

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: P628574

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

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628574
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-750-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (48) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

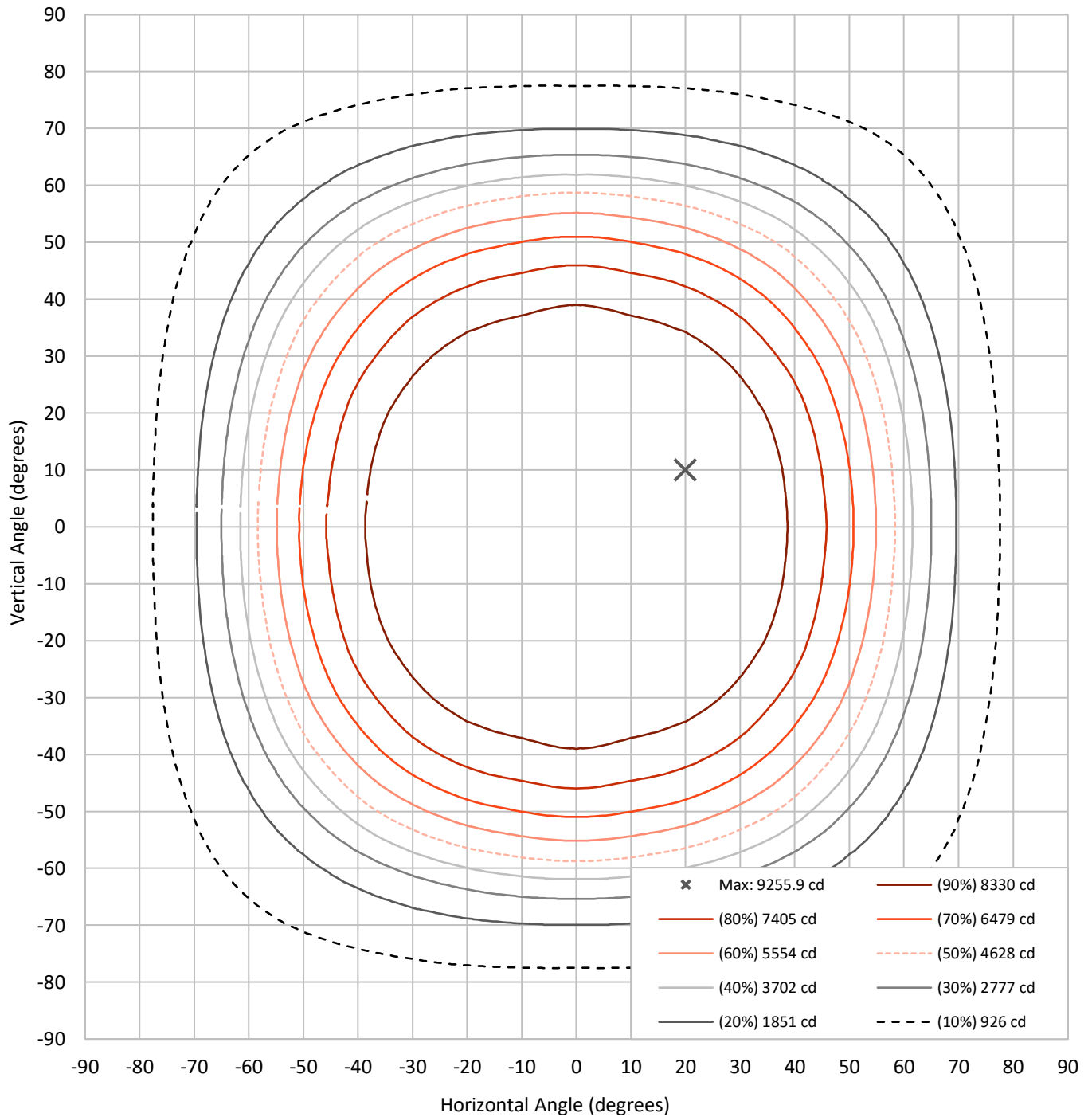
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	28395.9 lumens	Max Intensity:	9255.9 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	122.3 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 0.5' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	17424.3 lumens	Field Lumens:	20888.8 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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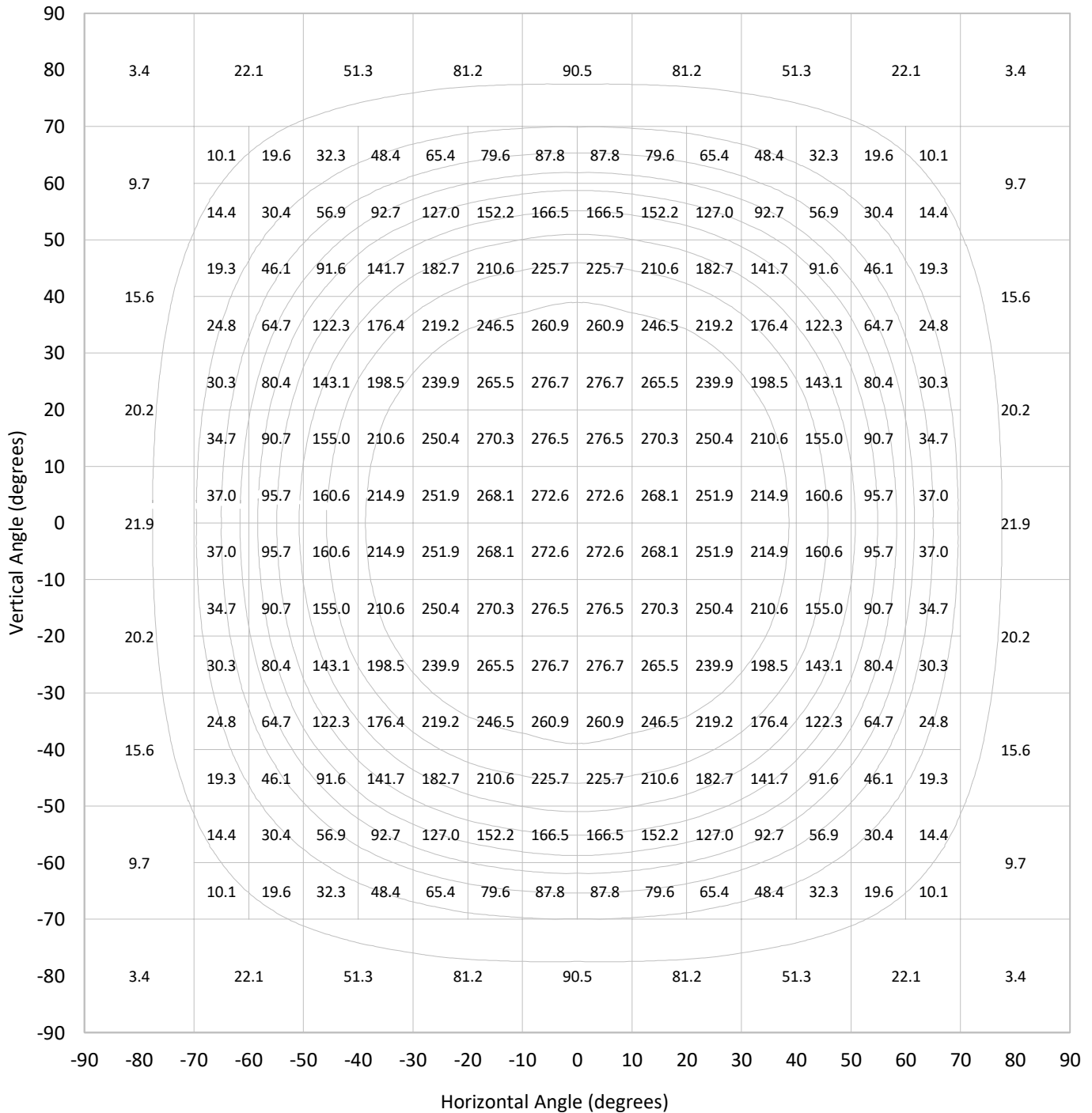
Iso-Candela Plot





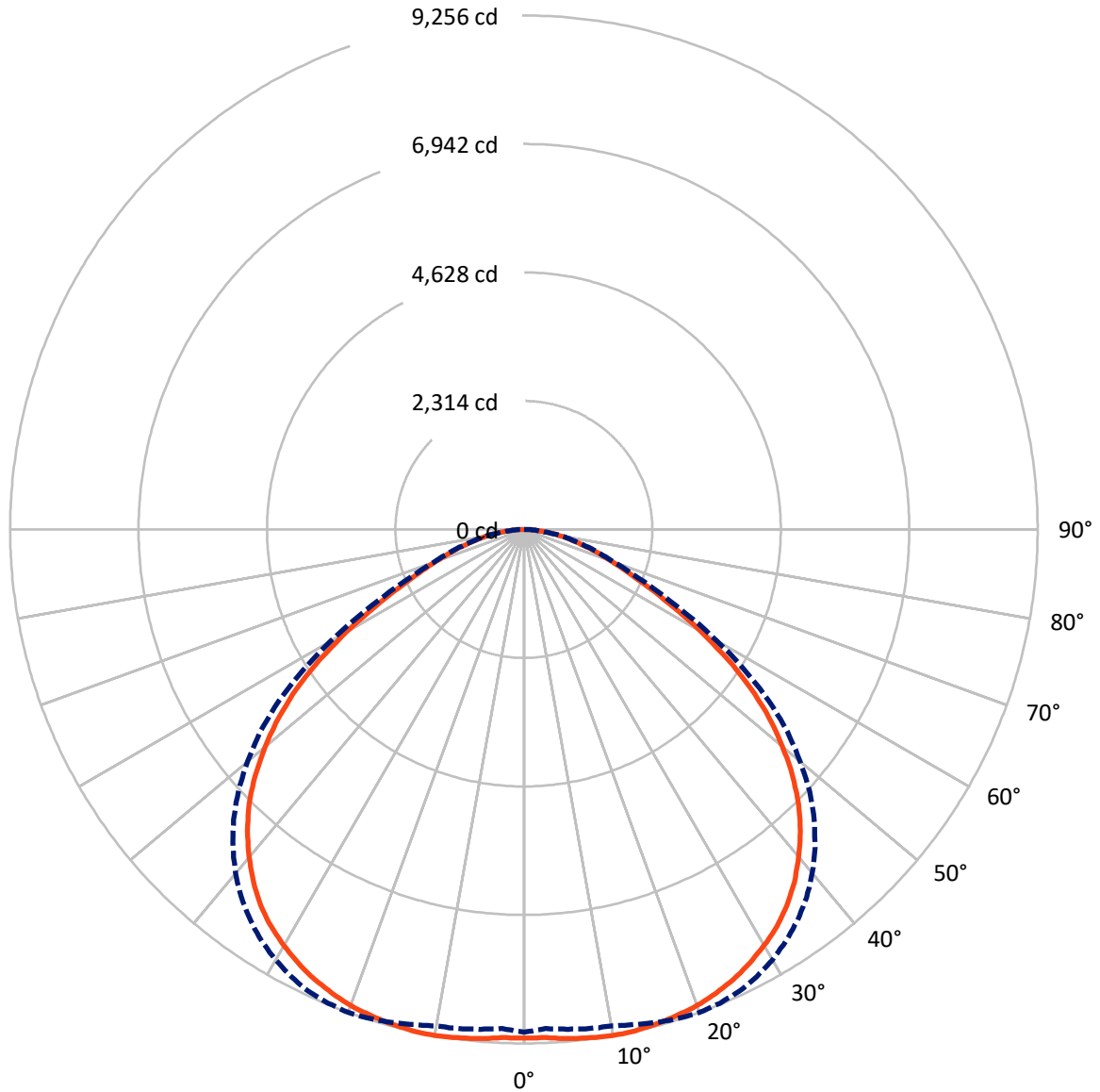
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Lumen Table



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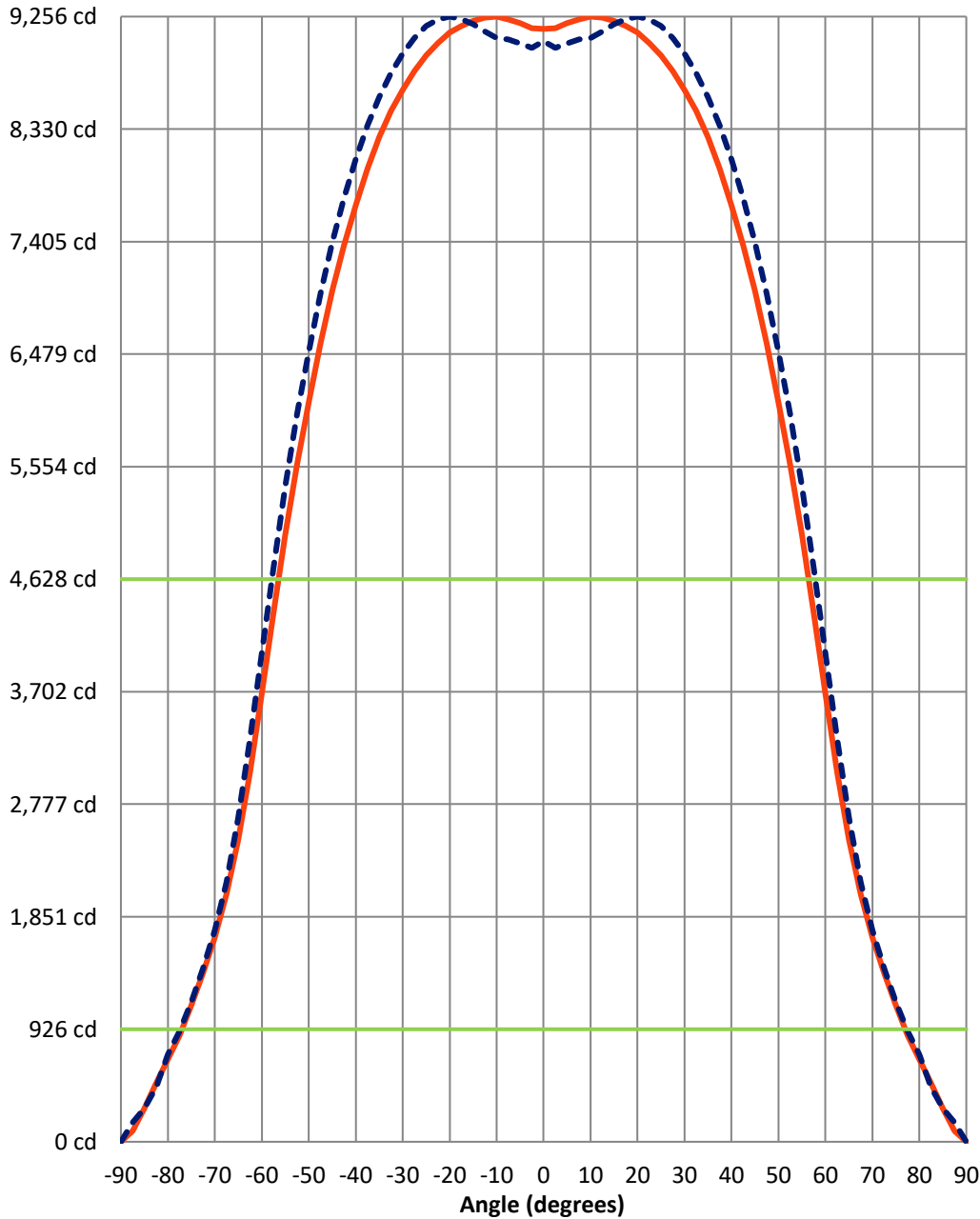
Luminous Intensity Polar Plot



— 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: 17424.3
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 20888.8
 Efficiency: 73.6%

Spill:
 Lumens: 7507.1
 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°	74.7	80.7	83.7	86.6	89.6	92.6	95.6	92.6	89.6	89.6	86.6
