

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: P624183

Luminaire Tested: **EPH-VN-07-E-730-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624183
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-730-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (112) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

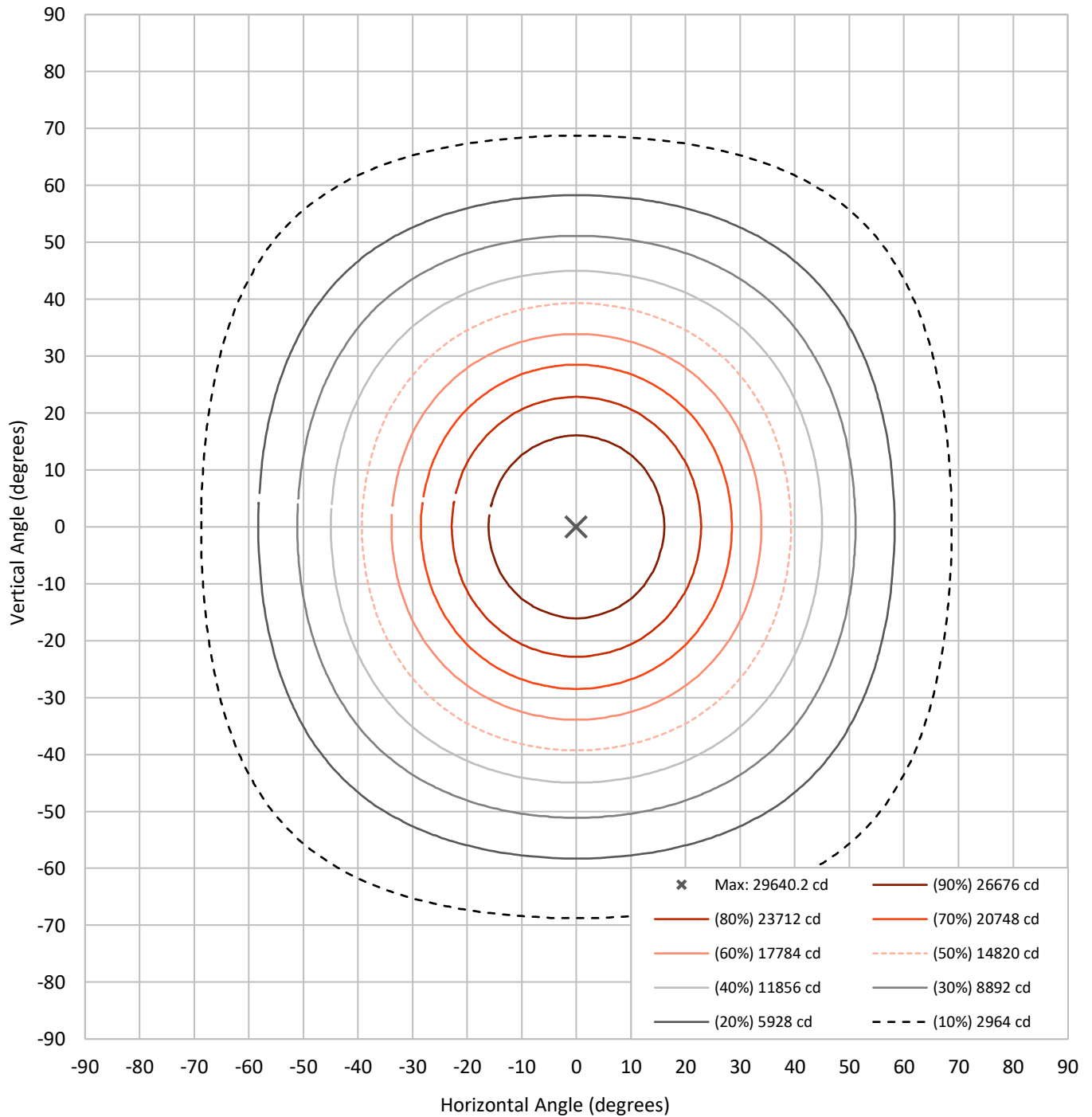
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	53367.8 lumens	Max Intensity:	29640.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	100.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	23091.7 lumens	Field Lumens:	37811.9 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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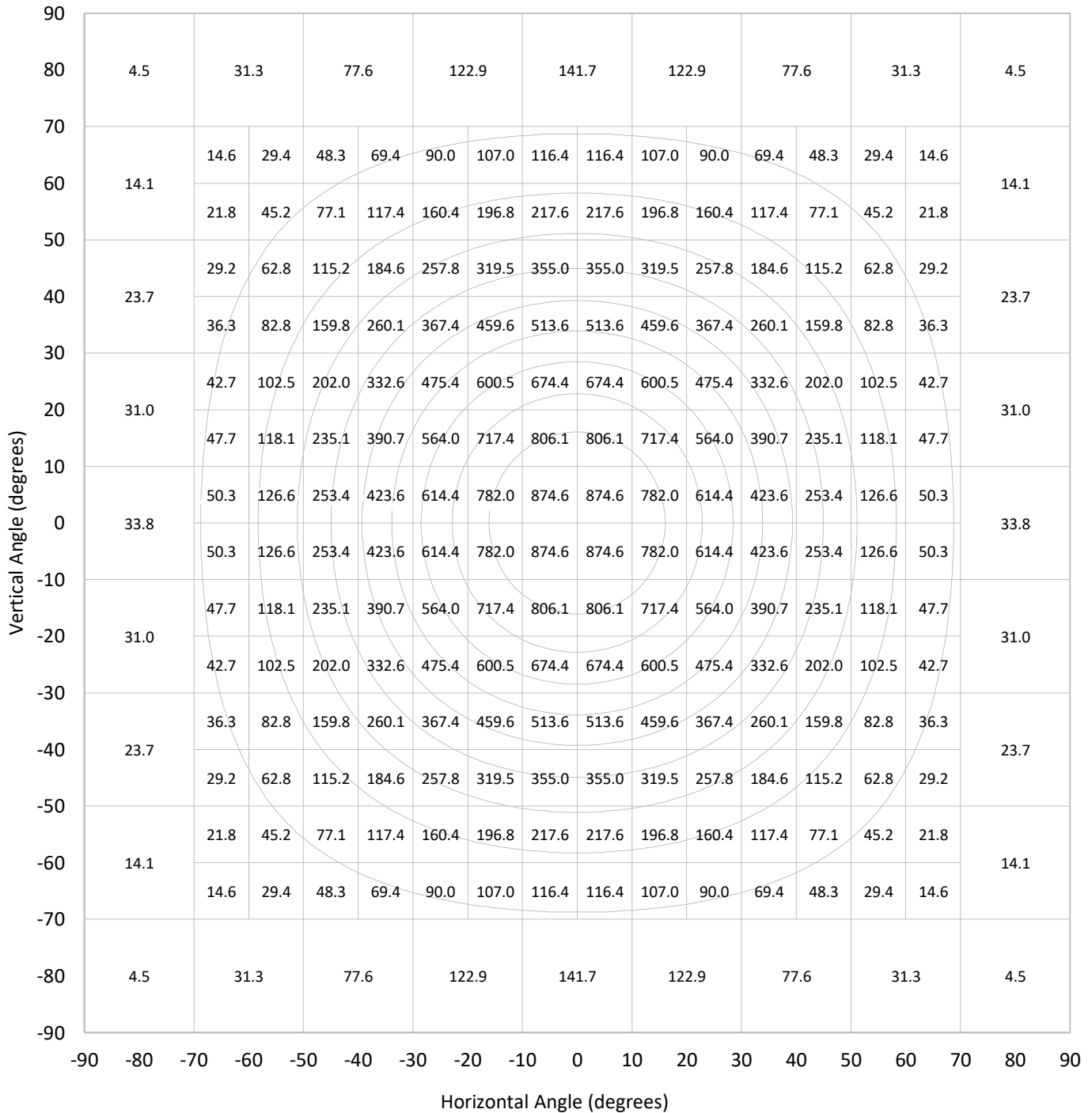
Iso-Candela Plot





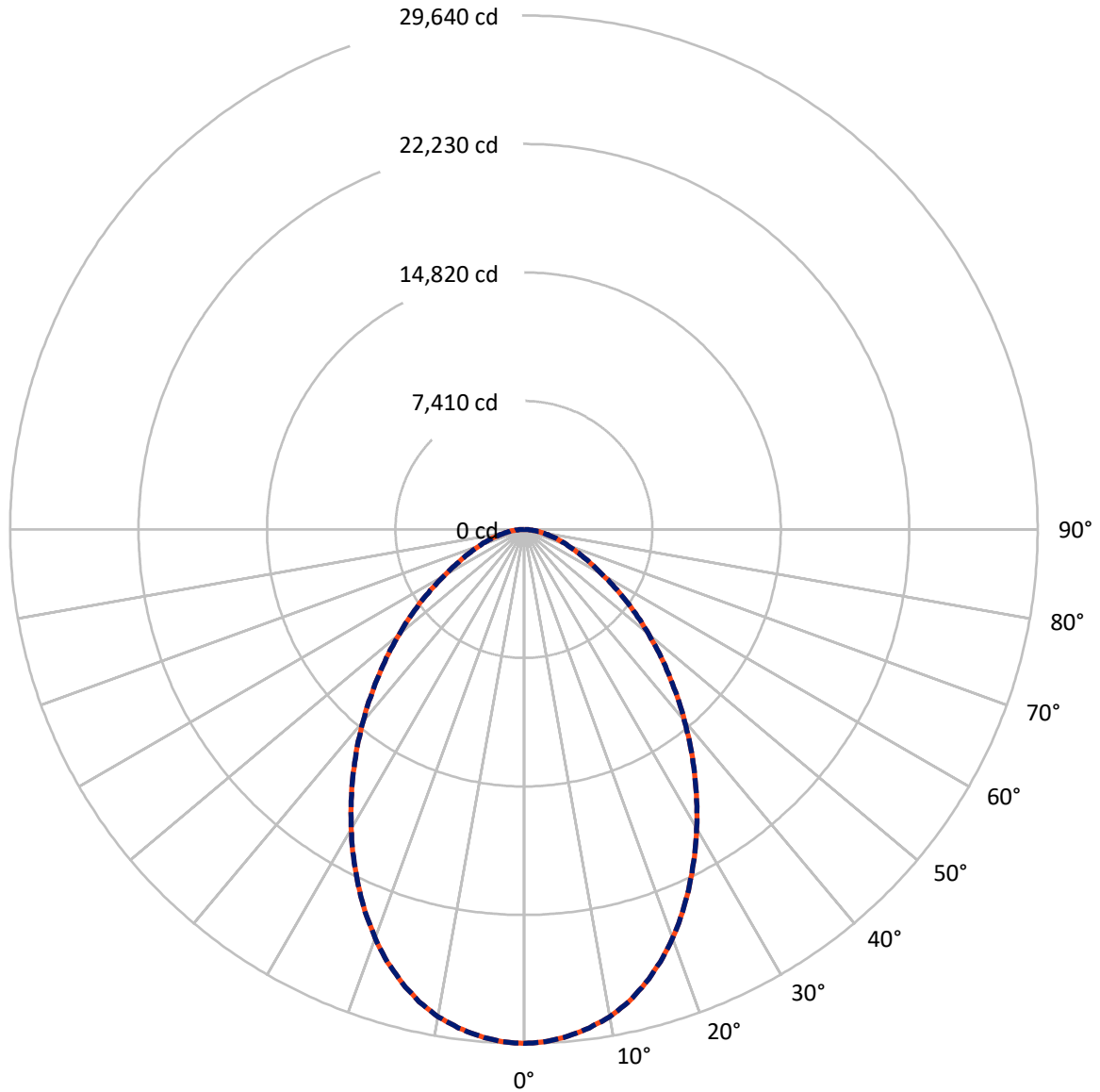
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Lumen Table



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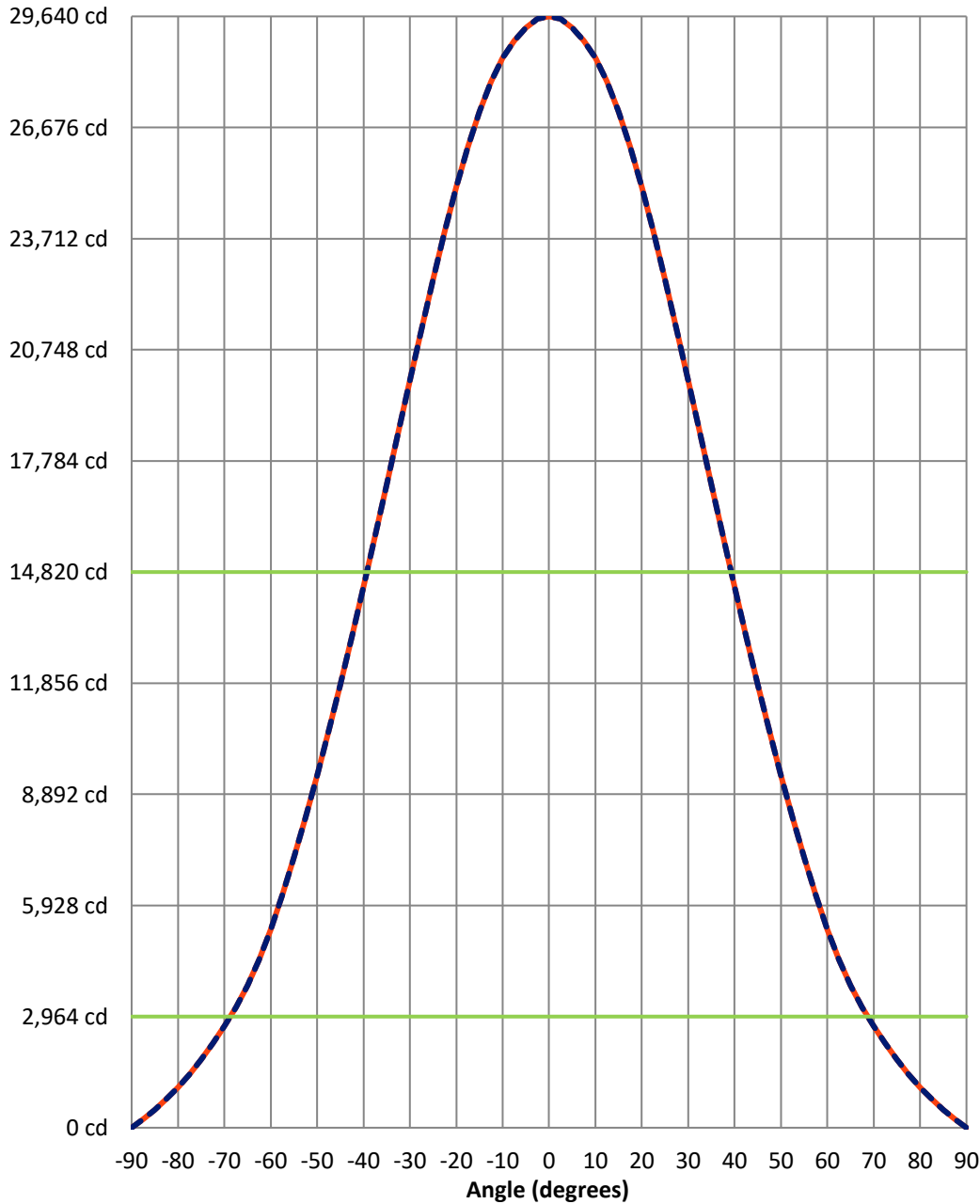
Luminous Intensity Polar Plot



— 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: 23091.7
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 37811.9
Efficiency: 70.9%

Spill:
Lumens: 15555.9
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°	228.1	228.1	228.1	228.1	228.1	228.1	228.1	217.0	217.0	211.4	205.9
85°	478.5	478.5	478.5	478.5	478.5	467.4	461.8	456.3	450.7	439.6	434.0
82.5°	767.9	767.9	767.9	767.9	756.7	745.6	740.0	728.9	717.8	701.1	684.4
