

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: P624198

Luminaire Tested: **EPH-VN-03-E-750-U-77**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624198
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-750-U-77
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 7 distribution lens
Light Source: (48) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

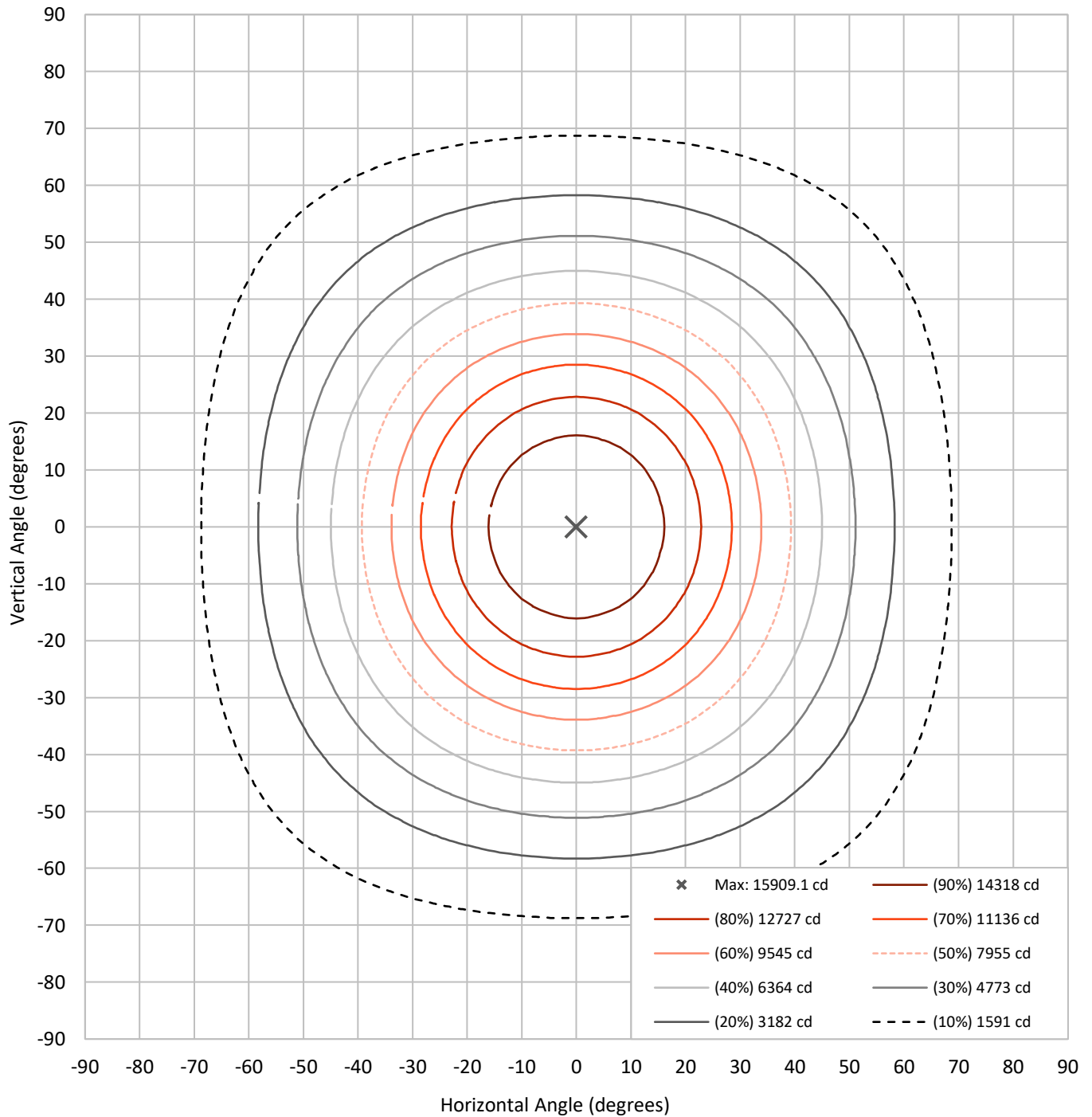
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	28644.7 lumens	Max Intensity:	15909.1 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	123.4 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	78.6°H x 78.6°V	Field Angle (10%):	137.5°H x 137.5°V
Beam Lumens:	12394.3 lumens	Field Lumens:	20295.2 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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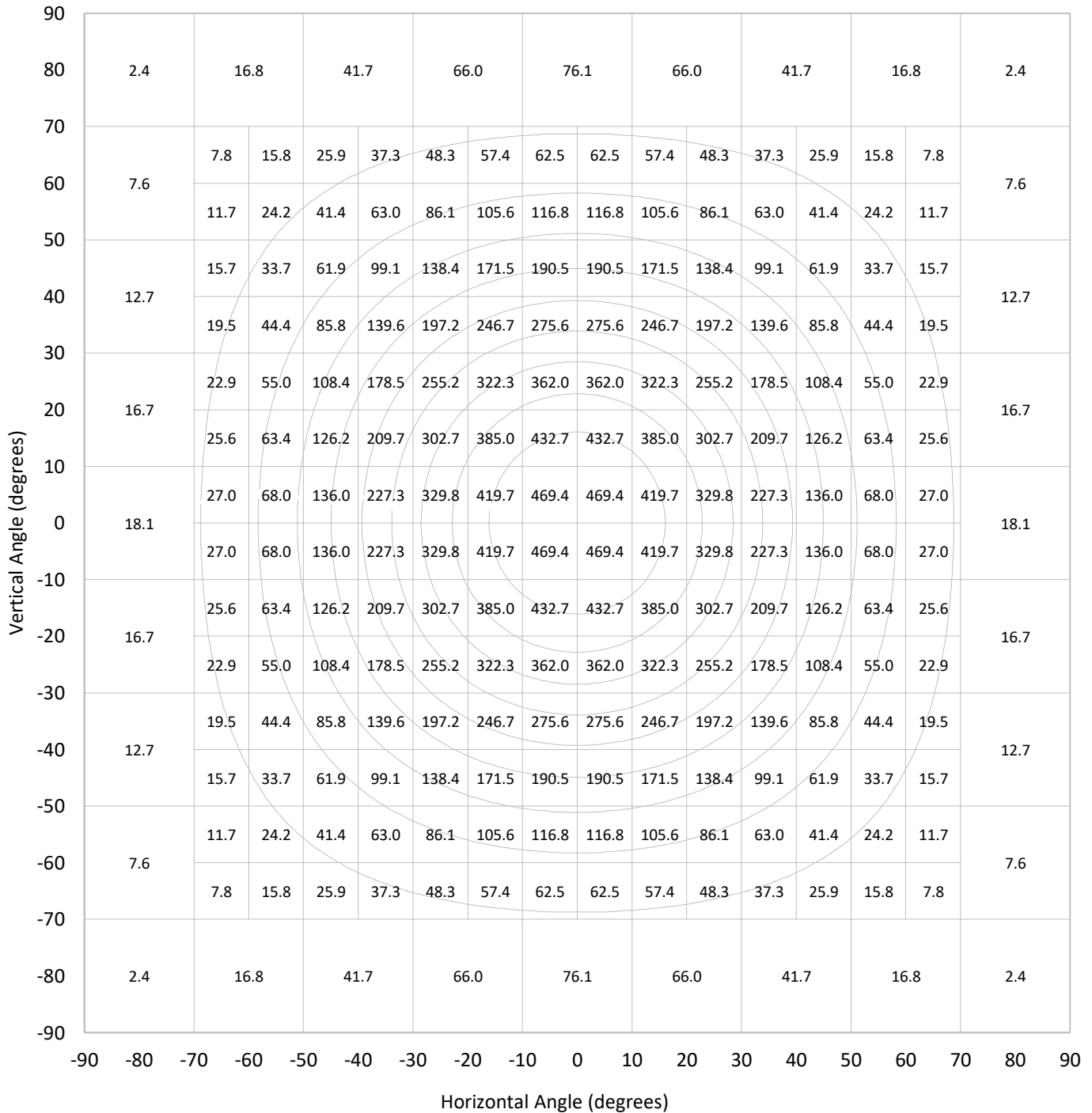
Iso-Candela Plot





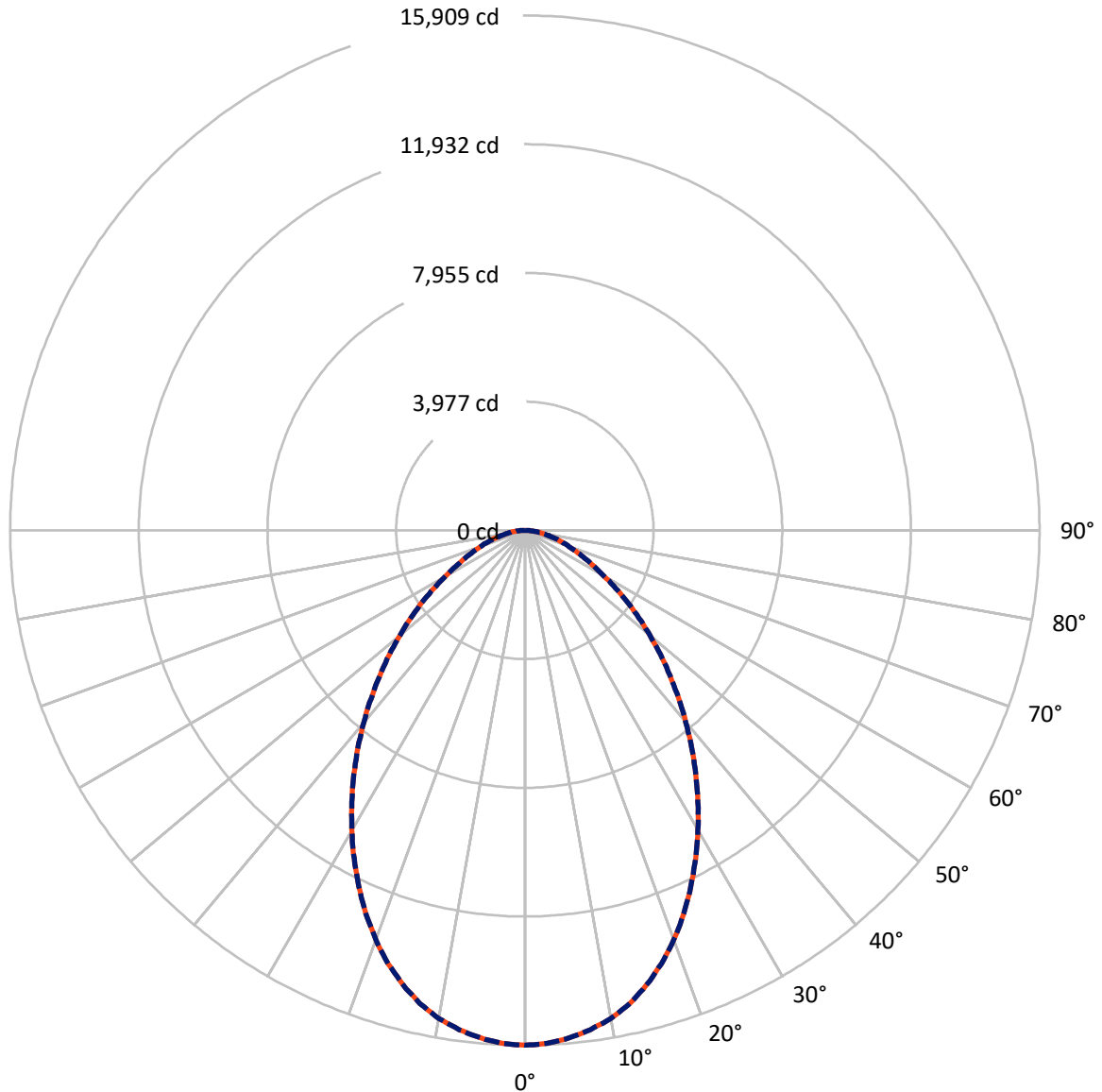
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Lumen Table



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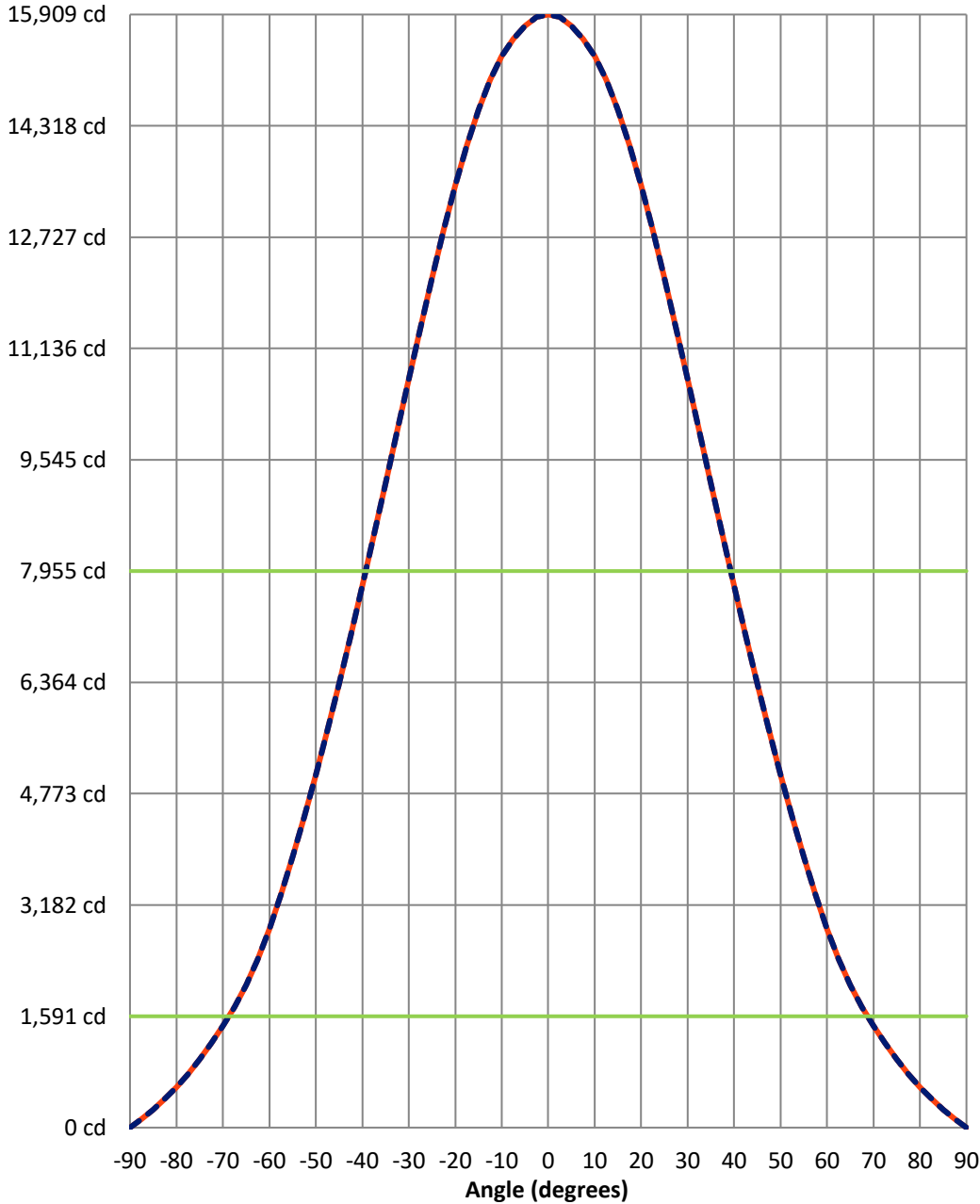
Luminous Intensity Polar Plot



— 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: 12394.3
Efficiency: 43.3%

Field:
H Angle: 137.5°
V Angle: 137.5°
Lumens: 20295.2
Efficiency: 70.9%

Spill:
Lumens: 8349.5
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°	122.4	122.4	122.4	122.4	122.4	122.4	122.4	116.5	116.5	113.5	110.5
