

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: P624075

Luminaire Tested: **EPH-VN-07-E-730-U-44**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624075
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-07-E-730-U-44
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 4 distribution lens
Light Source: (112) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

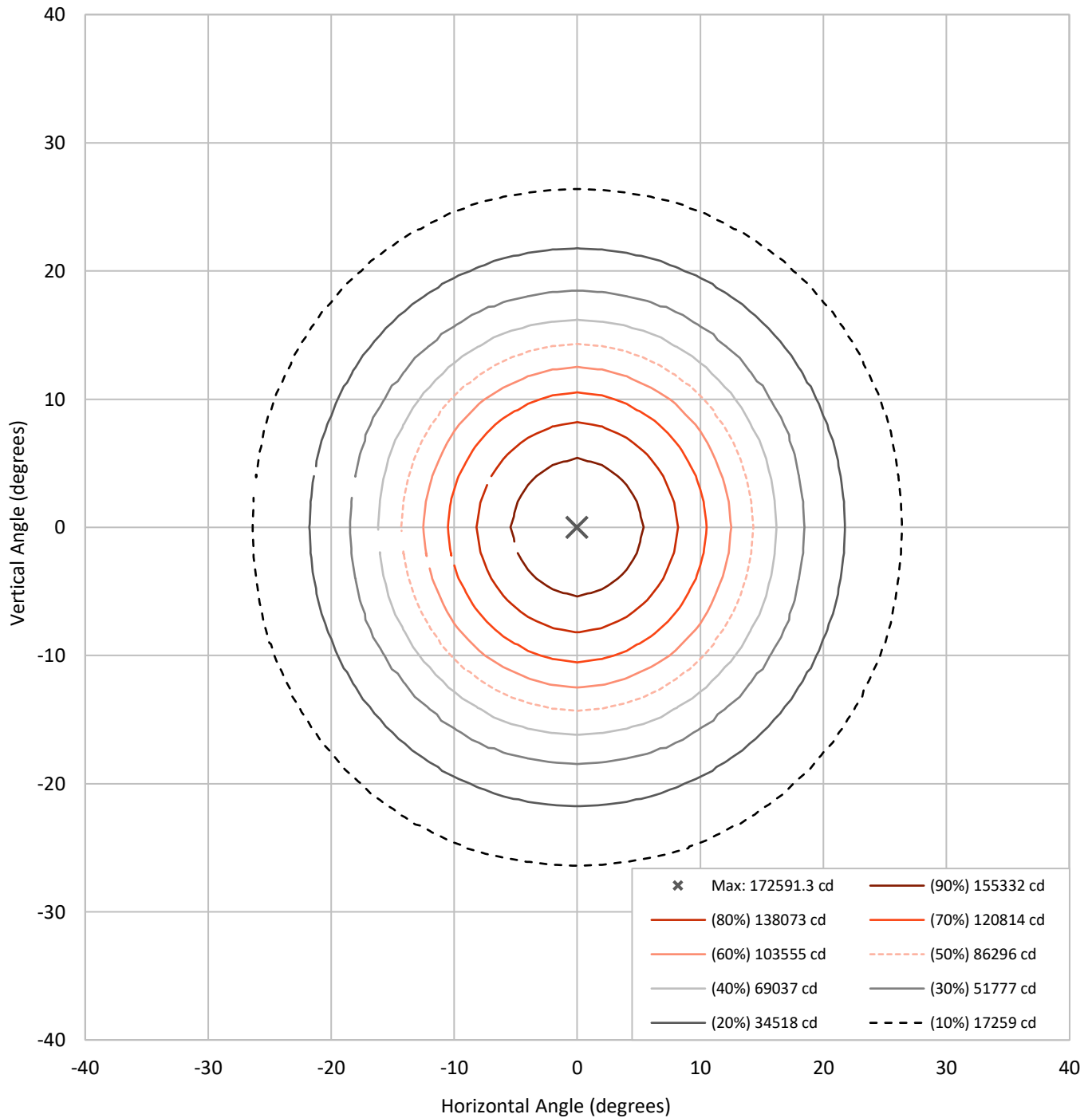
Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	53375.2 lumens	Max Intensity:	172591.3 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	100.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	19258.8 lumens	Field Lumens:	32521.1 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

