

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: P624142

Luminaire Tested: **EPH-VN-08-D-740-U-55**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624142  
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-740-U-55  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 5 distribution lens  
Light Source: (128) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	58126.8 lumens	Max Intensity:	71033.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	119.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

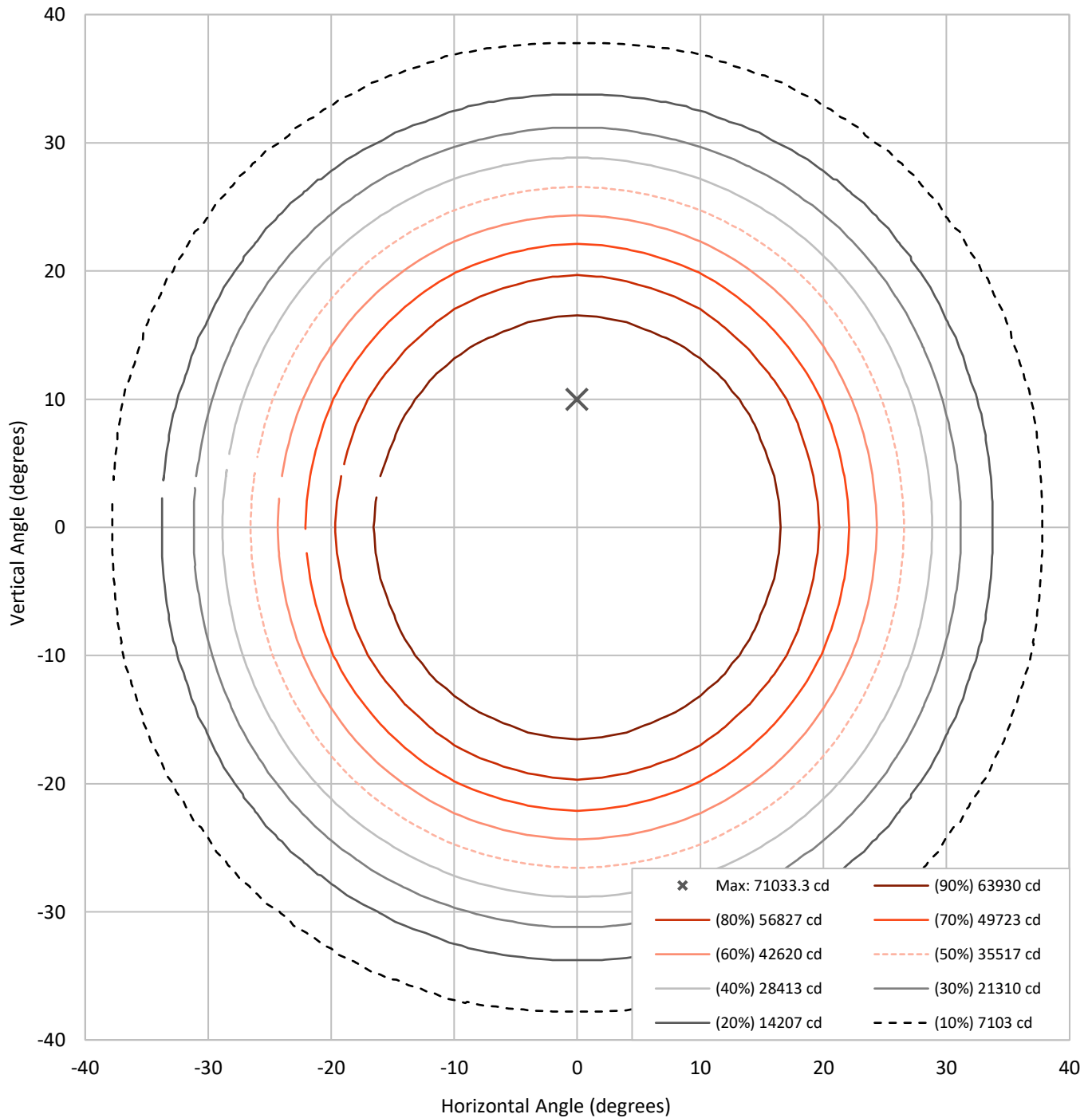
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	28890.5 lumens	Field Lumens:	37572.9 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

