

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: P624225

Luminaire Tested: **EPH-VN-07-E-940-U-77**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624225  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-07-E-940-U-77  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 7 distribution lens  
Light Source: (112) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

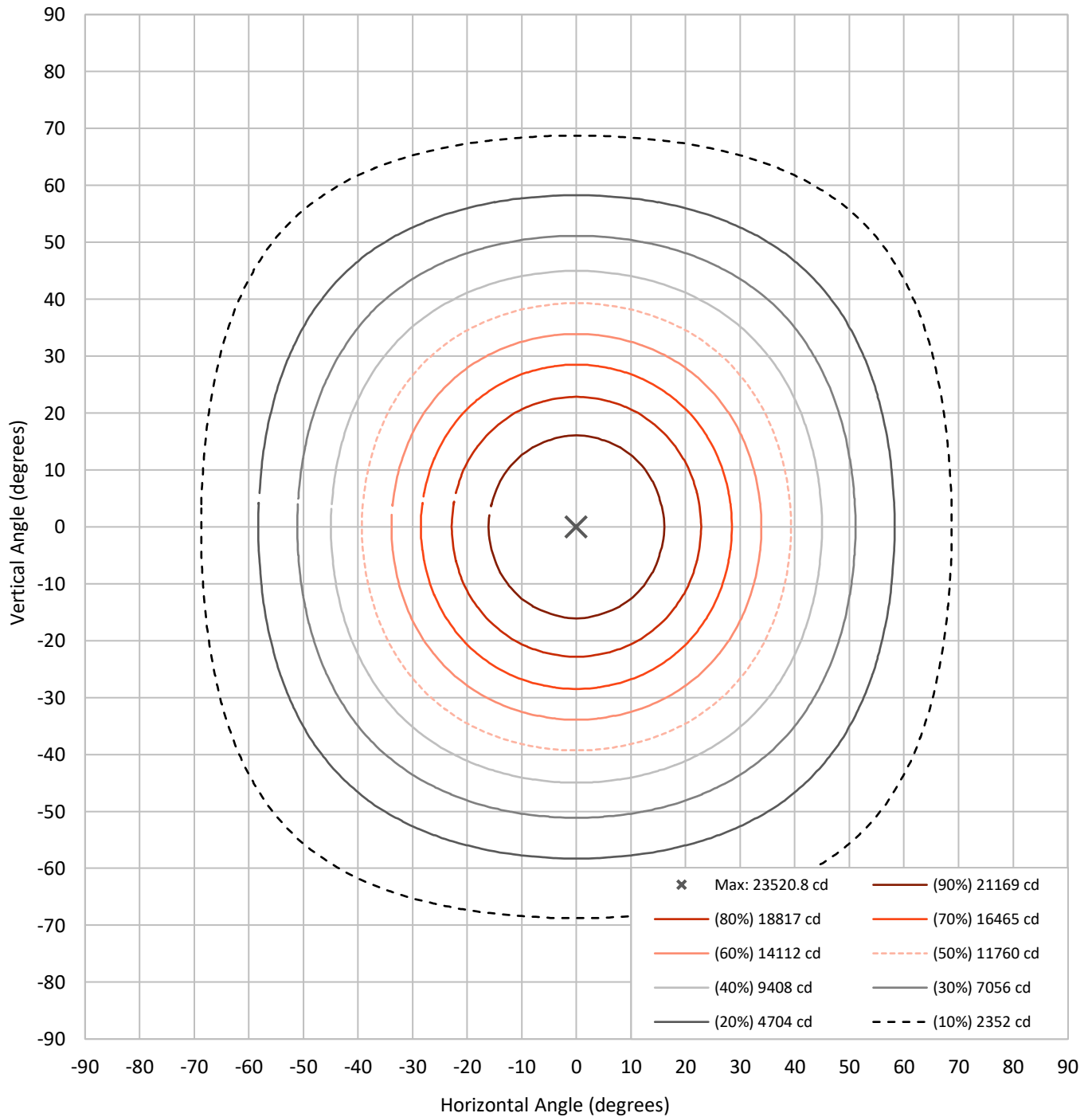
