

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: P621697

Luminaire Tested: VLT-FA-125U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621697  
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-125U-050D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

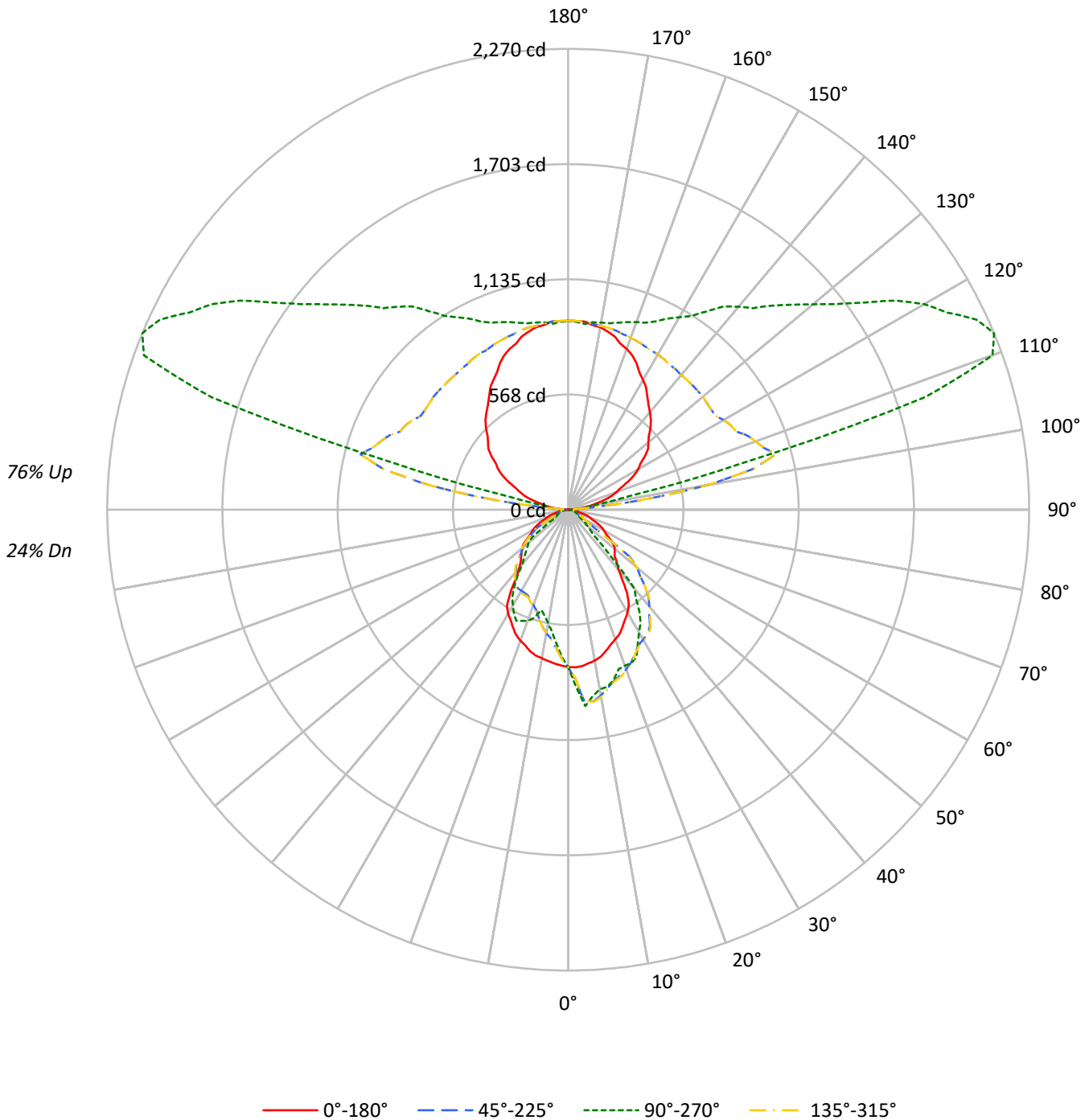
Lumens per Lamp: N/A  
Luminaire Lumens: 6596.4 lumens  
Efficiency: N/A  
Efficacy: 125.4 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 52.6  
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	85	82	82	79	76	73	61	59	57	44	43	42	29	29	28	21
2	84	78	72	67	75	69	65	61	54	51	48	39	38	36	26	25	24	18
3	77	68	62	56	69	61	56	51	48	44	41	35	33	31	24	22	21	16
4	71	61	53	48	63	54	48	43	43	38	35	32	29	27	21	20	18	14
5	65	54	47	41	58	49	42	37	38	34	30	28	25	23	19	18	16	12
6	60	48	41	36	53	44	37	32	34	30	26	26	23	20	18	16	14	11
7	55	44	36	31	49	39	33	28	31	27	23	23	20	18	16	14	13	10
8	51	40	32	27	46	36	29	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	24	42	33	26	22	26	21	18	20	17	14	14	12	11	8
10	44	33	26	22	40	30	24	20	24	19	16	18	15	13	13	11	10	8

