

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: P624180

Luminaire Tested: **EPH-VN-03-E-730-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624180
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-03-E-730-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (48) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

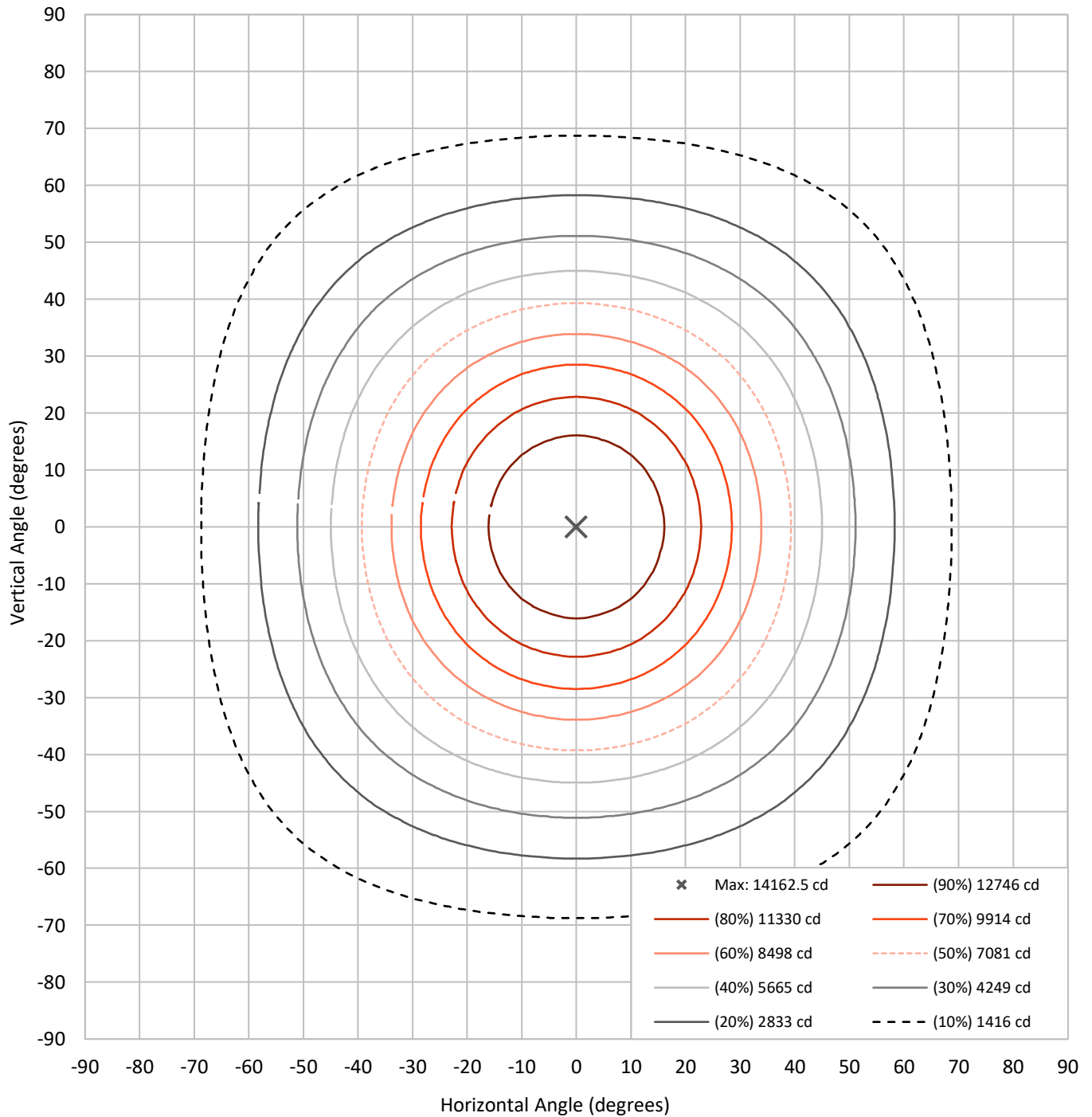
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	25500 lumens	Max Intensity:	14162.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	109.9 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	11033.6 lumens	Field Lumens:	18067.1 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 232.1
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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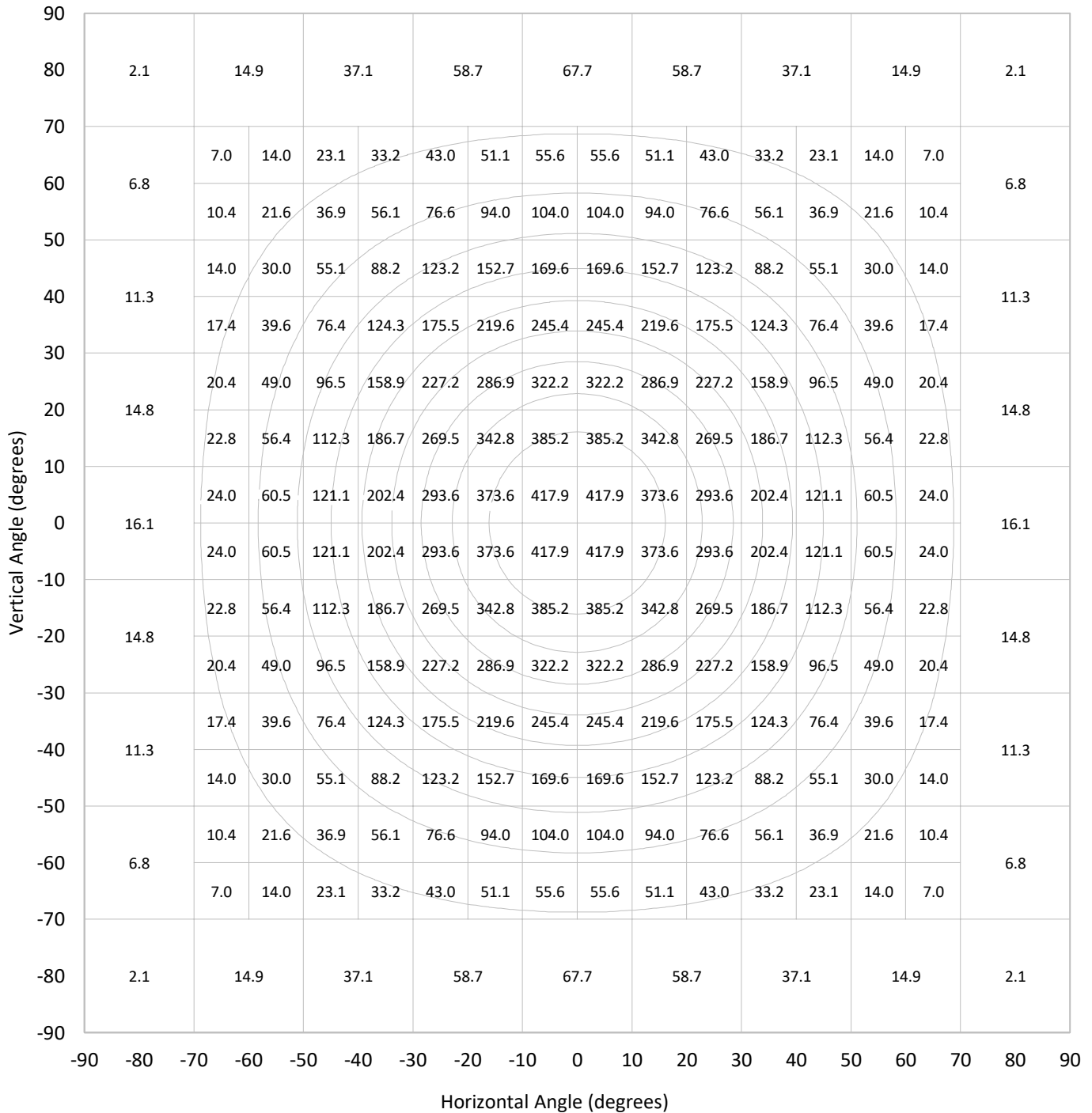
Iso-Candela Plot





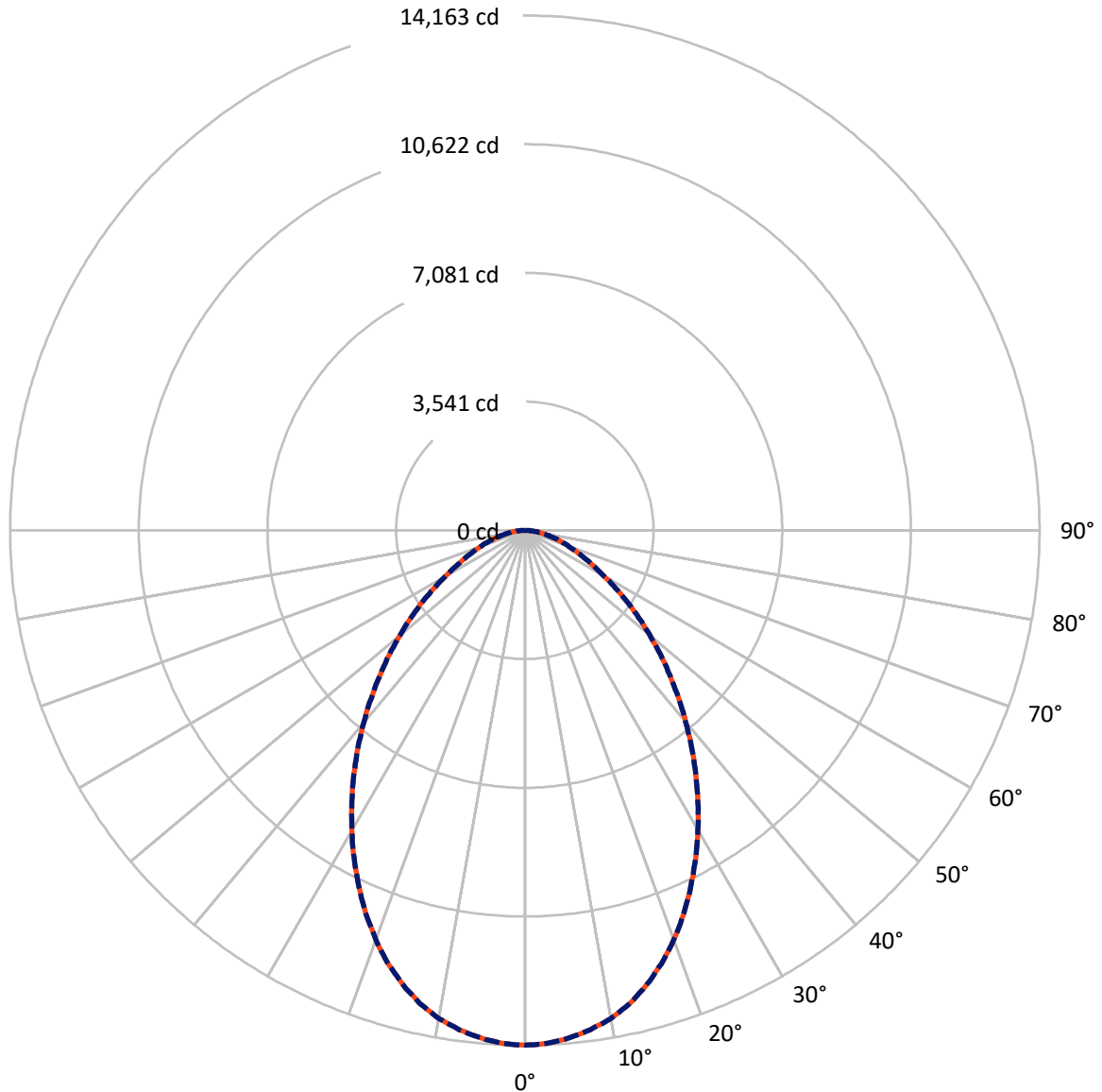
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Lumen Table



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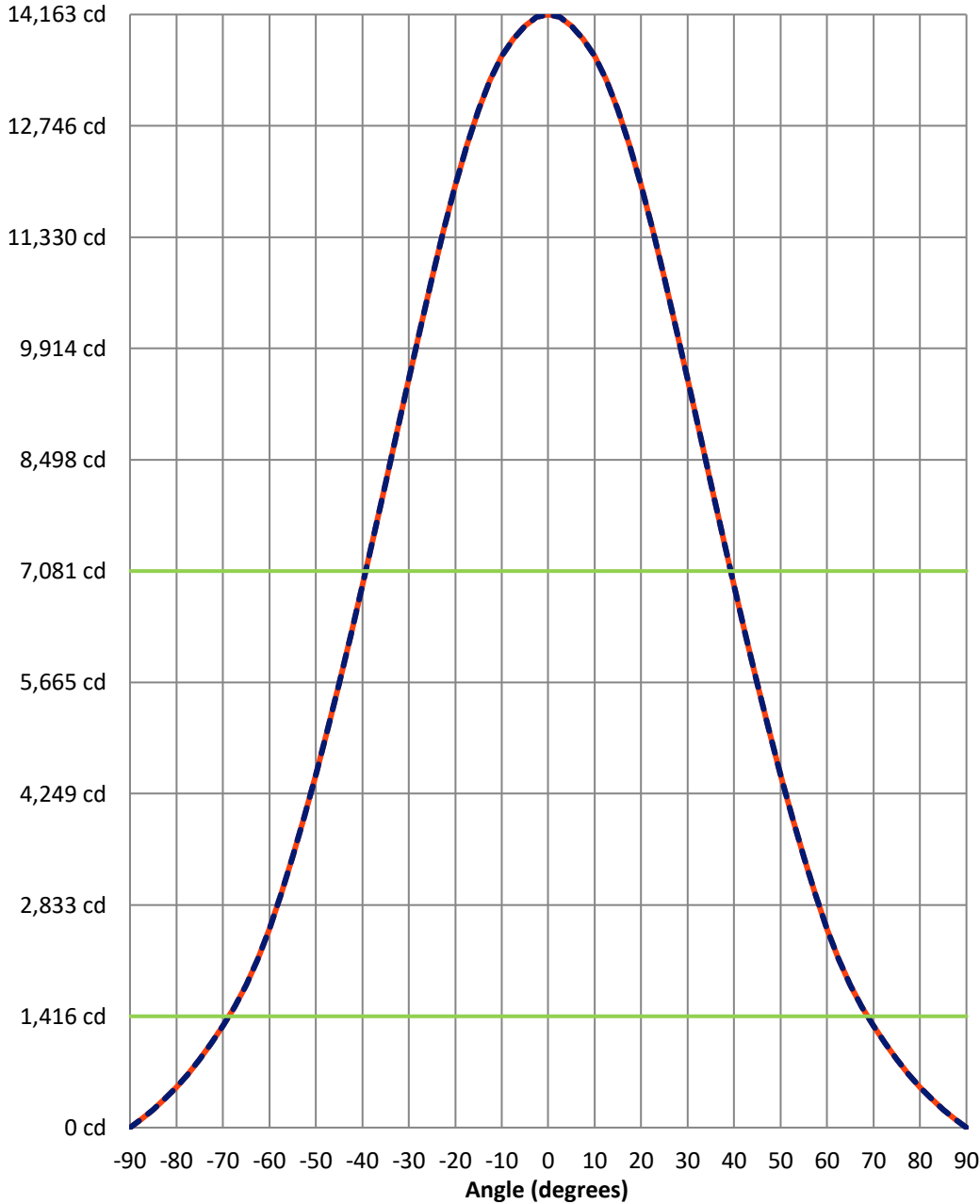
Luminous Intensity Polar Plot



— 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: 11033.6
 Efficiency: 43.3%

Field:
 H Angle: 137.5°
 V Angle: 137.5°
 Lumens: 18067.1
 Efficiency: 70.9%

Spill:
 Lumens: 7432.8
 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°	109.0	109.0	109.0	109.0	109.0	109.0	109.0	103.7	103.7	101.0	98.4
