

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: P624220

Luminaire Tested: **EPH-VN-08-D-935-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624220
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-D-935-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (128) 3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

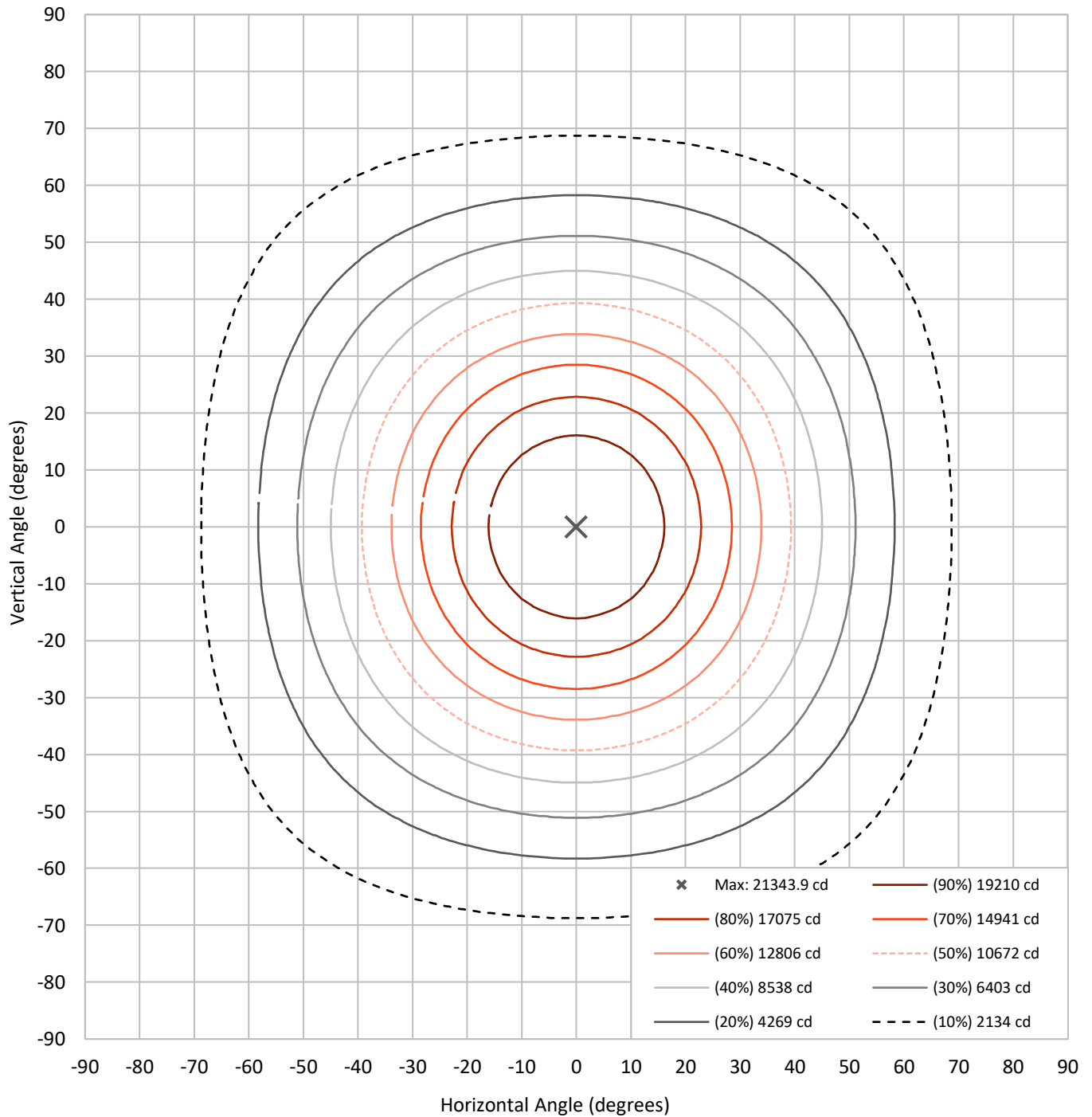
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	38430.1 lumens	Max Intensity:	21343.9 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	78.7 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	16628.3 lumens	Field Lumens:	27228.3 lumens
Beam Efficiency:	43.3%	Field Efficiency:	70.9%

Input Watts (W): 488.3
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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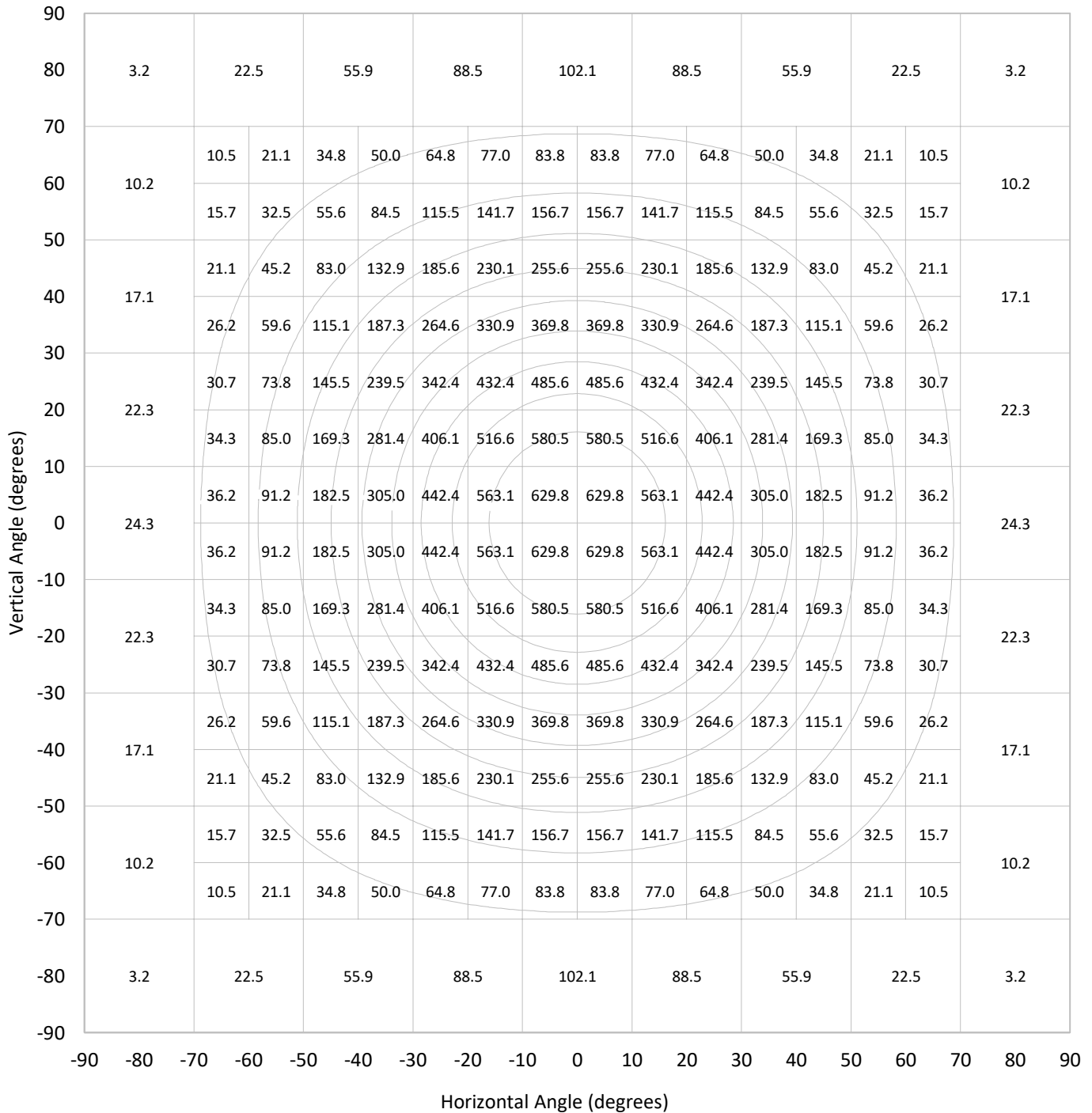
Iso-Candela Plot





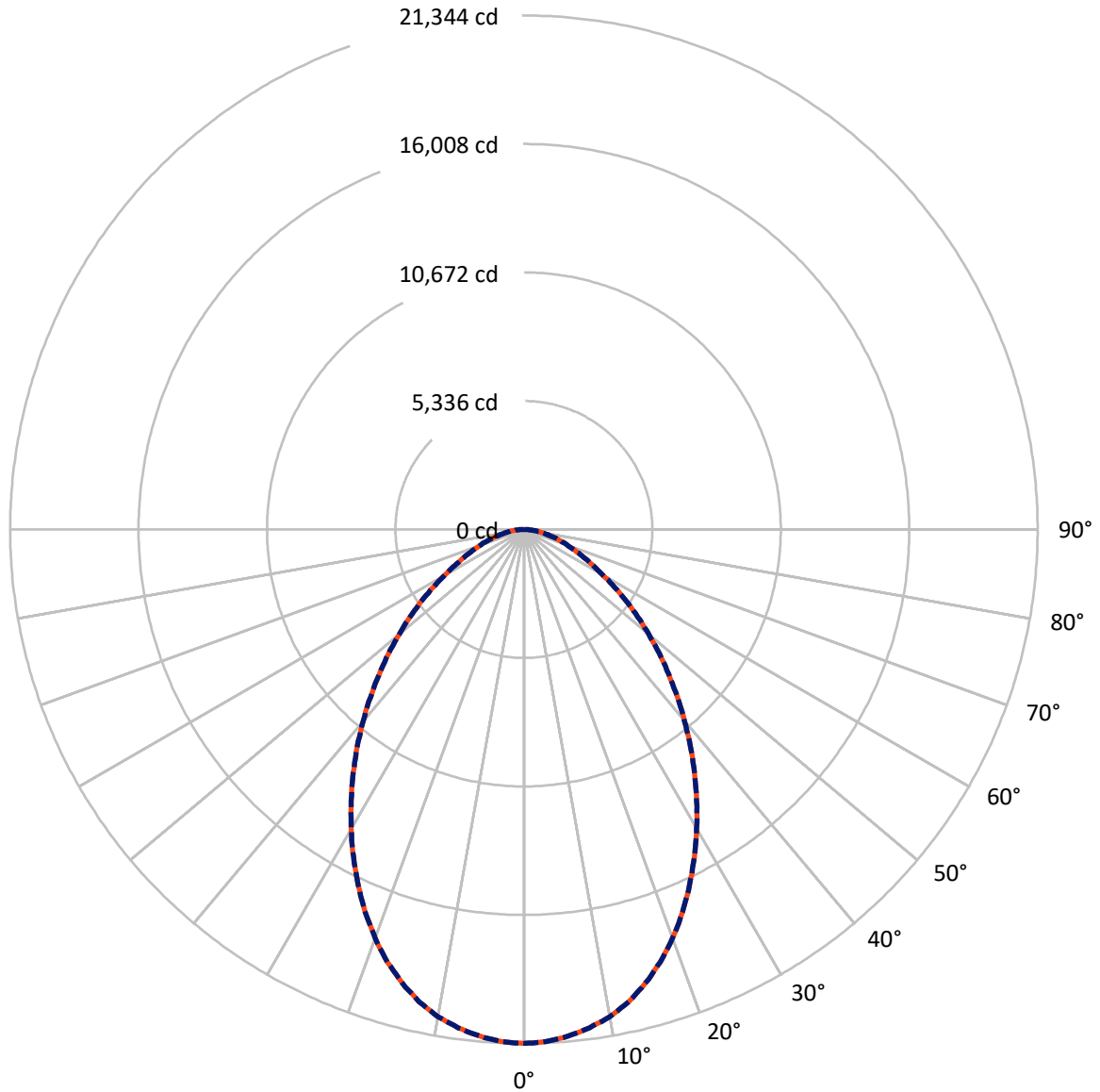
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Lumen Table



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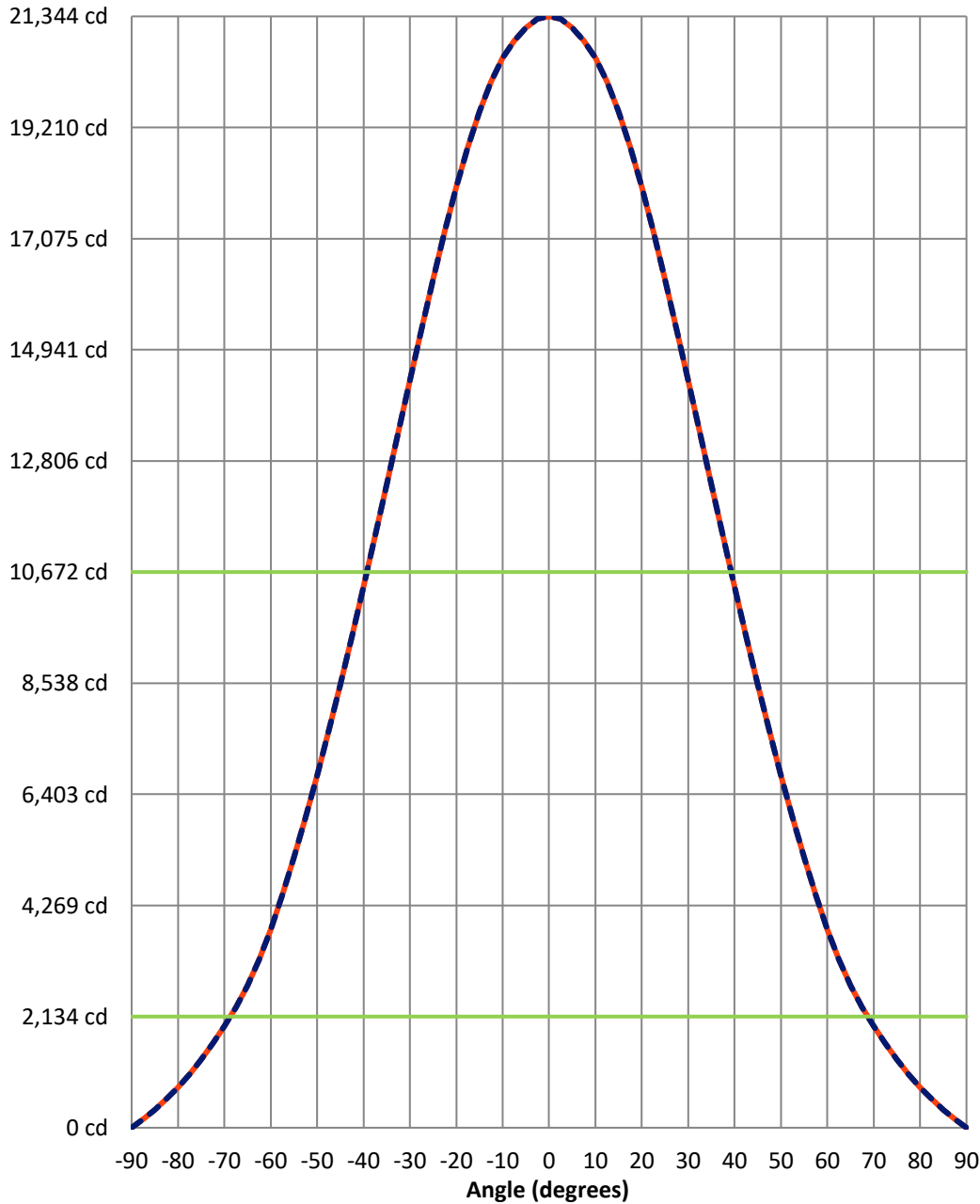
Luminous Intensity Polar Plot



— 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: 16628.3
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 27228.3
Efficiency: 70.9%

Spill:
Lumens: 11201.8
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°	164.3	164.3	164.3	164.3	164.3	164.3	164.3	156.3	156.3	152.3	148.2
