

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: P624136

Luminaire Tested: **EPH-VN-08-D-735-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624136
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-D-735-U-55
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 5 distribution lens
Light Source: (128) 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

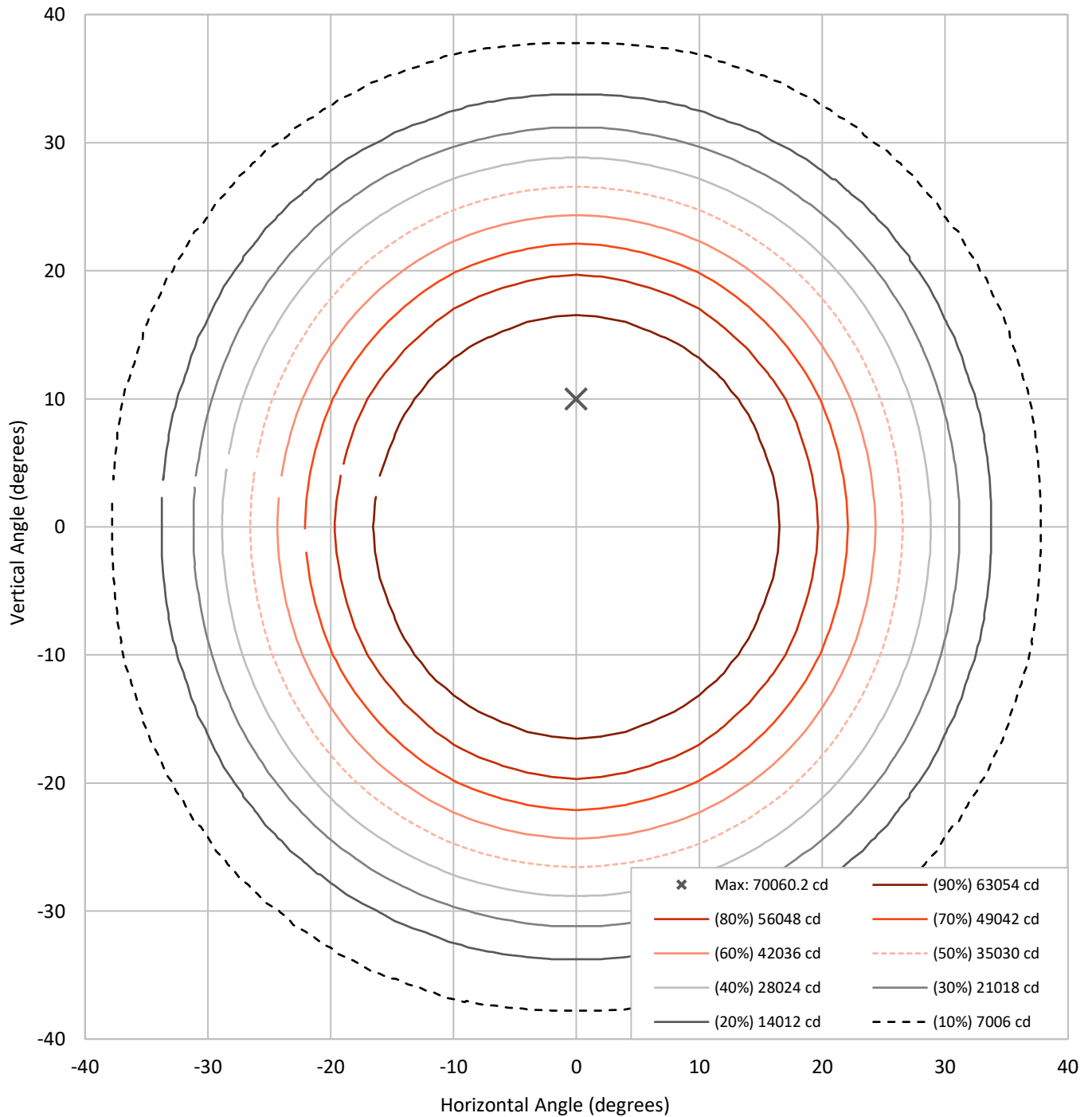
Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	57330.4 lumens	Max Intensity:	70060.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	117.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	28494.7 lumens	Field Lumens:	37058.2 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