85°	228.6	228.6	228.6	228.6	228.6	223.3	220.7	218.0	215.3	210.0	207.4
82.5°	366.9	366.9	366.9	366.9	361.6	356.3	353.6	348.3	343.0	335.0	327.0
80°	513.1	513.1	513.1	513.1	505.1	499.8	491.8	486.5	478.6	467.9	457.3
77.5°	680.6	680.6	680.6	672.6	667.3	659.3	651.4	640.7	630.1	616.8	600.9
75°	869.4	869.4	869.4	858.7	850.8	842.8	829.5	816.2	800.2	781.6	760.4
72.5°	1074.1	1074.1	1074.1	1060.8	1052.8	1039.5	1023.6	1005.0	986.4	962.4	935.8
70°	1294.8	1294.8	1294.8	1278.8	1265.5	1252.2	1230.9	1209.7	1183.1	1156.5	1124.6
67.5°	1534.0	1534.0	1534.0	1515.4	1499.5	1480.9	1456.9	1430.3	1398.4	1361.2	1324.0
65°	1813.2	1813.2	1802.6	1786.6	1768.0	1741.4	1712.2	1674.9	1635.1	1587.2	1536.7
62.5°	2142.9	2142.9	2126.9	2108.3	2084.4	2049.8	2009.9	1962.1	1906.2	1845.1	1783.9
60°	2525.7	2525.7	2507.1	2483.2	2448.6	2406.1	2352.9	2291.7	2222.6	2145.5	2071.1
57.5°	2967.0	2967.0	2943.1	2911.2	2868.7	2815.5	2749.0	2671.9	2584.2	2488.5	2395.4
55°	3445.6	3445.6	3416.3	3379.1	3328.6	3264.8	3185.0	3094.6	2988.3	2879.3	2759.7
52.5°	3953.4	3953.4	3918.8	3876.3	3817.8	3743.4	3653.0	3546.6	3424.3	3296.7	3155.8
50°	4487.8	4487.8	4447.9	4400.0	4333.6	4245.8	4142.1	4019.9	3884.3	3735.4	3573.2
47.5°	5059.4	5059.4	5014.2	4958.3	4878.6	4777.6	4655.3	4514.4	4360.2	4192.7	4009.2
45°	5646.9	5646.9	5596.4	5532.6	5444.9	5330.6	5195.0	5059.4	4862.6	4668.6	4455.9
42.5°	6258.4	6258.4	6199.9	6128.1	6027.1	5902.2	5748.0	5572.5	5378.4	5160.4	4929.1
