

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: P628597

Luminaire Tested: **EPH-VN-08-E-935-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628597
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-E-935-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (128) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

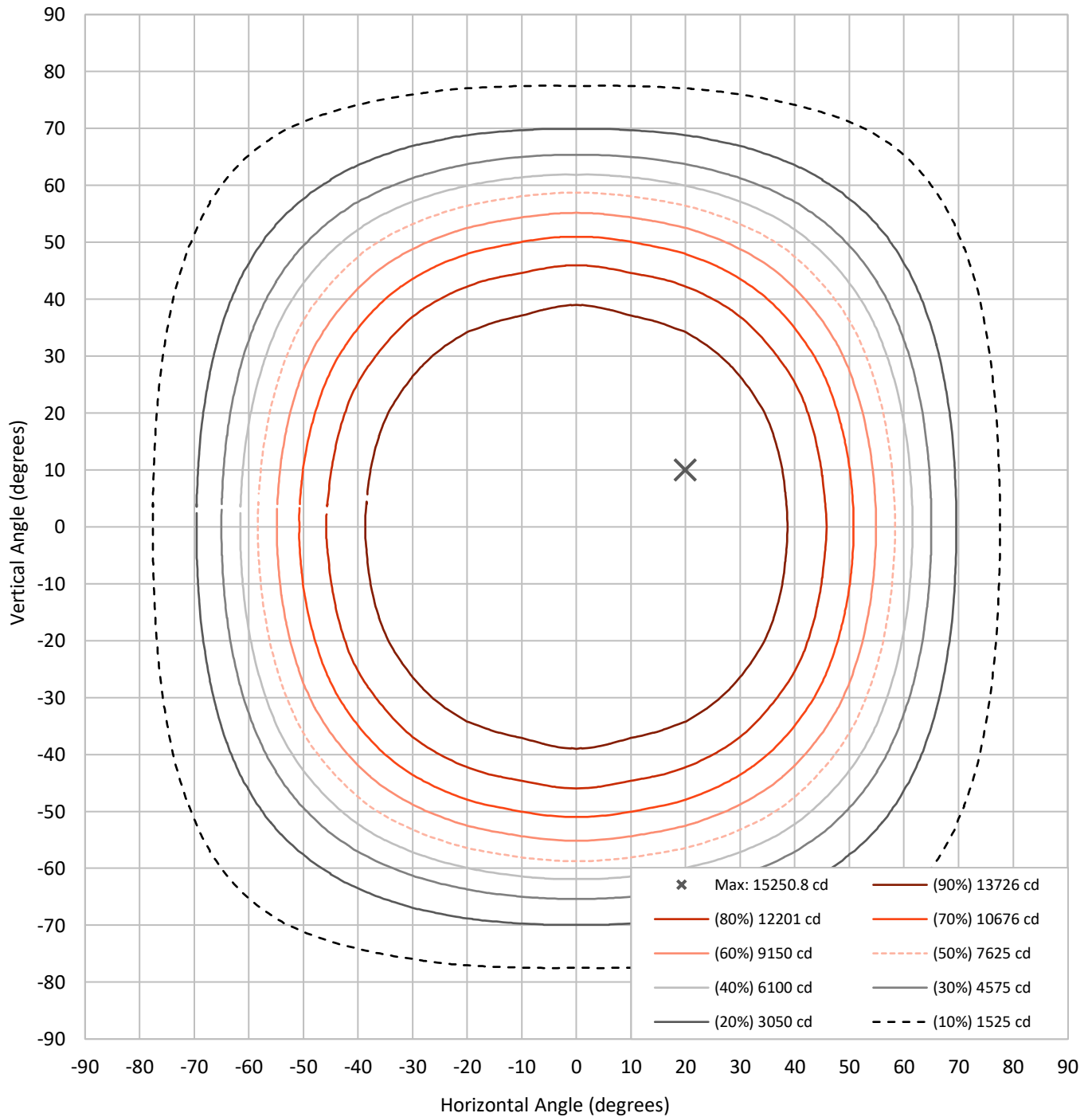
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	46787.3 lumens	Max Intensity:	15250.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	74.6 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	28709.7 lumens	Field Lumens:	34418 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 626.8
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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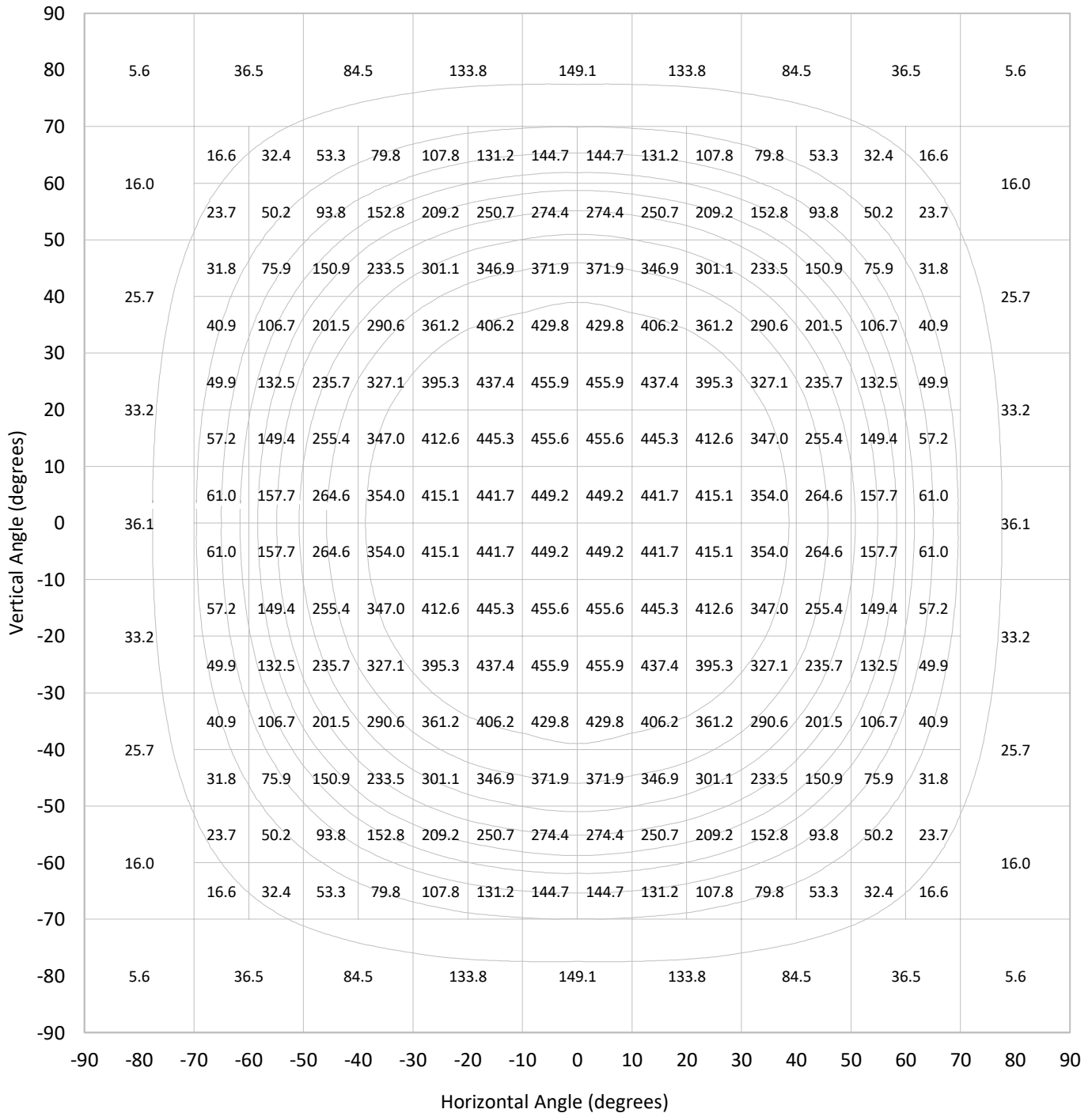
Iso-Candela Plot





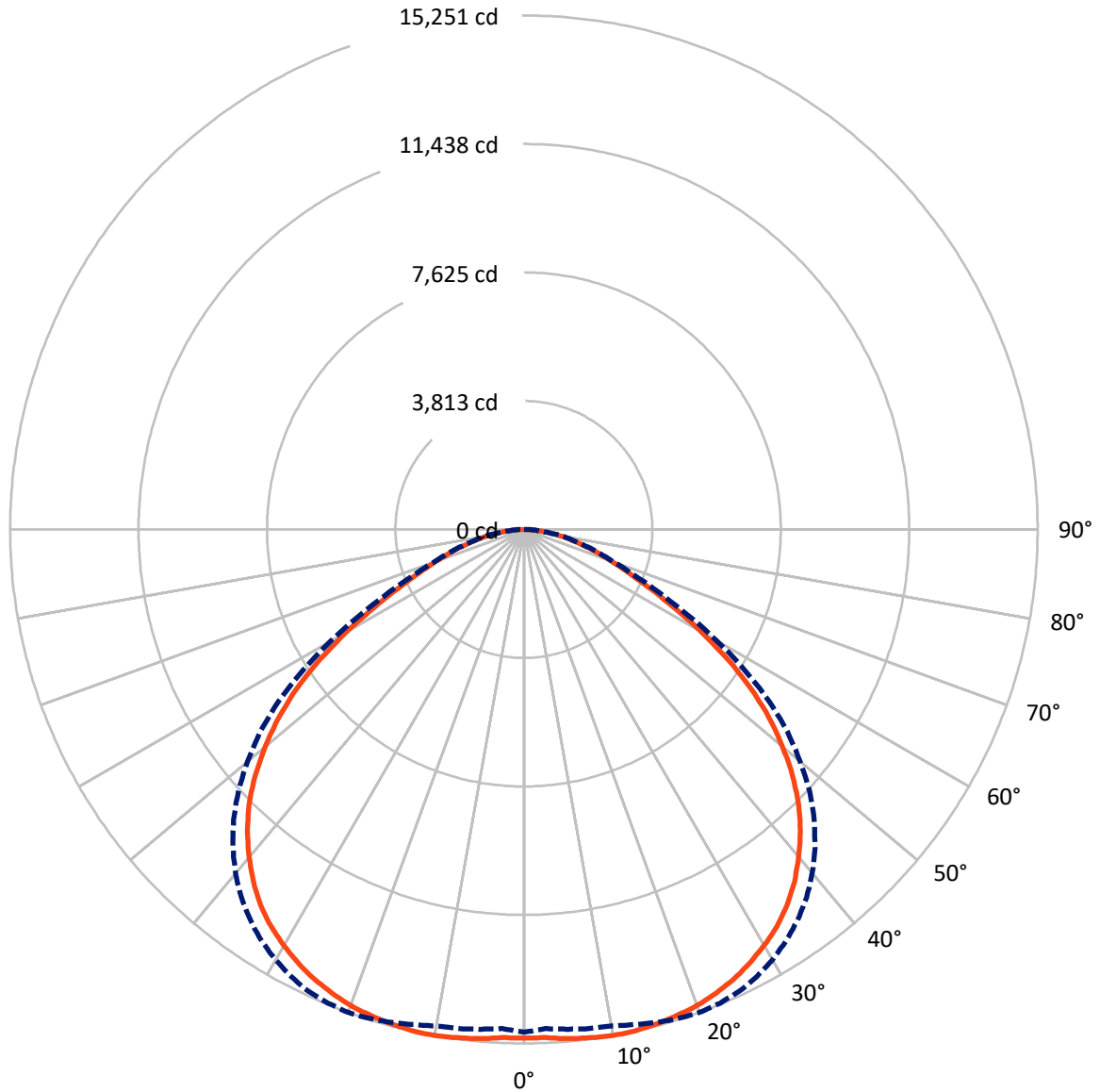
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Lumen Table



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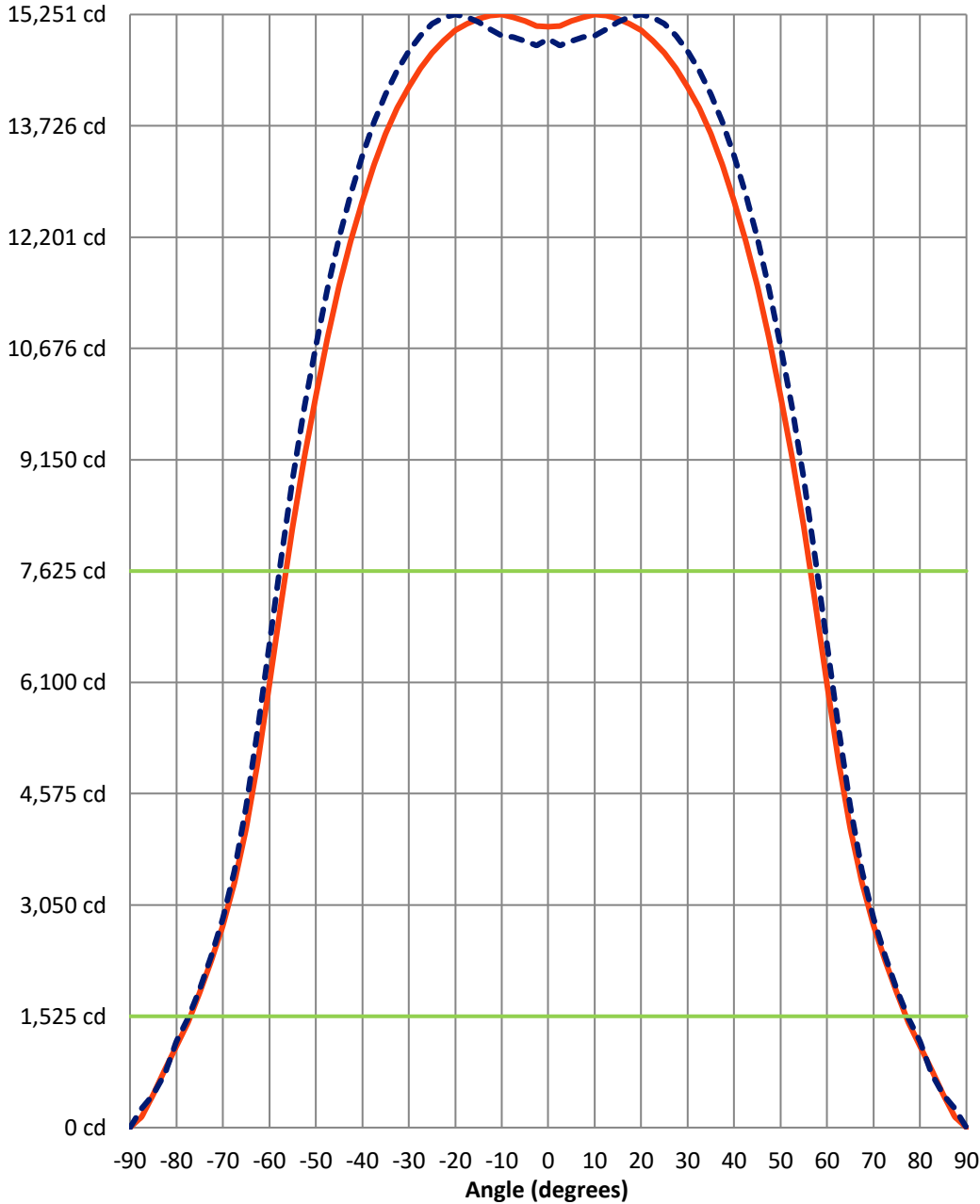
Luminous Intensity Polar Plot



— 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: 28709.7
Efficiency: 61.4%

Field:
H Angle: 154.7°
V Angle: 154°
Lumens: 34418
Efficiency: 73.6%

Spill:
Lumens: 12369.3
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°	123.1	132.9	137.8	142.8	147.7	152.6	157.5	152.6	147.7	147.7	142.8
85°	329.8	339.7	344.6	379.1	413.5	433.2	457.8	452.9	452.9	448.0	443.1
