

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: P624085

Luminaire Tested: **EPH-VN-04-E-740-U-44**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624085  
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-740-U-44  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 4 distribution lens  
Light Source: (64) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	36315.4 lumens	Max Intensity:	117427.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	119.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

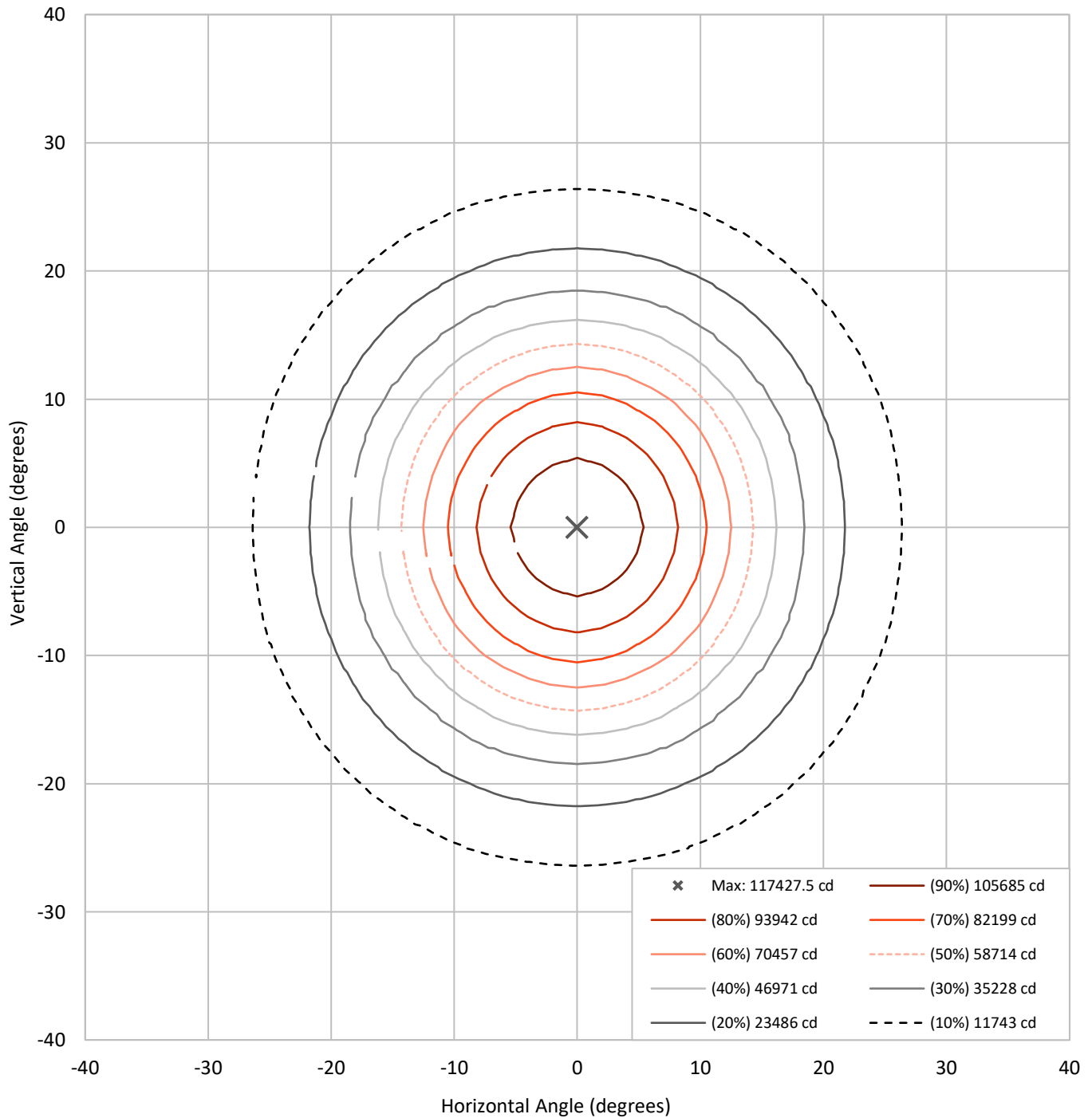
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	13103.3 lumens	Field Lumens:	22126.7 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

