

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: P621691

Luminaire Tested: VLT-FA-100U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621691  
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-100U-125D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

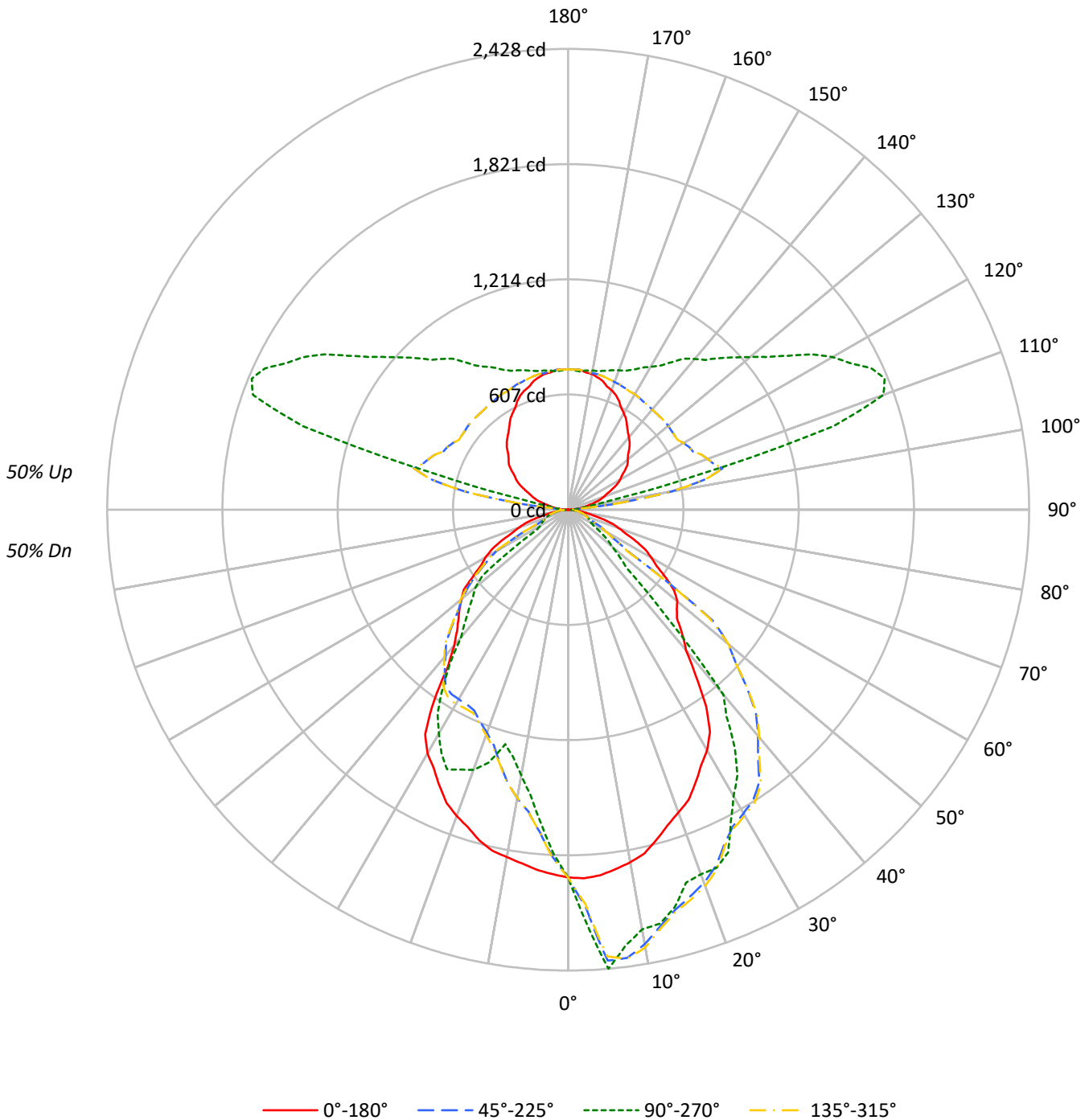
Lumens per Lamp: N/A  
Luminaire Lumens: 7967.9 lumens  
Efficiency: N/A  
Efficacy: 117.7 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 67.7  
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	
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	99	95	91	88	91	88	85	82	74	72	70	62	61	59	51	50	49	44
2	91	84	78	73	83	78	73	68	66	63	59	56	53	51	46	44	43	38
3	83	74	67	62	77	69	63	58	59	55	51	50	47	44	41	39	37	33
4	76	66	59	53	70	62	55	50	53	48	44	45	41	38	38	35	33	29
5	70	59	52	46	65	55	49	43	48	43	39	41	37	34	34	31	29	26
6	65	54	46	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23
7	60	49	41	36	56	45	39	34	39	34	30	34	30	27	29	26	23	21
8	56	44	37	32	52	41	35	30	36	31	27	31	27	24	26	23	21	19
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17
10	49	37	30	26	45	35	29	24	31	26	22	27	23	20	23	20	17	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	13902	13902	13902	13902
5°	13927	17490	13714	11925
10°	13743	16356	13542	10354
15°	13367	16106	13412	9503
20°	12958	15607	13109	11137
25°	12562	15776	12702	11953
30°	12117	14436	12280	11284
35°	11101	13380	10825	10117
40°	9046	11908	8732	8234
45°	8220	4420	8300	7501
50°	8361	3366	8206	7128
55°	7891	2614	7619	4265
60°	7269	2008	7213	2375
65°	6693	2075	6559	2510
70°	5954	2193	5789	2606
75°	5082	2296	4863	2678
80°	3827	2364	3583	2769
85°	2594	2108	2272	2594

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 15221 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.9	2.3
10°-20°	511.9	6.4
20°-30°	766.0	9.6
30°-40°	871.2	10.9
40°-50°	745.1	9.4
50°-60°	502.4	6.3
60°-70°	259.3	3.3
70°-80°	117.1	1.5
80°-90°	36.5	0.5
90°-100°	90.9	1.1
100°-110°	647.7	8.1
110°-120°	879.4	11.0
120°-130°	715.7	9.0
130°-140°	575.6	7.2
140°-150°	453.8	5.7
150°-160°	331.8	4.2
160°-170°	206.1	2.6
170°-180°	70.3	0.9
0°-30°	1464.9	18.4
0°-40°	2336.0	29.3
0°-60°	3583.5	45.0
0°-90°	3996.5	50.2
90°-120°	1618.0	20.3
90°-150°	3363.2	42.2
90°-180°	3971.0	49.8
0°-180°	7967.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1937	1937	1937	1937	1937	