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





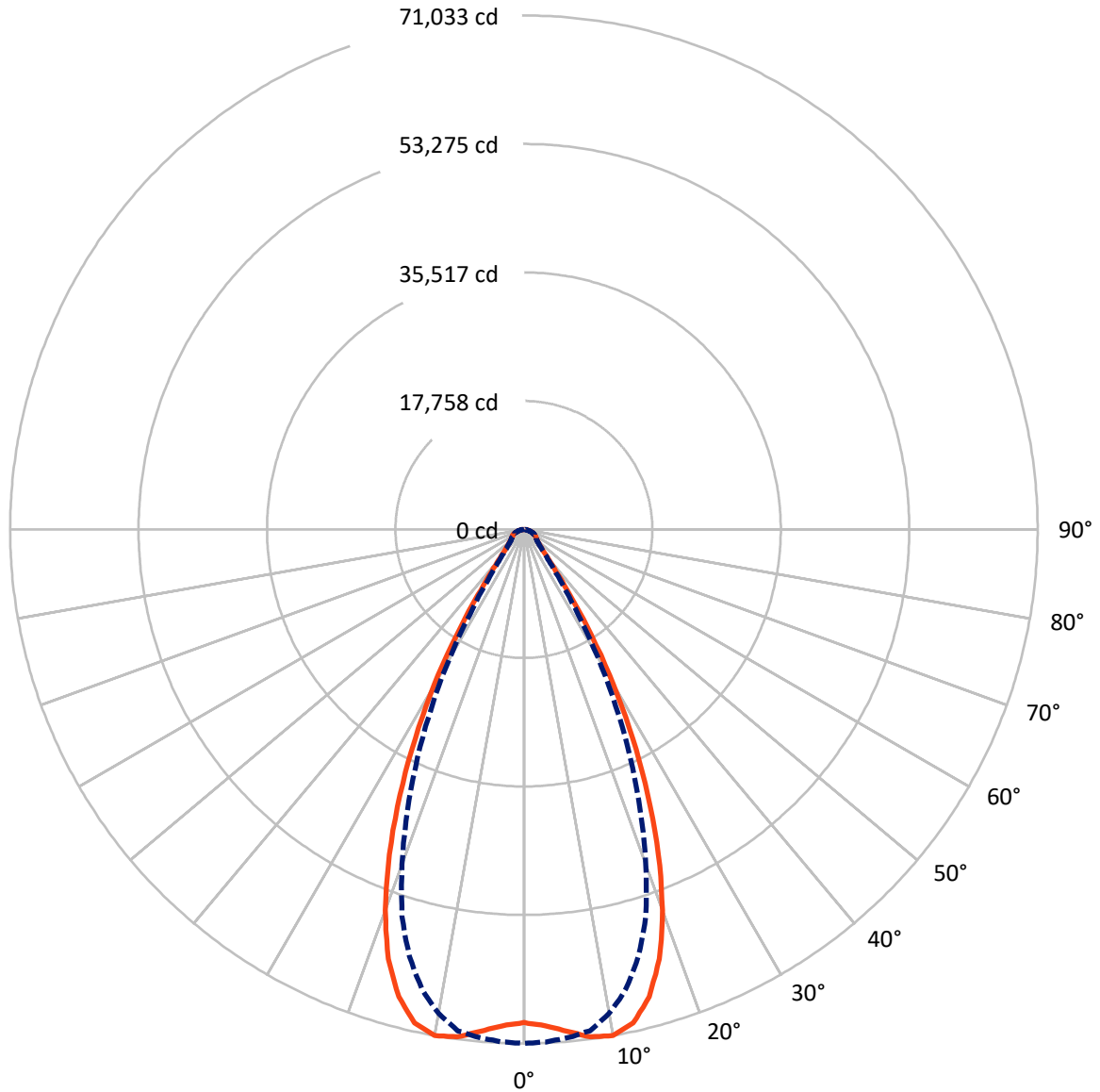
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### Lumen Table

