

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: P624149

Luminaire Tested: **EPH-VN-08-E-750-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624149
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-08-E-750-U-55
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 5 distribution lens
Light Source: (128) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	73022.2 lumens	Max Intensity:	89236.2 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	116.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

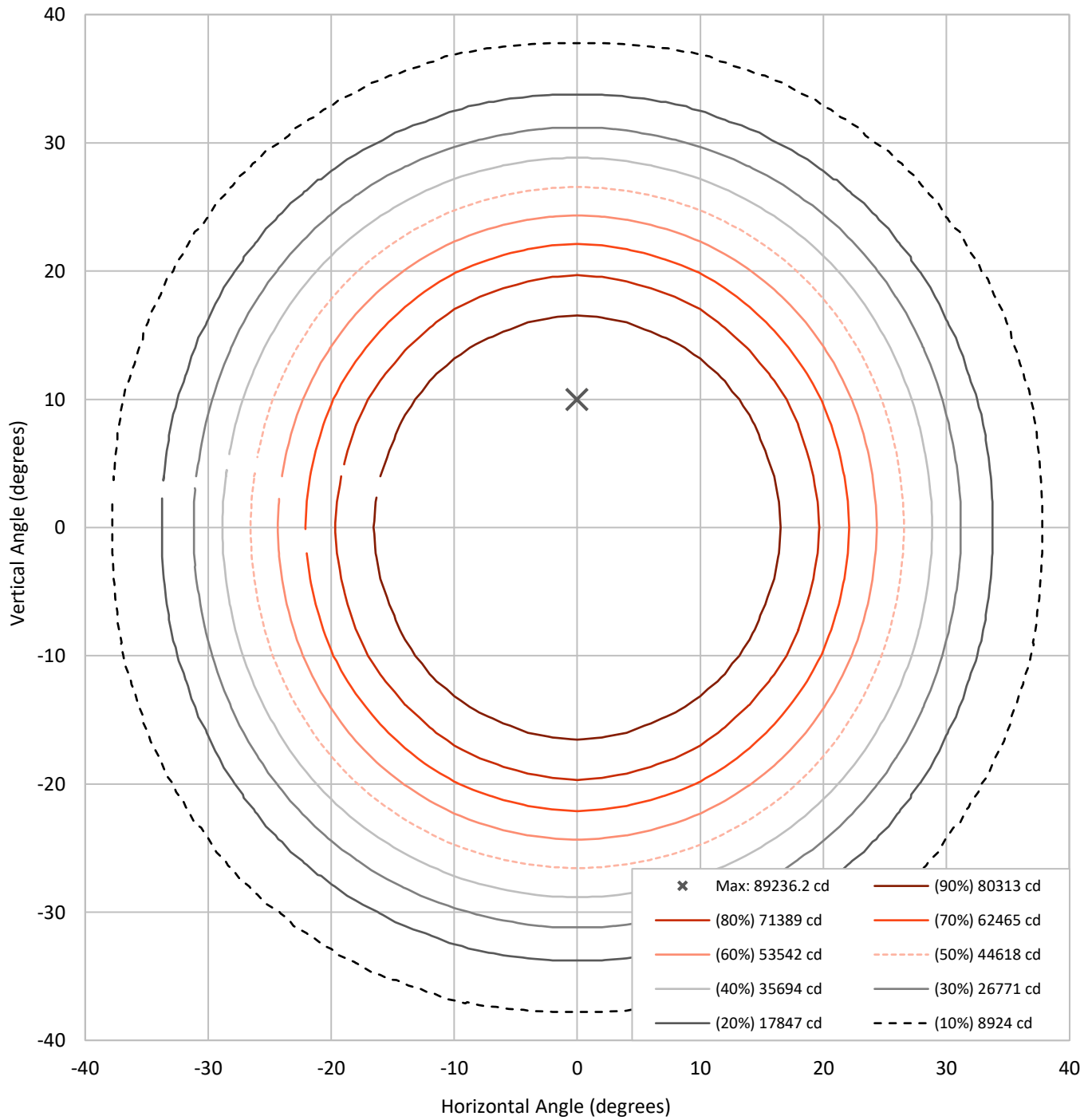
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	36293.9 lumens	Field Lumens:	47201.3 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

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





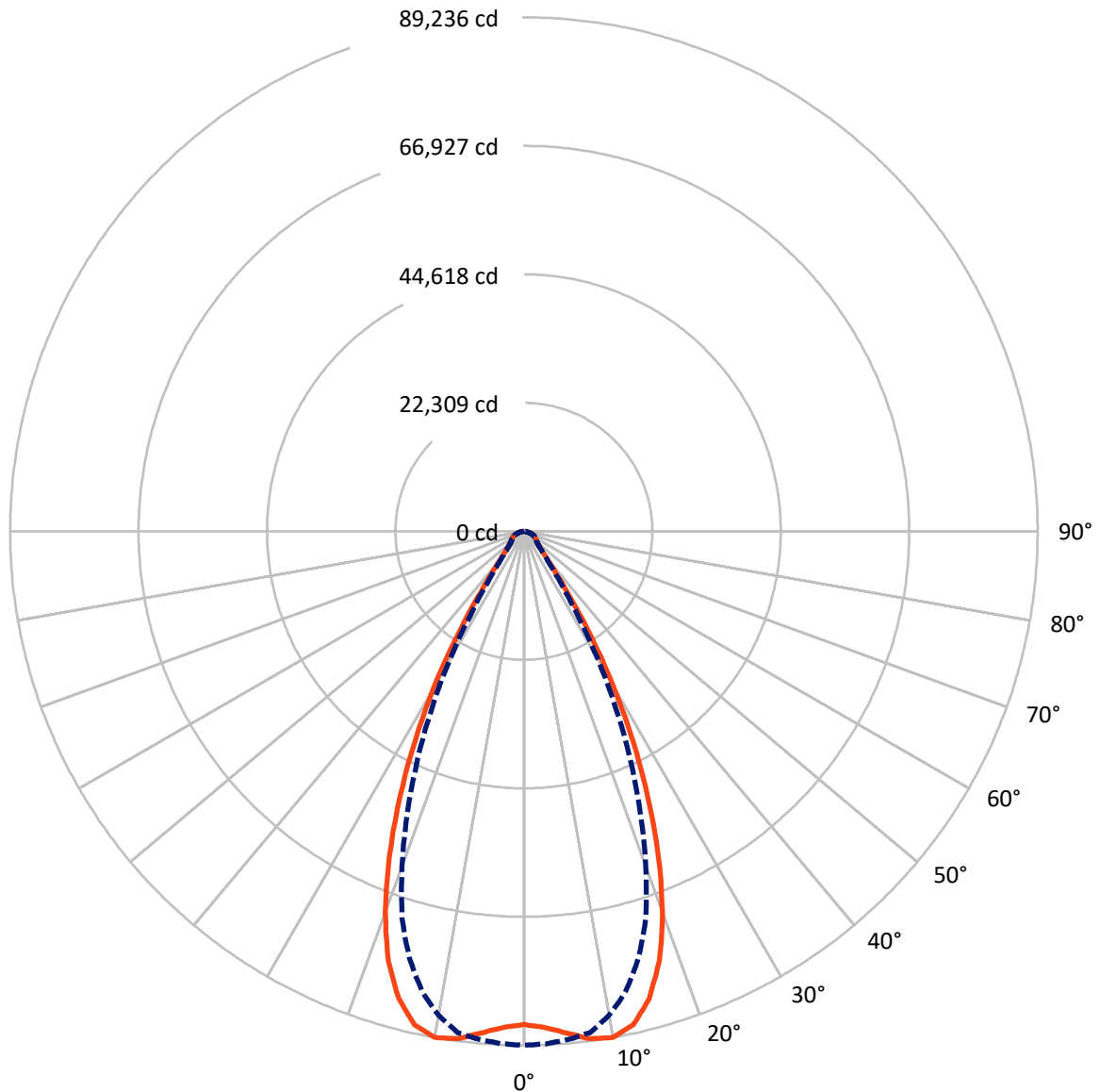
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Lumen Table

90	2.1	16.0	41.8	67.4	78.0	67.4	41.8	16.0	2.1							
80	2.1	16.0	41.8	67.4	78.0	67.4	41.8	16.0	2.1							
70	7.3	7.9	16.5	27.3	38.3	47.9	54.8	58.5	58.5	54.8	47.9	38.3	27.3	16.5	7.9	7.3
60		12.3	25.3	40.1	53.8	65.4	74.2	79.2	79.2	74.2	65.4	53.8	40.1	25.3	12.3	
50	13.0	16.5	32.6	49.3	66.1	85.5	108.3	125.8	125.8	108.3	85.5	66.1	49.3	32.6	16.5	13.0
40		20.0	37.8	57.1	86.6	154.3	301.5	454.7	454.7	301.5	154.3	86.6	57.1	37.8	20.0	
30	17.3	22.6	41.5	67.0	140.0	446.2	1033.8	1467.3	1467.3	1033.8	446.2	140.0	67.0	41.5	22.6	17.3
20		24.3	44.3	79.9	258.4	973.8	1905.2	2428.8	2428.8	1905.2	973.8	258.4	79.9	44.3	24.3	
10	18.8	25.1	45.8	90.2	379.3	1341.4	2357.0	2672.9	2672.9	2357.0	1341.4	379.3	90.2	45.8	25.1	18.8
