

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: P621610

Luminaire Tested: VLT-FA-050U-075D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621610  
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-075D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

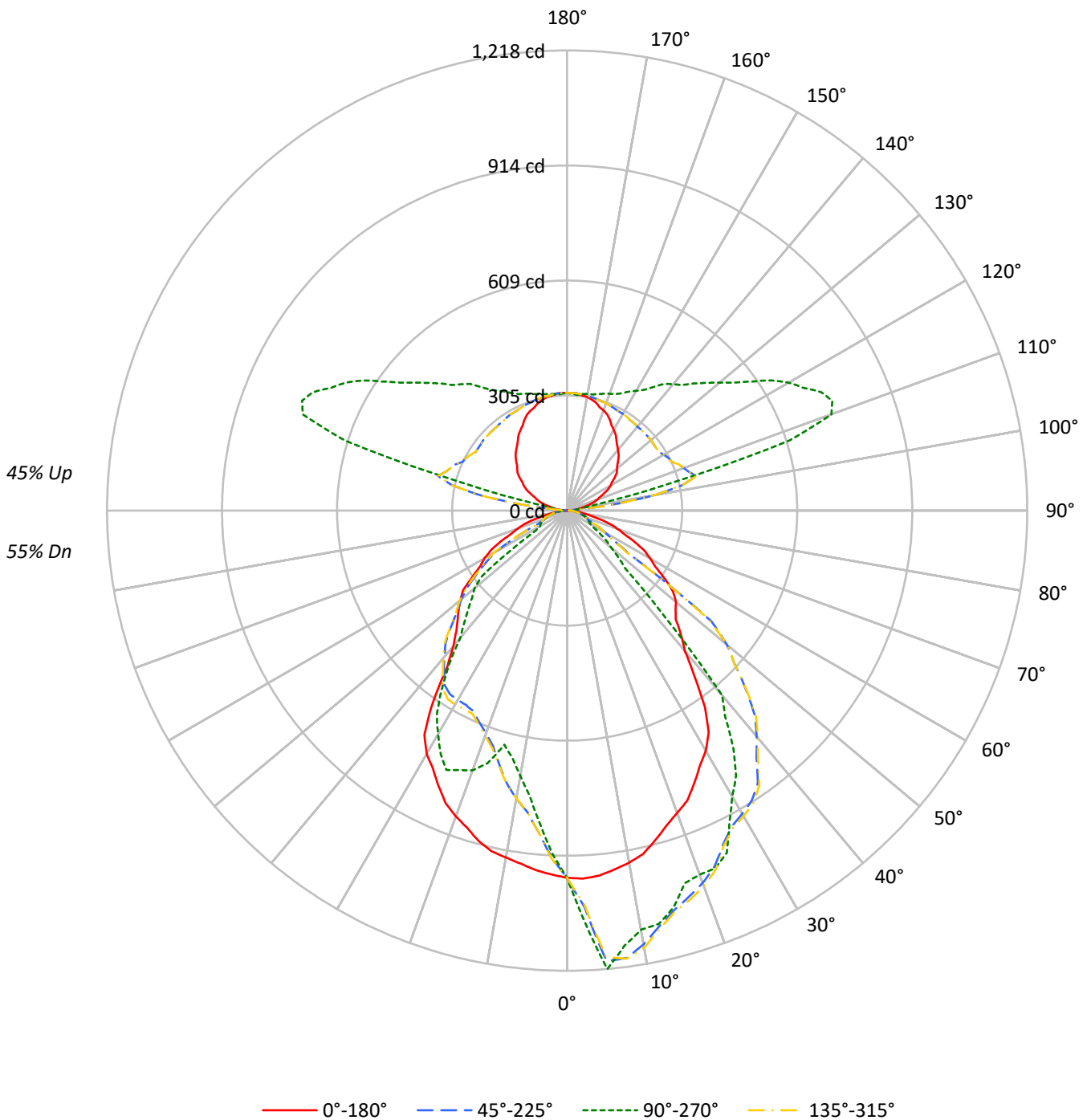
Lumens per Lamp: N/A  
Luminaire Lumens: 3677.1 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.2  
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: P621610  
CATALOG NUMBER: VLT-FA-050U-075D-930-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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55				
1	100	96	92	89	92	89	86	83	77	74	72	65	64	62	55	54	53	48				
2	92	85	79	74	85	79	74	70	68	65	61	58	56	53	49	47	46	41				
3	84	75	68	63	78	70	64	59	61	56	53	52	49	46	44	42	40	36				
4	77	67	60	54	72	63	56	51	55	50	46	47	43	40	40	37	35	32				
5	71	60	53	47	66	57	50	44	49	44	40	43	39	36	37	34	31	28				
6	66	54	47	41	61	51	44	39	45	39	35	39	35	31	34	30	28	25				
7	61	49	42	36	57	46	40	35	41	35	31	36	31	28	31	28	25	23				
8	57	45	37	32	53	42	36	31	37	32	28	33	28	25	28	25	23	20				
9	53	41	34	29	49	39	32	28	34	29	25	30	26	23	26	23	21	18				
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	24	21	19	17				