5°	1933	2428	1904	1656	1933	183
15°	1799	2168	1805	1279	1799	506
25°	1586	1992	1604	1510	1586	730
35°	1267	1527	1236	1155	1267	775
45°	810	436	818	739	810	643
55°	631	209	609	341	631	562
65°	394	122	386	148	394	390
75°	183	83	175	97	183	195
85°	32	26	28	32	32	40
90°	0	14	0	14	0	3
95°	37	51	37	51	37	42
105°	144	711	144	711	144	152
115°	256	1762	256	1762	256	254
125°	367	1414	367	1414	367	326
135°	456	1130	456	1130	456	351
145°	539	949	539	949	539	339
155°	632	814	632	814	632	290
165°	702	758	702	758	702	197
175°	739	730	739	730	739	70
180°	739	739	739	739	739	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1943.6	2009.9	2093.4	2150.7	2175.4	2150.7	2079.2	2009.4	1921.5	1895.3	1833.2
5°	1933.4	2137.6	2384.7	2414.5	2428.0	2414.5	2363.0	2125.4	1903.8	1809.4	1706.7
7.5°	1909.7	2267.0	2381.9	2315.3	2315.7	2328.0	2385.5	2255.9	1879.0	1730.6	1604.6
10°	1886.1	2338.9	2323.6	2227.4	2244.7	2237.0	2341.3	2324.8	1858.5	1687.0	1543.1
12.5°	1854.5	2361.3	2246.3	2214.8	2233.7	2222.9	2257.8	2349.1	1841.1	1655.7	1472.2
15°	1799.3	2329.3	2181.7	2167.9	2167.9	2177.5	2191.5	2339.0	1805.3	1599.1	1385.5
17.5°	1742.6	2265.2	2136.7	2068.4	2061.1	2073.8	2152.9	2281.6	1754.4	1536.3	1301.5
20°	1696.9	2221.0	2091.0	2011.0	2043.7	2014.8	2108.8	2233.0	1716.6	1496.9	1249.5
22.5°	1655.9	2166.1	2032.7	1998.6	2042.1	1999.4	2048.8	2178.1	1672.4	1452.7	1210.1
25°	1586.5	2074.0	1945.2	1977.1	1992.5	1977.1	1953.1	2082.1	1604.2	1396.1	1168.7
27.5°	1517.5	1976.9	1879.8	1901.2	1854.1	1890.4	1890.4	1977.3	1534.1	1330.2	1156.1
30°	1462.3	1909.4	1846.6	1815.4	1742.2	1800.0	1860.4	1909.8	1482.0	1287.4	1152.9
32.5°	1389.8	1847.7	1813.5	1705.6	1658.6	1697.9	1828.9	1846.4	1401.6	1248.6	1149.8
35°	1267.2	1760.5	1754.0	1575.5	1527.4	1564.0	1767.8	1756.0	1235.7	1187.5	1125.3
37.5°	1102.9	1682.9	1640.1	1444.0	1367.3	1434.4	1653.1	1674.5	1039.4	1131.5	1068.2
40°	965.7	1630.5	1555.0	1346.3	1271.2	1336.7	1564.8	1625.9	932.2	1092.1	1005.1
42.5°	888.4	1584.1	1465.1	1242.9	777.7	1227.1	1475.0	1578.2	866.0	1041.3	949.9
45°	810.0	1499.9	1334.2	688.0	435.5	655.2	1336.2	1478.8	817.9	964.3	865.2
47.5°	775.7	1396.2	1197.5	414.4	367.8	402.4	1196.3	1373.5	776.1	887.1	784.4
50°	748.9	1330.9	1099.7	365.1	301.5	351.6	1101.7	1309.4	735.1	835.3	729.2
52.5°	704.8	1252.8	959.4	302.5	260.5	295.2	936.1	1228.2	692.5	778.9	659.8
