

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: P623246

Luminaire Tested: **EPH-VN-08-D-750-U-33**

Issue Date: 10/13/2022

Test Information

Test Method: LM-79-2019
Report Number: P623246
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-750-U-33
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 3 distribution lens
Light Source: (128) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	59334.6 lumens	Max Intensity:	552118.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	121.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

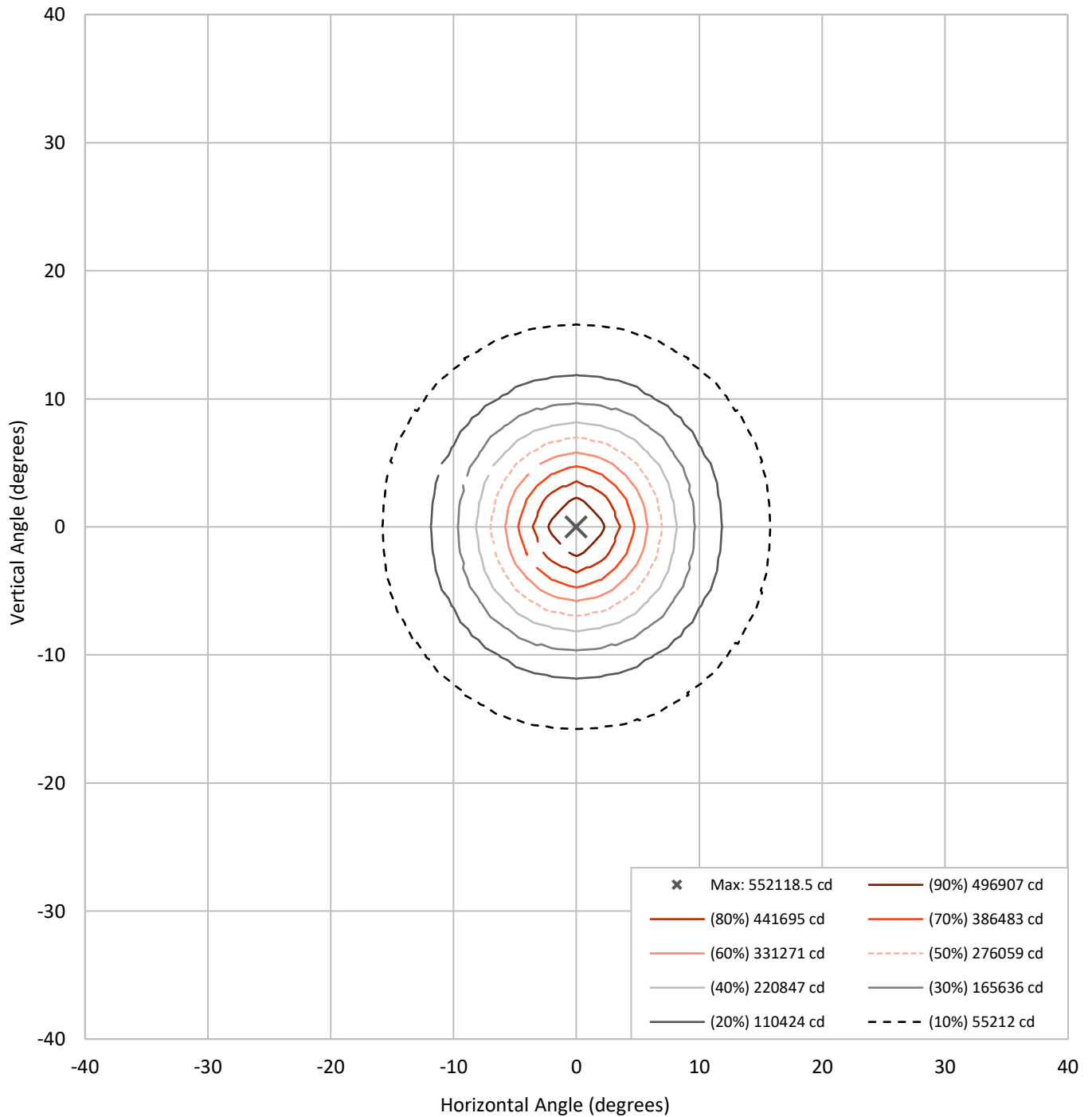
Beam Angle (50%):	13.8°H x 13.8°V	Field Angle (10%):	31.4°H x 31.4°V
Beam Lumens:	12974.8 lumens	Field Lumens:	30210.9 lumens
Beam Efficiency:	21.9%	Field Efficiency:	50.9%

