

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: P621740

Luminaire Tested: VLT-FA-150U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621740  
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-125D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

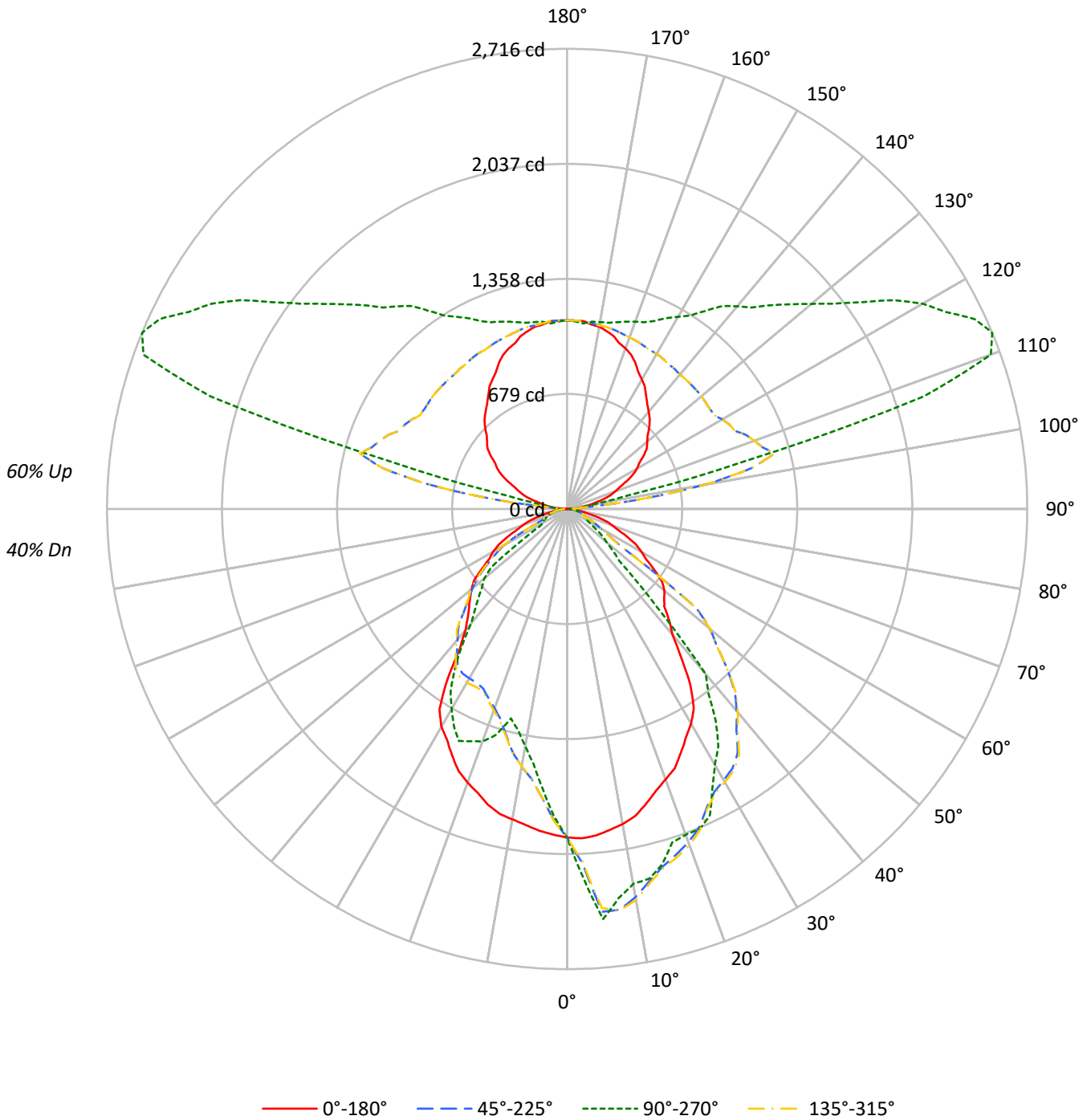
Lumens per Lamp: N/A  
Luminaire Lumens: 9980.2 lumens  
Efficiency: N/A  
Efficacy: 114.3 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 87.3  
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: P621740  
CATALOG NUMBER: VLT-FA-150U-125D-835-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621740

