

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: P623233

Luminaire Tested: **EPH-VN-07-E-735-U-33**

Issue Date: 10/13/2022

Test Information

Test Method: LM-79-2019
Report Number: P623233
Test Lab: INNOVATION CENTER(G2)
Issue Date: 10/13/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-07-E-735-U-33
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 3 distribution lens
Light Source: (112) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	3H x 3V
Luminaire Lumens:	57933.9 lumens	Max Intensity:	539084.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	108.8 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

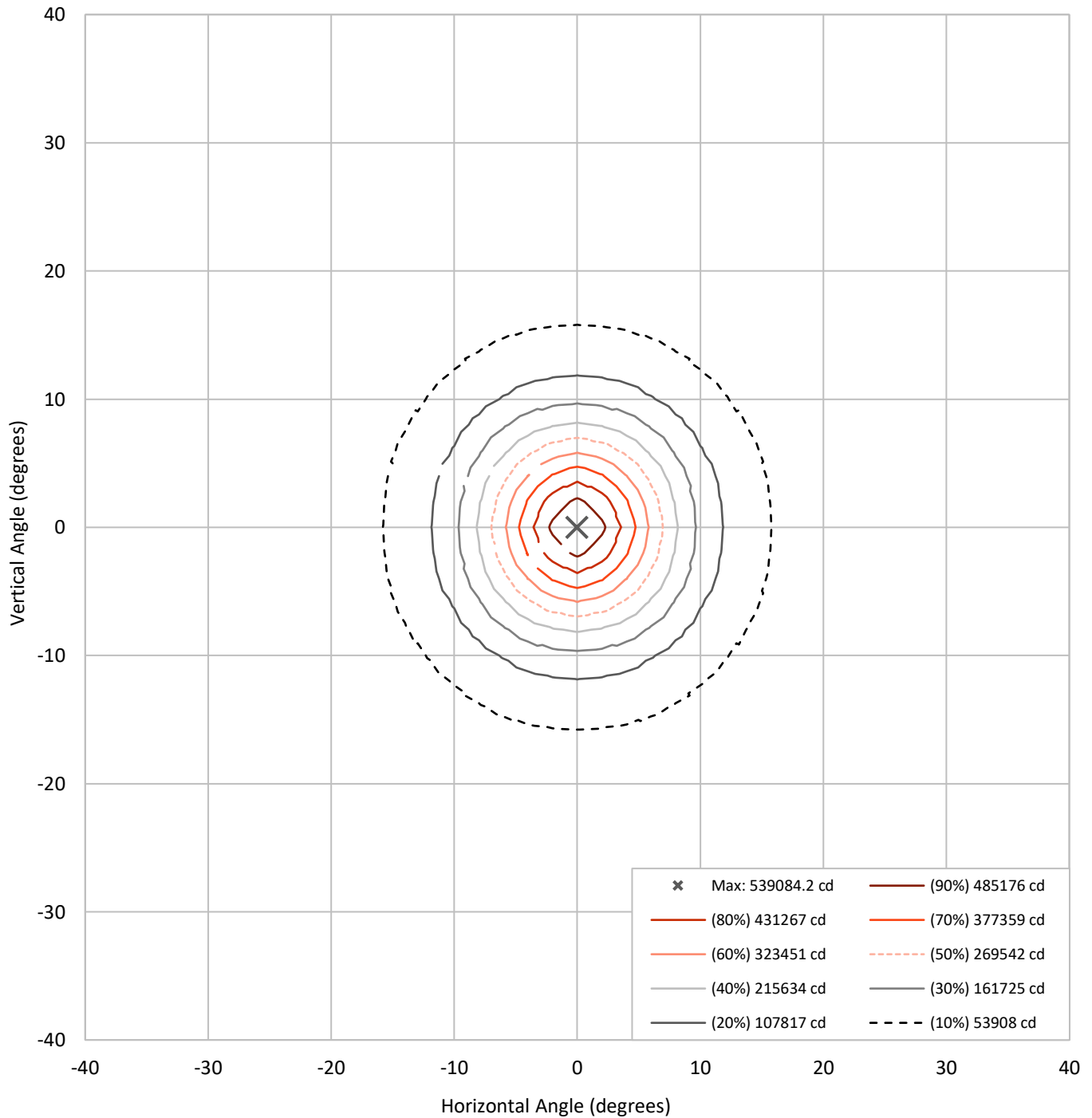
Beam Angle (50%):	13.8°H x 13.8°V	Field Angle (10%):	31.4°H x 31.4°V
Beam Lumens:	12668.5 lumens	Field Lumens:	29497.7 lumens
Beam Efficiency:	21.9%	Field Efficiency:	50.9%