0		25.1	45.8	90.2	379.3	1341.4	2357.0	2672.9	2672.9	2357.0	1341.4	379.3	90.2	45.8	25.1	
-10	17.3	24.3	44.3	79.9	258.4	973.8	1905.2	2428.8	2428.8	1905.2	973.8	258.4	79.9	44.3	24.3	17.3
-20		22.6	41.5	67.0	140.0	446.2	1033.8	1467.3	1467.3	1033.8	446.2	140.0	67.0	41.5	22.6	
-30	13.0	20.0	37.8	57.1	86.6	154.3	301.5	454.7	454.7	301.5	154.3	86.6	57.1	37.8	20.0	13.0
-40		16.5	32.6	49.3	66.1	85.5	108.3	125.8	125.8	108.3	85.5	66.1	49.3	32.6	16.5	
-50	7.3	12.3	25.3	40.1	53.8	65.4	74.2	79.2	79.2	74.2	65.4	53.8	40.1	25.3	12.3	7.3
-60		7.9	16.5	27.3	38.3	47.9	54.8	58.5	58.5	54.8	47.9	38.3	27.3	16.5	7.9	
-70	2.1	16.0	41.8	67.4	78.0	67.4	41.8	16.0	2.1							
-80		2.1	16.0	41.8	67.4	78.0	67.4	41.8	16.0	2.1						
-90	2.1	16.0	41.8	67.4	78.0	67.4	41.8	16.0	2.1							

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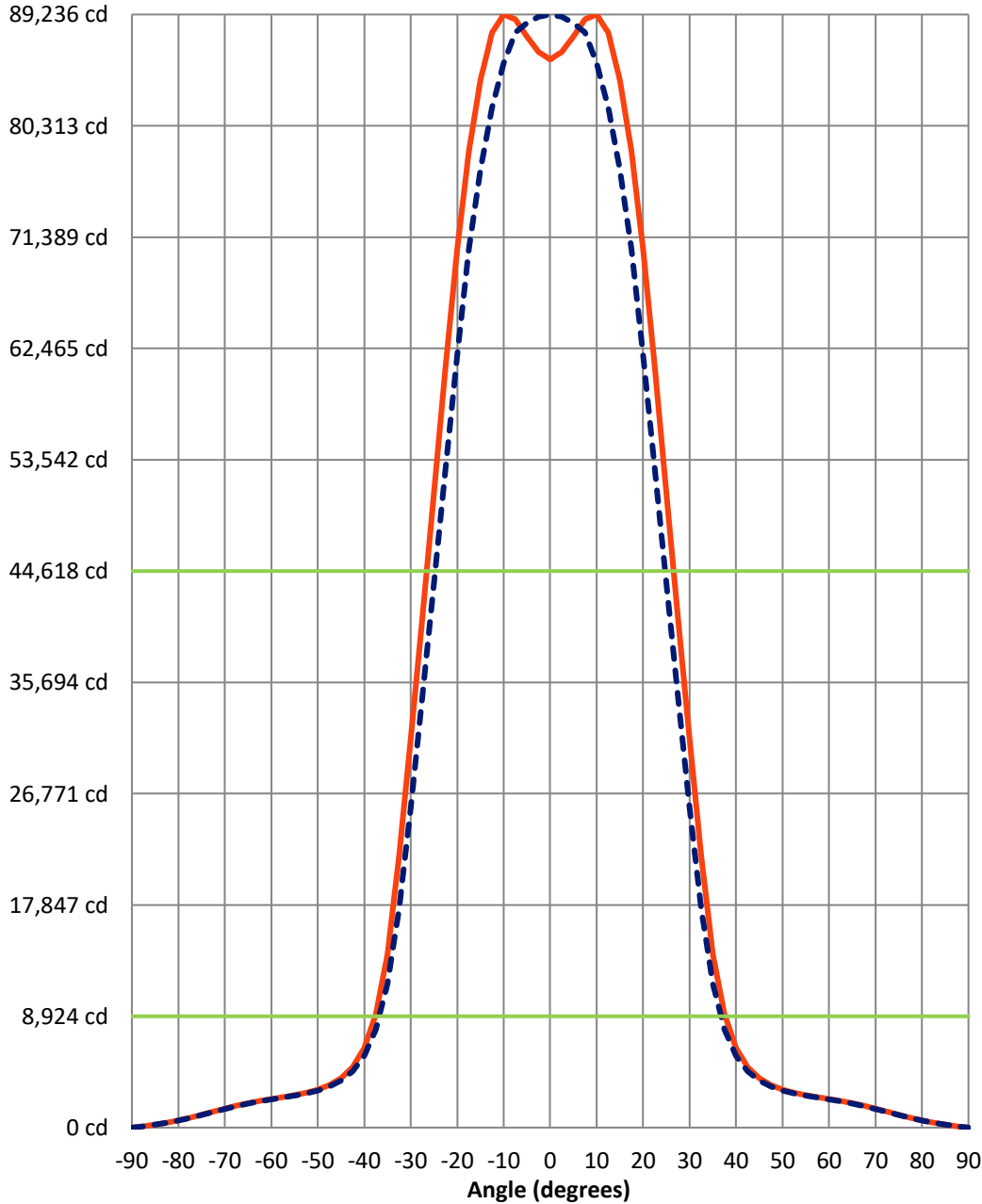
Luminous Intensity Polar Plot



— 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: 36293.9
Efficiency: 49.7%

Field:
H Angle: 73.6°
V Angle: 75.3°
Lumens: 47201.3
Efficiency: 64.6%

Spill:
Lumens: 25821
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°	98.6	98.6	98.6	98.6	98.6	98.6	98.6	91.0	91.0	91.0	91.0
85°	242.7	242.7	242.7	242.7	242.7	235.2	235.2	227.6	227.6	220.0	212.4
82.5°	394.4	394.4	394.4	394.4	386.9	386.9	379.3	371.7	364.1	356.5	348.9
80°	576.5	576.5	576.5	576.5	568.9	561.3	553.7	546.2	531.0	523.4	508.2
77.5°	788.9	788.9	788.9	781.3	773.7	766.1	751.0	735.8	720.6	705.5	690.3
75°	1031.6	1031.6	1031.6	1016.5	1008.9	993.7	978.5	963.4	940.6	917.8	895.1