85°	344.6	344.6	344.6	344.6	344.6	336.6	332.6	328.6	324.5	316.5	312.5
82.5°	552.9	552.9	552.9	552.9	544.9	536.9	532.9	524.9	516.9	504.8	492.8
80°	773.3	773.3	773.3	773.3	761.3	753.3	741.2	733.2	721.2	705.2	689.2
77.5°	1025.7	1025.7	1025.7	1013.7	1005.7	993.7	981.6	965.6	949.6	929.6	905.5
75°	1310.2	1310.2	1310.2	1294.2	1282.2	1270.1	1250.1	1230.1	1206.0	1178.0	1145.9
72.5°	1618.7	1618.7	1618.7	1598.7	1586.7	1566.6	1542.6	1514.5	1486.5	1450.4	1410.4
70°	1951.3	1951.3	1951.3	1927.2	1907.2	1887.2	1855.1	1823.1	1783.0	1742.9	1694.8
67.5°	2311.9	2311.9	2311.9	2283.8	2259.8	2231.7	2195.7	2155.6	2107.5	2051.4	1995.4
65°	2732.6	2732.6	2716.6	2692.5	2664.5	2624.4	2580.3	2524.2	2464.1	2392.0	2315.9
62.5°	3229.4	3229.4	3205.4	3177.3	3141.3	3089.2	3029.1	2957.0	2872.8	2780.7	2688.5
60°	3806.4	3806.4	3778.3	3742.3	3690.2	3626.1	3546.0	3453.8	3349.6	3233.4	3121.2
57.5°	4471.5	4471.5	4435.5	4387.4	4323.3	4243.1	4143.0	4026.8	3894.5	3750.3	3610.1
55°	5192.7	5192.7	5148.7	5092.6	5016.4	4920.3	4800.1	4663.8	4503.6	4339.3	4159.0
52.5°	5958.0	5958.0	5905.9	5841.8	5753.7	5641.5	5505.2	5345.0	5160.7	4968.3	4756.0
50°	6763.4	6763.4	6703.3	6631.1	6531.0	6398.8	6242.5	6058.2	5853.8	5629.5	5385.0
47.5°	7624.8	7624.8	7556.7	7472.6	7352.4	7200.1	7015.8	6803.4	6571.0	6318.6	6042.2
45°	8510.3	8510.3	8434.2	8338.0	8205.8	8033.5	7829.2	7624.8	7328.3	7035.8	6715.3
42.5°	9431.8	9431.8	9343.7	9235.5	9083.3	8894.9	8662.6	8398.1	8105.6	7777.1	7428.5
