

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P621723

Luminaire Tested: VLT-FA-150U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621723  
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-050D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

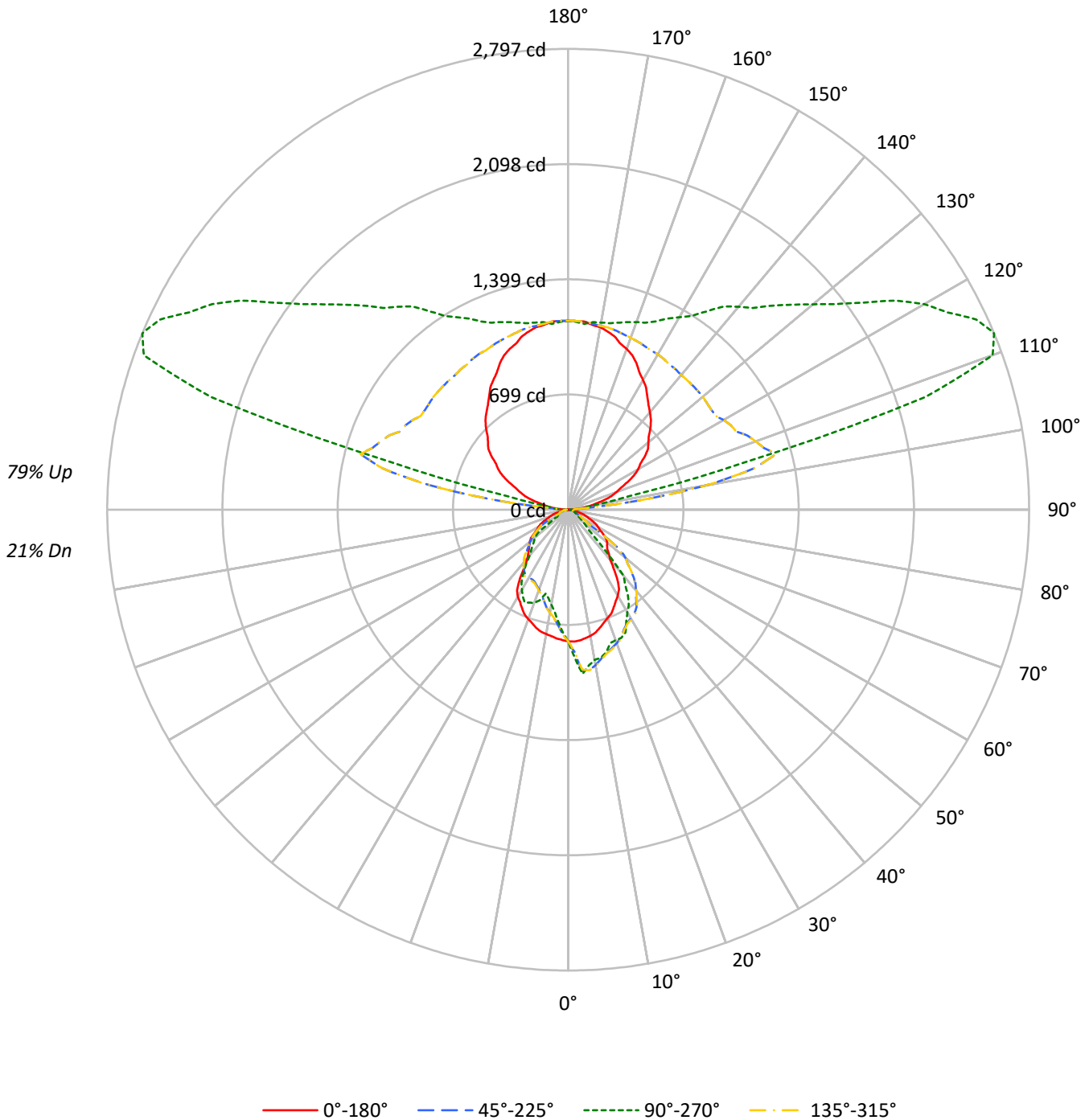
Lumens per Lamp: N/A  
Luminaire Lumens: 7806.6 lumens  
Efficiency: N/A  
Efficacy: 123.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 63  
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	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	21
1	92	88	84	81	81	78	75	72	59	57	56	42	41	40	27	26	26	18
2	84	77	71	67	74	68	64	60	52	49	47	38	36	34	24	23	22	16
3	77	68	61	56	68	60	55	50	46	43	39	33	31	29	21	20	19	14
4	70	60	53	47	62	54	47	43	41	37	34	30	27	25	19	18	17	12
5	64	53	46	40	57	48	41	37	37	33	29	27	24	22	18	16	15	11
6	59	48	40	35	52	43	36	32	33	29	25	24	21	19	16	14	13	10
7	55	43	36	31	48	39	32	28	30	26	22	22	19	17	15	13	12	9
8	51	39	32	27	45	35	29	24	27	23	20	20	17	15	13	12	10	8
9	47	36	28	24	42	32	26	22	25	21	18	19	16	13	12	11	9	7
10	44	32	26	21	39	29	23	19	23	19	16	17	14	12	11	10	9	7