Input Watts (W): 532.7
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





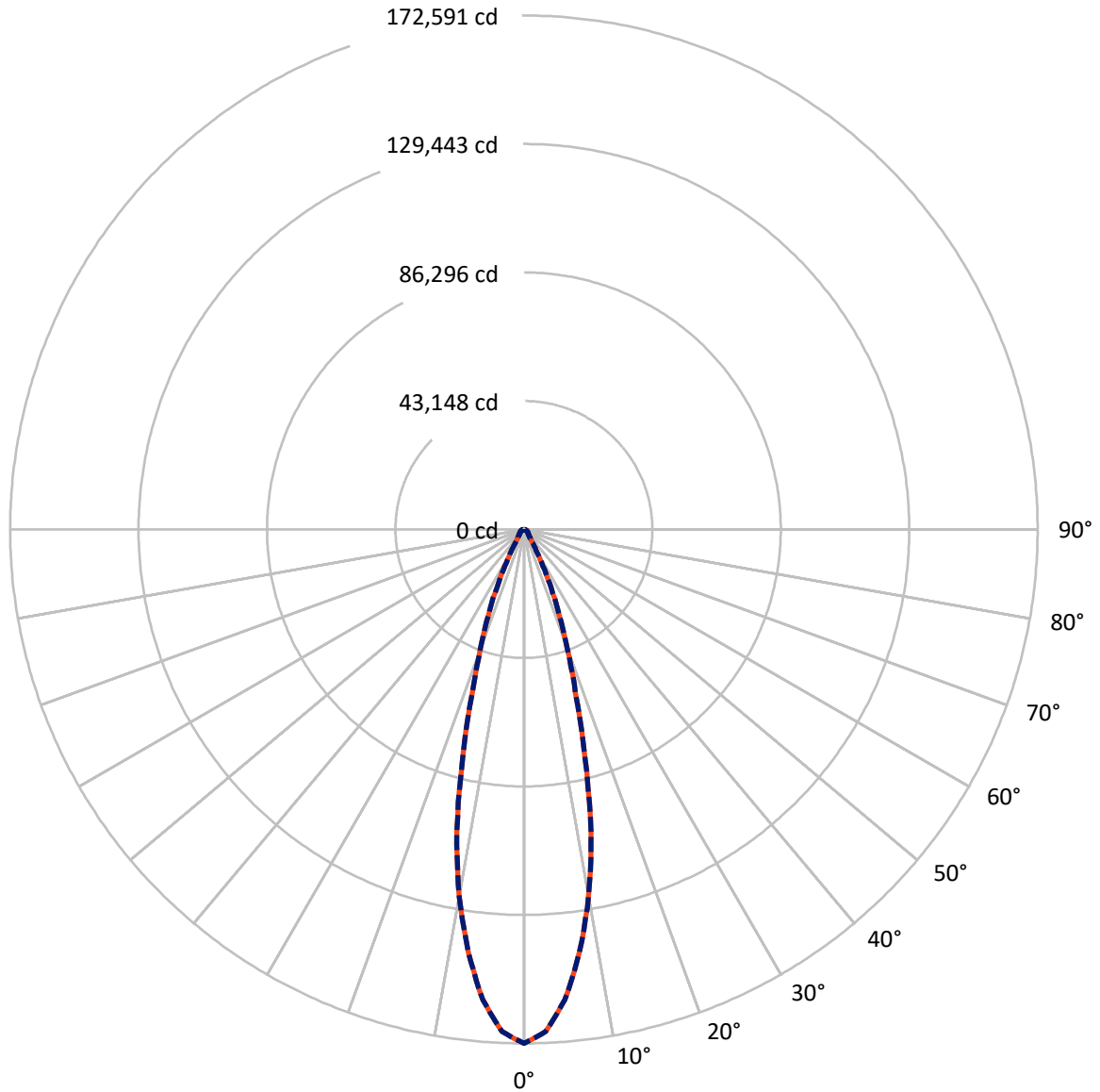
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Lumen Table

