

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: P624134

Luminaire Tested: **EPH-VN-06-E-735-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624134
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHEBUS
Catalog Number: EPH-VN-06-E-735-U-55
Description: EPHEBUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 5 distribution lens
Light Source: (96) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	54415.3 lumens	Max Intensity:	66497.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	117.2 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		

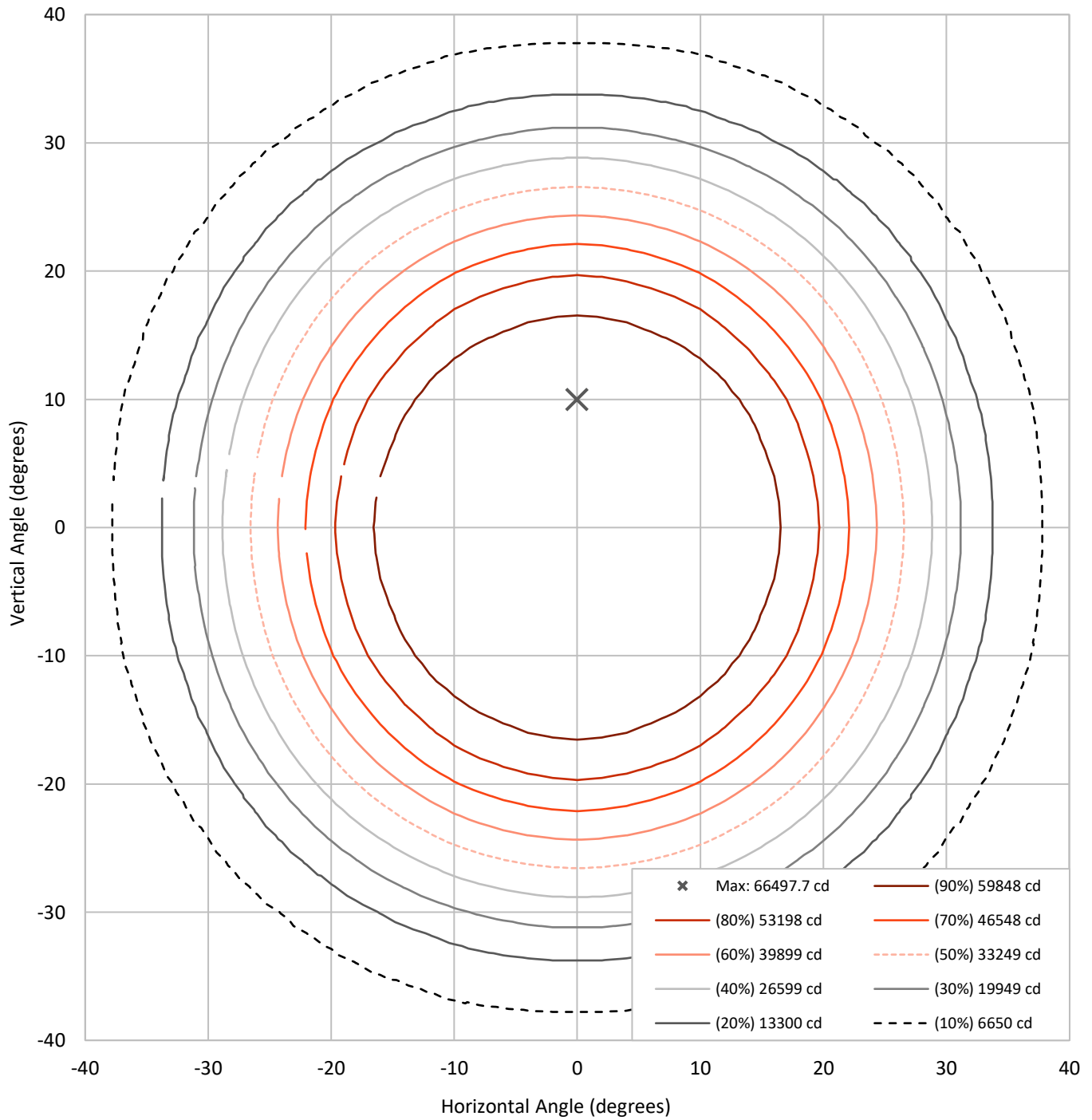
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	27045.8 lumens	Field Lumens:	35173.8 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

Input Watts (W): 464.2
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





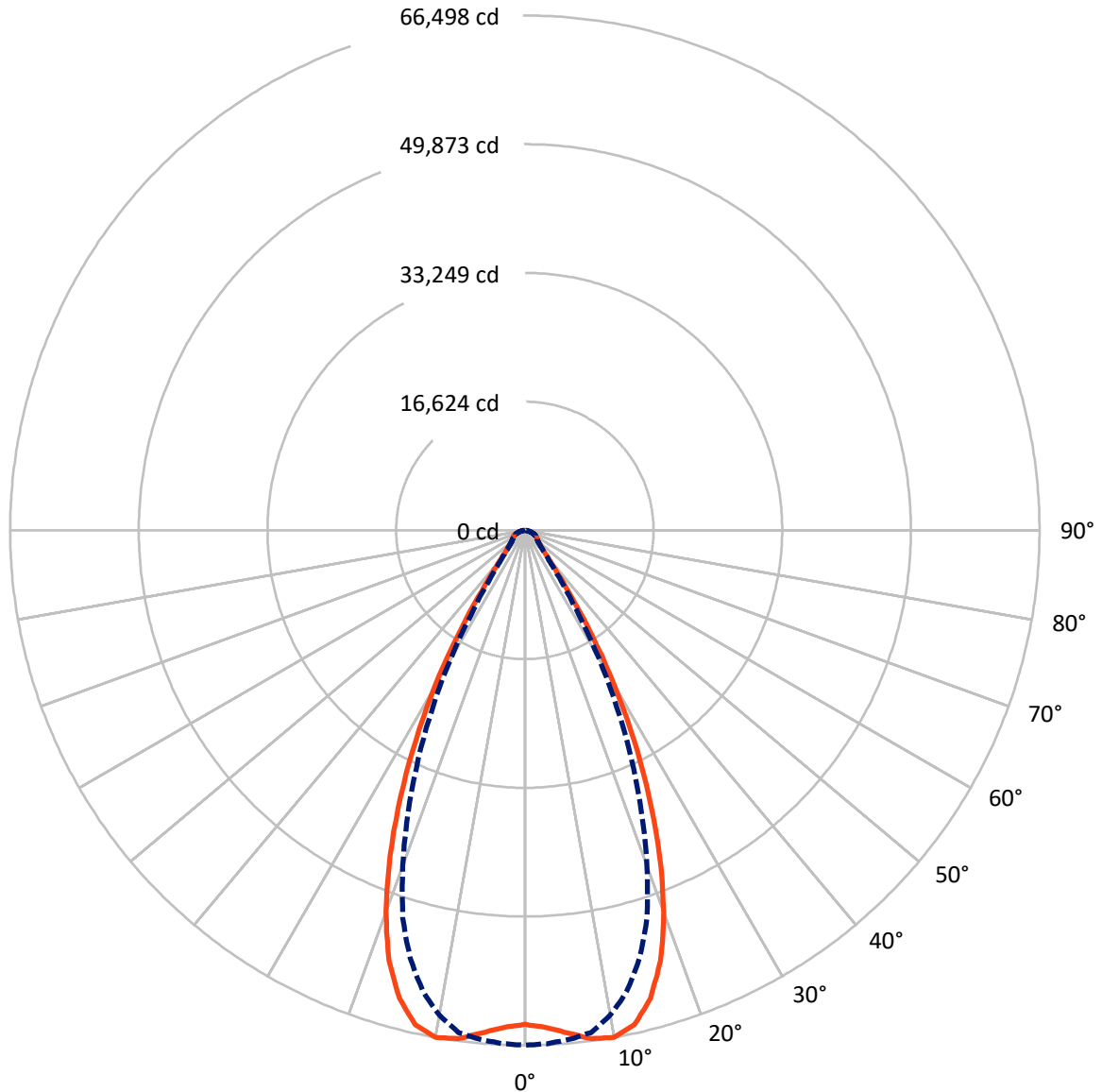
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Lumen Table

90	1.6	11.9	31.1	50.2	58.2	50.2	31.1	11.9	1.6							
80	1.6	11.9	31.1	50.2	58.2	50.2	31.1	11.9	1.6							
70	5.5	5.9	12.3	20.3	28.5	35.7	40.8	43.6	43.6	40.8	35.7	28.5	20.3	12.3	5.9	5.5
60		9.1	18.8	29.9	40.1	48.7	55.3	59.0	59.0	55.3	48.7	40.1	29.9	18.8	9.1	
50	9.7	12.3	24.3	36.7	49.3	63.7	80.7	93.8	93.8	80.7	63.7	49.3	36.7	24.3	12.3	9.7
40		14.9	28.2	42.6	64.5	115.0	224.6	338.8	338.8	224.6	115.0	64.5	42.6	28.2	14.9	
30	12.9	16.8	31.0	49.9	104.4	332.5	770.4	1093.4	1093.4	770.4	332.5	104.4	49.9	31.0	16.8	12.9
20		18.1	33.0	59.5	192.6	725.7	1419.8	1809.9	1809.9	1419.8	725.7	192.6	59.5	33.0	18.1	
