

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: P623235

Luminaire Tested: **EPH-VN-08-E-735-U-33**

Issue Date: 10/13/2022

Test Information

Test Method: LM-79-2019
Report Number: P623235
Test Lab: INNOVATION CENTER(G2)
Issue Date: 10/13/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-E-735-U-33
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 3 distribution lens
Light Source: (128) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	70263.6 lumens	Max Intensity:	653813.9 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	112.1 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

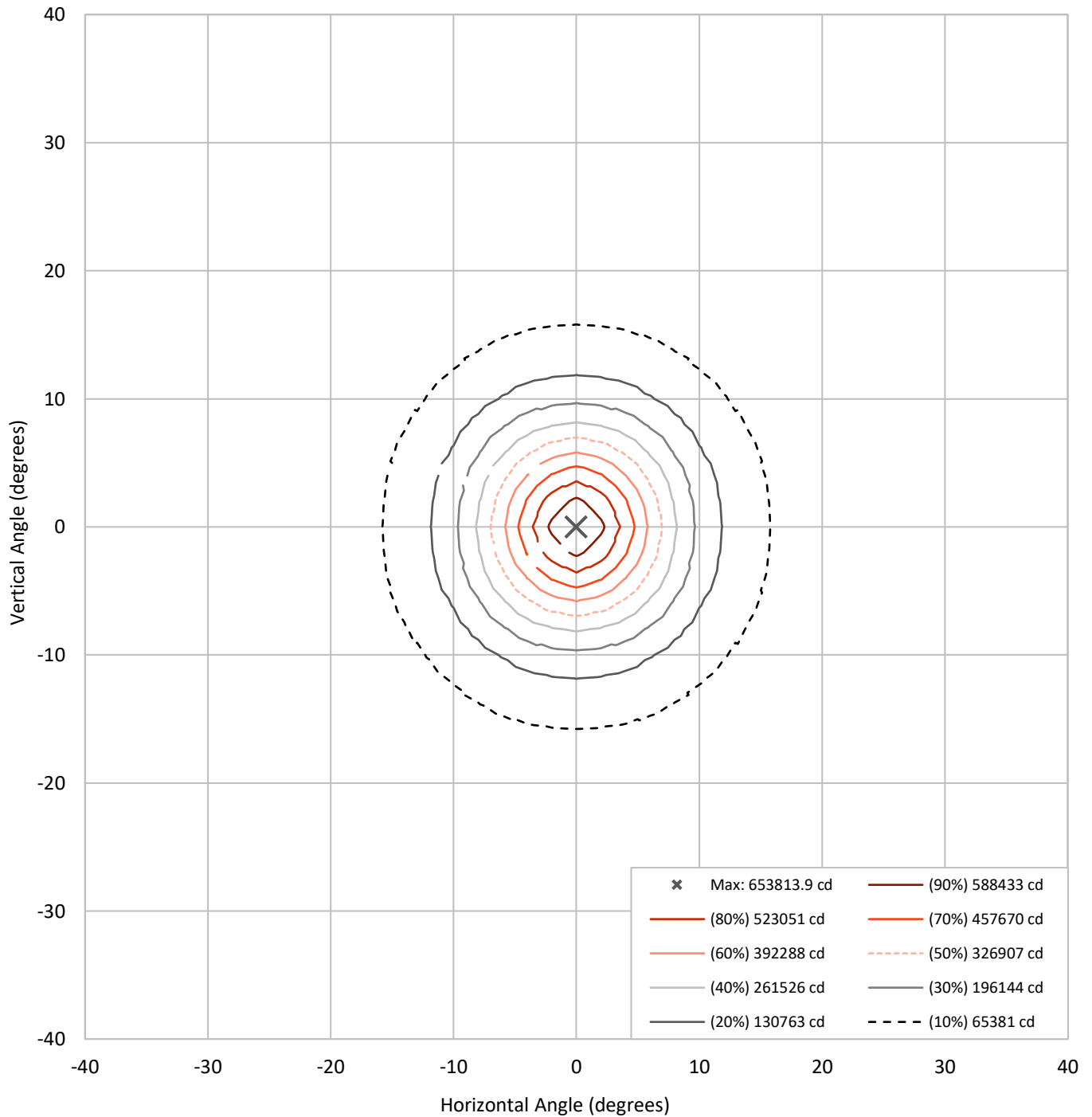
Beam Angle (50%):	13.8°H x 13.8°V	Field Angle (10%):	31.4°H x 31.4°V
Beam Lumens:	15364.7 lumens	Field Lumens:	35775.5 lumens
Beam Efficiency:	21.9%	Field Efficiency:	50.9%

