

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: P623229

Luminaire Tested: **EPH-VN-08-E-730-U-33**

Issue Date: 10/13/2022

Test Information

Test Method: LM-79-2019
Report Number: P623229
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-730-U-33
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 3 distribution lens
Light Source: (128) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	64870.8 lumens	Max Intensity:	603632.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	103.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

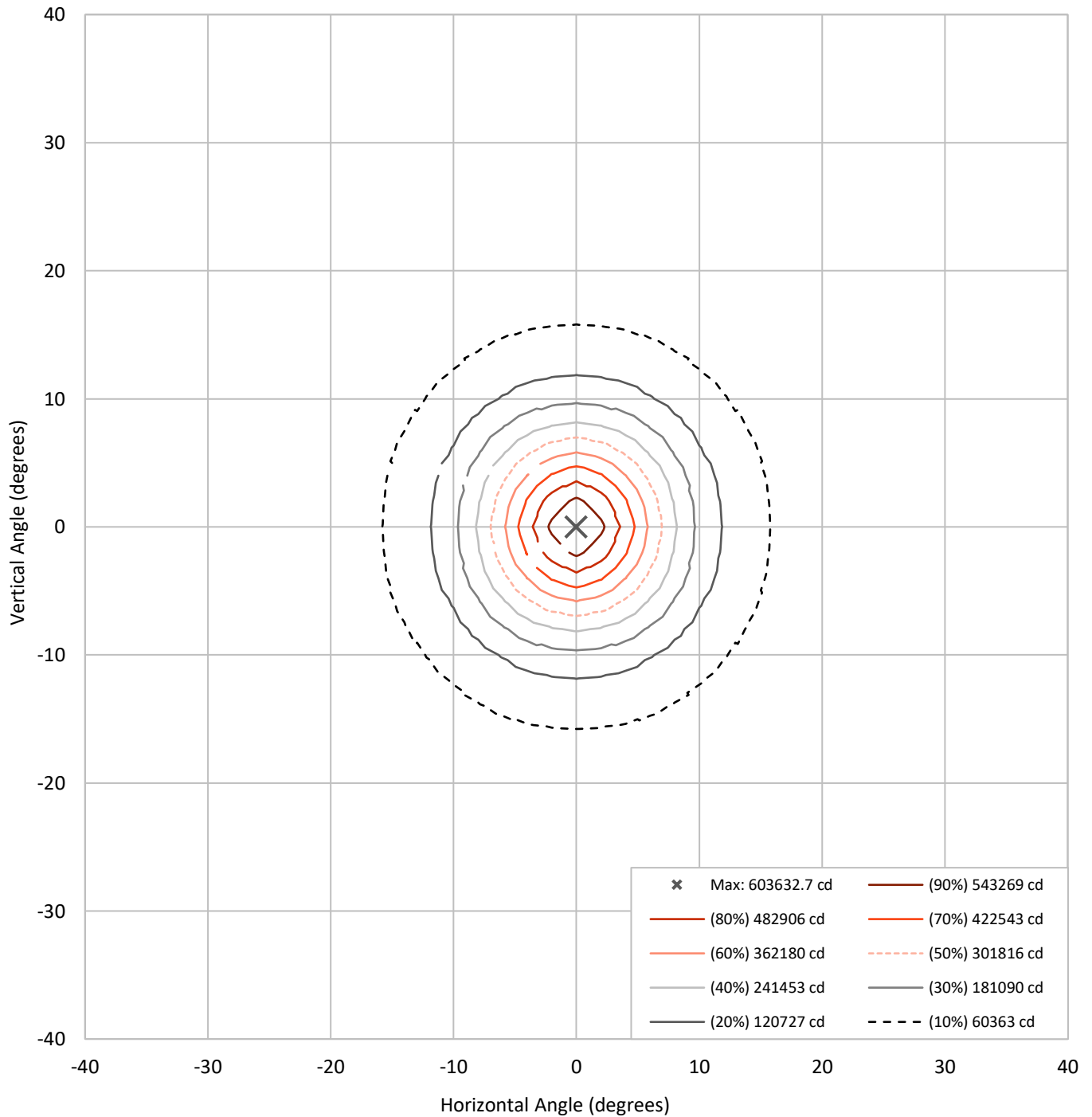
Beam Angle (50%):	13.8°H x 13.8°V	Field Angle (10%):	31.4°H x 31.4°V
Beam Lumens:	14185.4 lumens	Field Lumens:	33029.6 lumens
Beam Efficiency:	21.9%	Field Efficiency:	50.9%

