

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: P628572

Luminaire Tested: **EPH-VN-08-D-740-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628572
Test Lab: INNOVATION CENTER(G2)
Issue Date: 01/11/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-D-740-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (128) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

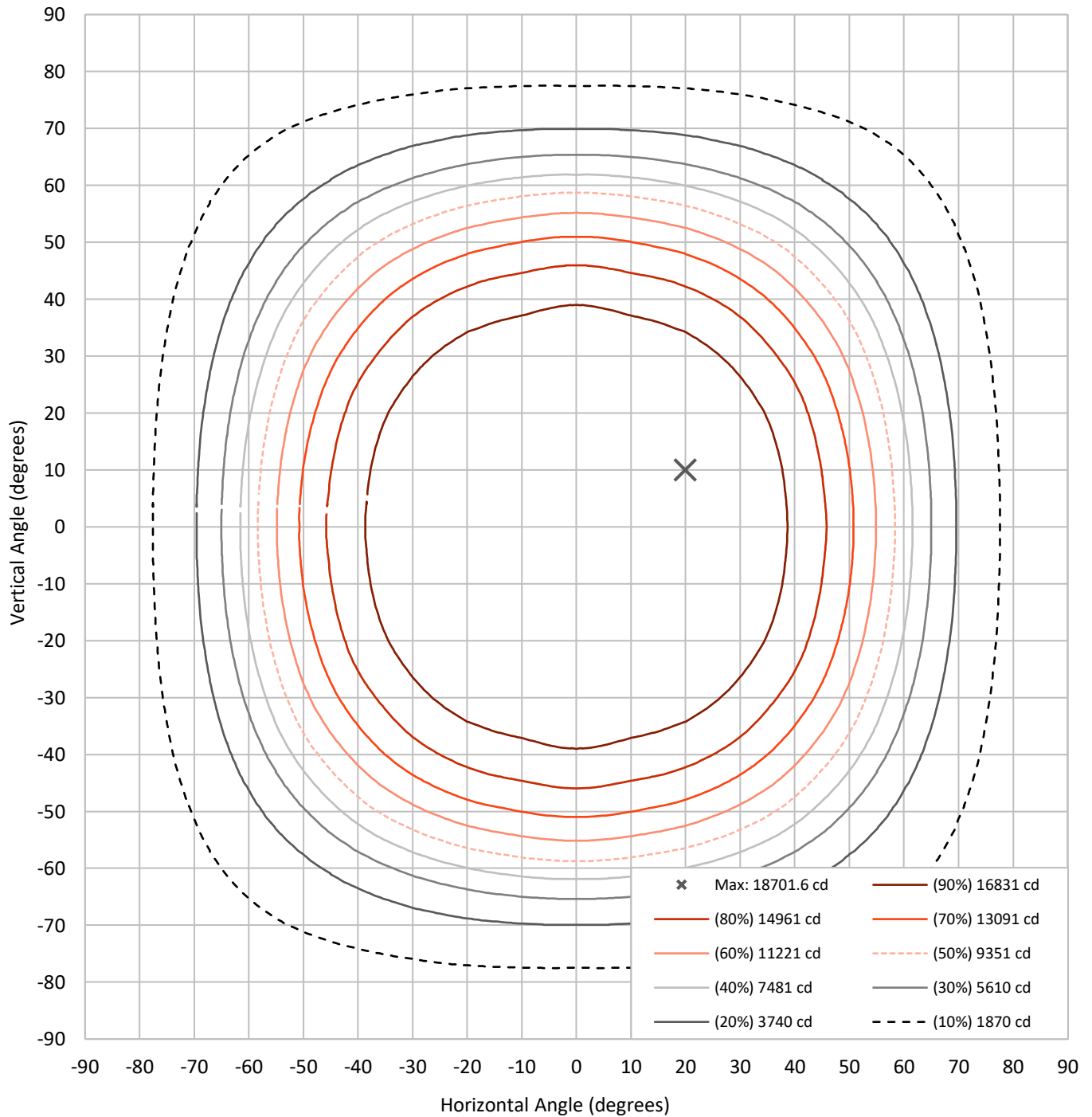
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	57373.9 lumens	Max Intensity:	18701.6 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	117.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	35205.8 lumens	Field Lumens:	42205.7 lumens
Beam Efficiency:	61.4%	Field Efficiency:	73.6%

Input Watts (W): 488.3
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



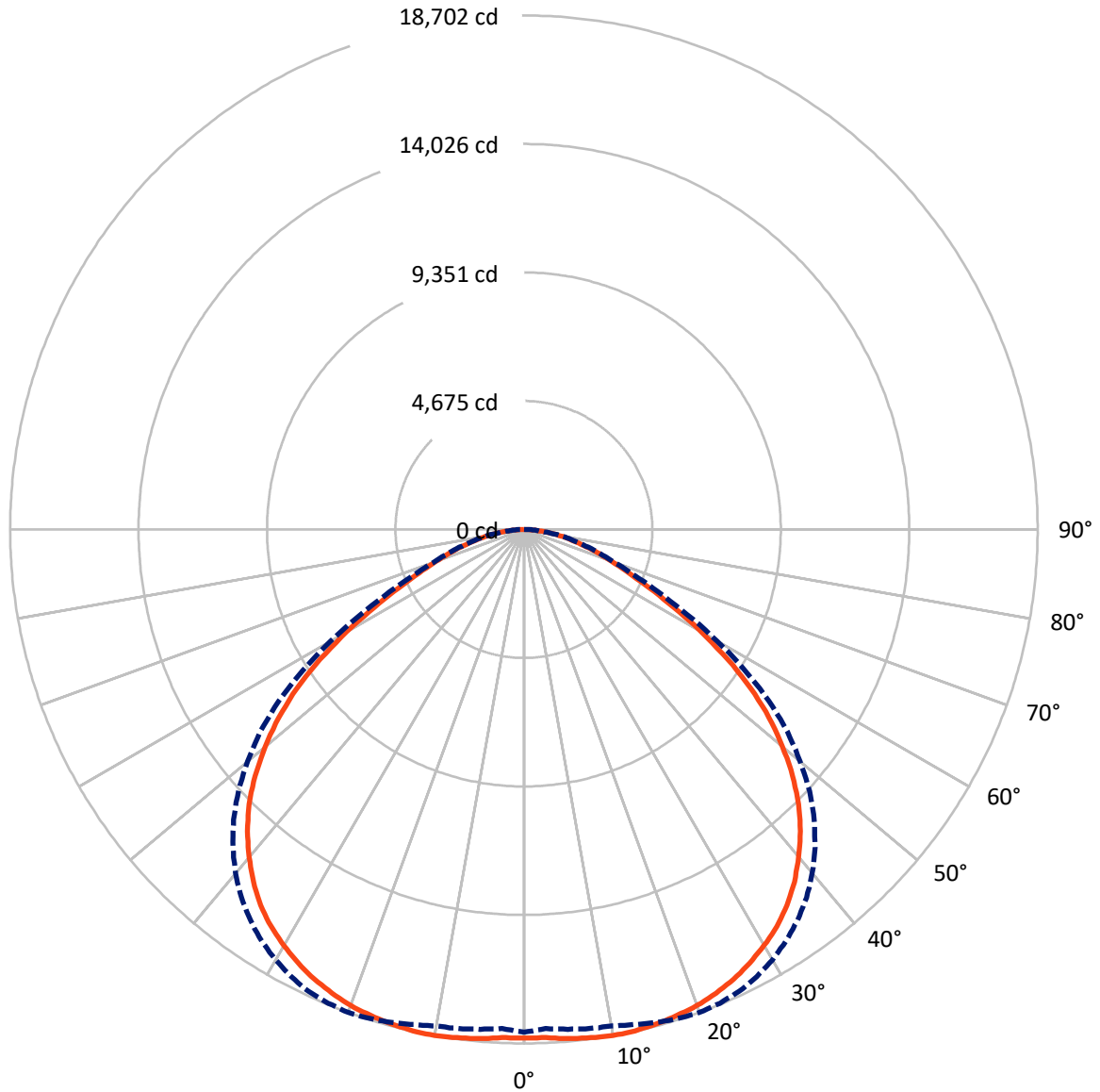
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Iso-Candela Plot



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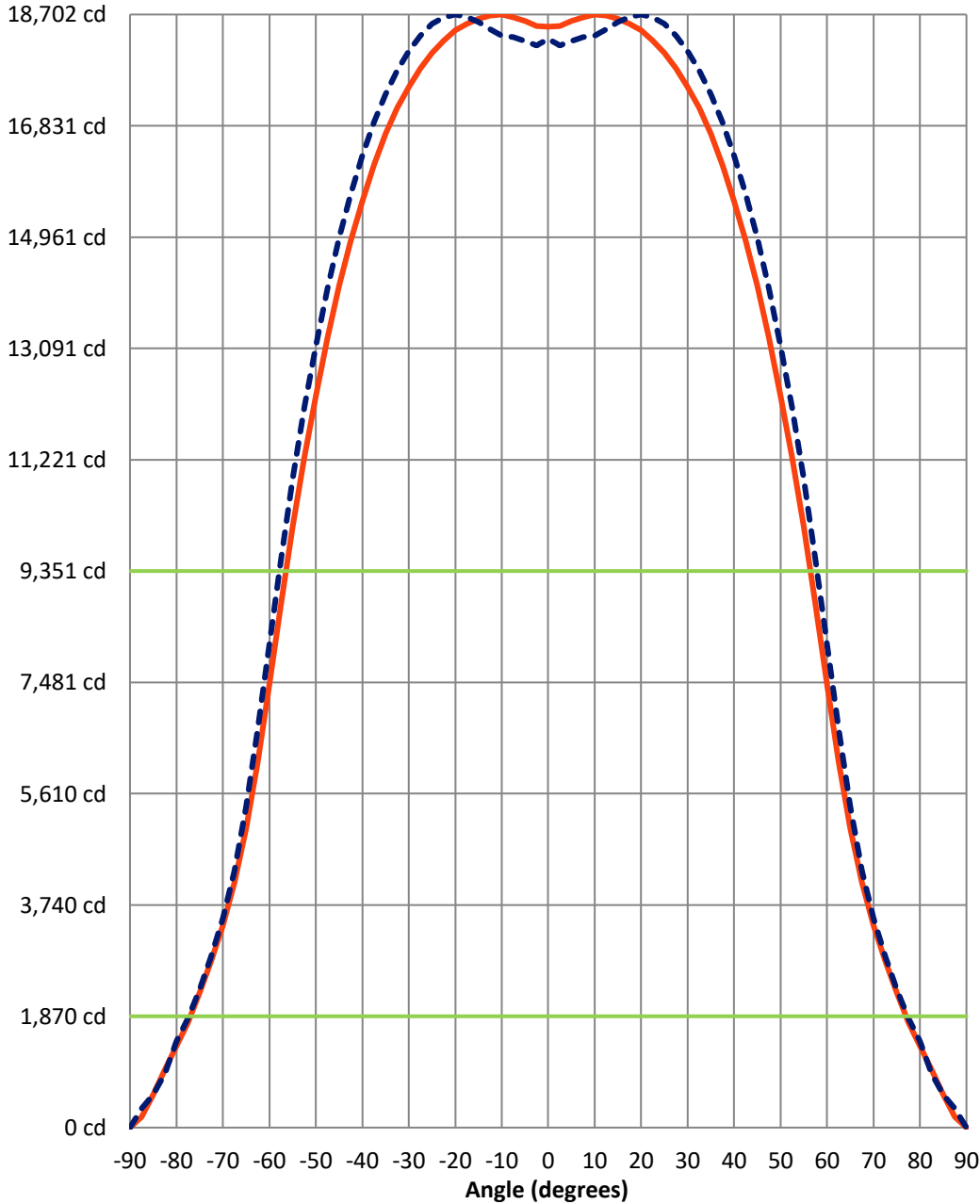
Luminous Intensity Polar Plot



— 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: 35205.8
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 42205.7
 Efficiency: 73.6%

Spill:
 Lumens: 15168.1
 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°	150.9	163.0	169.0	175.1	181.1	187.1	193.2	187.1	181.1	181.1	175.1
85°	404.5	416.5	422.6	464.8	507.1	531.2	561.4	555.4	555.4	549.3	543.3
82.5°	808.9	845.1	875.3	917.6	941.7	977.9	1002.1	984.0	971.9	947.8	929.6
80°	1436.7	1448.8	1454.8	1460.9	1430.7	1424.7	1412.6	1394.5	1370.3	1340.1	1310.0
77.5°	1829.1	1841.2	1853.3	1841.2	1835.1	1829.1	1811.0	1792.9	1768.7	1744.6	1708.4
