

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: P621727

Luminaire Tested: VLT-FA-150U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621727
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

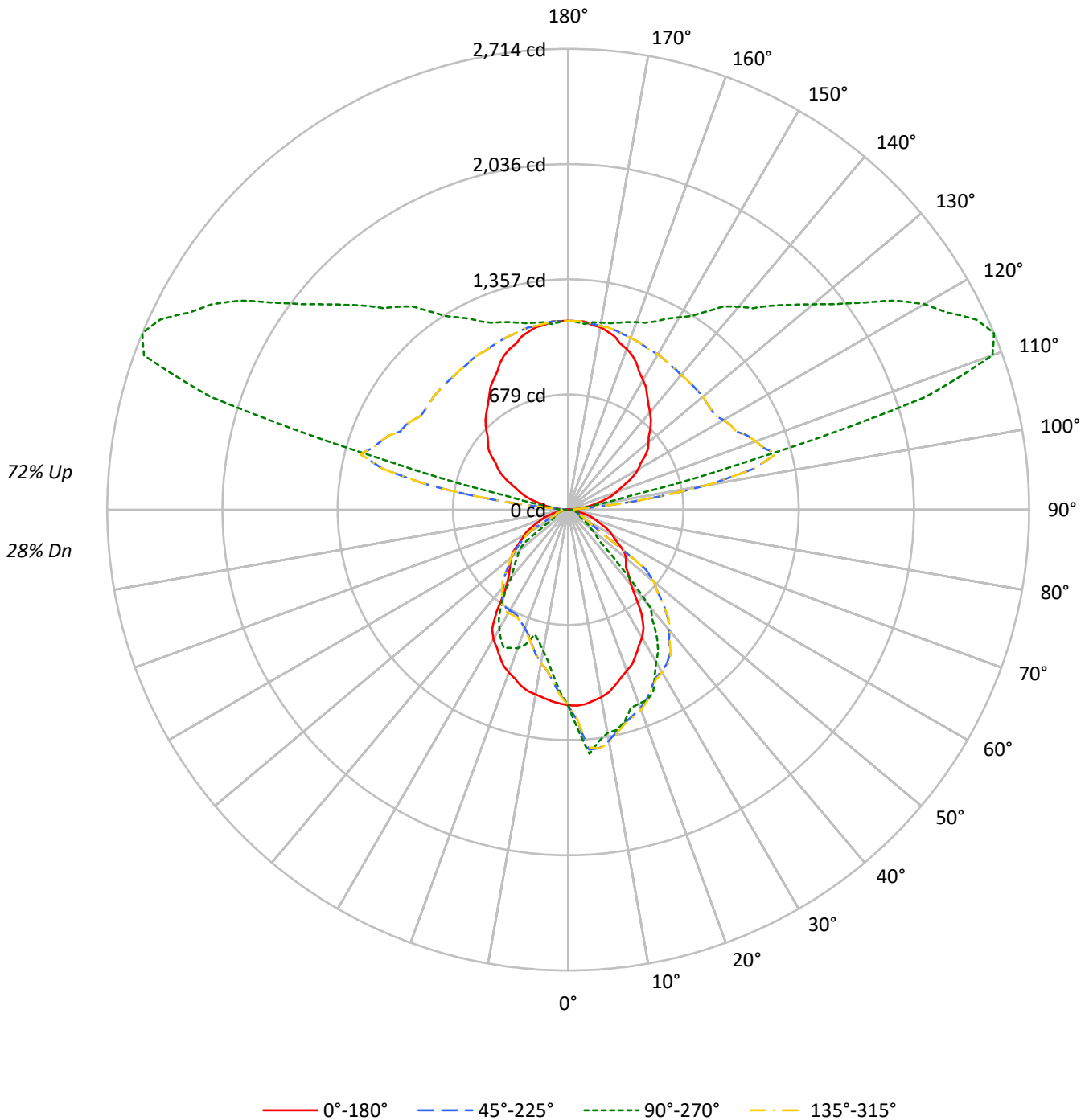
Lumens per Lamp: N/A
Luminaire Lumens: 8351.1 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 70.2
Input Voltage (V): 120
Input Current (A_{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



TEST NUMBER: P621727
CATALOG NUMBER: VLT-FA-150U-075D-830-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	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°	8264	8264	8264	8264
5°	8279	10397	8152	7089
10°	8170	9723	8050	6155
15°	7946	9574	7972	5648
20°	7703	9278	7792	6620
25°	7467	9378	7550	7105
30°	7203	8581	7300	6708
35°	6599	7953	6435	6014
40°	5378	7078	5191	4895
45°	4886	2627	4934	4458
50°	4970	2001	4879	4238
55°	4690	1554	4529	2536
60°	4321	1194	4287	1412
65°	3978	1233	3899	1493
70°	3540	1303	3441	1548
75°	3022	1364	2892	1591
80°	2277	1405	2128	1645
85°	1540	1251	1350	1540