72.5°	1282.0	1282.0	1282.0	1266.8	1251.6	1236.4	1221.3	1198.5	1175.8	1145.4	1115.1
70°	1517.1	1517.1	1517.1	1501.9	1486.8	1471.6	1448.8	1426.1	1395.7	1365.4	1335.1
67.5°	1759.8	1759.8	1759.8	1737.1	1721.9	1706.7	1684.0	1653.6	1623.3	1585.4	1547.4
65°	1957.1	1957.1	1949.5	1941.9	1926.7	1904.0	1888.8	1858.5	1828.1	1797.8	1759.8
62.5°	2139.1	2139.1	2131.5	2123.9	2108.8	2086.0	2063.3	2040.5	2010.2	1972.2	1934.3
60°	2290.8	2290.8	2283.2	2275.7	2260.5	2245.3	2222.6	2199.8	2169.5	2139.1	2101.2
57.5°	2442.5	2442.5	2435.0	2427.4	2412.2	2389.4	2366.7	2343.9	2313.6	2275.7	2237.7
55°	2601.8	2601.8	2594.3	2579.1	2563.9	2541.2	2518.4	2488.1	2450.1	2412.2	2374.3
52.5°	2791.5	2791.5	2776.3	2761.1	2738.4	2715.6	2677.7	2639.8	2594.3	2548.7	2503.2
50°	3041.8	3041.8	3026.6	3003.9	2965.9	2928.0	2882.5	2821.8	2768.7	2708.0	2647.4
47.5°	3413.5	3413.5	3383.1	3345.2	3292.1	3231.4	3148.0	3057.0	2981.1	2905.3	2814.2
45°	3959.6	3959.6	3914.1	3853.5	3770.0	3663.8	3542.4	3413.5	3284.5	3155.6	3026.6
42.5°	4847.2	4847.2	4763.7	4657.5	4513.4	4331.3	4103.8	3891.4	3709.3	3504.5	3330.0
40°	6379.4	6379.4	6220.1	6022.9	5749.8	5400.9	4983.7	4649.9	4331.3	3974.8	3732.1
37.5°	9102.6	9102.6	8791.6	8412.4	7881.4	7213.8	6409.8	5871.2	5279.5	4718.2	4308.6
35°	13911.9	13911.9	13312.6	12576.8	11552.8	10263.2	8890.2	7873.8	6743.5	5878.8	5112.7
32.5°	21800.8	21800.8	20723.7	19396.2	17568.1	15254.5	13054.7	11120.4	9102.6	7669.0	6288.4
30°	31176.5	31176.5	29765.6	28028.6	25646.7	22642.8	19510.0	16073.7	12887.8	10331.5	8245.5
27.5°	40870.9	40468.8	39255.1	37275.3	34559.7	31176.5	27270.0	22832.5	18523.9	14018.1	11037.0
