

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: P621732

Luminaire Tested: VLT-FA-150U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621732  
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-075D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

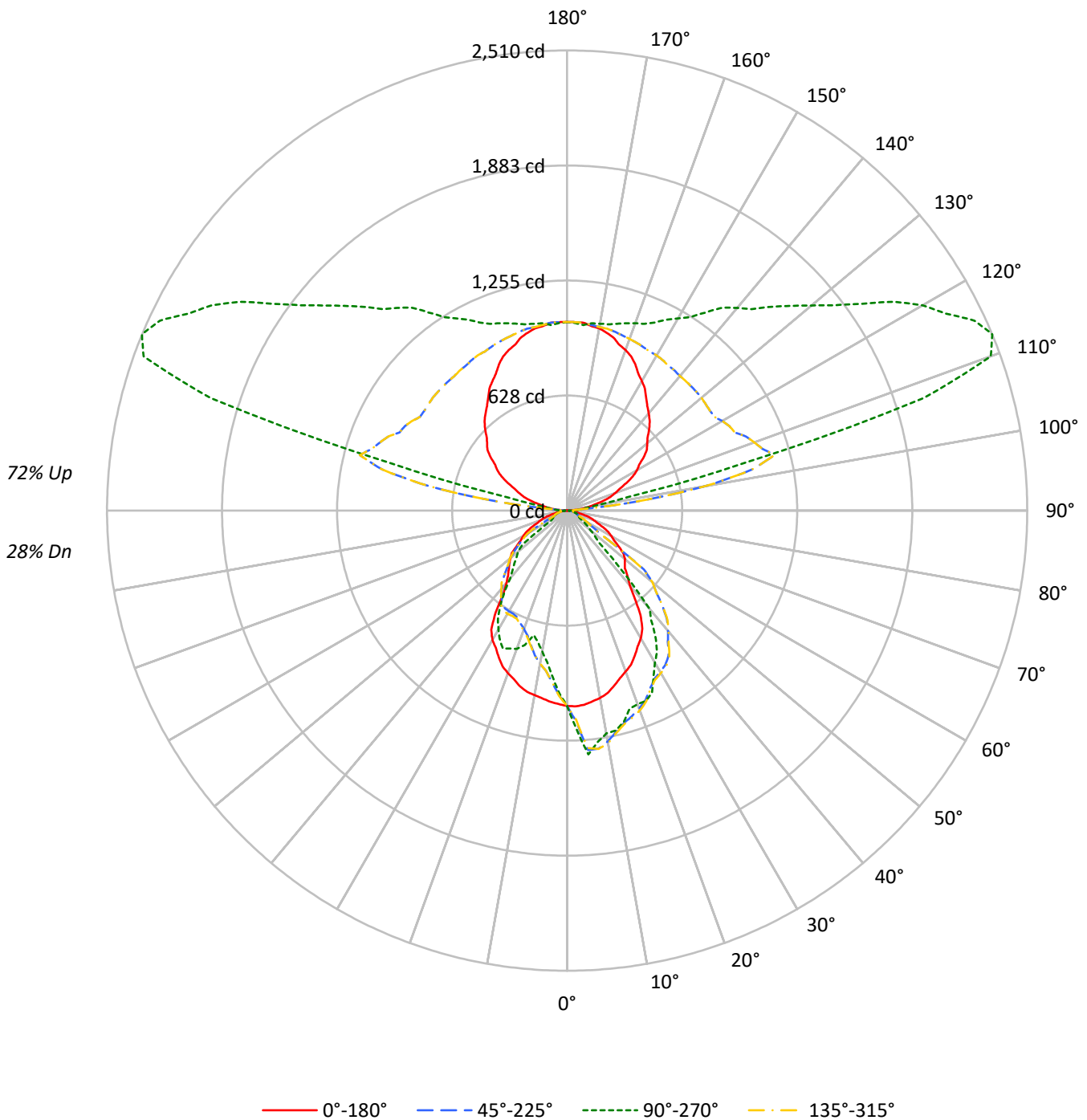
Lumens per Lamp: N/A  
Luminaire Lumens: 7724.8 lumens  
Efficiency: N/A  
Efficacy: 110.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 70.2  
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



