

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: P624123

Luminaire Tested: **EPH-VN-07-E-950-U-44**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P624123
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: EPHESUS
Catalog Number: EPH-VN-07-E-950-U-44
Description: EPHESUS LUMAVISION FLOOD – Middle Tier Light Square Luminaire w/
Nema 4 distribution lens
Light Source: (112) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

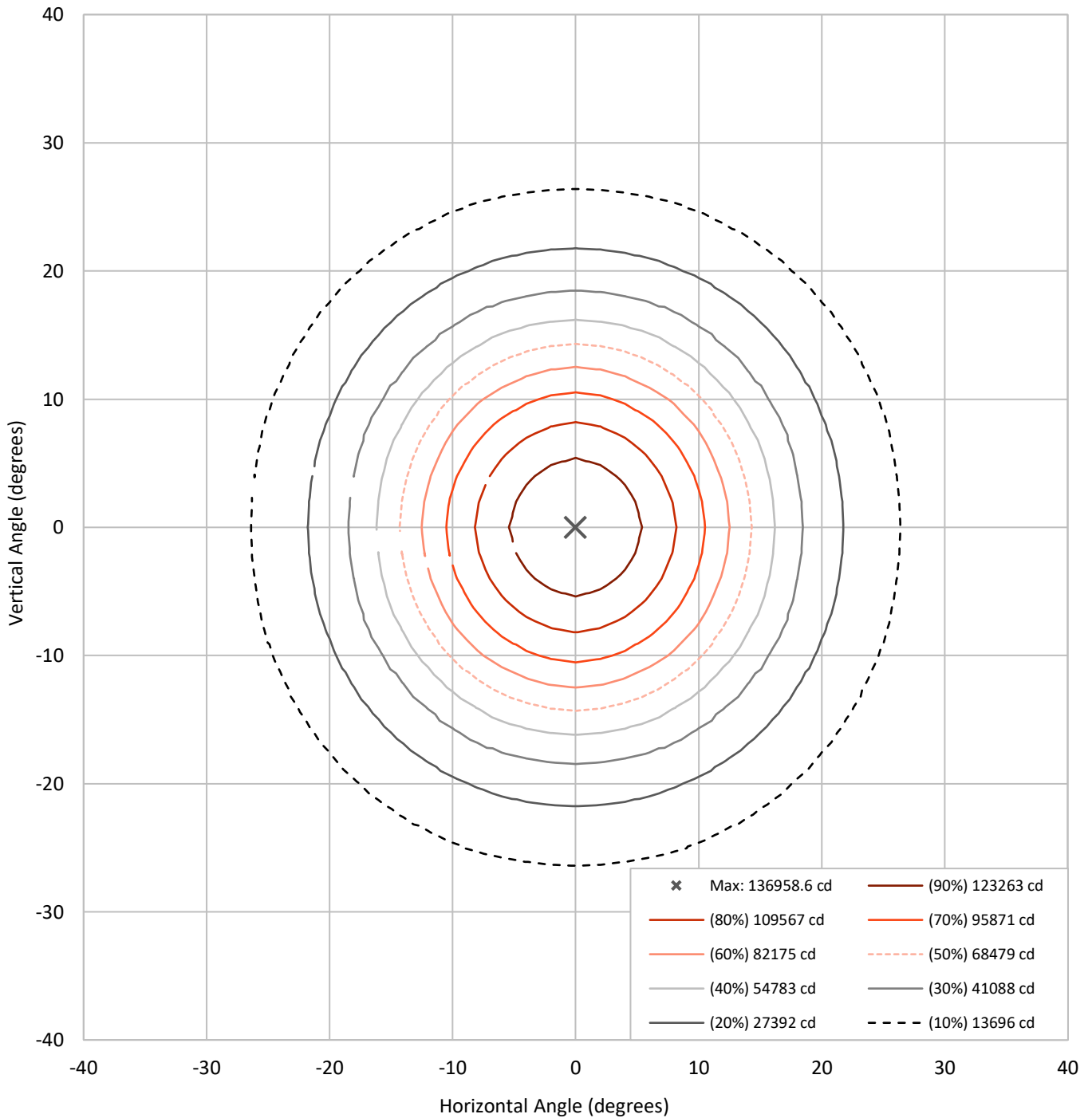
Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	42355.5 lumens	Max Intensity:	136958.6 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	79.5 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	15282.7 lumens	Field Lumens:	25806.9 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

