

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: P624224

Luminaire Tested: **EPH-VN-06-E-940-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624224
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-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (96) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

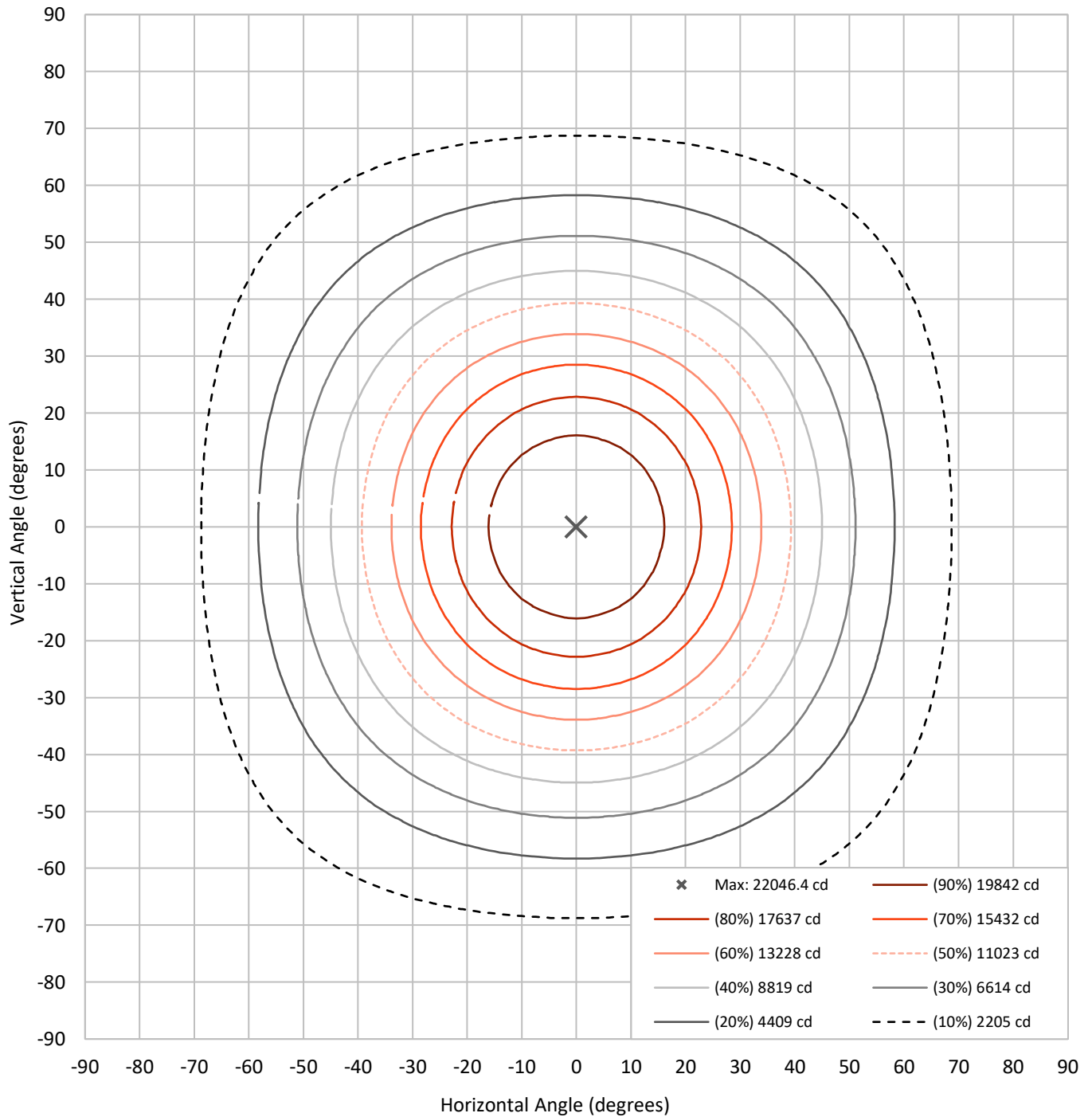
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	39695.1 lumens	Max Intensity:	22046.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	85.5 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	17175.7 lumens	Field Lumens:	28124.6 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

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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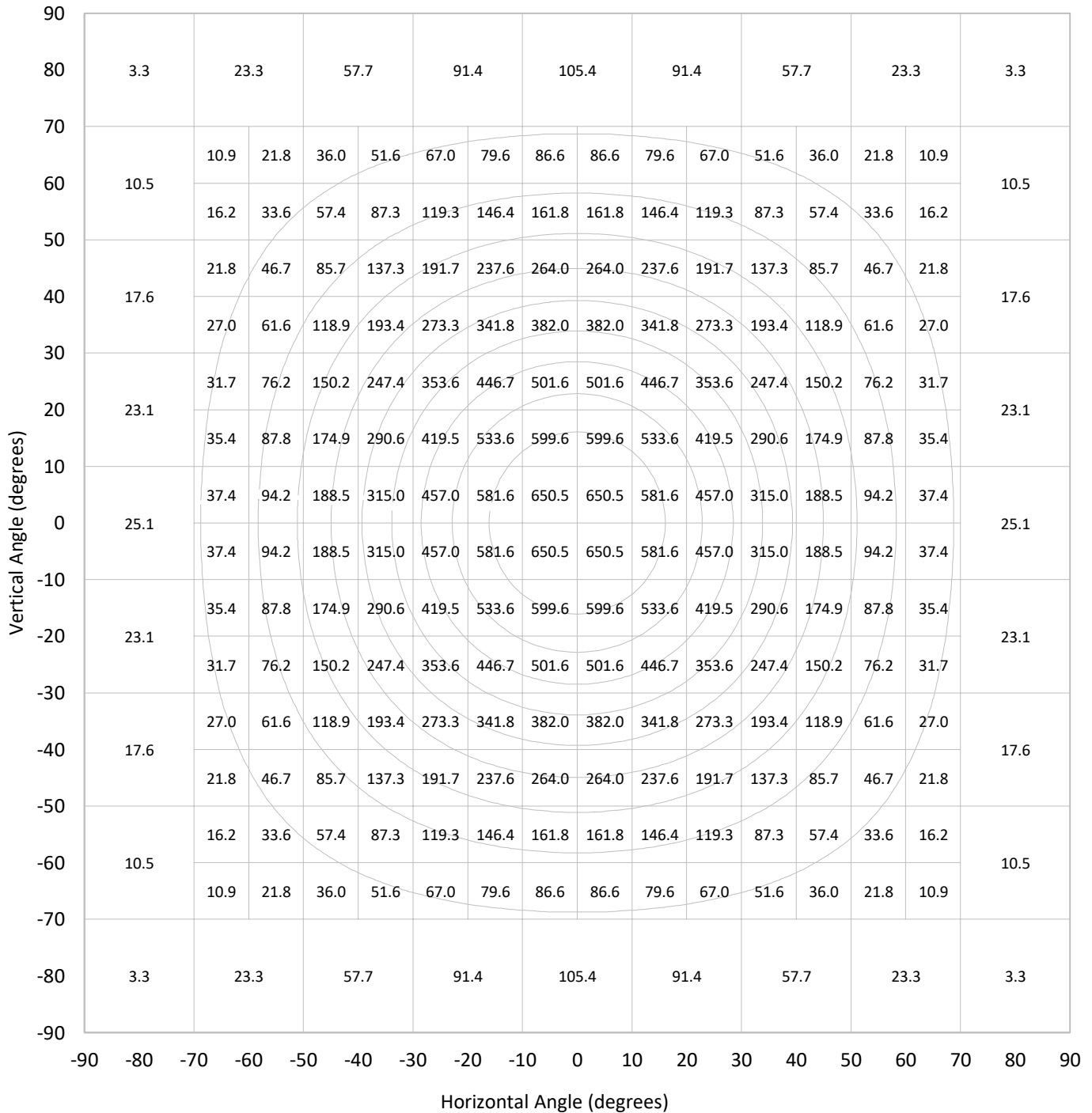
Iso-Candela Plot





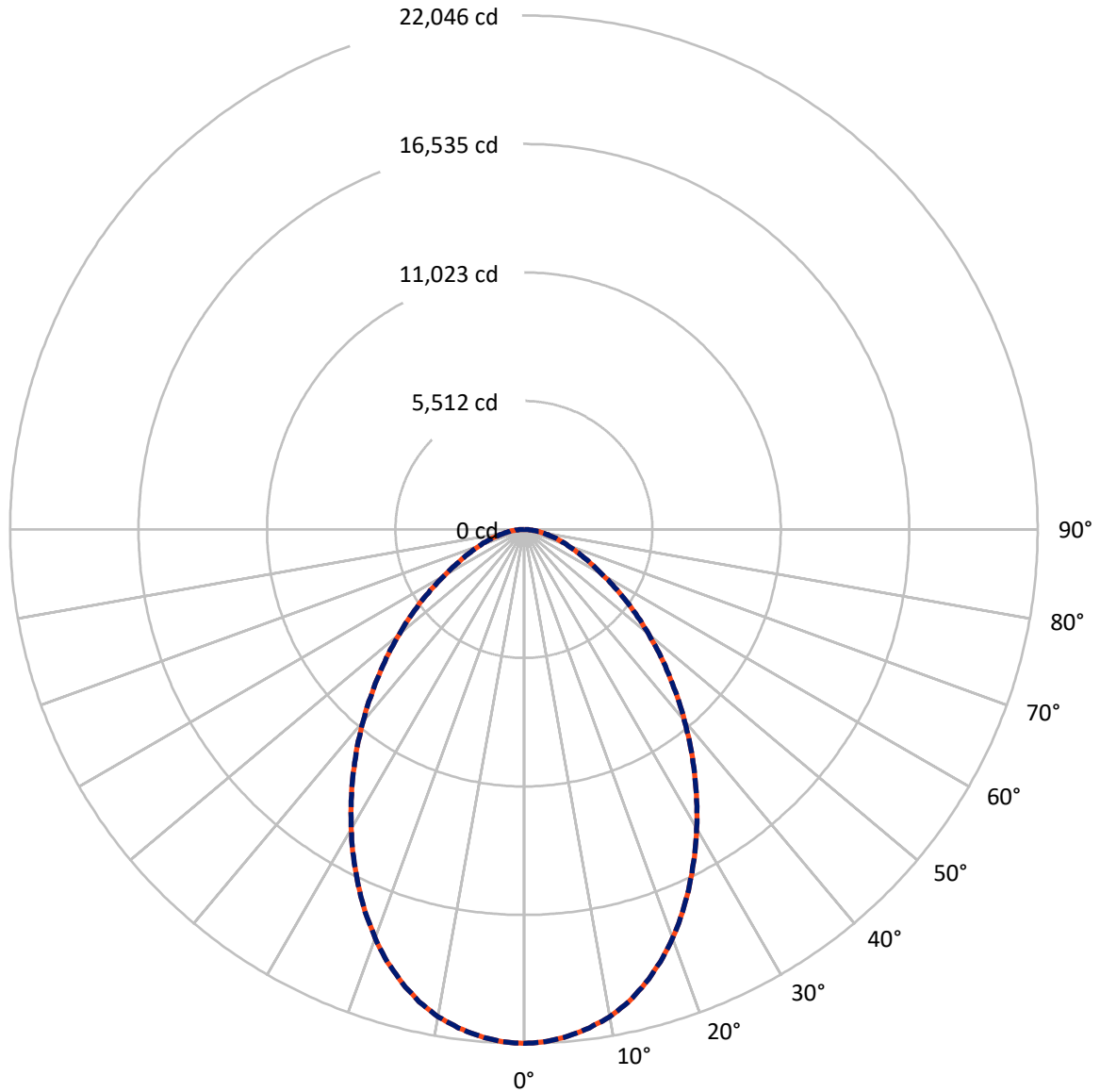
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Lumen Table



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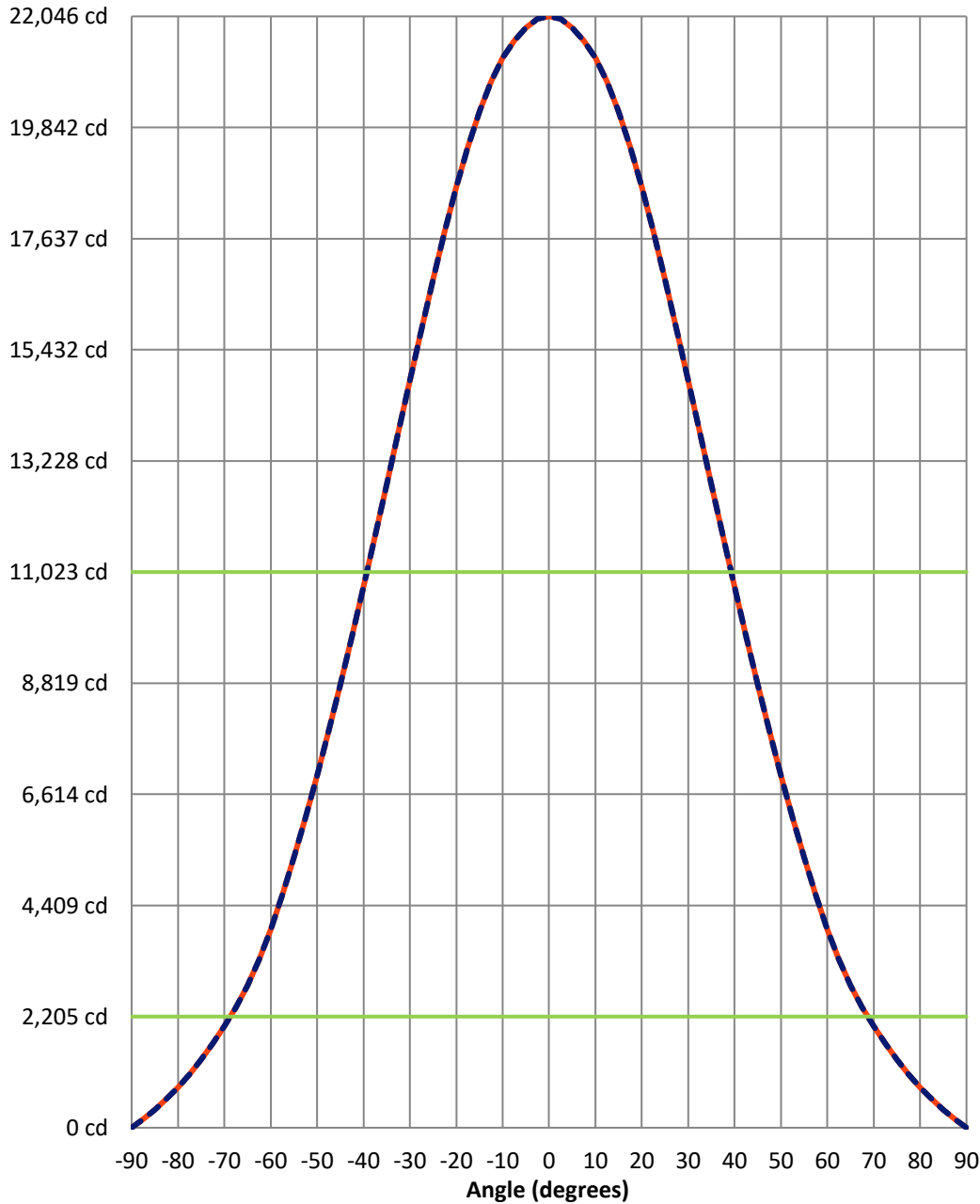
Luminous Intensity Polar Plot



— 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: 17175.7
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 28124.6
Efficiency: 70.9%

Spill:
Lumens: 11570.5
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°	169.7	169.7	169.7	169.7	169.7	169.7	169.7	161.4	161.4	157.3	153.1
85°	355.9	355.9	355.9	355.9	355.9	347.6	343.5	339.4	335.2	327.0	322.8