CATALOG NUMBER: VLT-FA-150U-125D-835-UNV-STD-W-4

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

RF	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	50	30	10	0														
RCR																																						
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40																				
1	96	92	89	85	88	84	81	78	69	67	65	55	54	53	43	42	41	35																				
2	88	81	76	71	80	74	70	65	61	58	55	49	47	45	38	37	36	31																				
3	81	72	65	60	73	66	60	55	55	50	47	44	41	39	35	33	31	27																				
4	74	64	57	51	67	59	52	47	49	44	41	40	36	34	31	29	27	23																				
5	68	57	50	44	62	53	46	41	44	39	35	36	32	30	28	26	24	21																				
6	63	52	44	38	57	48	41	36	40	35	31	33	29	26	26	23	21	18																				
7	58	47	39	34	53	43	36	32	36	31	27	30	26	23	24	21	19	17																				
8	54	42	35	30	49	39	33	28	33	28	24	27	24	21	22	19	17	15																				
9	50	39	32	27	46	36	29	25	30	25	22	25	21	19	20	18	16	14																				
10	47	36	29	24	43	33	27	23	28	23	20	23	20	17	19	16	14	12																				

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

	0°	90°	180°	270°
0°	13915	13915	13915	13915
5°	13939	17506	13726	11936
10°	13756	16372	13554	10363
15°	13380	16120	13424	9511
20°	12970	15621	13120	11147
25°	12573	15790	12714	11964
30°	12128	14449	12292	11295
35°	11111	13393	10835	10126
40°	9055	11918	8740	8242
45°	8227	4424	8307	7507
50°	8368	3369	8214	7135
55°	7897	2616	7625	4270
60°	7276	2011	7219	2378
65°	6699	2077	6564	2511
70°	5961	2193	5795	2608
75°	5088	2296	4869	2681
80°	3831	2364	3587	2773
85°	2602	2108	2272	2602

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 15235 cd/sqm



TEST NUMBER: P621740

CATALOG NUMBER: VLT-FA-150U-125D-835-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.1	1.9
10°-20°	512.4	5.1
20°-30°	766.7	7.7
30°-40°	872.0	8.7
40°-50°	745.7	7.5
50°-60°	502.9	5.0
60°-70°	259.6	2.6
70°-80°	117.2	1.2
80°-90°	37.4	0.4
90°-100°	136.8	1.4
100°-110°	975.2	9.8
110°-120°	1324.0	13.3
120°-130°	1077.6	10.8
130°-140°	866.7	8.7
140°-150°	683.3	6.8
150°-160°	499.6	5.0
160°-170°	310.3	3.1
170°-180°	105.8	1.1
0°-30°	1466.2	14.7
0°-40°	2338.2	23.4
0°-60°	3586.8	35.9
0°-90°	4000.9	40.1
90°-120°	2436.0	24.4
90°-150°	5063.5	50.7
90°-180°	5979.0	59.9
0°-180°	9980.2	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1939	1939	1939	1939	1939	
5°	1935	2430	1906	1657	1935	183
15°	1801	2170	1807	1280	1801	507
25°	1588	1994	1606	1511	1588	731
35°	1268	1529	1237	1156	1268	775
45°	811	436	819	740	811	643
55°	631	209	610	341	631	562
65°	394	122	387	148	394	390
75°	184	83	176	97	184	196
85°	32	26	28	32	32	40
90°	0	21	0	21	0	4
95°	56	77	56	77	56	63
105°	217	1071	217	1071	217	229
115°	385	2653	385	2653	385	382
125°	553	2128	553	2128	553	491
135°	686	1701	686	1701	686	528
145°	812	1428	812	1428	812	510
155°	952	1225	952	1225	952	437
165°	1057	1141	1057	1141	1057	297
175°	1113	1099	1113	1099	1113	105
180°	1113	1113	1113	1113	1113	