Input Watts (W): 532.7
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





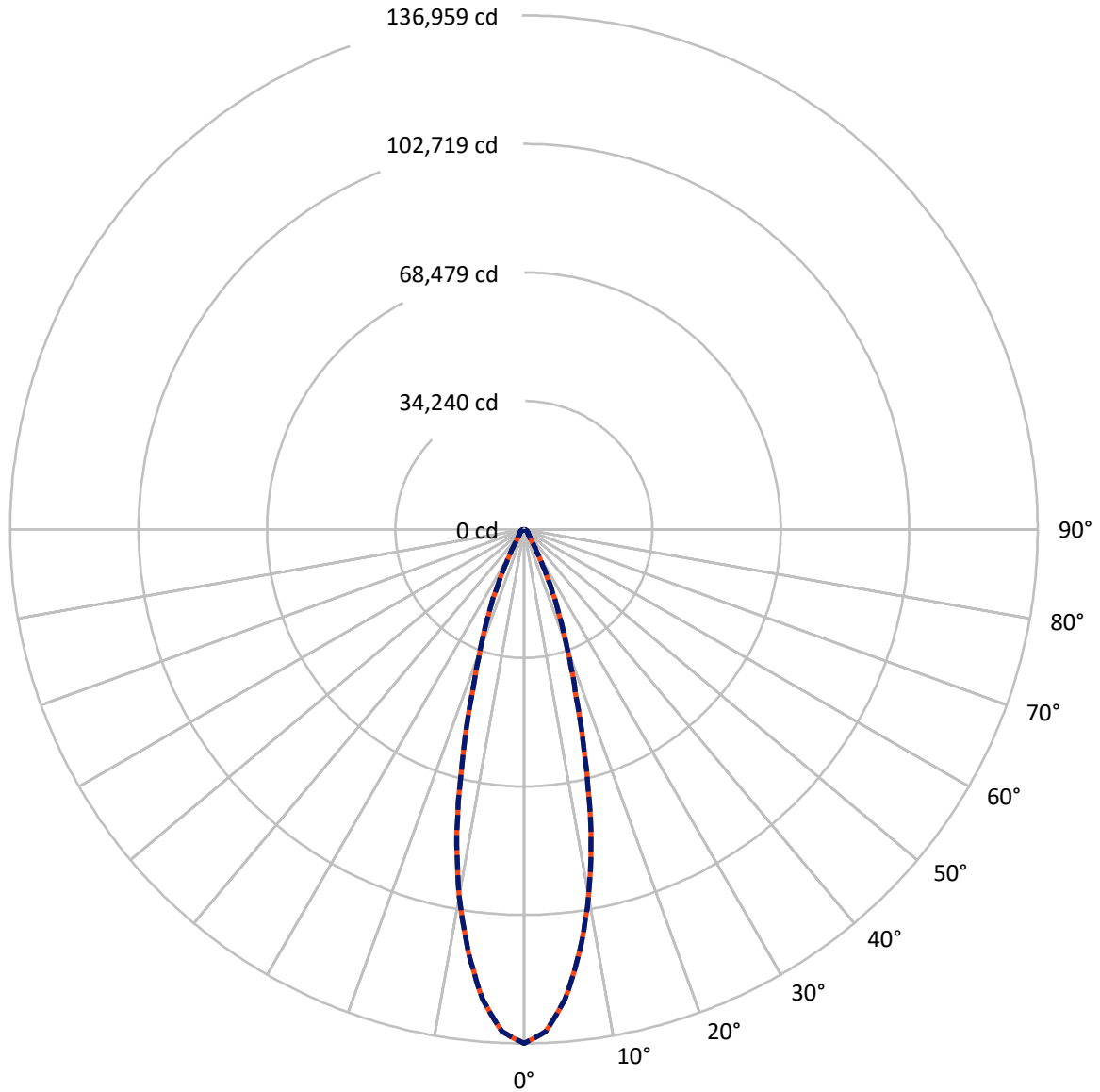
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Lumen Table