82.5°	571.1	571.1	571.1	571.1	562.9	554.6	550.4	542.2	533.9	521.5	509.1
80°	798.8	798.8	798.8	798.8	786.3	778.1	765.6	757.4	745.0	728.4	711.8
77.5°	1059.5	1059.5	1059.5	1047.1	1038.8	1026.4	1014.0	997.4	980.9	960.2	935.3
75°	1353.3	1353.3	1353.3	1336.8	1324.4	1311.9	1291.3	1270.6	1245.7	1216.8	1183.6
72.5°	1672.0	1672.0	1672.0	1651.3	1638.9	1618.2	1593.4	1564.4	1535.4	1498.2	1456.8
70°	2015.5	2015.5	2015.5	1990.7	1970.0	1949.3	1916.2	1883.1	1841.7	1800.3	1750.6
67.5°	2388.0	2388.0	2388.0	2359.0	2334.2	2305.2	2268.0	2226.6	2176.9	2119.0	2061.0
65°	2822.5	2822.5	2806.0	2781.2	2752.2	2710.8	2665.3	2607.3	2545.3	2470.8	2392.1
62.5°	3335.7	3335.7	3310.9	3281.9	3244.7	3190.9	3128.8	3054.3	2967.4	2872.2	2777.0
60°	3931.7	3931.7	3902.7	3865.5	3811.7	3745.5	3662.7	3567.5	3459.9	3339.9	3224.0
57.5°	4618.7	4618.7	4581.5	4531.8	4465.6	4382.8	4279.3	4159.3	4022.7	3873.8	3728.9
55°	5363.7	5363.7	5318.1	5260.2	5181.6	5082.2	4958.1	4817.4	4651.8	4482.1	4295.9
52.5°	6154.1	6154.1	6100.3	6034.1	5943.1	5827.2	5686.5	5520.9	5330.5	5131.9	4912.5
50°	6986.0	6986.0	6923.9	6849.4	6746.0	6609.4	6448.0	6257.6	6046.5	5814.8	5562.3
47.5°	7875.8	7875.8	7805.4	7718.5	7594.4	7437.1	7246.7	7027.4	6787.3	6526.6	6241.0
45°	8790.4	8790.4	8711.8	8612.5	8475.9	8297.9	8086.9	7875.8	7569.5	7267.4	6936.3
42.5°	9742.3	9742.3	9651.3	9539.5	9382.3	9187.7	8947.7	8674.6	8372.4	8033.1	7673.0
