

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: P621739

Luminaire Tested: VLT-FA-150U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621739
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-830-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

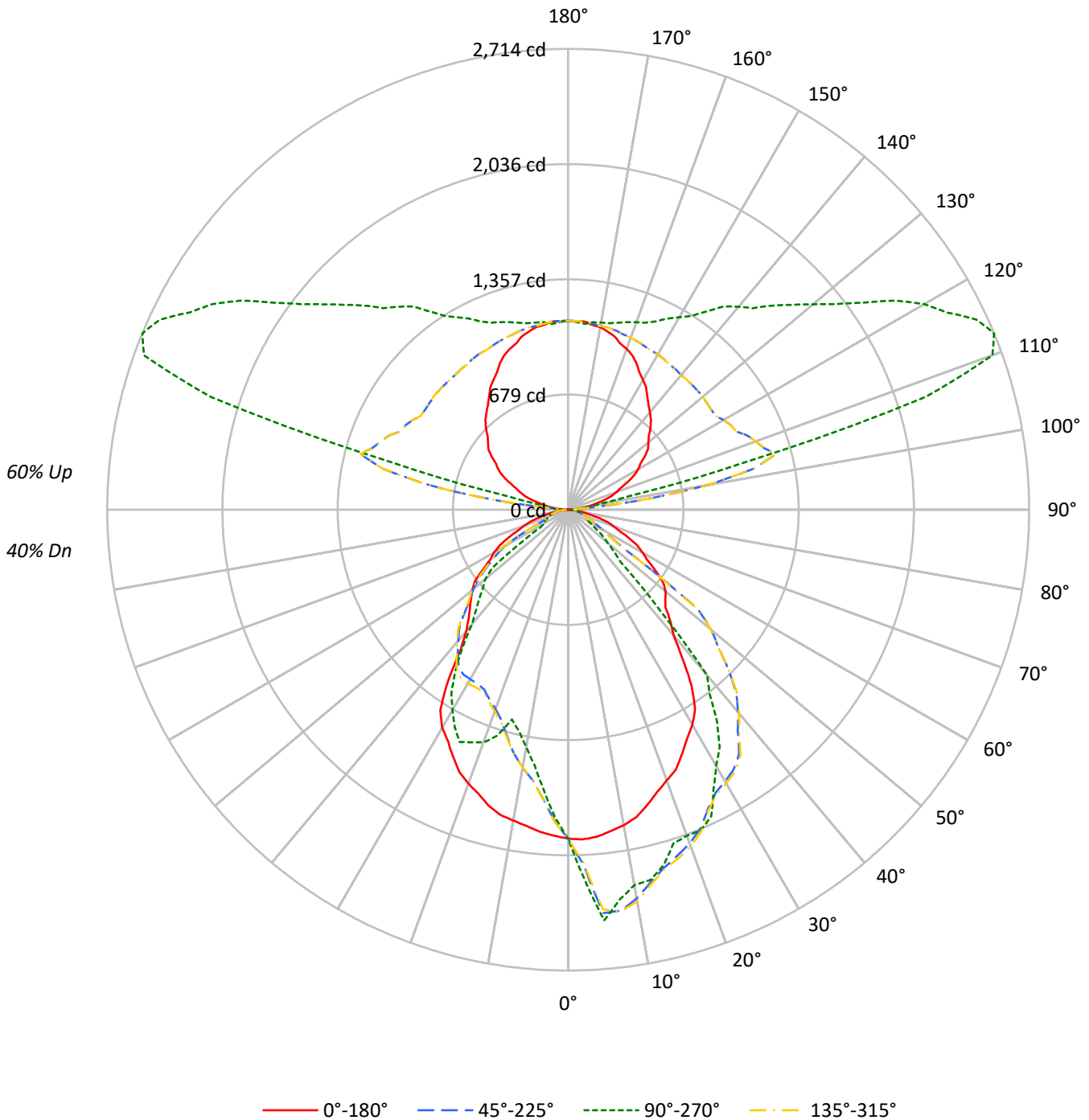
Lumens per Lamp: N/A
Luminaire Lumens: 9971.2 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.3
Input Voltage (V): 120
Input Current (A_{in}): 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°	13902	13902	13902	13902
5°	13927	17490	13714	11925
10°	13743	16356	13542	10354
15°	13367	16106	13412	9503
20°	12958	15607	13109	11137
25°	12562	15776	12702	11953
30°	12117	14436	12280	11284
35°	11101	13380	10825	10117
40°	9046	11908	8732	8234
45°	8220	4420	8300	7501
50°	8361	3366	8206	7128
55°	7891	2614	7619	4265
60°	7269	2008	7213	2375
65°	6693	2075	6559	2510
70°	5954	2193	5789	2606
75°	5082	2296	4863	2678
80°	3827	2364	3583	2769
85°	2594	2108	2272	2594