75°	2420.7	2420.7	2420.7	2402.6	2390.5	2372.4	2342.2	2312.0	2269.8	2221.5	2167.2
72.5°	3048.5	3042.5	3036.4	3000.2	2970.0	2933.8	2891.6	2855.3	2807.0	2752.7	2680.3
70°	3706.5	3718.6	3724.6	3676.3	3640.1	3591.8	3537.5	3471.1	3398.6	3320.2	3217.5
67.5°	4612.0	4599.9	4587.9	4521.5	4473.2	4406.8	4328.3	4231.7	4123.0	4002.3	3857.4
65°	5734.8	5752.9	5716.7	5650.3	5559.8	5451.1	5330.4	5191.5	5028.5	4847.4	4642.2
62.5°	7093.1	7123.3	7081.0	6996.5	6881.8	6736.9	6567.9	6368.7	6145.3	5891.8	5638.2
60°	8638.5	8632.4	8553.9	8439.2	8288.3	8107.2	7920.1	7702.8	7449.2	7153.4	6845.6
57.5°	10057.1	10045.0	9948.4	9833.7	9682.8	9489.6	9290.4	9061.0	8795.4	8481.5	8125.3
55°	11330.8	11318.7	11222.1	11101.4	10944.5	10751.3	10570.2	10352.9	10093.3	9761.3	9381.0
52.5°	12459.7	12465.7	12381.2	12248.4	12079.4	11892.2	11717.2	11499.8	11252.3	10920.3	10552.1
50°	13498.0	13491.9	13401.4	13280.7	13123.7	12942.6	12767.5	12550.2	12290.6	11970.7	11614.5
47.5°	14463.8	14451.8	14349.1	14216.3	14053.3	13896.4	13733.4	13540.2	13268.6	12948.6	12592.5
45°	15272.7	15248.6	15146.0	15019.2	14862.3	14723.4	14578.5	14433.7	14143.9	13848.1	13510.0
42.5°	15967.0	15960.9	15858.3	15731.5	15574.6	15453.8	15321.0	15139.9	14898.5	14626.8	14294.8
40°	16631.0	16582.7	16480.1	16359.3	16214.5	16111.8	15979.0	15797.9	15562.5	15296.9	14977.0
37.5°	17126.0	17132.0	17023.4	16890.6	16763.8	16667.2	16546.5	16377.5	16172.2	15912.6	15592.7
35°	17596.9	17566.7	17476.1	17361.4	17246.7	17138.1	17011.3	16866.4	16697.4	16455.9	16154.1
32.5°	17904.7	17947.0	17838.3	17717.6	17651.2	17566.7	17433.9	17283.0	17132.0	16890.6	16618.9
30°	18242.8	18206.6	18122.1	18019.4	17971.1	17916.8	17802.1	17657.2	17482.2	17264.8	17011.3