40°	6893.8	6893.8	6827.4	6744.9	6633.3	6489.7	6316.9	6120.2	5902.2	5660.2	5405.0
37.5°	7542.5	7542.5	7468.1	7377.7	7252.7	7093.2	6899.1	6681.1	6436.5	6168.0	5886.2
35°	8196.6	8196.6	8114.1	8015.8	7877.5	7702.1	7492.0	7250.1	6978.9	6686.5	6370.1
32.5°	8863.9	8863.9	8773.5	8661.8	8505.0	8310.9	8079.6	7816.4	7542.5	7202.2	6856.6
30°	9523.2	9523.2	9424.8	9302.6	9135.1	8922.4	8669.8	8380.0	8058.3	7710.0	7337.8
27.5°	10171.9	10145.3	10062.9	9932.6	9749.2	9523.2	9249.4	8935.7	8587.4	8204.5	7805.7
25°	10810.0	10780.8	10690.4	10546.8	10350.1	10102.8	9807.7	9472.7	9097.8	8693.7	8257.7
22.5°	11421.5	11389.6	11293.9	11139.7	10929.6	10661.1	10344.7	9985.8	9587.0	9153.7	8693.7
20°	11987.8	11953.2	11854.8	11692.7	11474.7	11190.2	10855.2	10469.7	10044.3	9587.0	9097.8
17.5°	12498.2	12463.7	12360.0	12192.5	11987.8	11671.4	11325.8	10919.0	10469.7	9985.8	9472.7
15°	12947.5	12910.3	12804.0	12636.5	12402.5	12104.7	11740.5	11325.8	10855.2	10344.7	9807.7
12.5°	13330.4	13293.2	13184.2	13016.7	12774.7	12477.0	12104.7	11671.4	11190.2	10661.1	10102.8
10°	13633.5	13596.2	13492.6	13333.0	13083.1	12774.7	12402.5	11987.8	11474.7	10929.6	10350.1
7.5°	13851.5	13816.9	13721.2	13561.7	13333.0	13016.7	12636.5	12192.5	11692.7	11139.7	10546.8
5°	14016.3	13976.4	13880.7	13721.2	13492.6	13184.2	12804.0	12360.0	11854.8	11293.9	10690.4
