

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: P628592

Luminaire Tested: **EPH-VN-03-E-935-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628592
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-935-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (48) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

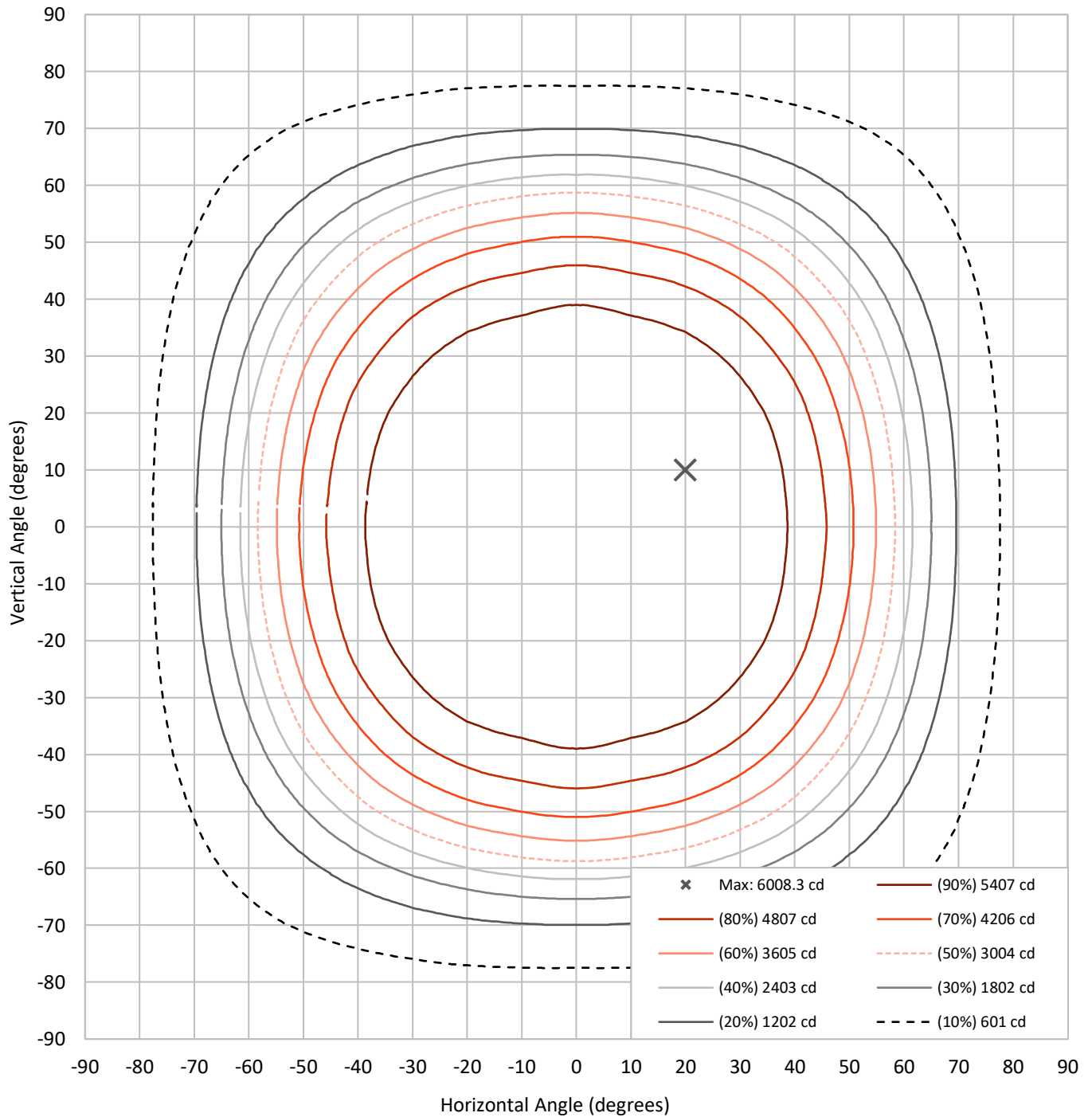
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	18432.8 lumens	Max Intensity:	6008.3 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	79.4 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	11310.7 lumens	Field Lumens:	13559.6 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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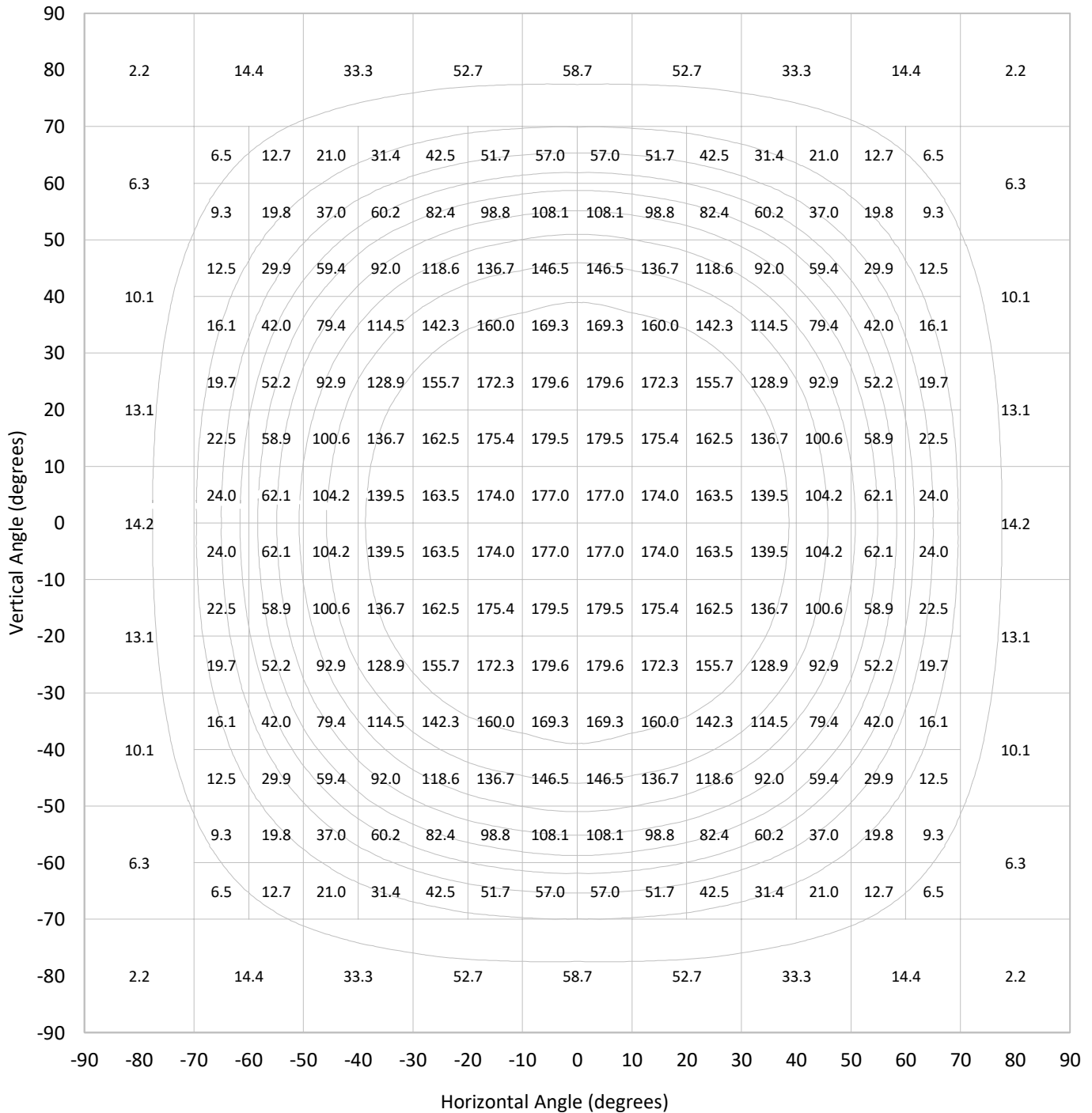
Iso-Candela Plot





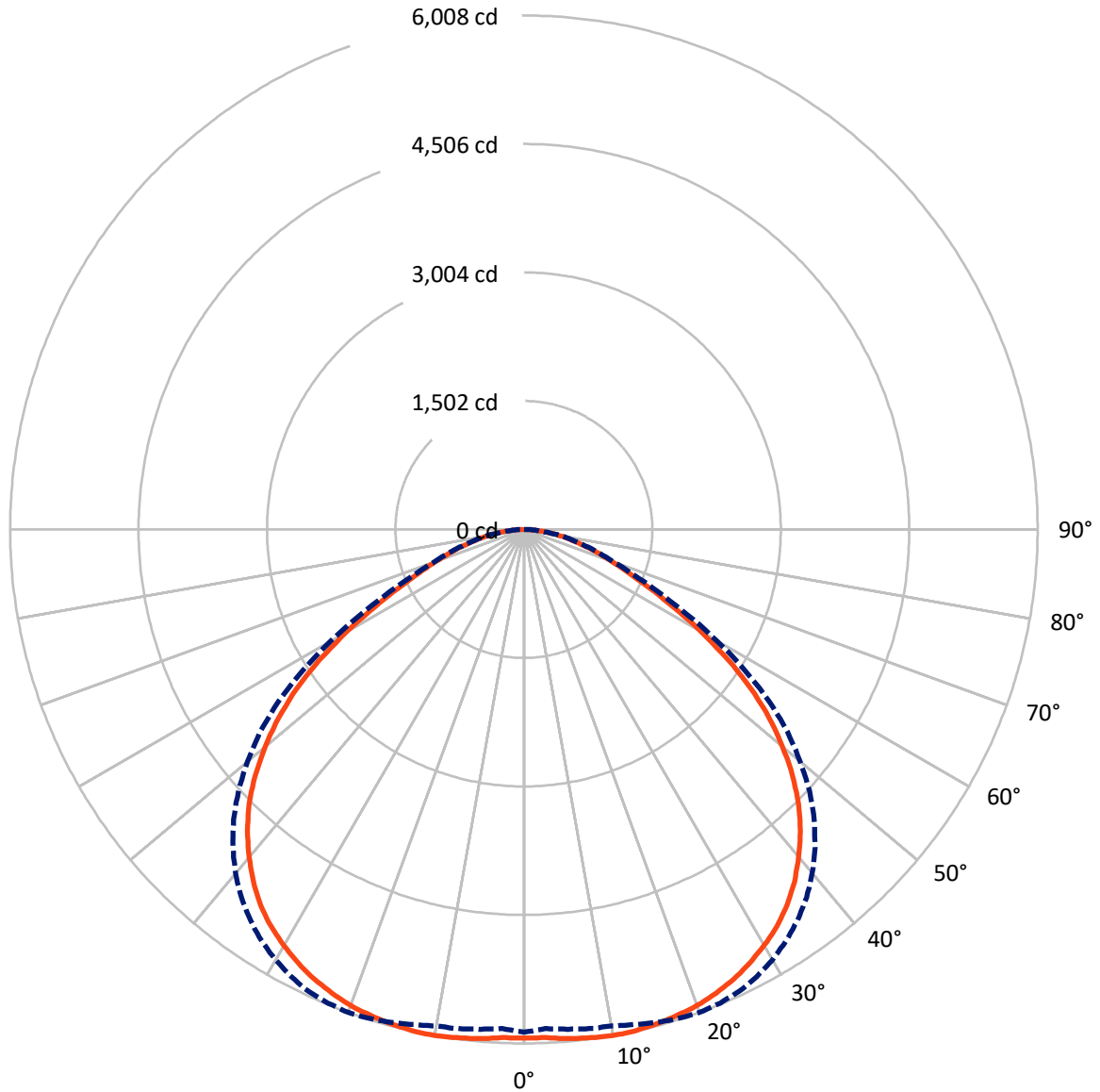
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Lumen Table



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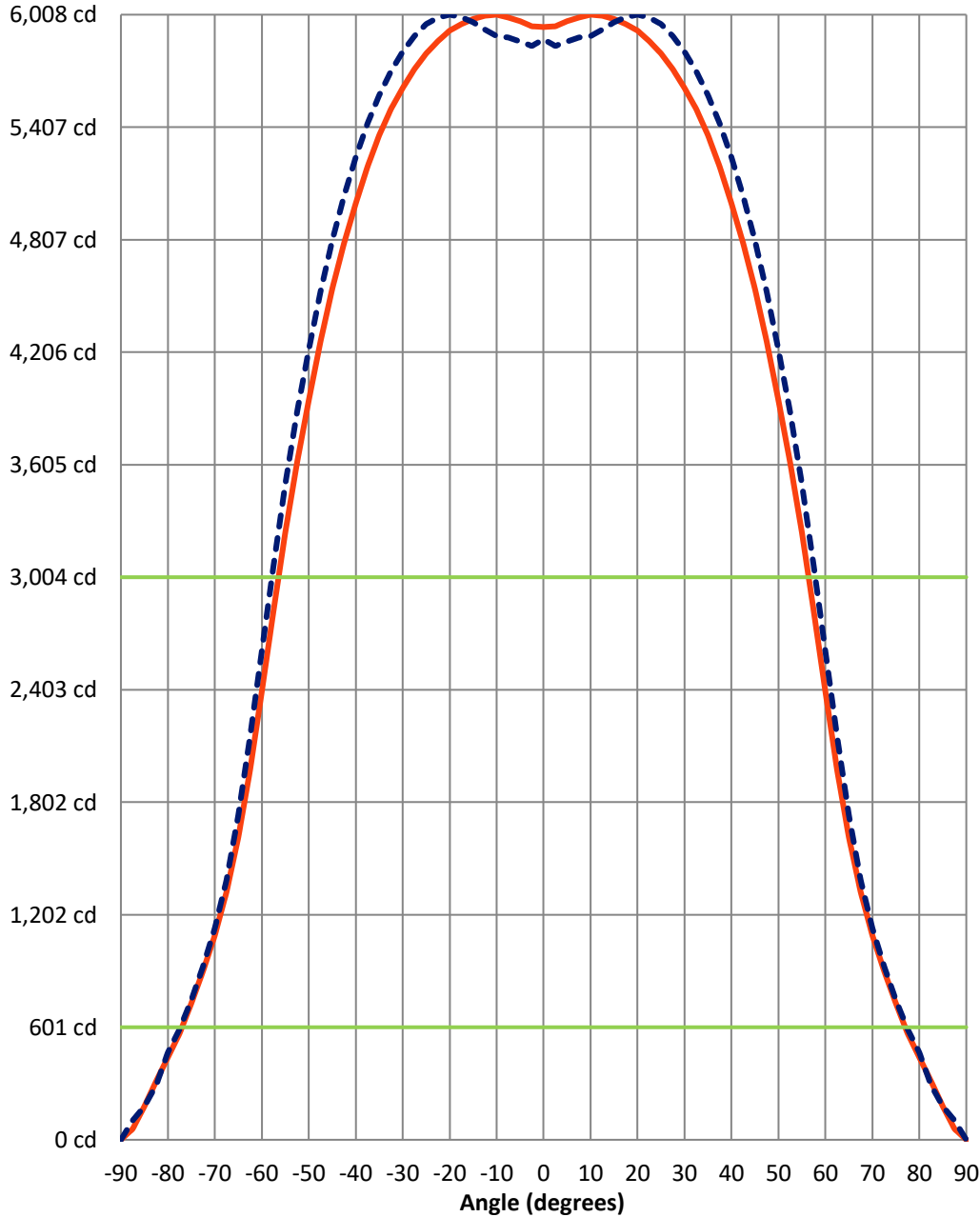
Luminous Intensity Polar Plot



— 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: 11310.7
Efficiency: 61.4%

Field:
H Angle: 154.7°
V Angle: 154°
Lumens: 13559.6
Efficiency: 73.6%

Spill:
Lumens: 4873.1
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°	48.5	52.4	54.3	56.2	58.2	60.1	62.1	60.1	58.2	58.2	56.2
85°	129.9	133.8	135.8	149.3	162.9	170.7	180.4	178.4	178.4	176.5	174.5
