

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: P623232

Luminaire Tested: **EPH-VN-06-E-735-U-33**

Issue Date: 10/13/2022

Test Information

Test Method: LM-79-2019
Report Number: P623232
Test Lab: INNOVATION CENTER(G2)
Issue Date: 10/13/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-06-E-735-U-33
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 3 distribution lens
Light Source: (96) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	54302.5 lumens	Max Intensity:	505293.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	117.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		

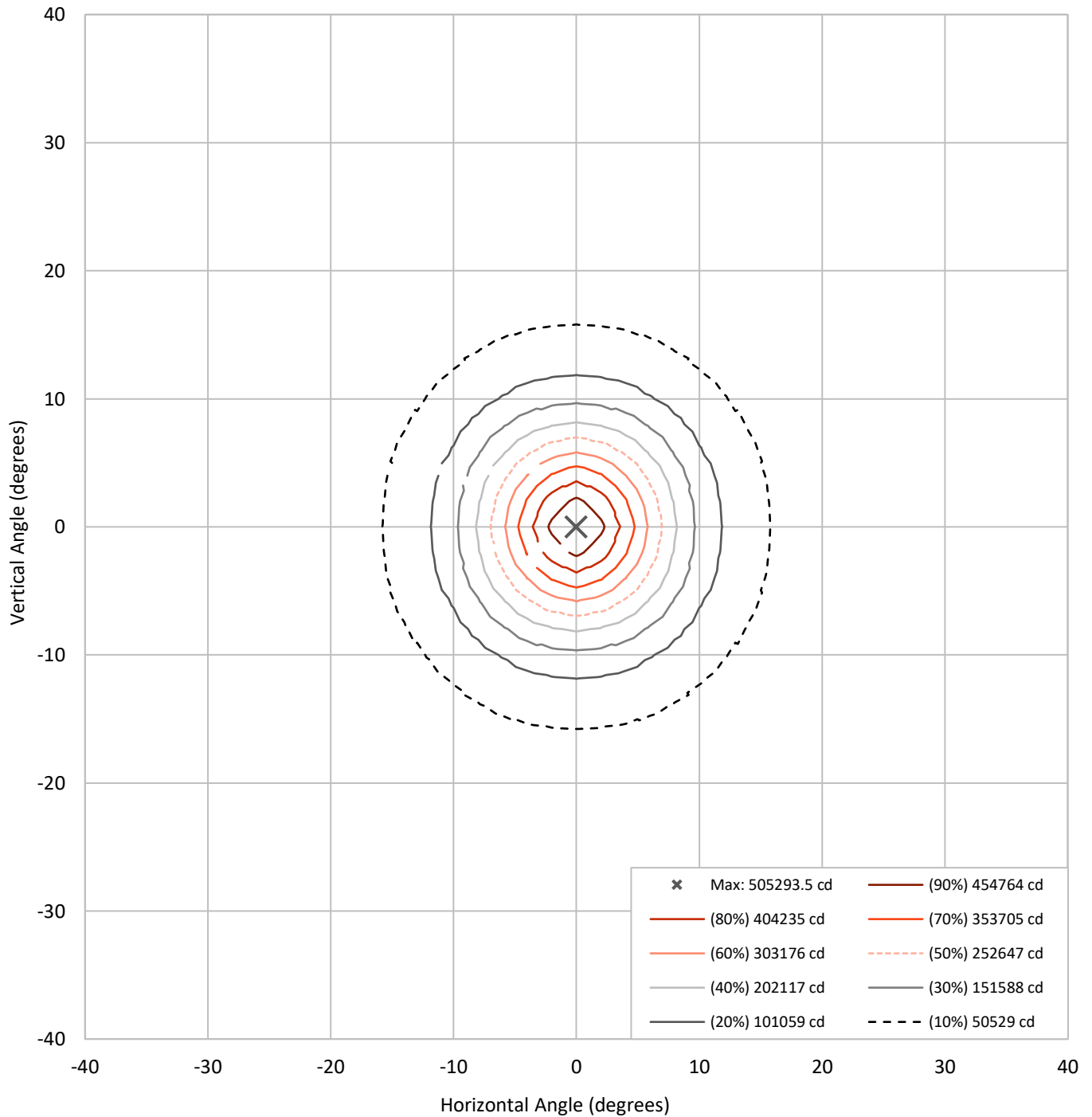
Beam Angle (50%):	13.8°H x 13.8°V	Field Angle (10%):	31.4°H x 31.4°V
Beam Lumens:	11874.4 lumens	Field Lumens:	27648.7 lumens
Beam Efficiency:	21.9%	Field Efficiency:	50.9%

