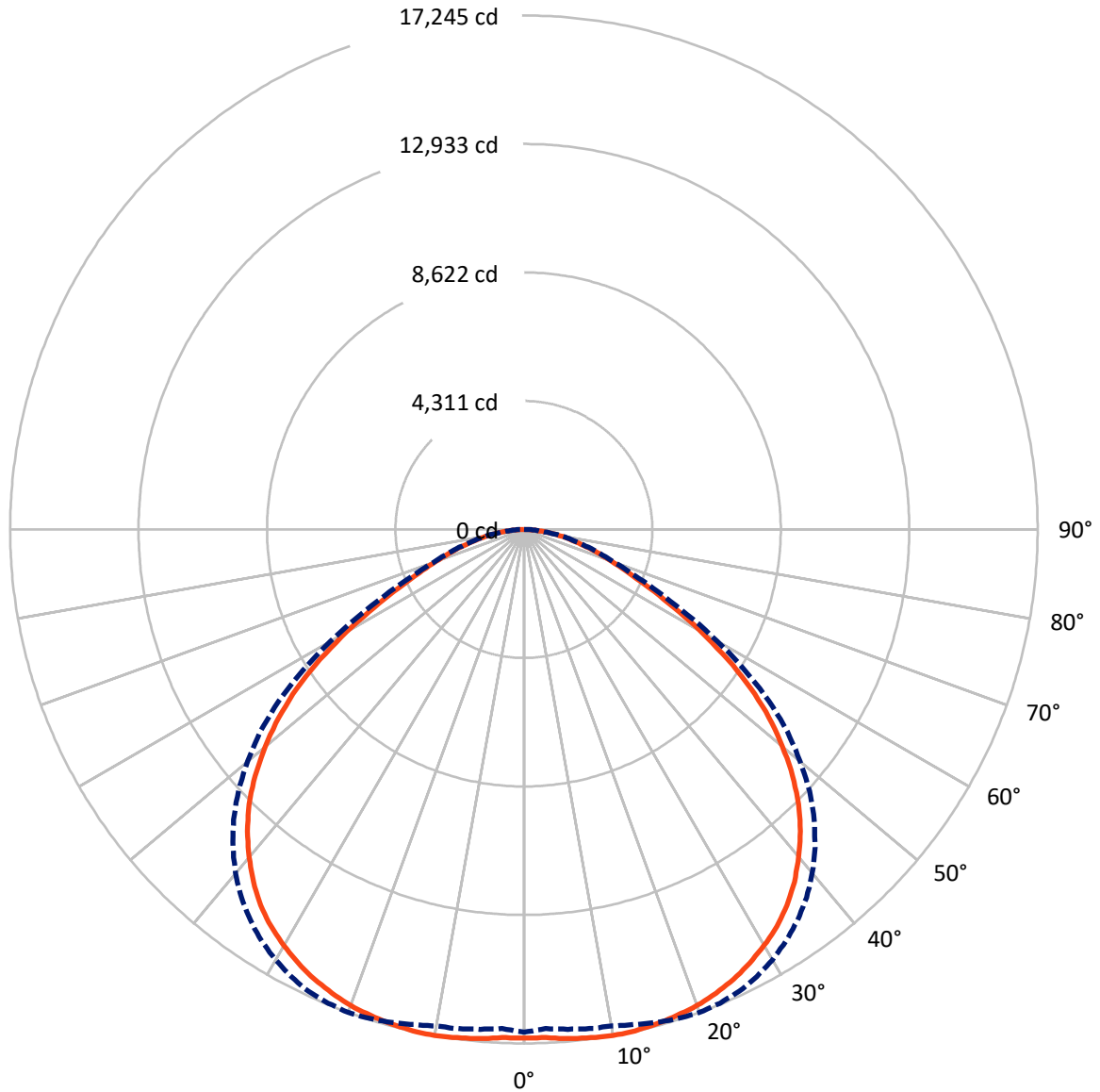
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### Lumen Table



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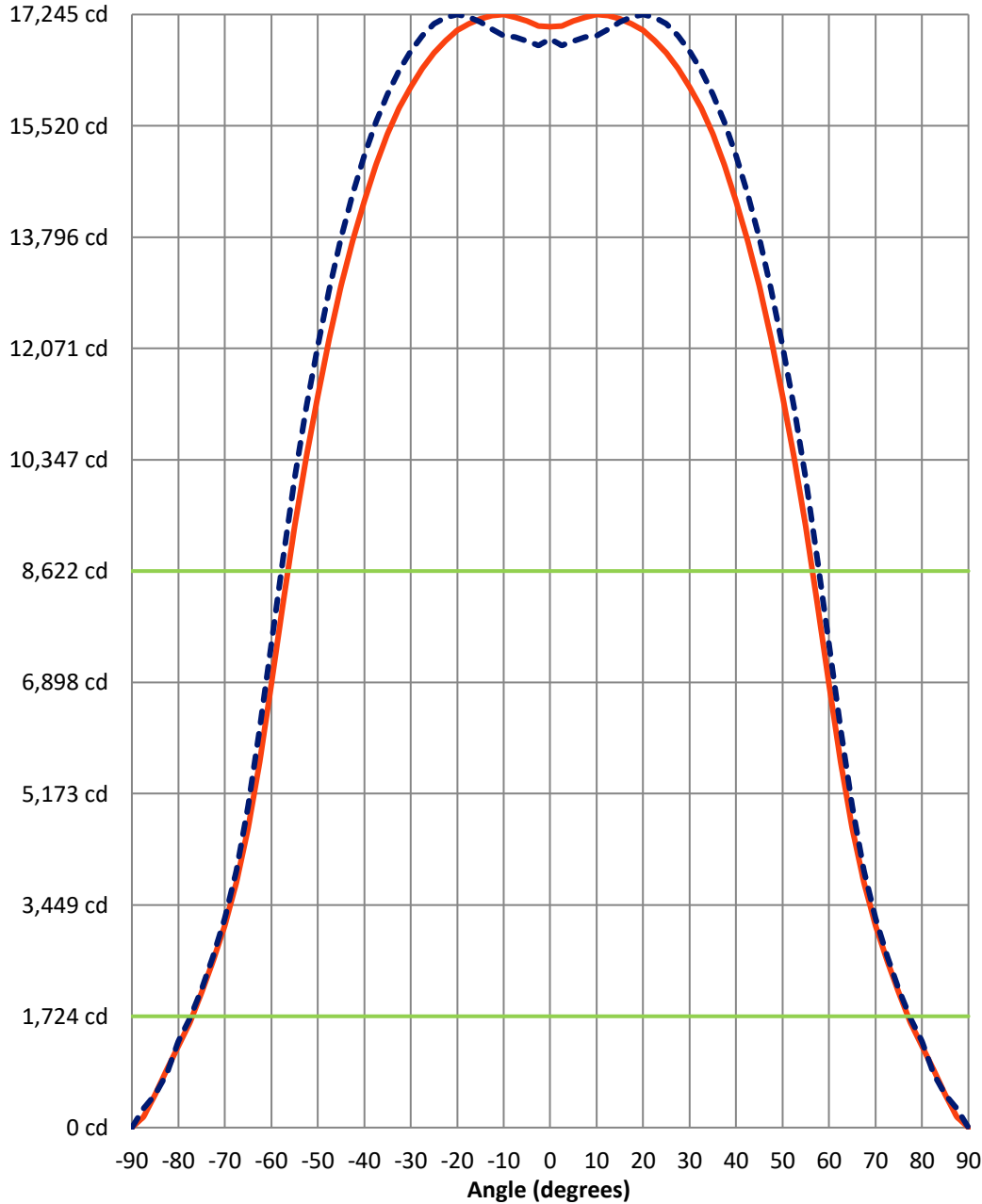
### Luminous Intensity Polar Plot



— 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: 32463.1  
 Efficiency: 61.4%

**Field:**  
 H Angle: 154.7°  
 V Angle: 154°  
 Lumens: 38917.7  
 Efficiency: 73.6%

**Spill:**  
 Lumens: 13986.5  
 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°	139.2	150.3	155.9	161.4	167.0	172.6	178.1	172.6	167.0	167.0	161.4
85°	372.9	384.1	389.6	428.6	467.6	489.8	517.7	512.1	512.1	506.5	501.0
82.5°	745.9	779.3	807.1	846.1	868.4	901.8	924.0	907.3	896.2	873.9	857.2
80°	1324.8	1335.9	1341.5	1347.1	1319.2	1313.7	1302.5	1285.8	1263.6	1235.7	1207.9
77.5°	1686.6	1697.7	1708.9	1697.7	1692.2	1686.6	1669.9	1653.2	1630.9	1608.7	1575.3
75°	2232.1	2232.1	2232.1	2215.4	2204.3	2187.6	2159.8	2131.9	2093.0	2048.4	1998.3
72.5°	2811.0	2805.5	2799.9	2766.5	2738.7	2705.3	2666.3	2632.9	2588.4	2538.3	2471.5
70°	3417.8	3428.9	3434.5	3389.9	3356.5	3312.0	3261.9	3200.7	3133.9	3061.5	2966.9
67.5°	4252.7	4241.6	4230.4	4169.2	4124.7	4063.5	3991.1	3902.0	3801.8	3690.5	3556.9
65°	5288.1	5304.8	5271.4	5210.1	5126.6	5026.4	4915.1	4787.1	4636.8	4469.8	4280.5
62.5°	6540.5	6568.3	6529.4	6451.4	6345.7	6212.1	6056.2	5872.5	5666.6	5432.8	5199.0
60°	7965.5	7959.9	7887.6	7781.8	7642.6	7475.6	7303.1	7102.7	6868.9	6596.2	6312.3
57.5°	9273.6	9262.5	9173.4	9067.6	8928.5	8750.3	8566.7	8355.1	8110.2	7820.8	7492.3
55°	10448.1	10437.0	10347.9	10236.6	10091.8	9913.7	9746.7	9546.3	9307.0	9000.8	8650.2
52.5°	11489.0	11494.6	11416.6	11294.2	11138.3	10965.8	10804.3	10604.0	10375.7	10069.6	9730.0
50°	12446.4	12440.9	12357.4	12246.0	12101.3	11934.3	11772.9	11572.5	11333.1	11038.1	10709.7
