

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: P624131

Luminaire Tested: **EPH-VN-08-E-730-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624131
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-E-730-U-55
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 5 distribution lens
Light Source: (128) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	65005.4 lumens	Max Intensity:	79439.4 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	103.7 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

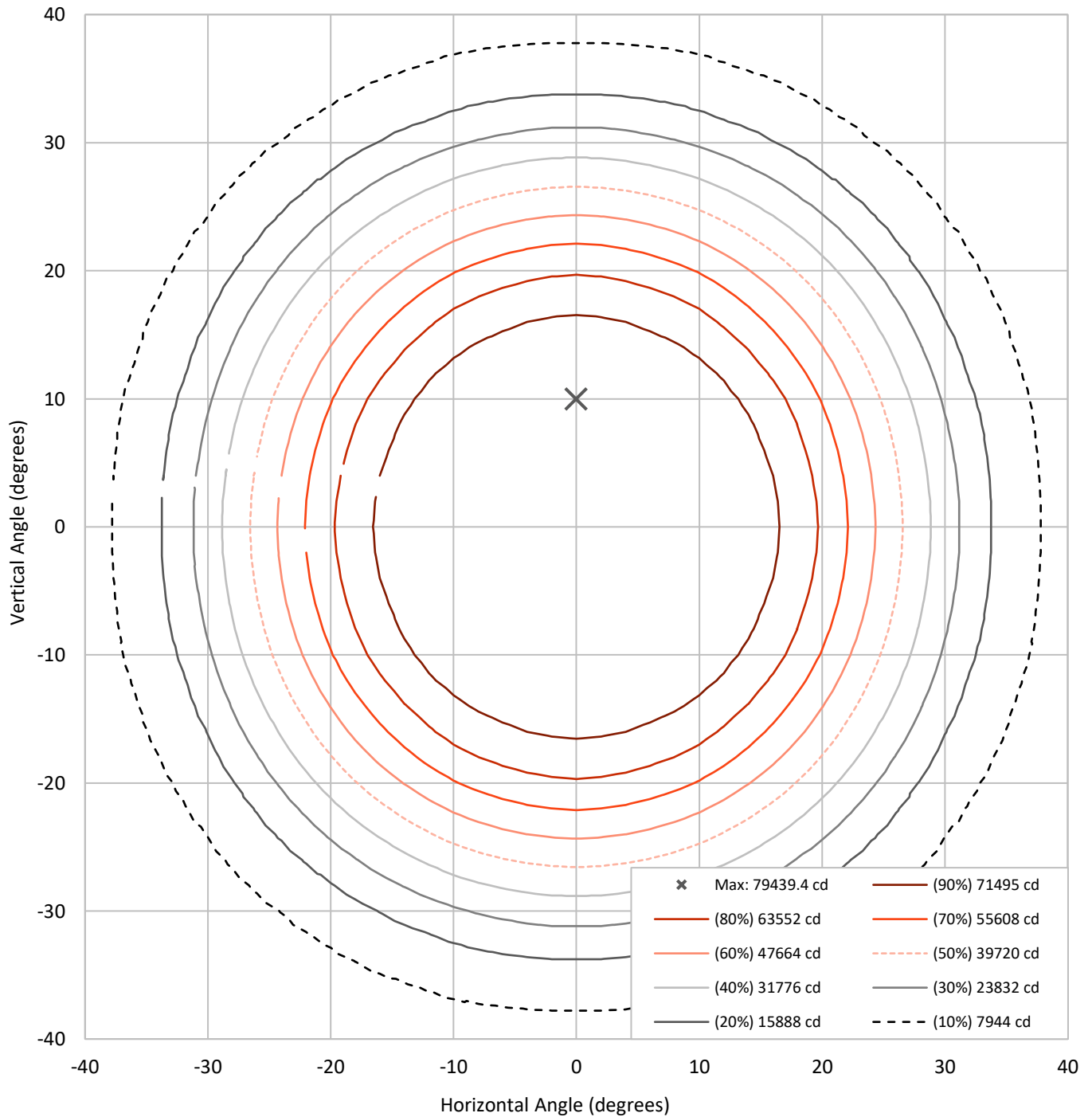
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	32309.3 lumens	Field Lumens:	42019.3 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

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





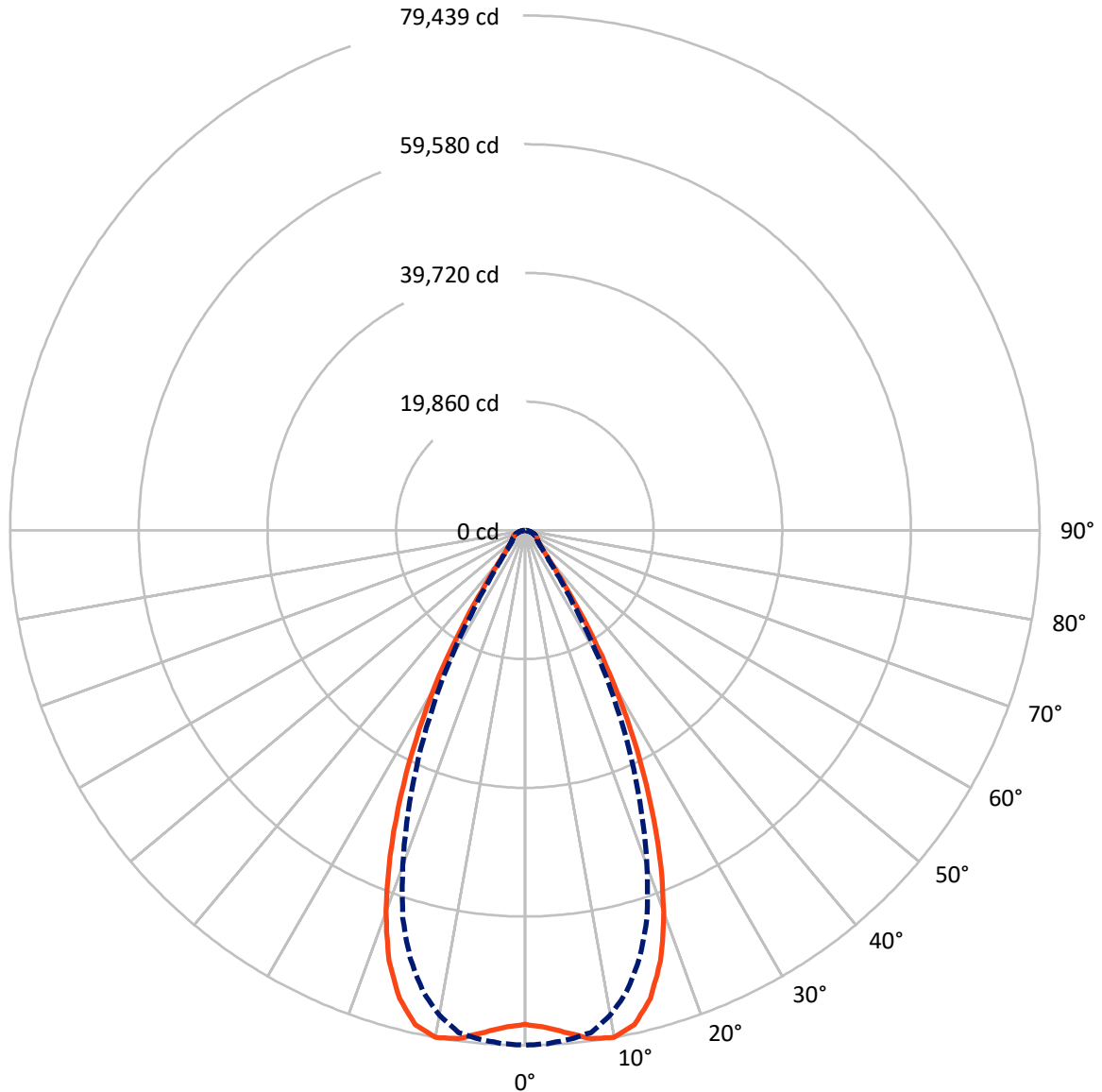
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Lumen Table

90	1.9	14.3	37.2	60.0	69.5	60.0	37.2	14.3	1.9							
80	1.9	14.3	37.2	60.0	69.5	60.0	37.2	14.3	1.9							
70	6.5	7.1	14.7	24.3	34.1	42.6	48.8	52.1	52.1	48.8	42.6	34.1	24.3	14.7	7.1	6.5
60		10.9	22.5	35.7	47.9	58.2	66.1	70.5	70.5	66.1	58.2	47.9	35.7	22.5	10.9	
50	11.5	14.7	29.0	43.9	58.8	76.2	96.4	112.0	112.0	96.4	76.2	58.8	43.9	29.0	14.7	11.5
40		17.8	33.7	50.9	77.1	137.3	268.4	404.7	404.7	268.4	137.3	77.1	50.9	33.7	17.8	
30	15.4	20.1	37.0	59.6	124.7	397.2	920.3	1306.2	1306.2	920.3	397.2	124.7	59.6	37.0	20.1	15.4
20		21.6	39.4	71.1	230.1	866.9	1696.1	2162.2	2162.2	1696.1	866.9	230.1	71.1	39.4	21.6	
10	16.8	22.4	40.8	80.3	337.6	1194.1	2098.3	2379.5	2379.5	2098.3	1194.1	337.6	80.3	40.8	22.4	16.8
