

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: P624100

Luminaire Tested: **EPH-VN-08-D-760-U-44**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624100  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-08-D-760-U-44  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 4 distribution lens  
Light Source: (128) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

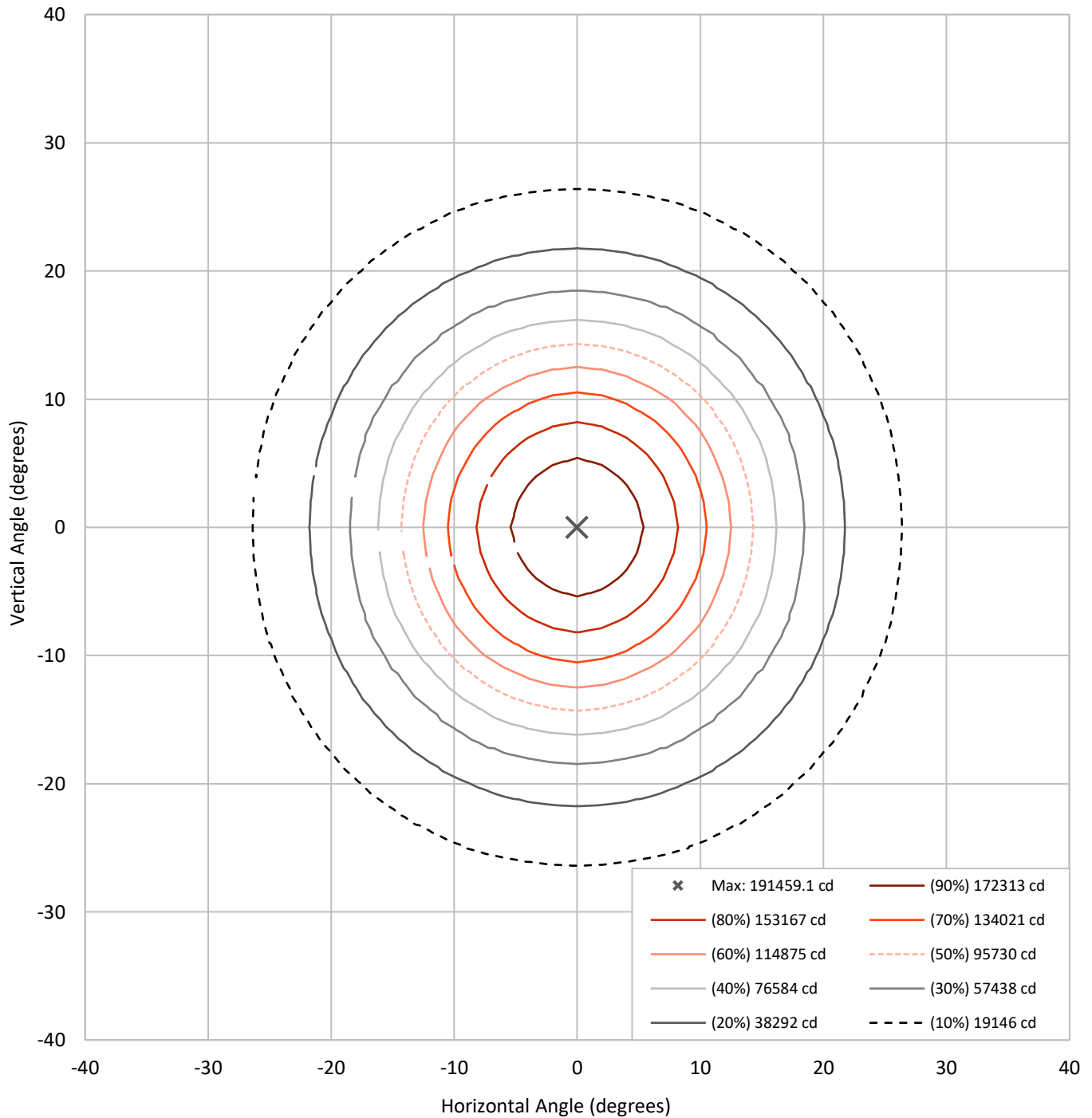
Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	59210.3 lumens	Max Intensity:	191459.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	121.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	21364.2 lumens	Field Lumens:	36076.3 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

Input Watts (W): 488.3  
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





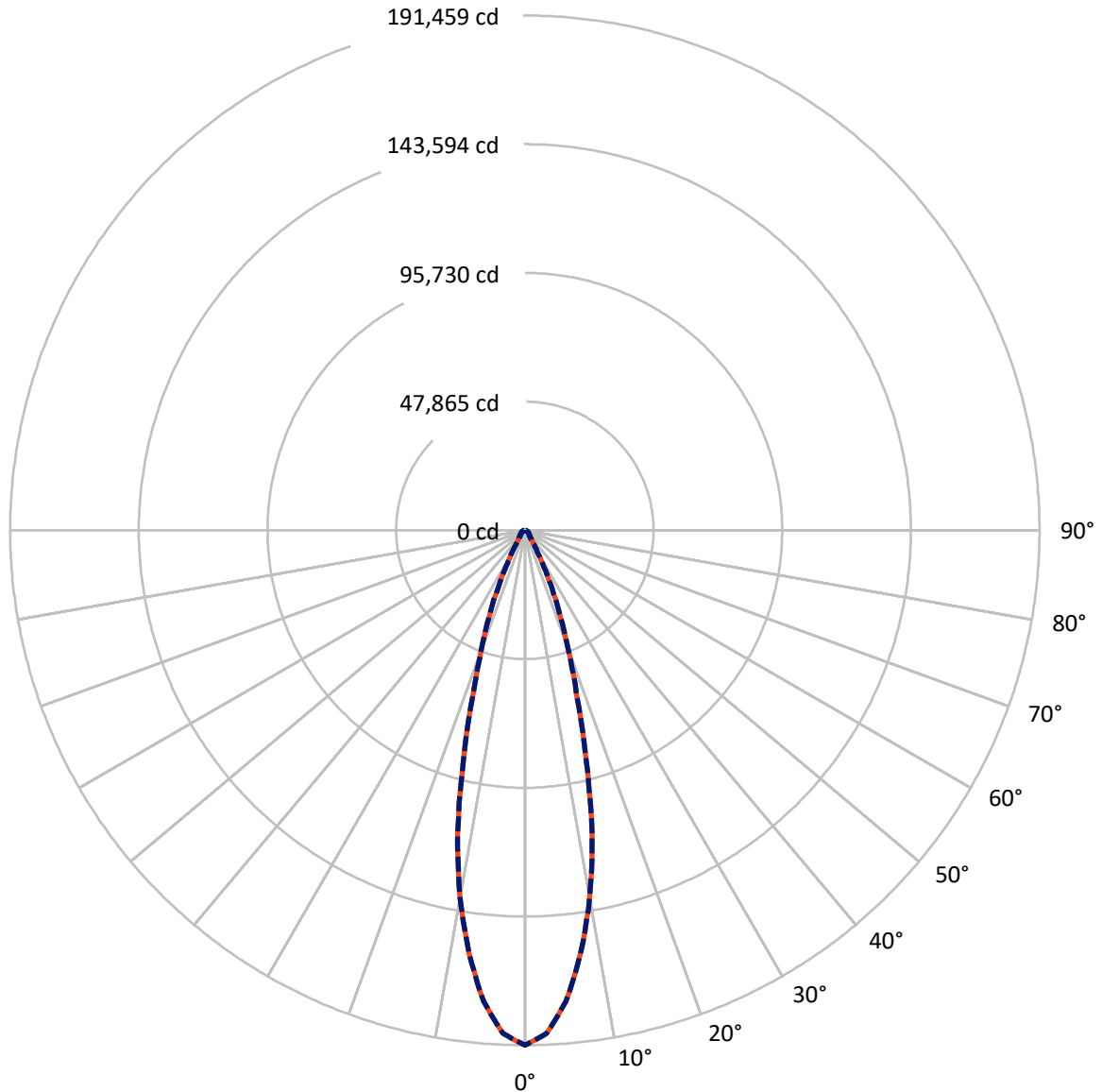
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### Lumen Table

90	1.4	10.0		25.5		40.7		47.0		40.7		25.5		10.0		1.4
80	1.4	10.0		25.5		40.7		47.0		40.7		25.5		10.0		1.4
70	4.6	4.8	9.8	16.2	22.8	28.6	33.0	35.4	35.4	33.0	28.6	22.8	16.2	9.8	4.8	4.6
60		7.3	15.0	24.0	33.2	41.3	47.4	50.7	50.7	47.4	41.3	33.2	24.0	15.0	7.3	
50	7.8	9.8	19.6	30.9	42.4	53.8	64.2	70.8	70.8	64.2	53.8	42.4	30.9	19.6	9.8	7.8
40		11.9	23.4	36.6	52.6	74.9	109.3	145.5	145.5	109.3	74.9	52.6	36.6	23.4	11.9	
30	10.3	13.5	26.3	42.1	67.8	142.1	389.5	705.6	705.6	389.5	142.1	67.8	42.1	26.3	13.5	10.3
20		14.6	28.3	47.2	93.3	367.7	1264.6	2439.4	2439.4	1264.6	367.7	93.3	47.2	28.3	14.6	