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



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### Iso-Candela Plot





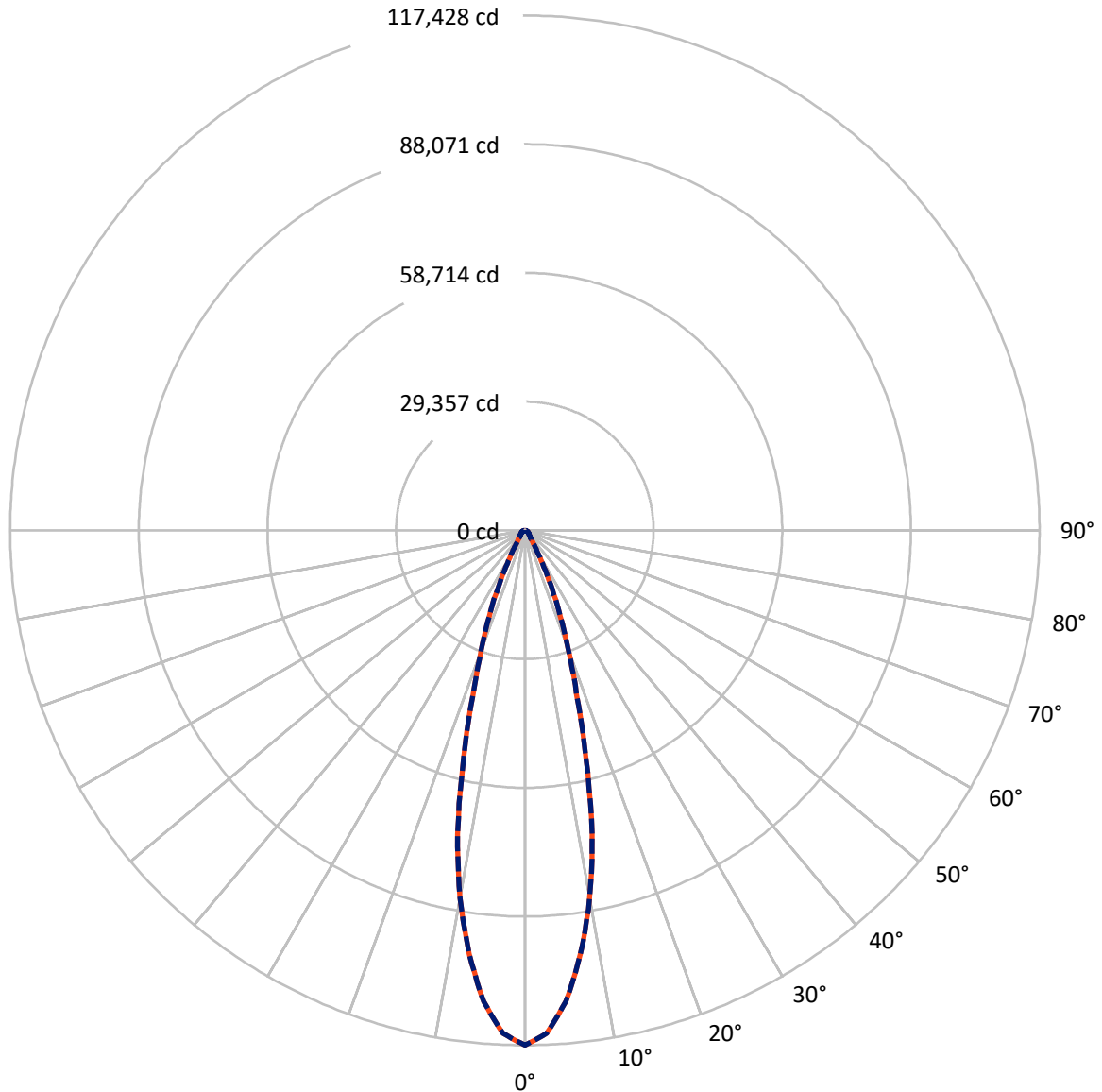
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### Lumen Table

