

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: P624116

Luminaire Tested: **EPH-VN-06-E-940-U-44**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624116  
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-940-U-44  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 4 distribution lens  
Light Source: (96) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	39700.6 lumens	Max Intensity:	128373.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	85.5 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		

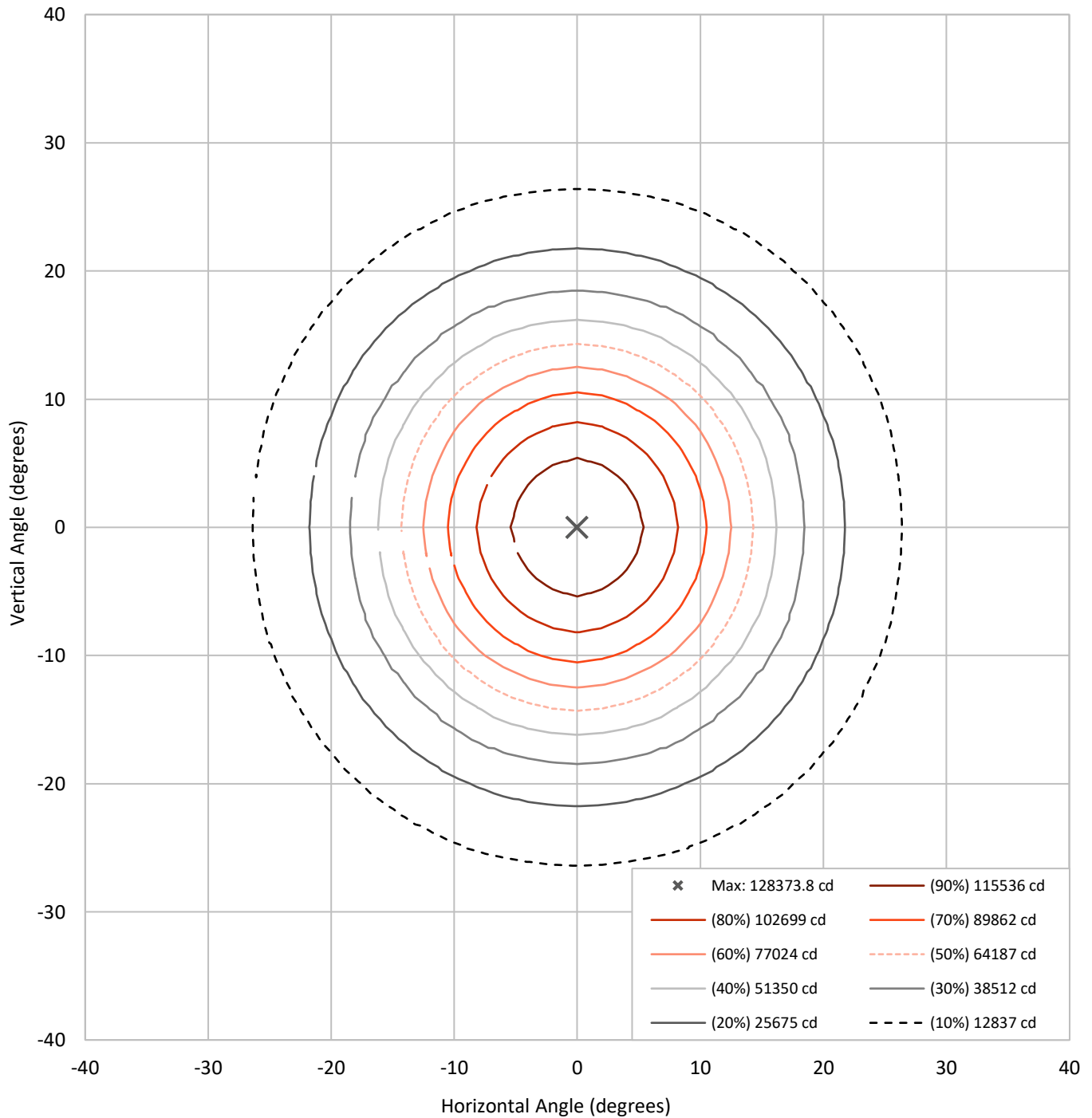
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	14324.7 lumens	Field Lumens:	24189.3 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

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





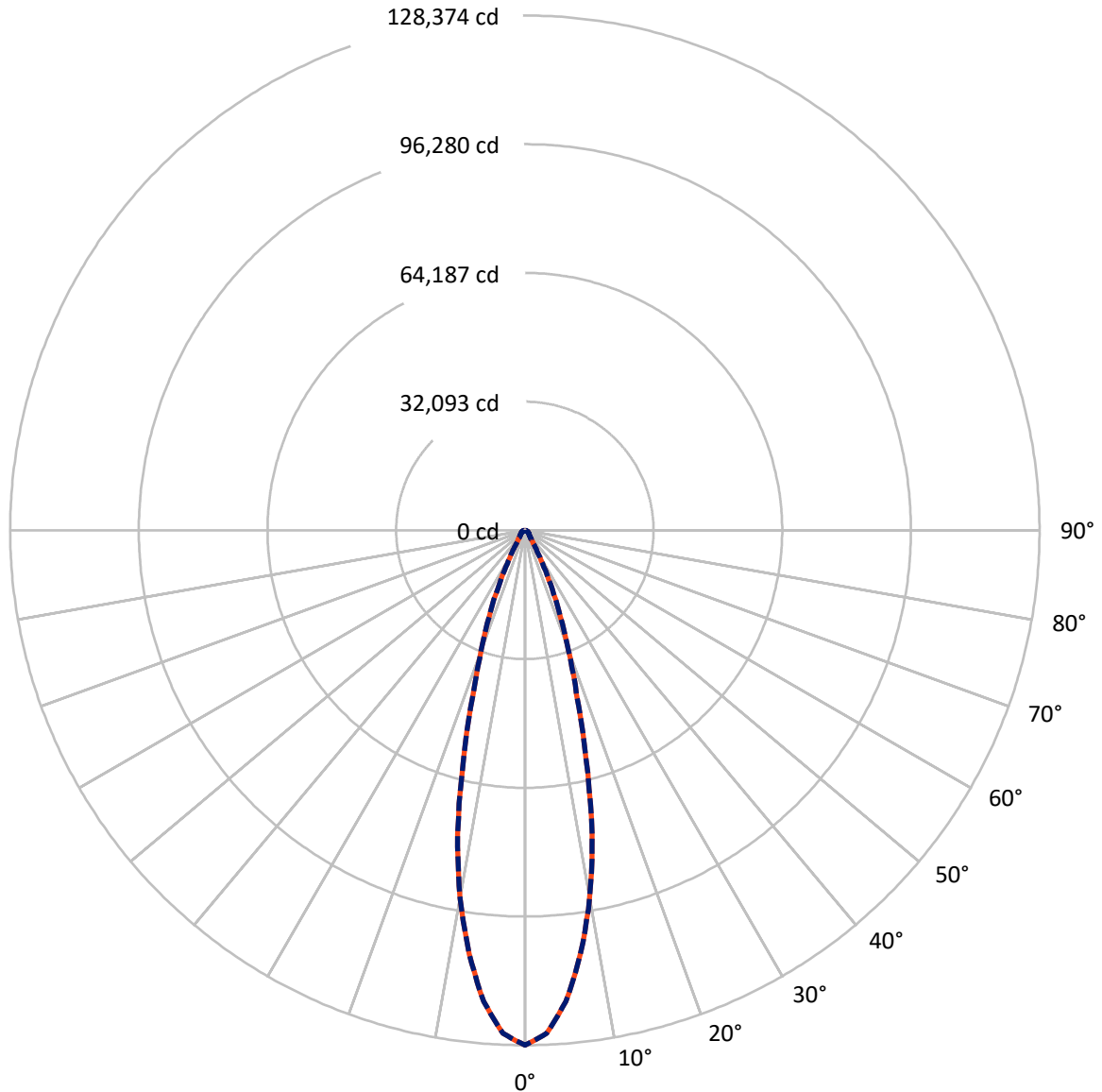
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### Lumen Table

90	0.9	6.7		17.1		27.3		31.5		27.3		17.1		6.7		0.9
80	0.9	6.7		17.1		27.3		31.5		27.3		17.1		6.7		0.9
70	3.1	3.2	6.6	10.8	15.3	19.2	22.1	23.7	23.7	22.1	19.2	15.3	10.8	6.6	3.2	3.1
60		4.9	10.0	16.1	22.3	27.7	31.8	34.0	34.0	31.8	27.7	22.3	16.1	10.0	4.9	
50	5.3	6.6	13.1	20.7	28.4	36.1	43.1	47.5	47.5	43.1	36.1	28.4	20.7	13.1	6.6	5.3
40		8.0	15.7	24.6	35.3	50.2	73.3	97.6	97.6	73.3	50.2	35.3	24.6	15.7	8.0	
30	6.9	9.1	17.6	28.2	45.5	95.3	261.2	473.1	473.1	261.2	95.3	45.5	28.2	17.6	9.1	6.9
20		9.8	19.0	31.7	62.5	246.6	847.9	1635.6	1635.6	847.9	246.6	62.5	31.7	19.0	9.8	