82.5°	659.7	689.2	713.8	748.3	768.0	797.5	817.2	802.4	792.6	772.9	758.1
80°	1171.6	1181.5	1186.4	1191.3	1166.7	1161.8	1151.9	1137.2	1117.5	1092.9	1068.2
77.5°	1491.6	1501.4	1511.3	1501.4	1496.5	1491.6	1476.8	1462.1	1442.4	1422.7	1393.1
75°	1974.0	1974.0	1974.0	1959.3	1949.4	1934.7	1910.0	1885.4	1851.0	1811.6	1767.3
72.5°	2486.0	2481.1	2476.2	2446.6	2422.0	2392.5	2358.0	2328.5	2289.1	2244.8	2185.7
70°	3022.6	3032.4	3037.4	2998.0	2968.4	2929.1	2884.8	2830.6	2771.5	2707.5	2623.8
67.5°	3761.0	3751.2	3741.3	3687.2	3647.8	3593.6	3529.6	3450.9	3362.3	3263.8	3145.7
65°	4676.6	4691.4	4661.9	4607.7	4533.9	4445.3	4346.8	4233.6	4100.7	3953.0	3785.6
62.5°	5784.3	5808.9	5774.4	5705.5	5612.0	5493.8	5356.0	5193.5	5011.4	4804.6	4597.9
60°	7044.5	7039.6	6975.6	6882.1	6759.0	6611.3	6458.7	6281.5	6074.7	5833.5	5582.4
57.5°	8201.4	8191.5	8112.7	8019.2	7896.1	7738.6	7576.2	7389.1	7172.5	6916.5	6626.1
55°	9240.1	9230.2	9151.5	9053.0	8925.0	8767.5	8619.8	8442.6	8230.9	7960.1	7650.0
52.5°	10160.6	10165.5	10096.6	9988.3	9850.5	9697.9	9555.1	9377.9	9176.1	8905.3	8605.0
50°	11007.3	11002.4	10928.6	10830.1	10702.1	10554.4	10411.7	10234.5	10022.8	9761.9	9471.4
47.5°	11795.0	11785.1	11701.5	11593.2	11460.2	11332.2	11199.3	11041.8	10820.3	10559.4	10268.9
45°	12454.6	12435.0	12351.3	12247.9	12119.9	12006.7	11888.5	11770.4	11534.1	11292.9	11017.2
42.5°	13020.8	13015.8	12932.2	12828.8	12700.8	12602.3	12494.0	12346.3	12149.4	11927.9	11657.2
