

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: P624170

Luminaire Tested: **EPH-VN-06-E-940-U-55**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624170
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-06-E-940-U-55
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 5 distribution lens
Light Source: (96) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

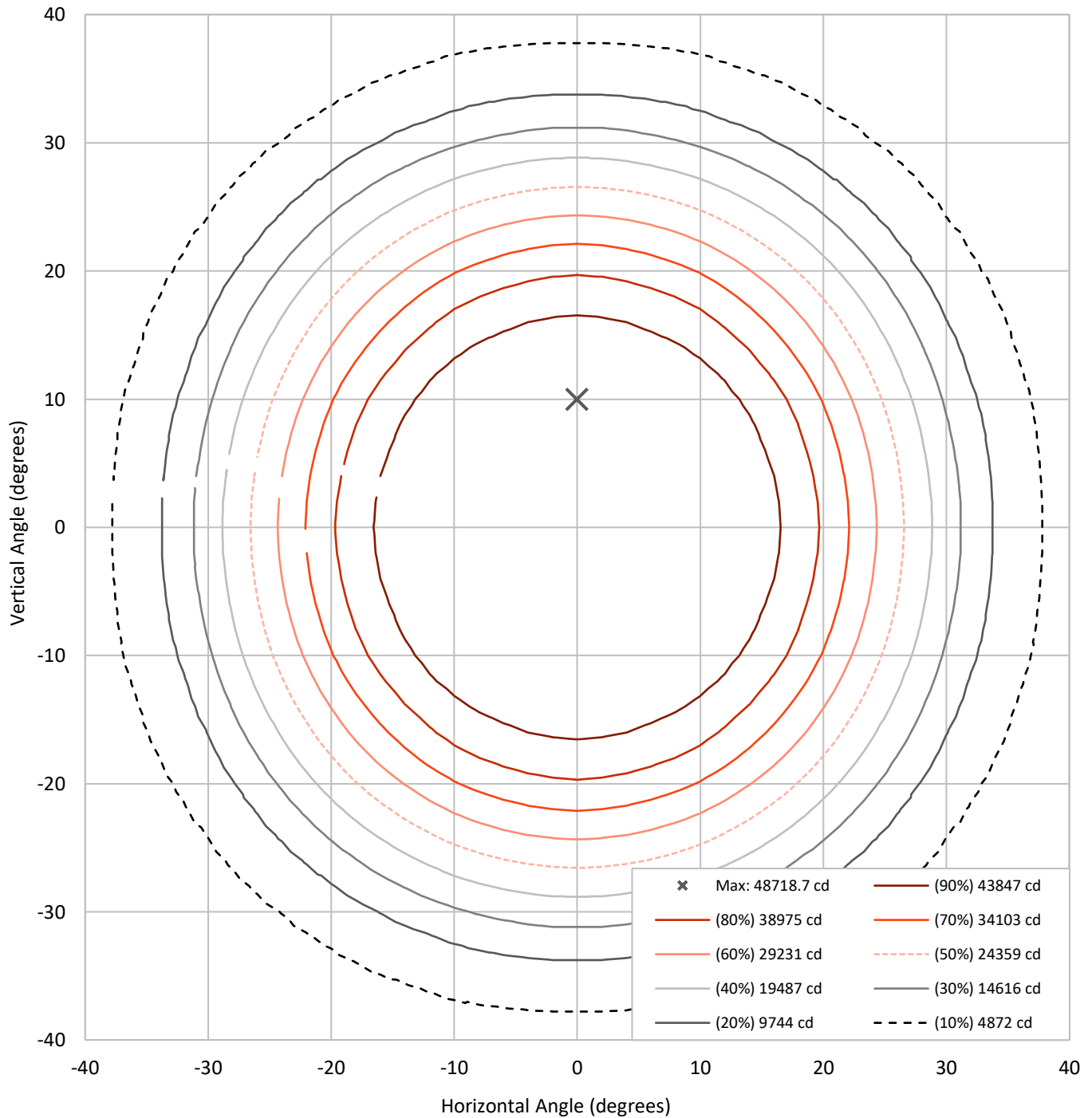
Lumens per Lamp:	N/A	NEMA Type:	5H x 5V
Luminaire Lumens:	39866.6 lumens	Max Intensity:	48718.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 10°V
Efficacy:	85.9 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		
Beam Angle (50%):	49.5°H x 53.1°V	Field Angle (10%):	73.6°H x 75.3°V
Beam Lumens:	19814.7 lumens	Field Lumens:	25769.6 lumens
Beam Efficiency:	49.7%	Field Efficiency:	64.6%

Input Watts (W): 464.2
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





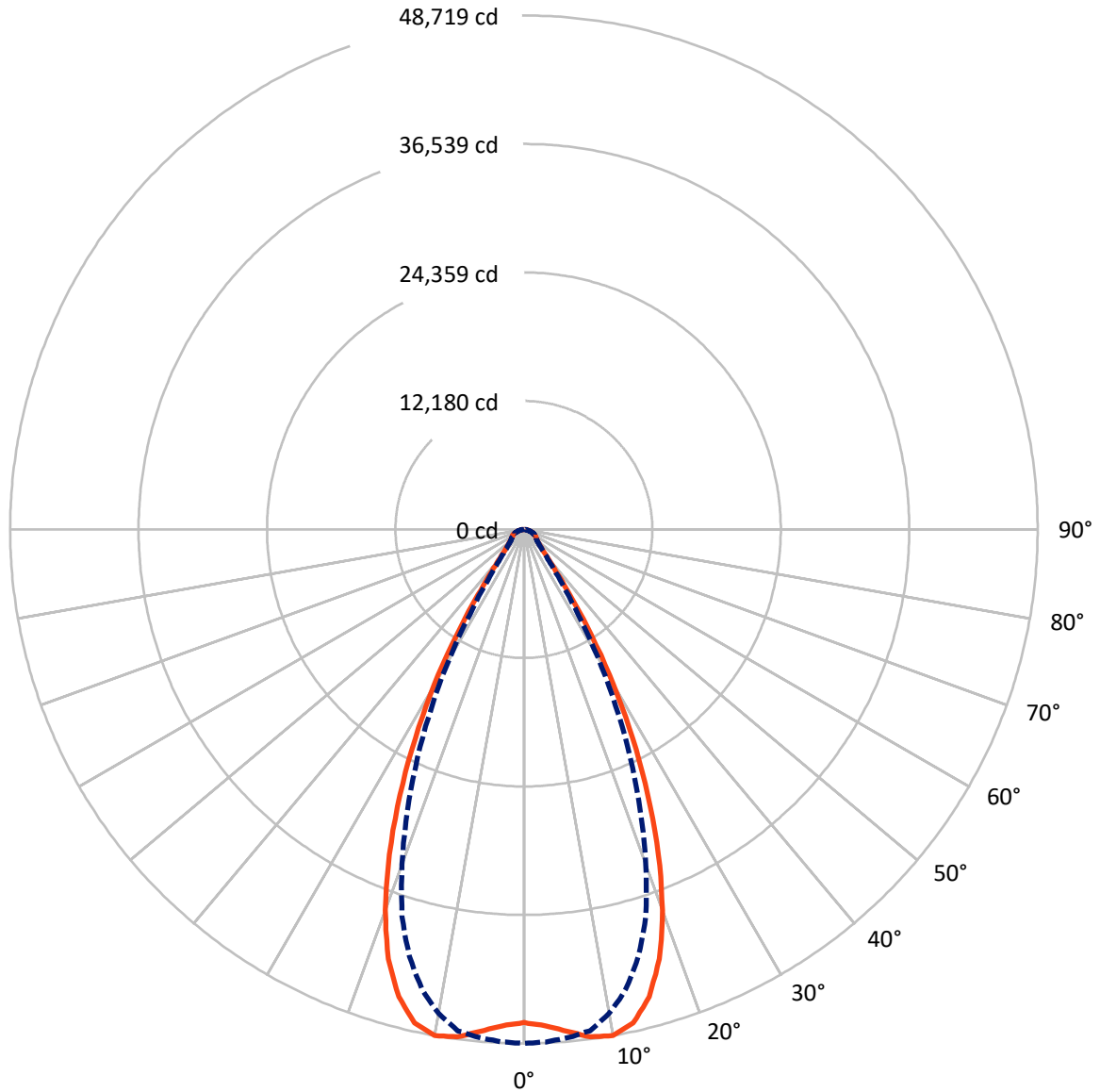
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Lumen Table

90	1.1	8.7	22.8	36.8	42.6	36.8	22.8	8.7	1.1							
80	1.1	8.7	22.8	36.8	42.6	36.8	22.8	8.7	1.1							
70	4.0	4.3	9.0	14.9	20.9	26.1	29.9	31.9	31.9	29.9	26.1	20.9	14.9	9.0	4.3	4.0
60		6.7	13.8	21.9	29.4	35.7	40.5	43.2	43.2	40.5	35.7	29.4	21.9	13.8	6.7	
50	7.1	9.0	17.8	26.9	36.1	46.7	59.1	68.7	68.7	59.1	46.7	36.1	26.9	17.8	9.0	7.1
40		10.9	20.6	31.2	47.3	84.2	164.6	248.2	248.2	164.6	84.2	47.3	31.2	20.6	10.9	
30	9.4	12.3	22.7	36.6	76.5	243.6	564.4	801.1	801.1	564.4	243.6	76.5	36.6	22.7	12.3	9.4