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

	0°	90°	180°	270°
0°	5559	5559	5559	5559
5°	5569	6994	5484	4769
10°	5496	6540	5415	4140
15°	5345	6440	5363	3800
20°	5181	6241	5242	4454
25°	5023	6308	5079	4780
30°	4845	5772	4910	4513
35°	4439	5350	4328	4045
40°	3618	4762	3492	3293
45°	3287	1768	3318	2999
50°	3344	1346	3281	2850
55°	3155	1045	3046	1705
60°	2906	804	2885	950
65°	2676	830	2623	1004
70°	2381	877	2314	1041
75°	2032	918	1944	1070
80°	1529	946	1434	1107
85°	1037	840	906	1037

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 6087 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.7	1.1
10°-20°	204.7	3.1
20°-30°	306.3	4.6
30°-40°	348.4	5.3
40°-50°	297.9	4.5
50°-60°	200.9	3.0
60°-70°	103.7	1.6
70°-80°	46.8	0.7
80°-90°	16.0	0.2
90°-100°	114.4	1.7
100°-110°	815.0	12.4
110°-120°	1106.4	16.8
120°-130°	900.5	13.7
130°-140°	724.3	11.0
140°-150°	571.0	8.7
150°-160°	417.5	6.3
160°-170°	259.3	3.9
170°-180°	88.4	1.3
0°-30°	585.8	8.9
0°-40°	934.1	14.2
0°-60°	1432.9	21.7
0°-90°	1599.5	24.2
90°-120°	2035.8	30.9
90°-150°	4231.6	64.2
90°-180°	4997.0	75.8
0°-180°	6596.4	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	775	775	775	775	775	
5°	773	971	761	662	773	73
15°	720	867	722	512	720	203
25°	634	797	642	604	634	292
35°	507	611	494	462	507	310
45°	324	174	327	296	324	257
55°	252	84	244	136	252	225
65°	158	49	154	59	158	156
75°	73	33	70	39	73	78
85°	13	10	11	13	13	16
90°	0	18	0	18	0	2
95°	47	64	47	64	47	52
105°	181	895	181	895	181	191
115°	322	2217	322	2217	322	319
125°	462	1778	462	1778	462	411
135°	573	1422	573	1422	573	441
145°	679	1194	679	1194	679	426
155°	796	1024	796	1024	796	365
165°	883	954	883	954	883	248
175°	930	918	930	918	930	88
180°	930	930	930	930	930	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	777.2	803.7	837.1	860.0	869.9	860.0	831.4	803.5	768.4	757.9	733.1
5°	773.1	854.8	953.6	965.5	970.9	965.5	944.9	849.9	761.3	723.5	682.5
7.5°	763.6	906.5	952.5	925.8	926.0	930.9	953.9	902.1	751.3	692.0	641.6
10°	754.2	935.3	929.1	890.7	897.6	894.5	936.2	929.6	743.1	674.6	617.1
12.5°	741.6	944.2	898.2	885.6	893.2	888.9	902.8	939.3	736.2	662.1	588.7
15°	719.5	931.4	872.4	866.9	866.9	870.7	876.3	935.3	721.9	639.4	554.0
17.5°	696.8	905.8	854.4	827.1	824.2	829.2	860.9	912.4	701.5	614.3	520.4
20°	678.5	888.1	836.1	804.1	817.2	805.7	843.2	892.9	686.4	598.6	499.6
22.5°	662.1	866.2	812.8	799.2	816.6	799.5	819.3	870.9	668.8	580.9	483.9
