

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: P621742

Luminaire Tested: VLT-FA-150U-125D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621742  
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-930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

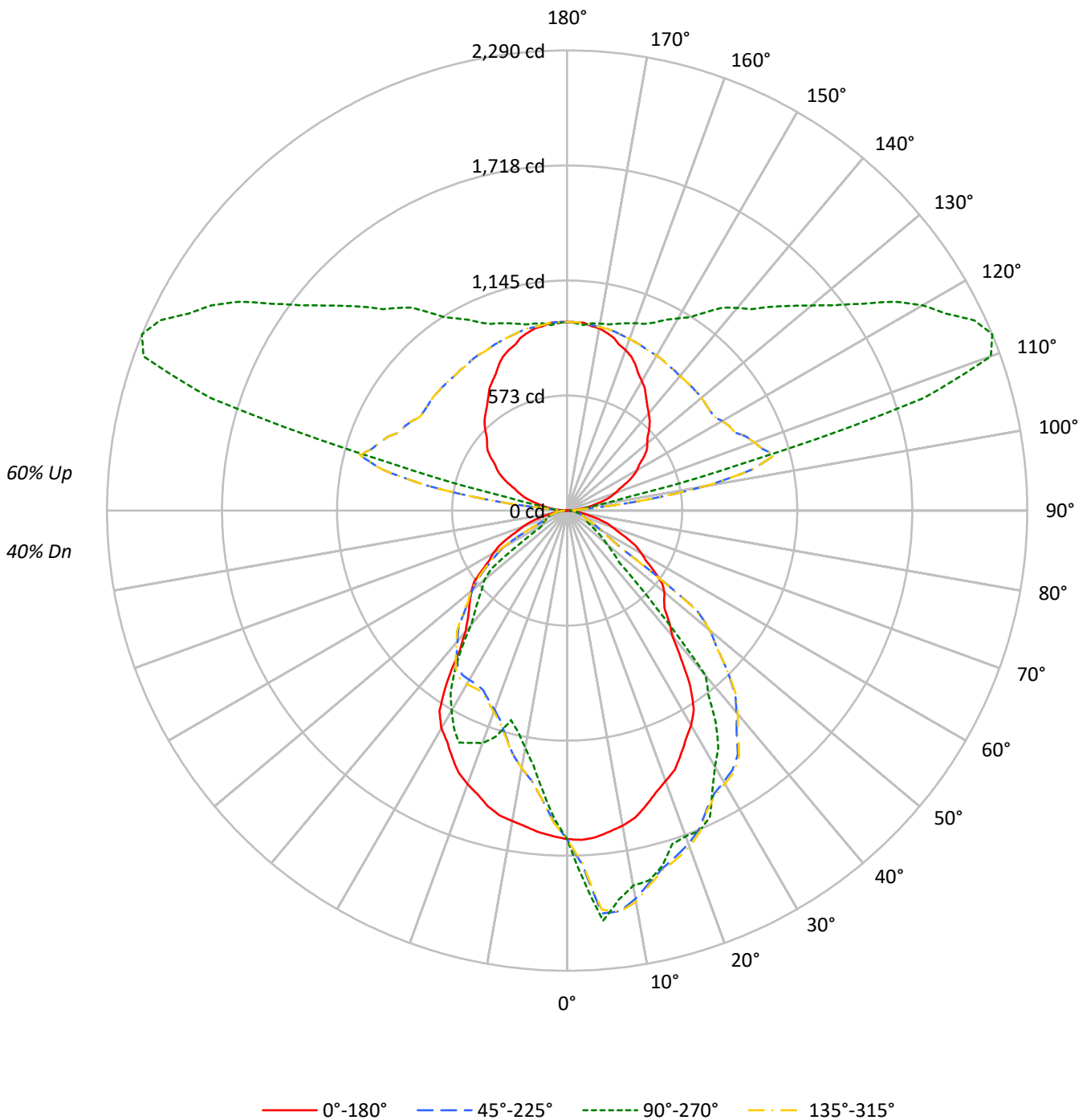
Lumens per Lamp: N/A  
Luminaire Lumens: 8415.1 lumens  
Efficiency: N/A  
Efficacy: 96.4 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