90	0.9	6.2	15.6	25.0	28.8	25.0	15.6	6.2	0.9							
80	0.9	6.2	15.6	25.0	28.8	25.0	15.6	6.2	0.9							
70	2.8	2.9	6.0	9.9	14.0	17.6	20.3	21.7	21.7	20.3	17.6	14.0	9.9	6.0	2.9	2.8
60		4.5	9.2	14.7	20.4	25.3	29.1	31.1	31.1	29.1	25.3	20.4	14.7	9.2	4.5	
50	4.8	6.0	12.0	18.9	26.0	33.0	39.4	43.4	43.4	39.4	33.0	26.0	18.9	12.0	6.0	4.8
40		7.3	14.3	22.5	32.3	45.9	67.0	89.3	89.3	67.0	45.9	32.3	22.5	14.3	7.3	
30	6.3	8.3	16.1	25.8	41.6	87.1	238.9	432.7	432.7	238.9	87.1	41.6	25.8	16.1	8.3	6.3
20		9.0	17.4	29.0	57.2	225.5	775.6	1496.1	1496.1	775.6	225.5	57.2	29.0	17.4	9.0	
10	6.9	9.3	18.0	31.0	74.2	397.3	1455.6	2869.7	2869.7	1455.6	397.3	74.2	31.0	18.0	9.3	6.9
0		9.3	18.0	31.0	74.2	397.3	1455.6	2869.7	2869.7	1455.6	397.3	74.2	31.0	18.0	9.3	
-10	6.3	9.0	17.4	29.0	57.2	225.5	775.6	1496.1	1496.1	775.6	225.5	57.2	29.0	17.4	9.0	6.3
-20		8.3	16.1	25.8	41.6	87.1	238.9	432.7	432.7	238.9	87.1	41.6	25.8	16.1	8.3	
-30	4.8	7.3	14.3	22.5	32.3	45.9	67.0	89.3	89.3	67.0	45.9	32.3	22.5	14.3	7.3	4.8
-40		6.0	12.0	18.9	26.0	33.0	39.4	43.4	43.4	39.4	33.0	26.0	18.9	12.0	6.0	
-50	2.8	4.5	9.2	14.7	20.4	25.3	29.1	31.1	31.1	29.1	25.3	20.4	14.7	9.2	4.5	2.8
-60		2.9	6.0	9.9	14.0	17.6	20.3	21.7	21.7	20.3	17.6	14.0	9.9	6.0	2.9	
-70	0.9	6.2	15.6	25.0	28.8	25.0	15.6	6.2	0.9							
-80		0.9	6.2	15.6	25.0	28.8	25.0	15.6	6.2	0.9						
-90	0.9	6.2	15.6	25.0	28.8	25.0	15.6	6.2	0.9							