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

	0°	90°	180°	270°
0°	5730	5730	5730	5730
5°	5740	7208	5652	4915
10°	5665	6742	5582	4268
15°	5509	6638	5528	3917
20°	5341	6432	5403	4590
25°	5177	6502	5235	4926
30°	4994	5950	5061	4651
35°	4575	5515	4462	4170
40°	3728	4908	3599	3394
45°	3389	1822	3421	3091
50°	3446	1388	3383	2938
55°	3252	1077	3140	1758
60°	2997	828	2972	979
65°	2759	856	2703	1034
70°	2455	904	2386	1074
75°	2093	945	2005	1103
80°	1579	975	1475	1141
85°	1070	873	939	1070

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 6274 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	1.0
10°-20°	211.0	2.7
20°-30°	315.7	4.0
30°-40°	359.1	4.6
40°-50°	307.1	3.9
50°-60°	207.1	2.7
60°-70°	106.9	1.4
70°-80°	48.3	0.6
80°-90°	16.9	0.2
90°-100°	140.9	1.8
100°-110°	1004.3	12.9
110°-120°	1363.4	17.5
120°-130°	1109.7	14.2
130°-140°	892.5	11.4
140°-150°	703.6	9.0
150°-160°	514.5	6.6
160°-170°	319.6	4.1
170°-180°	109.0	1.4
0°-30°	603.8	7.7
0°-40°	962.8	12.3
0°-60°	1477.0	18.9
0°-90°	1649.1	21.1
90°-120°	2508.7	32.1
90°-150°	5214.5	66.8
90°-180°	6158.0	78.9
0°-180°	7806.6	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	798	798	798	798	798	
5°	797	1001	785	682	797	75
15°	742	894	744	527	742	209
25°	654	821	661	622	654	301
35°	522	630	509	476	522	319
45°	334	180	337	305	334	265
55°	260	86	251	140	260	232
65°	162	50	159	61	162	161
75°	76	34	72	40	76	81
85°	13	11	11	13	13	17
90°	0	22	0	22	0	3
95°	58	79	58	79	58	65
105°	224	1103	224	1103	224	236
115°	396	2732	396	2732	396	394
125°	570	2192	570	2192	570	506
135°	706	1752	706	1752	706	544
145°	836	1471	836	1471	836	525
155°	980	1262	980	1262	980	450
165°	1089	1175	1089	1175	1089	306
175°	1146	1132	1146	1132	1146	108
180°	1146	1146	1146	1146	1146	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5	798.5
2.5°	801.1	828.4	862.8	886.4	896.6	886.4	857.0	828.2	792.0	781.2	755.6
5°	796.9	881.0	982.9	995.2	1000.7	995.2	973.9	876.0	784.7	745.8	703.4
7.5°	787.1	934.4	981.7	954.3	954.4	959.5	983.2	929.8	774.4	713.3	661.4
10°	777.4	964.0	957.7	918.1	925.2	922.0	965.0	958.2	766.0	695.3	636.0
12.5°	764.4	973.3	925.8	912.9	920.7	916.2	930.6	968.2	758.8	682.4	606.8
15°	741.6	960.0	899.2	893.5	893.5	897.5	903.3	964.1	744.1	659.1	571.0
17.5°	718.2	933.6	880.7	852.5	849.5	854.7	887.3	940.4	723.1	633.2	536.4
20°	699.4	915.4	861.8	828.8	842.3	830.4	869.2	920.4	707.5	617.0	515.0
22.5°	682.5	892.8	837.8	823.7	841.7	824.1	844.5	897.7	689.3	598.8	498.7