85°	256.8	256.8	256.8	256.8	256.8	250.9	247.9	244.9	241.9	235.9	232.9
82.5°	412.1	412.1	412.1	412.1	406.2	400.2	397.2	391.2	385.3	376.3	367.3
80°	576.4	576.4	576.4	576.4	567.4	561.5	552.5	546.5	537.6	525.6	513.7
77.5°	764.5	764.5	764.5	755.6	749.6	740.7	731.7	719.7	707.8	692.9	675.0
75°	976.6	976.6	976.6	964.6	955.7	946.7	931.8	916.9	898.9	878.0	854.1
72.5°	1206.5	1206.5	1206.5	1191.6	1182.7	1167.7	1149.8	1128.9	1108.0	1081.1	1051.3
70°	1454.4	1454.4	1454.4	1436.5	1421.6	1406.6	1382.8	1358.9	1329.0	1299.1	1263.3
67.5°	1723.2	1723.2	1723.2	1702.3	1684.4	1663.5	1636.6	1606.7	1570.9	1529.1	1487.3
65°	2036.8	2036.8	2024.9	2006.9	1986.0	1956.2	1923.3	1881.5	1836.7	1782.9	1726.2
62.5°	2407.1	2407.1	2389.2	2368.3	2341.4	2302.6	2257.8	2204.0	2141.3	2072.6	2003.9
60°	2837.2	2837.2	2816.3	2789.4	2750.6	2702.8	2643.1	2574.4	2496.7	2410.1	2326.5
57.5°	3332.9	3332.9	3306.1	3270.2	3222.4	3162.7	3088.0	3001.4	2902.9	2795.4	2690.8
55°	3870.5	3870.5	3837.7	3795.9	3739.1	3667.4	3577.8	3476.3	3356.8	3234.4	3100.0
52.5°	4440.9	4440.9	4402.1	4354.3	4288.6	4205.0	4103.5	3984.0	3846.6	3703.3	3545.0
50°	5041.2	5041.2	4996.4	4942.7	4868.0	4769.5	4653.0	4515.6	4363.3	4196.0	4013.9
47.5°	5683.3	5683.3	5632.6	5569.8	5480.2	5366.8	5229.4	5071.1	4897.9	4709.7	4503.7
45°	6343.3	6343.3	6286.6	6214.9	6116.4	5987.9	5835.6	5683.3	5462.3	5244.3	5005.4