40°	10731.4	10731.4	10628.0	10499.7	10325.9	10102.4	9833.4	9527.1	9187.7	8811.1	8413.8
37.5°	11741.3	11741.3	11625.4	11484.7	11290.2	11041.8	10739.7	10400.4	10019.6	9601.6	9162.9
35°	12759.4	12759.4	12631.1	12477.9	12262.7	11989.6	11662.6	11286.0	10863.9	10408.6	9916.1
32.5°	13798.2	13798.2	13657.5	13483.6	13239.5	12937.3	12577.3	12167.5	11741.3	11211.5	10673.5
30°	14824.5	14824.5	14671.4	14481.0	14220.3	13889.2	13496.0	13044.9	12544.2	12002.0	11422.6
27.5°	15834.4	15793.0	15664.7	15461.9	15176.3	14824.5	14398.3	13909.9	13367.7	12771.8	12151.0
25°	16827.6	16782.1	16641.4	16417.9	16111.7	15726.8	15267.4	14745.9	14162.4	13533.3	12854.6
22.5°	17779.5	17729.9	17580.9	17340.8	17013.9	16595.9	16103.4	15544.7	14923.9	14249.3	13533.3
20°	18661.0	18607.2	18454.1	18201.7	17862.3	17419.5	16898.0	16297.9	15635.7	14923.9	14162.4
17.5°	19455.7	19401.9	19240.5	18979.7	18661.0	18168.6	17630.5	16997.3	16297.9	15544.7	14745.9
15°	20155.1	20097.1	19931.6	19670.9	19306.7	18843.1	18276.2	17630.5	16898.0	16103.4	15267.4
12.5°	20751.1	20693.1	20523.4	20262.7	19886.1	19422.6	18843.1	18168.6	17419.5	16595.9	15726.8
10°	21222.9	21164.9	21003.5	20755.2	20366.2	19886.1	19306.7	18661.0	17862.3	17013.9	16111.7
7.5°	21562.2	21508.4	21359.4	21111.1	20755.2	20262.7	19670.9	18979.7	18201.7	17340.8	16417.9
5°	21818.8	21756.7	21607.7	21359.4	21003.5	20523.4	19931.6	19240.5	18454.1	17580.9	16641.4
2.5°	21996.8	21922.3	21756.7	21508.4	21164.9	20693.1	20097.1	19401.9	18607.2	17729.9	16782.1