40°	13562.3	13522.9	13439.2	13340.7	13222.6	13138.9	13030.6	12882.9	12690.9	12474.3	12213.4
37.5°	13965.9	13970.9	13882.2	13773.9	13670.6	13591.8	13493.3	13355.5	13188.1	12976.5	12715.5
35°	14349.9	14325.3	14251.5	14157.9	14064.4	13975.8	13872.4	13754.3	13616.4	13419.5	13173.4
32.5°	14601.0	14635.4	14546.8	14448.4	14394.2	14325.3	14217.0	14093.9	13970.9	13773.9	13552.4
30°	14876.7	14847.1	14778.2	14694.5	14655.1	14610.8	14517.3	14399.1	14256.4	14079.2	13872.4
27.5°	15068.6	15053.9	14970.2	14891.4	14871.7	14832.3	14758.5	14655.1	14512.4	14340.1	14148.1
25°	15152.3	15162.2	15083.4	15039.1	15039.1	15014.5	14955.4	14866.8	14724.0	14566.5	14379.5
22.5°	15191.7	15181.9	15127.7	15117.9	15142.5	15122.8	15098.2	15019.4	14891.4	14763.4	14605.9
20°	15216.3	15147.4	15098.2	15137.6	15167.1	15162.2	15142.5	15093.3	15034.2	14925.9	14788.0
17.5°	15162.2	15117.9	15058.8	15117.9	15181.9	15186.8	15167.1	15137.6	15122.8	15053.9	14930.8
15°	15029.3	14994.8	15004.6	15063.7	15137.6	15162.2	15176.9	15211.4	15191.7	15137.6	15029.3
12.5°	14940.6	14896.3	14940.6	14999.7	15039.1	15053.9	15172.0	15236.0	15236.0	15186.8	15117.9
10°	14916.0	14827.4	14886.5	14940.6	14960.3	15048.9	15147.4	15216.3	15250.8	15211.4	15122.8
7.5°	14866.8	14807.7	14832.3	14857.0	14970.2	15034.2	15088.3	15162.2	15211.4	15206.5	15127.7
5°	14842.2	14768.4	14778.2	14881.6	14960.3	15004.6	15024.3	15088.3	15162.2	15176.9	15117.9
2.5°	14778.2	14743.7	14817.6	14827.4	14886.5	14921.0	14940.6	14999.7	15093.3	15127.7	15103.1
