

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: P628561

Luminaire Tested: **EPH-VN-08-E-730-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628561
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-E-730-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (128) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	64163.5 lumens	Max Intensity:	20914.7 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	102.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

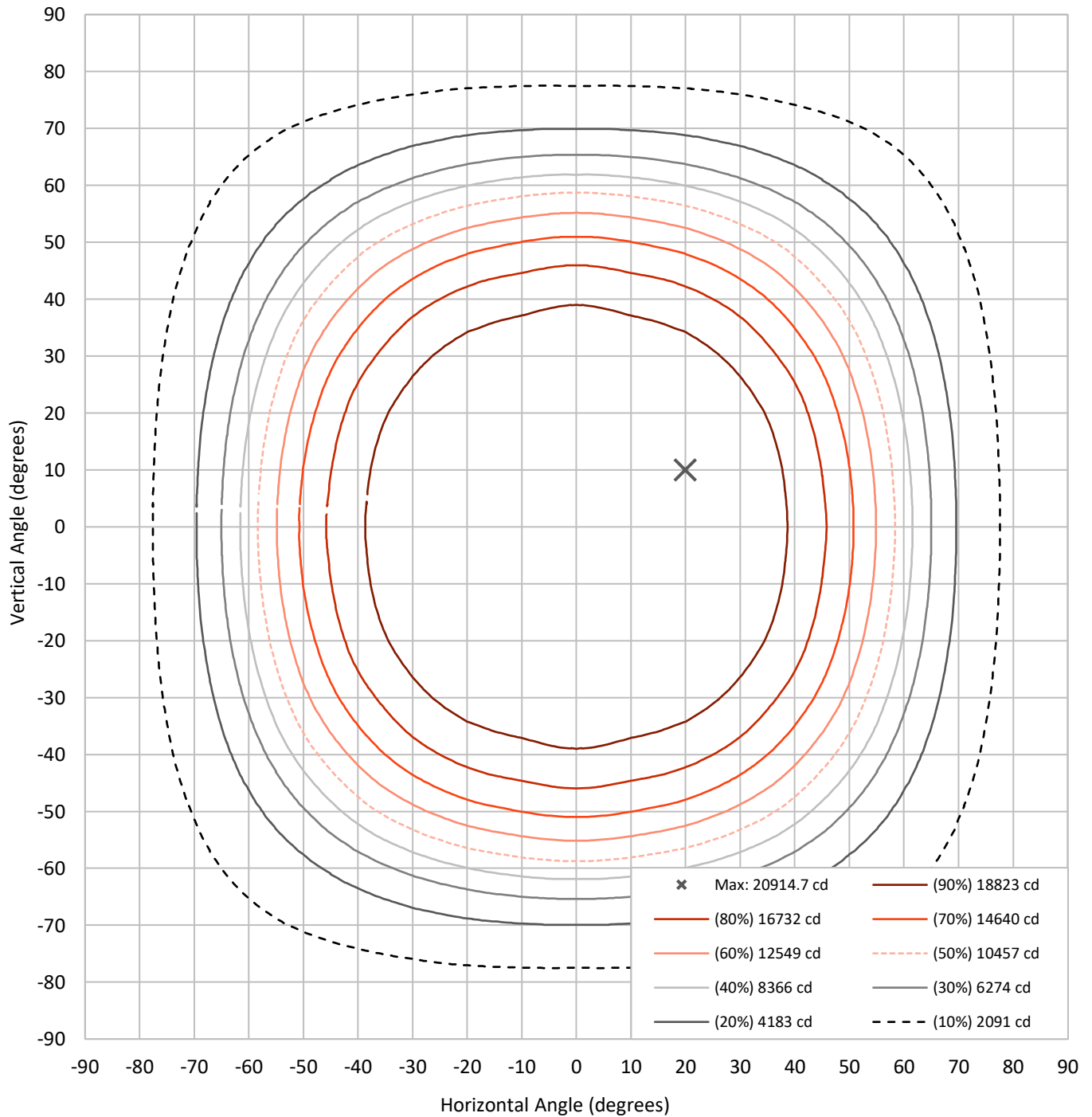
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	39372 lumens	Field Lumens:	47200.4 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 626.8
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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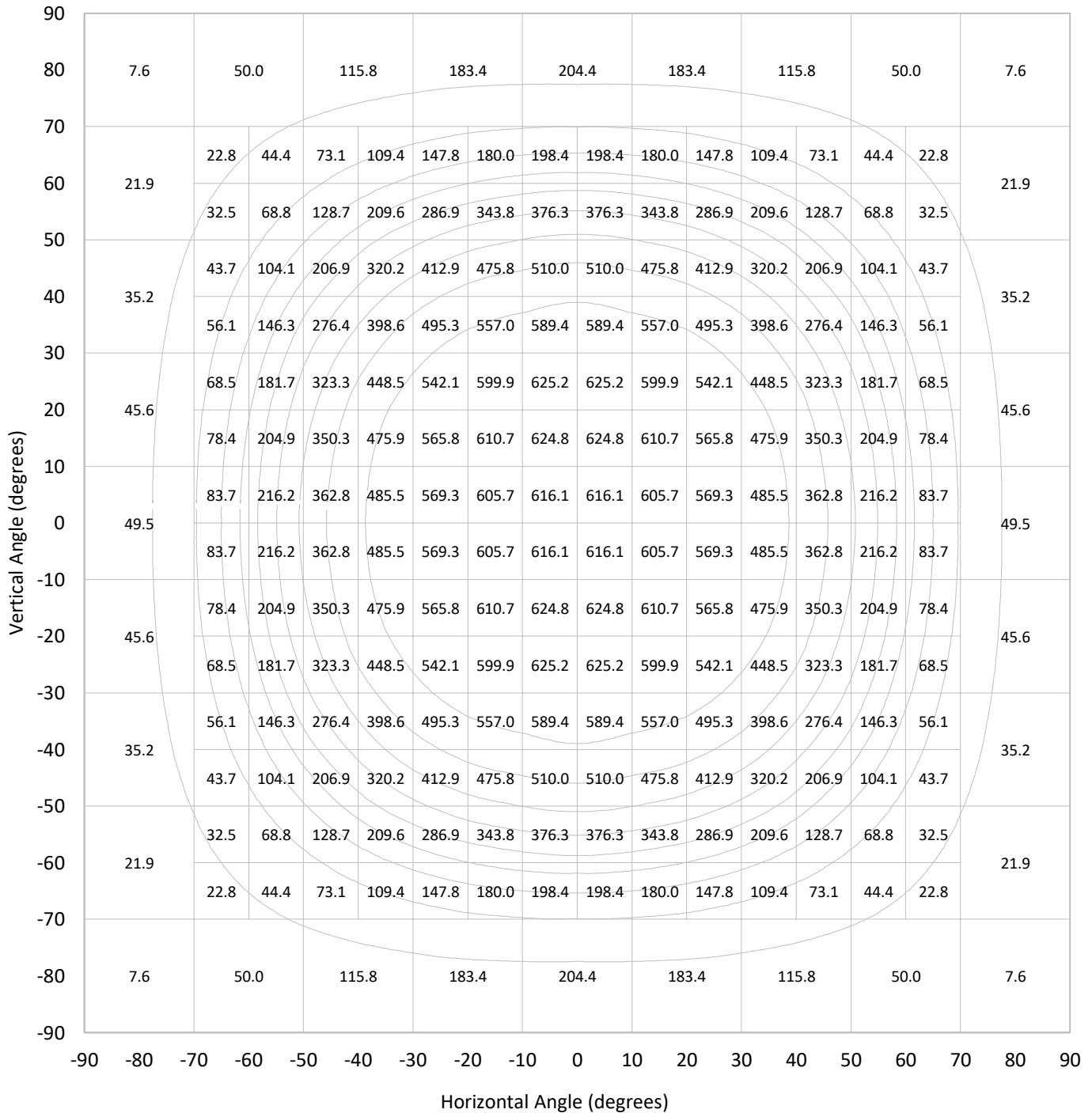
Iso-Candela Plot





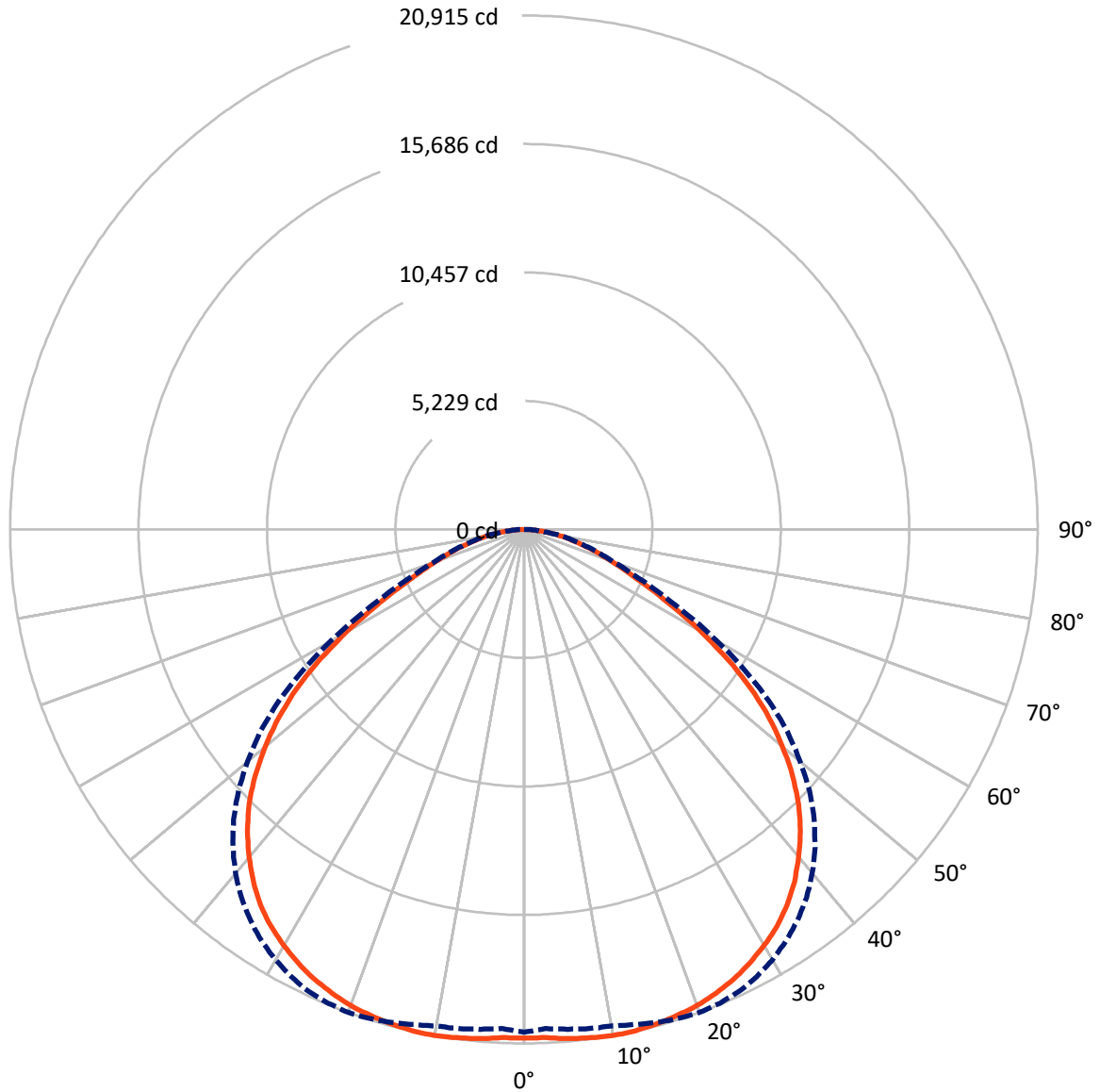
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Lumen Table



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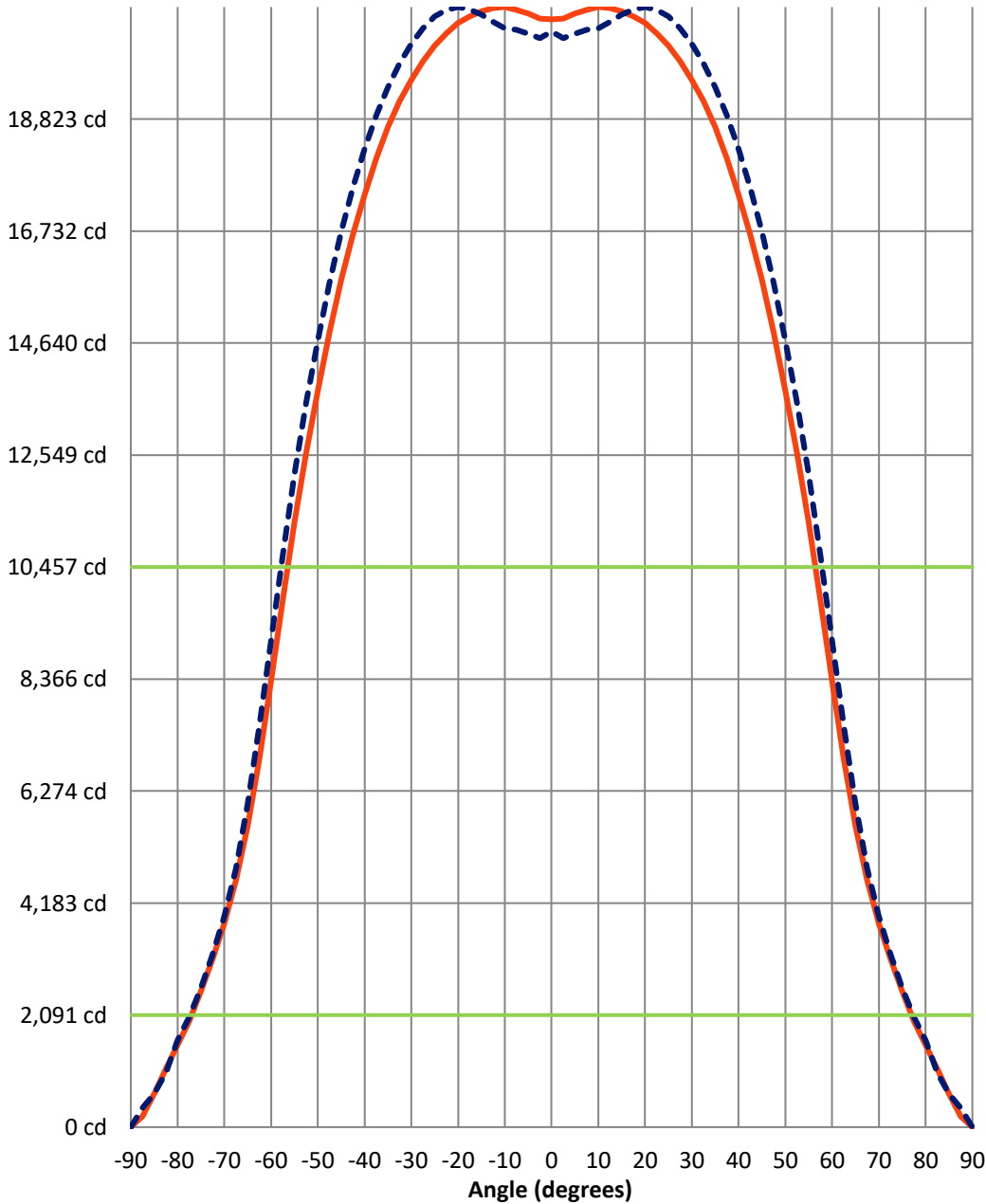
Luminous Intensity Polar Plot



— 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: 39372
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 47200.4
 Efficiency: 73.6%

Spill:
 Lumens: 16963.1
 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°	168.8	182.3	189.0	195.8	202.5	209.3	216.0	209.3	202.5	202.5	195.8
85°	452.3	465.8	472.6	519.8	567.1	594.1	627.8	621.1	621.1	614.3	607.6