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15221 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	1.9
10°-20°	511.9	5.1
20°-30°	766.0	7.7
30°-40°	871.2	8.7
40°-50°	745.1	7.5
50°-60°	502.4	5.0
60°-70°	259.3	2.6
70°-80°	117.1	1.2
80°-90°	37.3	0.4
90°-100°	136.7	1.4
100°-110°	974.3	9.8
110°-120°	1322.8	13.3
120°-130°	1076.6	10.8
130°-140°	865.9	8.7
140°-150°	682.6	6.8
150°-160°	499.1	5.0
160°-170°	310.0	3.1
170°-180°	105.7	1.1
0°-30°	1464.9	14.7
0°-40°	2336.0	23.4
0°-60°	3583.5	35.9
0°-90°	3997.3	40.1
90°-120°	2433.8	24.4
90°-150°	5059.0	50.7
90°-180°	5974.0	59.9
0°-180°	9971.2	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1937	1937	1937	1937	1937	
5°	1933	2428	1904	1656	1933	183
15°	1799	2168	1805	1279	1799	506
25°	1586	1992	1604	1510	1586	730
35°	1267	1527	1236	1155	1267	775
45°	810	436	818	739	810	643
55°	631	209	609	341	631	562
65°	394	122	386	148	394	390
75°	183	83	175	97	183	195
85°	32	26	28	32	32	40
90°	0	21	0	21	0	4
95°	56	77	56	77	56	63
105°	217	1070	217	1070	217	229
115°	385	2651	385	2651	385	382
125°	553	2126	553	2126	553	491
135°	685	1700	685	1700	685	527
145°	811	1427	811	1427	811	510
155°	951	1224	951	1224	951	437
165°	1056	1140	1056	1140	1056	297
175°	1112	1098	1112	1098	1112	105
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1943.6	2009.9	2093.4	2150.7	2175.4	2150.7	2079.2	2009.4	1921.5	1895.3	1833.2
5°	1933.4	2137.6	2384.7	2414.5	2428.0	2414.5	2363.0	2125.4	1903.8	1809.4	1706.7
7.5°	1909.7	2267.0	2381.9	2315.3	2315.7	2328.0	2385.5	2255.9	1879.0	1730.6	1604.6
10°	1886.1	2338.9	2323.6	2227.4	2244.7	2237.0	2341.3	2324.8	1858.5	1687.0	1543.1
12.5°	1854.5	2361.3	2246.3	2214.8	2233.7	2222.9	2257.8	2349.1	1841.1	1655.7	1472.2
15°	1799.3	2329.3	2181.7	2167.9	2167.9	2177.5	2191.5	2339.0	1805.3	1599.1	1385.5
17.5°	1742.6	2265.2	2136.7	2068.4	2061.1	2073.8	2152.9	2281.6	1754.4	1536.3	1301.5
20°	1696.9	2221.0	2091.0	2011.0	2043.7	2014.8	2108.8	2233.0	1716.6	1496.9	1249.5
22.5°	1655.9	2166.1	2032.7	1998.6	2042.1	1999.4	2048.8	2178.1	1672.4	1452.7	1210.1
25°	1586.5	2074.0	1945.2	1977.1	1992.5	1977.1	1953.1	2082.1	1604.2	1396.1	1168.7
27.5°	1517.5	1976.9	1879.8	1901.2	1854.1	1890.4	1890.4	1977.3	1534.1	1330.2	1156.1
30°	1462.3	1909.4	1846.6	1815.4	1742.2	1800.0	1860.4	1909.8	1482.0	1287.4	1152.9
32.5°	1389.8	1847.7	1813.5	1705.6	1658.6	1697.9	1828.9	1846.4	1401.6	1248.6	1149.8
35°	1267.2	1760.5	1754.0	1575.5	1527.4	1564.0	1767.8	1756.0	1235.7	1187.5	1125.3
37.5°	1102.9	1682.9	1640.1	1444.0	1367.3	1434.4	1653.1	1674.5	1039.4	1131.5	1068.2
40°	965.7	1630.5	1555.0	1346.3	1271.2	1336.7	1564.8	1625.9	932.2	1092.1	1005.1
42.5°	888.4	1584.1	1465.1	1242.9	777.7	1227.1	1475.0	1578.2	866.0	1041.3	949.9
45°	810.0	1499.9	1334.2	688.0	435.5	655.2	1336.2	1478.8	817.9	964.3	865.2
47.5°	775.7	1396.2	1197.5	414.4	367.8	402.4	1196.3	1373.5	776.1	887.1	784.4
50°	748.9	1330.9	1099.7	365.1	301.5	351.6	1101.7	1309.4	735.1	835.3	729.2
52.5°	704.8	1252.8	959.4	302.5	260.5	295.2	936.1	1228.2	692.5	778.9	659.8
55°	630.7	1102.8	400.1	237.8	208.9	228.2	380.4	1065.7	609.0	689.9	579.4
57.5°	552.2	938.8	280.6	185.1	162.0	183.2	278.7	901.2	542.0	584.4	505.3
60°	506.5	828.3	228.6	155.3	139.9	153.4	226.6	795.5	502.6	514.1	437.5
62.5°	460.8	716.3	189.2	136.7	132.0	134.7	188.8	680.3	453.7	454.5	308.2
65°	394.2	542.5	139.9	124.1	122.2	122.2	136.0	523.1	386.3	374.7	177.4
67.5°	326.4	389.6	112.3	114.3	112.3	112.3	110.4	378.6	318.5	298.8	134.0
70°	283.8	299.2	104.5	106.4	104.5	104.5	102.5	291.3	275.9	231.6	126.1
72.5°	242.8	204.3	96.6	97.0	96.6	96.6	94.6	191.8	234.9	162.8	115.1
75°	183.3	102.4	82.8	82.8	82.8	82.8	80.8	98.3	175.4	106.0	98.5
77.5°	127.3	67.6	68.6	68.2	68.2	66.6	66.6	67.0	119.8	73.2	79.6
80°	92.6	56.0	59.1	57.2	57.2	57.2	57.2	54.0	86.7	61.7	67.0
82.5°	65.8	44.6	48.1	46.1	46.1	46.1	46.1	44.1	59.9	50.3	54.4
85°	31.5	29.6	31.5	27.5	25.6	27.5	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	103.8	56.0	63.3	76.9	63.3	56.0	103.8	56.0	103.8	56.0
97.5°	99.3	199.2	411.3	121.3	104.9	121.3	411.3	199.2	99.3	199.2	411.3
100°	132.9	249.2	825.3	242.9	160.9	242.9	825.3	249.2	132.9	249.2	825.3
102.5°	166.5	288.2	1116.3	641.1	351.1	641.1	1116.3	288.2	166.5	288.2	1116.3
105°	216.8	333.1	1266.0	1617.2	1070.1	1617.2	1266.0	333.1	216.8	333.1	1266.0
107.5°	267.2	354.7	1208.6	2353.7	2204.6	2353.7	1208.6	354.7	267.2	354.7	1208.6
110°	300.8	382.8	1175.0	2473.2	2657.8	2473.2	1175.0	382.8	300.8	382.8	1175.0