TEST NUMBER: P621740

CATALOG NUMBER: VLT-FA-150U-125D-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°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1945.4	2011.7	2095.3	2152.7	2177.3	2152.7	2081.1	2011.2	1923.3	1897.0	1834.9
5°	1935.1	2139.6	2386.8	2416.7	2430.2	2416.7	2365.1	2127.3	1905.5	1811.0	1708.3
7.5°	1911.4	2269.0	2384.1	2317.4	2317.8	2330.1	2387.6	2257.9	1880.7	1732.1	1606.1
10°	1887.8	2341.0	2325.7	2229.4	2246.8	2239.1	2343.4	2326.9	1860.1	1688.5	1544.5
12.5°	1856.2	2363.5	2248.4	2216.8	2235.7	2224.9	2259.8	2351.2	1842.8	1657.2	1473.5
15°	1801.0	2331.4	2183.7	2169.8	2169.8	2179.5	2193.5	2341.2	1806.9	1600.5	1386.7
17.5°	1744.2	2267.2	2138.7	2070.3	2062.9	2075.7	2154.9	2283.7	1756.0	1537.7	1302.7
20°	1698.4	2223.0	2092.9	2012.8	2045.6	2016.6	2110.7	2235.0	1718.1	1498.2	1250.6
22.5°	1657.4	2168.1	2034.5	2000.4	2044.0	2001.2	2050.7	2180.0	1673.9	1454.1	1211.2
25°	1587.9	2075.9	1946.9	1978.9	1994.3	1978.9	1954.8	2084.0	1605.7	1397.4	1169.7
27.5°	1518.9	1978.7	1881.5	1902.9	1855.8	1892.1	1892.1	1979.1	1535.5	1331.4	1157.1
30°	1463.7	1911.1	1848.3	1817.1	1743.8	1801.6	1862.1	1911.6	1483.4	1288.6	1154.0
32.5°	1391.1	1849.3	1815.2	1707.2	1660.1	1699.5	1830.6	1848.1	1402.9	1249.8	1150.8
35°	1268.4	1762.1	1755.6	1577.0	1528.8	1565.4	1769.4	1757.6	1236.8	1188.6	1126.3
37.5°	1103.9	1684.4	1641.6	1445.3	1368.6	1435.7	1654.6	1676.1	1040.3	1132.5	1069.1
40°	966.6	1632.0	1556.4	1347.5	1272.3	1337.9	1566.2	1627.4	933.0	1093.1	1006.0
42.5°	889.2	1585.5	1466.4	1244.0	778.4	1228.2	1476.3	1579.6	866.8	1042.3	950.8
45°	810.7	1501.2	1335.4	688.6	435.9	655.8	1337.4	1480.2	818.6	965.2	866.0
47.5°	776.4	1397.5	1198.5	414.8	368.1	402.8	1197.4	1374.7	776.8	887.9	785.1
50°	749.6	1332.1	1100.7	365.5	301.8	352.0	1102.7	1310.5	735.8	836.1	729.9
52.5°	705.4	1253.9	960.3	302.8	260.8	295.5	937.0	1229.4	693.2	779.6	660.4
55°	631.2	1103.8	400.4	238.0	209.1	228.4	380.7	1066.6	609.5	690.5	579.9
57.5°	552.7	939.6	280.9	185.3	162.1	183.4	278.9	902.0	542.5	584.9	505.8
60°	507.0	829.1	228.8	155.5	140.1	153.6	226.8	796.2	503.0	514.6	437.9
62.5°	461.2	716.9	189.4	136.8	132.2	134.9	189.0	680.9	454.1	454.9	308.5
65°	394.5	543.0	140.1	124.2	122.3	122.3	136.1	523.6	386.6	375.1	177.5
67.5°	326.7	389.9	112.4	114.4	112.4	112.4	110.5	378.9	318.8	299.1	134.1
70°	284.1	299.5	104.5	106.5	104.5	104.5	102.6	291.6	276.2	231.8	126.2
72.5°	243.0	204.4	96.7	97.0	96.7	96.7	94.7	191.9	235.1	163.0	115.2
75°	183.5	102.4	82.8	82.8	82.8	82.8	80.9	98.4	175.6	106.1	98.6
77.5°	127.4	67.6	68.6	68.3	68.3	66.7	66.7	67.1	119.9	73.3	79.7
80°	92.7	56.1	59.2	57.2	57.2	57.2	57.2	54.0	86.8	61.7	67.1
82.5°	65.9	44.7	48.1	46.2	46.2	46.2	46.2	44.2	60.0	50.3	54.4
85°	31.6	29.6	31.6	27.6	25.6	27.6	29.6	29.5	27.6	33.4	35.5
87.5°	9.5	15.5	15.4	13.7	13.7	13.7	13.8	13.9	7.9	17.0	17.0
90°	0.0	6.8	14.0	21.0	21.0	21.0	14.0	6.8	0.0	6.8	14.0
92.5°	16.8	23.6	30.8	43.5	49.0	43.5	30.8	23.6	16.8	23.6	30.8
95°	56.0	103.9	56.0	63.3	77.0	63.3	56.0	103.9	56.0	103.9	56.0
97.5°	99.4	199.3	411.6	121.4	105.0	121.4	411.6	199.3	99.4	199.3	411.6
100°	133.0	249.4	826.1	243.2	161.0	243.2	826.1	249.4	133.0	249.4	826.1
102.5°	166.6	288.5	1117.3	641.7	351.4	641.7	1117.3	288.5	166.6	288.5	1117.3
105°	217.0	333.4	1267.1	1618.7	1071.1	1618.7	1267.1	333.4	217.0	333.4	1267.1
107.5°	267.4	355.0	1209.7	2355.8	2206.6	2355.8	1209.7	355.0	267.4	355.0	1209.7
110°	301.0	383.2	1176.1	2475.4	2660.2	2475.4	1176.1	383.2	301.0	383.2	1176.1



