

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: P623247

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

Issue Date: 10/13/2022

Test Information

Test Method: LM-79-2019
Report Number: P623247
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-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:	72871 lumens	Max Intensity:	678075.9 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	116.3 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

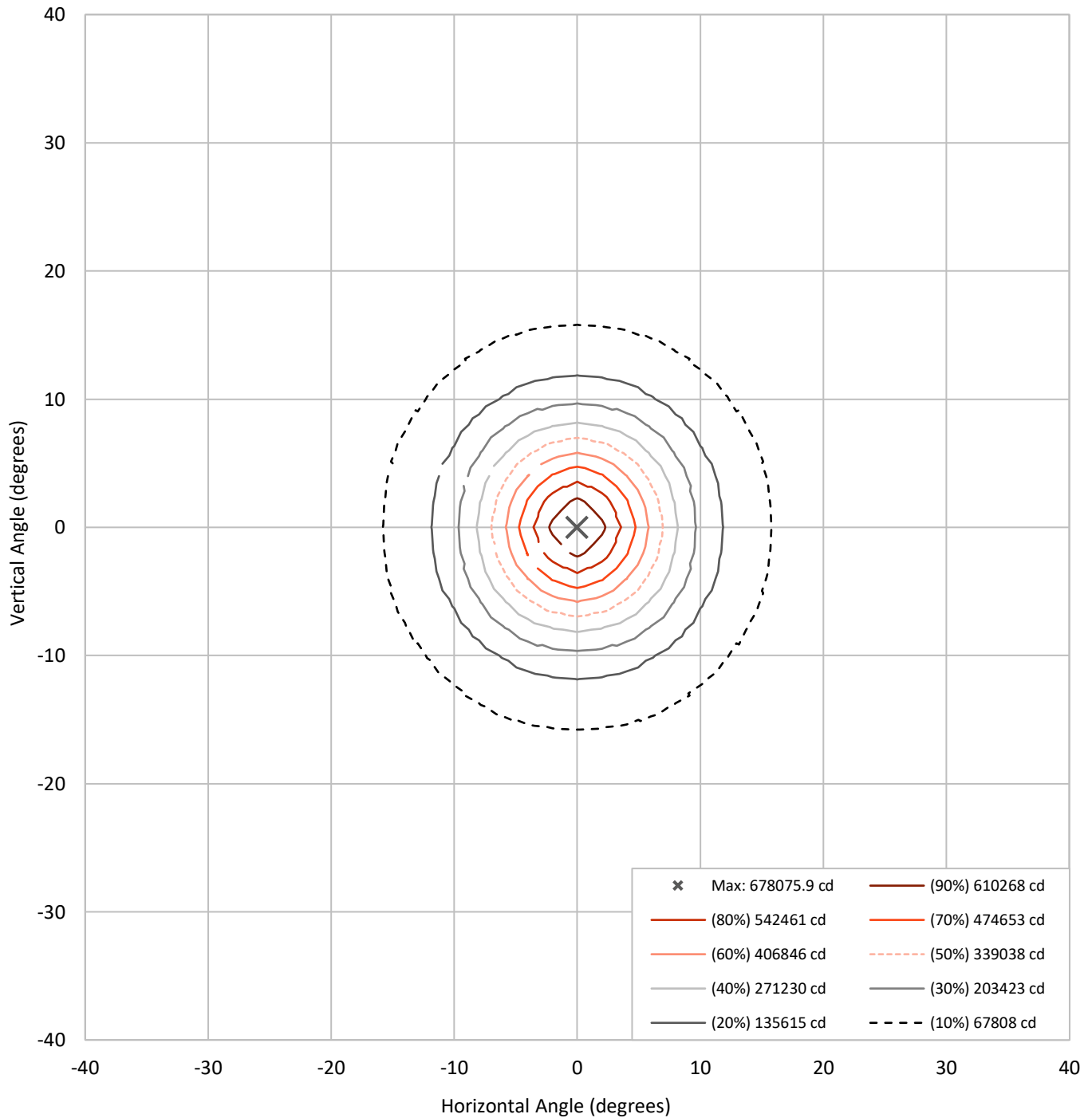
Beam Angle (50%):	13.8°H x 13.8°V	Field Angle (10%):	31.4°H x 31.4°V
Beam Lumens:	15934.8 lumens	Field Lumens:	37103 lumens
Beam Efficiency:	21.9%	Field Efficiency:	50.9%