90	1.7	12.8	33.2	53.6	62.1	53.6	33.2	12.8	1.7										
80																			
70																			
60	5.8	6.3	13.1	21.7	30.5	38.1	43.6	46.6	46.6	43.6	38.1	30.5	21.7	13.1	6.3				5.8
50		9.8	20.1	31.9	42.8	52.0	59.1	63.0	63.0	59.1	52.0	42.8	31.9	20.1	9.8				
40	10.3	13.1	25.9	39.2	52.6	68.1	86.2	100.2	100.2	86.2	68.1	52.6	39.2	25.9	13.1				10.3
30		15.9	30.1	45.5	68.9	122.8	240.0	361.9	361.9	240.0	122.8	68.9	45.5	30.1	15.9				
20	13.7	18.0	33.1	53.3	111.5	355.2	822.9	1168.0	1168.0	822.9	355.2	111.5	53.3	33.1	18.0				13.7
10		19.3	35.3	63.6	205.7	775.1	1516.6	1933.4	1933.4	1516.6	775.1	205.7	63.6	35.3	19.3				
0	15.0	20.0	36.5	71.8	301.9	1067.8	1876.2	2127.7	2127.7	1876.2	1067.8	301.9	71.8	36.5	20.0				15.0
-10		20.0	36.5	71.8	301.9	1067.8	1876.2	2127.7	2127.7	1876.2	1067.8	301.9	71.8	36.5	20.0				
