

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: P628568

Luminaire Tested: **EPH-VN-03-E-740-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628568
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-03-E-740-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (48) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

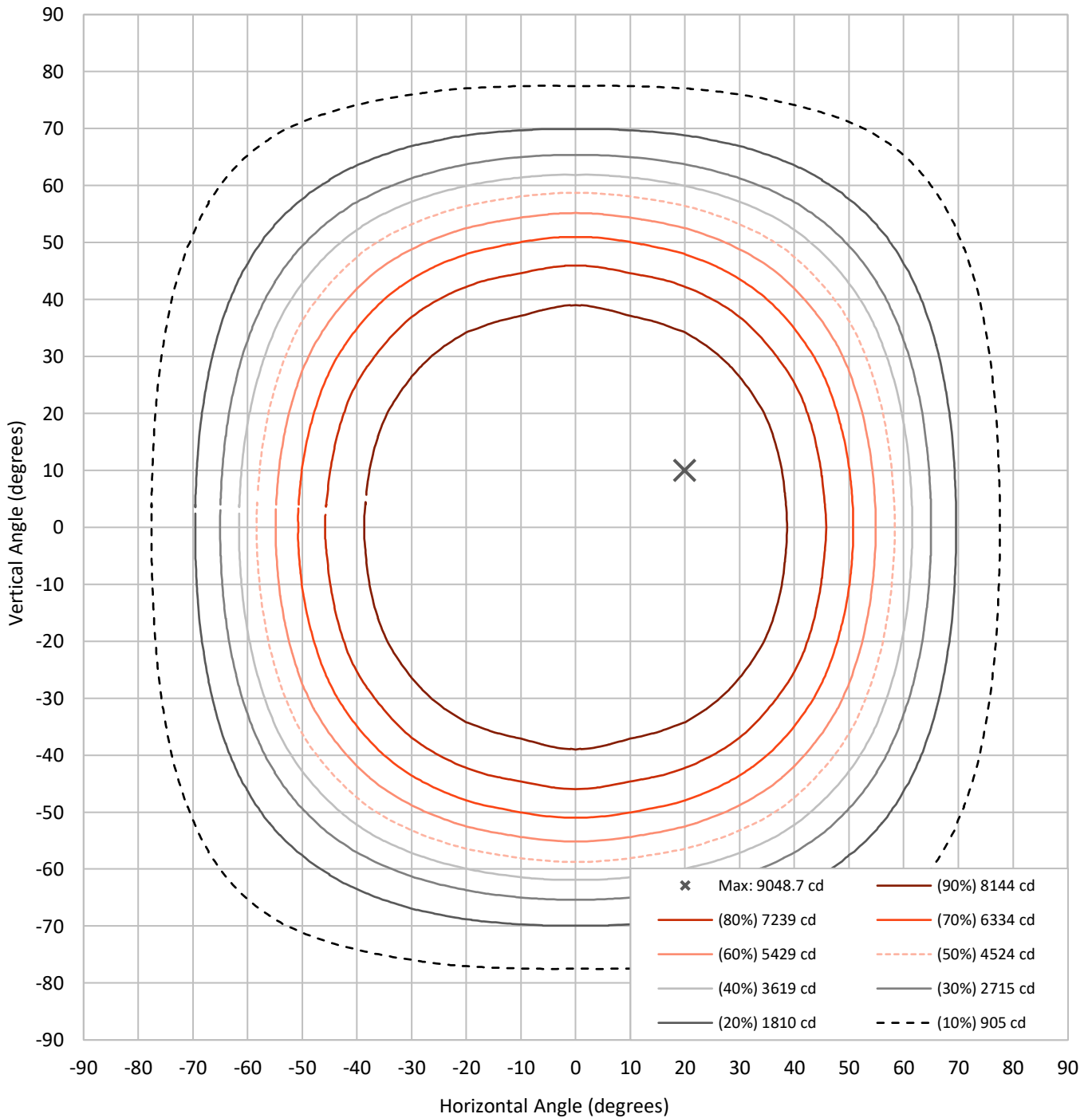
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	27760.2 lumens	Max Intensity:	9048.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	119.6 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	17034.2 lumens	Field Lumens:	20421.1 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

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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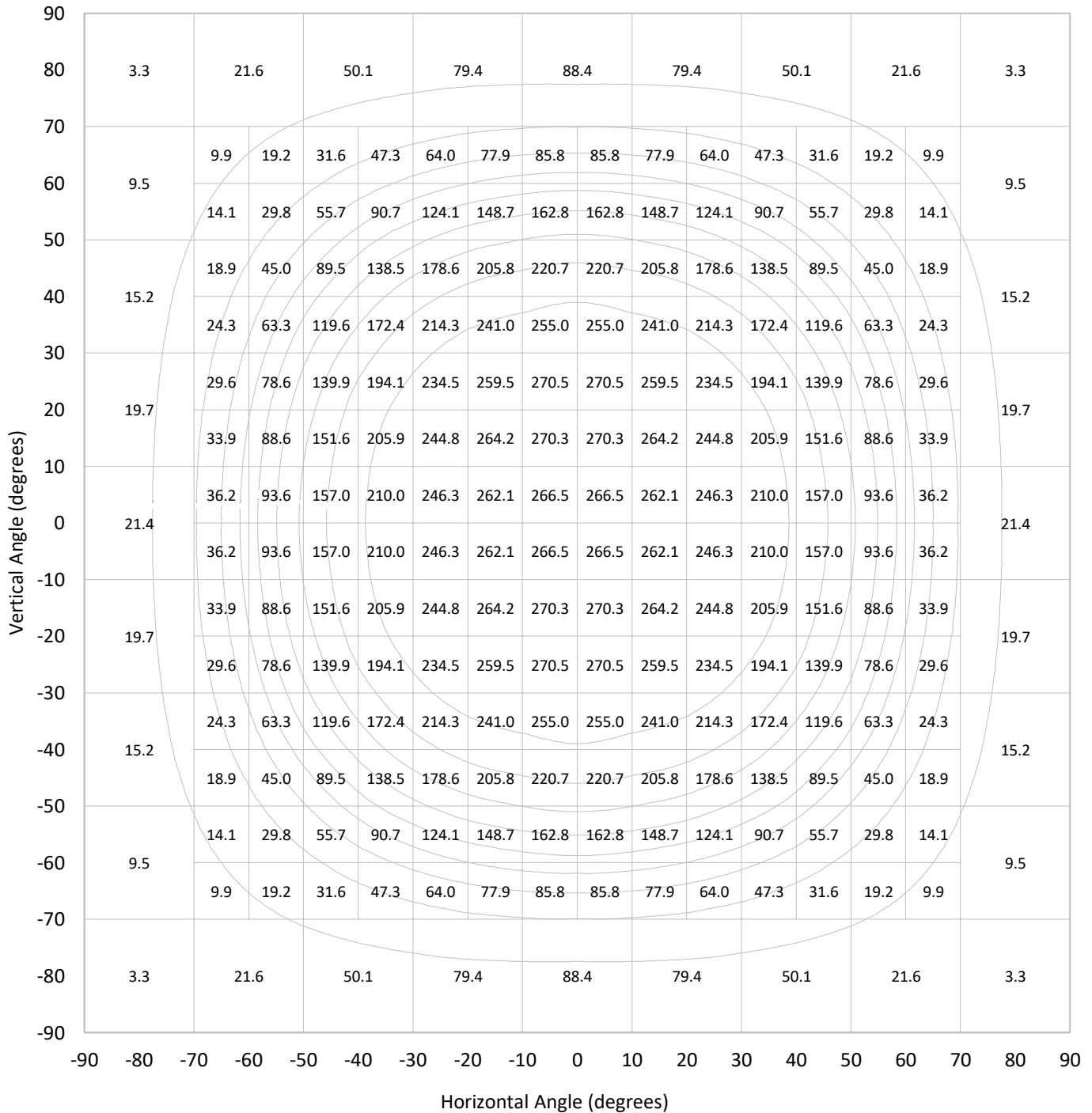
Iso-Candela Plot





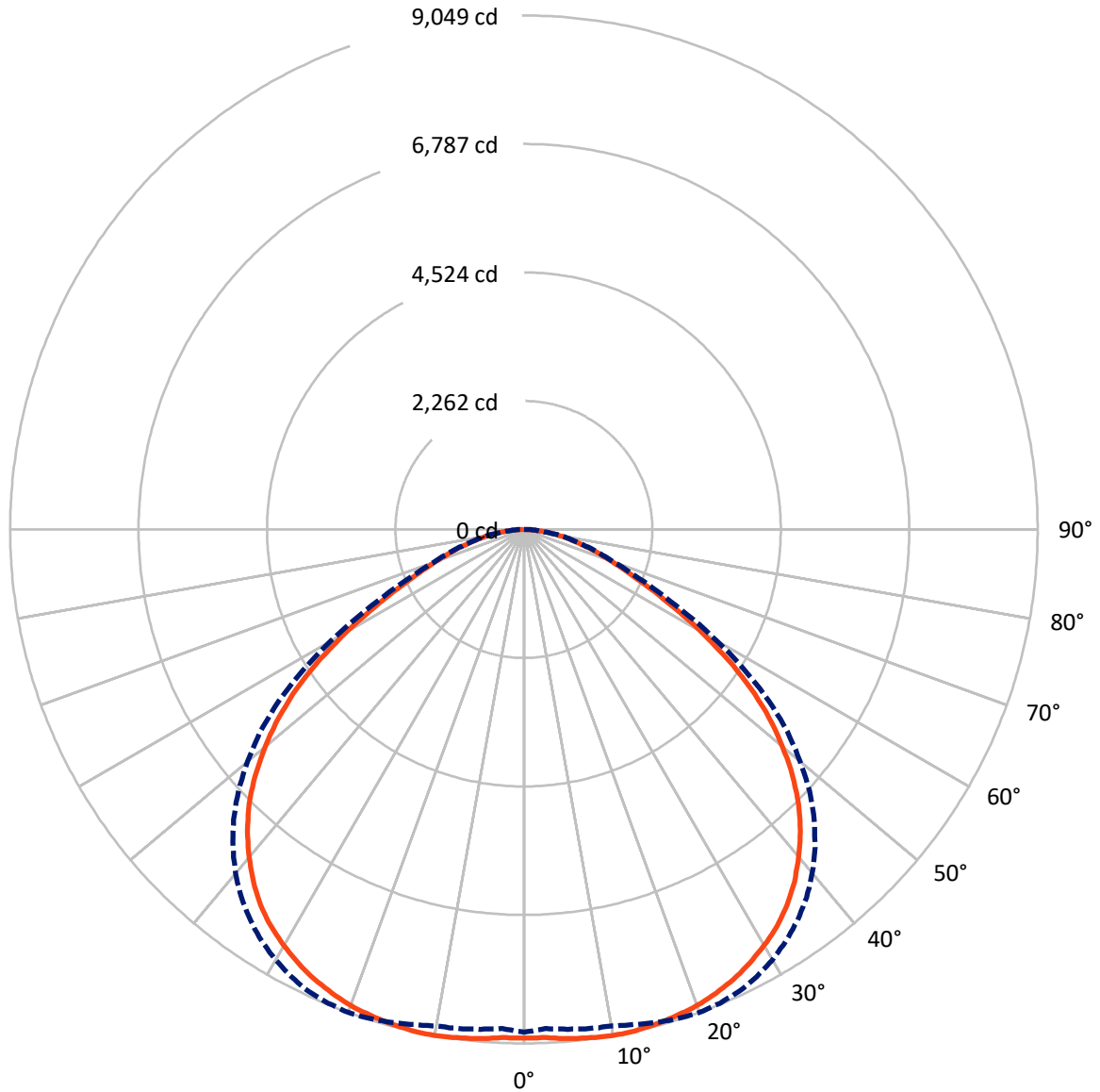
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Lumen Table



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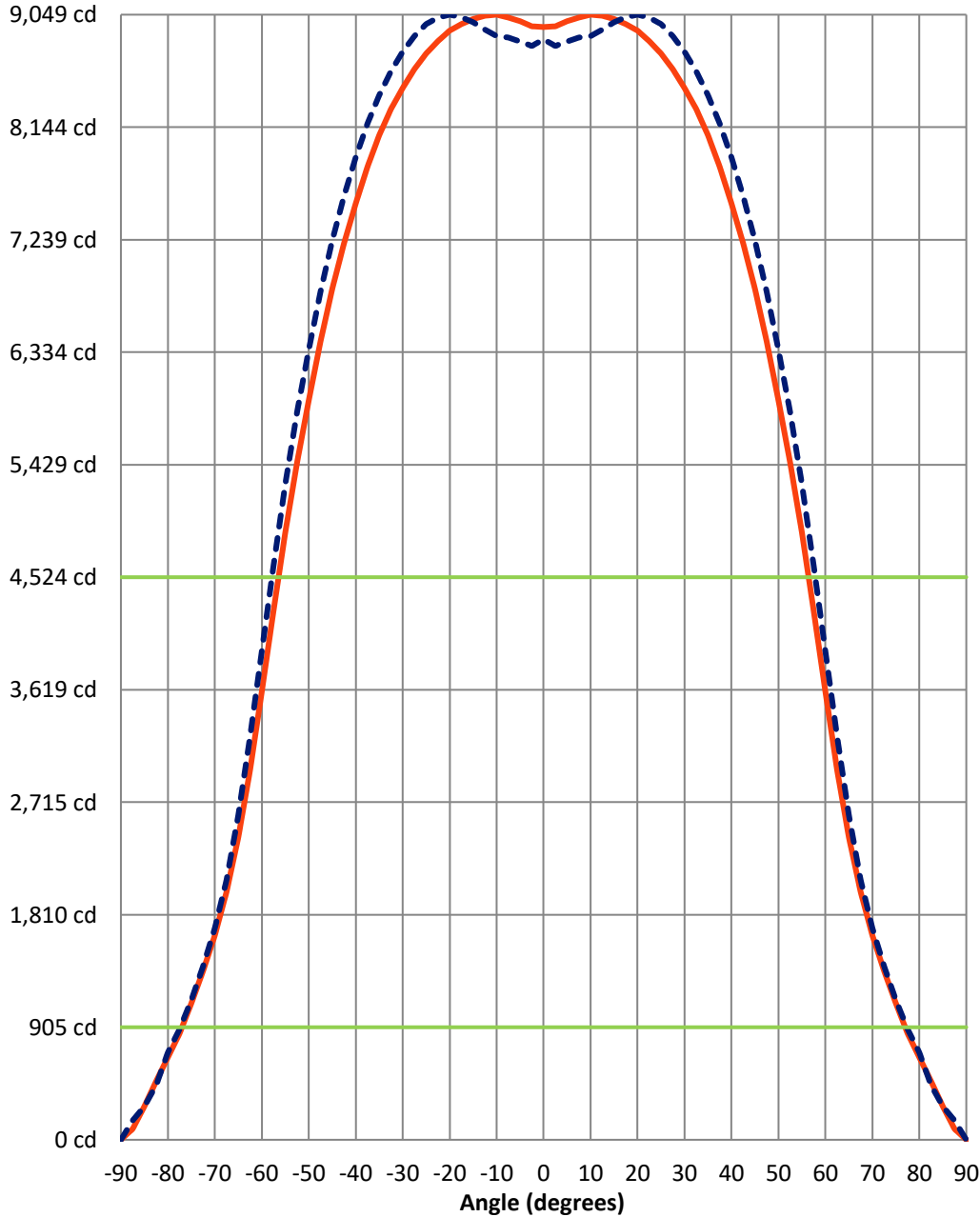
Luminous Intensity Polar Plot



— Vertical Distribution Through 20-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 115.7°
 V Angle: 112.9°
 Lumens: 17034.2
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 20421.1
 Efficiency: 73.6%

Spill:
 Lumens: 7339.1
 Efficiency: 26.4%

- Vertical Distribution through 20-Deg