47.5°	13337.0	13325.9	13231.3	13108.8	12958.5	12813.8	12663.5	12485.4	12234.9	11939.9	11611.5
45°	14082.9	14060.7	13966.0	13849.2	13704.4	13576.4	13442.8	13309.2	13042.0	12769.3	12457.6
42.5°	14723.1	14717.5	14622.9	14506.0	14361.3	14249.9	14127.5	13960.5	13737.8	13487.3	13181.2
40°	15335.4	15290.8	15196.2	15084.9	14951.3	14856.7	14734.2	14567.2	14350.1	14105.2	13810.2
37.5°	15791.8	15797.4	15697.2	15574.7	15457.8	15368.8	15257.4	15101.6	14912.3	14673.0	14378.0
35°	16226.0	16198.2	16114.7	16008.9	15903.1	15802.9	15686.1	15552.5	15396.6	15173.9	14895.6
32.5°	16509.9	16548.8	16448.6	16337.3	16276.1	16198.2	16075.7	15936.5	15797.4	15574.7	15324.2
30°	16821.6	16788.2	16710.3	16615.6	16571.1	16521.0	16415.3	16281.7	16120.2	15919.8	15686.1
27.5°	17038.7	17022.0	16927.4	16838.3	16816.0	16771.5	16688.0	16571.1	16409.7	16214.9	15997.8
25°	17133.3	17144.4	17055.4	17005.3	17005.3	16977.5	16910.7	16810.5	16649.0	16470.9	16259.4
22.5°	17177.8	17166.7	17105.5	17094.3	17122.2	17099.9	17072.1	16983.0	16838.3	16693.6	16515.4
20°	17205.7	17127.7	17072.1	17116.6	17150.0	17144.4	17122.2	17066.5	16999.7	16877.3	16721.4
17.5°	17144.4	17094.3	17027.6	17094.3	17166.7	17172.3	17150.0	17116.6	17099.9	17022.0	16882.8
15°	16994.2	16955.2	16966.3	17033.1	17116.6	17144.4	17161.1	17200.1	17177.8	17116.6	16994.2
12.5°	16894.0	16843.9	16894.0	16960.8	17005.3	17022.0	17155.6	17227.9	17227.9	17172.3	17094.3
10°	16866.1	16765.9	16832.7	16894.0	16916.2	17016.4	17127.7	17205.7	17244.6	17200.1	17099.9
7.5°	16810.5	16743.7	16771.5	16799.3	16927.4	16999.7	17061.0	17144.4	17200.1	17194.5	17105.5
5°	16782.6	16699.1	16710.3	16827.2	16916.2	16966.3	16988.6	17061.0	17144.4	17161.1	17094.3
2.5°	16710.3	16671.3	16754.8	16765.9	16832.7	16871.7	16894.0	16960.8	17066.5	17105.5	17077.6
0°	16671.3	16615.6	16560.0	16604.5	16715.8	16799.3	16832.7	16932.9	17055.4	17094.3	17033.1