10	7.6	10.2	19.7	33.9	81.1	434.3	1591.3	3137.2	3137.2	1591.3	434.3	81.1	33.9	19.7	10.2	7.6
0		10.2	19.7	33.9	81.1	434.3	1591.3	3137.2	3137.2	1591.3	434.3	81.1	33.9	19.7	10.2	
-10	6.9	9.8	19.0	31.7	62.5	246.6	847.9	1635.6	1635.6	847.9	246.6	62.5	31.7	19.0	9.8	6.9
-20		9.1	17.6	28.2	45.5	95.3	261.2	473.1	473.1	261.2	95.3	45.5	28.2	17.6	9.1	
-30	5.3	8.0	15.7	24.6	35.3	50.2	73.3	97.6	97.6	73.3	50.2	35.3	24.6	15.7	8.0	5.3
-40		6.6	13.1	20.7	28.4	36.1	43.1	47.5	47.5	43.1	36.1	28.4	20.7	13.1	6.6	
-50	3.1	4.9	10.0	16.1	22.3	27.7	31.8	34.0	34.0	31.8	27.7	22.3	16.1	10.0	4.9	3.1
-60		3.2	6.6	10.8	15.3	19.2	22.1	23.7	23.7	22.1	19.2	15.3	10.8	6.6	3.2	
-70	0.9	6.7		17.1		27.3		31.5		27.3		17.1		6.7		0.9
-80		6.7		17.1		27.3		31.5		27.3		17.1		6.7		
-90	0.9	6.7		17.1		27.3		31.5		27.3		17.1		6.7		0.9

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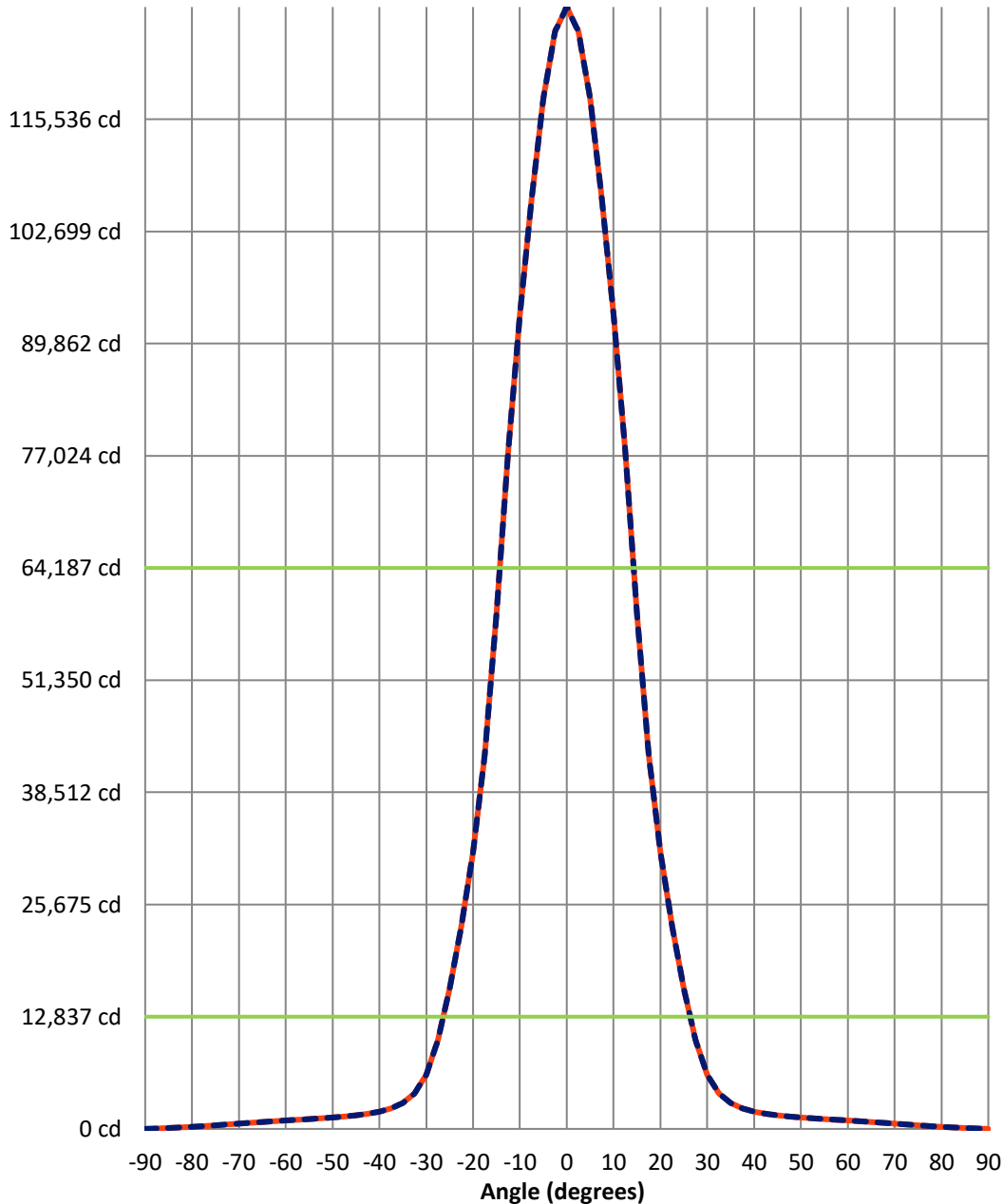
### Luminous Intensity Polar Plot



— 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: 14324.7  
Efficiency: 36.1%

**Field:**  
H Angle: 52.7°  
V Angle: 52.7°  
Lumens: 24189.3  
Efficiency: 60.9%

**Spill:**  
Lumens: 15511.4  
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°	45.5	45.5	45.5	45.5	45.5	45.5	45.5	41.4	41.4	41.4	41.4
85°	103.5	103.5	103.5	103.5	103.5	99.3	99.3	99.3	95.2	95.2	91.1
82.5°	165.6	165.6	165.6	165.6	161.4	161.4	157.3	157.3	153.2	153.2	149.0
80°	235.9	235.9	235.9	235.9	231.8	227.7	227.7	223.5	219.4	215.2	211.1
77.5°	318.7	318.7	318.7	314.6	310.4	310.4	306.3	298.0	293.9	285.6	281.5
