

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: P624203

Luminaire Tested: **EPH-VN-08-E-750-U-77**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624203  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 11/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-08-E-750-U-77  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 7 distribution lens  
Light Source: (128) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

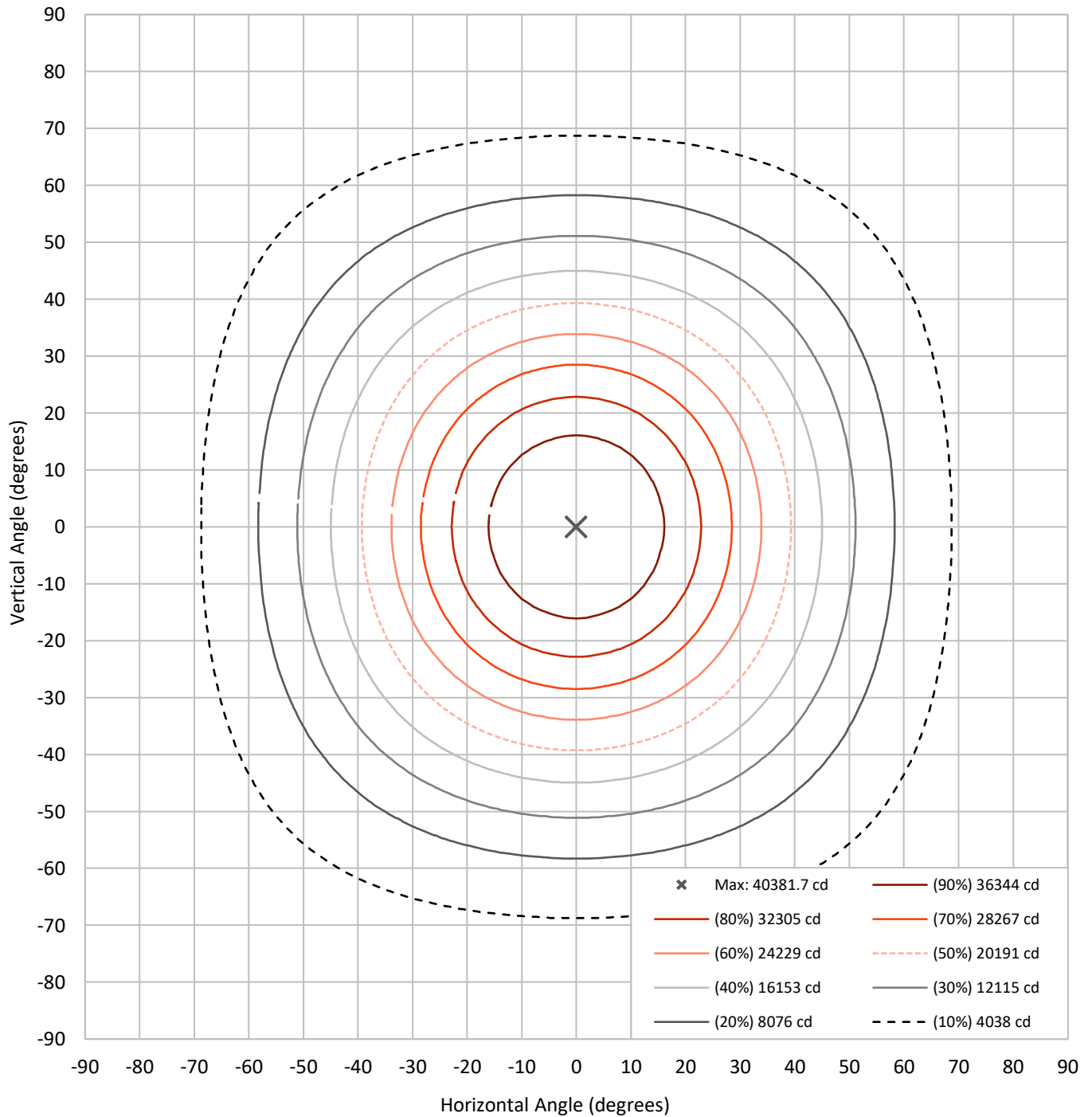
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	72708.1 lumens	Max Intensity:	40381.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	116.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	31460.1 lumens	Field Lumens:	51514.8 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 626.8  
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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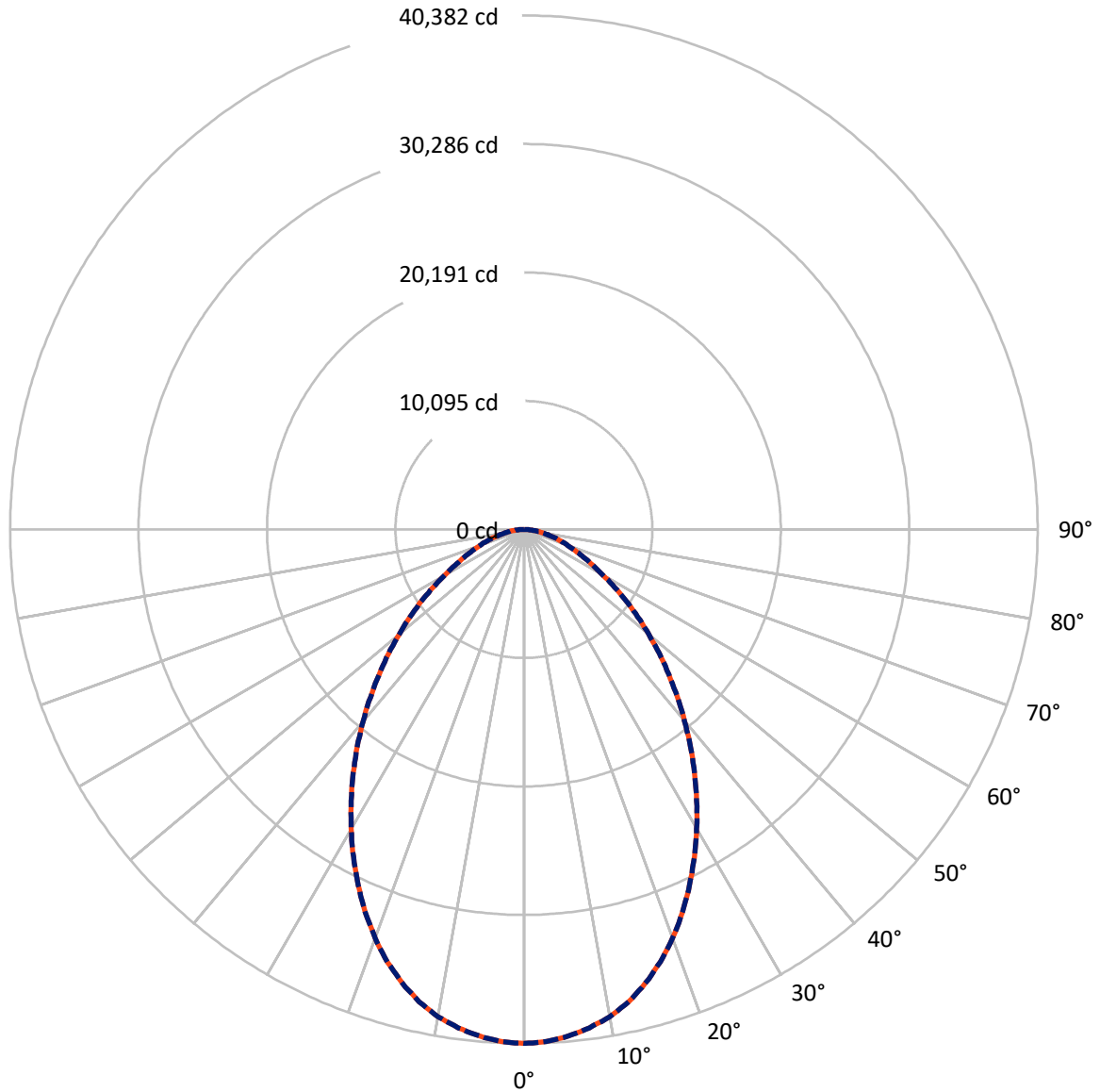
### Iso-Candela Plot





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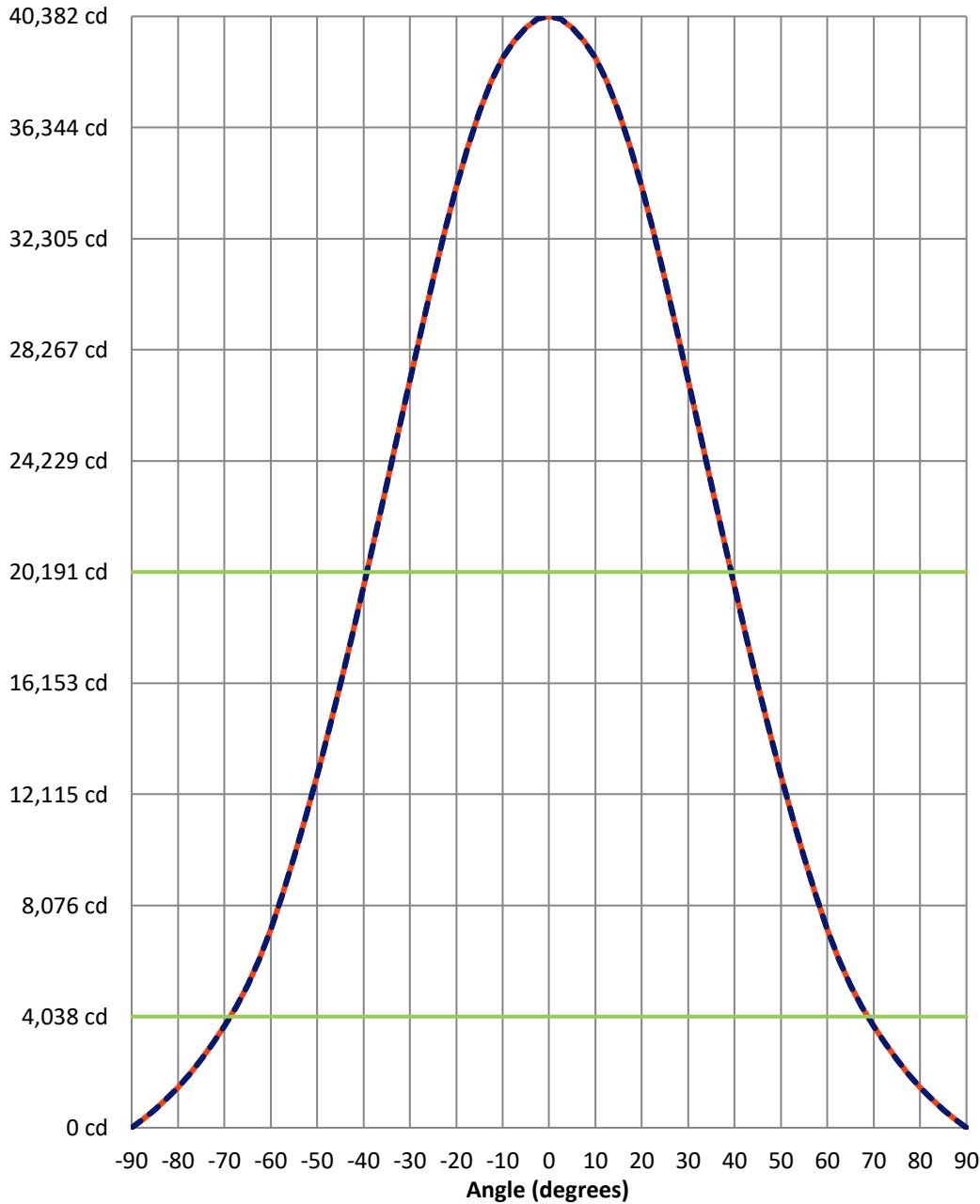
### Luminous Intensity Polar Plot



— 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: 31460.1  
 Efficiency: 43.3%

**Field:**  
 H Angle: 137.5°  
 V Angle: 137.5°  
 Lumens: 51514.8  
 Efficiency: 70.9%

**Spill:**  
 Lumens: 21193.3  
 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°	310.8	310.8	310.8	310.8	310.8	310.8	310.8	295.6	295.6	288.1	280.5
85°	651.9	651.9	651.9	651.9	651.9	636.8	629.2	621.6	614.0	598.9	591.3
82.5°	1046.1	1046.1	1046.1	1046.1	1031.0	1015.8	1008.2	993.1	977.9	955.2	932.4
80°	1463.0	1463.0	1463.0	1463.0	1440.3	1425.1	1402.4	1387.2	1364.5	1334.2	1303.9