10	14.0	18.7	34.1	67.2	282.6	999.6	1756.4	1991.8	1991.8	1756.4	999.6	282.6	67.2	34.1	18.7	14.0
0		18.7	34.1	67.2	282.6	999.6	1756.4	1991.8	1991.8	1756.4	999.6	282.6	67.2	34.1	18.7	
-10	12.9	18.1	33.0	59.5	192.6	725.7	1419.8	1809.9	1809.9	1419.8	725.7	192.6	59.5	33.0	18.1	12.9
-20		16.8	31.0	49.9	104.4	332.5	770.4	1093.4	1093.4	770.4	332.5	104.4	49.9	31.0	16.8	
-30	9.7	14.9	28.2	42.6	64.5	115.0	224.6	338.8	338.8	224.6	115.0	64.5	42.6	28.2	14.9	9.7
-40		12.3	24.3	36.7	49.3	63.7	80.7	93.8	93.8	80.7	63.7	49.3	36.7	24.3	12.3	
-50	5.5	9.1	18.8	29.9	40.1	48.7	55.3	59.0	59.0	55.3	48.7	40.1	29.9	18.8	9.1	5.5
-60		5.9	12.3	20.3	28.5	35.7	40.8	43.6	43.6	40.8	35.7	28.5	20.3	12.3	5.9	
-70	1.6	11.9	31.1	50.2	58.2	50.2	31.1	11.9	1.6							
-80		1.6	11.9	31.1	50.2	58.2	50.2	31.1	11.9	1.6						
-90	1.6	11.9	31.1	50.2	58.2	50.2	31.1	11.9	1.6							

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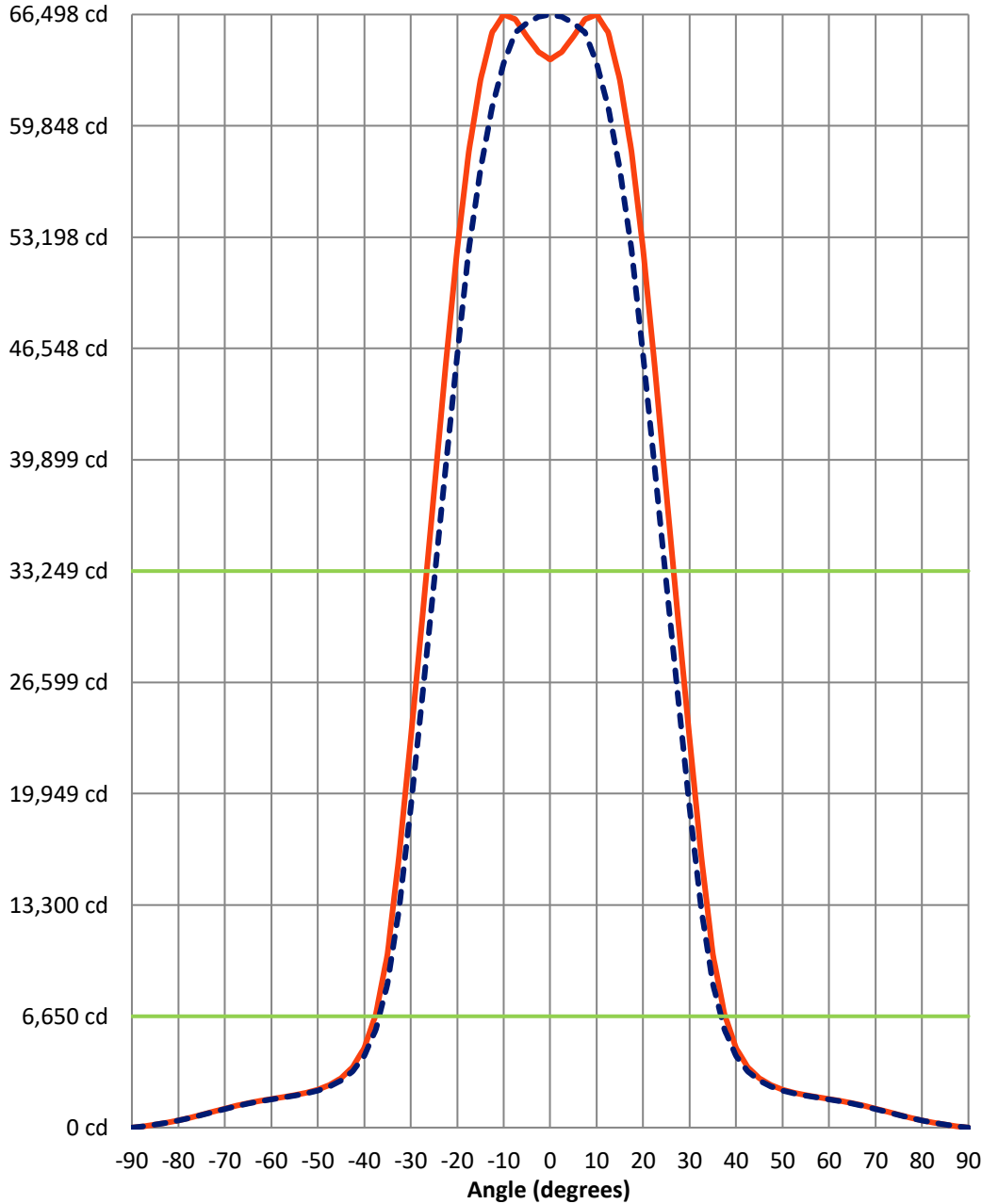
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 49.5°
 V Angle: 53.1°
 Lumens: 27045.8
 Efficiency: 49.7%

Field:
 H Angle: 73.6°
 V Angle: 75.3°
 Lumens: 35173.8
 Efficiency: 64.6%

Spill:
 Lumens: 19241.5
 Efficiency: 35.4%

- Vertical Distribution through 0-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°	73.5	73.5	73.5	73.5	73.5	73.5	73.5	67.8	67.8	67.8	67.8
85°	180.9	180.9	180.9	180.9	180.9	175.2	175.2	169.6	169.6	163.9	158.3
82.5°	293.9	293.9	293.9	293.9	288.3	288.3	282.6	277.0	271.3	265.7	260.0
80°	429.6	429.6	429.6	429.6	423.9	418.3	412.6	407.0	395.7	390.0	378.7
77.5°	587.9	587.9	587.9	582.2	576.6	570.9	559.6	548.3	537.0	525.7	514.4
