

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: P624172

Luminaire Tested: **EPH-VN-08-D-940-U-55**

Issue Date: 11/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P624172  
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-940-U-55  
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/  
Nema 5 distribution lens  
Light Source: (128) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

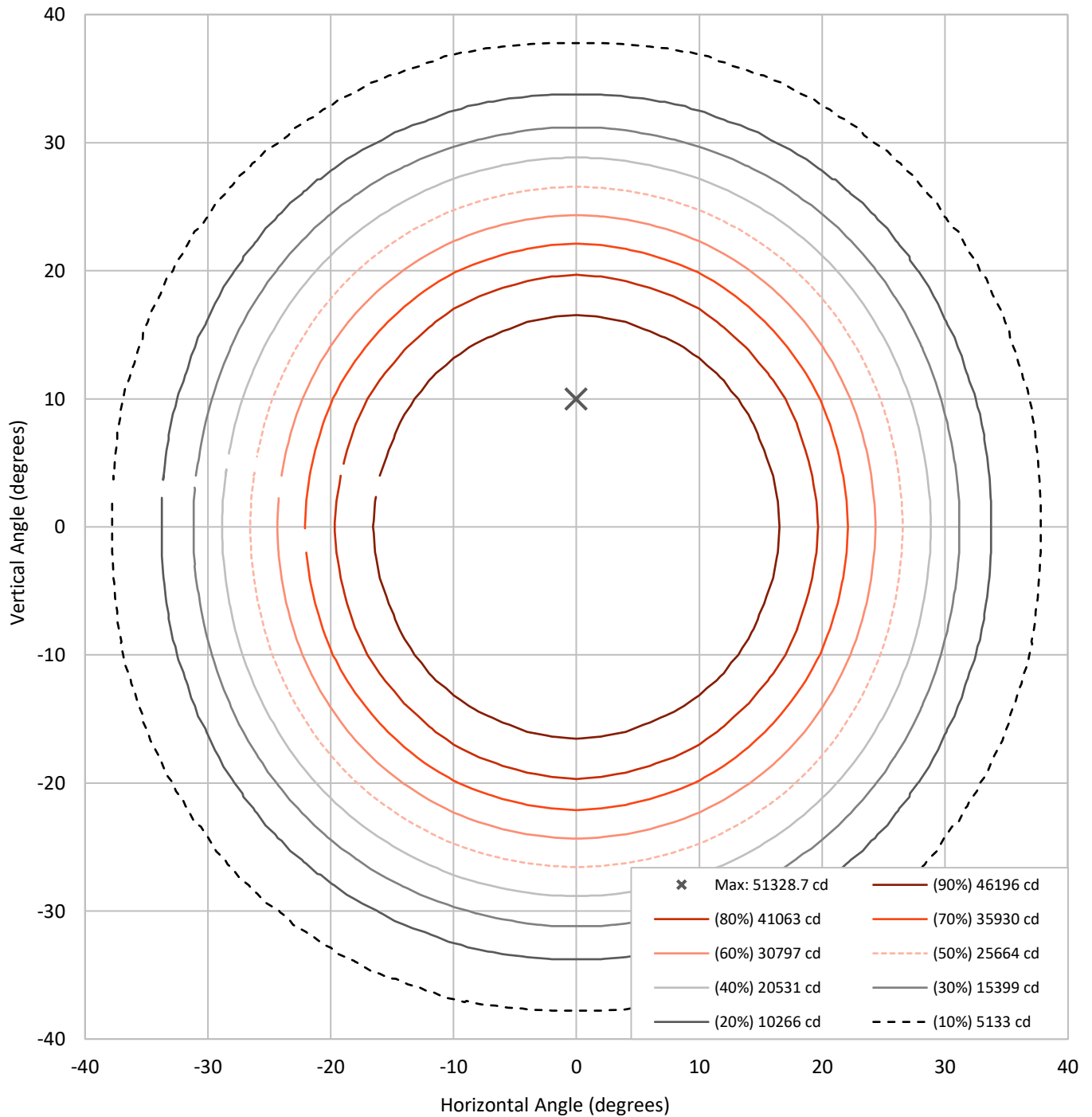
Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	42002.4 lumens	Max Intensity:	51328.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	86.0 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	20876.2 lumens	Field Lumens:	27150.2 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