90	1.0	7.2	18.2	29.1	33.6	29.1	18.2	7.2	1.0							
80	1.0	7.2	18.2	29.1	33.6	29.1	18.2	7.2	1.0							
70	3.3	3.4	7.0	11.6	16.3	20.5	23.6	25.3	25.3	23.6	20.5	16.3	11.6	7.0	3.4	3.3
60		5.2	10.7	17.2	23.8	29.5	33.9	36.3	36.3	33.9	29.5	23.8	17.2	10.7	5.2	
50	5.6	7.0	14.0	22.1	30.3	38.5	45.9	50.7	50.7	45.9	38.5	30.3	22.1	14.0	7.0	5.6
40		8.5	16.7	26.2	37.6	53.6	78.2	104.1	104.1	78.2	53.6	37.6	26.2	16.7	8.5	
30	7.4	9.7	18.8	30.1	48.5	101.6	278.6	504.7	504.7	278.6	101.6	48.5	30.1	18.8	9.7	7.4
20		10.5	20.2	33.8	66.7	263.0	904.6	1745.0	1745.0	904.6	263.0	66.7	33.8	20.2	10.5	
10	8.1	10.9	21.0	36.1	86.5	463.4	1697.7	3347.0	3347.0	1697.7	463.4	86.5	36.1	21.0	10.9	8.1
0		10.9	21.0	36.1	86.5	463.4	1697.7	3347.0	3347.0	1697.7	463.4	86.5	36.1	21.0	10.9	
-10	7.4	10.5	20.2	33.8	66.7	263.0	904.6	1745.0	1745.0	904.6	263.0	66.7	33.8	20.2	10.5	7.4
-20		9.7	18.8	30.1	48.5	101.6	278.6	504.7	504.7	278.6	101.6	48.5	30.1	18.8	9.7	
-30	5.6	8.5	16.7	26.2	37.6	53.6	78.2	104.1	104.1	78.2	53.6	37.6	26.2	16.7	8.5	5.6
-40		7.0	14.0	22.1	30.3	38.5	45.9	50.7	50.7	45.9	38.5	30.3	22.1	14.0	7.0	
-50	3.3	5.2	10.7	17.2	23.8	29.5	33.9	36.3	36.3	33.9	29.5	23.8	17.2	10.7	5.2	3.3
-60		3.4	7.0	11.6	16.3	20.5	23.6	25.3	25.3	23.6	20.5	16.3	11.6	7.0	3.4	
-70	1.0	7.2	18.2	29.1	33.6	29.1	18.2	7.2	1.0							
-80		1.0	7.2	18.2	29.1	33.6	29.1	18.2	7.2	1.0						
-90	1.0	7.2	18.2	29.1	33.6	29.1	18.2	7.2	1.0							

