

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: P623240

Luminaire Tested: **EPH-VN-08-D-740-U-33**

Issue Date: 10/13/2022

Test Information

Test Method: LM-79-2019
Report Number: P623240
Test Lab: INNOVATION CENTER(G2)
Issue Date: 10/13/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-D-740-U-33
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 3 distribution lens
Light Source: (128) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

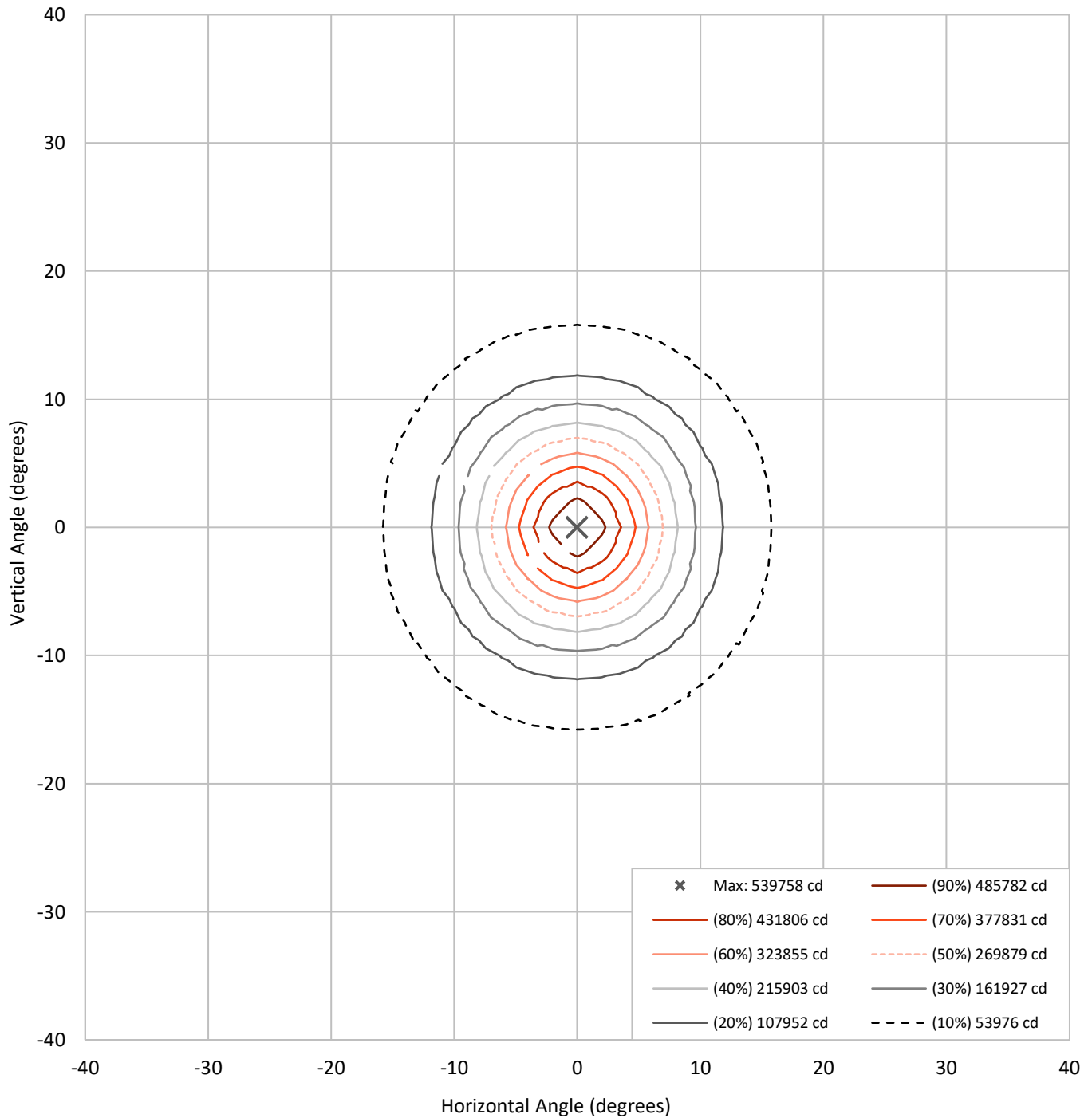
Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	58006.3 lumens	Max Intensity:	539758 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	118.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	13.8°H x 13.8°V	Field Angle (10%):	31.4°H x 31.4°V
Beam Lumens:	12684.3 lumens	Field Lumens:	29534.5 lumens
Beam Efficiency:	21.9%	Field Efficiency:	50.9%