25°	634.4	829.3	777.8	790.6	796.7	790.6	781.0	832.6	641.5	558.3	467.3
27.5°	606.8	790.5	751.7	760.2	741.4	755.9	755.9	790.7	613.4	531.9	462.3
30°	584.7	763.5	738.4	725.9	696.6	719.8	743.9	763.7	592.6	514.8	461.0
32.5°	555.7	738.8	725.2	682.0	663.2	679.0	731.3	738.3	560.5	499.3	459.8
35°	506.7	704.0	701.4	630.0	610.7	625.4	706.9	702.2	494.1	474.9	450.0
37.5°	441.0	672.9	655.8	577.4	546.8	573.6	661.0	669.6	415.6	452.5	427.1
40°	386.2	652.0	621.8	538.4	508.3	534.5	625.7	650.2	372.8	436.7	401.9
42.5°	355.3	633.4	585.8	497.0	311.0	490.7	589.8	631.1	346.3	416.4	379.8
45°	323.9	599.8	533.5	275.1	174.2	262.0	534.3	591.3	327.0	385.6	346.0
47.5°	310.2	558.3	478.8	165.7	147.1	160.9	478.4	549.2	310.3	354.7	313.6
50°	299.5	532.2	439.7	146.0	120.6	140.6	440.5	523.6	293.9	334.0	291.6
52.5°	281.8	501.0	383.6	121.0	104.2	118.1	374.3	491.1	276.9	311.4	263.8
55°	252.2	441.0	160.0	95.1	83.5	91.2	152.1	426.1	243.5	275.9	231.7
57.5°	220.8	375.4	112.2	74.0	64.8	73.3	111.4	360.3	216.7	233.7	202.1
60°	202.5	331.2	91.4	62.1	56.0	61.3	90.6	318.1	201.0	205.6	175.0
62.5°	184.2	286.4	75.7	54.6	52.8	53.9	75.5	272.0	181.4	181.7	123.3
65°	157.6	216.9	56.0	49.6	48.9	48.9	54.4	209.2	154.5	149.8	70.9
67.5°	130.5	155.8	44.9	45.7	44.9	44.9	44.1	151.4	127.4	119.5	53.6
70°	113.5	119.6	41.8	42.5	41.8	41.8	41.0	116.5	110.3	92.6	50.4
72.5°	97.1	81.7	38.6	38.8	38.6	38.6	37.8	76.7	93.9	65.1	46.0
75°	73.3	40.9	33.1	33.1	33.1	33.1	32.3	39.3	70.1	42.4	39.4
77.5°	50.9	27.0	27.4	27.3	27.3	26.7	26.6	26.8	47.9	29.3	31.8
80°	37.0	22.4	23.6	22.9	22.9	22.9	22.9	21.6	34.7	24.7	26.8
82.5°	26.3	17.8	19.2	18.4	18.4	18.4	18.4	17.6	24.0	20.1	21.8
85°	12.6	11.8	12.6	11.0	10.2	11.0	11.8	11.8	11.0	13.3	14.2
87.5°	3.8	6.8	7.4	7.3	7.3	7.3	6.8	6.1	3.2	7.4	8.0
90°	0.0	5.7	11.7	17.6	17.6	17.6	11.7	5.7	0.0	5.7	11.7
92.5°	14.0	19.8	25.7	36.4	41.0	36.4	25.7	19.8	14.0	19.8	25.7
95°	46.8	86.8	46.8	52.9	64.4	52.9	46.8	86.8	46.8	86.8	46.8
97.5°	83.1	166.6	344.0	101.5	87.8	101.5	344.0	166.6	83.1	166.6	344.0
100°	111.2	208.4	690.3	203.2	134.6	203.2	690.3	208.4	111.2	208.4	690.3
102.5°	139.2	241.1	933.7	536.2	293.7	536.2	933.7	241.1	139.2	241.1	933.7
105°	181.4	278.6	1058.9	1352.7	895.1	1352.7	1058.9	278.6	181.4	278.6	1058.9
107.5°	223.5	296.7	1011.0	1968.8	1844.0	1968.8	1011.0	296.7	223.5	296.7	1011.0
110°	251.6	320.2	982.9	2068.7	2223.2	2068.7	982.9	320.2	251.6	320.2	982.9