20		13.2	24.2	43.6	141.1	531.6	1040.2	1326.0	1326.0	1040.2	531.6	141.1	43.6	24.2	13.2	
10	10.3	13.7	25.0	49.2	207.1	732.3	1286.8	1459.3	1459.3	1286.8	732.3	207.1	49.2	25.0	13.7	10.3
0		13.7	25.0	49.2	207.1	732.3	1286.8	1459.3	1459.3	1286.8	732.3	207.1	49.2	25.0	13.7	
-10	9.4	13.2	24.2	43.6	141.1	531.6	1040.2	1326.0	1326.0	1040.2	531.6	141.1	43.6	24.2	13.2	9.4
-20		12.3	22.7	36.6	76.5	243.6	564.4	801.1	801.1	564.4	243.6	76.5	36.6	22.7	12.3	
-30	7.1	10.9	20.6	31.2	47.3	84.2	164.6	248.2	248.2	164.6	84.2	47.3	31.2	20.6	10.9	7.1
-40		9.0	17.8	26.9	36.1	46.7	59.1	68.7	68.7	59.1	46.7	36.1	26.9	17.8	9.0	
-50	4.0	6.7	13.8	21.9	29.4	35.7	40.5	43.2	43.2	40.5	35.7	29.4	21.9	13.8	6.7	4.0
-60		4.3	9.0	14.9	20.9	26.1	29.9	31.9	31.9	29.9	26.1	20.9	14.9	9.0	4.3	
-70	1.1	8.7	22.8	36.8	42.6	36.8	22.8	8.7	1.1							
-80		1.1	8.7	22.8	36.8	42.6	36.8	22.8	8.7	1.1						
-90	1.1	8.7	22.8	36.8	42.6	36.8	22.8	8.7	1.1							

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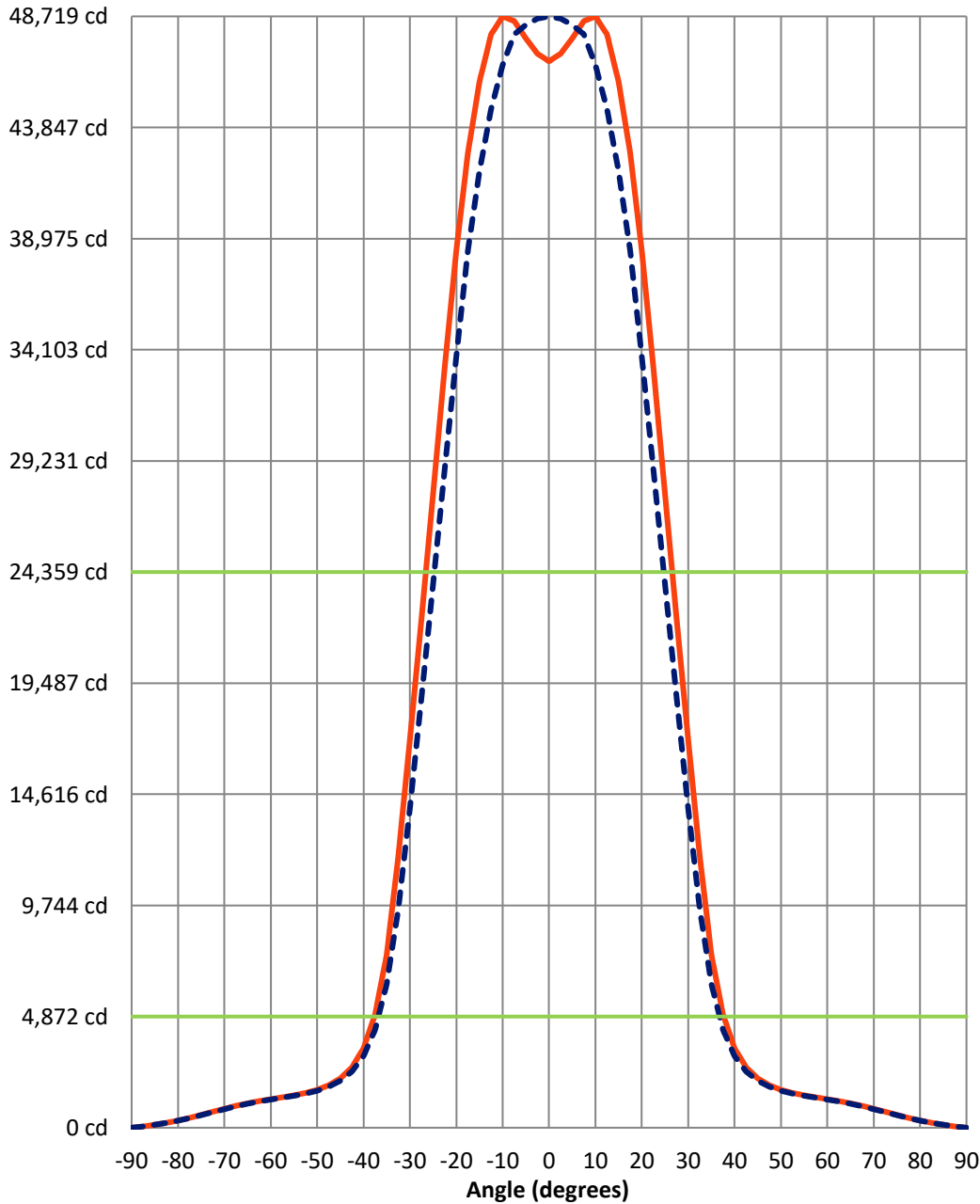
Luminous Intensity Polar Plot



— 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: 19814.7
Efficiency: 49.7%

Field:
H Angle: 73.6°
V Angle: 75.3°
Lumens: 25769.6
Efficiency: 64.6%

Spill:
Lumens: 14097
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°	53.8	53.8	53.8	53.8	53.8	53.8	53.8	49.7	49.7	49.7	49.7
85°	132.5	132.5	132.5	132.5	132.5	128.4	128.4	124.2	124.2	120.1	116.0
82.5°	215.3	215.3	215.3	215.3	211.2	211.2	207.1	202.9	198.8	194.6	190.5
80°	314.7	314.7	314.7	314.7	310.6	306.5	302.3	298.2	289.9	285.8	277.5