40°	10389.5	10389.5	10289.3	10165.1	9996.8	9780.4	9520.0	9223.5	8894.9	8530.3	8145.7
37.5°	11367.1	11367.1	11254.9	11118.7	10930.4	10690.0	10397.5	10068.9	9700.3	9295.6	8870.9
35°	12352.8	12352.8	12228.5	12080.3	11871.9	11607.5	11291.0	10926.4	10517.7	10076.9	9600.1
32.5°	13358.4	13358.4	13222.2	13053.9	12817.5	12525.0	12176.5	11779.8	11367.1	10854.2	10333.4
30°	14352.1	14352.1	14203.9	14019.6	13767.1	13446.6	13066.0	12629.2	12144.4	11619.5	11058.6
27.5°	15329.8	15289.7	15165.5	14969.2	14692.7	14352.1	13939.4	13466.6	12941.7	12364.8	11763.8
25°	16291.4	16247.3	16111.1	15894.7	15598.2	15225.6	14780.8	14276.0	13711.0	13102.0	12444.9
22.5°	17212.9	17164.8	17020.6	16788.2	16471.7	16067.0	15590.2	15049.3	14448.3	13795.2	13102.0
20°	18066.4	18014.3	17866.0	17621.6	17293.1	16864.3	16359.5	15778.5	15137.4	14448.3	13711.0
17.5°	18835.6	18783.6	18627.3	18374.9	18066.4	17589.6	17068.7	16455.6	15778.5	15049.3	14276.0
15°	19512.8	19456.7	19296.4	19044.0	18691.4	18242.7	17693.7	17068.7	16359.5	15590.2	14780.8
12.5°	20089.8	20033.7	19869.4	19617.0	19252.3	18803.6	18242.7	17589.6	16864.3	16067.0	15225.6
10°	20546.5	20490.4	20334.2	20093.8	19717.1	19252.3	18691.4	18066.4	17293.1	16471.7	15598.2
7.5°	20875.1	20823.0	20678.7	20438.3	20093.8	19617.0	19044.0	18374.9	17621.6	16788.2	15894.7
5°	21123.5	21063.4	20919.1	20678.7	20334.2	19869.4	19296.4	18627.3	17866.0	17020.6	16111.1