77.5°	1940.6	1940.6	1940.6	1917.9	1902.7	1880.0	1857.2	1826.9	1796.6	1758.7	1713.2
75°	2478.8	2478.8	2478.8	2448.5	2425.8	2403.0	2365.1	2327.2	2281.7	2228.7	2168.0
72.5°	3062.5	3062.5	3062.5	3024.6	3001.9	2964.0	2918.5	2865.5	2812.4	2744.2	2668.4
70°	3691.7	3691.7	3691.7	3646.3	3608.3	3570.4	3509.8	3449.2	3373.4	3297.5	3206.6
67.5°	4374.0	4374.0	4374.0	4320.9	4275.4	4222.4	4154.1	4078.3	3987.4	3881.2	3775.1
65°	5169.9	5169.9	5139.6	5094.1	5041.1	4965.3	4881.9	4775.8	4662.0	4525.6	4381.6
62.5°	6109.9	6109.9	6064.4	6011.4	5943.2	5844.6	5730.9	5594.5	5435.3	5260.9	5086.6
60°	7201.5	7201.5	7148.5	7080.2	6981.7	6860.4	6708.8	6534.4	6337.3	6117.5	5905.3
57.5°	8459.9	8459.9	8391.7	8300.7	8179.4	8027.8	7838.3	7618.5	7368.3	7095.4	6830.1
55°	9824.4	9824.4	9741.0	9634.9	9490.9	9308.9	9081.5	8823.8	8520.6	8209.7	7868.6
52.5°	11272.3	11272.3	11173.7	11052.5	10885.7	10673.4	10415.7	10112.5	9763.8	9399.9	8998.1
50°	12796.0	12796.0	12682.3	12545.8	12356.3	12106.2	11810.5	11461.8	11075.2	10650.7	10188.3
47.5°	14425.8	14425.8	14296.9	14137.7	13910.3	13622.3	13273.6	12871.8	12432.1	11954.5	11431.5
45°	16101.1	16101.1	15957.1	15775.1	15525.0	15199.0	14812.4	14425.8	13864.8	13311.5	12705.0
42.5°	17844.6	17844.6	17677.9	17473.2	17185.1	16828.8	16389.2	15888.9	15335.5	14713.9	14054.4
40°	19656.4	19656.4	19466.9	19231.9	18913.5	18504.2	18011.4	17450.5	16828.8	16139.0	15411.3
37.5°	21506.1	21506.1	21293.8	21036.1	20679.8	20224.9	19671.6	19050.0	18352.5	17586.9	16783.4
35°	23370.9	23370.9	23135.9	22855.4	22461.2	21960.9	21362.0	20672.2	19899.0	19065.1	18163.0
32.5°	25273.6	25273.6	25015.9	24697.5	24250.2	23696.8	23037.3	22286.9	21506.1	20535.7	19550.3
