

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: P621623

Luminaire Tested: VLT-FA-050U-125D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621623  
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-050U-125D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

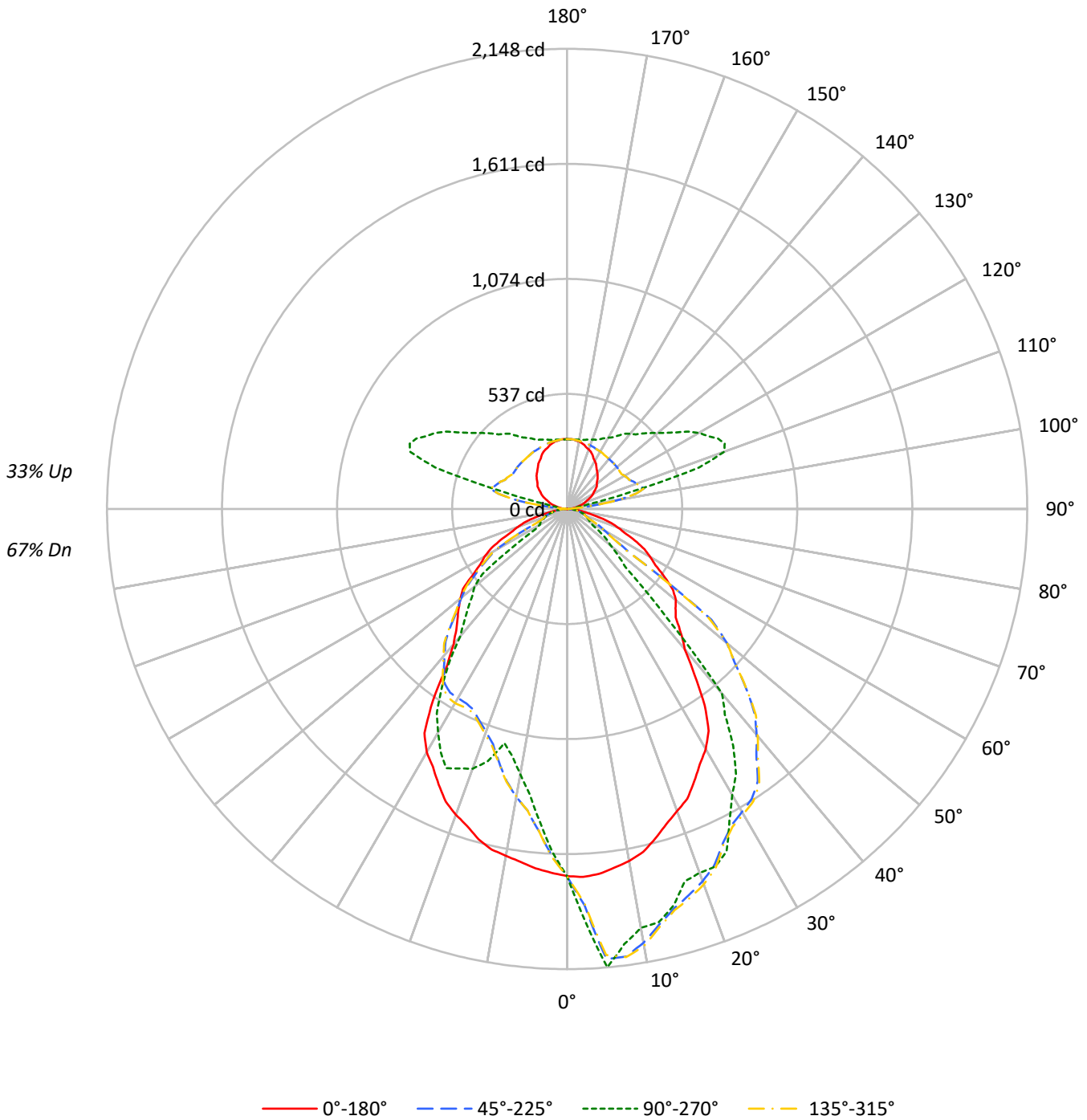
Lumens per Lamp: N/A  
Luminaire Lumens: 5286.4 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 53.3  
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