27.5°	18478.2	18460.1	18357.5	18260.9	18236.7	18188.5	18097.9	17971.1	17796.1	17584.8	17349.4
25°	18580.8	18592.9	18496.3	18442.0	18442.0	18411.8	18339.4	18230.7	18055.6	17862.5	17633.1
22.5°	18629.1	18617.1	18550.7	18538.6	18568.8	18544.6	18514.4	18417.8	18260.9	18103.9	17910.8
20°	18659.3	18574.8	18514.4	18562.7	18598.9	18592.9	18568.8	18508.4	18436.0	18303.2	18134.1
17.5°	18592.9	18538.6	18466.1	18538.6	18617.1	18623.1	18598.9	18562.7	18544.6	18460.1	18309.2
15°	18429.9	18387.7	18399.7	18472.2	18562.7	18592.9	18611.0	18653.3	18629.1	18562.7	18429.9
12.5°	18321.3	18266.9	18321.3	18393.7	18442.0	18460.1	18605.0	18683.5	18683.5	18623.1	18538.6
10°	18291.1	18182.4	18254.9	18321.3	18345.4	18454.1	18574.8	18659.3	18701.6	18653.3	18544.6
7.5°	18230.7	18158.3	18188.5	18218.6	18357.5	18436.0	18502.4	18592.9	18653.3	18647.2	18550.7
5°	18200.5	18110.0	18122.1	18248.8	18345.4	18399.7	18423.9	18502.4	18592.9	18611.0	18538.6
2.5°	18122.1	18079.8	18170.3	18182.4	18254.9	18297.1	18321.3	18393.7	18508.4	18550.7	18520.5
0°	18079.8	18019.4	17959.1	18007.4	18128.1	18218.6	18254.9	18363.5	18496.3	18538.6	18472.2



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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°	169.0	163.0	157.0	150.9	157.0	157.0	157.0	150.9	157.0	150.9	150.9
85°	525.2	501.0	482.9	458.8	434.6	416.5	392.4	368.2	362.2	356.2	344.1
82.5°	905.5	875.3	845.1	808.9	772.7	730.4	688.2	639.9	627.8	615.7	597.6
80°	1273.7	1231.5	1189.2	1147.0	1110.7	1068.5	1020.2	965.9	929.6	899.5	863.2
77.5°	1660.1	1599.7	1539.3	1466.9	1424.7	1382.4	1334.1	1279.8	1225.4	1177.1	1122.8
75°	2100.8	2034.4	1974.0	1901.5	1823.1	1744.6	1666.1	1593.7	1515.2	1442.8	1370.3