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





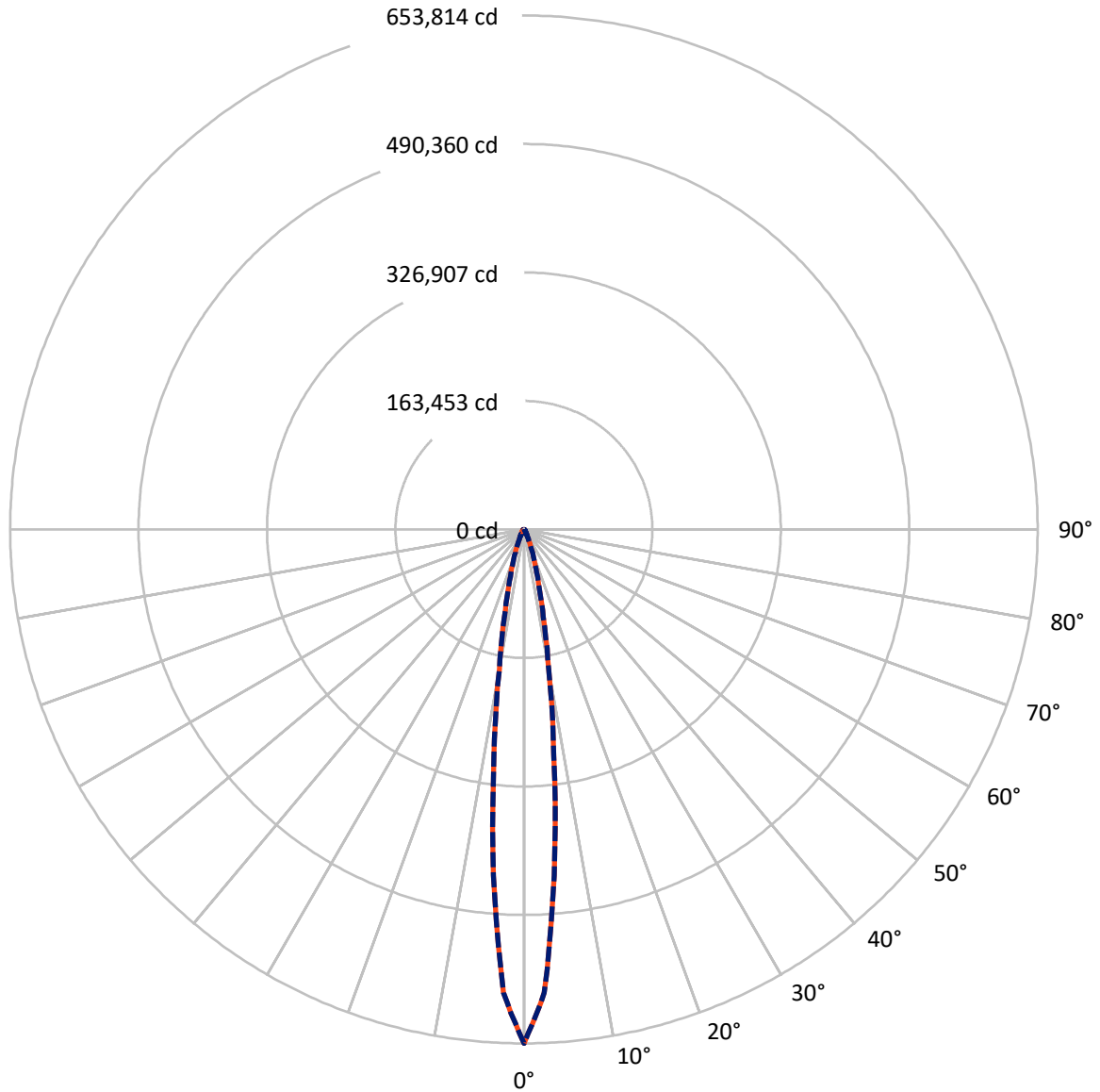
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Lumen Table