2.5°	21295.8	21223.7	21063.4	20823.0	20490.4	20033.7	19456.7	18783.6	18014.3	17164.8	16247.3
0°	21343.9	21295.8	21123.5	20875.1	20546.5	20089.8	19512.8	18835.6	18066.4	17212.9	16291.4



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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°	144.2	144.2	140.2	136.2	132.2	124.2	120.2	116.2	112.2	104.2	100.2
85°	304.5	296.5	288.5	280.5	268.5	260.4	248.4	240.4	228.4	216.4	204.3
82.5°	480.8	468.8	452.8	440.7	424.7	404.7	388.7	368.6	348.6	332.6	312.5
80°	673.1	653.1	633.1	613.0	589.0	564.9	540.9	516.9	488.8	460.8	432.7
77.5°	881.5	853.4	825.4	793.3	765.3	733.2	701.2	669.1	633.1	597.0	560.9
75°	1113.9	1077.8	1037.7	997.7	961.6	917.5	873.5	829.4	781.3	737.2	689.2
72.5°	1366.3	1322.2	1274.1	1226.1	1174.0	1117.9	1061.8	1001.7	945.6	889.5	829.4
70°	1638.8	1586.7	1526.6	1466.5	1402.4	1334.2	1266.1	1194.0	1121.9	1049.8	977.6
67.5°	1931.2	1867.1	1795.0	1722.9	1642.8	1562.6	1482.5	1398.3	1310.2	1222.1	1137.9
65°	2243.8	2163.6	2079.5	1987.3	1895.2	1803.0	1706.9	1606.7	1506.5	1402.4	1310.2
62.5°	2592.4	2492.2	2384.0	2271.8	2167.6	2055.5	1951.3	1827.1	1706.9	1590.7	1474.5
60°	2997.0	2864.8	2732.6	2592.4	2460.1	2315.9	2187.7	2051.4	1915.2	1783.0	1646.8
57.5°	3449.8	3281.5	3121.2	2953.0	2776.7	2616.4	2452.1	2287.8	2135.6	1979.3	1831.1
55°	3962.7	3758.3	3558.0	3349.6	3145.3	2944.9	2736.6	2552.3	2364.0	2187.7	2015.4
52.5°	4523.6	4291.2	4042.8	3806.4	3546.0	3297.5	3065.2	2832.8	2612.4	2400.0	2203.7