-20	13.7	19.3	35.3	63.6	205.7	775.1	1516.6	1933.4	1933.4	1516.6	775.1	205.7	63.6	35.3	19.3				13.7
-30		18.0	33.1	53.3	111.5	355.2	822.9	1168.0	1168.0	822.9	355.2	111.5	53.3	33.1	18.0				
-40	10.3	15.9	30.1	45.5	68.9	122.8	240.0	361.9	361.9	240.0	122.8	68.9	45.5	30.1	15.9				10.3
-50		13.1	25.9	39.2	52.6	68.1	86.2	100.2	100.2	86.2	68.1	52.6	39.2	25.9	13.1				
-60	5.8	9.8	20.1	31.9	42.8	52.0	59.1	63.0	63.0	59.1	52.0	42.8	31.9	20.1	9.8				5.8
-70		6.3	13.1	21.7	30.5	38.1	43.6	46.6	46.6	43.6	38.1	30.5	21.7	13.1	6.3				
-80	1.7	12.8	33.2	53.6	62.1	53.6	33.2	12.8	1.7										
-90																			

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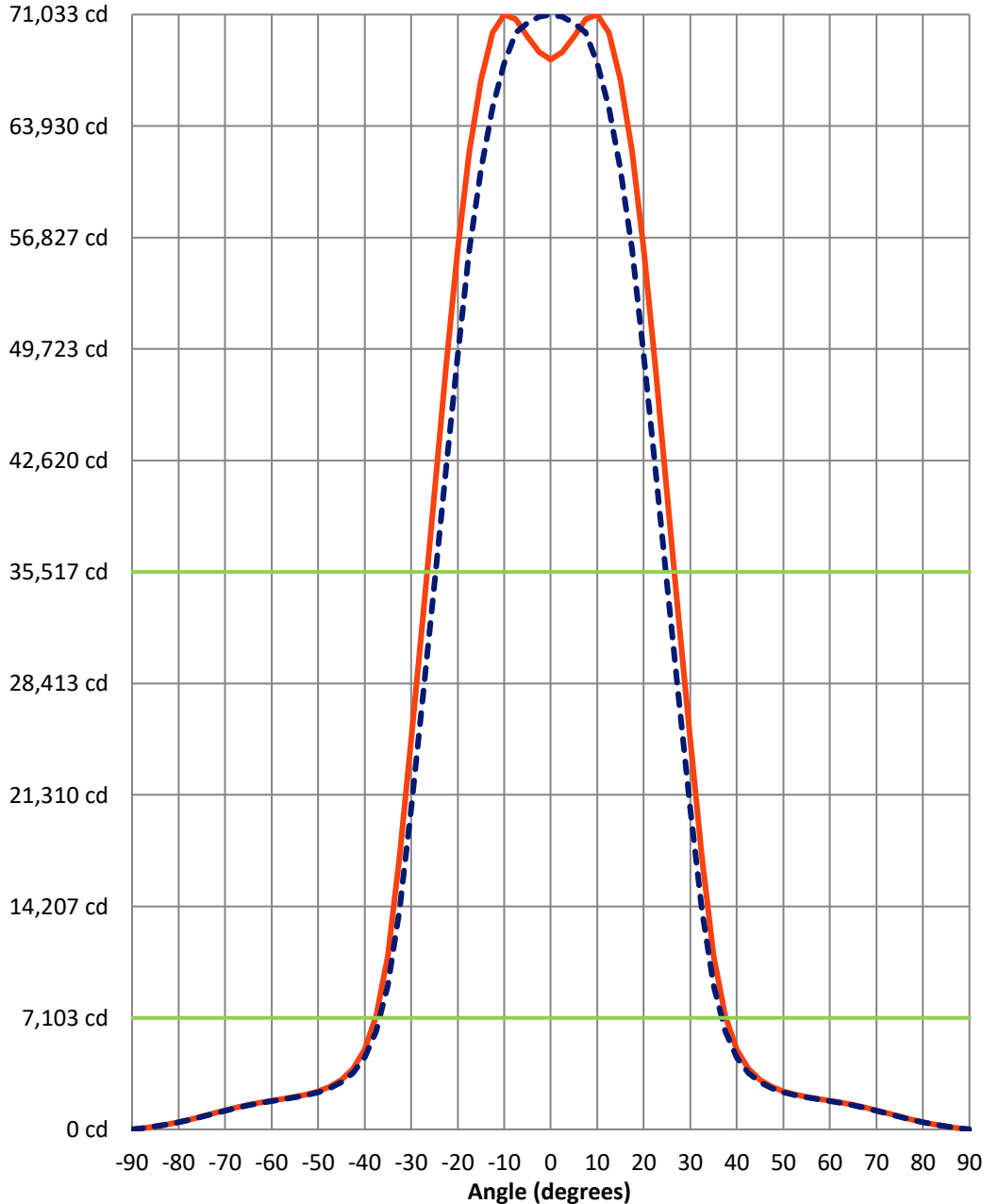
### Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg      - - - Horizontal Distribution Through 10-Deg