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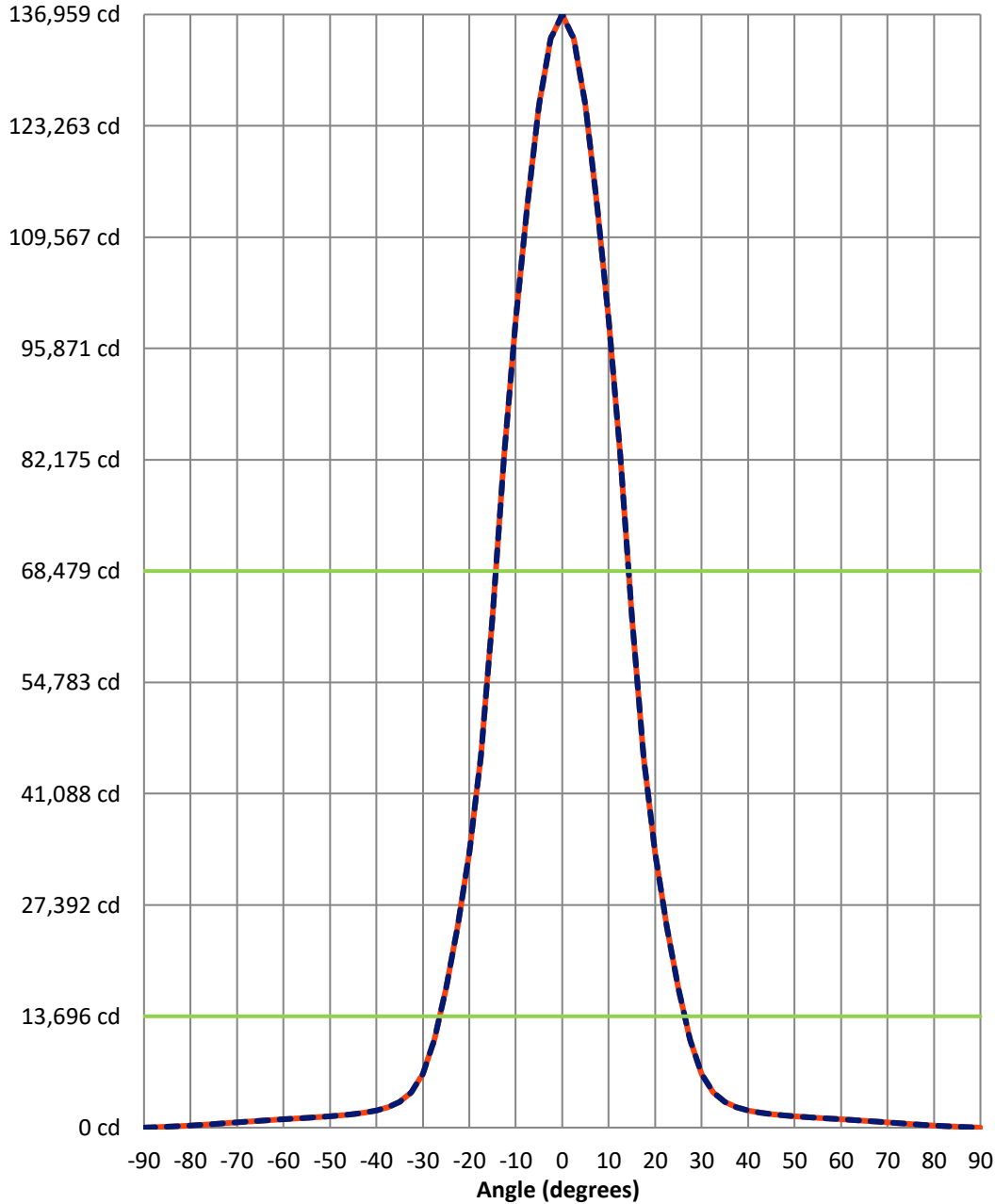
Luminous Intensity Polar Plot



— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg

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Luminous Intensity Plot



Beam:
H Angle: 28.6°
V Angle: 28.6°
Lumens: 15282.7
Efficiency: 36.1%

Field:
H Angle: 52.7°
V Angle: 52.7°
Lumens: 25806.9
Efficiency: 60.9%

Spill:
Lumens: 16548.6
Efficiency: 39.1%

— 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°	48.6	48.6	48.6	48.6	48.6	48.6	48.6	44.2	44.2	44.2	44.2
85°	110.4	110.4	110.4	110.4	110.4	106.0	106.0	106.0	101.6	101.6	97.2
82.5°	176.6	176.6	176.6	176.6	172.2	172.2	167.8	167.8	163.4	163.4	159.0
80°	251.7	251.7	251.7	251.7	247.3	242.9	242.9	238.5	234.0	229.6	225.2
77.5°	340.0	340.0	340.0	335.6	331.2	331.2	326.8	318.0	313.5	304.7	300.3
75°	437.2	437.2	437.2	432.8	428.4	423.9	415.1	410.7	401.9	393.0	379.8
72.5°	543.2	543.2	543.2	538.8	529.9	525.5	516.7	507.8	499.0	485.8	472.5
70°	644.7	644.7	644.7	635.9	631.5	622.7	613.8	605.0	591.7	578.5	565.3
67.5°	746.3	746.3	746.3	737.5	733.1	724.2	715.4	702.1	688.9	671.2	658.0
65°	839.0	839.0	834.6	830.2	825.8	817.0	803.7	794.9	781.6	764.0	746.3
62.5°	936.2	936.2	931.8	927.4	918.5	909.7	896.5	883.2	865.5	847.9	830.2
60°	1033.3	1033.3	1028.9	1024.5	1015.7	1002.4	989.2	975.9	958.3	936.2	914.1
57.5°	1112.8	1112.8	1108.4	1104.0	1095.2	1086.3	1073.1	1059.8	1042.2	1024.5	998.0
55°	1196.7	1196.7	1192.3	1183.5	1174.7	1165.8	1152.6	1134.9	1117.3	1095.2	1077.5
52.5°	1293.9	1293.9	1289.5	1280.6	1267.4	1254.2	1236.5	1214.4	1192.3	1170.2	1143.8
50°	1391.0	1391.0	1382.2	1373.4	1364.6	1346.9	1329.2	1307.1	1280.6	1254.2	1223.2
47.5°	1510.3	1510.3	1501.4	1488.2	1470.5	1452.9	1426.4	1395.5	1369.0	1338.1	1302.7
45°	1656.0	1656.0	1642.8	1629.5	1607.4	1576.5	1545.6	1510.3	1470.5	1430.8	1386.6
42.5°	1845.9	1845.9	1828.2	1806.2	1775.2	1735.5	1686.9	1638.3	1589.8	1536.8	1483.8
40°	2102.0	2102.0	2075.5	2044.6	1996.0	1938.6	1868.0	1801.7	1735.5	1660.4	1594.2
37.5°	2503.9	2503.9	2459.7	2402.3	2322.8	2225.7	2106.4	2018.1	1916.6	1819.4	1731.1
35°	3161.9	3161.9	3082.4	2980.8	2839.5	2662.9	2473.0	2322.8	2155.0	2018.1	1890.1
32.5°	4332.1	4332.1	4173.1	3974.4	3705.0	3360.6	3042.6	2777.7	2503.9	2291.9	2088.8
30°	6597.5	6597.5	6257.5	5838.0	5259.5	4535.3	3992.1	3484.2	3020.6	2671.7	2375.8
27.5°	10850.2	10673.5	10143.6	9273.7	8081.3	6597.5	5652.5	4579.4	3846.4	3179.5	2768.8
25°	17129.8	16838.3	15963.9	14537.6	12594.5	10390.9	8461.1	6425.3	5140.3	4031.8	3267.9
22.5°	24760.7	24358.8	23170.9	21232.2	18604.7	15672.5	12550.3	9622.5	7017.1	5330.1	4031.8
20°	33795.8	33257.1	31662.9	29075.1	25595.3	21863.7	17695.0	13773.6	10015.5	7017.1	5140.3
17.5°	45723.5	44902.1	42486.6	38600.5	33795.8	28766.0	23555.1	18494.3	13773.6	9622.5	6425.3
15°	62870.9	61484.3	57430.4	50991.8	43511.1	36498.4	29852.3	23555.1	17695.0	12550.3	8461.1
12.5°	82694.5	80764.7	75178.4	66465.6	56299.9	45211.3	36498.4	28766.0	21863.7	15672.5	10390.9
10°	99395.9	97360.1	91588.4	82849.0	69958.7	56299.9	43511.1	33795.8	25595.3	18604.7	12594.5
7.5°	113505.1	111226.4	105004.2	95443.5	82849.0	66465.6	50991.8	38600.5	29075.1	21232.2	14537.6
5°	125759.6	122871.5	115629.2	105004.2	91588.4	75178.4	57430.4	42486.6	31662.9	23170.9	15963.9
2.5°	133946.9	130555.4	122871.5	111226.4	97360.1	80764.7	61484.3	44902.1	33257.1	24358.8	16838.3
0°	136958.6	133946.9	125759.6	113505.1	99395.9	82694.5	62870.9	45723.5	33795.8	24760.7	17129.8



