

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: P621602

Luminaire Tested: VLT-FA-050U-050D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621602  
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-050D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

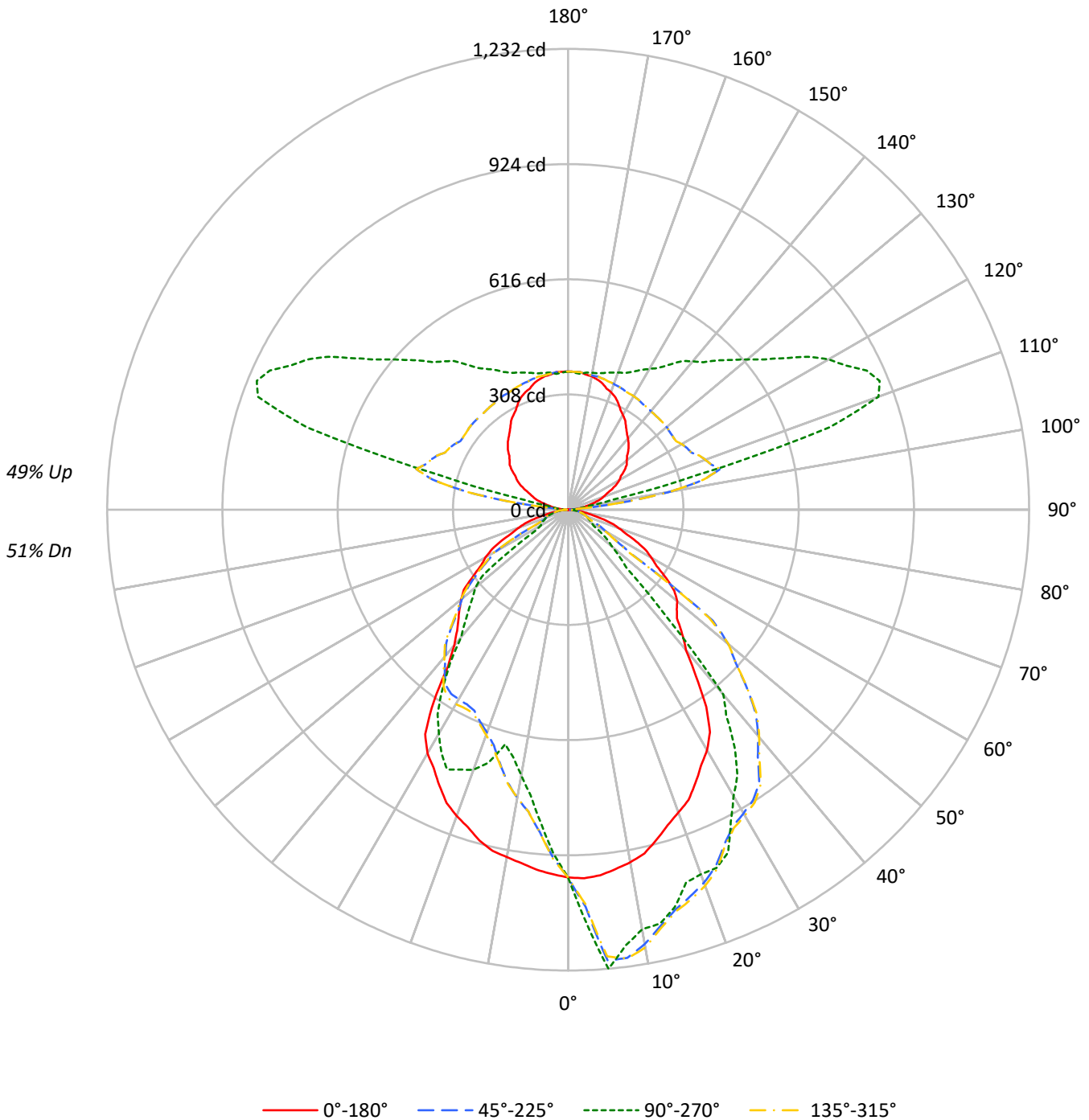
Lumens per Lamp: N/A  
Luminaire Lumens: 4011.1 lumens  
Efficiency: N/A  
Efficacy: 138.3 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 29  
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: P621602  
CATALOG NUMBER: VLT-FA-050U-050D-835-UNV-STD-W-4