82.5°	259.9	271.5	281.2	294.8	302.6	314.2	321.9	316.1	312.2	304.5	298.7
80°	461.6	465.5	467.4	469.3	459.6	457.7	453.8	448.0	440.2	430.6	420.9
77.5°	587.6	591.5	595.4	591.5	589.6	587.6	581.8	576.0	568.3	560.5	548.9
75°	777.7	777.7	777.7	771.9	768.0	762.2	752.5	742.8	729.2	713.7	696.3
72.5°	979.4	977.5	975.5	963.9	954.2	942.6	929.0	917.3	901.8	884.4	861.1
70°	1190.8	1194.7	1196.6	1181.1	1169.5	1154.0	1136.5	1115.2	1091.9	1066.7	1033.7
67.5°	1481.7	1477.8	1474.0	1452.6	1437.1	1415.8	1390.6	1359.5	1324.6	1285.8	1239.3
65°	1842.5	1848.3	1836.6	1815.3	1786.2	1751.3	1712.5	1667.9	1615.5	1557.4	1491.4
62.5°	2278.8	2288.5	2274.9	2247.8	2210.9	2164.4	2110.1	2046.1	1974.3	1892.9	1811.4
60°	2775.3	2773.4	2748.2	2711.3	2662.8	2604.6	2544.5	2474.7	2393.3	2298.2	2199.3
57.5°	3231.1	3227.2	3196.2	3159.3	3110.8	3048.8	2984.8	2911.1	2825.7	2724.9	2610.5
55°	3640.3	3636.4	3605.4	3566.6	3516.2	3454.1	3395.9	3326.1	3242.7	3136.1	3013.9
52.5°	4003.0	4004.9	3977.8	3935.1	3880.8	3820.7	3764.4	3694.6	3615.1	3508.4	3390.1
50°	4336.6	4334.6	4305.5	4266.7	4216.3	4158.1	4101.9	4032.1	3948.7	3845.9	3731.5
47.5°	4646.9	4643.0	4610.0	4567.3	4515.0	4464.6	4412.2	4350.1	4262.9	4160.1	4045.6
45°	4906.7	4899.0	4866.0	4825.3	4774.9	4730.3	4683.7	4637.2	4544.1	4449.0	4340.4
42.5°	5129.8	5127.8	5094.9	5054.1	5003.7	4964.9	4922.3	4864.1	4786.5	4699.2	4592.6