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	42349.7 lumens	Max Intensity:	23520.8 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	79.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	18324.3 lumens	Field Lumens:	30005.4 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 532.7  
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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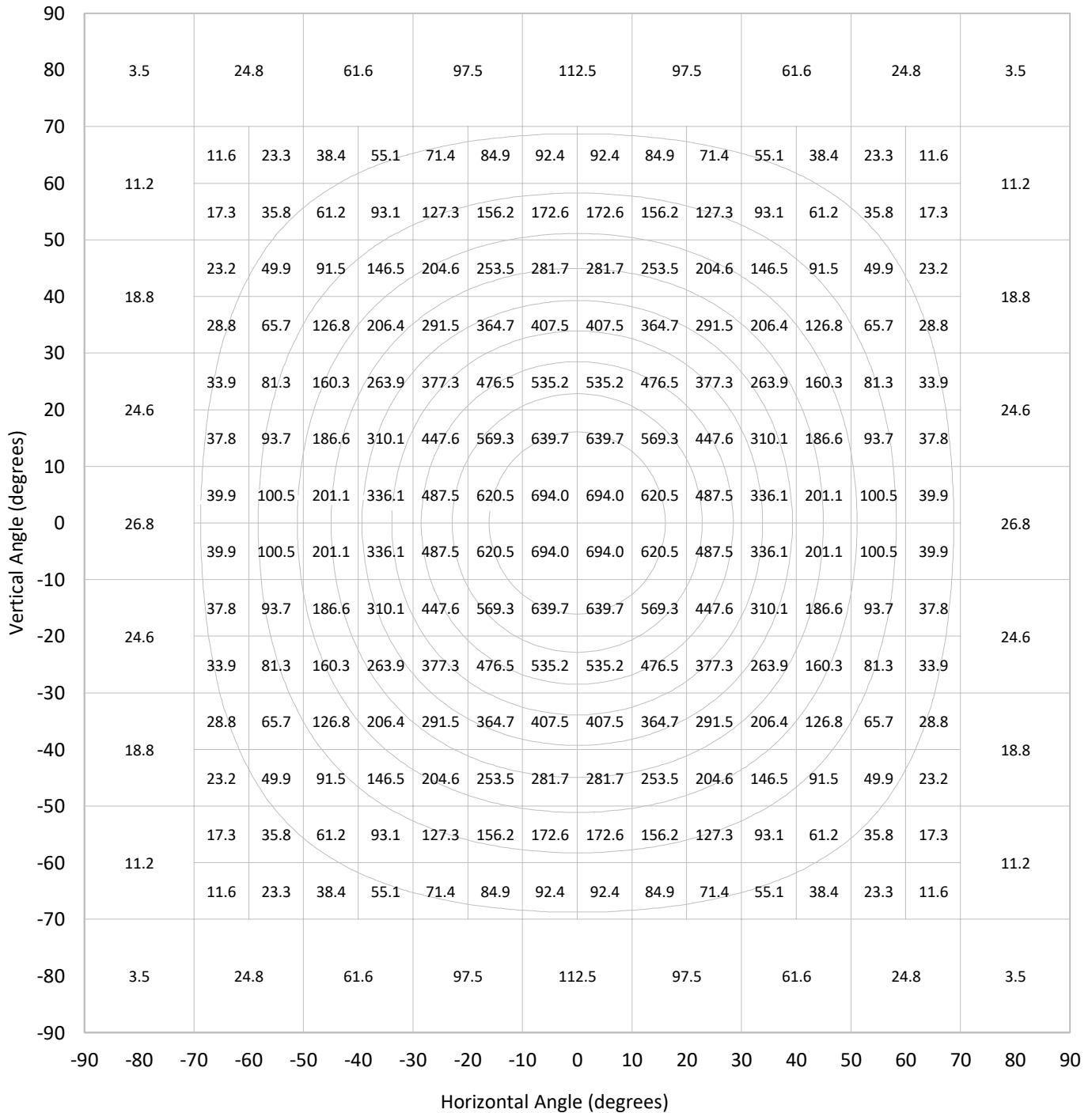
### Iso-Candela Plot