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





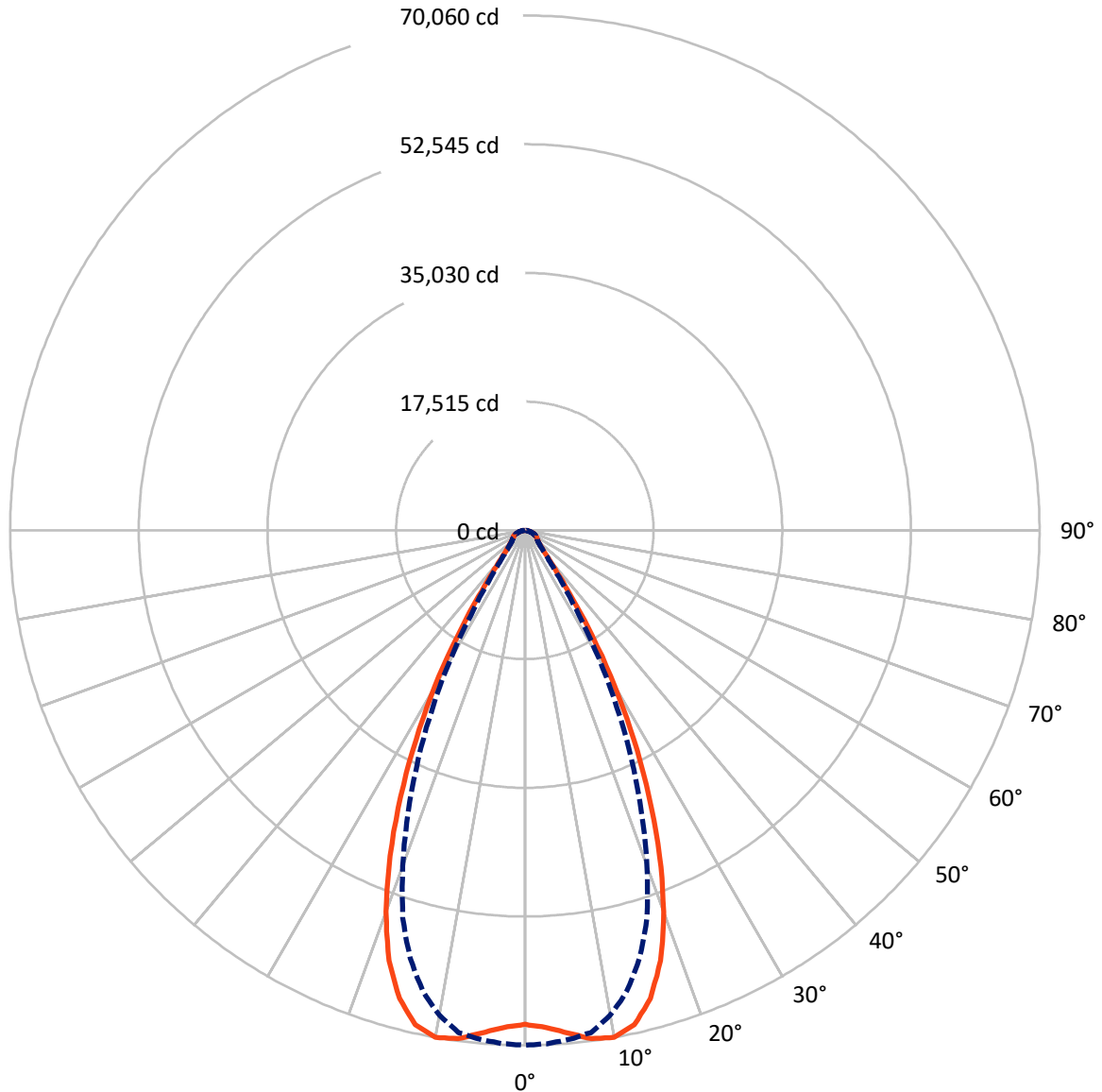
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Lumen Table