40°	5343.1	5327.6	5294.6	5255.8	5209.3	5176.3	5133.7	5075.5	4999.8	4914.5	4811.7
37.5°	5502.1	5504.1	5469.2	5426.5	5385.8	5354.8	5316.0	5261.7	5195.7	5112.3	5009.5
35°	5653.4	5643.7	5614.6	5577.8	5540.9	5506.0	5465.3	5418.8	5364.4	5286.9	5189.9
32.5°	5752.3	5765.9	5731.0	5692.2	5670.9	5643.7	5601.1	5552.6	5504.1	5426.5	5339.2
30°	5860.9	5849.3	5822.2	5789.2	5773.7	5756.2	5719.4	5672.8	5616.6	5546.8	5465.3
27.5°	5936.6	5930.8	5897.8	5866.8	5859.0	5843.5	5814.4	5773.7	5717.4	5649.5	5573.9
25°	5969.6	5973.4	5942.4	5924.9	5924.9	5915.2	5892.0	5857.1	5800.8	5738.8	5665.1
22.5°	5985.1	5981.2	5959.9	5956.0	5965.7	5957.9	5948.2	5917.2	5866.8	5816.3	5754.3
20°	5994.8	5967.6	5948.2	5963.7	5975.4	5973.4	5965.7	5946.3	5923.0	5880.3	5826.0
17.5°	5973.4	5956.0	5932.7	5956.0	5981.2	5983.1	5975.4	5963.7	5957.9	5930.8	5882.3
15°	5921.1	5907.5	5911.4	5934.6	5963.7	5973.4	5979.2	5992.8	5985.1	5963.7	5921.1
12.5°	5886.2	5868.7	5886.2	5909.4	5924.9	5930.8	5977.3	6002.5	6002.5	5983.1	5956.0
10°	5876.5	5841.5	5864.8	5886.2	5893.9	5928.8	5967.6	5994.8	6008.3	5992.8	5957.9
7.5°	5857.1	5833.8	5843.5	5853.2	5897.8	5923.0	5944.3	5973.4	5992.8	5990.9	5959.9
5°	5847.4	5818.3	5822.2	5862.9	5893.9	5911.4	5919.1	5944.3	5973.4	5979.2	5956.0
2.5°	5822.2	5808.6	5837.7	5841.5	5864.8	5878.4	5886.2	5909.4	5946.3	5959.9	5950.2