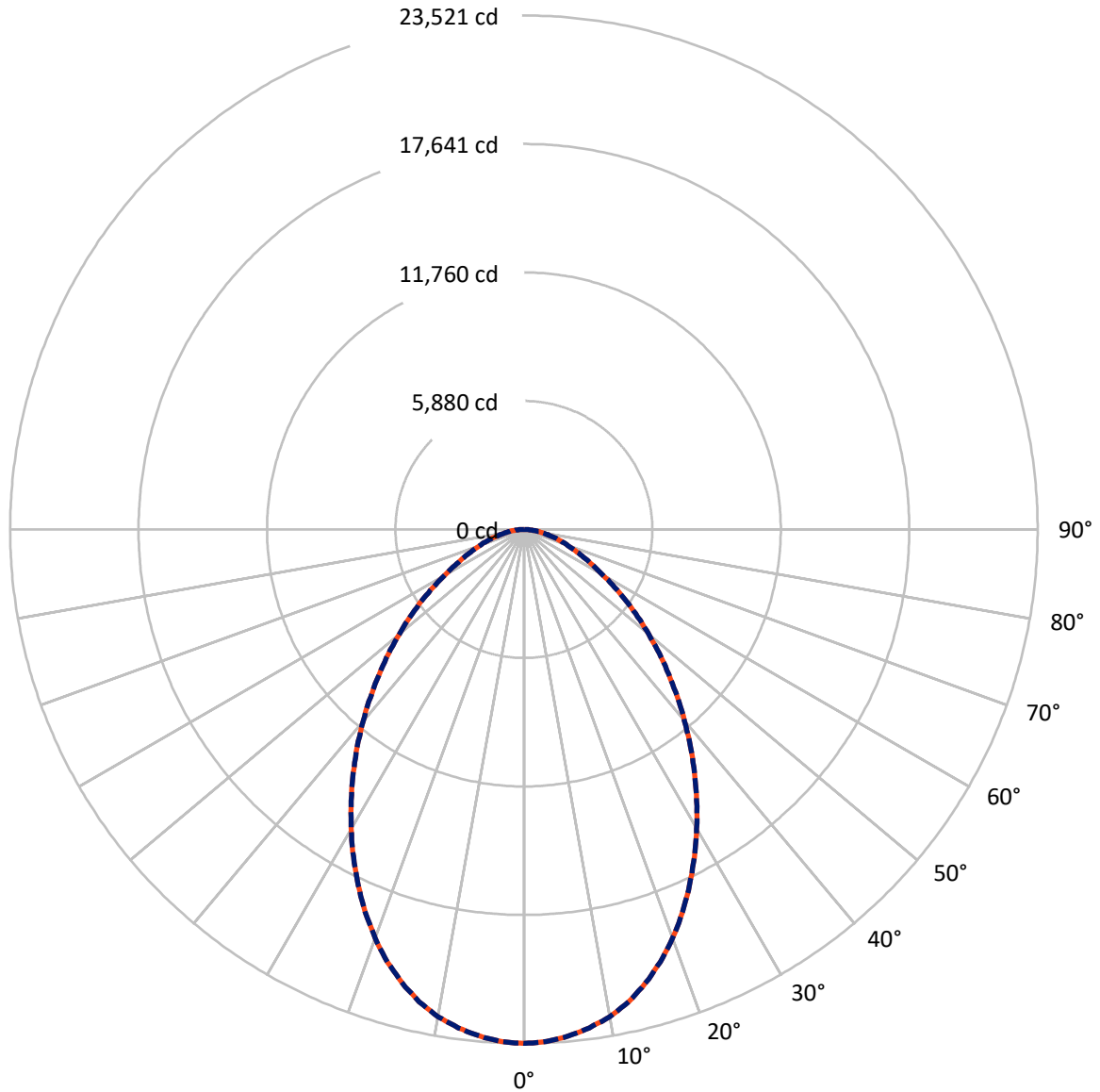
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### Lumen Table