0		22.4	40.8	80.3	337.6	1194.1	2098.3	2379.5	2379.5	2098.3	1194.1	337.6	80.3	40.8	22.4	
-10	15.4	21.6	39.4	71.1	230.1	866.9	1696.1	2162.2	2162.2	1696.1	866.9	230.1	71.1	39.4	21.6	15.4
-20		20.1	37.0	59.6	124.7	397.2	920.3	1306.2	1306.2	920.3	397.2	124.7	59.6	37.0	20.1	
-30	11.5	17.8	33.7	50.9	77.1	137.3	268.4	404.7	404.7	268.4	137.3	77.1	50.9	33.7	17.8	11.5
-40		14.7	29.0	43.9	58.8	76.2	96.4	112.0	112.0	96.4	76.2	58.8	43.9	29.0	14.7	
-50	6.5	10.9	22.5	35.7	47.9	58.2	66.1	70.5	70.5	66.1	58.2	47.9	35.7	22.5	10.9	6.5
-60		7.1	14.7	24.3	34.1	42.6	48.8	52.1	52.1	48.8	42.6	34.1	24.3	14.7	7.1	
-70	1.9	14.3	37.2	60.0	69.5	60.0	37.2	14.3	1.9							
-80		1.9	14.3	37.2	60.0	69.5	60.0	37.2	14.3	1.9						
-90	1.9	14.3	37.2	60.0	69.5	60.0	37.2	14.3	1.9							

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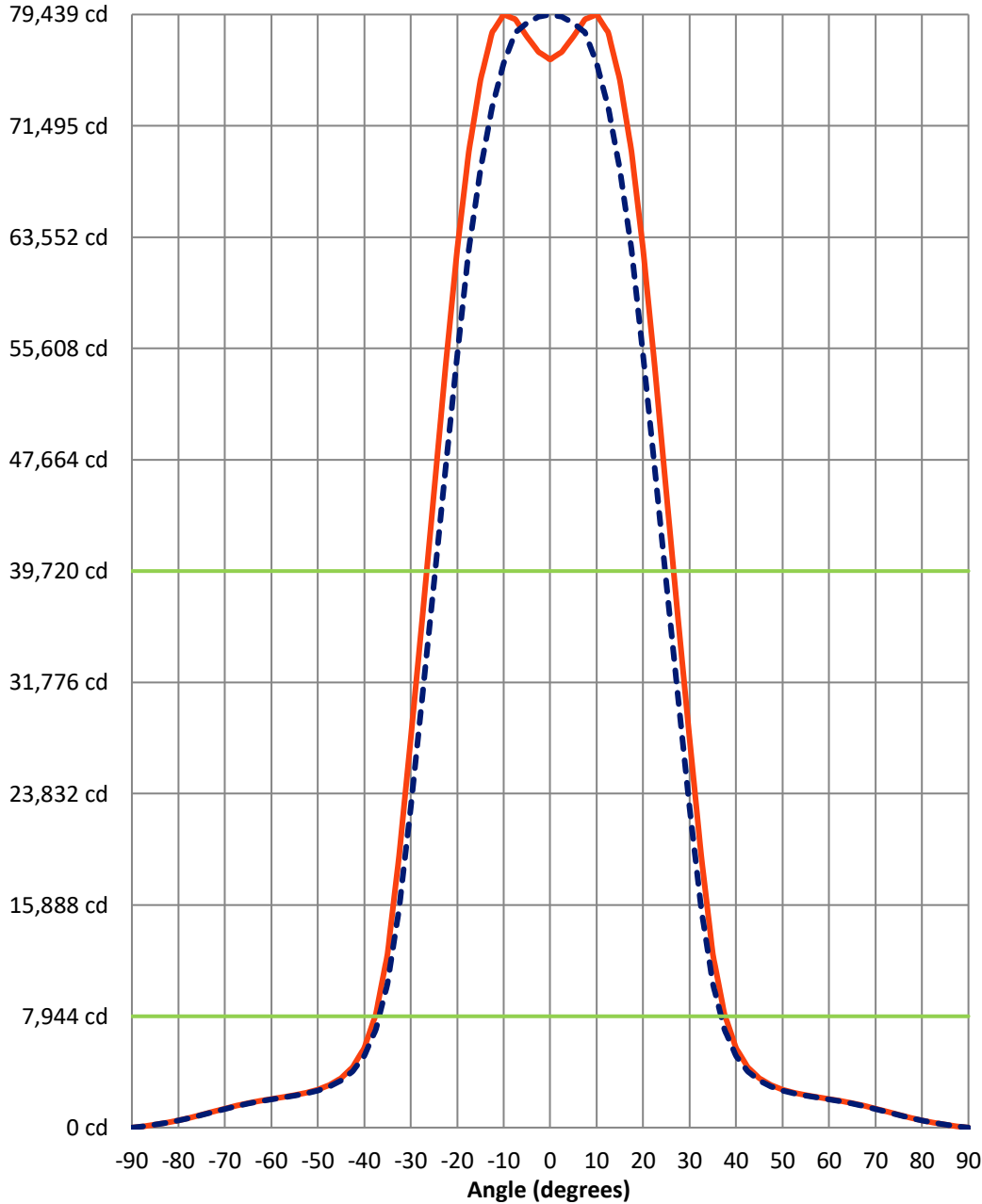
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 49.5°
 V Angle: 53.1°
 Lumens: 32309.3
 Efficiency: 49.7%

Field:
 H Angle: 73.6°
 V Angle: 75.3°
 Lumens: 42019.3
 Efficiency: 64.6%

Spill:
 Lumens: 22986.2
 Efficiency: 35.4%

— Vertical Distribution through 0-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°	87.8	87.8	87.8	87.8	87.8	87.8	87.8	81.0	81.0	81.0	81.0
85°	216.1	216.1	216.1	216.1	216.1	209.3	209.3	202.6	202.6	195.8	189.1
82.5°	351.1	351.1	351.1	351.1	344.4	344.4	337.6	330.9	324.1	317.4	310.6
80°	513.2	513.2	513.2	513.2	506.5	499.7	493.0	486.2	472.7	465.9	452.4
77.5°	702.3	702.3	702.3	695.5	688.8	682.0	668.5	655.0	641.5	628.0	614.5
75°	918.4	918.4	918.4	904.9	898.1	884.6	871.1	857.6	837.3	817.1	796.8