82.5°	904.6	945.1	978.9	1026.2	1053.2	1093.7	1120.7	1100.4	1086.9	1059.9	1039.7
80°	1606.7	1620.2	1627.0	1633.8	1600.0	1593.2	1579.7	1559.5	1532.5	1498.7	1465.0
77.5°	2045.6	2059.1	2072.6	2059.1	2052.3	2045.6	2025.3	2005.1	1978.1	1951.0	1910.5
75°	2707.2	2707.2	2707.2	2686.9	2673.4	2653.2	2619.4	2585.6	2538.4	2484.4	2423.6
72.5°	3409.3	3402.5	3395.8	3355.3	3321.5	3281.0	3233.7	3193.2	3139.2	3078.5	2997.5
70°	4145.1	4158.6	4165.4	4111.4	4070.9	4016.9	3956.1	3881.8	3800.8	3713.1	3598.3
67.5°	5157.8	5144.3	5130.8	5056.5	5002.5	4928.3	4840.5	4732.5	4611.0	4475.9	4313.9
65°	6413.5	6433.7	6393.2	6319.0	6217.7	6096.2	5961.2	5805.9	5623.6	5421.1	5191.5
62.5°	7932.5	7966.2	7919.0	7824.4	7696.2	7534.2	7345.1	7122.3	6872.6	6589.0	6305.5
60°	9660.7	9654.0	9566.2	9437.9	9269.2	9066.6	8857.4	8614.3	8330.8	8000.0	7655.7
57.5°	11247.2	11233.7	11125.7	10997.4	10828.7	10612.6	10389.8	10133.3	9836.3	9485.2	9086.9
55°	12671.7	12658.2	12550.2	12415.2	12239.6	12023.6	11821.1	11578.0	11287.7	10916.4	10491.1
52.5°	13934.1	13940.9	13846.4	13697.8	13508.8	13299.5	13103.8	12860.7	12583.9	12212.6	11800.8
50°	15095.3	15088.6	14987.3	14852.3	14676.7	14474.2	14278.4	14035.4	13745.1	13387.3	12989.0
47.5°	16175.5	16162.0	16047.2	15898.7	15716.4	15540.9	15358.6	15142.6	14838.8	14481.0	14082.7
45°	17080.1	17053.1	16938.3	16796.6	16621.0	16465.8	16303.7	16141.7	15817.7	15486.9	15108.8
42.5°	17856.5	17849.7	17735.0	17593.2	17417.7	17282.6	17134.1	16931.6	16661.6	16357.8	15986.4