72.5°	2589.7	2493.1	2396.6	2306.0	2209.4	2112.8	2010.2	1913.6	1817.0	1720.4	1617.8
70°	3102.8	2982.1	2861.4	2740.6	2613.9	2487.1	2366.4	2245.6	2124.9	1998.1	1883.4
67.5°	3706.5	3567.7	3410.7	3241.7	3054.5	2891.6	2734.6	2589.7	2444.8	2300.0	2155.1
65°	4461.1	4267.9	4056.6	3827.2	3609.9	3392.6	3163.2	2945.9	2776.9	2607.8	2444.8
62.5°	5390.7	5119.1	4823.3	4527.5	4261.9	3978.2	3712.5	3428.8	3163.2	2921.7	2722.5
60°	6501.5	6133.2	5771.0	5390.7	5022.5	4636.2	4298.1	3948.0	3616.0	3320.2	3030.4
57.5°	7726.9	7298.3	6863.7	6398.9	5897.8	5445.1	4986.3	4527.5	4135.1	3742.7	3416.7
55°	8970.5	8517.7	8028.8	7503.6	6954.2	6374.7	5752.9	5239.8	4702.6	4243.8	3821.2
52.5°	10153.7	9682.8	9175.7	8692.8	8034.8	7370.8	6688.6	6012.5	5384.7	4799.1	4286.0
50°	11210.1	10751.3	10262.3	9700.9	9091.2	8384.9	7624.3	6863.7	6121.2	5433.0	4793.1
47.5°	12175.9	11729.2	11240.3	10678.8	10123.5	9338.7	8572.1	7733.0	6905.9	6115.1	5366.6
45°	13081.4	12628.7	12121.6	11584.3	10944.5	10244.2	9453.4	8608.3	7720.9	6833.5	5970.3
42.5°	13902.4	13449.7	12936.6	12381.2	11747.3	11053.1	10286.5	9435.3	8541.9	7576.0	6628.3
40°	14620.8	14180.1	13685.1	13105.6	12514.0	11783.6	11029.0	10220.1	9296.5	8324.6	7280.2
37.5°	15248.6	14838.1	14349.1	13775.7	13147.8	12495.9	11717.2	10908.2	10075.2	9018.8	7950.3
35°	15804.0	15423.7	14922.6	14379.3	13763.6	13075.4	12345.0	11554.2	10654.7	9664.7	8626.4
32.5°	16286.9	15900.6	15441.8	14898.5	14300.8	13654.9	12906.4	12109.5	11258.4	10250.2	9121.4
30°	16697.4	16323.1	15888.5	15375.4	14801.9	14162.0	13431.6	12628.7	11759.4	10757.3	9640.5
27.5°	17053.6	16697.4	16274.8	15797.9	15248.6	14632.9	13896.4	13087.5	12200.1	11234.2	10117.4