85°	200.2	206.2	209.1	230.1	251.0	262.9	277.9	274.9	274.9	271.9	268.9
82.5°	400.4	418.3	433.2	454.1	466.1	484.0	496.0	487.0	481.0	469.1	460.1
80°	711.1	717.0	720.0	723.0	708.1	705.1	699.1	690.2	678.2	663.3	648.3
77.5°	905.3	911.3	917.2	911.3	908.3	905.3	896.3	887.3	875.4	863.4	845.5
75°	1198.1	1198.1	1198.1	1189.1	1183.1	1174.2	1159.2	1144.3	1123.4	1099.5	1072.6
72.5°	1508.8	1505.8	1502.8	1484.9	1470.0	1452.0	1431.1	1413.2	1389.3	1362.4	1326.5
70°	1834.5	1840.4	1843.4	1819.5	1801.6	1777.7	1750.8	1717.9	1682.1	1643.2	1592.4
67.5°	2282.6	2276.6	2270.7	2237.8	2213.9	2181.0	2142.2	2094.4	2040.6	1980.9	1909.1
65°	2838.3	2847.3	2829.4	2796.5	2751.7	2697.9	2638.1	2569.4	2488.8	2399.1	2297.5
62.5°	3510.6	3525.5	3504.6	3462.8	3406.0	3334.3	3250.6	3152.0	3041.5	2916.0	2790.5
60°	4275.4	4272.4	4233.6	4176.8	4102.1	4012.5	3919.9	3812.3	3686.8	3540.4	3388.1
57.5°	4977.5	4971.5	4923.7	4867.0	4792.3	4696.7	4598.1	4484.5	4353.1	4197.7	4021.5
55°	5607.9	5602.0	5554.1	5494.4	5416.7	5321.1	5231.5	5123.9	4995.4	4831.1	4642.9
52.5°	6166.6	6169.6	6127.8	6062.1	5978.4	5885.8	5799.1	5691.6	5569.1	5404.8	5222.5
50°	6680.5	6677.5	6632.7	6573.0	6495.3	6405.6	6319.0	6211.4	6083.0	5924.6	5748.3
47.5°	7158.5	7152.6	7101.8	7036.1	6955.4	6877.7	6797.0	6701.4	6567.0	6408.6	6232.4
45°	7558.9	7546.9	7496.2	7433.4	7355.7	7287.0	7215.3	7143.6	7000.2	6853.8	6686.5
