

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: P628571

Luminaire Tested: **EPH-VN-07-E-740-U-LAM**

Issue Date: 01/11/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P628571  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 01/11/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-07-E-740-U-LAM  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
LAMBERTIAN distribution lens  
Light Source: (112) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

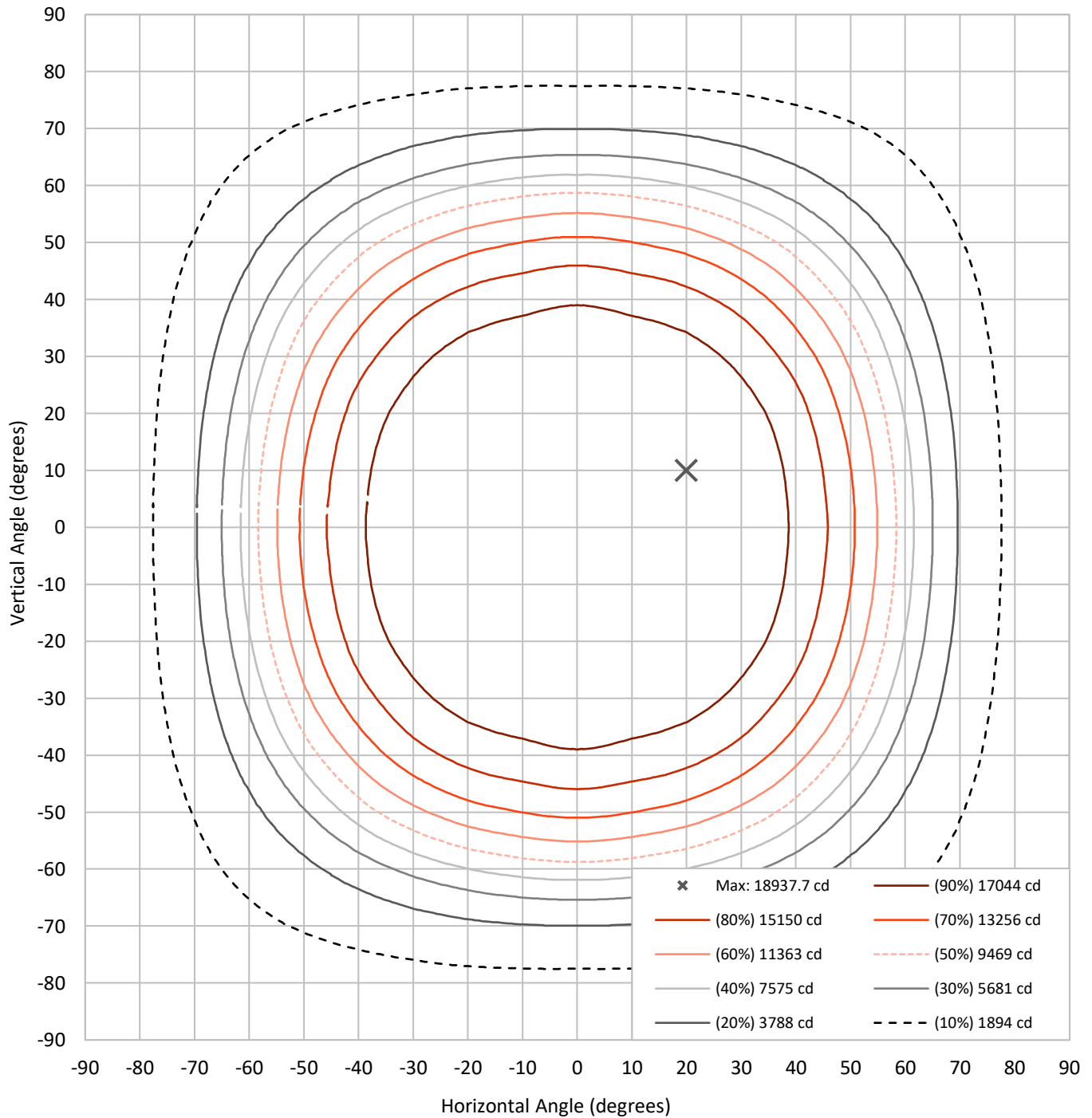
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	58098.2 lumens	Max Intensity:	18937.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	109.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	35650.2 lumens	Field Lumens:	42738.6 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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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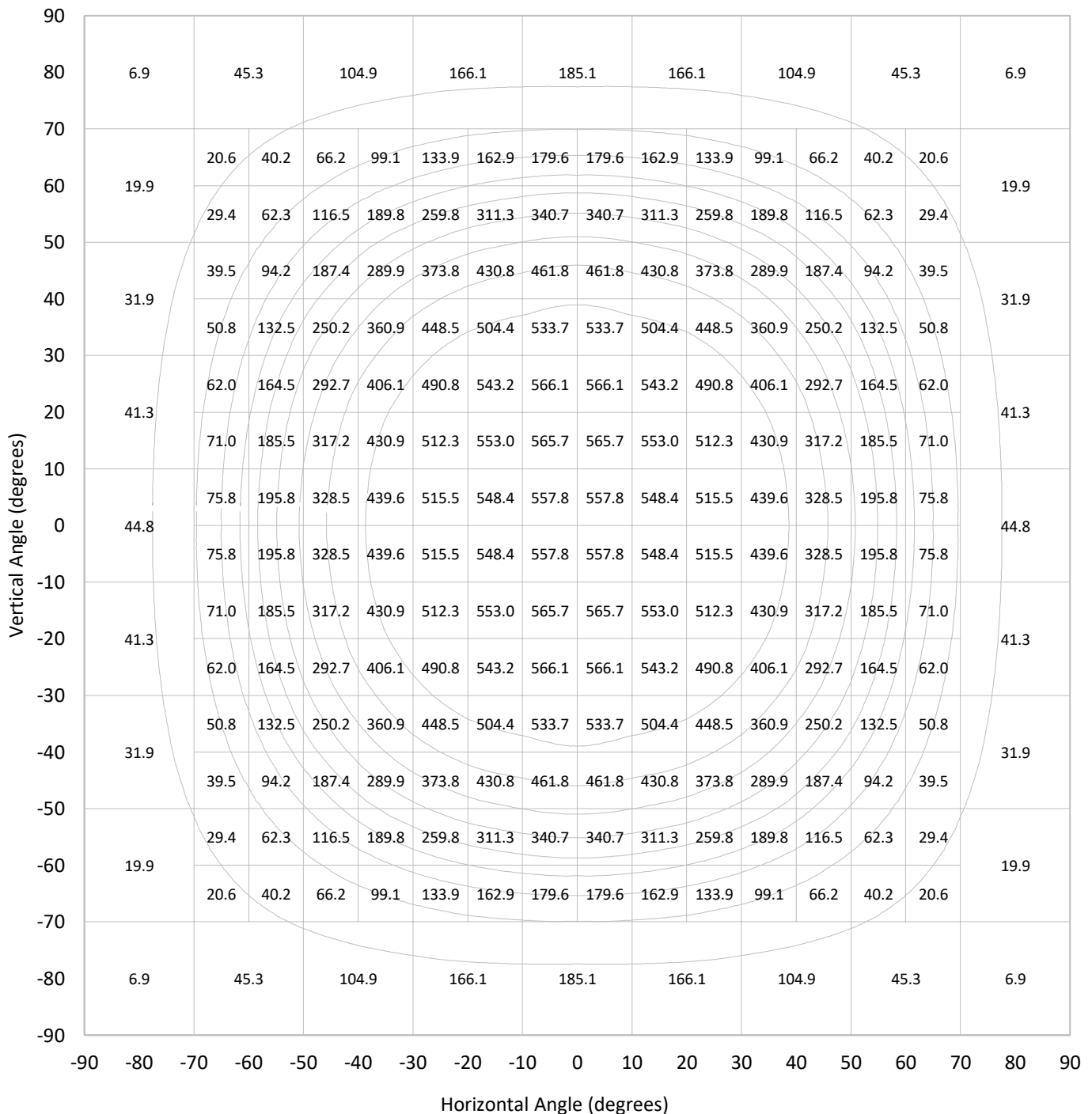
### Iso-Candela Plot





