

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: P628556

Luminaire Tested: **EPH-VN-03-E-730-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628556
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-03-E-730-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (48) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

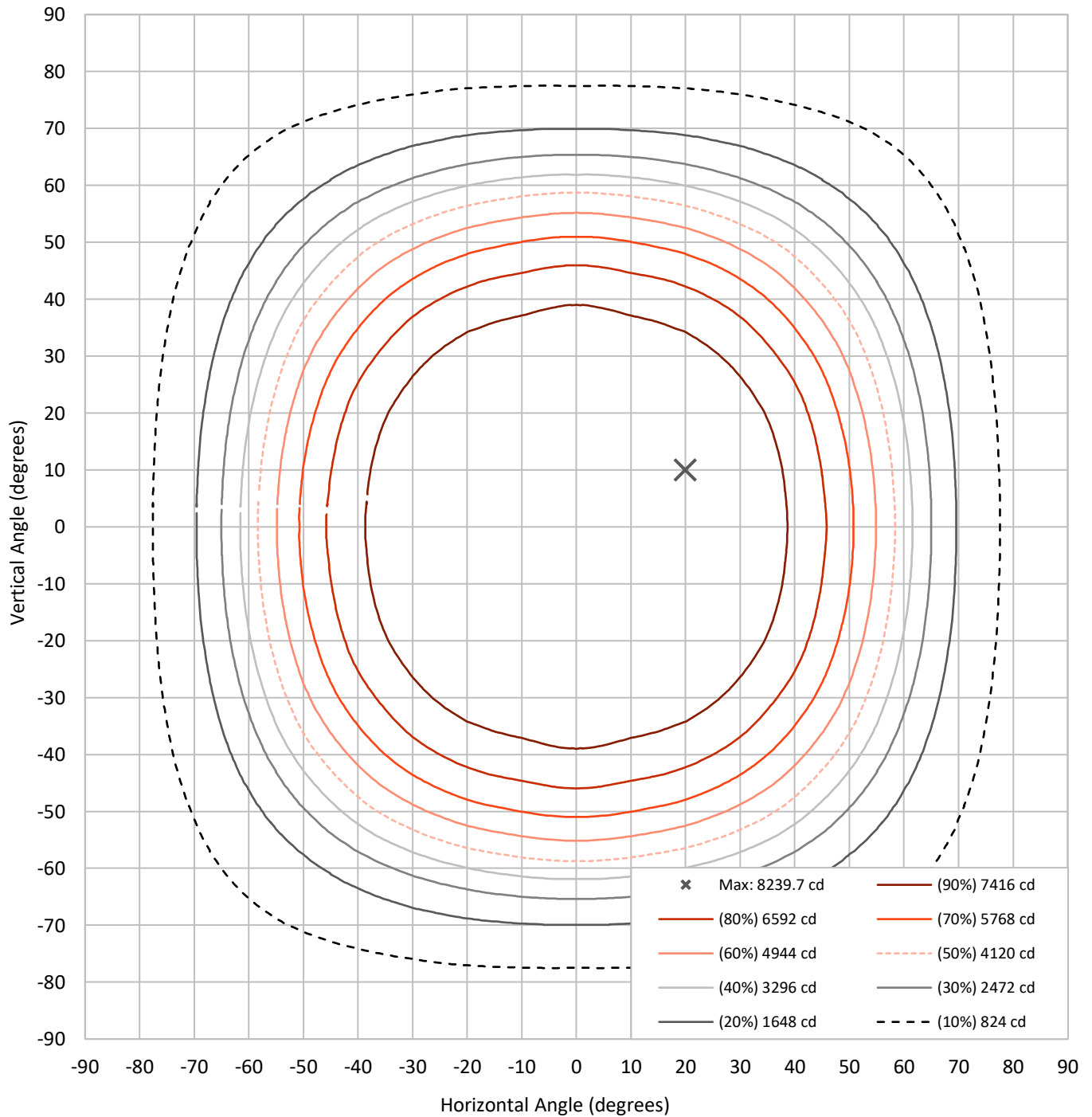
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	25278.4 lumens	Max Intensity:	8239.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	108.9 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	15511.4 lumens	Field Lumens:	18595.5 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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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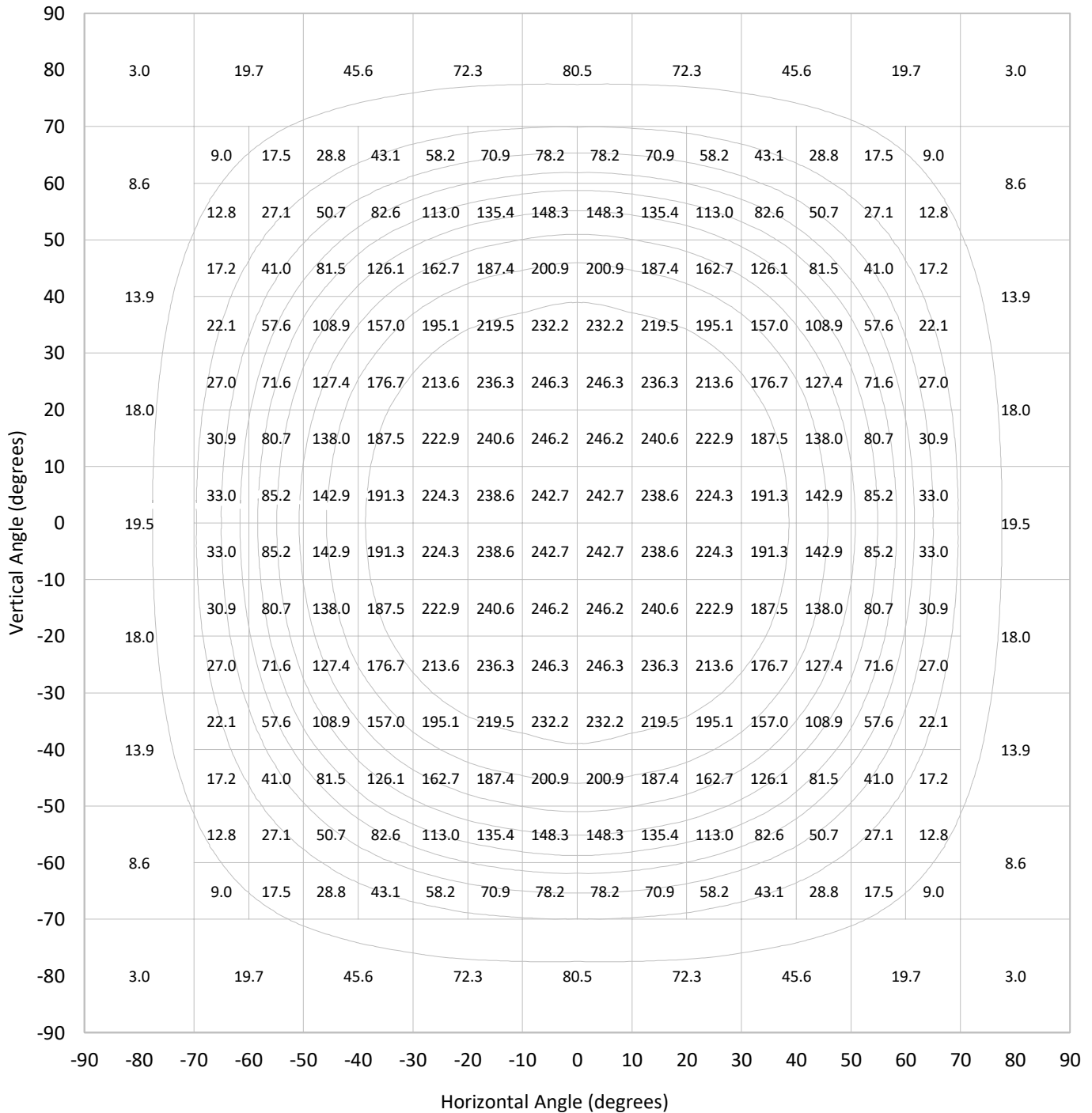
Iso-Candela Plot





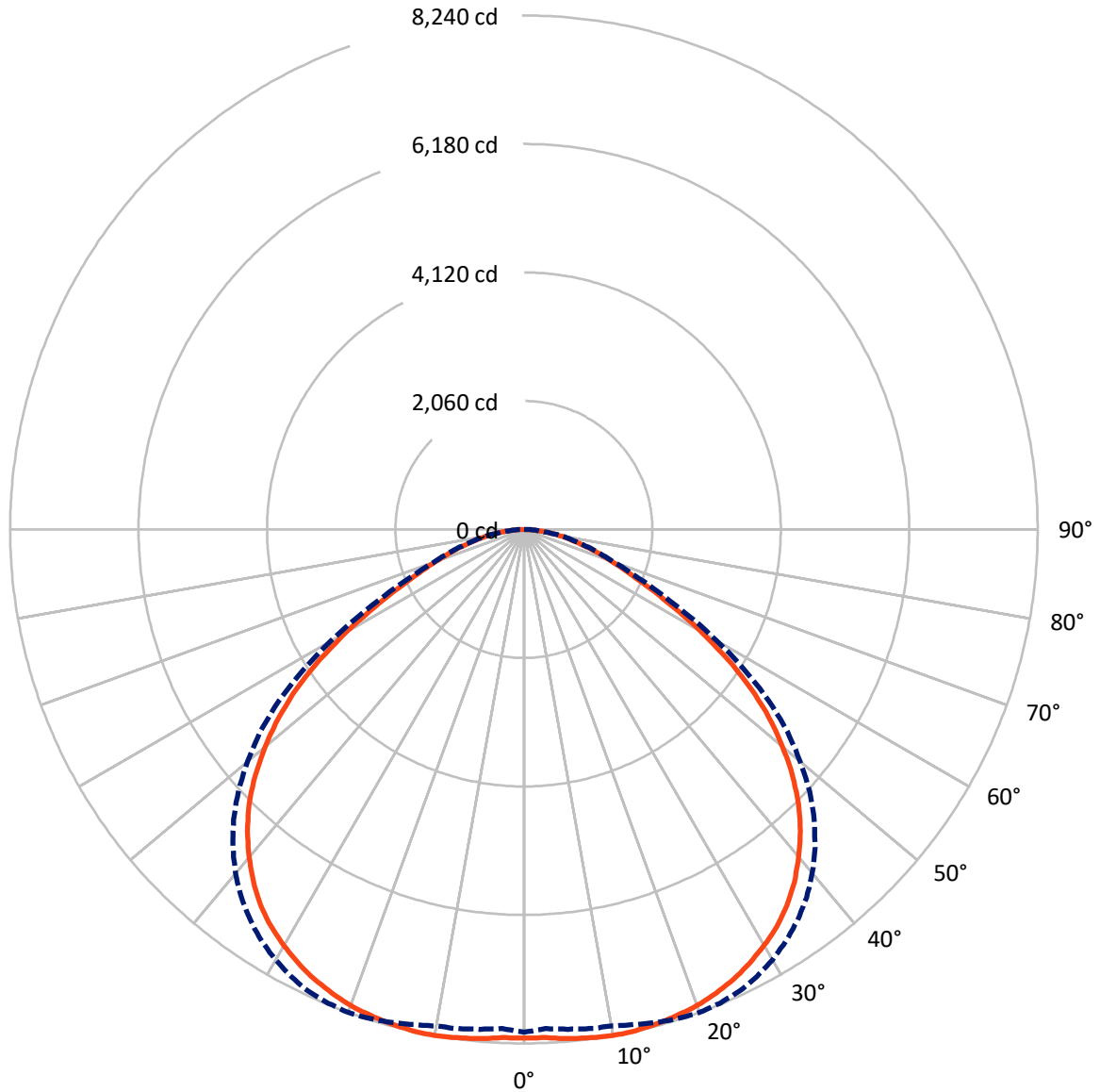
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Lumen Table



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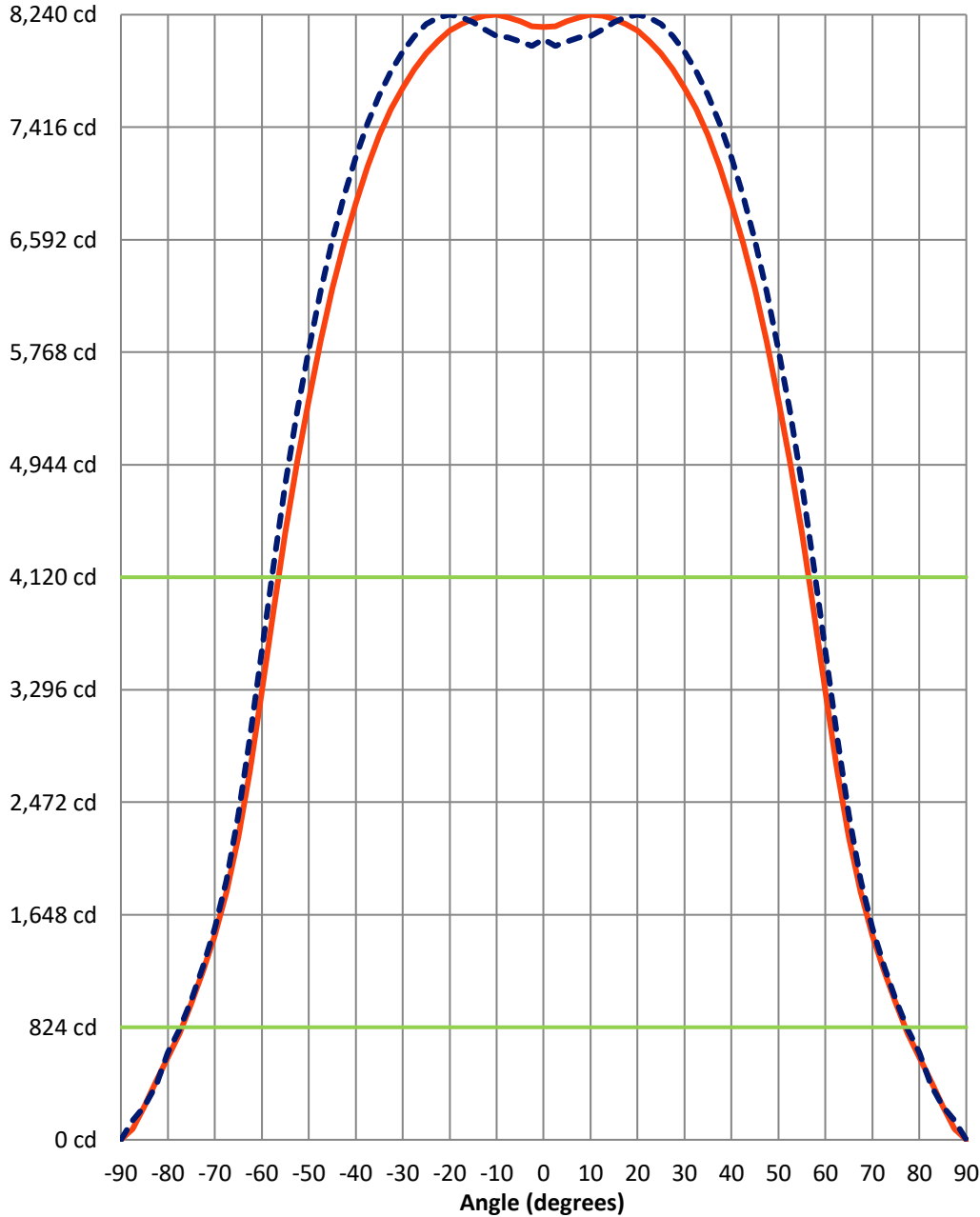
Luminous Intensity Polar Plot



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

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 15511.4
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 18595.5
 Efficiency: 73.6%

Spill:
 Lumens: 6682.9
 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°	66.5	71.8	74.5	77.1	79.8	82.5	85.1	82.5	79.8	79.8	77.1
