

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: P621690

Luminaire Tested: VLT-FA-100U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621690  
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-100U-100D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

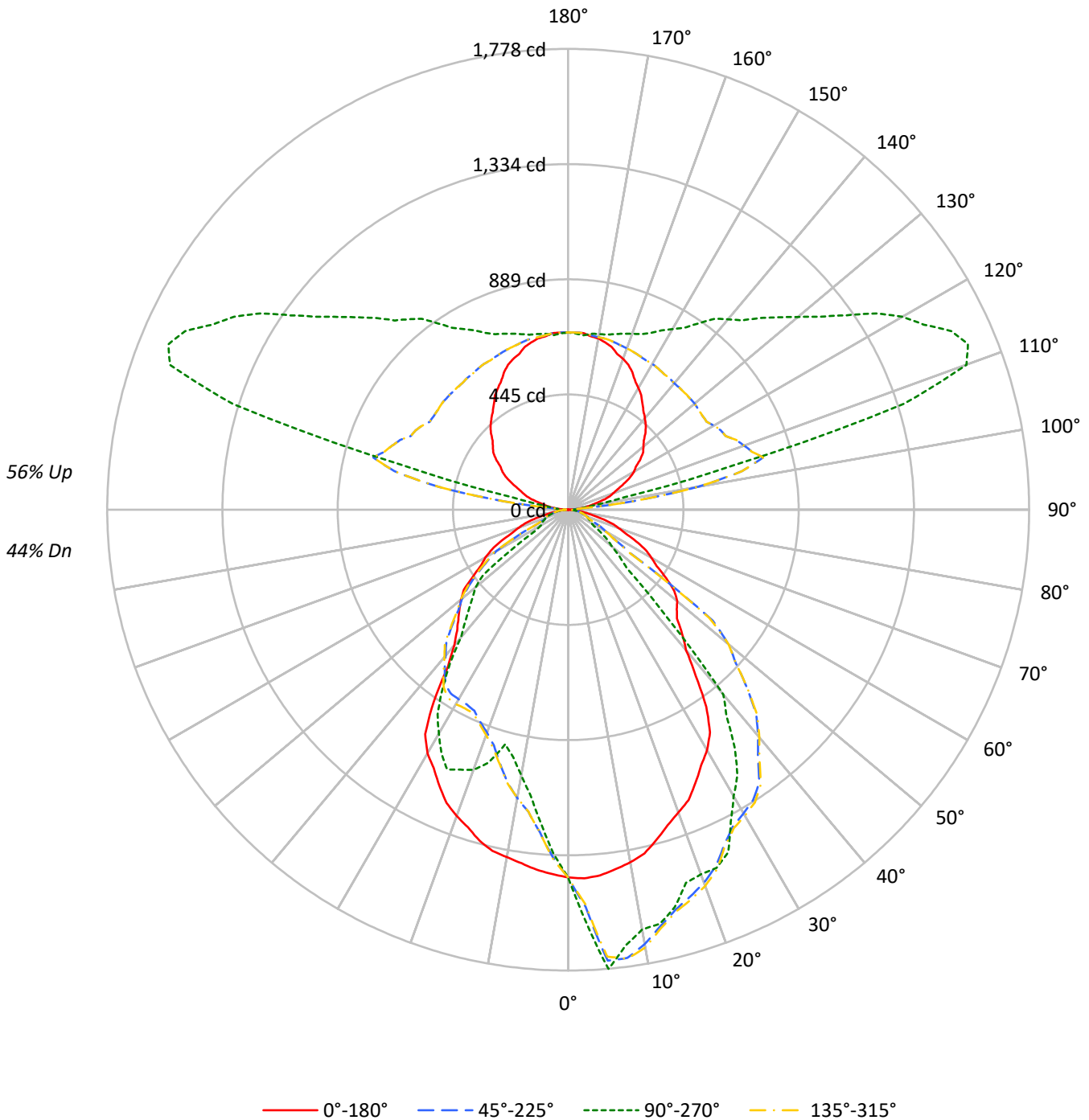
Lumens per Lamp: N/A  
Luminaire Lumens: 6601.0 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.2  
Input Voltage (V): 120  
Input Current (Ain): 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: P621690  
CATALOG NUMBER: VLT-FA-100U-100D-940-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621690