75°	409.8	409.8	409.8	405.6	401.5	397.4	389.1	384.9	376.7	368.4	356.0
72.5°	509.1	509.1	509.1	505.0	496.7	492.6	484.3	476.0	467.7	455.3	442.9
70°	604.3	604.3	604.3	596.0	591.9	583.6	575.4	567.1	554.7	542.2	529.8
67.5°	699.5	699.5	699.5	691.2	687.1	678.8	670.6	658.1	645.7	629.2	616.7
65°	786.5	786.5	782.3	778.2	774.0	765.8	753.3	745.1	732.6	716.1	699.5
62.5°	877.5	877.5	873.4	869.2	861.0	852.7	840.3	827.8	811.3	794.7	778.2
60°	968.6	968.6	964.4	960.3	952.0	939.6	927.2	914.8	898.2	877.5	856.8
57.5°	1043.1	1043.1	1038.9	1034.8	1026.5	1018.2	1005.8	993.4	976.9	960.3	935.5
55°	1121.7	1121.7	1117.6	1109.3	1101.0	1092.8	1080.3	1063.8	1047.2	1026.5	1010.0
52.5°	1212.8	1212.8	1208.7	1200.4	1188.0	1175.5	1159.0	1138.3	1117.6	1096.9	1072.1
50°	1303.9	1303.9	1295.6	1287.3	1279.0	1262.5	1245.9	1225.2	1200.4	1175.5	1146.6
47.5°	1415.6	1415.6	1407.3	1394.9	1378.4	1361.8	1337.0	1308.0	1283.2	1254.2	1221.1
45°	1552.2	1552.2	1539.8	1527.4	1506.7	1477.7	1448.7	1415.6	1378.4	1341.1	1299.7
42.5°	1730.2	1730.2	1713.6	1692.9	1664.0	1626.7	1581.2	1535.7	1490.1	1440.4	1390.8
40°	1970.3	1970.3	1945.4	1916.5	1870.9	1817.1	1750.9	1688.8	1626.7	1556.3	1494.3
37.5°	2346.9	2346.9	2305.5	2251.7	2177.2	2086.2	1974.4	1891.6	1796.4	1705.4	1622.6
35°	2963.7	2963.7	2889.2	2794.0	2661.5	2496.0	2318.0	2177.2	2019.9	1891.6	1771.6
32.5°	4060.6	4060.6	3911.6	3725.3	3472.8	3149.9	2851.9	2603.6	2346.9	2148.3	1957.9
30°	6184.0	6184.0	5865.3	5472.1	4929.8	4251.0	3741.9	3265.8	2831.2	2504.2	2226.9