25°	653.9	854.8	801.7	814.9	821.2	814.9	805.0	858.2	661.2	575.4	481.7
27.5°	625.5	814.8	774.8	783.6	764.2	779.1	779.1	815.0	632.3	548.3	476.5
30°	602.7	787.0	761.1	748.2	718.1	741.9	766.8	787.2	610.8	530.6	475.2
32.5°	572.8	761.5	747.5	703.0	683.6	699.8	753.8	761.0	577.7	514.6	473.9
35°	522.3	725.6	722.9	649.4	629.5	644.6	728.6	723.8	509.3	489.5	463.8
37.5°	454.6	693.6	676.0	595.2	563.6	591.2	681.3	690.2	428.4	466.4	440.3
40°	398.0	672.0	640.9	554.9	523.9	550.9	645.0	670.1	384.2	450.1	414.3
42.5°	366.2	652.9	603.9	512.3	320.5	505.7	607.9	650.5	356.9	429.2	391.5
45°	333.9	618.2	549.9	283.6	179.5	270.1	550.7	609.5	337.1	397.5	356.6
47.5°	319.7	575.5	493.5	170.8	151.6	165.9	493.1	566.1	319.9	365.6	323.3
50°	308.7	548.5	453.3	150.5	124.3	144.9	454.1	539.7	303.0	344.3	300.5
52.5°	290.5	516.4	395.4	124.7	107.4	121.7	385.8	506.2	285.4	321.0	272.0
55°	259.9	454.5	164.9	98.0	86.1	94.0	156.8	439.2	251.0	284.4	238.8
57.5°	227.6	386.9	115.7	76.3	66.8	75.5	114.9	371.4	223.4	240.9	208.3
60°	208.8	341.4	94.2	64.0	57.7	63.2	93.4	327.9	207.1	211.9	180.3
62.5°	189.9	295.2	78.0	56.3	54.4	55.5	77.8	280.4	187.0	187.3	127.0
65°	162.5	223.6	57.7	51.2	50.4	50.4	56.0	215.6	159.2	154.4	73.1
67.5°	134.5	160.6	46.3	47.1	46.3	46.3	45.5	156.0	131.3	123.2	55.2
70°	117.0	123.3	43.1	43.8	43.1	43.1	42.2	120.1	113.7	95.5	52.0
72.5°	100.1	84.2	39.8	40.0	39.8	39.8	39.0	79.0	96.8	67.1	47.4
75°	75.5	42.2	34.1	34.1	34.1	34.1	33.3	40.5	72.3	43.7	40.6
77.5°	52.5	27.9	28.3	28.1	28.1	27.5	27.5	27.6	49.4	30.2	32.8
80°	38.2	23.1	24.4	23.6	23.6	23.6	23.6	22.2	35.7	25.4	27.6
82.5°	27.1	18.4	19.8	19.0	19.0	19.0	19.0	18.2	24.7	20.7	22.4
85°	13.0	12.2	13.0	11.4	10.6	11.4	12.2	12.2	11.4	13.8	14.6
87.5°	3.9	7.2	8.1	8.2	8.2	8.2	7.4	6.6	3.2	7.8	8.7
90°	0.0	7.0	14.4	21.6	21.6	21.6	14.4	7.0	0.0	7.0	14.4
92.5°	17.3	24.4	31.7	44.8	50.5	44.8	31.7	24.4	17.3	24.4	31.7
95°	57.7	107.0	57.7	65.2	79.3	65.2	57.7	107.0	57.7	107.0	57.7
97.5°	102.4	205.3	423.9	125.1	108.1	125.1	423.9	205.3	102.4	205.3	423.9
100°	137.0	256.8	850.7	250.4	165.8	250.4	850.7	256.8	137.0	256.8	850.7
102.5°	171.6	297.1	1150.6	660.8	361.9	660.8	1150.6	297.1	171.6	297.1	1150.6
105°	223.5	343.3	1304.9	1667.0	1103.0	1667.0	1304.9	343.3	223.5	343.3	1304.9
107.5°	275.4	365.6	1245.8	2426.1	2272.4	2426.1	1245.8	365.6	275.4	365.6	1245.8
110°	310.0	394.6	1211.2	2549.2	2739.5	2549.2	1211.2	394.6	310.0	394.6	1211.2