25°	17361.4	17017.3	16625.0	16172.2	15628.9	15025.2	14331.0	13485.9	12598.5	11626.6	10521.9
22.5°	17639.1	17307.1	16914.7	16474.0	15979.0	15375.4	14675.1	13836.0	12936.6	11976.7	10890.1
20°	17886.6	17578.8	17192.4	16739.7	16244.6	15634.9	14940.7	14143.9	13238.4	12296.7	11222.1
17.5°	18085.8	17814.2	17427.8	16950.9	16455.9	15864.3	15188.2	14457.8	13498.0	12568.3	11499.8
15°	18224.7	17959.1	17608.9	17126.0	16643.1	16057.5	15381.4	14626.8	13733.4	12785.6	11729.2
12.5°	18321.3	18037.5	17711.6	17264.8	16781.9	16202.4	15544.4	14801.9	13932.6	12978.8	11928.4
10°	18345.4	18085.8	17759.9	17361.4	16890.6	16329.2	15683.2	14946.8	14095.6	13129.7	12091.4
7.5°	18357.5	18110.0	17814.2	17433.9	16969.0	16425.7	15785.9	15061.5	14216.3	13256.5	12212.2
5°	18351.4	18116.0	17850.4	17482.2	17017.3	16480.1	15852.3	15139.9	14300.8	13341.0	12302.7
2.5°	18333.3	18122.1	17874.5	17518.4	17071.7	16540.4	15918.7	15230.5	14391.4	13413.5	12375.2
0°	18381.6	18200.5	17886.6	17506.3	17083.7	16540.4	15912.6	15242.6	14403.5	13407.4	12369.1



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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°	150.9	144.9	144.9	138.8	132.8	126.8	114.7	108.7	96.6	78.5	60.4
85°	326.0	307.9	289.8	277.7	265.6	253.5	235.4	217.3	193.2	157.0	120.7
82.5°	573.5	537.3	501.0	458.8	422.6	386.3	356.2	326.0	289.8	235.4	181.1
80°	821.0	766.7	712.3	652.0	597.6	537.3	482.9	434.6	386.3	313.9	241.5
77.5°	1068.5	996.0	917.6	845.1	766.7	688.2	609.7	543.3	470.9	386.3	301.8
75°	1297.9	1213.4	1140.9	1038.3	941.7	839.1	736.5	645.9	555.4	452.7	362.2
72.5°	1527.3	1418.6	1316.0	1219.4	1110.7	984.0	869.3	754.6	639.9	519.2	410.5
70°	1756.7	1623.9	1497.1	1382.4	1261.7	1134.9	996.0	863.2	724.4	579.5	452.7
