

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: P624086

Luminaire Tested: **EPH-VN-06-E-740-U-44**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624086
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-06-E-740-U-44
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 4 distribution lens
Light Source: (96) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	54941.4 lumens	Max Intensity:	177655.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	118.4 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		

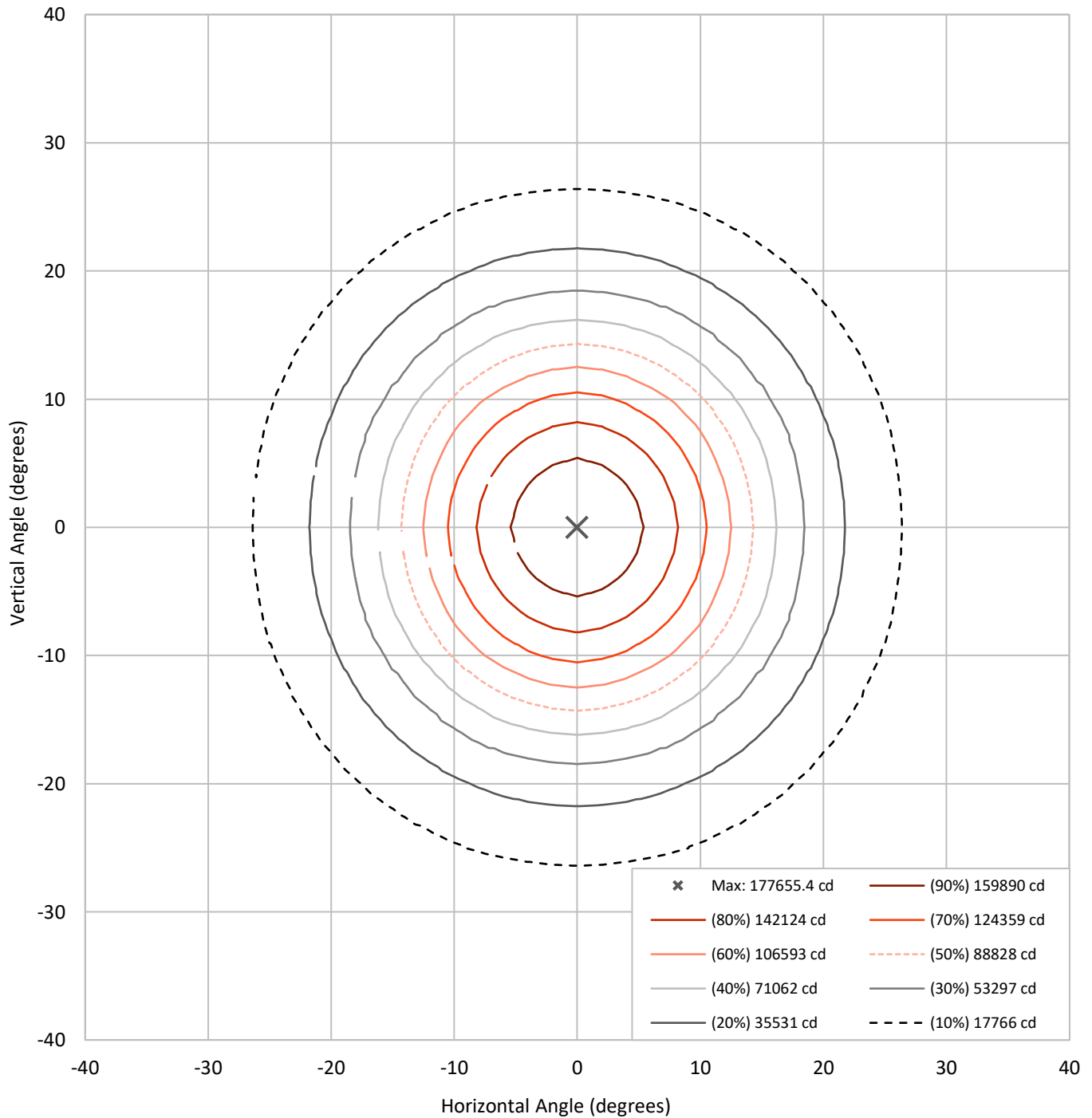
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	19823.9 lumens	Field Lumens:	33475.3 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