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

	0°	90°	180°	270°
0°	6974	6974	6974	6974
5°	6987	8774	6880	5982
10°	6895	8206	6794	5195
15°	6706	8080	6729	4767
20°	6501	7830	6577	5588
25°	6302	7915	6372	5997
30°	6079	7242	6161	5661
35°	5570	6713	5430	5076
40°	4539	5974	4381	4131
45°	4124	2217	4164	3763
50°	4194	1689	4117	3576
55°	3958	1311	3822	2139
60°	3647	1008	3618	1193
65°	3357	1041	3291	1260
70°	2988	1099	2904	1307
75°	2551	1151	2440	1342
80°	1922	1186	1798	1389
85°	1301	1062	1136	1301

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 7637 cd/sqm



TEST NUMBER: P621610  
 CATALOG NUMBER: VLT-FA-050U-075D-930-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.8	2.6
10°-20°	256.8	7.0
20°-30°	384.3	10.5
30°-40°	437.1	11.9
40°-50°	373.8	10.2
50°-60°	252.1	6.9
60°-70°	130.1	3.5
70°-80°	58.7	1.6
80°-90°	18.2	0.5
90°-100°	38.3	1.0
100°-110°	272.7	7.4
110°-120°	370.3	10.1
120°-130°	301.4	8.2
130°-140°	242.4	6.6
140°-150°	191.1	5.2
150°-160°	139.7	3.8
160°-170°	86.8	2.4
170°-180°	29.6	0.8
0°-30°	734.9	20.0
0°-40°	1172.0	31.9
0°-60°	1797.8	48.9
0°-90°	2004.8	54.5
90°-120°	681.3	18.5
90°-150°	1416.2	38.5
90°-180°	1672.0	45.5
0°-180°	3677.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	972	972	972	972	972	
5°	970	1218	955	830	970	92
15°	903	1088	906	642	903	254
25°	796	1000	805	757	796	366
35°	636	766	620	579	636	389
45°	406	218	410	371	406	322
55°	316	105	306	171	316	282
65°	198	61	194	74	198	195
75°	92	42	88	48	92	98
85°	16	13	14	16	16	20
90°	0	6	0	6	0	1
95°	16	22	16	22	16	18
105°	61	300	61	300	61	64
115°	108	742	108	742	108	107
125°	155	595	155	595	155	137
135°	192	476	192	476	192	148
145°	227	399	227	399	227	143
155°	266	343	266	343	266	122
165°	296	319	296	319	296	83
175°	311	307	311	307	311	29
180°	311	311	311	311	311	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	971.9	971.9	971.9	971.9	971.9	971.9	971.9	971.9	971.9	971.9	971.9
2.5°	975.1	1008.3	1050.2	1079.0	1091.4	1079.0	1043.1	1008.1	964.0	950.9	919.7
5°	969.9	1072.4	1196.4	1211.3	1218.1	1211.3	1185.5	1066.3	955.1	907.7	856.2
7.5°	958.1	1137.3	1195.0	1161.6	1161.8	1167.9	1196.8	1131.7	942.7	868.2	805.0
10°	946.2	1173.4	1165.7	1117.5	1126.2	1122.3	1174.6	1166.3	932.4	846.3	774.2
12.5°	930.4	1184.6	1127.0	1111.1	1120.6	1115.2	1132.7	1178.5	923.7	830.7	738.6
15°	902.7	1168.6	1094.5	1087.6	1087.6	1092.4	1099.5	1173.5	905.7	802.2	695.1
17.5°	874.2	1136.4	1072.0	1037.7	1034.0	1040.4	1080.1	1144.7	880.2	770.7	653.0