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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°	44.2	44.2	39.7	39.7	39.7	35.3	35.3	35.3	30.9	30.9	30.9
85°	97.2	92.7	92.7	88.3	83.9	79.5	79.5	75.1	70.7	66.2	61.8
82.5°	154.6	150.1	145.7	141.3	136.9	128.1	123.6	119.2	110.4	106.0	101.6
80°	216.4	212.0	203.1	198.7	189.9	181.1	172.2	163.4	154.6	145.7	136.9
77.5°	291.5	278.2	269.4	260.5	247.3	238.5	225.2	216.4	203.1	189.9	176.6
75°	370.9	357.7	344.4	331.2	318.0	300.3	287.0	269.4	256.1	238.5	225.2
72.5°	459.3	441.6	423.9	406.3	388.6	370.9	353.3	331.2	313.5	291.5	269.4
70°	547.6	529.9	512.3	490.2	468.1	446.0	423.9	397.4	375.4	348.9	322.4
67.5°	640.3	618.2	596.2	574.1	552.0	525.5	494.6	468.1	437.2	406.3	379.8
65°	728.6	706.6	680.1	653.6	627.1	600.6	569.7	538.8	503.4	468.1	437.2
62.5°	808.1	786.1	764.0	733.1	706.6	675.7	644.7	605.0	569.7	534.3	494.6
60°	892.0	865.5	839.0	808.1	777.2	746.3	711.0	671.2	635.9	591.7	552.0
57.5°	971.5	945.0	914.1	883.2	847.9	812.5	777.2	737.5	697.7	653.6	609.4
55°	1051.0	1024.5	993.6	958.3	918.5	878.8	839.0	799.3	759.6	711.0	662.4
52.5°	1117.3	1090.8	1059.8	1033.3	989.2	949.4	905.3	856.7	812.5	764.0	715.4
50°	1187.9	1157.0	1121.7	1090.8	1055.4	1015.7	967.1	918.5	865.5	817.0	764.0
47.5°	1267.4	1227.7	1187.9	1148.2	1112.8	1068.7	1028.9	975.9	922.9	865.5	812.5
45°	1346.9	1302.7	1258.6	1210.0	1165.8	1121.7	1077.5	1033.3	975.9	918.5	856.7
42.5°	1430.8	1377.8	1329.2	1280.6	1227.7	1174.7	1126.1	1077.5	1028.9	967.1	905.3
40°	1527.9	1466.1	1404.3	1346.9	1293.9	1232.1	1174.7	1121.7	1068.7	1015.7	949.4
37.5°	1638.3	1563.3	1488.2	1417.5	1351.3	1293.9	1227.7	1165.8	1112.8	1055.4	989.2
35°	1779.7	1669.3	1580.9	1492.6	1417.5	1346.9	1280.6	1210.0	1148.2	1090.8	1033.3
32.5°	1938.6	1801.7	1682.5	1580.9	1488.2	1404.3	1329.2	1258.6	1187.9	1121.7	1059.8
30°	2132.9	1956.3	1801.7	1669.3	1563.3	1466.1	1377.8	1302.7	1227.7	1157.0	1090.8
27.5°	2406.7	2132.9	1938.6	1779.7	1638.3	1527.9	1430.8	1346.9	1267.4	1187.9	1117.3
25°	2768.8	2375.8	2088.8	1890.1	1731.1	1594.2	1483.8	1386.6	1302.7	1223.2	1143.8
22.5°	3179.5	2671.7	2291.9	2018.1	1819.4	1660.4	1536.8	1430.8	1338.1	1254.2	1170.2
20°	3846.4	3020.6	2503.9	2155.0	1916.6	1735.5	1589.8	1470.5	1369.0	1280.6	1192.3
17.5°	4579.4	3484.2	2777.7	2322.8	2018.1	1801.7	1638.3	1510.3	1395.5	1307.1	1214.4
15°	5652.5	3992.1	3042.6	2473.0	2106.4	1868.0	1686.9	1545.6	1426.4	1329.2	1236.5
12.5°	6597.5	4535.3	3360.6	2662.9	2225.7	1938.6	1735.5	1576.5	1452.9	1346.9	1254.2
10°	8081.3	5259.5	3705.0	2839.5	2322.8	1996.0	1775.2	1607.4	1470.5	1364.6	1267.4
7.5°	9273.7	5838.0	3974.4	2980.8	2402.3	2044.6	1806.2	1629.5	1488.2	1373.4	1280.6
5°	10143.6	6257.5	4173.1	3082.4	2459.7	2075.5	1828.2	1642.8	1501.4	1382.2	1289.5
2.5°	10673.5	6597.5	4332.1	3161.9	2503.9	2102.0	1845.9	1656.0	1510.3	1391.0	1293.9
0°	10850.2	6597.5	4332.1	3161.9	2503.9	2102.0	1845.9	1656.0	1510.3	1391.0	1293.9



