

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: P624148

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

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624148  
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-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

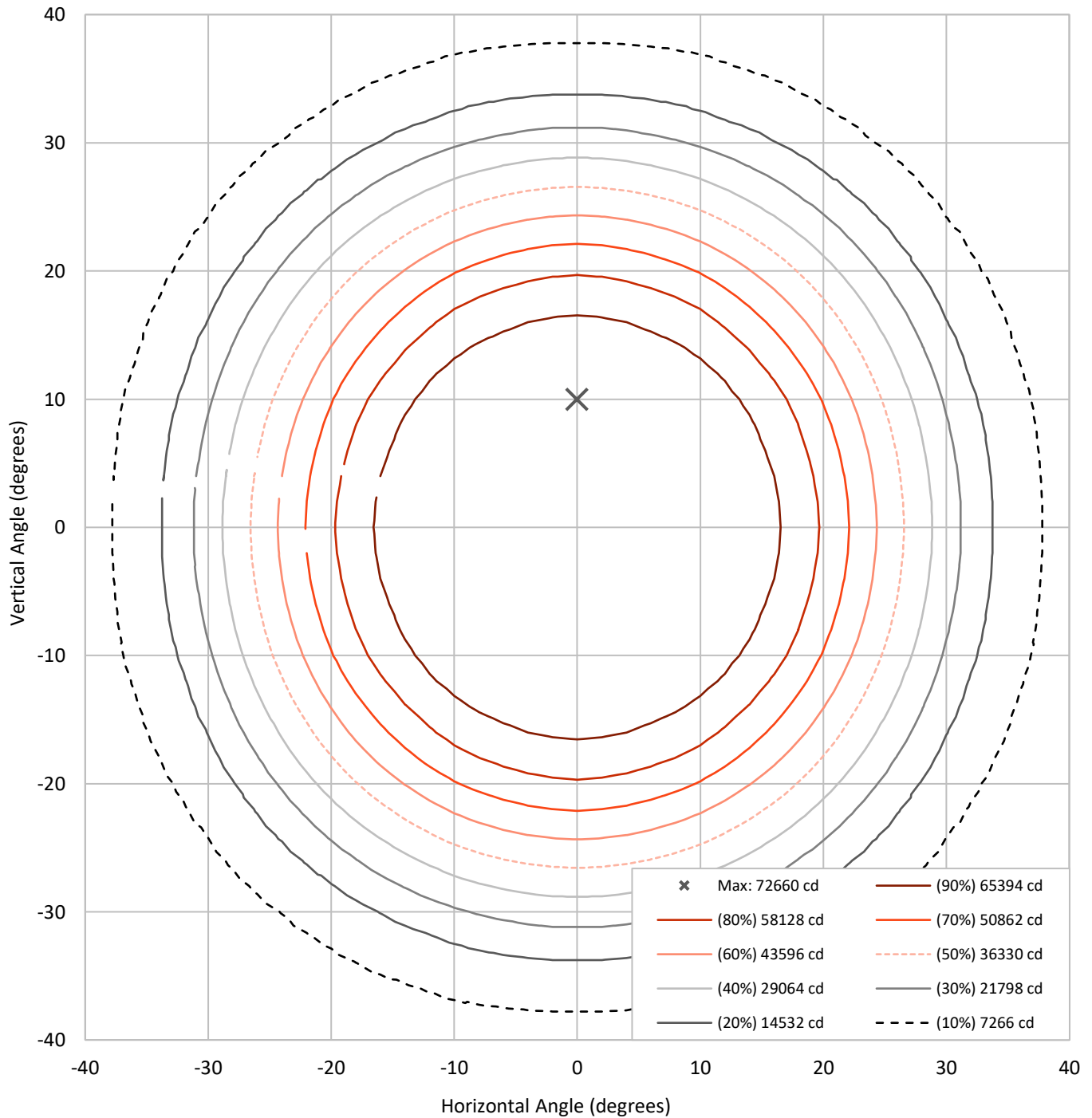
**Summary**

Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	59457.9 lumens	Max Intensity:	72660 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	121.8 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:	29552.1 lumens	Field Lumens:	38433.3 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