40°	18599.1	18545.1	18430.3	18295.3	18133.3	18018.5	17870.0	17667.5	17404.2	17107.1	16749.3
37.5°	19152.7	19159.4	19037.9	18889.4	18747.6	18639.6	18504.6	18315.6	18086.0	17795.7	17437.9
35°	19679.3	19645.5	19544.2	19416.0	19287.7	19166.2	19024.4	18862.4	18673.4	18403.3	18065.8
32.5°	20023.6	20070.8	19949.3	19814.3	19740.0	19645.5	19497.0	19328.2	19159.4	18889.4	18585.6
30°	20401.6	20361.1	20266.6	20151.8	20097.8	20037.1	19908.8	19746.8	19551.0	19308.0	19024.4
27.5°	20664.9	20644.7	20529.9	20421.9	20394.9	20340.9	20239.6	20097.8	19902.0	19665.8	19402.5
25°	20779.7	20793.2	20685.2	20624.4	20624.4	20590.7	20509.6	20388.1	20192.3	19976.3	19719.8
22.5°	20833.7	20820.2	20745.9	20732.4	20766.2	20739.2	20705.4	20597.4	20421.9	20246.4	20030.3
20°	20867.4	20772.9	20705.4	20759.4	20799.9	20793.2	20766.2	20698.7	20617.7	20469.1	20280.1
17.5°	20793.2	20732.4	20651.4	20732.4	20820.2	20826.9	20799.9	20759.4	20739.2	20644.7	20475.9
15°	20610.9	20563.6	20577.2	20658.2	20759.4	20793.2	20813.4	20860.7	20833.7	20759.4	20610.9
12.5°	20489.4	20428.6	20489.4	20570.4	20624.4	20644.7	20806.7	20894.5	20894.5	20826.9	20732.4
10°	20455.6	20334.1	20415.1	20489.4	20516.4	20637.9	20772.9	20867.4	20914.7	20860.7	20739.2
7.5°	20388.1	20307.1	20340.9	20374.6	20529.9	20617.7	20691.9	20793.2	20860.7	20853.9	20745.9
5°	20354.4	20253.1	20266.6	20408.4	20516.4	20577.2	20604.2	20691.9	20793.2	20813.4	20732.4
2.5°	20266.6	20219.3	20320.6	20334.1	20415.1	20462.4	20489.4	20570.4	20698.7	20745.9	20712.2