55°	630.7	1102.8	400.1	237.8	208.9	228.2	380.4	1065.7	609.0	689.9	579.4
57.5°	552.2	938.8	280.6	185.1	162.0	183.2	278.7	901.2	542.0	584.4	505.3
60°	506.5	828.3	228.6	155.3	139.9	153.4	226.6	795.5	502.6	514.1	437.5
62.5°	460.8	716.3	189.2	136.7	132.0	134.7	188.8	680.3	453.7	454.5	308.2
65°	394.2	542.5	139.9	124.1	122.2	122.2	136.0	523.1	386.3	374.7	177.4
67.5°	326.4	389.6	112.3	114.3	112.3	112.3	110.4	378.6	318.5	298.8	134.0
70°	283.8	299.2	104.5	106.4	104.5	104.5	102.5	291.3	275.9	231.6	126.1
72.5°	242.8	204.3	96.6	97.0	96.6	96.6	94.6	191.8	234.9	162.8	115.1
75°	183.3	102.4	82.8	82.8	82.8	82.8	80.8	98.3	175.4	106.0	98.5
77.5°	127.3	67.6	68.6	68.2	68.2	66.6	66.6	67.0	119.8	73.2	79.6
80°	92.6	56.0	59.1	57.2	57.2	57.2	57.2	54.0	86.7	61.7	67.0
82.5°	65.8	44.6	48.1	46.1	46.1	46.1	46.1	44.1	59.9	50.3	54.4
85°	31.5	29.6	31.5	27.5	25.6	27.5	29.6	29.5	27.6	33.4	35.5
87.5°	9.5	15.0	14.5	12.2	12.2	12.2	12.9	13.4	7.9	16.5	16.0
90°	0.0	4.5	9.3	13.9	13.9	13.9	9.3	4.5	0.0	4.5	9.3
92.5°	11.2	15.7	20.5	28.9	32.5	28.9	20.5	15.7	11.2	15.7	20.5
95°	37.2	69.0	37.2	42.1	51.1	42.1	37.2	69.0	37.2	69.0	37.2
97.5°	66.0	132.4	273.4	80.7	69.7	80.7	273.4	132.4	66.0	132.4	273.4
100°	88.3	165.6	548.7	161.5	106.9	161.5	548.7	165.6	88.3	165.6	548.7
102.5°	110.7	191.6	742.1	426.2	233.4	426.2	742.1	191.6	110.7	191.6	742.1
105°	144.1	221.4	841.6	1075.1	711.4	1075.1	841.6	221.4	144.1	221.4	841.6
107.5°	177.6	235.8	803.5	1564.7	1465.6	1564.7	803.5	235.8	177.6	235.8	803.5
110°	199.9	254.5	781.2	1644.2	1766.9	1644.2	781.2	254.5	199.9	254.5	781.2



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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°	222.3	276.8	758.9	1597.7	1804.1	1597.7	758.9	276.8	222.3	276.8	758.9
115°	255.7	310.3	725.4	1507.7	1762.3	1507.7	725.4	310.3	255.7	310.3	725.4
117.5°	290.1	343.8	717.0	1410.2	1672.1	1410.2	717.0	343.8	290.1	343.8	717.0
120°	316.2	366.2	702.1	1336.0	1608.8	1336.0	702.1	366.2	316.2	366.2	702.1
122.5°	334.8	388.4	683.5	1272.3	1523.3	1272.3	683.5	388.4	334.8	388.4	683.5
125°	367.3	417.3	683.5	1195.3	1413.5	1195.3	683.5	417.3	367.3	417.3	683.5
127.5°	394.3	445.2	684.5	1106.0	1321.5	1106.0	684.5	445.2	394.3	445.2	684.5
130°	409.2	463.7	688.2	1046.2	1250.8	1046.2	688.2	463.7	409.2	463.7	688.2
132.5°	427.8	482.3	688.2	1019.3	1187.6	1019.3	688.2	482.3	427.8	482.3	688.2