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





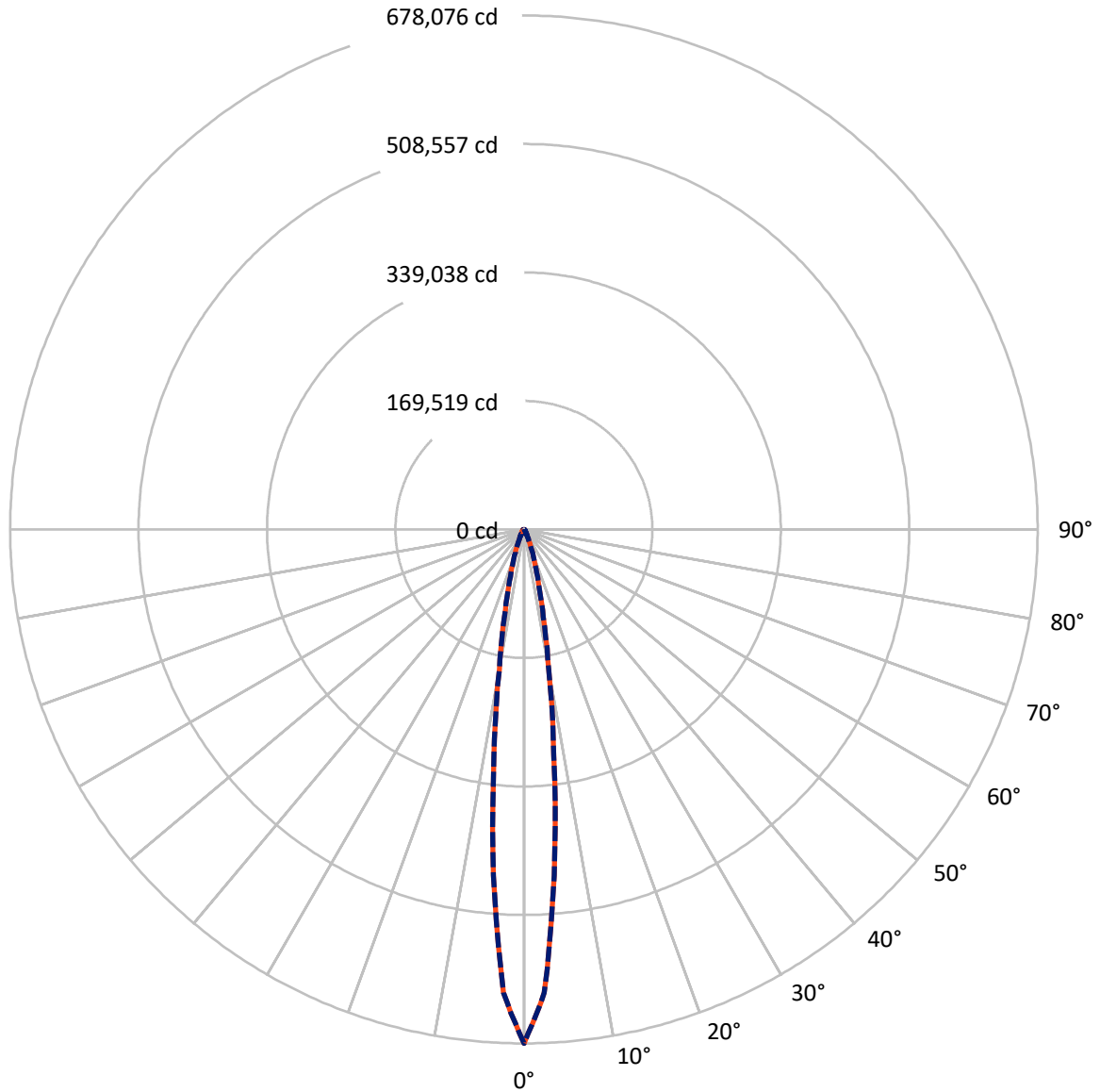
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Lumen Table

