

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: P624217

Luminaire Tested: **EPH-VN-04-E-935-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624217
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-04-E-935-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (64) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	24110.1 lumens	Max Intensity:	13390.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	79.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

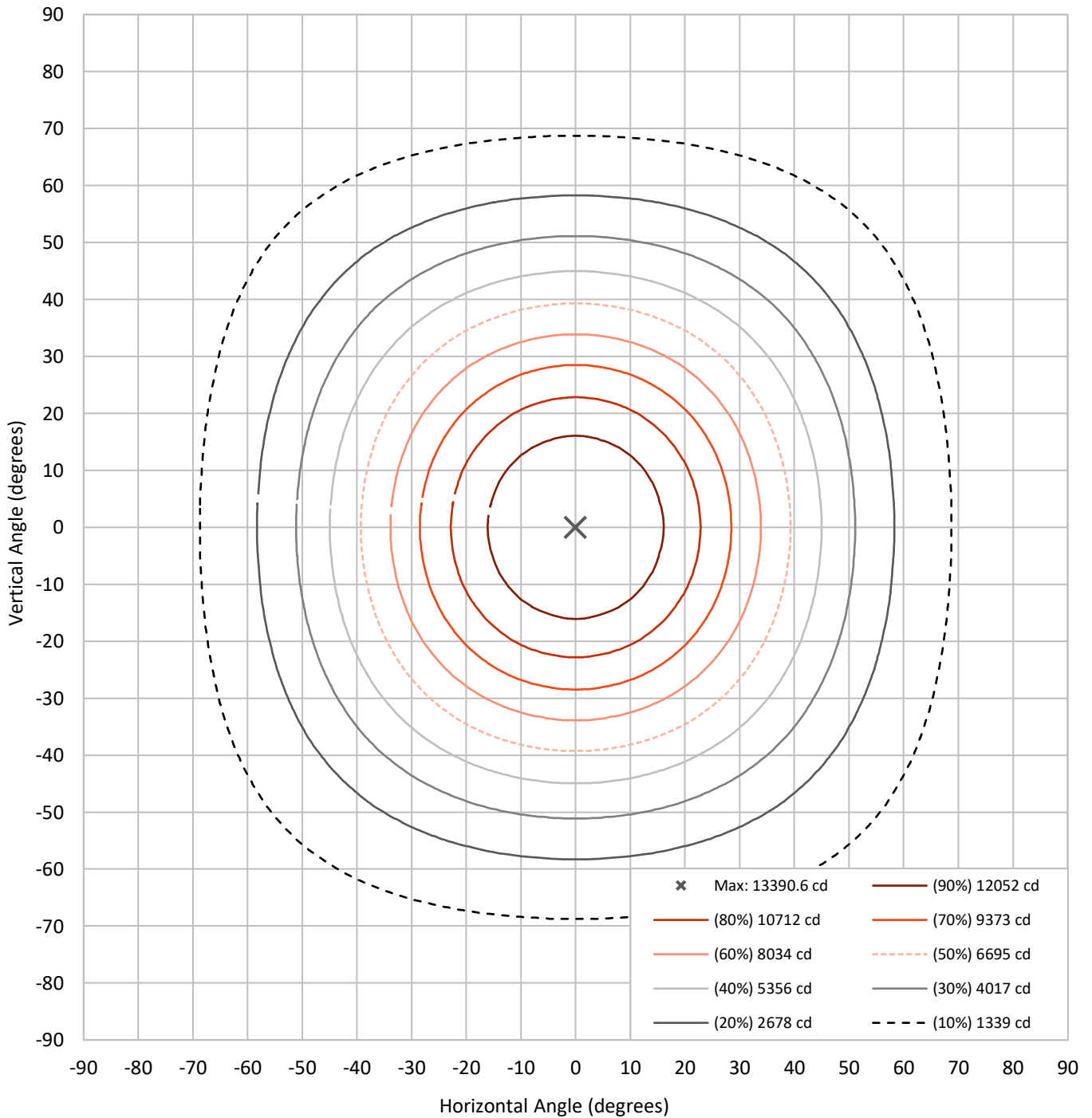
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	10432.2 lumens	Field Lumens:	17082.3 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 303.8
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



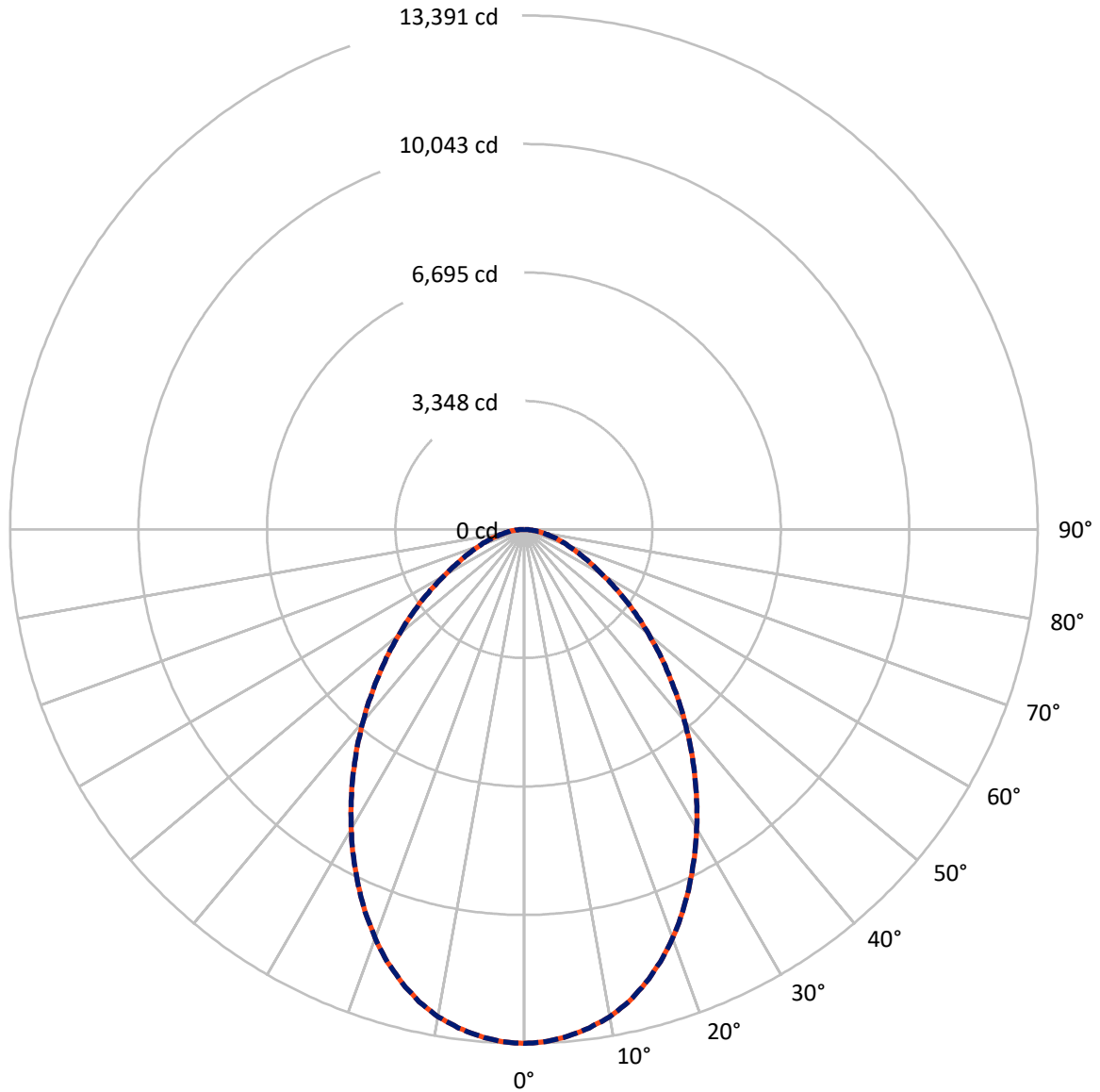
REPORT NUMBER: P624217
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Iso-Candela Plot



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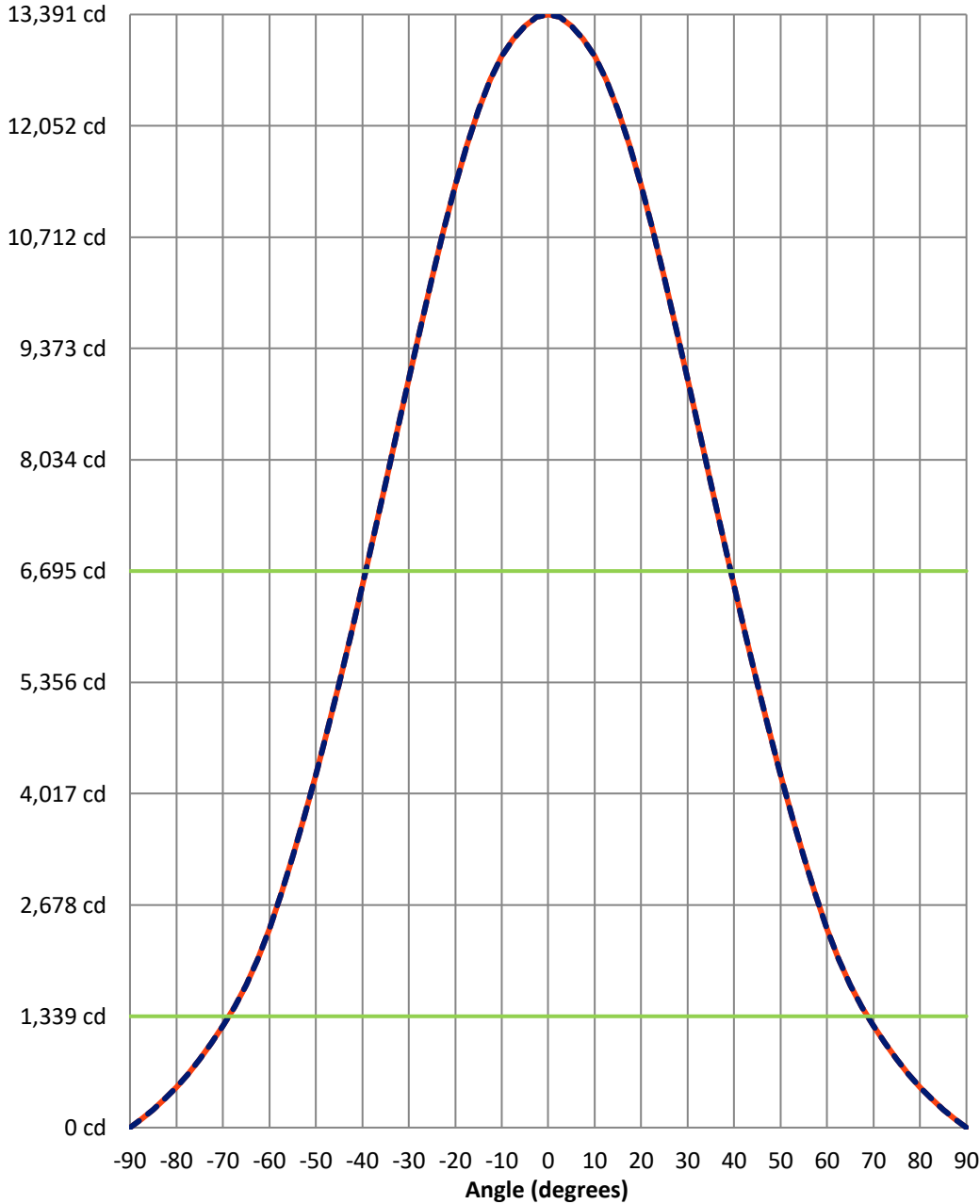
Luminous Intensity Polar Plot



— 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: 10432.2
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 17082.3
 Efficiency: 70.9%

Spill:
 Lumens: 7027.7
 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°	103.1	103.1	103.1	103.1	103.1	103.1	103.1	98.0	98.0	95.5	93.0
85°	216.2	216.2	216.2	216.2	216.2	211.2	208.6	206.1	203.6	198.6	196.1
82.5°	346.9	346.9	346.9	346.9	341.9	336.8	334.3	329.3	324.3	316.7	309.2
80°	485.1	485.1	485.1	485.1	477.6	472.6	465.0	460.0	452.5	442.4	432.4
77.5°	643.5	643.5	643.5	636.0	630.9	623.4	615.9	605.8	595.8	583.2	568.1