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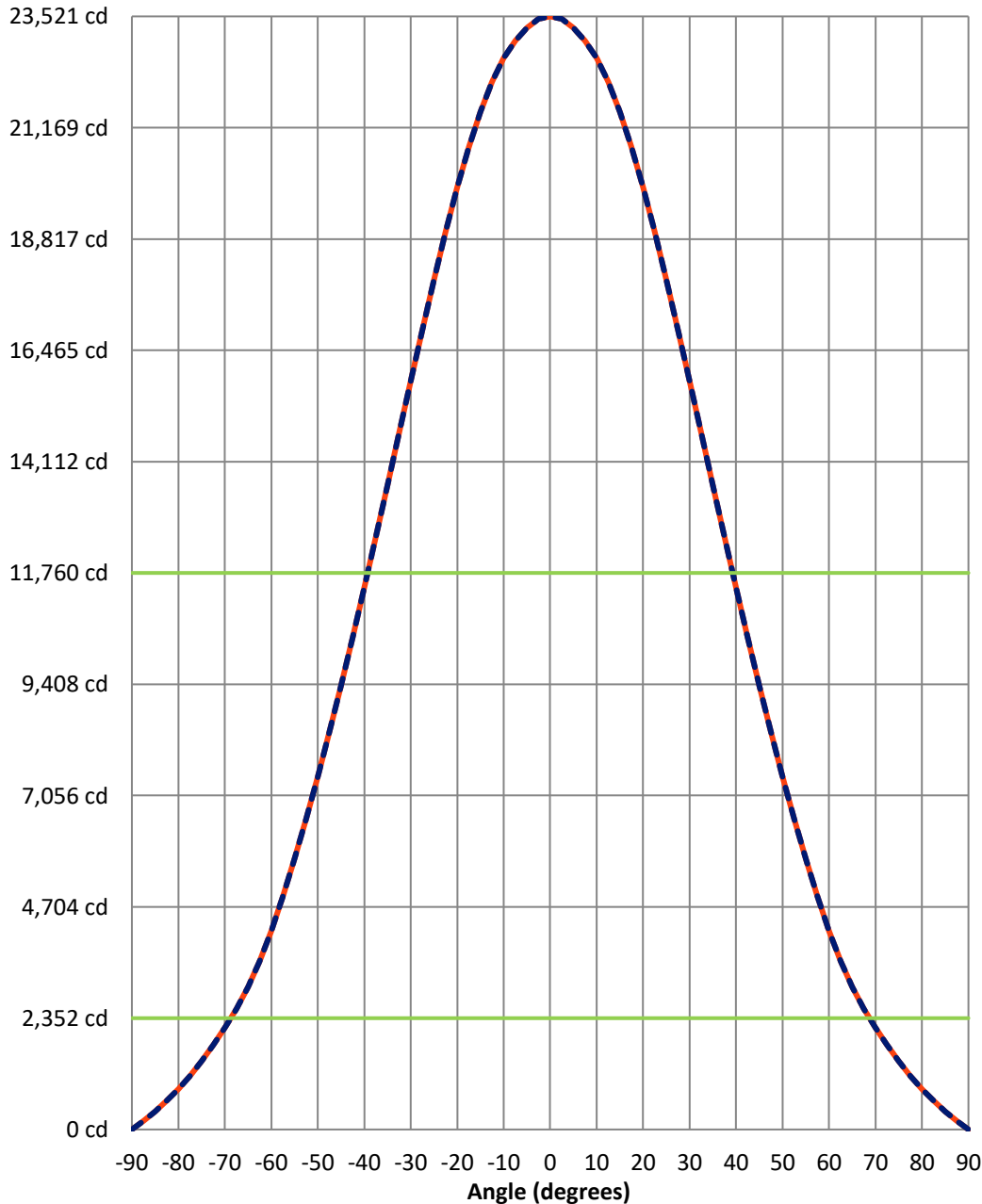
### Luminous Intensity Polar Plot



