

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

Brand: CORELITE

Report Number: P621737

Luminaire Tested: VLT-FA-150U-100D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621737
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-21)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-FA-150U-100D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

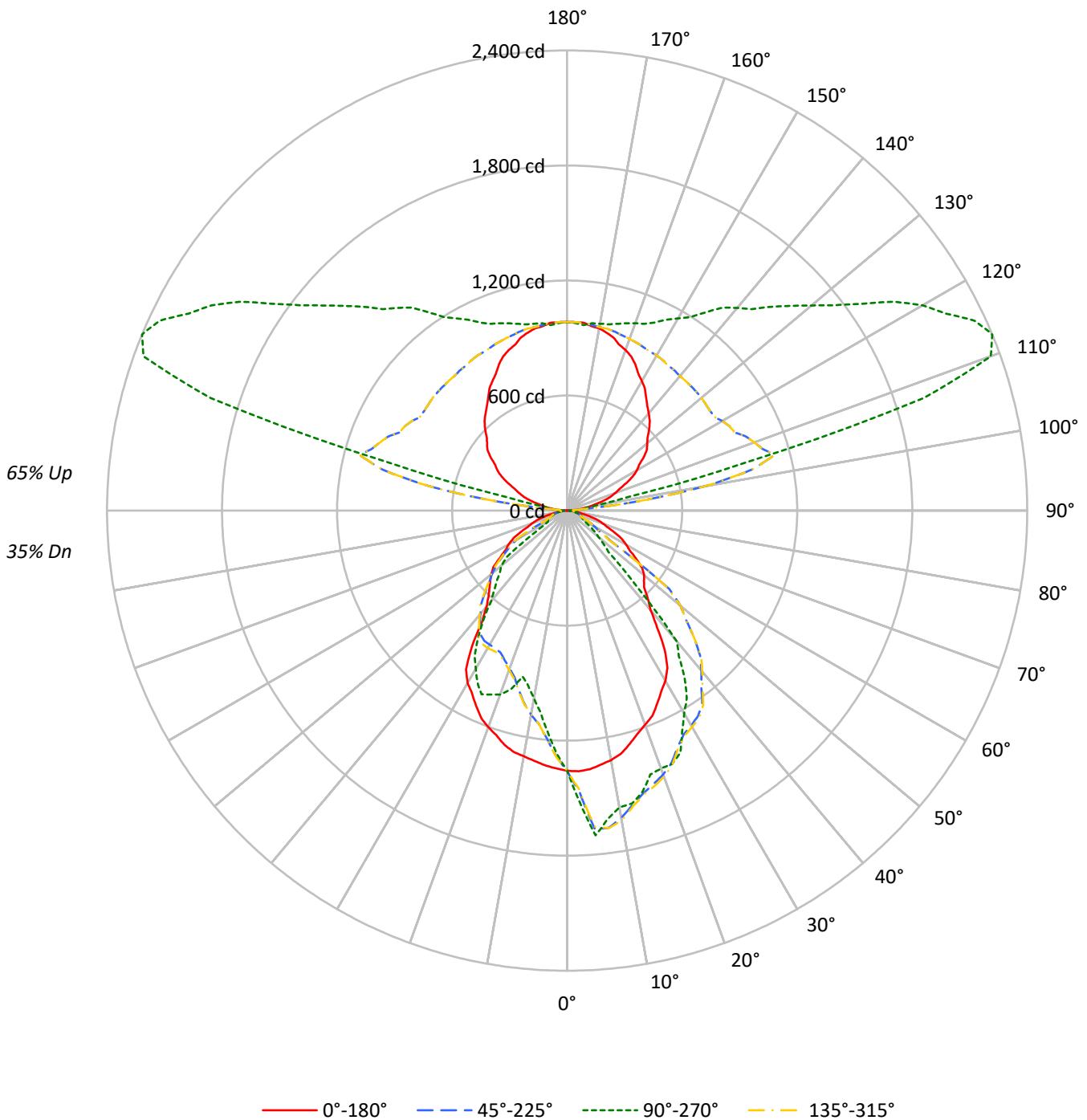
Lumens per Lamp: N/A
Luminaire Lumens: 8083.5 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 77.8
Input Voltage (V): 120
Input Current (A_{in}): 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: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	35
1	95	91	87	84	86	82	79	77	66	64	62	52	50	49	38	37	37	30
2	87	80	74	70	78	73	68	64	59	55	53	46	44	42	34	33	32	26
3	80	71	64	59	72	64	59	54	52	48	45	41	38	36	31	29	28	23
4	73	63	56	50	66	57	51	46	47	42	39	37	34	31	28	26	24	20
5	67	56	49	43	61	51	45	40	42	37	34	33	30	27	25	23	21	18
6	62	51	43	37	56	46	40	35	38	33	29	30	27	24	23	21	19	16
7	57	46	38	33	52	42	35	31	34	30	26	28	24	21	21	19	17	14
8	53	41	34	29	48	38	32	27	31	27	23	25	22	19	19	17	15	13
9	49	38	31	26	45	35	28	24	29	24	21	23	20	17	18	16	14	12
10	46	35	28	23	42	32	26	22	27	22	19	22	18	16	17	14	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9736	9736	9736	9736
5°	9753	12249	9604	8352
10°	9625	11455	9484	7251
15°	9361	11279	9393	6654
20°	9075	10930	9181	7799
25°	8797	11048	8896	8371
30°	8486	10110	8600	7902
35°	7775	9371	7581	7085
40°	6335	8339	6115	5767
45°	5757	3095	5813	5253
50°	5855	2358	5747	4992
55°	5526	1830	5336	2988
60°	5091	1406	5052	1663
65°	4686	1453	4593	1757
70°	4169	1536	4054	1825
75°	3560	1608	3405	1874
80°	2682	1653	2508	1938
85°	1820	1474	1589	1820

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 10660 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.9	1.6
10°-20°	358.5	4.4
20°-30°	536.5	6.6
30°-40°	610.1	7.5
40°-50°	521.8	6.5
50°-60°	351.9	4.4
60°-70°	181.6	2.2
70°-80°	82.0	1.0
80°-90°	26.6	0.3
90°-100°	120.9	1.5
100°-110°	861.8	10.7
110°-120°	1169.9	14.5
120°-130°	952.2	11.8
130°-140°	765.8	9.5
140°-150°	603.8	7.5
150°-160°	441.5	5.5
160°-170°	274.2	3.4
170°-180°	93.5	1.2
0°-30°	1025.9	12.7
0°-40°	1636.0	20.2
0°-60°	2509.6	31.0
0°-90°	2799.9	34.6
90°-120°	2152.6	26.6
90°-150°	4474.4	55.4
90°-180°	5284.0	65.4