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





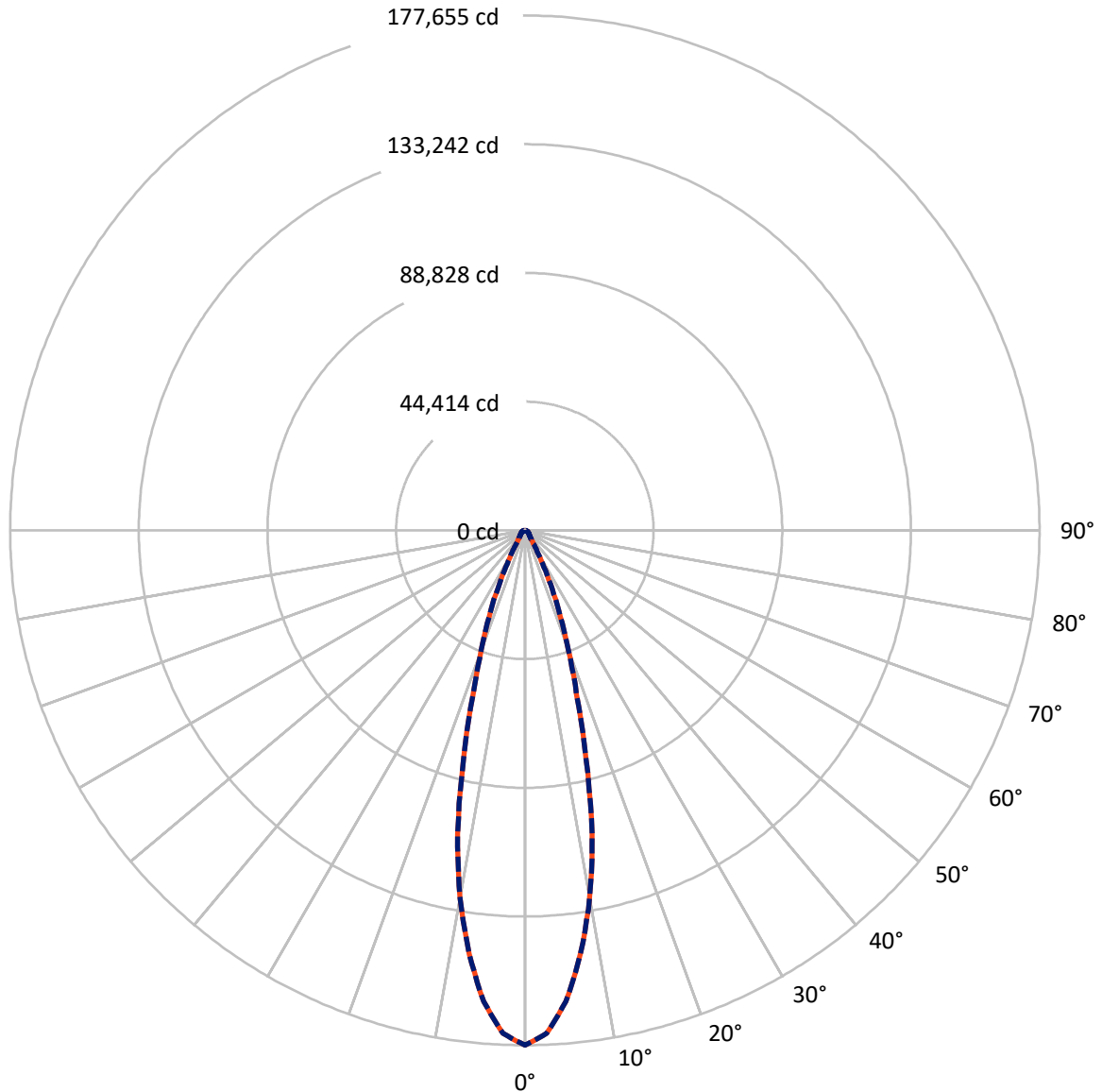
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Lumen Table