80°	1073.9	1073.9	1073.9	1073.9	1057.2	1046.1	1029.4	1018.2	1001.5	979.3	957.0
77.5°	1424.4	1424.4	1424.4	1407.7	1396.6	1379.9	1363.2	1341.0	1318.7	1290.9	1257.5
75°	1819.5	1819.5	1819.5	1797.2	1780.5	1763.8	1736.0	1708.2	1674.8	1635.9	1591.3
72.5°	2247.9	2247.9	2247.9	2220.1	2203.4	2175.6	2142.2	2103.2	2064.3	2014.2	1958.6
70°	2709.7	2709.7	2709.7	2676.4	2648.5	2620.7	2576.2	2531.7	2476.0	2420.4	2353.6
67.5°	3210.5	3210.5	3210.5	3171.6	3138.2	3099.2	3049.2	2993.5	2926.7	2848.8	2770.9
65°	3794.7	3794.7	3772.5	3739.1	3700.2	3644.5	3583.3	3505.4	3421.9	3321.8	3216.1
62.5°	4484.7	4484.7	4451.3	4412.4	4362.3	4290.0	4206.5	4106.3	3989.5	3861.5	3733.5
60°	5285.9	5285.9	5247.0	5196.9	5124.6	5035.5	4924.3	4796.3	4651.6	4490.3	4334.5
57.5°	6209.6	6209.6	6159.5	6092.7	6003.7	5892.4	5753.3	5592.0	5408.3	5208.0	5013.3
55°	7211.1	7211.1	7149.9	7072.0	6966.3	6832.8	6665.8	6476.7	6254.1	6026.0	5775.6
52.5°	8273.9	8273.9	8201.5	8112.5	7990.1	7834.3	7645.1	7422.6	7166.6	6899.5	6604.6
50°	9392.3	9392.3	9308.8	9208.7	9069.6	8885.9	8668.9	8413.0	8129.2	7817.6	7478.2
47.5°	10588.6	10588.6	10494.0	10377.1	10210.2	9998.8	9742.8	9447.9	9125.2	8774.7	8390.7
45°	11818.2	11818.2	11712.5	11579.0	11395.4	11156.1	10872.3	10588.6	10176.8	9770.6	9325.5
42.5°	13098.0	13098.0	12975.6	12825.4	12613.9	12352.4	12029.7	11662.4	11256.3	10800.0	10315.9
40°	14427.8	14427.8	14288.7	14116.2	13882.5	13582.1	13220.4	12808.7	12352.4	11846.1	11311.9