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### Luminous Intensity Plot



**Beam:**  
 H Angle: 49.5°  
 V Angle: 53.1°  
 Lumens: 28890.5  
 Efficiency: 49.7%

**Field:**  
 H Angle: 73.6°  
 V Angle: 75.3°  
 Lumens: 37572.9  
 Efficiency: 64.6%

**Spill:**  
 Lumens: 20553.9  
 Efficiency: 35.4%

- Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 10-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°	78.5	78.5	78.5	78.5	78.5	78.5	78.5	72.5	72.5	72.5	72.5
85°	193.2	193.2	193.2	193.2	193.2	187.2	187.2	181.1	181.1	175.1	169.1
82.5°	314.0	314.0	314.0	314.0	307.9	307.9	301.9	295.9	289.8	283.8	277.8
80°	458.9	458.9	458.9	458.9	452.9	446.8	440.8	434.7	422.7	416.6	404.6
77.5°	628.0	628.0	628.0	621.9	615.9	609.9	597.8	585.7	573.6	561.6	549.5
75°	821.2	821.2	821.2	809.1	803.1	791.0	778.9	766.9	748.7	730.6	712.5
72.5°	1020.5	1020.5	1020.5	1008.4	996.3	984.2	972.1	954.0	935.9	911.8	887.6
70°	1207.6	1207.6	1207.6	1195.6	1183.5	1171.4	1153.3	1135.2	1111.0	1086.9	1062.7
67.5°	1400.9	1400.9	1400.9	1382.7	1370.7	1358.6	1340.5	1316.3	1292.2	1262.0	1231.8
65°	1557.9	1557.9	1551.8	1545.8	1533.7	1515.6	1503.5	1479.4	1455.2	1431.1	1400.9
62.5°	1702.8	1702.8	1696.7	1690.7	1678.6	1660.5	1642.4	1624.3	1600.1	1569.9	1539.7
60°	1823.5	1823.5	1817.5	1811.5	1799.4	1787.3	1769.2	1751.1	1726.9	1702.8	1672.6
57.5°	1944.3	1944.3	1938.3	1932.2	1920.1	1902.0	1883.9	1865.8	1841.6	1811.5	1781.3
55°	2071.1	2071.1	2065.1	2053.0	2040.9	2022.8	2004.7	1980.5	1950.3	1920.1	1890.0
52.5°	2222.1	2222.1	2210.0	2197.9	2179.8	2161.7	2131.5	2101.3	2065.1	2028.8	1992.6
50°	2421.3	2421.3	2409.2	2391.1	2360.9	2330.7	2294.5	2246.2	2203.9	2155.6	2107.3
47.5°	2717.2	2717.2	2693.0	2662.8	2620.6	2572.3	2505.9	2433.4	2373.0	2312.6	2240.2
45°	3151.9	3151.9	3115.7	3067.4	3001.0	2916.4	2819.8	2717.2	2614.5	2511.9	2409.2
42.5°	3858.4	3858.4	3792.0	3707.5	3592.7	3447.8	3266.7	3097.6	2952.7	2789.6	2650.8
40°	5078.1	5078.1	4951.3	4794.3	4577.0	4299.2	3967.1	3701.4	3447.8	3164.0	2970.8
37.5°	7245.8	7245.8	6998.3	6696.4	6273.7	5742.3	5102.3	4673.6	4202.6	3755.8	3429.7
35°	11074.0	11074.0	10597.0	10011.3	9196.2	8169.7	7076.8	6267.6	5368.0	4679.6	4069.7
32.5°	17353.8	17353.8	16496.3	15439.7	13984.5	12142.8	10391.7	8852.0	7245.8	6104.6	5005.7
30°	24817.0	24817.0	23693.9	22311.1	20415.1	18024.0	15530.2	12794.9	10258.9	8224.0	6563.5
27.5°	32533.8	32213.8	31247.7	29671.7	27510.0	24817.0	21707.3	18175.0	14745.3	11158.6	8785.6
25°	40516.3	40141.9	39036.9	37225.5	34749.8	31700.5	28198.4	24249.4	20016.6	15741.6	11635.6
22.5°	48583.3	48160.6	46904.7	44857.7	42080.2	38662.6	34695.5	30305.7	25577.8	20638.5	15741.6
20°	56040.5	55593.6	54277.3	52145.8	49271.7	45521.9	41114.1	36247.3	31018.2	25577.8	20016.6
17.5°	62284.0	61855.3	60587.2	58552.4	56040.5	51892.2	47309.2	41959.4	36247.3	30305.7	24249.4
15°	66842.8	66474.5	65393.6	63684.8	61124.6	57453.4	52785.9	47309.2	41114.1	34695.5	28198.4
12.5°	69867.9	69572.1	68720.7	67392.3	65097.8	62018.3	57453.4	51892.2	45521.9	38662.6	31700.5
10°	71033.3	70888.4	70489.9	69880.0	67923.6	65097.8	61124.6	56040.5	49271.7	42080.2	34749.8
7.5°	70725.4	70773.7	70912.5	70755.6	69880.0	67392.3	63684.8	58552.4	52145.8	44857.7	37225.5
5°	69626.4	69886.1	70532.1	70912.5	70489.9	68720.7	65393.6	60587.2	54277.3	46904.7	39036.9
2.5°	68648.2	69052.8	69886.1	70773.7	70888.4	69572.1	66474.5	61855.3	55593.6	48160.6	40141.9
0°	68165.2	68648.2	69626.4	70725.4	71033.3	69867.9	66842.8	62284.0	56040.5	48583.3	40516.3