90	1.3	9.3	23.6	37.8	43.6	37.8	23.6	9.3	1.3										
80																			
70	4.2	4.5	9.1	15.0	21.1	26.6	30.6	32.8	32.8	30.6	26.6	21.1	15.0	9.1	4.5	4.2			
60		6.8	13.9	22.3	30.8	38.3	44.0	47.1	47.1	44.0	38.3	30.8	22.3	13.9	6.8				
50	7.3	9.1	18.1	28.7	39.3	49.9	59.6	65.7	65.7	59.6	49.9	39.3	28.7	18.1	9.1	7.3			
40		11.0	21.7	34.0	48.8	69.5	101.4	135.0	135.0	101.4	69.5	48.8	34.0	21.7	11.0				
30	9.6	12.5	24.4	39.1	62.9	131.8	361.4	654.7	654.7	361.4	131.8	62.9	39.1	24.4	12.5	9.6			
20		13.6	26.3	43.8	86.5	341.2	1173.4	2263.5	2263.5	1173.4	341.2	86.5	43.8	26.3	13.6				
10	10.5	14.1	27.2	46.9	112.2	601.1	2202.1	4341.5	4341.5	2202.1	601.1	112.2	46.9	27.2	14.1	10.5			
0		14.1	27.2	46.9	112.2	601.1	2202.1	4341.5	4341.5	2202.1	601.1	112.2	46.9	27.2	14.1				
-10	9.6	13.6	26.3	43.8	86.5	341.2	1173.4	2263.5	2263.5	1173.4	341.2	86.5	43.8	26.3	13.6	9.6			
-20		12.5	24.4	39.1	62.9	131.8	361.4	654.7	654.7	361.4	131.8	62.9	39.1	24.4	12.5				
-30	7.3	11.0	21.7	34.0	48.8	69.5	101.4	135.0	135.0	101.4	69.5	48.8	34.0	21.7	11.0	7.3			
-40		9.1	18.1	28.7	39.3	49.9	59.6	65.7	65.7	59.6	49.9	39.3	28.7	18.1	9.1				
-50	4.2	6.8	13.9	22.3	30.8	38.3	44.0	47.1	47.1	44.0	38.3	30.8	22.3	13.9	6.8	4.2			
-60		4.5	9.1	15.0	21.1	26.6	30.6	32.8	32.8	30.6	26.6	21.1	15.0	9.1	4.5				
-70	1.3															1.3			
-80		9.3	23.6	37.8	43.6	37.8	23.6	9.3											
-90																			