75°	768.8	768.8	768.8	757.5	751.8	740.5	729.2	717.9	700.9	684.0	667.0
72.5°	955.3	955.3	955.3	944.0	932.7	921.4	910.1	893.1	876.2	853.5	830.9
70°	1130.5	1130.5	1130.5	1119.2	1107.9	1096.6	1079.7	1062.7	1040.1	1017.5	994.9
67.5°	1311.4	1311.4	1311.4	1294.5	1283.2	1271.8	1254.9	1232.3	1209.7	1181.4	1153.1
65°	1458.4	1458.4	1452.7	1447.1	1435.8	1418.8	1407.5	1384.9	1362.3	1339.7	1311.4
62.5°	1594.0	1594.0	1588.4	1582.7	1571.4	1554.5	1537.5	1520.6	1498.0	1469.7	1441.4
60°	1707.1	1707.1	1701.4	1695.8	1684.5	1673.2	1656.2	1639.3	1616.7	1594.0	1565.8
57.5°	1820.2	1820.2	1814.5	1808.8	1797.5	1780.6	1763.6	1746.7	1724.1	1695.8	1667.5
55°	1938.9	1938.9	1933.2	1921.9	1910.6	1893.6	1876.7	1854.1	1825.8	1797.5	1769.3
52.5°	2080.2	2080.2	2068.9	2057.6	2040.6	2023.6	1995.4	1967.1	1933.2	1899.3	1865.4
50°	2266.7	2266.7	2255.4	2238.4	2210.2	2181.9	2148.0	2102.8	2063.2	2018.0	1972.8
47.5°	2543.7	2543.7	2521.1	2492.8	2453.2	2408.0	2345.8	2278.0	2221.5	2165.0	2097.1
45°	2950.7	2950.7	2916.8	2871.5	2809.4	2730.2	2639.8	2543.7	2447.6	2351.5	2255.4
42.5°	3612.0	3612.0	3549.9	3470.7	3363.3	3227.7	3058.1	2899.8	2764.1	2611.5	2481.5
40°	4753.9	4753.9	4635.2	4488.2	4284.7	4024.7	3713.8	3465.1	3227.7	2962.0	2781.1
37.5°	6783.2	6783.2	6551.4	6268.8	5873.1	5375.7	4776.5	4375.1	3934.2	3515.9	3210.7
35°	10366.9	10366.9	9920.4	9372.1	8609.0	7648.0	6624.9	5867.4	5025.2	4380.8	3809.9
32.5°	16245.7	16245.7	15443.0	14453.8	13091.5	11367.5	9728.2	8286.8	6783.2	5714.8	4686.0
30°	23232.4	23232.4	22181.0	20886.5	19111.6	16873.1	14538.6	11978.0	9603.8	7698.9	6144.4