90	1.2	9.4	25.0	40.7	47.3	40.7	25.0	9.4	1.2							
80	1.2	9.4	25.0	40.7	47.3	40.7	25.0	9.4	1.2							
70	4.3	4.8	10.1	16.8	23.8	30.0	34.6	37.1	37.1	34.6	30.0	23.8	16.8	10.1	4.8	4.3
60		7.5	15.6	25.2	34.8	43.3	49.9	53.5	53.5	49.9	43.3	34.8	25.2	15.6	7.5	
50	7.8	10.1	20.5	32.4	44.8	57.5	69.5	77.1	77.1	69.5	57.5	44.8	32.4	20.5	10.1	7.8
40		12.4	24.5	38.7	56.7	81.2	111.0	136.4	136.4	111.0	81.2	56.7	38.7	24.5	12.4	
30	10.5	14.2	27.6	45.0	73.6	129.8	265.0	453.5	453.5	265.0	129.8	73.6	45.0	27.6	14.2	10.5
20		15.4	29.8	51.1	94.6	249.8	898.5	2231.1	2231.1	898.5	249.8	94.6	51.1	29.8	15.4	
10	11.5	16.0	31.0	55.0	112.9	416.2	2174.0	9545.5	9545.5	2174.0	416.2	112.9	55.0	31.0	16.0	11.5
0		16.0	31.0	55.0	112.9	416.2	2174.0	9545.5	9545.5	2174.0	416.2	112.9	55.0	31.0	16.0	
-10	10.5	15.4	29.8	51.1	94.6	249.8	898.5	2231.1	2231.1	898.5	249.8	94.6	51.1	29.8	15.4	10.5
-20		14.2	27.6	45.0	73.6	129.8	265.0	453.5	453.5	265.0	129.8	73.6	45.0	27.6	14.2	
-30	7.8	12.4	24.5	38.7	56.7	81.2	111.0	136.4	136.4	111.0	81.2	56.7	38.7	24.5	12.4	7.8
-40		10.1	20.5	32.4	44.8	57.5	69.5	77.1	77.1	69.5	57.5	44.8	32.4	20.5	10.1	
-50	4.3	7.5	15.6	25.2	34.8	43.3	49.9	53.5	53.5	49.9	43.3	34.8	25.2	15.6	7.5	4.3
-60		4.8	10.1	16.8	23.8	30.0	34.6	37.1	37.1	34.6	30.0	23.8	16.8	10.1	4.8	
-70	1.2	9.4	25.0	40.7	47.3	40.7	25.0	9.4	1.2							
-80		1.2	9.4	25.0	40.7	47.3	40.7	25.0	9.4	1.2						
-90	1.2	9.4	25.0	40.7	47.3	40.7	25.0	9.4	1.2							