85°	178.2	183.5	186.2	204.8	223.4	234.1	247.4	244.7	244.7	242.0	239.4
82.5°	356.4	372.4	385.7	404.3	414.9	430.9	441.5	433.5	428.2	417.6	409.6
80°	633.0	638.3	641.0	643.6	630.3	627.7	622.4	614.4	603.8	590.5	577.2
77.5°	805.9	811.2	816.5	811.2	808.5	805.9	797.9	789.9	779.3	768.7	752.7
75°	1066.5	1066.5	1066.5	1058.6	1053.2	1045.3	1032.0	1018.7	1000.0	978.8	954.8
72.5°	1343.1	1340.5	1337.8	1321.9	1308.6	1292.6	1274.0	1258.0	1236.8	1212.8	1180.9
70°	1633.1	1638.4	1641.0	1619.8	1603.8	1582.5	1558.6	1529.3	1497.4	1462.8	1417.6
67.5°	2032.0	2026.7	2021.4	1992.1	1970.8	1941.6	1907.0	1864.4	1816.6	1763.4	1699.5
65°	2526.7	2534.7	2518.7	2489.5	2449.6	2401.7	2348.5	2287.3	2215.5	2135.7	2045.3
62.5°	3125.1	3138.4	3119.8	3082.6	3032.1	2968.2	2893.8	2806.0	2707.6	2595.9	2484.2
60°	3806.0	3803.4	3768.8	3718.3	3651.8	3572.0	3489.5	3393.8	3282.1	3151.7	3016.1
57.5°	4431.1	4425.7	4383.2	4332.7	4266.2	4181.0	4093.3	3992.2	3875.2	3736.9	3580.0
55°	4992.3	4986.9	4944.4	4891.2	4822.0	4736.9	4657.1	4561.4	4447.0	4300.7	4133.2
52.5°	5489.6	5492.3	5455.0	5396.5	5322.1	5239.6	5162.5	5066.7	4957.7	4811.4	4649.2
50°	5947.1	5944.4	5904.5	5851.3	5782.2	5702.4	5625.3	5529.5	5415.1	5274.2	5117.3
47.5°	6372.6	6367.3	6322.1	6263.6	6191.8	6122.6	6050.8	5965.7	5846.0	5705.1	5548.1
45°	6729.0	6718.4	6673.2	6617.3	6548.2	6487.0	6423.2	6359.3	6231.7	6101.4	5952.4