42.5°	7030.2	7030.2	6964.5	6883.9	6770.4	6630.0	6456.8	6259.7	6041.7	5796.8	5537.0
40°	7744.0	7744.0	7669.4	7576.8	7451.3	7290.1	7095.9	6874.9	6630.0	6358.3	6071.6
37.5°	8472.7	8472.7	8389.1	8287.6	8147.2	7968.0	7750.0	7505.1	7230.3	6928.7	6612.1
35°	9207.4	9207.4	9114.8	9004.3	8849.0	8651.9	8416.0	8144.2	7839.6	7511.1	7155.7
32.5°	9957.0	9957.0	9855.5	9730.0	9553.8	9335.8	9076.0	8780.3	8472.7	8090.5	7702.2
30°	10697.7	10697.7	10587.2	10449.8	10261.6	10022.7	9739.0	9413.5	9052.1	8660.9	8242.8
27.5°	11426.4	11396.5	11303.9	11157.6	10951.5	10697.7	10390.1	10037.7	9646.4	9216.4	8768.4
25°	12143.1	12110.3	12008.7	11847.5	11626.5	11348.7	11017.2	10640.9	10219.8	9765.9	9276.1
22.5°	12830.0	12794.2	12686.7	12513.5	12277.5	11975.9	11620.5	11217.3	10769.3	10282.5	9765.9
20°	13466.2	13427.3	13316.8	13134.7	12889.8	12570.2	12193.9	11760.9	11283.0	10769.3	10219.8
17.5°	14039.6	14000.7	13884.3	13696.1	13466.2	13110.8	12722.5	12265.6	11760.9	11217.3	10640.9
15°	14544.3	14502.5	14383.0	14194.9	13932.1	13597.6	13188.4	12722.5	12193.9	11620.5	11017.2
12.5°	14974.4	14932.5	14810.1	14621.9	14350.2	14015.7	13597.6	13110.8	12570.2	11975.9	11348.7
10°	15314.8	15273.0	15156.5	14977.3	14696.6	14350.2	13932.1	13466.2	12889.8	12277.5	11626.5
7.5°	15559.7	15520.9	15413.4	15234.2	14977.3	14621.9	14194.9	13696.1	13134.7	12513.5	11847.5
5°	15744.9	15700.1	15592.6	15413.4	15156.5	14810.1	14383.0	13884.3	13316.8	12686.7	12008.7