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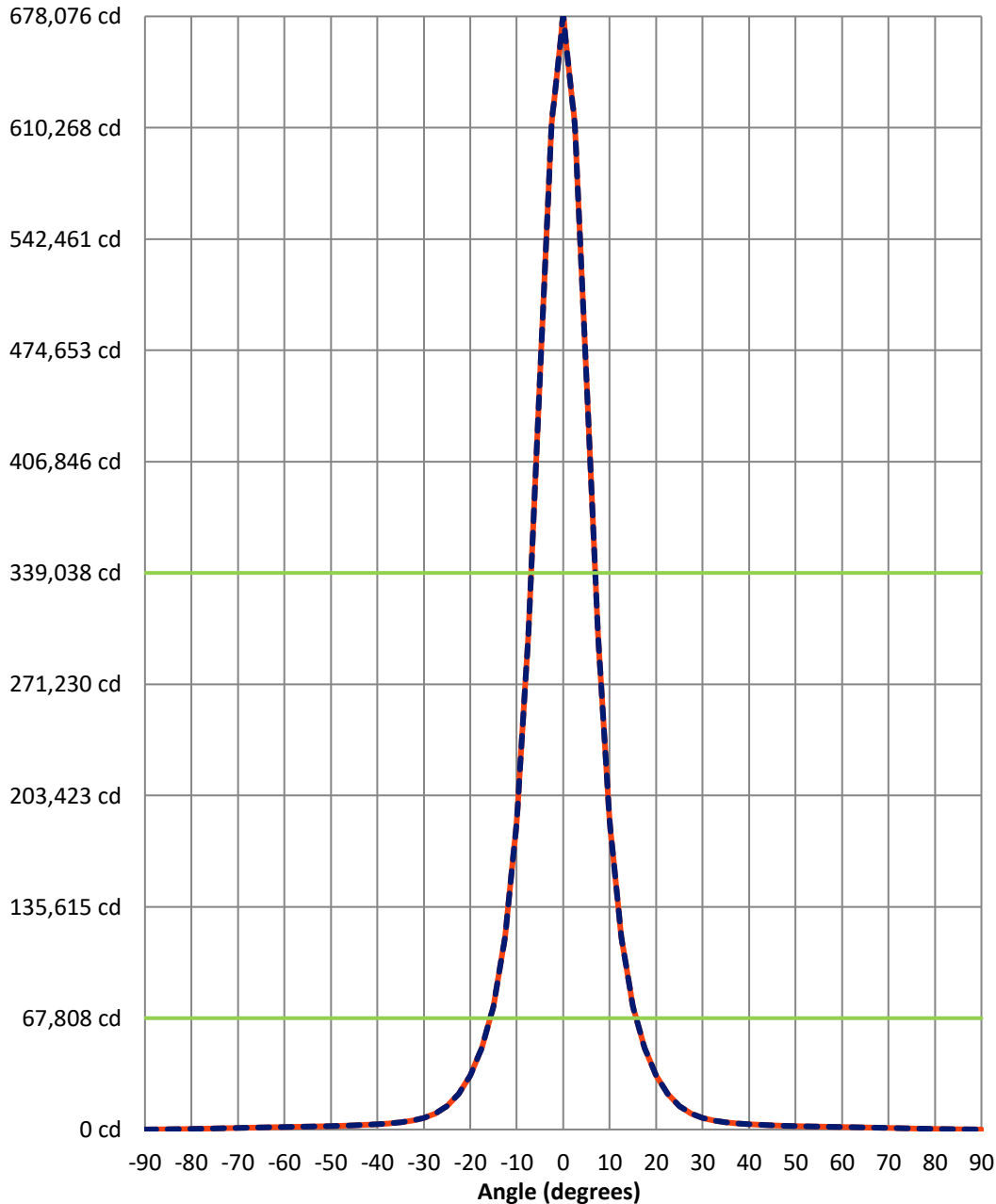
Luminous Intensity Polar Plot



— 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: 15934.8
Efficiency: 21.9%