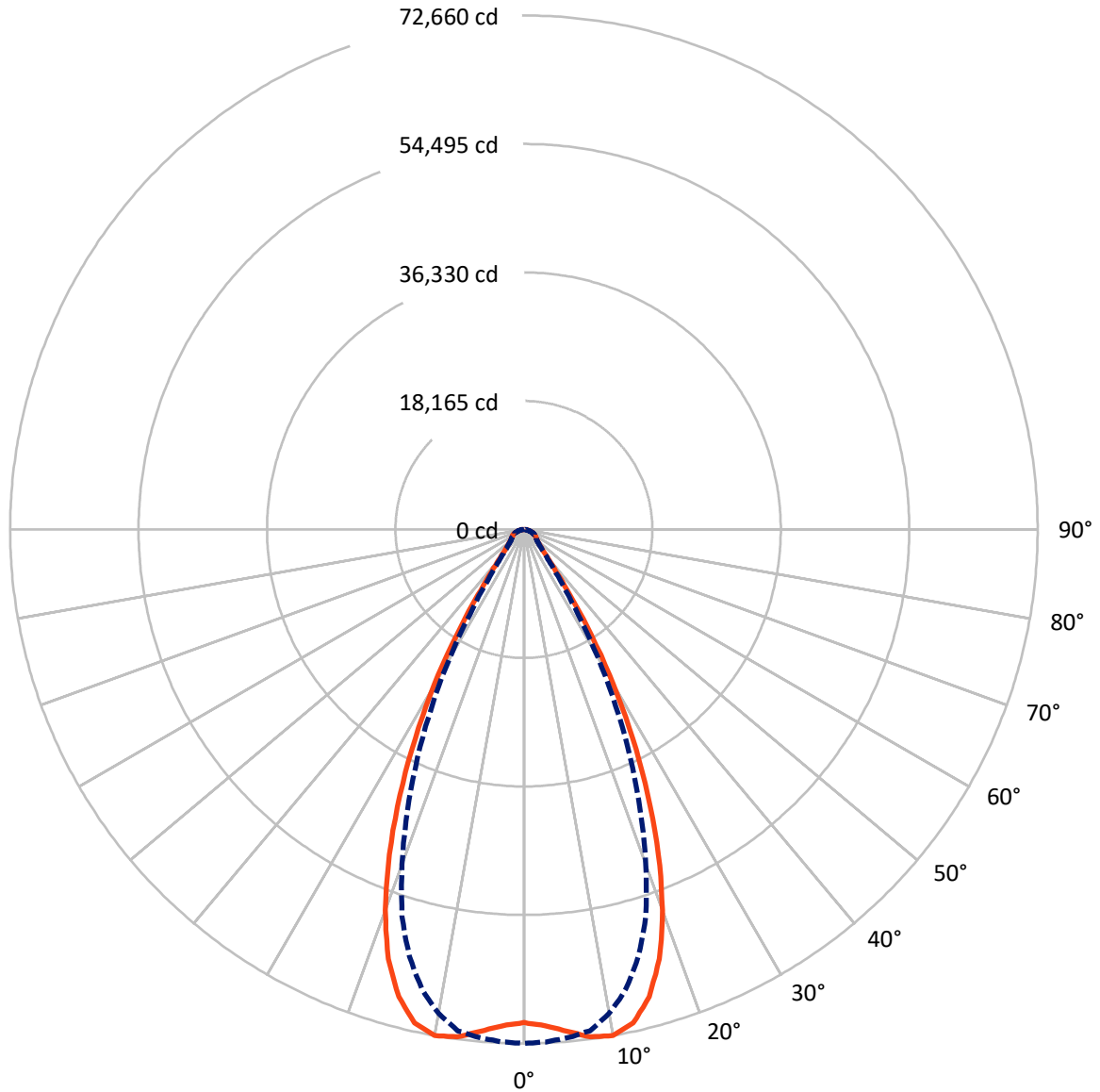
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### Lumen Table