30°	27153.6	27153.6	26873.1	26524.4	26046.8	25440.4	24720.2	23893.9	22976.7	21983.6	20922.4
27.5°	29003.2	28927.4	28692.4	28321.0	27797.9	27153.6	26372.8	25478.3	24485.2	23393.6	22256.5
25°	30822.6	30739.2	30481.4	30072.1	29511.1	28806.1	27964.7	27009.5	25940.7	24788.4	23545.2
22.5°	32566.1	32475.1	32202.2	31762.6	31163.7	30398.1	29496.0	28472.6	27335.5	26099.9	24788.4
20°	34180.8	34082.2	33801.7	33339.3	32717.7	31906.6	30951.4	29852.3	28639.4	27335.5	25940.7
17.5°	35636.2	35537.7	35242.0	34764.5	34180.8	33278.7	32293.2	31133.4	29852.3	28472.6	27009.5
15°	36917.3	36811.2	36508.0	36030.4	35363.3	34514.3	33475.8	32293.2	30951.4	29496.0	27964.7
12.5°	38008.9	37902.8	37592.0	37114.4	36424.6	35575.6	34514.3	33278.7	31906.6	30398.1	28806.1
10°	38873.1	38767.0	38471.4	38016.5	37303.9	36424.6	35363.3	34180.8	32717.7	31163.7	29511.1
7.5°	39494.7	39396.2	39123.3	38668.4	38016.5	37114.4	36030.4	34764.5	33339.3	31762.6	30072.1
5°	39964.7	39851.0	39578.1	39123.3	38471.4	37592.0	36508.0	35242.0	33801.7	32202.2	30481.4
2.5°	40290.7	40154.2	39851.0	39396.2	38767.0	37902.8	36811.2	35537.7	34082.2	32475.1	30739.2
0°	40381.7	40290.7	39964.7	39494.7	38873.1	38008.9	36917.3	35636.2	34180.8	32566.1	30822.6



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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°	272.9	272.9	265.3	257.7	250.2	235.0	227.4	219.8	212.3	197.1	189.5
85°	576.1	561.0	545.8	530.6	507.9	492.7	470.0	454.8	432.1	409.4	386.6
82.5°	909.7	886.9	856.6	833.9	803.5	765.6	735.3	697.4	659.5	629.2	591.3
80°	1273.5	1235.6	1197.7	1159.8	1114.3	1068.9	1023.4	977.9	924.8	871.8	818.7
77.5°	1667.7	1614.7	1561.6	1501.0	1447.9	1387.2	1326.6	1266.0	1197.7	1129.5	1061.3