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28																			
1	93	89	86	83	84	80	77	75	63	61	59	47	46	45	33	32	32	25																			
2	85	79	73	68	76	71	66	62	56	53	50	42	40	38	29	28	27	22																			
3	78	69	63	57	70	63	57	52	50	46	42	38	35	33	26	25	24	19																			
4	72	62	54	49	64	56	49	45	44	40	36	34	31	28	24	22	21	17																			
5	66	55	47	42	59	50	43	38	40	35	32	30	27	25	22	20	18	15																			
6	61	49	42	36	54	45	38	33	36	31	28	28	24	22	20	18	16	13																			
7	56	44	37	32	50	40	34	29	32	28	24	25	22	19	18	16	15	12																			
8	52	40	33	28	47	37	30	26	30	25	22	23	20	17	17	15	13	11																			
9	48	37	30	25	43	33	27	23	27	22	19	21	18	16	15	13	12	10																			
10	45	34	27	22	40	31	25	21	25	20	17	19	16	14	14	12	11	9																			

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

	0°	90°	180°	270°
0°	7645	7645	7645	7645
5°	7658	9617	7540	6557
10°	7557	8994	7446	5693
15°	7350	8856	7375	5225
20°	7126	8582	7208	6124
25°	6907	8675	6984	6573
30°	6663	7938	6752	6205
35°	6104	7358	5953	5563
40°	4974	6548	4802	4527
45°	4520	2431	4564	4124
50°	4597	1851	4512	3920
55°	4339	1437	4190	2346
60°	3997	1104	3965	1306
65°	3680	1141	3606	1380
70°	3275	1204	3183	1433
75°	2795	1262	2673	1472
80°	2103	1298	1971	1521
85°	1424	1161	1251	1424