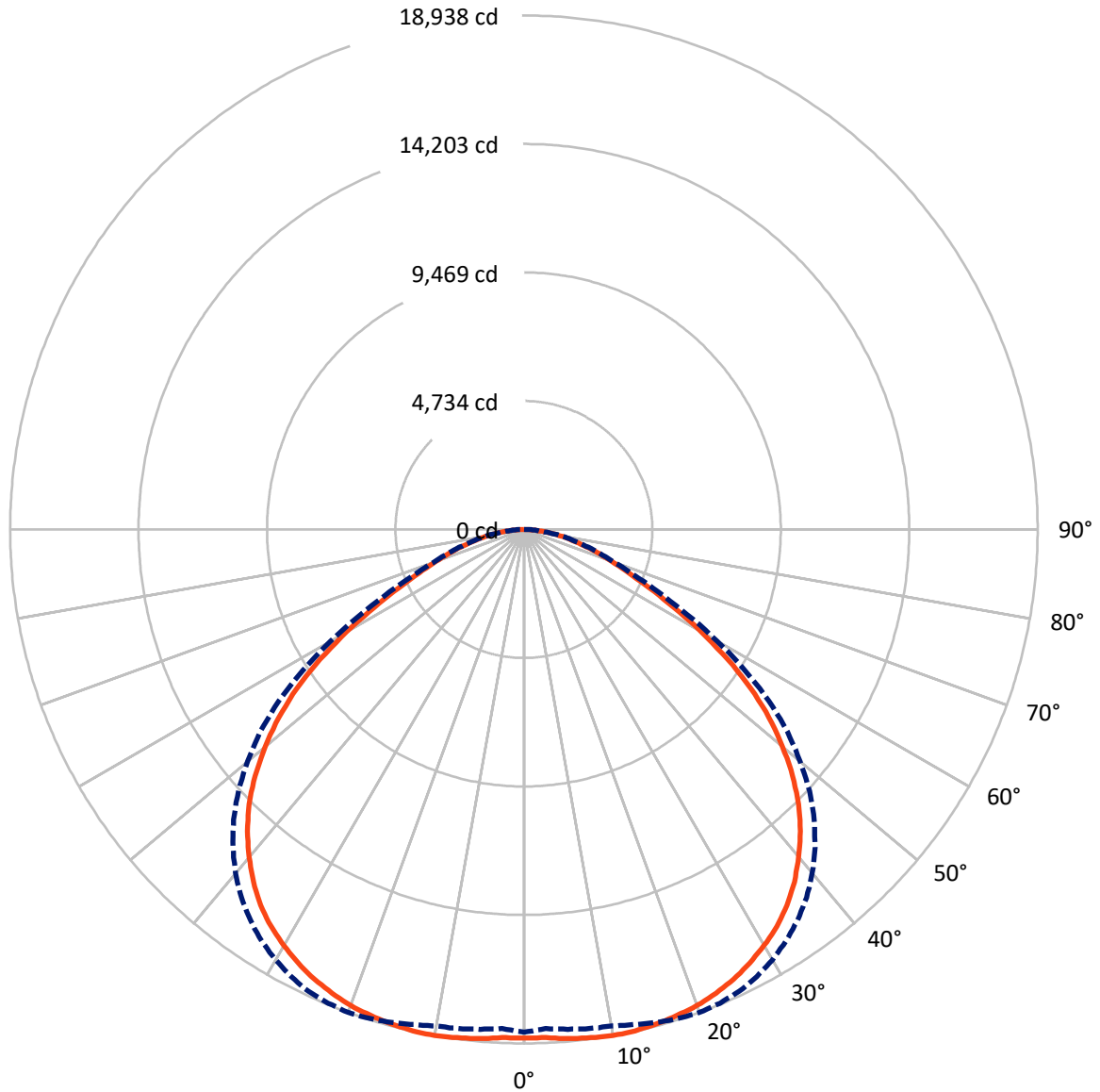
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### Lumen Table