2.5°	15873.3	15819.5	15700.1	15520.9	15273.0	14932.5	14502.5	14000.7	13427.3	12794.2	12110.3
0°	15909.1	15873.3	15744.9	15559.7	15314.8	14974.4	14544.3	14039.6	13466.2	12830.0	12143.1



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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°	107.5	107.5	104.5	101.5	98.6	92.6	89.6	86.6	83.6	77.6	74.7
85°	227.0	221.0	215.0	209.1	200.1	194.1	185.2	179.2	170.2	161.3	152.3
82.5°	358.4	349.4	337.5	328.5	316.6	301.6	289.7	274.8	259.8	247.9	232.9
80°	501.7	486.8	471.9	456.9	439.0	421.1	403.2	385.3	364.4	343.4	322.5
77.5°	657.0	636.1	615.2	591.3	570.4	546.5	522.6	498.7	471.9	445.0	418.1
75°	830.2	803.4	773.5	743.6	716.8	683.9	651.1	618.2	582.4	549.5	513.7
72.5°	1018.4	985.5	949.7	913.9	875.0	833.2	791.4	746.6	704.8	663.0	618.2
70°	1221.5	1182.7	1137.9	1093.1	1045.3	994.5	943.7	890.0	836.2	782.5	728.7
67.5°	1439.5	1391.7	1338.0	1284.2	1224.5	1164.7	1105.0	1042.3	976.6	910.9	848.2
65°	1672.4	1612.7	1550.0	1481.3	1412.6	1343.9	1272.3	1197.6	1122.9	1045.3	976.6
62.5°	1932.3	1857.6	1777.0	1693.4	1615.7	1532.1	1454.4	1361.8	1272.3	1185.6	1099.0
60°	2233.9	2135.4	2036.8	1932.3	1833.7	1726.2	1630.6	1529.1	1427.6	1329.0	1227.5
57.5°	2571.4	2446.0	2326.5	2201.1	2069.7	1950.2	1827.7	1705.3	1591.8	1475.3	1364.8
55°	2953.7	2801.3	2652.0	2496.7	2344.4	2195.1	2039.8	1902.4	1762.0	1630.6	1502.2
52.5°	3371.8	3198.6	3013.4	2837.2	2643.1	2457.9	2284.7	2111.5	1947.2	1788.9	1642.6