90	1.2	9.0	24.1	39.3	45.6	39.3	24.1	9.0	1.2							
80	1.2	9.0	24.1	39.3	45.6	39.3	24.1	9.0	1.2							
70	4.1	4.6	9.7	16.2	22.9	28.9	33.4	35.8	35.8	33.4	28.9	22.9	16.2	9.7	4.6	4.1
60		7.2	15.1	24.3	33.6	41.8	48.1	51.6	51.6	48.1	41.8	33.6	24.3	15.1	7.2	
50	7.5	9.8	19.8	31.2	43.2	55.5	67.0	74.3	74.3	67.0	55.5	43.2	31.2	19.8	9.8	7.5
40		12.0	23.6	37.3	54.7	78.3	107.0	131.5	131.5	107.0	78.3	54.7	37.3	23.6	12.0	
30	10.1	13.7	26.6	43.4	70.9	125.1	255.6	437.2	437.2	255.6	125.1	70.9	43.4	26.6	13.7	10.1
20		14.8	28.7	49.3	91.2	240.9	866.3	2151.3	2151.3	866.3	240.9	91.2	49.3	28.7	14.8	
10	11.1	15.4	29.9	53.1	108.9	401.3	2096.2	9204.0	9204.0	2096.2	401.3	108.9	53.1	29.9	15.4	11.1
0		15.4	29.9	53.1	108.9	401.3	2096.2	9204.0	9204.0	2096.2	401.3	108.9	53.1	29.9	15.4	
-10	10.1	14.8	28.7	49.3	91.2	240.9	866.3	2151.3	2151.3	866.3	240.9	91.2	49.3	28.7	14.8	10.1
-20		13.7	26.6	43.4	70.9	125.1	255.6	437.2	437.2	255.6	125.1	70.9	43.4	26.6	13.7	
-30	7.5	12.0	23.6	37.3	54.7	78.3	107.0	131.5	131.5	107.0	78.3	54.7	37.3	23.6	12.0	7.5
-40		9.8	19.8	31.2	43.2	55.5	67.0	74.3	74.3	67.0	55.5	43.2	31.2	19.8	9.8	
-50	4.1	7.2	15.1	24.3	33.6	41.8	48.1	51.6	51.6	48.1	41.8	33.6	24.3	15.1	7.2	4.1
-60		4.6	9.7	16.2	22.9	28.9	33.4	35.8	35.8	33.4	28.9	22.9	16.2	9.7	4.6	
-70	1.2	9.0	24.1	39.3	45.6	39.3	24.1	9.0	1.2							
-80		1.2	9.0	24.1	39.3	45.6	39.3	24.1	9.0	1.2						
-90	1.2	9.0	24.1	39.3	45.6	39.3	24.1	9.0	1.2							