77.5°	430.7	430.7	430.7	426.6	422.4	418.3	410.0	401.7	393.4	385.1	376.9
75°	563.2	563.2	563.2	554.9	550.8	542.5	534.2	525.9	513.5	501.1	488.7
72.5°	699.9	699.9	699.9	691.6	683.3	675.0	666.8	654.3	641.9	625.3	608.8
70°	828.3	828.3	828.3	820.0	811.7	803.4	791.0	778.6	762.0	745.4	728.9
67.5°	960.8	960.8	960.8	948.4	940.1	931.8	919.4	902.8	886.2	865.5	844.8
65°	1068.5	1068.5	1064.3	1060.2	1051.9	1039.5	1031.2	1014.6	998.1	981.5	960.8
62.5°	1167.9	1167.9	1163.7	1159.6	1151.3	1138.9	1126.4	1114.0	1097.5	1076.7	1056.0
60°	1250.7	1250.7	1246.5	1242.4	1234.1	1225.8	1213.4	1201.0	1184.4	1167.9	1147.2
57.5°	1333.5	1333.5	1329.4	1325.2	1316.9	1304.5	1292.1	1279.7	1263.1	1242.4	1221.7
55°	1420.5	1420.5	1416.3	1408.1	1399.8	1387.3	1374.9	1358.4	1337.7	1316.9	1296.2
52.5°	1524.0	1524.0	1515.7	1507.4	1495.0	1482.6	1461.9	1441.2	1416.3	1391.5	1366.6
50°	1660.7	1660.7	1652.4	1640.0	1619.3	1598.6	1573.7	1540.6	1511.6	1478.5	1445.3
47.5°	1863.6	1863.6	1847.0	1826.3	1797.3	1764.2	1718.7	1669.0	1627.5	1586.1	1536.4
45°	2161.8	2161.8	2136.9	2103.8	2058.2	2000.3	1934.0	1863.6	1793.2	1722.8	1652.4
42.5°	2646.3	2646.3	2600.8	2542.8	2464.1	2364.7	2240.5	2124.5	2025.1	1913.3	1818.0
40°	3482.9	3482.9	3395.9	3288.2	3139.1	2948.6	2720.9	2538.6	2364.7	2170.1	2037.5
37.5°	4969.6	4969.6	4799.8	4592.7	4302.8	3938.4	3499.4	3205.4	2882.4	2575.9	2352.3
35°	7595.2	7595.2	7268.0	6866.3	6307.3	5603.2	4853.6	4298.7	3681.6	3209.5	2791.3
32.5°	11902.2	11902.2	11314.1	10589.4	9591.3	8328.2	7127.2	6071.2	4969.6	4186.9	3433.2
30°	17020.9	17020.9	16250.6	15302.2	14001.9	12361.9	10651.5	8775.5	7036.1	5640.5	4501.6