0°-180°	8083.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1357	1357	1357	1357	1357	
5°	1354	1700	1333	1159	1354	128
15°	1260	1518	1264	896	1260	355
25°	1111	1395	1124	1057	1111	511
35°	888	1070	865	809	888	543
45°	567	305	573	518	567	450
55°	442	146	426	239	442	394
65°	276	86	270	104	276	273
75°	128	58	123	68	128	137
85°	22	18	19	22	22	28
90°	0	19	0	19	0	3
95°	50	68	50	68	50	55
105°	192	946	192	946	192	202
115°	340	2344	340	2344	340	338
125°	489	1881	489	1881	489	434
135°	606	1503	606	1503	606	466
145°	718	1262	718	1262	718	451
155°	841	1083	841	1083	841	386
165°	934	1008	934	1008	934	262
175°	984	971	984	971	984	93
180°	984	984	984	984	984	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7
2.5°	1361.2	1407.6	1466.0	1506.2	1523.5	1506.2	1456.1	1407.2	1345.7	1327.3	1283.9
5°	1354.0	1497.0	1670.0	1691.0	1700.4	1691.0	1654.9	1488.5	1333.3	1267.1	1195.3
7.5°	1337.4	1587.6	1668.1	1621.5	1621.7	1630.4	1670.6	1579.9	1315.9	1212.0	1123.8
10°	1320.9	1638.0	1627.3	1559.9	1572.0	1566.6	1639.7	1628.1	1301.5	1181.4	1080.7
12.5°	1298.8	1653.7	1573.2	1551.1	1564.3	1556.8	1581.2	1645.1	1289.4	1159.6	1031.0
15°	1260.1	1631.2	1527.9	1518.2	1518.2	1525.0	1534.8	1638.1	1264.3	1119.9	970.3
17.5°	1220.4	1586.4	1496.4	1448.5	1443.4	1452.3	1507.7	1597.9	1228.7	1075.9	911.5
20°	1188.4	1555.4	1464.4	1408.3	1431.3	1411.0	1476.8	1563.8	1202.2	1048.3	875.0
22.5°	1159.6	1517.0	1423.5	1399.7	1430.2	1400.2	1434.9	1525.4	1171.2	1017.4	847.4
25°	1111.1	1452.5	1362.3	1384.6	1395.4	1384.6	1367.8	1458.2	1123.5	977.7	818.5
27.5°	1062.8	1384.5	1316.4	1331.4	1298.5	1323.9	1323.9	1384.7	1074.3	931.6	809.6
30°	1024.1	1337.2	1293.2	1271.4	1220.1	1260.6	1302.9	1337.5	1037.9	901.6	807.4
32.5°	973.3	1294.0	1270.1	1194.5	1161.6	1189.1	1280.8	1293.1	981.6	874.4	805.2
35°	887.5	1232.9	1228.4	1103.4	1069.7	1095.3	1238.0	1229.8	865.4	831.6	788.1
37.5°	772.4	1178.6	1148.6	1011.3	957.6	1004.5	1157.7	1172.7	727.9	792.4	748.1
40°	676.3	1141.9	1089.0	942.9	890.2	936.1	1095.9	1138.7	652.8	764.8	703.9
42.5°	622.2	1109.4	1026.0	870.4	544.6	859.3	1032.9	1105.2	606.5	729.3	665.3
45°	567.3	1050.4	934.4	481.8	305.0	458.9	935.8	1035.7	572.8	675.3	605.9
47.5°	543.2	977.8	838.6	290.2	257.5	281.8	837.8	961.9	543.5	621.3	549.3
50°	524.5	932.0	770.2	255.7	211.2	246.3	771.5	917.0	514.8	585.0	510.7