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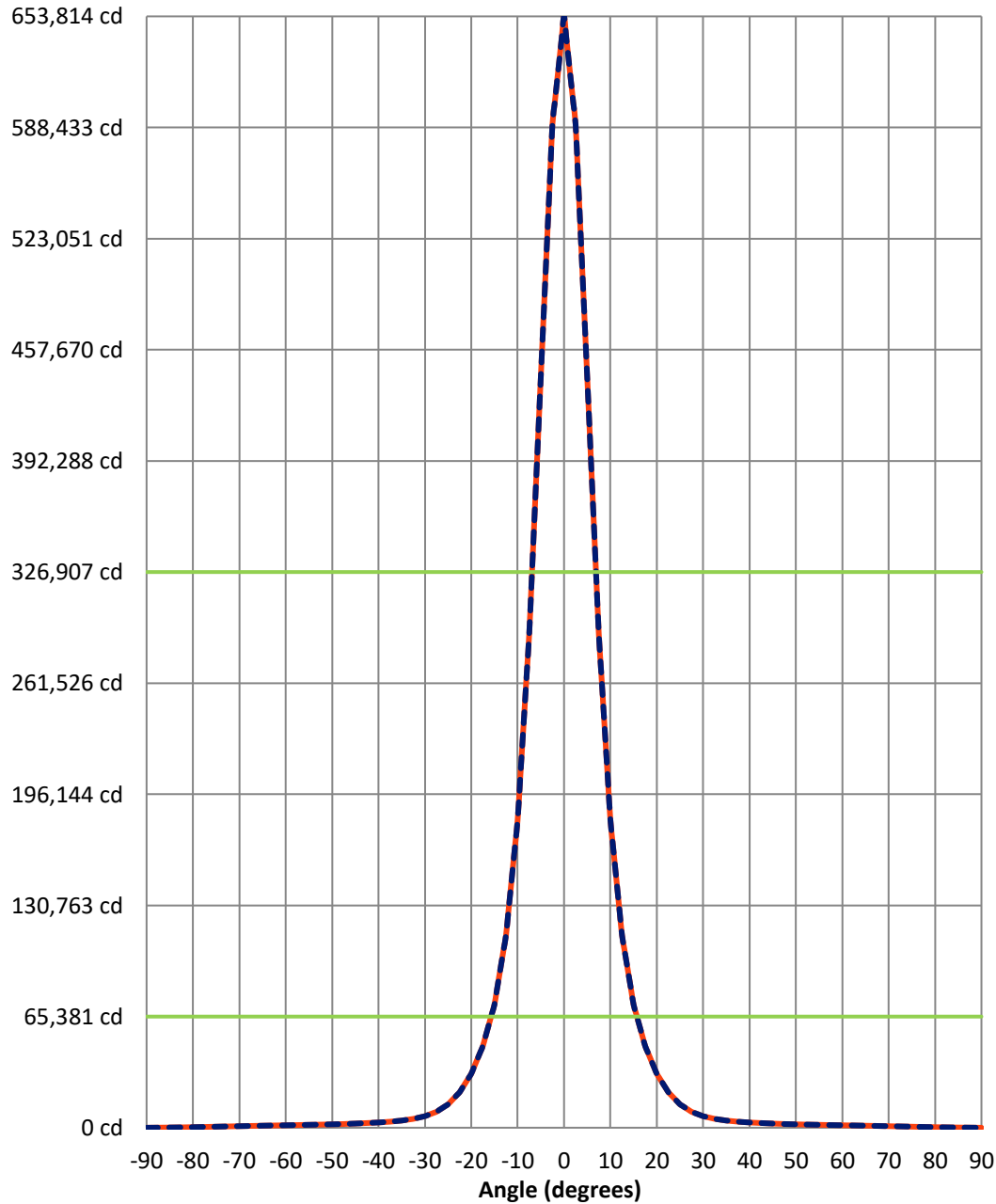
Luminous Intensity Polar Plot