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

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### Luminous Intensity Plot



**Beam:**  
 H Angle: 78.6°  
 V Angle: 78.6°  
 Lumens: 18324.3  
 Efficiency: 43.3%

**Field:**  
 H Angle: 137.5°  
 V Angle: 137.5°  
 Lumens: 30005.4  
 Efficiency: 70.9%

**Spill:**  
 Lumens: 12344.3  
 Efficiency: 29.1%

- 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°	181.0	181.0	181.0	181.0	181.0	181.0	181.0	172.2	172.2	167.8	163.4
85°	379.7	379.7	379.7	379.7	379.7	370.9	366.5	362.1	357.6	348.8	344.4
82.5°	609.3	609.3	609.3	609.3	600.5	591.7	587.2	578.4	569.6	556.3	543.1
80°	852.2	852.2	852.2	852.2	838.9	830.1	816.8	808.0	794.8	777.1	759.4
77.5°	1130.3	1130.3	1130.3	1117.1	1108.3	1095.0	1081.8	1064.1	1046.4	1024.4	997.9
75°	1443.8	1443.8	1443.8	1426.2	1412.9	1399.7	1377.6	1355.5	1329.0	1298.1	1262.8
72.5°	1783.8	1783.8	1783.8	1761.7	1748.5	1726.4	1699.9	1669.0	1638.1	1598.4	1554.2
70°	2150.3	2150.3	2150.3	2123.8	2101.7	2079.6	2044.3	2009.0	1964.8	1920.7	1867.7
67.5°	2547.7	2547.7	2547.7	2516.8	2490.3	2459.4	2419.6	2375.5	2322.5	2260.7	2198.9
65°	3011.3	3011.3	2993.6	2967.1	2936.2	2892.1	2843.5	2781.7	2715.5	2636.0	2552.1
62.5°	3558.8	3558.8	3532.3	3501.4	3461.7	3404.3	3338.0	3258.6	3165.8	3064.3	2962.7
60°	4194.6	4194.6	4163.7	4124.0	4066.6	3995.9	3907.6	3806.1	3691.3	3563.2	3439.6
57.5°	4927.6	4927.6	4887.8	4834.8	4764.2	4675.9	4565.5	4437.5	4291.8	4132.8	3978.3
55°	5722.3	5722.3	5673.8	5612.0	5528.1	5422.1	5289.6	5139.5	4962.9	4781.9	4583.2
52.5°	6565.7	6565.7	6508.3	6437.6	6340.5	6216.9	6066.7	5890.1	5687.0	5475.1	5241.1
50°	7453.2	7453.2	7386.9	7307.5	7197.1	7051.4	6879.2	6676.1	6450.9	6203.6	5934.3
47.5°	8402.5	8402.5	8327.4	8234.7	8102.2	7934.4	7731.3	7497.3	7241.2	6963.1	6658.4
45°	9378.3	9378.3	9294.4	9188.4	9042.7	8852.8	8627.7	8402.5	8075.7	7753.4	7400.2
42.5°	10393.8	10393.8	10296.7	10177.5	10009.7	9802.2	9546.1	9254.6	8932.3	8570.3	8186.1
40°	11449.1	11449.1	11338.7	11201.8	11016.4	10778.0	10491.0	10164.2	9802.2	9400.4	8976.5
37.5°	12526.4	12526.4	12402.8	12252.7	12045.2	11780.2	11457.9	11095.9	10689.6	10243.7	9775.7
35°	13612.6	13612.6	13475.8	13312.4	13082.8	12791.4	12442.6	12040.8	11590.4	11104.7	10579.3
32.5°	14720.9	14720.9	14570.8	14385.3	14124.8	13802.5	13418.4	12981.2	12526.4	11961.3	11387.3
30°	15815.9	15815.9	15652.5	15449.4	15171.3	14818.0	14398.6	13917.3	13383.0	12804.6	12186.5
27.5°	16893.3	16849.1	16712.2	16495.9	16191.2	15815.9	15361.1	14840.1	14261.7	13625.9	12963.6
25°	17953.0	17904.4	17754.3	17515.8	17189.1	16778.5	16288.4	15732.0	15109.4	14438.3	13714.2
22.5°	18968.5	18915.5	18756.6	18500.5	18151.6	17705.7	17180.3	16584.2	15921.9	15202.2	14438.3
20°	19909.0	19851.6	19688.2	19418.9	19056.8	18584.4	18028.0	17387.8	16681.3	15921.9	15109.4
17.5°	20756.7	20699.3	20527.1	20249.0	19909.0	19383.5	18809.5	18134.0	17387.8	16584.2	15732.0
15°	21502.9	21441.1	21264.5	20986.3	20597.8	20103.3	19498.3	18809.5	18028.0	17180.3	16288.4
12.5°	22138.7	22076.9	21895.9	21617.7	21215.9	20721.4	20103.3	19383.5	18584.4	17705.7	16778.5
10°	22642.1	22580.3	22408.1	22143.2	21728.1	21215.9	20597.8	19909.0	19056.8	18151.6	17189.1
7.5°	23004.2	22946.8	22787.8	22522.9	22143.2	21617.7	20986.3	20249.0	19418.9	18500.5	17515.8
5°	23277.9	23211.7	23052.7	22787.8	22408.1	21895.9	21264.5	20527.1	19688.2	18756.6	17754.3
2.5°	23467.8	23388.3	23211.7	22946.8	22580.3	22076.9	21441.1	20699.3	19851.6	18915.5	17904.4
0°	23520.8	23467.8	23277.9	23004.2	22642.1	22138.7	21502.9	20756.7	19909.0	18968.5	17953.0