90	1.7	13.0	34.0	54.9	63.5	54.9	34.0	13.0	1.7										
80																			
70	6.0	6.5	13.4	22.2	31.2	39.0	44.6	47.6	47.6	44.6	39.0	31.2	22.2	13.4	6.5	6.0			
60		10.0	20.6	32.6	43.8	53.2	60.4	64.4	64.4	60.4	53.2	43.8	32.6	20.6	10.0				
50	10.5	13.4	26.5	40.1	53.8	69.7	88.2	102.4	102.4	88.2	69.7	53.8	40.1	26.5	13.4	10.5			
40		16.3	30.8	46.5	70.5	125.6	245.5	370.2	370.2	245.5	125.6	70.5	46.5	30.8	16.3				
30	14.1	18.4	33.8	54.5	114.0	363.3	841.8	1194.8	1194.8	841.8	363.3	114.0	54.5	33.8	18.4	14.1			
20		19.8	36.1	65.0	210.4	792.9	1551.3	1977.6	1977.6	1551.3	792.9	210.4	65.0	36.1	19.8				
10	15.3	20.4	37.3	73.4	308.8	1092.2	1919.2	2176.4	2176.4	1919.2	1092.2	308.8	73.4	37.3	20.4	15.3			
0		20.4	37.3	73.4	308.8	1092.2	1919.2	2176.4	2176.4	1919.2	1092.2	308.8	73.4	37.3	20.4				
-10	14.1	19.8	36.1	65.0	210.4	792.9	1551.3	1977.6	1977.6	1551.3	792.9	210.4	65.0	36.1	19.8	14.1			
-20		18.4	33.8	54.5	114.0	363.3	841.8	1194.8	1194.8	841.8	363.3	114.0	54.5	33.8	18.4				
-30	10.5	16.3	30.8	46.5	70.5	125.6	245.5	370.2	370.2	245.5	125.6	70.5	46.5	30.8	16.3	10.5			
-40		13.4	26.5	40.1	53.8	69.7	88.2	102.4	102.4	88.2	69.7	53.8	40.1	26.5	13.4				
-50	6.0	10.0	20.6	32.6	43.8	53.2	60.4	64.4	64.4	60.4	53.2	43.8	32.6	20.6	10.0	6.0			
-60		6.5	13.4	22.2	31.2	39.0	44.6	47.6	47.6	44.6	39.0	31.2	22.2	13.4	6.5				
-70																			
-80	1.7	13.0	34.0	54.9	63.5	54.9	34.0	13.0	1.7										
-90																			