0°	22046.4	21996.8	21818.8	21562.2	21222.9	20751.1	20155.1	19455.7	18661.0	17779.5	16827.6



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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°	149.0	149.0	144.9	140.7	136.6	128.3	124.2	120.0	115.9	107.6	103.5
85°	314.5	306.3	298.0	289.7	277.3	269.0	256.6	248.3	235.9	223.5	211.1
82.5°	496.6	484.2	467.7	455.2	438.7	418.0	401.4	380.8	360.1	343.5	322.8
80°	695.3	674.6	653.9	633.2	608.4	583.5	558.7	533.9	504.9	475.9	447.0
77.5°	910.5	881.5	852.6	819.4	790.5	757.4	724.3	691.1	653.9	616.7	579.4
75°	1150.5	1113.3	1071.9	1030.5	993.3	947.7	902.2	856.7	807.0	761.5	711.8
72.5°	1411.3	1365.7	1316.1	1266.4	1212.6	1154.7	1096.7	1034.7	976.7	918.8	856.7
70°	1692.7	1638.9	1576.8	1514.7	1448.5	1378.2	1307.8	1233.3	1158.8	1084.3	1009.8
67.5°	1994.8	1928.6	1854.1	1779.6	1696.8	1614.1	1531.3	1444.4	1353.3	1262.3	1175.4
65°	2317.6	2234.9	2147.9	2052.8	1957.6	1862.4	1763.1	1659.6	1556.1	1448.5	1353.3
62.5°	2677.7	2574.2	2462.5	2346.6	2239.0	2123.1	2015.5	1887.2	1763.1	1643.0	1523.0
60°	3095.7	2959.1	2822.5	2677.7	2541.1	2392.1	2259.7	2119.0	1978.3	1841.7	1701.0
57.5°	3563.4	3389.5	3224.0	3050.2	2868.1	2702.5	2532.8	2363.2	2205.9	2044.5	1891.4
55°	4093.1	3882.0	3675.1	3459.9	3248.8	3041.9	2826.7	2636.3	2441.8	2259.7	2081.7
52.5°	4672.5	4432.5	4175.9	3931.7	3662.7	3406.1	3166.0	2926.0	2698.4	2479.0	2276.2