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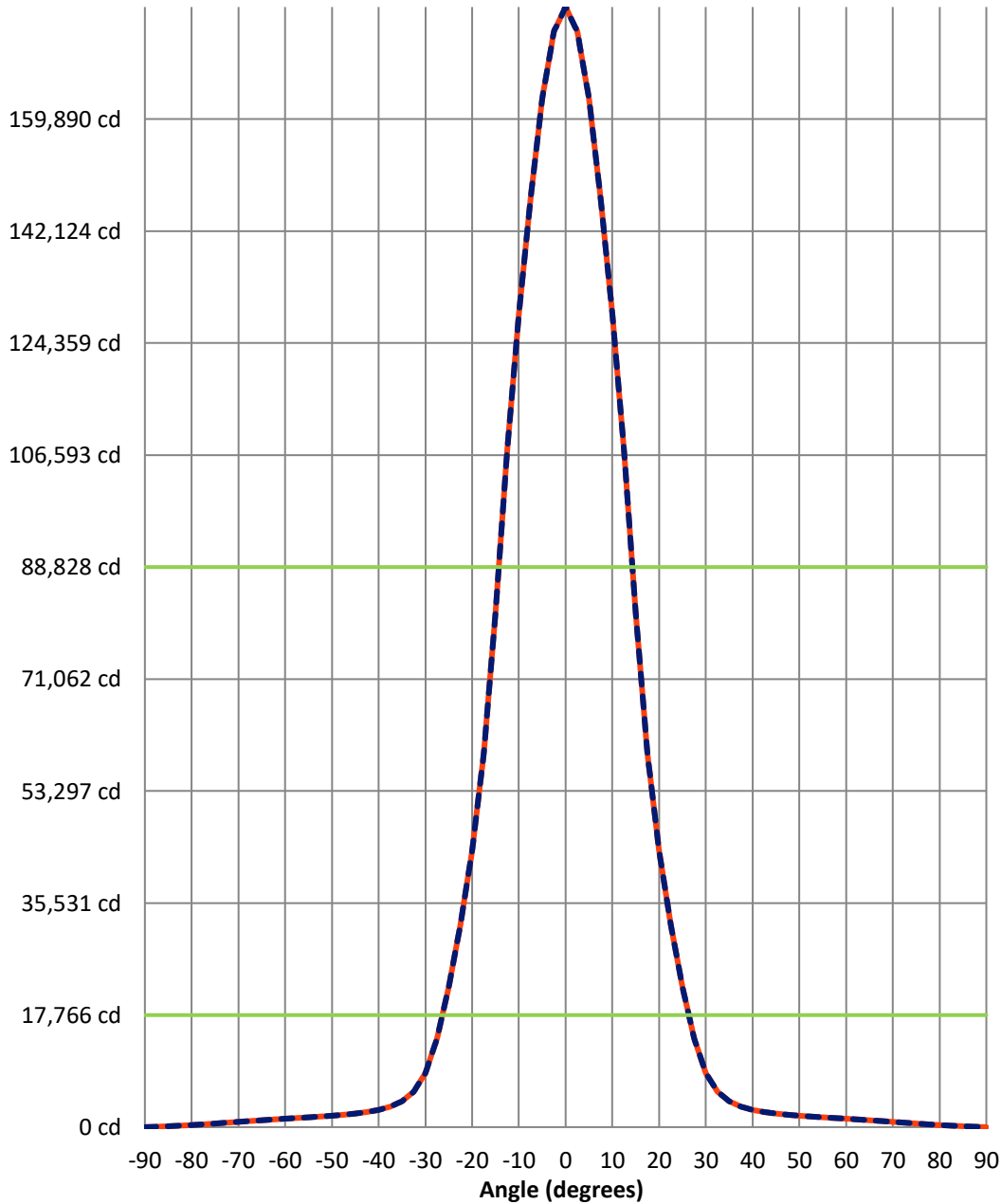
Luminous Intensity Polar Plot