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





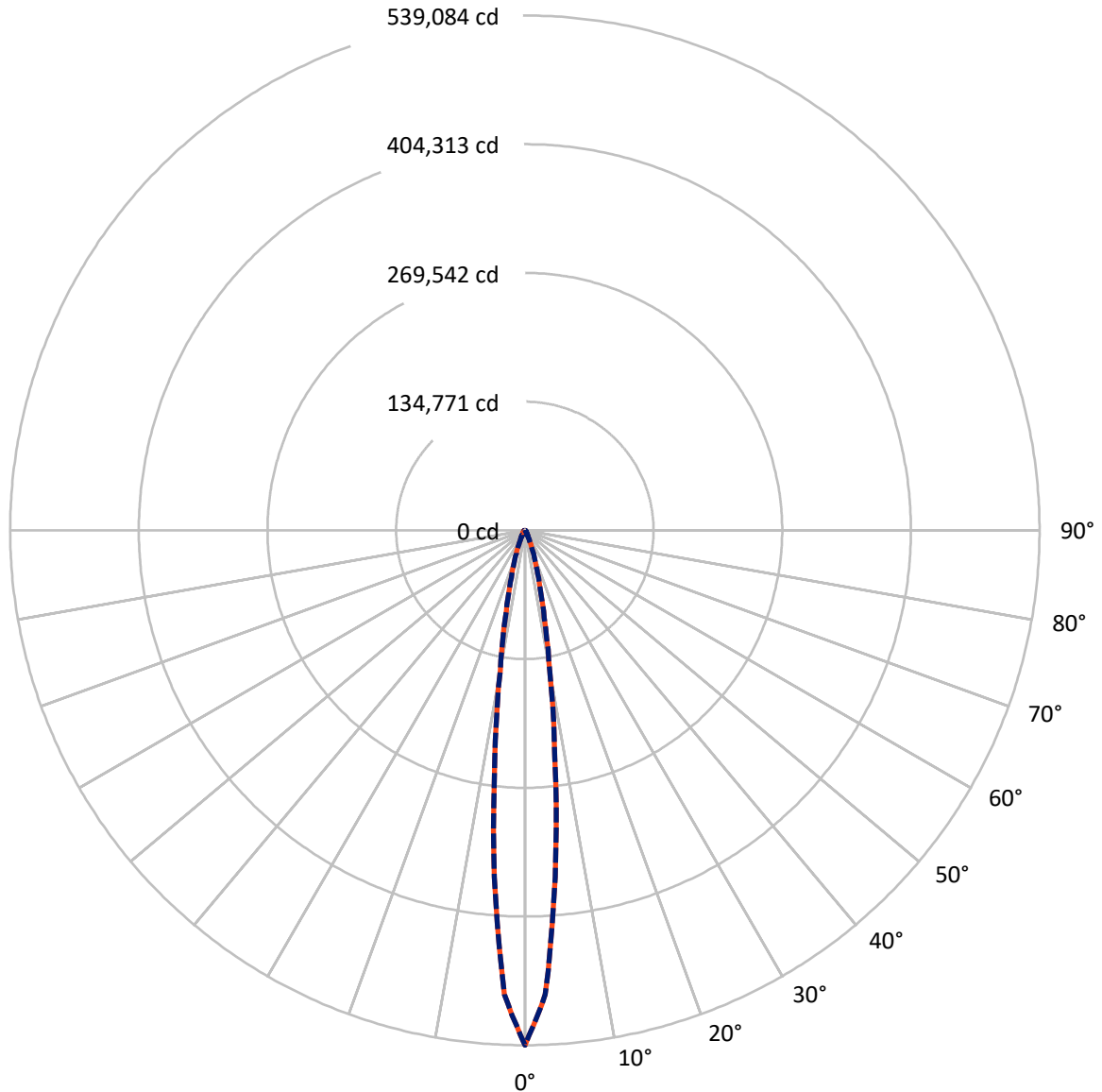
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Lumen Table