90	1.3	9.1	23.0	36.7	42.4	36.7	23.0	9.1	1.3										
80																			
70	4.1	4.3	8.9	14.6	20.5	25.8	29.8	31.9	31.9	29.8	25.8	20.5	14.6	8.9	4.3	4.1			
60		6.6	13.5	21.7	30.0	37.2	42.7	45.7	45.7	42.7	37.2	30.0	21.7	13.5	6.6				
50	7.1	8.8	17.6	27.8	38.2	48.5	57.9	63.8	63.8	57.9	48.5	38.2	27.8	17.6	8.8	7.1			
40		10.7	21.1	33.0	47.4	67.5	98.5	131.2	131.2	98.5	67.5	47.4	33.0	21.1	10.7				
30	9.3	12.2	23.7	38.0	61.1	128.1	351.1	636.0	636.0	351.1	128.1	61.1	38.0	23.7	12.2	9.3			
20		13.2	25.5	42.6	84.1	331.5	1140.0	2199.0	2199.0	1140.0	331.5	84.1	42.6	25.5	13.2				
10	10.2	13.7	26.5	45.6	109.0	583.9	2139.4	4217.8	4217.8	2139.4	583.9	109.0	45.6	26.5	13.7	10.2			
0		13.7	26.5	45.6	109.0	583.9	2139.4	4217.8	4217.8	2139.4	583.9	109.0	45.6	26.5	13.7				
-10	9.3	13.2	25.5	42.6	84.1	331.5	1140.0	2199.0	2199.0	1140.0	331.5	84.1	42.6	25.5	13.2	9.3			
-20		12.2	23.7	38.0	61.1	128.1	351.1	636.0	636.0	351.1	128.1	61.1	38.0	23.7	12.2				
-30	7.1	10.7	21.1	33.0	47.4	67.5	98.5	131.2	131.2	98.5	67.5	47.4	33.0	21.1	10.7	7.1			
-40		8.8	17.6	27.8	38.2	48.5	57.9	63.8	63.8	57.9	48.5	38.2	27.8	17.6	8.8				
-50	4.1	6.6	13.5	21.7	30.0	37.2	42.7	45.7	45.7	42.7	37.2	30.0	21.7	13.5	6.6	4.1			
-60		4.3	8.9	14.6	20.5	25.8	29.8	31.9	31.9	29.8	25.8	20.5	14.6	8.9	4.3				
-70																			
-80	1.3	9.1	23.0	36.7	42.4	36.7	23.0	9.1	1.3										
-90																			