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





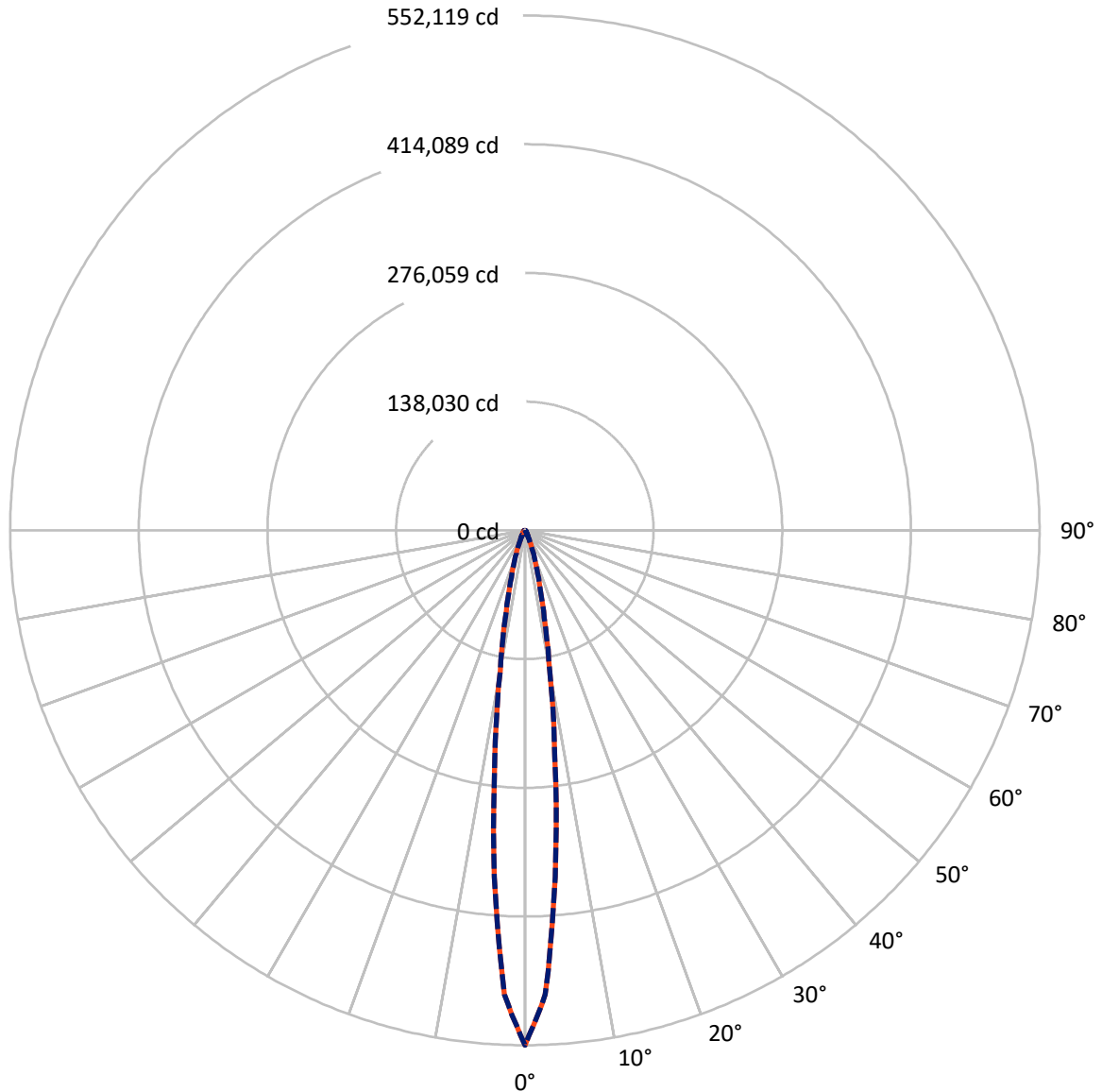
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Lumen Table