0°	5808.6	5789.2	5769.8	5785.3	5824.1	5853.2	5864.8	5899.7	5942.4	5956.0	5934.6



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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°	54.3	52.4	50.4	48.5	50.4	50.4	50.4	48.5	50.4	48.5	48.5
85°	168.7	161.0	155.2	147.4	139.6	133.8	126.1	118.3	116.4	114.4	110.5
82.5°	290.9	281.2	271.5	259.9	248.2	234.7	221.1	205.6	201.7	197.8	192.0
80°	409.2	395.6	382.1	368.5	356.9	343.3	327.8	310.3	298.7	289.0	277.3
77.5°	533.3	513.9	494.6	471.3	457.7	444.1	428.6	411.2	393.7	378.2	360.7
75°	674.9	653.6	634.2	610.9	585.7	560.5	535.3	512.0	486.8	463.5	440.2
72.5°	832.0	801.0	770.0	740.9	709.8	678.8	645.8	614.8	583.8	552.7	519.8
70°	996.9	958.1	919.3	880.5	839.8	799.0	760.3	721.5	682.7	641.9	605.1
67.5°	1190.8	1146.2	1095.8	1041.5	981.3	929.0	878.6	832.0	785.5	738.9	692.4
65°	1433.2	1371.2	1303.3	1229.6	1159.8	1090.0	1016.3	946.4	892.1	837.8	785.5
62.5°	1731.9	1644.6	1549.6	1454.6	1369.2	1278.1	1192.7	1101.6	1016.3	938.7	874.7
60°	2088.8	1970.5	1854.1	1731.9	1613.6	1489.5	1380.9	1268.4	1161.7	1066.7	973.6
57.5°	2482.5	2344.8	2205.1	2055.8	1894.8	1749.4	1602.0	1454.6	1328.5	1202.4	1097.7
55°	2882.0	2736.5	2579.4	2410.7	2234.2	2048.0	1848.3	1683.4	1510.8	1363.4	1227.7
52.5°	3262.1	3110.8	2947.9	2792.8	2581.4	2368.0	2148.9	1931.7	1730.0	1541.8	1377.0
50°	3601.5	3454.1	3297.0	3116.7	2920.8	2693.9	2449.5	2205.1	1966.6	1745.5	1539.9