90	1.7	12.6	32.8	52.9	61.3	52.9	32.8	12.6	1.7										
80																			
70																			
60	5.8	6.2	13.0	21.4	30.1	37.6	43.0	45.9	45.9	43.0	37.6	30.1	21.4	13.0	6.2				5.8
50		9.6	19.8	31.5	42.2	51.3	58.3	62.1	62.1	58.3	51.3	42.2	31.5	19.8	9.6				
40	10.2	12.9	25.6	38.7	51.9	67.2	85.0	98.8	98.8	85.0	67.2	51.9	38.7	25.6	12.9				10.2
30		15.7	29.7	44.9	68.0	121.1	236.7	357.0	357.0	236.7	121.1	68.0	44.9	29.7	15.7				
20	13.6	17.7	32.6	52.6	110.0	350.3	811.7	1152.0	1152.0	811.7	350.3	110.0	52.6	32.6	17.7				13.6
10		19.0	34.8	62.7	202.9	764.5	1495.8	1906.9	1906.9	1495.8	764.5	202.9	62.7	34.8	19.0				
0	14.8	19.7	36.0	70.8	297.8	1053.2	1850.5	2098.5	2098.5	1850.5	1053.2	297.8	70.8	36.0	19.7				14.8
-10		19.7	36.0	70.8	297.8	1053.2	1850.5	2098.5	2098.5	1850.5	1053.2	297.8	70.8	36.0	19.7				
-20	13.6	19.0	34.8	62.7	202.9	764.5	1495.8	1906.9	1906.9	1495.8	764.5	202.9	62.7	34.8	19.0				13.6
-30		17.7	32.6	52.6	110.0	350.3	811.7	1152.0	1152.0	811.7	350.3	110.0	52.6	32.6	17.7				
-40	10.2	15.7	29.7	44.9	68.0	121.1	236.7	357.0	357.0	236.7	121.1	68.0	44.9	29.7	15.7				10.2
-50		12.9	25.6	38.7	51.9	67.2	85.0	98.8	98.8	85.0	67.2	51.9	38.7	25.6	12.9				
-60	5.8	9.6	19.8	31.5	42.2	51.3	58.3	62.1	62.1	58.3	51.3	42.2	31.5	19.8	9.6				5.8
-70		6.2	13.0	21.4	30.1	37.6	43.0	45.9	45.9	43.0	37.6	30.1	21.4	13.0	6.2				
-80	1.7	12.6	32.8	52.9	61.3	52.9	32.8	12.6	1.7										
-90																			