90	1.0	7.6	20.4	33.2	38.5	33.2	20.4	7.6	1.0										
80																			
70																			
60	3.5	3.9	8.2	13.7	19.4	24.4	28.2	30.2	30.2	28.2	24.4	19.4	13.7	8.2	3.9				3.5
50		6.1	12.7	20.5	28.4	35.3	40.6	43.5	43.5	40.6	35.3	28.4	20.5	12.7	6.1				
40	6.4	8.3	16.7	26.3	36.5	46.8	56.6	62.8	62.8	56.6	46.8	36.5	26.3	16.7	8.3				6.4
30		10.1	19.9	31.5	46.2	66.1	90.4	111.0	111.0	90.4	66.1	46.2	31.5	19.9	10.1				
20	8.5	11.5	22.4	36.7	59.9	105.7	215.8	369.2	369.2	215.8	105.7	59.9	36.7	22.4	11.5				8.5
10		12.5	24.3	41.6	77.0	203.4	731.6	1816.7	1816.7	731.6	203.4	77.0	41.6	24.3	12.5				
0	9.4	13.0	25.2	44.8	92.0	338.9	1770.1	7772.4	7772.4	1770.1	338.9	92.0	44.8	25.2	13.0				9.4
-10		13.0	25.2	44.8	92.0	338.9	1770.1	7772.4	7772.4	1770.1	338.9	92.0	44.8	25.2	13.0				
-20	8.5	12.5	24.3	41.6	77.0	203.4	731.6	1816.7	1816.7	731.6	203.4	77.0	41.6	24.3	12.5				8.5
-30		11.5	22.4	36.7	59.9	105.7	215.8	369.2	369.2	215.8	105.7	59.9	36.7	22.4	11.5				
-40	6.4	10.1	19.9	31.5	46.2	66.1	90.4	111.0	111.0	90.4	66.1	46.2	31.5	19.9	10.1				6.4
-50		8.3	16.7	26.3	36.5	46.8	56.6	62.8	62.8	56.6	46.8	36.5	26.3	16.7	8.3				
-60	3.5	6.1	12.7	20.5	28.4	35.3	40.6	43.5	43.5	40.6	35.3	28.4	20.5	12.7	6.1				3.5
-70		3.9	8.2	13.7	19.4	24.4	28.2	30.2	30.2	28.2	24.4	19.4	13.7	8.2	3.9				
-80	1.0	7.6	20.4	33.2	38.5	33.2	20.4	7.6	1.0										
-90																			