0°	14743.7	14694.5	14645.3	14684.7	14783.1	14857.0	14886.5	14975.1	15083.4	15117.9	15063.7



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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°	137.8	132.9	128.0	123.1	128.0	128.0	128.0	123.1	128.0	123.1	123.1
85°	428.3	408.6	393.8	374.1	354.4	339.7	320.0	300.3	295.4	290.4	280.6
82.5°	738.4	713.8	689.2	659.7	630.1	595.7	561.2	521.8	512.0	502.1	487.4
80°	1038.7	1004.2	969.8	935.3	905.8	871.3	832.0	787.6	758.1	733.5	704.0
77.5°	1353.8	1304.5	1255.3	1196.2	1161.8	1127.3	1087.9	1043.6	999.3	959.9	915.6
75°	1713.1	1659.0	1609.8	1550.7	1486.7	1422.7	1358.7	1299.6	1235.6	1176.5	1117.5
72.5°	2111.9	2033.1	1954.3	1880.5	1801.7	1723.0	1639.3	1560.5	1481.8	1403.0	1319.3
70°	2530.3	2431.9	2333.4	2234.9	2131.6	2028.2	1929.7	1831.3	1732.8	1629.4	1535.9
67.5°	3022.6	2909.4	2781.4	2643.5	2490.9	2358.0	2230.0	2111.9	1993.7	1875.6	1757.4
65°	3637.9	3480.4	3308.1	3121.0	2943.8	2766.6	2579.5	2402.3	2264.5	2126.6	1993.7
62.5°	4396.0	4174.5	3933.3	3692.1	3475.5	3244.1	3027.5	2796.1	2579.5	2382.6	2220.2
60°	5301.8	5001.5	4706.2	4396.0	4095.8	3780.7	3505.0	3219.5	2948.7	2707.5	2471.2
57.5°	6301.2	5951.6	5597.2	5218.2	4809.6	4440.4	4066.2	3692.1	3372.1	3052.1	2786.3
55°	7315.3	6946.0	6547.3	6119.0	5671.0	5198.5	4691.4	4273.0	3834.8	3460.7	3116.1
52.5°	8280.1	7896.1	7482.6	7088.8	6552.2	6010.7	5454.4	4903.1	4391.1	3913.6	3495.2
50°	9141.6	8767.5	8368.7	7910.9	7413.7	6837.7	6217.5	5597.2	4991.7	4430.5	3908.7