47.5°	3911.8	3768.3	3611.2	3430.8	3252.4	3000.3	2754.0	2484.4	2218.7	1964.6	1724.1
45°	4202.7	4057.3	3894.4	3721.8	3516.2	3291.2	3037.1	2765.6	2480.5	2195.4	1918.1
42.5°	4466.5	4321.0	4156.2	3977.8	3774.1	3551.1	3304.8	3031.3	2744.3	2434.0	2129.5
40°	4697.3	4555.7	4396.7	4210.5	4020.4	3785.8	3543.3	3283.4	2986.7	2674.5	2338.9
37.5°	4899.0	4767.1	4610.0	4425.8	4224.1	4014.6	3764.4	3504.5	3236.9	2897.5	2554.2
35°	5077.4	4955.2	4794.3	4619.7	4421.9	4200.8	3966.1	3712.1	3423.1	3105.0	2771.4
32.5°	5232.6	5108.4	4961.0	4786.5	4594.5	4387.0	4146.5	3890.5	3617.0	3293.1	2930.5
30°	5364.4	5244.2	5104.6	4939.7	4755.5	4549.9	4315.2	4057.3	3778.0	3456.1	3097.3
27.5°	5478.9	5364.4	5228.7	5075.5	4899.0	4701.2	4464.6	4204.7	3919.6	3609.3	3250.5
25°	5577.8	5467.2	5341.2	5195.7	5021.2	4827.2	4604.2	4332.7	4047.6	3735.3	3380.4
22.5°	5667.0	5560.3	5434.3	5292.7	5133.7	4939.7	4714.7	4445.2	4156.2	3847.8	3498.7
20°	5746.5	5647.6	5523.5	5378.0	5219.0	5023.1	4800.1	4544.1	4253.2	3950.6	3605.4
17.5°	5810.5	5723.2	5599.1	5445.9	5286.9	5096.8	4879.6	4644.9	4336.6	4037.9	3694.6
15°	5855.1	5769.8	5657.3	5502.1	5347.0	5158.9	4941.7	4699.2	4412.2	4107.7	3768.3
12.5°	5886.2	5795.0	5690.3	5546.8	5391.6	5205.4	4994.0	4755.5	4476.2	4169.8	3832.3
10°	5893.9	5810.5	5705.8	5577.8	5426.5	5246.1	5038.6	4802.0	4528.6	4218.2	3884.7