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





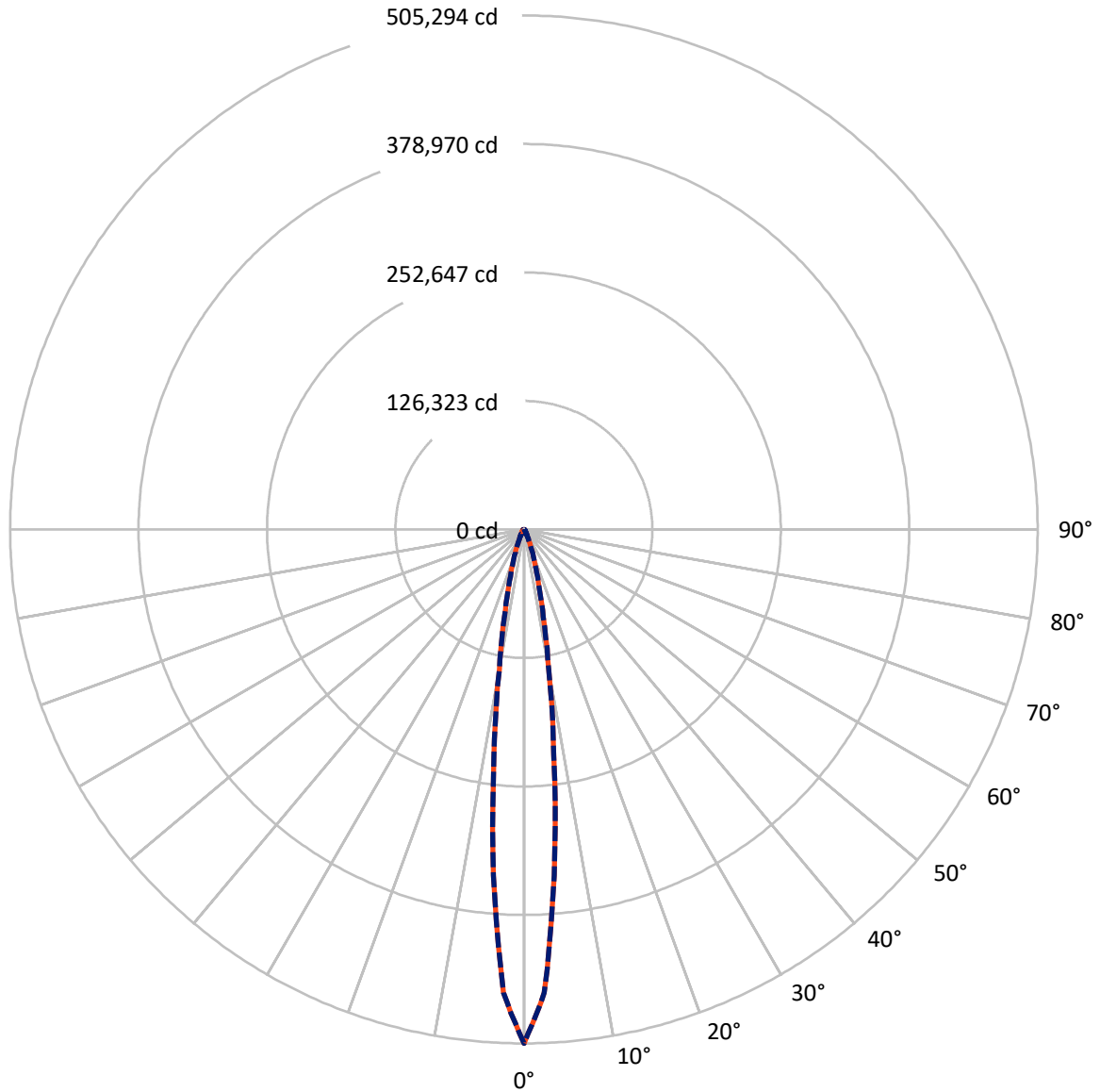
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Lumen Table