27.5°	30456.4	30156.9	29252.4	27777.1	25753.4	23232.4	20321.3	17014.5	13803.8	10446.1	8224.6
25°	37929.2	37578.8	36544.3	34848.6	32531.0	29676.4	26397.8	22701.0	18738.5	14736.4	10892.6
22.5°	45481.2	45085.5	43909.7	41993.5	39393.3	36193.9	32480.1	28370.6	23944.6	19320.7	14736.4
20°	52462.2	52043.9	50811.6	48816.2	46125.6	42615.3	38488.9	33932.8	29037.6	23944.6	18738.5
17.5°	58307.0	57905.7	56718.6	54813.7	52462.2	48578.8	44288.5	39280.2	33932.8	28370.6	22701.0
15°	62574.8	62230.0	61218.1	59618.4	57221.7	53784.9	49415.4	44288.5	38488.9	32480.1	26397.8
12.5°	65406.7	65129.8	64332.7	63089.2	60941.2	58058.3	53784.9	48578.8	42615.3	36193.9	29676.4
10°	66497.7	66362.0	65989.0	65418.1	63586.6	60941.2	57221.7	52462.2	46125.6	39393.3	32531.0
7.5°	66209.4	66254.6	66384.7	66237.7	65418.1	63089.2	59618.4	54813.7	48816.2	41993.5	34848.6
5°	65180.6	65423.7	66028.5	66384.7	65989.0	64332.7	61218.1	56718.6	50811.6	43909.7	36544.3
2.5°	64264.9	64643.6	65423.7	66254.6	66362.0	65129.8	62230.0	57905.7	52043.9	45085.5	37578.8
0°	63812.7	64264.9	65180.6	66209.4	66497.7	65406.7	62574.8	58307.0	52462.2	45481.2	37929.2



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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°	67.8	62.2	62.2	62.2	56.5	56.5	56.5	50.9	50.9	45.2	45.2
85°	158.3	152.6	147.0	141.3	135.7	130.0	124.4	118.7	113.1	101.7	96.1
82.5°	254.4	248.7	243.1	231.8	226.1	214.8	203.5	192.2	180.9	175.2	163.9
80°	367.4	356.1	344.8	333.5	316.5	299.6	288.3	271.3	260.0	243.1	231.8
77.5°	497.4	480.5	463.5	440.9	423.9	407.0	384.4	367.4	344.8	322.2	299.6