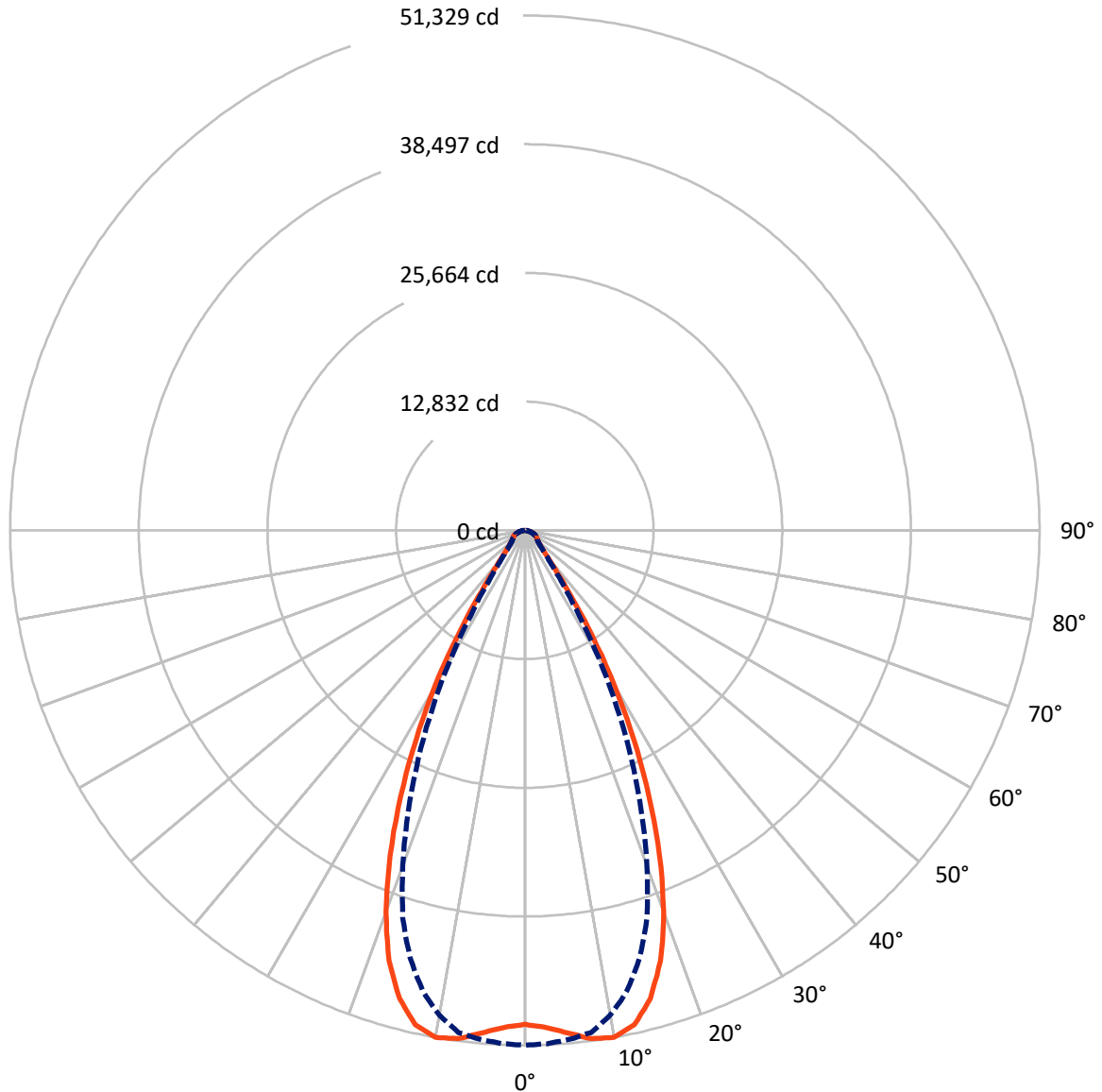
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### Lumen Table