37.5°	15785.5	15785.5	15629.7	15440.5	15179.0	14845.1	14439.0	13982.7	13470.8	12908.8	12319.0
35°	17154.3	17154.3	16981.8	16775.9	16486.6	16119.3	15679.8	15173.4	14605.9	13993.8	13331.7
32.5°	18550.9	18550.9	18361.7	18128.0	17799.7	17393.5	16909.4	16358.6	15785.5	15073.3	14349.9
30°	19930.8	19930.8	19724.9	19468.9	19118.4	18673.3	18144.7	17538.2	16864.9	16136.0	15357.0
27.5°	21288.4	21232.8	21060.3	20787.6	20403.7	19930.8	19357.7	18701.1	17972.2	17170.9	16336.3
25°	22623.8	22562.6	22373.4	22073.0	21661.2	21143.7	20526.1	19825.0	19040.5	18194.7	17282.2
22.5°	23903.6	23836.8	23636.5	23313.8	22874.2	22312.2	21650.1	20898.9	20064.3	19157.3	18194.7
20°	25088.7	25016.4	24810.5	24471.1	24014.8	23419.5	22718.4	21911.6	21021.3	20064.3	19040.5
17.5°	26157.0	26084.7	25867.7	25517.2	25088.7	24426.6	23703.3	22851.9	21911.6	20898.9	19825.0
15°	27097.4	27019.5	26796.9	26446.4	25956.7	25333.5	24571.3	23703.3	22718.4	21650.1	20526.1
12.5°	27898.6	27820.7	27592.6	27242.0	26735.7	26112.5	25333.5	24426.6	23419.5	22312.2	21143.7
10°	28532.9	28455.0	28238.0	27904.2	27381.1	26735.7	25956.7	25088.7	24014.8	22874.2	21661.2
7.5°	28989.2	28916.9	28716.5	28382.7	27904.2	27242.0	26446.4	25517.2	24471.1	23313.8	22073.0
5°	29334.2	29250.7	29050.4	28716.5	28238.0	27592.6	26796.9	25867.7	24810.5	23636.5	22373.4
2.5°	29573.4	29473.3	29250.7	28916.9	28455.0	27820.7	27019.5	26084.7	25016.4	23836.8	22562.6