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 8369 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.8	1.3
10°-20°	281.5	3.6
20°-30°	421.2	5.5
30°-40°	479.0	6.2
40°-50°	409.7	5.3
50°-60°	276.3	3.6
60°-70°	142.6	1.8
70°-80°	64.4	0.8
80°-90°	21.5	0.3
90°-100°	126.5	1.6
100°-110°	901.3	11.7
110°-120°	1223.6	15.8
120°-130°	995.9	12.9
130°-140°	800.9	10.4
140°-150°	631.5	8.2
150°-160°	461.7	6.0
160°-170°	286.8	3.7
170°-180°	97.8	1.3
0°-30°	805.5	10.4
0°-40°	1284.5	16.6
0°-60°	1970.5	25.5
0°-90°	2198.9	28.5
90°-120°	2251.3	29.1
90°-150°	4679.6	60.6
90°-180°	5526.0	71.5
0°-180°	7724.8	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1065	1065	1065	1065	1065	
5°	1063	1335	1047	910	1063	101
15°	989	1192	993	703	989	278
25°	872	1096	882	830	872	402
35°	697	840	680	635	697	426
45°	445	240	450	406	445	353
55°	347	115	335	188	347	309
65°	217	67	212	81	217	214
75°	101	46	96	53	101	107
85°	17	14	15	17	17	22
90°	0	19	0	19	0	3
95°	52	71	52	71	52	58
105°	201	990	201	990	201	212
115°	356	2452	356	2452	356	353
125°	511	1967	511	1967	511	454
135°	634	1572	634	1572	634	488
145°	750	1320	750	1320	750	471
155°	880	1132	880	1132	880	404
165°	977	1055	977	1055	977	274
175°	1029	1016	1029	1016	1029	97
180°	1029	1029	1029	1029	1029	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3
2.5°	1068.7	1105.2	1151.1	1182.6	1196.2	1182.6	1143.3	1104.9	1056.6	1042.2	1008.0
5°	1063.1	1175.4	1311.3	1327.7	1335.1	1327.7	1299.3	1168.7	1046.8	994.9	938.5
7.5°	1050.1	1246.5	1309.7	1273.1	1273.3	1280.1	1311.7	1240.4	1033.2	951.6	882.3
10°	1037.1	1286.1	1277.7	1224.8	1234.3	1230.1	1287.4	1278.3	1021.9	927.6	848.5
12.5°	1019.7	1298.4	1235.2	1217.9	1228.2	1222.3	1241.5	1291.7	1012.4	910.4	809.5
15°	989.4	1280.8	1199.6	1192.1	1192.1	1197.3	1205.1	1286.2	992.7	879.3	761.8
17.5°	958.2	1245.6	1174.9	1137.3	1133.3	1140.3	1183.8	1254.6	964.7	844.7	715.7
20°	933.1	1221.3	1149.8	1105.8	1123.8	1107.9	1159.5	1227.9	943.9	823.1	687.1
22.5°	910.5	1191.1	1117.7	1099.0	1122.9	1099.4	1126.6	1197.7	919.6	798.8	665.4
25°	872.4	1140.4	1069.6	1087.1	1095.6	1087.1	1073.9	1144.9	882.1	767.7	642.6
27.5°	834.4	1087.0	1033.6	1045.4	1019.5	1039.4	1039.5	1087.2	843.5	731.4	635.7
30°	804.1	1049.9	1015.4	998.2	958.0	989.8	1023.0	1050.2	814.9	707.9	634.0
32.5°	764.2	1016.0	997.2	937.9	912.0	933.6	1005.7	1015.3	770.7	686.6	632.2
35°	696.8	968.1	964.5	866.3	839.9	860.0	972.1	965.6	679.5	653.0	618.8
37.5°	606.4	925.4	901.8	794.0	751.9	788.7	909.0	920.8	571.5	622.2	587.4
40°	531.0	896.6	855.0	740.3	699.0	735.0	860.4	894.0	512.6	600.5	552.7
42.5°	488.5	871.0	805.6	683.4	427.6	674.7	811.0	867.8	476.2	572.6	522.3
45°	445.4	824.7	733.7	378.3	239.5	360.3	734.7	813.2	449.7	530.3	475.7
47.5°	426.5	767.7	658.4	227.9	202.2	221.3	657.8	755.2	426.8	487.8	431.3
50°	411.8	731.8	604.7	200.8	165.8	193.4	605.8	720.0	404.2	459.3	401.0
52.5°	387.5	688.9	527.5	166.4	143.3	162.3	514.7	675.4	380.8	428.3	362.8
55°	346.8	606.4	220.0	130.8	114.9	125.5	209.2	586.0	334.9	379.4	318.6
57.5°	303.6	516.2	154.3	101.8	89.1	100.7	153.2	495.5	298.0	321.3	277.9
60°	278.5	455.5	125.7	85.4	76.9	84.4	124.6	437.4	276.3	282.7	240.6
62.5°	253.4	393.9	104.0	75.1	72.6	74.1	103.8	374.1	249.5	249.9	169.5
65°	216.7	298.3	76.9	68.2	67.2	67.2	74.8	287.6	212.4	206.0	97.5
67.5°	179.5	214.2	61.8	62.8	61.8	61.8	60.7	208.2	175.1	164.3	73.7
70°	156.1	164.5	57.4	58.5	57.4	57.4	56.4	160.2	151.7	127.3	69.4
72.5°	133.5	112.3	53.1	53.3	53.1	53.1	52.0	105.4	129.2	89.5	63.3
75°	100.8	56.3	45.5	45.5	45.5	45.5	44.4	54.1	96.4	58.3	54.2
77.5°	70.0	37.2	37.7	37.5	37.5	36.6	36.6	36.9	65.9	40.2	43.8
80°	50.9	30.8	32.5	31.4	31.4	31.4	31.4	29.7	47.7	33.9	36.8
82.5°	36.2	24.5	26.4	25.4	25.4	25.4	25.4	24.3	32.9	27.6	29.9
85°	17.3	16.3	17.3	15.1	14.1	15.1	16.3	16.2	15.2	18.4	19.5
87.5°	5.2	9.0	9.5	9.1	9.1	9.1	8.7	8.1	4.3	9.8	10.4
90°	0.0	6.3	12.9	19.4	19.4	19.4	12.9	6.3	0.0	6.3	12.9
92.5°	15.5	21.9	28.5	40.2	45.3	40.2	28.5	21.9	15.5	21.9	28.5
95°	51.8	96.0	51.8	58.5	71.2	58.5	51.8	96.0	51.8	96.0	51.8
97.5°	91.9	184.2	380.4	112.2	97.0	112.2	380.4	184.2	91.9	184.2	380.4
100°	122.9	230.5	763.4	224.7	148.8	224.7	763.4	230.5	122.9	230.5	763.4
102.5°	154.0	266.6	1032.6	593.0	324.8	593.0	1032.6	266.6	154.0	266.6	1032.6
105°	200.6	308.1	1171.0	1496.0	989.9	1496.0	1171.0	308.1	200.6	308.1	1171.0
107.5°	247.1	328.1	1118.0	2177.2	2039.3	2177.2	1118.0	328.1	247.1	328.1	1118.0
110°	278.2	354.1	1086.9	2287.7	2458.5	2287.7	1086.9	354.1	278.2	354.1	1086.9