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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°	159.0	159.0	154.5	150.1	145.7	136.9	132.5	128.0	123.6	114.8	110.4
85°	335.6	326.7	317.9	309.1	295.8	287.0	273.8	264.9	251.7	238.4	225.2
82.5°	529.8	516.6	498.9	485.7	468.0	446.0	428.3	406.2	384.1	366.5	344.4
80°	741.8	719.7	697.6	675.6	649.1	622.6	596.1	569.6	538.7	507.8	476.9
77.5°	971.4	940.5	909.6	874.2	843.3	808.0	772.7	737.4	697.6	657.9	618.2
75°	1227.5	1187.7	1143.6	1099.4	1059.7	1011.1	962.6	914.0	861.0	812.4	759.4
72.5°	1505.6	1457.1	1404.1	1351.1	1293.7	1231.9	1170.1	1103.8	1042.0	980.2	914.0
70°	1805.9	1748.5	1682.3	1616.0	1545.4	1470.3	1395.3	1315.8	1236.3	1156.8	1077.4
67.5°	2128.2	2057.6	1978.1	1898.6	1810.3	1722.0	1633.7	1541.0	1443.8	1346.7	1254.0
65°	2472.6	2384.3	2291.6	2190.0	2088.5	1986.9	1881.0	1770.6	1660.2	1545.4	1443.8
62.5°	2856.8	2746.4	2627.2	2503.5	2388.7	2265.1	2150.3	2013.4	1881.0	1752.9	1624.9
60°	3302.7	3157.0	3011.3	2856.8	2711.0	2552.1	2410.8	2260.7	2110.6	1964.8	1814.7
57.5°	3801.6	3616.2	3439.6	3254.1	3059.9	2883.2	2702.2	2521.2	2353.4	2181.2	2017.8
55°	4366.8	4141.6	3920.9	3691.3	3466.1	3245.3	3015.7	2812.6	2605.1	2410.8	2220.9
52.5°	4985.0	4728.9	4455.1	4194.6	3907.6	3633.9	3377.8	3121.7	2878.8	2644.8	2428.5
50°	5647.3	5347.0	5033.5	4715.6	4388.9	4066.6	3757.5	3457.2	3174.7	2900.9	2644.8
47.5°	6336.1	5996.1	5638.4	5276.4	4927.6	4534.6	4163.7	3823.7	3483.7	3174.7	2878.8
45°	7042.5	6658.4	6265.4	5854.8	5444.2	5020.3	4609.7	4194.6	3823.7	3457.2	3121.7
42.5°	7771.1	7338.4	6901.2	6446.5	5991.7	5528.1	5064.4	4609.7	4163.7	3757.5	3377.8
40°	8521.7	8044.8	7545.9	7051.4	6565.7	6035.8	5528.1	5020.3	4534.6	4066.6	3633.9
37.5°	9272.3	8751.3	8212.6	7656.3	7099.9	6565.7	5991.7	5444.2	4927.6	4388.9	3907.6
35°	10027.3	9453.3	8870.5	8265.6	7656.3	7051.4	6446.5	5854.8	5276.4	4715.6	4194.6
32.5°	10786.8	10159.8	9515.2	8870.5	8212.6	7545.9	6901.2	6265.4	5638.4	5033.5	4455.1
30°	11533.0	10853.0	10159.8	9453.3	8751.3	8044.8	7338.4	6658.4	5996.1	5347.0	4728.9
27.5°	12261.5	11533.0	10786.8	10027.3	9272.3	8521.7	7771.1	7042.5	6336.1	5647.3	4985.0
25°	12963.6	12186.5	11387.3	10579.3	9775.7	8976.5	8186.1	7400.2	6658.4	5934.3	5241.1
22.5°	13625.9	12804.6	11961.3	11104.7	10243.7	9400.4	8570.3	7753.4	6963.1	6203.6	5475.1
20°	14261.7	13383.0	12526.4	11590.4	10689.6	9802.2	8932.3	8075.7	7241.2	6450.9	5687.0
17.5°	14840.1	13917.3	12981.2	12040.8	11095.9	10164.2	9254.6	8402.5	7497.3	6676.1	5890.1
15°	15361.1	14398.6	13418.4	12442.6	11457.9	10491.0	9546.1	8627.7	7731.3	6879.2	6066.7
12.5°	15815.9	14818.0	13802.5	12791.4	11780.2	10778.0	9802.2	8852.8	7934.4	7051.4	6216.9
10°	16191.2	15171.3	14124.8	13082.8	12045.2	11016.4	10009.7	9042.7	8102.2	7197.1	6340.5
7.5°	16495.9	15449.4	14385.3	13312.4	12252.7	11201.8	10177.5	9188.4	8234.7	7307.5	6437.6
5°	16712.2	15652.5	14570.8	13475.8	12402.8	11338.7	10296.7	9294.4	8327.4	7386.9	6508.3
2.5°	16849.1	15815.9	14720.9	13612.6	12526.4	11449.1	10393.8	9378.3	8402.5	7453.2	6565.7
0°	16893.3	15815.9	14720.9	13612.6	12526.4	11449.1	10393.8	9378.3	8402.5	7453.2	6565.7