- - - Horizontal Distribution through 10-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°	73.0	78.9	81.8	84.7	87.6	90.5	93.5	90.5	87.6	87.6	84.7
85°	195.7	201.5	204.5	224.9	245.3	257.0	271.6	268.7	268.7	265.8	262.9
82.5°	391.4	408.9	423.5	444.0	455.6	473.2	484.9	476.1	470.3	458.6	449.8
80°	695.2	701.0	703.9	706.8	692.2	689.3	683.5	674.7	663.0	648.4	633.8
77.5°	885.0	890.9	896.7	890.9	887.9	885.0	876.2	867.5	855.8	844.1	826.6
75°	1171.2	1171.2	1171.2	1162.5	1156.6	1147.9	1133.3	1118.7	1098.2	1074.9	1048.6
72.5°	1475.0	1472.1	1469.2	1451.6	1437.0	1419.5	1399.1	1381.5	1358.2	1331.9	1296.8
70°	1793.4	1799.2	1802.1	1778.8	1761.3	1737.9	1711.6	1679.5	1644.4	1606.5	1556.8
67.5°	2231.5	2225.7	2219.8	2187.7	2164.3	2132.2	2094.2	2047.5	1994.9	1936.5	1866.4
65°	2774.8	2783.5	2766.0	2733.9	2690.1	2637.5	2579.1	2511.9	2433.0	2345.4	2246.1
62.5°	3432.0	3446.6	3426.1	3385.2	3329.7	3259.6	3177.9	3081.5	2973.4	2850.7	2728.0
60°	4179.7	4176.8	4138.8	4083.3	4010.3	3922.7	3832.1	3727.0	3604.3	3461.2	3312.2
57.5°	4866.1	4860.2	4813.5	4758.0	4685.0	4591.5	4495.1	4384.2	4255.6	4103.8	3931.4
55°	5482.4	5476.5	5429.8	5371.4	5295.4	5202.0	5114.4	5009.2	4883.6	4723.0	4539.0
52.5°	6028.6	6031.5	5990.6	5926.3	5844.6	5754.0	5669.3	5564.2	5444.4	5283.8	5105.6
50°	6531.0	6528.0	6484.2	6425.8	6349.9	6262.2	6177.5	6072.4	5946.8	5792.0	5619.7
47.5°	6998.3	6992.4	6942.8	6878.5	6799.7	6723.7	6644.9	6551.4	6420.0	6265.2	6092.8