90	0.9	7.0	18.6	30.4	35.3	30.4	18.6	7.0	0.9							
80																
70																
60	3.2	3.6	7.5	12.5	17.7	22.4	25.8	27.7	27.7	25.8	22.4	17.7	12.5	7.5	3.6	3.2
50		5.6	11.6	18.8	26.0	32.3	37.2	39.8	39.8	37.2	32.3	26.0	18.8	11.6	5.6	
40	5.8	7.6	15.3	24.1	33.4	42.9	51.8	57.5	57.5	51.8	42.9	33.4	24.1	15.3	7.6	5.8
30		9.3	18.3	28.8	42.3	60.5	82.7	101.6	101.6	82.7	60.5	42.3	28.8	18.3	9.3	
20	7.8	10.6	20.5	33.5	54.8	96.7	197.5	337.9	337.9	197.5	96.7	54.8	33.5	20.5	10.6	7.8
10		11.4	22.2	38.1	70.5	186.2	669.5	1662.6	1662.6	669.5	186.2	70.5	38.1	22.2	11.4	
0	8.6	11.9	23.1	41.0	84.2	310.2	1620.0	7113.2	7113.2	1620.0	310.2	84.2	41.0	23.1	11.9	8.6
-10		11.9	23.1	41.0	84.2	310.2	1620.0	7113.2	7113.2	1620.0	310.2	84.2	41.0	23.1	11.9	
-20	7.8	11.4	22.2	38.1	70.5	186.2	669.5	1662.6	1662.6	669.5	186.2	70.5	38.1	22.2	11.4	7.8
-30		10.6	20.5	33.5	54.8	96.7	197.5	337.9	337.9	197.5	96.7	54.8	33.5	20.5	10.6	
-40	5.8	9.3	18.3	28.8	42.3	60.5	82.7	101.6	101.6	82.7	60.5	42.3	28.8	18.3	9.3	5.8
-50		7.6	15.3	24.1	33.4	42.9	51.8	57.5	57.5	51.8	42.9	33.4	24.1	15.3	7.6	
-60	3.2	5.6	11.6	18.8	26.0	32.3	37.2	39.8	39.8	37.2	32.3	26.0	18.8	11.6	5.6	3.2
-70		3.6	7.5	12.5	17.7	22.4	25.8	27.7	27.7	25.8	22.4	17.7	12.5	7.5	3.6	
-80	0.9	7.0	18.6	30.4	35.3	30.4	18.6	7.0	0.9							
-90																