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



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### 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	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°	11733	11733	11733	11733
5°	11754	14760	11574	10064
10°	11598	13805	11429	8738
15°	11282	13592	11319	8020
20°	10936	13171	11063	9399
25°	10601	13315	10720	10088
30°	10226	12183	10364	9523
35°	9369	11292	9136	8539
40°	7635	10049	7369	6949
45°	6937	3731	7005	6330
50°	7056	2841	6926	6016
55°	6658	2206	6429	3599
60°	6135	1695	6087	2005
65°	5649	1751	5535	2117
70°	5025	1851	4886	2199
75°	4289	1938	4103	2260
80°	3232	1992	3025	2339
85°	2190	1778	1918	2190

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 12846 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.7	1.9
10°-20°	432.1	5.1
20°-30°	646.5	7.7
30°-40°	735.2	8.7
40°-50°	628.8	7.5
50°-60°	424.0	5.0
60°-70°	218.9	2.6
70°-80°	98.8	1.2
80°-90°	31.5	0.4
90°-100°	115.4	1.4
100°-110°	822.3	9.8
110°-120°	1116.3	13.3
120°-130°	908.6	10.8
130°-140°	730.8	8.7
140°-150°	576.1	6.8
150°-160°	421.3	5.0
160°-170°	261.7	3.1
170°-180°	89.2	1.1
0°-30°	1236.3	14.7
0°-40°	1971.5	23.4
0°-60°	3024.3	35.9
0°-90°	3373.5	40.1
90°-120°	2054.0	24.4
90°-150°	4269.5	50.7
90°-180°	5042.0	59.9
0°-180°	8415.1	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1635	1635	1635	1635	1635	
5°	1632	2049	1607	1397	1632	154
15°	1519	1830	1524	1080	1519	427
25°	1339	1682	1354	1274	1339	616
35°	1070	1289	1043	975	1070	654
45°	684	368	690	624	684	542
55°	532	176	514	288	532	474
65°	333	103	326	125	333	329
75°	155	70	148	82	155	165
85°	27	22	23	27	27	34
90°	0	18	0	18	0	3
95°	47	65	47	65	47	53
105°	183	903	183	903	183	193
115°	325	2237	325	2237	325	322
125°	466	1794	466	1794	466	414
135°	578	1434	578	1434	578	445
145°	685	1204	685	1204	685	430
155°	803	1033	803	1033	803	369
165°	891	962	891	962	891	250
175°	939	927	939	927	939	89
180°	939	939	939	939	939	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0
2.5°	1640.3	1696.3	1766.7	1815.1	1835.9	1815.1	1754.7	1695.8	1621.7	1599.6	1547.2
5°	1631.7	1804.1	2012.6	2037.8	2049.1	2037.8	1994.3	1793.7	1606.7	1527.0	1440.4
7.5°	1611.7	1913.2	2010.2	1954.0	1954.3	1964.7	2013.2	1903.9	1585.8	1460.5	1354.2
10°	1591.7	1973.9	1961.0	1879.8	1894.5	1888.0	1976.0	1962.0	1568.5	1423.7	1302.3
12.5°	1565.1	1992.9	1895.8	1869.2	1885.1	1876.0	1905.4	1982.5	1553.8	1397.4	1242.5
15°	1518.6	1965.8	1841.2	1829.6	1829.6	1837.7	1849.6	1974.0	1523.6	1349.5	1169.3
17.5°	1470.7	1911.7	1803.3	1745.6	1739.4	1750.2	1817.0	1925.6	1480.6	1296.5	1098.4
20°	1432.1	1874.4	1764.7	1697.2	1724.8	1700.4	1779.7	1884.6	1448.7	1263.3	1054.5