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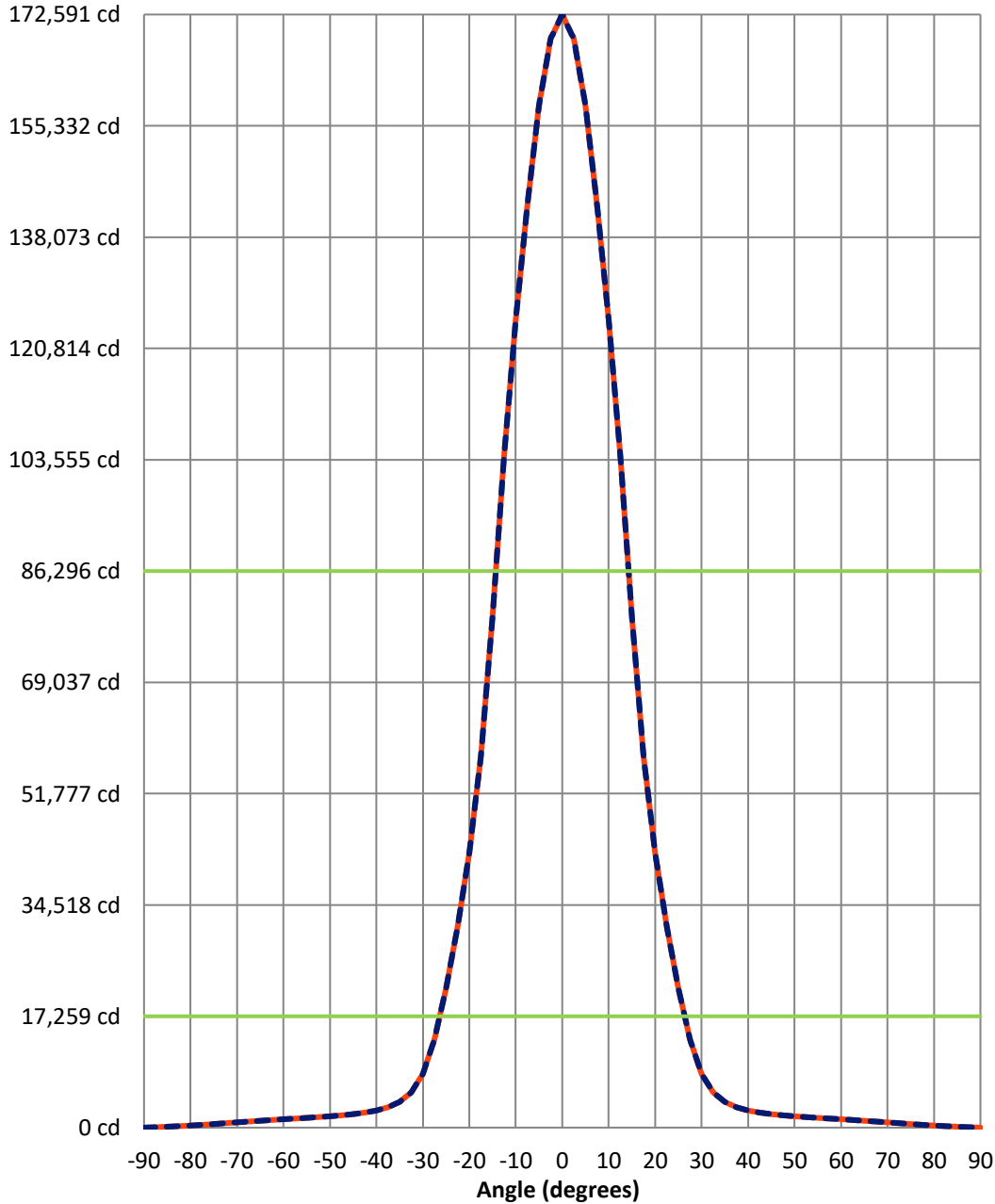
Luminous Intensity Polar Plot