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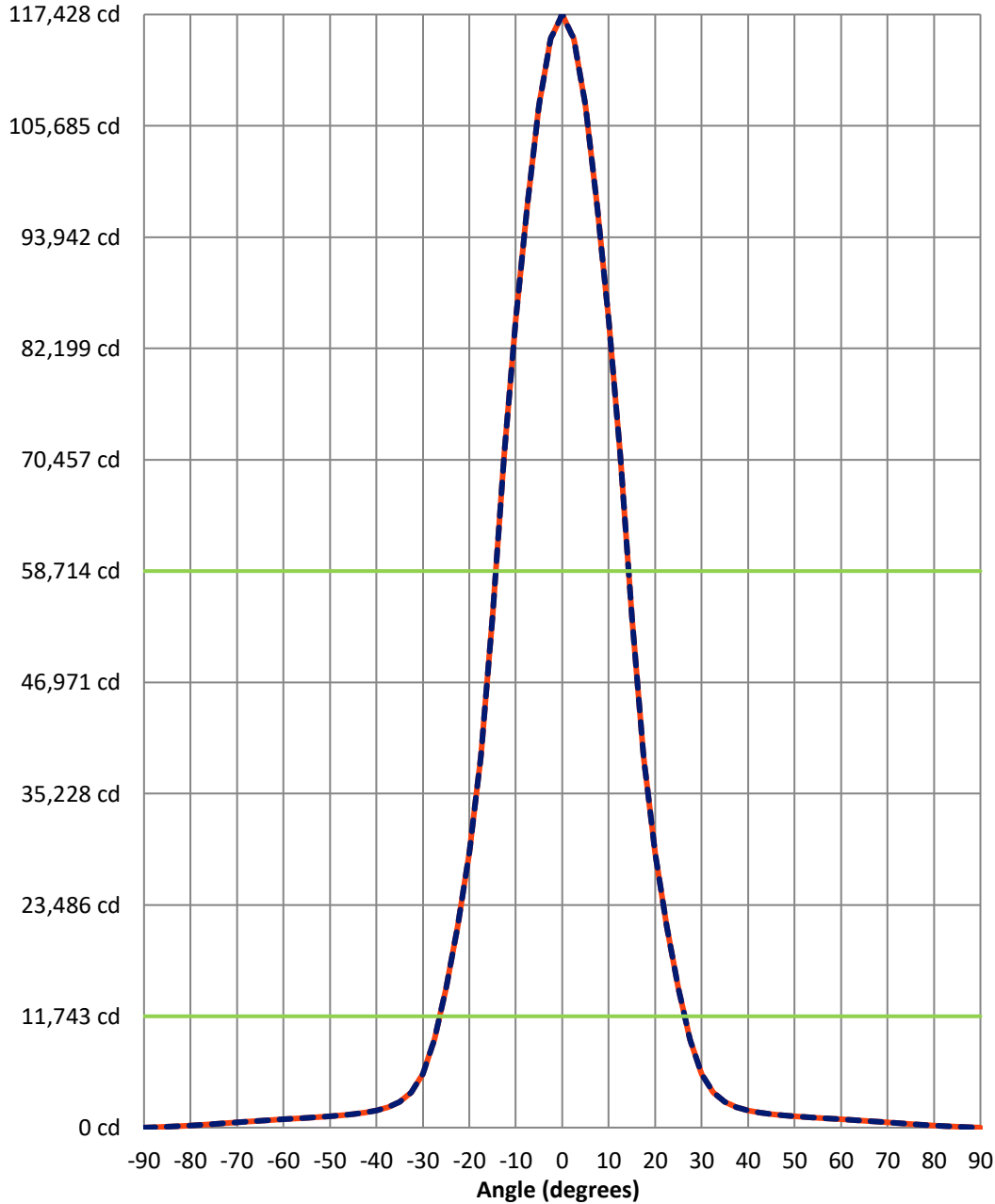
### Luminous Intensity Polar Plot



— 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: 13103.3  
Efficiency: 36.1%

