

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: P628596

Luminaire Tested: **EPH-VN-08-D-935-U-LAM**

Issue Date: 01/11/2023

Test Information

Test Method: LM-79-2019
Report Number: P628596
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-935-U-LAM
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
LAMBERTIAN distribution lens
Light Source: (128) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

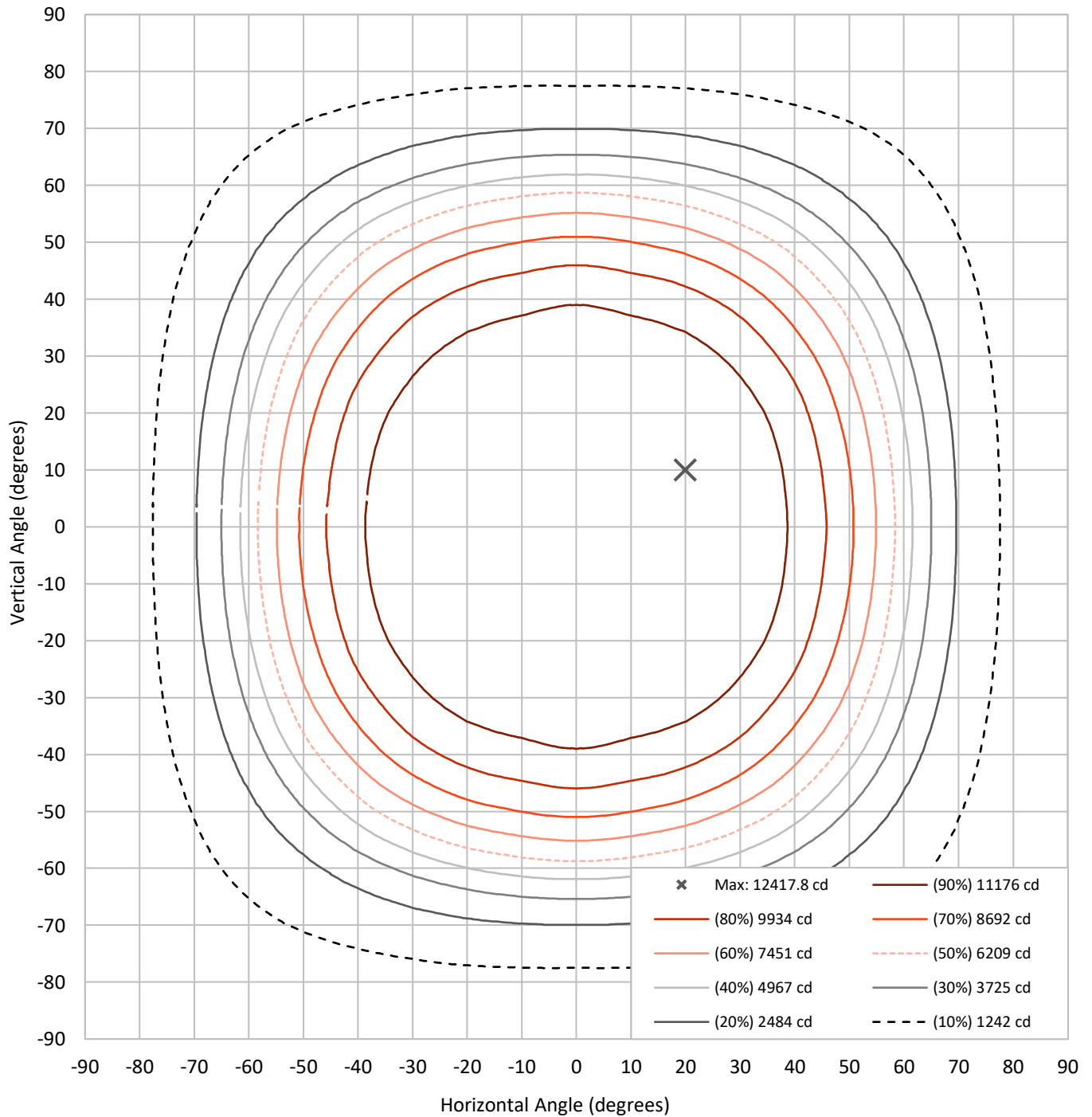