TEST NUMBER: P621623  
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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	50	30	10	0	
RCR																						
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67				
1	103	99	95	92	97	93	90	87	83	81	79	74	72	70	65	64	63	59				
2	94	88	82	77	89	83	78	74	74	70	67	66	63	61	59	56	55	51				
3	87	78	71	65	82	74	68	63	66	62	58	59	56	53	53	50	48	44				
4	80	70	62	56	75	66	60	54	60	54	50	54	49	46	48	45	42	39				
5	74	63	55	49	70	60	53	47	54	48	44	49	44	41	44	40	37	34				
6	68	57	49	43	65	54	47	42	49	43	39	44	40	36	40	36	33	31				
7	64	52	44	38	60	49	42	37	45	39	35	41	36	32	37	33	30	28				
8	59	47	40	34	56	45	38	33	41	35	31	37	33	29	34	30	27	25				
9	55	43	36	31	52	41	35	30	38	32	28	35	30	26	31	28	25	23				
10	52	40	33	28	49	38	32	27	35	30	26	32	27	24	29	25	23	21				

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

	0°	90°	180°	270°
0°	12296	12296	12296	12296
5°	12318	15469	12129	10547
10°	12155	14467	11977	9158
15°	11823	14245	11862	8405
20°	11461	13804	11594	9850
25°	11110	13953	11235	10572
30°	10717	12768	10861	9981
35°	9818	11834	9574	8948
40°	8001	10532	7724	7282
45°	7270	3909	7341	6634
50°	7395	2977	7259	6305
55°	6979	2312	6738	3773
60°	6430	1777	6379	2101
65°	5919	1836	5800	2219
70°	5266	1939	5119	2304
75°	4494	2030	4300	2368
80°	3384	2087	3170	2451
85°	2297	1869	2009	2297