0°	29640.2	29573.4	29334.2	28989.2	28532.9	27898.6	27097.4	26157.0	25088.7	23903.6	22623.8



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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°	200.3	200.3	194.7	189.2	183.6	172.5	166.9	161.4	155.8	144.7	139.1
85°	422.9	411.7	400.6	389.5	372.8	361.7	345.0	333.8	317.2	300.5	283.8
82.5°	667.7	651.0	628.7	612.1	589.8	562.0	539.7	511.9	484.1	461.8	434.0
80°	934.8	907.0	879.1	851.3	817.9	784.5	751.2	717.8	678.8	639.9	600.9
77.5°	1224.1	1185.2	1146.2	1101.7	1062.8	1018.2	973.7	929.2	879.1	829.1	779.0
75°	1546.8	1496.8	1441.1	1385.5	1335.4	1274.2	1213.0	1151.8	1085.0	1023.8	957.0
72.5°	1897.4	1836.2	1769.4	1702.6	1630.3	1552.4	1474.5	1391.0	1313.1	1235.2	1151.8
70°	2275.7	2203.4	2119.9	2036.5	1947.5	1852.9	1758.3	1658.1	1558.0	1457.8	1357.7
67.5°	2681.9	2592.9	2492.7	2392.6	2281.3	2170.0	2058.7	1941.9	1819.5	1697.1	1580.2
65°	3115.9	3004.6	2887.8	2759.8	2631.8	2503.9	2370.3	2231.2	2092.1	1947.5	1819.5
62.5°	3600.0	3460.9	3310.7	3154.9	3010.2	2854.4	2709.7	2537.2	2370.3	2209.0	2047.6
60°	4162.0	3978.4	3794.7	3600.0	3416.4	3216.1	3038.0	2848.8	2659.7	2476.0	2286.9
57.5°	4790.7	4557.0	4334.5	4100.8	3856.0	3633.4	3405.3	3177.1	2965.7	2748.7	2542.8
55°	5502.9	5219.2	4941.0	4651.6	4367.9	4089.6	3800.3	3544.4	3282.8	3038.0	2798.8
52.5°	6281.9	5959.2	5614.2	5285.9	4924.3	4579.3	4256.6	3933.8	3627.8	3332.9	3060.3
50°	7116.5	6738.2	6343.1	5942.5	5530.8	5124.6	4735.1	4356.7	4000.6	3655.6	3332.9