Lumens per Lamp:	N/A	NEMA Type:	7H x 7V
Luminaire Lumens:	38096.2 lumens	Max Intensity:	12417.8 candela
Efficiency:	N/A	Max Intensity Angle:	20°H x 10°V
Efficacy:	78.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	115.7°H x 112.9°V	Field Angle (10%):	154.7°H x 154°V
Beam Lumens:	23376.6 lumens	Field Lumens:	28024.6 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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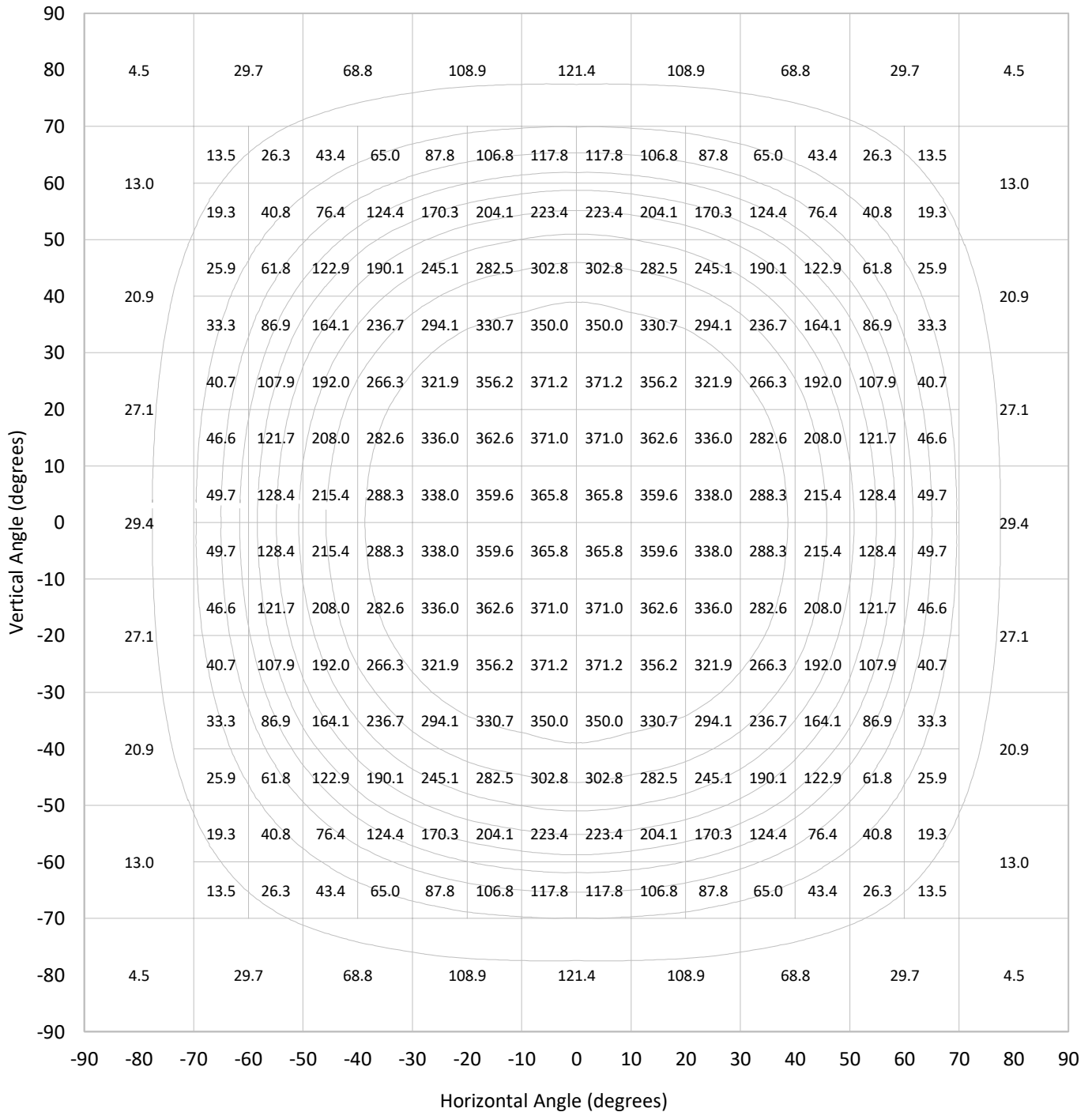
Iso-Candela Plot