90	1.2	9.2	24.0	38.8	44.9	38.8	24.0	9.2	1.2							
80	1.2	9.2	24.0	38.8	44.9	38.8	24.0	9.2	1.2							
70	4.2	4.6	9.5	15.7	22.0	27.5	31.5	33.7	33.7	31.5	27.5	22.0	15.7	9.5	4.6	4.2
60		7.1	14.5	23.0	30.9	37.6	42.7	45.5	45.5	42.7	37.6	30.9	23.0	14.5	7.1	
50	7.5	9.5	18.7	28.3	38.0	49.2	62.3	72.4	72.4	62.3	49.2	38.0	28.3	18.7	9.5	7.5
40		11.5	21.7	32.9	49.8	88.7	173.4	261.5	261.5	173.4	88.7	49.8	32.9	21.7	11.5	
30	9.9	13.0	23.9	38.5	80.6	256.6	594.7	844.0	844.0	594.7	256.6	80.6	38.5	23.9	13.0	9.9
20		14.0	25.5	45.9	148.7	560.1	1095.9	1397.1	1397.1	1095.9	560.1	148.7	45.9	25.5	14.0	
10	10.8	14.4	26.4	51.9	218.2	771.6	1355.8	1537.5	1537.5	1355.8	771.6	218.2	51.9	26.4	14.4	10.8
0		14.4	26.4	51.9	218.2	771.6	1355.8	1537.5	1537.5	1355.8	771.6	218.2	51.9	26.4	14.4	
-10	9.9	14.0	25.5	45.9	148.7	560.1	1095.9	1397.1	1397.1	1095.9	560.1	148.7	45.9	25.5	14.0	9.9
-20		13.0	23.9	38.5	80.6	256.6	594.7	844.0	844.0	594.7	256.6	80.6	38.5	23.9	13.0	
-30	7.5	11.5	21.7	32.9	49.8	88.7	173.4	261.5	261.5	173.4	88.7	49.8	32.9	21.7	11.5	7.5
-40		9.5	18.7	28.3	38.0	49.2	62.3	72.4	72.4	62.3	49.2	38.0	28.3	18.7	9.5	
-50	4.2	7.1	14.5	23.0	30.9	37.6	42.7	45.5	45.5	42.7	37.6	30.9	23.0	14.5	7.1	4.2
-60		4.6	9.5	15.7	22.0	27.5	31.5	33.7	33.7	31.5	27.5	22.0	15.7	9.5	4.6	
-70	1.2	9.2	24.0	38.8	44.9	38.8	24.0	9.2	1.2							
-80		1.2	9.2	24.0	38.8	44.9	38.8	24.0	9.2	1.2						
-90	1.2	9.2	24.0	38.8	44.9	38.8	24.0	9.2	1.2							