67.5°	1992.1	1841.2	1696.3	1551.4	1412.6	1267.7	1122.8	971.9	808.9	639.9	501.0
65°	2251.7	2064.5	1889.5	1726.5	1563.5	1406.5	1243.6	1080.6	899.5	706.3	543.3
62.5°	2511.3	2306.0	2100.8	1895.5	1714.4	1539.3	1364.3	1183.2	984.0	778.7	585.6
60°	2788.9	2553.5	2318.1	2088.7	1865.3	1672.2	1479.0	1285.8	1074.5	845.1	627.8
57.5°	3096.8	2813.1	2547.5	2287.9	2034.4	1805.0	1593.7	1388.4	1153.0	911.5	676.1
55°	3446.9	3096.8	2782.9	2493.1	2215.5	1937.8	1708.4	1497.1	1243.6	977.9	730.4
52.5°	3815.2	3410.7	3030.4	2704.4	2408.6	2094.7	1817.0	1581.6	1334.1	1044.3	778.7
50°	4243.8	3730.7	3308.1	2909.7	2577.7	2251.7	1931.7	1678.2	1424.7	1122.8	827.0
47.5°	4684.4	4117.0	3585.8	3151.1	2758.8	2402.6	2064.5	1762.7	1509.2	1195.3	875.3
45°	5197.6	4485.2	3899.7	3386.6	2933.8	2559.5	2197.3	1853.3	1581.6	1267.7	923.6
42.5°	5692.6	4919.9	4225.7	3646.1	3133.0	2710.5	2318.1	1949.8	1654.0	1340.1	965.9
40°	6278.1	5354.5	4539.6	3893.6	3332.2	2855.3	2438.8	2052.5	1720.4	1406.5	1008.1
37.5°	6839.5	5795.2	4919.9	4165.3	3525.4	3000.2	2559.5	2149.1	1780.8	1472.9	1062.5
35°	7394.9	6284.2	5282.1	4418.8	3724.6	3163.2	2680.3	2239.6	1841.2	1527.3	1110.7
32.5°	7926.1	6742.9	5650.3	4702.6	3941.9	3314.1	2788.9	2324.1	1901.5	1575.6	1159.0
30°	8421.1	7177.6	6012.5	4992.3	4141.1	3453.0	2891.6	2408.6	1974.0	1617.8	1207.3
27.5°	8873.9	7600.2	6374.7	5264.0	4328.3	3579.7	3000.2	2487.1	2034.4	1660.1	1249.6
25°	9284.4	7980.5	6706.7	5511.5	4497.3	3718.6	3102.8	2565.6	2088.7	1696.3	1285.8
22.5°	9670.7	8330.6	7008.6	5759.0	4702.6	3857.4	3199.4	2638.0	2143.0	1732.5	1322.0
20°	10008.8	8650.5	7298.3	6006.5	4883.7	3984.2	3283.9	2704.4	2191.3	1756.7	1358.2
17.5°	10280.4	8934.3	7557.9	6223.8	5040.6	4092.9	3356.4	2764.8	2233.6	1786.9	1382.4