TEST NUMBER: P621740

CATALOG NUMBER: VLT-FA-150U-125D-835-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°	334.6	416.8	1142.5	2405.5	2716.2	2405.5	1142.5	416.8	334.6	416.8	1142.5
115°	385.0	467.2	1092.1	2269.9	2653.2	2269.9	1092.1	467.2	385.0	467.2	1092.1
117.5°	436.8	517.6	1079.5	2123.1	2517.4	2123.1	1079.5	517.6	436.8	517.6	1079.5
120°	476.0	551.3	1057.1	2011.5	2422.2	2011.5	1057.1	551.3	476.0	551.3	1057.1
122.5°	504.0	584.8	1029.1	1915.6	2293.4	1915.6	1029.1	584.8	504.0	584.8	1029.1
125°	553.0	628.3	1029.1	1799.6	2128.2	1799.6	1029.1	628.3	553.0	628.3	1029.1
127.5°	593.7	670.3	1030.5	1665.1	1989.6	1665.1	1030.5	670.3	593.7	670.3	1030.5
130°	616.1	698.2	1036.1	1575.1	1883.2	1575.1	1036.1	698.2	616.1	698.2	1036.1
132.5°	644.1	726.2	1036.1	1534.7	1788.0	1534.7	1036.1	726.2	644.1	726.2	1036.1
135°	686.1	761.4	1036.1	1482.1	1701.2	1482.1	1036.1	761.4	686.1	761.4	1036.1
137.5°	721.1	801.8	1036.1	1424.0	1611.5	1424.0	1036.1	801.8	721.1	801.8	1036.1
140°	749.1	824.4	1036.1	1390.0	1561.1	1390.0	1036.1	824.4	749.1	824.4	1036.1
142.5°	777.1	846.9	1041.7	1350.6	1510.7	1350.6	1041.7	846.9	777.1	846.9	1041.7
145°	812.1	880.5	1043.1	1291.2	1428.1	1291.2	1043.1	880.5	812.1	880.5	1043.1
147.5°	854.1	914.3	1051.5	1248.5	1353.9	1248.5	1051.5	914.3	854.1	914.3	1051.5
150°	882.1	936.8	1057.1	1220.1	1309.1	1220.1	1057.1	936.8	882.1	936.8	1057.1
152.5°	910.1	959.4	1057.1	1197.4	1269.9	1197.4	1057.1	959.4	910.1	959.4	1057.1
155°	952.1	986.3	1064.1	1170.3	1225.1	1170.3	1064.1	986.3	952.1	986.3	1064.1
157.5°	985.7	1018.5	1072.5	1153.2	1192.9	1153.2	1072.5	1018.5	985.7	1018.5	1072.5
160°	1008.1	1035.5	1078.1	1141.9	1176.1	1141.9	1078.1	1035.5	1008.1	1035.5	1078.1
162.5°	1024.9	1052.3	1083.7	1136.0	1159.3	1136.0	1083.7	1052.3	1024.9	1052.3	1083.7
165°	1057.1	1070.8	1092.1	1120.6	1141.1	1120.6	1092.1	1070.8	1057.1	1070.8	1092.1
167.5°	1075.3	1087.6	1099.1	1113.4	1125.7	1113.4	1099.1	1087.6	1075.3	1087.6	1099.1
170°	1092.1	1098.9	1099.1	1113.3	1120.1	1113.3	1099.1	1098.9	1092.1	1098.9	1099.1
172.5°	1097.7	1110.0	1104.7	1107.7	1114.5	1107.7	1104.7	1110.0	1097.7	1110.0	1104.7
175°	1113.1	1119.9	1113.1	1105.9	1099.1	1105.9	1113.1	1119.9	1113.1	1119.9	1113.1