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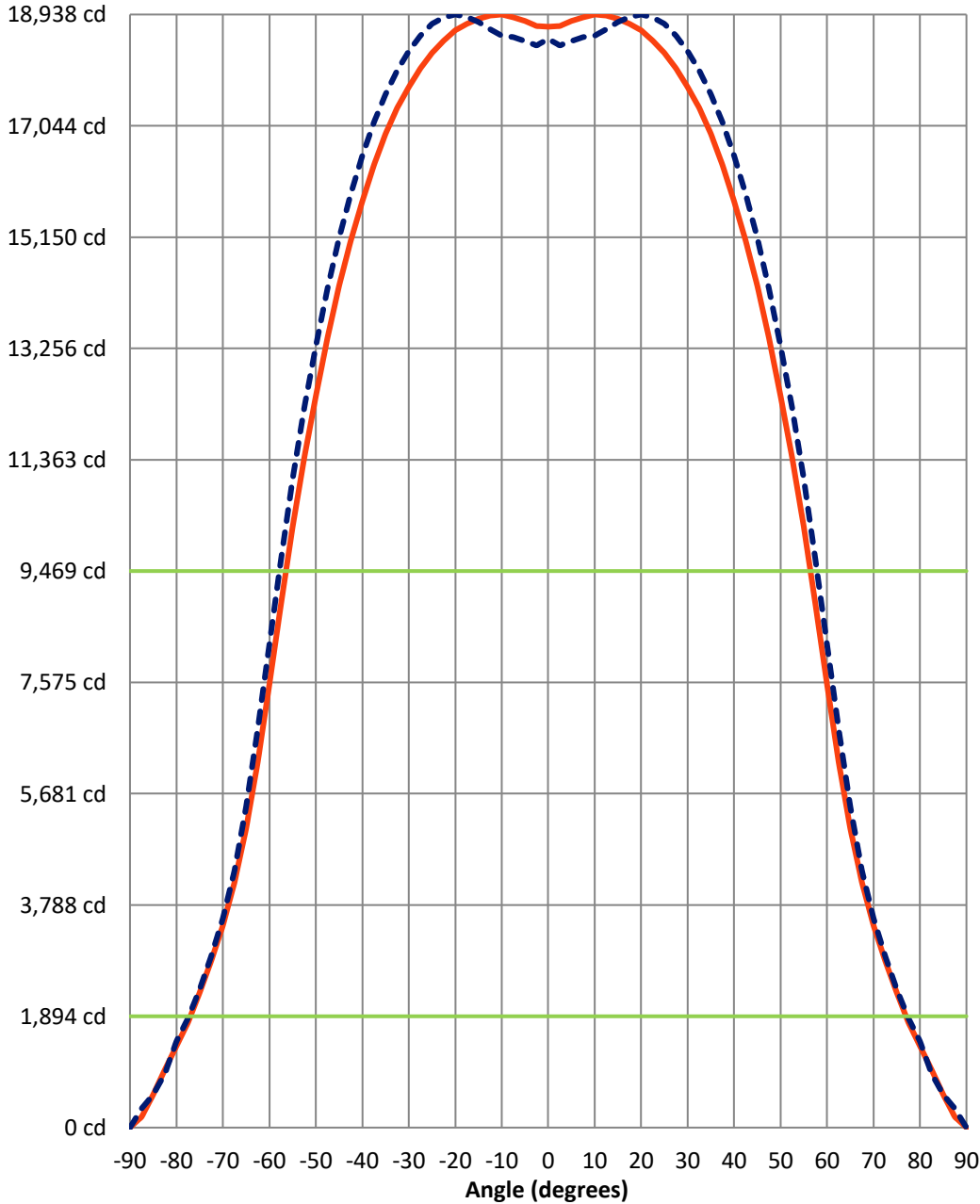
### Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg    - - - Horizontal Distribution Through 10-Deg