90	1.0	7.5	19.9	32.4	37.6	32.4	19.9	7.5	1.0							
80	1.0	7.5	19.9	32.4	37.6	32.4	19.9	7.5	1.0							
70	3.4	3.8	8.0	13.3	18.9	23.8	27.5	29.5	29.5	27.5	23.8	18.9	13.3	8.0	3.8	3.4
60		5.9	12.4	20.1	27.7	34.4	39.7	42.5	42.5	39.7	34.4	27.7	20.1	12.4	5.9	
50	6.2	8.1	16.3	25.7	35.6	45.7	55.3	61.3	61.3	55.3	45.7	35.6	25.7	16.3	8.1	6.2
40		9.9	19.5	30.8	45.1	64.6	88.3	108.4	108.4	88.3	64.6	45.1	30.8	19.5	9.9	
30	8.3	11.3	21.9	35.8	58.5	103.2	210.7	360.5	360.5	210.7	103.2	58.5	35.8	21.9	11.3	8.3
20		12.2	23.7	40.7	75.2	198.6	714.3	1773.8	1773.8	714.3	198.6	75.2	40.7	23.7	12.2	
10	9.1	12.7	24.6	43.8	89.8	330.9	1728.3	7588.9	7588.9	1728.3	330.9	89.8	43.8	24.6	12.7	9.1
0		12.7	24.6	43.8	89.8	330.9	1728.3	7588.9	7588.9	1728.3	330.9	89.8	43.8	24.6	12.7	
-10	8.3	12.2	23.7	40.7	75.2	198.6	714.3	1773.8	1773.8	714.3	198.6	75.2	40.7	23.7	12.2	8.3
-20		11.3	21.9	35.8	58.5	103.2	210.7	360.5	360.5	210.7	103.2	58.5	35.8	21.9	11.3	
-30	6.2	9.9	19.5	30.8	45.1	64.6	88.3	108.4	108.4	88.3	64.6	45.1	30.8	19.5	9.9	6.2
-40		8.1	16.3	25.7	35.6	45.7	55.3	61.3	61.3	55.3	45.7	35.6	25.7	16.3	8.1	
-50	3.4	5.9	12.4	20.1	27.7	34.4	39.7	42.5	42.5	39.7	34.4	27.7	20.1	12.4	5.9	3.4
-60		3.8	8.0	13.3	18.9	23.8	27.5	29.5	29.5	27.5	23.8	18.9	13.3	8.0	3.8	
-70	1.0	7.5	19.9	32.4	37.6	32.4	19.9	7.5	1.0							
-80		1.0	7.5	19.9	32.4	37.6	32.4	19.9	7.5	1.0						
-90	1.0	7.5	19.9	32.4	37.6	32.4	19.9	7.5	1.0							