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 9048 cd/sqm



TEST NUMBER: P621727

CATALOG NUMBER: VLT-FA-150U-075D-830-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	1.3
10°-20°	304.3	3.6
20°-30°	455.4	5.5
30°-40°	517.9	6.2
40°-50°	442.9	5.3
50°-60°	298.7	3.6
60°-70°	154.2	1.8
70°-80°	69.6	0.8
80°-90°	23.2	0.3
90°-100°	136.7	1.6
100°-110°	974.3	11.7
110°-120°	1322.8	15.8
120°-130°	1076.6	12.9
130°-140°	865.9	10.4
140°-150°	682.6	8.2
150°-160°	499.1	6.0
160°-170°	310.0	3.7
170°-180°	105.7	1.3
0°-30°	870.8	10.4
0°-40°	1388.7	16.6
0°-60°	2130.2	25.5
0°-90°	2377.2	28.5
90°-120°	2433.8	29.1
90°-150°	5059.0	60.6
90°-180°	5974.0	71.5
0°-180°	8351.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1152	1152	1152	1152	1152	
5°	1149	1443	1132	984	1149	109
15°	1070	1289	1073	760	1070	301
25°	943	1184	954	897	943	434
35°	753	908	735	686	753	461
45°	482	259	486	439	482	382
55°	375	124	362	203	375	334
65°	234	73	230	88	234	232
75°	109	49	104	57	109	116
85°	19	15	16	19	19	24
90°	0	21	0	21	0	3
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	



TEST NUMBER: P621727

CATALOG NUMBER: VLT-FA-150U-075D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6
2.5°	1155.4	1194.8	1244.4	1278.5	1293.2	1278.5	1236.0	1194.5	1142.3	1126.7	1089.8
5°	1149.3	1270.7	1417.6	1435.3	1443.3	1435.3	1404.7	1263.4	1131.7	1075.6	1014.6
7.5°	1135.2	1347.6	1415.9	1376.3	1376.6	1383.9	1418.0	1341.0	1117.0	1028.7	953.9
10°	1121.2	1390.4	1381.3	1324.1	1334.4	1329.8	1391.8	1382.0	1104.8	1002.8	917.3
12.5°	1102.4	1403.7	1335.3	1316.6	1327.8	1321.4	1342.1	1396.4	1094.5	984.3	875.1
15°	1069.6	1384.6	1296.9	1288.7	1288.7	1294.4	1302.8	1390.4	1073.1	950.6	823.6
17.5°	1035.9	1346.5	1270.2	1229.6	1225.2	1232.8	1279.8	1356.3	1042.9	913.2	773.7
20°	1008.7	1320.3	1243.0	1195.4	1214.9	1197.7	1253.6	1327.4	1020.4	889.8	742.8
22.5°	984.3	1287.7	1208.3	1188.1	1214.0	1188.5	1217.9	1294.8	994.2	863.6	719.3
25°	943.1	1232.9	1156.3	1175.3	1184.4	1175.3	1161.0	1237.7	953.6	829.9	694.7
27.5°	902.1	1175.2	1117.4	1130.1	1102.2	1123.7	1123.7	1175.4	911.9	790.7	687.2
30°	869.3	1135.0	1097.7	1079.2	1035.6	1070.0	1105.9	1135.3	881.0	765.3	685.4
32.5°	826.2	1098.3	1078.1	1013.9	986.0	1009.3	1087.2	1097.6	833.2	742.2	683.5
35°	753.3	1046.6	1042.7	936.6	907.9	929.7	1050.9	1043.8	734.6	705.9	669.0
37.5°	655.6	1000.4	975.0	858.4	812.8	852.7	982.7	995.4	617.9	672.6	635.0
40°	574.1	969.3	924.3	800.3	755.6	794.6	930.2	966.5	554.1	649.2	597.5
42.5°	528.1	941.7	870.9	738.8	462.3	729.4	876.8	938.2	514.8	619.0	564.7
45°	481.5	891.6	793.1	409.0	258.9	389.5	794.3	879.1	486.2	573.2	514.3
47.5°	461.1	830.0	711.8	246.3	218.6	239.2	711.1	816.5	461.4	527.3	466.3
50°	445.2	791.1	653.7	217.0	179.2	209.0	654.9	778.3	437.0	496.6	433.5
52.5°	418.9	744.7	570.3	179.9	154.9	175.5	556.5	730.1	411.7	463.0	392.2
55°	374.9	655.5	237.8	141.4	124.2	135.6	226.1	633.5	362.0	410.1	344.4
57.5°	328.3	558.1	166.8	110.0	96.3	108.9	165.7	535.7	322.2	347.4	300.4
60°	301.1	492.4	135.9	92.3	83.2	91.2	134.7	472.9	298.7	305.6	260.1
62.5°	273.9	425.8	112.5	81.2	78.5	80.1	112.2	404.4	269.7	270.1	183.2
65°	234.3	322.5	83.2	73.8	72.6	72.6	80.8	311.0	229.6	222.7	105.4
67.5°	194.0	231.6	66.8	67.9	66.8	66.8	65.6	225.1	189.3	177.6	79.7
70°	168.7	177.9	62.1	63.2	62.1	62.1	60.9	173.2	164.0	137.7	75.0
72.5°	144.3	121.4	57.4	57.6	57.4	57.4	56.2	114.0	139.6	96.8	68.4
75°	109.0	60.8	49.2	49.2	49.2	49.2	48.0	58.4	104.3	63.0	58.6
77.5°	75.7	40.2	40.8	40.5	40.5	39.6	39.6	39.8	71.2	43.5	47.3
80°	55.1	33.3	35.1	34.0	34.0	34.0	34.0	32.1	51.5	36.7	39.8
82.5°	39.1	26.5	28.6	27.4	27.4	27.4	27.4	26.2	35.6	29.9	32.3
85°	18.7	17.6	18.7	16.4	15.2	16.4	17.6	17.5	16.4	19.8	21.1
87.5°	5.6	9.7	10.3	9.8	9.8	9.8	9.4	8.8	4.7	10.6	11.2
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