135°	455.7	505.7	688.2	984.4	1129.9	984.4	688.2	505.7	455.7	505.7	688.2
137.5°	478.9	532.6	688.2	945.8	1070.4	945.8	688.2	532.6	478.9	532.6	688.2
140°	497.5	547.5	688.2	923.2	1036.9	923.2	688.2	547.5	497.5	547.5	688.2
142.5°	516.1	562.5	691.9	897.0	1003.4	897.0	691.9	562.5	516.1	562.5	691.9
145°	539.4	584.8	692.8	857.6	948.6	857.6	692.8	584.8	539.4	584.8	692.8
147.5°	567.3	607.3	698.4	829.3	899.3	829.3	698.4	607.3	567.3	607.3	698.4
150°	585.9	622.3	702.1	810.4	869.5	810.4	702.1	622.3	585.9	622.3	702.1
152.5°	604.5	637.2	702.1	795.3	843.5	795.3	702.1	637.2	604.5	637.2	702.1
155°	632.4	655.1	706.8	777.3	813.7	777.3	706.8	655.1	632.4	655.1	706.8
157.5°	654.7	676.5	712.4	766.0	792.3	766.0	712.4	676.5	654.7	676.5	712.4
160°	669.6	687.8	716.1	758.4	781.2	758.4	716.1	687.8	669.6	687.8	716.1
162.5°	680.7	698.9	719.8	754.6	770.0	754.6	719.8	698.9	680.7	698.9	719.8
165°	702.1	711.2	725.4	744.3	757.9	744.3	725.4	711.2	702.1	711.2	725.4
167.5°	714.2	722.4	730.0	739.5	747.7	739.5	730.0	722.4	714.2	722.4	730.0
170°	725.4	729.9	730.0	739.4	744.0	739.4	730.0	729.9	725.4	729.9	730.0
172.5°	729.1	737.3	733.7	735.7	740.3	735.7	733.7	737.3	729.1	737.3	733.7
175°	739.3	743.9	739.3	734.6	730.0	734.6	739.3	743.9	739.3	743.9	739.3
177.5°	739.3	743.0	739.3	739.2	735.6	739.2	739.3	743.0	739.3	743.0	739.3
180°	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3	739.3



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1811.1	1809.6	1812.7	1839.5	1894.3	1943.6
5°	1649.7	1655.5	1661.3	1706.7	1802.3	1933.4
7.5°	1525.6	1517.1	1530.2	1604.2	1721.6	1909.7
10°	1440.2	1421.0	1440.2	1541.2	1677.9	1886.1
12.5°	1359.7	1335.8	1365.9	1476.5	1641.8	1854.5
15°	1255.9	1279.1	1265.6	1389.4	1587.4	1799.3
17.5°	1280.5	1396.9	1305.2	1313.7	1533.3	1742.6
20°	1338.9	1458.4	1377.5	1263.3	1498.4	1696.9
22.5°	1391.9	1482.0	1408.8	1220.7	1463.6	1655.9
25°	1432.6	1509.6	1428.7	1182.5	1413.1	1586.5
27.5°	1434.6	1445.4	1435.4	1179.3	1350.6	1517.5
30°	1408.1	1361.8	1404.2	1182.5	1306.2	1462.3
32.5°	1332.3	1279.8	1316.1	1176.2	1261.5	1389.8
35°	1224.3	1154.9	1205.0	1143.1	1192.1	1267.2
37.5°	1110.3	1022.5	1091.8	1077.6	1132.9	1102.9
40°	1033.1	879.0	1017.7	1013.0	1100.6	965.7
42.5°	934.3	803.3	920.5	961.0	1065.0	888.4
45°	754.5	739.1	746.8	873.1	989.2	810.0
47.5°	689.9	679.5	686.1	793.1	903.7	775.7