0°	20219.3	20151.8	20084.3	20138.3	20273.4	20374.6	20415.1	20536.6	20685.2	20732.4	20658.2



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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°	189.0	182.3	175.5	168.8	175.5	175.5	175.5	168.8	175.5	168.8	168.8
85°	587.3	560.3	540.1	513.1	486.1	465.8	438.8	411.8	405.1	398.3	384.8
82.5°	1012.7	978.9	945.1	904.6	864.1	816.9	769.6	715.6	702.1	688.6	668.4
80°	1424.5	1377.2	1330.0	1282.7	1242.2	1194.9	1140.9	1080.2	1039.7	1005.9	965.4
77.5°	1856.5	1789.0	1721.5	1640.5	1593.2	1546.0	1492.0	1431.2	1370.5	1316.5	1255.7
75°	2349.4	2275.1	2207.6	2126.6	2038.8	1951.0	1863.3	1782.3	1694.5	1613.5	1532.5
72.5°	2896.2	2788.2	2680.2	2578.9	2470.9	2362.9	2248.1	2140.1	2032.1	1924.0	1809.3
70°	3470.0	3335.0	3200.0	3065.0	2923.2	2781.4	2646.4	2511.4	2376.4	2234.6	2106.3
67.5°	4145.1	3989.9	3814.3	3625.3	3416.0	3233.7	3058.2	2896.2	2734.2	2572.1	2410.1
65°	4989.0	4773.0	4536.7	4280.2	4037.1	3794.1	3537.5	3294.5	3105.5	2916.4	2734.2
62.5°	6028.7	5724.9	5394.1	5063.3	4766.2	4448.9	4151.9	3834.6	3537.5	3267.5	3044.7
60°	7270.9	6859.1	6454.0	6028.7	5616.9	5184.8	4806.7	4415.2	4043.9	3713.1	3389.0
57.5°	8641.3	8162.0	7675.9	7156.1	6595.8	6089.4	5576.4	5063.3	4624.5	4185.6	3821.1
55°	10032.0	9525.7	8978.9	8391.5	7777.2	7129.1	6433.7	5859.9	5259.1	4746.0	4273.4
52.5°	11355.2	10828.7	10261.6	9721.5	8985.6	8243.0	7480.1	6724.0	6021.9	5367.1	4793.2
50°	12536.7	12023.6	11476.8	10848.9	10167.1	9377.2	8526.6	7675.9	6845.5	6075.9	5360.3