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

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Luminous Intensity Plot



Beam:
H Angle: 28.6°
V Angle: 28.6°
Lumens: 19258.8
Efficiency: 36.1%

Field:
H Angle: 52.7°
V Angle: 52.7°
Lumens: 32521.1
Efficiency: 60.9%

Spill:
Lumens: 20854.1
Efficiency: 39.1%

— 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°	61.2	61.2	61.2	61.2	61.2	61.2	61.2	55.6	55.6	55.6	55.6
85°	139.1	139.1	139.1	139.1	139.1	133.6	133.6	133.6	128.0	128.0	122.4
82.5°	222.6	222.6	222.6	222.6	217.0	217.0	211.5	211.5	205.9	205.9	200.3
80°	317.2	317.2	317.2	317.2	311.6	306.1	306.1	300.5	294.9	289.4	283.8
77.5°	428.5	428.5	428.5	422.9	417.4	417.4	411.8	400.7	395.1	384.0	378.4
75°	550.9	550.9	550.9	545.4	539.8	534.2	523.1	517.5	506.4	495.3	478.6
72.5°	684.5	684.5	684.5	678.9	667.8	662.2	651.1	640.0	628.8	612.1	595.4
70°	812.5	812.5	812.5	801.4	795.8	784.7	773.5	762.4	745.7	729.0	712.3
67.5°	940.5	940.5	940.5	929.3	923.8	912.7	901.5	884.8	868.1	845.9	829.2
65°	1057.3	1057.3	1051.8	1046.2	1040.6	1029.5	1012.8	1001.7	985.0	962.7	940.5
62.5°	1179.8	1179.8	1174.2	1168.6	1157.5	1146.4	1129.7	1113.0	1090.7	1068.5	1046.2
60°	1302.2	1302.2	1296.6	1291.1	1279.9	1263.2	1246.5	1229.9	1207.6	1179.8	1151.9
57.5°	1402.4	1402.4	1396.8	1391.2	1380.1	1369.0	1352.3	1335.6	1313.3	1291.1	1257.7
55°	1508.1	1508.1	1502.5	1491.4	1480.3	1469.1	1452.5	1430.2	1407.9	1380.1	1357.8
52.5°	1630.5	1630.5	1625.0	1613.8	1597.1	1580.4	1558.2	1530.4	1502.5	1474.7	1441.3
50°	1753.0	1753.0	1741.8	1730.7	1719.6	1697.3	1675.0	1647.2	1613.8	1580.4	1541.5
47.5°	1903.2	1903.2	1892.1	1875.4	1853.1	1830.9	1797.5	1758.5	1725.1	1686.2	1641.7
45°	2086.9	2086.9	2070.2	2053.5	2025.6	1986.7	1947.7	1903.2	1853.1	1803.0	1747.4
42.5°	2326.1	2326.1	2303.9	2276.1	2237.1	2187.0	2125.8	2064.6	2003.4	1936.6	1869.8
40°	2648.9	2648.9	2615.5	2576.6	2515.4	2443.0	2354.0	2270.5	2187.0	2092.4	2008.9
37.5°	3155.3	3155.3	3099.7	3027.3	2927.2	2804.7	2654.5	2543.2	2415.2	2292.8	2181.5
35°	3984.5	3984.5	3884.3	3756.3	3578.3	3355.7	3116.4	2927.2	2715.7	2543.2	2381.8
32.5°	5459.2	5459.2	5258.9	5008.5	4669.0	4234.9	3834.2	3500.4	3155.3	2888.2	2632.2
30°	8314.0	8314.0	7885.5	7356.9	6627.9	5715.2	5030.7	4390.7	3806.4	3366.8	2993.9
27.5°	13673.1	13450.5	12782.7	11686.4	10183.9	8314.0	7123.1	5770.9	4847.1	4006.8	3489.2
25°	21586.4	21219.2	20117.3	18319.8	15871.2	13094.3	10662.4	8097.0	6477.6	5080.8	4118.1
22.5°	31202.7	30696.3	29199.3	26756.3	23445.1	19750.0	15815.6	12126.0	8842.7	6716.9	5080.8
20°	42588.6	41909.6	39900.7	36639.6	32254.4	27552.1	22298.8	17357.1	12621.3	8842.7	6477.6
17.5°	57619.5	56584.4	53540.4	48643.2	42588.6	36250.1	29683.4	23306.0	17357.1	12126.0	8097.0
15°	79228.2	77480.8	72372.2	64258.5	54831.4	45994.3	37619.1	29683.4	22298.8	15815.6	10662.4
12.5°	104209.2	101777.4	94737.7	83758.0	70947.5	56973.9	45994.3	36250.1	27552.1	19750.0	13094.3
10°	125255.9	122690.4	115417.0	104404.0	88159.9	70947.5	54831.4	42588.6	32254.4	23445.1	15871.2
7.5°	143035.9	140164.4	132323.4	120275.2	104404.0	83758.0	64258.5	48643.2	36639.6	26756.3	18319.8
5°	158478.6	154839.1	145712.6	132323.4	115417.0	94737.7	72372.2	53540.4	39900.7	29199.3	20117.3
2.5°	168796.0	164522.2	154839.1	140164.4	122690.4	101777.4	77480.8	56584.4	41909.6	30696.3	21219.2
0°	172591.3	168796.0	158478.6	143035.9	125255.9	104209.2	79228.2	57619.5	42588.6	31202.7	21586.4