75°	822.0	822.0	822.0	811.9	804.4	796.9	784.3	771.7	756.6	739.0	718.9
72.5°	1015.5	1015.5	1015.5	1003.0	995.4	982.9	967.8	950.2	932.6	910.0	884.8
70°	1224.2	1224.2	1224.2	1209.1	1196.5	1184.0	1163.9	1143.7	1118.6	1093.5	1063.3
67.5°	1450.4	1450.4	1450.4	1432.8	1417.7	1400.1	1377.5	1352.4	1322.2	1287.0	1251.8
65°	1714.4	1714.4	1704.3	1689.2	1671.6	1646.5	1618.8	1583.6	1545.9	1500.7	1452.9
62.5°	2026.1	2026.1	2011.0	1993.4	1970.8	1938.1	1900.4	1855.1	1802.3	1744.5	1686.7
60°	2388.0	2388.0	2370.4	2347.8	2315.1	2274.9	2224.6	2166.8	2101.5	2028.6	1958.2
57.5°	2805.3	2805.3	2782.7	2752.5	2712.3	2662.0	2599.2	2526.3	2443.3	2352.8	2264.9
55°	3257.8	3257.8	3230.1	3194.9	3147.2	3086.9	3011.4	2926.0	2825.4	2722.4	2609.2
52.5°	3737.9	3737.9	3705.2	3665.0	3609.7	3539.3	3453.9	3353.3	3237.7	3117.0	2983.8
50°	4243.2	4243.2	4205.5	4160.2	4097.4	4014.4	3916.4	3800.7	3672.5	3531.8	3378.4
47.5°	4783.6	4783.6	4740.9	4688.1	4612.7	4517.2	4401.5	4268.3	4122.5	3964.1	3790.7
45°	5339.1	5339.1	5291.4	5231.1	5148.1	5040.0	4911.8	4783.6	4597.6	4414.1	4213.0
42.5°	5917.3	5917.3	5862.0	5794.1	5698.6	5580.5	5434.7	5268.8	5085.3	4879.1	4660.4
40°	6518.1	6518.1	6455.2	6377.3	6271.7	6136.0	5972.6	5786.6	5580.5	5351.7	5110.4
37.5°	7131.4	7131.4	7061.0	6975.6	6857.4	6706.6	6523.1	6317.0	6085.7	5831.8	5565.4
35°	7749.8	7749.8	7671.9	7578.9	7448.2	7282.3	7083.7	6854.9	6598.5	6322.0	6022.9
32.5°	8380.8	8380.8	8295.3	8189.7	8041.4	7857.9	7639.2	7390.3	7131.4	6809.7	6482.9
30°	9004.2	9004.2	8911.1	8795.5	8637.2	8436.1	8197.2	7923.3	7619.1	7289.8	6937.9