2.5°	14130.6	14082.8	13976.4	13816.9	13596.2	13293.2	12910.3	12463.7	11953.2	11389.6	10780.8
0°	14162.5	14130.6	14016.3	13851.5	13633.5	13330.4	12947.5	12498.2	11987.8	11421.5	10810.0



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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°	95.7	95.7	93.1	90.4	87.7	82.4	79.8	77.1	74.4	69.1	66.5
85°	202.1	196.7	191.4	186.1	178.1	172.8	164.8	159.5	151.5	143.6	135.6
82.5°	319.0	311.1	300.4	292.4	281.8	268.5	257.9	244.6	231.3	220.7	207.4
80°	446.7	433.4	420.1	406.8	390.8	374.9	358.9	343.0	324.4	305.7	287.1
77.5°	584.9	566.3	547.7	526.4	507.8	486.5	465.3	444.0	420.1	396.1	372.2
75°	739.1	715.2	688.6	662.0	638.1	608.8	579.6	550.3	518.4	489.2	457.3
72.5°	906.6	877.3	845.4	813.5	779.0	741.8	704.5	664.7	627.4	590.2	550.3
70°	1087.4	1052.8	1012.9	973.1	930.5	885.3	840.1	792.3	744.4	696.6	648.7
67.5°	1281.5	1238.9	1191.1	1143.2	1090.0	1036.9	983.7	927.9	869.4	810.9	755.1
65°	1488.8	1435.7	1379.8	1318.7	1257.5	1196.4	1132.6	1066.1	999.6	930.5	869.4
62.5°	1720.1	1653.7	1581.9	1507.4	1438.3	1363.9	1294.8	1212.3	1132.6	1055.5	978.4
60°	1988.7	1900.9	1813.2	1720.1	1632.4	1536.7	1451.6	1361.2	1270.8	1183.1	1092.7
57.5°	2289.1	2177.4	2071.1	1959.4	1842.4	1736.1	1627.1	1518.1	1417.1	1313.4	1215.0
55°	2629.4	2493.8	2360.9	2222.6	2087.0	1954.1	1815.8	1693.5	1568.6	1451.6	1337.3
52.5°	3001.6	2847.4	2682.6	2525.7	2352.9	2188.1	2033.9	1879.7	1733.4	1592.5	1462.2