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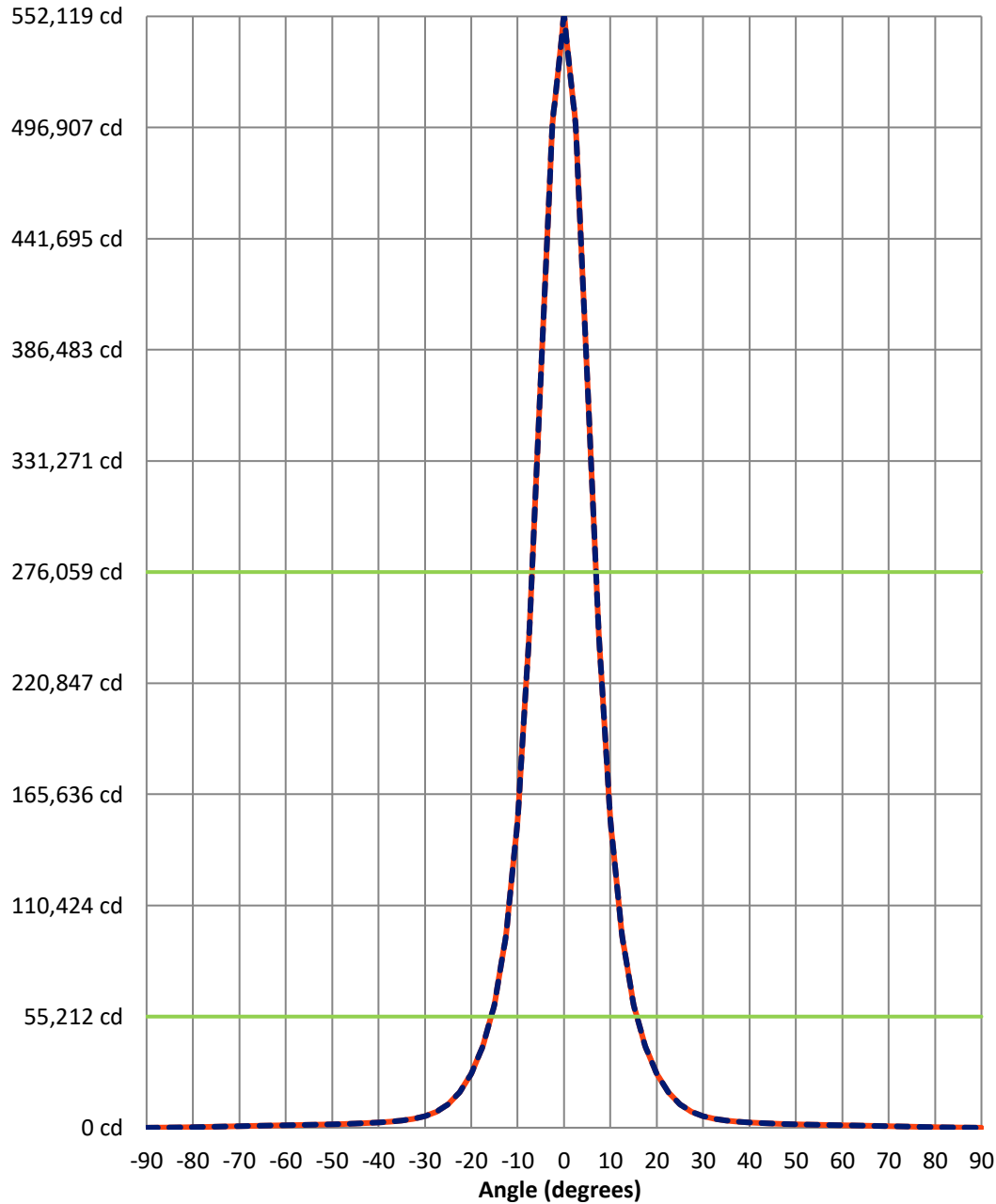
Luminous Intensity Polar Plot



— 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: 12974.8
Efficiency: 21.9%