27.5°	9617.5	9592.4	9514.4	9391.3	9217.8	9004.2	8745.2	8448.6	8119.3	7757.3	7380.3
25°	10220.8	10193.1	10107.7	9971.9	9785.9	9552.1	9273.1	8956.4	8602.0	8219.9	7807.6
22.5°	10799.0	10768.8	10678.3	10532.5	10333.9	10080.0	9780.9	9441.5	9064.5	8654.7	8219.9
20°	11334.4	11301.7	11208.7	11055.4	10849.2	10580.3	10263.5	9899.0	9496.8	9064.5	8602.0
17.5°	11817.0	11784.3	11686.3	11527.9	11334.4	11035.2	10708.5	10323.9	9899.0	9441.5	8956.4
15°	12241.8	12206.6	12106.1	11947.7	11726.5	11445.0	11100.6	10708.5	10263.5	9780.9	9273.1
12.5°	12603.8	12568.6	12465.6	12307.2	12078.4	11796.9	11445.0	11035.2	10580.3	10080.0	9552.1
10°	12890.4	12855.2	12757.1	12606.3	12370.0	12078.4	11726.5	11334.4	10849.2	10333.9	9785.9
7.5°	13096.5	13063.8	12973.3	12822.5	12606.3	12307.2	11947.7	11527.9	11055.4	10532.5	9971.9
5°	13252.3	13214.6	13124.1	12973.3	12757.1	12465.6	12106.1	11686.3	11208.7	10678.3	10107.7
2.5°	13360.4	13315.2	13214.6	13063.8	12855.2	12568.6	12206.6	11784.3	11301.7	10768.8	10193.1
0°	13390.6	13360.4	13252.3	13096.5	12890.4	12603.8	12241.8	11817.0	11334.4	10799.0	10220.8



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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°	90.5	90.5	88.0	85.5	83.0	77.9	75.4	72.9	70.4	65.4	62.8
85°	191.0	186.0	181.0	176.0	168.4	163.4	155.9	150.8	143.3	135.7	128.2
82.5°	301.6	294.1	284.1	276.5	266.5	253.9	243.8	231.3	218.7	208.6	196.1
80°	422.3	409.7	397.2	384.6	369.5	354.4	339.4	324.3	306.7	289.1	271.5
77.5°	553.0	535.4	517.8	497.7	480.1	460.0	439.9	419.8	397.2	374.5	351.9