50°	5124.6	4852.2	4567.7	4279.2	3982.7	3690.2	3409.7	3137.3	2880.8	2632.4	2400.0
47.5°	5749.7	5441.1	5116.6	4788.0	4471.5	4114.9	3778.3	3469.8	3161.3	2880.8	2612.4
45°	6390.7	6042.2	5685.6	5312.9	4940.3	4555.7	4183.0	3806.4	3469.8	3137.3	2832.8
42.5°	7051.8	6659.2	6262.5	5849.8	5437.1	5016.4	4595.7	4183.0	3778.3	3409.7	3065.2
40°	7733.0	7300.3	6847.5	6398.8	5958.0	5477.2	5016.4	4555.7	4114.9	3690.2	3297.5
37.5°	8414.1	7941.3	7452.5	6947.7	6442.8	5958.0	5437.1	4940.3	4471.5	3982.7	3546.0
35°	9099.3	8578.4	8049.5	7500.6	6947.7	6398.8	5849.8	5312.9	4788.0	4279.2	3806.4
32.5°	9788.4	9219.5	8634.5	8049.5	7452.5	6847.5	6262.5	5685.6	5116.6	4567.7	4042.8
30°	10465.6	9848.5	9219.5	8578.4	7941.3	7300.3	6659.2	6042.2	5441.1	4852.2	4291.2
27.5°	11126.7	10465.6	9788.4	9099.3	8414.1	7733.0	7051.8	6390.7	5749.7	5124.6	4523.6
25°	11763.8	11058.6	10333.4	9600.1	8870.9	8145.7	7428.5	6715.3	6042.2	5385.0	4756.0
22.5°	12364.8	11619.5	10854.2	10076.9	9295.6	8530.3	7777.1	7035.8	6318.6	5629.5	4968.3
20°	12941.7	12144.4	11367.1	10517.7	9700.3	8894.9	8105.6	7328.3	6571.0	5853.8	5160.7
17.5°	13466.6	12629.2	11779.8	10926.4	10068.9	9223.5	8398.1	7624.8	6803.4	6058.2	5345.0
15°	13939.4	13066.0	12176.5	11291.0	10397.5	9520.0	8662.6	7829.2	7015.8	6242.5	5505.2
12.5°	14352.1	13446.6	12525.0	11607.5	10690.0	9780.4	8894.9	8033.5	7200.1	6398.8	5641.5
10°	14692.7	13767.1	12817.5	11871.9	10930.4	9996.8	9083.3	8205.8	7352.4	6531.0	5753.7