72.5°	1141.2	1141.2	1141.2	1127.7	1114.2	1100.7	1087.2	1066.9	1046.7	1019.7	992.7
70°	1350.5	1350.5	1350.5	1337.0	1323.5	1310.0	1289.8	1269.5	1242.5	1215.5	1188.5
67.5°	1566.6	1566.6	1566.6	1546.4	1532.9	1519.4	1499.1	1472.1	1445.1	1411.3	1377.6
65°	1742.2	1742.2	1735.5	1728.7	1715.2	1694.9	1681.4	1654.4	1627.4	1600.4	1566.6
62.5°	1904.3	1904.3	1897.5	1890.8	1877.3	1857.0	1836.7	1816.5	1789.5	1755.7	1722.0
60°	2039.3	2039.3	2032.6	2025.8	2012.3	1998.8	1978.6	1958.3	1931.3	1904.3	1870.5
57.5°	2174.4	2174.4	2167.6	2160.9	2147.4	2127.1	2106.9	2086.6	2059.6	2025.8	1992.1
55°	2316.2	2316.2	2309.4	2295.9	2282.4	2262.2	2241.9	2214.9	2181.1	2147.4	2113.6
52.5°	2485.0	2485.0	2471.5	2458.0	2437.7	2417.5	2383.7	2350.0	2309.4	2268.9	2228.4
50°	2707.9	2707.9	2694.3	2674.1	2640.3	2606.6	2566.0	2512.0	2464.8	2410.7	2356.7
47.5°	3038.7	3038.7	3011.7	2978.0	2930.7	2876.7	2802.4	2721.4	2653.8	2586.3	2505.3
45°	3524.9	3524.9	3484.4	3430.4	3356.1	3261.6	3153.5	3038.7	2923.9	2809.1	2694.3
42.5°	4315.0	4315.0	4240.7	4146.2	4017.9	3855.8	3653.2	3464.2	3302.1	3119.8	2964.5
40°	5679.1	5679.1	5537.3	5361.7	5118.6	4808.0	4436.6	4139.4	3855.8	3538.4	3322.4
37.5°	8103.3	8103.3	7826.4	7488.8	7016.1	6421.9	5706.1	5226.6	4699.9	4200.2	3835.6
35°	12384.5	12384.5	11851.1	11196.1	10284.4	9136.5	7914.2	7009.4	6003.2	5233.4	4551.4
32.5°	19407.4	19407.4	18448.5	17266.8	15639.4	13579.8	11621.5	9899.5	8103.3	6827.0	5598.0
30°	27753.8	27753.8	26497.8	24951.4	22831.0	20157.0	17368.1	14309.1	11472.9	9197.2	7340.2
27.5°	36383.8	36025.9	34945.5	33183.0	30765.5	27753.8	24276.1	20325.8	16490.2	12479.1	9825.3