45°	7389.7	7378.0	7328.3	7267.0	7191.1	7123.9	7053.8	6983.7	6843.5	6700.4	6536.8
42.5°	7725.6	7722.7	7673.0	7611.7	7535.7	7477.3	7413.0	7325.4	7208.6	7077.1	6916.5
40°	8046.9	8023.5	7973.8	7915.4	7845.3	7795.7	7731.4	7643.8	7529.9	7401.4	7246.6
37.5°	8286.4	8289.3	8236.7	8172.5	8111.1	8064.4	8006.0	7924.2	7824.9	7699.3	7544.5
35°	8514.2	8499.6	8455.8	8400.3	8344.8	8292.2	8230.9	8160.8	8079.0	7962.2	7816.1
32.5°	8663.2	8683.6	8631.0	8572.6	8540.5	8499.6	8435.3	8362.3	8289.3	8172.5	8041.0
30°	8826.7	8809.2	8768.3	8718.7	8695.3	8669.0	8613.5	8543.4	8458.7	8353.5	8230.9
27.5°	8940.6	8931.9	8882.2	8835.5	8823.8	8800.4	8756.6	8695.3	8610.6	8508.4	8394.4
25°	8990.3	8996.1	8949.4	8923.1	8923.1	8908.5	8873.5	8820.9	8736.2	8642.7	8531.7
22.5°	9013.7	9007.8	8975.7	8969.8	8984.4	8972.8	8958.2	8911.4	8835.5	8759.5	8666.1
20°	9028.3	8987.4	8958.2	8981.5	8999.0	8996.1	8984.4	8955.2	8920.2	8855.9	8774.1
17.5°	8996.1	8969.8	8934.8	8969.8	9007.8	9010.7	8999.0	8981.5	8972.8	8931.9	8858.8
15°	8917.3	8896.8	8902.7	8937.7	8981.5	8996.1	9004.9	9025.3	9013.7	8981.5	8917.3
12.5°	8864.7	8838.4	8864.7	8899.7	8923.1	8931.9	9002.0	9039.9	9039.9	9010.7	8969.8
10°	8850.1	8797.5	8832.6	8864.7	8876.4	8928.9	8987.4	9028.3	9048.7	9025.3	8972.8
7.5°	8820.9	8785.8	8800.4	8815.0	8882.2	8920.2	8952.3	8996.1	9025.3	9022.4	8975.7
5°	8806.3	8762.5	8768.3	8829.6	8876.4	8902.7	8914.3	8952.3	8996.1	9004.9	8969.8