47.5°	9929.3	9565.0	9166.2	8708.4	8255.5	7615.5	6990.4	6306.1	5631.7	4986.8	4376.4
45°	10667.7	10298.5	9884.9	9446.8	8925.0	8354.0	7709.1	7019.9	6296.2	5572.6	4868.6
42.5°	11337.2	10968.0	10549.5	10096.6	9579.7	9013.6	8388.4	7694.3	6965.7	6178.1	5405.2
40°	11923.0	11563.6	11160.0	10687.4	10204.9	9609.3	8993.9	8334.3	7581.1	6788.5	5936.9
37.5°	12435.0	12100.2	11701.5	11233.8	10721.8	10190.2	9555.1	8895.5	8216.1	7354.6	6483.3
35°	12887.8	12577.7	12169.1	11726.1	11223.9	10662.7	10067.1	9422.2	8688.7	7881.4	7034.7
32.5°	13281.7	12966.6	12592.5	12149.4	11662.1	11135.3	10524.9	9875.1	9181.0	8358.9	7438.3
30°	13616.4	13311.2	12956.8	12538.3	12070.7	11548.8	10953.2	10298.5	9589.6	8772.4	7861.7
27.5°	13906.9	13616.4	13271.8	12882.9	12435.0	11932.8	11332.2	10672.6	9948.9	9161.3	8250.6
25°	14157.9	13877.3	13557.3	13188.1	12745.1	12252.8	11686.7	10997.5	10273.8	9481.3	8580.4
22.5°	14384.4	14113.6	13793.6	13434.3	13030.6	12538.3	11967.3	11283.0	10549.5	9766.8	8880.7
20°	14586.2	14335.1	14020.1	13650.9	13247.2	12750.0	12183.9	11534.1	10795.7	10027.7	9151.5
17.5°	14748.7	14527.1	14212.1	13823.2	13419.5	12937.1	12385.7	11790.1	11007.3	10249.2	9377.9
15°	14861.9	14645.3	14359.8	13965.9	13572.1	13094.6	12543.3	11927.9	11199.3	10426.5	9565.0
12.5°	14940.6	14709.3	14443.4	14079.2	13685.3	13212.8	12676.2	12070.7	11361.8	10584.0	9727.4
10°	14960.3	14748.7	14482.8	14157.9	13773.9	13316.1	12789.4	12188.8	11494.7	10707.1	9860.3