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





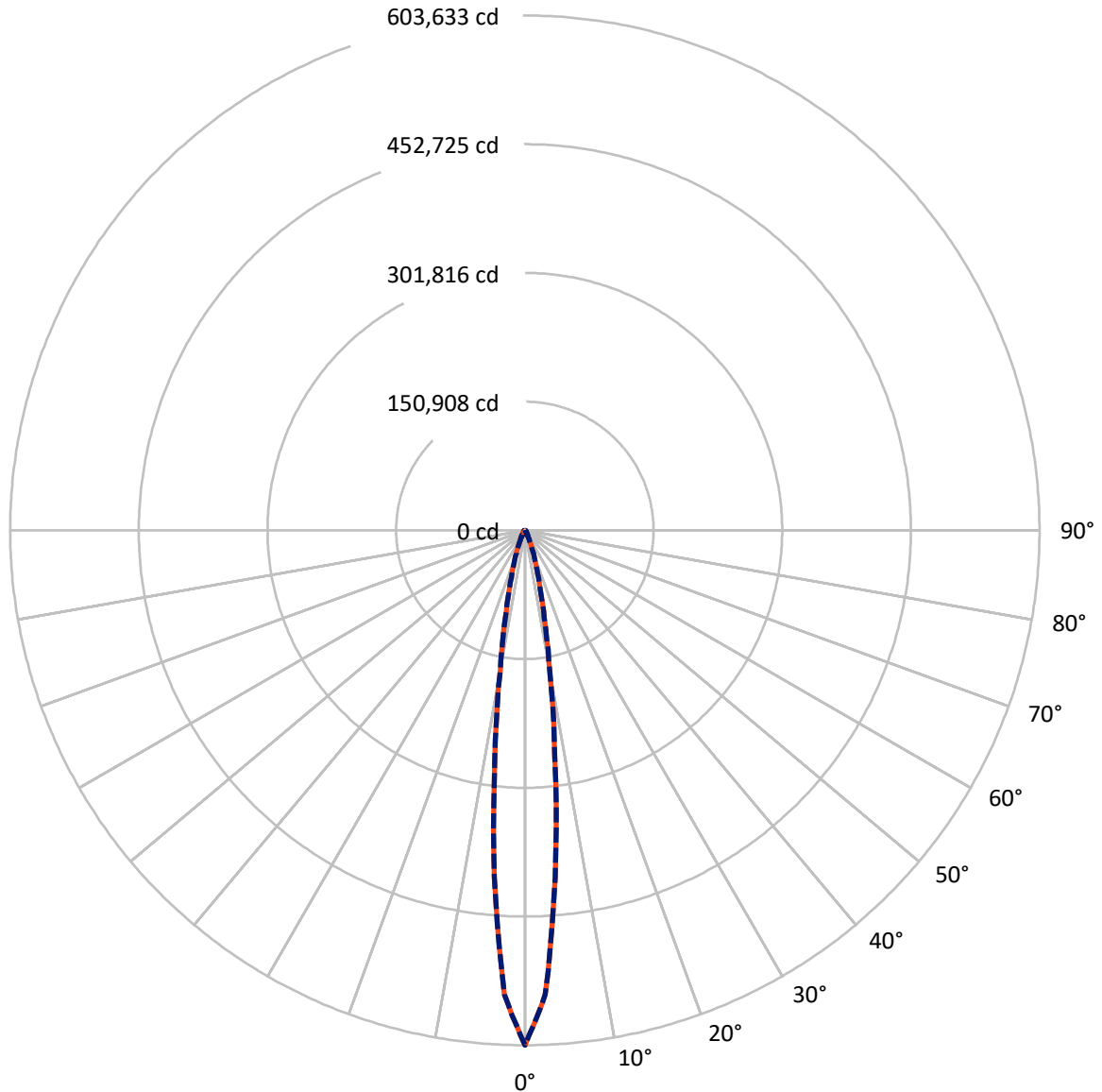
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Lumen Table