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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°	344.6	429.2	1176.6	2477.2	2797.2	2477.2	1176.6	429.2	344.6	429.2	1176.6
115°	396.5	481.1	1124.7	2337.6	2732.3	2337.6	1124.7	481.1	396.5	481.1	1124.7
117.5°	449.9	533.0	1111.7	2186.4	2592.5	2186.4	1111.7	533.0	449.9	533.0	1111.7
120°	490.2	567.8	1088.6	2071.5	2494.4	2071.5	1088.6	567.8	490.2	567.8	1088.6
122.5°	519.1	602.3	1059.8	1972.7	2361.8	1972.7	1059.8	602.3	519.1	602.3	1059.8
125°	569.5	647.1	1059.8	1853.3	2191.6	1853.3	1059.8	647.1	569.5	647.1	1059.8
127.5°	611.4	690.3	1061.2	1714.8	2048.9	1714.8	1061.2	690.3	611.4	690.3	1061.2
130°	634.4	719.0	1067.0	1622.1	1939.3	1622.1	1067.0	719.0	634.4	719.0	1067.0
132.5°	663.3	747.8	1067.0	1580.4	1841.3	1580.4	1067.0	747.8	663.3	747.8	1067.0
135°	706.5	784.1	1067.0	1526.3	1751.9	1526.3	1067.0	784.1	706.5	784.1	1067.0
137.5°	742.6	825.7	1067.0	1466.4	1659.6	1466.4	1067.0	825.7	742.6	825.7	1067.0
140°	771.4	848.9	1067.0	1431.5	1607.7	1431.5	1067.0	848.9	771.4	848.9	1067.0
142.5°	800.2	872.1	1072.7	1390.8	1555.8	1390.8	1072.7	872.1	800.2	872.1	1072.7
145°	836.3	906.8	1074.2	1329.7	1470.7	1329.7	1074.2	906.8	836.3	906.8	1074.2
147.5°	879.5	941.6	1082.8	1285.7	1394.3	1285.7	1082.8	941.6	879.5	941.6	1082.8
150°	908.4	964.8	1088.6	1256.5	1348.1	1256.5	1088.6	964.8	908.4	964.8	1088.6
152.5°	937.2	988.0	1088.6	1233.1	1307.8	1233.1	1088.6	988.0	937.2	988.0	1088.6
155°	980.5	1015.7	1095.8	1205.2	1261.6	1205.2	1095.8	1015.7	980.5	1015.7	1095.8
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5	1187.6	1104.5	1048.9	1015.1	1048.9	1104.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2	1175.9	1110.2	1066.3	1038.1	1066.3	1110.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9	1169.9	1116.0	1083.6	1055.4	1083.6	1116.0
165°	1088.6	1102.7	1124.7	1154.0	1175.1	1154.0	1124.7	1102.7	1088.6	1102.7	1124.7
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3	1146.6	1131.9	1120.0	1107.4	1120.0	1131.9
170°	1124.7	1131.7	1131.9	1146.4	1153.5	1146.4	1131.9	1131.7	1124.7	1131.7	1131.9
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7	1140.7	1137.6	1143.1	1130.4	1143.1	1137.6
175°	1146.3	1153.3	1146.3	1138.9	1131.9	1138.9	1146.3	1153.3	1146.3	1153.3	1146.3
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5	1146.2	1146.3	1151.9	1146.3	1151.9	1146.3
180°	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	798.5	798.5	798.5	798.5	798.5	798.5
2.5°	746.5	745.8	747.1	758.2	780.7	801.1
5°	679.9	682.3	684.7	703.4	742.8	796.9
7.5°	628.8	625.3	630.7	661.2	709.6	787.1
10°	593.6	585.7	593.6	635.2	691.6	777.4
12.5°	560.4	550.6	563.0	608.6	676.7	764.4
15°	517.6	527.2	521.6	572.7	654.3	741.6
17.5°	527.8	575.8	537.9	541.5	632.0	718.2
20°	551.9	601.1	567.7	520.7	617.6	699.4
22.5°	573.7	610.8	580.7	503.1	603.2	682.5
25°	590.4	622.2	588.9	487.4	582.4	653.9
27.5°	591.3	595.7	591.6	486.1	556.7	625.5
30°	580.4	561.3	578.8	487.4	538.4	602.7
32.5°	549.1	527.5	542.4	484.8	519.9	572.8
35°	504.6	476.0	496.7	471.1	491.3	522.3
37.5°	457.6	421.4	450.0	444.2	466.9	454.6
40°	425.8	362.3	419.5	417.5	453.6	398.0
42.5°	385.1	331.1	379.4	396.1	438.9	366.2
45°	311.0	304.6	307.8	359.8	407.7	333.9
47.5°	284.4	280.1	282.8	326.9	372.5	319.7
50°	268.7	263.2	267.2	305.4	350.0	308.7
52.5°	247.1	232.0	245.5	276.2	326.7	290.5
55°	185.8	140.5	185.0	242.9	291.7	259.9
57.5°	109.0	81.2	106.6	211.4	247.1	227.6
60°	73.8	68.2	74.6	186.0	217.5	208.8
62.5°	67.4	65.6	67.5	129.5	191.0	189.9
65°	61.7	60.9	61.7	74.7	157.7	162.5
67.5°	55.9	55.1	56.5	57.3	124.5	134.5
70°	52.0	51.2	52.0	52.8	95.5	117.0
72.5°	47.4	46.6	47.4	48.3	67.2	100.1
75°	40.6	39.8	40.6	41.4	44.6	75.5
77.5°	32.8	32.8	33.6	33.6	31.2	52.5
80°	27.6	27.6	28.4	28.4	27.1	38.2
82.5°	22.4	21.8	23.2	23.9	22.4	27.1
85°	13.8	13.0	14.6	15.4	14.6	13.0
87.5°	9.5	8.9	10.1	10.0	8.5	3.9
90°	21.6	21.6	21.6	14.4	7.0	0.0
92.5°	44.8	50.5	44.8	31.7	24.4	17.3
95°	65.2	79.3	65.2	57.7	107.0	57.7
97.5°	125.1	108.1	125.1	423.9	205.3	102.4
100°	250.4	165.8	250.4	850.7	256.8	137.0
102.5°	660.8	361.9	660.8	1150.6	297.1	171.6
105°	1667.0	1103.0	1667.0	1304.9	343.3	223.5
107.5°	2426.1	2272.4	2426.1	1245.8	365.6	275.4
110°	2549.2	2739.5	2549.2	1211.2	394.6	310.0