Field:
H Angle: 31.4°
V Angle: 31.4°
Lumens: 37103
Efficiency: 50.9%

Spill:
Lumens: 35767.9
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°	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	53.1	53.1
85°	136.5	136.5	136.5	136.5	136.5	136.5	128.9	128.9	128.9	121.3	121.3
82.5°	227.4	227.4	227.4	227.4	219.8	219.8	219.8	212.3	212.3	204.7	204.7
80°	348.7	348.7	348.7	348.7	341.1	333.6	333.6	326.0	318.4	310.8	303.2
77.5°	477.6	477.6	477.6	470.0	470.0	462.4	454.9	447.3	439.7	424.5	417.0
75°	629.2	629.2	629.2	621.6	614.1	606.5	598.9	583.7	576.2	561.0	545.8
72.5°	788.4	788.4	788.4	780.8	773.3	758.1	750.5	735.4	720.2	697.5	682.3
70°	940.0	940.0	940.0	932.5	917.3	909.7	894.6	879.4	864.2	841.5	818.7
67.5°	1091.7	1091.7	1091.7	1076.5	1068.9	1061.3	1046.2	1023.4	1008.3	985.5	955.2
65°	1235.7	1235.7	1228.1	1220.5	1213.0	1197.8	1182.6	1167.5	1144.7	1122.0	1091.7
62.5°	1379.7	1379.7	1372.2	1364.6	1357.0	1341.8	1319.1	1303.9	1273.6	1250.9	1220.5
60°	1501.0	1501.0	1493.5	1485.9	1478.3	1463.1	1448.0	1425.2	1402.5	1379.7	1349.4
57.5°	1629.9	1629.9	1622.3	1614.8	1599.6	1584.4	1569.3	1546.5	1516.2	1485.9	1463.1
55°	1774.0	1774.0	1766.4	1751.2	1736.1	1720.9	1698.1	1667.8	1637.5	1607.2	1569.3
52.5°	1910.4	1910.4	1902.8	1887.7	1872.5	1857.3	1827.0	1804.3	1766.4	1728.5	1683.0
50°	2077.2	2077.2	2062.0	2046.9	2031.7	2001.4	1971.1	1933.2	1895.3	1849.8	1811.9
47.5°	2266.7	2266.7	2251.6	2236.4	2206.1	2175.7	2130.3	2084.8	2039.3	1986.2	1925.6
45°	2532.1	2532.1	2509.3	2479.0	2441.1	2388.0	2327.4	2266.7	2198.5	2137.8	2069.6
42.5°	2858.0	2858.0	2827.7	2789.8	2736.7	2668.5	2585.1	2501.7	2410.8	2312.2	2221.2
40°	3199.2	3199.2	3161.3	3123.4	3062.7	2979.3	2888.4	2782.2	2668.5	2539.6	2425.9
37.5°	3669.2	3669.2	3616.1	3547.9	3456.9	3343.2	3206.8	3085.5	2956.6	2812.6	2660.9
35°	4366.7	4366.7	4283.3	4169.6	4025.5	3836.0	3631.3	3456.9	3259.8	3085.5	2918.7
32.5°	5397.7	5397.7	5253.6	5086.9	4844.3	4541.0	4245.4	3964.9	3669.2	3419.0	3176.4
30°	7020.0	7020.0	6777.4	6474.2	6064.8	5541.7	5102.0	4647.2	4215.0	3851.2	3517.6
27.5°	9718.9	9605.1	9271.6	8718.2	7960.1	7020.0	6345.3	5579.6	4973.1	4381.8	3949.7
25°	14267.5	14055.2	13426.0	12387.4	10984.9	9430.8	8202.7	6898.7	5973.8	5132.3	4457.6
22.5°	21658.9	21272.3	20120.0	18239.9	15700.3	13213.7	10947.0	8938.0	7285.4	6110.3	5132.3
20°	32909.2	32234.5	30248.2	27033.9	22697.5	18854.0	14813.3	11834.0	9188.2	7285.4	5973.8
17.5°	49814.8	48647.3	45228.3	39716.9	32909.2	26647.3	20491.5	15586.6	11834.0	8938.0	6898.7
15°	75105.1	73058.2	67084.4	57585.4	46676.3	36745.2	28004.3	20491.5	14813.3	10947.0	8202.7
12.5°	117566.3	113427.1	101464.2	82807.4	65416.5	49094.6	36745.2	26647.3	18854.0	13213.7	9430.8
10°	187721.0	179169.6	154917.9	118210.7	90289.8	65416.5	46676.3	32909.2	22697.5	15700.3	10984.9
7.5°	301436.1	283082.5	232934.1	171126.1	118210.7	82807.4	57585.4	39716.9	27033.9	18239.9	12387.4
5°	458279.6	421345.0	328629.2	232934.1	154917.9	101464.2	67084.4	45228.3	30248.2	20120.0	13426.0
2.5°	612052.8	548395.1	421345.0	283082.5	179169.6	113427.1	73058.2	48647.3	32234.5	21272.3	14055.2
0°	678075.9	612052.8	458279.6	301436.1	187721.0	117566.3	75105.1	49814.8	32909.2	21658.9	14267.5