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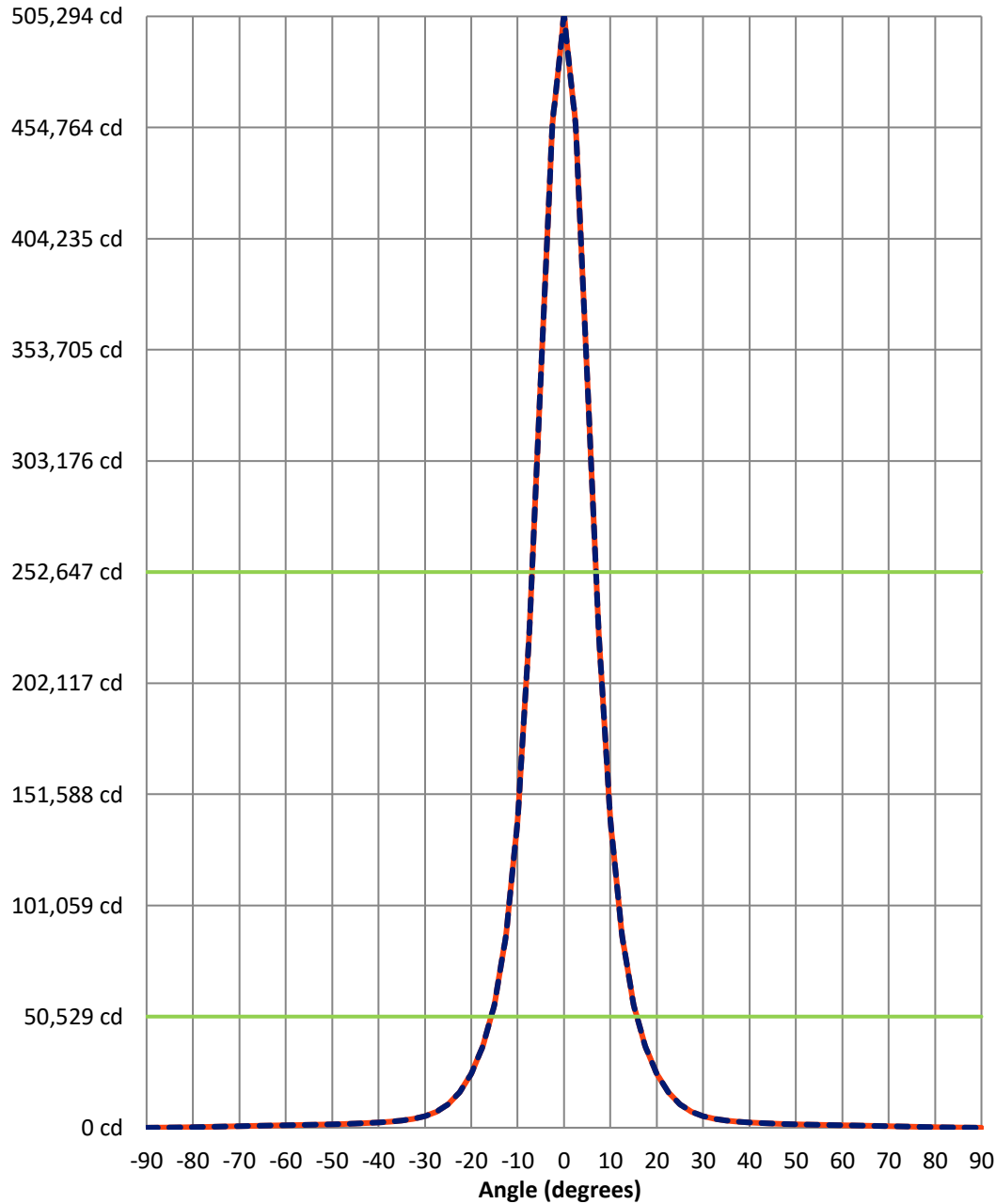
Luminous Intensity Polar Plot