42.5°	7902.5	7899.5	7848.7	7786.0	7708.3	7648.5	7582.8	7493.2	7373.7	7239.2	7074.9
40°	8231.1	8207.2	8156.4	8096.7	8025.0	7974.2	7908.5	7818.8	7702.3	7570.9	7412.5
37.5°	8476.1	8479.1	8425.3	8359.6	8296.9	8249.1	8189.3	8105.7	8004.1	7875.6	7717.2
35°	8709.2	8694.2	8649.4	8592.6	8535.9	8482.1	8419.4	8347.7	8264.0	8144.5	7995.1
32.5°	8861.5	8882.5	8828.7	8768.9	8736.1	8694.2	8628.5	8553.8	8479.1	8359.6	8225.2
30°	9028.9	9010.9	8969.1	8918.3	8894.4	8867.5	8810.7	8739.0	8652.4	8544.8	8419.4
27.5°	9145.4	9136.4	9085.6	9037.8	9025.9	9002.0	8957.1	8894.4	8807.8	8703.2	8586.7
25°	9196.2	9202.1	9154.3	9127.4	9127.4	9112.5	9076.7	9022.9	8936.2	8840.6	8727.1
22.5°	9220.1	9214.1	9181.2	9175.3	9190.2	9178.2	9163.3	9115.5	9037.8	8960.1	8864.5
20°	9235.0	9193.2	9163.3	9187.2	9205.1	9202.1	9190.2	9160.3	9124.5	9058.7	8975.1
17.5°	9202.1	9175.3	9139.4	9175.3	9214.1	9217.1	9205.1	9187.2	9178.2	9136.4	9061.7
15°	9121.5	9100.6	9106.5	9142.4	9187.2	9202.1	9211.1	9232.0	9220.1	9187.2	9121.5
12.5°	9067.7	9040.8	9067.7	9103.5	9127.4	9136.4	9208.1	9247.0	9247.0	9217.1	9175.3
10°	9052.8	8999.0	9034.8	9067.7	9079.6	9133.4	9193.2	9235.0	9255.9	9232.0	9178.2
7.5°	9022.9	8987.0	9002.0	9016.9	9085.6	9124.5	9157.3	9202.1	9232.0	9229.0	9181.2
5°	9007.9	8963.1	8969.1	9031.8	9079.6	9106.5	9118.5	9157.3	9202.1	9211.1	9175.3
2.5°	8969.1	8948.2	8993.0	8999.0	9034.8	9055.7	9067.7	9103.5	9160.3	9181.2	9166.3