22.5°	1397.5	1828.1	1715.5	1686.7	1723.5	1687.4	1729.1	1838.2	1411.4	1226.0	1021.2
25°	1338.9	1750.4	1641.6	1668.6	1681.6	1668.6	1648.3	1757.2	1353.9	1178.3	986.3
27.5°	1280.7	1668.4	1586.4	1604.5	1564.8	1595.4	1595.4	1668.7	1294.7	1122.6	975.7
30°	1234.1	1611.4	1558.5	1532.1	1470.3	1519.1	1570.1	1611.8	1250.8	1086.5	973.0
32.5°	1172.9	1559.3	1530.5	1439.5	1399.8	1433.0	1543.5	1558.3	1182.9	1053.8	970.3
35°	1069.5	1485.8	1480.3	1329.7	1289.0	1319.9	1491.9	1482.0	1042.9	1002.2	949.7
37.5°	930.8	1420.3	1384.2	1218.7	1154.0	1210.6	1395.1	1413.2	877.2	954.9	901.5
40°	815.0	1376.1	1312.3	1136.2	1072.8	1128.1	1320.6	1372.2	786.7	921.7	848.3
42.5°	749.8	1336.9	1236.5	1048.9	656.3	1035.6	1244.8	1331.9	730.8	878.8	801.7
45°	683.6	1265.8	1126.0	580.6	367.6	553.0	1127.7	1248.1	690.3	813.9	730.2
47.5°	654.7	1178.3	1010.6	349.7	310.4	339.6	1009.6	1159.1	655.0	748.7	662.0
50°	632.0	1123.2	928.1	308.1	254.5	296.8	929.8	1105.0	620.4	705.0	615.4
52.5°	594.8	1057.3	809.7	255.3	219.9	249.2	790.1	1036.6	584.5	657.3	556.9
55°	532.2	930.7	337.6	200.7	176.3	192.6	321.0	899.4	513.9	582.3	489.0
57.5°	466.0	792.3	236.8	156.2	136.7	154.6	235.2	760.5	457.4	493.2	426.5
60°	427.5	699.1	192.9	131.1	118.1	129.5	191.3	671.3	424.1	433.9	369.2
62.5°	388.9	604.5	159.7	115.3	111.4	113.7	159.3	574.1	382.9	383.5	260.1
65°	332.7	457.9	118.1	104.7	103.1	103.1	114.8	441.5	326.0	316.2	149.7
67.5°	275.4	328.8	94.8	96.4	94.8	94.8	93.1	319.5	268.8	252.2	113.1
70°	239.5	252.5	88.2	89.8	88.2	88.2	86.5	245.9	232.9	195.5	106.4
72.5°	204.9	172.4	81.5	81.8	81.5	81.5	79.8	161.8	198.3	137.4	97.1
75°	154.7	86.4	69.9	69.9	69.9	69.9	68.2	83.0	148.0	89.5	83.2
77.5°	107.4	57.0	57.9	57.5	57.5	56.2	56.2	56.6	101.1	61.8	67.2
80°	78.2	47.3	49.9	48.2	48.2	48.2	48.2	45.5	73.2	52.0	56.6
82.5°	55.6	37.7	40.6	38.9	38.9	38.9	38.9	37.2	50.6	42.4	45.9
85°	26.6	25.0	26.6	23.2	21.6	23.2	24.9	24.9	23.3	28.2	29.9
87.5°	8.0	13.0	13.0	11.5	11.5	11.5	11.7	11.7	6.7	14.3	14.3
90°	0.0	5.8	11.8	17.7	17.7	17.7	11.8	5.8	0.0	5.8	11.8
92.5°	14.2	19.9	26.0	36.7	41.3	36.7	26.0	19.9	14.2	19.9	26.0
95°	47.2	87.6	47.2	53.4	64.9	53.4	47.2	87.6	47.2	87.6	47.2
97.5°	83.8	168.1	347.1	102.4	88.5	102.4	347.1	168.1	83.8	168.1	347.1
100°	112.2	210.3	696.5	205.0	135.8	205.0	696.5	210.3	112.2	210.3	696.5
102.5°	140.5	243.2	942.1	541.0	296.3	541.0	942.1	243.2	140.5	243.2	942.1
105°	183.0	281.1	1068.4	1364.9	903.1	1364.9	1068.4	281.1	183.0	281.1	1068.4
107.5°	225.5	299.4	1020.0	1986.4	1860.6	1986.4	1020.0	299.4	225.5	299.4	1020.0
110°	253.8	323.1	991.7	2087.3	2243.1	2087.3	991.7	323.1	253.8	323.1	991.7