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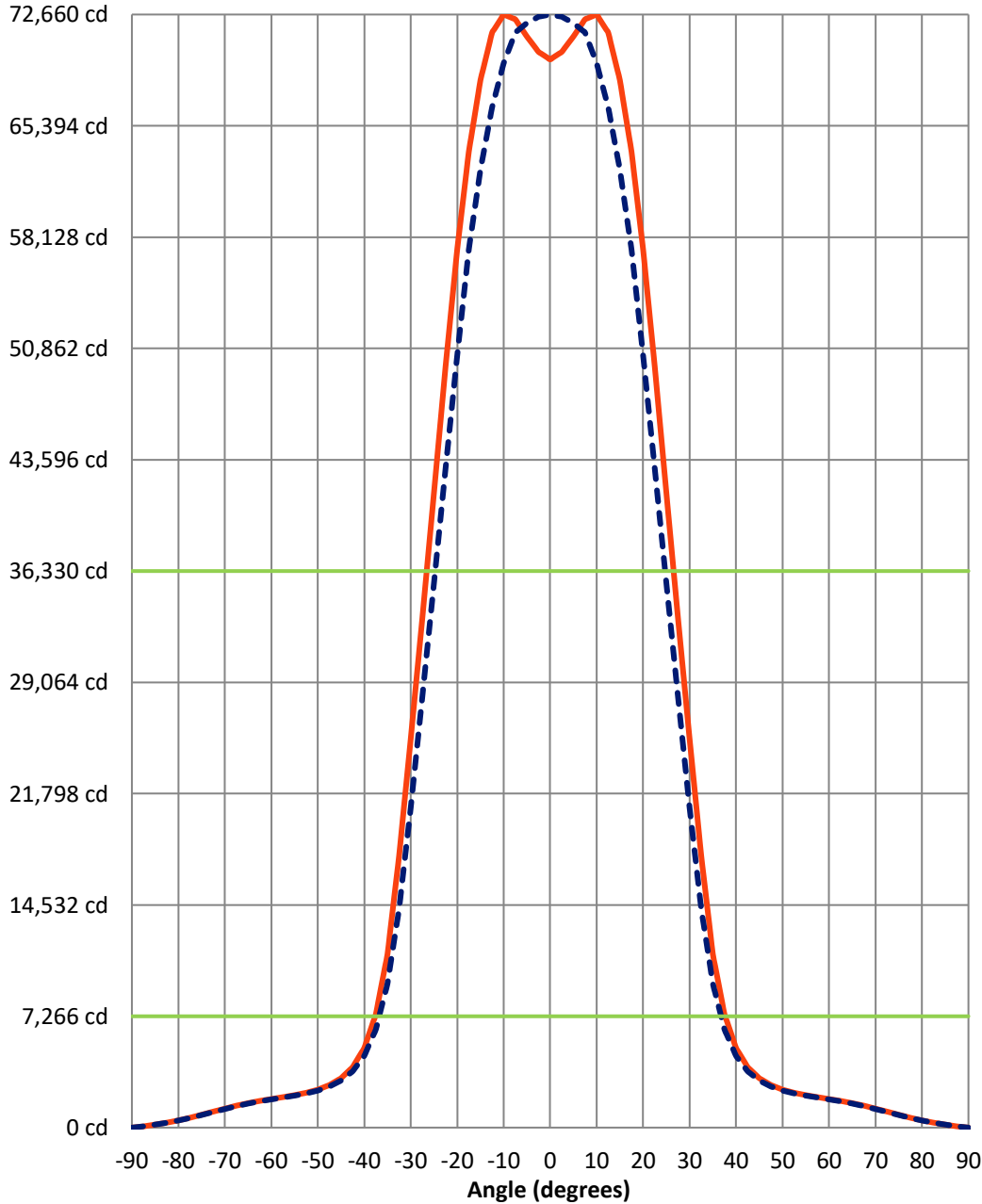
### Luminous Intensity Polar Plot



— 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: 29552.1  
 Efficiency: 49.7%