50°	3819.7	3616.7	3404.6	3189.6	2968.6	2750.6	2541.5	2338.4	2147.3	1962.1	1788.9
47.5°	4285.6	4055.7	3813.8	3568.9	3332.9	3067.1	2816.3	2586.3	2356.4	2147.3	1947.2
45°	4763.5	4503.7	4237.9	3960.1	3682.4	3395.7	3117.9	2837.2	2586.3	2338.4	2111.5
42.5°	5256.3	4963.6	4667.9	4360.3	4052.7	3739.1	3425.5	3117.9	2816.3	2541.5	2284.7
40°	5764.0	5441.4	5103.9	4769.5	4440.9	4082.6	3739.1	3395.7	3067.1	2750.6	2457.9
37.5°	6271.7	5919.3	5554.9	5178.6	4802.3	4440.9	4052.7	3682.4	3332.9	2968.6	2643.1
35°	6782.4	6394.1	5999.9	5590.7	5178.6	4769.5	4360.3	3960.1	3568.9	3189.6	2837.2
32.5°	7296.0	6872.0	6435.9	5999.9	5554.9	5103.9	4667.9	4237.9	3813.8	3404.6	3013.4
30°	7800.8	7340.8	6872.0	6394.1	5919.3	5441.4	4963.6	4503.7	4055.7	3616.7	3198.6
27.5°	8293.5	7800.8	7296.0	6782.4	6271.7	5764.0	5256.3	4763.5	4285.6	3819.7	3371.8
25°	8768.4	8242.8	7702.2	7155.7	6612.1	6071.6	5537.0	5005.4	4503.7	4013.9	3545.0
22.5°	9216.4	8660.9	8090.5	7511.1	6928.7	6358.3	5796.8	5244.3	4709.7	4196.0	3703.3
20°	9646.4	9052.1	8472.7	7839.6	7230.3	6630.0	6041.7	5462.3	4897.9	4363.3	3846.6
17.5°	10037.7	9413.5	8780.3	8144.2	7505.1	6874.9	6259.7	5683.3	5071.1	4515.6	3984.0
15°	10390.1	9739.0	9076.0	8416.0	7750.0	7095.9	6456.8	5835.6	5229.4	4653.0	4103.5
12.5°	10697.7	10022.7	9335.8	8651.9	7968.0	7290.1	6630.0	5987.9	5366.8	4769.5	4205.0
10°	10951.5	10261.6	9553.8	8849.0	8147.2	7451.3	6770.4	6116.4	5480.2	4868.0	4288.6