7.5°	14969.2	14019.6	13053.9	12080.3	11118.7	10165.1	9235.5	8338.0	7472.6	6631.1	5841.8
5°	15165.5	14203.9	13222.2	12228.5	11254.9	10289.3	9343.7	8434.2	7556.7	6703.3	5905.9
2.5°	15289.7	14352.1	13358.4	12352.8	11367.1	10389.5	9431.8	8510.3	7624.8	6763.4	5958.0
0°	15329.8	14352.1	13358.4	12352.8	11367.1	10389.5	9431.8	8510.3	7624.8	6763.4	5958.0



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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°	96.2	88.1	80.1	76.1	68.1	64.1	56.1	48.1	44.1	36.1	28.0
85°	192.3	176.3	164.3	152.3	140.2	124.2	112.2	100.2	84.1	72.1	56.1
82.5°	292.5	272.5	252.4	232.4	212.4	192.3	168.3	148.2	128.2	108.2	84.1
80°	404.7	372.6	344.6	316.5	288.5	260.4	228.4	200.3	168.3	140.2	112.2
77.5°	520.9	484.8	444.7	404.7	364.6	328.6	288.5	252.4	216.4	176.3	140.2
75°	645.1	597.0	552.9	500.8	452.8	400.7	352.6	304.5	260.4	216.4	168.3
72.5°	773.3	713.2	653.1	597.0	536.9	476.8	420.7	360.6	304.5	252.4	200.3
70°	905.5	833.4	761.3	693.2	625.1	552.9	488.8	420.7	352.6	288.5	228.4
67.5°	1045.8	961.6	877.5	789.3	713.2	633.1	552.9	476.8	400.7	328.6	260.4
65°	1198.0	1097.8	993.7	901.5	801.3	713.2	625.1	536.9	452.8	364.6	288.5
62.5°	1354.3	1238.1	1121.9	1005.7	901.5	789.3	693.2	597.0	500.8	404.7	316.5
60°	1514.5	1382.3	1250.1	1121.9	993.7	877.5	761.3	653.1	552.9	444.7	344.6
57.5°	1678.8	1530.6	1382.3	1238.1	1097.8	961.6	833.4	713.2	597.0	484.8	372.6