### 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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51	51	51	51	
1	99	95	91	88	91	88	85	82	75	72	70	63	61	60	51	50	49	44	44	44	44	
2	91	84	78	73	84	78	73	69	66	63	60	56	53	51	46	45	43	38	38	38	38	
3	83	74	67	62	77	69	63	58	59	55	51	50	47	44	42	39	38	34	34	34	34	
4	76	66	59	53	71	62	55	50	53	48	44	45	42	39	38	35	33	29	29	29	29	
5	70	59	52	46	65	55	49	44	48	43	39	41	37	34	34	32	29	26	26	26	26	
6	65	54	46	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23	23	23	23	
7	60	49	41	36	56	45	39	34	40	34	30	34	30	27	29	26	23	21	21	21	21	
8	56	44	37	32	52	42	35	30	36	31	27	31	27	24	27	23	21	19	19	19	19	
9	52	41	33	28	49	38	32	27	33	28	24	29	25	22	25	22	19	17	17	17	17	
10	49	37	30	26	45	35	29	24	31	26	22	27	23	20	23	20	18	16	16	16	16	

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

	0°	90°	180°	270°
0°	7054	7054	7054	7054
5°	7066	8875	6958	6051
10°	6973	8299	6871	5254
15°	6783	8172	6805	4821
20°	6575	7919	6651	5651
25°	6374	8005	6445	6065
30°	6148	7325	6231	5726
35°	5633	6789	5493	5133
40°	4590	6042	4431	4178
45°	4171	2243	4212	3806
50°	4242	1708	4164	3617
55°	4003	1326	3866	2164
60°	3688	1019	3660	1206
65°	3396	1053	3328	1273
70°	3021	1112	2937	1322
75°	2578	1164	2468	1359
80°	1942	1198	1818	1405
85°	1317	1070	1153	1317

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 7723 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.8	2.4
10°-20°	259.8	6.5
20°-30°	388.7	9.7
30°-40°	442.0	11.0
40°-50°	378.0	9.4
50°-60°	254.9	6.4
60°-70°	131.6	3.3
70°-80°	59.4	1.5
80°-90°	18.5	0.5
90°-100°	45.4	1.1
100°-110°	323.5	8.1
110°-120°	439.1	10.9
120°-130°	357.4	8.9
130°-140°	287.5	7.2
140°-150°	226.6	5.7
150°-160°	165.7	4.1
160°-170°	102.9	2.6
170°-180°	35.1	0.9
0°-30°	743.3	18.5
0°-40°	1185.3	29.6
0°-60°	1818.3	45.3
0°-90°	2027.8	50.6
90°-120°	808.0	20.1
90°-150°	1679.5	41.9
90°-180°	1983.0	49.4
0°-180°	4011.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	983	983	983	983	983	
5°	981	1232	966	840	981	93
15°	913	1100	916	649	913	257
25°	805	1011	814	766	805	370
35°	643	775	627	586	643	393
45°	411	221	415	375	411	326
55°	320	106	309	173	320	285
65°	200	62	196	75	200	198
75°	93	42	89	49	93	99
85°	16	13	14	16	16	20
90°	0	7	0	7	0	1
95°	19	26	19	26	19	21
105°	72	355	72	355	72	76
115°	128	880	128	880	128	127
125°	183	706	183	706	183	163
135°	228	564	228	564	228	175
145°	269	474	269	474	269	169
155°	316	406	316	406	316	145
165°	351	378	351	378	351	98
175°	369	365	369	365	369	35
180°	369	369	369	369	369	