75°	698.8	676.2	651.1	625.9	603.3	575.6	548.0	520.3	490.2	462.5	432.4
72.5°	857.2	829.5	799.4	769.2	736.5	701.3	666.1	628.4	593.2	558.0	520.3
70°	1028.1	995.4	957.7	920.0	879.8	837.1	794.3	749.1	703.8	658.6	613.3
67.5°	1211.6	1171.4	1126.1	1080.9	1030.6	980.4	930.1	877.3	822.0	766.7	713.9
65°	1407.7	1357.4	1304.6	1246.8	1189.0	1131.2	1070.8	1008.0	945.2	879.8	822.0
62.5°	1626.4	1563.5	1495.7	1425.3	1359.9	1289.5	1224.2	1146.3	1070.8	997.9	925.0
60°	1880.3	1797.3	1714.4	1626.4	1543.4	1452.9	1372.5	1287.0	1201.6	1118.6	1033.1
57.5°	2164.3	2058.7	1958.2	1852.6	1742.0	1641.5	1538.4	1435.3	1339.8	1241.8	1148.8
55°	2486.1	2357.9	2232.2	2101.5	1973.3	1847.6	1716.9	1601.2	1483.1	1372.5	1264.4
52.5°	2838.0	2692.2	2536.3	2388.0	2224.6	2068.8	1923.0	1777.2	1638.9	1505.7	1382.5
50°	3215.1	3044.1	2865.6	2684.7	2498.6	2315.1	2139.2	1968.2	1807.4	1651.5	1505.7
47.5°	3607.2	3413.6	3210.0	3003.9	2805.3	2581.6	2370.4	2176.9	1983.3	1807.4	1638.9
45°	4009.4	3790.7	3567.0	3333.2	3099.4	2858.1	2624.3	2388.0	2176.9	1968.2	1777.2
42.5°	4424.2	4177.8	3928.9	3670.0	3411.1	3147.2	2883.2	2624.3	2370.4	2139.2	1923.0
40°	4851.5	4580.0	4296.0	4014.4	3737.9	3436.3	3147.2	2858.1	2581.6	2315.1	2068.8
37.5°	5278.8	4982.2	4675.5	4358.8	4042.1	3737.9	3411.1	3099.4	2805.3	2498.6	2224.6
35°	5708.7	5381.9	5050.1	4705.7	4358.8	4014.4	3670.0	3333.2	3003.9	2684.7	2388.0
32.5°	6141.0	5784.1	5417.1	5050.1	4675.5	4296.0	3928.9	3567.0	3210.0	2865.6	2536.3
30°	6565.8	6178.7	5784.1	5381.9	4982.2	4580.0	4177.8	3790.7	3413.6	3044.1	2692.2
27.5°	6980.6	6565.8	6141.0	5708.7	5278.8	4851.5	4424.2	4009.4	3607.2	3215.1	2838.0