25°	45311.0	44892.3	43656.5	41630.7	38862.1	35451.9	31535.3	27119.0	22385.4	17604.4	13012.5
22.5°	54332.6	53859.9	52455.4	50166.2	47059.9	43237.9	38801.3	33892.1	28604.6	23080.9	17604.4
20°	62672.3	62172.6	60700.5	58316.7	55102.4	50909.0	45979.5	40536.8	34688.9	28604.6	22385.4
17.5°	69654.6	69175.2	67757.1	65481.4	62672.3	58033.1	52907.8	46924.9	40536.8	33892.1	27119.0
15°	74752.9	74341.0	73132.3	71221.3	68358.1	64252.4	59032.5	52907.8	45979.5	38801.3	31535.3
12.5°	78136.1	77805.2	76853.0	75367.4	72801.4	69357.5	64252.4	58033.1	50909.0	43237.9	35451.9
10°	79439.4	79277.3	78831.6	78149.6	75961.7	72801.4	68358.1	62672.3	55102.4	47059.9	38862.1
7.5°	79095.0	79149.0	79304.3	79128.7	78149.6	75367.4	71221.3	65481.4	58316.7	50166.2	41630.7
5°	77866.0	78156.3	78878.9	79304.3	78831.6	76853.0	73132.3	67757.1	60700.5	52455.4	43656.5
2.5°	76772.0	77224.4	78156.3	79149.0	79277.3	77805.2	74341.0	69175.2	62172.6	53859.9	44892.3
0°	76231.8	76772.0	77866.0	79095.0	79439.4	78136.1	74752.9	69654.6	62672.3	54332.6	45311.0



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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°	81.0	74.3	74.3	74.3	67.5	67.5	67.5	60.8	60.8	54.0	54.0
85°	189.1	182.3	175.6	168.8	162.1	155.3	148.6	141.8	135.1	121.5	114.8
82.5°	303.9	297.1	290.4	276.9	270.1	256.6	243.1	229.6	216.1	209.3	195.8
80°	438.9	425.4	411.9	398.4	378.2	357.9	344.4	324.1	310.6	290.4	276.9
77.5°	594.2	574.0	553.7	526.7	506.5	486.2	459.2	438.9	411.9	384.9	357.9
75°	769.8	742.8	709.0	682.0	655.0	621.3	587.5	553.7	520.0	486.2	452.4