7.5°	14970.2	14768.4	14527.1	14217.0	13837.9	13394.9	12873.1	12282.3	11593.2	10810.4	9958.8
5°	14965.3	14773.3	14556.7	14256.4	13877.3	13439.2	12927.2	12346.3	11662.1	10879.4	10032.6
2.5°	14950.5	14778.2	14576.4	14285.9	13921.6	13488.4	12981.4	12420.2	11735.9	10938.4	10091.7
0°	14989.9	14842.2	14586.2	14276.1	13931.5	13488.4	12976.5	12430.0	11745.8	10933.5	10086.8



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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°	123.1	118.1	118.1	113.2	108.3	103.4	93.5	88.6	78.8	64.0	49.2
85°	265.8	251.1	236.3	226.4	216.6	206.8	192.0	177.2	157.5	128.0	98.5
82.5°	467.7	438.1	408.6	374.1	344.6	315.1	290.4	265.8	236.3	192.0	147.7
80°	669.5	625.2	580.9	531.7	487.4	438.1	393.8	354.4	315.1	256.0	196.9
77.5°	871.3	812.3	748.3	689.2	625.2	561.2	497.2	443.1	384.0	315.1	246.1
75°	1058.4	989.5	930.4	846.7	768.0	684.3	600.6	526.7	452.9	369.2	295.4
72.5°	1245.5	1156.9	1073.2	994.4	905.8	802.4	708.9	615.3	521.8	423.4	334.7
70°	1432.5	1324.2	1220.9	1127.3	1028.9	925.5	812.3	704.0	590.7	472.6	369.2
67.5°	1624.5	1501.4	1383.3	1265.2	1151.9	1033.8	915.6	792.6	659.7	521.8	408.6
65°	1836.2	1683.6	1540.8	1407.9	1275.0	1147.0	1014.1	881.2	733.5	576.0	443.1
62.5°	2047.9	1880.5	1713.1	1545.8	1398.1	1255.3	1112.5	964.9	802.4	635.0	477.5
60°	2274.3	2082.3	1890.3	1703.3	1521.1	1363.6	1206.1	1048.6	876.3	689.2	512.0
57.5°	2525.4	2294.0	2077.4	1865.7	1659.0	1471.9	1299.6	1132.2	940.3	743.3	551.4