47.5°	7984.5	7556.1	7105.4	6649.2	6209.6	5714.4	5247.0	4818.5	4390.1	4000.6	3627.8
45°	8874.8	8390.7	7895.5	7378.1	6860.6	6326.4	5809.0	5285.9	4818.5	4356.7	3933.8
42.5°	9792.9	9247.6	8696.8	8123.6	7550.5	6966.3	6382.1	5809.0	5247.0	4735.1	4256.6
40°	10738.8	10137.9	9509.1	8885.9	8273.9	7606.2	6966.3	6326.4	5714.4	5124.6	4579.3
37.5°	11684.7	11028.1	10349.3	9648.2	8947.1	8273.9	7550.5	6860.6	6209.6	5530.8	4924.3
35°	12636.2	11912.8	11178.4	10416.1	9648.2	8885.9	8123.6	7378.1	6649.2	5942.5	5285.9
32.5°	13593.2	12803.1	11990.7	11178.4	10349.3	9509.1	8696.8	7895.5	7105.4	6343.1	5614.2
30°	14533.5	13676.7	12803.1	11912.8	11028.1	10137.9	9247.6	8390.7	7556.1	6738.2	5959.2
27.5°	15451.6	14533.5	13593.2	12636.2	11684.7	10738.8	9792.9	8874.8	7984.5	7116.5	6281.9
25°	16336.3	15357.0	14349.9	13331.7	12319.0	11311.9	10315.9	9325.5	8390.7	7478.2	6604.6
22.5°	17170.9	16136.0	15073.3	13993.8	12908.8	11846.1	10800.0	9770.6	8774.7	7817.6	6899.5
20°	17972.2	16864.9	15785.5	14605.9	13470.8	12352.4	11256.3	10176.8	9125.2	8129.2	7166.6
17.5°	18701.1	17538.2	16358.6	15173.4	13982.7	12808.7	11662.4	10588.6	9447.9	8413.0	7422.6
15°	19357.7	18144.7	16909.4	15679.8	14439.0	13220.4	12029.7	10872.3	9742.8	8668.9	7645.1
12.5°	19930.8	18673.3	17393.5	16119.3	14845.1	13582.1	12352.4	11156.1	9998.8	8885.9	7834.3
10°	20403.7	19118.4	17799.7	16486.6	15179.0	13882.5	12613.9	11395.4	10210.2	9069.6	7990.1