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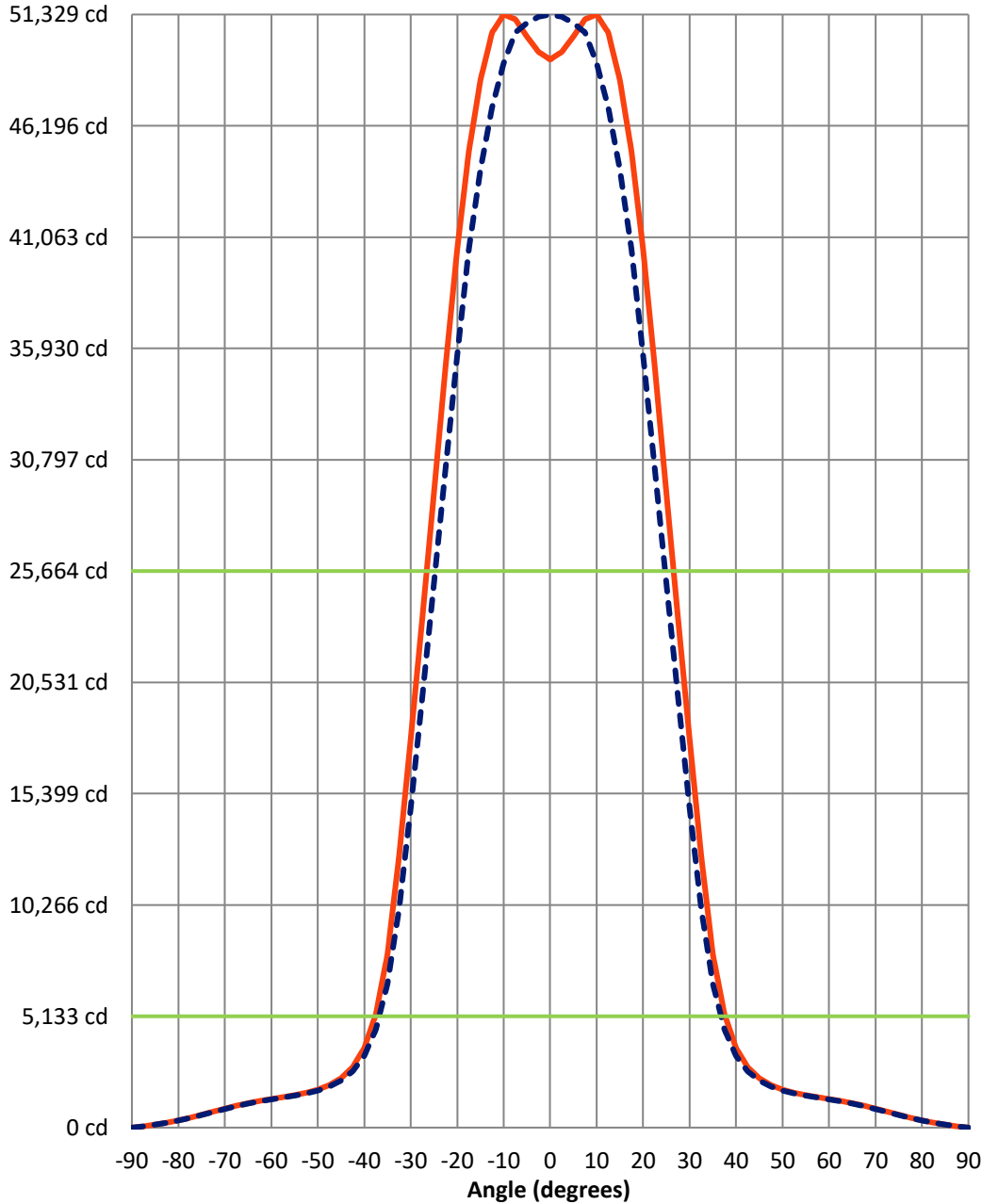
### Luminous Intensity Polar Plot



— 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: 20876.2  
 Efficiency: 49.7%