47.5°	13616.8	13117.3	12570.4	11942.6	11321.5	10443.8	9586.5	8648.1	7723.2	6838.8	6001.7
45°	14629.5	14123.2	13556.1	12955.2	12239.6	11456.5	10572.1	9627.0	8634.6	7642.2	6676.8
42.5°	15547.6	15041.3	14467.5	13846.4	13137.5	12361.1	11503.8	10551.9	9552.7	8472.5	7412.6
40°	16351.0	15858.2	15304.6	14656.5	13994.9	13178.0	12334.1	11429.5	10396.6	9309.7	8141.7
37.5°	17053.1	16594.0	16047.2	15405.9	14703.8	13974.6	13103.8	12199.1	11267.5	10086.0	8891.1
35°	17674.2	17248.9	16688.6	16081.0	15392.4	14622.7	13805.9	12921.5	11915.6	10808.4	9647.2
32.5°	18214.3	17782.2	17269.1	16661.6	15993.2	15270.8	14433.7	13542.6	12590.7	11463.3	10200.8
30°	18673.4	18254.8	17768.7	17194.9	16553.5	15837.9	15021.1	14123.2	13151.0	12030.3	10781.4
27.5°	19071.7	18673.4	18200.8	17667.5	17053.1	16364.5	15540.9	14636.2	13643.8	12563.7	11314.7
25°	19416.0	19031.2	18592.3	18086.0	17478.4	16803.3	16027.0	15081.8	14089.4	13002.5	11767.1
22.5°	19726.5	19355.2	18916.4	18423.6	17870.0	17194.9	16411.8	15473.4	14467.5	13394.1	12178.9
20°	20003.3	19659.0	19226.9	18720.6	18167.0	17485.2	16708.8	15817.7	14805.0	13751.9	12550.2
17.5°	20226.1	19922.3	19490.2	18956.9	18403.3	17741.7	16985.6	16168.7	15095.3	14055.7	12860.7
15°	20381.4	20084.3	19692.8	19152.7	18612.6	17957.8	17201.6	16357.8	15358.6	14298.7	13117.3
12.5°	20489.4	20172.1	19807.5	19308.0	18767.9	18119.8	17383.9	16553.5	15581.4	14514.7	13340.0
10°	20516.4	20226.1	19861.5	19416.0	18889.4	18261.5	17539.2	16715.6	15763.7	14683.5	13522.3