72.5°	958.9	925.1	891.4	857.6	817.1	769.8	729.3	682.0	641.5	601.0	553.7
70°	1154.7	1114.2	1073.7	1033.2	985.9	931.9	884.6	830.6	776.6	722.5	668.5
67.5°	1337.0	1296.5	1249.3	1208.7	1154.7	1100.7	1039.9	979.1	918.4	850.8	783.3
65°	1526.1	1478.9	1424.8	1370.8	1316.8	1256.0	1195.2	1134.5	1060.2	985.9	918.4
62.5°	1681.4	1640.9	1593.6	1539.6	1478.9	1411.3	1350.5	1269.5	1195.2	1121.0	1033.2
60°	1830.0	1782.7	1742.2	1681.4	1627.4	1566.6	1492.4	1411.3	1330.3	1242.5	1161.5
57.5°	1958.3	1917.8	1870.5	1816.5	1755.7	1694.9	1627.4	1553.1	1458.6	1370.8	1276.3
55°	2073.1	2025.8	1978.6	1931.3	1877.3	1809.7	1742.2	1667.9	1586.9	1492.4	1391.1
52.5°	2187.9	2140.6	2086.6	2039.3	1978.6	1917.8	1850.3	1776.0	1694.9	1607.2	1499.1
50°	2302.7	2248.7	2194.6	2133.9	2073.1	2012.3	1944.8	1877.3	1789.5	1701.7	1607.2
47.5°	2437.7	2370.2	2302.7	2235.2	2174.4	2100.1	2032.6	1958.3	1884.0	1789.5	1694.9
45°	2606.6	2505.3	2424.2	2343.2	2268.9	2194.6	2113.6	2039.3	1958.3	1877.3	1776.0
42.5°	2815.9	2680.8	2572.8	2464.8	2370.2	2282.4	2201.4	2113.6	2032.6	1944.8	1850.3
40°	3099.5	2917.2	2741.6	2606.6	2485.0	2377.0	2282.4	2194.6	2100.1	2012.3	1917.8
37.5°	3470.9	3214.3	2971.2	2775.4	2620.1	2485.0	2370.2	2268.9	2174.4	2073.1	1978.6
35°	4031.4	3585.7	3275.1	2991.5	2775.4	2606.6	2464.8	2343.2	2235.2	2133.9	2039.3
32.5°	4821.5	4132.7	3633.0	3275.1	2971.2	2741.6	2572.8	2424.2	2302.7	2194.6	2086.6
30°	5861.4	4909.2	4132.7	3585.7	3214.3	2917.2	2680.8	2505.3	2370.2	2248.7	2140.6
27.5°	7509.1	5861.4	4821.5	4031.4	3470.9	3099.5	2815.9	2606.6	2437.7	2302.7	2187.9