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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°	53.1	53.1	53.1	53.1	45.5	45.5	45.5	45.5	37.9	37.9	37.9
85°	121.3	113.7	113.7	106.1	106.1	98.6	98.6	91.0	91.0	83.4	75.8
82.5°	197.1	189.5	181.9	174.4	174.4	166.8	159.2	144.0	136.5	128.9	121.3
80°	295.7	280.5	272.9	257.8	250.2	235.0	219.8	212.3	197.1	189.5	174.4
77.5°	401.8	386.6	379.1	356.3	341.1	326.0	310.8	288.1	272.9	250.2	227.4
75°	523.1	507.9	485.2	462.4	447.3	424.5	401.8	379.1	348.7	326.0	303.2
72.5°	659.5	636.8	614.1	583.7	553.4	530.7	492.8	462.4	439.7	409.4	379.1
70°	796.0	773.3	742.9	712.6	674.7	644.4	606.5	568.6	530.7	492.8	454.9
67.5°	932.5	902.1	871.8	833.9	796.0	758.1	720.2	674.7	629.2	583.7	538.3
65°	1061.3	1031.0	993.1	955.2	917.3	871.8	826.3	780.8	727.8	674.7	629.2
62.5°	1190.2	1152.3	1114.4	1076.5	1031.0	985.5	940.0	879.4	826.3	773.3	712.6
60°	1311.5	1273.6	1235.7	1190.2	1144.7	1091.7	1038.6	985.5	924.9	864.2	803.6
57.5°	1425.2	1387.3	1349.4	1296.4	1250.9	1197.8	1137.2	1084.1	1015.9	955.2	887.0
55°	1531.4	1493.5	1448.0	1402.5	1357.0	1296.4	1235.7	1175.1	1106.8	1038.6	962.8
52.5°	1637.5	1592.0	1546.5	1501.0	1448.0	1394.9	1334.3	1266.0	1197.8	1122.0	1046.2
50°	1758.8	1705.7	1645.1	1592.0	1531.4	1478.3	1417.6	1349.4	1281.2	1197.8	1122.0
47.5°	1872.5	1819.4	1758.8	1690.6	1629.9	1561.7	1493.5	1432.8	1357.0	1281.2	1197.8
45°	2001.4	1925.6	1864.9	1796.7	1720.9	1645.1	1576.9	1501.0	1432.8	1349.4	1266.0
42.5°	2137.8	2054.5	1971.1	1887.7	1819.4	1736.1	1652.7	1576.9	1493.5	1417.6	1334.3
40°	2297.0	2198.5	2092.4	2001.4	1910.4	1827.0	1736.1	1645.1	1561.7	1478.3	1394.9
37.5°	2501.7	2365.3	2228.8	2115.1	2009.0	1910.4	1819.4	1720.9	1629.9	1531.4	1448.0
35°	2744.3	2554.8	2395.6	2236.4	2115.1	2001.4	1887.7	1796.7	1690.6	1592.0	1501.0
32.5°	2986.9	2782.2	2577.5	2395.6	2228.8	2092.4	1971.1	1864.9	1758.8	1645.1	1546.5
30°	3237.1	3009.7	2782.2	2554.8	2365.3	2198.5	2054.5	1925.6	1819.4	1705.7	1592.0
27.5°	3555.5	3237.1	2986.9	2744.3	2501.7	2297.0	2137.8	2001.4	1872.5	1758.8	1637.5
25°	3949.7	3517.6	3176.4	2918.7	2660.9	2425.9	2221.2	2069.6	1925.6	1811.9	1683.0
22.5°	4381.8	3851.2	3419.0	3085.5	2812.6	2539.6	2312.2	2137.8	1986.2	1849.8	1728.5
20°	4973.1	4215.0	3669.2	3259.8	2956.6	2668.5	2410.8	2198.5	2039.3	1895.3	1766.4
17.5°	5579.6	4647.2	3964.9	3456.9	3085.5	2782.2	2501.7	2266.7	2084.8	1933.2	1804.3
15°	6345.3	5102.0	4245.4	3631.3	3206.8	2888.4	2585.1	2327.4	2130.3	1971.1	1827.0
12.5°	7020.0	5541.7	4541.0	3836.0	3343.2	2979.3	2668.5	2388.0	2175.7	2001.4	1857.3
10°	7960.1	6064.8	4844.3	4025.5	3456.9	3062.7	2736.7	2441.1	2206.1	2031.7	1872.5
7.5°	8718.2	6474.2	5086.9	4169.6	3547.9	3123.4	2789.8	2479.0	2236.4	2046.9	1887.7
5°	9271.6	6777.4	5253.6	4283.3	3616.1	3161.3	2827.7	2509.3	2251.6	2062.0	1902.8
2.5°	9605.1	7020.0	5397.7	4366.7	3669.2	3199.2	2858.0	2532.1	2266.7	2077.2	1910.4
0°	9718.9	7020.0	5397.7	4366.7	3669.2	3199.2	2858.0	2532.1	2266.7	2077.2	1910.4