CATALOG NUMBER: VLT-FA-100U-100D-940-UNV-STD-W-4

**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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	93	90	86	89	86	83	80	71	69	67	58	57	56	46	45	44	39
2	89	82	77	72	82	76	71	67	63	60	57	52	50	48	42	40	39	34
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	37	35	34	29
4	75	65	58	52	69	60	54	49	51	46	42	42	39	36	34	32	30	26
5	69	58	51	45	63	54	47	42	46	41	37	38	34	31	31	28	26	23
6	64	52	45	39	58	49	42	37	41	36	32	35	31	28	28	25	23	20
7	59	47	40	35	54	44	37	33	38	32	29	32	28	25	26	23	21	18
8	55	43	36	31	50	40	34	29	34	29	26	29	25	22	24	21	19	17
9	51	39	32	27	47	37	30	26	32	27	23	27	23	20	22	19	17	15
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	21	18	16	14

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

	0°	90°	180°	270°
0°	10182	10182	10182	10182
5°	10201	12810	10044	8734
10°	10066	11980	9919	7583
15°	9791	11796	9823	6960
20°	9491	11431	9601	8157
25°	9200	11555	9303	8755
30°	8875	10573	8995	8265
35°	8131	9800	7929	7410
40°	6626	8721	6396	6031
45°	6021	3237	6079	5493
50°	6123	2466	6011	5221
55°	5779	1914	5580	3124
60°	5325	1471	5283	1741
65°	4902	1520	4804	1839
70°	4362	1605	4240	1907
75°	3721	1680	3563	1960
80°	2802	1732	2624	2029
85°	1902	1548	1663	1902

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 11149 cd/sqm



TEST NUMBER: P621690

CATALOG NUMBER: VLT-FA-100U-100D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	2.1
10°-20°	375.0	5.7
20°-30°	561.1	8.5
30°-40°	638.1	9.7
40°-50°	545.7	8.3
50°-60°	368.0	5.6
60°-70°	189.9	2.9
70°-80°	85.8	1.3
80°-90°	27.1	0.4
90°-100°	84.1	1.3
100°-110°	599.2	9.1
110°-120°	813.4	12.3
120°-130°	662.0	10.0
130°-140°	532.5	8.1
140°-150°	419.8	6.4
150°-160°	306.9	4.6
160°-170°	190.7	2.9
170°-180°	65.0	1.0
0°-30°	1072.9	16.3
0°-40°	1711.0	25.9
0°-60°	2624.7	39.8
0°-90°	2927.5	44.3
90°-120°	1496.6	22.7
90°-150°	3111.0	47.1
90°-180°	3674.0	55.7
0°-180°	6601.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1419	1419	1419	1419	1419	
5°	1416	1778	1394	1212	1416	134
15°	1318	1588	1322	937	1318	371
25°	1162	1459	1175	1106	1162	535
35°	928	1119	905	846	928	567
45°	593	319	599	541	593	471
55°	462	153	446	250	462	412
65°	289	90	283	108	289	285
75°	134	61	128	71	134	143
85°	23	19	20	23	23	30
90°	0	13	0	13	0	2
95°	34	47	34	47	34	38
105°	133	658	133	658	133	141
115°	237	1630	237	1630	237	235
125°	340	1308	340	1308	340	302
135°	422	1045	422	1045	422	324
145°	499	877	499	877	499	313
155°	585	753	585	753	585	269
165°	650	701	650	701	650	182
175°	684	675	684	675	684	65
180°	684	684	684	684	684	