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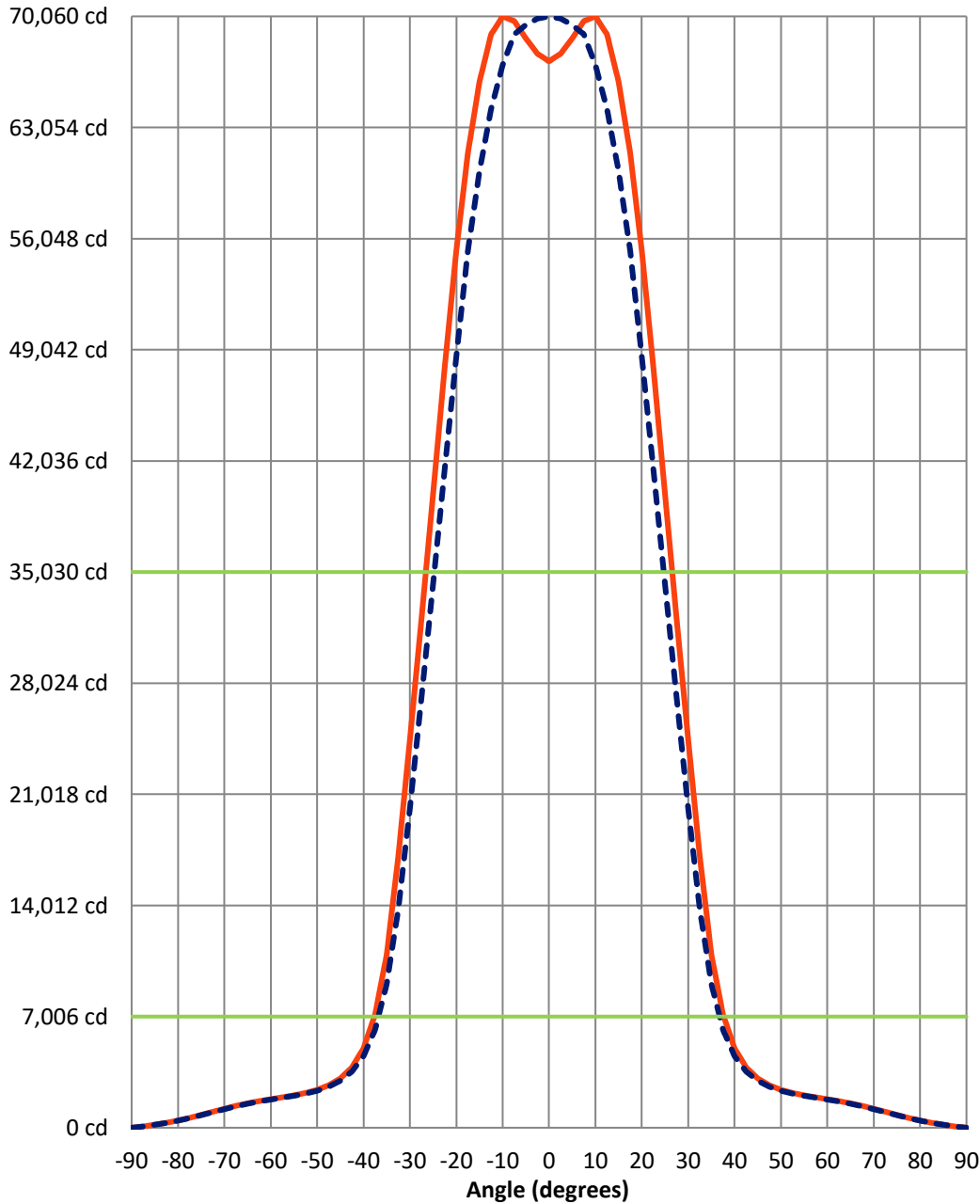
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 10-Deg