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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°	282.2	351.4	963.3	2028.3	2290.3	2028.3	963.3	351.4	282.2	351.4	963.3
115°	324.7	393.9	920.8	1914.0	2237.2	1914.0	920.8	393.9	324.7	393.9	920.8
117.5°	368.3	436.4	910.2	1790.2	2122.7	1790.2	910.2	436.4	368.3	436.4	910.2
120°	401.4	464.9	891.3	1696.1	2042.4	1696.1	891.3	464.9	401.4	464.9	891.3
122.5°	425.0	493.1	867.7	1615.2	1933.8	1615.2	867.7	493.1	425.0	493.1	867.7
125°	466.3	529.8	867.7	1517.4	1794.5	1517.4	867.7	529.8	466.3	529.8	867.7
127.5°	500.6	565.2	868.9	1404.0	1677.6	1404.0	868.9	565.2	500.6	565.2	868.9
130°	519.5	588.7	873.6	1328.1	1587.9	1328.1	873.6	588.7	519.5	588.7	873.6
132.5°	543.1	612.3	873.6	1294.0	1507.6	1294.0	873.6	612.3	543.1	612.3	873.6
135°	578.5	642.0	873.6	1249.7	1434.4	1249.7	873.6	642.0	578.5	642.0	873.6
137.5°	608.0	676.1	873.6	1200.7	1358.8	1200.7	873.6	676.1	608.0	676.1	873.6
140°	631.6	695.1	873.6	1172.0	1316.3	1172.0	873.6	695.1	631.6	695.1	873.6
142.5°	655.2	714.1	878.3	1138.8	1273.8	1138.8	878.3	714.1	655.2	714.1	878.3
145°	684.7	742.4	879.5	1088.8	1204.2	1088.8	879.5	742.4	684.7	742.4	879.5
147.5°	720.1	770.9	886.6	1052.7	1141.6	1052.7	886.6	770.9	720.1	770.9	886.6
150°	743.8	789.9	891.3	1028.8	1103.8	1028.8	891.3	789.9	743.8	789.9	891.3
152.5°	767.4	808.9	891.3	1009.6	1070.8	1009.6	891.3	808.9	767.4	808.9	891.3
155°	802.8	831.6	897.2	986.8	1033.0	986.8	897.2	831.6	802.8	831.6	897.2
157.5°	831.1	858.8	904.3	972.4	1005.8	972.4	904.3	858.8	831.1	858.8	904.3
160°	850.0	873.1	909.0	962.8	991.7	962.8	909.0	873.1	850.0	873.1	909.0
162.5°	864.2	887.3	913.8	957.9	977.5	957.9	913.8	887.3	864.2	887.3	913.8
165°	891.3	902.9	920.8	944.9	962.2	944.9	920.8	902.9	891.3	902.9	920.8
167.5°	906.7	917.1	926.7	938.8	949.2	938.8	926.7	917.1	906.7	917.1	926.7
170°	920.8	926.6	926.7	938.7	944.5	938.7	926.7	926.6	920.8	926.6	926.7
172.5°	925.6	936.0	931.5	934.0	939.7	934.0	931.5	936.0	925.6	936.0	931.5
175°	938.6	944.3	938.6	932.5	926.7	932.5	938.6	944.3	938.6	944.3	938.6
177.5°	938.6	943.2	938.6	938.5	933.8	938.5	938.6	943.2	938.6	943.2	938.6
180°	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6	938.6