52.5°	493.6	877.4	671.9	211.9	182.5	206.8	655.6	860.2	485.0	545.5	462.1
55°	441.7	772.3	280.2	166.5	146.3	159.8	266.4	746.3	426.5	483.2	405.8
57.5°	386.7	657.4	196.5	129.6	113.5	128.3	195.2	631.1	379.6	409.2	353.9
60°	354.7	580.1	160.1	108.8	98.0	107.4	158.7	557.1	352.0	360.0	306.4
62.5°	322.7	501.6	132.5	95.7	92.5	94.4	132.2	476.4	317.7	318.3	215.9
65°	276.0	380.0	98.0	86.9	85.6	85.6	95.2	366.3	270.5	262.4	124.2
67.5°	228.6	272.8	78.7	80.0	78.7	78.7	77.3	265.1	223.0	209.3	93.9
70°	198.7	209.5	73.2	74.5	73.2	73.2	71.8	204.0	193.2	162.2	88.3
72.5°	170.0	143.1	67.6	67.9	67.6	67.6	66.2	134.3	164.5	114.0	80.6
75°	128.4	71.7	58.0	58.0	58.0	58.0	56.6	68.9	122.8	74.3	69.0
77.5°	89.2	47.3	48.0	47.8	47.8	46.7	46.7	46.9	83.9	51.3	55.8
80°	64.9	39.2	41.4	40.0	40.0	40.0	40.0	37.8	60.7	43.2	46.9
82.5°	46.1	31.3	33.7	32.3	32.3	32.3	32.3	30.9	42.0	35.2	38.1
85°	22.1	20.7	22.1	19.3	17.9	19.3	20.7	20.7	19.3	23.4	24.8
87.5°	6.6	11.1	11.3	10.3	10.3	10.3	10.2	10.0	5.5	12.1	12.4
90°	0.0	6.0	12.4	18.6	18.6	18.6	12.4	6.0	0.0	6.0	12.4
92.5°	14.8	20.9	27.2	38.5	43.3	38.5	27.2	20.9	14.8	20.9	27.2
95°	49.5	91.8	49.5	56.0	68.0	56.0	49.5	91.8	49.5	91.8	49.5
97.5°	87.8	176.2	363.7	107.3	92.8	107.3	363.7	176.2	87.8	176.2	363.7
100°	117.5	220.4	730.0	214.9	142.3	214.9	730.0	220.4	117.5	220.4	730.0
102.5°	147.2	254.9	987.3	567.0	310.5	567.0	987.3	254.9	147.2	254.9	987.3
105°	191.8	294.6	1119.7	1430.4	946.5	1430.4	1119.7	294.6	191.8	294.6	1119.7
107.5°	236.3	313.7	1069.0	2081.7	1949.9	2081.7	1069.0	313.7	236.3	313.7	1069.0
110°	266.0	338.6	1039.3	2187.4	2350.7	2187.4	1039.3	338.6	266.0	338.6	1039.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	295.7	368.3	1009.6	2125.6	2400.2	2125.6	1009.6	368.3	295.7	368.3	1009.6
115°	340.2	412.8	965.0	2005.8	2344.5	2005.8	965.0	412.8	340.2	412.8	965.0
117.5°	386.0	457.4	953.9	1876.1	2224.5	1876.1	953.9	457.4	386.0	457.4	953.9
120°	420.7	487.2	934.1	1777.5	2140.4	1777.5	934.1	487.2	420.7	487.2	934.1
122.5°	445.4	516.8	909.4	1692.7	2026.6	1692.7	909.4	516.8	445.4	516.8	909.4
125°	488.7	555.2	909.4	1590.2	1880.6	1590.2	909.4	555.2	488.7	555.2	909.4
127.5°	524.6	592.3	910.6	1471.4	1758.1	1471.4	910.6	592.3	524.6	592.3	910.6
130°	544.4	617.0	915.5	1391.9	1664.1	1391.9	915.5	617.0	544.4	617.0	915.5
132.5°	569.1	641.7	915.5	1356.1	1579.9	1356.1	915.5	641.7	569.1	641.7	915.5