27.5°	22313.5	22094.0	21431.4	20350.5	18867.9	17020.9	14888.1	12465.4	10113.1	7653.2	6025.6
25°	27788.4	27531.6	26773.7	25531.3	23833.4	21742.0	19340.0	16631.6	13728.5	10796.5	7980.4
22.5°	33321.2	33031.3	32169.9	30766.0	28861.0	26517.0	23796.1	20785.4	17542.7	14155.1	10796.5
20°	38435.8	38129.3	37226.5	35764.6	33793.3	31221.5	28198.4	24860.4	21274.0	17542.7	13728.5
17.5°	42717.9	42423.9	41554.2	40158.5	38435.8	35590.7	32447.4	28778.2	24860.4	20785.4	16631.6
15°	45844.6	45592.0	44850.7	43678.7	41922.8	39404.8	36203.6	32447.4	28198.4	23796.1	19340.0
12.5°	47919.4	47716.5	47132.6	46221.5	44647.8	42535.7	39404.8	35590.7	31221.5	26517.0	21742.0
10°	48718.7	48619.3	48346.0	47927.7	46585.9	44647.8	41922.8	38435.8	33793.3	28861.0	23833.4
7.5°	48507.5	48540.6	48635.9	48528.2	47927.7	46221.5	43678.7	40158.5	35764.6	30766.0	25531.3
5°	47753.8	47931.8	48375.0	48635.9	48346.0	47132.6	44850.7	41554.2	37226.5	32169.9	26773.7
2.5°	47082.9	47360.3	47931.8	48540.6	48619.3	47716.5	45592.0	42423.9	38129.3	33031.3	27531.6
0°	46751.6	47082.9	47753.8	48507.5	48718.7	47919.4	45844.6	42717.9	38435.8	33321.2	27788.4



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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°	49.7	45.6	45.6	45.6	41.4	41.4	41.4	37.3	37.3	33.1	33.1
85°	116.0	111.8	107.7	103.5	99.4	95.3	91.1	87.0	82.8	74.5	70.4
82.5°	186.4	182.2	178.1	169.8	165.7	157.4	149.1	140.8	132.5	128.4	120.1
80°	269.2	260.9	252.6	244.3	231.9	219.5	211.2	198.8	190.5	178.1	169.8