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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°	55.6	55.6	50.1	50.1	50.1	44.5	44.5	44.5	39.0	39.0	39.0
85°	122.4	116.9	116.9	111.3	105.7	100.2	100.2	94.6	89.0	83.5	77.9
82.5°	194.8	189.2	183.6	178.1	172.5	161.4	155.8	150.3	139.1	133.6	128.0
80°	272.7	267.1	256.0	250.4	239.3	228.2	217.0	205.9	194.8	183.6	172.5
77.5°	367.3	350.6	339.5	328.3	311.6	300.5	283.8	272.7	256.0	239.3	222.6
75°	467.5	450.8	434.1	417.4	400.7	378.4	361.7	339.5	322.8	300.5	283.8
72.5°	578.8	556.5	534.2	512.0	489.7	467.5	445.2	417.4	395.1	367.3	339.5
70°	690.1	667.8	645.5	617.7	589.9	562.1	534.2	500.8	473.0	439.6	406.2
67.5°	806.9	779.1	751.3	723.4	695.6	662.2	623.3	589.9	550.9	512.0	478.6
65°	918.2	890.4	857.0	823.6	790.2	756.8	717.9	678.9	634.4	589.9	550.9
62.5°	1018.4	990.6	962.7	923.8	890.4	851.4	812.5	762.4	717.9	673.4	623.3
60°	1124.1	1090.7	1057.3	1018.4	979.4	940.5	896.0	845.9	801.4	745.7	695.6
57.5°	1224.3	1190.9	1151.9	1113.0	1068.5	1024.0	979.4	929.3	879.3	823.6	768.0
55°	1324.5	1291.1	1252.1	1207.6	1157.5	1107.4	1057.3	1007.3	957.2	896.0	834.7
52.5°	1407.9	1374.5	1335.6	1302.2	1246.5	1196.5	1140.8	1079.6	1024.0	962.7	901.5
50°	1497.0	1458.0	1413.5	1374.5	1330.0	1279.9	1218.7	1157.5	1090.7	1029.5	962.7
47.5°	1597.1	1547.1	1497.0	1446.9	1402.4	1346.7	1296.6	1229.9	1163.1	1090.7	1024.0
45°	1697.3	1641.7	1586.0	1524.8	1469.1	1413.5	1357.8	1302.2	1229.9	1157.5	1079.6
42.5°	1803.0	1736.3	1675.0	1613.8	1547.1	1480.3	1419.1	1357.8	1296.6	1218.7	1140.8
40°	1925.5	1847.6	1769.7	1697.3	1630.5	1552.6	1480.3	1413.5	1346.7	1279.9	1196.5
37.5°	2064.6	1970.0	1875.4	1786.3	1702.9	1630.5	1547.1	1469.1	1402.4	1330.0	1246.5
35°	2242.7	2103.6	1992.3	1881.0	1786.3	1697.3	1613.8	1524.8	1446.9	1374.5	1302.2
32.5°	2443.0	2270.5	2120.2	1992.3	1875.4	1769.7	1675.0	1586.0	1497.0	1413.5	1335.6
30°	2687.9	2465.3	2270.5	2103.6	1970.0	1847.6	1736.3	1641.7	1547.1	1458.0	1374.5
27.5°	3032.9	2687.9	2443.0	2242.7	2064.6	1925.5	1803.0	1697.3	1597.1	1497.0	1407.9
25°	3489.2	2993.9	2632.2	2381.8	2181.5	2008.9	1869.8	1747.4	1641.7	1541.5	1441.3
22.5°	4006.8	3366.8	2888.2	2543.2	2292.8	2092.4	1936.6	1803.0	1686.2	1580.4	1474.7
20°	4847.1	3806.4	3155.3	2715.7	2415.2	2187.0	2003.4	1853.1	1725.1	1613.8	1502.5
17.5°	5770.9	4390.7	3500.4	2927.2	2543.2	2270.5	2064.6	1903.2	1758.5	1647.2	1530.4
15°	7123.1	5030.7	3834.2	3116.4	2654.5	2354.0	2125.8	1947.7	1797.5	1675.0	1558.2
12.5°	8314.0	5715.2	4234.9	3355.7	2804.7	2443.0	2187.0	1986.7	1830.9	1697.3	1580.4
10°	10183.9	6627.9	4669.0	3578.3	2927.2	2515.4	2237.1	2025.6	1853.1	1719.6	1597.1
7.5°	11686.4	7356.9	5008.5	3756.3	3027.3	2576.6	2276.1	2053.5	1875.4	1730.7	1613.8
5°	12782.7	7885.5	5258.9	3884.3	3099.7	2615.5	2303.9	2070.2	1892.1	1741.8	1625.0
2.5°	13450.5	8314.0	5459.2	3984.5	3155.3	2648.9	2326.1	2086.9	1903.2	1753.0	1630.5
0°	13673.1	8314.0	5459.2	3984.5	3155.3	2648.9	2326.1	2086.9	1903.2	1753.0	1630.5