2.5°	8768.3	8747.9	8791.7	8797.5	8832.6	8853.0	8864.7	8899.7	8955.2	8975.7	8961.1
0°	8747.9	8718.7	8689.4	8712.8	8771.2	8815.0	8832.6	8885.1	8949.4	8969.8	8937.7



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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°	81.8	78.9	75.9	73.0	75.9	75.9	75.9	73.0	75.9	73.0	73.0
85°	254.1	242.4	233.7	222.0	210.3	201.5	189.9	178.2	175.2	172.3	166.5
82.5°	438.1	423.5	408.9	391.4	373.9	353.4	333.0	309.6	303.8	297.9	289.2
80°	616.3	595.8	575.4	555.0	537.4	517.0	493.6	467.3	449.8	435.2	417.7
77.5°	803.2	774.0	744.8	709.8	689.3	668.9	645.5	619.2	592.9	569.6	543.3
75°	1016.4	984.3	955.1	920.1	882.1	844.1	806.1	771.1	733.1	698.1	663.0
72.5°	1253.0	1206.3	1159.6	1115.8	1069.0	1022.3	972.6	925.9	879.2	832.4	782.8
70°	1501.3	1442.9	1384.5	1326.1	1264.7	1203.4	1145.0	1086.5	1028.1	966.8	911.3
67.5°	1793.4	1726.2	1650.3	1568.5	1477.9	1399.1	1323.1	1253.0	1182.9	1112.8	1042.7
65°	2158.5	2065.0	1962.8	1851.8	1746.7	1641.5	1530.5	1425.4	1343.6	1261.8	1182.9
62.5°	2608.3	2476.9	2333.7	2190.6	2062.1	1924.8	1796.3	1659.0	1530.5	1413.7	1317.3
60°	3145.7	2967.6	2792.3	2608.3	2430.1	2243.2	2079.6	1910.2	1749.6	1606.5	1466.3
57.5°	3738.7	3531.3	3321.0	3096.1	2853.6	2634.6	2412.6	2190.6	2000.8	1810.9	1653.2
55°	4340.3	4121.3	3884.7	3630.6	3364.8	3084.4	2783.5	2535.3	2275.3	2053.3	1848.9
52.5°	4912.8	4685.0	4439.6	4206.0	3887.6	3566.3	3236.3	2909.1	2605.4	2322.1	2073.8