75°	644.4	621.8	593.5	570.9	548.3	520.0	491.8	463.5	435.3	407.0	378.7
72.5°	802.7	774.4	746.1	717.9	684.0	644.4	610.5	570.9	537.0	503.1	463.5
70°	966.6	932.7	898.8	864.9	825.3	780.1	740.5	695.3	650.1	604.8	559.6
67.5°	1119.2	1085.3	1045.7	1011.8	966.6	921.4	870.5	819.6	768.8	712.2	655.7
65°	1277.5	1237.9	1192.7	1147.5	1102.3	1051.4	1000.5	949.6	887.5	825.3	768.8
62.5°	1407.5	1373.6	1334.0	1288.8	1237.9	1181.4	1130.5	1062.7	1000.5	938.3	864.9
60°	1531.9	1492.3	1458.4	1407.5	1362.3	1311.4	1249.2	1181.4	1113.6	1040.1	972.3
57.5°	1639.3	1605.4	1565.8	1520.6	1469.7	1418.8	1362.3	1300.1	1221.0	1147.5	1068.3
55°	1735.4	1695.8	1656.2	1616.7	1571.4	1514.9	1458.4	1396.2	1328.4	1249.2	1164.4
52.5°	1831.5	1791.9	1746.7	1707.1	1656.2	1605.4	1548.8	1486.6	1418.8	1345.3	1254.9
50°	1927.6	1882.3	1837.1	1786.2	1735.4	1684.5	1628.0	1571.4	1498.0	1424.5	1345.3
47.5°	2040.6	1984.1	1927.6	1871.0	1820.2	1758.0	1701.4	1639.3	1577.1	1498.0	1418.8
45°	2181.9	2097.1	2029.3	1961.5	1899.3	1837.1	1769.3	1707.1	1639.3	1571.4	1486.6
42.5°	2357.2	2244.1	2153.7	2063.2	1984.1	1910.6	1842.8	1769.3	1701.4	1628.0	1548.8
40°	2594.6	2441.9	2295.0	2181.9	2080.2	1989.7	1910.6	1837.1	1758.0	1684.5	1605.4
37.5°	2905.5	2690.7	2487.2	2323.2	2193.2	2080.2	1984.1	1899.3	1820.2	1735.4	1656.2
35°	3374.6	3001.6	2741.5	2504.1	2323.2	2181.9	2063.2	1961.5	1871.0	1786.2	1707.1
32.5°	4036.0	3459.4	3041.1	2741.5	2487.2	2295.0	2153.7	2029.3	1927.6	1837.1	1746.7
30°	4906.5	4109.5	3459.4	3001.6	2690.7	2441.9	2244.1	2097.1	1984.1	1882.3	1791.9