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

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Luminous Intensity Plot



Beam:
 H Angle: 13.8°
 V Angle: 13.8°
 Lumens: 15364.7
 Efficiency: 21.9%

Field:
 H Angle: 31.4°
 V Angle: 31.4°
 Lumens: 35775.5
 Efficiency: 50.9%

Spill:
 Lumens: 34488.1
 Efficiency: 49.1%

— Vertical Distribution through 0-Deg
 - - - Horizontal Distribution through 0-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°	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	58.5	51.2	51.2
85°	131.6	131.6	131.6	131.6	131.6	131.6	124.3	124.3	124.3	117.0	117.0
82.5°	219.3	219.3	219.3	219.3	212.0	212.0	212.0	204.7	204.7	197.4	197.4
80°	336.2	336.2	336.2	336.2	328.9	321.6	321.6	314.3	307.0	299.7	292.4
77.5°	460.5	460.5	460.5	453.2	453.2	445.9	438.6	431.3	424.0	409.3	402.0
75°	606.7	606.7	606.7	599.4	592.1	584.8	577.5	562.9	555.5	540.9	526.3
72.5°	760.2	760.2	760.2	752.9	745.6	731.0	723.7	709.0	694.4	672.5	657.9
70°	906.4	906.4	906.4	899.1	884.5	877.2	862.6	847.9	833.3	811.4	789.5
67.5°	1052.6	1052.6	1052.6	1038.0	1030.7	1023.4	1008.7	986.8	972.2	950.3	921.0
65°	1191.5	1191.5	1184.2	1176.9	1169.6	1154.9	1140.3	1125.7	1103.8	1081.8	1052.6
62.5°	1330.4	1330.4	1323.1	1315.8	1308.4	1293.8	1271.9	1257.3	1228.0	1206.1	1176.9
60°	1447.3	1447.3	1440.0	1432.7	1425.4	1410.8	1396.2	1374.2	1352.3	1330.4	1301.1
57.5°	1571.6	1571.6	1564.3	1557.0	1542.4	1527.7	1513.1	1491.2	1462.0	1432.7	1410.8
55°	1710.5	1710.5	1703.2	1688.6	1673.9	1659.3	1637.4	1608.1	1578.9	1549.7	1513.1
52.5°	1842.1	1842.1	1834.7	1820.1	1805.5	1790.9	1761.7	1739.7	1703.2	1666.6	1622.8
50°	2002.9	2002.9	1988.3	1973.6	1959.0	1929.8	1900.5	1864.0	1827.4	1783.6	1747.0
47.5°	2185.6	2185.6	2171.0	2156.4	2127.1	2097.9	2054.0	2010.2	1966.3	1915.2	1856.7
45°	2441.5	2441.5	2419.5	2390.3	2353.7	2302.6	2244.1	2185.6	2119.8	2061.4	1995.6
42.5°	2755.8	2755.8	2726.5	2690.0	2638.8	2573.0	2492.6	2412.2	2324.5	2229.5	2141.8
40°	3084.7	3084.7	3048.2	3011.6	2953.1	2872.7	2785.0	2682.7	2573.0	2448.8	2339.1
37.5°	3537.9	3537.9	3486.8	3421.0	3333.2	3223.6	3092.0	2975.1	2850.8	2711.9	2565.7
35°	4210.4	4210.4	4130.0	4020.4	3881.5	3698.7	3501.4	3333.2	3143.2	2975.1	2814.3
32.5°	5204.5	5204.5	5065.7	4904.8	4670.9	4378.5	4093.5	3823.0	3537.9	3296.7	3062.8
30°	6768.8	6768.8	6534.9	6242.5	5847.8	5343.4	4919.5	4480.9	4064.2	3713.4	3391.7
27.5°	9371.1	9261.5	8939.8	8406.2	7675.2	6768.8	6118.3	5380.0	4795.2	4225.0	3808.4
25°	13757.0	13552.3	12945.6	11944.1	10591.8	9093.3	7909.2	6651.9	5760.1	4948.7	4298.1
22.5°	20884.0	20511.2	19400.1	17587.3	15138.5	12740.9	10555.3	8618.2	7024.7	5891.7	4948.7
20°	31731.7	31081.1	29165.9	26066.6	21885.4	18179.4	14283.3	11410.5	8859.4	7024.7	5760.1
17.5°	48032.4	46906.7	43610.0	38295.8	31731.7	25693.8	19758.3	15028.9	11410.5	8618.2	6651.9
15°	72417.8	70444.1	64684.0	55524.9	45006.2	35430.4	27002.2	19758.3	14283.3	10555.3	7909.2
12.5°	113359.7	109368.6	97833.8	79844.5	63075.9	47338.0	35430.4	25693.8	18179.4	12740.9	9093.3
10°	181004.2	172758.8	149374.9	113981.0	87059.2	63075.9	45006.2	31731.7	21885.4	15138.5	10591.8
7.5°	290650.5	272953.6	224599.6	165003.1	113981.0	79844.5	55524.9	38295.8	26066.6	17587.3	11944.1
5°	441882.1	406269.0	316870.6	224599.6	149374.9	97833.8	64684.0	43610.0	29165.9	19400.1	12945.6
2.5°	590153.2	528773.2	406269.0	272953.6	172758.8	109368.6	70444.1	46906.7	31081.1	20511.2	13552.3
0°	653813.9	590153.2	441882.1	290650.5	181004.2	113359.7	72417.8	48032.4	31731.7	20884.0	13757.0