TEST NUMBER: P621602

CATALOG NUMBER: VLT-FA-050U-050D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	986.2	1019.8	1062.2	1091.3	1103.8	1091.3	1055.0	1019.6	975.0	961.7	930.2
5°	981.0	1084.6	1210.0	1225.2	1232.0	1225.2	1199.0	1078.4	966.0	918.1	866.0
7.5°	969.0	1150.3	1208.6	1174.8	1175.0	1181.3	1210.4	1144.7	953.4	878.1	814.2
10°	957.0	1186.8	1179.0	1130.2	1139.0	1135.1	1188.0	1179.6	943.0	856.0	783.0
12.5°	941.0	1198.2	1139.8	1123.8	1133.4	1127.9	1145.6	1191.9	934.2	840.1	747.0
15°	913.0	1181.9	1107.0	1100.0	1100.0	1104.9	1112.0	1186.8	916.0	811.4	703.0
17.5°	884.2	1149.4	1084.2	1049.5	1045.8	1052.3	1092.4	1157.7	890.2	779.5	660.4
20°	861.0	1127.0	1061.0	1020.4	1037.0	1022.3	1070.0	1133.0	871.0	759.5	634.0
22.5°	840.2	1099.1	1031.4	1014.1	1036.2	1014.5	1039.6	1105.2	848.6	737.1	614.0
25°	805.0	1052.4	987.0	1003.2	1011.0	1003.2	991.0	1056.5	814.0	708.4	593.0
27.5°	770.0	1003.1	953.8	964.7	940.8	959.2	959.2	1003.3	778.4	675.0	586.6
30°	742.0	968.8	937.0	921.2	884.0	913.3	944.0	969.1	752.0	653.2	585.0
32.5°	705.2	937.5	920.2	865.5	841.6	861.5	928.0	936.9	711.2	633.6	583.4
35°	643.0	893.3	890.0	799.4	775.0	793.6	897.0	891.0	627.0	602.6	571.0
37.5°	559.6	853.9	832.2	732.7	693.8	727.8	838.8	849.7	527.4	574.1	542.0
40°	490.0	827.3	789.0	683.1	645.0	678.2	794.0	825.0	473.0	554.2	510.0
42.5°	450.8	803.8	743.4	630.6	394.6	622.6	748.4	800.8	439.4	528.4	482.0
45°	411.0	761.0	677.0	349.1	221.0	332.5	678.0	750.4	415.0	489.3	439.0
47.5°	393.6	708.4	607.6	210.3	186.6	204.2	607.0	696.9	393.8	450.1	398.0
50°	380.0	675.3	558.0	185.3	153.0	178.4	559.0	664.4	373.0	423.8	370.0
52.5°	357.6	635.7	486.8	153.5	132.2	149.8	475.0	623.2	351.4	395.2	334.8
55°	320.0	559.6	203.0	120.7	106.0	115.8	193.0	540.7	309.0	350.1	294.0
57.5°	280.2	476.3	142.4	93.9	82.2	93.0	141.4	457.3	275.0	296.5	256.4
60°	257.0	420.3	116.0	78.8	71.0	77.8	115.0	403.6	255.0	260.9	222.0
62.5°	233.8	363.5	96.0	69.3	67.0	68.4	95.8	345.2	230.2	230.6	156.4
65°	200.0	275.3	71.0	63.0	62.0	62.0	69.0	265.4	196.0	190.1	90.0
67.5°	165.6	197.7	57.0	58.0	57.0	57.0	56.0	192.1	161.6	151.6	68.0
70°	144.0	151.8	53.0	54.0	53.0	53.0	52.0	147.8	140.0	117.5	64.0
72.5°	123.2	103.6	49.0	49.2	49.0	49.0	48.0	97.3	119.2	82.6	58.4
75°	93.0	51.9	42.0	42.0	42.0	42.0	41.0	49.9	89.0	53.8	50.0
77.5°	64.6	34.3	34.8	34.6	34.6	33.8	33.8	34.0	60.8	37.1	40.4
80°	47.0	28.4	30.0	29.0	29.0	29.0	29.0	27.4	44.0	31.3	34.0
82.5°	33.4	22.6	24.4	23.4	23.4	23.4	23.4	22.4	30.4	25.5	27.6
85°	16.0	15.0	16.0	14.0	13.0	14.0	15.0	15.0	14.0	16.9	18.0
87.5°	4.8	7.6	7.3	6.2	6.2	6.2	6.5	6.8	4.0	8.4	8.1
90°	0.0	2.3	4.6	7.0	7.0	7.0	4.6	2.3	0.0	2.3	4.6
92.5°	5.6	7.8	10.2	14.4	16.3	14.4	10.2	7.8	5.6	7.8	10.2
95°	18.6	34.5	18.6	21.0	25.5	21.0	18.6	34.5	18.6	34.5	18.6
97.5°	33.0	66.1	136.5	40.3	34.8	40.3	136.5	66.1	33.0	66.1	136.5
100°	44.1	82.7	274.0	80.7	53.4	80.7	274.0	82.7	44.1	82.7	274.0
102.5°	55.3	95.7	370.6	212.8	116.6	212.8	370.6	95.7	55.3	95.7	370.6
105°	72.0	110.6	420.3	536.9	355.3	536.9	420.3	110.6	72.0	110.6	420.3
107.5°	88.7	117.8	401.2	781.4	731.9	781.4	401.2	117.8	88.7	117.8	401.2
110°	99.8	127.1	390.1	821.1	882.4	821.1	390.1	127.1	99.8	127.1	390.1