7.5°	5897.8	5818.3	5723.2	5601.1	5451.7	5277.2	5071.6	4838.9	4567.3	4259.0	3923.5
5°	5895.9	5820.2	5734.9	5616.6	5467.2	5294.6	5092.9	4864.1	4594.5	4286.1	3952.5
2.5°	5890.0	5822.2	5742.6	5628.2	5484.7	5314.0	5114.3	4893.2	4623.6	4309.4	3975.8
0°	5905.5	5847.4	5746.5	5624.3	5488.6	5314.0	5112.3	4897.0	4627.5	4307.5	3973.9



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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°	48.5	46.5	46.5	44.6	42.7	40.7	36.8	34.9	31.0	25.2	19.4
85°	104.7	98.9	93.1	89.2	85.3	81.5	75.6	69.8	62.1	50.4	38.8
82.5°	184.2	172.6	161.0	147.4	135.8	124.1	114.4	104.7	93.1	75.6	58.2
80°	263.8	246.3	228.9	209.5	192.0	172.6	155.2	139.6	124.1	100.9	77.6
77.5°	343.3	320.0	294.8	271.5	246.3	221.1	195.9	174.5	151.3	124.1	97.0
75°	417.0	389.8	366.6	333.6	302.6	269.6	236.6	207.5	178.4	145.5	116.4
72.5°	490.7	455.8	422.8	391.8	356.9	316.1	279.3	242.4	205.6	166.8	131.9
70°	564.4	521.7	481.0	444.1	405.3	364.6	320.0	277.3	232.7	186.2	145.5
67.5°	640.0	591.5	545.0	498.4	453.8	407.3	360.7	312.2	259.9	205.6	161.0
65°	723.4	663.3	607.0	554.7	502.3	451.9	399.5	347.2	289.0	226.9	174.5
62.5°	806.8	740.9	674.9	609.0	550.8	494.6	438.3	380.1	316.1	250.2	188.1
60°	896.0	820.4	744.7	671.0	599.3	537.2	475.2	413.1	345.2	271.5	201.7
57.5°	994.9	903.8	818.4	735.0	653.6	579.9	512.0	446.1	370.4	292.9	217.2
55°	1107.4	994.9	894.1	801.0	711.8	622.6	548.9	481.0	399.5	314.2	234.7