27.5°	10170.1	10004.5	9507.8	8692.4	7574.8	6184.0	5298.2	4292.4	3605.3	2980.2	2595.3
25°	16056.0	15782.9	14963.3	13626.3	11805.1	9739.6	7930.7	6022.6	4818.1	3779.1	3063.0
22.5°	23208.6	22831.9	21718.5	19901.4	17438.5	14690.1	11763.7	9019.4	6577.2	4996.0	3779.1
20°	31677.5	31172.5	29678.2	27252.6	23990.9	20493.3	16585.9	12910.2	9387.8	6577.2	4818.1
17.5°	42857.5	42087.6	39823.5	36180.9	31677.5	26962.9	22078.6	17335.1	12910.2	9019.4	6022.6
15°	58930.1	57630.4	53830.6	47795.6	40783.7	34210.7	27981.1	22078.6	16585.9	11763.7	7930.7
12.5°	77511.1	75702.2	70466.1	62299.4	52770.9	42377.3	34210.7	26962.9	20493.3	14690.1	9739.6
10°	93165.6	91257.4	85847.5	77655.9	65573.5	52770.9	40783.7	31677.5	23990.9	17438.5	11805.1
7.5°	106390.4	104254.6	98422.4	89461.0	77655.9	62299.4	47795.6	36180.9	27252.6	19901.4	13626.3
5°	117876.8	115169.7	108381.4	98422.4	85847.5	70466.1	53830.6	39823.5	29678.2	21718.5	14963.3
2.5°	125550.9	122371.9	115169.7	104254.6	91257.4	75702.2	57630.4	42087.6	31172.5	22831.9	15782.9
0°	128373.8	125550.9	117876.8	106390.4	93165.6	77511.1	58930.1	42857.5	31677.5	23208.6	16056.0



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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°	41.4	41.4	37.3	37.3	37.3	33.1	33.1	33.1	29.0	29.0	29.0
85°	91.1	86.9	86.9	82.8	78.6	74.5	74.5	70.4	66.2	62.1	57.9
82.5°	144.9	140.7	136.6	132.5	128.3	120.0	115.9	111.8	103.5	99.3	95.2
80°	202.8	198.7	190.4	186.3	178.0	169.7	161.4	153.2	144.9	136.6	128.3
77.5°	273.2	260.8	252.5	244.2	231.8	223.5	211.1	202.8	190.4	178.0	165.6