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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°	334.3	416.4	1141.5	2403.3	2713.8	2403.3	1141.5	416.4	334.3	416.4	1141.5
115°	384.7	466.8	1091.1	2267.9	2650.8	2267.9	1091.1	466.8	384.7	466.8	1091.1
117.5°	436.4	517.1	1078.5	2121.2	2515.2	2121.2	1078.5	517.1	436.4	517.1	1078.5
120°	475.6	550.8	1056.1	2009.7	2420.0	2009.7	1056.1	550.8	475.6	550.8	1056.1
122.5°	503.6	584.3	1028.2	1913.8	2291.3	1913.8	1028.2	584.3	503.6	584.3	1028.2
125°	552.6	627.8	1028.2	1798.0	2126.3	1798.0	1028.2	627.8	552.6	627.8	1028.2
127.5°	593.1	669.7	1029.6	1663.6	1987.8	1663.6	1029.6	669.7	593.1	669.7	1029.6
130°	615.5	697.6	1035.2	1573.7	1881.5	1573.7	1035.2	697.6	615.5	697.6	1035.2
132.5°	643.5	725.5	1035.2	1533.3	1786.3	1533.3	1035.2	725.5	643.5	725.5	1035.2
135°	685.4	760.7	1035.2	1480.8	1699.6	1480.8	1035.2	760.7	685.4	760.7	1035.2
137.5°	720.4	801.1	1035.2	1422.7	1610.1	1422.7	1035.2	801.1	720.4	801.1	1035.2
140°	748.4	823.6	1035.2	1388.8	1559.7	1388.8	1035.2	823.6	748.4	823.6	1035.2
142.5°	776.4	846.1	1040.8	1349.3	1509.4	1349.3	1040.8	846.1	776.4	846.1	1040.8
145°	811.3	879.7	1042.2	1290.1	1426.8	1290.1	1042.2	879.7	811.3	879.7	1042.2
147.5°	853.3	913.5	1050.5	1247.4	1352.7	1247.4	1050.5	913.5	853.3	913.5	1050.5
150°	881.3	936.0	1056.1	1219.0	1307.9	1219.0	1056.1	936.0	881.3	936.0	1056.1
152.5°	909.3	958.5	1056.1	1196.3	1268.8	1196.3	1056.1	958.5	909.3	958.5	1056.1
155°	951.2	985.4	1063.1	1169.3	1224.0	1169.3	1063.1	985.4	951.2	985.4	1063.1
157.5°	984.8	1017.6	1071.5	1152.2	1191.8	1152.2	1071.5	1017.6	984.8	1017.6	1071.5
160°	1007.2	1034.5	1077.1	1140.8	1175.0	1140.8	1077.1	1034.5	1007.2	1034.5	1077.1
162.5°	1024.0	1051.3	1082.7	1135.0	1158.3	1135.0	1082.7	1051.3	1024.0	1051.3	1082.7
165°	1056.1	1069.8	1091.1	1119.6	1140.1	1119.6	1091.1	1069.8	1056.1	1069.8	1091.1
167.5°	1074.3	1086.6	1098.1	1112.4	1124.7	1112.4	1098.1	1086.6	1074.3	1086.6	1098.1
170°	1091.1	1098.0	1098.1	1112.3	1119.1	1112.3	1098.1	1098.0	1091.1	1098.0	1098.1
172.5°	1096.7	1109.0	1103.7	1106.7	1113.5	1106.7	1103.7	1109.0	1096.7	1109.0	1103.7
175°	1112.1	1118.9	1112.1	1104.9	1098.1	1104.9	1112.1	1118.9	1112.1	1118.9	1112.1
177.5°	1112.1	1117.6	1112.1	1112.0	1106.5	1112.0	1112.1	1117.6	1112.1	1117.6	1112.1
180°	1112.1	1112.1	1112.1	1112.1	1112.1	1112.1	1112.1	1112.1	1112.1	1112.1	1112.1