52.5°	1225.7	1095.8	973.6	868.9	773.8	673.0	583.8	508.1	428.6	335.5	250.2
50°	1363.4	1198.6	1062.8	934.8	828.1	723.4	620.6	539.2	457.7	360.7	265.7
47.5°	1505.0	1322.7	1152.0	1012.4	886.3	771.9	663.3	566.3	484.9	384.0	281.2
45°	1669.8	1441.0	1252.9	1088.0	942.6	822.3	706.0	595.4	508.1	407.3	296.7
42.5°	1828.9	1580.6	1357.6	1171.4	1006.6	870.8	744.7	626.4	531.4	430.6	310.3
40°	2017.0	1720.3	1458.4	1250.9	1070.6	917.3	783.5	659.4	552.7	451.9	323.9
37.5°	2197.4	1861.8	1580.6	1338.2	1132.6	963.9	822.3	690.4	572.1	473.2	341.3
35°	2375.8	2018.9	1697.0	1419.7	1196.6	1016.3	861.1	719.5	591.5	490.7	356.9
32.5°	2546.5	2166.3	1815.3	1510.8	1266.4	1064.7	896.0	746.7	610.9	506.2	372.4
30°	2705.5	2306.0	1931.7	1603.9	1330.4	1109.4	929.0	773.8	634.2	519.8	387.9
27.5°	2851.0	2441.7	2048.0	1691.2	1390.6	1150.1	963.9	799.0	653.6	533.3	401.5
25°	2982.8	2563.9	2154.7	1770.7	1444.9	1194.7	996.9	824.3	671.0	545.0	413.1
22.5°	3107.0	2676.4	2251.7	1850.2	1510.8	1239.3	1027.9	847.5	688.5	556.6	424.7
20°	3215.6	2779.2	2344.8	1929.7	1569.0	1280.0	1055.0	868.9	704.0	564.4	436.4
17.5°	3302.8	2870.3	2428.2	1999.5	1619.4	1314.9	1078.3	888.3	717.6	574.1	444.1
15°	3380.4	2947.9	2498.0	2059.7	1664.0	1344.0	1099.7	903.8	729.2	579.9	453.8
12.5°	3446.4	3013.9	2558.1	2112.0	1702.8	1369.2	1117.1	915.4	738.9	585.7	459.6