135°	606.2	672.8	915.5	1309.7	1503.2	1309.7	915.5	672.8	606.2	672.8	915.5
137.5°	637.2	708.5	915.5	1258.3	1424.0	1258.3	915.5	708.5	637.2	708.5	915.5
140°	661.9	728.5	915.5	1228.3	1379.5	1228.3	915.5	728.5	661.9	728.5	915.5
142.5°	686.7	748.4	920.5	1193.4	1335.0	1193.4	920.5	748.4	686.7	748.4	920.5
145°	717.6	778.1	921.7	1141.0	1262.0	1141.0	921.7	778.1	717.6	778.1	921.7
147.5°	754.7	807.9	929.2	1103.2	1196.4	1103.2	929.2	807.9	754.7	807.9	929.2
150°	779.5	827.8	934.1	1078.2	1156.8	1078.2	934.1	827.8	779.5	827.8	934.1
152.5°	804.2	847.7	934.1	1058.0	1122.2	1058.0	934.1	847.7	804.2	847.7	934.1
155°	841.3	871.6	940.3	1034.2	1082.6	1034.2	940.3	871.6	841.3	871.6	940.3
157.5°	871.0	900.0	947.7	1019.0	1054.1	1019.0	947.7	900.0	871.0	900.0	947.7
160°	890.8	915.0	952.7	1009.0	1039.3	1009.0	952.7	915.0	890.8	915.0	952.7
162.5°	905.7	929.8	957.6	1003.9	1024.4	1003.9	957.6	929.8	905.7	929.8	957.6
165°	934.1	946.2	965.0	990.2	1008.3	990.2	965.0	946.2	934.1	946.2	965.0
167.5°	950.2	961.1	971.2	983.8	994.7	983.8	971.2	961.1	950.2	961.1	971.2
170°	965.0	971.1	971.2	983.7	989.8	983.7	971.2	971.1	965.0	971.1	971.2
172.5°	970.0	980.9	976.2	978.8	984.8	978.8	976.2	980.9	970.0	980.9	976.2
175°	983.6	989.6	983.6	977.3	971.2	977.3	983.6	989.6	983.6	989.6	983.6
177.5°	983.6	988.4	983.6	983.5	978.6	983.5	983.6	988.4	983.6	988.4	983.6
180°	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6	983.6

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1356.7	1356.7	1356.7	1356.7	1356.7	1356.7
2.5°	1268.4	1267.3	1269.5	1288.3	1326.6	1361.2
5°	1155.3	1159.4	1163.4	1195.3	1262.2	1354.0
7.5°	1068.4	1062.5	1071.7	1123.5	1205.7	1337.4
10°	1008.6	995.1	1008.6	1079.3	1175.1	1320.9
12.5°	952.2	935.5	956.6	1034.0	1149.8	1298.8
15°	879.6	895.7	886.3	973.0	1111.7	1260.1
17.5°	896.8	978.3	914.0	920.0	1073.8	1220.4
20°	937.7	1021.3	964.7	884.7	1049.4	1188.4
22.5°	974.8	1037.9	986.6	854.9	1025.0	1159.6
25°	1003.3	1057.2	1000.6	828.1	989.6	1111.1
27.5°	1004.7	1012.2	1005.2	825.9	945.9	1062.8
30°	986.1	953.7	983.4	828.1	914.8	1024.1
32.5°	933.0	896.3	921.7	823.7	883.4	973.3
35°	857.4	808.8	843.9	800.5	834.8	887.5
37.5°	777.6	716.0	764.6	754.7	793.4	772.4
40°	723.5	615.6	712.7	709.4	770.8	676.3
42.5°	654.3	562.6	644.6	673.0	745.8	622.2
45°	528.4	517.6	523.0	611.4	692.8	567.3
47.5°	483.2	475.9	480.5	555.4	632.9	543.2
