

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: P621736

Luminaire Tested: VLT-FA-150U-100D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621736  
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-930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

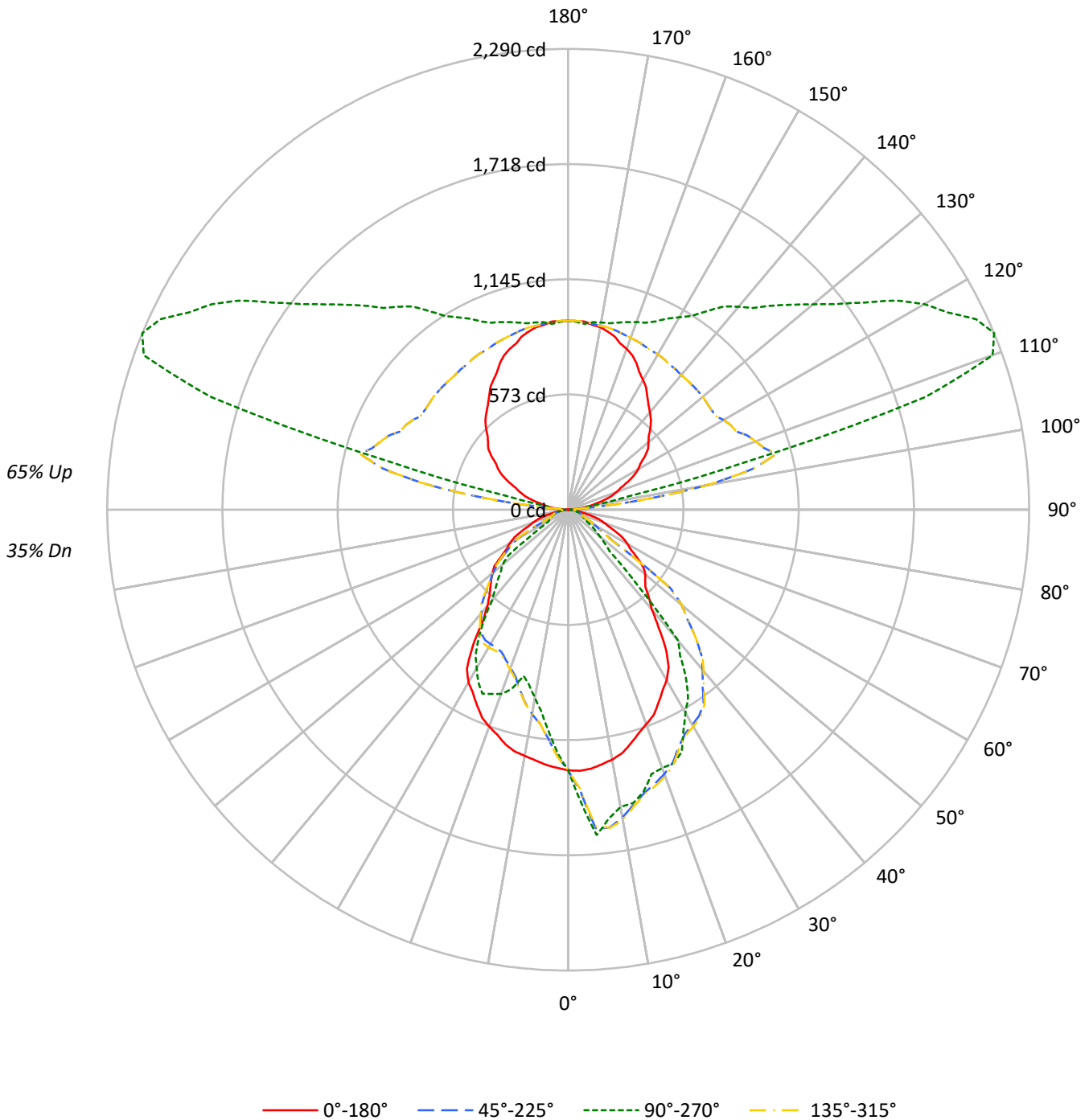
Lumens per Lamp: N/A  
Luminaire Lumens: 7713.3 lumens  
Efficiency: N/A  
Efficacy: 99.1 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 77.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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			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°	9290	9290	9290	9290
5°	9307	11687	9164	7969
10°	9184	10931	9049	6919
15°	8933	10763	8962	6350
20°	8659	10429	8760	7443
25°	8394	10543	8488	7987
30°	8097	9647	8207	7540
35°	7418	8942	7234	6761
40°	6045	7958	5835	5502
45°	5493	2954	5547	5012
50°	5587	2250	5484	4764
55°	5272	1747	5092	2850
60°	4858	1342	4819	1587
65°	4472	1387	4382	1678
70°	3978	1464	3869	1741
75°	3396	1533	3249	1788
80°	2558	1579	2393	1851
85°	1737	1408	1515	1737

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 10172 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.9	1.6
10°-20°	342.1	4.4
20°-30°	511.9	6.6
30°-40°	582.2	7.5
40°-50°	497.9	6.5
50°-60°	335.8	4.4
60°-70°	173.3	2.2
70°-80°	78.2	1.0
80°-90°	25.4	0.3
90°-100°	115.4	1.5
100°-110°	822.3	10.7
110°-120°	1116.3	14.5
120°-130°	908.6	11.8
130°-140°	730.8	9.5
140°-150°	576.1	7.5
150°-160°	421.3	5.5
160°-170°	261.7	3.4
170°-180°	89.2	1.2
0°-30°	978.9	12.7
0°-40°	1561.1	20.2
0°-60°	2394.7	31.0
0°-90°	2671.7	34.6
90°-120°	2054.0	26.6
90°-150°	4269.5	55.4
90°-180°	5042.0	65.4
0°-180°	7713.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1295	1295	1295	1295	1295	
5°	1292	1622	1272	1106	1292	122
15°	1202	1449	1206	855	1202	338
25°	1060	1332	1072	1009	1060	488
35°	847	1021	826	772	847	518
45°	541	291	547	494	541	429
55°	421	140	407	228	421	375
65°	263	82	258	99	263	260
75°	122	55	117	64	122	131
85°	21	17	18	21	21	27
90°	0	18	0	18	0	3
95°	47	65	47	65	47	53
105°	183	903	183	903	183	193
115°	325	2237	325	2237	325	322
125°	466	1794	466	1794	466	414
135°	578	1434	578	1434	578	445