7.5°	20529.9	20253.1	19922.3	19497.0	18977.2	18369.6	17654.0	16843.8	15898.7	14825.3	13657.3
5°	20523.1	20259.9	19962.8	19551.0	19031.2	18430.3	17728.2	16931.6	15993.2	14919.8	13758.6
2.5°	20502.9	20266.6	19989.8	19591.5	19091.9	18497.8	17802.5	17032.9	16094.5	15000.8	13839.6
0°	20556.9	20354.4	20003.3	19578.0	19105.4	18497.8	17795.7	17046.4	16108.0	14994.0	13832.9



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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°	168.8	162.0	162.0	155.3	148.5	141.8	128.3	121.5	108.0	87.8	67.5
85°	364.6	344.3	324.0	310.5	297.0	283.5	263.3	243.0	216.0	175.5	135.0
82.5°	641.3	600.8	560.3	513.1	472.6	432.1	398.3	364.6	324.0	263.3	202.5
80°	918.1	857.4	796.6	729.1	668.4	600.8	540.1	486.1	432.1	351.1	270.0
77.5°	1194.9	1113.9	1026.2	945.1	857.4	769.6	681.9	607.6	526.6	432.1	337.6
75°	1451.5	1357.0	1275.9	1161.2	1053.2	938.4	823.6	722.4	621.1	506.3	405.1
72.5°	1708.0	1586.5	1471.7	1363.7	1242.2	1100.4	972.1	843.9	715.6	580.6	459.1
70°	1964.6	1816.0	1674.3	1546.0	1411.0	1269.2	1113.9	965.4	810.1	648.1	506.3
67.5°	2227.8	2059.1	1897.0	1735.0	1579.7	1417.7	1255.7	1086.9	904.6	715.6	560.3
65°	2518.1	2308.9	2113.1	1930.8	1748.5	1573.0	1390.7	1208.4	1005.9	789.9	607.6
62.5°	2808.4	2578.9	2349.4	2119.8	1917.3	1721.5	1525.7	1323.2	1100.4	870.9	654.9
60°	3119.0	2855.7	2592.4	2335.9	2086.1	1870.0	1654.0	1438.0	1201.7	945.1	702.1
57.5°	3463.3	3146.0	2848.9	2558.6	2275.1	2018.6	1782.3	1552.7	1289.4	1019.4	756.1