177.5°	1113.1	1118.6	1113.1	1113.0	1107.5	1113.0	1113.1	1118.6	1113.1	1118.6	1113.1
180°	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1



TEST NUMBER: P621740

CATALOG NUMBER: VLT-FA-150U-125D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1812.8	1811.2	1814.3	1841.2	1896.0	1945.4
5°	1651.2	1657.0	1662.8	1708.3	1804.0	1935.1
7.5°	1527.0	1518.5	1531.6	1605.7	1723.2	1911.4
10°	1441.5	1422.2	1441.5	1542.6	1679.5	1887.8
12.5°	1360.9	1337.0	1367.1	1477.9	1643.3	1856.2
15°	1257.1	1280.2	1266.7	1390.7	1588.8	1801.0
17.5°	1281.7	1398.2	1306.4	1314.9	1534.7	1744.2
20°	1340.1	1459.7	1378.7	1264.4	1499.7	1698.4
22.5°	1393.1	1483.4	1410.1	1221.8	1464.9	1657.4
25°	1433.9	1511.0	1430.0	1183.6	1414.3	1587.9
27.5°	1435.9	1446.7	1436.7	1180.4	1351.9	1518.9
30°	1409.3	1363.1	1405.5	1183.6	1307.4	1463.7
32.5°	1333.5	1281.0	1317.3	1177.2	1262.6	1391.1
35°	1225.4	1155.9	1206.1	1144.1	1193.2	1268.4
37.5°	1111.3	1023.4	1092.8	1078.6	1133.9	1103.9
40°	1034.1	879.8	1018.6	1013.9	1101.6	966.6
42.5°	935.2	804.0	921.3	961.8	1065.9	889.2
45°	755.1	739.7	747.4	873.9	990.1	810.7
47.5°	690.6	680.1	686.7	793.8	904.5	776.4
50°	652.6	639.1	648.8	741.7	849.9	749.6
52.5°	600.0	563.4	596.2	670.7	793.3	705.4
55°	451.2	341.3	449.3	589.8	708.4	631.2
57.5°	264.8	197.3	259.0	513.3	600.2	552.7
60°	179.2	165.7	181.1	451.7	528.2	507.0
62.5°	163.6	159.4	164.0	314.4	463.9	461.2
65°	149.9	147.9	149.9	181.5	382.9	394.5
67.5°	135.7	133.7	137.2	139.3	302.4	326.7
70°	126.2	124.3	126.2	128.2	232.0	284.1
72.5°	115.2	113.2	115.2	117.2	163.2	243.0
75°	98.6	96.7	98.6	100.6	108.2	183.5
77.5°	79.7	79.7	81.6	81.7	75.7	127.4
80°	67.1	67.1	69.0	69.0	65.7	92.7
82.5°	54.4	52.9	56.3	58.0	54.3	65.9
85°	33.5	31.6	35.4	37.5	35.4	31.6
87.5°	16.8	15.2	18.3	20.2	18.6	9.5
90°	21.0	21.0	21.0	14.0	6.8	0.0
92.5°	43.5	49.0	43.5	30.8	23.6	16.8
95°	63.3	77.0	63.3	56.0	103.9	56.0
97.5°	121.4	105.0	121.4	411.6	199.3	99.4
100°	243.2	161.0	243.2	826.1	249.4	133.0
102.5°	641.7	351.4	641.7	1117.3	288.5	166.6
105°	1618.7	1071.1	1618.7	1267.1	333.4	217.0
107.5°	2355.8	2206.6	2355.8	1209.7	355.0	267.4
110°	2475.4	2660.2	2475.4	1176.1	383.2	301.0