145°	685	1204	685	1204	685	430
155°	803	1033	803	1033	803	369
165°	891	962	891	962	891	250
175°	939	927	939	927	939	89
180°	939	939	939	939	939	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1298.8	1343.1	1398.9	1437.2	1453.7	1437.2	1389.4	1342.8	1284.1	1266.6	1225.1
5°	1292.0	1428.5	1593.6	1613.5	1622.5	1613.5	1579.1	1420.3	1272.2	1209.1	1140.5
7.5°	1276.2	1514.9	1591.7	1547.2	1547.5	1555.7	1594.1	1507.5	1255.6	1156.5	1072.3
10°	1260.4	1563.0	1552.7	1488.5	1500.1	1494.9	1564.6	1553.6	1241.9	1127.3	1031.2
12.5°	1239.3	1578.0	1501.1	1480.1	1492.7	1485.5	1508.8	1569.8	1230.3	1106.5	983.8
15°	1202.4	1556.5	1457.9	1448.7	1448.7	1455.1	1464.5	1563.1	1206.4	1068.6	925.8
17.5°	1164.5	1513.7	1427.9	1382.2	1377.3	1385.8	1438.7	1524.7	1172.4	1026.6	869.7
20°	1133.9	1484.2	1397.3	1343.8	1365.7	1346.4	1409.2	1492.2	1147.1	1000.3	835.0
22.5°	1106.5	1447.5	1358.4	1335.6	1364.7	1336.1	1369.2	1455.5	1117.6	970.8	808.6
25°	1060.2	1386.0	1299.9	1321.2	1331.5	1321.2	1305.1	1391.4	1072.0	933.0	781.0
27.5°	1014.1	1321.1	1256.2	1270.5	1239.0	1263.2	1263.3	1321.3	1025.2	888.9	772.6
30°	977.2	1276.0	1234.0	1213.2	1164.2	1202.9	1243.2	1276.3	990.4	860.3	770.4
32.5°	928.7	1234.7	1211.9	1139.8	1108.4	1134.7	1222.2	1233.9	936.6	834.4	768.3
35°	846.8	1176.5	1172.1	1052.9	1020.7	1045.1	1181.3	1173.4	825.8	793.6	752.0
37.5°	737.0	1124.6	1096.0	965.0	913.7	958.5	1104.7	1119.0	694.6	756.1	713.8
40°	645.3	1089.6	1039.1	899.7	849.5	893.2	1045.7	1086.5	622.9	729.8	671.7
42.5°	593.7	1058.6	979.1	830.5	519.7	820.0	985.6	1054.6	578.7	695.9	634.8
45°	541.3	1002.3	891.6	459.7	291.1	437.9	892.9	988.2	546.6	644.4	578.2
47.5°	518.4	933.0	800.2	276.9	245.8	268.9	799.4	917.8	518.6	592.8	524.2
50°	500.5	889.4	734.9	244.0	201.5	235.0	736.2	875.0	491.2	558.2	487.3
52.5°	471.0	837.2	641.1	202.2	174.1	197.3	625.6	820.8	462.8	520.5	440.9
55°	421.4	736.9	267.4	158.9	139.6	152.5	254.2	712.1	407.0	461.0	387.2
57.5°	369.0	627.3	187.5	123.7	108.3	122.4	186.2	602.2	362.2	390.5	337.7
60°	338.5	553.5	152.8	103.8	93.5	102.5	151.5	531.6	335.8	343.6	292.4
62.5°	307.9	478.7	126.4	91.3	88.2	90.0	126.2	454.6	303.2	303.7	206.0
65°	263.4	362.6	93.5	82.9	81.7	81.7	90.9	349.6	258.1	250.4	118.5