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

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Luminous Intensity Plot



Beam:
H Angle: 28.6°
V Angle: 28.6°
Lumens: 19823.9
Efficiency: 36.1%

Field:
H Angle: 52.7°
V Angle: 52.7°
Lumens: 33475.3
Efficiency: 60.9%

Spill:
Lumens: 21466
Efficiency: 39.1%

— 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°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	57.3	57.3	57.3	57.3
85°	143.2	143.2	143.2	143.2	143.2	137.5	137.5	137.5	131.7	131.7	126.0
82.5°	229.1	229.1	229.1	229.1	223.4	223.4	217.7	217.7	211.9	211.9	206.2
80°	326.5	326.5	326.5	326.5	320.8	315.1	315.1	309.3	303.6	297.9	292.1
77.5°	441.1	441.1	441.1	435.3	429.6	429.6	423.9	412.4	406.7	395.2	389.5
75°	567.1	567.1	567.1	561.4	555.6	549.9	538.5	532.7	521.3	509.8	492.6
72.5°	704.6	704.6	704.6	698.8	687.4	681.7	670.2	658.7	647.3	630.1	612.9
70°	836.3	836.3	836.3	824.9	819.1	807.7	796.2	784.8	767.6	750.4	733.2
67.5°	968.1	968.1	968.1	956.6	950.9	939.4	928.0	910.8	893.6	870.7	853.5
65°	1088.4	1088.4	1082.6	1076.9	1071.2	1059.7	1042.5	1031.1	1013.9	991.0	968.1
62.5°	1214.4	1214.4	1208.7	1202.9	1191.5	1180.0	1162.8	1145.6	1122.7	1099.8	1076.9
60°	1340.4	1340.4	1334.7	1329.0	1317.5	1300.3	1283.1	1265.9	1243.0	1214.4	1185.7
57.5°	1443.5	1443.5	1437.8	1432.1	1420.6	1409.1	1392.0	1374.8	1351.9	1329.0	1294.6
55°	1552.4	1552.4	1546.6	1535.2	1523.7	1512.3	1495.1	1472.2	1449.2	1420.6	1397.7
52.5°	1678.4	1678.4	1672.6	1661.2	1644.0	1626.8	1603.9	1575.3	1546.6	1518.0	1483.6
50°	1804.4	1804.4	1792.9	1781.5	1770.0	1747.1	1724.2	1695.6	1661.2	1626.8	1586.7
47.5°	1959.1	1959.1	1947.6	1930.4	1907.5	1884.6	1850.2	1810.1	1775.8	1735.7	1689.8
45°	2148.1	2148.1	2130.9	2113.7	2085.1	2045.0	2004.9	1959.1	1907.5	1855.9	1798.7
42.5°	2394.4	2394.4	2371.5	2342.8	2302.7	2251.2	2188.2	2125.2	2062.2	1993.4	1924.7
40°	2726.6	2726.6	2692.3	2652.2	2589.2	2514.7	2423.0	2337.1	2251.2	2153.8	2067.9
37.5°	3247.9	3247.9	3190.6	3116.2	3013.1	2887.0	2732.4	2617.8	2486.1	2360.0	2245.5
35°	4101.4	4101.4	3998.3	3866.6	3683.3	3454.1	3207.8	3013.1	2795.4	2617.8	2451.7
32.5°	5619.4	5619.4	5413.2	5155.4	4806.0	4359.2	3946.8	3603.1	3247.9	2973.0	2709.5
30°	8558.0	8558.0	8116.9	7572.7	6822.3	5882.9	5178.3	4519.6	3918.1	3465.6	3081.8
27.5°	14074.3	13845.1	13157.8	12029.3	10482.7	8558.0	7332.1	5940.2	4989.3	4124.3	3591.6
25°	22219.8	21841.8	20707.6	18857.3	16336.9	13478.5	10975.3	8334.6	6667.7	5229.9	4238.9
22.5°	32118.2	31596.9	30056.0	27541.3	24133.0	20329.5	16279.6	12481.8	9102.2	6914.0	5229.9
20°	43838.2	43139.3	41071.4	37714.7	33200.8	28360.5	22953.0	17866.4	12991.6	9102.2	6667.7
17.5°	59310.1	58244.7	55111.3	50070.5	43838.2	37313.7	30554.4	23989.8	17866.4	12481.8	8334.6
15°	81552.9	79754.2	74495.7	66143.9	56440.3	47343.8	38722.9	30554.4	22953.0	16279.6	10975.3
12.5°	107266.9	104763.7	97517.4	86215.6	73029.2	58645.7	47343.8	37313.7	28360.5	20329.5	13478.5
10°	128931.1	126290.4	118803.6	107467.4	90746.7	73029.2	56440.3	43838.2	33200.8	24133.0	16336.9
7.5°	147232.8	144277.0	136205.9	123804.3	107467.4	86215.6	66143.9	50070.5	37714.7	27541.3	18857.3
5°	163128.6	159382.4	149988.1	136205.9	118803.6	97517.4	74495.7	55111.3	41071.4	30056.0	20707.6
2.5°	173748.8	169349.5	159382.4	144277.0	126290.4	104763.7	79754.2	58244.7	43139.3	31596.9	21841.8
0°	177655.4	173748.8	163128.6	147232.8	128931.1	107266.9	81552.9	59310.1	43838.2	32118.2	22219.8