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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°	279.6	348.3	954.8	2010.3	2270.0	2010.3	954.8	348.3	279.6	348.3	954.8
115°	321.8	390.4	912.7	1897.0	2217.3	1897.0	912.7	390.4	321.8	390.4	912.7
117.5°	365.1	432.6	902.1	1774.3	2103.8	1774.3	902.1	432.6	365.1	432.6	902.1
120°	397.8	460.8	883.4	1681.0	2024.2	1681.0	883.4	460.8	397.8	460.8	883.4
122.5°	421.2	488.7	860.0	1600.8	1916.6	1600.8	860.0	488.7	421.2	488.7	860.0
125°	462.2	525.1	860.0	1503.9	1778.5	1503.9	860.0	525.1	462.2	525.1	860.0
127.5°	496.1	560.2	861.2	1391.5	1662.7	1391.5	861.2	560.2	496.1	560.2	861.2
130°	514.8	583.5	865.9	1316.3	1573.8	1316.3	865.9	583.5	514.8	583.5	865.9
132.5°	538.2	606.9	865.9	1282.5	1494.2	1282.5	865.9	606.9	538.2	606.9	865.9
135°	573.3	636.3	865.9	1238.6	1421.7	1238.6	865.9	636.3	573.3	636.3	865.9
137.5°	602.6	670.1	865.9	1190.0	1346.8	1190.0	865.9	670.1	602.6	670.1	865.9
140°	626.0	688.9	865.9	1161.6	1304.6	1161.6	865.9	688.9	626.0	688.9	865.9
142.5°	649.4	707.7	870.5	1128.7	1262.5	1128.7	870.5	707.7	649.4	707.7	870.5
145°	678.6	735.9	871.7	1079.1	1193.5	1079.1	871.7	735.9	678.6	735.9	871.7
147.5°	713.8	764.1	878.7	1043.4	1131.5	1043.4	878.7	764.1	713.8	764.1	878.7
150°	737.2	782.9	883.4	1019.7	1094.0	1019.7	883.4	782.9	737.2	782.9	883.4
152.5°	760.6	801.7	883.4	1000.6	1061.3	1000.6	883.4	801.7	760.6	801.7	883.4
155°	795.7	824.3	889.3	978.1	1023.8	978.1	889.3	824.3	795.7	824.3	889.3
157.5°	823.7	851.2	896.3	963.7	996.9	963.7	896.3	851.2	823.7	851.2	896.3
160°	842.5	865.3	901.0	954.3	982.9	954.3	901.0	865.3	842.5	865.3	901.0
162.5°	856.5	879.4	905.6	949.4	968.8	949.4	905.6	879.4	856.5	879.4	905.6
165°	883.4	894.9	912.7	936.5	953.6	936.5	912.7	894.9	883.4	894.9	912.7
167.5°	898.6	908.9	918.5	930.4	940.7	930.4	918.5	908.9	898.6	908.9	918.5
170°	912.7	918.4	918.5	930.3	936.1	930.3	918.5	918.4	912.7	918.4	918.5
172.5°	917.3	927.6	923.2	925.7	931.4	925.7	923.2	927.6	917.3	927.6	923.2
175°	930.2	935.9	930.2	924.2	918.5	924.2	930.2	935.9	930.2	935.9	930.2
177.5°	930.2	934.8	930.2	930.1	925.5	930.1	930.2	934.8	930.2	934.8	930.2
180°	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	774.7	774.7	774.7	774.7	774.7	774.7
2.5°	724.2	723.6	724.8	735.6	757.5	777.2
5°	659.7	662.0	664.3	682.5	720.7	773.1
7.5°	610.0	606.7	611.9	641.5	688.4	763.6
10°	575.9	568.2	575.9	616.3	671.0	754.2
12.5°	543.7	534.1	546.2	590.4	656.5	741.6
15°	502.2	511.5	506.1	555.6	634.7	719.5
17.5°	512.0	558.6	521.9	525.3	613.1	696.8
20°	535.4	583.2	550.8	505.1	599.2	678.5
22.5°	556.6	592.6	563.3	488.1	585.2	662.1
25°	572.8	603.7	571.3	472.8	565.0	634.4
27.5°	573.7	578.0	574.0	471.6	540.1	606.8
30°	563.0	544.6	561.5	472.8	522.3	584.7
32.5°	532.7	511.8	526.3	470.3	504.4	555.7
35°	489.5	461.8	481.8	457.1	476.7	506.7
37.5°	444.0	408.8	436.6	430.9	453.0	441.0
40°	413.1	351.5	407.0	405.1	440.1	386.2
42.5°	373.6	321.2	368.1	384.3	425.8	355.3
45°	301.7	295.5	298.6	349.1	395.6	323.9
47.5°	275.9	271.7	274.3	317.1	361.3	310.2
50°	260.7	255.3	259.2	296.3	339.5	299.5
52.5°	239.7	225.1	238.2	267.9	316.9	281.8
55°	180.3	136.3	179.5	235.6	283.0	252.2
57.5°	105.8	78.8	103.5	205.1	239.8	220.8
60°	71.6	66.2	72.4	180.5	211.0	202.5
62.5°	65.4	63.7	65.5	125.6	185.3	184.2
65°	59.9	59.1	59.9	72.5	153.0	157.6
67.5°	54.2	53.4	54.8	55.6	120.8	130.5
70°	50.4	49.6	50.4	51.2	92.7	113.5
72.5°	46.0	45.2	46.0	46.8	65.2	97.1
75°	39.4	38.6	39.4	40.2	43.2	73.3
77.5°	31.8	31.8	32.6	32.6	30.3	50.9
80°	26.8	26.8	27.6	27.6	26.3	37.0
82.5°	21.7	21.1	22.5	23.2	21.7	26.3
85°	13.4	12.6	14.2	15.0	14.2	12.6
87.5°	8.5	7.9	9.2	9.3	8.0	3.8
90°	17.6	17.6	17.6	11.7	5.7	0.0
92.5°	36.4	41.0	36.4	25.7	19.8	14.0
95°	52.9	64.4	52.9	46.8	86.8	46.8
97.5°	101.5	87.8	101.5	344.0	166.6	83.1
100°	203.2	134.6	203.2	690.3	208.4	111.2
102.5°	536.2	293.7	536.2	933.7	241.1	139.2
105°	1352.7	895.1	1352.7	1058.9	278.6	181.4
107.5°	1968.8	1844.0	1968.8	1011.0	296.7	223.5
110°	2068.7	2223.2	2068.7	982.9	320.2	251.6