50°	456.6	447.2	453.9	519.0	594.7	524.5
52.5°	419.8	394.2	417.1	469.3	555.1	493.6
55°	315.7	238.8	314.3	412.7	495.6	441.7
57.5°	185.3	138.0	181.2	359.1	419.9	386.7
60°	125.4	115.9	126.7	316.1	369.6	354.7
62.5°	114.5	111.5	114.8	220.0	324.6	322.7
65°	104.9	103.5	104.9	127.0	267.9	276.0
67.5°	94.9	93.6	96.0	97.4	211.6	228.6
70°	88.3	87.0	88.3	89.7	162.3	198.7
72.5°	80.6	79.2	80.6	82.0	114.2	170.0
75°	69.0	67.6	69.0	70.4	75.7	128.4
77.5°	55.8	55.8	57.1	57.1	53.0	89.2
80°	46.9	46.9	48.3	48.3	46.0	64.9
82.5°	38.1	37.0	39.4	40.6	38.0	46.1
85°	23.4	22.1	24.8	26.2	24.8	22.1
87.5°	12.5	11.4	13.6	14.6	13.2	6.6
90°	18.6	18.6	18.6	12.4	6.0	0.0
92.5°	38.5	43.3	38.5	27.2	20.9	14.8
95°	56.0	68.0	56.0	49.5	91.8	49.5
97.5°	107.3	92.8	107.3	363.7	176.2	87.8
100°	214.9	142.3	214.9	730.0	220.4	117.5
102.5°	567.0	310.5	567.0	987.3	254.9	147.2
105°	1430.4	946.5	1430.4	1119.7	294.6	191.8
107.5°	2081.7	1949.9	2081.7	1069.0	313.7	236.3
110°	2187.4	2350.7	2187.4	1039.3	338.6	266.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2125.6	2400.2	2125.6	1009.6	368.3	295.7
115°	2005.8	2344.5	2005.8	965.0	412.8	340.2
117.5°	1876.1	2224.5	1876.1	953.9	457.4	386.0
120°	1777.5	2140.4	1777.5	934.1	487.2	420.7
122.5°	1692.7	2026.6	1692.7	909.4	516.8	445.4
125°	1590.2	1880.6	1590.2	909.4	555.2	488.7
127.5°	1471.4	1758.1	1471.4	910.6	592.3	524.6
130°	1391.9	1664.1	1391.9	915.5	617.0	544.4
132.5°	1356.1	1579.9	1356.1	915.5	641.7	569.1
135°	1309.7	1503.2	1309.7	915.5	672.8	606.2
137.5°	1258.3	1424.0	1258.3	915.5	708.5	637.2
140°	1228.3	1379.5	1228.3	915.5	728.5	661.9
142.5°	1193.4	1335.0	1193.4	920.5	748.4	686.7
145°	1141.0	1262.0	1141.0	921.7	778.1	717.6
147.5°	1103.2	1196.4	1103.2	929.2	807.9	754.7
150°	1078.2	1156.8	1078.2	934.1	827.8	779.5
152.5°	1058.0	1122.2	1058.0	934.1	847.7	804.2
155°	1034.2	1082.6	1034.2	940.3	871.6	841.3
157.5°	1019.0	1054.1	1019.0	947.7	900.0	871.0
160°	1009.0	1039.3	1009.0	952.7	915.0	890.8
162.5°	1003.9	1024.4	1003.9	957.6	929.8	905.7
165°	990.2	1008.3	990.2	965.0	946.2	934.1
167.5°	983.8	994.7	983.8	971.2	961.1	950.2
170°	983.7	989.8	983.7	971.2	971.1	965.0
172.5°	978.8	984.8	978.8	976.2	980.9	970.0
175°	977.3	971.2	977.3	983.6	989.6	983.6
177.5°	983.5	978.6	983.5	983.6	988.4	983.6
180°	983.6	983.6	983.6	983.6	983.6	983.6

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