TEST NUMBER: P621740

CATALOG NUMBER: VLT-FA-150U-125D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2405.5	2716.2	2405.5	1142.5	416.8	334.6
115°	2269.9	2653.2	2269.9	1092.1	467.2	385.0
117.5°	2123.1	2517.4	2123.1	1079.5	517.6	436.8
120°	2011.5	2422.2	2011.5	1057.1	551.3	476.0
122.5°	1915.6	2293.4	1915.6	1029.1	584.8	504.0
125°	1799.6	2128.2	1799.6	1029.1	628.3	553.0
127.5°	1665.1	1989.6	1665.1	1030.5	670.3	593.7
130°	1575.1	1883.2	1575.1	1036.1	698.2	616.1
132.5°	1534.7	1788.0	1534.7	1036.1	726.2	644.1
135°	1482.1	1701.2	1482.1	1036.1	761.4	686.1
137.5°	1424.0	1611.5	1424.0	1036.1	801.8	721.1
140°	1390.0	1561.1	1390.0	1036.1	824.4	749.1
142.5°	1350.6	1510.7	1350.6	1041.7	846.9	777.1
145°	1291.2	1428.1	1291.2	1043.1	880.5	812.1
147.5°	1248.5	1353.9	1248.5	1051.5	914.3	854.1
150°	1220.1	1309.1	1220.1	1057.1	936.8	882.1
152.5°	1197.4	1269.9	1197.4	1057.1	959.4	910.1
155°	1170.3	1225.1	1170.3	1064.1	986.3	952.1
157.5°	1153.2	1192.9	1153.2	1072.5	1018.5	985.7
160°	1141.9	1176.1	1141.9	1078.1	1035.5	1008.1
162.5°	1136.0	1159.3	1136.0	1083.7	1052.3	1024.9
165°	1120.6	1141.1	1120.6	1092.1	1070.8	1057.1
167.5°	1113.4	1125.7	1113.4	1099.1	1087.6	1075.3
170°	1113.3	1120.1	1113.3	1099.1	1098.9	1092.1
172.5°	1107.7	1114.5	1107.7	1104.7	1110.0	1097.7
175°	1105.9	1099.1	1105.9	1113.1	1119.9	1113.1
177.5°	1113.0	1107.5	1113.0	1113.1	1118.6	1113.1
180°	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1

(END OF REPORT)