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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°	309.3	385.2	1055.9	2223.1	2510.3	2223.1	1055.9	385.2	309.3	385.2	1055.9
115°	355.8	431.7	1009.3	2097.8	2452.0	2097.8	1009.3	431.7	355.8	431.7	1009.3
117.5°	403.7	478.4	997.6	1962.2	2326.5	1962.2	997.6	478.4	403.7	478.4	997.6
120°	439.9	509.5	976.9	1859.0	2238.5	1859.0	976.9	509.5	439.9	509.5	976.9
122.5°	465.8	540.5	951.1	1770.3	2119.5	1770.3	951.1	540.5	465.8	540.5	951.1
125°	511.1	580.7	951.1	1663.2	1966.8	1663.2	951.1	580.7	511.1	580.7	951.1
127.5°	548.6	619.5	952.3	1538.9	1838.7	1538.9	952.3	619.5	548.6	619.5	952.3
130°	569.3	645.3	957.5	1455.7	1740.4	1455.7	957.5	645.3	569.3	645.3	957.5
132.5°	595.2	671.1	957.5	1418.3	1652.4	1418.3	957.5	671.1	595.2	671.1	957.5
135°	634.0	703.6	957.5	1369.7	1572.2	1369.7	957.5	703.6	634.0	703.6	957.5
137.5°	666.4	741.0	957.5	1316.0	1489.3	1316.0	957.5	741.0	666.4	741.0	957.5
140°	692.3	761.9	957.5	1284.6	1442.8	1284.6	957.5	761.9	692.3	761.9	957.5
142.5°	718.1	782.7	962.7	1248.1	1396.2	1248.1	962.7	782.7	718.1	782.7	962.7
145°	750.5	813.8	964.0	1193.3	1319.8	1193.3	964.0	813.8	750.5	813.8	964.0
147.5°	789.3	845.0	971.8	1153.8	1251.3	1153.8	971.8	845.0	789.3	845.0	971.8
150°	815.2	865.8	976.9	1127.6	1209.8	1127.6	976.9	865.8	815.2	865.8	976.9
152.5°	841.1	886.6	976.9	1106.6	1173.6	1106.6	976.9	886.6	841.1	886.6	976.9
155°	879.9	911.5	983.4	1081.6	1132.2	1081.6	983.4	911.5	879.9	911.5	983.4
157.5°	910.9	941.3	991.2	1065.8	1102.4	1065.8	991.2	941.3	910.9	941.3	991.2
160°	931.6	957.0	996.3	1055.3	1086.9	1055.3	996.3	957.0	931.6	957.0	996.3
162.5°	947.2	972.5	1001.5	1049.9	1071.4	1049.9	1001.5	972.5	947.2	972.5	1001.5
165°	976.9	989.6	1009.3	1035.6	1054.6	1035.6	1009.3	989.6	976.9	989.6	1009.3
167.5°	993.8	1005.1	1015.8	1029.0	1040.3	1029.0	1015.8	1005.1	993.8	1005.1	1015.8
170°	1009.3	1015.6	1015.8	1028.8	1035.2	1028.8	1015.8	1015.6	1009.3	1015.6	1015.8
172.5°	1014.5	1025.8	1020.9	1023.7	1030.0	1023.7	1020.9	1025.8	1014.5	1025.8	1020.9
175°	1028.7	1035.0	1028.7	1022.1	1015.8	1022.1	1028.7	1035.0	1028.7	1035.0	1028.7
177.5°	1028.7	1033.8	1028.7	1028.6	1023.5	1028.6	1028.7	1033.8	1028.7	1033.8	1028.7
180°	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3
2.5°	995.9	995.0	996.7	1011.5	1041.6	1068.7
5°	907.1	910.3	913.5	938.5	991.0	1063.1
7.5°	838.9	834.2	841.4	882.1	946.7	1050.1
10°	791.9	781.3	791.9	847.4	922.6	1037.1
12.5°	747.7	734.5	751.1	811.9	902.8	1019.7
15°	690.6	703.3	695.9	764.0	872.8	989.4
17.5°	704.1	768.1	717.7	722.4	843.1	958.2
20°	736.2	801.9	757.4	694.6	823.9	933.1
22.5°	765.3	814.9	774.7	671.2	804.8	910.5
25°	787.7	830.1	785.6	650.2	777.0	872.4
27.5°	788.8	794.8	789.3	648.5	742.7	834.4
30°	774.3	748.8	772.1	650.2	718.3	804.1
32.5°	732.6	703.7	723.7	646.7	693.6	764.2
35°	673.2	635.0	662.6	628.5	655.5	696.8
37.5°	610.5	562.2	600.4	592.6	623.0	606.4
40°	568.1	483.3	559.6	557.0	605.2	531.0
42.5°	513.8	441.7	506.1	528.4	585.6	488.5
45°	414.9	406.4	410.6	480.1	543.9	445.4
47.5°	379.4	373.7	377.3	436.1	496.9	426.5
50°	358.5	351.1	356.4	407.5	466.9	411.8
52.5°	329.6	309.5	327.5	368.5	435.8	387.5
55°	247.9	187.5	246.8	324.0	389.2	346.8
57.5°	145.5	108.4	142.3	282.0	329.7	303.6
60°	98.4	91.0	99.5	248.2	290.2	278.5
62.5°	89.9	87.6	90.1	172.7	254.8	253.4
65°	82.3	81.3	82.3	99.7	210.4	216.7
67.5°	74.5	73.5	75.4	76.5	166.1	179.5
70°	69.3	68.3	69.3	70.4	127.4	156.1
72.5°	63.3	62.2	63.3	64.4	89.6	133.5
75°	54.2	53.1	54.2	55.3	59.5	100.8
77.5°	43.8	43.8	44.8	44.9	41.6	70.0
80°	36.8	36.8	37.9	37.9	36.1	50.9
82.5°	29.9	29.0	30.9	31.9	29.8	36.2
85°	18.4	17.3	19.5	20.6	19.5	17.3
87.5°	10.8	10.0	11.6	12.1	10.7	5.2
90°	19.4	19.4	19.4	12.9	6.3	0.0
92.5°	40.2	45.3	40.2	28.5	21.9	15.5
95°	58.5	71.2	58.5	51.8	96.0	51.8
97.5°	112.2	97.0	112.2	380.4	184.2	91.9
100°	224.7	148.8	224.7	763.4	230.5	122.9
102.5°	593.0	324.8	593.0	1032.6	266.6	154.0
105°	1496.0	989.9	1496.0	1171.0	308.1	200.6
107.5°	2177.2	2039.3	2177.2	1118.0	328.1	247.1
110°	2287.7	2458.5	2287.7	1086.9	354.1	278.2