50°	652.0	638.5	648.2	741.0	849.1	748.9
52.5°	599.5	562.9	595.6	670.1	792.6	704.8
55°	450.8	340.9	448.9	589.3	707.7	630.7
57.5°	264.5	197.1	258.7	512.8	599.6	552.2
60°	179.0	165.5	181.0	451.3	527.7	506.5
62.5°	163.5	159.2	163.9	314.1	463.5	460.8
65°	149.7	147.8	149.7	181.3	382.6	394.2
67.5°	135.5	133.6	137.1	139.1	302.1	326.4
70°	126.1	124.2	126.1	128.1	231.8	283.8
72.5°	115.1	113.1	115.1	117.1	163.0	242.8
75°	98.5	96.6	98.5	100.5	108.1	183.3
77.5°	79.6	79.6	81.5	81.6	75.7	127.3
80°	67.0	67.0	68.9	69.0	65.6	92.6
82.5°	54.4	52.8	56.3	57.9	54.3	65.8
85°	33.5	31.5	35.4	37.4	35.4	31.5
87.5°	15.4	13.8	16.9	19.2	18.1	9.5
90°	13.9	13.9	13.9	9.3	4.5	0.0
92.5°	28.9	32.5	28.9	20.5	15.7	11.2
95°	42.1	51.1	42.1	37.2	69.0	37.2
97.5°	80.7	69.7	80.7	273.4	132.4	66.0
100°	161.5	106.9	161.5	548.7	165.6	88.3
102.5°	426.2	233.4	426.2	742.1	191.6	110.7
105°	1075.1	711.4	1075.1	841.6	221.4	144.1
107.5°	1564.7	1465.6	1564.7	803.5	235.8	177.6
110°	1644.2	1766.9	1644.2	781.2	254.5	199.9





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1597.7	1804.1	1597.7	758.9	276.8	222.3
115°	1507.7	1762.3	1507.7	725.4	310.3	255.7
117.5°	1410.2	1672.1	1410.2	717.0	343.8	290.1
120°	1336.0	1608.8	1336.0	702.1	366.2	316.2
122.5°	1272.3	1523.3	1272.3	683.5	388.4	334.8
125°	1195.3	1413.5	1195.3	683.5	417.3	367.3
127.5°	1106.0	1321.5	1106.0	684.5	445.2	394.3
130°	1046.2	1250.8	1046.2	688.2	463.7	409.2
132.5°	1019.3	1187.6	1019.3	688.2	482.3	427.8
135°	984.4	1129.9	984.4	688.2	505.7	455.7
137.5°	945.8	1070.4	945.8	688.2	532.6	478.9
140°	923.2	1036.9	923.2	688.2	547.5	497.5
142.5°	897.0	1003.4	897.0	691.9	562.5	516.1
145°	857.6	948.6	857.6	692.8	584.8	539.4
147.5°	829.3	899.3	829.3	698.4	607.3	567.3
150°	810.4	869.5	810.4	702.1	622.3	585.9
152.5°	795.3	843.5	795.3	702.1	637.2	604.5
155°	777.3	813.7	777.3	706.8	655.1	632.4
157.5°	766.0	792.3	766.0	712.4	676.5	654.7
160°	758.4	781.2	758.4	716.1	687.8	669.6
162.5°	754.6	770.0	754.6	719.8	698.9	680.7
165°	744.3	757.9	744.3	725.4	711.2	702.1
167.5°	739.5	747.7	739.5	730.0	722.4	714.2
170°	739.4	744.0	739.4	730.0	729.9	725.4
172.5°	735.7	740.3	735.7	733.7	737.3	729.1
175°	734.6	730.0	734.6	739.3	743.9	739.3
177.5°	739.2	735.6	739.2	739.3	743.0	739.3
180°	739.3	739.3	739.3	739.3	739.3	739.3

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