10	11.3	15.2	29.4	50.5	120.9	647.8	2373.3	4678.8	4678.8	2373.3	647.8	120.9	50.5	29.4	15.2	11.3
0		15.2	29.4	50.5	120.9	647.8	2373.3	4678.8	4678.8	2373.3	647.8	120.9	50.5	29.4	15.2	
-10	10.3	14.6	28.3	47.2	93.3	367.7	1264.6	2439.4	2439.4	1264.6	367.7	93.3	47.2	28.3	14.6	10.3
-20		13.5	26.3	42.1	67.8	142.1	389.5	705.6	705.6	389.5	142.1	67.8	42.1	26.3	13.5	
-30	7.8	11.9	23.4	36.6	52.6	74.9	109.3	145.5	145.5	109.3	74.9	52.6	36.6	23.4	11.9	7.8
-40		9.8	19.6	30.9	42.4	53.8	64.2	70.8	70.8	64.2	53.8	42.4	30.9	19.6	9.8	
-50	4.6	7.3	15.0	24.0	33.2	41.3	47.4	50.7	50.7	47.4	41.3	33.2	24.0	15.0	7.3	4.6
-60		4.8	9.8	16.2	22.8	28.6	33.0	35.4	35.4	33.0	28.6	22.8	16.2	9.8	4.8	
-70	1.4	10.0		25.5		40.7		47.0		40.7		25.5		10.0		1.4
-80		10.0		25.5		40.7		47.0		40.7		25.5		10.0		
-90	1.4	10.0		25.5		40.7		47.0		40.7		25.5		10.0		1.4

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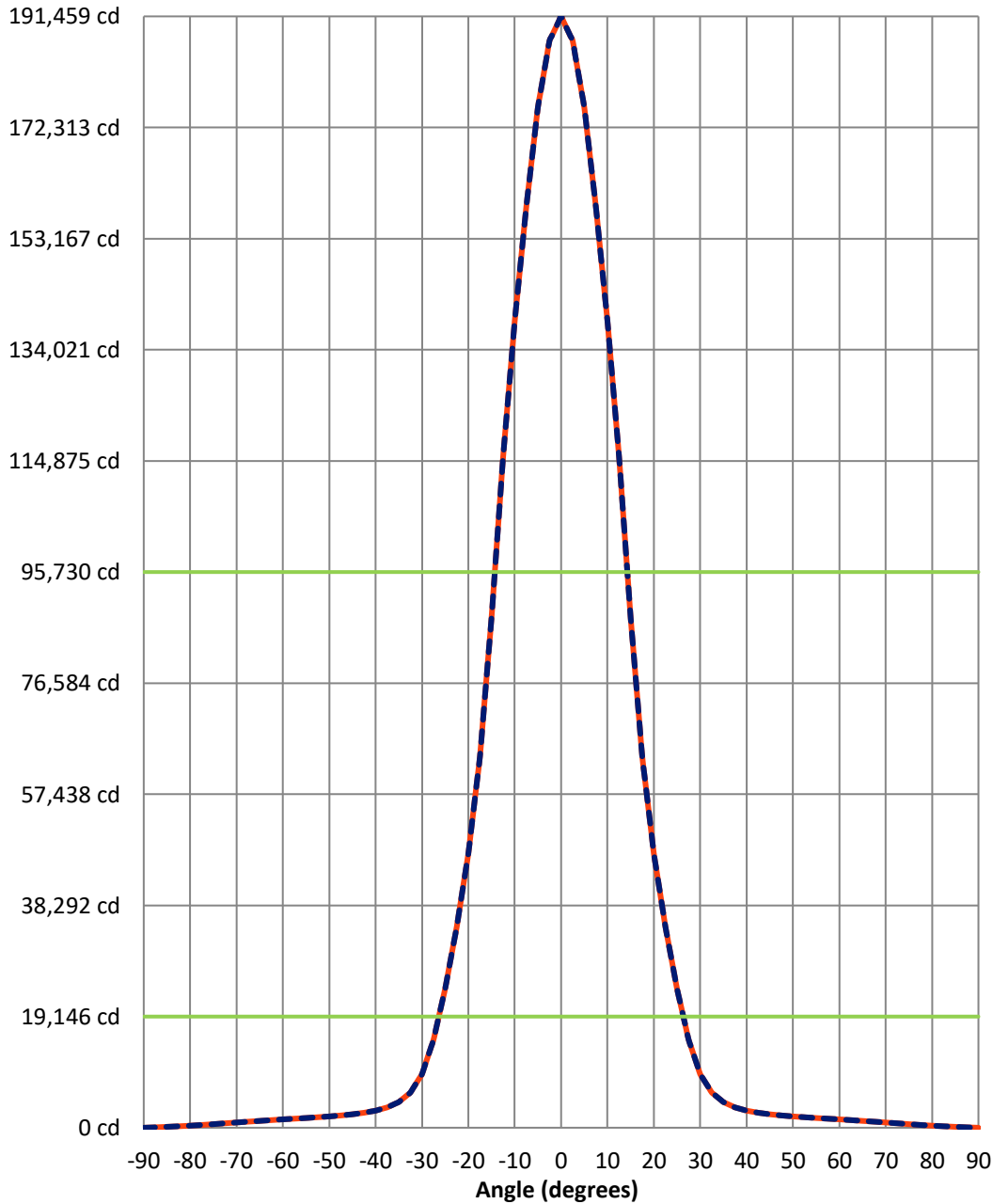
### Luminous Intensity Polar Plot



— 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: 21364.2  
 Efficiency: 36.1%

**Field:**  
 H Angle: 52.7°  
 V Angle: 52.7°  
 Lumens: 36076.3  
 Efficiency: 60.9%

**Spill:**  
 Lumens: 23133.9  
 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°	67.9	67.9	67.9	67.9	67.9	67.9	67.9	61.7	61.7	61.7	61.7
85°	154.3	154.3	154.3	154.3	154.3	148.2	148.2	148.2	142.0	142.0	135.8
82.5°	246.9	246.9	246.9	246.9	240.8	240.8	234.6	234.6	228.4	228.4	222.2
80°	351.9	351.9	351.9	351.9	345.7	339.5	339.5	333.4	327.2	321.0	314.8
77.5°	475.3	475.3	475.3	469.2	463.0	463.0	456.8	444.5	438.3	426.0	419.8