50°	3400.4	3219.6	3030.8	2839.4	2642.7	2448.6	2262.5	2081.7	1911.6	1746.7	1592.5
47.5°	3815.1	3610.4	3395.1	3177.1	2967.0	2730.4	2507.1	2302.4	2097.7	1911.6	1733.4
45°	4240.5	4009.2	3772.6	3525.3	3278.1	3022.9	2775.6	2525.7	2302.4	2081.7	1879.7
42.5°	4679.2	4418.6	4155.4	3881.6	3607.8	3328.6	3049.5	2775.6	2507.1	2262.5	2033.9
40°	5131.2	4844.0	4543.6	4245.8	3953.4	3634.3	3328.6	3022.9	2730.4	2448.6	2188.1
37.5°	5583.1	5269.4	4945.1	4610.1	4275.1	3953.4	3607.8	3278.1	2967.0	2642.7	2352.9
35°	6037.8	5692.1	5341.2	4977.0	4610.1	4245.8	3881.6	3525.3	3177.1	2839.4	2525.7
32.5°	6495.0	6117.5	5729.4	5341.2	4945.1	4543.6	4155.4	3772.6	3395.1	3030.8	2682.6
30°	6944.3	6534.9	6117.5	5692.1	5269.4	4844.0	4418.6	4009.2	3610.4	3219.6	2847.4
27.5°	7383.0	6944.3	6495.0	6037.8	5583.1	5131.2	4679.2	4240.5	3815.1	3400.4	3001.6
25°	7805.7	7337.8	6856.6	6370.1	5886.2	5405.0	4929.1	4455.9	4009.2	3573.2	3155.8
22.5°	8204.5	7710.0	7202.2	6686.5	6168.0	5660.2	5160.4	4668.6	4192.7	3735.4	3296.7
20°	8587.4	8058.3	7542.5	6978.9	6436.5	5902.2	5378.4	4862.6	4360.2	3884.3	3424.3
17.5°	8935.7	8380.0	7816.4	7250.1	6681.1	6120.2	5572.5	5059.4	4514.4	4019.9	3546.6
15°	9249.4	8669.8	8079.6	7492.0	6899.1	6316.9	5748.0	5195.0	4655.3	4142.1	3653.0
12.5°	9523.2	8922.4	8310.9	7702.1	7093.2	6489.7	5902.2	5330.6	4777.6	4245.8	3743.4
10°	9749.2	9135.1	8505.0	7877.5	7252.7	6633.3	6027.1	5444.9	4878.6	4333.6	3817.8