55°	1847.1	1678.8	1514.5	1354.3	1198.0	1045.8	905.5	773.3	645.1	520.9	404.7
52.5°	2015.4	1831.1	1646.8	1474.5	1310.2	1137.9	977.6	829.4	689.2	560.9	432.7
50°	2187.7	1979.3	1783.0	1590.7	1402.4	1222.1	1049.8	889.5	737.2	597.0	460.8
47.5°	2364.0	2135.6	1915.2	1706.9	1506.5	1310.2	1121.9	945.6	781.3	633.1	488.8
45°	2552.3	2287.8	2051.4	1827.1	1606.7	1398.3	1194.0	1001.7	829.4	669.1	516.9
42.5°	2736.6	2452.1	2187.7	1951.3	1706.9	1482.5	1266.1	1061.8	873.5	701.2	540.9
40°	2944.9	2616.4	2315.9	2055.5	1803.0	1562.6	1334.2	1117.9	917.5	733.2	564.9
37.5°	3145.3	2776.7	2460.1	2167.6	1895.2	1642.8	1402.4	1174.0	961.6	765.3	589.0
35°	3349.6	2953.0	2592.4	2271.8	1987.3	1722.9	1466.5	1226.1	997.7	793.3	613.0
32.5°	3558.0	3121.2	2732.6	2384.0	2079.5	1795.0	1526.6	1274.1	1037.7	825.4	633.1
30°	3758.3	3281.5	2864.8	2492.2	2163.6	1867.1	1586.7	1322.2	1077.8	853.4	653.1
27.5°	3962.7	3449.8	2997.0	2592.4	2243.8	1931.2	1638.8	1366.3	1113.9	881.5	673.1
25°	4159.0	3610.1	3121.2	2688.5	2315.9	1995.4	1694.8	1410.4	1145.9	905.5	689.2
22.5°	4339.3	3750.3	3233.4	2780.7	2392.0	2051.4	1742.9	1450.4	1178.0	929.6	705.2
20°	4503.6	3894.5	3349.6	2872.8	2464.1	2107.5	1783.0	1486.5	1206.0	949.6	721.2
17.5°	4663.8	4026.8	3453.8	2957.0	2524.2	2155.6	1823.1	1514.5	1230.1	965.6	733.2
15°	4800.1	4143.0	3546.0	3029.1	2580.3	2195.7	1855.1	1542.6	1250.1	981.6	741.2
12.5°	4920.3	4243.1	3626.1	3089.2	2624.4	2231.7	1887.2	1566.6	1270.1	993.7	753.3