75°	2107.4	2039.2	1963.4	1887.6	1819.3	1735.9	1652.6	1569.2	1478.2	1394.8	1303.9
72.5°	2585.0	2501.6	2410.6	2319.7	2221.1	2115.0	2008.8	1895.1	1789.0	1682.9	1569.2
70°	3100.4	3001.9	2888.2	2774.5	2653.2	2524.3	2395.5	2259.0	2122.6	1986.1	1849.7
67.5°	3653.8	3532.5	3396.1	3259.6	3108.0	2956.4	2804.8	2645.6	2478.8	2312.1	2152.9
65°	4245.1	4093.5	3934.3	3760.0	3585.6	3411.3	3229.3	3039.8	2850.3	2653.2	2478.8
62.5°	4904.6	4715.1	4510.4	4298.2	4101.1	3888.8	3691.7	3456.7	3229.3	3009.5	2789.6
60°	5670.3	5420.1	5169.9	4904.6	4654.5	4381.6	4139.0	3881.2	3623.5	3373.4	3115.6
57.5°	6526.9	6208.5	5905.3	5586.9	5253.3	4950.1	4639.3	4328.5	4040.4	3744.8	3464.3
55°	7497.2	7110.6	6731.5	6337.3	5950.7	5571.7	5177.5	4828.8	4472.5	4139.0	3813.0
52.5°	8558.5	8118.8	7648.8	7201.5	6708.8	6238.8	5799.1	5359.5	4942.5	4540.8	4169.3
50°	9695.5	9180.1	8641.8	8096.0	7535.1	6981.7	6451.1	5935.6	5450.4	4980.4	4540.8
47.5°	10878.1	10294.4	9680.4	9058.8	8459.9	7785.2	7148.5	6564.8	5981.1	5450.4	4942.5
45°	12091.0	11431.5	10756.8	10051.8	9346.8	8619.1	7914.1	7201.5	6564.8	5935.6	5359.5
42.5°	13341.8	12598.9	11848.4	11067.6	10286.8	9490.9	8694.9	7914.1	7148.5	6451.1	5799.1
40°	14630.5	13811.8	12955.2	12106.2	11272.3	10362.6	9490.9	8619.1	7785.2	6981.7	6238.8
37.5°	15919.2	15024.7	14099.8	13144.7	12189.5	11272.3	10286.8	9346.8	8459.9	7535.1	6708.8
35°	17215.5	16230.0	15229.3	14190.8	13144.7	12106.2	11067.6	10051.8	9058.8	8096.0	7201.5
32.5°	18519.3	17442.9	16336.1	15229.3	14099.8	12955.2	11848.4	10756.8	9680.4	8641.8	7648.8
30°	19800.4	18633.0	17442.9	16230.0	15024.7	13811.8	12598.9	11431.5	10294.4	9180.1	8118.8
27.5°	21051.2	19800.4	18519.3	17215.5	15919.2	14630.5	13341.8	12091.0	10878.1	9695.5	8558.5