7.5°	9932.6	9302.6	8661.8	8015.8	7377.7	6744.9	6128.1	5532.6	4958.3	4400.0	3876.3
5°	10062.9	9424.8	8773.5	8114.1	7468.1	6827.4	6199.9	5596.4	5014.2	4447.9	3918.8
2.5°	10145.3	9523.2	8863.9	8196.6	7542.5	6893.8	6258.4	5646.9	5059.4	4487.8	3953.4
0°	10171.9	9523.2	8863.9	8196.6	7542.5	6893.8	6258.4	5646.9	5059.4	4487.8	3953.4



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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°	63.8	58.5	53.2	50.5	45.2	42.5	37.2	31.9	29.2	23.9	18.6
85°	127.6	117.0	109.0	101.0	93.1	82.4	74.4	66.5	55.8	47.9	37.2
82.5°	194.1	180.8	167.5	154.2	140.9	127.6	111.7	98.4	85.1	71.8	55.8
80°	268.5	247.3	228.6	210.0	191.4	172.8	151.5	132.9	111.7	93.1	74.4
77.5°	345.6	321.7	295.1	268.5	241.9	218.0	191.4	167.5	143.6	117.0	93.1
75°	428.0	396.1	366.9	332.3	300.4	265.9	234.0	202.1	172.8	143.6	111.7
72.5°	513.1	473.2	433.4	396.1	356.3	316.4	279.2	239.3	202.1	167.5	132.9
70°	600.9	553.0	505.1	459.9	414.7	366.9	324.4	279.2	234.0	191.4	151.5
67.5°	693.9	638.1	582.2	523.8	473.2	420.1	366.9	316.4	265.9	218.0	172.8
65°	794.9	728.5	659.3	598.2	531.7	473.2	414.7	356.3	300.4	241.9	191.4
62.5°	898.6	821.5	744.4	667.3	598.2	523.8	459.9	396.1	332.3	268.5	210.0
60°	1005.0	917.2	829.5	744.4	659.3	582.2	505.1	433.4	366.9	295.1	228.6
57.5°	1114.0	1015.6	917.2	821.5	728.5	638.1	553.0	473.2	396.1	321.7	247.3
55°	1225.6	1114.0	1005.0	898.6	794.9	693.9	600.9	513.1	428.0	345.6	268.5