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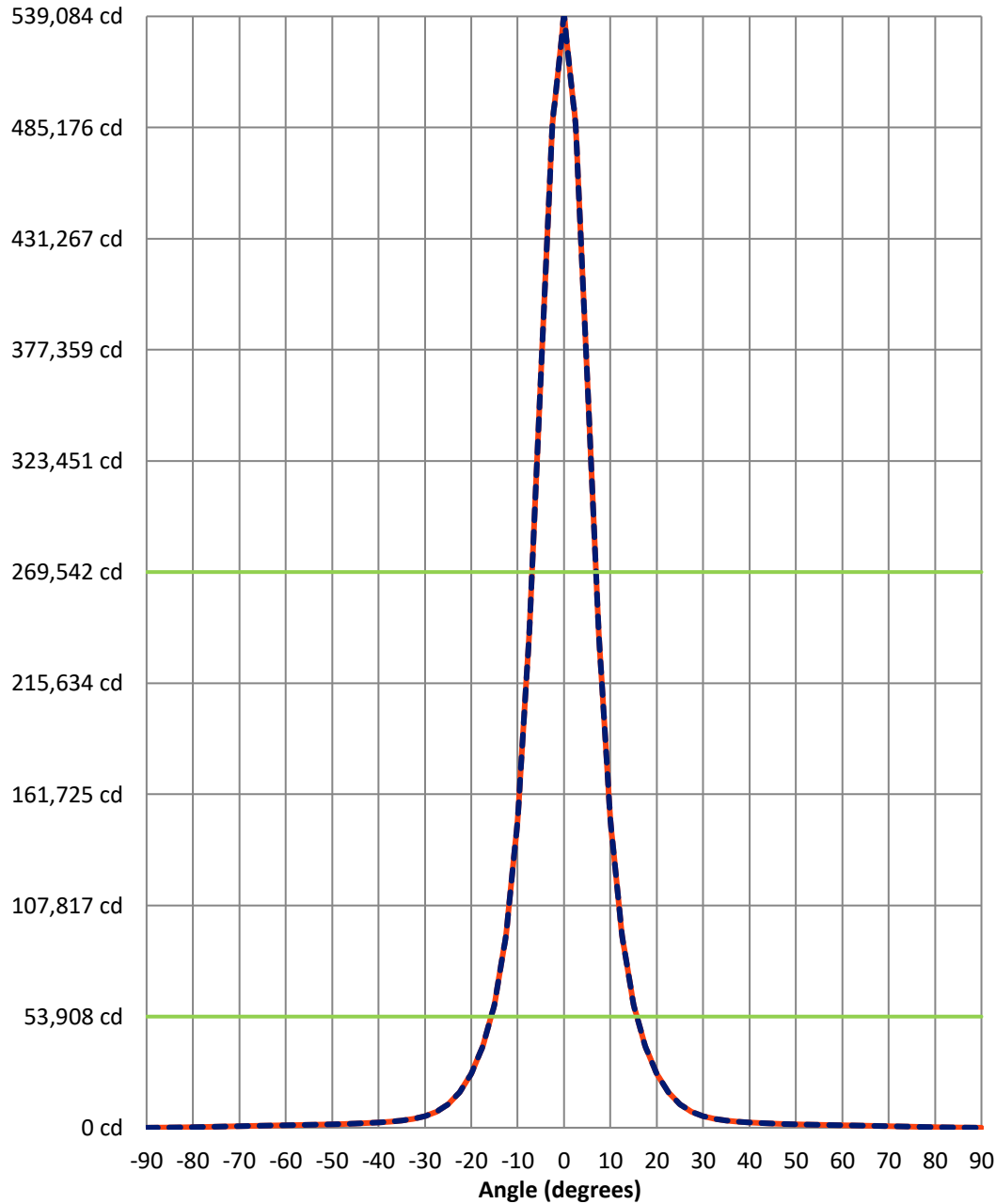
Luminous Intensity Polar Plot



— 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: 12668.5
Efficiency: 21.9%