**Field:**  
 H Angle: 73.6°  
 V Angle: 75.3°  
 Lumens: 38433.3  
 Efficiency: 64.6%

**Spill:**  
 Lumens: 21024.5  
 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°	80.3	80.3	80.3	80.3	80.3	80.3	80.3	74.1	74.1	74.1	74.1
85°	197.6	197.6	197.6	197.6	197.6	191.5	191.5	185.3	185.3	179.1	172.9
82.5°	321.2	321.2	321.2	321.2	315.0	315.0	308.8	302.6	296.5	290.3	284.1
80°	469.4	469.4	469.4	469.4	463.2	457.1	450.9	444.7	432.4	426.2	413.8
77.5°	642.4	642.4	642.4	636.2	630.0	623.8	611.5	599.1	586.8	574.4	562.1
75°	840.0	840.0	840.0	827.6	821.5	809.1	796.8	784.4	765.9	747.4	728.8
72.5°	1043.8	1043.8	1043.8	1031.5	1019.1	1006.8	994.4	975.9	957.4	932.6	907.9
70°	1235.3	1235.3	1235.3	1222.9	1210.6	1198.2	1179.7	1161.2	1136.5	1111.8	1087.1
67.5°	1432.9	1432.9	1432.9	1414.4	1402.1	1389.7	1371.2	1346.5	1321.8	1290.9	1260.0
65°	1593.5	1593.5	1587.4	1581.2	1568.8	1550.3	1537.9	1513.2	1488.5	1463.8	1432.9
62.5°	1741.8	1741.8	1735.6	1729.4	1717.1	1698.5	1680.0	1661.5	1636.8	1605.9	1575.0
60°	1865.3	1865.3	1859.1	1852.9	1840.6	1828.2	1809.7	1791.2	1766.5	1741.8	1710.9
57.5°	1988.8	1988.8	1982.6	1976.5	1964.1	1945.6	1927.1	1908.5	1883.8	1852.9	1822.1
55°	2118.5	2118.5	2112.4	2100.0	2087.6	2069.1	2050.6	2025.9	1995.0	1964.1	1933.2
52.5°	2272.9	2272.9	2260.6	2248.2	2229.7	2211.2	2180.3	2149.4	2112.4	2075.3	2038.2
50°	2476.8	2476.8	2464.4	2445.9	2415.0	2384.1	2347.1	2297.6	2254.4	2205.0	2155.6
47.5°	2779.4	2779.4	2754.7	2723.8	2680.6	2631.2	2563.2	2489.1	2427.4	2365.6	2291.5
45°	3224.1	3224.1	3187.1	3137.6	3069.7	2983.2	2884.4	2779.4	2674.4	2569.4	2464.4
42.5°	3946.8	3946.8	3878.8	3792.4	3675.0	3526.8	3341.5	3168.5	3020.3	2853.5	2711.5
40°	5194.4	5194.4	5064.7	4904.1	4681.8	4397.6	4057.9	3786.2	3526.8	3236.5	3038.8
37.5°	7411.8	7411.8	7158.5	6849.7	6417.4	5873.8	5219.1	4780.6	4298.8	3841.8	3508.2
35°	11327.6	11327.6	10839.7	10240.6	9406.8	8356.8	7238.8	6411.2	5490.9	4786.8	4162.9
32.5°	17751.2	17751.2	16874.1	15793.2	14304.7	12420.9	10629.7	9054.7	7411.8	6244.4	5120.3
30°	25385.3	25385.3	24236.5	22822.0	20882.6	18436.8	15885.9	13087.9	10493.8	8412.3	6713.8
27.5°	33278.8	32951.5	31963.2	30351.2	28140.0	25385.3	22204.4	18591.2	15082.9	11414.1	8986.8
25°	41444.1	41061.2	39930.9	38077.9	35545.6	32426.5	28844.1	24804.7	20475.0	16102.1	11902.1
22.5°	49695.9	49263.5	47978.8	45885.0	43043.8	39547.9	35490.0	30999.7	26163.5	21111.2	16102.1
20°	57323.8	56866.7	55520.3	53340.0	50400.0	46564.4	42055.6	37077.3	31728.5	26163.5	20475.0
17.5°	63710.3	63271.7	61974.7	59893.2	57323.8	53080.6	48392.6	42920.3	37077.3	30999.7	24804.7
15°	68373.5	67996.7	66891.1	65143.2	62524.4	58769.1	53994.7	48392.6	42055.6	35490.0	28844.1
12.5°	71467.9	71165.3	70294.4	68935.6	66588.5	63438.5	58769.1	53080.6	46564.4	39547.9	32426.5
10°	72660.0	72511.7	72104.1	71480.3	69479.1	66588.5	62524.4	57323.8	50400.0	43043.8	35545.6
7.5°	72345.0	72394.4	72536.4	72375.9	71480.3	68935.6	65143.2	59893.2	53340.0	45885.0	38077.9
5°	71220.9	71486.4	72147.3	72536.4	72104.1	70294.4	66891.1	61974.7	55520.3	47978.8	39930.9
2.5°	70220.3	70634.1	71486.4	72394.4	72511.7	71165.3	67996.7	63271.7	56866.7	49263.5	41061.2
0°	69726.1	70220.3	71220.9	72345.0	72660.0	71467.9	68373.5	63710.3	57323.8	49695.9	41444.1