90	1.1	8.4	22.3	36.3	42.1	36.3	22.3	8.4	1.1										
80																			
70	3.8	4.3	9.0	14.9	21.2	26.7	30.8	33.0	33.0	30.8	26.7	21.2	14.9	9.0	4.3	3.8			
60		6.7	13.9	22.5	31.0	38.6	44.4	47.6	47.6	44.4	38.6	31.0	22.5	13.9	6.7				
50	6.9	9.0	18.3	28.8	39.9	51.2	61.9	68.6	68.6	61.9	51.2	39.9	28.8	18.3	9.0	6.9			
40		11.1	21.8	34.5	50.5	72.3	98.8	121.4	121.4	98.8	72.3	50.5	34.5	21.8	11.1				
30	9.3	12.6	24.5	40.1	65.5	115.5	235.9	403.7	403.7	235.9	115.5	65.5	40.1	24.5	12.6	9.3			
20		13.7	26.5	45.5	84.2	222.4	799.9	1986.2	1986.2	799.9	222.4	84.2	45.5	26.5	13.7				
10	10.2	14.2	27.6	49.0	100.5	370.5	1935.3	8497.6	8497.6	1935.3	370.5	100.5	49.0	27.6	14.2	10.2			
0		14.2	27.6	49.0	100.5	370.5	1935.3	8497.6	8497.6	1935.3	370.5	100.5	49.0	27.6	14.2				
-10	9.3	13.7	26.5	45.5	84.2	222.4	799.9	1986.2	1986.2	799.9	222.4	84.2	45.5	26.5	13.7	9.3			
-20		12.6	24.5	40.1	65.5	115.5	235.9	403.7	403.7	235.9	115.5	65.5	40.1	24.5	12.6				
-30	6.9	11.1	21.8	34.5	50.5	72.3	98.8	121.4	121.4	98.8	72.3	50.5	34.5	21.8	11.1	6.9			
-40		9.0	18.3	28.8	39.9	51.2	61.9	68.6	68.6	61.9	51.2	39.9	28.8	18.3	9.0				
-50	3.8	6.7	13.9	22.5	31.0	38.6	44.4	47.6	47.6	44.4	38.6	31.0	22.5	13.9	6.7	3.8			
-60		4.3	9.0	14.9	21.2	26.7	30.8	33.0	33.0	30.8	26.7	21.2	14.9	9.0	4.3				
-70																			
-80	1.1	8.4	22.3	36.3	42.1	36.3	22.3	8.4	1.1										
-90																			
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80	90