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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°	51.2	51.2	51.2	51.2	43.9	43.9	43.9	43.9	36.5	36.5	36.5
85°	117.0	109.6	109.6	102.3	102.3	95.0	95.0	87.7	87.7	80.4	73.1
82.5°	190.1	182.7	175.4	168.1	168.1	160.8	153.5	138.9	131.6	124.3	117.0
80°	285.1	270.5	263.2	248.5	241.2	226.6	212.0	204.7	190.1	182.7	168.1
77.5°	387.4	372.8	365.5	343.6	328.9	314.3	299.7	277.8	263.2	241.2	219.3
75°	504.4	489.8	467.8	445.9	431.3	409.3	387.4	365.5	336.2	314.3	292.4
72.5°	635.9	614.0	592.1	562.9	533.6	511.7	475.1	445.9	424.0	394.7	365.5
70°	767.5	745.6	716.4	687.1	650.6	621.3	584.8	548.2	511.7	475.1	438.6
67.5°	899.1	869.9	840.6	804.1	767.5	731.0	694.4	650.6	606.7	562.9	519.0
65°	1023.4	994.1	957.6	921.0	884.5	840.6	796.8	752.9	701.7	650.6	606.7
62.5°	1147.6	1111.1	1074.5	1038.0	994.1	950.3	906.4	847.9	796.8	745.6	687.1
60°	1264.6	1228.0	1191.5	1147.6	1103.8	1052.6	1001.4	950.3	891.8	833.3	774.8
57.5°	1374.2	1337.7	1301.1	1250.0	1206.1	1154.9	1096.5	1045.3	979.5	921.0	855.2
55°	1476.6	1440.0	1396.2	1352.3	1308.4	1250.0	1191.5	1133.0	1067.2	1001.4	928.3
52.5°	1578.9	1535.0	1491.2	1447.3	1396.2	1345.0	1286.5	1220.7	1154.9	1081.8	1008.7
50°	1695.9	1644.7	1586.2	1535.0	1476.6	1425.4	1366.9	1301.1	1235.3	1154.9	1081.8
47.5°	1805.5	1754.3	1695.9	1630.1	1571.6	1505.8	1440.0	1381.5	1308.4	1235.3	1154.9
45°	1929.8	1856.7	1798.2	1732.4	1659.3	1586.2	1520.4	1447.3	1381.5	1301.1	1220.7
42.5°	2061.4	1980.9	1900.5	1820.1	1754.3	1673.9	1593.5	1520.4	1440.0	1366.9	1286.5
40°	2214.9	2119.8	2017.5	1929.8	1842.1	1761.7	1673.9	1586.2	1505.8	1425.4	1345.0
37.5°	2412.2	2280.6	2149.1	2039.4	1937.1	1842.1	1754.3	1659.3	1571.6	1476.6	1396.2
35°	2646.1	2463.4	2309.9	2156.4	2039.4	1929.8	1820.1	1732.4	1630.1	1535.0	1447.3
32.5°	2880.0	2682.7	2485.3	2309.9	2149.1	2017.5	1900.5	1798.2	1695.9	1586.2	1491.2
30°	3121.3	2902.0	2682.7	2463.4	2280.6	2119.8	1980.9	1856.7	1754.3	1644.7	1535.0
27.5°	3428.3	3121.3	2880.0	2646.1	2412.2	2214.9	2061.4	1929.8	1805.5	1695.9	1578.9
25°	3808.4	3391.7	3062.8	2814.3	2565.7	2339.1	2141.8	1995.6	1856.7	1747.0	1622.8
22.5°	4225.0	3713.4	3296.7	2975.1	2711.9	2448.8	2229.5	2061.4	1915.2	1783.6	1666.6
20°	4795.2	4064.2	3537.9	3143.2	2850.8	2573.0	2324.5	2119.8	1966.3	1827.4	1703.2
17.5°	5380.0	4480.9	3823.0	3333.2	2975.1	2682.7	2412.2	2185.6	2010.2	1864.0	1739.7
15°	6118.3	4919.5	4093.5	3501.4	3092.0	2785.0	2492.6	2244.1	2054.0	1900.5	1761.7
12.5°	6768.8	5343.4	4378.5	3698.7	3223.6	2872.7	2573.0	2302.6	2097.9	1929.8	1790.9
10°	7675.2	5847.8	4670.9	3881.5	3333.2	2953.1	2638.8	2353.7	2127.1	1959.0	1805.5
7.5°	8406.2	6242.5	4904.8	4020.4	3421.0	3011.6	2690.0	2390.3	2156.4	1973.6	1820.1
5°	8939.8	6534.9	5065.7	4130.0	3486.8	3048.2	2726.5	2419.5	2171.0	1988.3	1834.7
2.5°	9261.5	6768.8	5204.5	4210.4	3537.9	3084.7	2755.8	2441.5	2185.6	2002.9	1842.1
0°	9371.1	6768.8	5204.5	4210.4	3537.9	3084.7	2755.8	2441.5	2185.6	2002.9	1842.1