Field:
H Angle: 31.4°
V Angle: 31.4°
Lumens: 30210.9
Efficiency: 50.9%

Spill:
Lumens: 29123.8
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°	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	49.4	43.2	43.2
85°	111.1	111.1	111.1	111.1	111.1	111.1	104.9	104.9	104.9	98.8	98.8
82.5°	185.2	185.2	185.2	185.2	179.0	179.0	179.0	172.8	172.8	166.7	166.7
80°	283.9	283.9	283.9	283.9	277.8	271.6	271.6	265.4	259.3	253.1	246.9
77.5°	388.9	388.9	388.9	382.7	382.7	376.5	370.4	364.2	358.0	345.7	339.5
75°	512.3	512.3	512.3	506.2	500.0	493.8	487.6	475.3	469.1	456.8	444.4
72.5°	642.0	642.0	642.0	635.8	629.6	617.3	611.1	598.8	586.4	567.9	555.6
70°	765.4	765.4	765.4	759.3	746.9	740.7	728.4	716.0	703.7	685.2	666.7
67.5°	888.9	888.9	888.9	876.5	870.4	864.2	851.8	833.3	821.0	802.5	777.8
65°	1006.2	1006.2	1000.0	993.8	987.6	975.3	963.0	950.6	932.1	913.6	888.9
62.5°	1123.4	1123.4	1117.3	1111.1	1104.9	1092.6	1074.1	1061.7	1037.0	1018.5	993.8
60°	1222.2	1222.2	1216.0	1209.9	1203.7	1191.3	1179.0	1160.5	1142.0	1123.4	1098.8
57.5°	1327.1	1327.1	1321.0	1314.8	1302.5	1290.1	1277.8	1259.2	1234.6	1209.9	1191.3
55°	1444.4	1444.4	1438.3	1425.9	1413.6	1401.2	1382.7	1358.0	1333.3	1308.6	1277.8
52.5°	1555.5	1555.5	1549.4	1537.0	1524.7	1512.3	1487.6	1469.1	1438.3	1407.4	1370.4
50°	1691.3	1691.3	1679.0	1666.7	1654.3	1629.6	1604.9	1574.1	1543.2	1506.2	1475.3
47.5°	1845.7	1845.7	1833.3	1821.0	1796.3	1771.6	1734.6	1697.5	1660.5	1617.3	1567.9
45°	2061.7	2061.7	2043.2	2018.5	1987.6	1944.4	1895.0	1845.7	1790.1	1740.7	1685.2
42.5°	2327.1	2327.1	2302.4	2271.6	2228.4	2172.8	2104.9	2037.0	1962.9	1882.7	1808.6
40°	2604.9	2604.9	2574.1	2543.2	2493.8	2425.9	2351.8	2265.4	2172.8	2067.9	1975.3
37.5°	2987.6	2987.6	2944.4	2888.9	2814.8	2722.2	2611.1	2512.3	2407.4	2290.1	2166.6
35°	3555.5	3555.5	3487.6	3395.0	3277.7	3123.4	2956.8	2814.8	2654.3	2512.3	2376.5
32.5°	4395.0	4395.0	4277.7	4141.9	3944.4	3697.5	3456.8	3228.4	2987.6	2783.9	2586.4
30°	5716.0	5716.0	5518.5	5271.6	4938.2	4512.3	4154.3	3783.9	3432.1	3135.8	2864.2
27.5°	7913.5	7820.9	7549.3	7098.7	6481.4	5716.0	5166.6	4543.2	4049.3	3567.9	3216.0
25°	11617.2	11444.3	10932.0	10086.3	8944.4	7678.9	6679.0	5617.2	4864.2	4179.0	3629.6
22.5°	17635.6	17320.8	16382.6	14851.7	12783.8	10759.2	8913.5	7277.7	5932.0	4975.3	4179.0
20°	26796.1	26246.7	24629.4	22012.1	18481.3	15351.7	12061.6	9635.7	7481.4	5932.0	4864.2
17.5°	40561.4	39610.8	36826.8	32339.2	26796.1	21697.3	16685.0	12691.2	9635.7	7277.7	5617.2
15°	61153.8	59487.1	54623.0	46888.5	38005.8	29919.5	22802.3	16685.0	12061.6	8913.5	6679.0
12.5°	95727.5	92357.2	82616.5	67425.3	53265.0	39974.9	29919.5	21697.3	15351.7	10759.2	7678.9
10°	152850.5	145887.6	126140.8	96252.2	73517.9	53265.0	38005.8	26796.1	18481.3	12783.8	8944.4
7.5°	245442.2	230497.9	189665.0	139338.3	96252.2	67425.3	46888.5	32339.2	22012.1	14851.7	10086.3
5°	373151.0	343077.2	267584.0	189665.0	126140.8	82616.5	54623.0	36826.8	24629.4	16382.6	10932.0
2.5°	498359.7	446526.8	343077.2	230497.9	145887.6	92357.2	59487.1	39610.8	26246.7	17320.8	11444.3
0°	552118.5	498359.7	373151.0	245442.2	152850.5	95727.5	61153.8	40561.4	26796.1	17635.6	11617.2