15°	10521.9	9175.7	7775.2	6410.9	5179.5	4183.4	3422.8	2813.1	2269.8	1805.0	1412.6
12.5°	10727.1	9381.0	7962.4	6573.9	5300.2	4261.9	3477.1	2849.3	2300.0	1823.1	1430.7
10°	10896.2	9544.0	8119.3	6700.7	5396.8	4322.2	3519.4	2885.5	2324.1	1841.2	1448.8
7.5°	11022.9	9664.7	8234.0	6809.4	5475.2	4364.5	3555.6	2909.7	2348.3	1853.3	1479.0
5°	11119.5	9767.3	8324.6	6881.8	5535.6	4424.9	3597.8	2939.9	2372.4	1865.3	1479.0
2.5°	11192.0	9851.8	8397.0	6942.2	5583.9	4412.8	3597.8	2933.8	2372.4	1865.3	1472.9
0°	11179.9	9857.9	8391.0	6942.2	5583.9	4400.7	3597.8	2927.8	2372.4	1865.3	1472.9



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	42.3	30.2	12.1	0.0
85°	90.5	60.4	30.2	0.0
82.5°	132.8	84.5	42.3	0.0
80°	175.1	114.7	54.3	0.0
77.5°	223.4	144.9	72.4	0.0
75°	265.6	169.0	84.5	0.0
72.5°	307.9	199.2	96.6	0.0
70°	344.1	223.4	108.7	0.0
67.5°	380.3	253.5	126.8	0.0
65°	410.5	277.7	138.8	0.0
62.5°	434.6	307.9	150.9	0.0
60°	464.8	332.0	163.0	0.0
57.5°	489.0	350.1	175.1	0.0
55°	513.1	362.2	187.1	0.0
52.5°	537.3	380.3	199.2	0.0
50°	561.4	398.4	211.3	0.0
47.5°	585.6	410.5	217.3	0.0
45°	621.8	428.6	229.4	0.0
42.5°	652.0	440.7	241.5	0.0
40°	682.1	452.7	247.5	0.0
37.5°	712.3	464.8	259.6	0.0
35°	742.5	476.9	265.6	0.0
32.5°	766.7	489.0	271.6	0.0
30°	790.8	501.0	277.7	0.0
27.5°	814.9	507.1	283.7	0.0
25°	833.1	519.2	289.8	0.0
22.5°	851.2	525.2	295.8	0.0
20°	863.2	531.2	301.8	0.0
17.5°	881.4	537.3	307.9	0.0
15°	887.4	543.3	319.9	0.0
12.5°	899.5	549.3	319.9	0.0
10°	905.5	555.4	319.9	0.0
7.5°	917.6	555.4	319.9	0.0
5°	911.5	555.4	319.9	0.0
2.5°	911.5	555.4	319.9	0.0
0°	905.5	555.4	319.9	0.0

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