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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°	37.9	30.3	30.3	30.3	22.7	22.7	22.7	15.2	15.2	15.2	7.6
85°	68.2	68.2	60.6	53.1	53.1	45.5	37.9	37.9	30.3	22.7	22.7
82.5°	113.7	106.1	98.6	91.0	83.4	68.2	60.6	53.1	45.5	37.9	30.3
80°	159.2	151.6	136.5	121.3	113.7	98.6	91.0	75.8	60.6	53.1	45.5
77.5°	212.3	197.1	181.9	166.8	144.0	128.9	113.7	98.6	83.4	68.2	53.1
75°	280.5	250.2	227.4	204.7	181.9	159.2	136.5	121.3	98.6	83.4	60.6
72.5°	348.7	318.4	280.5	250.2	219.8	197.1	166.8	144.0	121.3	98.6	75.8
70°	417.0	379.1	341.1	303.2	265.3	227.4	197.1	166.8	136.5	113.7	91.0
67.5°	485.2	447.3	401.8	356.3	318.4	272.9	227.4	197.1	159.2	128.9	98.6
65°	568.6	515.5	462.4	417.0	363.9	318.4	265.3	219.8	181.9	144.0	113.7
62.5°	652.0	591.3	530.7	470.0	417.0	356.3	303.2	250.2	204.7	166.8	121.3
60°	735.4	667.1	598.9	530.7	462.4	401.8	341.1	280.5	227.4	181.9	136.5
57.5°	818.7	742.9	667.1	591.3	515.5	447.3	379.1	318.4	250.2	197.1	151.6
55°	894.6	818.7	735.4	652.0	568.6	485.2	417.0	348.7	280.5	212.3	159.2
52.5°	962.8	887.0	803.6	712.6	629.2	538.3	454.9	379.1	303.2	227.4	174.4
50°	1038.6	955.2	864.2	773.3	674.7	583.7	492.8	409.4	326.0	250.2	189.5
47.5°	1106.8	1015.9	924.9	826.3	727.8	629.2	530.7	439.7	348.7	272.9	197.1
45°	1175.1	1084.1	985.5	879.4	780.8	674.7	568.6	462.4	379.1	288.1	212.3
42.5°	1235.7	1137.2	1038.6	940.0	826.3	720.2	606.5	492.8	401.8	310.8	219.8
40°	1296.4	1197.8	1091.7	985.5	871.8	758.1	644.4	530.7	424.5	326.0	235.0
37.5°	1357.0	1250.9	1144.7	1031.0	917.3	796.0	674.7	553.4	447.3	341.1	250.2
35°	1402.5	1296.4	1190.2	1076.5	955.2	833.9	712.6	583.7	462.4	356.3	257.8
32.5°	1448.0	1349.4	1235.7	1114.4	993.1	871.8	742.9	614.1	485.2	379.1	272.9
30°	1493.5	1387.3	1273.6	1152.3	1031.0	902.1	773.3	636.8	507.9	386.6	280.5
27.5°	1531.4	1425.2	1311.5	1190.2	1061.3	932.5	796.0	659.5	523.1	401.8	295.7