TEST NUMBER: P621690

CATALOG NUMBER: VLT-FA-100U-100D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9
2.5°	1423.6	1472.1	1533.3	1575.2	1593.3	1575.2	1522.9	1471.8	1407.4	1388.2	1342.7
5°	1416.1	1565.7	1746.6	1768.5	1778.4	1768.5	1730.7	1556.7	1394.4	1325.2	1250.1
7.5°	1398.7	1660.4	1744.6	1695.8	1696.1	1705.1	1747.2	1652.3	1376.2	1267.5	1175.3
10°	1381.4	1713.1	1701.9	1631.4	1644.1	1638.5	1714.9	1702.8	1361.2	1235.6	1130.2
12.5°	1358.3	1729.5	1645.3	1622.2	1636.0	1628.1	1653.7	1720.5	1348.5	1212.7	1078.3
15°	1317.9	1706.0	1597.9	1587.8	1587.8	1594.9	1605.2	1713.2	1322.2	1171.2	1014.8
17.5°	1276.3	1659.1	1565.0	1515.0	1509.6	1518.9	1576.9	1671.1	1285.0	1125.2	953.3
20°	1242.8	1626.7	1531.5	1472.9	1496.9	1475.7	1544.5	1635.5	1257.3	1096.4	915.2
22.5°	1212.8	1586.6	1488.8	1463.8	1495.7	1464.4	1500.6	1595.3	1224.9	1064.0	886.3
25°	1162.0	1519.1	1424.7	1448.1	1459.4	1448.1	1430.5	1525.0	1175.0	1022.6	856.0
27.5°	1111.5	1448.0	1376.8	1392.5	1358.0	1384.6	1384.6	1448.2	1123.6	974.3	846.7
30°	1071.1	1398.5	1352.5	1329.7	1276.0	1318.4	1362.6	1398.8	1085.5	942.9	844.4
32.5°	1017.9	1353.3	1328.3	1249.3	1214.8	1243.6	1339.6	1352.4	1026.6	914.5	842.1
35°	928.2	1289.5	1284.7	1154.0	1118.7	1145.5	1294.8	1286.1	905.1	869.8	824.2
37.5°	807.8	1232.6	1201.3	1057.7	1001.5	1050.6	1210.8	1226.5	761.3	828.8	782.4
40°	707.3	1194.2	1138.9	986.1	931.0	979.0	1146.1	1190.9	682.8	799.9	736.2
42.5°	650.7	1160.2	1073.1	910.3	569.6	898.7	1080.3	1155.9	634.3	762.7	695.8
45°	593.3	1098.6	977.2	503.9	319.0	479.9	978.7	1083.2	599.0	706.3	633.7
47.5°	568.2	1022.6	877.1	303.5	269.4	294.8	876.2	1006.0	568.4	649.7	574.5
50°	548.5	974.8	805.5	267.4	220.9	257.5	806.9	959.0	538.4	611.8	534.1
52.5°	516.2	917.6	702.7	221.6	190.8	216.2	685.7	899.6	507.2	570.5	483.3
55°	461.9	807.7	293.0	174.2	153.0	167.1	278.6	780.5	446.0	505.3	424.4
57.5°	404.5	687.6	205.6	135.6	118.7	134.2	204.1	660.0	397.0	428.0	370.1
60°	371.0	606.7	167.4	113.8	102.5	112.4	166.0	582.6	368.1	376.6	320.5
62.5°	337.5	524.6	138.6	100.1	96.7	98.7	138.3	498.3	332.3	332.9	225.8
65°	288.7	397.4	102.5	90.9	89.5	89.5	99.6	383.1	282.9	274.5	129.9
67.5°	239.0	285.3	82.3	83.7	82.3	82.3	80.8	277.3	233.3	218.9	98.2
70°	207.9	219.2	76.5	77.9	76.5	76.5	75.1	213.4	202.1	169.6	92.4
72.5°	177.8	149.6	70.7	71.0	70.7	70.7	69.3	140.4	172.1	119.3	84.3
75°	134.2	75.0	60.6	60.6	60.6	60.6	59.2	72.0	128.5	77.7	72.2
77.5°	93.2	49.5	50.2	49.9	49.9	48.8	48.8	49.1	87.8	53.6	58.3
80°	67.8	41.0	43.3	41.9	41.9	41.9	41.9	39.5	63.5	45.2	49.1
82.5°	48.2	32.7	35.2	33.8	33.8	33.8	33.8	32.3	43.9	36.8	39.8
85°	23.1	21.7	23.1	20.2	18.8	20.2	21.7	21.6	20.2	24.4	26.0
87.5°	6.9	11.2	11.0	9.5	9.5	9.5	9.8	10.0	5.8	12.3	12.1
90°	0.0	4.2	8.6	12.9	12.9	12.9	8.6	4.2	0.0	4.2	8.6
92.5°	10.3	14.5	18.9	26.7	30.1	26.7	18.9	14.5	10.3	14.5	18.9
95°	34.4	63.8	34.4	38.9	47.3	38.9	34.4	63.8	34.4	63.8	34.4
97.5°	61.1	122.5	252.9	74.6	64.5	74.6	252.9	122.5	61.1	122.5	252.9
100°	81.7	153.2	507.5	149.4	98.9	149.4	507.5	153.2	81.7	153.2	507.5
102.5°	102.4	177.2	686.5	394.2	215.9	394.2	686.5	177.2	102.4	177.2	686.5
105°	133.3	204.8	778.5	994.5	658.1	994.5	778.5	204.8	133.3	204.8	778.5
107.5°	164.3	218.1	743.2	1447.4	1355.7	1447.4	743.2	218.1	164.3	218.1	743.2
110°	184.9	235.4	722.6	1520.9	1634.4	1520.9	722.6	235.4	184.9	235.4	722.6