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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°	106.0	97.1	88.3	83.9	75.1	70.6	61.8	53.0	48.6	39.7	30.9
85°	211.9	194.3	181.0	167.8	154.5	136.9	123.6	110.4	92.7	79.5	61.8
82.5°	322.3	300.2	278.2	256.1	234.0	211.9	185.4	163.4	141.3	119.2	92.7
80°	446.0	410.6	379.7	348.8	317.9	287.0	251.7	220.8	185.4	154.5	123.6
77.5°	574.0	534.3	490.1	446.0	401.8	362.1	317.9	278.2	238.4	194.3	154.5
75°	710.9	657.9	609.3	551.9	498.9	441.5	388.6	335.6	287.0	238.4	185.4
72.5°	852.2	785.9	719.7	657.9	591.7	525.4	463.6	397.4	335.6	278.2	220.8
70°	997.9	918.4	838.9	763.9	688.8	609.3	538.7	463.6	388.6	317.9	251.7
67.5°	1152.4	1059.7	967.0	869.8	785.9	697.6	609.3	525.4	441.5	362.1	287.0
65°	1320.2	1209.8	1095.0	993.5	883.1	785.9	688.8	591.7	498.9	401.8	317.9
62.5°	1492.4	1364.4	1236.3	1108.3	993.5	869.8	763.9	657.9	551.9	446.0	348.8
60°	1669.0	1523.3	1377.6	1236.3	1095.0	967.0	838.9	719.7	609.3	490.1	379.7
57.5°	1850.0	1686.7	1523.3	1364.4	1209.8	1059.7	918.4	785.9	657.9	534.3	410.6
55°	2035.5	1850.0	1669.0	1492.4	1320.2	1152.4	997.9	852.2	710.9	574.0	446.0
52.5°	2220.9	2017.8	1814.7	1624.9	1443.8	1254.0	1077.4	914.0	759.4	618.2	476.9
50°	2410.8	2181.2	1964.8	1752.9	1545.4	1346.7	1156.8	980.2	812.4	657.9	507.8
47.5°	2605.1	2353.4	2110.6	1881.0	1660.2	1443.8	1236.3	1042.0	861.0	697.6	538.7
45°	2812.6	2521.2	2260.7	2013.4	1770.6	1541.0	1315.8	1103.8	914.0	737.4	569.6
42.5°	3015.7	2702.2	2410.8	2150.3	1881.0	1633.7	1395.3	1170.1	962.6	772.7	596.1
40°	3245.3	2883.2	2552.1	2265.1	1986.9	1722.0	1470.3	1231.9	1011.1	808.0	622.6
37.5°	3466.1	3059.9	2711.0	2388.7	2088.5	1810.3	1545.4	1293.7	1059.7	843.3	649.1
35°	3691.3	3254.1	2856.8	2503.5	2190.0	1898.6	1616.0	1351.1	1099.4	874.2	675.6
32.5°	3920.9	3439.6	3011.3	2627.2	2291.6	1978.1	1682.3	1404.1	1143.6	909.6	697.6
30°	4141.6	3616.2	3157.0	2746.4	2384.3	2057.6	1748.5	1457.1	1187.7	940.5	719.7
27.5°	4366.8	3801.6	3302.7	2856.8	2472.6	2128.2	1805.9	1505.6	1227.5	971.4	741.8
25°	4583.2	3978.3	3439.6	2962.7	2552.1	2198.9	1867.7	1554.2	1262.8	997.9	759.4
22.5°	4781.9	4132.8	3563.2	3064.3	2636.0	2260.7	1920.7	1598.4	1298.1	1024.4	777.1
20°	4962.9	4291.8	3691.3	3165.8	2715.5	2322.5	1964.8	1638.1	1329.0	1046.4	794.8
17.5°	5139.5	4437.5	3806.1	3258.6	2781.7	2375.5	2009.0	1669.0	1355.5	1064.1	808.0
15°	5289.6	4565.5	3907.6	3338.0	2843.5	2419.6	2044.3	1699.9	1377.6	1081.8	816.8
12.5°	5422.1	4675.9	3995.9	3404.3	2892.1	2459.4	2079.6	1726.4	1399.7	1095.0	830.1
10°	5528.1	4764.2	4066.6	3461.7	2936.2	2490.3	2101.7	1748.5	1412.9	1108.3	838.9
7.5°	5612.0	4834.8	4124.0	3501.4	2967.1	2516.8	2123.8	1761.7	1426.2	1117.1	852.2
5°	5673.8	4887.8	4163.7	3532.3	2993.6	2547.7	2150.3	1783.8	1443.8	1130.3	852.2
2.5°	5722.3	4927.6	4194.6	3558.8	3011.3	2547.7	2150.3	1783.8	1443.8	1130.3	852.2
0°	5722.3	4927.6	4194.6	3558.8	3011.3	2547.7	2150.3	1783.8	1443.8	1130.3	852.2