55°	3854.8	3463.3	3112.2	2788.2	2477.6	2167.1	1910.5	1674.3	1390.7	1093.7	816.9
52.5°	4266.7	3814.3	3389.0	3024.5	2693.7	2342.6	2032.1	1768.8	1492.0	1167.9	870.9
50°	4746.0	4172.1	3699.6	3254.0	2882.7	2518.1	2160.3	1876.8	1593.2	1255.7	924.9
47.5°	5238.8	4604.2	4010.1	3524.0	3085.2	2686.9	2308.9	1971.3	1687.8	1336.7	978.9
45°	5812.6	5016.0	4361.2	3787.3	3281.0	2862.4	2457.4	2072.6	1768.8	1417.7	1032.9
42.5°	6366.2	5502.1	4725.7	4077.6	3503.8	3031.2	2592.4	2180.6	1849.8	1498.7	1080.2
40°	7021.1	5988.2	5076.8	4354.4	3726.6	3193.2	2727.4	2295.4	1924.0	1573.0	1127.4
37.5°	7648.9	6481.0	5502.1	4658.2	3942.6	3355.3	2862.4	2403.4	1991.6	1647.3	1188.2
35°	8270.0	7027.8	5907.2	4941.8	4165.4	3537.5	2997.5	2504.6	2059.1	1708.0	1242.2
32.5°	8864.1	7540.9	6319.0	5259.1	4408.4	3706.3	3119.0	2599.1	2126.6	1762.0	1296.2
30°	9417.7	8027.0	6724.0	5583.1	4631.2	3861.6	3233.7	2693.7	2207.6	1809.3	1350.2
27.5°	9924.0	8499.6	7129.1	5886.9	4840.5	4003.4	3355.3	2781.4	2275.1	1856.5	1397.5
25°	10383.1	8924.9	7500.4	6163.7	5029.5	4158.6	3470.0	2869.2	2335.9	1897.0	1438.0
22.5°	10815.2	9316.4	7838.0	6440.5	5259.1	4313.9	3578.0	2950.2	2396.6	1937.5	1478.5
20°	11193.2	9674.2	8162.0	6717.3	5461.6	4455.7	3672.6	3024.5	2450.6	1964.6	1519.0
17.5°	11497.0	9991.5	8452.3	6960.3	5637.1	4577.2	3753.6	3092.0	2497.9	1998.3	1546.0
15°	11767.1	10261.6	8695.3	7169.6	5792.4	4678.5	3827.8	3146.0	2538.4	2018.6	1579.7
12.5°	11996.6	10491.1	8904.6	7351.9	5927.4	4766.2	3888.6	3186.5	2572.1	2038.8	1600.0