7.5°	20787.6	19468.9	18128.0	16775.9	15440.5	14116.2	12825.4	11579.0	10377.1	9208.7	8112.5
5°	21060.3	19724.9	18361.7	16981.8	15629.7	14288.7	12975.6	11712.5	10494.0	9308.8	8201.5
2.5°	21232.8	19930.8	18550.9	17154.3	15785.5	14427.8	13098.0	11818.2	10588.6	9392.3	8273.9
0°	21288.4	19930.8	18550.9	17154.3	15785.5	14427.8	13098.0	11818.2	10588.6	9392.3	8273.9



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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°	133.5	122.4	111.3	105.7	94.6	89.0	77.9	66.8	61.2	50.1	38.9
85°	267.1	244.8	228.1	211.4	194.7	172.5	155.8	139.1	116.8	100.2	77.9
82.5°	406.2	378.4	350.5	322.7	294.9	267.1	233.7	205.9	178.1	150.2	116.8
80°	562.0	517.5	478.5	439.6	400.6	361.7	317.2	278.2	233.7	194.7	155.8
77.5°	723.3	673.3	617.6	562.0	506.3	456.3	400.6	350.5	300.5	244.8	194.7
75°	895.8	829.1	767.9	695.5	628.7	556.4	489.6	422.9	361.7	300.5	233.7
72.5°	1073.9	990.4	907.0	829.1	745.6	662.1	584.2	500.8	422.9	350.5	278.2
70°	1257.5	1157.3	1057.2	962.6	868.0	767.9	678.8	584.2	489.6	400.6	317.2
67.5°	1452.2	1335.4	1218.5	1096.1	990.4	879.1	767.9	662.1	556.4	456.3	361.7
65°	1663.7	1524.6	1379.9	1251.9	1112.8	990.4	868.0	745.6	628.7	506.3	400.6
62.5°	1880.7	1719.3	1558.0	1396.6	1251.9	1096.1	962.6	829.1	695.5	562.0	439.6
60°	2103.2	1919.6	1736.0	1558.0	1379.9	1218.5	1057.2	907.0	767.9	617.6	478.5
57.5°	2331.4	2125.5	1919.6	1719.3	1524.6	1335.4	1157.3	990.4	829.1	673.3	517.5
55°	2565.1	2331.4	2103.2	1880.7	1663.7	1452.2	1257.5	1073.9	895.8	723.3	562.0