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 13463 cd/sqm



TEST NUMBER: P621623

CATALOG NUMBER: VLT-FA-050U-125D-935-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	165.3	3.1
10°-20°	452.8	8.6
20°-30°	677.5	12.8
30°-40°	770.5	14.6
40°-50°	659.0	12.5
50°-60°	444.4	8.4
60°-70°	229.4	4.3
70°-80°	103.6	2.0
80°-90°	31.6	0.6
90°-100°	40.1	0.8
100°-110°	285.8	5.4
110°-120°	388.0	7.3
120°-130°	315.8	6.0
130°-140°	254.0	4.8
140°-150°	200.3	3.8
150°-160°	146.4	2.8
160°-170°	90.9	1.7
170°-180°	31.0	0.6
0°-30°	1295.6	24.5
0°-40°	2066.1	39.1
0°-60°	3169.5	60.0
0°-90°	3534.0	66.8
90°-120°	714.0	13.5
90°-150°	1484.1	28.1
90°-180°	1752.0	33.1
0°-180°	5286.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1714	1714	1714	1714	1714	
5°	1710	2148	1684	1464	1710	162
15°	1591	1917	1597	1131	1591	448
25°	1403	1762	1419	1335	1403	646
35°	1121	1351	1093	1021	1121	685
45°	716	385	723	654	716	568
55°	558	185	539	302	558	497
65°	349	108	342	131	349	345
75°	162	73	155	85	162	173
85°	28	23	24	28	28	36
90°	0	6	0	6	0	2
95°	16	23	16	23	16	18
105°	64	314	64	314	64	67
115°	113	778	113	778	113	112
125°	162	624	162	624	162	144
135°	201	499	201	499	201	155
145°	238	419	238	419	238	149
155°	279	359	279	359	279	128
165°	310	334	310	334	310	87
175°	326	322	326	322	326	31
180°	326	326	326	326	326	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1713.5	1713.5	1713.5	1713.5	1713.5	1713.5	1713.5	1713.5	1713.5	1713.5	1713.5
2.5°	1719.0	1777.7	1851.5	1902.2	1924.0	1902.2	1839.0	1777.2	1699.5	1676.3	1621.4
5°	1710.0	1890.6	2109.1	2135.5	2147.5	2135.5	2090.0	1879.8	1683.8	1600.3	1509.5
7.5°	1689.0	2005.0	2106.7	2047.8	2048.1	2059.0	2109.8	1995.2	1661.9	1530.6	1419.2
10°	1668.1	2068.7	2055.1	1970.0	1985.4	1978.6	2070.8	2056.2	1643.7	1492.0	1364.8
12.5°	1640.2	2088.5	1986.8	1958.9	1975.6	1966.1	1996.9	2077.7	1628.4	1464.4	1302.1
15°	1591.4	2060.1	1929.6	1917.4	1917.4	1925.9	1938.3	2068.8	1596.7	1414.3	1225.4
17.5°	1541.2	2003.5	1889.9	1829.4	1822.9	1834.2	1904.1	2018.0	1551.7	1358.8	1151.1
20°	1500.8	1964.4	1849.4	1778.6	1807.6	1782.0	1865.1	1975.0	1518.2	1323.9	1105.1
22.5°	1464.5	1915.9	1797.8	1767.7	1806.2	1768.3	1812.1	1926.4	1479.2	1284.9	1070.3
25°	1403.2	1834.4	1720.4	1748.6	1762.3	1748.6	1727.4	1841.5	1418.9	1234.8	1033.6
27.5°	1342.2	1748.5	1662.6	1681.5	1639.9	1671.9	1672.0	1748.8	1356.8	1176.5	1022.5
30°	1293.4	1688.8	1633.3	1605.7	1540.9	1592.0	1645.5	1689.2	1310.8	1138.7	1019.7
32.5°	1229.2	1634.2	1604.0	1508.6	1467.0	1501.7	1617.6	1633.0	1239.7	1104.4	1016.9
35°	1120.8	1557.1	1551.3	1393.5	1350.9	1383.3	1563.5	1553.1	1092.9	1050.3	995.3
37.5°	975.4	1488.4	1450.6	1277.2	1209.4	1268.7	1462.1	1481.1	919.3	1000.8	944.8
40°	854.1	1442.1	1375.3	1190.8	1124.3	1182.2	1384.0	1438.0	824.5	965.9	889.0
42.5°	785.8	1401.1	1295.8	1099.3	687.8	1085.3	1304.5	1395.8	765.9	921.0	840.2
45°	716.4	1326.6	1180.1	608.5	385.2	579.5	1181.8	1308.0	723.4	852.9	765.2
47.5°	686.1	1234.9	1059.1	366.5	325.3	355.9	1058.1	1214.8	686.4	784.6	693.7
50°	662.4	1177.1	972.6	322.9	266.7	311.0	974.4	1158.1	650.2	738.8	644.9
52.5°	623.3	1108.0	848.5	267.6	230.4	261.1	828.0	1086.3	612.5	688.9	583.6
55°	557.8	975.4	353.8	210.3	184.8	201.8	336.4	942.5	538.6	610.2	512.5
57.5°	488.4	830.3	248.2	163.7	143.3	162.0	246.5	797.0	479.3	516.8	446.9
60°	448.0	732.6	202.2	137.4	123.8	135.7	200.5	703.5	444.5	454.7	387.0
62.5°	407.5	633.5	167.3	120.9	116.8	119.2	167.0	601.7	401.3	401.9	272.6
65°	348.6	479.9	123.8	109.8	108.1	108.1	120.3	462.7	341.6	331.4	156.9
67.5°	288.7	344.6	99.4	101.1	99.4	99.4	97.6	334.9	281.7	264.3	118.5
70°	251.0	264.6	92.4	94.1	92.4	92.4	90.6	257.7	244.0	204.8	111.6
72.5°	214.7	180.7	85.4	85.8	85.4	85.4	83.7	169.6	207.8	144.0	101.8
75°	162.1	90.5	73.2	73.2	73.2	73.2	71.5	87.0	155.1	93.8	87.2
77.5°	112.6	59.8	60.7	60.3	60.3	58.9	58.9	59.3	106.0	64.7	70.4
80°	81.9	49.5	52.3	50.5	50.5	50.5	50.5	47.7	76.7	54.5	59.3
82.5°	58.2	39.5	42.5	40.8	40.8	40.8	40.8	39.0	53.0	44.5	48.1
85°	27.9	26.2	27.9	24.4	22.7	24.4	26.1	26.1	24.4	29.5	31.4
87.5°	8.4	12.9	12.0	9.6	9.6	9.6	10.6	11.5	7.0	14.2	13.4
90°	0.0	2.0	4.1	6.2	6.2	6.2	4.1	2.0	0.0	2.0	4.1
92.5°	4.9	6.9	9.0	12.8	14.4	12.8	9.0	6.9	4.9	6.9	9.0
95°	16.4	30.5	16.4	18.6	22.6	18.6	16.4	30.5	16.4	30.5	16.4
97.5°	29.1	58.4	120.6	35.6	30.8	35.6	120.6	58.4	29.1	58.4	120.6
100°	39.0	73.1	242.1	71.3	47.2	71.3	242.1	73.1	39.0	73.1	242.1
102.5°	48.8	84.5	327.5	188.1	103.0	188.1	327.5	84.5	48.8	84.5	327.5
105°	63.6	97.7	371.4	474.4	313.9	474.4	371.4	97.7	63.6	97.7	371.4
107.5°	78.4	104.1	354.6	690.5	646.7	690.5	354.6	104.1	78.4	104.1	354.6
110°	88.2	112.3	344.7	725.5	779.7	725.5	344.7	112.3	88.2	112.3	344.7