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Luminous Intensity Plot



Beam:
 H Angle: 49.5°
 V Angle: 53.1°
 Lumens: 28494.7
 Efficiency: 49.7%

Field:
 H Angle: 73.6°
 V Angle: 75.3°
 Lumens: 37058.2
 Efficiency: 64.6%

Spill:
 Lumens: 20272.3
 Efficiency: 35.4%

- Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 10-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°	77.4	77.4	77.4	77.4	77.4	77.4	77.4	71.5	71.5	71.5	71.5
85°	190.6	190.6	190.6	190.6	190.6	184.6	184.6	178.7	178.7	172.7	166.8
82.5°	309.7	309.7	309.7	309.7	303.7	303.7	297.8	291.8	285.9	279.9	274.0
80°	452.6	452.6	452.6	452.6	446.7	440.7	434.7	428.8	416.9	410.9	399.0
77.5°	619.4	619.4	619.4	613.4	607.5	601.5	589.6	577.7	565.8	553.9	541.9
75°	809.9	809.9	809.9	798.0	792.1	780.2	768.3	756.3	738.5	720.6	702.7
72.5°	1006.5	1006.5	1006.5	994.6	982.7	970.7	958.8	941.0	923.1	899.3	875.5
70°	1191.1	1191.1	1191.1	1179.2	1167.3	1155.4	1137.5	1119.6	1095.8	1072.0	1048.2
67.5°	1381.7	1381.7	1381.7	1363.8	1351.9	1340.0	1322.1	1298.3	1274.5	1244.7	1214.9
65°	1536.5	1536.5	1530.6	1524.6	1512.7	1494.8	1482.9	1459.1	1435.3	1411.4	1381.7
62.5°	1679.4	1679.4	1673.5	1667.5	1655.6	1637.8	1619.9	1602.0	1578.2	1548.4	1518.6
60°	1798.6	1798.6	1792.6	1786.6	1774.7	1762.8	1745.0	1727.1	1703.3	1679.4	1649.7
57.5°	1917.7	1917.7	1911.7	1905.8	1893.8	1876.0	1858.1	1840.2	1816.4	1786.6	1756.9
55°	2042.7	2042.7	2036.8	2024.9	2012.9	1995.1	1977.2	1953.4	1923.6	1893.8	1864.1
52.5°	2191.6	2191.6	2179.7	2167.8	2149.9	2132.1	2102.3	2072.5	2036.8	2001.0	1965.3
50°	2388.1	2388.1	2376.2	2358.4	2328.6	2298.8	2263.1	2215.4	2173.7	2126.1	2078.5
47.5°	2680.0	2680.0	2656.1	2626.4	2584.7	2537.0	2471.5	2400.1	2340.5	2280.9	2209.5
45°	3108.8	3108.8	3073.0	3025.4	2959.9	2876.5	2781.2	2680.0	2578.7	2477.5	2376.2
42.5°	3805.5	3805.5	3740.0	3656.7	3543.5	3400.6	3221.9	3055.2	2912.2	2751.4	2614.5
40°	5008.6	5008.6	4883.5	4728.6	4514.2	4240.3	3912.7	3650.7	3400.6	3120.7	2930.1
37.5°	7146.6	7146.6	6902.4	6604.6	6187.7	5663.7	5032.4	4609.5	4145.0	3704.3	3382.7
35°	10922.3	10922.3	10451.9	9874.2	9070.2	8057.8	6979.8	6181.8	5294.4	4615.5	4014.0
32.5°	17116.0	17116.0	16270.3	15228.1	13792.9	11976.5	10249.4	8730.7	7146.6	6021.0	4937.1
30°	24477.0	24477.0	23369.3	22005.5	20135.4	17777.1	15317.5	12619.6	10118.3	8111.4	6473.6
27.5°	32088.1	31772.4	30819.6	29265.2	27133.1	24477.0	21409.9	17926.0	14543.3	11005.7	8665.2
25°	39961.2	39592.0	38502.1	36715.5	34273.7	31266.2	27812.0	23917.2	19742.4	15525.9	11476.2
22.5°	47917.7	47500.8	46262.1	44243.2	41503.7	38132.9	34220.1	29890.5	25227.4	20355.8	15525.9
20°	55272.7	54832.0	53533.7	51431.4	48596.6	44898.3	40550.8	35750.7	30593.3	25227.4	19742.4
17.5°	61430.7	61007.8	59757.2	57750.2	55272.7	51181.3	46661.1	41384.6	35750.7	29890.5	23917.2
15°	65927.1	65563.8	64497.7	62812.3	60287.2	56666.3	52062.7	46661.1	40550.8	34220.1	27812.0
12.5°	68910.7	68618.9	67779.2	66469.0	64205.9	61168.6	56666.3	51181.3	44898.3	38132.9	31266.2
10°	70060.2	69917.2	69524.2	68922.7	66993.1	64205.9	60287.2	55272.7	48596.6	41503.7	34273.7
7.5°	69756.4	69804.1	69941.0	69786.2	68922.7	66469.0	62812.3	57750.2	51431.4	44243.2	36715.5
5°	68672.5	68928.6	69565.8	69941.0	69524.2	67779.2	64497.7	59757.2	53533.7	46262.1	38502.1
2.5°	67707.7	68106.8	68928.6	69804.1	69917.2	68618.9	65563.8	61007.8	54832.0	47500.8	39592.0
0°	67231.3	67707.7	68672.5	69756.4	70060.2	68910.7	65927.1	61430.7	55272.7	47917.7	39961.2