75°	347.7	335.3	322.9	310.4	298.0	281.5	269.0	252.5	240.1	223.5	211.1
72.5°	430.5	413.9	397.4	380.8	364.3	347.7	331.1	310.4	293.9	273.2	252.5
70°	513.3	496.7	480.1	459.5	438.8	418.1	397.4	372.5	351.8	327.0	302.2
67.5°	600.2	579.5	558.8	538.1	517.4	492.6	463.6	438.8	409.8	380.8	356.0
65°	683.0	662.3	637.4	612.6	587.8	562.9	534.0	505.0	471.9	438.8	409.8
62.5°	757.5	736.8	716.1	687.1	662.3	633.3	604.3	567.1	534.0	500.8	463.6
60°	836.1	811.3	786.5	757.5	728.5	699.5	666.4	629.2	596.0	554.7	517.4
57.5°	910.6	885.8	856.8	827.8	794.7	761.6	728.5	691.2	654.0	612.6	571.2
55°	985.1	960.3	931.3	898.2	861.0	823.7	786.5	749.2	711.9	666.4	620.9
52.5°	1047.2	1022.4	993.4	968.6	927.2	889.9	848.5	803.0	761.6	716.1	670.6
50°	1113.5	1084.5	1051.4	1022.4	989.3	952.0	906.5	861.0	811.3	765.8	716.1
47.5°	1188.0	1150.7	1113.5	1076.2	1043.1	1001.7	964.4	914.8	865.1	811.3	761.6
45°	1262.5	1221.1	1179.7	1134.1	1092.8	1051.4	1010.0	968.6	914.8	861.0	803.0
42.5°	1341.1	1291.4	1245.9	1200.4	1150.7	1101.0	1055.5	1010.0	964.4	906.5	848.5
40°	1432.2	1374.2	1316.3	1262.5	1212.8	1154.8	1101.0	1051.4	1001.7	952.0	889.9
37.5°	1535.7	1465.3	1394.9	1328.7	1266.6	1212.8	1150.7	1092.8	1043.1	989.3	927.2
35°	1668.1	1564.6	1481.8	1399.1	1328.7	1262.5	1200.4	1134.1	1076.2	1022.4	968.6
32.5°	1817.1	1688.8	1577.0	1481.8	1394.9	1316.3	1245.9	1179.7	1113.5	1051.4	993.4
30°	1999.2	1833.7	1688.8	1564.6	1465.3	1374.2	1291.4	1221.1	1150.7	1084.5	1022.4
27.5°	2255.9	1999.2	1817.1	1668.1	1535.7	1432.2	1341.1	1262.5	1188.0	1113.5	1047.2