20°	851.3	1114.3	1049.0	1008.9	1025.3	1010.8	1057.9	1120.3	861.2	751.0	626.9
22.5°	830.7	1086.7	1019.8	1002.7	1024.5	1003.1	1027.9	1092.7	839.0	728.8	607.1
25°	795.9	1040.5	975.9	991.9	999.6	991.9	979.8	1044.6	804.8	700.4	586.3
27.5°	761.3	991.8	943.0	953.8	930.2	948.4	948.4	992.0	769.6	667.3	580.0
30°	733.6	957.9	926.4	910.8	874.0	903.0	933.4	958.1	743.5	645.9	578.4
32.5°	697.3	927.0	909.8	855.7	832.1	851.8	917.5	926.3	703.2	626.4	576.8
35°	635.8	883.2	880.0	790.4	766.3	784.6	886.9	881.0	619.9	595.8	564.6
37.5°	553.3	844.3	822.8	724.5	686.0	719.6	829.3	840.1	521.5	567.7	535.9
40°	484.5	818.0	780.1	675.4	637.7	670.6	785.0	815.7	467.7	547.9	504.3
42.5°	445.7	794.7	735.0	623.5	390.2	615.6	740.0	791.8	434.4	522.4	476.6
45°	406.4	752.5	669.4	345.2	218.5	328.7	670.4	741.9	410.3	483.8	434.1
47.5°	389.2	700.5	600.8	207.9	184.5	201.9	600.2	689.1	389.4	445.0	393.5
50°	375.7	667.7	551.7	183.2	151.3	176.4	552.7	656.9	368.8	419.1	365.8
52.5°	353.6	628.5	481.3	151.8	130.7	148.1	469.6	616.2	347.4	390.7	331.0
55°	316.4	553.2	200.7	119.3	104.8	114.5	190.8	534.6	305.5	346.1	290.7
57.5°	277.0	471.0	140.8	92.9	81.3	91.9	139.8	452.1	271.9	293.2	253.5
60°	254.1	415.6	114.7	77.9	70.2	77.0	113.7	399.1	252.1	257.9	219.5
62.5°	231.2	359.4	94.9	68.6	66.2	67.6	94.7	341.3	227.6	228.0	154.6
65°	197.7	272.2	70.2	62.3	61.3	61.3	68.2	262.4	193.8	188.0	89.0
67.5°	163.7	195.4	56.4	57.3	56.4	56.4	55.4	189.9	159.8	149.9	67.2
70°	142.4	150.1	52.4	53.4	52.4	52.4	51.4	146.2	138.4	116.2	63.3
72.5°	121.8	102.5	48.4	48.6	48.4	48.4	47.5	96.2	117.9	81.7	57.7
75°	92.0	51.3	41.5	41.5	41.5	41.5	40.5	49.3	88.0	53.2	49.4
77.5°	63.9	33.9	34.4	34.2	34.2	33.4	33.4	33.6	60.1	36.7	39.9
80°	46.5	28.1	29.7	28.7	28.7	28.7	28.7	27.1	43.5	30.9	33.6
82.5°	33.0	22.4	24.1	23.1	23.1	23.1	23.1	22.1	30.1	25.2	27.3
85°	15.8	14.9	15.8	13.8	12.9	13.8	14.8	14.8	13.8	16.7	17.8
87.5°	4.7	7.4	7.1	5.9	5.9	5.9	6.3	6.7	4.0	8.2	7.9
90°	0.0	1.9	3.9	5.9	5.9	5.9	3.9	1.9	0.0	1.9	3.9
92.5°	4.7	6.6	8.6	12.2	13.7	12.2	8.6	6.6	4.7	6.6	8.6
95°	15.7	29.1	15.7	17.7	21.5	17.7	15.7	29.1	15.7	29.1	15.7
97.5°	27.8	55.8	115.1	34.0	29.4	34.0	115.1	55.8	27.8	55.8	115.1
100°	37.2	69.7	231.0	68.0	45.0	68.0	231.0	69.7	37.2	69.7	231.0
102.5°	46.6	80.7	312.5	179.5	98.3	179.5	312.5	80.7	46.6	80.7	312.5
105°	60.7	93.2	354.4	452.7	299.6	452.7	354.4	93.2	60.7	93.2	354.4
107.5°	74.8	99.3	338.3	658.9	617.1	658.9	338.3	99.3	74.8	99.3	338.3
110°	84.2	107.2	328.9	692.3	744.0	692.3	328.9	107.2	84.2	107.2	328.9