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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°	57.3	57.3	51.6	51.6	51.6	45.8	45.8	45.8	40.1	40.1	40.1
85°	126.0	120.3	120.3	114.6	108.8	103.1	103.1	97.4	91.7	85.9	80.2
82.5°	200.5	194.8	189.0	183.3	177.6	166.1	160.4	154.7	143.2	137.5	131.7
80°	280.7	275.0	263.5	257.8	246.3	234.9	223.4	211.9	200.5	189.0	177.6
77.5°	378.1	360.9	349.4	338.0	320.8	309.3	292.1	280.7	263.5	246.3	229.1
75°	481.2	464.0	446.8	429.6	412.4	389.5	372.3	349.4	332.2	309.3	292.1
72.5°	595.7	572.8	549.9	527.0	504.1	481.2	458.3	429.6	406.7	378.1	349.4
70°	710.3	687.4	664.5	635.8	607.2	578.6	549.9	515.5	486.9	452.5	418.2
67.5°	830.6	802.0	773.3	744.7	716.0	681.7	641.6	607.2	567.1	527.0	492.6
65°	945.2	916.5	882.1	847.8	813.4	779.0	738.9	698.8	653.0	607.2	567.1
62.5°	1048.3	1019.6	991.0	950.9	916.5	876.4	836.3	784.8	738.9	693.1	641.6
60°	1157.1	1122.7	1088.4	1048.3	1008.2	968.1	922.2	870.7	824.9	767.6	716.0
57.5°	1260.2	1225.8	1185.7	1145.6	1099.8	1054.0	1008.2	956.6	905.1	847.8	790.5
55°	1363.3	1329.0	1288.9	1243.0	1191.5	1139.9	1088.4	1036.8	985.3	922.2	859.2
52.5°	1449.2	1414.9	1374.8	1340.4	1283.1	1231.6	1174.3	1111.3	1054.0	991.0	928.0
50°	1540.9	1500.8	1455.0	1414.9	1369.0	1317.5	1254.5	1191.5	1122.7	1059.7	991.0
47.5°	1644.0	1592.4	1540.9	1489.3	1443.5	1386.2	1334.7	1265.9	1197.2	1122.7	1054.0
45°	1747.1	1689.8	1632.5	1569.5	1512.3	1455.0	1397.7	1340.4	1265.9	1191.5	1111.3
42.5°	1855.9	1787.2	1724.2	1661.2	1592.4	1523.7	1460.7	1397.7	1334.7	1254.5	1174.3
40°	1982.0	1901.8	1821.6	1747.1	1678.4	1598.2	1523.7	1455.0	1386.2	1317.5	1231.6
37.5°	2125.2	2027.8	1930.4	1838.8	1752.8	1678.4	1592.4	1512.3	1443.5	1369.0	1283.1
35°	2308.5	2165.3	2050.7	1936.1	1838.8	1747.1	1661.2	1569.5	1489.3	1414.9	1340.4
32.5°	2514.7	2337.1	2182.5	2050.7	1930.4	1821.6	1724.2	1632.5	1540.9	1455.0	1374.8
30°	2766.7	2537.6	2337.1	2165.3	2027.8	1901.8	1787.2	1689.8	1592.4	1500.8	1414.9
27.5°	3121.9	2766.7	2514.7	2308.5	2125.2	1982.0	1855.9	1747.1	1644.0	1540.9	1449.2
25°	3591.6	3081.8	2709.5	2451.7	2245.5	2067.9	1924.7	1798.7	1689.8	1586.7	1483.6
22.5°	4124.3	3465.6	2973.0	2617.8	2360.0	2153.8	1993.4	1855.9	1735.7	1626.8	1518.0
20°	4989.3	3918.1	3247.9	2795.4	2486.1	2251.2	2062.2	1907.5	1775.8	1661.2	1546.6
17.5°	5940.2	4519.6	3603.1	3013.1	2617.8	2337.1	2125.2	1959.1	1810.1	1695.6	1575.3
15°	7332.1	5178.3	3946.8	3207.8	2732.4	2423.0	2188.2	2004.9	1850.2	1724.2	1603.9
12.5°	8558.0	5882.9	4359.2	3454.1	2887.0	2514.7	2251.2	2045.0	1884.6	1747.1	1626.8
10°	10482.7	6822.3	4806.0	3683.3	3013.1	2589.2	2302.7	2085.1	1907.5	1770.0	1644.0
7.5°	12029.3	7572.7	5155.4	3866.6	3116.2	2652.2	2342.8	2113.7	1930.4	1781.5	1661.2
5°	13157.8	8116.9	5413.2	3998.3	3190.6	2692.3	2371.5	2130.9	1947.6	1792.9	1672.6
2.5°	13845.1	8558.0	5619.4	4101.4	3247.9	2726.6	2394.4	2148.1	1959.1	1804.4	1678.4
0°	14074.3	8558.0	5619.4	4101.4	3247.9	2726.6	2394.4	2148.1	1959.1	1804.4	1678.4