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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°	74.1	67.9	67.9	67.9	61.8	61.8	61.8	55.6	55.6	49.4	49.4
85°	172.9	166.8	160.6	154.4	148.2	142.1	135.9	129.7	123.5	111.2	105.0
82.5°	277.9	271.8	265.6	253.2	247.1	234.7	222.4	210.0	197.6	191.5	179.1
80°	401.5	389.1	376.8	364.4	345.9	327.4	315.0	296.5	284.1	265.6	253.2
77.5°	543.5	525.0	506.5	481.8	463.2	444.7	420.0	401.5	376.8	352.1	327.4
75°	704.1	679.4	648.5	623.8	599.1	568.2	537.4	506.5	475.6	444.7	413.8
72.5°	877.1	846.2	815.3	784.4	747.4	704.1	667.1	623.8	586.8	549.7	506.5
70°	1056.2	1019.1	982.1	945.0	901.8	852.4	809.1	759.7	710.3	660.9	611.5
67.5°	1222.9	1185.9	1142.6	1105.6	1056.2	1006.8	951.2	895.6	840.0	778.2	716.5
65°	1395.9	1352.6	1303.2	1253.8	1204.4	1148.8	1093.2	1037.6	969.7	901.8	840.0
62.5°	1537.9	1500.9	1457.6	1408.2	1352.6	1290.9	1235.3	1161.2	1093.2	1025.3	945.0
60°	1673.8	1630.6	1593.5	1537.9	1488.5	1432.9	1365.0	1290.9	1216.8	1136.5	1062.4
57.5°	1791.2	1754.1	1710.9	1661.5	1605.9	1550.3	1488.5	1420.6	1334.1	1253.8	1167.4
55°	1896.2	1852.9	1809.7	1766.5	1717.1	1655.3	1593.5	1525.6	1451.5	1365.0	1272.4
52.5°	2001.2	1957.9	1908.5	1865.3	1809.7	1754.1	1692.4	1624.4	1550.3	1470.0	1371.2
50°	2106.2	2056.8	2007.4	1951.8	1896.2	1840.6	1778.8	1717.1	1636.8	1556.5	1470.0
47.5°	2229.7	2167.9	2106.2	2044.4	1988.8	1920.9	1859.1	1791.2	1723.2	1636.8	1550.3
45°	2384.1	2291.5	2217.4	2143.2	2075.3	2007.4	1933.2	1865.3	1791.2	1717.1	1624.4
42.5°	2575.6	2452.1	2353.2	2254.4	2167.9	2087.6	2013.5	1933.2	1859.1	1778.8	1692.4
40°	2835.0	2668.2	2507.6	2384.1	2272.9	2174.1	2087.6	2007.4	1920.9	1840.6	1754.1
37.5°	3174.7	2940.0	2717.6	2538.5	2396.5	2272.9	2167.9	2075.3	1988.8	1896.2	1809.7
35°	3687.4	3279.7	2995.6	2736.2	2538.5	2384.1	2254.4	2143.2	2044.4	1951.8	1865.3
32.5°	4410.0	3780.0	3322.9	2995.6	2717.6	2507.6	2353.2	2217.4	2106.2	2007.4	1908.5
30°	5361.2	4490.3	3780.0	3279.7	2940.0	2668.2	2452.1	2291.5	2167.9	2056.8	1957.9
27.5°	6868.2	5361.2	4410.0	3687.4	3174.7	2835.0	2575.6	2384.1	2229.7	2106.2	2001.2
25°	8986.8	6713.8	5120.3	4162.9	3508.2	3038.8	2711.5	2464.4	2291.5	2155.6	2038.2
22.5°	11414.1	8412.3	6244.4	4786.8	3841.8	3236.5	2853.5	2569.4	2365.6	2205.0	2075.3
20°	15082.9	10493.8	7411.8	5490.9	4298.8	3526.8	3020.3	2674.4	2427.4	2254.4	2112.4
17.5°	18591.2	13087.9	9054.7	6411.2	4780.6	3786.2	3168.5	2779.4	2489.1	2297.6	2149.4
15°	22204.4	15885.9	10629.7	7238.8	5219.1	4057.9	3341.5	2884.4	2563.2	2347.1	2180.3
12.5°	25385.3	18436.8	12420.9	8356.8	5873.8	4397.6	3526.8	2983.2	2631.2	2384.1	2211.2
10°	28140.0	20882.6	14304.7	9406.8	6417.4	4681.8	3675.0	3069.7	2680.6	2415.0	2229.7
7.5°	30351.2	22822.0	15793.2	10240.6	6849.7	4904.1	3792.4	3137.6	2723.8	2445.9	2248.2
5°	31963.2	24236.5	16874.1	10839.7	7158.5	5064.7	3878.8	3187.1	2754.7	2464.4	2260.6
2.5°	32951.5	25385.3	17751.2	11327.6	7411.8	5194.4	3946.8	3224.1	2779.4	2476.8	2272.9
0°	33278.8	25385.3	17751.2	11327.6	7411.8	5194.4	3946.8	3224.1	2779.4	2476.8	2272.9