77.5°	364.4	352.0	339.6	323.0	310.6	298.2	281.6	269.2	252.6	236.1	219.5
75°	472.1	455.5	434.8	418.3	401.7	381.0	360.3	339.6	318.9	298.2	277.5
72.5°	588.1	567.4	546.7	525.9	501.1	472.1	447.3	418.3	393.4	368.6	339.6
70°	708.2	683.3	658.5	633.6	604.6	571.5	542.5	509.4	476.3	443.1	410.0
67.5°	820.0	795.1	766.1	741.3	708.2	675.0	637.8	600.5	563.2	521.8	480.4
65°	935.9	907.0	873.8	840.7	807.6	770.3	733.0	695.7	650.2	604.6	563.2
62.5°	1031.2	1006.3	977.4	944.2	907.0	865.5	828.3	778.6	733.0	687.5	633.6
60°	1122.3	1093.3	1068.5	1031.2	998.1	960.8	915.2	865.5	815.8	762.0	712.3
57.5°	1201.0	1176.1	1147.2	1114.0	1076.7	1039.5	998.1	952.5	894.5	840.7	782.7
55°	1271.4	1242.4	1213.4	1184.4	1151.3	1109.9	1068.5	1022.9	973.2	915.2	853.1
52.5°	1341.8	1312.8	1279.7	1250.7	1213.4	1176.1	1134.7	1089.2	1039.5	985.6	919.4
50°	1412.2	1379.1	1345.9	1308.7	1271.4	1234.1	1192.7	1151.3	1097.5	1043.6	985.6
47.5°	1495.0	1453.6	1412.2	1370.8	1333.5	1288.0	1246.5	1201.0	1155.4	1097.5	1039.5
45°	1598.6	1536.4	1486.7	1437.0	1391.5	1345.9	1296.2	1250.7	1201.0	1151.3	1089.2
42.5°	1726.9	1644.1	1577.8	1511.6	1453.6	1399.8	1350.1	1296.2	1246.5	1192.7	1134.7
40°	1900.9	1789.1	1681.4	1598.6	1524.0	1457.8	1399.8	1345.9	1288.0	1234.1	1176.1
37.5°	2128.6	1971.3	1822.2	1702.1	1606.8	1524.0	1453.6	1391.5	1333.5	1271.4	1213.4
35°	2472.4	2199.1	2008.5	1834.6	1702.1	1598.6	1511.6	1437.0	1370.8	1308.7	1250.7
32.5°	2956.9	2534.5	2228.0	2008.5	1822.2	1681.4	1577.8	1486.7	1412.2	1345.9	1279.7
30°	3594.7	3010.8	2534.5	2199.1	1971.3	1789.1	1644.1	1536.4	1453.6	1379.1	1312.8