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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°	93.6	116.6	319.5	672.7	759.7	672.7	319.5	116.6	93.6	116.6	319.5
115°	107.7	130.7	305.4	634.8	742.0	634.8	305.4	130.7	107.7	130.7	305.4
117.5°	122.2	144.8	301.9	593.8	704.1	593.8	301.9	144.8	122.2	144.8	301.9
120°	133.1	154.2	295.6	562.6	677.4	562.6	295.6	154.2	133.1	154.2	295.6
122.5°	141.0	163.6	287.8	535.7	641.4	535.7	287.8	163.6	141.0	163.6	287.8
125°	154.7	175.7	287.8	503.3	595.2	503.3	287.8	175.7	154.7	175.7	287.8
127.5°	166.0	187.5	288.2	465.7	556.4	465.7	288.2	187.5	166.0	187.5	288.2
130°	172.3	195.3	289.8	440.5	526.7	440.5	289.8	195.3	172.3	195.3	289.8
132.5°	180.1	203.1	289.8	429.2	500.0	429.2	289.8	203.1	180.1	203.1	289.8
135°	191.9	212.9	289.8	414.5	475.8	414.5	289.8	212.9	191.9	212.9	289.8
137.5°	201.7	224.3	289.8	398.2	450.7	398.2	289.8	224.3	201.7	224.3	289.8
140°	209.5	230.6	289.8	388.7	436.6	388.7	289.8	230.6	209.5	230.6	289.8
142.5°	217.3	236.9	291.3	377.7	422.5	377.7	291.3	236.9	217.3	236.9	291.3
145°	227.1	246.3	291.7	361.1	399.4	361.1	291.7	246.3	227.1	246.3	291.7
147.5°	238.9	255.7	294.1	349.2	378.7	349.2	294.1	255.7	238.9	255.7	294.1
150°	246.7	262.0	295.6	341.2	366.1	341.2	295.6	262.0	246.7	262.0	295.6
152.5°	254.5	268.3	295.6	334.9	355.2	334.9	295.6	268.3	254.5	268.3	295.6
155°	266.3	275.8	297.6	327.3	342.6	327.3	297.6	275.8	266.3	275.8	297.6
157.5°	275.7	284.9	299.9	322.5	333.6	322.5	299.9	284.9	275.7	284.9	299.9
160°	281.9	289.6	301.5	319.4	328.9	319.4	301.5	289.6	281.9	289.6	301.5
162.5°	286.6	294.3	303.1	317.7	324.2	317.7	303.1	294.3	286.6	294.3	303.1
165°	295.6	299.5	305.4	313.4	319.1	313.4	305.4	299.5	295.6	299.5	305.4
167.5°	300.7	304.2	307.4	311.4	314.8	311.4	307.4	304.2	300.7	304.2	307.4
170°	305.4	307.3	307.4	311.3	313.3	311.3	307.4	307.3	305.4	307.3	307.4
172.5°	307.0	310.4	309.0	309.8	311.7	309.8	309.0	310.4	307.0	310.4	309.0
175°	311.3	313.2	311.3	309.3	307.4	309.3	311.3	313.2	311.3	313.2	311.3
177.5°	311.3	312.8	311.3	311.3	309.7	311.3	311.3	312.8	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3