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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°	43.2	43.2	43.2	43.2	37.0	37.0	37.0	37.0	30.9	30.9	30.9
85°	98.8	92.6	92.6	86.4	86.4	80.2	80.2	74.1	74.1	67.9	61.7
82.5°	160.5	154.3	148.1	142.0	142.0	135.8	129.6	117.3	111.1	104.9	98.8
80°	240.7	228.4	222.2	209.9	203.7	191.4	179.0	172.8	160.5	154.3	142.0
77.5°	327.2	314.8	308.6	290.1	277.8	265.4	253.1	234.6	222.2	203.7	185.2
75°	425.9	413.6	395.1	376.5	364.2	345.7	327.2	308.6	283.9	265.4	246.9
72.5°	537.0	518.5	500.0	475.3	450.6	432.1	401.2	376.5	358.0	333.3	308.6
70°	648.1	629.6	604.9	580.2	549.4	524.7	493.8	463.0	432.1	401.2	370.4
67.5°	759.3	734.6	709.9	679.0	648.1	617.3	586.4	549.4	512.3	475.3	438.3
65°	864.2	839.5	808.6	777.8	746.9	709.9	672.8	635.8	592.6	549.4	512.3
62.5°	969.1	938.3	907.4	876.5	839.5	802.5	765.4	716.0	672.8	629.6	580.2
60°	1067.9	1037.0	1006.2	969.1	932.1	888.9	845.7	802.5	753.1	703.7	654.3
57.5°	1160.5	1129.6	1098.8	1055.5	1018.5	975.3	925.9	882.7	827.2	777.8	722.2
55°	1246.9	1216.0	1179.0	1142.0	1104.9	1055.5	1006.2	956.8	901.2	845.7	783.9
52.5°	1333.3	1296.3	1259.2	1222.2	1179.0	1135.8	1086.4	1030.9	975.3	913.6	851.8
50°	1432.1	1388.9	1339.5	1296.3	1246.9	1203.7	1154.3	1098.8	1043.2	975.3	913.6
47.5°	1524.7	1481.5	1432.1	1376.5	1327.1	1271.6	1216.0	1166.7	1104.9	1043.2	975.3
45°	1629.6	1567.9	1518.5	1462.9	1401.2	1339.5	1283.9	1222.2	1166.7	1098.8	1030.9
42.5°	1740.7	1672.8	1604.9	1537.0	1481.5	1413.6	1345.7	1283.9	1216.0	1154.3	1086.4
40°	1870.4	1790.1	1703.7	1629.6	1555.5	1487.6	1413.6	1339.5	1271.6	1203.7	1135.8
37.5°	2037.0	1925.9	1814.8	1722.2	1635.8	1555.5	1481.5	1401.2	1327.1	1246.9	1179.0
35°	2234.5	2080.2	1950.6	1821.0	1722.2	1629.6	1537.0	1462.9	1376.5	1296.3	1222.2
32.5°	2432.1	2265.4	2098.7	1950.6	1814.8	1703.7	1604.9	1518.5	1432.1	1339.5	1259.2
30°	2635.8	2450.6	2265.4	2080.2	1925.9	1790.1	1672.8	1567.9	1481.5	1388.9	1296.3
27.5°	2895.0	2635.8	2432.1	2234.5	2037.0	1870.4	1740.7	1629.6	1524.7	1432.1	1333.3
25°	3216.0	2864.2	2586.4	2376.5	2166.6	1975.3	1808.6	1685.2	1567.9	1475.3	1370.4
22.5°	3567.9	3135.8	2783.9	2512.3	2290.1	2067.9	1882.7	1740.7	1617.3	1506.2	1407.4
20°	4049.3	3432.1	2987.6	2654.3	2407.4	2172.8	1962.9	1790.1	1660.5	1543.2	1438.3
17.5°	4543.2	3783.9	3228.4	2814.8	2512.3	2265.4	2037.0	1845.7	1697.5	1574.1	1469.1
15°	5166.6	4154.3	3456.8	2956.8	2611.1	2351.8	2104.9	1895.0	1734.6	1604.9	1487.6
12.5°	5716.0	4512.3	3697.5	3123.4	2722.2	2425.9	2172.8	1944.4	1771.6	1629.6	1512.3
10°	6481.4	4938.2	3944.4	3277.7	2814.8	2493.8	2228.4	1987.6	1796.3	1654.3	1524.7
7.5°	7098.7	5271.6	4141.9	3395.0	2888.9	2543.2	2271.6	2018.5	1821.0	1666.7	1537.0
5°	7549.3	5518.5	4277.7	3487.6	2944.4	2574.1	2302.4	2043.2	1833.3	1679.0	1549.4
2.5°	7820.9	5716.0	4395.0	3555.5	2987.6	2604.9	2327.1	2061.7	1845.7	1691.3	1555.5
0°	7913.5	5716.0	4395.0	3555.5	2987.6	2604.9	2327.1	2061.7	1845.7	1691.3	1555.5