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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°	33.4	33.4	27.8	27.8	27.8	22.3	22.3	16.7	16.7	11.1	11.1
85°	72.3	66.8	61.2	55.6	50.1	44.5	44.5	39.0	33.4	27.8	22.3
82.5°	116.9	111.3	100.2	89.0	83.5	72.3	61.2	55.6	50.1	39.0	33.4
80°	161.4	150.3	139.1	128.0	116.9	100.2	89.0	77.9	61.2	50.1	44.5
77.5°	211.5	194.8	178.1	161.4	144.7	133.6	116.9	100.2	83.5	66.8	50.1
75°	261.6	239.3	222.6	200.3	183.6	161.4	139.1	122.4	105.7	83.5	61.2
72.5°	317.2	289.4	267.1	239.3	217.0	194.8	166.9	144.7	122.4	100.2	77.9
70°	378.4	345.0	311.6	283.8	256.0	222.6	194.8	166.9	139.1	116.9	89.0
67.5°	439.6	400.7	361.7	322.8	289.4	256.0	222.6	194.8	161.4	133.6	100.2
65°	500.8	456.3	417.4	372.9	328.3	289.4	256.0	217.0	183.6	144.7	116.9
62.5°	567.6	517.5	467.5	417.4	372.9	322.8	283.8	239.3	200.3	161.4	128.0
60°	640.0	584.3	523.1	467.5	417.4	361.7	311.6	267.1	222.6	178.1	139.1
57.5°	706.7	645.5	584.3	517.5	456.3	400.7	345.0	289.4	239.3	194.8	150.3
55°	773.5	706.7	640.0	567.6	500.8	439.6	378.4	317.2	261.6	211.5	161.4
52.5°	834.7	768.0	695.6	623.3	550.9	478.6	406.2	339.5	283.8	222.6	172.5
50°	896.0	823.6	745.7	673.4	589.9	512.0	439.6	367.3	300.5	239.3	183.6
47.5°	957.2	879.3	801.4	717.9	634.4	550.9	473.0	395.1	322.8	256.0	194.8
45°	1007.3	929.3	845.9	762.4	678.9	589.9	500.8	417.4	339.5	272.7	205.9
42.5°	1057.3	979.4	896.0	812.5	717.9	623.3	534.2	445.2	361.7	283.8	217.0
40°	1107.4	1024.0	940.5	851.4	756.8	662.2	562.1	467.5	378.4	300.5	228.2
37.5°	1157.5	1068.5	979.4	890.4	790.2	695.6	589.9	489.7	400.7	311.6	239.3
35°	1207.6	1113.0	1018.4	923.8	823.6	723.4	617.7	512.0	417.4	328.3	250.4
32.5°	1252.1	1151.9	1057.3	962.7	857.0	751.3	645.5	534.2	434.1	339.5	256.0
30°	1291.1	1190.9	1090.7	990.6	890.4	779.1	667.8	556.5	450.8	350.6	267.1
27.5°	1324.5	1224.3	1124.1	1018.4	918.2	806.9	690.1	578.8	467.5	367.3	272.7