25°	22256.5	20922.4	19550.3	18163.0	16783.4	15411.3	14054.4	12705.0	11431.5	10188.3	8998.1
22.5°	23393.6	21983.6	20535.7	19065.1	17586.9	16139.0	14713.9	13311.5	11954.5	10650.7	9399.9
20°	24485.2	22976.7	21506.1	19899.0	18352.5	16828.8	15335.5	13864.8	12432.1	11075.2	9763.8
17.5°	25478.3	23893.9	22286.9	20672.2	19050.0	17450.5	15888.9	14425.8	12871.8	11461.8	10112.5
15°	26372.8	24720.2	23037.3	21362.0	19671.6	18011.4	16389.2	14812.4	13273.6	11810.5	10415.7
12.5°	27153.6	25440.4	23696.8	21960.9	20224.9	18504.2	16828.8	15199.0	13622.3	12106.2	10673.4
10°	27797.9	26046.8	24250.2	22461.2	20679.8	18913.5	17185.1	15525.0	13910.3	12356.3	10885.7
7.5°	28321.0	26524.4	24697.5	22855.4	21036.1	19231.9	17473.2	15775.1	14137.7	12545.8	11052.5
5°	28692.4	26873.1	25015.9	23135.9	21293.8	19466.9	17677.9	15957.1	14296.9	12682.3	11173.7
2.5°	28927.4	27153.6	25273.6	23370.9	21506.1	19656.4	17844.6	16101.1	14425.8	12796.0	11272.3
0°	29003.2	27153.6	25273.6	23370.9	21506.1	19656.4	17844.6	16101.1	14425.8	12796.0	11272.3





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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°	181.9	166.8	151.6	144.0	128.9	121.3	106.1	91.0	83.4	68.2	53.1
85°	363.9	333.5	310.8	288.1	265.3	235.0	212.3	189.5	159.2	136.5	106.1
82.5°	553.4	515.5	477.6	439.7	401.8	363.9	318.4	280.5	242.6	204.7	159.2
80°	765.6	705.0	651.9	598.9	545.8	492.7	432.1	379.0	318.4	265.3	212.3
77.5°	985.5	917.2	841.4	765.6	689.8	621.6	545.8	477.6	409.4	333.5	265.3
75°	1220.5	1129.5	1046.1	947.6	856.6	758.1	667.1	576.1	492.7	409.4	318.4
72.5°	1463.0	1349.3	1235.6	1129.5	1015.8	902.1	796.0	682.3	576.1	477.6	379.0
70°	1713.2	1576.8	1440.3	1311.4	1182.6	1046.1	924.8	796.0	667.1	545.8	432.1