25°	9825.3	7340.2	5598.0	4551.4	3835.6	3322.4	2964.5	2694.3	2505.3	2356.7	2228.4
22.5°	12479.1	9197.2	6827.0	5233.4	4200.2	3538.4	3119.8	2809.1	2586.3	2410.7	2268.9
20°	16490.2	11472.9	8103.3	6003.2	4699.9	3855.8	3302.1	2923.9	2653.8	2464.8	2309.4
17.5°	20325.8	14309.1	9899.5	7009.4	5226.6	4139.4	3464.2	3038.7	2721.4	2512.0	2350.0
15°	24276.1	17368.1	11621.5	7914.2	5706.1	4436.6	3653.2	3153.5	2802.4	2566.0	2383.7
12.5°	27753.8	20157.0	13579.8	9136.5	6421.9	4808.0	3855.8	3261.6	2876.7	2606.6	2417.5
10°	30765.5	22831.0	15639.4	10284.4	7016.1	5118.6	4017.9	3356.1	2930.7	2640.3	2437.7
7.5°	33183.0	24951.4	17266.8	11196.1	7488.8	5361.7	4146.2	3430.4	2978.0	2674.1	2458.0
5°	34945.5	26497.8	18448.5	11851.1	7826.4	5537.3	4240.7	3484.4	3011.7	2694.3	2471.5
2.5°	36025.9	27753.8	19407.4	12384.5	8103.3	5679.1	4315.0	3524.9	3038.7	2707.9	2485.0
0°	36383.8	27753.8	19407.4	12384.5	8103.3	5679.1	4315.0	3524.9	3038.7	2707.9	2485.0



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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°	47.3	47.3	40.5	40.5	33.8	33.8	27.0	27.0	20.3	20.3	13.5
85°	108.0	94.5	87.8	81.0	74.3	67.5	60.8	54.0	47.3	40.5	33.8
82.5°	182.3	168.8	148.6	135.1	121.5	108.0	87.8	81.0	67.5	54.0	47.3
80°	256.6	236.3	216.1	195.8	175.6	155.3	135.1	114.8	94.5	74.3	60.8
77.5°	330.9	303.9	283.6	256.6	229.6	202.6	175.6	148.6	121.5	94.5	74.3
75°	418.7	384.9	351.1	317.4	283.6	249.9	222.8	189.1	155.3	121.5	94.5
72.5°	513.2	465.9	425.4	384.9	337.6	303.9	263.4	229.6	189.1	148.6	114.8
70°	614.5	560.5	506.5	452.4	405.2	351.1	310.6	263.4	222.8	175.6	135.1