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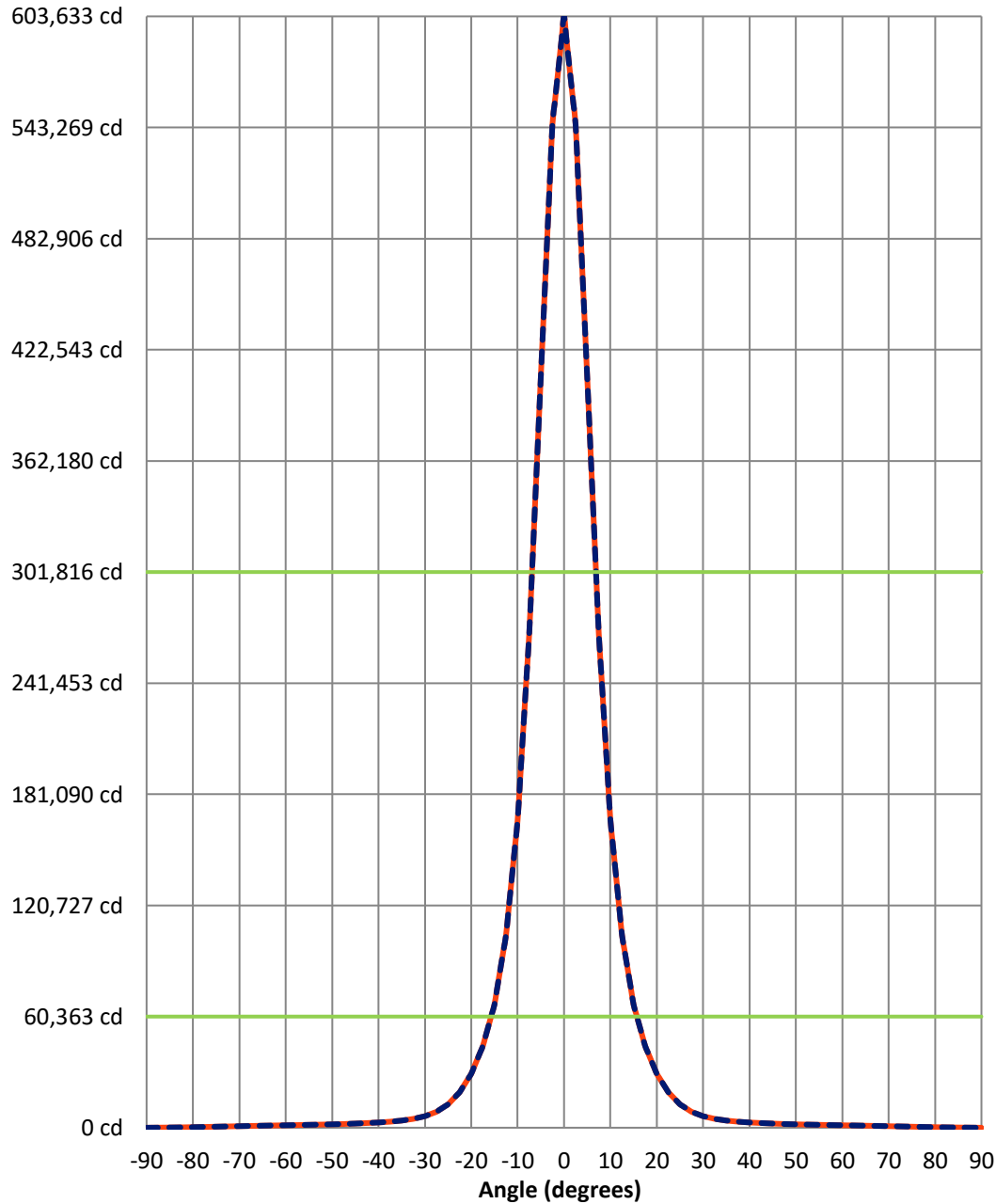
Luminous Intensity Polar Plot



— 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: 14185.4
Efficiency: 21.9%