TEST NUMBER: P621602

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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°	111.0	138.2	378.9	797.9	900.9	797.9	378.9	138.2	111.0	138.2	378.9
115°	127.7	155.0	362.2	752.9	880.0	752.9	362.2	155.0	127.7	155.0	362.2
117.5°	144.9	171.7	358.0	704.2	835.0	704.2	358.0	171.7	144.9	171.7	358.0
120°	157.9	182.9	350.6	667.2	803.4	667.2	350.6	182.9	157.9	182.9	350.6
122.5°	167.2	194.0	341.3	635.4	760.7	635.4	341.3	194.0	167.2	194.0	341.3
125°	183.4	208.4	341.3	596.9	705.9	596.9	341.3	208.4	183.4	208.4	341.3
127.5°	196.9	222.3	341.8	552.3	659.9	552.3	341.8	222.3	196.9	222.3	341.8
130°	204.3	231.6	343.7	522.4	624.6	522.4	343.7	231.6	204.3	231.6	343.7
132.5°	213.6	240.9	343.7	509.0	593.0	509.0	343.7	240.9	213.6	240.9	343.7
135°	227.6	252.5	343.7	491.6	564.2	491.6	343.7	252.5	227.6	252.5	343.7
137.5°	239.2	266.0	343.7	472.3	534.5	472.3	343.7	266.0	239.2	266.0	343.7
140°	248.5	273.4	343.7	461.0	517.8	461.0	343.7	273.4	248.5	273.4	343.7
142.5°	257.7	280.9	345.5	448.0	501.1	448.0	345.5	280.9	257.7	280.9	345.5
145°	269.4	292.1	346.0	428.3	473.7	428.3	346.0	292.1	269.4	292.1	346.0
147.5°	283.3	303.3	348.8	414.1	449.1	414.1	348.8	303.3	283.3	303.3	348.8
150°	292.6	310.7	350.6	404.7	434.2	404.7	350.6	310.7	292.6	310.7	350.6
152.5°	301.9	318.2	350.6	397.1	421.2	397.1	350.6	318.2	301.9	318.2	350.6
155°	315.8	327.1	352.9	388.2	406.3	388.2	352.9	327.1	315.8	327.1	352.9
157.5°	326.9	337.8	355.7	382.5	395.7	382.5	355.7	337.8	326.9	337.8	355.7
160°	334.4	343.4	357.6	378.7	390.1	378.7	357.6	343.4	334.4	343.4	357.6
162.5°	339.9	349.0	359.4	376.8	384.5	376.8	359.4	349.0	339.9	349.0	359.4
165°	350.6	355.2	362.2	371.7	378.5	371.7	362.2	355.2	350.6	355.2	362.2
167.5°	356.7	360.7	364.6	369.3	373.4	369.3	364.6	360.7	356.7	360.7	364.6
170°	362.2	364.5	364.6	369.2	371.5	369.2	364.6	364.5	362.2	364.5	364.6
172.5°	364.1	368.2	366.4	367.4	369.7	367.4	366.4	368.2	364.1	368.2	366.4
175°	369.2	371.5	369.2	366.8	364.6	366.8	369.2	371.5	369.2	371.5	369.2
177.5°	369.2	371.0	369.2	369.2	367.3	369.2	369.2	371.0	369.2	371.0	369.2
180°	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	919.0	918.2	919.8	933.4	961.2	986.2
5°	837.1	840.0	842.9	866.0	914.5	981.0
7.5°	774.1	769.8	776.5	814.0	873.6	969.0
10°	730.8	721.0	730.8	782.0	851.4	957.0
12.5°	689.9	677.8	693.1	749.2	833.1	941.0
15°	637.3	649.0	642.2	705.0	805.4	913.0
17.5°	649.7	708.8	662.3	666.6	778.0	884.2
20°	679.4	740.0	698.9	641.0	760.3	861.0
22.5°	706.2	752.0	714.8	619.4	742.6	840.2
25°	726.9	766.0	724.9	600.0	717.0	805.0
27.5°	727.9	733.4	728.3	598.4	685.3	770.0
30°	714.5	691.0	712.5	600.0	662.8	742.0
32.5°	676.0	649.4	667.8	596.8	640.1	705.2
35°	621.2	586.0	611.4	580.0	604.9	643.0
37.5°	563.4	518.8	554.0	546.8	574.9	559.6
40°	524.2	446.0	516.4	514.0	558.4	490.0
42.5°	474.1	407.6	467.0	487.6	540.4	450.8
45°	382.8	375.0	378.9	443.0	501.9	411.0
47.5°	350.1	344.8	348.1	402.4	458.5	393.6
50°	330.8	324.0	328.9	376.0	430.8	380.0
52.5°	304.2	285.6	302.2	340.0	402.2	357.6
55°	228.7	173.0	227.8	299.0	359.1	320.0
57.5°	134.2	100.0	131.3	260.2	304.3	280.2
60°	90.8	84.0	91.8	229.0	267.8	257.0
62.5°	83.0	80.8	83.1	159.4	235.2	233.8
65°	76.0	75.0	76.0	92.0	194.1	200.0
67.5°	68.8	67.8	69.6	70.6	153.3	165.6
70°	64.0	63.0	64.0	65.0	117.6	144.0
72.5°	58.4	57.4	58.4	59.4	82.7	123.2
75°	50.0	49.0	50.0	51.0	54.9	93.0
77.5°	40.4	40.4	41.4	41.4	38.4	64.6
80°	34.0	34.0	35.0	35.0	33.3	47.0
82.5°	27.6	26.8	28.6	29.4	27.5	33.4
85°	17.0	16.0	18.0	19.0	18.0	16.0
87.5°	7.8	7.0	8.6	9.7	9.2	4.8
90°	7.0	7.0	7.0	4.6	2.3	0.0
92.5°	14.4	16.3	14.4	10.2	7.8	5.6
95°	21.0	25.5	21.0	18.6	34.5	18.6
97.5°	40.3	34.8	40.3	136.5	66.1	33.0
100°	80.7	53.4	80.7	274.0	82.7	44.1
102.5°	212.8	116.6	212.8	370.6	95.7	55.3
105°	536.9	355.3	536.9	420.3	110.6	72.0
107.5°	781.4	731.9	781.4	401.2	117.8	88.7
110°	821.1	882.4	821.1	390.1	127.1	99.8