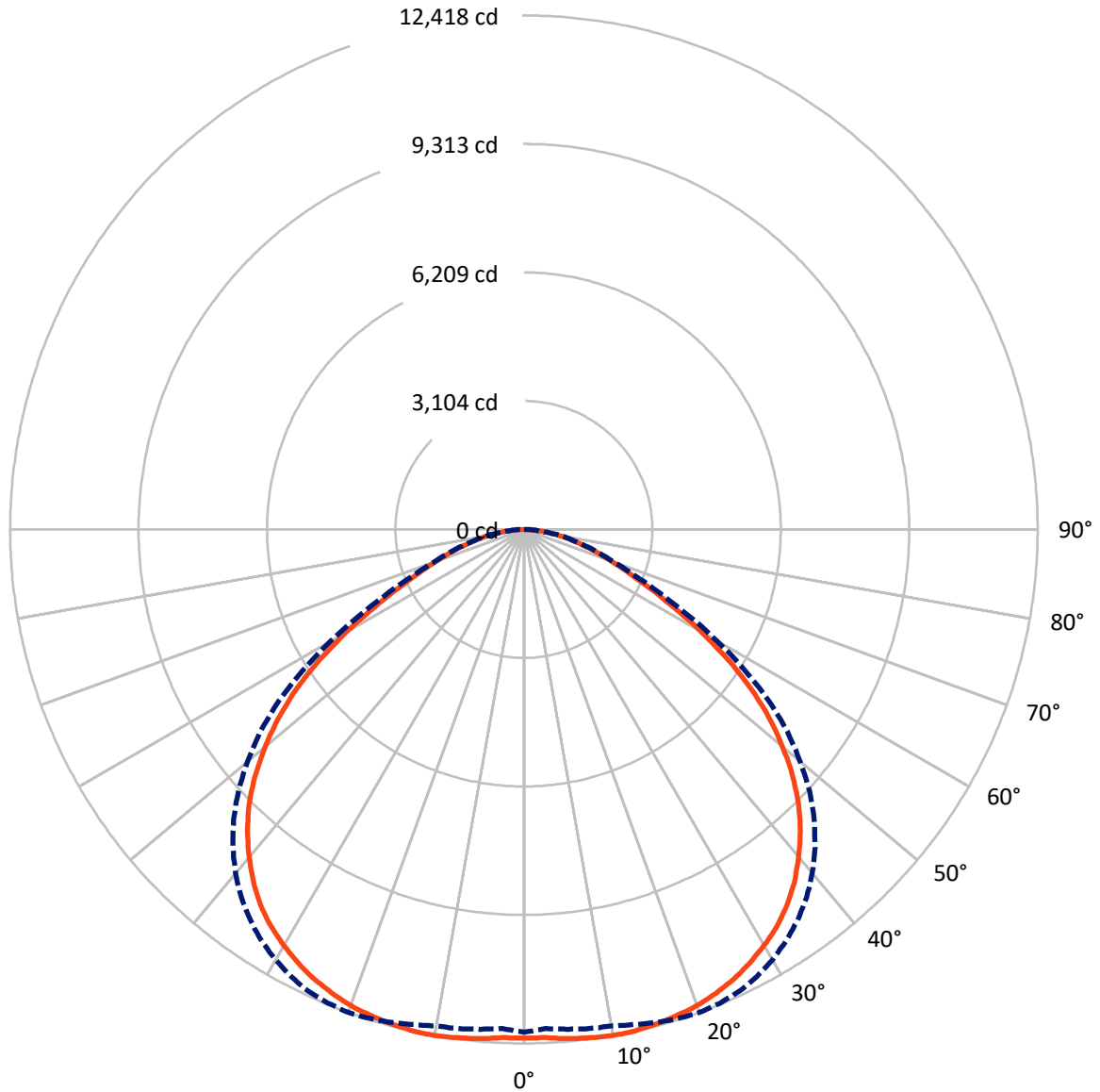
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Lumen Table