75°	611.2	611.2	611.2	605.0	598.8	592.6	580.3	574.1	561.8	549.4	530.9
72.5°	759.3	759.3	759.3	753.1	740.8	734.6	722.3	709.9	697.6	679.1	660.5
70°	901.3	901.3	901.3	889.0	882.8	870.4	858.1	845.7	827.2	808.7	790.2
67.5°	1043.3	1043.3	1043.3	1030.9	1024.8	1012.4	1000.1	981.6	963.0	938.3	919.8
65°	1172.9	1172.9	1166.8	1160.6	1154.4	1142.1	1123.5	1111.2	1092.7	1068.0	1043.3
62.5°	1308.7	1308.7	1302.6	1296.4	1284.0	1271.7	1253.2	1234.7	1210.0	1185.3	1160.6
60°	1444.6	1444.6	1438.4	1432.2	1419.9	1401.3	1382.8	1364.3	1339.6	1308.7	1277.9
57.5°	1555.7	1555.7	1549.5	1543.3	1531.0	1518.6	1500.1	1481.6	1456.9	1432.2	1395.2
55°	1673.0	1673.0	1666.8	1654.4	1642.1	1629.8	1611.2	1586.5	1561.8	1531.0	1506.3
52.5°	1808.8	1808.8	1802.6	1790.3	1771.7	1753.2	1728.5	1697.7	1666.8	1635.9	1598.9
50°	1944.6	1944.6	1932.2	1919.9	1907.6	1882.9	1858.2	1827.3	1790.3	1753.2	1710.0
47.5°	2111.3	2111.3	2098.9	2080.4	2055.7	2031.0	1994.0	1950.8	1913.7	1870.5	1821.1
45°	2315.0	2315.0	2296.5	2278.0	2247.1	2203.9	2160.7	2111.3	2055.7	2000.2	1938.4
42.5°	2580.4	2580.4	2555.8	2524.9	2481.7	2426.1	2358.2	2290.3	2222.4	2148.3	2074.2
40°	2938.5	2938.5	2901.5	2858.2	2790.3	2710.1	2611.3	2518.7	2426.1	2321.2	2228.6
37.5°	3500.3	3500.3	3438.5	3358.3	3247.2	3111.3	2944.7	2821.2	2679.2	2543.4	2419.9
35°	4420.1	4420.1	4309.0	4167.0	3969.4	3722.5	3457.1	3247.2	3012.6	2821.2	2642.2
32.5°	6056.0	6056.0	5833.8	5556.0	5179.4	4697.9	4253.4	3883.0	3500.3	3203.9	2920.0
30°	9222.9	9222.9	8747.6	8161.1	7352.4	6340.0	5580.7	4870.7	4222.5	3734.9	3321.2