Field:
H Angle: 31.4°
V Angle: 31.4°
Lumens: 33029.6
Efficiency: 50.9%

Spill:
Lumens: 31841.1
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°	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	54.0	47.2	47.2
85°	121.5	121.5	121.5	121.5	121.5	121.5	114.7	114.7	114.7	108.0	108.0
82.5°	202.5	202.5	202.5	202.5	195.7	195.7	195.7	189.0	189.0	182.2	182.2
80°	310.4	310.4	310.4	310.4	303.7	296.9	296.9	290.2	283.4	276.7	269.9
77.5°	425.2	425.2	425.2	418.4	418.4	411.7	404.9	398.2	391.4	377.9	371.2
75°	560.1	560.1	560.1	553.4	546.6	539.9	533.1	519.7	512.9	499.4	485.9
72.5°	701.9	701.9	701.9	695.1	688.4	674.9	668.1	654.6	641.1	620.9	607.4
70°	836.8	836.8	836.8	830.1	816.6	809.8	796.3	782.9	769.4	749.1	728.9
67.5°	971.8	971.8	971.8	958.3	951.6	944.8	931.3	911.1	897.6	877.3	850.3
65°	1100.0	1100.0	1093.3	1086.5	1079.8	1066.3	1052.8	1039.3	1019.1	998.8	971.8
62.5°	1228.3	1228.3	1221.5	1214.8	1208.0	1194.5	1174.3	1160.8	1133.8	1113.5	1086.5
60°	1336.2	1336.2	1329.5	1322.7	1316.0	1302.5	1289.0	1268.8	1248.5	1228.3	1201.3
57.5°	1451.0	1451.0	1444.2	1437.5	1424.0	1410.5	1397.0	1376.7	1349.7	1322.7	1302.5
55°	1579.2	1579.2	1572.5	1559.0	1545.5	1532.0	1511.7	1484.7	1457.7	1430.7	1397.0
52.5°	1700.7	1700.7	1693.9	1680.4	1666.9	1653.4	1626.4	1606.2	1572.5	1538.7	1498.2
50°	1849.1	1849.1	1835.7	1822.2	1808.7	1781.7	1754.7	1720.9	1687.2	1646.7	1612.9
47.5°	2017.9	2017.9	2004.4	1990.9	1963.9	1936.9	1896.4	1855.9	1815.4	1768.2	1714.2
45°	2254.1	2254.1	2233.8	2206.8	2173.1	2125.8	2071.9	2017.9	1957.1	1903.1	1842.4
42.5°	2544.3	2544.3	2517.3	2483.5	2436.3	2375.6	2301.3	2227.1	2146.1	2058.4	1977.4
40°	2848.0	2848.0	2814.2	2780.5	2726.5	2652.2	2571.3	2476.8	2375.6	2260.8	2159.6
37.5°	3266.4	3266.4	3219.1	3158.4	3077.4	2976.2	2854.7	2746.7	2632.0	2503.8	2368.8
35°	3887.3	3887.3	3813.0	3711.8	3583.6	3414.9	3232.6	3077.4	2902.0	2746.7	2598.3
32.5°	4805.1	4805.1	4676.9	4528.4	4312.4	4042.5	3779.3	3529.6	3266.4	3043.7	2827.7
30°	6249.3	6249.3	6033.4	5763.4	5399.0	4933.3	4541.9	4137.0	3752.3	3428.4	3131.4
27.5°	8651.9	8550.6	8253.7	7761.0	7086.2	6249.3	5648.7	4967.1	4427.2	3900.8	3516.1
25°	12701.1	12512.1	11952.0	11027.4	9778.9	8395.4	7302.1	6141.3	5318.0	4568.9	3968.2
22.5°	19281.1	18936.9	17911.1	16237.4	13976.6	11763.0	9745.2	7956.7	6485.5	5439.5	4568.9
20°	29296.2	28695.6	26927.4	24065.9	20205.7	16784.1	13187.0	10534.8	8179.5	6485.5	5318.0
17.5°	44345.9	43306.5	40262.9	35356.6	29296.2	23721.8	18241.8	13875.4	10534.8	7956.7	6141.3
15°	66859.6	65037.4	59719.4	51263.3	41551.9	32711.1	24929.8	18241.8	13187.0	9745.2	7302.1
12.5°	104659.2	100974.4	90324.9	73716.3	58234.7	43704.7	32711.1	23721.8	16784.1	11763.0	8395.4
10°	167111.9	159499.3	137910.1	105232.8	80377.3	58234.7	41551.9	29296.2	20205.7	13976.6	9778.9
7.5°	268342.7	252004.0	207361.2	152338.9	105232.8	73716.3	51263.3	35356.6	24065.9	16237.4	11027.4
5°	407967.0	375087.2	292550.3	207361.2	137910.1	90324.9	59719.4	40262.9	26927.4	17911.1	11952.0
2.5°	544858.1	488189.1	375087.2	252004.0	159499.3	100974.4	65037.4	43306.5	28695.6	18936.9	12512.1
0°	603632.7	544858.1	407967.0	268342.7	167111.9	104659.2	66859.6	44345.9	29296.2	19281.1	12701.1