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	797.9	900.9	797.9	378.9	138.2	111.0
115°	752.9	880.0	752.9	362.2	155.0	127.7
117.5°	704.2	835.0	704.2	358.0	171.7	144.9
120°	667.2	803.4	667.2	350.6	182.9	157.9
122.5°	635.4	760.7	635.4	341.3	194.0	167.2
125°	596.9	705.9	596.9	341.3	208.4	183.4
127.5°	552.3	659.9	552.3	341.8	222.3	196.9
130°	522.4	624.6	522.4	343.7	231.6	204.3
132.5°	509.0	593.0	509.0	343.7	240.9	213.6
135°	491.6	564.2	491.6	343.7	252.5	227.6
137.5°	472.3	534.5	472.3	343.7	266.0	239.2
140°	461.0	517.8	461.0	343.7	273.4	248.5
142.5°	448.0	501.1	448.0	345.5	280.9	257.7
145°	428.3	473.7	428.3	346.0	292.1	269.4
147.5°	414.1	449.1	414.1	348.8	303.3	283.3
150°	404.7	434.2	404.7	350.6	310.7	292.6
152.5°	397.1	421.2	397.1	350.6	318.2	301.9
155°	388.2	406.3	388.2	352.9	327.1	315.8
157.5°	382.5	395.7	382.5	355.7	337.8	326.9
160°	378.7	390.1	378.7	357.6	343.4	334.4
162.5°	376.8	384.5	376.8	359.4	349.0	339.9
165°	371.7	378.5	371.7	362.2	355.2	350.6
167.5°	369.3	373.4	369.3	364.6	360.7	356.7
170°	369.2	371.5	369.2	364.6	364.5	362.2
172.5°	367.4	369.7	367.4	366.4	368.2	364.1
175°	366.8	364.6	366.8	369.2	371.5	369.2
177.5°	369.2	367.3	369.2	369.2	371.0	369.2
180°	369.2	369.2	369.2	369.2	369.2	369.2

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