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

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Luminous Intensity Plot



Beam:
H Angle: 13.8°
V Angle: 13.8°
Lumens: 11874.4
Efficiency: 21.9%

Field:
H Angle: 31.4°
V Angle: 31.4°
Lumens: 27648.7
Efficiency: 50.9%

Spill:
Lumens: 26653.8
Efficiency: 49.1%

— 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°	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	39.5	39.5
85°	101.7	101.7	101.7	101.7	101.7	101.7	96.0	96.0	96.0	90.4	90.4
82.5°	169.5	169.5	169.5	169.5	163.8	163.8	163.8	158.2	158.2	152.5	152.5
80°	259.9	259.9	259.9	259.9	254.2	248.6	248.6	242.9	237.3	231.6	226.0
77.5°	355.9	355.9	355.9	350.3	350.3	344.6	339.0	333.3	327.7	316.4	310.7
75°	468.9	468.9	468.9	463.2	457.6	451.9	446.3	435.0	429.3	418.0	406.7
72.5°	587.5	587.5	587.5	581.9	576.2	564.9	559.3	548.0	536.7	519.7	508.4
70°	700.5	700.5	700.5	694.9	683.6	677.9	666.6	655.3	644.0	627.1	610.1
67.5°	813.5	813.5	813.5	802.2	796.5	790.9	779.6	762.7	751.4	734.4	711.8
65°	920.8	920.8	915.2	909.5	903.9	892.6	881.3	870.0	853.0	836.1	813.5
62.5°	1028.2	1028.2	1022.5	1016.9	1011.2	999.9	983.0	971.7	949.1	932.1	909.5
60°	1118.6	1118.6	1112.9	1107.3	1101.6	1090.3	1079.0	1062.1	1045.1	1028.2	1005.6
57.5°	1214.6	1214.6	1208.9	1203.3	1192.0	1180.7	1169.4	1152.5	1129.9	1107.3	1090.3
55°	1321.9	1321.9	1316.3	1305.0	1293.7	1282.4	1265.4	1242.8	1220.2	1197.6	1169.4
52.5°	1423.6	1423.6	1418.0	1406.7	1395.4	1384.1	1361.5	1344.5	1316.3	1288.0	1254.1
50°	1547.9	1547.9	1536.6	1525.3	1514.0	1491.4	1468.8	1440.6	1412.3	1378.4	1350.2
47.5°	1689.1	1689.1	1677.8	1666.5	1643.9	1621.3	1587.4	1553.5	1519.7	1480.1	1434.9
45°	1886.9	1886.9	1869.9	1847.3	1819.1	1779.5	1734.3	1689.1	1638.3	1593.1	1542.3
42.5°	2129.8	2129.8	2107.2	2078.9	2039.4	1988.5	1926.4	1864.3	1796.5	1723.0	1655.2
40°	2384.0	2384.0	2355.7	2327.5	2282.3	2220.2	2152.4	2073.3	1988.5	1892.5	1807.8
37.5°	2734.2	2734.2	2694.7	2643.9	2576.1	2491.3	2389.6	2299.3	2203.2	2095.9	1982.9
35°	3254.0	3254.0	3191.8	3107.1	2999.8	2858.5	2706.0	2576.1	2429.2	2299.3	2175.0
32.5°	4022.3	4022.3	3914.9	3790.7	3609.9	3383.9	3163.6	2954.6	2734.2	2547.8	2367.0
30°	5231.2	5231.2	5050.4	4824.5	4519.4	4129.6	3802.0	3463.0	3141.0	2869.8	2621.3
27.5°	7242.4	7157.6	6909.1	6496.7	5931.7	5231.2	4728.4	4157.9	3705.9	3265.3	2943.3
25°	10631.9	10473.8	10004.9	9230.9	8185.8	7027.7	6112.5	5140.8	4451.6	3824.6	3321.8
22.5°	16140.0	15851.9	14993.2	13592.2	11699.6	9846.7	8157.5	6660.5	5429.0	4553.3	3824.6
20°	24523.5	24020.7	22540.6	20145.3	16913.9	14049.7	11038.7	8818.5	6846.9	5429.0	4451.6
17.5°	37121.4	36251.4	33703.6	29596.5	24523.5	19857.2	15270.0	11614.9	8818.5	6660.5	5140.8
15°	55967.3	54442.0	49990.4	42911.9	34782.6	27382.0	20868.4	15270.0	11038.7	8157.5	6112.5
12.5°	87608.9	84524.4	75609.9	61707.0	48747.6	36584.7	27382.0	19857.2	14049.7	9846.7	7027.7
10°	139887.3	133514.9	115442.9	88089.1	67282.8	48747.6	34782.6	24523.5	16913.9	11699.6	8185.8
7.5°	224626.4	210949.5	173579.6	127521.0	88089.1	61707.0	42911.9	29596.5	20145.3	13592.2	9230.9
5°	341504.2	313980.9	244890.3	173579.6	115442.9	75609.9	49990.4	33703.6	22540.6	14993.2	10004.9
2.5°	456094.0	408657.1	313980.9	210949.5	133514.9	84524.4	54442.0	36251.4	24020.7	15851.9	10473.8
0°	505293.5	456094.0	341504.2	224626.4	139887.3	87608.9	55967.3	37121.4	24523.5	16140.0	10631.9