Field:
H Angle: 31.4°
V Angle: 31.4°
Lumens: 29497.7
Efficiency: 50.9%

Spill:
Lumens: 28436.2
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°	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	48.2	42.2	42.2
85°	108.5	108.5	108.5	108.5	108.5	108.5	102.5	102.5	102.5	96.4	96.4
82.5°	180.8	180.8	180.8	180.8	174.8	174.8	174.8	168.8	168.8	162.7	162.7
80°	277.2	277.2	277.2	277.2	271.2	265.2	265.2	259.2	253.1	247.1	241.1
77.5°	379.7	379.7	379.7	373.7	373.7	367.7	361.6	355.6	349.6	337.5	331.5
75°	500.2	500.2	500.2	494.2	488.2	482.2	476.1	464.1	458.1	446.0	433.9
72.5°	626.8	626.8	626.8	620.8	614.8	602.7	596.7	584.6	572.6	554.5	542.4
70°	747.4	747.4	747.4	741.3	729.3	723.2	711.2	699.1	687.1	669.0	650.9
67.5°	867.9	867.9	867.9	855.8	849.8	843.8	831.7	813.7	801.6	783.5	759.4
65°	982.4	982.4	976.4	970.4	964.3	952.3	940.2	928.2	910.1	892.0	867.9
62.5°	1096.9	1096.9	1090.9	1084.9	1078.8	1066.8	1048.7	1036.7	1012.5	994.5	970.4
60°	1193.4	1193.4	1187.3	1181.3	1175.3	1163.2	1151.2	1133.1	1115.0	1096.9	1072.8
57.5°	1295.8	1295.8	1289.8	1283.8	1271.7	1259.7	1247.6	1229.5	1205.4	1181.3	1163.2
55°	1410.3	1410.3	1404.3	1392.3	1380.2	1368.1	1350.1	1326.0	1301.8	1277.7	1247.6
52.5°	1518.8	1518.8	1512.8	1500.7	1488.7	1476.6	1452.5	1434.4	1404.3	1374.2	1338.0
50°	1651.4	1651.4	1639.4	1627.3	1615.3	1591.1	1567.0	1536.9	1506.8	1470.6	1440.5
47.5°	1802.1	1802.1	1790.0	1778.0	1753.9	1729.8	1693.6	1657.4	1621.3	1579.1	1530.9
45°	2013.0	2013.0	1995.0	1970.8	1940.7	1898.5	1850.3	1802.1	1747.8	1699.6	1645.4
42.5°	2272.2	2272.2	2248.1	2218.0	2175.8	2121.5	2055.2	1988.9	1916.6	1838.3	1765.9
40°	2543.4	2543.4	2513.3	2483.1	2434.9	2368.6	2296.3	2211.9	2121.5	2019.1	1928.7
37.5°	2917.1	2917.1	2874.9	2820.7	2748.3	2657.9	2549.4	2453.0	2350.6	2236.0	2115.5
35°	3471.6	3471.6	3405.3	3314.9	3200.4	3049.7	2887.0	2748.3	2591.6	2453.0	2320.4
32.5°	4291.3	4291.3	4176.8	4044.2	3851.3	3610.2	3375.2	3152.2	2917.1	2718.2	2525.3
30°	5581.1	5581.1	5388.2	5147.1	4821.6	4405.8	4056.2	3694.6	3351.0	3061.7	2796.6
27.5°	7726.7	7636.3	7371.1	6931.1	6328.4	5581.1	5044.6	4435.9	3953.8	3483.6	3140.1
25°	11342.9	11174.2	10673.9	9848.2	8733.2	7497.7	6521.3	5484.6	4749.3	4080.3	3543.9
22.5°	17219.3	16911.9	15995.8	14501.1	12482.0	10505.2	8703.1	7105.9	5792.0	4857.8	4080.3
20°	26163.5	25627.1	24048.0	21492.5	18045.0	14989.3	11776.9	9408.2	7304.8	5792.0	4749.3
17.5°	39603.8	38675.6	35957.4	31575.8	26163.5	21185.1	16291.1	12391.6	9408.2	7105.9	5484.6
15°	59710.1	58082.8	53333.4	45781.5	37108.6	29213.2	22264.0	16291.1	11776.9	8703.1	6521.3
12.5°	93467.6	90176.8	80666.1	65833.6	52007.5	39031.2	29213.2	21185.1	14989.3	10505.2	7497.7
10°	149242.0	142443.5	123162.9	93979.9	71782.3	52007.5	37108.6	26163.5	18045.0	12482.0	8733.2
7.5°	239647.9	225056.4	185187.4	136048.8	93979.9	65833.6	45781.5	31575.8	21492.5	14501.1	9848.2
5°	364341.7	334977.9	261266.9	185187.4	123162.9	80666.1	53333.4	35957.4	24048.0	15995.8	10673.9
2.5°	486594.5	435985.3	334977.9	225056.4	142443.5	90176.8	58082.8	38675.6	25627.1	16911.9	11174.2
0°	539084.2	486594.5	364341.7	239647.9	149242.0	93467.6	59710.1	39603.8	26163.5	17219.3	11342.9