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





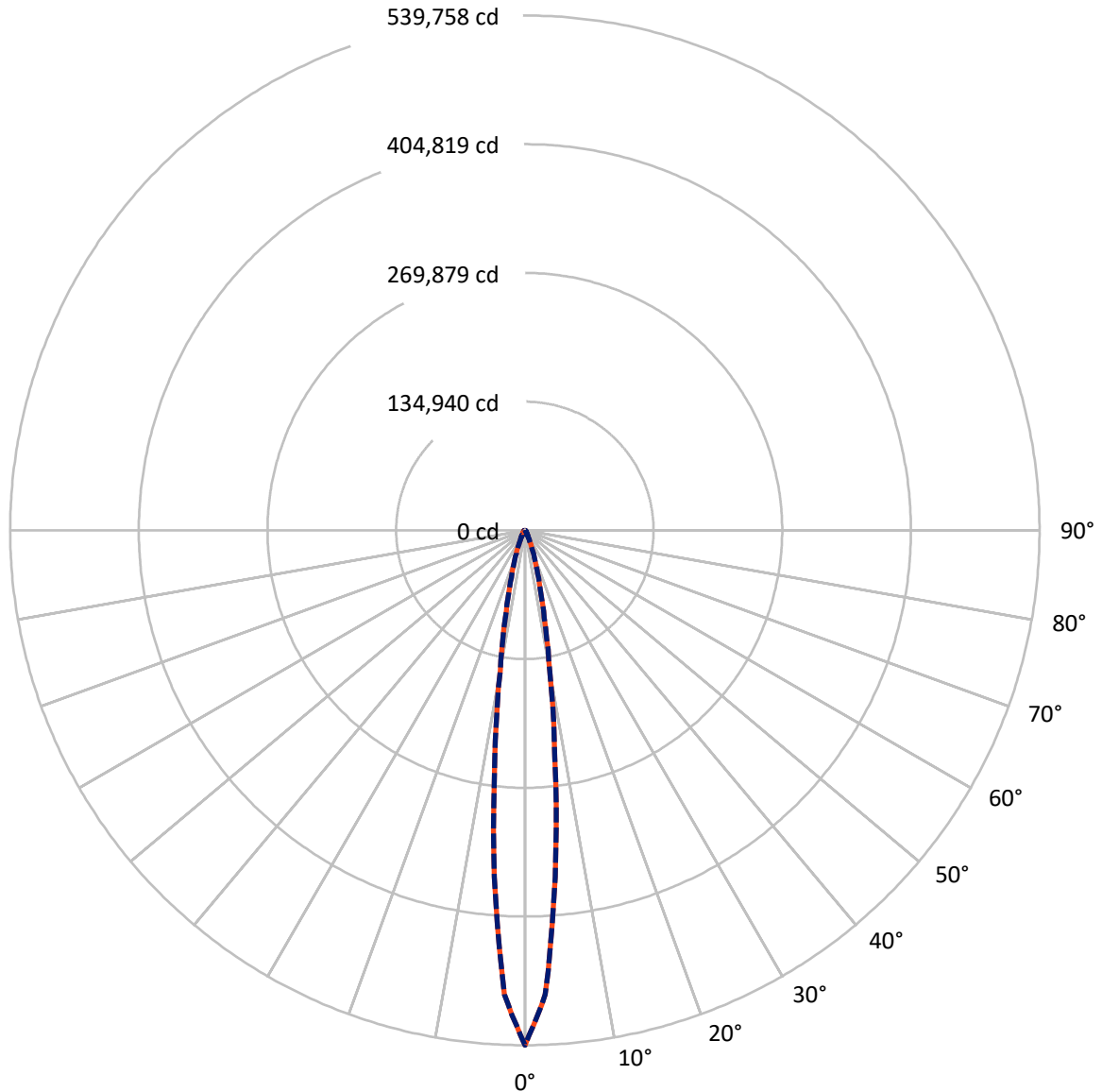
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Lumen Table