**Field:**  
H Angle: 52.7°  
V Angle: 52.7°  
Lumens: 22126.7  
Efficiency: 60.9%

**Spill:**  
Lumens: 14188.7  
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°	41.6	41.6	41.6	41.6	41.6	41.6	41.6	37.9	37.9	37.9	37.9
85°	94.7	94.7	94.7	94.7	94.7	90.9	90.9	90.9	87.1	87.1	83.3
82.5°	151.5	151.5	151.5	151.5	147.7	147.7	143.9	143.9	140.1	140.1	136.3
80°	215.8	215.8	215.8	215.8	212.0	208.2	208.2	204.5	200.7	196.9	193.1
77.5°	291.5	291.5	291.5	287.8	284.0	284.0	280.2	272.6	268.8	261.3	257.5
75°	374.8	374.8	374.8	371.1	367.3	363.5	355.9	352.1	344.6	337.0	325.6
72.5°	465.7	465.7	465.7	461.9	454.4	450.6	443.0	435.4	427.8	416.5	405.1
70°	552.8	552.8	552.8	545.2	541.4	533.9	526.3	518.7	507.4	496.0	484.6
67.5°	639.9	639.9	639.9	632.3	628.5	620.9	613.4	602.0	590.7	575.5	564.2
65°	719.4	719.4	715.6	711.8	708.0	700.5	689.1	681.5	670.2	655.0	639.9
62.5°	802.7	802.7	798.9	795.1	787.5	780.0	768.6	757.3	742.1	727.0	711.8
60°	886.0	886.0	882.2	878.4	870.8	859.5	848.1	836.8	821.6	802.7	783.8
57.5°	954.1	954.1	950.4	946.6	939.0	931.4	920.1	908.7	893.6	878.4	855.7
55°	1026.1	1026.1	1022.3	1014.7	1007.1	999.6	988.2	973.1	957.9	939.0	923.9
52.5°	1109.4	1109.4	1105.6	1098.0	1086.7	1075.3	1060.2	1041.2	1022.3	1003.4	980.6
50°	1192.7	1192.7	1185.1	1177.5	1170.0	1154.8	1139.7	1120.7	1098.0	1075.3	1048.8
47.5°	1294.9	1294.9	1287.3	1276.0	1260.8	1245.7	1223.0	1196.5	1173.7	1147.2	1117.0
45°	1419.9	1419.9	1408.5	1397.1	1378.2	1351.7	1325.2	1294.9	1260.8	1226.8	1188.9
42.5°	1582.7	1582.7	1567.5	1548.6	1522.1	1488.0	1446.4	1404.7	1363.1	1317.6	1272.2
40°	1802.3	1802.3	1779.5	1753.0	1711.4	1662.2	1601.6	1544.8	1488.0	1423.6	1366.8
37.5°	2146.8	2146.8	2109.0	2059.7	1991.6	1908.3	1806.1	1730.3	1643.2	1559.9	1484.2
35°	2711.0	2711.0	2642.8	2555.7	2434.6	2283.1	2120.3	1991.6	1847.7	1730.3	1620.5
32.5°	3714.3	3714.3	3578.0	3407.6	3176.7	2881.4	2608.7	2381.6	2146.8	1965.1	1790.9
30°	5656.7	5656.7	5365.2	5005.5	4509.5	3888.5	3422.8	2987.4	2589.8	2290.7	2037.0
27.5°	9302.9	9151.4	8697.1	7951.2	6928.9	5656.7	4846.4	3926.4	3297.8	2726.1	2374.0
25°	14687.0	14437.1	13687.4	12464.4	10798.5	8909.1	7254.5	5509.0	4407.2	3456.9	2801.8
22.5°	21229.6	20885.1	19866.6	18204.4	15951.6	13437.5	10760.6	8250.3	6016.4	4570.0	3456.9
20°	28976.4	28514.4	27147.6	24928.8	21945.2	18745.8	15171.6	11809.4	8587.3	6016.4	4407.2
17.5°	39203.1	38498.8	36427.8	33095.8	28976.4	24663.8	20196.0	15856.9	11809.4	8250.3	5509.0
15°	53905.2	52716.3	49240.5	43720.1	37306.2	31293.6	25595.2	20196.0	15171.6	10760.6	7254.5
12.5°	70901.8	69247.2	64457.5	56987.2	48271.2	38763.9	31293.6	24663.8	18745.8	13437.5	8909.1
10°	85221.5	83476.0	78527.3	71034.3	59982.2	48271.2	37306.2	28976.4	21945.2	15951.6	10798.5
7.5°	97318.6	95364.9	90030.0	81832.8	71034.3	56987.2	43720.1	33095.8	24928.8	18204.4	12464.4
5°	107825.5	105349.3	99139.8	90030.0	78527.3	64457.5	49240.5	36427.8	27147.6	19866.6	13687.4
2.5°	114845.3	111937.4	105349.3	95364.9	83476.0	69247.2	52716.3	38498.8	28514.4	20885.1	14437.1
0°	117427.5	114845.3	107825.5	97318.6	85221.5	70901.8	53905.2	39203.1	28976.4	21229.6	14687.0