52.5°	2798.8	2542.8	2286.9	2047.6	1819.5	1580.2	1357.7	1151.8	957.0	779.0	600.9
50°	3038.0	2748.7	2476.0	2209.0	1947.5	1697.1	1457.8	1235.2	1023.8	829.1	639.9
47.5°	3282.8	2965.7	2659.7	2370.3	2092.1	1819.5	1558.0	1313.1	1085.0	879.1	678.8
45°	3544.4	3177.1	2848.8	2537.2	2231.2	1941.9	1658.1	1391.0	1151.8	929.2	717.8
42.5°	3800.3	3405.3	3038.0	2709.7	2370.3	2058.7	1758.3	1474.5	1213.0	973.7	751.2
40°	4089.6	3633.4	3216.1	2854.4	2503.9	2170.0	1852.9	1552.4	1274.2	1018.2	784.5
37.5°	4367.9	3856.0	3416.4	3010.2	2631.8	2281.3	1947.5	1630.3	1335.4	1062.8	817.9
35°	4651.6	4100.8	3600.0	3154.9	2759.8	2392.6	2036.5	1702.6	1385.5	1101.7	851.3
32.5°	4941.0	4334.5	3794.7	3310.7	2887.8	2492.7	2119.9	1769.4	1441.1	1146.2	879.1
30°	5219.2	4557.0	3978.4	3460.9	3004.6	2592.9	2203.4	1836.2	1496.8	1185.2	907.0
27.5°	5502.9	4790.7	4162.0	3600.0	3115.9	2681.9	2275.7	1897.4	1546.8	1224.1	934.8
25°	5775.6	5013.3	4334.5	3733.5	3216.1	2770.9	2353.6	1958.6	1591.3	1257.5	957.0
22.5°	6026.0	5208.0	4490.3	3861.5	3321.8	2848.8	2420.4	2014.2	1635.9	1290.9	979.3
20°	6254.1	5408.3	4651.6	3989.5	3421.9	2926.7	2476.0	2064.3	1674.8	1318.7	1001.5
17.5°	6476.7	5592.0	4796.3	4106.3	3505.4	2993.5	2531.7	2103.2	1708.2	1341.0	1018.2
15°	6665.8	5753.3	4924.3	4206.5	3583.3	3049.2	2576.2	2142.2	1736.0	1363.2	1029.4
12.5°	6832.8	5892.4	5035.5	4290.0	3644.5	3099.2	2620.7	2175.6	1763.8	1379.9	1046.1