90	1.0	7.5		19.9		32.4		37.7		32.4		19.9		7.5		1.0
80	1.0	7.5		19.9		32.4		37.7		32.4		19.9		7.5		1.0
70	3.4	3.8	8.0	13.3	18.9	23.9	27.6	29.5	29.5	27.6	23.9	18.9	13.3	8.0	3.8	3.4
60		6.0	12.4	20.1	27.7	34.5	39.7	42.6	42.6	39.7	34.5	27.7	20.1	12.4	6.0	
50	6.2	8.1	16.3	25.8	35.6	45.8	55.3	61.4	61.4	55.3	45.8	35.6	25.8	16.3	8.1	6.2
40		9.9	19.5	30.8	45.1	64.7	88.4	108.6	108.6	88.4	64.7	45.1	30.8	19.5	9.9	
30	8.4	11.3	21.9	35.8	58.6	103.3	211.0	361.0	361.0	211.0	103.3	58.6	35.8	21.9	11.3	8.4
20		12.2	23.7	40.7	75.3	198.9	715.2	1776.0	1776.0	715.2	198.9	75.3	40.7	23.7	12.2	
10	9.2	12.7	24.7	43.8	89.9	331.3	1730.5	7598.4	7598.4	1730.5	331.3	89.9	43.8	24.7	12.7	9.2
0		12.7	24.7	43.8	89.9	331.3	1730.5	7598.4	7598.4	1730.5	331.3	89.9	43.8	24.7	12.7	
-10	8.4	12.2	23.7	40.7	75.3	198.9	715.2	1776.0	1776.0	715.2	198.9	75.3	40.7	23.7	12.2	8.4
-20		11.3	21.9	35.8	58.6	103.3	211.0	361.0	361.0	211.0	103.3	58.6	35.8	21.9	11.3	
-30	6.2	9.9	19.5	30.8	45.1	64.7	88.4	108.6	108.6	88.4	64.7	45.1	30.8	19.5	9.9	6.2
-40		8.1	16.3	25.8	35.6	45.8	55.3	61.4	61.4	55.3	45.8	35.6	25.8	16.3	8.1	
-50	3.4	6.0	12.4	20.1	27.7	34.5	39.7	42.6	42.6	39.7	34.5	27.7	20.1	12.4	6.0	3.4
-60		3.8	8.0	13.3	18.9	23.9	27.6	29.5	29.5	27.6	23.9	18.9	13.3	8.0	3.8	
-70	1.0	7.5		19.9		32.4		37.7		32.4		19.9		7.5		1.0
-80		7.5		19.9		32.4		37.7		32.4		19.9		7.5		
-90	1.0	7.5		19.9		32.4		37.7		32.4		19.9		7.5		1.0