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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°	37.9	37.9	34.1	34.1	34.1	30.3	30.3	30.3	26.5	26.5	26.5
85°	83.3	79.5	79.5	75.7	71.9	68.2	68.2	64.4	60.6	56.8	53.0
82.5°	132.5	128.7	124.9	121.2	117.4	109.8	106.0	102.2	94.7	90.9	87.1
80°	185.5	181.7	174.2	170.4	162.8	155.2	147.7	140.1	132.5	124.9	117.4
77.5°	249.9	238.5	231.0	223.4	212.0	204.5	193.1	185.5	174.2	162.8	151.5
75°	318.0	306.7	295.3	284.0	272.6	257.5	246.1	231.0	219.6	204.5	193.1
72.5°	393.8	378.6	363.5	348.3	333.2	318.0	302.9	284.0	268.8	249.9	231.0
70°	469.5	454.4	439.2	420.3	401.3	382.4	363.5	340.8	321.8	299.1	276.4
67.5°	549.0	530.1	511.1	492.2	473.3	450.6	424.1	401.3	374.8	348.3	325.6
65°	624.7	605.8	583.1	560.4	537.7	514.9	488.4	461.9	431.6	401.3	374.8
62.5°	692.9	674.0	655.0	628.5	605.8	579.3	552.8	518.7	488.4	458.1	424.1
60°	764.8	742.1	719.4	692.9	666.4	639.9	609.6	575.5	545.2	507.4	473.3
57.5°	833.0	810.3	783.8	757.3	727.0	696.7	666.4	632.3	598.2	560.4	522.5
55°	901.1	878.4	851.9	821.6	787.5	753.5	719.4	685.3	651.2	609.6	567.9
52.5°	957.9	935.2	908.7	886.0	848.1	814.0	776.2	734.5	696.7	655.0	613.4
50°	1018.5	992.0	961.7	935.2	904.9	870.8	829.2	787.5	742.1	700.5	655.0
47.5°	1086.7	1052.6	1018.5	984.4	954.1	916.3	882.2	836.8	791.3	742.1	696.7
45°	1154.8	1117.0	1079.1	1037.4	999.6	961.7	923.9	886.0	836.8	787.5	734.5
42.5°	1226.8	1181.3	1139.7	1098.0	1052.6	1007.1	965.5	923.9	882.2	829.2	776.2
40°	1310.1	1257.0	1204.0	1154.8	1109.4	1056.4	1007.1	961.7	916.3	870.8	814.0
37.5°	1404.7	1340.3	1276.0	1215.4	1158.6	1109.4	1052.6	999.6	954.1	904.9	848.1
35°	1525.9	1431.2	1355.5	1279.8	1215.4	1154.8	1098.0	1037.4	984.4	935.2	886.0
32.5°	1662.2	1544.8	1442.6	1355.5	1276.0	1204.0	1139.7	1079.1	1018.5	961.7	908.7
30°	1828.8	1677.3	1544.8	1431.2	1340.3	1257.0	1181.3	1117.0	1052.6	992.0	935.2
27.5°	2063.5	1828.8	1662.2	1525.9	1404.7	1310.1	1226.8	1154.8	1086.7	1018.5	957.9
25°	2374.0	2037.0	1790.9	1620.5	1484.2	1366.8	1272.2	1188.9	1117.0	1048.8	980.6
22.5°	2726.1	2290.7	1965.1	1730.3	1559.9	1423.6	1317.6	1226.8	1147.2	1075.3	1003.4
20°	3297.8	2589.8	2146.8	1847.7	1643.2	1488.0	1363.1	1260.8	1173.7	1098.0	1022.3
17.5°	3926.4	2987.4	2381.6	1991.6	1730.3	1544.8	1404.7	1294.9	1196.5	1120.7	1041.2
15°	4846.4	3422.8	2608.7	2120.3	1806.1	1601.6	1446.4	1325.2	1223.0	1139.7	1060.2
12.5°	5656.7	3888.5	2881.4	2283.1	1908.3	1662.2	1488.0	1351.7	1245.7	1154.8	1075.3
10°	6928.9	4509.5	3176.7	2434.6	1991.6	1711.4	1522.1	1378.2	1260.8	1170.0	1086.7
7.5°	7951.2	5005.5	3407.6	2555.7	2059.7	1753.0	1548.6	1397.1	1276.0	1177.5	1098.0
5°	8697.1	5365.2	3578.0	2642.8	2109.0	1779.5	1567.5	1408.5	1287.3	1185.1	1105.6
2.5°	9151.4	5656.7	3714.3	2711.0	2146.8	1802.3	1582.7	1419.9	1294.9	1192.7	1109.4
0°	9302.9	5656.7	3714.3	2711.0	2146.8	1802.3	1582.7	1419.9	1294.9	1192.7	1109.4