50°	5424.0	5202.0	4965.4	4693.8	4398.8	4057.0	3689.0	3321.0	2961.7	2628.7	2319.1
47.5°	5891.3	5675.2	5438.6	5166.9	4898.2	4518.5	4147.6	3741.6	3341.4	2958.8	2596.6
45°	6329.4	6110.4	5865.0	5605.1	5295.4	4956.6	4574.0	4165.1	3735.7	3306.4	2888.7
42.5°	6726.7	6507.6	6259.3	5990.6	5683.9	5348.0	4977.1	4565.2	4133.0	3665.6	3207.1
40°	7074.2	6861.0	6621.5	6341.1	6054.9	5701.4	5336.3	4944.9	4498.1	4027.8	3522.5
37.5°	7378.0	7179.4	6942.8	6665.3	6361.5	6046.1	5669.3	5277.9	4874.9	4363.7	3846.7
35°	7646.7	7462.7	7220.3	6957.4	6659.5	6326.5	5973.1	5590.5	5155.2	4676.2	4173.9
32.5°	7880.4	7693.4	7471.5	7208.6	6919.4	6606.9	6244.7	5859.2	5447.3	4959.6	4413.4
30°	8079.0	7897.9	7687.6	7439.3	7161.9	6852.2	6498.8	6110.4	5689.8	5204.9	4664.6
27.5°	8251.3	8079.0	7874.5	7643.8	7378.0	7080.1	6723.7	6332.3	5903.0	5435.6	4895.3
25°	8400.3	8233.8	8043.9	7824.9	7562.0	7269.9	6934.0	6525.1	6095.8	5625.5	5091.0
22.5°	8534.6	8374.0	8184.1	7970.9	7731.4	7439.3	7100.5	6694.5	6259.3	5794.9	5269.2
20°	8654.4	8505.4	8318.5	8099.4	7859.9	7564.9	7229.0	6843.5	6405.4	5949.7	5429.8
17.5°	8750.8	8619.3	8432.4	8201.7	7962.2	7675.9	7348.8	6995.4	6531.0	6081.1	5564.2
15°	8818.0	8689.4	8520.0	8286.4	8052.7	7769.4	7442.3	7077.1	6644.9	6186.3	5675.2
12.5°	8864.7	8727.4	8569.7	8353.5	8119.9	7839.5	7521.1	7161.9	6741.3	6279.8	5771.5
10°	8876.4	8750.8	8593.1	8400.3	8172.5	7900.8	7588.3	7232.0	6820.1	6352.8	5850.4