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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°	26.5	26.5	22.1	22.1	22.1	17.7	17.7	13.2	13.2	8.8	8.8
85°	57.4	53.0	48.6	44.2	39.7	35.3	35.3	30.9	26.5	22.1	17.7
82.5°	92.7	88.3	79.5	70.7	66.2	57.4	48.6	44.2	39.7	30.9	26.5
80°	128.1	119.2	110.4	101.6	92.7	79.5	70.7	61.8	48.6	39.7	35.3
77.5°	167.8	154.6	141.3	128.1	114.8	106.0	92.7	79.5	66.2	53.0	39.7
75°	207.6	189.9	176.6	159.0	145.7	128.1	110.4	97.2	83.9	66.2	48.6
72.5°	251.7	229.6	212.0	189.9	172.2	154.6	132.5	114.8	97.2	79.5	61.8
70°	300.3	273.8	247.3	225.2	203.1	176.6	154.6	132.5	110.4	92.7	70.7
67.5°	348.9	318.0	287.0	256.1	229.6	203.1	176.6	154.6	128.1	106.0	79.5
65°	397.4	362.1	331.2	295.9	260.5	229.6	203.1	172.2	145.7	114.8	92.7
62.5°	450.4	410.7	370.9	331.2	295.9	256.1	225.2	189.9	159.0	128.1	101.6
60°	507.8	463.7	415.1	370.9	331.2	287.0	247.3	212.0	176.6	141.3	110.4
57.5°	560.8	512.3	463.7	410.7	362.1	318.0	273.8	229.6	189.9	154.6	119.2
55°	613.8	560.8	507.8	450.4	397.4	348.9	300.3	251.7	207.6	167.8	128.1
52.5°	662.4	609.4	552.0	494.6	437.2	379.8	322.4	269.4	225.2	176.6	136.9
50°	711.0	653.6	591.7	534.3	468.1	406.3	348.9	291.5	238.5	189.9	145.7
47.5°	759.6	697.7	635.9	569.7	503.4	437.2	375.4	313.5	256.1	203.1	154.6
45°	799.3	737.5	671.2	605.0	538.8	468.1	397.4	331.2	269.4	216.4	163.4
42.5°	839.0	777.2	711.0	644.7	569.7	494.6	423.9	353.3	287.0	225.2	172.2
40°	878.8	812.5	746.3	675.7	600.6	525.5	446.0	370.9	300.3	238.5	181.1
37.5°	918.5	847.9	777.2	706.6	627.1	552.0	468.1	388.6	318.0	247.3	189.9
35°	958.3	883.2	808.1	733.1	653.6	574.1	490.2	406.3	331.2	260.5	198.7
32.5°	993.6	914.1	839.0	764.0	680.1	596.2	512.3	423.9	344.4	269.4	203.1
30°	1024.5	945.0	865.5	786.1	706.6	618.2	529.9	441.6	357.7	278.2	212.0
27.5°	1051.0	971.5	892.0	808.1	728.6	640.3	547.6	459.3	370.9	291.5	216.4
25°	1077.5	998.0	914.1	830.2	746.3	658.0	565.3	472.5	379.8	300.3	225.2
22.5°	1095.2	1024.5	936.2	847.9	764.0	671.2	578.5	485.8	393.0	304.7	229.6
20°	1117.3	1042.2	958.3	865.5	781.6	688.9	591.7	499.0	401.9	313.5	234.0
17.5°	1134.9	1059.8	975.9	883.2	794.9	702.1	605.0	507.8	410.7	318.0	238.5
15°	1152.6	1073.1	989.2	896.5	803.7	715.4	613.8	516.7	415.1	326.8	242.9
12.5°	1165.8	1086.3	1002.4	909.7	817.0	724.2	622.7	525.5	423.9	331.2	242.9
10°	1174.7	1095.2	1015.7	918.5	825.8	733.1	631.5	529.9	428.4	331.2	247.3
7.5°	1183.5	1104.0	1024.5	927.4	830.2	737.5	635.9	538.8	432.8	335.6	251.7
5°	1192.3	1108.4	1028.9	931.8	834.6	746.3	644.7	543.2	437.2	340.0	251.7
2.5°	1196.7	1112.8	1033.3	936.2	839.0	746.3	644.7	543.2	437.2	340.0	251.7
0°	1196.7	1112.8	1033.3	936.2	839.0	746.3	644.7	543.2	437.2	340.0	251.7