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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°	71.5	65.5	65.5	65.5	59.6	59.6	59.6	53.6	53.6	47.6	47.6
85°	166.8	160.8	154.8	148.9	142.9	137.0	131.0	125.1	119.1	107.2	101.2
82.5°	268.0	262.0	256.1	244.2	238.2	226.3	214.4	202.5	190.6	184.6	172.7
80°	387.1	375.2	363.3	351.4	333.5	315.6	303.7	285.9	274.0	256.1	244.2
77.5°	524.1	506.2	488.3	464.5	446.7	428.8	405.0	387.1	363.3	339.5	315.6
75°	678.9	655.1	625.3	601.5	577.7	547.9	518.1	488.3	458.6	428.8	399.0
72.5°	845.7	815.9	786.1	756.3	720.6	678.9	643.2	601.5	565.8	530.0	488.3
70°	1018.4	982.7	946.9	911.2	869.5	821.9	780.2	732.5	684.9	637.2	589.6
67.5°	1179.2	1143.5	1101.8	1066.0	1018.4	970.7	917.1	863.5	809.9	750.4	690.8
65°	1345.9	1304.2	1256.6	1209.0	1161.3	1107.7	1054.1	1000.5	935.0	869.5	809.9
62.5°	1482.9	1447.2	1405.5	1357.8	1304.2	1244.7	1191.1	1119.6	1054.1	988.6	911.2
60°	1613.9	1572.2	1536.5	1482.9	1435.3	1381.7	1316.2	1244.7	1173.2	1095.8	1024.3
57.5°	1727.1	1691.4	1649.7	1602.0	1548.4	1494.8	1435.3	1369.8	1286.4	1209.0	1125.6
55°	1828.3	1786.6	1745.0	1703.3	1655.6	1596.1	1536.5	1471.0	1399.5	1316.2	1226.8
52.5°	1929.6	1887.9	1840.2	1798.6	1745.0	1691.4	1631.8	1566.3	1494.8	1417.4	1322.1
50°	2030.8	1983.2	1935.5	1881.9	1828.3	1774.7	1715.2	1655.6	1578.2	1500.8	1417.4
47.5°	2149.9	2090.4	2030.8	1971.3	1917.7	1852.2	1792.6	1727.1	1661.6	1578.2	1494.8
45°	2298.8	2209.5	2138.0	2066.5	2001.0	1935.5	1864.1	1798.6	1727.1	1655.6	1566.3
42.5°	2483.4	2364.3	2269.0	2173.7	2090.4	2012.9	1941.5	1864.1	1792.6	1715.2	1631.8
40°	2733.6	2572.8	2417.9	2298.8	2191.6	2096.3	2012.9	1935.5	1852.2	1774.7	1691.4
37.5°	3061.1	2834.8	2620.4	2447.7	2310.7	2191.6	2090.4	2001.0	1917.7	1828.3	1745.0
35°	3555.4	3162.4	2888.4	2638.3	2447.7	2298.8	2173.7	2066.5	1971.3	1881.9	1798.6
32.5°	4252.2	3644.7	3204.0	2888.4	2620.4	2417.9	2269.0	2138.0	2030.8	1935.5	1840.2
30°	5169.3	4329.6	3644.7	3162.4	2834.8	2572.8	2364.3	2209.5	2090.4	1983.2	1887.9
27.5°	6622.5	5169.3	4252.2	3555.4	3061.1	2733.6	2483.4	2298.8	2149.9	2030.8	1929.6
25°	8665.2	6473.6	4937.1	4014.0	3382.7	2930.1	2614.5	2376.2	2209.5	2078.5	1965.3
22.5°	11005.7	8111.4	6021.0	4615.5	3704.3	3120.7	2751.4	2477.5	2280.9	2126.1	2001.0
20°	14543.3	10118.3	7146.6	5294.4	4145.0	3400.6	2912.2	2578.7	2340.5	2173.7	2036.8
17.5°	17926.0	12619.6	8730.7	6181.8	4609.5	3650.7	3055.2	2680.0	2400.1	2215.4	2072.5
15°	21409.9	15317.5	10249.4	6979.8	5032.4	3912.7	3221.9	2781.2	2471.5	2263.1	2102.3
12.5°	24477.0	17777.1	11976.5	8057.8	5663.7	4240.3	3400.6	2876.5	2537.0	2298.8	2132.1
10°	27133.1	20135.4	13792.9	9070.2	6187.7	4514.2	3543.5	2959.9	2584.7	2328.6	2149.9
7.5°	29265.2	22005.5	15228.1	9874.2	6604.6	4728.6	3656.7	3025.4	2626.4	2358.4	2167.8
5°	30819.6	23369.3	16270.3	10451.9	6902.4	4883.5	3740.0	3073.0	2656.1	2376.2	2179.7
2.5°	31772.4	24477.0	17116.0	10922.3	7146.6	5008.6	3805.5	3108.8	2680.0	2388.1	2191.6
0°	32088.1	24477.0	17116.0	10922.3	7146.6	5008.6	3805.5	3108.8	2680.0	2388.1	2191.6