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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°	155.9	150.3	144.7	139.2	144.7	144.7	144.7	139.2	144.7	139.2	139.2
85°	484.3	462.0	445.3	423.0	400.8	384.1	361.8	339.5	334.0	328.4	317.3
82.5°	835.0	807.1	779.3	745.9	712.5	673.5	634.6	590.0	578.9	567.8	551.1
80°	1174.5	1135.5	1096.6	1057.6	1024.2	985.2	940.7	890.6	857.2	829.4	796.0
77.5°	1530.8	1475.1	1419.4	1352.6	1313.7	1274.7	1230.2	1180.1	1130.0	1085.4	1035.3
75°	1937.1	1875.9	1820.2	1753.4	1681.0	1608.7	1536.3	1469.5	1397.2	1330.4	1263.6
72.5°	2388.0	2298.9	2209.9	2126.4	2037.3	1948.2	1853.6	1764.5	1675.5	1586.4	1491.8
70°	2861.1	2749.8	2638.5	2527.1	2410.2	2293.3	2182.0	2070.7	1959.4	1842.5	1736.7
67.5°	3417.8	3289.7	3145.0	2989.1	2816.6	2666.3	2521.6	2388.0	2254.4	2120.8	1987.2
65°	4113.6	3935.4	3740.6	3529.1	3328.7	3128.3	2916.8	2716.4	2560.5	2404.7	2254.4
62.5°	4970.8	4720.3	4447.5	4174.8	3929.9	3668.2	3423.3	3161.7	2916.8	2694.1	2510.4
60°	5995.0	5655.4	5321.5	4970.8	4631.2	4275.0	3963.3	3640.4	3334.3	3061.5	2794.3
57.5°	7125.0	6729.8	6329.0	5900.4	5438.4	5020.9	4597.8	4174.8	3813.0	3451.2	3150.6
55°	8271.6	7854.2	7403.3	6919.0	6412.5	5878.1	5304.8	4831.6	4336.2	3913.2	3523.5
52.5°	9362.6	8928.5	8460.9	8015.6	7408.8	6796.5	6167.5	5544.1	4965.2	4425.3	3952.1
50°	10336.8	9913.7	9462.8	8945.2	8383.0	7731.7	7030.3	6329.0	5644.3	5009.7	4419.7
47.5°	11227.4	10815.5	10364.6	9846.9	9334.8	8611.2	7904.3	7130.5	6367.9	5638.7	4948.5
45°	12062.3	11644.9	11177.3	10681.9	10091.8	9446.1	8716.9	7937.7	7119.4	6301.1	5505.1
42.5°	12819.4	12401.9	11928.7	11416.6	10832.2	10192.0	9485.1	8700.2	7876.4	6985.8	6111.9
40°	13481.8	13075.4	12619.0	12084.6	11539.1	10865.6	10169.8	9423.9	8572.2	7676.0	6713.1
37.5°	14060.7	13682.2	13231.3	12702.5	12123.6	11522.4	10804.3	10058.4	9290.3	8316.2	7330.9