67.5°	218.1	260.3	75.1	76.4	75.1	75.1	73.8	253.0	212.8	199.7	89.6
70°	189.6	199.9	69.8	71.1	69.8	69.8	68.5	194.7	184.4	154.8	84.3
72.5°	162.3	136.5	64.5	64.8	64.5	64.5	63.2	128.1	157.0	108.8	76.9
75°	122.5	68.4	55.3	55.3	55.3	55.3	54.0	65.7	117.2	70.9	65.8
77.5°	85.1	45.2	45.8	45.6	45.6	44.5	44.5	44.8	80.1	48.9	53.2
80°	61.9	37.4	39.5	38.2	38.2	38.2	38.2	36.1	57.9	41.2	44.8
82.5°	44.0	29.8	32.1	30.8	30.8	30.8	30.8	29.5	40.0	33.6	36.3
85°	21.1	19.8	21.1	18.4	17.1	18.4	19.8	19.7	18.4	22.3	23.7
87.5°	6.3	10.6	10.8	9.9	9.9	9.9	9.7	9.5	5.3	11.6	11.8
90°	0.0	5.8	11.8	17.7	17.7	17.7	11.8	5.8	0.0	5.8	11.8
92.5°	14.2	19.9	26.0	36.7	41.3	36.7	26.0	19.9	14.2	19.9	26.0
95°	47.2	87.6	47.2	53.4	64.9	53.4	47.2	87.6	47.2	87.6	47.2
97.5°	83.8	168.1	347.1	102.4	88.5	102.4	347.1	168.1	83.8	168.1	347.1
100°	112.2	210.3	696.5	205.0	135.8	205.0	696.5	210.3	112.2	210.3	696.5
102.5°	140.5	243.2	942.1	541.0	296.3	541.0	942.1	243.2	140.5	243.2	942.1
105°	183.0	281.1	1068.4	1364.9	903.1	1364.9	1068.4	281.1	183.0	281.1	1068.4
107.5°	225.5	299.4	1020.0	1986.4	1860.6	1986.4	1020.0	299.4	225.5	299.4	1020.0
110°	253.8	323.1	991.7	2087.3	2243.1	2087.3	991.7	323.1	253.8	323.1	991.7



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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°	282.2	351.4	963.3	2028.3	2290.3	2028.3	963.3	351.4	282.2	351.4	963.3
115°	324.7	393.9	920.8	1914.0	2237.2	1914.0	920.8	393.9	324.7	393.9	920.8
117.5°	368.3	436.4	910.2	1790.2	2122.7	1790.2	910.2	436.4	368.3	436.4	910.2
120°	401.4	464.9	891.3	1696.1	2042.4	1696.1	891.3	464.9	401.4	464.9	891.3
122.5°	425.0	493.1	867.7	1615.2	1933.8	1615.2	867.7	493.1	425.0	493.1	867.7
125°	466.3	529.8	867.7	1517.4	1794.5	1517.4	867.7	529.8	466.3	529.8	867.7
127.5°	500.6	565.2	868.9	1404.0	1677.6	1404.0	868.9	565.2	500.6	565.2	868.9
130°	519.5	588.7	873.6	1328.1	1587.9	1328.1	873.6	588.7	519.5	588.7	873.6
132.5°	543.1	612.3	873.6	1294.0	1507.6	1294.0	873.6	612.3	543.1	612.3	873.6
135°	578.5	642.0	873.6	1249.7	1434.4	1249.7	873.6	642.0	578.5	642.0	873.6
137.5°	608.0	676.1	873.6	1200.7	1358.8	1200.7	873.6	676.1	608.0	676.1	873.6