27.5°	15167.8	14920.9	14180.1	12964.0	11297.2	9222.9	7901.8	6401.7	5377.0	4444.8	3870.7
25°	23946.3	23538.8	22316.5	20322.5	17606.3	14525.8	11828.1	8982.2	7185.7	5636.2	4568.3
22.5°	34613.8	34052.0	32391.4	29681.3	26008.2	21909.1	17544.6	13451.6	9809.4	7451.2	5636.2
20°	47244.4	46491.2	44262.7	40645.1	35780.5	30564.1	24736.5	19254.6	14001.1	9809.4	7185.7
17.5°	63918.5	62770.2	59393.4	53960.9	47244.4	40213.0	32928.5	25853.8	19254.6	13451.6	8982.2
15°	87889.5	85951.0	80283.9	71283.2	60825.7	51022.4	41731.6	32928.5	24736.5	17544.6	11828.1
12.5°	115601.5	112903.7	105094.5	92914.5	78703.6	63202.4	51022.4	40213.0	30564.1	21909.1	14525.8
10°	138948.9	136103.0	128034.5	115817.5	97797.6	78703.6	60825.7	47244.4	35780.5	26008.2	17606.3
7.5°	158672.7	155487.2	146789.0	133423.8	115817.5	92914.5	71283.2	53960.9	40645.1	29681.3	20322.5
5°	175803.6	171766.3	161642.0	146789.0	128034.5	105094.5	80283.9	59393.4	44262.7	32391.4	22316.5
2.5°	187248.9	182507.8	171766.3	155487.2	136103.0	112903.7	85951.0	62770.2	46491.2	34052.0	23538.8
0°	191459.1	187248.9	175803.6	158672.7	138948.9	115601.5	87889.5	63918.5	47244.4	34613.8	23946.3



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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°	61.7	61.7	55.6	55.6	55.6	49.4	49.4	49.4	43.2	43.2	43.2
85°	135.8	129.6	129.6	123.5	117.3	111.1	111.1	104.9	98.8	92.6	86.4
82.5°	216.1	209.9	203.7	197.5	191.4	179.0	172.9	166.7	154.3	148.2	142.0
80°	302.5	296.3	284.0	277.8	265.5	253.1	240.8	228.4	216.1	203.7	191.4
77.5°	407.4	388.9	376.6	364.2	345.7	333.4	314.8	302.5	284.0	265.5	246.9