50°	5293.3	5011.9	4718.0	4420.0	4113.8	3811.7	3522.0	3240.5	2975.7	2719.1	2479.0
47.5°	5938.9	5620.2	5285.0	4945.7	4618.7	4250.4	3902.7	3584.0	3265.4	2975.7	2698.4
45°	6601.1	6241.0	5872.7	5487.8	5102.9	4705.6	4320.7	3931.7	3584.0	3240.5	2926.0
42.5°	7284.0	6878.4	6468.7	6042.4	5616.1	5181.6	4747.0	4320.7	3902.7	3522.0	3166.0
40°	7987.5	7540.6	7072.9	6609.4	6154.1	5657.5	5181.6	4705.6	4250.4	3811.7	3406.1
37.5°	8691.1	8202.7	7697.8	7176.4	6654.9	6154.1	5616.1	5102.9	4618.7	4113.8	3662.7
35°	9398.8	8860.8	8314.5	7747.5	7176.4	6609.4	6042.4	5487.8	4945.7	4420.0	3931.7
32.5°	10110.7	9523.0	8918.7	8314.5	7697.8	7072.9	6468.7	5872.7	5285.0	4718.0	4175.9
30°	10810.1	10172.7	9523.0	8860.8	8202.7	7540.6	6878.4	6241.0	5620.2	5011.9	4432.5
27.5°	11493.0	10810.1	10110.7	9398.8	8691.1	7987.5	7284.0	6601.1	5938.9	5293.3	4672.5
25°	12151.0	11422.6	10673.5	9916.1	9162.9	8413.8	7673.0	6936.3	6241.0	5562.3	4912.5
22.5°	12771.8	12002.0	11211.5	10408.6	9601.6	8811.1	8033.1	7267.4	6526.6	5814.8	5131.9
20°	13367.7	12544.2	11741.3	10863.9	10019.6	9187.7	8372.4	7569.5	6787.3	6046.5	5330.5
17.5°	13909.9	13044.9	12167.5	11286.0	10400.4	9527.1	8674.6	7875.8	7027.4	6257.6	5520.9
15°	14398.3	13496.0	12577.3	11662.6	10739.7	9833.4	8947.7	8086.9	7246.7	6448.0	5686.5
12.5°	14824.5	13889.2	12937.3	11989.6	11041.8	10102.4	9187.7	8297.9	7437.1	6609.4	5827.2
10°	15176.3	14220.3	13239.5	12262.7	11290.2	10325.9	9382.3	8475.9	7594.4	6746.0	5943.1