**Field:**  
 H Angle: 73.6°  
 V Angle: 75.3°  
 Lumens: 27150.2  
 Efficiency: 64.6%

**Spill:**  
 Lumens: 14852.2  
 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°	56.7	56.7	56.7	56.7	56.7	56.7	56.7	52.4	52.4	52.4	52.4
85°	139.6	139.6	139.6	139.6	139.6	135.3	135.3	130.9	130.9	126.5	122.2
82.5°	226.9	226.9	226.9	226.9	222.5	222.5	218.2	213.8	209.4	205.1	200.7
80°	331.6	331.6	331.6	331.6	327.2	322.9	318.5	314.2	305.4	301.1	292.3
77.5°	453.8	453.8	453.8	449.4	445.0	440.7	432.0	423.2	414.5	405.8	397.1
75°	593.4	593.4	593.4	584.7	580.3	571.6	562.9	554.1	541.0	527.9	514.9
72.5°	737.4	737.4	737.4	728.7	719.9	711.2	702.5	689.4	676.3	658.8	641.4
70°	872.6	872.6	872.6	863.9	855.2	846.5	833.4	820.3	802.8	785.4	767.9
67.5°	1012.3	1012.3	1012.3	999.2	990.4	981.7	968.6	951.2	933.7	911.9	890.1
65°	1125.7	1125.7	1121.3	1117.0	1108.3	1095.2	1086.4	1069.0	1051.5	1034.1	1012.3
62.5°	1230.4	1230.4	1226.1	1221.7	1213.0	1199.9	1186.8	1173.7	1156.2	1134.4	1112.6
60°	1317.7	1317.7	1313.3	1309.0	1300.2	1291.5	1278.4	1265.3	1247.9	1230.4	1208.6
57.5°	1404.9	1404.9	1400.6	1396.2	1387.5	1374.4	1361.3	1348.2	1330.8	1309.0	1287.1
55°	1496.6	1496.6	1492.2	1483.5	1474.8	1461.7	1448.6	1431.1	1409.3	1387.5	1365.7
52.5°	1605.7	1605.7	1596.9	1588.2	1575.1	1562.0	1540.2	1518.4	1492.2	1466.0	1439.9
50°	1749.6	1749.6	1740.9	1727.8	1706.0	1684.2	1658.0	1623.1	1592.6	1557.7	1522.8
47.5°	1963.4	1963.4	1946.0	1924.2	1893.6	1858.7	1810.7	1758.4	1714.7	1671.1	1618.7
45°	2277.6	2277.6	2251.4	2216.5	2168.5	2107.4	2037.6	1963.4	1889.3	1815.1	1740.9
42.5°	2788.1	2788.1	2740.1	2679.0	2596.1	2491.4	2360.5	2238.3	2133.6	2015.8	1915.4
40°	3669.5	3669.5	3577.8	3464.4	3307.3	3106.6	2866.6	2674.6	2491.4	2286.3	2146.7
37.5°	5235.8	5235.8	5056.9	4838.8	4533.4	4149.4	3686.9	3377.1	3036.8	2713.9	2478.3
35°	8002.1	8002.1	7657.4	7234.2	6645.2	5903.4	5113.7	4529.0	3878.9	3381.5	2940.8
32.5°	12539.8	12539.8	11920.3	11156.7	10105.2	8774.4	7509.1	6396.4	5235.8	4411.2	3617.1
30°	17932.7	17932.7	17121.2	16122.0	14752.0	13024.1	11222.1	9245.6	7413.1	5942.7	4742.8
27.5°	23508.9	23277.7	22579.6	21440.8	19878.7	17932.7	15685.7	13133.2	10654.9	8063.2	6348.5
25°	29277.1	29006.5	28208.1	26899.1	25110.2	22906.8	20376.1	17522.6	14464.0	11374.9	8407.9
22.5°	35106.3	34800.9	33893.3	32414.2	30407.1	27937.6	25070.9	21898.9	18482.5	14913.4	11374.9
20°	40494.8	40172.0	39220.8	37680.6	35603.7	32894.2	29709.0	26192.3	22413.8	18482.5	14464.0
17.5°	45006.4	44696.6	43780.3	42309.9	40494.8	37497.3	34185.7	30319.9	26192.3	21898.9	17522.6
15°	48300.6	48034.5	47253.4	46018.7	44168.7	41515.8	38143.1	34185.7	29709.0	25070.9	20376.1
12.5°	50486.6	50272.8	49657.6	48697.7	47039.6	44814.4	41515.8	37497.3	32894.2	27937.6	22906.8
10°	51328.7	51224.0	50936.0	50495.3	49081.6	47039.6	44168.7	40494.8	35603.7	30407.1	25110.2
7.5°	51106.1	51141.1	51241.4	51128.0	50495.3	48697.7	46018.7	42309.9	37680.6	32414.2	26899.1
5°	50312.0	50499.7	50966.5	51241.4	50936.0	49657.6	47253.4	43780.3	39220.8	33893.3	28208.1
2.5°	49605.2	49897.5	50499.7	51141.1	51224.0	50272.8	48034.5	44696.6	40172.0	34800.9	29006.5
0°	49256.1	49605.2	50312.0	51106.1	51328.7	50486.6	48300.6	45006.4	40494.8	35106.3	29277.1