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2010.3	2270.0	2010.3	954.8	348.3	279.6
115°	1897.0	2217.3	1897.0	912.7	390.4	321.8
117.5°	1774.3	2103.8	1774.3	902.1	432.6	365.1
120°	1681.0	2024.2	1681.0	883.4	460.8	397.8
122.5°	1600.8	1916.6	1600.8	860.0	488.7	421.2
125°	1503.9	1778.5	1503.9	860.0	525.1	462.2
127.5°	1391.5	1662.7	1391.5	861.2	560.2	496.1
130°	1316.3	1573.8	1316.3	865.9	583.5	514.8
132.5°	1282.5	1494.2	1282.5	865.9	606.9	538.2
135°	1238.6	1421.7	1238.6	865.9	636.3	573.3
137.5°	1190.0	1346.8	1190.0	865.9	670.1	602.6
140°	1161.6	1304.6	1161.6	865.9	688.9	626.0
142.5°	1128.7	1262.5	1128.7	870.5	707.7	649.4
145°	1079.1	1193.5	1079.1	871.7	735.9	678.6
147.5°	1043.4	1131.5	1043.4	878.7	764.1	713.8
150°	1019.7	1094.0	1019.7	883.4	782.9	737.2
152.5°	1000.6	1061.3	1000.6	883.4	801.7	760.6
155°	978.1	1023.8	978.1	889.3	824.3	795.7
157.5°	963.7	996.9	963.7	896.3	851.2	823.7
160°	954.3	982.9	954.3	901.0	865.3	842.5
162.5°	949.4	968.8	949.4	905.6	879.4	856.5
165°	936.5	953.6	936.5	912.7	894.9	883.4
167.5°	930.4	940.7	930.4	918.5	908.9	898.6
170°	930.3	936.1	930.3	918.5	918.4	912.7
172.5°	925.7	931.4	925.7	923.2	927.6	917.3
175°	924.2	918.5	924.2	930.2	935.9	930.2
177.5°	930.1	925.5	930.1	930.2	934.8	930.2
180°	930.2	930.2	930.2	930.2	930.2	930.2

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