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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	30.1	30.1	30.1
85°	96.4	90.4	90.4	84.4	84.4	78.4	78.4	72.3	72.3	66.3	60.3
82.5°	156.7	150.7	144.6	138.6	138.6	132.6	126.6	114.5	108.5	102.5	96.4
80°	235.1	223.0	217.0	204.9	198.9	186.8	174.8	168.8	156.7	150.7	138.6
77.5°	319.4	307.4	301.4	283.3	271.2	259.2	247.1	229.0	217.0	198.9	180.8
75°	415.9	403.8	385.7	367.7	355.6	337.5	319.4	301.4	277.2	259.2	241.1
72.5°	524.4	506.3	488.2	464.1	440.0	421.9	391.8	367.7	349.6	325.5	301.4
70°	632.8	614.8	590.7	566.5	536.4	512.3	482.2	452.0	421.9	391.8	361.6
67.5°	741.3	717.2	693.1	663.0	632.8	602.7	572.6	536.4	500.2	464.1	427.9
65°	843.8	819.7	789.5	759.4	729.3	693.1	656.9	620.8	578.6	536.4	500.2
62.5°	946.2	916.1	886.0	855.8	819.7	783.5	747.4	699.1	656.9	614.8	566.5
60°	1042.7	1012.5	982.4	946.2	910.1	867.9	825.7	783.5	735.3	687.1	638.9
57.5°	1133.1	1103.0	1072.8	1030.6	994.5	952.3	904.1	861.9	807.6	759.4	705.2
55°	1217.5	1187.3	1151.2	1115.0	1078.8	1030.6	982.4	934.2	880.0	825.7	765.4
52.5°	1301.8	1265.7	1229.5	1193.4	1151.2	1109.0	1060.8	1006.5	952.3	892.0	831.7
50°	1398.3	1356.1	1307.9	1265.7	1217.5	1175.3	1127.1	1072.8	1018.6	952.3	892.0
47.5°	1488.7	1446.5	1398.3	1344.0	1295.8	1241.6	1187.3	1139.1	1078.8	1018.6	952.3
45°	1591.1	1530.9	1482.7	1428.4	1368.1	1307.9	1253.6	1193.4	1139.1	1072.8	1006.5
42.5°	1699.6	1633.3	1567.0	1500.7	1446.5	1380.2	1313.9	1253.6	1187.3	1127.1	1060.8
40°	1826.2	1747.8	1663.5	1591.1	1518.8	1452.5	1380.2	1307.9	1241.6	1175.3	1109.0
37.5°	1988.9	1880.4	1772.0	1681.5	1597.2	1518.8	1446.5	1368.1	1295.8	1217.5	1151.2
35°	2181.8	2031.1	1904.6	1778.0	1681.5	1591.1	1500.7	1428.4	1344.0	1265.7	1193.4
32.5°	2374.7	2211.9	2049.2	1904.6	1772.0	1663.5	1567.0	1482.7	1398.3	1307.9	1229.5
30°	2573.6	2392.7	2211.9	2031.1	1880.4	1747.8	1633.3	1530.9	1446.5	1356.1	1265.7
27.5°	2826.7	2573.6	2374.7	2181.8	1988.9	1826.2	1699.6	1591.1	1488.7	1398.3	1301.8
25°	3140.1	2796.6	2525.3	2320.4	2115.5	1928.7	1765.9	1645.4	1530.9	1440.5	1338.0
22.5°	3483.6	3061.7	2718.2	2453.0	2236.0	2019.1	1838.3	1699.6	1579.1	1470.6	1374.2
20°	3953.8	3351.0	2917.1	2591.6	2350.6	2121.5	1916.6	1747.8	1621.3	1506.8	1404.3
17.5°	4435.9	3694.6	3152.2	2748.3	2453.0	2211.9	1988.9	1802.1	1657.4	1536.9	1434.4
15°	5044.6	4056.2	3375.2	2887.0	2549.4	2296.3	2055.2	1850.3	1693.6	1567.0	1452.5
12.5°	5581.1	4405.8	3610.2	3049.7	2657.9	2368.6	2121.5	1898.5	1729.8	1591.1	1476.6
10°	6328.4	4821.6	3851.3	3200.4	2748.3	2434.9	2175.8	1940.7	1753.9	1615.3	1488.7
7.5°	6931.1	5147.1	4044.2	3314.9	2820.7	2483.1	2218.0	1970.8	1778.0	1627.3	1500.7
5°	7371.1	5388.2	4176.8	3405.3	2874.9	2513.3	2248.1	1995.0	1790.0	1639.4	1512.8
2.5°	7636.3	5581.1	4291.3	3471.6	2917.1	2543.4	2272.2	2013.0	1802.1	1651.4	1518.8
0°	7726.7	5581.1	4291.3	3471.6	2917.1	2543.4	2272.2	2013.0	1802.1	1651.4	1518.8