67.5°	1978.5	1819.3	1660.1	1493.4	1349.3	1197.7	1046.1	902.1	758.1	621.6	492.7
65°	2266.6	2077.1	1880.0	1705.6	1516.1	1349.3	1182.6	1015.8	856.6	689.8	545.8
62.5°	2562.2	2342.4	2122.6	1902.7	1705.6	1493.4	1311.4	1129.5	947.6	765.6	598.9
60°	2865.5	2615.3	2365.1	2122.6	1880.0	1660.1	1440.3	1235.6	1046.1	841.4	651.9
57.5°	3176.3	2895.8	2615.3	2342.4	2077.1	1819.3	1576.8	1349.3	1129.5	917.2	705.0
55°	3494.6	3176.3	2865.5	2562.2	2266.6	1978.5	1713.2	1463.0	1220.5	985.5	765.6
52.5°	3813.0	3464.3	3115.6	2789.6	2478.8	2152.9	1849.7	1569.2	1303.9	1061.3	818.7
50°	4139.0	3744.8	3373.4	3009.5	2653.2	2312.1	1986.1	1682.9	1394.8	1129.5	871.8
47.5°	4472.5	4040.4	3623.5	3229.3	2850.3	2478.8	2122.6	1789.0	1478.2	1197.7	924.8
45°	4828.8	4328.5	3881.2	3456.7	3039.8	2645.6	2259.0	1895.1	1569.2	1266.0	977.9
42.5°	5177.5	4639.3	4139.0	3691.7	3229.3	2804.8	2395.5	2008.8	1652.6	1326.6	1023.4
40°	5571.7	4950.1	4381.6	3888.8	3411.3	2956.4	2524.3	2115.0	1735.9	1387.2	1068.9
37.5°	5950.7	5253.3	4654.5	4101.1	3585.6	3108.0	2653.2	2221.1	1819.3	1447.9	1114.3
35°	6337.3	5586.9	4904.6	4298.2	3760.0	3259.6	2774.5	2319.7	1887.6	1501.0	1159.8
32.5°	6731.5	5905.3	5169.9	4510.4	3934.3	3396.1	2888.2	2410.6	1963.4	1561.6	1197.7
30°	7110.6	6208.5	5420.1	4715.1	4093.5	3532.5	3001.9	2501.6	2039.2	1614.7	1235.6
27.5°	7497.2	6526.9	5670.3	4904.6	4245.1	3653.8	3100.4	2585.0	2107.4	1667.7	1273.5
25°	7868.6	6830.1	5905.3	5086.6	4381.6	3775.1	3206.6	2668.4	2168.0	1713.2	1303.9
22.5°	8209.7	7095.4	6117.5	5260.9	4525.6	3881.2	3297.5	2744.2	2228.7	1758.7	1334.2
20°	8520.6	7368.3	6337.3	5435.3	4662.0	3987.4	3373.4	2812.4	2281.7	1796.6	1364.5
17.5°	8823.8	7618.5	6534.4	5594.5	4775.8	4078.3	3449.2	2865.5	2327.2	1826.9	1387.2