0°	8948.2	8918.3	8888.4	8912.3	8972.1	9016.9	9034.8	9088.6	9154.3	9175.3	9142.4



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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°	83.7	80.7	77.7	74.7	77.7	77.7	77.7	74.7	77.7	74.7	74.7
85°	259.9	248.0	239.0	227.1	215.1	206.2	194.2	182.3	179.3	176.3	170.3
82.5°	448.2	433.2	418.3	400.4	382.4	361.5	340.6	316.7	310.7	304.7	295.8
80°	630.4	609.5	588.6	567.7	549.7	528.8	504.9	478.0	460.1	445.2	427.2
77.5°	821.6	791.7	761.9	726.0	705.1	684.2	660.3	633.4	606.5	582.6	555.7
75°	1039.7	1006.9	977.0	941.1	902.3	863.4	824.6	788.8	749.9	714.1	678.2
72.5°	1281.7	1233.9	1186.1	1141.3	1093.5	1045.7	994.9	947.1	899.3	851.5	800.7
70°	1535.7	1475.9	1416.2	1356.4	1293.7	1230.9	1171.2	1111.4	1051.7	988.9	932.2
67.5°	1834.5	1765.7	1688.1	1604.4	1511.8	1431.1	1353.4	1281.7	1210.0	1138.3	1066.6
65°	2207.9	2112.3	2007.7	1894.2	1786.6	1679.1	1565.6	1458.0	1374.3	1290.7	1210.0
62.5°	2668.0	2533.6	2387.2	2240.8	2109.3	1968.9	1837.4	1697.0	1565.6	1446.1	1347.5
60°	3217.8	3035.5	2856.2	2668.0	2485.8	2294.6	2127.2	1954.0	1789.6	1643.2	1499.8
57.5°	3824.3	3612.1	3397.0	3167.0	2919.0	2694.9	2467.8	2240.8	2046.6	1852.4	1691.0
55°	4439.7	4215.7	3973.7	3713.7	3441.8	3155.0	2847.3	2593.3	2327.4	2100.4	1891.2
52.5°	5025.3	4792.3	4541.3	4302.3	3976.6	3648.0	3310.4	2975.8	2665.0	2375.2	2121.3
50°	5548.2	5321.1	5079.1	4801.2	4499.5	4149.9	3773.5	3397.0	3029.5	2688.9	2372.2