27.5°	6285.7	4906.5	4036.0	3374.6	2905.5	2594.6	2357.2	2181.9	2040.6	1927.6	1831.5
25°	8224.6	6144.4	4686.0	3809.9	3210.7	2781.1	2481.5	2255.4	2097.1	1972.8	1865.4
22.5°	10446.1	7698.9	5714.8	4380.8	3515.9	2962.0	2611.5	2351.5	2165.0	2018.0	1899.3
20°	13803.8	9603.8	6783.2	5025.2	3934.2	3227.7	2764.1	2447.6	2221.5	2063.2	1933.2
17.5°	17014.5	11978.0	8286.8	5867.4	4375.1	3465.1	2899.8	2543.7	2278.0	2102.8	1967.1
15°	20321.3	14538.6	9728.2	6624.9	4776.5	3713.8	3058.1	2639.8	2345.8	2148.0	1995.4
12.5°	23232.4	16873.1	11367.5	7648.0	5375.7	4024.7	3227.7	2730.2	2408.0	2181.9	2023.6
10°	25753.4	19111.6	13091.5	8609.0	5873.1	4284.7	3363.3	2809.4	2453.2	2210.2	2040.6
7.5°	27777.1	20886.5	14453.8	9372.1	6268.8	4488.2	3470.7	2871.5	2492.8	2238.4	2057.6
5°	29252.4	22181.0	15443.0	9920.4	6551.4	4635.2	3549.9	2916.8	2521.1	2255.4	2068.9
2.5°	30156.9	23232.4	16245.7	10366.9	6783.2	4753.9	3612.0	2950.7	2543.7	2266.7	2080.2
0°	30456.4	23232.4	16245.7	10366.9	6783.2	4753.9	3612.0	2950.7	2543.7	2266.7	2080.2



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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°	39.6	39.6	33.9	33.9	28.3	28.3	22.6	22.6	17.0	17.0	11.3
85°	90.4	79.1	73.5	67.8	62.2	56.5	50.9	45.2	39.6	33.9	28.3
82.5°	152.6	141.3	124.4	113.1	101.7	90.4	73.5	67.8	56.5	45.2	39.6
80°	214.8	197.8	180.9	163.9	147.0	130.0	113.1	96.1	79.1	62.2	50.9
77.5°	277.0	254.4	237.4	214.8	192.2	169.6	147.0	124.4	101.7	79.1	62.2
75°	350.5	322.2	293.9	265.7	237.4	209.1	186.5	158.3	130.0	101.7	79.1
72.5°	429.6	390.0	356.1	322.2	282.6	254.4	220.5	192.2	158.3	124.4	96.1