42.5°	7034.9	7032.2	6987.0	6931.2	6862.0	6808.8	6750.3	6670.5	6564.1	6444.5	6298.2
40°	7327.5	7306.2	7261.0	7207.8	7144.0	7098.7	7040.2	6960.4	6856.7	6739.7	6598.7
37.5°	7545.6	7548.2	7500.4	7441.8	7386.0	7343.4	7290.2	7215.8	7125.3	7011.0	6870.0
35°	7753.0	7739.7	7699.8	7649.3	7598.8	7550.9	7495.0	7431.2	7356.7	7250.3	7117.4
32.5°	7888.7	7907.3	7859.4	7806.2	7777.0	7739.7	7681.2	7614.7	7548.2	7441.8	7322.2
30°	8037.6	8021.7	7984.4	7939.2	7917.9	7894.0	7843.5	7779.6	7702.5	7606.7	7495.0
27.5°	8141.3	8133.4	8088.1	8045.6	8035.0	8013.7	7973.8	7917.9	7840.8	7747.7	7644.0
25°	8186.6	8191.9	8149.3	8125.4	8125.4	8112.1	8080.2	8032.3	7955.2	7870.1	7769.0
22.5°	8207.8	8202.5	8173.3	8167.9	8181.2	8170.6	8157.3	8114.7	8045.6	7976.4	7891.3
20°	8221.1	8183.9	8157.3	8178.6	8194.5	8191.9	8181.2	8154.6	8122.7	8064.2	7989.7
17.5°	8191.9	8167.9	8136.0	8167.9	8202.5	8205.2	8194.5	8178.6	8170.6	8133.4	8066.9
15°	8120.1	8101.4	8106.8	8138.7	8178.6	8191.9	8199.9	8218.5	8207.8	8178.6	8120.1
12.5°	8072.2	8048.3	8072.2	8104.1	8125.4	8133.4	8197.2	8231.8	8231.8	8205.2	8167.9
10°	8058.9	8011.0	8042.9	8072.2	8082.8	8130.7	8183.9	8221.1	8239.7	8218.5	8170.6
7.5°	8032.3	8000.4	8013.7	8027.0	8088.1	8122.7	8152.0	8191.9	8218.5	8215.8	8173.3
5°	8019.0	7979.1	7984.4	8040.3	8082.8	8106.8	8117.4	8152.0	8191.9	8199.9	8167.9
2.5°	7984.4	7965.8	8005.7	8011.0	8042.9	8061.5	8072.2	8104.1	8154.6	8173.3	8160.0