TEST NUMBER: P621690

CATALOG NUMBER: VLT-FA-100U-100D-940-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°	205.6	256.1	701.9	1477.9	1668.8	1477.9	701.9	256.1	205.6	256.1	701.9
115°	236.6	287.0	671.0	1394.6	1630.1	1394.6	671.0	287.0	236.6	287.0	671.0
117.5°	268.4	318.0	663.2	1304.4	1546.7	1304.4	663.2	318.0	268.4	318.0	663.2
120°	292.5	338.7	649.5	1235.9	1488.2	1235.9	649.5	338.7	292.5	338.7	649.5
122.5°	309.7	359.3	632.3	1176.9	1409.0	1176.9	632.3	359.3	309.7	359.3	632.3
125°	339.8	386.0	632.3	1105.7	1307.5	1105.7	632.3	386.0	339.8	386.0	632.3
127.5°	364.7	411.8	633.1	1023.0	1222.4	1023.0	633.1	411.8	364.7	411.8	633.1
130°	378.5	429.0	636.6	967.7	1157.0	967.7	636.6	429.0	378.5	429.0	636.6
132.5°	395.7	446.2	636.6	942.9	1098.5	942.9	636.6	446.2	395.7	446.2	636.6
135°	421.5	467.8	636.6	910.6	1045.2	910.6	636.6	467.8	421.5	467.8	636.6
137.5°	443.0	492.6	636.6	874.9	990.1	874.9	636.6	492.6	443.0	492.6	636.6
140°	460.2	506.5	636.6	854.0	959.1	854.0	636.6	506.5	460.2	506.5	636.6
142.5°	477.4	520.3	640.0	829.8	928.2	829.8	640.0	520.3	477.4	520.3	640.0
145°	498.9	541.0	640.9	793.3	877.4	793.3	640.9	541.0	498.9	541.0	640.9
147.5°	524.7	561.7	646.0	767.1	831.8	767.1	646.0	561.7	524.7	561.7	646.0
150°	541.9	575.6	649.5	749.6	804.3	749.6	649.5	575.6	541.9	575.6	649.5
152.5°	559.1	589.4	649.5	735.6	780.2	735.6	649.5	589.4	559.1	589.4	649.5
155°	585.0	606.0	653.8	719.0	752.7	719.0	653.8	606.0	585.0	606.0	653.8
157.5°	605.6	625.8	658.9	708.5	732.9	708.5	658.9	625.8	605.6	625.8	658.9
160°	619.4	636.2	662.4	701.6	722.6	701.6	662.4	636.2	619.4	636.2	662.4
162.5°	629.7	646.5	665.8	698.0	712.3	698.0	665.8	646.5	629.7	646.5	665.8
165°	649.5	657.9	671.0	688.5	701.1	688.5	671.0	657.9	649.5	657.9	671.0
167.5°	660.7	668.2	675.3	684.0	691.6	684.0	675.3	668.2	660.7	668.2	675.3
170°	671.0	675.2	675.3	684.0	688.2	684.0	675.3	675.2	671.0	675.2	675.3
172.5°	674.4	682.0	678.7	680.5	684.7	680.5	678.7	682.0	674.4	682.0	678.7
175°	683.9	688.1	683.9	679.5	675.3	679.5	683.9	688.1	683.9	688.1	683.9
177.5°	683.9	687.2	683.9	683.8	680.4	683.8	683.9	687.2	683.9	687.2	683.9
180°	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9