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	22.1	17.7	8.8	0.0
85°	48.6	30.9	17.7	0.0
82.5°	70.6	48.6	22.1	0.0
80°	92.7	61.8	30.9	0.0
77.5°	119.2	79.5	39.7	0.0
75°	141.3	92.7	48.6	0.0
72.5°	163.4	110.4	53.0	0.0
70°	185.4	123.6	61.8	0.0
67.5°	211.9	136.9	70.6	0.0
65°	234.0	154.5	75.1	0.0
62.5°	256.1	167.8	83.9	0.0
60°	278.2	181.0	88.3	0.0
57.5°	300.2	194.3	97.1	0.0
55°	322.3	211.9	106.0	0.0
52.5°	344.4	225.2	110.4	0.0
50°	366.5	238.4	114.8	0.0
47.5°	384.1	251.7	123.6	0.0
45°	406.2	264.9	128.0	0.0
42.5°	428.3	273.8	132.5	0.0
40°	446.0	287.0	136.9	0.0
37.5°	468.0	295.8	145.7	0.0
35°	485.7	309.1	150.1	0.0
32.5°	498.9	317.9	154.5	0.0
30°	516.6	326.7	159.0	0.0
27.5°	529.8	335.6	159.0	0.0
25°	543.1	344.4	163.4	0.0
22.5°	556.3	348.8	167.8	0.0
20°	569.6	357.6	172.2	0.0
17.5°	578.4	362.1	172.2	0.0
15°	587.2	366.5	181.0	0.0
12.5°	591.7	370.9	181.0	0.0
10°	600.5	379.7	181.0	0.0
7.5°	609.3	379.7	181.0	0.0
5°	609.3	379.7	181.0	0.0
2.5°	609.3	379.7	181.0	0.0
0°	609.3	379.7	181.0	0.0

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