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1635.0	1635.0	1635.0	1635.0	1635.0	1635.0
2.5°	1528.5	1527.2	1529.8	1552.5	1598.7	1640.3
5°	1392.3	1397.1	1402.0	1440.4	1521.1	1631.7
7.5°	1287.5	1280.4	1291.4	1353.9	1453.0	1611.7
10°	1215.5	1199.2	1215.5	1300.7	1416.1	1591.7
12.5°	1147.5	1127.4	1152.7	1246.1	1385.6	1565.1
15°	1059.9	1079.5	1068.1	1172.6	1339.7	1518.6
17.5°	1080.7	1178.9	1101.5	1108.7	1294.0	1470.7
20°	1130.0	1230.8	1162.5	1066.2	1264.6	1432.1
22.5°	1174.7	1250.8	1189.0	1030.2	1235.2	1397.5
25°	1209.0	1274.1	1205.8	998.0	1192.6	1338.9
27.5°	1210.7	1219.8	1211.4	995.3	1139.9	1280.7
30°	1188.3	1149.3	1185.1	998.0	1102.4	1234.1
32.5°	1124.4	1080.1	1110.7	992.6	1064.6	1172.9
35°	1033.2	974.7	1017.0	964.7	1006.1	1069.5
37.5°	937.1	862.9	921.4	909.5	956.1	930.8
40°	871.9	741.8	858.9	854.9	928.8	815.0
42.5°	788.5	677.9	776.8	811.0	898.8	749.8
45°	636.7	623.7	630.2	736.8	834.8	683.6
47.5°	582.3	573.5	579.0	669.3	762.6	654.7
50°	550.3	538.9	547.0	625.4	716.6	632.0
52.5°	505.9	475.0	502.7	565.5	668.9	594.8
55°	380.4	287.7	378.8	497.3	597.3	532.2
57.5°	223.2	166.3	218.4	432.8	506.1	466.0
60°	151.1	139.7	152.7	380.9	445.3	427.5
62.5°	138.0	134.4	138.3	265.1	391.1	388.9
65°	126.4	124.7	126.4	153.0	322.9	332.7
67.5°	114.4	112.8	115.7	117.4	254.9	275.4
70°	106.4	104.8	106.4	108.1	195.6	239.5
72.5°	97.1	95.5	97.1	98.8	137.6	204.9
75°	83.1	81.5	83.1	84.8	91.3	154.7
77.5°	67.2	67.2	68.8	68.9	63.9	107.4
80°	56.6	56.6	58.2	58.2	55.4	78.2
82.5°	45.9	44.6	47.5	48.9	45.8	55.6
85°	28.2	26.6	29.9	31.6	29.9	26.6
87.5°	14.2	12.9	15.5	17.0	15.6	8.0
90°	17.7	17.7	17.7	11.8	5.8	0.0
92.5°	36.7	41.3	36.7	26.0	19.9	14.2
95°	53.4	64.9	53.4	47.2	87.6	47.2
97.5°	102.4	88.5	102.4	347.1	168.1	83.8
100°	205.0	135.8	205.0	696.5	210.3	112.2
102.5°	541.0	296.3	541.0	942.1	243.2	140.5
105°	1364.9	903.1	1364.9	1068.4	281.1	183.0
107.5°	1986.4	1860.6	1986.4	1020.0	299.4	225.5
110°	2087.3	2243.1	2087.3	991.7	323.1	253.8





TEST NUMBER: P621742

CATALOG NUMBER: VLT-FA-150U-125D-930-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2028.3	2290.3	2028.3	963.3	351.4	282.2
115°	1914.0	2237.2	1914.0	920.8	393.9	324.7
117.5°	1790.2	2122.7	1790.2	910.2	436.4	368.3
120°	1696.1	2042.4	1696.1	891.3	464.9	401.4
122.5°	1615.2	1933.8	1615.2	867.7	493.1	425.0
125°	1517.4	1794.5	1517.4	867.7	529.8	466.3
127.5°	1404.0	1677.6	1404.0	868.9	565.2	500.6
130°	1328.1	1587.9	1328.1	873.6	588.7	519.5
132.5°	1294.0	1507.6	1294.0	873.6	612.3	543.1
135°	1249.7	1434.4	1249.7	873.6	642.0	578.5
137.5°	1200.7	1358.8	1200.7	873.6	676.1	608.0
140°	1172.0	1316.3	1172.0	873.6	695.1	631.6
142.5°	1138.8	1273.8	1138.8	878.3	714.1	655.2
145°	1088.8	1204.2	1088.8	879.5	742.4	684.7
147.5°	1052.7	1141.6	1052.7	886.6	770.9	720.1
150°	1028.8	1103.8	1028.8	891.3	789.9	743.8
152.5°	1009.6	1070.8	1009.6	891.3	808.9	767.4
155°	986.8	1033.0	986.8	897.2	831.6	802.8
157.5°	972.4	1005.8	972.4	904.3	858.8	831.1
160°	962.8	991.7	962.8	909.0	873.1	850.0
162.5°	957.9	977.5	957.9	913.8	887.3	864.2
165°	944.9	962.2	944.9	920.8	902.9	891.3
167.5°	938.8	949.2	938.8	926.7	917.1	906.7
170°	938.7	944.5	938.7	926.7	926.6	920.8
172.5°	934.0	939.7	934.0	931.5	936.0	925.6
175°	932.5	926.7	932.5	938.6	944.3	938.6
177.5°	938.5	933.8	938.5	938.6	943.2	938.6
180°	938.6	938.6	938.6	938.6	938.6	938.6

(END OF REPORT)