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### Luminous Intensity Plot



**Beam:**  
 H Angle: 115.7°  
 V Angle: 112.9°  
 Lumens: 35650.2  
 Efficiency: 61.4%

**Field:**  
 H Angle: 154.7°  
 V Angle: 154°  
 Lumens: 42738.6  
 Efficiency: 73.6%

**Spill:**  
 Lumens: 15359.6  
 Efficiency: 26.4%

- Vertical Distribution through 20-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°	152.8	165.0	171.2	177.3	183.4	189.5	195.6	189.5	183.4	183.4	177.3
85°	409.6	421.8	427.9	470.7	513.5	537.9	568.5	562.4	556.3	556.3	550.2
82.5°	819.1	855.8	886.4	929.2	953.6	990.3	1014.7	996.4	959.7	959.7	941.4
80°	1454.9	1467.1	1473.2	1479.3	1448.7	1442.6	1430.4	1412.1	1357.1	1357.1	1326.5
77.5°	1852.2	1864.4	1876.7	1864.4	1858.3	1852.2	1833.9	1815.5	1766.6	1766.6	1729.9
75°	2451.3	2451.3	2451.3	2432.9	2420.7	2402.4	2371.8	2341.2	2249.5	2249.5	2194.5
72.5°	3087.0	3080.9	3074.8	3038.1	3007.5	2970.9	2928.1	2891.4	2787.5	2787.5	2714.1
70°	3753.3	3765.5	3771.6	3722.7	3686.1	3637.2	3582.1	3514.9	3362.1	3362.1	3258.2
67.5°	4670.2	4658.0	4645.8	4578.5	4529.6	4462.4	4382.9	4285.1	4052.8	4052.8	3906.1
65°	5807.2	5825.6	5788.9	5721.6	5630.0	5519.9	5397.7	5257.1	4908.6	4908.6	4700.8
62.5°	7182.6	7213.2	7170.4	7084.8	6968.7	6822.0	6650.8	6449.1	5966.2	5966.2	5709.4
60°	8747.5	8741.4	8661.9	8545.8	8393.0	8209.6	8020.1	7800.0	7243.7	7243.7	6932.0
57.5°	10184.0	10171.8	10074.0	9957.9	9805.0	9609.4	9407.7	9175.4	8588.6	8588.6	8227.9
55°	11473.9	11461.6	11363.8	11241.6	11082.6	10887.0	10703.6	10483.6	9884.5	9884.5	9499.4
52.5°	12617.0	12623.1	12537.5	12403.0	12231.9	12042.4	11865.1	11645.0	11058.2	11058.2	10685.3
50°	13668.4	13662.3	13570.6	13448.3	13289.4	13106.0	12928.7	12708.7	12121.8	12121.8	11761.2
47.5°	14646.4	14634.2	14530.3	14395.8	14230.8	14071.8	13906.8	13711.2	13112.1	13112.1	12751.4
45°	15465.6	15441.1	15337.2	15208.8	15049.9	14909.3	14762.6	14615.9	14022.9	14022.9	13680.6
42.5°	16168.5	16162.4	16058.5	15930.1	15771.2	15648.9	15514.5	15331.1	14811.5	14811.5	14475.3
40°	16841.0	16792.1	16688.1	16565.9	16419.2	16315.2	16180.8	15997.4	15490.0	15490.0	15166.0
37.5°	17342.2	17348.3	17238.3	17103.8	16975.4	16877.6	16755.4	16584.2	16113.5	16113.5	15789.5
35°	17819.0	17788.4	17696.8	17580.6	17464.5	17354.4	17226.1	17079.4	16663.7	16663.7	16358.0
32.5°	18130.8	18173.6	18063.5	17941.3	17874.0	17788.4	17654.0	17501.1	17103.8	17103.8	16828.7
30°	18473.1	18436.4	18350.8	18246.9	18198.0	18143.0	18026.9	17880.1	17482.8	17482.8	17226.1
27.5°	18711.5	18693.2	18589.2	18491.4	18467.0	18418.1	18326.4	18198.0	17806.8	17806.8	17568.4
25°	18815.4	18827.6	18729.8	18674.8	18674.8	18644.3	18570.9	18460.9	18088.0	18088.0	17855.7
22.5°	18864.3	18852.1	18784.8	18772.6	18803.2	18778.7	18748.2	18650.4	18332.5	18332.5	18136.9
20°	18894.9	18809.3	18748.2	18797.1	18833.7	18827.6	18803.2	18742.1	18534.2	18534.2	18363.1
17.5°	18827.6	18772.6	18699.3	18772.6	18852.1	18858.2	18833.7	18797.1	18693.2	18693.2	18540.3
15°	18662.6	18619.8	18632.0	18705.4	18797.1	18827.6	18846.0	18888.8	18797.1	18797.1	18662.6
12.5°	18552.6	18497.5	18552.6	18625.9	18674.8	18693.2	18839.9	18919.3	18858.2	18858.2	18772.6
10°	18522.0	18412.0	18485.3	18552.6	18577.0	18687.0	18809.3	18894.9	18937.7	18888.8	18778.7
7.5°	18460.9	18387.5	18418.1	18448.6	18589.2	18668.7	18735.9	18827.6	18888.8	18888.8	18784.8
5°	18430.3	18338.6	18350.8	18479.2	18577.0	18632.0	18656.5	18735.9	18827.6	18846.0	18772.6
2.5°	18350.8	18308.0	18399.7	18412.0	18485.3	18528.1	18552.6	18625.9	18742.1	18784.8	18754.3
0°	18308.0	18246.9	18185.8	18234.7	18356.9	18448.6	18485.3	18595.3	18729.8	18772.6	18705.4