27.5°	4605.2	3594.7	2956.9	2472.4	2128.6	1900.9	1726.9	1598.6	1495.0	1412.2	1341.8
25°	6025.6	4501.6	3433.2	2791.3	2352.3	2037.5	1818.0	1652.4	1536.4	1445.3	1366.6
22.5°	7653.2	5640.5	4186.9	3209.5	2575.9	2170.1	1913.3	1722.8	1586.1	1478.5	1391.5
20°	10113.1	7036.1	4969.6	3681.6	2882.4	2364.7	2025.1	1793.2	1627.5	1511.6	1416.3
17.5°	12465.4	8775.5	6071.2	4298.7	3205.4	2538.6	2124.5	1863.6	1669.0	1540.6	1441.2
15°	14888.1	10651.5	7127.2	4853.6	3499.4	2720.9	2240.5	1934.0	1718.7	1573.7	1461.9
12.5°	17020.9	12361.9	8328.2	5603.2	3938.4	2948.6	2364.7	2000.3	1764.2	1598.6	1482.6
10°	18867.9	14001.9	9591.3	6307.3	4302.8	3139.1	2464.1	2058.2	1797.3	1619.3	1495.0
7.5°	20350.5	15302.2	10589.4	6866.3	4592.7	3288.2	2542.8	2103.8	1826.3	1640.0	1507.4
5°	21431.4	16250.6	11314.1	7268.0	4799.8	3395.9	2600.8	2136.9	1847.0	1652.4	1515.7
2.5°	22094.0	17020.9	11902.2	7595.2	4969.6	3482.9	2646.3	2161.8	1863.6	1660.7	1524.0
0°	22313.5	17020.9	11902.2	7595.2	4969.6	3482.9	2646.3	2161.8	1863.6	1660.7	1524.0



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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°	29.0	29.0	24.8	24.8	20.7	20.7	16.6	16.6	12.4	12.4	8.3
85°	66.3	58.0	53.8	49.7	45.6	41.4	37.3	33.1	29.0	24.8	20.7
82.5°	111.8	103.5	91.1	82.8	74.5	66.3	53.8	49.7	41.4	33.1	29.0
80°	157.4	144.9	132.5	120.1	107.7	95.3	82.8	70.4	58.0	45.6	37.3
77.5°	202.9	186.4	173.9	157.4	140.8	124.2	107.7	91.1	74.5	58.0	45.6
75°	256.8	236.1	215.3	194.6	173.9	153.2	136.7	116.0	95.3	74.5	58.0
72.5°	314.7	285.8	260.9	236.1	207.1	186.4	161.5	140.8	116.0	91.1	70.4