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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°	30.9	24.7	24.7	24.7	18.5	18.5	18.5	12.3	12.3	12.3	6.2
85°	55.6	55.6	49.4	43.2	43.2	37.0	30.9	30.9	24.7	18.5	18.5
82.5°	92.6	86.4	80.2	74.1	67.9	55.6	49.4	43.2	37.0	30.9	24.7
80°	129.6	123.5	111.1	98.8	92.6	80.2	74.1	61.7	49.4	43.2	37.0
77.5°	172.8	160.5	148.1	135.8	117.3	104.9	92.6	80.2	67.9	55.6	43.2
75°	228.4	203.7	185.2	166.7	148.1	129.6	111.1	98.8	80.2	67.9	49.4
72.5°	283.9	259.3	228.4	203.7	179.0	160.5	135.8	117.3	98.8	80.2	61.7
70°	339.5	308.6	277.8	246.9	216.0	185.2	160.5	135.8	111.1	92.6	74.1
67.5°	395.1	364.2	327.2	290.1	259.3	222.2	185.2	160.5	129.6	104.9	80.2
65°	463.0	419.7	376.5	339.5	296.3	259.3	216.0	179.0	148.1	117.3	92.6
62.5°	530.9	481.5	432.1	382.7	339.5	290.1	246.9	203.7	166.7	135.8	98.8
60°	598.8	543.2	487.6	432.1	376.5	327.2	277.8	228.4	185.2	148.1	111.1
57.5°	666.7	604.9	543.2	481.5	419.7	364.2	308.6	259.3	203.7	160.5	123.5
55°	728.4	666.7	598.8	530.9	463.0	395.1	339.5	283.9	228.4	172.8	129.6
52.5°	783.9	722.2	654.3	580.2	512.3	438.3	370.4	308.6	246.9	185.2	142.0
50°	845.7	777.8	703.7	629.6	549.4	475.3	401.2	333.3	265.4	203.7	154.3
47.5°	901.2	827.2	753.1	672.8	592.6	512.3	432.1	358.0	283.9	222.2	160.5
45°	956.8	882.7	802.5	716.0	635.8	549.4	463.0	376.5	308.6	234.6	172.8
42.5°	1006.2	925.9	845.7	765.4	672.8	586.4	493.8	401.2	327.2	253.1	179.0
40°	1055.5	975.3	888.9	802.5	709.9	617.3	524.7	432.1	345.7	265.4	191.4
37.5°	1104.9	1018.5	932.1	839.5	746.9	648.1	549.4	450.6	364.2	277.8	203.7
35°	1142.0	1055.5	969.1	876.5	777.8	679.0	580.2	475.3	376.5	290.1	209.9
32.5°	1179.0	1098.8	1006.2	907.4	808.6	709.9	604.9	500.0	395.1	308.6	222.2
30°	1216.0	1129.6	1037.0	938.3	839.5	734.6	629.6	518.5	413.6	314.8	228.4
27.5°	1246.9	1160.5	1067.9	969.1	864.2	759.3	648.1	537.0	425.9	327.2	240.7
25°	1277.8	1191.3	1098.8	993.8	888.9	777.8	666.7	555.6	444.4	339.5	246.9
22.5°	1308.6	1209.9	1123.4	1018.5	913.6	802.5	685.2	567.9	456.8	345.7	253.1
20°	1333.3	1234.6	1142.0	1037.0	932.1	821.0	703.7	586.4	469.1	358.0	259.3
17.5°	1358.0	1259.2	1160.5	1061.7	950.6	833.3	716.0	598.8	475.3	364.2	265.4
15°	1382.7	1277.8	1179.0	1074.1	963.0	851.8	728.4	611.1	487.6	370.4	271.6
12.5°	1401.2	1290.1	1191.3	1092.6	975.3	864.2	740.7	617.3	493.8	376.5	271.6
10°	1413.6	1302.5	1203.7	1104.9	987.6	870.4	746.9	629.6	500.0	382.7	277.8
7.5°	1425.9	1314.8	1209.9	1111.1	993.8	876.5	759.3	635.8	506.2	382.7	283.9
5°	1438.3	1321.0	1216.0	1117.3	1000.0	888.9	765.4	642.0	512.3	388.9	283.9
2.5°	1444.4	1327.1	1222.2	1123.4	1006.2	888.9	765.4	642.0	512.3	388.9	283.9
0°	1444.4	1327.1	1222.2	1123.4	1006.2	888.9	765.4	642.0	512.3	388.9	283.9