10°	6966.3	6003.7	5124.6	4362.3	3700.2	3138.2	2648.5	2203.4	1780.5	1396.6	1057.2
7.5°	7072.0	6092.7	5196.9	4412.4	3739.1	3171.6	2676.4	2220.1	1797.2	1407.7	1073.9
5°	7149.9	6159.5	5247.0	4451.3	3772.5	3210.5	2709.7	2247.9	1819.5	1424.4	1073.9
2.5°	7211.1	6209.6	5285.9	4484.7	3794.7	3210.5	2709.7	2247.9	1819.5	1424.4	1073.9
0°	7211.1	6209.6	5285.9	4484.7	3794.7	3210.5	2709.7	2247.9	1819.5	1424.4	1073.9



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	27.8	22.3	11.1	0.0
85°	61.2	38.9	22.3	0.0
82.5°	89.0	61.2	27.8	0.0
80°	116.8	77.9	38.9	0.0
77.5°	150.2	100.2	50.1	0.0
75°	178.1	116.8	61.2	0.0
72.5°	205.9	139.1	66.8	0.0
70°	233.7	155.8	77.9	0.0
67.5°	267.1	172.5	89.0	0.0
65°	294.9	194.7	94.6	0.0
62.5°	322.7	211.4	105.7	0.0
60°	350.5	228.1	111.3	0.0
57.5°	378.4	244.8	122.4	0.0
55°	406.2	267.1	133.5	0.0
52.5°	434.0	283.8	139.1	0.0
50°	461.8	300.5	144.7	0.0
47.5°	484.1	317.2	155.8	0.0
45°	511.9	333.8	161.4	0.0
42.5°	539.7	345.0	166.9	0.0
40°	562.0	361.7	172.5	0.0
37.5°	589.8	372.8	183.6	0.0
35°	612.1	389.5	189.2	0.0
32.5°	628.7	400.6	194.7	0.0
30°	651.0	411.7	200.3	0.0
27.5°	667.7	422.9	200.3	0.0
25°	684.4	434.0	205.9	0.0
22.5°	701.1	439.6	211.4	0.0
20°	717.8	450.7	217.0	0.0
17.5°	728.9	456.3	217.0	0.0
15°	740.0	461.8	228.1	0.0
12.5°	745.6	467.4	228.1	0.0
10°	756.7	478.5	228.1	0.0
7.5°	767.9	478.5	228.1	0.0
5°	767.9	478.5	228.1	0.0
2.5°	767.9	478.5	228.1	0.0
0°	767.9	478.5	228.1	0.0

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