25°	2595.3	2226.9	1957.9	1771.6	1622.6	1494.3	1390.8	1299.7	1221.1	1146.6	1072.1
22.5°	2980.2	2504.2	2148.3	1891.6	1705.4	1556.3	1440.4	1341.1	1254.2	1175.5	1096.9
20°	3605.3	2831.2	2346.9	2019.9	1796.4	1626.7	1490.1	1378.4	1283.2	1200.4	1117.6
17.5°	4292.4	3265.8	2603.6	2177.2	1891.6	1688.8	1535.7	1415.6	1308.0	1225.2	1138.3
15°	5298.2	3741.9	2851.9	2318.0	1974.4	1750.9	1581.2	1448.7	1337.0	1245.9	1159.0
12.5°	6184.0	4251.0	3149.9	2496.0	2086.2	1817.1	1626.7	1477.7	1361.8	1262.5	1175.5
10°	7574.8	4929.8	3472.8	2661.5	2177.2	1870.9	1664.0	1506.7	1378.4	1279.0	1188.0
7.5°	8692.4	5472.1	3725.3	2794.0	2251.7	1916.5	1692.9	1527.4	1394.9	1287.3	1200.4
5°	9507.8	5865.3	3911.6	2889.2	2305.5	1945.4	1713.6	1539.8	1407.3	1295.6	1208.7
2.5°	10004.5	6184.0	4060.6	2963.7	2346.9	1970.3	1730.2	1552.2	1415.6	1303.9	1212.8
0°	10170.1	6184.0	4060.6	2963.7	2346.9	1970.3	1730.2	1552.2	1415.6	1303.9	1212.8





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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°	24.8	24.8	20.7	20.7	20.7	16.6	16.6	12.4	12.4	8.3	8.3
85°	53.8	49.7	45.5	41.4	37.3	33.1	33.1	29.0	24.8	20.7	16.6
82.5°	86.9	82.8	74.5	66.2	62.1	53.8	45.5	41.4	37.3	29.0	24.8
80°	120.0	111.8	103.5	95.2	86.9	74.5	66.2	57.9	45.5	37.3	33.1
77.5°	157.3	144.9	132.5	120.0	107.6	99.3	86.9	74.5	62.1	49.7	37.3
75°	194.5	178.0	165.6	149.0	136.6	120.0	103.5	91.1	78.6	62.1	45.5
72.5°	235.9	215.2	198.7	178.0	161.4	144.9	124.2	107.6	91.1	74.5	57.9