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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2223.1	2510.3	2223.1	1055.9	385.2	309.3
115°	2097.8	2452.0	2097.8	1009.3	431.7	355.8
117.5°	1962.2	2326.5	1962.2	997.6	478.4	403.7
120°	1859.0	2238.5	1859.0	976.9	509.5	439.9
122.5°	1770.3	2119.5	1770.3	951.1	540.5	465.8
125°	1663.2	1966.8	1663.2	951.1	580.7	511.1
127.5°	1538.9	1838.7	1538.9	952.3	619.5	548.6
130°	1455.7	1740.4	1455.7	957.5	645.3	569.3
132.5°	1418.3	1652.4	1418.3	957.5	671.1	595.2
135°	1369.7	1572.2	1369.7	957.5	703.6	634.0
137.5°	1316.0	1489.3	1316.0	957.5	741.0	666.4
140°	1284.6	1442.8	1284.6	957.5	761.9	692.3
142.5°	1248.1	1396.2	1248.1	962.7	782.7	718.1
145°	1193.3	1319.8	1193.3	964.0	813.8	750.5
147.5°	1153.8	1251.3	1153.8	971.8	845.0	789.3
150°	1127.6	1209.8	1127.6	976.9	865.8	815.2
152.5°	1106.6	1173.6	1106.6	976.9	886.6	841.1
155°	1081.6	1132.2	1081.6	983.4	911.5	879.9
157.5°	1065.8	1102.4	1065.8	991.2	941.3	910.9
160°	1055.3	1086.9	1055.3	996.3	957.0	931.6
162.5°	1049.9	1071.4	1049.9	1001.5	972.5	947.2
165°	1035.6	1054.6	1035.6	1009.3	989.6	976.9
167.5°	1029.0	1040.3	1029.0	1015.8	1005.1	993.8
170°	1028.8	1035.2	1028.8	1015.8	1015.6	1009.3
172.5°	1023.7	1030.0	1023.7	1020.9	1025.8	1014.5
175°	1022.1	1015.8	1022.1	1028.7	1035.0	1028.7
177.5°	1028.6	1023.5	1028.6	1028.7	1033.8	1028.7
180°	1028.7	1028.7	1028.7	1028.7	1028.7	1028.7

(END OF REPORT)