7.5°	15461.9	14481.0	13483.6	12477.9	11484.7	10499.7	9539.5	8612.5	7718.5	6849.4	6034.1
5°	15664.7	14671.4	13657.5	12631.1	11625.4	10628.0	9651.3	8711.8	7805.4	6923.9	6100.3
2.5°	15793.0	14824.5	13798.2	12759.4	11741.3	10731.4	9742.3	8790.4	7875.8	6986.0	6154.1
0°	15834.4	14824.5	13798.2	12759.4	11741.3	10731.4	9742.3	8790.4	7875.8	6986.0	6154.1



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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°	99.3	91.0	82.8	78.6	70.4	66.2	57.9	49.7	45.5	37.2	29.0
85°	198.7	182.1	169.7	157.3	144.9	128.3	115.9	103.5	86.9	74.5	57.9
82.5°	302.1	281.4	260.7	240.0	219.3	198.7	173.8	153.1	132.4	111.7	86.9
80°	418.0	384.9	355.9	327.0	298.0	269.0	235.9	206.9	173.8	144.9	115.9
77.5°	538.0	500.8	459.4	418.0	376.6	339.4	298.0	260.7	223.5	182.1	144.9
75°	666.3	616.7	571.1	517.3	467.7	413.9	364.2	314.5	269.0	223.5	173.8
72.5°	798.8	736.7	674.6	616.7	554.6	492.5	434.6	372.5	314.5	260.7	206.9
70°	935.3	860.8	786.3	716.0	645.6	571.1	504.9	434.6	364.2	298.0	235.9
67.5°	1080.2	993.3	906.4	815.3	736.7	653.9	571.1	492.5	413.9	339.4	269.0
65°	1237.4	1134.0	1026.4	931.2	827.7	736.7	645.6	554.6	467.7	376.6	298.0
62.5°	1398.9	1278.8	1158.8	1038.8	931.2	815.3	716.0	616.7	517.3	418.0	327.0
60°	1564.4	1427.8	1291.3	1158.8	1026.4	906.4	786.3	674.6	571.1	459.4	355.9
57.5°	1734.1	1581.0	1427.8	1278.8	1134.0	993.3	860.8	736.7	616.7	500.8	384.9
55°	1907.9	1734.1	1564.4	1398.9	1237.4	1080.2	935.3	798.8	666.3	538.0	418.0