70°	514.4	469.2	423.9	378.7	339.2	293.9	260.0	220.5	186.5	147.0	113.1
67.5°	599.2	548.3	497.4	440.9	390.0	344.8	293.9	254.4	209.1	169.6	130.0
65°	700.9	633.1	570.9	508.7	446.6	390.0	339.2	282.6	237.4	192.2	147.0
62.5°	797.0	723.5	650.1	576.6	508.7	440.9	378.7	322.2	265.7	214.8	163.9
60°	893.1	814.0	729.2	650.1	570.9	497.4	423.9	356.1	293.9	237.4	180.9
57.5°	989.2	898.8	814.0	723.5	633.1	548.3	469.2	390.0	322.2	254.4	197.8
55°	1074.0	989.2	893.1	797.0	700.9	599.2	514.4	429.6	350.5	277.0	214.8
52.5°	1164.4	1068.3	972.3	864.9	768.8	655.7	559.6	463.5	378.7	299.6	231.8
50°	1249.2	1147.5	1040.1	938.3	825.3	712.2	604.8	503.1	407.0	322.2	243.1
47.5°	1328.4	1221.0	1113.6	1000.5	887.5	768.8	650.1	537.0	435.3	344.8	260.0
45°	1396.2	1300.1	1181.4	1062.7	949.6	819.6	695.3	570.9	463.5	367.4	271.3
42.5°	1458.4	1362.3	1249.2	1130.5	1000.5	870.5	740.5	610.5	491.8	384.4	288.3
40°	1514.9	1418.8	1311.4	1181.4	1051.4	921.4	780.1	644.4	520.0	407.0	299.6
37.5°	1571.4	1469.7	1362.3	1237.9	1102.3	966.6	825.3	684.0	548.3	423.9	316.5
35°	1616.7	1520.6	1407.5	1288.8	1147.5	1011.8	864.9	717.9	570.9	440.9	333.5
32.5°	1656.2	1565.8	1458.4	1334.0	1192.7	1045.7	898.8	746.1	593.5	463.5	344.8
30°	1695.8	1605.4	1492.3	1373.6	1237.9	1085.3	932.7	774.4	621.8	480.5	356.1
27.5°	1735.4	1639.3	1531.9	1407.5	1277.5	1119.2	966.6	802.7	644.4	497.4	367.4
25°	1769.3	1667.5	1565.8	1441.4	1311.4	1153.1	994.9	830.9	667.0	514.4	378.7
22.5°	1797.5	1695.8	1594.0	1469.7	1339.7	1181.4	1017.5	853.5	684.0	525.7	390.0
20°	1825.8	1724.1	1616.7	1498.0	1362.3	1209.7	1040.1	876.2	700.9	537.0	395.7