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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	4.4	4.4	0.0	0.0
85°	13.2	8.8	4.4	0.0
82.5°	17.7	13.2	4.4	0.0
80°	26.5	17.7	8.8	0.0
77.5°	30.9	22.1	8.8	0.0
75°	39.7	26.5	13.2	0.0
72.5°	44.2	30.9	13.2	0.0
70°	48.6	35.3	17.7	0.0
67.5°	57.4	35.3	17.7	0.0
65°	66.2	39.7	22.1	0.0
62.5°	70.7	44.2	22.1	0.0
60°	79.5	48.6	22.1	0.0
57.5°	88.3	53.0	26.5	0.0
55°	92.7	57.4	26.5	0.0
52.5°	101.6	61.8	30.9	0.0
50°	106.0	66.2	30.9	0.0
47.5°	110.4	70.7	30.9	0.0
45°	119.2	75.1	35.3	0.0
42.5°	123.6	79.5	35.3	0.0
40°	128.1	79.5	35.3	0.0
37.5°	136.9	83.9	39.7	0.0
35°	141.3	88.3	39.7	0.0
32.5°	145.7	92.7	39.7	0.0
30°	150.1	92.7	44.2	0.0
27.5°	154.6	97.2	44.2	0.0
25°	159.0	97.2	44.2	0.0
22.5°	163.4	101.6	44.2	0.0
20°	163.4	101.6	44.2	0.0
17.5°	167.8	106.0	44.2	0.0
15°	167.8	106.0	48.6	0.0
12.5°	172.2	106.0	48.6	0.0
10°	172.2	110.4	48.6	0.0
7.5°	176.6	110.4	48.6	0.0
5°	176.6	110.4	48.6	0.0
2.5°	176.6	110.4	48.6	0.0
0°	176.6	110.4	48.6	0.0

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