52.5°	2081.7	1891.4	1701.0	1523.0	1353.3	1175.4	1009.8	856.7	711.8	579.4	447.0
50°	2259.7	2044.5	1841.7	1643.0	1448.5	1262.3	1084.3	918.8	761.5	616.7	475.9
47.5°	2441.8	2205.9	1978.3	1763.1	1556.1	1353.3	1158.8	976.7	807.0	653.9	504.9
45°	2636.3	2363.2	2119.0	1887.2	1659.6	1444.4	1233.3	1034.7	856.7	691.1	533.9
42.5°	2826.7	2532.8	2259.7	2015.5	1763.1	1531.3	1307.8	1096.7	902.2	724.3	558.7
40°	3041.9	2702.5	2392.1	2123.1	1862.4	1614.1	1378.2	1154.7	947.7	757.4	583.5
37.5°	3248.8	2868.1	2541.1	2239.0	1957.6	1696.8	1448.5	1212.6	993.3	790.5	608.4
35°	3459.9	3050.2	2677.7	2346.6	2052.8	1779.6	1514.7	1266.4	1030.5	819.4	633.2
32.5°	3675.1	3224.0	2822.5	2462.5	2147.9	1854.1	1576.8	1316.1	1071.9	852.6	653.9
30°	3882.0	3389.5	2959.1	2574.2	2234.9	1928.6	1638.9	1365.7	1113.3	881.5	674.6
27.5°	4093.1	3563.4	3095.7	2677.7	2317.6	1994.8	1692.7	1411.3	1150.5	910.5	695.3
25°	4295.9	3728.9	3224.0	2777.0	2392.1	2061.0	1750.6	1456.8	1183.6	935.3	711.8
22.5°	4482.1	3873.8	3339.9	2872.2	2470.8	2119.0	1800.3	1498.2	1216.8	960.2	728.4
20°	4651.8	4022.7	3459.9	2967.4	2545.3	2176.9	1841.7	1535.4	1245.7	980.9	745.0
17.5°	4817.4	4159.3	3567.5	3054.3	2607.3	2226.6	1883.1	1564.4	1270.6	997.4	757.4
15°	4958.1	4279.3	3662.7	3128.8	2665.3	2268.0	1916.2	1593.4	1291.3	1014.0	765.6
12.5°	5082.2	4382.8	3745.5	3190.9	2710.8	2305.2	1949.3	1618.2	1311.9	1026.4	778.1