52.5°	1337.3	1215.0	1092.7	978.4	869.4	755.1	648.7	550.3	457.3	372.2	287.1
50°	1451.6	1313.4	1183.1	1055.5	930.5	810.9	696.6	590.2	489.2	396.1	305.7
47.5°	1568.6	1417.1	1270.8	1132.6	999.6	869.4	744.4	627.4	518.4	420.1	324.4
45°	1693.5	1518.1	1361.2	1212.3	1066.1	927.9	792.3	664.7	550.3	444.0	343.0
42.5°	1815.8	1627.1	1451.6	1294.8	1132.6	983.7	840.1	704.5	579.6	465.3	358.9
40°	1954.1	1736.1	1536.7	1363.9	1196.4	1036.9	885.3	741.8	608.8	486.5	374.9
37.5°	2087.0	1842.4	1632.4	1438.3	1257.5	1090.0	930.5	779.0	638.1	507.8	390.8
35°	2222.6	1959.4	1720.1	1507.4	1318.7	1143.2	973.1	813.5	662.0	526.4	406.8
32.5°	2360.9	2071.1	1813.2	1581.9	1379.8	1191.1	1012.9	845.4	688.6	547.7	420.1
30°	2493.8	2177.4	1900.9	1653.7	1435.7	1238.9	1052.8	877.3	715.2	566.3	433.4
27.5°	2629.4	2289.1	1988.7	1720.1	1488.8	1281.5	1087.4	906.6	739.1	584.9	446.7
25°	2759.7	2395.4	2071.1	1783.9	1536.7	1324.0	1124.6	935.8	760.4	600.9	457.3
22.5°	2879.3	2488.5	2145.5	1845.1	1587.2	1361.2	1156.5	962.4	781.6	616.8	467.9
20°	2988.3	2584.2	2222.6	1906.2	1635.1	1398.4	1183.1	986.4	800.2	630.1	478.6
17.5°	3094.6	2671.9	2291.7	1962.1	1674.9	1430.3	1209.7	1005.0	816.2	640.7	486.5
15°	3185.0	2749.0	2352.9	2009.9	1712.2	1456.9	1230.9	1023.6	829.5	651.4	491.8
12.5°	3264.8	2815.5	2406.1	2049.8	1741.4	1480.9	1252.2	1039.5	842.8	659.3	499.8