70°	376.9	343.7	310.6	277.5	248.5	215.3	190.5	161.5	136.7	107.7	82.8
67.5°	439.0	401.7	364.4	323.0	285.8	252.6	215.3	186.4	153.2	124.2	95.3
65°	513.5	463.8	418.3	372.7	327.2	285.8	248.5	207.1	173.9	140.8	107.7
62.5°	583.9	530.1	476.3	422.4	372.7	323.0	277.5	236.1	194.6	157.4	120.1
60°	654.3	596.4	534.2	476.3	418.3	364.4	310.6	260.9	215.3	173.9	132.5
57.5°	724.7	658.5	596.4	530.1	463.8	401.7	343.7	285.8	236.1	186.4	144.9
55°	786.9	724.7	654.3	583.9	513.5	439.0	376.9	314.7	256.8	202.9	157.4
52.5°	853.1	782.7	712.3	633.6	563.2	480.4	410.0	339.6	277.5	219.5	169.8
50°	915.2	840.7	762.0	687.5	604.6	521.8	443.1	368.6	298.2	236.1	178.1
47.5°	973.2	894.5	815.8	733.0	650.2	563.2	476.3	393.4	318.9	252.6	190.5
45°	1022.9	952.5	865.5	778.6	695.7	600.5	509.4	418.3	339.6	269.2	198.8
42.5°	1068.5	998.1	915.2	828.3	733.0	637.8	542.5	447.3	360.3	281.6	211.2
40°	1109.9	1039.5	960.8	865.5	770.3	675.0	571.5	472.1	381.0	298.2	219.5
37.5°	1151.3	1076.7	998.1	907.0	807.6	708.2	604.6	501.1	401.7	310.6	231.9
35°	1184.4	1114.0	1031.2	944.2	840.7	741.3	633.6	525.9	418.3	323.0	244.3
32.5°	1213.4	1147.2	1068.5	977.4	873.8	766.1	658.5	546.7	434.8	339.6	252.6
30°	1242.4	1176.1	1093.3	1006.3	907.0	795.1	683.3	567.4	455.5	352.0	260.9
27.5°	1271.4	1201.0	1122.3	1031.2	935.9	820.0	708.2	588.1	472.1	364.4	269.2
25°	1296.2	1221.7	1147.2	1056.0	960.8	844.8	728.9	608.8	488.7	376.9	277.5
22.5°	1316.9	1242.4	1167.9	1076.7	981.5	865.5	745.4	625.3	501.1	385.1	285.8
20°	1337.7	1263.1	1184.4	1097.5	998.1	886.2	762.0	641.9	513.5	393.4	289.9