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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°	30.1	24.1	24.1	24.1	18.1	18.1	18.1	12.1	12.1	12.1	6.0
85°	54.2	54.2	48.2	42.2	42.2	36.2	30.1	30.1	24.1	18.1	18.1
82.5°	90.4	84.4	78.4	72.3	66.3	54.2	48.2	42.2	36.2	30.1	24.1
80°	126.6	120.5	108.5	96.4	90.4	78.4	72.3	60.3	48.2	42.2	36.2
77.5°	168.8	156.7	144.6	132.6	114.5	102.5	90.4	78.4	66.3	54.2	42.2
75°	223.0	198.9	180.8	162.7	144.6	126.6	108.5	96.4	78.4	66.3	48.2
72.5°	277.2	253.1	223.0	198.9	174.8	156.7	132.6	114.5	96.4	78.4	60.3
70°	331.5	301.4	271.2	241.1	210.9	180.8	156.7	132.6	108.5	90.4	72.3
67.5°	385.7	355.6	319.4	283.3	253.1	217.0	180.8	156.7	126.6	102.5	78.4
65°	452.0	409.8	367.7	331.5	289.3	253.1	210.9	174.8	144.6	114.5	90.4
62.5°	518.3	470.1	421.9	373.7	331.5	283.3	241.1	198.9	162.7	132.6	96.4
60°	584.6	530.4	476.1	421.9	367.7	319.4	271.2	223.0	180.8	144.6	108.5
57.5°	650.9	590.7	530.4	470.1	409.8	355.6	301.4	253.1	198.9	156.7	120.5
55°	711.2	650.9	584.6	518.3	452.0	385.7	331.5	277.2	223.0	168.8	126.6
52.5°	765.4	705.2	638.9	566.5	500.2	427.9	361.6	301.4	241.1	180.8	138.6
50°	825.7	759.4	687.1	614.8	536.4	464.1	391.8	325.5	259.2	198.9	150.7
47.5°	880.0	807.6	735.3	656.9	578.6	500.2	421.9	349.6	277.2	217.0	156.7
45°	934.2	861.9	783.5	699.1	620.8	536.4	452.0	367.7	301.4	229.0	168.8
42.5°	982.4	904.1	825.7	747.4	656.9	572.6	482.2	391.8	319.4	247.1	174.8
40°	1030.6	952.3	867.9	783.5	693.1	602.7	512.3	421.9	337.5	259.2	186.8
37.5°	1078.8	994.5	910.1	819.7	729.3	632.8	536.4	440.0	355.6	271.2	198.9
35°	1115.0	1030.6	946.2	855.8	759.4	663.0	566.5	464.1	367.7	283.3	204.9
32.5°	1151.2	1072.8	982.4	886.0	789.5	693.1	590.7	488.2	385.7	301.4	217.0
30°	1187.3	1103.0	1012.5	916.1	819.7	717.2	614.8	506.3	403.8	307.4	223.0
27.5°	1217.5	1133.1	1042.7	946.2	843.8	741.3	632.8	524.4	415.9	319.4	235.1
25°	1247.6	1163.2	1072.8	970.4	867.9	759.4	650.9	542.4	433.9	331.5	241.1
22.5°	1277.7	1181.3	1096.9	994.5	892.0	783.5	669.0	554.5	446.0	337.5	247.1
20°	1301.8	1205.4	1115.0	1012.5	910.1	801.6	687.1	572.6	458.1	349.6	253.1
17.5°	1326.0	1229.5	1133.1	1036.7	928.2	813.7	699.1	584.6	464.1	355.6	259.2
15°	1350.1	1247.6	1151.2	1048.7	940.2	831.7	711.2	596.7	476.1	361.6	265.2
12.5°	1368.1	1259.7	1163.2	1066.8	952.3	843.8	723.2	602.7	482.2	367.7	265.2
10°	1380.2	1271.7	1175.3	1078.8	964.3	849.8	729.3	614.8	488.2	373.7	271.2
7.5°	1392.3	1283.8	1181.3	1084.9	970.4	855.8	741.3	620.8	494.2	373.7	277.2
5°	1404.3	1289.8	1187.3	1090.9	976.4	867.9	747.4	626.8	500.2	379.7	277.2
2.5°	1410.3	1295.8	1193.4	1096.9	982.4	867.9	747.4	626.8	500.2	379.7	277.2
0°	1410.3	1295.8	1193.4	1096.9	982.4	867.9	747.4	626.8	500.2	379.7	277.2