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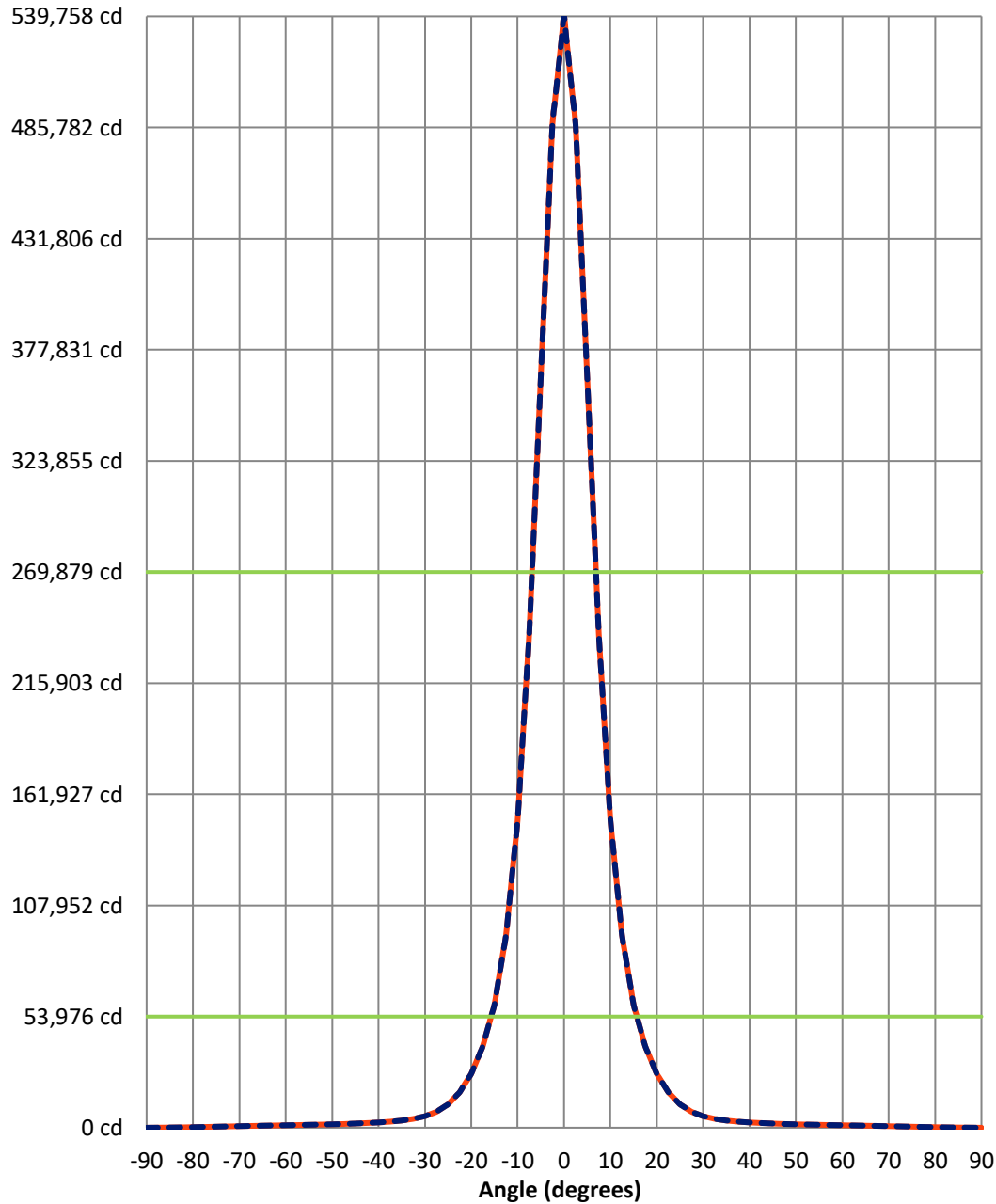
Luminous Intensity Polar Plot



— 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: 12684.3
 Efficiency: 21.9%