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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°	34.4	34.4	28.6	28.6	28.6	22.9	22.9	17.2	17.2	11.5	11.5
85°	74.5	68.7	63.0	57.3	51.6	45.8	45.8	40.1	34.4	28.6	22.9
82.5°	120.3	114.6	103.1	91.7	85.9	74.5	63.0	57.3	51.6	40.1	34.4
80°	166.1	154.7	143.2	131.7	120.3	103.1	91.7	80.2	63.0	51.6	45.8
77.5°	217.7	200.5	183.3	166.1	148.9	137.5	120.3	103.1	85.9	68.7	51.6
75°	269.2	246.3	229.1	206.2	189.0	166.1	143.2	126.0	108.8	85.9	63.0
72.5°	326.5	297.9	275.0	246.3	223.4	200.5	171.8	148.9	126.0	103.1	80.2
70°	389.5	355.2	320.8	292.1	263.5	229.1	200.5	171.8	143.2	120.3	91.7
67.5°	452.5	412.4	372.3	332.2	297.9	263.5	229.1	200.5	166.1	137.5	103.1
65°	515.5	469.7	429.6	383.8	338.0	297.9	263.5	223.4	189.0	148.9	120.3
62.5°	584.3	532.7	481.2	429.6	383.8	332.2	292.1	246.3	206.2	166.1	131.7
60°	658.7	601.5	538.5	481.2	429.6	372.3	320.8	275.0	229.1	183.3	143.2
57.5°	727.5	664.5	601.5	532.7	469.7	412.4	355.2	297.9	246.3	200.5	154.7
55°	796.2	727.5	658.7	584.3	515.5	452.5	389.5	326.5	269.2	217.7	166.1
52.5°	859.2	790.5	716.0	641.6	567.1	492.6	418.2	349.4	292.1	229.1	177.6
50°	922.2	847.8	767.6	693.1	607.2	527.0	452.5	378.1	309.3	246.3	189.0
47.5°	985.3	905.1	824.9	738.9	653.0	567.1	486.9	406.7	332.2	263.5	200.5
45°	1036.8	956.6	870.7	784.8	698.8	607.2	515.5	429.6	349.4	280.7	211.9
42.5°	1088.4	1008.2	922.2	836.3	738.9	641.6	549.9	458.3	372.3	292.1	223.4
40°	1139.9	1054.0	968.1	876.4	779.0	681.7	578.6	481.2	389.5	309.3	234.9
37.5°	1191.5	1099.8	1008.2	916.5	813.4	716.0	607.2	504.1	412.4	320.8	246.3
35°	1243.0	1145.6	1048.3	950.9	847.8	744.7	635.8	527.0	429.6	338.0	257.8
32.5°	1288.9	1185.7	1088.4	991.0	882.1	773.3	664.5	549.9	446.8	349.4	263.5
30°	1329.0	1225.8	1122.7	1019.6	916.5	802.0	687.4	572.8	464.0	360.9	275.0
27.5°	1363.3	1260.2	1157.1	1048.3	945.2	830.6	710.3	595.7	481.2	378.1	280.7
25°	1397.7	1294.6	1185.7	1076.9	968.1	853.5	733.2	612.9	492.6	389.5	292.1
22.5°	1420.6	1329.0	1214.4	1099.8	991.0	870.7	750.4	630.1	509.8	395.2	297.9
20°	1449.2	1351.9	1243.0	1122.7	1013.9	893.6	767.6	647.3	521.3	406.7	303.6
17.5°	1472.2	1374.8	1265.9	1145.6	1031.1	910.8	784.8	658.7	532.7	412.4	309.3
15°	1495.1	1392.0	1283.1	1162.8	1042.5	928.0	796.2	670.2	538.5	423.9	315.1
12.5°	1512.3	1409.1	1300.3	1180.0	1059.7	939.4	807.7	681.7	549.9	429.6	315.1
10°	1523.7	1420.6	1317.5	1191.5	1071.2	950.9	819.1	687.4	555.6	429.6	320.8
7.5°	1535.2	1432.1	1329.0	1202.9	1076.9	956.6	824.9	698.8	561.4	435.3	326.5
5°	1546.6	1437.8	1334.7	1208.7	1082.6	968.1	836.3	704.6	567.1	441.1	326.5
2.5°	1552.4	1443.5	1340.4	1214.4	1088.4	968.1	836.3	704.6	567.1	441.1	326.5
0°	1552.4	1443.5	1340.4	1214.4	1088.4	968.1	836.3	704.6	567.1	441.1	326.5