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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°	43.2	43.2	37.1	37.1	30.9	30.9	24.7	24.7	18.5	18.5	12.4
85°	98.8	86.5	80.3	74.1	67.9	61.8	55.6	49.4	43.2	37.1	30.9
82.5°	166.8	154.4	135.9	123.5	111.2	98.8	80.3	74.1	61.8	49.4	43.2
80°	234.7	216.2	197.6	179.1	160.6	142.1	123.5	105.0	86.5	67.9	55.6
77.5°	302.6	277.9	259.4	234.7	210.0	185.3	160.6	135.9	111.2	86.5	67.9
75°	382.9	352.1	321.2	290.3	259.4	228.5	203.8	172.9	142.1	111.2	86.5
72.5°	469.4	426.2	389.1	352.1	308.8	277.9	240.9	210.0	172.9	135.9	105.0
70°	562.1	512.6	463.2	413.8	370.6	321.2	284.1	240.9	203.8	160.6	123.5
67.5°	654.7	599.1	543.5	481.8	426.2	376.8	321.2	277.9	228.5	185.3	142.1
65°	765.9	691.8	623.8	555.9	487.9	426.2	370.6	308.8	259.4	210.0	160.6
62.5°	870.9	790.6	710.3	630.0	555.9	481.8	413.8	352.1	290.3	234.7	179.1
60°	975.9	889.4	796.8	710.3	623.8	543.5	463.2	389.1	321.2	259.4	197.6
57.5°	1080.9	982.1	889.4	790.6	691.8	599.1	512.6	426.2	352.1	277.9	216.2
55°	1173.5	1080.9	975.9	870.9	765.9	654.7	562.1	469.4	382.9	302.6	234.7
52.5°	1272.4	1167.4	1062.4	945.0	840.0	716.5	611.5	506.5	413.8	327.4	253.2
50°	1365.0	1253.8	1136.5	1025.3	901.8	778.2	660.9	549.7	444.7	352.1	265.6
47.5°	1451.5	1334.1	1216.8	1093.2	969.7	840.0	710.3	586.8	475.6	376.8	284.1
45°	1525.6	1420.6	1290.9	1161.2	1037.6	895.6	759.7	623.8	506.5	401.5	296.5
42.5°	1593.5	1488.5	1365.0	1235.3	1093.2	951.2	809.1	667.1	537.4	420.0	315.0
40°	1655.3	1550.3	1432.9	1290.9	1148.8	1006.8	852.4	704.1	568.2	444.7	327.4
37.5°	1717.1	1605.9	1488.5	1352.6	1204.4	1056.2	901.8	747.4	599.1	463.2	345.9
35°	1766.5	1661.5	1537.9	1408.2	1253.8	1105.6	945.0	784.4	623.8	481.8	364.4
32.5°	1809.7	1710.9	1593.5	1457.6	1303.2	1142.6	982.1	815.3	648.5	506.5	376.8
30°	1852.9	1754.1	1630.6	1500.9	1352.6	1185.9	1019.1	846.2	679.4	525.0	389.1
27.5°	1896.2	1791.2	1673.8	1537.9	1395.9	1222.9	1056.2	877.1	704.1	543.5	401.5
25°	1933.2	1822.1	1710.9	1575.0	1432.9	1260.0	1087.1	907.9	728.8	562.1	413.8
22.5°	1964.1	1852.9	1741.8	1605.9	1463.8	1290.9	1111.8	932.6	747.4	574.4	426.2
20°	1995.0	1883.8	1766.5	1636.8	1488.5	1321.8	1136.5	957.4	765.9	586.8	432.4
17.5°	2025.9	1908.5	1791.2	1661.5	1513.2	1346.5	1161.2	975.9	784.4	599.1	444.7
15°	2050.6	1927.1	1809.7	1680.0	1537.9	1371.2	1179.7	994.4	796.8	611.5	450.9
12.5°	2069.1	1945.6	1828.2	1698.5	1550.3	1389.7	1198.2	1006.8	809.1	623.8	457.1
10°	2087.6	1964.1	1840.6	1717.1	1568.8	1402.1	1210.6	1019.1	821.5	630.0	463.2
7.5°	2100.0	1976.5	1852.9	1729.4	1581.2	1414.4	1222.9	1031.5	827.6	636.2	469.4
5°	2112.4	1982.6	1859.1	1735.6	1587.4	1432.9	1235.3	1043.8	840.0	642.4	469.4
2.5°	2118.5	1988.8	1865.3	1741.8	1593.5	1432.9	1235.3	1043.8	840.0	642.4	469.4
0°	2118.5	1988.8	1865.3	1741.8	1593.5	1432.9	1235.3	1043.8	840.0	642.4	469.4