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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°	171.2	165.0	158.9	152.8	158.9	158.9	158.9	152.8	158.9	152.8	152.8
85°	531.8	507.4	489.0	464.6	440.1	421.8	397.3	372.9	366.8	360.7	348.4
82.5°	916.9	886.4	855.8	819.1	782.4	739.7	696.9	648.0	635.7	623.5	605.2
80°	1289.8	1247.0	1204.2	1161.4	1124.8	1082.0	1033.1	978.1	941.4	910.8	874.1
77.5°	1681.0	1619.9	1558.8	1485.4	1442.6	1399.8	1350.9	1295.9	1240.9	1192.0	1137.0
75°	2127.3	2060.0	1998.9	1925.6	1846.1	1766.6	1687.2	1613.8	1534.3	1461.0	1387.6
72.5°	2622.4	2524.6	2426.8	2335.1	2237.3	2139.5	2035.6	1937.8	1840.0	1742.2	1638.2
70°	3142.0	3019.8	2897.5	2775.2	2646.9	2518.5	2396.2	2274.0	2151.7	2023.4	1907.2
67.5°	3753.3	3612.7	3453.8	3282.6	3093.1	2928.1	2769.1	2622.4	2475.7	2329.0	2182.3
65°	4517.4	4321.8	4107.8	3875.6	3655.5	3435.4	3203.1	2983.1	2811.9	2640.8	2475.7
62.5°	5458.8	5183.7	4884.2	4584.7	4315.7	4028.4	3759.4	3472.1	3203.1	2958.6	2756.9
60°	6583.6	6210.7	5843.9	5458.8	5085.9	4694.7	4352.4	3997.8	3661.6	3362.1	3068.7
57.5°	7824.5	7390.5	6950.3	6479.6	5972.3	5513.8	5049.2	4584.7	4187.3	3790.0	3459.9
55°	9083.7	8625.3	8130.1	7598.3	7042.0	6455.2	5825.6	5306.0	4761.9	4297.3	3869.4
52.5°	10281.8	9805.0	9291.6	8802.5	8136.2	7463.8	6773.1	6088.4	5452.7	4859.7	4340.1
50°	11351.6	10887.0	10391.9	9823.4	9206.0	8490.8	7720.6	6950.3	6198.4	5501.6	4853.6
47.5°	12329.7	11877.3	11382.2	10813.7	10251.3	9456.6	8680.3	7830.6	6993.1	6192.3	5434.3
45°	13246.6	12788.1	12274.6	11730.6	11082.6	10373.5	9572.8	8717.0	7818.4	6919.8	6045.6
42.5°	14077.9	13619.5	13099.9	12537.5	11895.6	11192.7	10416.3	9554.4	8649.7	7671.7	6711.9
40°	14805.4	14359.1	13857.9	13271.0	12672.0	11932.3	11168.2	10349.1	9413.8	8429.6	7372.1
37.5°	15441.1	15025.4	14530.3	13949.6	13313.8	12653.6	11865.1	11046.0	10202.4	9132.6	8050.6
35°	16003.5	15618.4	15111.0	14560.9	13937.3	13240.5	12500.8	11700.0	10789.2	9786.7	8735.3
32.5°	16492.5	16101.3	15636.7	15086.6	14481.4	13827.3	13069.3	12262.4	11400.5	10379.7	9236.5
30°	16908.2	16529.2	16089.1	15569.5	14988.8	14340.8	13601.1	12788.1	11907.9	10893.1	9762.3
27.5°	17268.9	16908.2	16480.3	15997.4	15441.1	14817.6	14071.8	13252.7	12354.1	11376.0	10245.2
25°	17580.6	17232.2	16834.8	16376.4	15826.2	15214.9	14512.0	13656.1	12757.6	11773.4	10654.7
22.5°	17861.8	17525.6	17128.3	16682.0	16180.8	15569.5	14860.4	14010.7	13099.9	12127.9	11027.6
20°	18112.4	17800.7	17409.5	16951.0	16449.7	15832.3	15129.4	14322.5	13405.5	12451.9	11363.8
17.5°	18314.2	18039.1	17647.9	17164.9	16663.7	16064.6	15380.0	14640.3	13668.4	12727.0	11645.0
15°	18454.8	18185.8	17831.2	17342.2	16853.2	16260.2	15575.6	14811.5	13906.8	12947.1	11877.3
12.5°	18552.6	18265.3	17935.2	17482.8	16993.8	16406.9	15740.6	14988.8	14108.5	13142.7	12079.0
10°	18577.0	18314.2	17984.1	17580.6	17103.8	16535.3	15881.2	15135.5	14273.5	13295.5	12244.1
7.5°	18589.2	18338.6	18039.1	17654.0	17183.3	16633.1	15985.2	15251.6	14395.8	13423.9	12366.3
5°	18583.1	18344.7	18075.8	17702.9	17232.2	16688.1	16052.4	15331.1	14481.4	13509.4	12458.0
2.5°	18564.8	18350.8	18100.2	17739.5	17287.2	16749.3	16119.6	15422.8	14573.1	13582.8	12531.4
0°	18613.7	18430.3	18112.4	17727.3	17299.4	16749.3	16113.5	15435.0	14585.3	13576.7	12525.3