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	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°	30.1	18.1	12.1	0.0
75°	36.2	24.1	12.1	0.0
72.5°	42.2	30.1	12.1	0.0
70°	48.2	30.1	18.1	0.0
67.5°	54.2	36.2	18.1	0.0
65°	66.3	42.2	18.1	0.0
62.5°	72.3	42.2	24.1	0.0
60°	78.4	48.2	24.1	0.0
57.5°	84.4	54.2	24.1	0.0
55°	90.4	54.2	30.1	0.0
52.5°	96.4	60.3	30.1	0.0
50°	102.5	66.3	30.1	0.0
47.5°	108.5	72.3	30.1	0.0
45°	114.5	72.3	36.2	0.0
42.5°	126.6	78.4	36.2	0.0
40°	132.6	78.4	36.2	0.0
37.5°	138.6	84.4	36.2	0.0
35°	138.6	84.4	42.2	0.0
32.5°	144.6	90.4	42.2	0.0
30°	150.7	90.4	42.2	0.0
27.5°	156.7	96.4	42.2	0.0
25°	162.7	96.4	42.2	0.0
22.5°	162.7	96.4	42.2	0.0
20°	168.8	102.5	48.2	0.0
17.5°	168.8	102.5	48.2	0.0
15°	174.8	102.5	48.2	0.0
12.5°	174.8	108.5	48.2	0.0
10°	174.8	108.5	48.2	0.0
7.5°	180.8	108.5	48.2	0.0
5°	180.8	108.5	48.2	0.0
2.5°	180.8	108.5	48.2	0.0
0°	180.8	108.5	48.2	0.0

(END OF REPORT)