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1811.1	1809.6	1812.7	1839.5	1894.3	1943.6
5°	1649.7	1655.5	1661.3	1706.7	1802.3	1933.4
7.5°	1525.6	1517.1	1530.2	1604.2	1721.6	1909.7
10°	1440.2	1421.0	1440.2	1541.2	1677.9	1886.1
12.5°	1359.7	1335.8	1365.9	1476.5	1641.8	1854.5
15°	1255.9	1279.1	1265.6	1389.4	1587.4	1799.3
17.5°	1280.5	1396.9	1305.2	1313.7	1533.3	1742.6
20°	1338.9	1458.4	1377.5	1263.3	1498.4	1696.9
22.5°	1391.9	1482.0	1408.8	1220.7	1463.6	1655.9
25°	1432.6	1509.6	1428.7	1182.5	1413.1	1586.5
27.5°	1434.6	1445.4	1435.4	1179.3	1350.6	1517.5
30°	1408.1	1361.8	1404.2	1182.5	1306.2	1462.3
32.5°	1332.3	1279.8	1316.1	1176.2	1261.5	1389.8
35°	1224.3	1154.9	1205.0	1143.1	1192.1	1267.2
37.5°	1110.3	1022.5	1091.8	1077.6	1132.9	1102.9
40°	1033.1	879.0	1017.7	1013.0	1100.6	965.7
42.5°	934.3	803.3	920.5	961.0	1065.0	888.4
45°	754.5	739.1	746.8	873.1	989.2	810.0
47.5°	689.9	679.5	686.1	793.1	903.7	775.7
50°	652.0	638.5	648.2	741.0	849.1	748.9
52.5°	599.5	562.9	595.6	670.1	792.6	704.8
55°	450.8	340.9	448.9	589.3	707.7	630.7
57.5°	264.5	197.1	258.7	512.8	599.6	552.2
60°	179.0	165.5	181.0	451.3	527.7	506.5
62.5°	163.5	159.2	163.9	314.1	463.5	460.8
65°	149.7	147.8	149.7	181.3	382.6	394.2
67.5°	135.5	133.6	137.1	139.1	302.1	326.4
70°	126.1	124.2	126.1	128.1	231.8	283.8
72.5°	115.1	113.1	115.1	117.1	163.0	242.8
75°	98.5	96.6	98.5	100.5	108.1	183.3
77.5°	79.6	79.6	81.5	81.6	75.7	127.3
80°	67.0	67.0	68.9	69.0	65.6	92.6
82.5°	54.4	52.8	56.3	57.9	54.3	65.8
85°	33.5	31.5	35.4	37.4	35.4	31.5
87.5°	16.8	15.2	18.3	20.1	18.5	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	76.9	63.3	56.0	103.8	56.0
97.5°	121.3	104.9	121.3	411.3	199.2	99.3
100°	242.9	160.9	242.9	825.3	249.2	132.9
102.5°	641.1	351.1	641.1	1116.3	288.2	166.5
105°	1617.2	1070.1	1617.2	1266.0	333.1	216.8
107.5°	2353.7	2204.6	2353.7	1208.6	354.7	267.2
110°	2473.2	2657.8	2473.2	1175.0	382.8	300.8