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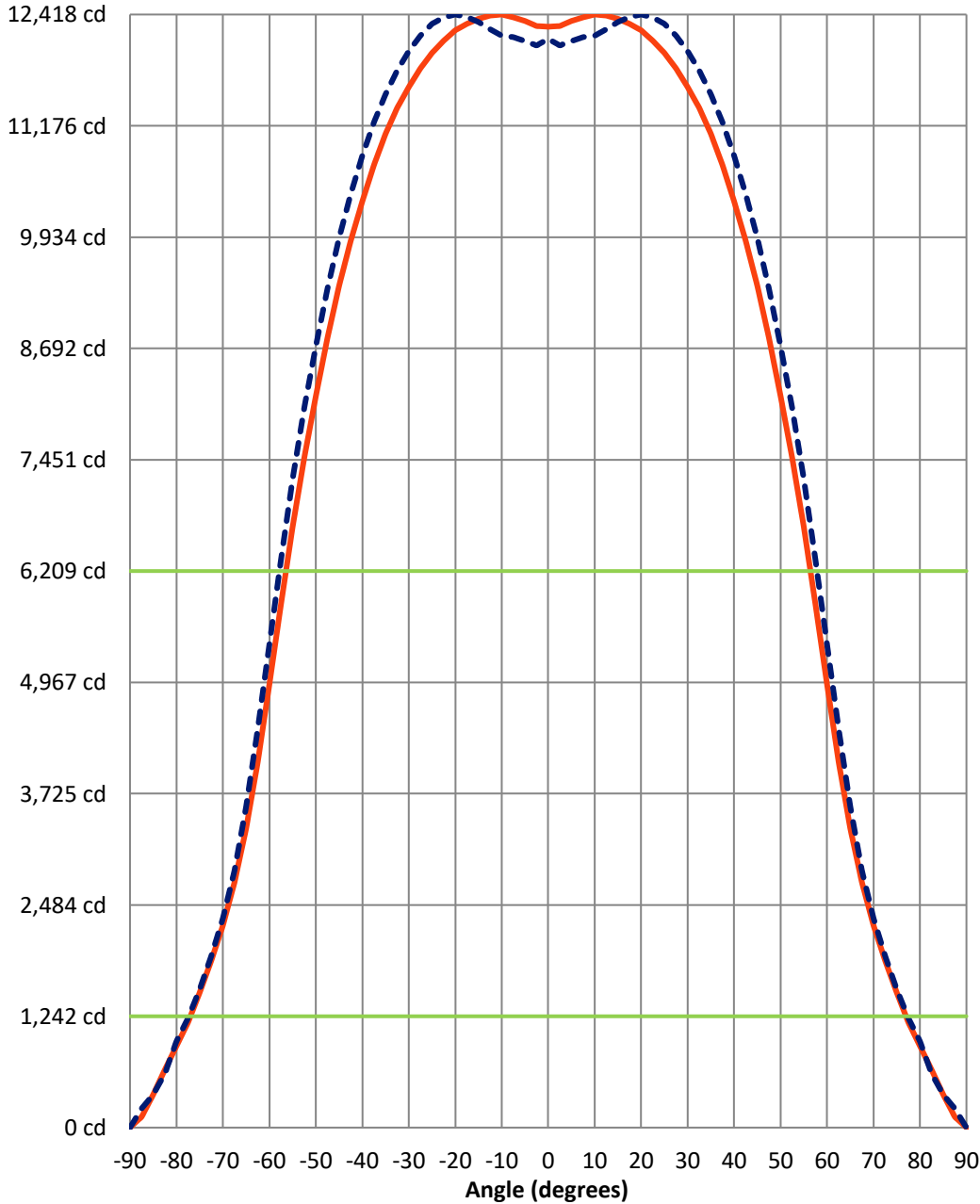
Luminous Intensity Polar Plot



— 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: 23376.6
 Efficiency: 61.4%