75°	518.6	500.0	481.5	463.0	444.5	419.8	401.3	376.6	358.1	333.4	314.8
72.5°	642.0	617.3	592.6	567.9	543.3	518.6	493.9	463.0	438.3	407.4	376.6
70°	765.5	740.8	716.1	685.2	654.4	623.5	592.6	555.6	524.7	487.7	450.7
67.5°	895.1	864.3	833.4	802.5	771.7	734.6	691.4	654.4	611.2	567.9	530.9
65°	1018.6	987.7	950.7	913.7	876.6	839.6	796.4	753.1	703.8	654.4	611.2
62.5°	1129.7	1098.8	1068.0	1024.8	987.7	944.5	901.3	845.7	796.4	747.0	691.4
60°	1247.0	1210.0	1172.9	1129.7	1086.5	1043.3	993.9	938.3	889.0	827.2	771.7
57.5°	1358.1	1321.1	1277.9	1234.7	1185.3	1135.9	1086.5	1030.9	975.4	913.7	851.9
55°	1469.2	1432.2	1389.0	1339.6	1284.0	1228.5	1172.9	1117.4	1061.8	993.9	926.0
52.5°	1561.8	1524.8	1481.6	1444.6	1382.8	1327.3	1265.5	1197.6	1135.9	1068.0	1000.1
50°	1660.6	1617.4	1568.0	1524.8	1475.4	1419.9	1352.0	1284.0	1210.0	1142.1	1068.0
47.5°	1771.7	1716.2	1660.6	1605.1	1555.7	1493.9	1438.4	1364.3	1290.2	1210.0	1135.9
45°	1882.9	1821.1	1759.4	1691.5	1629.8	1568.0	1506.3	1444.6	1364.3	1284.0	1197.6
42.5°	2000.2	1926.1	1858.2	1790.3	1716.2	1642.1	1574.2	1506.3	1438.4	1352.0	1265.5
40°	2136.0	2049.5	1963.1	1882.9	1808.8	1722.4	1642.1	1568.0	1493.9	1419.9	1327.3
37.5°	2290.3	2185.4	2080.4	1981.6	1889.0	1808.8	1716.2	1629.8	1555.7	1475.4	1382.8
35°	2487.8	2333.5	2210.0	2086.6	1981.6	1882.9	1790.3	1691.5	1605.1	1524.8	1444.6
32.5°	2710.1	2518.7	2352.0	2210.0	2080.4	1963.1	1858.2	1759.4	1660.6	1568.0	1481.6
30°	2981.7	2734.8	2518.7	2333.5	2185.4	2049.5	1926.1	1821.1	1716.2	1617.4	1524.8
27.5°	3364.5	2981.7	2710.1	2487.8	2290.3	2136.0	2000.2	1882.9	1771.7	1660.6	1561.8