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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°	41.7	41.7	35.7	35.7	29.8	29.8	23.8	23.8	17.9	17.9	11.9
85°	95.3	83.4	77.4	71.5	65.5	59.6	53.6	47.6	41.7	35.7	29.8
82.5°	160.8	148.9	131.0	119.1	107.2	95.3	77.4	71.5	59.6	47.6	41.7
80°	226.3	208.4	190.6	172.7	154.8	137.0	119.1	101.2	83.4	65.5	53.6
77.5°	291.8	268.0	250.1	226.3	202.5	178.7	154.8	131.0	107.2	83.4	65.5
75°	369.2	339.5	309.7	279.9	250.1	220.4	196.5	166.8	137.0	107.2	83.4
72.5°	452.6	410.9	375.2	339.5	297.8	268.0	232.3	202.5	166.8	131.0	101.2
70°	541.9	494.3	446.7	399.0	357.3	309.7	274.0	232.3	196.5	154.8	119.1
67.5°	631.3	577.7	524.1	464.5	410.9	363.3	309.7	268.0	220.4	178.7	137.0
65°	738.5	667.0	601.5	536.0	470.5	410.9	357.3	297.8	250.1	202.5	154.8
62.5°	839.7	762.3	684.9	607.5	536.0	464.5	399.0	339.5	279.9	226.3	172.7
60°	941.0	857.6	768.3	684.9	601.5	524.1	446.7	375.2	309.7	250.1	190.6
57.5°	1042.2	946.9	857.6	762.3	667.0	577.7	494.3	410.9	339.5	268.0	208.4
55°	1131.5	1042.2	941.0	839.7	738.5	631.3	541.9	452.6	369.2	291.8	226.3
52.5°	1226.8	1125.6	1024.3	911.2	809.9	690.8	589.6	488.3	399.0	315.6	244.2
50°	1316.2	1209.0	1095.8	988.6	869.5	750.4	637.2	530.0	428.8	339.5	256.1
47.5°	1399.5	1286.4	1173.2	1054.1	935.0	809.9	684.9	565.8	458.6	363.3	274.0
45°	1471.0	1369.8	1244.7	1119.6	1000.5	863.5	732.5	601.5	488.3	387.1	285.9
42.5°	1536.5	1435.3	1316.2	1191.1	1054.1	917.1	780.2	643.2	518.1	405.0	303.7
40°	1596.1	1494.8	1381.7	1244.7	1107.7	970.7	821.9	678.9	547.9	428.8	315.6
37.5°	1655.6	1548.4	1435.3	1304.2	1161.3	1018.4	869.5	720.6	577.7	446.7	333.5
35°	1703.3	1602.0	1482.9	1357.8	1209.0	1066.0	911.2	756.3	601.5	464.5	351.4
32.5°	1745.0	1649.7	1536.5	1405.5	1256.6	1101.8	946.9	786.1	625.3	488.3	363.3
30°	1786.6	1691.4	1572.2	1447.2	1304.2	1143.5	982.7	815.9	655.1	506.2	375.2
27.5°	1828.3	1727.1	1613.9	1482.9	1345.9	1179.2	1018.4	845.7	678.9	524.1	387.1
25°	1864.1	1756.9	1649.7	1518.6	1381.7	1214.9	1048.2	875.5	702.7	541.9	399.0
22.5°	1893.8	1786.6	1679.4	1548.4	1411.4	1244.7	1072.0	899.3	720.6	553.9	410.9
20°	1923.6	1816.4	1703.3	1578.2	1435.3	1274.5	1095.8	923.1	738.5	565.8	416.9
17.5°	1953.4	1840.2	1727.1	1602.0	1459.1	1298.3	1119.6	941.0	756.3	577.7	428.8
15°	1977.2	1858.1	1745.0	1619.9	1482.9	1322.1	1137.5	958.8	768.3	589.6	434.7
12.5°	1995.1	1876.0	1762.8	1637.8	1494.8	1340.0	1155.4	970.7	780.2	601.5	440.7
10°	2012.9	1893.8	1774.7	1655.6	1512.7	1351.9	1167.3	982.7	792.1	607.5	446.7
7.5°	2024.9	1905.8	1786.6	1667.5	1524.6	1363.8	1179.2	994.6	798.0	613.4	452.6
5°	2036.8	1911.7	1792.6	1673.5	1530.6	1381.7	1191.1	1006.5	809.9	619.4	452.6
2.5°	2042.7	1917.7	1798.6	1679.4	1536.5	1381.7	1191.1	1006.5	809.9	619.4	452.6
0°	2042.7	1917.7	1798.6	1679.4	1536.5	1381.7	1191.1	1006.5	809.9	619.4	452.6