70°	281.5	256.6	231.8	211.1	190.4	165.6	144.9	124.2	103.5	86.9	66.2
67.5°	327.0	298.0	269.0	240.1	215.2	190.4	165.6	144.9	120.0	99.3	74.5
65°	372.5	339.4	310.4	277.3	244.2	215.2	190.4	161.4	136.6	107.6	86.9
62.5°	422.2	384.9	347.7	310.4	277.3	240.1	211.1	178.0	149.0	120.0	95.2
60°	476.0	434.6	389.1	347.7	310.4	269.0	231.8	198.7	165.6	132.5	103.5
57.5°	525.7	480.1	434.6	384.9	339.4	298.0	256.6	215.2	178.0	144.9	111.8
55°	575.4	525.7	476.0	422.2	372.5	327.0	281.5	235.9	194.5	157.3	120.0
52.5°	620.9	571.2	517.4	463.6	409.8	356.0	302.2	252.5	211.1	165.6	128.3
50°	666.4	612.6	554.7	500.8	438.8	380.8	327.0	273.2	223.5	178.0	136.6
47.5°	711.9	654.0	596.0	534.0	471.9	409.8	351.8	293.9	240.1	190.4	144.9
45°	749.2	691.2	629.2	567.1	505.0	438.8	372.5	310.4	252.5	202.8	153.2
42.5°	786.5	728.5	666.4	604.3	534.0	463.6	397.4	331.1	269.0	211.1	161.4
40°	823.7	761.6	699.5	633.3	562.9	492.6	418.1	347.7	281.5	223.5	169.7
37.5°	861.0	794.7	728.5	662.3	587.8	517.4	438.8	364.3	298.0	231.8	178.0
35°	898.2	827.8	757.5	687.1	612.6	538.1	459.5	380.8	310.4	244.2	186.3
32.5°	931.3	856.8	786.5	716.1	637.4	558.8	480.1	397.4	322.9	252.5	190.4
30°	960.3	885.8	811.3	736.8	662.3	579.5	496.7	413.9	335.3	260.8	198.7
27.5°	985.1	910.6	836.1	757.5	683.0	600.2	513.3	430.5	347.7	273.2	202.8
25°	1010.0	935.5	856.8	778.2	699.5	616.7	529.8	442.9	356.0	281.5	211.1
22.5°	1026.5	960.3	877.5	794.7	716.1	629.2	542.2	455.3	368.4	285.6	215.2
20°	1047.2	976.9	898.2	811.3	732.6	645.7	554.7	467.7	376.7	293.9	219.4