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	12.4	6.2	6.2	0.0
85°	18.5	12.4	6.2	0.0
82.5°	30.9	18.5	12.4	0.0
80°	43.2	30.9	12.4	0.0
77.5°	49.4	37.1	18.5	0.0
75°	61.8	43.2	18.5	0.0
72.5°	74.1	49.4	24.7	0.0
70°	80.3	55.6	24.7	0.0
67.5°	98.8	61.8	30.9	0.0
65°	111.2	67.9	30.9	0.0
62.5°	123.5	74.1	37.1	0.0
60°	135.9	80.3	37.1	0.0
57.5°	154.4	86.5	43.2	0.0
55°	166.8	98.8	43.2	0.0
52.5°	179.1	105.0	49.4	0.0
50°	191.5	111.2	49.4	0.0
47.5°	197.6	123.5	55.6	0.0
45°	210.0	129.7	55.6	0.0
42.5°	222.4	135.9	61.8	0.0
40°	234.7	142.1	61.8	0.0
37.5°	247.1	148.2	61.8	0.0
35°	253.2	154.4	67.9	0.0
32.5°	265.6	160.6	67.9	0.0
30°	271.8	166.8	67.9	0.0
27.5°	277.9	172.9	74.1	0.0
25°	284.1	172.9	74.1	0.0
22.5°	290.3	179.1	74.1	0.0
20°	296.5	185.3	74.1	0.0
17.5°	302.6	185.3	74.1	0.0
15°	308.8	191.5	80.3	0.0
12.5°	315.0	191.5	80.3	0.0
10°	315.0	197.6	80.3	0.0
7.5°	321.2	197.6	80.3	0.0
5°	321.2	197.6	80.3	0.0
2.5°	321.2	197.6	80.3	0.0
0°	321.2	197.6	80.3	0.0

(END OF REPORT)