Field:
 H Angle: 31.4°
 V Angle: 31.4°
 Lumens: 29534.5
 Efficiency: 50.9%

Spill:
 Lumens: 28471.8
 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°	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3	42.2	42.2
85°	108.6	108.6	108.6	108.6	108.6	108.6	102.6	102.6	102.6	96.6	96.6
82.5°	181.0	181.0	181.0	181.0	175.0	175.0	175.0	169.0	169.0	162.9	162.9
80°	277.6	277.6	277.6	277.6	271.6	265.5	265.5	259.5	253.5	247.4	241.4
77.5°	380.2	380.2	380.2	374.1	374.1	368.1	362.1	356.0	350.0	337.9	331.9
75°	500.9	500.9	500.9	494.8	488.8	482.8	476.7	464.7	458.6	446.6	434.5
72.5°	627.6	627.6	627.6	621.6	615.5	603.5	597.4	585.4	573.3	555.2	543.1
70°	748.3	748.3	748.3	742.3	730.2	724.2	712.1	700.0	687.9	669.8	651.7
67.5°	869.0	869.0	869.0	856.9	850.9	844.8	832.8	814.7	802.6	784.5	760.4
65°	983.6	983.6	977.6	971.6	965.5	953.5	941.4	929.3	911.2	893.1	869.0
62.5°	1098.3	1098.3	1092.3	1086.2	1080.2	1068.1	1050.0	1037.9	1013.8	995.7	971.6
60°	1194.8	1194.8	1188.8	1182.8	1176.7	1164.7	1152.6	1134.5	1116.4	1098.3	1074.2
57.5°	1297.4	1297.4	1291.4	1285.4	1273.3	1261.2	1249.2	1231.1	1206.9	1182.8	1164.7
55°	1412.1	1412.1	1406.1	1394.0	1381.9	1369.9	1351.7	1327.6	1303.5	1279.3	1249.2
52.5°	1520.7	1520.7	1514.7	1502.6	1490.5	1478.5	1454.3	1436.2	1406.1	1375.9	1339.7
50°	1653.5	1653.5	1641.4	1629.3	1617.3	1593.1	1569.0	1538.8	1508.6	1472.4	1442.3
47.5°	1804.3	1804.3	1792.3	1780.2	1756.1	1731.9	1695.7	1659.5	1623.3	1581.1	1532.8
45°	2015.6	2015.6	1997.4	1973.3	1943.1	1900.9	1852.6	1804.3	1750.0	1701.8	1647.4
42.5°	2275.0	2275.0	2250.9	2220.7	2178.5	2124.2	2057.8	1991.4	1919.0	1840.6	1768.1
40°	2546.6	2546.6	2516.4	2486.3	2438.0	2371.6	2299.2	2214.7	2124.2	2021.6	1931.1
37.5°	2920.7	2920.7	2878.5	2824.2	2751.8	2661.3	2552.6	2456.1	2353.5	2238.8	2118.1
35°	3475.9	3475.9	3409.5	3319.0	3204.4	3053.5	2890.6	2751.8	2594.9	2456.1	2323.3
32.5°	4296.6	4296.6	4182.0	4049.2	3856.1	3614.7	3379.4	3156.1	2920.7	2721.6	2528.5
30°	5588.0	5588.0	5394.9	5153.5	4827.7	4411.3	4061.3	3699.2	3355.2	3065.6	2800.1
27.5°	7736.3	7645.8	7380.3	6939.8	6336.3	5588.0	5051.0	4441.5	3958.7	3488.0	3144.0
25°	11357.1	11188.1	10687.3	9860.5	8744.1	7507.0	6529.4	5491.5	4755.3	4085.4	3548.3
22.5°	17240.8	16933.1	16015.8	14519.2	12497.6	10518.3	8714.0	7114.8	5799.2	4863.9	4085.4
20°	26196.2	25659.1	24078.0	21519.4	18067.6	15008.0	11791.6	9420.0	7313.9	5799.2	4755.3
17.5°	39653.3	38724.0	36002.4	31615.2	26196.2	21211.6	16311.5	12407.1	9420.0	7114.8	5491.5
15°	59784.7	58155.4	53400.1	45838.8	37155.0	29249.7	22291.8	16311.5	11791.6	8714.0	6529.4
12.5°	93584.4	90289.6	80767.0	65915.8	52072.5	39080.0	29249.7	21211.6	15008.0	10518.3	7507.0
10°	149428.6	142621.5	123316.9	94097.4	71872.0	52072.5	37155.0	26196.2	18067.6	12497.6	8744.1
7.5°	239947.4	225337.7	185418.9	136218.8	94097.4	65915.8	45838.8	31615.2	21519.4	14519.2	9860.5
5°	364797.1	335396.6	261593.5	185418.9	123316.9	80767.0	53400.1	36002.4	24078.0	16015.8	10687.3
2.5°	487202.8	436530.3	335396.6	225337.7	142621.5	90289.6	58155.4	38724.0	25659.1	16933.1	11188.1
0°	539758.0	487202.8	364797.1	239947.4	149428.6	93584.4	59784.7	39653.3	26196.2	17240.8	11357.1