25°	3870.7	3321.2	2920.0	2642.2	2419.9	2228.6	2074.2	1938.4	1821.1	1710.0	1598.9
22.5°	4444.8	3734.9	3203.9	2821.2	2543.4	2321.2	2148.3	2000.2	1870.5	1753.2	1635.9
20°	5377.0	4222.5	3500.3	3012.6	2679.2	2426.1	2222.4	2055.7	1913.7	1790.3	1666.8
17.5°	6401.7	4870.7	3883.0	3247.2	2821.2	2518.7	2290.3	2111.3	1950.8	1827.3	1697.7
15°	7901.8	5580.7	4253.4	3457.1	2944.7	2611.3	2358.2	2160.7	1994.0	1858.2	1728.5
12.5°	9222.9	6340.0	4697.9	3722.5	3111.3	2710.1	2426.1	2203.9	2031.0	1882.9	1753.2
10°	11297.2	7352.4	5179.4	3969.4	3247.2	2790.3	2481.7	2247.1	2055.7	1907.6	1771.7
7.5°	12964.0	8161.1	5556.0	4167.0	3358.3	2858.2	2524.9	2278.0	2080.4	1919.9	1790.3
5°	14180.1	8747.6	5833.8	4309.0	3438.5	2901.5	2555.8	2296.5	2098.9	1932.2	1802.6
2.5°	14920.9	9222.9	6056.0	4420.1	3500.3	2938.5	2580.4	2315.0	2111.3	1944.6	1808.8
0°	15167.8	9222.9	6056.0	4420.1	3500.3	2938.5	2580.4	2315.0	2111.3	1944.6	1808.8





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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°	37.0	37.0	30.9	30.9	30.9	24.7	24.7	18.5	18.5	12.3	12.3
85°	80.3	74.1	67.9	61.7	55.6	49.4	49.4	43.2	37.0	30.9	24.7
82.5°	129.6	123.5	111.1	98.8	92.6	80.3	67.9	61.7	55.6	43.2	37.0
80°	179.0	166.7	154.3	142.0	129.6	111.1	98.8	86.4	67.9	55.6	49.4
77.5°	234.6	216.1	197.5	179.0	160.5	148.2	129.6	111.1	92.6	74.1	55.6
75°	290.1	265.5	246.9	222.2	203.7	179.0	154.3	135.8	117.3	92.6	67.9
72.5°	351.9	321.0	296.3	265.5	240.8	216.1	185.2	160.5	135.8	111.1	86.4