7.5°	8882.2	8762.5	8619.3	8435.3	8210.4	7947.6	7637.9	7287.4	6878.5	6414.1	5908.8
5°	8879.3	8765.4	8636.9	8458.7	8233.8	7973.8	7670.1	7325.4	6919.4	6455.0	5952.6
2.5°	8870.5	8768.3	8648.6	8476.2	8260.1	8003.0	7702.2	7369.2	6963.2	6490.1	5987.7
0°	8893.9	8806.3	8654.4	8470.4	8265.9	8003.0	7699.3	7375.1	6969.1	6487.1	5984.8



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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°	73.0	70.1	70.1	67.2	64.3	61.3	55.5	52.6	46.7	38.0	29.2
85°	157.7	149.0	140.2	134.4	128.5	122.7	113.9	105.1	93.5	75.9	58.4
82.5°	277.5	260.0	242.4	222.0	204.5	186.9	172.3	157.7	140.2	113.9	87.6
80°	397.2	370.9	344.7	315.4	289.2	260.0	233.7	210.3	186.9	151.9	116.8
77.5°	517.0	481.9	444.0	408.9	370.9	333.0	295.0	262.9	227.8	186.9	146.0
75°	628.0	587.1	552.0	502.4	455.6	406.0	356.3	312.5	268.7	219.1	175.2
72.5°	739.0	686.4	636.7	590.0	537.4	476.1	420.6	365.1	309.6	251.2	198.6
70°	850.0	785.7	724.4	668.9	610.5	549.1	481.9	417.7	350.5	280.4	219.1
67.5°	963.9	890.9	820.8	750.7	683.5	613.4	543.3	470.3	391.4	309.6	242.4
65°	1089.5	998.9	914.2	835.4	756.5	680.6	601.7	522.8	435.2	341.7	262.9
62.5°	1215.1	1115.8	1016.4	917.1	829.5	744.8	660.1	572.5	476.1	376.8	283.3
60°	1349.4	1235.5	1121.6	1010.6	902.5	809.1	715.6	622.1	519.9	408.9	303.8
57.5°	1498.4	1361.1	1232.6	1107.0	984.3	873.3	771.1	671.8	557.9	441.0	327.1
55°	1667.8	1498.4	1346.5	1206.3	1071.9	937.6	826.6	724.4	601.7	473.2	353.4