25°	7380.3	6937.9	6482.9	6022.9	5565.4	5110.4	4660.4	4213.0	3790.7	3378.4	2983.8
22.5°	7757.3	7289.8	6809.7	6322.0	5831.8	5351.7	4879.1	4414.1	3964.1	3531.8	3117.0
20°	8119.3	7619.1	7131.4	6598.5	6085.7	5580.5	5085.3	4597.6	4122.5	3672.5	3237.7
17.5°	8448.6	7923.3	7390.3	6854.9	6317.0	5786.6	5268.8	4783.6	4268.3	3800.7	3353.3
15°	8745.2	8197.2	7639.2	7083.7	6523.1	5972.6	5434.7	4911.8	4401.5	3916.4	3453.9
12.5°	9004.2	8436.1	7857.9	7282.3	6706.6	6136.0	5580.5	5040.0	4517.2	4014.4	3539.3
10°	9217.8	8637.2	8041.4	7448.2	6857.4	6271.7	5698.6	5148.1	4612.7	4097.4	3609.7
7.5°	9391.3	8795.5	8189.7	7578.9	6975.6	6377.3	5794.1	5231.1	4688.1	4160.2	3665.0
5°	9514.4	8911.1	8295.3	7671.9	7061.0	6455.2	5862.0	5291.4	4740.9	4205.5	3705.2
2.5°	9592.4	9004.2	8380.8	7749.8	7131.4	6518.1	5917.3	5339.1	4783.6	4243.2	3737.9
0°	9617.5	9004.2	8380.8	7749.8	7131.4	6518.1	5917.3	5339.1	4783.6	4243.2	3737.9



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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°	60.3	55.3	50.3	47.8	42.7	40.2	35.2	30.2	27.7	22.6	17.6
85°	120.7	110.6	103.1	95.5	88.0	77.9	70.4	62.8	52.8	45.2	35.2
82.5°	183.5	170.9	158.4	145.8	133.2	120.7	105.6	93.0	80.4	67.9	52.8
80°	253.9	233.8	216.2	198.6	181.0	163.4	143.3	125.7	105.6	88.0	70.4
77.5°	326.8	304.2	279.0	253.9	228.7	206.1	181.0	158.4	135.7	110.6	88.0
75°	404.7	374.5	346.9	314.2	284.1	251.4	221.2	191.0	163.4	135.7	105.6
72.5°	485.1	447.4	409.7	374.5	336.8	299.1	263.9	226.2	191.0	158.4	125.7
70°	568.1	522.9	477.6	434.9	392.1	346.9	306.7	263.9	221.2	181.0	143.3