0°	7965.8	7939.2	7912.6	7933.9	7987.1	8027.0	8042.9	8090.8	8149.3	8167.9	8138.7



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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°	74.5	71.8	69.2	66.5	69.2	69.2	69.2	66.5	69.2	66.5	66.5
85°	231.4	220.8	212.8	202.1	191.5	183.5	172.9	162.2	159.6	156.9	151.6
82.5°	399.0	385.7	372.4	356.4	340.4	321.8	303.2	281.9	276.6	271.3	263.3
80°	561.2	542.6	524.0	505.3	489.4	470.8	449.5	425.6	409.6	396.3	380.3
77.5°	731.4	704.8	678.2	646.3	627.7	609.1	587.8	563.9	539.9	518.6	494.7
75°	925.6	896.3	869.7	837.8	803.2	768.7	734.1	702.2	667.6	635.7	603.8
72.5°	1141.0	1098.5	1055.9	1016.0	973.5	930.9	885.7	843.1	800.6	758.0	712.8
70°	1367.1	1313.9	1260.7	1207.5	1151.6	1095.8	1042.6	989.4	936.2	880.4	829.8
67.5°	1633.1	1571.9	1502.7	1428.3	1345.8	1274.0	1204.8	1141.0	1077.2	1013.3	949.5
65°	1965.5	1880.4	1787.3	1686.2	1590.5	1494.8	1393.7	1297.9	1223.5	1149.0	1077.2
62.5°	2375.1	2255.4	2125.1	1994.8	1877.7	1752.7	1635.7	1510.7	1393.7	1287.3	1199.5
60°	2864.5	2702.3	2542.7	2375.1	2212.9	2042.6	1893.7	1739.4	1593.2	1462.8	1335.2
57.5°	3404.4	3215.6	3024.1	2819.3	2598.5	2399.0	2196.9	1994.8	1821.9	1649.0	1505.4
55°	3952.3	3752.8	3537.4	3306.0	3064.0	2808.6	2534.7	2308.6	2071.9	1869.8	1683.6
52.5°	4473.6	4266.2	4042.7	3830.0	3540.1	3247.5	2946.9	2649.1	2372.5	2114.5	1888.4
50°	4939.1	4736.9	4521.5	4274.1	4005.5	3694.3	3359.2	3024.1	2696.9	2393.7	2111.8