35°	14572.8	14222.1	13760.1	13259.1	12691.3	12056.8	11383.2	10654.0	9824.7	8911.8	7954.4
32.5°	15018.1	14661.8	14238.8	13737.8	13186.8	12591.1	11900.9	11166.2	10381.3	9451.7	8410.8
30°	15396.6	15051.5	14650.7	14177.6	13648.8	13058.7	12385.2	11644.9	10843.3	9919.3	8889.5
27.5°	15725.0	15396.6	15007.0	14567.2	14060.7	13492.9	12813.8	12067.9	11249.7	10359.0	9329.3
25°	16008.9	15691.6	15329.8	14912.3	14411.4	13854.7	13214.6	12435.3	11617.0	10720.8	9702.2
22.5°	16265.0	15958.8	15597.0	15190.6	14734.2	14177.6	13531.9	12758.1	11928.7	11043.7	10041.7
20°	16493.2	16209.3	15853.0	15435.6	14979.1	14416.9	13776.8	13042.0	12207.1	11338.7	10347.9
17.5°	16676.9	16426.4	16070.1	15630.4	15173.9	14628.4	14005.0	13331.5	12446.4	11589.2	10604.0
15°	16804.9	16560.0	16237.1	15791.8	15346.5	14806.6	14183.1	13487.3	12663.5	11789.6	10815.5
12.5°	16894.0	16632.3	16331.8	15919.8	15474.5	14940.2	14333.4	13648.8	12847.2	11967.7	10999.2
10°	16916.2	16676.9	16376.3	16008.9	15574.7	15057.1	14461.5	13782.4	12997.5	12106.9	11149.5
7.5°	16927.4	16699.1	16426.4	16075.7	15647.1	15146.1	14556.1	13888.1	13108.8	12223.8	11260.8
5°	16921.8	16704.7	16459.8	16120.2	15691.6	15196.2	14617.3	13960.5	13186.8	12301.7	11344.3
2.5°	16905.1	16710.3	16482.0	16153.6	15741.7	15251.9	14678.5	14044.0	13270.2	12368.5	11411.1
0°	16949.6	16782.6	16493.2	16142.5	15752.9	15251.9	14673.0	14055.1	13281.4	12362.9	11405.5





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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°	139.2	133.6	133.6	128.0	122.5	116.9	105.8	100.2	89.1	72.4	55.7
85°	300.6	283.9	267.2	256.1	244.9	233.8	217.1	200.4	178.1	144.7	111.3
82.5°	528.8	495.4	462.0	423.0	389.6	356.2	328.4	300.6	267.2	217.1	167.0
80°	757.0	706.9	656.8	601.2	551.1	495.4	445.3	400.8	356.2	289.5	222.7