67.5°	656.1	603.3	550.5	495.2	447.4	397.2	346.9	299.1	251.4	206.1	163.4
65°	751.6	688.8	623.4	565.6	502.7	447.4	392.1	336.8	284.1	228.7	181.0
62.5°	849.6	776.7	703.8	630.9	565.6	495.2	434.9	374.5	314.2	253.9	198.6
60°	950.2	867.2	784.3	703.8	623.4	550.5	477.6	409.7	346.9	279.0	216.2
57.5°	1053.2	960.2	867.2	776.7	688.8	603.3	522.9	447.4	374.5	304.2	233.8
55°	1158.8	1053.2	950.2	849.6	751.6	656.1	568.1	485.1	404.7	326.8	253.9
52.5°	1264.4	1148.8	1033.1	925.0	822.0	713.9	613.3	520.3	432.4	351.9	271.5
50°	1372.5	1241.8	1118.6	997.9	879.8	766.7	658.6	558.0	462.5	374.5	289.1
47.5°	1483.1	1339.8	1201.6	1070.8	945.2	822.0	703.8	593.2	490.2	397.2	306.7
45°	1601.2	1435.3	1287.0	1146.3	1008.0	877.3	749.1	628.4	520.3	419.8	324.3
42.5°	1716.9	1538.4	1372.5	1224.2	1070.8	930.1	794.3	666.1	548.0	439.9	339.4
40°	1847.6	1641.5	1452.9	1289.5	1131.2	980.4	837.1	701.3	575.6	460.0	354.4
37.5°	1973.3	1742.0	1543.4	1359.9	1189.0	1030.6	879.8	736.5	603.3	480.1	369.5
35°	2101.5	1852.6	1626.4	1425.3	1246.8	1080.9	920.0	769.2	625.9	497.7	384.6
32.5°	2232.2	1958.2	1714.4	1495.7	1304.6	1126.1	957.7	799.4	651.1	517.8	397.2
30°	2357.9	2058.7	1797.3	1563.5	1357.4	1171.4	995.4	829.5	676.2	535.4	409.7
27.5°	2486.1	2164.3	1880.3	1626.4	1407.7	1211.6	1028.1	857.2	698.8	553.0	422.3
25°	2609.2	2264.9	1958.2	1686.7	1452.9	1251.8	1063.3	884.8	718.9	568.1	432.4
22.5°	2722.4	2352.8	2028.6	1744.5	1500.7	1287.0	1093.5	910.0	739.0	583.2	442.4
20°	2825.4	2443.3	2101.5	1802.3	1545.9	1322.2	1118.6	932.6	756.6	595.8	452.5
17.5°	2926.0	2526.3	2166.8	1855.1	1583.6	1352.4	1143.7	950.2	771.7	605.8	460.0