47.5°	5364.6	5167.8	4952.4	4705.0	4460.3	4114.6	3776.8	3407.1	3042.7	2694.3	2364.5
45°	5763.6	5564.1	5340.7	5104.0	4822.0	4513.5	4165.1	3792.7	3401.8	3010.8	2630.4
42.5°	6125.3	5925.8	5699.7	5455.0	5175.8	4869.9	4532.1	4157.1	3763.5	3337.9	2920.4
40°	6441.8	6247.6	6029.5	5774.2	5513.6	5191.7	4859.3	4502.9	4095.9	3667.7	3207.6
37.5°	6718.4	6537.5	6322.1	6069.4	5792.8	5505.6	5162.5	4806.1	4439.0	3973.6	3502.8
35°	6963.1	6795.5	6574.8	6335.4	6064.1	5760.9	5439.1	5090.7	4694.4	4258.2	3800.7
32.5°	7175.9	7005.6	6803.5	6564.1	6300.8	6016.2	5686.4	5335.4	4960.3	4516.2	4018.8
30°	7356.7	7191.8	7000.3	6774.3	6521.6	6239.7	5917.8	5564.1	5181.1	4739.6	4247.5
27.5°	7513.7	7356.7	7170.5	6960.4	6718.4	6447.1	6122.6	5766.2	5375.3	4949.7	4457.7
25°	7649.3	7497.7	7324.8	7125.3	6886.0	6620.0	6314.1	5941.8	5550.8	5122.6	4635.9
22.5°	7771.6	7625.4	7452.5	7258.3	7040.2	6774.3	6465.7	6096.0	5699.7	5276.8	4798.1
20°	7880.7	7745.0	7574.8	7375.3	7157.3	6888.6	6582.8	6231.7	5832.7	5417.8	4944.4
17.5°	7968.5	7848.8	7678.6	7468.4	7250.3	6989.7	6691.8	6370.0	5947.1	5537.5	5066.7
15°	8029.6	7912.6	7758.3	7545.6	7332.8	7074.8	6776.9	6444.5	6050.8	5633.2	5167.8
12.5°	8072.2	7947.2	7803.6	7606.7	7394.0	7138.6	6848.7	6521.6	6138.6	5718.4	5255.6
10°	8082.8	7968.5	7824.8	7649.3	7441.8	7194.5	6909.9	6585.4	6210.4	5784.8	5327.4
7.5°	8088.1	7979.1	7848.8	7681.2	7476.4	7237.0	6955.1	6636.0	6263.6	5840.7	5380.6