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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°	47.2	47.2	47.2	47.2	40.5	40.5	40.5	40.5	33.7	33.7	33.7
85°	108.0	101.2	101.2	94.5	94.5	87.7	87.7	81.0	81.0	74.2	67.5
82.5°	175.5	168.7	162.0	155.2	155.2	148.5	141.7	128.2	121.5	114.7	108.0
80°	263.2	249.7	243.0	229.5	222.7	209.2	195.7	189.0	175.5	168.7	155.2
77.5°	357.7	344.2	337.4	317.2	303.7	290.2	276.7	256.5	243.0	222.7	202.5
75°	465.7	452.2	431.9	411.7	398.2	377.9	357.7	337.4	310.4	290.2	269.9
72.5°	587.1	566.9	546.6	519.7	492.7	472.4	438.7	411.7	391.4	364.4	337.4
70°	708.6	688.4	661.4	634.4	600.6	573.6	539.9	506.2	472.4	438.7	404.9
67.5°	830.1	803.1	776.1	742.4	708.6	674.9	641.1	600.6	560.1	519.7	479.2
65°	944.8	917.8	884.1	850.3	816.6	776.1	735.6	695.1	647.9	600.6	560.1
62.5°	1059.5	1025.8	992.1	958.3	917.8	877.3	836.8	782.9	735.6	688.4	634.4
60°	1167.5	1133.8	1100.0	1059.5	1019.1	971.8	924.6	877.3	823.3	769.4	715.4
57.5°	1268.8	1235.0	1201.3	1154.0	1113.5	1066.3	1012.3	965.1	904.3	850.3	789.6
55°	1363.2	1329.5	1289.0	1248.5	1208.0	1154.0	1100.0	1046.1	985.3	924.6	857.1
52.5°	1457.7	1417.2	1376.7	1336.2	1289.0	1241.8	1187.8	1127.0	1066.3	998.8	931.3
50°	1565.7	1518.5	1464.5	1417.2	1363.2	1316.0	1262.0	1201.3	1140.5	1066.3	998.8
47.5°	1666.9	1619.7	1565.7	1505.0	1451.0	1390.2	1329.5	1275.5	1208.0	1140.5	1066.3
45°	1781.7	1714.2	1660.2	1599.4	1532.0	1464.5	1403.7	1336.2	1275.5	1201.3	1127.0
42.5°	1903.1	1828.9	1754.7	1680.4	1619.7	1545.5	1471.2	1403.7	1329.5	1262.0	1187.8
40°	2044.9	1957.1	1862.6	1781.7	1700.7	1626.4	1545.5	1464.5	1390.2	1316.0	1241.8
37.5°	2227.1	2105.6	1984.1	1882.9	1788.4	1700.7	1619.7	1532.0	1451.0	1363.2	1289.0
35°	2443.0	2274.3	2132.6	1990.9	1882.9	1781.7	1680.4	1599.4	1505.0	1417.2	1336.2
32.5°	2659.0	2476.8	2294.6	2132.6	1984.1	1862.6	1754.7	1660.2	1565.7	1464.5	1376.7
30°	2881.7	2679.2	2476.8	2274.3	2105.6	1957.1	1828.9	1714.2	1619.7	1518.5	1417.2
27.5°	3165.2	2881.7	2659.0	2443.0	2227.1	2044.9	1903.1	1781.7	1666.9	1565.7	1457.7
25°	3516.1	3131.4	2827.7	2598.3	2368.8	2159.6	1977.4	1842.4	1714.2	1612.9	1498.2
22.5°	3900.8	3428.4	3043.7	2746.7	2503.8	2260.8	2058.4	1903.1	1768.2	1646.7	1538.7
20°	4427.2	3752.3	3266.4	2902.0	2632.0	2375.6	2146.1	1957.1	1815.4	1687.2	1572.5
17.5°	4967.1	4137.0	3529.6	3077.4	2746.7	2476.8	2227.1	2017.9	1855.9	1720.9	1606.2
15°	5648.7	4541.9	3779.3	3232.6	2854.7	2571.3	2301.3	2071.9	1896.4	1754.7	1626.4
12.5°	6249.3	4933.3	4042.5	3414.9	2976.2	2652.2	2375.6	2125.8	1936.9	1781.7	1653.4
10°	7086.2	5399.0	4312.4	3583.6	3077.4	2726.5	2436.3	2173.1	1963.9	1808.7	1666.9
7.5°	7761.0	5763.4	4528.4	3711.8	3158.4	2780.5	2483.5	2206.8	1990.9	1822.2	1680.4
5°	8253.7	6033.4	4676.9	3813.0	3219.1	2814.2	2517.3	2233.8	2004.4	1835.7	1693.9
2.5°	8550.6	6249.3	4805.1	3887.3	3266.4	2848.0	2544.3	2254.1	2017.9	1849.1	1700.7
0°	8651.9	6249.3	4805.1	3887.3	3266.4	2848.0	2544.3	2254.1	2017.9	1849.1	1700.7