47.5°	6026.2	5805.1	5563.1	5285.3	5010.4	4622.0	4242.5	3827.3	3417.9	3026.5	2656.1
45°	6474.4	6250.3	5999.3	5733.4	5416.7	5070.1	4678.8	4260.5	3821.3	3382.1	2954.8
42.5°	6880.7	6656.6	6402.7	6127.8	5814.1	5470.5	5091.1	4669.8	4227.6	3749.6	3280.5
40°	7236.2	7018.1	6773.1	6486.3	6193.5	5832.0	5458.5	5058.2	4601.1	4120.0	3603.2
37.5°	7546.9	7343.8	7101.8	6817.9	6507.2	6184.6	5799.1	5398.8	4986.5	4463.6	3934.8
35°	7821.8	7633.6	7385.6	7116.7	6812.0	6471.4	6109.9	5718.5	5273.3	4783.3	4269.4
32.5°	8060.8	7869.6	7642.6	7373.7	7077.9	6758.2	6387.7	5993.3	5572.1	5073.1	4514.4
30°	8264.0	8078.8	7863.6	7609.7	7325.9	7009.2	6647.6	6250.3	5820.1	5324.1	4771.4
27.5°	8440.3	8264.0	8054.9	7818.8	7546.9	7242.2	6877.7	6477.4	6038.2	5560.1	5007.4
25°	8592.6	8422.3	8228.1	8004.1	7735.2	7436.4	7092.8	6674.5	6235.3	5754.3	5207.6
22.5°	8730.1	8565.8	8371.6	8153.5	7908.5	7609.7	7263.1	6847.8	6402.7	5927.6	5389.8
20°	8852.6	8700.2	8509.0	8284.9	8039.9	7738.2	7394.6	7000.2	6552.0	6086.0	5554.1
17.5°	8951.2	8816.7	8625.5	8389.5	8144.5	7851.7	7517.1	7155.6	6680.5	6220.4	5691.6
15°	9019.9	8888.4	8715.1	8476.1	8237.1	7947.3	7612.7	7239.2	6797.0	6328.0	5805.1
12.5°	9067.7	8927.3	8765.9	8544.8	8305.8	8019.0	7693.3	7325.9	6895.6	6423.6	5903.7
10°	9079.6	8951.2	8789.8	8592.6	8359.6	8081.7	7762.1	7397.6	6976.3	6498.3	5984.4
7.5°	9085.6	8963.1	8816.7	8628.5	8398.4	8129.6	7812.9	7454.3	7036.1	6561.0	6044.1