7.5°	11157.6	10449.8	9730.0	9004.3	8287.6	7576.8	6883.9	6214.9	5569.8	4942.7	4354.3
5°	11303.9	10587.2	9855.5	9114.8	8389.1	7669.4	6964.5	6286.6	5632.6	4996.4	4402.1
2.5°	11396.5	10697.7	9957.0	9207.4	8472.7	7744.0	7030.2	6343.3	5683.3	5041.2	4440.9
0°	11426.4	10697.7	9957.0	9207.4	8472.7	7744.0	7030.2	6343.3	5683.3	5041.2	4440.9



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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°	71.7	65.7	59.7	56.7	50.8	47.8	41.8	35.8	32.9	26.9	20.9
85°	143.4	131.4	122.4	113.5	104.5	92.6	83.6	74.7	62.7	53.8	41.8
82.5°	218.0	203.1	188.2	173.2	158.3	143.4	125.4	110.5	95.6	80.6	62.7
80°	301.6	277.7	256.8	235.9	215.0	194.1	170.2	149.3	125.4	104.5	83.6
77.5°	388.2	361.4	331.5	301.6	271.8	244.9	215.0	188.2	161.3	131.4	104.5
75°	480.8	445.0	412.1	373.3	337.5	298.7	262.8	227.0	194.1	161.3	125.4
72.5°	576.4	531.6	486.8	445.0	400.2	355.4	313.6	268.8	227.0	188.2	149.3
70°	675.0	621.2	567.4	516.7	465.9	412.1	364.4	313.6	262.8	215.0	170.2
67.5°	779.5	716.8	654.0	588.3	531.6	471.9	412.1	355.4	298.7	244.9	194.1
65°	893.0	818.3	740.7	672.0	597.3	531.6	465.9	400.2	337.5	271.8	215.0
62.5°	1009.4	922.8	836.2	749.6	672.0	588.3	516.7	445.0	373.3	301.6	235.9
60°	1128.9	1030.3	931.8	836.2	740.7	654.0	567.4	486.8	412.1	331.5	256.8
57.5°	1251.3	1140.8	1030.3	922.8	818.3	716.8	621.2	531.6	445.0	361.4	277.7