10°	3500.7	3066.2	2608.5	2152.8	1733.8	1388.6	1130.7	927.0	746.7	591.5	465.5
7.5°	3541.4	3105.0	2645.4	2187.7	1759.1	1402.2	1142.3	934.8	754.4	595.4	475.2
5°	3572.4	3138.0	2674.5	2210.9	1778.5	1421.6	1155.9	944.5	762.2	599.3	475.2
2.5°	3595.7	3165.1	2697.7	2230.3	1794.0	1417.7	1155.9	942.6	762.2	599.3	473.2
0°	3591.8	3167.1	2695.8	2230.3	1794.0	1413.8	1155.9	940.6	762.2	599.3	473.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	13.6	9.7	3.9	0.0
85°	29.1	19.4	9.7	0.0
82.5°	42.7	27.2	13.6	0.0
80°	56.2	36.8	17.5	0.0
77.5°	71.8	46.5	23.3	0.0
75°	85.3	54.3	27.2	0.0
72.5°	98.9	64.0	31.0	0.0
70°	110.5	71.8	34.9	0.0
67.5°	122.2	81.5	40.7	0.0
65°	131.9	89.2	44.6	0.0
62.5°	139.6	98.9	48.5	0.0
60°	149.3	106.7	52.4	0.0
57.5°	157.1	112.5	56.2	0.0
55°	164.9	116.4	60.1	0.0
52.5°	172.6	122.2	64.0	0.0
50°	180.4	128.0	67.9	0.0
47.5°	188.1	131.9	69.8	0.0
45°	199.8	137.7	73.7	0.0
42.5°	209.5	141.6	77.6	0.0
40°	219.2	145.5	79.5	0.0
37.5°	228.9	149.3	83.4	0.0
35°	238.5	153.2	85.3	0.0
32.5°	246.3	157.1	87.3	0.0
30°	254.1	161.0	89.2	0.0
27.5°	261.8	162.9	91.2	0.0
25°	267.6	166.8	93.1	0.0
22.5°	273.5	168.7	95.0	0.0
20°	277.3	170.7	97.0	0.0
17.5°	283.2	172.6	98.9	0.0
15°	285.1	174.5	102.8	0.0
12.5°	289.0	176.5	102.8	0.0
10°	290.9	178.4	102.8	0.0
7.5°	294.8	178.4	102.8	0.0
5°	292.9	178.4	102.8	0.0
2.5°	292.9	178.4	102.8	0.0
0°	290.9	178.4	102.8	0.0

(END OF REPORT)