5°	9082.6	8966.1	8834.7	8652.4	8422.3	8156.4	7845.7	7493.2	7077.9	6602.8	6088.9
2.5°	9073.7	8969.1	8846.6	8670.3	8449.2	8186.3	7878.6	7538.0	7122.7	6638.7	6124.8
0°	9097.6	9007.9	8852.6	8664.4	8455.2	8186.3	7875.6	7544.0	7128.7	6635.7	6121.8



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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°	74.7	71.7	71.7	68.7	65.7	62.7	56.8	53.8	47.8	38.8	29.9
85°	161.3	152.4	143.4	137.4	131.5	125.5	116.5	107.6	95.6	77.7	59.8
82.5°	283.8	265.9	248.0	227.1	209.1	191.2	176.3	161.3	143.4	116.5	89.6
80°	406.3	379.4	352.5	322.7	295.8	265.9	239.0	215.1	191.2	155.4	119.5
77.5°	528.8	493.0	454.1	418.3	379.4	340.6	301.8	268.9	233.0	191.2	149.4
75°	642.4	600.5	564.7	513.9	466.1	415.3	364.5	319.7	274.9	224.1	179.3
72.5°	755.9	702.1	651.3	603.5	549.7	487.0	430.2	373.5	316.7	256.9	203.2
70°	869.4	803.7	741.0	684.2	624.4	561.7	493.0	427.2	358.5	286.8	224.1
67.5°	985.9	911.3	839.5	767.8	699.1	627.4	555.7	481.0	400.4	316.7	248.0
65°	1114.4	1021.8	935.2	854.5	773.8	696.1	615.5	534.8	445.2	349.6	268.9
62.5°	1242.9	1141.3	1039.7	938.1	848.5	761.9	675.2	585.6	487.0	385.4	289.8
60°	1380.3	1263.8	1147.3	1033.7	923.2	827.6	732.0	636.4	531.8	418.3	310.7
57.5°	1532.7	1392.3	1260.8	1132.3	1006.9	893.3	788.8	687.2	570.7	451.1	334.6
55°	1706.0	1532.7	1377.3	1233.9	1096.5	959.1	845.5	741.0	615.5	484.0	361.5