52.5°	1846.0	1650.3	1466.3	1308.5	1165.4	1013.5	879.2	765.3	645.5	505.3	376.8
50°	2053.3	1805.1	1600.6	1407.8	1247.2	1089.5	934.7	812.0	689.3	543.3	400.2
47.5°	2266.6	1992.0	1735.0	1524.7	1334.8	1162.5	998.9	852.9	730.2	578.3	423.5
45°	2514.8	2170.2	1886.9	1638.6	1419.5	1238.4	1063.2	896.7	765.3	613.4	446.9
42.5°	2754.3	2380.5	2044.6	1764.2	1515.9	1311.4	1121.6	943.4	800.3	648.4	467.3
40°	3037.7	2590.8	2196.5	1883.9	1612.3	1381.5	1180.0	993.1	832.4	680.6	487.8
37.5°	3309.3	2804.0	2380.5	2015.4	1705.8	1451.6	1238.4	1039.8	861.6	712.7	514.1
35°	3578.0	3040.6	2555.7	2138.0	1802.1	1530.5	1296.8	1083.6	890.9	739.0	537.4
32.5°	3835.0	3262.6	2733.9	2275.3	1907.3	1603.5	1349.4	1124.5	920.1	762.3	560.8
30°	4074.5	3472.9	2909.1	2415.5	2003.7	1670.7	1399.1	1165.4	955.1	782.8	584.2
27.5°	4293.6	3677.3	3084.4	2547.0	2094.2	1732.0	1451.6	1203.4	984.3	803.2	604.6
25°	4492.2	3861.3	3245.0	2666.7	2176.0	1799.2	1501.3	1241.3	1010.6	820.8	622.1
22.5°	4679.2	4030.7	3391.1	2786.5	2275.3	1866.4	1548.0	1276.4	1036.9	838.3	639.7
20°	4842.7	4185.5	3531.3	2906.2	2362.9	1927.7	1588.9	1308.5	1060.3	850.0	657.2
17.5°	4974.2	4322.8	3656.9	3011.4	2438.9	1980.3	1624.0	1337.7	1080.7	864.6	668.9
15°	5091.0	4439.6	3762.0	3101.9	2506.1	2024.1	1656.1	1361.1	1098.2	873.3	683.5
12.5°	5190.3	4539.0	3852.6	3180.8	2564.5	2062.1	1682.4	1378.6	1112.8	882.1	692.2