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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°	42.2	42.2	42.2	42.2	36.2	36.2	36.2	36.2	30.2	30.2	30.2
85°	96.6	90.5	90.5	84.5	84.5	78.4	78.4	72.4	72.4	66.4	60.3
82.5°	156.9	150.9	144.8	138.8	138.8	132.8	126.7	114.7	108.6	102.6	96.6
80°	235.3	223.3	217.2	205.2	199.1	187.1	175.0	169.0	156.9	150.9	138.8
77.5°	319.8	307.8	301.7	283.6	271.6	259.5	247.4	229.3	217.2	199.1	181.0
75°	416.4	404.3	386.2	368.1	356.0	337.9	319.8	301.7	277.6	259.5	241.4
72.5°	525.0	506.9	488.8	464.7	440.5	422.4	392.2	368.1	350.0	325.9	301.7
70°	633.6	615.5	591.4	567.3	537.1	512.9	482.8	452.6	422.4	392.2	362.1
67.5°	742.3	718.1	694.0	663.8	633.6	603.5	573.3	537.1	500.9	464.7	428.5
65°	844.8	820.7	790.5	760.4	730.2	694.0	657.8	621.6	579.3	537.1	500.9
62.5°	947.4	917.3	887.1	856.9	820.7	784.5	748.3	700.0	657.8	615.5	567.3
60°	1044.0	1013.8	983.6	947.4	911.2	869.0	826.7	784.5	736.2	687.9	639.7
57.5°	1134.5	1104.3	1074.2	1031.9	995.7	953.5	905.2	862.9	808.6	760.4	706.0
55°	1219.0	1188.8	1152.6	1116.4	1080.2	1031.9	983.6	935.4	881.1	826.7	766.4
52.5°	1303.5	1267.3	1231.1	1194.8	1152.6	1110.4	1062.1	1007.8	953.5	893.1	832.8
50°	1400.0	1357.8	1309.5	1267.3	1219.0	1176.7	1128.5	1074.2	1019.8	953.5	893.1
47.5°	1490.5	1448.3	1400.0	1345.7	1297.4	1243.1	1188.8	1140.5	1080.2	1019.8	953.5
45°	1593.1	1532.8	1484.5	1430.2	1369.9	1309.5	1255.2	1194.8	1140.5	1074.2	1007.8
42.5°	1701.8	1635.4	1569.0	1502.6	1448.3	1381.9	1315.5	1255.2	1188.8	1128.5	1062.1
40°	1828.5	1750.0	1665.5	1593.1	1520.7	1454.3	1381.9	1309.5	1243.1	1176.7	1110.4
37.5°	1991.4	1882.8	1774.2	1683.7	1599.2	1520.7	1448.3	1369.9	1297.4	1219.0	1152.6
35°	2184.5	2033.7	1906.9	1780.2	1683.7	1593.1	1502.6	1430.2	1345.7	1267.3	1194.8
32.5°	2377.6	2214.7	2051.8	1906.9	1774.2	1665.5	1569.0	1484.5	1400.0	1309.5	1231.1
30°	2576.8	2395.7	2214.7	2033.7	1882.8	1750.0	1635.4	1532.8	1448.3	1357.8	1267.3
27.5°	2830.2	2576.8	2377.6	2184.5	1991.4	1828.5	1701.8	1593.1	1490.5	1400.0	1303.5
25°	3144.0	2800.1	2528.5	2323.3	2118.1	1931.1	1768.1	1647.4	1532.8	1442.3	1339.7
22.5°	3488.0	3065.6	2721.6	2456.1	2238.8	2021.6	1840.6	1701.8	1581.1	1472.4	1375.9
20°	3958.7	3355.2	2920.7	2594.9	2353.5	2124.2	1919.0	1750.0	1623.3	1508.6	1406.1
17.5°	4441.5	3699.2	3156.1	2751.8	2456.1	2214.7	1991.4	1804.3	1659.5	1538.8	1436.2
15°	5051.0	4061.3	3379.4	2890.6	2552.6	2299.2	2057.8	1852.6	1695.7	1569.0	1454.3
12.5°	5588.0	4411.3	3614.7	3053.5	2661.3	2371.6	2124.2	1900.9	1731.9	1593.1	1478.5
10°	6336.3	4827.7	3856.1	3204.4	2751.8	2438.0	2178.5	1943.1	1756.1	1617.3	1490.5
7.5°	6939.8	5153.5	4049.2	3319.0	2824.2	2486.3	2220.7	1973.3	1780.2	1629.3	1502.6
5°	7380.3	5394.9	4182.0	3409.5	2878.5	2516.4	2250.9	1997.4	1792.3	1641.4	1514.7
2.5°	7645.8	5588.0	4296.6	3475.9	2920.7	2546.6	2275.0	2015.6	1804.3	1653.5	1520.7
0°	7736.3	5588.0	4296.6	3475.9	2920.7	2546.6	2275.0	2015.6	1804.3	1653.5	1520.7