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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°	39.5	39.5	39.5	39.5	33.9	33.9	33.9	33.9	28.2	28.2	28.2
85°	90.4	84.7	84.7	79.1	79.1	73.4	73.4	67.8	67.8	62.1	56.5
82.5°	146.9	141.2	135.6	129.9	129.9	124.3	118.6	107.3	101.7	96.0	90.4
80°	220.3	209.0	203.4	192.1	186.4	175.1	163.8	158.2	146.9	141.2	129.9
77.5°	299.4	288.1	282.5	265.5	254.2	242.9	231.6	214.7	203.4	186.4	169.5
75°	389.8	378.5	361.6	344.6	333.3	316.4	299.4	282.5	259.9	242.9	226.0
72.5°	491.5	474.5	457.6	435.0	412.4	395.4	367.2	344.6	327.7	305.1	282.5
70°	593.2	576.2	553.6	531.0	502.8	480.2	451.9	423.7	395.4	367.2	339.0
67.5°	694.9	672.3	649.7	621.4	593.2	564.9	536.7	502.8	468.9	435.0	401.1
65°	790.9	768.3	740.1	711.8	683.6	649.7	615.8	581.9	542.3	502.8	468.9
62.5°	886.9	858.7	830.4	802.2	768.3	734.4	700.5	655.3	615.8	576.2	531.0
60°	977.3	949.1	920.8	886.9	853.0	813.5	774.0	734.4	689.2	644.0	598.8
57.5°	1062.1	1033.8	1005.6	966.0	932.1	892.6	847.4	807.8	757.0	711.8	661.0
55°	1141.2	1112.9	1079.0	1045.1	1011.2	966.0	920.8	875.6	824.8	774.0	717.5
52.5°	1220.2	1186.3	1152.5	1118.6	1079.0	1039.5	994.3	943.4	892.6	836.1	779.6
50°	1310.6	1271.1	1225.9	1186.3	1141.2	1101.6	1056.4	1005.6	954.7	892.6	836.1
47.5°	1395.4	1355.8	1310.6	1259.8	1214.6	1163.8	1112.9	1067.7	1011.2	954.7	892.6
45°	1491.4	1434.9	1389.7	1338.9	1282.4	1225.9	1175.0	1118.6	1067.7	1005.6	943.4
42.5°	1593.1	1531.0	1468.8	1406.7	1355.8	1293.7	1231.5	1175.0	1112.9	1056.4	994.3
40°	1711.7	1638.3	1559.2	1491.4	1423.6	1361.5	1293.7	1225.9	1163.8	1101.6	1039.5
37.5°	1864.3	1762.6	1660.9	1576.1	1497.1	1423.6	1355.8	1282.4	1214.6	1141.2	1079.0
35°	2045.0	1903.8	1785.2	1666.5	1576.1	1491.4	1406.7	1338.9	1259.8	1186.3	1118.6
32.5°	2225.8	2073.3	1920.8	1785.2	1660.9	1559.2	1468.8	1389.7	1310.6	1225.9	1152.5
30°	2412.2	2242.8	2073.3	1903.8	1762.6	1638.3	1531.0	1434.9	1355.8	1271.1	1186.3
27.5°	2649.5	2412.2	2225.8	2045.0	1864.3	1711.7	1593.1	1491.4	1395.4	1310.6	1220.2
25°	2943.3	2621.3	2367.0	2175.0	1982.9	1807.8	1655.2	1542.3	1434.9	1350.2	1254.1
22.5°	3265.3	2869.8	2547.8	2299.3	2095.9	1892.5	1723.0	1593.1	1480.1	1378.4	1288.0
20°	3705.9	3141.0	2734.2	2429.2	2203.2	1988.5	1796.5	1638.3	1519.7	1412.3	1316.3
17.5°	4157.9	3463.0	2954.6	2576.1	2299.3	2073.3	1864.3	1689.1	1553.5	1440.6	1344.5
15°	4728.4	3802.0	3163.6	2706.0	2389.6	2152.4	1926.4	1734.3	1587.4	1468.8	1361.5
12.5°	5231.2	4129.6	3383.9	2858.5	2491.3	2220.2	1988.5	1779.5	1621.3	1491.4	1384.1
10°	5931.7	4519.4	3609.9	2999.8	2576.1	2282.3	2039.4	1819.1	1643.9	1514.0	1395.4
7.5°	6496.7	4824.5	3790.7	3107.1	2643.9	2327.5	2078.9	1847.3	1666.5	1525.3	1406.7
5°	6909.1	5050.4	3914.9	3191.8	2694.7	2355.7	2107.2	1869.9	1677.8	1536.6	1418.0
2.5°	7157.6	5231.2	4022.3	3254.0	2734.2	2384.0	2129.8	1886.9	1689.1	1547.9	1423.6
0°	7242.4	5231.2	4022.3	3254.0	2734.2	2384.0	2129.8	1886.9	1689.1	1547.9	1423.6