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2477.2	2797.2	2477.2	1176.6	429.2	344.6
115°	2337.6	2732.3	2337.6	1124.7	481.1	396.5
117.5°	2186.4	2592.5	2186.4	1111.7	533.0	449.9
120°	2071.5	2494.4	2071.5	1088.6	567.8	490.2
122.5°	1972.7	2361.8	1972.7	1059.8	602.3	519.1
125°	1853.3	2191.6	1853.3	1059.8	647.1	569.5
127.5°	1714.8	2048.9	1714.8	1061.2	690.3	611.4
130°	1622.1	1939.3	1622.1	1067.0	719.0	634.4
132.5°	1580.4	1841.3	1580.4	1067.0	747.8	663.3
135°	1526.3	1751.9	1526.3	1067.0	784.1	706.5
137.5°	1466.4	1659.6	1466.4	1067.0	825.7	742.6
140°	1431.5	1607.7	1431.5	1067.0	848.9	771.4
142.5°	1390.8	1555.8	1390.8	1072.7	872.1	800.2
145°	1329.7	1470.7	1329.7	1074.2	906.8	836.3
147.5°	1285.7	1394.3	1285.7	1082.8	941.6	879.5
150°	1256.5	1348.1	1256.5	1088.6	964.8	908.4
152.5°	1233.1	1307.8	1233.1	1088.6	988.0	937.2
155°	1205.2	1261.6	1205.2	1095.8	1015.7	980.5
157.5°	1187.6	1228.5	1187.6	1104.5	1048.9	1015.1
160°	1175.9	1211.2	1175.9	1110.2	1066.3	1038.1
162.5°	1169.9	1193.9	1169.9	1116.0	1083.6	1055.4
165°	1154.0	1175.1	1154.0	1124.7	1102.7	1088.6
167.5°	1146.6	1159.3	1146.6	1131.9	1120.0	1107.4
170°	1146.4	1153.5	1146.4	1131.9	1131.7	1124.7
172.5°	1140.7	1147.7	1140.7	1137.6	1143.1	1130.4
175°	1138.9	1131.9	1138.9	1146.3	1153.3	1146.3
177.5°	1146.2	1140.5	1146.2	1146.3	1151.9	1146.3
180°	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3

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