55°	1376.8	1251.3	1128.9	1009.4	893.0	779.5	675.0	576.4	480.8	388.2	301.6
52.5°	1502.2	1364.8	1227.5	1099.0	976.6	848.2	728.7	618.2	513.7	418.1	322.5
50°	1630.6	1475.3	1329.0	1185.6	1045.3	910.9	782.5	663.0	549.5	445.0	343.4
47.5°	1762.0	1591.8	1427.6	1272.3	1122.9	976.6	836.2	704.8	582.4	471.9	364.4
45°	1902.4	1705.3	1529.1	1361.8	1197.6	1042.3	890.0	746.6	618.2	498.7	385.3
42.5°	2039.8	1827.7	1630.6	1454.4	1272.3	1105.0	943.7	791.4	651.1	522.6	403.2
40°	2195.1	1950.2	1726.2	1532.1	1343.9	1164.7	994.5	833.2	683.9	546.5	421.1
37.5°	2344.4	2069.7	1833.7	1615.7	1412.6	1224.5	1045.3	875.0	716.8	570.4	439.0
35°	2496.7	2201.1	1932.3	1693.4	1481.3	1284.2	1093.1	913.9	743.6	591.3	456.9
32.5°	2652.0	2326.5	2036.8	1777.0	1550.0	1338.0	1137.9	949.7	773.5	615.2	471.9
30°	2801.3	2446.0	2135.4	1857.6	1612.7	1391.7	1182.7	985.5	803.4	636.1	486.8
27.5°	2953.7	2571.4	2233.9	1932.3	1672.4	1439.5	1221.5	1018.4	830.2	657.0	501.7
25°	3100.0	2690.8	2326.5	2003.9	1726.2	1487.3	1263.3	1051.3	854.1	675.0	513.7
22.5°	3234.4	2795.4	2410.1	2072.6	1782.9	1529.1	1299.1	1081.1	878.0	692.9	525.6
20°	3356.8	2902.9	2496.7	2141.3	1836.7	1570.9	1329.0	1108.0	898.9	707.8	537.6
17.5°	3476.3	3001.4	2574.4	2204.0	1881.5	1606.7	1358.9	1128.9	916.9	719.7	546.5
15°	3577.8	3088.0	2643.1	2257.8	1923.3	1636.6	1382.8	1149.8	931.8	731.7	552.5
12.5°	3667.4	3162.7	2702.8	2302.6	1956.2	1663.5	1406.6	1167.7	946.7	740.7	561.5