25°	50898.9	50428.6	49040.5	46764.8	43654.8	39824.1	35424.4	30463.5	25146.0	19775.5	14617.3
22.5°	61033.2	60502.2	58924.4	56352.9	52863.6	48570.2	43586.5	38071.8	32132.3	25927.4	19775.5
20°	70401.3	69840.0	68186.4	65508.7	61898.0	57187.3	51649.9	45536.0	38966.9	32132.3	25146.0
17.5°	78244.8	77706.2	76113.3	73556.9	70401.3	65190.1	59432.7	52711.9	45536.0	38071.8	30463.5
15°	83971.9	83509.2	82151.3	80004.6	76788.4	72176.4	66312.7	59432.7	51649.9	43586.5	35424.4
12.5°	87772.2	87400.5	86331.0	84662.2	81779.7	77911.0	72176.4	65190.1	57187.3	48570.2	39824.1
10°	89236.2	89054.2	88553.5	87787.4	85329.7	81779.7	76788.4	70401.3	61898.0	52863.6	43654.8
7.5°	88849.4	88910.1	89084.5	88887.3	87787.4	84662.2	80004.6	73556.9	65508.7	56352.9	46764.8
5°	87468.8	87795.0	88606.6	89084.5	88553.5	86331.0	82151.3	76113.3	68186.4	58924.4	49040.5
2.5°	86239.9	86748.2	87795.0	88910.1	89054.2	87400.5	83509.2	77706.2	69840.0	60502.2	50428.6
0°	85633.1	86239.9	87468.8	88849.4	89236.2	87772.2	83971.9	78244.8	70401.3	61033.2	50898.9



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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°	91.0	83.4	83.4	83.4	75.9	75.9	75.9	68.3	68.3	60.7	60.7
85°	212.4	204.8	197.2	189.6	182.1	174.5	166.9	159.3	151.7	136.5	129.0
82.5°	341.3	333.8	326.2	311.0	303.4	288.3	273.1	257.9	242.7	235.2	220.0
80°	493.1	477.9	462.7	447.5	424.8	402.0	386.9	364.1	348.9	326.2	311.0
77.5°	667.5	644.8	622.0	591.7	568.9	546.2	515.8	493.1	462.7	432.4	402.0
75°	864.8	834.4	796.5	766.1	735.8	697.9	659.9	622.0	584.1	546.2	508.2