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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°	30.2	24.1	24.1	24.1	18.1	18.1	18.1	12.1	12.1	12.1	6.0
85°	54.3	54.3	48.3	42.2	42.2	36.2	30.2	30.2	24.1	18.1	18.1
82.5°	90.5	84.5	78.4	72.4	66.4	54.3	48.3	42.2	36.2	30.2	24.1
80°	126.7	120.7	108.6	96.6	90.5	78.4	72.4	60.3	48.3	42.2	36.2
77.5°	169.0	156.9	144.8	132.8	114.7	102.6	90.5	78.4	66.4	54.3	42.2
75°	223.3	199.1	181.0	162.9	144.8	126.7	108.6	96.6	78.4	66.4	48.3
72.5°	277.6	253.5	223.3	199.1	175.0	156.9	132.8	114.7	96.6	78.4	60.3
70°	331.9	301.7	271.6	241.4	211.2	181.0	156.9	132.8	108.6	90.5	72.4
67.5°	386.2	356.0	319.8	283.6	253.5	217.2	181.0	156.9	126.7	102.6	78.4
65°	452.6	410.4	368.1	331.9	289.7	253.5	211.2	175.0	144.8	114.7	90.5
62.5°	519.0	470.7	422.4	374.1	331.9	283.6	241.4	199.1	162.9	132.8	96.6
60°	585.4	531.0	476.7	422.4	368.1	319.8	271.6	223.3	181.0	144.8	108.6
57.5°	651.7	591.4	531.0	470.7	410.4	356.0	301.7	253.5	199.1	156.9	120.7
55°	712.1	651.7	585.4	519.0	452.6	386.2	331.9	277.6	223.3	169.0	126.7
52.5°	766.4	706.0	639.7	567.3	500.9	428.5	362.1	301.7	241.4	181.0	138.8
50°	826.7	760.4	687.9	615.5	537.1	464.7	392.2	325.9	259.5	199.1	150.9
47.5°	881.1	808.6	736.2	657.8	579.3	500.9	422.4	350.0	277.6	217.2	156.9
45°	935.4	862.9	784.5	700.0	621.6	537.1	452.6	368.1	301.7	229.3	169.0
42.5°	983.6	905.2	826.7	748.3	657.8	573.3	482.8	392.2	319.8	247.4	175.0
40°	1031.9	953.5	869.0	784.5	694.0	603.5	512.9	422.4	337.9	259.5	187.1
37.5°	1080.2	995.7	911.2	820.7	730.2	633.6	537.1	440.5	356.0	271.6	199.1
35°	1116.4	1031.9	947.4	856.9	760.4	663.8	567.3	464.7	368.1	283.6	205.2
32.5°	1152.6	1074.2	983.6	887.1	790.5	694.0	591.4	488.8	386.2	301.7	217.2
30°	1188.8	1104.3	1013.8	917.3	820.7	718.1	615.5	506.9	404.3	307.8	223.3
27.5°	1219.0	1134.5	1044.0	947.4	844.8	742.3	633.6	525.0	416.4	319.8	235.3