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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°	152.8	146.7	146.7	140.6	134.5	128.4	116.1	110.0	97.8	79.5	61.1
85°	330.1	311.8	293.4	281.2	269.0	256.7	238.4	220.1	195.6	158.9	122.3
82.5°	580.7	544.0	507.4	464.6	427.9	391.2	360.7	330.1	293.4	238.4	183.4
80°	831.4	776.3	721.3	660.2	605.2	544.0	489.0	440.1	391.2	317.9	244.5
77.5°	1082.0	1008.6	929.2	855.8	776.3	696.9	617.4	550.2	476.8	391.2	305.6
75°	1314.3	1228.7	1155.3	1051.4	953.6	849.7	745.8	654.1	562.4	458.5	366.8
72.5°	1546.6	1436.5	1332.6	1234.8	1124.8	996.4	880.3	764.1	648.0	525.7	415.7
70°	1778.8	1644.4	1516.0	1399.8	1277.6	1149.2	1008.6	874.1	733.5	586.8	458.5
67.5°	2017.2	1864.4	1717.7	1571.0	1430.4	1283.7	1137.0	984.2	819.1	648.0	507.4
65°	2280.1	2090.6	1913.3	1748.3	1583.2	1424.3	1259.3	1094.2	910.8	715.2	550.2
62.5°	2543.0	2335.1	2127.3	1919.4	1736.1	1558.8	1381.5	1198.1	996.4	788.6	592.9
60°	2824.1	2585.7	2347.3	2115.1	1888.9	1693.3	1497.7	1302.0	1088.1	855.8	635.7
57.5°	3135.9	2848.6	2579.6	2316.8	2060.0	1827.7	1613.8	1406.0	1167.6	923.0	684.6
55°	3490.4	3135.9	2818.0	2524.6	2243.4	1962.2	1729.9	1516.0	1259.3	990.3	739.7
52.5°	3863.3	3453.8	3068.7	2738.6	2439.0	2121.2	1840.0	1601.6	1350.9	1057.5	788.6
50°	4297.3	3777.8	3349.9	2946.4	2610.2	2280.1	1956.1	1699.4	1442.6	1137.0	837.5
47.5°	4743.6	4169.0	3631.0	3190.9	2793.6	2432.9	2090.6	1785.0	1528.2	1210.3	886.4
45°	5263.2	4541.9	3948.9	3429.3	2970.9	2591.9	2225.1	1876.7	1601.6	1283.7	935.3
42.5°	5764.4	4982.0	4279.0	3692.2	3172.6	2744.7	2347.3	1974.5	1674.9	1357.1	978.1
40°	6357.4	5422.1	4596.9	3942.8	3374.3	2891.4	2469.6	2078.4	1742.2	1424.3	1020.8
37.5°	6925.9	5868.4	4982.0	4217.9	3569.9	3038.1	2591.9	2176.2	1803.3	1491.5	1075.9
35°	7488.3	6363.5	5348.8	4474.6	3771.6	3203.1	2714.1	2267.9	1864.4	1546.6	1124.8
32.5°	8026.2	6828.1	5721.6	4761.9	3991.7	3356.0	2824.1	2353.5	1925.6	1595.5	1173.7
30°	8527.5	7268.2	6088.4	5055.3	4193.4	3496.6	2928.1	2439.0	1998.9	1638.2	1222.6
27.5°	8985.9	7696.1	6455.2	5330.4	4382.9	3624.9	3038.1	2518.5	2060.0	1681.0	1265.4
25°	9401.6	8081.2	6791.4	5581.0	4554.1	3765.5	3142.0	2598.0	2115.1	1717.7	1302.0
22.5°	9792.8	8435.8	7097.0	5831.7	4761.9	3906.1	3239.8	2671.3	2170.1	1754.4	1338.7
20°	10135.1	8759.7	7390.5	6082.3	4945.3	4034.5	3325.4	2738.6	2219.0	1778.8	1375.4
17.5°	10410.2	9047.0	7653.3	6302.4	5104.2	4144.5	3398.8	2799.7	2261.8	1809.4	1399.8
15°	10654.7	9291.6	7873.4	6491.9	5244.8	4236.2	3466.0	2848.6	2298.4	1827.7	1430.4
12.5°	10862.6	9499.4	8062.9	6656.9	5367.1	4315.7	3521.0	2885.3	2329.0	1846.1	1448.7
10°	11033.7	9664.4	8221.8	6785.3	5464.9	4376.8	3563.8	2922.0	2353.5	1864.4	1467.1
7.5°	11162.1	9786.7	8338.0	6895.3	5544.4	4419.6	3600.5	2946.4	2377.9	1876.7	1497.7
5°	11259.9	9890.6	8429.6	6968.7	5605.5	4480.7	3643.3	2977.0	2402.4	1888.9	1497.7
2.5°	11333.3	9976.2	8503.0	7029.8	5654.4	4468.5	3643.3	2970.9	2402.4	1888.9	1491.5
0°	11321.0	9982.3	8496.9	7029.8	5654.4	4456.3	3643.3	2964.7	2402.4	1888.9	1491.5