72.5°	1077.1	1039.2	1001.3	963.4	917.8	864.8	819.2	766.1	720.6	675.1	622.0
70°	1297.1	1251.6	1206.1	1160.6	1107.5	1046.8	993.7	933.0	872.3	811.7	751.0
67.5°	1501.9	1456.4	1403.3	1357.8	1297.1	1236.4	1168.2	1099.9	1031.6	955.8	879.9
65°	1714.3	1661.2	1600.5	1539.9	1479.2	1410.9	1342.6	1274.4	1190.9	1107.5	1031.6
62.5°	1888.8	1843.3	1790.2	1729.5	1661.2	1585.4	1517.1	1426.1	1342.6	1259.2	1160.6
60°	2055.7	2002.6	1957.1	1888.8	1828.1	1759.8	1676.4	1585.4	1494.4	1395.7	1304.7
57.5°	2199.8	2154.3	2101.2	2040.5	1972.2	1904.0	1828.1	1744.7	1638.5	1539.9	1433.7
55°	2328.8	2275.7	2222.6	2169.5	2108.8	2032.9	1957.1	1873.6	1782.6	1676.4	1562.6
52.5°	2457.7	2404.6	2343.9	2290.8	2222.6	2154.3	2078.4	1995.0	1904.0	1805.4	1684.0
50°	2586.7	2526.0	2465.3	2397.0	2328.8	2260.5	2184.6	2108.8	2010.2	1911.6	1805.4
47.5°	2738.4	2662.5	2586.7	2510.8	2442.5	2359.1	2283.2	2199.8	2116.4	2010.2	1904.0
45°	2928.0	2814.2	2723.2	2632.2	2548.7	2465.3	2374.3	2290.8	2199.8	2108.8	1995.0
42.5°	3163.2	3011.5	2890.1	2768.7	2662.5	2563.9	2472.9	2374.3	2283.2	2184.6	2078.4
40°	3481.8	3277.0	3079.7	2928.0	2791.5	2670.1	2563.9	2465.3	2359.1	2260.5	2154.3
37.5°	3899.0	3610.7	3337.6	3117.7	2943.2	2791.5	2662.5	2548.7	2442.5	2328.8	2222.6
35°	4528.6	4027.9	3679.0	3360.4	3117.7	2928.0	2768.7	2632.2	2510.8	2397.0	2290.8
32.5°	5416.1	4642.3	4081.0	3679.0	3337.6	3079.7	2890.1	2723.2	2586.7	2465.3	2343.9
30°	6584.2	5514.7	4642.3	4027.9	3610.7	3277.0	3011.5	2814.2	2662.5	2526.0	2404.6
27.5°	8435.1	6584.2	5416.1	4528.6	3899.0	3481.8	3163.2	2928.0	2738.4	2586.7	2457.7