Field:
 H Angle: 154.7°
 V Angle: 154°
 Lumens: 28024.6
 Efficiency: 73.6%

Spill:
 Lumens: 10071.6
 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°	100.2	108.2	112.2	116.2	120.3	124.3	128.3	124.3	120.3	120.3	116.2
85°	268.6	276.6	280.6	308.6	336.7	352.7	372.8	368.8	368.8	364.8	360.8
82.5°	537.1	561.2	581.2	609.3	625.3	649.4	665.4	653.4	645.3	629.3	617.3
80°	954.0	962.0	966.0	970.0	950.0	946.0	938.0	925.9	909.9	889.9	869.8
77.5°	1214.5	1222.5	1230.6	1222.5	1218.5	1214.5	1202.5	1190.5	1174.4	1158.4	1134.4
75°	1607.3	1607.3	1607.3	1595.3	1587.3	1575.3	1555.2	1535.2	1507.1	1475.1	1439.0
72.5°	2024.2	2020.2	2016.2	1992.1	1972.1	1948.1	1920.0	1895.9	1863.9	1827.8	1779.7
70°	2461.1	2469.1	2473.1	2441.1	2417.0	2385.0	2348.9	2304.8	2256.7	2204.6	2136.4
67.5°	3062.4	3054.4	3046.3	3002.2	2970.2	2926.1	2874.0	2809.8	2737.7	2657.5	2561.3
65°	3807.9	3819.9	3795.9	3751.8	3691.7	3619.5	3539.4	3447.2	3338.9	3218.7	3082.4
62.5°	4709.8	4729.8	4701.8	4645.7	4569.5	4473.3	4361.1	4228.8	4080.5	3912.1	3743.8
60°	5735.9	5731.9	5679.8	5603.7	5503.5	5383.2	5258.9	5114.6	4946.3	4749.9	4545.5
57.5°	6677.9	6669.9	6605.7	6529.6	6429.4	6301.1	6168.8	6016.5	5840.2	5631.7	5395.2
55°	7523.7	7515.6	7451.5	7371.3	7267.1	7138.9	7018.6	6874.3	6701.9	6481.5	6229.0
52.5°	8273.2	8277.2	8221.1	8132.9	8020.7	7896.4	7780.2	7635.9	7471.5	7251.1	7006.6
50°	8962.7	8958.6	8898.5	8818.4	8714.1	8593.9	8477.6	8333.3	8161.0	7948.5	7712.0
47.5°	9604.0	9596.0	9527.8	9439.6	9331.4	9227.2	9119.0	8990.7	8810.3	8597.9	8361.4
45°	10141.1	10125.1	10056.9	9972.8	9868.5	9776.3	9680.1	9583.9	9391.5	9195.1	8970.7
42.5°	10602.1	10598.1	10529.9	10445.7	10341.5	10261.4	10173.2	10052.9	9892.6	9712.2	9491.8
40°	11043.0	11010.9	10942.8	10862.6	10766.4	10698.3	10610.1	10489.8	10333.5	10157.1	9944.7
37.5°	11371.7	11375.7	11303.5	11215.3	11131.2	11067.0	10986.9	10874.6	10738.3	10566.0	10353.5
35°	11684.3	11664.3	11604.1	11528.0	11451.8	11379.7	11295.5	11199.3	11087.1	10926.7	10726.3
32.5°	11888.7	11916.8	11844.6	11764.5	11720.4	11664.3	11576.1	11475.9	11375.7	11215.3	11035.0
30°	12113.2	12089.2	12033.0	11964.9	11932.8	11896.8	11820.6	11724.4	11608.2	11463.9	11295.5
27.5°	12269.5	12257.5	12189.4	12125.2	12109.2	12077.1	12017.0	11932.8	11816.6	11676.3	11520.0
25°	12337.7	12345.7	12281.6	12245.5	12245.5	12225.4	12177.3	12105.2	11988.9	11860.7	11708.4
22.5°	12369.7	12361.7	12317.6	12309.6	12329.7	12313.6	12293.6	12229.5	12125.2	12021.0	11892.7
20°	12389.8	12333.7	12293.6	12325.7	12349.7	12345.7	12329.7	12289.6	12241.5	12153.3	12041.1
17.5°	12345.7	12309.6	12261.5	12309.6	12361.7	12365.7	12349.7	12325.7	12313.6	12257.5	12157.3
15°	12237.5	12209.4	12217.4	12265.5	12325.7	12345.7	12357.7	12385.8	12369.7	12325.7	12237.5
12.5°	12165.3	12129.2	12165.3	12213.4	12245.5	12257.5	12353.7	12405.8	12405.8	12365.7	12309.6
10°	12145.3	12073.1	12121.2	12165.3	12181.4	12253.5	12333.7	12389.8	12417.8	12385.8	12313.6
7.5°	12105.2	12057.1	12077.1	12097.2	12189.4	12241.5	12285.6	12345.7	12385.8	12381.8	12317.6
5°	12085.2	12025.0	12033.0	12117.2	12181.4	12217.4	12233.5	12285.6	12345.7	12357.7	12309.6
2.5°	12033.0	12005.0	12065.1	12073.1	12121.2	12149.3	12165.3	12213.4	12289.6	12317.6	12297.6
0°	12005.0	11964.9	11924.8	11956.9	12037.1	12097.2	12121.2	12193.4	12281.6	12309.6	12265.5