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	6.2	6.2	0.0	0.0
85°	12.3	6.2	6.2	0.0
82.5°	18.5	12.3	6.2	0.0
80°	24.7	18.5	6.2	0.0
77.5°	30.9	18.5	12.3	0.0
75°	37.0	24.7	12.3	0.0
72.5°	43.2	30.9	12.3	0.0
70°	49.4	30.9	18.5	0.0
67.5°	55.6	37.0	18.5	0.0
65°	67.9	43.2	18.5	0.0
62.5°	74.1	43.2	24.7	0.0
60°	80.2	49.4	24.7	0.0
57.5°	86.4	55.6	24.7	0.0
55°	92.6	55.6	30.9	0.0
52.5°	98.8	61.7	30.9	0.0
50°	104.9	67.9	30.9	0.0
47.5°	111.1	74.1	30.9	0.0
45°	117.3	74.1	37.0	0.0
42.5°	129.6	80.2	37.0	0.0
40°	135.8	80.2	37.0	0.0
37.5°	142.0	86.4	37.0	0.0
35°	142.0	86.4	43.2	0.0
32.5°	148.1	92.6	43.2	0.0
30°	154.3	92.6	43.2	0.0
27.5°	160.5	98.8	43.2	0.0
25°	166.7	98.8	43.2	0.0
22.5°	166.7	98.8	43.2	0.0
20°	172.8	104.9	49.4	0.0
17.5°	172.8	104.9	49.4	0.0
15°	179.0	104.9	49.4	0.0
12.5°	179.0	111.1	49.4	0.0
10°	179.0	111.1	49.4	0.0
7.5°	185.2	111.1	49.4	0.0
5°	185.2	111.1	49.4	0.0
2.5°	185.2	111.1	49.4	0.0
0°	185.2	111.1	49.4	0.0

(END OF REPORT)