70°	419.8	382.7	345.7	314.8	284.0	246.9	216.1	185.2	154.3	129.6	98.8
67.5°	487.7	444.5	401.3	358.1	321.0	284.0	246.9	216.1	179.0	148.2	111.1
65°	555.6	506.2	463.0	413.6	364.2	321.0	284.0	240.8	203.7	160.5	129.6
62.5°	629.7	574.1	518.6	463.0	413.6	358.1	314.8	265.5	222.2	179.0	142.0
60°	709.9	648.2	580.3	518.6	463.0	401.3	345.7	296.3	246.9	197.5	154.3
57.5°	784.0	716.1	648.2	574.1	506.2	444.5	382.7	321.0	265.5	216.1	166.7
55°	858.1	784.0	709.9	629.7	555.6	487.7	419.8	351.9	290.1	234.6	179.0
52.5°	926.0	851.9	771.7	691.4	611.2	530.9	450.7	376.6	314.8	246.9	191.4
50°	993.9	913.7	827.2	747.0	654.4	567.9	487.7	407.4	333.4	265.5	203.7
47.5°	1061.8	975.4	889.0	796.4	703.8	611.2	524.7	438.3	358.1	284.0	216.1
45°	1117.4	1030.9	938.3	845.7	753.1	654.4	555.6	463.0	376.6	302.5	228.4
42.5°	1172.9	1086.5	993.9	901.3	796.4	691.4	592.6	493.9	401.3	314.8	240.8
40°	1228.5	1135.9	1043.3	944.5	839.6	734.6	623.5	518.6	419.8	333.4	253.1
37.5°	1284.0	1185.3	1086.5	987.7	876.6	771.7	654.4	543.3	444.5	345.7	265.5
35°	1339.6	1234.7	1129.7	1024.8	913.7	802.5	685.2	567.9	463.0	364.2	277.8
32.5°	1389.0	1277.9	1172.9	1068.0	950.7	833.4	716.1	592.6	481.5	376.6	284.0
30°	1432.2	1321.1	1210.0	1098.8	987.7	864.3	740.8	617.3	500.0	388.9	296.3
27.5°	1469.2	1358.1	1247.0	1129.7	1018.6	895.1	765.5	642.0	518.6	407.4	302.5
25°	1506.3	1395.2	1277.9	1160.6	1043.3	919.8	790.2	660.5	530.9	419.8	314.8
22.5°	1531.0	1432.2	1308.7	1185.3	1068.0	938.3	808.7	679.1	549.4	426.0	321.0
20°	1561.8	1456.9	1339.6	1210.0	1092.7	963.0	827.2	697.6	561.8	438.3	327.2
17.5°	1586.5	1481.6	1364.3	1234.7	1111.2	981.6	845.7	709.9	574.1	444.5	333.4