25°	11037.0	8245.5	6288.4	5112.7	4308.6	3732.1	3330.0	3026.6	2814.2	2647.4	2503.2
22.5°	14018.1	10331.5	7669.0	5878.8	4718.2	3974.8	3504.5	3155.6	2905.3	2708.0	2548.7
20°	18523.9	12887.8	9102.6	6743.5	5279.5	4331.3	3709.3	3284.5	2981.1	2768.7	2594.3
17.5°	22832.5	16073.7	11120.4	7873.8	5871.2	4649.9	3891.4	3413.5	3057.0	2821.8	2639.8
15°	27270.0	19510.0	13054.7	8890.2	6409.8	4983.7	4103.8	3542.4	3148.0	2882.5	2677.7
12.5°	31176.5	22642.8	15254.5	10263.2	7213.8	5400.9	4331.3	3663.8	3231.4	2928.0	2715.6
10°	34559.7	25646.7	17568.1	11552.8	7881.4	5749.8	4513.4	3770.0	3292.1	2965.9	2738.4
7.5°	37275.3	28028.6	19396.2	12576.8	8412.4	6022.9	4657.5	3853.5	3345.2	3003.9	2761.1
5°	39255.1	29765.6	20723.7	13312.6	8791.6	6220.1	4763.7	3914.1	3383.1	3026.6	2776.3
2.5°	40468.8	31176.5	21800.8	13911.9	9102.6	6379.4	4847.2	3959.6	3413.5	3041.8	2791.5
0°	40870.9	31176.5	21800.8	13911.9	9102.6	6379.4	4847.2	3959.6	3413.5	3041.8	2791.5



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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°	53.1	53.1	45.5	45.5	37.9	37.9	30.3	30.3	22.8	22.8	15.2
85°	121.4	106.2	98.6	91.0	83.4	75.9	68.3	60.7	53.1	45.5	37.9
82.5°	204.8	189.6	166.9	151.7	136.5	121.4	98.6	91.0	75.9	60.7	53.1
80°	288.3	265.5	242.7	220.0	197.2	174.5	151.7	129.0	106.2	83.4	68.3
77.5°	371.7	341.3	318.6	288.3	257.9	227.6	197.2	166.9	136.5	106.2	83.4
75°	470.3	432.4	394.4	356.5	318.6	280.7	250.3	212.4	174.5	136.5	106.2
72.5°	576.5	523.4	477.9	432.4	379.3	341.3	295.8	257.9	212.4	166.9	129.0
70°	690.3	629.6	568.9	508.2	455.1	394.4	348.9	295.8	250.3	197.2	151.7