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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°	112.2	108.2	104.2	100.2	104.2	104.2	104.2	100.2	104.2	100.2	100.2
85°	348.7	332.7	320.7	304.6	288.6	276.6	260.5	244.5	240.5	236.5	228.5
82.5°	601.3	581.2	561.2	537.1	513.1	485.0	457.0	424.9	416.9	408.9	396.8
80°	845.8	817.7	789.6	761.6	737.5	709.5	677.4	641.3	617.3	597.2	573.2
77.5°	1102.3	1062.2	1022.1	974.0	946.0	917.9	885.8	849.8	813.7	781.6	745.6
75°	1394.9	1350.8	1310.7	1262.6	1210.5	1158.4	1106.3	1058.2	1006.1	958.0	909.9
72.5°	1719.6	1655.4	1591.3	1531.2	1467.1	1402.9	1334.8	1270.6	1206.5	1142.4	1074.2
70°	2060.3	1980.1	1900.0	1819.8	1735.6	1651.4	1571.3	1491.1	1410.9	1326.8	1250.6
67.5°	2461.1	2368.9	2264.7	2152.5	2028.2	1920.0	1815.8	1719.6	1623.4	1527.2	1431.0
65°	2962.2	2833.9	2693.6	2541.3	2397.0	2252.7	2100.4	1956.1	1843.8	1731.6	1623.4
62.5°	3579.4	3399.1	3202.7	3006.3	2829.9	2641.5	2465.1	2276.7	2100.4	1940.0	1807.8
60°	4317.0	4072.5	3832.0	3579.4	3334.9	3078.4	2853.9	2621.5	2401.0	2204.6	2012.2
57.5°	5130.7	4846.1	4557.5	4248.8	3916.1	3615.5	3310.9	3006.3	2745.7	2485.2	2268.7
55°	5956.4	5655.8	5331.1	4982.4	4617.6	4232.8	3819.9	3479.2	3122.5	2817.9	2537.3
52.5°	6742.0	6429.4	6092.7	5772.0	5335.1	4894.2	4441.2	3992.3	3575.4	3186.6	2845.9
50°	7443.5	7138.9	6814.2	6441.4	6036.6	5567.6	5062.5	4557.5	4064.5	3607.5	3182.6
47.5°	8084.8	7788.2	7463.5	7090.8	6722.0	6200.9	5691.8	5134.7	4585.5	4060.5	3563.4
45°	8686.1	8385.5	8048.8	7692.0	7267.1	6802.2	6277.1	5715.9	5126.7	4537.4	3964.2
42.5°	9231.2	8930.6	8589.9	8221.1	7800.2	7339.3	6830.2	6265.0	5671.8	5030.5	4401.2
40°	9708.2	9415.6	9086.9	8702.1	8309.3	7824.3	7323.2	6786.1	6172.8	5527.5	4834.1
37.5°	10125.1	9852.5	9527.8	9147.0	8730.2	8297.3	7780.2	7243.1	6689.9	5988.5	5279.0
35°	10493.8	10241.3	9908.6	9547.9	9139.0	8682.1	8197.1	7672.0	7074.7	6417.4	5727.9
32.5°	10814.5	10558.0	10253.3	9892.6	9495.8	9066.9	8569.8	8040.7	7475.6	6806.2	6056.6
30°	11087.1	10838.6	10550.0	10209.2	9828.5	9403.6	8918.6	8385.5	7808.2	7142.9	6401.3
27.5°	11323.6	11087.1	10806.5	10489.8	10125.1	9716.2	9227.2	8690.1	8100.9	7459.5	6718.0
25°	11528.0	11299.5	11039.0	10738.3	10377.6	9976.8	9515.8	8954.6	8365.4	7720.1	6986.5
22.5°	11712.4	11491.9	11231.4	10938.8	10610.1	10209.2	9744.3	9187.1	8589.9	7952.5	7231.0
20°	11876.7	11672.3	11415.8	11115.1	10786.4	10381.6	9920.6	9391.5	8790.3	8165.0	7451.5
17.5°	12009.0	11828.6	11572.1	11255.4	10926.7	10533.9	10085.0	9600.0	8962.7	8345.4	7635.9
15°	12101.2	11924.8	11692.3	11371.7	11051.0	10662.2	10213.3	9712.2	9119.0	8489.7	7788.2
12.5°	12165.3	11976.9	11760.5	11463.9	11143.2	10758.4	10321.5	9828.5	9251.3	8617.9	7920.5
10°	12181.4	12009.0	11792.5	11528.0	11215.3	10842.6	10413.7	9924.7	9359.5	8718.1	8028.7
7.5°	12189.4	12025.0	11828.6	11576.1	11267.4	10906.7	10481.8	10000.8	9439.6	8802.3	8108.9
5°	12185.4	12029.0	11852.7	11608.2	11299.5	10942.8	10525.9	10052.9	9495.8	8858.4	8169.0
2.5°	12173.3	12033.0	11868.7	11632.2	11335.6	10982.9	10570.0	10113.0	9555.9	8906.5	8217.1
0°	12205.4	12085.2	11876.7	11624.2	11343.6	10982.9	10566.0	10121.1	9563.9	8902.5	8213.1