15°	1611.2	1500.1	1382.8	1253.2	1123.5	1000.1	858.1	722.3	580.3	456.8	339.5
12.5°	1629.8	1518.6	1401.3	1271.7	1142.1	1012.4	870.4	734.6	592.6	463.0	339.5
10°	1642.1	1531.0	1419.9	1284.0	1154.4	1024.8	882.8	740.8	598.8	463.0	345.7
7.5°	1654.4	1543.3	1432.2	1296.4	1160.6	1030.9	889.0	753.1	605.0	469.2	351.9
5°	1666.8	1549.5	1438.4	1302.6	1166.8	1043.3	901.3	759.3	611.2	475.3	351.9
2.5°	1673.0	1555.7	1444.6	1308.7	1172.9	1043.3	901.3	759.3	611.2	475.3	351.9
0°	1673.0	1555.7	1444.6	1308.7	1172.9	1043.3	901.3	759.3	611.2	475.3	351.9



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	6.2	6.2	0.0	0.0
85°	18.5	12.3	6.2	0.0
82.5°	24.7	18.5	6.2	0.0
80°	37.0	24.7	12.3	0.0
77.5°	43.2	30.9	12.3	0.0
75°	55.6	37.0	18.5	0.0
72.5°	61.7	43.2	18.5	0.0
70°	67.9	49.4	24.7	0.0
67.5°	80.3	49.4	24.7	0.0
65°	92.6	55.6	30.9	0.0
62.5°	98.8	61.7	30.9	0.0
60°	111.1	67.9	30.9	0.0
57.5°	123.5	74.1	37.0	0.0
55°	129.6	80.3	37.0	0.0
52.5°	142.0	86.4	43.2	0.0
50°	148.2	92.6	43.2	0.0
47.5°	154.3	98.8	43.2	0.0
45°	166.7	104.9	49.4	0.0
42.5°	172.9	111.1	49.4	0.0
40°	179.0	111.1	49.4	0.0
37.5°	191.4	117.3	55.6	0.0
35°	197.5	123.5	55.6	0.0
32.5°	203.7	129.6	55.6	0.0
30°	209.9	129.6	61.7	0.0
27.5°	216.1	135.8	61.7	0.0
25°	222.2	135.8	61.7	0.0
22.5°	228.4	142.0	61.7	0.0
20°	228.4	142.0	61.7	0.0
17.5°	234.6	148.2	61.7	0.0
15°	234.6	148.2	67.9	0.0
12.5°	240.8	148.2	67.9	0.0
10°	240.8	154.3	67.9	0.0
7.5°	246.9	154.3	67.9	0.0
5°	246.9	154.3	67.9	0.0
2.5°	246.9	154.3	67.9	0.0
0°	246.9	154.3	67.9	0.0

(END OF REPORT)