52.5°	1888.2	1688.1	1499.8	1338.5	1192.1	1036.7	899.3	782.8	660.3	516.9	385.4
50°	2100.4	1846.4	1637.3	1440.1	1275.8	1114.4	956.1	830.6	705.1	555.7	409.3
47.5°	2318.5	2037.6	1774.7	1559.6	1365.4	1189.1	1021.8	872.4	746.9	591.6	433.2
45°	2572.4	2219.9	1930.1	1676.1	1452.0	1266.8	1087.5	917.2	782.8	627.4	457.1
42.5°	2817.4	2435.0	2091.4	1804.6	1550.6	1341.5	1147.3	965.0	818.6	663.3	478.0
40°	3107.2	2650.1	2246.8	1927.1	1649.2	1413.2	1207.0	1015.8	851.5	696.1	498.9
37.5°	3385.1	2868.2	2435.0	2061.5	1744.8	1484.9	1266.8	1063.6	881.4	729.0	525.8
35°	3659.9	3110.2	2614.2	2187.0	1843.4	1565.6	1326.5	1108.4	911.3	755.9	549.7
32.5°	3922.9	3337.3	2796.5	2327.4	1951.0	1640.3	1380.3	1150.3	941.1	779.8	573.6
30°	4167.9	3552.4	2975.8	2470.8	2049.6	1709.0	1431.1	1192.1	977.0	800.7	597.5
27.5°	4391.9	3761.5	3155.0	2605.3	2142.2	1771.7	1484.9	1230.9	1006.9	821.6	618.5
25°	4595.1	3949.7	3319.3	2727.8	2225.8	1840.4	1535.7	1269.8	1033.7	839.5	636.4
22.5°	4786.3	4123.0	3468.7	2850.3	2327.4	1909.1	1583.5	1305.6	1060.6	857.5	654.3
20°	4953.6	4281.4	3612.1	2972.8	2417.1	1971.9	1625.3	1338.5	1084.5	869.4	672.2
17.5°	5088.1	4421.8	3740.6	3080.3	2494.7	2025.7	1661.2	1368.4	1105.5	884.4	684.2
15°	5207.6	4541.3	3848.2	3172.9	2563.5	2070.5	1694.0	1392.3	1123.4	893.3	699.1
12.5°	5309.2	4642.9	3940.8	3253.6	2623.2	2109.3	1720.9	1410.2	1138.3	902.3	708.1
10°	5392.8	4723.6	4018.5	3316.4	2671.0	2139.2	1741.8	1428.1	1150.3	911.3	717.0