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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°	22.7	22.7	18.9	18.9	18.9	15.1	15.1	11.4	11.4	7.6	7.6
85°	49.2	45.4	41.6	37.9	34.1	30.3	30.3	26.5	22.7	18.9	15.1
82.5°	79.5	75.7	68.2	60.6	56.8	49.2	41.6	37.9	34.1	26.5	22.7
80°	109.8	102.2	94.7	87.1	79.5	68.2	60.6	53.0	41.6	34.1	30.3
77.5°	143.9	132.5	121.2	109.8	98.4	90.9	79.5	68.2	56.8	45.4	34.1
75°	178.0	162.8	151.5	136.3	124.9	109.8	94.7	83.3	71.9	56.8	41.6
72.5°	215.8	196.9	181.7	162.8	147.7	132.5	113.6	98.4	83.3	68.2	53.0
70°	257.5	234.7	212.0	193.1	174.2	151.5	132.5	113.6	94.7	79.5	60.6
67.5°	299.1	272.6	246.1	219.6	196.9	174.2	151.5	132.5	109.8	90.9	68.2
65°	340.8	310.5	284.0	253.7	223.4	196.9	174.2	147.7	124.9	98.4	79.5
62.5°	386.2	352.1	318.0	284.0	253.7	219.6	193.1	162.8	136.3	109.8	87.1
60°	435.4	397.6	355.9	318.0	284.0	246.1	212.0	181.7	151.5	121.2	94.7
57.5°	480.9	439.2	397.6	352.1	310.5	272.6	234.7	196.9	162.8	132.5	102.2
55°	526.3	480.9	435.4	386.2	340.8	299.1	257.5	215.8	178.0	143.9	109.8
52.5°	567.9	522.5	473.3	424.1	374.8	325.6	276.4	231.0	193.1	151.5	117.4
50°	609.6	560.4	507.4	458.1	401.3	348.3	299.1	249.9	204.5	162.8	124.9
47.5°	651.2	598.2	545.2	488.4	431.6	374.8	321.8	268.8	219.6	174.2	132.5
45°	685.3	632.3	575.5	518.7	461.9	401.3	340.8	284.0	231.0	185.5	140.1
42.5°	719.4	666.4	609.6	552.8	488.4	424.1	363.5	302.9	246.1	193.1	147.7
40°	753.5	696.7	639.9	579.3	514.9	450.6	382.4	318.0	257.5	204.5	155.2
37.5°	787.5	727.0	666.4	605.8	537.7	473.3	401.3	333.2	272.6	212.0	162.8
35°	821.6	757.3	692.9	628.5	560.4	492.2	420.3	348.3	284.0	223.4	170.4
32.5°	851.9	783.8	719.4	655.0	583.1	511.1	439.2	363.5	295.3	231.0	174.2
30°	878.4	810.3	742.1	674.0	605.8	530.1	454.4	378.6	306.7	238.5	181.7
27.5°	901.1	833.0	764.8	692.9	624.7	549.0	469.5	393.8	318.0	249.9	185.5
25°	923.9	855.7	783.8	711.8	639.9	564.2	484.6	405.1	325.6	257.5	193.1
22.5°	939.0	878.4	802.7	727.0	655.0	575.5	496.0	416.5	337.0	261.3	196.9
20°	957.9	893.6	821.6	742.1	670.2	590.7	507.4	427.8	344.6	268.8	200.7
17.5°	973.1	908.7	836.8	757.3	681.5	602.0	518.7	435.4	352.1	272.6	204.5
15°	988.2	920.1	848.1	768.6	689.1	613.4	526.3	443.0	355.9	280.2	208.2
12.5°	999.6	931.4	859.5	780.0	700.5	620.9	533.9	450.6	363.5	284.0	208.2
10°	1007.1	939.0	870.8	787.5	708.0	628.5	541.4	454.4	367.3	284.0	212.0
7.5°	1014.7	946.6	878.4	795.1	711.8	632.3	545.2	461.9	371.1	287.8	215.8
5°	1022.3	950.4	882.2	798.9	715.6	639.9	552.8	465.7	374.8	291.5	215.8
2.5°	1026.1	954.1	886.0	802.7	719.4	639.9	552.8	465.7	374.8	291.5	215.8
0°	1026.1	954.1	886.0	802.7	719.4	639.9	552.8	465.7	374.8	291.5	215.8