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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°	100.2	96.2	96.2	92.2	88.2	84.2	76.2	72.2	64.1	52.1	40.1
85°	216.5	204.4	192.4	184.4	176.4	168.4	156.3	144.3	128.3	104.2	80.2
82.5°	380.8	356.7	332.7	304.6	280.6	256.5	236.5	216.5	192.4	156.3	120.3
80°	545.1	509.1	473.0	432.9	396.8	356.7	320.7	288.6	256.5	208.4	160.3
77.5°	709.5	661.4	609.3	561.2	509.1	457.0	404.8	360.8	312.7	256.5	200.4
75°	861.8	805.7	757.6	689.4	625.3	557.2	489.0	428.9	368.8	300.6	240.5
72.5°	1014.1	942.0	873.8	809.7	737.5	653.4	577.2	501.0	424.9	344.7	272.6
70°	1166.4	1078.2	994.1	917.9	837.7	753.6	661.4	573.2	481.0	384.8	300.6
67.5°	1322.8	1222.5	1126.3	1030.1	938.0	841.8	745.6	645.3	537.1	424.9	332.7
65°	1495.1	1370.9	1254.6	1146.4	1038.2	933.9	825.7	717.5	597.2	469.0	360.8
62.5°	1667.5	1531.2	1394.9	1258.6	1138.4	1022.1	905.9	785.6	653.4	517.1	388.8
60°	1851.9	1695.5	1539.2	1386.9	1238.6	1110.3	982.0	853.8	713.5	561.2	416.9
57.5°	2056.3	1867.9	1691.5	1519.2	1350.8	1198.5	1058.2	921.9	765.6	605.3	448.9
55°	2288.8	2056.3	1847.8	1655.4	1471.1	1286.7	1134.4	994.1	825.7	649.4	485.0
52.5°	2533.3	2264.7	2012.2	1795.7	1599.3	1390.9	1206.5	1050.2	885.8	693.4	517.1
50°	2817.9	2477.2	2196.6	1932.0	1711.6	1495.1	1282.7	1114.3	946.0	745.6	549.1
47.5°	3110.5	2733.7	2381.0	2092.4	1831.8	1595.3	1370.9	1170.4	1002.1	793.7	581.2
45°	3451.2	2978.2	2589.4	2248.7	1948.1	1699.5	1459.0	1230.6	1050.2	841.8	613.3
42.5°	3779.9	3266.8	2805.8	2421.0	2080.3	1799.7	1539.2	1294.7	1098.3	889.9	641.3
40°	4168.7	3555.4	3014.3	2585.4	2212.6	1895.9	1619.4	1362.8	1142.4	933.9	669.4
37.5°	4541.5	3848.0	3266.8	2765.8	2340.9	1992.1	1699.5	1427.0	1182.5	978.0	705.5
35°	4910.2	4172.7	3507.3	2934.1	2473.1	2100.4	1779.7	1487.1	1222.5	1014.1	737.5
32.5°	5263.0	4477.3	3751.8	3122.5	2617.4	2200.6	1851.9	1543.2	1262.6	1046.2	769.6
30°	5591.6	4765.9	3992.3	3314.9	2749.7	2292.8	1920.0	1599.3	1310.7	1074.2	801.7
27.5°	5892.3	5046.5	4232.8	3495.3	2874.0	2376.9	1992.1	1651.4	1350.8	1102.3	829.7
25°	6164.8	5299.0	4453.3	3659.6	2986.2	2469.1	2060.3	1703.5	1386.9	1126.3	853.8
22.5°	6421.4	5531.5	4653.7	3824.0	3122.5	2561.3	2124.4	1751.6	1423.0	1150.4	877.8
20°	6645.8	5744.0	4846.1	3988.3	3242.7	2645.5	2180.5	1795.7	1455.0	1166.4	901.9
17.5°	6826.2	5932.3	5018.4	4132.6	3347.0	2717.7	2228.6	1835.8	1483.1	1186.5	917.9
15°	6986.5	6092.7	5162.7	4256.9	3439.2	2777.8	2272.7	1867.9	1507.1	1198.5	938.0
12.5°	7122.8	6229.0	5287.0	4365.1	3519.3	2829.9	2308.8	1891.9	1527.2	1210.5	950.0
10°	7235.1	6337.2	5391.2	4449.3	3583.5	2870.0	2336.9	1916.0	1543.2	1222.5	962.0
7.5°	7319.2	6417.4	5467.4	4521.4	3635.6	2898.0	2360.9	1932.0	1559.2	1230.6	982.0
5°	7383.4	6485.5	5527.5	4569.5	3675.6	2938.1	2389.0	1952.1	1575.3	1238.6	982.0
2.5°	7431.5	6541.6	5575.6	4609.6	3707.7	2930.1	2389.0	1948.1	1575.3	1238.6	978.0
0°	7423.4	6545.6	5571.6	4609.6	3707.7	2922.1	2389.0	1944.0	1575.3	1238.6	978.0