15°	9081.5	7838.3	6708.8	5730.9	4881.9	4154.1	3509.8	2918.5	2365.1	1857.2	1402.4
12.5°	9308.9	8027.8	6860.4	5844.6	4965.3	4222.4	3570.4	2964.0	2403.0	1880.0	1425.1
10°	9490.9	8179.4	6981.7	5943.2	5041.1	4275.4	3608.3	3001.9	2425.8	1902.7	1440.3
7.5°	9634.9	8300.7	7080.2	6011.4	5094.1	4320.9	3646.3	3024.6	2448.5	1917.9	1463.0
5°	9741.0	8391.7	7148.5	6064.4	5139.6	4374.0	3691.7	3062.5	2478.8	1940.6	1463.0
2.5°	9824.4	8459.9	7201.5	6109.9	5169.9	4374.0	3691.7	3062.5	2478.8	1940.6	1463.0
0°	9824.4	8459.9	7201.5	6109.9	5169.9	4374.0	3691.7	3062.5	2478.8	1940.6	1463.0



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	37.9	30.3	15.2	0.0
85°	83.4	53.1	30.3	0.0
82.5°	121.3	83.4	37.9	0.0
80°	159.2	106.1	53.1	0.0
77.5°	204.7	136.5	68.2	0.0
75°	242.6	159.2	83.4	0.0
72.5°	280.5	189.5	91.0	0.0
70°	318.4	212.3	106.1	0.0
67.5°	363.9	235.0	121.3	0.0
65°	401.8	265.3	128.9	0.0
62.5°	439.7	288.1	144.0	0.0
60°	477.6	310.8	151.6	0.0
57.5°	515.5	333.5	166.8	0.0
55°	553.4	363.9	181.9	0.0
52.5°	591.3	386.6	189.5	0.0
50°	629.2	409.4	197.1	0.0
47.5°	659.5	432.1	212.3	0.0
45°	697.4	454.8	219.8	0.0
42.5°	735.3	470.0	227.4	0.0
40°	765.6	492.7	235.0	0.0
37.5°	803.5	507.9	250.2	0.0
35°	833.9	530.6	257.7	0.0
32.5°	856.6	545.8	265.3	0.0
30°	886.9	561.0	272.9	0.0
27.5°	909.7	576.1	272.9	0.0
25°	932.4	591.3	280.5	0.0
22.5°	955.2	598.9	288.1	0.0
20°	977.9	614.0	295.6	0.0
17.5°	993.1	621.6	295.6	0.0
15°	1008.2	629.2	310.8	0.0
12.5°	1015.8	636.8	310.8	0.0
10°	1031.0	651.9	310.8	0.0
7.5°	1046.1	651.9	310.8	0.0
5°	1046.1	651.9	310.8	0.0
2.5°	1046.1	651.9	310.8	0.0
0°	1046.1	651.9	310.8	0.0

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