10°	5016.4	4323.3	3690.2	3141.3	2664.5	2259.8	1907.2	1586.7	1282.2	1005.7	761.3
7.5°	5092.6	4387.4	3742.3	3177.3	2692.5	2283.8	1927.2	1598.7	1294.2	1013.7	773.3
5°	5148.7	4435.5	3778.3	3205.4	2716.6	2311.9	1951.3	1618.7	1310.2	1025.7	773.3
2.5°	5192.7	4471.5	3806.4	3229.4	2732.6	2311.9	1951.3	1618.7	1310.2	1025.7	773.3
0°	5192.7	4471.5	3806.4	3229.4	2732.6	2311.9	1951.3	1618.7	1310.2	1025.7	773.3



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.0	16.0	8.0	0.0
85°	44.1	28.0	16.0	0.0
82.5°	64.1	44.1	20.0	0.0
80°	84.1	56.1	28.0	0.0
77.5°	108.2	72.1	36.1	0.0
75°	128.2	84.1	44.1	0.0
72.5°	148.2	100.2	48.1	0.0
70°	168.3	112.2	56.1	0.0
67.5°	192.3	124.2	64.1	0.0
65°	212.4	140.2	68.1	0.0
62.5°	232.4	152.3	76.1	0.0
60°	252.4	164.3	80.1	0.0
57.5°	272.5	176.3	88.1	0.0
55°	292.5	192.3	96.2	0.0
52.5°	312.5	204.3	100.2	0.0
50°	332.6	216.4	104.2	0.0
47.5°	348.6	228.4	112.2	0.0
45°	368.6	240.4	116.2	0.0
42.5°	388.7	248.4	120.2	0.0
40°	404.7	260.4	124.2	0.0
37.5°	424.7	268.5	132.2	0.0
35°	440.7	280.5	136.2	0.0
32.5°	452.8	288.5	140.2	0.0
30°	468.8	296.5	144.2	0.0
27.5°	480.8	304.5	144.2	0.0
25°	492.8	312.5	148.2	0.0
22.5°	504.8	316.5	152.3	0.0
20°	516.9	324.5	156.3	0.0
17.5°	524.9	328.6	156.3	0.0
15°	532.9	332.6	164.3	0.0
12.5°	536.9	336.6	164.3	0.0
10°	544.9	344.6	164.3	0.0
7.5°	552.9	344.6	164.3	0.0
5°	552.9	344.6	164.3	0.0
2.5°	552.9	344.6	164.3	0.0
0°	552.9	344.6	164.3	0.0

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