25°	1249.2	1164.7	1074.2	971.6	869.0	760.4	651.7	543.1	434.5	331.9	241.4
22.5°	1279.3	1182.8	1098.3	995.7	893.1	784.5	669.8	555.2	446.6	337.9	247.4
20°	1303.5	1206.9	1116.4	1013.8	911.2	802.6	687.9	573.3	458.6	350.0	253.5
17.5°	1327.6	1231.1	1134.5	1037.9	929.3	814.7	700.0	585.4	464.7	356.0	259.5
15°	1351.7	1249.2	1152.6	1050.0	941.4	832.8	712.1	597.4	476.7	362.1	265.5
12.5°	1369.9	1261.2	1164.7	1068.1	953.5	844.8	724.2	603.5	482.8	368.1	265.5
10°	1381.9	1273.3	1176.7	1080.2	965.5	850.9	730.2	615.5	488.8	374.1	271.6
7.5°	1394.0	1285.4	1182.8	1086.2	971.6	856.9	742.3	621.6	494.8	374.1	277.6
5°	1406.1	1291.4	1188.8	1092.3	977.6	869.0	748.3	627.6	500.9	380.2	277.6
2.5°	1412.1	1297.4	1194.8	1098.3	983.6	869.0	748.3	627.6	500.9	380.2	277.6
0°	1412.1	1297.4	1194.8	1098.3	983.6	869.0	748.3	627.6	500.9	380.2	277.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	6.0	6.0	0.0	0.0
85°	12.1	6.0	6.0	0.0
82.5°	18.1	12.1	6.0	0.0
80°	24.1	18.1	6.0	0.0
77.5°	30.2	18.1	12.1	0.0
75°	36.2	24.1	12.1	0.0
72.5°	42.2	30.2	12.1	0.0
70°	48.3	30.2	18.1	0.0
67.5°	54.3	36.2	18.1	0.0
65°	66.4	42.2	18.1	0.0
62.5°	72.4	42.2	24.1	0.0
60°	78.4	48.3	24.1	0.0
57.5°	84.5	54.3	24.1	0.0
55°	90.5	54.3	30.2	0.0
52.5°	96.6	60.3	30.2	0.0
50°	102.6	66.4	30.2	0.0
47.5°	108.6	72.4	30.2	0.0
45°	114.7	72.4	36.2	0.0
42.5°	126.7	78.4	36.2	0.0
40°	132.8	78.4	36.2	0.0
37.5°	138.8	84.5	36.2	0.0
35°	138.8	84.5	42.2	0.0
32.5°	144.8	90.5	42.2	0.0
30°	150.9	90.5	42.2	0.0
27.5°	156.9	96.6	42.2	0.0
25°	162.9	96.6	42.2	0.0
22.5°	162.9	96.6	42.2	0.0
20°	169.0	102.6	48.3	0.0
17.5°	169.0	102.6	48.3	0.0
15°	175.0	102.6	48.3	0.0
12.5°	175.0	108.6	48.3	0.0
10°	175.0	108.6	48.3	0.0
7.5°	181.0	108.6	48.3	0.0
5°	181.0	108.6	48.3	0.0
2.5°	181.0	108.6	48.3	0.0
0°	181.0	108.6	48.3	0.0

(END OF REPORT)