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	5.7	5.7	0.0	0.0
85°	17.2	11.5	5.7	0.0
82.5°	22.9	17.2	5.7	0.0
80°	34.4	22.9	11.5	0.0
77.5°	40.1	28.6	11.5	0.0
75°	51.6	34.4	17.2	0.0
72.5°	57.3	40.1	17.2	0.0
70°	63.0	45.8	22.9	0.0
67.5°	74.5	45.8	22.9	0.0
65°	85.9	51.6	28.6	0.0
62.5°	91.7	57.3	28.6	0.0
60°	103.1	63.0	28.6	0.0
57.5°	114.6	68.7	34.4	0.0
55°	120.3	74.5	34.4	0.0
52.5°	131.7	80.2	40.1	0.0
50°	137.5	85.9	40.1	0.0
47.5°	143.2	91.7	40.1	0.0
45°	154.7	97.4	45.8	0.0
42.5°	160.4	103.1	45.8	0.0
40°	166.1	103.1	45.8	0.0
37.5°	177.6	108.8	51.6	0.0
35°	183.3	114.6	51.6	0.0
32.5°	189.0	120.3	51.6	0.0
30°	194.8	120.3	57.3	0.0
27.5°	200.5	126.0	57.3	0.0
25°	206.2	126.0	57.3	0.0
22.5°	211.9	131.7	57.3	0.0
20°	211.9	131.7	57.3	0.0
17.5°	217.7	137.5	57.3	0.0
15°	217.7	137.5	63.0	0.0
12.5°	223.4	137.5	63.0	0.0
10°	223.4	143.2	63.0	0.0
7.5°	229.1	143.2	63.0	0.0
5°	229.1	143.2	63.0	0.0
2.5°	229.1	143.2	63.0	0.0
0°	229.1	143.2	63.0	0.0

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