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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°	72.5	66.4	66.4	66.4	60.4	60.4	60.4	54.3	54.3	48.3	48.3
85°	169.1	163.0	157.0	151.0	144.9	138.9	132.8	126.8	120.8	108.7	102.6
82.5°	271.7	265.7	259.6	247.6	241.5	229.5	217.4	205.3	193.2	187.2	175.1
80°	392.5	380.4	368.3	356.3	338.1	320.0	307.9	289.8	277.8	259.6	247.6
77.5°	531.4	513.2	495.1	471.0	452.9	434.7	410.6	392.5	368.3	344.2	320.0
75°	688.4	664.2	634.0	609.9	585.7	555.5	525.3	495.1	464.9	434.7	404.6
72.5°	857.4	827.2	797.0	766.9	730.6	688.4	652.1	609.9	573.6	537.4	495.1
70°	1032.5	996.3	960.1	923.8	881.6	833.3	791.0	742.7	694.4	646.1	597.8
67.5°	1195.6	1159.3	1117.1	1080.8	1032.5	984.2	929.9	875.5	821.2	760.8	700.4
65°	1364.6	1322.4	1274.1	1225.8	1177.4	1123.1	1068.8	1014.4	948.0	881.6	821.2
62.5°	1503.5	1467.3	1425.0	1376.7	1322.4	1262.0	1207.6	1135.2	1068.8	1002.3	923.8
60°	1636.4	1594.1	1557.9	1503.5	1455.2	1400.9	1334.4	1262.0	1189.5	1111.0	1038.6
57.5°	1751.1	1714.8	1672.6	1624.3	1569.9	1515.6	1455.2	1388.8	1304.2	1225.8	1141.2
55°	1853.7	1811.5	1769.2	1726.9	1678.6	1618.2	1557.9	1491.4	1419.0	1334.4	1243.9
52.5°	1956.4	1914.1	1865.8	1823.5	1769.2	1714.8	1654.5	1588.0	1515.6	1437.1	1340.5
50°	2059.0	2010.7	1962.4	1908.1	1853.7	1799.4	1739.0	1678.6	1600.1	1521.6	1437.1
47.5°	2179.8	2119.4	2059.0	1998.6	1944.3	1877.9	1817.5	1751.1	1684.7	1600.1	1515.6
45°	2330.7	2240.2	2167.7	2095.3	2028.8	1962.4	1890.0	1823.5	1751.1	1678.6	1588.0
42.5°	2517.9	2397.2	2300.6	2203.9	2119.4	2040.9	1968.5	1890.0	1817.5	1739.0	1654.5
40°	2771.5	2608.5	2451.5	2330.7	2222.1	2125.4	2040.9	1962.4	1877.9	1799.4	1714.8
37.5°	3103.6	2874.2	2656.8	2481.7	2342.8	2222.1	2119.4	2028.8	1944.3	1853.7	1769.2
35°	3604.8	3206.3	2928.5	2674.9	2481.7	2330.7	2203.9	2095.3	1998.6	1908.1	1823.5
32.5°	4311.3	3695.4	3248.5	2928.5	2656.8	2451.5	2300.6	2167.7	2059.0	1962.4	1865.8
30°	5241.2	4389.8	3695.4	3206.3	2874.2	2608.5	2397.2	2240.2	2119.4	2010.7	1914.1
27.5°	6714.5	5241.2	4311.3	3604.8	3103.6	2771.5	2517.9	2330.7	2179.8	2059.0	1956.4
25°	8785.6	6563.5	5005.7	4069.7	3429.7	2970.8	2650.8	2409.2	2240.2	2107.3	1992.6
22.5°	11158.6	8224.0	6104.6	4679.6	3755.8	3164.0	2789.6	2511.9	2312.6	2155.6	2028.8
20°	14745.3	10258.9	7245.8	5368.0	4202.6	3447.8	2952.7	2614.5	2373.0	2203.9	2065.1
17.5°	18175.0	12794.9	8852.0	6267.6	4673.6	3701.4	3097.6	2717.2	2433.4	2246.2	2101.3
15°	21707.3	15530.2	10391.7	7076.8	5102.3	3967.1	3266.7	2819.8	2505.9	2294.5	2131.5
12.5°	24817.0	18024.0	12142.8	8169.7	5742.3	4299.2	3447.8	2916.4	2572.3	2330.7	2161.7
10°	27510.0	20415.1	13984.5	9196.2	6273.7	4577.0	3592.7	3001.0	2620.6	2360.9	2179.8
7.5°	29671.7	22311.1	15439.7	10011.3	6696.4	4794.3	3707.5	3067.4	2662.8	2391.1	2197.9
5°	31247.7	23693.9	16496.3	10597.0	6998.3	4951.3	3792.0	3115.7	2693.0	2409.2	2210.0
2.5°	32213.8	24817.0	17353.8	11074.0	7245.8	5078.1	3858.4	3151.9	2717.2	2421.3	2222.1
0°	32533.8	24817.0	17353.8	11074.0	7245.8	5078.1	3858.4	3151.9	2717.2	2421.3	2222.1