140°	631.6	695.1	873.6	1172.0	1316.3	1172.0	873.6	695.1	631.6	695.1	873.6
142.5°	655.2	714.1	878.3	1138.8	1273.8	1138.8	878.3	714.1	655.2	714.1	878.3
145°	684.7	742.4	879.5	1088.8	1204.2	1088.8	879.5	742.4	684.7	742.4	879.5
147.5°	720.1	770.9	886.6	1052.7	1141.6	1052.7	886.6	770.9	720.1	770.9	886.6
150°	743.8	789.9	891.3	1028.8	1103.8	1028.8	891.3	789.9	743.8	789.9	891.3
152.5°	767.4	808.9	891.3	1009.6	1070.8	1009.6	891.3	808.9	767.4	808.9	891.3
155°	802.8	831.6	897.2	986.8	1033.0	986.8	897.2	831.6	802.8	831.6	897.2
157.5°	831.1	858.8	904.3	972.4	1005.8	972.4	904.3	858.8	831.1	858.8	904.3
160°	850.0	873.1	909.0	962.8	991.7	962.8	909.0	873.1	850.0	873.1	909.0
162.5°	864.2	887.3	913.8	957.9	977.5	957.9	913.8	887.3	864.2	887.3	913.8
165°	891.3	902.9	920.8	944.9	962.2	944.9	920.8	902.9	891.3	902.9	920.8
167.5°	906.7	917.1	926.7	938.8	949.2	938.8	926.7	917.1	906.7	917.1	926.7
170°	920.8	926.6	926.7	938.7	944.5	938.7	926.7	926.6	920.8	926.6	926.7
172.5°	925.6	936.0	931.5	934.0	939.7	934.0	931.5	936.0	925.6	936.0	931.5
175°	938.6	944.3	938.6	932.5	926.7	932.5	938.6	944.3	938.6	944.3	938.6
177.5°	938.6	943.2	938.6	938.5	933.8	938.5	938.6	943.2	938.6	943.2	938.6
180°	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1210.3	1209.3	1211.3	1229.3	1265.9	1298.8
5°	1102.4	1106.3	1110.1	1140.5	1204.4	1292.0
7.5°	1019.5	1013.8	1022.6	1072.0	1150.5	1276.2
10°	962.4	949.6	962.4	1029.9	1121.3	1260.4
12.5°	908.6	892.7	912.7	986.7	1097.1	1239.3
15°	839.3	854.7	845.7	928.5	1060.8	1202.4
17.5°	855.7	933.5	872.2	877.9	1024.6	1164.5
20°	894.7	974.6	920.5	844.2	1001.3	1133.9
22.5°	930.1	990.4	941.4	815.7	978.0	1106.5
25°	957.3	1008.8	954.7	790.2	944.3	1060.2
27.5°	958.7	965.9	959.2	788.1	902.6	1014.1
30°	941.0	910.0	938.4	790.2	872.9	977.2
32.5°	890.3	855.3	879.5	786.0	843.0	928.7
35°	818.1	771.8	805.2	763.9	796.6	846.8
37.5°	742.0	683.3	729.6	720.1	757.1	737.0
40°	690.4	587.4	680.1	676.9	735.5	645.3
42.5°	624.4	536.8	615.1	642.2	711.7	593.7
45°	504.2	493.9	499.0	583.4	661.0	541.3
47.5°	461.1	454.1	458.5	530.0	603.9	518.4
50°	435.7	426.7	433.1	495.2	567.4	500.5
52.5°	400.6	376.1	398.0	447.8	529.7	471.0
55°	301.2	227.8	300.0	393.8	472.9	421.4
57.5°	176.8	131.7	172.9	342.7	400.7	369.0