55°	2810.9	2525.4	2269.4	2033.1	1806.7	1580.2	1393.1	1220.9	1014.1	797.5	595.7
52.5°	3111.2	2781.4	2471.2	2205.4	1964.2	1708.2	1481.8	1289.8	1087.9	851.6	635.0
50°	3460.7	3042.3	2697.7	2372.8	2102.0	1836.2	1575.3	1368.5	1161.8	915.6	674.4
47.5°	3820.1	3357.3	2924.1	2569.7	2249.7	1959.3	1683.6	1437.5	1230.7	974.7	713.8
45°	4238.5	3657.6	3180.1	2761.7	2392.5	2087.3	1791.9	1511.3	1289.8	1033.8	753.2
42.5°	4642.2	4012.1	3445.9	2973.4	2554.9	2210.3	1890.3	1590.1	1348.8	1092.9	787.6
40°	5119.7	4366.5	3701.9	3175.2	2717.4	2328.5	1988.8	1673.7	1403.0	1147.0	822.1
37.5°	5577.5	4725.9	4012.1	3396.7	2874.9	2446.6	2087.3	1752.5	1452.2	1201.2	866.4
35°	6030.4	5124.6	4307.4	3603.5	3037.4	2579.5	2185.7	1826.4	1501.4	1245.5	905.8
32.5°	6463.6	5498.7	4607.7	3834.8	3214.6	2702.6	2274.3	1895.3	1550.7	1284.8	945.2
30°	6867.3	5853.2	4903.1	4071.1	3377.0	2815.8	2358.0	1964.2	1609.8	1319.3	984.6
27.5°	7236.5	6197.8	5198.5	4292.7	3529.6	2919.2	2446.6	2028.2	1659.0	1353.8	1019.0
25°	7571.2	6507.9	5469.2	4494.5	3667.5	3032.4	2530.3	2092.2	1703.3	1383.3	1048.6
22.5°	7886.3	6793.4	5715.4	4696.3	3834.8	3145.7	2609.1	2151.3	1747.6	1412.8	1078.1
20°	8162.0	7054.3	5951.6	4898.2	3982.5	3249.0	2678.0	2205.4	1787.0	1432.5	1107.6
17.5°	8383.5	7285.7	6163.3	5075.4	4110.5	3337.6	2737.1	2254.6	1821.4	1457.1	1127.3
15°	8580.4	7482.6	6340.5	5228.0	4223.7	3411.5	2791.2	2294.0	1851.0	1471.9	1151.9
12.5°	8747.8	7650.0	6493.2	5360.9	4322.2	3475.5	2835.5	2323.6	1875.6	1486.7	1166.7