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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°	36.5	29.2	29.2	29.2	21.9	21.9	21.9	14.6	14.6	14.6	7.3
85°	65.8	65.8	58.5	51.2	51.2	43.9	36.5	36.5	29.2	21.9	21.9
82.5°	109.6	102.3	95.0	87.7	80.4	65.8	58.5	51.2	43.9	36.5	29.2
80°	153.5	146.2	131.6	117.0	109.6	95.0	87.7	73.1	58.5	51.2	43.9
77.5°	204.7	190.1	175.4	160.8	138.9	124.3	109.6	95.0	80.4	65.8	51.2
75°	270.5	241.2	219.3	197.4	175.4	153.5	131.6	117.0	95.0	80.4	58.5
72.5°	336.2	307.0	270.5	241.2	212.0	190.1	160.8	138.9	117.0	95.0	73.1
70°	402.0	365.5	328.9	292.4	255.8	219.3	190.1	160.8	131.6	109.6	87.7
67.5°	467.8	431.3	387.4	343.6	307.0	263.2	219.3	190.1	153.5	124.3	95.0
65°	548.2	497.1	445.9	402.0	350.9	307.0	255.8	212.0	175.4	138.9	109.6
62.5°	628.6	570.2	511.7	453.2	402.0	343.6	292.4	241.2	197.4	160.8	117.0
60°	709.0	643.3	577.5	511.7	445.9	387.4	328.9	270.5	219.3	175.4	131.6
57.5°	789.5	716.4	643.3	570.2	497.1	431.3	365.5	307.0	241.2	190.1	146.2
55°	862.6	789.5	709.0	628.6	548.2	467.8	402.0	336.2	270.5	204.7	153.5
52.5°	928.3	855.2	774.8	687.1	606.7	519.0	438.6	365.5	292.4	219.3	168.1
50°	1001.4	921.0	833.3	745.6	650.6	562.9	475.1	394.7	314.3	241.2	182.7
47.5°	1067.2	979.5	891.8	796.8	701.7	606.7	511.7	424.0	336.2	263.2	190.1
45°	1133.0	1045.3	950.3	847.9	752.9	650.6	548.2	445.9	365.5	277.8	204.7
42.5°	1191.5	1096.5	1001.4	906.4	796.8	694.4	584.8	475.1	387.4	299.7	212.0
40°	1250.0	1154.9	1052.6	950.3	840.6	731.0	621.3	511.7	409.3	314.3	226.6
37.5°	1308.4	1206.1	1103.8	994.1	884.5	767.5	650.6	533.6	431.3	328.9	241.2
35°	1352.3	1250.0	1147.6	1038.0	921.0	804.1	687.1	562.9	445.9	343.6	248.5
32.5°	1396.2	1301.1	1191.5	1074.5	957.6	840.6	716.4	592.1	467.8	365.5	263.2
30°	1440.0	1337.7	1228.0	1111.1	994.1	869.9	745.6	614.0	489.8	372.8	270.5
27.5°	1476.6	1374.2	1264.6	1147.6	1023.4	899.1	767.5	635.9	504.4	387.4	285.1