10°	5181.6	4465.6	3811.7	3244.7	2752.2	2334.2	1970.0	1638.9	1324.4	1038.8	786.3
7.5°	5260.2	4531.8	3865.5	3281.9	2781.2	2359.0	1990.7	1651.3	1336.8	1047.1	798.8
5°	5318.1	4581.5	3902.7	3310.9	2806.0	2388.0	2015.5	1672.0	1353.3	1059.5	798.8
2.5°	5363.7	4618.7	3931.7	3335.7	2822.5	2388.0	2015.5	1672.0	1353.3	1059.5	798.8
0°	5363.7	4618.7	3931.7	3335.7	2822.5	2388.0	2015.5	1672.0	1353.3	1059.5	798.8



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.7	16.6	8.3	0.0
85°	45.5	29.0	16.6	0.0
82.5°	66.2	45.5	20.7	0.0
80°	86.9	57.9	29.0	0.0
77.5°	111.7	74.5	37.2	0.0
75°	132.4	86.9	45.5	0.0
72.5°	153.1	103.5	49.7	0.0
70°	173.8	115.9	57.9	0.0
67.5°	198.7	128.3	66.2	0.0
65°	219.3	144.9	70.4	0.0
62.5°	240.0	157.3	78.6	0.0
60°	260.7	169.7	82.8	0.0
57.5°	281.4	182.1	91.0	0.0
55°	302.1	198.7	99.3	0.0
52.5°	322.8	211.1	103.5	0.0
50°	343.5	223.5	107.6	0.0
47.5°	360.1	235.9	115.9	0.0
45°	380.8	248.3	120.0	0.0
42.5°	401.4	256.6	124.2	0.0
40°	418.0	269.0	128.3	0.0
37.5°	438.7	277.3	136.6	0.0
35°	455.2	289.7	140.7	0.0
32.5°	467.7	298.0	144.9	0.0
30°	484.2	306.3	149.0	0.0
27.5°	496.6	314.5	149.0	0.0
25°	509.1	322.8	153.1	0.0
22.5°	521.5	327.0	157.3	0.0
20°	533.9	335.2	161.4	0.0
17.5°	542.2	339.4	161.4	0.0
15°	550.4	343.5	169.7	0.0
12.5°	554.6	347.6	169.7	0.0
10°	562.9	355.9	169.7	0.0
7.5°	571.1	355.9	169.7	0.0
5°	571.1	355.9	169.7	0.0
2.5°	571.1	355.9	169.7	0.0
0°	571.1	355.9	169.7	0.0

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