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	3.8	3.8	0.0	0.0
85°	11.4	7.6	3.8	0.0
82.5°	15.1	11.4	3.8	0.0
80°	22.7	15.1	7.6	0.0
77.5°	26.5	18.9	7.6	0.0
75°	34.1	22.7	11.4	0.0
72.5°	37.9	26.5	11.4	0.0
70°	41.6	30.3	15.1	0.0
67.5°	49.2	30.3	15.1	0.0
65°	56.8	34.1	18.9	0.0
62.5°	60.6	37.9	18.9	0.0
60°	68.2	41.6	18.9	0.0
57.5°	75.7	45.4	22.7	0.0
55°	79.5	49.2	22.7	0.0
52.5°	87.1	53.0	26.5	0.0
50°	90.9	56.8	26.5	0.0
47.5°	94.7	60.6	26.5	0.0
45°	102.2	64.4	30.3	0.0
42.5°	106.0	68.2	30.3	0.0
40°	109.8	68.2	30.3	0.0
37.5°	117.4	71.9	34.1	0.0
35°	121.2	75.7	34.1	0.0
32.5°	124.9	79.5	34.1	0.0
30°	128.7	79.5	37.9	0.0
27.5°	132.5	83.3	37.9	0.0
25°	136.3	83.3	37.9	0.0
22.5°	140.1	87.1	37.9	0.0
20°	140.1	87.1	37.9	0.0
17.5°	143.9	90.9	37.9	0.0
15°	143.9	90.9	41.6	0.0
12.5°	147.7	90.9	41.6	0.0
10°	147.7	94.7	41.6	0.0
7.5°	151.5	94.7	41.6	0.0
5°	151.5	94.7	41.6	0.0
2.5°	151.5	94.7	41.6	0.0
0°	151.5	94.7	41.6	0.0

(END OF REPORT)