10°	5272.1	4617.8	3928.5	3242.1	2611.2	2091.3	1702.8	1396.2	1124.5	890.9	701.0
7.5°	5333.4	4676.2	3984.0	3294.7	2649.2	2111.8	1720.4	1407.8	1136.2	896.7	715.6
5°	5380.2	4725.9	4027.8	3329.7	2678.4	2141.0	1740.8	1422.4	1147.9	902.5	715.6
2.5°	5415.2	4766.8	4062.9	3358.9	2701.8	2135.1	1740.8	1419.5	1147.9	902.5	712.7
0°	5409.4	4769.7	4059.9	3358.9	2701.8	2129.3	1740.8	1416.6	1147.9	902.5	712.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.4	14.6	5.8	0.0
85°	43.8	29.2	14.6	0.0
82.5°	64.3	40.9	20.4	0.0
80°	84.7	55.5	26.3	0.0
77.5°	108.1	70.1	35.0	0.0
75°	128.5	81.8	40.9	0.0
72.5°	149.0	96.4	46.7	0.0
70°	166.5	108.1	52.6	0.0
67.5°	184.0	122.7	61.3	0.0
65°	198.6	134.4	67.2	0.0
62.5°	210.3	149.0	73.0	0.0
60°	224.9	160.6	78.9	0.0
57.5°	236.6	169.4	84.7	0.0
55°	248.3	175.2	90.5	0.0
52.5°	260.0	184.0	96.4	0.0
50°	271.6	192.8	102.2	0.0
47.5°	283.3	198.6	105.1	0.0
45°	300.8	207.4	111.0	0.0
42.5°	315.4	213.2	116.8	0.0
40°	330.1	219.1	119.8	0.0
37.5°	344.7	224.9	125.6	0.0
35°	359.3	230.7	128.5	0.0
32.5°	370.9	236.6	131.4	0.0
30°	382.6	242.4	134.4	0.0
27.5°	394.3	245.3	137.3	0.0
25°	403.1	251.2	140.2	0.0
22.5°	411.8	254.1	143.1	0.0
20°	417.7	257.0	146.0	0.0
17.5°	426.4	260.0	149.0	0.0
15°	429.4	262.9	154.8	0.0
12.5°	435.2	265.8	154.8	0.0
10°	438.1	268.7	154.8	0.0
7.5°	444.0	268.7	154.8	0.0
5°	441.0	268.7	154.8	0.0
2.5°	441.0	268.7	154.8	0.0
0°	438.1	268.7	154.8	0.0

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