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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°	52.4	48.0	48.0	48.0	43.6	43.6	43.6	39.3	39.3	34.9	34.9
85°	122.2	117.8	113.4	109.1	104.7	100.4	96.0	91.6	87.3	78.5	74.2
82.5°	196.3	192.0	187.6	178.9	174.5	165.8	157.1	148.3	139.6	135.3	126.5
80°	283.6	274.9	266.2	257.4	244.3	231.2	222.5	209.4	200.7	187.6	178.9
77.5°	384.0	370.9	357.8	340.3	327.2	314.2	296.7	283.6	266.2	248.7	231.2
75°	497.4	480.0	458.1	440.7	423.2	401.4	379.6	357.8	336.0	314.2	292.3
72.5°	619.6	597.8	575.9	554.1	527.9	497.4	471.2	440.7	414.5	388.3	357.8
70°	746.1	719.9	693.7	667.6	637.0	602.1	571.6	536.7	501.8	466.9	432.0
67.5°	863.9	837.7	807.2	781.0	746.1	711.2	671.9	632.7	593.4	549.8	506.1
65°	986.1	955.5	920.6	885.7	850.8	811.6	772.3	733.0	685.0	637.0	593.4
62.5°	1086.4	1060.3	1029.7	994.8	955.5	911.9	872.6	820.3	772.3	724.3	667.6
60°	1182.4	1151.9	1125.7	1086.4	1051.5	1012.3	964.3	911.9	859.6	802.8	750.5
57.5°	1265.3	1239.1	1208.6	1173.7	1134.4	1095.2	1051.5	1003.5	942.5	885.7	824.6
55°	1339.5	1309.0	1278.4	1247.9	1213.0	1169.3	1125.7	1077.7	1025.4	964.3	898.8
52.5°	1413.7	1383.1	1348.2	1317.7	1278.4	1239.1	1195.5	1147.5	1095.2	1038.4	968.6
50°	1487.9	1452.9	1418.0	1378.8	1339.5	1300.2	1256.6	1213.0	1156.2	1099.5	1038.4
47.5°	1575.1	1531.5	1487.9	1444.2	1404.9	1357.0	1313.3	1265.3	1217.3	1156.2	1095.2
45°	1684.2	1618.7	1566.4	1514.0	1466.0	1418.0	1365.7	1317.7	1265.3	1213.0	1147.5
42.5°	1819.5	1732.2	1662.4	1592.6	1531.5	1474.8	1422.4	1365.7	1313.3	1256.6	1195.5
40°	2002.7	1884.9	1771.5	1684.2	1605.7	1535.8	1474.8	1418.0	1357.0	1300.2	1239.1
37.5°	2242.7	2076.9	1919.8	1793.3	1692.9	1605.7	1531.5	1466.0	1404.9	1339.5	1278.4
35°	2604.8	2316.9	2116.2	1932.9	1793.3	1684.2	1592.6	1514.0	1444.2	1378.8	1317.7
32.5°	3115.3	2670.3	2347.4	2116.2	1919.8	1771.5	1662.4	1566.4	1487.9	1418.0	1348.2
30°	3787.3	3172.0	2670.3	2316.9	2076.9	1884.9	1732.2	1618.7	1531.5	1452.9	1383.1
27.5°	4851.9	3787.3	3115.3	2604.8	2242.7	2002.7	1819.5	1684.2	1575.1	1487.9	1413.7
25°	6348.5	4742.8	3617.1	2940.8	2478.3	2146.7	1915.4	1740.9	1618.7	1522.8	1439.9
22.5°	8063.2	5942.7	4411.2	3381.5	2713.9	2286.3	2015.8	1815.1	1671.1	1557.7	1466.0
20°	10654.9	7413.1	5235.8	3878.9	3036.8	2491.4	2133.6	1889.3	1714.7	1592.6	1492.2
17.5°	13133.2	9245.6	6396.4	4529.0	3377.1	2674.6	2238.3	1963.4	1758.4	1623.1	1518.4
15°	15685.7	11222.1	7509.1	5113.7	3686.9	2866.6	2360.5	2037.6	1810.7	1658.0	1540.2
12.5°	17932.7	13024.1	8774.4	5903.4	4149.4	3106.6	2491.4	2107.4	1858.7	1684.2	1562.0
10°	19878.7	14752.0	10105.2	6645.2	4533.4	3307.3	2596.1	2168.5	1893.6	1706.0	1575.1
7.5°	21440.8	16122.0	11156.7	7234.2	4838.8	3464.4	2679.0	2216.5	1924.2	1727.8	1588.2
5°	22579.6	17121.2	11920.3	7657.4	5056.9	3577.8	2740.1	2251.4	1946.0	1740.9	1596.9
2.5°	23277.7	17932.7	12539.8	8002.1	5235.8	3669.5	2788.1	2277.6	1963.4	1749.6	1605.7
0°	23508.9	17932.7	12539.8	8002.1	5235.8	3669.5	2788.1	2277.6	1963.4	1749.6	1605.7