5°	8085.5	7981.8	7864.7	7702.5	7497.7	7261.0	6984.4	6670.5	6300.8	5877.9	5420.5
2.5°	8077.5	7984.4	7875.4	7718.4	7521.6	7287.6	7013.6	6710.4	6340.7	5909.9	5452.4
0°	8098.8	8019.0	7880.7	7713.1	7526.9	7287.6	7011.0	6715.7	6346.0	5907.2	5449.7



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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°	66.5	63.8	63.8	61.2	58.5	55.9	50.5	47.9	42.6	34.6	26.6
85°	143.6	135.6	127.7	122.3	117.0	111.7	103.7	95.7	85.1	69.2	53.2
82.5°	252.7	236.7	220.8	202.1	186.2	170.2	156.9	143.6	127.7	103.7	79.8
80°	361.7	337.8	313.8	287.2	263.3	236.7	212.8	191.5	170.2	138.3	106.4
77.5°	470.8	438.9	404.3	372.4	337.8	303.2	268.6	239.4	207.5	170.2	133.0
75°	571.8	534.6	502.7	457.5	414.9	369.7	324.5	284.6	244.7	199.5	159.6
72.5°	672.9	625.0	579.8	537.3	489.4	433.5	383.0	332.5	281.9	228.7	180.9
70°	774.0	715.5	659.6	609.1	555.9	500.0	438.9	380.3	319.2	255.3	199.5
67.5°	877.7	811.2	747.4	683.5	622.4	558.5	494.7	428.2	356.4	281.9	220.8
65°	992.1	909.6	832.5	760.7	688.9	619.7	547.9	476.1	396.3	311.2	239.4
62.5°	1106.4	1016.0	925.6	835.1	755.4	678.2	601.1	521.3	433.5	343.1	258.0
60°	1228.8	1125.1	1021.3	920.3	821.8	736.7	651.6	566.5	473.4	372.4	276.6
57.5°	1364.4	1239.4	1122.4	1008.0	896.3	795.3	702.2	611.7	508.0	401.6	297.9
55°	1518.7	1364.4	1226.1	1098.5	976.1	853.8	752.7	659.6	547.9	430.9	321.8