TEST NUMBER: P621623

CATALOG NUMBER: VLT-FA-050U-125D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	98.1	122.2	334.9	705.0	796.1	705.0	334.9	122.2	98.1	122.2	334.9
115°	112.9	136.9	320.1	665.3	777.6	665.3	320.1	136.9	112.9	136.9	320.1
117.5°	128.0	151.7	316.4	622.3	737.8	622.3	316.4	151.7	128.0	151.7	316.4
120°	139.5	161.6	309.8	589.6	709.9	589.6	309.8	161.6	139.5	161.6	309.8
122.5°	147.7	171.4	301.6	561.4	672.2	561.4	301.6	171.4	147.7	171.4	301.6
125°	162.1	184.2	301.6	527.5	623.8	527.5	301.6	184.2	162.1	184.2	301.6
127.5°	174.0	196.5	302.0	488.0	583.1	488.0	302.0	196.5	174.0	196.5	302.0
130°	180.6	204.6	303.7	461.7	551.9	461.7	303.7	204.6	180.6	204.6	303.7
132.5°	188.8	212.8	303.7	449.8	524.0	449.8	303.7	212.8	188.8	212.8	303.7
135°	201.1	223.1	303.7	434.4	498.6	434.4	303.7	223.1	201.1	223.1	303.7
137.5°	211.3	235.0	303.7	417.4	472.3	417.4	303.7	235.0	211.3	235.0	303.7
140°	219.5	241.6	303.7	407.4	457.6	407.4	303.7	241.6	219.5	241.6	303.7
142.5°	227.8	248.2	305.3	395.8	442.8	395.8	305.3	248.2	227.8	248.2	305.3
145°	238.0	258.1	305.7	378.4	418.6	378.4	305.7	258.1	238.0	258.1	305.7
147.5°	250.3	268.0	308.2	365.9	396.8	365.9	308.2	268.0	250.3	268.0	308.2
150°	258.5	274.6	309.8	357.6	383.7	357.6	309.8	274.6	258.5	274.6	309.8
152.5°	266.7	281.2	309.8	350.9	372.2	350.9	309.8	281.2	266.7	281.2	309.8
155°	279.0	289.1	311.9	343.0	359.1	343.0	311.9	289.1	279.0	289.1	311.9
157.5°	288.9	298.5	314.3	338.0	349.6	338.0	314.3	298.5	288.9	298.5	314.3
160°	295.5	303.5	316.0	334.7	344.7	334.7	316.0	303.5	295.5	303.5	316.0
162.5°	300.4	308.4	317.6	333.0	339.8	333.0	317.6	308.4	300.4	308.4	317.6
165°	309.8	313.8	320.1	328.4	334.4	328.4	320.1	313.8	309.8	313.8	320.1
167.5°	315.2	318.8	322.1	326.3	329.9	326.3	322.1	318.8	315.2	318.8	322.1
170°	320.1	322.1	322.1	326.3	328.3	326.3	322.1	322.1	320.1	322.1	322.1
172.5°	321.7	325.3	323.8	324.6	326.7	324.6	323.8	325.3	321.7	325.3	323.8
175°	326.2	328.2	326.2	324.1	322.1	324.1	326.2	328.2	326.2	328.2	326.2
177.5°	326.2	327.8	326.2	326.2	324.6	326.2	326.2	327.8	326.2	327.8	326.2
180°	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2	326.2