TEST NUMBER: P621690

CATALOG NUMBER: VLT-FA-100U-100D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1418.9	1418.9	1418.9	1418.9	1418.9	1418.9
2.5°	1326.5	1325.4	1327.7	1347.3	1387.4	1423.6
5°	1208.3	1212.5	1216.8	1250.1	1320.1	1416.1
7.5°	1117.4	1111.2	1120.8	1175.0	1261.0	1398.7
10°	1054.9	1040.7	1054.9	1128.8	1229.0	1381.4
12.5°	995.9	978.4	1000.4	1081.5	1202.5	1358.3
15°	919.9	936.8	926.9	1017.7	1162.6	1317.9
17.5°	937.9	1023.1	956.0	962.2	1123.0	1276.3
20°	980.7	1068.2	1008.9	925.3	1097.5	1242.8
22.5°	1019.4	1085.5	1031.9	894.1	1072.0	1212.8
25°	1049.3	1105.7	1046.4	866.1	1035.0	1162.0
27.5°	1050.7	1058.6	1051.3	863.8	989.3	1111.5
30°	1031.3	997.4	1028.5	866.1	956.7	1071.1
32.5°	975.8	937.4	963.9	861.5	923.9	1017.9
35°	896.7	845.9	882.6	837.2	873.1	928.2
37.5°	813.2	748.9	799.7	789.3	829.8	807.8
40°	756.7	643.8	745.4	741.9	806.1	707.3
42.5°	684.3	588.4	674.2	703.8	780.0	650.7
45°	552.6	541.3	547.0	639.5	724.5	593.3
47.5°	505.3	497.7	502.5	580.9	661.9	568.2
50°	477.6	467.7	474.7	542.7	621.9	548.5
52.5°	439.1	412.3	436.3	490.8	580.5	516.2
55°	330.2	249.7	328.8	431.6	518.4	461.9
57.5°	193.7	144.3	189.5	375.6	439.2	404.5
60°	131.1	121.3	132.5	330.6	386.5	371.0
62.5°	119.7	116.6	120.0	230.1	339.5	337.5
65°	109.7	108.3	109.7	132.8	280.2	288.7
67.5°	99.3	97.9	100.4	101.9	221.3	239.0
70°	92.4	90.9	92.4	93.8	169.8	207.9
72.5°	84.3	82.9	84.3	85.7	119.4	177.8
75°	72.1	70.7	72.1	73.6	79.2	134.2
77.5°	58.3	58.3	59.7	59.8	55.4	93.2
80°	49.1	49.1	50.5	50.5	48.1	67.8
82.5°	39.8	38.7	41.2	42.4	39.7	48.2
85°	24.5	23.1	25.9	27.4	25.9	23.1
87.5°	11.8	10.7	12.9	14.4	13.4	6.9
90°	12.9	12.9	12.9	8.6	4.2	0.0
92.5°	26.7	30.1	26.7	18.9	14.5	10.3
95°	38.9	47.3	38.9	34.4	63.8	34.4
97.5°	74.6	64.5	74.6	252.9	122.5	61.1
100°	149.4	98.9	149.4	507.5	153.2	81.7
102.5°	394.2	215.9	394.2	686.5	177.2	102.4
105°	994.5	658.1	994.5	778.5	204.8	133.3
107.5°	1447.4	1355.7	1447.4	743.2	218.1	164.3
110°	1520.9	1634.4	1520.9	722.6	235.4	184.9





TEST NUMBER: P621690

CATALOG NUMBER: VLT-FA-100U-100D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1477.9	1668.8	1477.9	701.9	256.1	205.6
115°	1394.6	1630.1	1394.6	671.0	287.0	236.6
117.5°	1304.4	1546.7	1304.4	663.2	318.0	268.4
120°	1235.9	1488.2	1235.9	649.5	338.7	292.5
122.5°	1176.9	1409.0	1176.9	632.3	359.3	309.7
125°	1105.7	1307.5	1105.7	632.3	386.0	339.8
127.5°	1023.0	1222.4	1023.0	633.1	411.8	364.7
130°	967.7	1157.0	967.7	636.6	429.0	378.5
132.5°	942.9	1098.5	942.9	636.6	446.2	395.7
135°	910.6	1045.2	910.6	636.6	467.8	421.5
137.5°	874.9	990.1	874.9	636.6	492.6	443.0
140°	854.0	959.1	854.0	636.6	506.5	460.2
142.5°	829.8	928.2	829.8	640.0	520.3	477.4
145°	793.3	877.4	793.3	640.9	541.0	498.9
147.5°	767.1	831.8	767.1	646.0	561.7	524.7
150°	749.6	804.3	749.6	649.5	575.6	541.9
152.5°	735.6	780.2	735.6	649.5	589.4	559.1
155°	719.0	752.7	719.0	653.8	606.0	585.0
157.5°	708.5	732.9	708.5	658.9	625.8	605.6
160°	701.6	722.6	701.6	662.4	636.2	619.4
162.5°	698.0	712.3	698.0	665.8	646.5	629.7
165°	688.5	701.1	688.5	671.0	657.9	649.5
167.5°	684.0	691.6	684.0	675.3	668.2	660.7
170°	684.0	688.2	684.0	675.3	675.2	671.0
172.5°	680.5	684.7	680.5	678.7	682.0	674.4
175°	679.5	675.3	679.5	683.9	688.1	683.9
177.5°	683.8	680.4	683.8	683.9	687.2	683.9
180°	683.9	683.9	683.9	683.9	683.9	683.9

(END OF REPORT)