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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°	30.5	30.5	26.2	26.2	21.8	21.8	17.5	17.5	13.1	13.1	8.7
85°	69.8	61.1	56.7	52.4	48.0	43.6	39.3	34.9	30.5	26.2	21.8
82.5°	117.8	109.1	96.0	87.3	78.5	69.8	56.7	52.4	43.6	34.9	30.5
80°	165.8	152.7	139.6	126.5	113.4	100.4	87.3	74.2	61.1	48.0	39.3
77.5°	213.8	196.3	183.3	165.8	148.3	130.9	113.4	96.0	78.5	61.1	48.0
75°	270.5	248.7	226.9	205.1	183.3	161.4	144.0	122.2	100.4	78.5	61.1
72.5°	331.6	301.1	274.9	248.7	218.2	196.3	170.2	148.3	122.2	96.0	74.2
70°	397.1	362.1	327.2	292.3	261.8	226.9	200.7	170.2	144.0	113.4	87.3
67.5°	462.5	423.2	384.0	340.3	301.1	266.2	226.9	196.3	161.4	130.9	100.4
65°	541.0	488.7	440.7	392.7	344.7	301.1	261.8	218.2	183.3	148.3	113.4
62.5°	615.2	558.5	501.8	445.0	392.7	340.3	292.3	248.7	205.1	165.8	126.5
60°	689.4	628.3	562.9	501.8	440.7	384.0	327.2	274.9	226.9	183.3	139.6
57.5°	763.6	693.7	628.3	558.5	488.7	423.2	362.1	301.1	248.7	196.3	152.7
55°	829.0	763.6	689.4	615.2	541.0	462.5	397.1	331.6	270.5	213.8	165.8
52.5°	898.8	824.6	750.5	667.6	593.4	506.1	432.0	357.8	292.3	231.2	178.9
50°	964.3	885.7	802.8	724.3	637.0	549.8	466.9	388.3	314.2	248.7	187.6
47.5°	1025.4	942.5	859.6	772.3	685.0	593.4	501.8	414.5	336.0	266.2	200.7
45°	1077.7	1003.5	911.9	820.3	733.0	632.7	536.7	440.7	357.8	283.6	209.4
42.5°	1125.7	1051.5	964.3	872.6	772.3	671.9	571.6	471.2	379.6	296.7	222.5
40°	1169.3	1095.2	1012.3	911.9	811.6	711.2	602.1	497.4	401.4	314.2	231.2
37.5°	1213.0	1134.4	1051.5	955.5	850.8	746.1	637.0	527.9	423.2	327.2	244.3
35°	1247.9	1173.7	1086.4	994.8	885.7	781.0	667.6	554.1	440.7	340.3	257.4
32.5°	1278.4	1208.6	1125.7	1029.7	920.6	807.2	693.7	575.9	458.1	357.8	266.2
30°	1309.0	1239.1	1151.9	1060.3	955.5	837.7	719.9	597.8	480.0	370.9	274.9
27.5°	1339.5	1265.3	1182.4	1086.4	986.1	863.9	746.1	619.6	497.4	384.0	283.6
25°	1365.7	1287.1	1208.6	1112.6	1012.3	890.1	767.9	641.4	514.9	397.1	292.3
22.5°	1387.5	1309.0	1230.4	1134.4	1034.1	911.9	785.4	658.8	527.9	405.8	301.1
20°	1409.3	1330.8	1247.9	1156.2	1051.5	933.7	802.8	676.3	541.0	414.5	305.4
17.5°	1431.1	1348.2	1265.3	1173.7	1069.0	951.2	820.3	689.4	554.1	423.2	314.2
15°	1448.6	1361.3	1278.4	1186.8	1086.4	968.6	833.4	702.5	562.9	432.0	318.5
12.5°	1461.7	1374.4	1291.5	1199.9	1095.2	981.7	846.5	711.2	571.6	440.7	322.9
10°	1474.8	1387.5	1300.2	1213.0	1108.3	990.4	855.2	719.9	580.3	445.0	327.2
7.5°	1483.5	1396.2	1309.0	1221.7	1117.0	999.2	863.9	728.7	584.7	449.4	331.6
5°	1492.2	1400.6	1313.3	1226.1	1121.3	1012.3	872.6	737.4	593.4	453.8	331.6
2.5°	1496.6	1404.9	1317.7	1230.4	1125.7	1012.3	872.6	737.4	593.4	453.8	331.6
0°	1496.6	1404.9	1317.7	1230.4	1125.7	1012.3	872.6	737.4	593.4	453.8	331.6