10°	3739.1	3222.4	2750.6	2341.4	1986.0	1684.4	1421.6	1182.7	955.7	749.6	567.4
7.5°	3795.9	3270.2	2789.4	2368.3	2006.9	1702.3	1436.5	1191.6	964.6	755.6	576.4
5°	3837.7	3306.1	2816.3	2389.2	2024.9	1723.2	1454.4	1206.5	976.6	764.5	576.4
2.5°	3870.5	3332.9	2837.2	2407.1	2036.8	1723.2	1454.4	1206.5	976.6	764.5	576.4
0°	3870.5	3332.9	2837.2	2407.1	2036.8	1723.2	1454.4	1206.5	976.6	764.5	576.4



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	14.9	11.9	6.0	0.0
85°	32.9	20.9	11.9	0.0
82.5°	47.8	32.9	14.9	0.0
80°	62.7	41.8	20.9	0.0
77.5°	80.6	53.8	26.9	0.0
75°	95.6	62.7	32.9	0.0
72.5°	110.5	74.7	35.8	0.0
70°	125.4	83.6	41.8	0.0
67.5°	143.4	92.6	47.8	0.0
65°	158.3	104.5	50.8	0.0
62.5°	173.2	113.5	56.7	0.0
60°	188.2	122.4	59.7	0.0
57.5°	203.1	131.4	65.7	0.0
55°	218.0	143.4	71.7	0.0
52.5°	232.9	152.3	74.7	0.0
50°	247.9	161.3	77.6	0.0
47.5°	259.8	170.2	83.6	0.0
45°	274.8	179.2	86.6	0.0
42.5°	289.7	185.2	89.6	0.0
40°	301.6	194.1	92.6	0.0
37.5°	316.6	200.1	98.6	0.0
35°	328.5	209.1	101.5	0.0
32.5°	337.5	215.0	104.5	0.0
30°	349.4	221.0	107.5	0.0
27.5°	358.4	227.0	107.5	0.0
25°	367.3	232.9	110.5	0.0
22.5°	376.3	235.9	113.5	0.0
20°	385.3	241.9	116.5	0.0
17.5°	391.2	244.9	116.5	0.0
15°	397.2	247.9	122.4	0.0
12.5°	400.2	250.9	122.4	0.0
10°	406.2	256.8	122.4	0.0
7.5°	412.1	256.8	122.4	0.0
5°	412.1	256.8	122.4	0.0
2.5°	412.1	256.8	122.4	0.0
0°	412.1	256.8	122.4	0.0

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