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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°	28.2	22.6	22.6	22.6	16.9	16.9	16.9	11.3	11.3	11.3	5.6
85°	50.8	50.8	45.2	39.5	39.5	33.9	28.2	28.2	22.6	16.9	16.9
82.5°	84.7	79.1	73.4	67.8	62.1	50.8	45.2	39.5	33.9	28.2	22.6
80°	118.6	113.0	101.7	90.4	84.7	73.4	67.8	56.5	45.2	39.5	33.9
77.5°	158.2	146.9	135.6	124.3	107.3	96.0	84.7	73.4	62.1	50.8	39.5
75°	209.0	186.4	169.5	152.5	135.6	118.6	101.7	90.4	73.4	62.1	45.2
72.5°	259.9	237.3	209.0	186.4	163.8	146.9	124.3	107.3	90.4	73.4	56.5
70°	310.7	282.5	254.2	226.0	197.7	169.5	146.9	124.3	101.7	84.7	67.8
67.5°	361.6	333.3	299.4	265.5	237.3	203.4	169.5	146.9	118.6	96.0	73.4
65°	423.7	384.2	344.6	310.7	271.2	237.3	197.7	163.8	135.6	107.3	84.7
62.5°	485.8	440.6	395.4	350.3	310.7	265.5	226.0	186.4	152.5	124.3	90.4
60°	548.0	497.1	446.3	395.4	344.6	299.4	254.2	209.0	169.5	135.6	101.7
57.5°	610.1	553.6	497.1	440.6	384.2	333.3	282.5	237.3	186.4	146.9	113.0
55°	666.6	610.1	548.0	485.8	423.7	361.6	310.7	259.9	209.0	158.2	118.6
52.5°	717.5	661.0	598.8	531.0	468.9	401.1	339.0	282.5	226.0	169.5	129.9
50°	774.0	711.8	644.0	576.2	502.8	435.0	367.2	305.1	242.9	186.4	141.2
47.5°	824.8	757.0	689.2	615.8	542.3	468.9	395.4	327.7	259.9	203.4	146.9
45°	875.6	807.8	734.4	655.3	581.9	502.8	423.7	344.6	282.5	214.7	158.2
42.5°	920.8	847.4	774.0	700.5	615.8	536.7	451.9	367.2	299.4	231.6	163.8
40°	966.0	892.6	813.5	734.4	649.7	564.9	480.2	395.4	316.4	242.9	175.1
37.5°	1011.2	932.1	853.0	768.3	683.6	593.2	502.8	412.4	333.3	254.2	186.4
35°	1045.1	966.0	886.9	802.2	711.8	621.4	531.0	435.0	344.6	265.5	192.1
32.5°	1079.0	1005.6	920.8	830.4	740.1	649.7	553.6	457.6	361.6	282.5	203.4
30°	1112.9	1033.8	949.1	858.7	768.3	672.3	576.2	474.5	378.5	288.1	209.0
27.5°	1141.2	1062.1	977.3	886.9	790.9	694.9	593.2	491.5	389.8	299.4	220.3
25°	1169.4	1090.3	1005.6	909.5	813.5	711.8	610.1	508.4	406.7	310.7	226.0
22.5°	1197.6	1107.3	1028.2	932.1	836.1	734.4	627.1	519.7	418.0	316.4	231.6
20°	1220.2	1129.9	1045.1	949.1	853.0	751.4	644.0	536.7	429.3	327.7	237.3
17.5°	1242.8	1152.5	1062.1	971.7	870.0	762.7	655.3	548.0	435.0	333.3	242.9
15°	1265.4	1169.4	1079.0	983.0	881.3	779.6	666.6	559.3	446.3	339.0	248.6
12.5°	1282.4	1180.7	1090.3	999.9	892.6	790.9	677.9	564.9	451.9	344.6	248.6
10°	1293.7	1192.0	1101.6	1011.2	903.9	796.5	683.6	576.2	457.6	350.3	254.2
7.5°	1305.0	1203.3	1107.3	1016.9	909.5	802.2	694.9	581.9	463.2	350.3	259.9
5°	1316.3	1208.9	1112.9	1022.5	915.2	813.5	700.5	587.5	468.9	355.9	259.9
2.5°	1321.9	1214.6	1118.6	1028.2	920.8	813.5	700.5	587.5	468.9	355.9	259.9
0°	1321.9	1214.6	1118.6	1028.2	920.8	813.5	700.5	587.5	468.9	355.9	259.9