25°	1513.1	1410.8	1301.1	1176.9	1052.6	921.0	789.5	657.9	526.3	402.0	292.4
22.5°	1549.7	1432.7	1330.4	1206.1	1081.8	950.3	811.4	672.5	540.9	409.3	299.7
20°	1578.9	1462.0	1352.3	1228.0	1103.8	972.2	833.3	694.4	555.5	424.0	307.0
17.5°	1608.1	1491.2	1374.2	1257.3	1125.7	986.8	847.9	709.0	562.9	431.3	314.3
15°	1637.4	1513.1	1396.2	1271.9	1140.3	1008.7	862.6	723.7	577.5	438.6	321.6
12.5°	1659.3	1527.7	1410.8	1293.8	1154.9	1023.4	877.2	731.0	584.8	445.9	321.6
10°	1673.9	1542.4	1425.4	1308.4	1169.6	1030.7	884.5	745.6	592.1	453.2	328.9
7.5°	1688.6	1557.0	1432.7	1315.8	1176.9	1038.0	899.1	752.9	599.4	453.2	336.2
5°	1703.2	1564.3	1440.0	1323.1	1184.2	1052.6	906.4	760.2	606.7	460.5	336.2
2.5°	1710.5	1571.6	1447.3	1330.4	1191.5	1052.6	906.4	760.2	606.7	460.5	336.2
0°	1710.5	1571.6	1447.3	1330.4	1191.5	1052.6	906.4	760.2	606.7	460.5	336.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	7.3	7.3	0.0	0.0
85°	14.6	7.3	7.3	0.0
82.5°	21.9	14.6	7.3	0.0
80°	29.2	21.9	7.3	0.0
77.5°	36.5	21.9	14.6	0.0
75°	43.9	29.2	14.6	0.0
72.5°	51.2	36.5	14.6	0.0
70°	58.5	36.5	21.9	0.0
67.5°	65.8	43.9	21.9	0.0
65°	80.4	51.2	21.9	0.0
62.5°	87.7	51.2	29.2	0.0
60°	95.0	58.5	29.2	0.0
57.5°	102.3	65.8	29.2	0.0
55°	109.6	65.8	36.5	0.0
52.5°	117.0	73.1	36.5	0.0
50°	124.3	80.4	36.5	0.0
47.5°	131.6	87.7	36.5	0.0
45°	138.9	87.7	43.9	0.0
42.5°	153.5	95.0	43.9	0.0
40°	160.8	95.0	43.9	0.0
37.5°	168.1	102.3	43.9	0.0
35°	168.1	102.3	51.2	0.0
32.5°	175.4	109.6	51.2	0.0
30°	182.7	109.6	51.2	0.0
27.5°	190.1	117.0	51.2	0.0
25°	197.4	117.0	51.2	0.0
22.5°	197.4	117.0	51.2	0.0
20°	204.7	124.3	58.5	0.0
17.5°	204.7	124.3	58.5	0.0
15°	212.0	124.3	58.5	0.0
12.5°	212.0	131.6	58.5	0.0
10°	212.0	131.6	58.5	0.0
7.5°	219.3	131.6	58.5	0.0
5°	219.3	131.6	58.5	0.0
2.5°	219.3	131.6	58.5	0.0
0°	219.3	131.6	58.5	0.0

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