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	28.1	20.0	8.0	0.0
85°	60.1	40.1	20.0	0.0
82.5°	88.2	56.1	28.1	0.0
80°	116.2	76.2	36.1	0.0
77.5°	148.3	96.2	48.1	0.0
75°	176.4	112.2	56.1	0.0
72.5°	204.4	132.3	64.1	0.0
70°	228.5	148.3	72.2	0.0
67.5°	252.5	168.4	84.2	0.0
65°	272.6	184.4	92.2	0.0
62.5°	288.6	204.4	100.2	0.0
60°	308.6	220.5	108.2	0.0
57.5°	324.7	232.5	116.2	0.0
55°	340.7	240.5	124.3	0.0
52.5°	356.7	252.5	132.3	0.0
50°	372.8	264.6	140.3	0.0
47.5°	388.8	272.6	144.3	0.0
45°	412.9	284.6	152.3	0.0
42.5°	432.9	292.6	160.3	0.0
40°	452.9	300.6	164.3	0.0
37.5°	473.0	308.6	172.4	0.0
35°	493.0	316.7	176.4	0.0
32.5°	509.1	324.7	180.4	0.0
30°	525.1	332.7	184.4	0.0
27.5°	541.1	336.7	188.4	0.0
25°	553.2	344.7	192.4	0.0
22.5°	565.2	348.7	196.4	0.0
20°	573.2	352.7	200.4	0.0
17.5°	585.2	356.7	204.4	0.0
15°	589.2	360.8	212.4	0.0
12.5°	597.2	364.8	212.4	0.0
10°	601.3	368.8	212.4	0.0
7.5°	609.3	368.8	212.4	0.0
5°	605.3	368.8	212.4	0.0
2.5°	605.3	368.8	212.4	0.0
0°	601.3	368.8	212.4	0.0

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