67.5°	804.1	735.8	667.5	591.7	523.4	462.7	394.4	341.3	280.7	227.6	174.5
65°	940.6	849.6	766.1	682.7	599.3	523.4	455.1	379.3	318.6	257.9	197.2
62.5°	1069.6	970.9	872.3	773.7	682.7	591.7	508.2	432.4	356.5	288.3	220.0
60°	1198.5	1092.3	978.5	872.3	766.1	667.5	568.9	477.9	394.4	318.6	242.7
57.5°	1327.5	1206.1	1092.3	970.9	849.6	735.8	629.6	523.4	432.4	341.3	265.5
55°	1441.3	1327.5	1198.5	1069.6	940.6	804.1	690.3	576.5	470.3	371.7	288.3
52.5°	1562.6	1433.7	1304.7	1160.6	1031.6	879.9	751.0	622.0	508.2	402.0	311.0
50°	1676.4	1539.9	1395.7	1259.2	1107.5	955.8	811.7	675.1	546.2	432.4	326.2
47.5°	1782.6	1638.5	1494.4	1342.6	1190.9	1031.6	872.3	720.6	584.1	462.7	348.9
45°	1873.6	1744.7	1585.4	1426.1	1274.4	1099.9	933.0	766.1	622.0	493.1	364.1
42.5°	1957.1	1828.1	1676.4	1517.1	1342.6	1168.2	993.7	819.2	659.9	515.8	386.9
40°	2032.9	1904.0	1759.8	1585.4	1410.9	1236.4	1046.8	864.8	697.9	546.2	402.0
37.5°	2108.8	1972.2	1828.1	1661.2	1479.2	1297.1	1107.5	917.8	735.8	568.9	424.8
35°	2169.5	2040.5	1888.8	1729.5	1539.9	1357.8	1160.6	963.4	766.1	591.7	447.5
32.5°	2222.6	2101.2	1957.1	1790.2	1600.5	1403.3	1206.1	1001.3	796.5	622.0	462.7
30°	2275.7	2154.3	2002.6	1843.3	1661.2	1456.4	1251.6	1039.2	834.4	644.8	477.9
27.5°	2328.8	2199.8	2055.7	1888.8	1714.3	1501.9	1297.1	1077.1	864.8	667.5	493.1
25°	2374.3	2237.7	2101.2	1934.3	1759.8	1547.4	1335.1	1115.1	895.1	690.3	508.2
22.5°	2412.2	2275.7	2139.1	1972.2	1797.8	1585.4	1365.4	1145.4	917.8	705.5	523.4
20°	2450.1	2313.6	2169.5	2010.2	1828.1	1623.3	1395.7	1175.8	940.6	720.6	531.0
17.5°	2488.1	2343.9	2199.8	2040.5	1858.5	1653.6	1426.1	1198.5	963.4	735.8	546.2