7.5°	5455.6	4783.3	4075.2	3370.1	2709.9	2160.1	1759.8	1440.1	1162.2	917.2	732.0
5°	5503.4	4834.1	4120.0	3406.0	2739.7	2190.0	1780.7	1455.0	1174.2	923.2	732.0
2.5°	5539.2	4875.9	4155.9	3435.9	2763.6	2184.0	1780.7	1452.0	1174.2	923.2	729.0
0°	5533.2	4878.9	4152.9	3435.9	2763.6	2178.0	1780.7	1449.0	1174.2	923.2	729.0



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	20.9	14.9	6.0	0.0
85°	44.8	29.9	14.9	0.0
82.5°	65.7	41.8	20.9	0.0
80°	86.6	56.8	26.9	0.0
77.5°	110.5	71.7	35.9	0.0
75°	131.5	83.7	41.8	0.0
72.5°	152.4	98.6	47.8	0.0
70°	170.3	110.5	53.8	0.0
67.5°	188.2	125.5	62.7	0.0
65°	203.2	137.4	68.7	0.0
62.5°	215.1	152.4	74.7	0.0
60°	230.1	164.3	80.7	0.0
57.5°	242.0	173.3	86.6	0.0
55°	254.0	179.3	92.6	0.0
52.5°	265.9	188.2	98.6	0.0
50°	277.9	197.2	104.6	0.0
47.5°	289.8	203.2	107.6	0.0
45°	307.7	212.1	113.5	0.0
42.5°	322.7	218.1	119.5	0.0
40°	337.6	224.1	122.5	0.0
37.5°	352.5	230.1	128.5	0.0
35°	367.5	236.0	131.5	0.0
32.5°	379.4	242.0	134.4	0.0
30°	391.4	248.0	137.4	0.0
27.5°	403.3	251.0	140.4	0.0
25°	412.3	256.9	143.4	0.0
22.5°	421.3	259.9	146.4	0.0
20°	427.2	262.9	149.4	0.0
17.5°	436.2	265.9	152.4	0.0
15°	439.2	268.9	158.3	0.0
12.5°	445.2	271.9	158.3	0.0
10°	448.2	274.9	158.3	0.0
7.5°	454.1	274.9	158.3	0.0
5°	451.1	274.9	158.3	0.0
2.5°	451.1	274.9	158.3	0.0
0°	448.2	274.9	158.3	0.0

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