TEST NUMBER: P621610

CATALOG NUMBER: VLT-FA-050U-075D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	971.9	971.9	971.9	971.9	971.9	971.9
2.5°	908.6	907.8	909.4	922.9	950.3	975.1
5°	827.6	830.5	833.4	856.2	904.2	969.9
7.5°	765.4	761.1	767.7	804.8	863.7	958.1
10°	722.5	712.9	722.5	773.2	841.8	946.2
12.5°	682.1	670.2	685.2	740.8	823.7	930.4
15°	630.1	641.7	634.9	697.1	796.4	902.7
17.5°	642.4	700.8	654.8	659.1	769.2	874.2
20°	671.7	731.7	691.1	633.8	751.7	851.3
22.5°	698.3	743.5	706.8	612.4	734.2	830.7
25°	718.7	757.4	716.8	593.2	708.9	795.9
27.5°	719.7	725.1	720.1	591.7	677.6	761.3
30°	706.4	683.2	704.5	593.2	655.3	733.6
32.5°	668.4	642.1	660.3	590.1	632.9	697.3
35°	614.2	579.4	604.5	573.5	598.0	635.8
37.5°	557.0	513.0	547.8	540.6	568.4	553.3
40°	518.3	441.0	510.6	508.2	552.1	484.5
42.5°	468.7	403.0	461.8	482.1	534.3	445.7
45°	378.5	370.8	374.6	438.0	496.3	406.4
47.5°	346.1	340.9	344.2	397.9	453.4	389.2
50°	327.1	320.3	325.2	371.8	426.0	375.7
52.5°	300.7	282.4	298.8	336.2	397.7	353.6
55°	226.2	171.0	225.2	295.6	355.1	316.4
57.5°	132.7	98.9	129.8	257.3	300.8	277.0
60°	89.8	83.1	90.8	226.4	264.7	254.1
62.5°	82.0	79.9	82.2	157.6	232.5	231.2
65°	75.1	74.2	75.1	91.0	191.9	197.7
67.5°	68.0	67.0	68.8	69.8	151.6	163.7
70°	63.3	62.3	63.3	64.3	116.3	142.4
72.5°	57.7	56.8	57.7	58.7	81.8	121.8
75°	49.4	48.4	49.4	50.4	54.2	92.0
77.5°	39.9	39.9	40.9	40.9	38.0	63.9
80°	33.6	33.6	34.6	34.6	32.9	46.5
82.5°	27.3	26.5	28.2	29.1	27.2	33.0
85°	16.8	15.8	17.8	18.8	17.8	15.8
87.5°	7.5	6.7	8.3	9.5	9.0	4.7
90°	5.9	5.9	5.9	3.9	1.9	0.0
92.5°	12.2	13.7	12.2	8.6	6.6	4.7
95°	17.7	21.5	17.7	15.7	29.1	15.7
97.5°	34.0	29.4	34.0	115.1	55.8	27.8
100°	68.0	45.0	68.0	231.0	69.7	37.2
102.5°	179.5	98.3	179.5	312.5	80.7	46.6
105°	452.7	299.6	452.7	354.4	93.2	60.7
107.5°	658.9	617.1	658.9	338.3	99.3	74.8
110°	692.3	744.0	692.3	328.9	107.2	84.2





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	672.7	759.7	672.7	319.5	116.6	93.6
115°	634.8	742.0	634.8	305.4	130.7	107.7
117.5°	593.8	704.1	593.8	301.9	144.8	122.2
120°	562.6	677.4	562.6	295.6	154.2	133.1
122.5°	535.7	641.4	535.7	287.8	163.6	141.0
125°	503.3	595.2	503.3	287.8	175.7	154.7
127.5°	465.7	556.4	465.7	288.2	187.5	166.0
130°	440.5	526.7	440.5	289.8	195.3	172.3
132.5°	429.2	500.0	429.2	289.8	203.1	180.1
135°	414.5	475.8	414.5	289.8	212.9	191.9
137.5°	398.2	450.7	398.2	289.8	224.3	201.7
140°	388.7	436.6	388.7	289.8	230.6	209.5
142.5°	377.7	422.5	377.7	291.3	236.9	217.3
145°	361.1	399.4	361.1	291.7	246.3	227.1
147.5°	349.2	378.7	349.2	294.1	255.7	238.9
150°	341.2	366.1	341.2	295.6	262.0	246.7
152.5°	334.9	355.2	334.9	295.6	268.3	254.5
155°	327.3	342.6	327.3	297.6	275.8	266.3
157.5°	322.5	333.6	322.5	299.9	284.9	275.7
160°	319.4	328.9	319.4	301.5	289.6	281.9
162.5°	317.7	324.2	317.7	303.1	294.3	286.6
165°	313.4	319.1	313.4	305.4	299.5	295.6
167.5°	311.4	314.8	311.4	307.4	304.2	300.7
170°	311.3	313.3	311.3	307.4	307.3	305.4
172.5°	309.8	311.7	309.8	309.0	310.4	307.0
175°	309.3	307.4	309.3	311.3	313.2	311.3
177.5°	311.3	309.7	311.3	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3

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