15°	3011.4	2599.2	2224.6	1900.4	1618.8	1377.5	1163.9	967.8	784.3	615.9	465.0
12.5°	3086.9	2662.0	2274.9	1938.1	1646.5	1400.1	1184.0	982.9	796.9	623.4	472.6
10°	3147.2	2712.3	2315.1	1970.8	1671.6	1417.7	1196.5	995.4	804.4	630.9	477.6
7.5°	3194.9	2752.5	2347.8	1993.4	1689.2	1432.8	1209.1	1003.0	811.9	636.0	485.1
5°	3230.1	2782.7	2370.4	2011.0	1704.3	1450.4	1224.2	1015.5	822.0	643.5	485.1
2.5°	3257.8	2805.3	2388.0	2026.1	1714.4	1450.4	1224.2	1015.5	822.0	643.5	485.1
0°	3257.8	2805.3	2388.0	2026.1	1714.4	1450.4	1224.2	1015.5	822.0	643.5	485.1



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.6	10.1	5.0	0.0
85°	27.7	17.6	10.1	0.0
82.5°	40.2	27.7	12.6	0.0
80°	52.8	35.2	17.6	0.0
77.5°	67.9	45.2	22.6	0.0
75°	80.4	52.8	27.7	0.0
72.5°	93.0	62.8	30.2	0.0
70°	105.6	70.4	35.2	0.0
67.5°	120.7	77.9	40.2	0.0
65°	133.2	88.0	42.7	0.0
62.5°	145.8	95.5	47.8	0.0
60°	158.4	103.1	50.3	0.0
57.5°	170.9	110.6	55.3	0.0
55°	183.5	120.7	60.3	0.0
52.5°	196.1	128.2	62.8	0.0
50°	208.6	135.7	65.4	0.0
47.5°	218.7	143.3	70.4	0.0
45°	231.3	150.8	72.9	0.0
42.5°	243.8	155.9	75.4	0.0
40°	253.9	163.4	77.9	0.0
37.5°	266.5	168.4	83.0	0.0
35°	276.5	176.0	85.5	0.0
32.5°	284.1	181.0	88.0	0.0
30°	294.1	186.0	90.5	0.0
27.5°	301.6	191.0	90.5	0.0
25°	309.2	196.1	93.0	0.0
22.5°	316.7	198.6	95.5	0.0
20°	324.3	203.6	98.0	0.0
17.5°	329.3	206.1	98.0	0.0
15°	334.3	208.6	103.1	0.0
12.5°	336.8	211.2	103.1	0.0
10°	341.9	216.2	103.1	0.0
7.5°	346.9	216.2	103.1	0.0
5°	346.9	216.2	103.1	0.0
2.5°	346.9	216.2	103.1	0.0
0°	346.9	216.2	103.1	0.0

(END OF REPORT)