77.5°	985.2	918.5	846.1	779.3	706.9	634.6	562.2	501.0	434.2	356.2	278.3
75°	1196.8	1118.8	1052.0	957.4	868.4	773.7	679.1	595.6	512.1	417.5	334.0
72.5°	1408.3	1308.1	1213.5	1124.4	1024.2	907.3	801.6	695.8	590.0	478.7	378.5
70°	1619.8	1497.4	1380.5	1274.7	1163.4	1046.5	918.5	796.0	668.0	534.4	417.5
67.5°	1836.9	1697.7	1564.2	1430.6	1302.5	1168.9	1035.3	896.2	745.9	590.0	462.0
65°	2076.3	1903.7	1742.3	1592.0	1441.7	1297.0	1146.7	996.4	829.4	651.3	501.0
62.5°	2315.6	2126.4	1937.1	1747.8	1580.9	1419.4	1258.0	1091.0	907.3	718.1	539.9
60°	2571.7	2354.6	2137.5	1926.0	1720.0	1541.9	1363.8	1185.6	990.8	779.3	578.9
57.5°	2855.6	2593.9	2349.0	2109.7	1875.9	1664.3	1469.5	1280.3	1063.2	840.5	623.4
55°	3178.4	2855.6	2566.1	2298.9	2042.9	1786.8	1575.3	1380.5	1146.7	901.8	673.5
52.5°	3518.0	3145.0	2794.3	2493.7	2221.0	1931.5	1675.5	1458.4	1230.2	963.0	718.1
50°	3913.2	3440.0	3050.4	2683.0	2376.8	2076.3	1781.2	1547.5	1313.7	1035.3	762.6
47.5°	4319.5	3796.3	3306.4	2905.6	2543.8	2215.4	1903.7	1625.4	1391.6	1102.1	807.1
45°	4792.7	4135.8	3595.9	3122.7	2705.3	2360.1	2026.2	1708.9	1458.4	1168.9	851.7
42.5°	5249.1	4536.6	3896.5	3362.1	2889.0	2499.3	2137.5	1797.9	1525.2	1235.7	890.6
40°	5789.0	4937.4	4185.9	3590.3	3072.6	2632.9	2248.8	1892.6	1586.4	1297.0	929.6
37.5°	6306.7	5343.7	4536.6	3840.8	3250.8	2766.5	2360.1	1981.6	1642.1	1358.2	979.7
35°	6818.8	5794.6	4870.6	4074.6	3434.5	2916.8	2471.5	2065.1	1697.7	1408.3	1024.2
32.5°	7308.7	6217.6	5210.1	4336.2	3634.8	3055.9	2571.7	2143.1	1753.4	1452.8	1068.7
30°	7765.1	6618.4	5544.1	4603.4	3818.5	3184.0	2666.3	2221.0	1820.2	1491.8	1113.3
27.5°	8182.6	7008.1	5878.1	4853.9	3991.1	3300.9	2766.5	2293.3	1875.9	1530.8	1152.2
25°	8561.1	7358.8	6184.2	5082.1	4147.0	3428.9	2861.1	2365.7	1926.0	1564.2	1185.6
22.5°	8917.3	7681.6	6462.6	5310.3	4336.2	3556.9	2950.2	2432.5	1976.1	1597.6	1219.0