10°	12185.6	10673.4	9080.1	7493.6	6035.4	4833.7	3935.9	3227.0	2599.1	2059.1	1620.2
7.5°	12327.4	10808.4	9208.4	7615.2	6123.2	4881.0	3976.4	3254.0	2626.2	2072.6	1654.0
5°	12435.4	10923.2	9309.7	7696.2	6190.7	4948.5	4023.6	3287.8	2653.2	2086.1	1654.0
2.5°	12516.4	11017.7	9390.7	7763.7	6244.7	4935.0	4023.6	3281.0	2653.2	2086.1	1647.3
0°	12502.9	11024.4	9383.9	7763.7	6244.7	4921.5	4023.6	3274.3	2653.2	2086.1	1647.3



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	47.3	33.8	13.5	0.0
85°	101.3	67.5	33.8	0.0
82.5°	148.5	94.5	47.3	0.0
80°	195.8	128.3	60.8	0.0
77.5°	249.8	162.0	81.0	0.0
75°	297.0	189.0	94.5	0.0
72.5°	344.3	222.8	108.0	0.0
70°	384.8	249.8	121.5	0.0
67.5°	425.3	283.5	141.8	0.0
65°	459.1	310.5	155.3	0.0
62.5°	486.1	344.3	168.8	0.0
60°	519.8	371.3	182.3	0.0
57.5°	546.8	391.6	195.8	0.0
55°	573.8	405.1	209.3	0.0
52.5°	600.8	425.3	222.8	0.0
50°	627.8	445.6	236.3	0.0
47.5°	654.9	459.1	243.0	0.0
45°	695.4	479.3	256.5	0.0
42.5°	729.1	492.8	270.0	0.0
40°	762.9	506.3	276.8	0.0
37.5°	796.6	519.8	290.3	0.0
35°	830.4	533.3	297.0	0.0
32.5°	857.4	546.8	303.8	0.0
30°	884.4	560.3	310.5	0.0
27.5°	911.4	567.1	317.3	0.0
25°	931.6	580.6	324.0	0.0
22.5°	951.9	587.3	330.8	0.0
20°	965.4	594.1	337.6	0.0
17.5°	985.7	600.8	344.3	0.0
15°	992.4	607.6	357.8	0.0
12.5°	1005.9	614.3	357.8	0.0
10°	1012.7	621.1	357.8	0.0
7.5°	1026.2	621.1	357.8	0.0
5°	1019.4	621.1	357.8	0.0
2.5°	1019.4	621.1	357.8	0.0
0°	1012.7	621.1	357.8	0.0

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