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	11.9	6.0	6.0	0.0
85°	17.9	11.9	6.0	0.0
82.5°	29.8	17.9	11.9	0.0
80°	41.7	29.8	11.9	0.0
77.5°	47.6	35.7	17.9	0.0
75°	59.6	41.7	17.9	0.0
72.5°	71.5	47.6	23.8	0.0
70°	77.4	53.6	23.8	0.0
67.5°	95.3	59.6	29.8	0.0
65°	107.2	65.5	29.8	0.0
62.5°	119.1	71.5	35.7	0.0
60°	131.0	77.4	35.7	0.0
57.5°	148.9	83.4	41.7	0.0
55°	160.8	95.3	41.7	0.0
52.5°	172.7	101.2	47.6	0.0
50°	184.6	107.2	47.6	0.0
47.5°	190.6	119.1	53.6	0.0
45°	202.5	125.1	53.6	0.0
42.5°	214.4	131.0	59.6	0.0
40°	226.3	137.0	59.6	0.0
37.5°	238.2	142.9	59.6	0.0
35°	244.2	148.9	65.5	0.0
32.5°	256.1	154.8	65.5	0.0
30°	262.0	160.8	65.5	0.0
27.5°	268.0	166.8	71.5	0.0
25°	274.0	166.8	71.5	0.0
22.5°	279.9	172.7	71.5	0.0
20°	285.9	178.7	71.5	0.0
17.5°	291.8	178.7	71.5	0.0
15°	297.8	184.6	77.4	0.0
12.5°	303.7	184.6	77.4	0.0
10°	303.7	190.6	77.4	0.0
7.5°	309.7	190.6	77.4	0.0
5°	309.7	190.6	77.4	0.0
2.5°	309.7	190.6	77.4	0.0
0°	309.7	190.6	77.4	0.0

(END OF REPORT)