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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°	42.3	42.3	36.2	36.2	30.2	30.2	24.2	24.2	18.1	18.1	12.1
85°	96.6	84.5	78.5	72.5	66.4	60.4	54.3	48.3	42.3	36.2	30.2
82.5°	163.0	151.0	132.8	120.8	108.7	96.6	78.5	72.5	60.4	48.3	42.3
80°	229.5	211.3	193.2	175.1	157.0	138.9	120.8	102.6	84.5	66.4	54.3
77.5°	295.9	271.7	253.6	229.5	205.3	181.1	157.0	132.8	108.7	84.5	66.4
75°	374.4	344.2	314.0	283.8	253.6	223.4	199.3	169.1	138.9	108.7	84.5
72.5°	458.9	416.6	380.4	344.2	301.9	271.7	235.5	205.3	169.1	132.8	102.6
70°	549.5	501.2	452.9	404.6	362.3	314.0	277.8	235.5	199.3	157.0	120.8
67.5°	640.0	585.7	531.4	471.0	416.6	368.3	314.0	271.7	223.4	181.1	138.9
65°	748.7	676.3	609.9	543.4	477.0	416.6	362.3	301.9	253.6	205.3	157.0
62.5°	851.4	772.9	694.4	615.9	543.4	471.0	404.6	344.2	283.8	229.5	175.1
60°	954.0	869.5	778.9	694.4	609.9	531.4	452.9	380.4	314.0	253.6	193.2
57.5°	1056.7	960.1	869.5	772.9	676.3	585.7	501.2	416.6	344.2	271.7	211.3
55°	1147.3	1056.7	954.0	851.4	748.7	640.0	549.5	458.9	374.4	295.9	229.5
52.5°	1243.9	1141.2	1038.6	923.8	821.2	700.4	597.8	495.1	404.6	320.0	247.6
50°	1334.4	1225.8	1111.0	1002.3	881.6	760.8	646.1	537.4	434.7	344.2	259.6
47.5°	1419.0	1304.2	1189.5	1068.8	948.0	821.2	694.4	573.6	464.9	368.3	277.8
45°	1491.4	1388.8	1262.0	1135.2	1014.4	875.5	742.7	609.9	495.1	392.5	289.8
42.5°	1557.9	1455.2	1334.4	1207.6	1068.8	929.9	791.0	652.1	525.3	410.6	307.9
40°	1618.2	1515.6	1400.9	1262.0	1123.1	984.2	833.3	688.4	555.5	434.7	320.0
37.5°	1678.6	1569.9	1455.2	1322.4	1177.4	1032.5	881.6	730.6	585.7	452.9	338.1
35°	1726.9	1624.3	1503.5	1376.7	1225.8	1080.8	923.8	766.9	609.9	471.0	356.3
32.5°	1769.2	1672.6	1557.9	1425.0	1274.1	1117.1	960.1	797.0	634.0	495.1	368.3
30°	1811.5	1714.8	1594.1	1467.3	1322.4	1159.3	996.3	827.2	664.2	513.2	380.4
27.5°	1853.7	1751.1	1636.4	1503.5	1364.6	1195.6	1032.5	857.4	688.4	531.4	392.5
25°	1890.0	1781.3	1672.6	1539.7	1400.9	1231.8	1062.7	887.6	712.5	549.5	404.6
22.5°	1920.1	1811.5	1702.8	1569.9	1431.1	1262.0	1086.9	911.8	730.6	561.6	416.6
20°	1950.3	1841.6	1726.9	1600.1	1455.2	1292.2	1111.0	935.9	748.7	573.6	422.7
17.5°	1980.5	1865.8	1751.1	1624.3	1479.4	1316.3	1135.2	954.0	766.9	585.7	434.7
15°	2004.7	1883.9	1769.2	1642.4	1503.5	1340.5	1153.3	972.1	778.9	597.8	440.8
12.5°	2022.8	1902.0	1787.3	1660.5	1515.6	1358.6	1171.4	984.2	791.0	609.9	446.8
10°	2040.9	1920.1	1799.4	1678.6	1533.7	1370.7	1183.5	996.3	803.1	615.9	452.9
7.5°	2053.0	1932.2	1811.5	1690.7	1545.8	1382.7	1195.6	1008.4	809.1	621.9	458.9
5°	2065.1	1938.3	1817.5	1696.7	1551.8	1400.9	1207.6	1020.5	821.2	628.0	458.9
2.5°	2071.1	1944.3	1823.5	1702.8	1557.9	1400.9	1207.6	1020.5	821.2	628.0	458.9
0°	2071.1	1944.3	1823.5	1702.8	1557.9	1400.9	1207.6	1020.5	821.2	628.0	458.9



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25°	277.8	169.1	72.5	0.0
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12.5°	307.9	187.2	78.5	0.0
10°	307.9	193.2	78.5	0.0
7.5°	314.0	193.2	78.5	0.0
5°	314.0	193.2	78.5	0.0
2.5°	314.0	193.2	78.5	0.0
0°	314.0	193.2	78.5	0.0

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