TEST NUMBER: P621727

CATALOG NUMBER: VLT-FA-150U-075D-830-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°	334.3	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



TEST NUMBER: P621727

CATALOG NUMBER: VLT-FA-150U-075D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1151.6	1151.6	1151.6	1151.6	1151.6	1151.6
2.5°	1076.6	1075.7	1077.5	1093.5	1126.1	1155.4
5°	980.7	984.1	987.5	1014.6	1071.4	1149.3
7.5°	906.9	901.9	909.6	953.6	1023.4	1135.2
10°	856.1	844.7	856.1	916.1	997.5	1121.2
12.5°	808.3	794.1	811.9	877.7	976.0	1102.4
15°	746.6	760.3	752.3	825.9	943.6	1069.6
17.5°	761.2	830.4	775.9	781.0	911.5	1035.9
20°	795.9	866.9	818.8	751.0	890.7	1008.7
22.5°	827.4	881.0	837.5	725.7	870.0	984.3
25°	851.6	897.4	849.3	702.9	840.0	943.1
27.5°	852.8	859.2	853.3	701.1	802.9	902.1
30°	837.0	809.5	834.7	702.9	776.5	869.3
32.5°	792.0	760.8	782.3	699.2	749.9	826.2
35°	727.8	686.5	716.3	679.5	708.6	753.3
37.5°	660.0	607.8	649.0	640.6	673.5	655.6
40°	614.1	522.5	605.0	602.2	654.2	574.1
42.5°	555.4	477.5	547.2	571.2	633.1	528.1
45°	448.5	439.3	443.9	519.0	588.0	481.5
47.5°	410.1	403.9	407.8	471.4	537.2	461.1
50°	387.6	379.6	385.3	440.5	504.8	445.2
52.5°	356.4	334.6	354.1	398.3	471.2	418.9
55°	268.0	202.7	266.8	350.3	420.7	374.9
57.5°	157.2	117.2	153.8	304.8	356.4	328.3
60°	106.4	98.4	107.6	268.3	313.7	301.1
62.5°	97.2	94.7	97.4	186.7	275.5	273.9
65°	89.0	87.9	89.0	107.8	227.4	234.3
67.5°	80.6	79.4	81.5	82.7	179.6	194.0
70°	75.0	73.8	75.0	76.2	137.8	168.7
72.5°	68.4	67.2	68.4	69.6	96.9	144.3
75°	58.6	57.4	58.6	59.7	64.3	109.0
77.5°	47.3	47.3	48.5	48.5	45.0	75.7
80°	39.8	39.8	41.0	41.0	39.0	55.1
82.5°	32.3	31.4	33.5	34.4	32.3	39.1
85°	19.9	18.7	21.0	22.3	21.0	18.7
87.5°	11.7	10.8	12.6	13.1	11.6	5.6
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: P621727

CATALOG NUMBER: VLT-FA-150U-075D-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)