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	42.8	30.6	12.2	0.0
85°	91.7	61.1	30.6	0.0
82.5°	134.5	85.6	42.8	0.0
80°	177.3	116.1	55.0	0.0
77.5°	226.2	146.7	73.4	0.0
75°	269.0	171.2	85.6	0.0
72.5°	311.8	201.7	97.8	0.0
70°	348.4	226.2	110.0	0.0
67.5°	385.1	256.7	128.4	0.0
65°	415.7	281.2	140.6	0.0
62.5°	440.1	311.8	152.8	0.0
60°	470.7	336.2	165.0	0.0
57.5°	495.1	354.5	177.3	0.0
55°	519.6	366.8	189.5	0.0
52.5°	544.0	385.1	201.7	0.0
50°	568.5	403.4	214.0	0.0
47.5°	592.9	415.7	220.1	0.0
45°	629.6	434.0	232.3	0.0
42.5°	660.2	446.2	244.5	0.0
40°	690.8	458.5	250.6	0.0
37.5°	721.3	470.7	262.9	0.0
35°	751.9	482.9	269.0	0.0
32.5°	776.3	495.1	275.1	0.0
30°	800.8	507.4	281.2	0.0
27.5°	825.2	513.5	287.3	0.0
25°	843.6	525.7	293.4	0.0
22.5°	861.9	531.8	299.5	0.0
20°	874.1	537.9	305.6	0.0
17.5°	892.5	544.0	311.8	0.0
15°	898.6	550.2	324.0	0.0
12.5°	910.8	556.3	324.0	0.0
10°	916.9	562.4	324.0	0.0
7.5°	929.2	562.4	324.0	0.0
5°	923.0	562.4	324.0	0.0
2.5°	923.0	562.4	324.0	0.0
0°	916.9	562.4	324.0	0.0

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