67.5°	715.8	655.0	594.2	526.7	465.9	411.9	351.1	303.9	249.9	202.6	155.3
65°	837.3	756.3	682.0	607.7	533.5	465.9	405.2	337.6	283.6	229.6	175.6
62.5°	952.1	864.4	776.6	688.8	607.7	526.7	452.4	384.9	317.4	256.6	195.8
60°	1066.9	972.4	871.1	776.6	682.0	594.2	506.5	425.4	351.1	283.6	216.1
57.5°	1181.7	1073.7	972.4	864.4	756.3	655.0	560.5	465.9	384.9	303.9	236.3
55°	1283.0	1181.7	1066.9	952.1	837.3	715.8	614.5	513.2	418.7	330.9	256.6
52.5°	1391.1	1276.3	1161.5	1033.2	918.4	783.3	668.5	553.7	452.4	357.9	276.9
50°	1492.4	1370.8	1242.5	1121.0	985.9	850.8	722.5	601.0	486.2	384.9	290.4
47.5°	1586.9	1458.6	1330.3	1195.2	1060.2	918.4	776.6	641.5	520.0	411.9	310.6
45°	1667.9	1553.1	1411.3	1269.5	1134.5	979.1	830.6	682.0	553.7	438.9	324.1
42.5°	1742.2	1627.4	1492.4	1350.5	1195.2	1039.9	884.6	729.3	587.5	459.2	344.4
40°	1809.7	1694.9	1566.6	1411.3	1256.0	1100.7	931.9	769.8	621.3	486.2	357.9
37.5°	1877.3	1755.7	1627.4	1478.9	1316.8	1154.7	985.9	817.1	655.0	506.5	378.2
35°	1931.3	1816.5	1681.4	1539.6	1370.8	1208.7	1033.2	857.6	682.0	526.7	398.4
32.5°	1978.6	1870.5	1742.2	1593.6	1424.8	1249.3	1073.7	891.4	709.0	553.7	411.9
30°	2025.8	1917.8	1782.7	1640.9	1478.9	1296.5	1114.2	925.1	742.8	574.0	425.4
27.5°	2073.1	1958.3	1830.0	1681.4	1526.1	1337.0	1154.7	958.9	769.8	594.2	438.9
25°	2113.6	1992.1	1870.5	1722.0	1566.6	1377.6	1188.5	992.7	796.8	614.5	452.4
22.5°	2147.4	2025.8	1904.3	1755.7	1600.4	1411.3	1215.5	1019.7	817.1	628.0	465.9
20°	2181.1	2059.6	1931.3	1789.5	1627.4	1445.1	1242.5	1046.7	837.3	641.5	472.7
17.5°	2214.9	2086.6	1958.3	1816.5	1654.4	1472.1	1269.5	1066.9	857.6	655.0	486.2