17.5°	1358.4	1279.7	1201.0	1114.0	1014.6	902.8	778.6	654.3	525.9	401.7	298.2
15°	1374.9	1292.1	1213.4	1126.4	1031.2	919.4	791.0	666.8	534.2	410.0	302.3
12.5°	1387.3	1304.5	1225.8	1138.9	1039.5	931.8	803.4	675.0	542.5	418.3	306.5
10°	1399.8	1316.9	1234.1	1151.3	1051.9	940.1	811.7	683.3	550.8	422.4	310.6
7.5°	1408.1	1325.2	1242.4	1159.6	1060.2	948.4	820.0	691.6	554.9	426.6	314.7
5°	1416.3	1329.4	1246.5	1163.7	1064.3	960.8	828.3	699.9	563.2	430.7	314.7
2.5°	1420.5	1333.5	1250.7	1167.9	1068.5	960.8	828.3	699.9	563.2	430.7	314.7
0°	1420.5	1333.5	1250.7	1167.9	1068.5	960.8	828.3	699.9	563.2	430.7	314.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	8.3	4.1	4.1	0.0
85°	12.4	8.3	4.1	0.0
82.5°	20.7	12.4	8.3	0.0
80°	29.0	20.7	8.3	0.0
77.5°	33.1	24.8	12.4	0.0
75°	41.4	29.0	12.4	0.0
72.5°	49.7	33.1	16.6	0.0
70°	53.8	37.3	16.6	0.0
67.5°	66.3	41.4	20.7	0.0
65°	74.5	45.6	20.7	0.0
62.5°	82.8	49.7	24.8	0.0
60°	91.1	53.8	24.8	0.0
57.5°	103.5	58.0	29.0	0.0
55°	111.8	66.3	29.0	0.0
52.5°	120.1	70.4	33.1	0.0
50°	128.4	74.5	33.1	0.0
47.5°	132.5	82.8	37.3	0.0
45°	140.8	87.0	37.3	0.0
42.5°	149.1	91.1	41.4	0.0
40°	157.4	95.3	41.4	0.0
37.5°	165.7	99.4	41.4	0.0
35°	169.8	103.5	45.6	0.0
32.5°	178.1	107.7	45.6	0.0
30°	182.2	111.8	45.6	0.0
27.5°	186.4	116.0	49.7	0.0
25°	190.5	116.0	49.7	0.0
22.5°	194.6	120.1	49.7	0.0
20°	198.8	124.2	49.7	0.0
17.5°	202.9	124.2	49.7	0.0
15°	207.1	128.4	53.8	0.0
12.5°	211.2	128.4	53.8	0.0
10°	211.2	132.5	53.8	0.0
7.5°	215.3	132.5	53.8	0.0
5°	215.3	132.5	53.8	0.0
2.5°	215.3	132.5	53.8	0.0
0°	215.3	132.5	53.8	0.0

(END OF REPORT)