25°	1357.8	1257.7	1151.9	1046.2	940.5	829.2	712.3	595.4	478.6	378.4	283.8
22.5°	1380.1	1291.1	1179.8	1068.5	962.7	845.9	729.0	612.1	495.3	384.0	289.4
20°	1407.9	1313.3	1207.6	1090.7	985.0	868.1	745.7	628.8	506.4	395.1	294.9
17.5°	1430.2	1335.6	1229.9	1113.0	1001.7	884.8	762.4	640.0	517.5	400.7	300.5
15°	1452.5	1352.3	1246.5	1129.7	1012.8	901.5	773.5	651.1	523.1	411.8	306.1
12.5°	1469.1	1369.0	1263.2	1146.4	1029.5	912.7	784.7	662.2	534.2	417.4	306.1
10°	1480.3	1380.1	1279.9	1157.5	1040.6	923.8	795.8	667.8	539.8	417.4	311.6
7.5°	1491.4	1391.2	1291.1	1168.6	1046.2	929.3	801.4	678.9	545.4	422.9	317.2
5°	1502.5	1396.8	1296.6	1174.2	1051.8	940.5	812.5	684.5	550.9	428.5	317.2
2.5°	1508.1	1402.4	1302.2	1179.8	1057.3	940.5	812.5	684.5	550.9	428.5	317.2
0°	1508.1	1402.4	1302.2	1179.8	1057.3	940.5	812.5	684.5	550.9	428.5	317.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	5.6	5.6	0.0	0.0
85°	16.7	11.1	5.6	0.0
82.5°	22.3	16.7	5.6	0.0
80°	33.4	22.3	11.1	0.0
77.5°	39.0	27.8	11.1	0.0
75°	50.1	33.4	16.7	0.0
72.5°	55.6	39.0	16.7	0.0
70°	61.2	44.5	22.3	0.0
67.5°	72.3	44.5	22.3	0.0
65°	83.5	50.1	27.8	0.0
62.5°	89.0	55.6	27.8	0.0
60°	100.2	61.2	27.8	0.0
57.5°	111.3	66.8	33.4	0.0
55°	116.9	72.3	33.4	0.0
52.5°	128.0	77.9	39.0	0.0
50°	133.6	83.5	39.0	0.0
47.5°	139.1	89.0	39.0	0.0
45°	150.3	94.6	44.5	0.0
42.5°	155.8	100.2	44.5	0.0
40°	161.4	100.2	44.5	0.0
37.5°	172.5	105.7	50.1	0.0
35°	178.1	111.3	50.1	0.0
32.5°	183.6	116.9	50.1	0.0
30°	189.2	116.9	55.6	0.0
27.5°	194.8	122.4	55.6	0.0
25°	200.3	122.4	55.6	0.0
22.5°	205.9	128.0	55.6	0.0
20°	205.9	128.0	55.6	0.0
17.5°	211.5	133.6	55.6	0.0
15°	211.5	133.6	61.2	0.0
12.5°	217.0	133.6	61.2	0.0
10°	217.0	139.1	61.2	0.0
7.5°	222.6	139.1	61.2	0.0
5°	222.6	139.1	61.2	0.0
2.5°	222.6	139.1	61.2	0.0
0°	222.6	139.1	61.2	0.0

(END OF REPORT)