15°	2241.9	2106.9	1978.6	1836.7	1681.4	1499.1	1289.8	1087.2	871.1	668.5	493.0
12.5°	2262.2	2127.1	1998.8	1857.0	1694.9	1519.4	1310.0	1100.7	884.6	682.0	499.7
10°	2282.4	2147.4	2012.3	1877.3	1715.2	1532.9	1323.5	1114.2	898.1	688.8	506.5
7.5°	2295.9	2160.9	2025.8	1890.8	1728.7	1546.4	1337.0	1127.7	904.9	695.5	513.2
5°	2309.4	2167.6	2032.6	1897.5	1735.5	1566.6	1350.5	1141.2	918.4	702.3	513.2
2.5°	2316.2	2174.4	2039.3	1904.3	1742.2	1566.6	1350.5	1141.2	918.4	702.3	513.2
0°	2316.2	2174.4	2039.3	1904.3	1742.2	1566.6	1350.5	1141.2	918.4	702.3	513.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	13.5	6.8	6.8	0.0
85°	20.3	13.5	6.8	0.0
82.5°	33.8	20.3	13.5	0.0
80°	47.3	33.8	13.5	0.0
77.5°	54.0	40.5	20.3	0.0
75°	67.5	47.3	20.3	0.0
72.5°	81.0	54.0	27.0	0.0
70°	87.8	60.8	27.0	0.0
67.5°	108.0	67.5	33.8	0.0
65°	121.5	74.3	33.8	0.0
62.5°	135.1	81.0	40.5	0.0
60°	148.6	87.8	40.5	0.0
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55°	182.3	108.0	47.3	0.0
52.5°	195.8	114.8	54.0	0.0
50°	209.3	121.5	54.0	0.0
47.5°	216.1	135.1	60.8	0.0
45°	229.6	141.8	60.8	0.0
42.5°	243.1	148.6	67.5	0.0
40°	256.6	155.3	67.5	0.0
37.5°	270.1	162.1	67.5	0.0
35°	276.9	168.8	74.3	0.0
32.5°	290.4	175.6	74.3	0.0
30°	297.1	182.3	74.3	0.0
27.5°	303.9	189.1	81.0	0.0
25°	310.6	189.1	81.0	0.0
22.5°	317.4	195.8	81.0	0.0
20°	324.1	202.6	81.0	0.0
17.5°	330.9	202.6	81.0	0.0
15°	337.6	209.3	87.8	0.0
12.5°	344.4	209.3	87.8	0.0
10°	344.4	216.1	87.8	0.0
7.5°	351.1	216.1	87.8	0.0
5°	351.1	216.1	87.8	0.0
2.5°	351.1	216.1	87.8	0.0
0°	351.1	216.1	87.8	0.0

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