10°	3328.6	2868.7	2448.6	2084.4	1768.0	1499.5	1265.5	1052.8	850.8	667.3	505.1
7.5°	3379.1	2911.2	2483.2	2108.3	1786.6	1515.4	1278.8	1060.8	858.7	672.6	513.1
5°	3416.3	2943.1	2507.1	2126.9	1802.6	1534.0	1294.8	1074.1	869.4	680.6	513.1
2.5°	3445.6	2967.0	2525.7	2142.9	1813.2	1534.0	1294.8	1074.1	869.4	680.6	513.1
0°	3445.6	2967.0	2525.7	2142.9	1813.2	1534.0	1294.8	1074.1	869.4	680.6	513.1



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	13.3	10.6	5.3	0.0
85°	29.2	18.6	10.6	0.0
82.5°	42.5	29.2	13.3	0.0
80°	55.8	37.2	18.6	0.0
77.5°	71.8	47.9	23.9	0.0
75°	85.1	55.8	29.2	0.0
72.5°	98.4	66.5	31.9	0.0
70°	111.7	74.4	37.2	0.0
67.5°	127.6	82.4	42.5	0.0
65°	140.9	93.1	45.2	0.0
62.5°	154.2	101.0	50.5	0.0
60°	167.5	109.0	53.2	0.0
57.5°	180.8	117.0	58.5	0.0
55°	194.1	127.6	63.8	0.0
52.5°	207.4	135.6	66.5	0.0
50°	220.7	143.6	69.1	0.0
47.5°	231.3	151.5	74.4	0.0
45°	244.6	159.5	77.1	0.0
42.5°	257.9	164.8	79.8	0.0
40°	268.5	172.8	82.4	0.0
37.5°	281.8	178.1	87.7	0.0
35°	292.4	186.1	90.4	0.0
32.5°	300.4	191.4	93.1	0.0
30°	311.1	196.7	95.7	0.0
27.5°	319.0	202.1	95.7	0.0
25°	327.0	207.4	98.4	0.0
22.5°	335.0	210.0	101.0	0.0
20°	343.0	215.3	103.7	0.0
17.5°	348.3	218.0	103.7	0.0
15°	353.6	220.7	109.0	0.0
12.5°	356.3	223.3	109.0	0.0
10°	361.6	228.6	109.0	0.0
7.5°	366.9	228.6	109.0	0.0
5°	366.9	228.6	109.0	0.0
2.5°	366.9	228.6	109.0	0.0
0°	366.9	228.6	109.0	0.0

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