10°	8885.6	7782.9	6621.1	5464.3	4401.0	3524.7	2870.0	2353.1	1895.3	1501.4	1181.5
7.5°	8989.0	7881.4	6714.7	5552.9	4465.0	3559.2	2899.5	2372.8	1915.0	1511.3	1206.1
5°	9067.8	7965.1	6788.5	5612.0	4514.2	3608.4	2934.0	2397.4	1934.7	1521.1	1206.1
2.5°	9126.8	8034.0	6847.6	5661.2	4553.6	3598.6	2934.0	2392.5	1934.7	1521.1	1201.2
0°	9117.0	8038.9	6842.7	5661.2	4553.6	3588.7	2934.0	2387.5	1934.7	1521.1	1201.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	34.5	24.6	9.8	0.0
85°	73.8	49.2	24.6	0.0
82.5°	108.3	68.9	34.5	0.0
80°	142.8	93.5	44.3	0.0
77.5°	182.1	118.1	59.1	0.0
75°	216.6	137.8	68.9	0.0
72.5°	251.1	162.5	78.8	0.0
70°	280.6	182.1	88.6	0.0
67.5°	310.1	206.8	103.4	0.0
65°	334.7	226.4	113.2	0.0
62.5°	354.4	251.1	123.1	0.0
60°	379.1	270.8	132.9	0.0
57.5°	398.7	285.5	142.8	0.0
55°	418.4	295.4	152.6	0.0
52.5°	438.1	310.1	162.5	0.0
50°	457.8	324.9	172.3	0.0
47.5°	477.5	334.7	177.2	0.0
45°	507.0	349.5	187.1	0.0
42.5°	531.7	359.4	196.9	0.0
40°	556.3	369.2	201.8	0.0
37.5°	580.9	379.1	211.7	0.0
35°	605.5	388.9	216.6	0.0
32.5°	625.2	398.7	221.5	0.0
30°	644.9	408.6	226.4	0.0
27.5°	664.6	413.5	231.4	0.0
25°	679.3	423.4	236.3	0.0
22.5°	694.1	428.3	241.2	0.0
20°	704.0	433.2	246.1	0.0
17.5°	718.7	438.1	251.1	0.0
15°	723.6	443.1	260.9	0.0
12.5°	733.5	448.0	260.9	0.0
10°	738.4	452.9	260.9	0.0
7.5°	748.3	452.9	260.9	0.0
5°	743.3	452.9	260.9	0.0
2.5°	743.3	452.9	260.9	0.0
0°	738.4	452.9	260.9	0.0

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