17.5°	1854.1	1746.7	1639.3	1520.6	1384.9	1232.3	1062.7	893.1	717.9	548.3	407.0
15°	1876.7	1763.6	1656.2	1537.5	1407.5	1254.9	1079.7	910.1	729.2	559.6	412.6
12.5°	1893.6	1780.6	1673.2	1554.5	1418.8	1271.8	1096.6	921.4	740.5	570.9	418.3
10°	1910.6	1797.5	1684.5	1571.4	1435.8	1283.2	1107.9	932.7	751.8	576.6	423.9
7.5°	1921.9	1808.8	1695.8	1582.7	1447.1	1294.5	1119.2	944.0	757.5	582.2	429.6
5°	1933.2	1814.5	1701.4	1588.4	1452.7	1311.4	1130.5	955.3	768.8	587.9	429.6
2.5°	1938.9	1820.2	1707.1	1594.0	1458.4	1311.4	1130.5	955.3	768.8	587.9	429.6
0°	1938.9	1820.2	1707.1	1594.0	1458.4	1311.4	1130.5	955.3	768.8	587.9	429.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	11.3	5.7	5.7	0.0
85°	17.0	11.3	5.7	0.0
82.5°	28.3	17.0	11.3	0.0
80°	39.6	28.3	11.3	0.0
77.5°	45.2	33.9	17.0	0.0
75°	56.5	39.6	17.0	0.0
72.5°	67.8	45.2	22.6	0.0
70°	73.5	50.9	22.6	0.0
67.5°	90.4	56.5	28.3	0.0
65°	101.7	62.2	28.3	0.0
62.5°	113.1	67.8	33.9	0.0
60°	124.4	73.5	33.9	0.0
57.5°	141.3	79.1	39.6	0.0
55°	152.6	90.4	39.6	0.0
52.5°	163.9	96.1	45.2	0.0
50°	175.2	101.7	45.2	0.0
47.5°	180.9	113.1	50.9	0.0
45°	192.2	118.7	50.9	0.0
42.5°	203.5	124.4	56.5	0.0
40°	214.8	130.0	56.5	0.0
37.5°	226.1	135.7	56.5	0.0
35°	231.8	141.3	62.2	0.0
32.5°	243.1	147.0	62.2	0.0
30°	248.7	152.6	62.2	0.0
27.5°	254.4	158.3	67.8	0.0
25°	260.0	158.3	67.8	0.0
22.5°	265.7	163.9	67.8	0.0
20°	271.3	169.6	67.8	0.0
17.5°	277.0	169.6	67.8	0.0
15°	282.6	175.2	73.5	0.0
12.5°	288.3	175.2	73.5	0.0
10°	288.3	180.9	73.5	0.0
7.5°	293.9	180.9	73.5	0.0
5°	293.9	180.9	73.5	0.0
2.5°	293.9	180.9	73.5	0.0
0°	293.9	180.9	73.5	0.0

(END OF REPORT)