20°	9229.1	7976.6	6729.8	5538.5	4503.2	3673.8	3028.1	2493.7	2020.6	1619.8	1252.4
17.5°	9479.5	8238.2	6969.1	5738.9	4647.9	3774.0	3094.9	2549.4	2059.6	1647.6	1274.7
15°	9702.2	8460.9	7169.5	5911.5	4776.0	3857.5	3156.1	2593.9	2093.0	1664.3	1302.5
12.5°	9891.5	8650.2	7342.1	6061.8	4887.3	3929.9	3206.2	2627.3	2120.8	1681.0	1319.2
10°	10047.3	8800.4	7486.8	6178.7	4976.3	3985.5	3245.2	2660.7	2143.1	1697.7	1335.9
7.5°	10164.2	8911.8	7592.5	6278.9	5048.7	4024.5	3278.6	2683.0	2165.3	1708.9	1363.8
5°	10253.3	9006.4	7676.0	6345.7	5104.4	4080.2	3317.6	2710.8	2187.6	1720.0	1363.8
2.5°	10320.1	9084.3	7742.8	6401.3	5148.9	4069.0	3317.6	2705.3	2187.6	1720.0	1358.2
0°	10308.9	9089.9	7737.3	6401.3	5148.9	4057.9	3317.6	2699.7	2187.6	1720.0	1358.2



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	39.0	27.8	11.1	0.0
85°	83.5	55.7	27.8	0.0
82.5°	122.5	77.9	39.0	0.0
80°	161.4	105.8	50.1	0.0
77.5°	206.0	133.6	66.8	0.0
75°	244.9	155.9	77.9	0.0
72.5°	283.9	183.7	89.1	0.0
70°	317.3	206.0	100.2	0.0
67.5°	350.7	233.8	116.9	0.0
65°	378.5	256.1	128.0	0.0
62.5°	400.8	283.9	139.2	0.0
60°	428.6	306.2	150.3	0.0
57.5°	450.9	322.8	161.4	0.0
55°	473.1	334.0	172.6	0.0
52.5°	495.4	350.7	183.7	0.0
50°	517.7	367.4	194.8	0.0
47.5°	539.9	378.5	200.4	0.0
45°	573.3	395.2	211.5	0.0
42.5°	601.2	406.3	222.7	0.0
40°	629.0	417.5	228.2	0.0
37.5°	656.8	428.6	239.4	0.0
35°	684.7	439.7	244.9	0.0
32.5°	706.9	450.9	250.5	0.0
30°	729.2	462.0	256.1	0.0
27.5°	751.5	467.6	261.6	0.0
25°	768.2	478.7	267.2	0.0
22.5°	784.9	484.3	272.8	0.0
20°	796.0	489.8	278.3	0.0
17.5°	812.7	495.4	283.9	0.0
15°	818.3	501.0	295.0	0.0
12.5°	829.4	506.5	295.0	0.0
10°	835.0	512.1	295.0	0.0
7.5°	846.1	512.1	295.0	0.0
5°	840.5	512.1	295.0	0.0
2.5°	840.5	512.1	295.0	0.0
0°	835.0	512.1	295.0	0.0

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