60°	119.6	110.6	120.9	301.6	352.6	338.5
62.5°	109.2	106.4	109.5	209.9	309.7	307.9
65°	100.1	98.8	100.1	121.2	255.7	263.4
67.5°	90.6	89.3	91.6	93.0	201.9	218.1
70°	84.3	83.0	84.3	85.6	154.9	189.6
72.5°	76.9	75.6	76.9	78.2	108.9	162.3
75°	65.8	64.5	65.8	67.2	72.3	122.5
77.5°	53.2	53.2	54.5	54.5	50.6	85.1
80°	44.8	44.8	46.1	46.1	43.9	61.9
82.5°	36.3	35.3	37.6	38.7	36.3	44.0
85°	22.4	21.1	23.6	25.0	23.6	21.1
87.5°	11.9	10.9	13.0	14.0	12.6	6.3
90°	17.7	17.7	17.7	11.8	5.8	0.0
92.5°	36.7	41.3	36.7	26.0	19.9	14.2
95°	53.4	64.9	53.4	47.2	87.6	47.2
97.5°	102.4	88.5	102.4	347.1	168.1	83.8
100°	205.0	135.8	205.0	696.5	210.3	112.2
102.5°	541.0	296.3	541.0	942.1	243.2	140.5
105°	1364.9	903.1	1364.9	1068.4	281.1	183.0
107.5°	1986.4	1860.6	1986.4	1020.0	299.4	225.5
110°	2087.3	2243.1	2087.3	991.7	323.1	253.8





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2028.3	2290.3	2028.3	963.3	351.4	282.2
115°	1914.0	2237.2	1914.0	920.8	393.9	324.7
117.5°	1790.2	2122.7	1790.2	910.2	436.4	368.3
120°	1696.1	2042.4	1696.1	891.3	464.9	401.4
122.5°	1615.2	1933.8	1615.2	867.7	493.1	425.0
125°	1517.4	1794.5	1517.4	867.7	529.8	466.3
127.5°	1404.0	1677.6	1404.0	868.9	565.2	500.6
130°	1328.1	1587.9	1328.1	873.6	588.7	519.5
132.5°	1294.0	1507.6	1294.0	873.6	612.3	543.1
135°	1249.7	1434.4	1249.7	873.6	642.0	578.5
137.5°	1200.7	1358.8	1200.7	873.6	676.1	608.0
140°	1172.0	1316.3	1172.0	873.6	695.1	631.6
142.5°	1138.8	1273.8	1138.8	878.3	714.1	655.2
145°	1088.8	1204.2	1088.8	879.5	742.4	684.7
147.5°	1052.7	1141.6	1052.7	886.6	770.9	720.1
150°	1028.8	1103.8	1028.8	891.3	789.9	743.8
152.5°	1009.6	1070.8	1009.6	891.3	808.9	767.4
155°	986.8	1033.0	986.8	897.2	831.6	802.8
157.5°	972.4	1005.8	972.4	904.3	858.8	831.1
160°	962.8	991.7	962.8	909.0	873.1	850.0
162.5°	957.9	977.5	957.9	913.8	887.3	864.2
165°	944.9	962.2	944.9	920.8	902.9	891.3
167.5°	938.8	949.2	938.8	926.7	917.1	906.7
170°	938.7	944.5	938.7	926.7	926.6	920.8
172.5°	934.0	939.7	934.0	931.5	936.0	925.6
175°	932.5	926.7	932.5	938.6	944.3	938.6
177.5°	938.5	933.8	938.5	938.6	943.2	938.6
180°	938.6	938.6	938.6	938.6	938.6	938.6

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