52.5°	1680.9	1502.7	1335.2	1191.5	1061.2	922.9	800.6	696.8	587.8	460.1	343.1
50°	1869.8	1643.7	1457.5	1282.0	1135.7	992.1	851.1	739.4	627.7	494.7	364.4
47.5°	2063.9	1813.9	1579.9	1388.4	1215.5	1058.6	909.6	776.6	664.9	526.6	385.7
45°	2290.0	1976.2	1718.2	1492.1	1292.6	1127.7	968.1	816.5	696.8	558.5	406.9
42.5°	2508.1	2167.7	1861.8	1606.5	1380.4	1194.2	1021.3	859.1	728.8	590.5	425.6
40°	2766.1	2359.2	2000.1	1715.5	1468.2	1258.0	1074.5	904.3	758.0	619.7	444.2
37.5°	3013.4	2553.3	2167.7	1835.2	1553.3	1321.9	1127.7	946.9	784.6	649.0	468.1
35°	3258.1	2768.7	2327.2	1946.9	1641.0	1393.7	1180.9	986.7	811.2	672.9	489.4
32.5°	3492.2	2970.9	2489.5	2071.9	1736.8	1460.2	1228.8	1024.0	837.8	694.2	510.7
30°	3710.3	3162.4	2649.1	2199.6	1824.6	1521.3	1274.0	1061.2	869.7	712.8	531.9
27.5°	3909.8	3348.6	2808.6	2319.3	1907.0	1577.2	1321.9	1095.8	896.3	731.4	550.6
25°	4090.6	3516.1	2954.9	2428.3	1981.5	1638.4	1367.1	1130.4	920.3	747.4	566.5
22.5°	4260.8	3670.4	3087.9	2537.4	2071.9	1699.5	1409.6	1162.3	944.2	763.3	582.5
20°	4409.8	3811.3	3215.6	2646.4	2151.7	1755.4	1446.9	1191.5	965.5	774.0	598.4
17.5°	4529.5	3936.4	3329.9	2742.2	2220.8	1803.3	1478.8	1218.1	984.1	787.3	609.1
15°	4635.9	4042.7	3425.7	2824.6	2282.0	1843.2	1508.0	1239.4	1000.0	795.3	622.4
12.5°	4726.3	4133.2	3508.1	2896.4	2335.2	1877.7	1532.0	1255.4	1013.3	803.2	630.3
10°	4800.8	4205.0	3577.3	2952.3	2377.8	1904.3	1550.6	1271.3	1024.0	811.2	638.3