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**CANDELA DISTRIBUTION (continued):**

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.7	4.4	4.4	0.0
85°	13.1	8.7	4.4	0.0
82.5°	21.8	13.1	8.7	0.0
80°	30.5	21.8	8.7	0.0
77.5°	34.9	26.2	13.1	0.0
75°	43.6	30.5	13.1	0.0
72.5°	52.4	34.9	17.5	0.0
70°	56.7	39.3	17.5	0.0
67.5°	69.8	43.6	21.8	0.0
65°	78.5	48.0	21.8	0.0
62.5°	87.3	52.4	26.2	0.0
60°	96.0	56.7	26.2	0.0
57.5°	109.1	61.1	30.5	0.0
55°	117.8	69.8	30.5	0.0
52.5°	126.5	74.2	34.9	0.0
50°	135.3	78.5	34.9	0.0
47.5°	139.6	87.3	39.3	0.0
45°	148.3	91.6	39.3	0.0
42.5°	157.1	96.0	43.6	0.0
40°	165.8	100.4	43.6	0.0
37.5°	174.5	104.7	43.6	0.0
35°	178.9	109.1	48.0	0.0
32.5°	187.6	113.4	48.0	0.0
30°	192.0	117.8	48.0	0.0
27.5°	196.3	122.2	52.4	0.0
25°	200.7	122.2	52.4	0.0
22.5°	205.1	126.5	52.4	0.0
20°	209.4	130.9	52.4	0.0
17.5°	213.8	130.9	52.4	0.0
15°	218.2	135.3	56.7	0.0
12.5°	222.5	135.3	56.7	0.0
10°	222.5	139.6	56.7	0.0
7.5°	226.9	139.6	56.7	0.0
5°	226.9	139.6	56.7	0.0
2.5°	226.9	139.6	56.7	0.0
0°	226.9	139.6	56.7	0.0

(END OF REPORT)