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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°	33.7	27.0	27.0	27.0	20.2	20.2	20.2	13.5	13.5	13.5	6.7
85°	60.7	60.7	54.0	47.2	47.2	40.5	33.7	33.7	27.0	20.2	20.2
82.5°	101.2	94.5	87.7	81.0	74.2	60.7	54.0	47.2	40.5	33.7	27.0
80°	141.7	135.0	121.5	108.0	101.2	87.7	81.0	67.5	54.0	47.2	40.5
77.5°	189.0	175.5	162.0	148.5	128.2	114.7	101.2	87.7	74.2	60.7	47.2
75°	249.7	222.7	202.5	182.2	162.0	141.7	121.5	108.0	87.7	74.2	54.0
72.5°	310.4	283.4	249.7	222.7	195.7	175.5	148.5	128.2	108.0	87.7	67.5
70°	371.2	337.4	303.7	269.9	236.2	202.5	175.5	148.5	121.5	101.2	81.0
67.5°	431.9	398.2	357.7	317.2	283.4	243.0	202.5	175.5	141.7	114.7	87.7
65°	506.2	458.9	411.7	371.2	323.9	283.4	236.2	195.7	162.0	128.2	101.2
62.5°	580.4	526.4	472.4	418.4	371.2	317.2	269.9	222.7	182.2	148.5	108.0
60°	654.6	593.9	533.1	472.4	411.7	357.7	303.7	249.7	202.5	162.0	121.5
57.5°	728.9	661.4	593.9	526.4	458.9	398.2	337.4	283.4	222.7	175.5	135.0
55°	796.3	728.9	654.6	580.4	506.2	431.9	371.2	310.4	249.7	189.0	141.7
52.5°	857.1	789.6	715.4	634.4	560.1	479.2	404.9	337.4	269.9	202.5	155.2
50°	924.6	850.3	769.4	688.4	600.6	519.7	438.7	364.4	290.2	222.7	168.7
47.5°	985.3	904.3	823.3	735.6	647.9	560.1	472.4	391.4	310.4	243.0	175.5
45°	1046.1	965.1	877.3	782.9	695.1	600.6	506.2	411.7	337.4	256.5	189.0
42.5°	1100.0	1012.3	924.6	836.8	735.6	641.1	539.9	438.7	357.7	276.7	195.7
40°	1154.0	1066.3	971.8	877.3	776.1	674.9	573.6	472.4	377.9	290.2	209.2
37.5°	1208.0	1113.5	1019.1	917.8	816.6	708.6	600.6	492.7	398.2	303.7	222.7
35°	1248.5	1154.0	1059.5	958.3	850.3	742.4	634.4	519.7	411.7	317.2	229.5
32.5°	1289.0	1201.3	1100.0	992.1	884.1	776.1	661.4	546.6	431.9	337.4	243.0
30°	1329.5	1235.0	1133.8	1025.8	917.8	803.1	688.4	566.9	452.2	344.2	249.7
27.5°	1363.2	1268.8	1167.5	1059.5	944.8	830.1	708.6	587.1	465.7	357.7	263.2
25°	1397.0	1302.5	1201.3	1086.5	971.8	850.3	728.9	607.4	485.9	371.2	269.9
22.5°	1430.7	1322.7	1228.3	1113.5	998.8	877.3	749.1	620.9	499.4	377.9	276.7
20°	1457.7	1349.7	1248.5	1133.8	1019.1	897.6	769.4	641.1	512.9	391.4	283.4
17.5°	1484.7	1376.7	1268.8	1160.8	1039.3	911.1	782.9	654.6	519.7	398.2	290.2
15°	1511.7	1397.0	1289.0	1174.3	1052.8	931.3	796.3	668.1	533.1	404.9	296.9
12.5°	1532.0	1410.5	1302.5	1194.5	1066.3	944.8	809.8	674.9	539.9	411.7	296.9
10°	1545.5	1424.0	1316.0	1208.0	1079.8	951.6	816.6	688.4	546.6	418.4	303.7
7.5°	1559.0	1437.5	1322.7	1214.8	1086.5	958.3	830.1	695.1	553.4	418.4	310.4
5°	1572.5	1444.2	1329.5	1221.5	1093.3	971.8	836.8	701.9	560.1	425.2	310.4
2.5°	1579.2	1451.0	1336.2	1228.3	1100.0	971.8	836.8	701.9	560.1	425.2	310.4
0°	1579.2	1451.0	1336.2	1228.3	1100.0	971.8	836.8	701.9	560.1	425.2	310.4