17.5°	1063.8	993.4	914.8	827.8	745.1	658.1	567.1	476.0	384.9	298.0	223.5
15°	1080.3	1005.8	927.2	840.3	753.3	670.6	575.4	484.3	389.1	306.3	227.7
12.5°	1092.8	1018.2	939.6	852.7	765.8	678.8	583.6	492.6	397.4	310.4	227.7
10°	1101.0	1026.5	952.0	861.0	774.0	687.1	591.9	496.7	401.5	310.4	231.8
7.5°	1109.3	1034.8	960.3	869.2	778.2	691.2	596.0	505.0	405.6	314.6	235.9
5°	1117.6	1038.9	964.4	873.4	782.3	699.5	604.3	509.1	409.8	318.7	235.9
2.5°	1121.7	1043.1	968.6	877.5	786.5	699.5	604.3	509.1	409.8	318.7	235.9
0°	1121.7	1043.1	968.6	877.5	786.5	699.5	604.3	509.1	409.8	318.7	235.9



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	4.1	4.1	0.0	0.0
85°	12.4	8.3	4.1	0.0
82.5°	16.6	12.4	4.1	0.0
80°	24.8	16.6	8.3	0.0
77.5°	29.0	20.7	8.3	0.0
75°	37.3	24.8	12.4	0.0
72.5°	41.4	29.0	12.4	0.0
70°	45.5	33.1	16.6	0.0
67.5°	53.8	33.1	16.6	0.0
65°	62.1	37.3	20.7	0.0
62.5°	66.2	41.4	20.7	0.0
60°	74.5	45.5	20.7	0.0
57.5°	82.8	49.7	24.8	0.0
55°	86.9	53.8	24.8	0.0
52.5°	95.2	57.9	29.0	0.0
50°	99.3	62.1	29.0	0.0
47.5°	103.5	66.2	29.0	0.0
45°	111.8	70.4	33.1	0.0
42.5°	115.9	74.5	33.1	0.0
40°	120.0	74.5	33.1	0.0
37.5°	128.3	78.6	37.3	0.0
35°	132.5	82.8	37.3	0.0
32.5°	136.6	86.9	37.3	0.0
30°	140.7	86.9	41.4	0.0
27.5°	144.9	91.1	41.4	0.0
25°	149.0	91.1	41.4	0.0
22.5°	153.2	95.2	41.4	0.0
20°	153.2	95.2	41.4	0.0
17.5°	157.3	99.3	41.4	0.0
15°	157.3	99.3	45.5	0.0
12.5°	161.4	99.3	45.5	0.0
10°	161.4	103.5	45.5	0.0
7.5°	165.6	103.5	45.5	0.0
5°	165.6	103.5	45.5	0.0
2.5°	165.6	103.5	45.5	0.0
0°	165.6	103.5	45.5	0.0

(END OF REPORT)