TEST NUMBER: P621739

CATALOG NUMBER: VLT-FA-150U-125D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2403.3	2713.8	2403.3	1141.5	416.4	334.3
115°	2267.9	2650.8	2267.9	1091.1	466.8	384.7
117.5°	2121.2	2515.2	2121.2	1078.5	517.1	436.4
120°	2009.7	2420.0	2009.7	1056.1	550.8	475.6
122.5°	1913.8	2291.3	1913.8	1028.2	584.3	503.6
125°	1798.0	2126.3	1798.0	1028.2	627.8	552.6
127.5°	1663.6	1987.8	1663.6	1029.6	669.7	593.1
130°	1573.7	1881.5	1573.7	1035.2	697.6	615.5
132.5°	1533.3	1786.3	1533.3	1035.2	725.5	643.5
135°	1480.8	1699.6	1480.8	1035.2	760.7	685.4
137.5°	1422.7	1610.1	1422.7	1035.2	801.1	720.4
140°	1388.8	1559.7	1388.8	1035.2	823.6	748.4
142.5°	1349.3	1509.4	1349.3	1040.8	846.1	776.4
145°	1290.1	1426.8	1290.1	1042.2	879.7	811.3
147.5°	1247.4	1352.7	1247.4	1050.5	913.5	853.3
150°	1219.0	1307.9	1219.0	1056.1	936.0	881.3
152.5°	1196.3	1268.8	1196.3	1056.1	958.5	909.3
155°	1169.3	1224.0	1169.3	1063.1	985.4	951.2
157.5°	1152.2	1191.8	1152.2	1071.5	1017.6	984.8
160°	1140.8	1175.0	1140.8	1077.1	1034.5	1007.2
162.5°	1135.0	1158.3	1135.0	1082.7	1051.3	1024.0
165°	1119.6	1140.1	1119.6	1091.1	1069.8	1056.1
167.5°	1112.4	1124.7	1112.4	1098.1	1086.6	1074.3
170°	1112.3	1119.1	1112.3	1098.1	1098.0	1091.1
172.5°	1106.7	1113.5	1106.7	1103.7	1109.0	1096.7
175°	1104.9	1098.1	1104.9	1112.1	1118.9	1112.1
177.5°	1112.0	1106.5	1112.0	1112.1	1117.6	1112.1
180°	1112.1	1112.1	1112.1	1112.1	1112.1	1112.1

(END OF REPORT)