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	6.7	6.7	0.0	0.0
85°	13.5	6.7	6.7	0.0
82.5°	20.2	13.5	6.7	0.0
80°	27.0	20.2	6.7	0.0
77.5°	33.7	20.2	13.5	0.0
75°	40.5	27.0	13.5	0.0
72.5°	47.2	33.7	13.5	0.0
70°	54.0	33.7	20.2	0.0
67.5°	60.7	40.5	20.2	0.0
65°	74.2	47.2	20.2	0.0
62.5°	81.0	47.2	27.0	0.0
60°	87.7	54.0	27.0	0.0
57.5°	94.5	60.7	27.0	0.0
55°	101.2	60.7	33.7	0.0
52.5°	108.0	67.5	33.7	0.0
50°	114.7	74.2	33.7	0.0
47.5°	121.5	81.0	33.7	0.0
45°	128.2	81.0	40.5	0.0
42.5°	141.7	87.7	40.5	0.0
40°	148.5	87.7	40.5	0.0
37.5°	155.2	94.5	40.5	0.0
35°	155.2	94.5	47.2	0.0
32.5°	162.0	101.2	47.2	0.0
30°	168.7	101.2	47.2	0.0
27.5°	175.5	108.0	47.2	0.0
25°	182.2	108.0	47.2	0.0
22.5°	182.2	108.0	47.2	0.0
20°	189.0	114.7	54.0	0.0
17.5°	189.0	114.7	54.0	0.0
15°	195.7	114.7	54.0	0.0
12.5°	195.7	121.5	54.0	0.0
10°	195.7	121.5	54.0	0.0
7.5°	202.5	121.5	54.0	0.0
5°	202.5	121.5	54.0	0.0
2.5°	202.5	121.5	54.0	0.0
0°	202.5	121.5	54.0	0.0

(END OF REPORT)