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CATALOG NUMBER: VLT-FA-050U-125D-935-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1713.5	1713.5	1713.5	1713.5	1713.5	1713.5
2.5°	1601.9	1600.5	1603.2	1627.0	1675.4	1719.0
5°	1459.1	1464.2	1469.3	1509.5	1594.1	1710.0
7.5°	1349.3	1341.8	1353.4	1418.9	1522.7	1689.0
10°	1273.8	1256.8	1273.8	1363.1	1484.1	1668.1
12.5°	1202.6	1181.5	1208.1	1305.9	1452.1	1640.2
15°	1110.8	1131.3	1119.3	1228.9	1404.0	1591.4
17.5°	1132.6	1235.5	1154.4	1161.9	1356.1	1541.2
20°	1184.2	1289.9	1218.3	1117.3	1325.2	1500.8
22.5°	1231.0	1310.8	1246.0	1079.7	1294.4	1464.5
25°	1267.0	1335.2	1263.6	1045.9	1249.8	1403.2
27.5°	1268.8	1278.4	1269.5	1043.1	1194.6	1342.2
30°	1245.4	1204.5	1242.0	1045.9	1155.3	1293.4
32.5°	1178.3	1132.0	1164.0	1040.3	1115.7	1229.2
35°	1082.8	1021.4	1065.8	1011.0	1054.3	1120.8
37.5°	982.0	904.3	965.7	953.1	1002.0	975.4
40°	913.8	777.4	900.1	895.9	973.4	854.1
42.5°	826.4	710.5	814.1	849.9	941.9	785.8
45°	667.3	653.7	660.5	772.2	874.9	716.4
47.5°	610.2	601.0	606.8	701.4	799.2	686.1
50°	576.7	564.8	573.3	655.4	751.0	662.4
52.5°	530.2	497.8	526.8	592.6	701.0	623.3
55°	398.7	301.6	397.0	521.2	626.0	557.8
57.5°	234.0	174.3	228.8	453.6	530.3	488.4
60°	158.3	146.4	160.1	399.2	466.7	448.0
62.5°	144.6	140.8	144.9	277.8	409.9	407.5
65°	132.4	130.7	132.4	160.4	338.4	348.6
67.5°	119.9	118.2	121.2	123.1	267.2	288.7
70°	111.5	109.8	111.5	113.3	205.0	251.0
72.5°	101.8	100.1	101.8	103.5	144.2	214.7
75°	87.1	85.4	87.1	88.9	95.6	162.1
77.5°	70.4	70.4	72.1	72.2	66.9	112.6
80°	59.3	59.3	61.0	61.0	58.1	81.9
82.5°	48.1	46.7	49.8	51.2	48.0	58.2
85°	29.6	27.9	31.3	33.1	31.3	27.9
87.5°	12.4	11.0	13.7	16.2	15.6	8.4
90°	6.2	6.2	6.2	4.1	2.0	0.0
92.5°	12.8	14.4	12.8	9.0	6.9	4.9
95°	18.6	22.6	18.6	16.4	30.5	16.4
97.5°	35.6	30.8	35.6	120.6	58.4	29.1
100°	71.3	47.2	71.3	242.1	73.1	39.0
102.5°	188.1	103.0	188.1	327.5	84.5	48.8
105°	474.4	313.9	474.4	371.4	97.7	63.6
107.5°	690.5	646.7	690.5	354.6	104.1	78.4
110°	725.5	779.7	725.5	344.7	112.3	88.2





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	705.0	796.1	705.0	334.9	122.2	98.1
115°	665.3	777.6	665.3	320.1	136.9	112.9
117.5°	622.3	737.8	622.3	316.4	151.7	128.0
120°	589.6	709.9	589.6	309.8	161.6	139.5
122.5°	561.4	672.2	561.4	301.6	171.4	147.7
125°	527.5	623.8	527.5	301.6	184.2	162.1
127.5°	488.0	583.1	488.0	302.0	196.5	174.0
130°	461.7	551.9	461.7	303.7	204.6	180.6
132.5°	449.8	524.0	449.8	303.7	212.8	188.8
135°	434.4	498.6	434.4	303.7	223.1	201.1
137.5°	417.4	472.3	417.4	303.7	235.0	211.3
140°	407.4	457.6	407.4	303.7	241.6	219.5
142.5°	395.8	442.8	395.8	305.3	248.2	227.8
145°	378.4	418.6	378.4	305.7	258.1	238.0
147.5°	365.9	396.8	365.9	308.2	268.0	250.3
150°	357.6	383.7	357.6	309.8	274.6	258.5
152.5°	350.9	372.2	350.9	309.8	281.2	266.7
155°	343.0	359.1	343.0	311.9	289.1	279.0
157.5°	338.0	349.6	338.0	314.3	298.5	288.9
160°	334.7	344.7	334.7	316.0	303.5	295.5
162.5°	333.0	339.8	333.0	317.6	308.4	300.4
165°	328.4	334.4	328.4	320.1	313.8	309.8
167.5°	326.3	329.9	326.3	322.1	318.8	315.2
170°	326.3	328.3	326.3	322.1	322.1	320.1
172.5°	324.6	326.7	324.6	323.8	325.3	321.7
175°	324.1	322.1	324.1	326.2	328.2	326.2
177.5°	326.2	324.6	326.2	326.2	327.8	326.2
180°	326.2	326.2	326.2	326.2	326.2	326.2

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