7.5°	4856.6	4258.2	3627.8	3000.1	2412.3	1923.0	1566.6	1282.0	1034.6	816.5	651.6
5°	4899.2	4303.4	3667.7	3032.1	2438.9	1949.6	1585.2	1295.3	1045.3	821.8	651.6
2.5°	4931.1	4340.6	3699.6	3058.7	2460.2	1944.2	1585.2	1292.6	1045.3	821.8	649.0
0°	4925.8	4343.3	3697.0	3058.7	2460.2	1938.9	1585.2	1290.0	1045.3	821.8	649.0



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	18.6	13.3	5.3	0.0
85°	39.9	26.6	13.3	0.0
82.5°	58.5	37.2	18.6	0.0
80°	77.1	50.5	23.9	0.0
77.5°	98.4	63.8	31.9	0.0
75°	117.0	74.5	37.2	0.0
72.5°	135.6	87.8	42.6	0.0
70°	151.6	98.4	47.9	0.0
67.5°	167.6	111.7	55.9	0.0
65°	180.9	122.3	61.2	0.0
62.5°	191.5	135.6	66.5	0.0
60°	204.8	146.3	71.8	0.0
57.5°	215.4	154.3	77.1	0.0
55°	226.1	159.6	82.5	0.0
52.5°	236.7	167.6	87.8	0.0
50°	247.4	175.5	93.1	0.0
47.5°	258.0	180.9	95.7	0.0
45°	273.9	188.8	101.1	0.0
42.5°	287.2	194.2	106.4	0.0
40°	300.5	199.5	109.0	0.0
37.5°	313.8	204.8	114.4	0.0
35°	327.1	210.1	117.0	0.0
32.5°	337.8	215.4	119.7	0.0
30°	348.4	220.8	122.3	0.0
27.5°	359.1	223.4	125.0	0.0
25°	367.0	228.7	127.7	0.0
22.5°	375.0	231.4	130.3	0.0
20°	380.3	234.1	133.0	0.0
17.5°	388.3	236.7	135.6	0.0
15°	391.0	239.4	141.0	0.0
12.5°	396.3	242.0	141.0	0.0
10°	399.0	244.7	141.0	0.0
7.5°	404.3	244.7	141.0	0.0
5°	401.6	244.7	141.0	0.0
2.5°	401.6	244.7	141.0	0.0
0°	399.0	244.7	141.0	0.0

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