25°	1569.3	1463.1	1349.4	1220.5	1091.7	955.2	818.7	682.3	545.8	417.0	303.2
22.5°	1607.2	1485.9	1379.7	1250.9	1122.0	985.5	841.5	697.5	561.0	424.5	310.8
20°	1637.5	1516.2	1402.5	1273.6	1144.7	1008.3	864.2	720.2	576.2	439.7	318.4
17.5°	1667.8	1546.5	1425.2	1303.9	1167.5	1023.4	879.4	735.4	583.7	447.3	326.0
15°	1698.1	1569.3	1448.0	1319.1	1182.6	1046.2	894.6	750.5	598.9	454.9	333.6
12.5°	1720.9	1584.4	1463.1	1341.8	1197.8	1061.3	909.7	758.1	606.5	462.4	333.6
10°	1736.1	1599.6	1478.3	1357.0	1213.0	1068.9	917.3	773.3	614.1	470.0	341.1
7.5°	1751.2	1614.8	1485.9	1364.6	1220.5	1076.5	932.5	780.8	621.6	470.0	348.7
5°	1766.4	1622.3	1493.5	1372.2	1228.1	1091.7	940.0	788.4	629.2	477.6	348.7
2.5°	1774.0	1629.9	1501.0	1379.7	1235.7	1091.7	940.0	788.4	629.2	477.6	348.7
0°	1774.0	1629.9	1501.0	1379.7	1235.7	1091.7	940.0	788.4	629.2	477.6	348.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	7.6	7.6	0.0	0.0
85°	15.2	7.6	7.6	0.0
82.5°	22.7	15.2	7.6	0.0
80°	30.3	22.7	7.6	0.0
77.5°	37.9	22.7	15.2	0.0
75°	45.5	30.3	15.2	0.0
72.5°	53.1	37.9	15.2	0.0
70°	60.6	37.9	22.7	0.0
67.5°	68.2	45.5	22.7	0.0
65°	83.4	53.1	22.7	0.0
62.5°	91.0	53.1	30.3	0.0
60°	98.6	60.6	30.3	0.0
57.5°	106.1	68.2	30.3	0.0
55°	113.7	68.2	37.9	0.0
52.5°	121.3	75.8	37.9	0.0
50°	128.9	83.4	37.9	0.0
47.5°	136.5	91.0	37.9	0.0
45°	144.0	91.0	45.5	0.0
42.5°	159.2	98.6	45.5	0.0
40°	166.8	98.6	45.5	0.0
37.5°	174.4	106.1	45.5	0.0
35°	174.4	106.1	53.1	0.0
32.5°	181.9	113.7	53.1	0.0
30°	189.5	113.7	53.1	0.0
27.5°	197.1	121.3	53.1	0.0
25°	204.7	121.3	53.1	0.0
22.5°	204.7	121.3	53.1	0.0
20°	212.3	128.9	60.6	0.0
17.5°	212.3	128.9	60.6	0.0
15°	219.8	128.9	60.6	0.0
12.5°	219.8	136.5	60.6	0.0
10°	219.8	136.5	60.6	0.0
7.5°	227.4	136.5	60.6	0.0
5°	227.4	136.5	60.6	0.0
2.5°	227.4	136.5	60.6	0.0
0°	227.4	136.5	60.6	0.0

(END OF REPORT)