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	5.6	5.6	0.0	0.0
85°	11.3	5.6	5.6	0.0
82.5°	16.9	11.3	5.6	0.0
80°	22.6	16.9	5.6	0.0
77.5°	28.2	16.9	11.3	0.0
75°	33.9	22.6	11.3	0.0
72.5°	39.5	28.2	11.3	0.0
70°	45.2	28.2	16.9	0.0
67.5°	50.8	33.9	16.9	0.0
65°	62.1	39.5	16.9	0.0
62.5°	67.8	39.5	22.6	0.0
60°	73.4	45.2	22.6	0.0
57.5°	79.1	50.8	22.6	0.0
55°	84.7	50.8	28.2	0.0
52.5°	90.4	56.5	28.2	0.0
50°	96.0	62.1	28.2	0.0
47.5°	101.7	67.8	28.2	0.0
45°	107.3	67.8	33.9	0.0
42.5°	118.6	73.4	33.9	0.0
40°	124.3	73.4	33.9	0.0
37.5°	129.9	79.1	33.9	0.0
35°	129.9	79.1	39.5	0.0
32.5°	135.6	84.7	39.5	0.0
30°	141.2	84.7	39.5	0.0
27.5°	146.9	90.4	39.5	0.0
25°	152.5	90.4	39.5	0.0
22.5°	152.5	90.4	39.5	0.0
20°	158.2	96.0	45.2	0.0
17.5°	158.2	96.0	45.2	0.0
15°	163.8	96.0	45.2	0.0
12.5°	163.8	101.7	45.2	0.0
10°	163.8	101.7	45.2	0.0
7.5°	169.5	101.7	45.2	0.0
5°	169.5	101.7	45.2	0.0
2.5°	169.5	101.7	45.2	0.0
0°	169.5	101.7	45.2	0.0

(END OF REPORT)