15°	2518.4	2366.7	2222.6	2063.3	1888.8	1684.0	1448.8	1221.3	978.5	751.0	553.7
12.5°	2541.2	2389.4	2245.3	2086.0	1904.0	1706.7	1471.6	1236.4	993.7	766.1	561.3
10°	2563.9	2412.2	2260.5	2108.8	1926.7	1721.9	1486.8	1251.6	1008.9	773.7	568.9
7.5°	2579.1	2427.4	2275.7	2123.9	1941.9	1737.1	1501.9	1266.8	1016.5	781.3	576.5
5°	2594.3	2435.0	2283.2	2131.5	1949.5	1759.8	1517.1	1282.0	1031.6	788.9	576.5
2.5°	2601.8	2442.5	2290.8	2139.1	1957.1	1759.8	1517.1	1282.0	1031.6	788.9	576.5
0°	2601.8	2442.5	2290.8	2139.1	1957.1	1759.8	1517.1	1282.0	1031.6	788.9	576.5



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	15.2	7.6	7.6	0.0
85°	22.8	15.2	7.6	0.0
82.5°	37.9	22.8	15.2	0.0
80°	53.1	37.9	15.2	0.0
77.5°	60.7	45.5	22.8	0.0
75°	75.9	53.1	22.8	0.0
72.5°	91.0	60.7	30.3	0.0
70°	98.6	68.3	30.3	0.0
67.5°	121.4	75.9	37.9	0.0
65°	136.5	83.4	37.9	0.0
62.5°	151.7	91.0	45.5	0.0
60°	166.9	98.6	45.5	0.0
57.5°	189.6	106.2	53.1	0.0
55°	204.8	121.4	53.1	0.0
52.5°	220.0	129.0	60.7	0.0
50°	235.2	136.5	60.7	0.0
47.5°	242.7	151.7	68.3	0.0
45°	257.9	159.3	68.3	0.0
42.5°	273.1	166.9	75.9	0.0
40°	288.3	174.5	75.9	0.0
37.5°	303.4	182.1	75.9	0.0
35°	311.0	189.6	83.4	0.0
32.5°	326.2	197.2	83.4	0.0
30°	333.8	204.8	83.4	0.0
27.5°	341.3	212.4	91.0	0.0
25°	348.9	212.4	91.0	0.0
22.5°	356.5	220.0	91.0	0.0
20°	364.1	227.6	91.0	0.0
17.5°	371.7	227.6	91.0	0.0
15°	379.3	235.2	98.6	0.0
12.5°	386.9	235.2	98.6	0.0
10°	386.9	242.7	98.6	0.0
7.5°	394.4	242.7	98.6	0.0
5°	394.4	242.7	98.6	0.0
2.5°	394.4	242.7	98.6	0.0
0°	394.4	242.7	98.6	0.0

(END OF REPORT)