

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: P621681

Luminaire Tested: VLT-FA-100U-075D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621681  
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-075D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

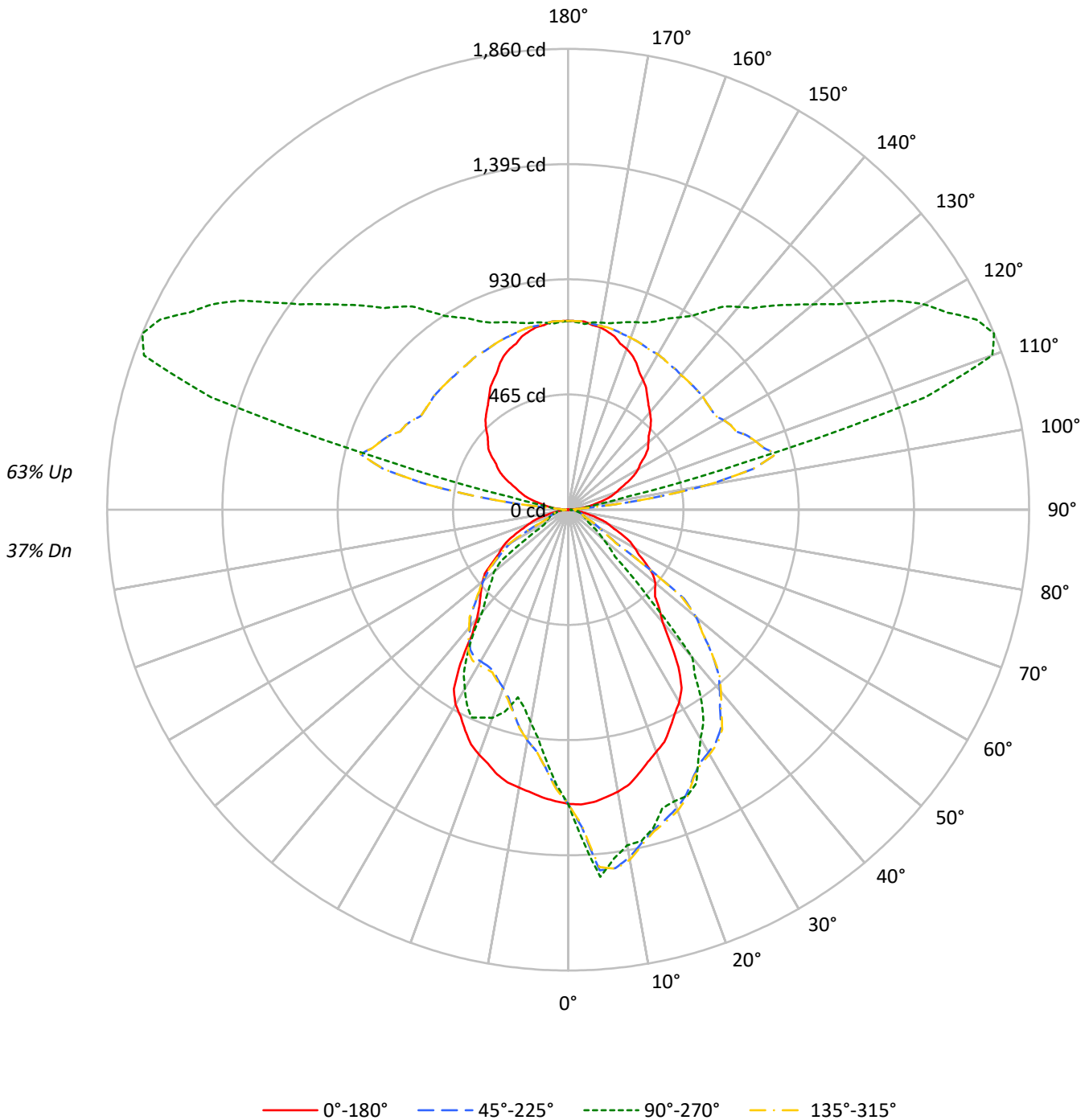
Lumens per Lamp: N/A  
Luminaire Lumens: 6542.9 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 50.6  
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: P621681  
CATALOG NUMBER: VLT-FA-100U-075D-840-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621681

CATALOG NUMBER: VLT-FA-100U-075D-840-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	50	30	10	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				
1	96	92	88	85	87	83	80	78	68	66	64	54	52	51	40	40	39	33				
2	88	81	75	70	79	74	69	65	60	57	54	48	45	44	36	35	34	28				
3	80	71	65	59	73	65	59	55	54	49	46	43	40	37	33	31	29	25				
4	74	64	56	50	67	58	52	47	48	43	40	38	35	33	30	27	26	22				
5	68	57	49	44	61	52	45	40	43	38	34	35	31	29	27	25	23	19				
6	62	51	43	38	57	47	40	35	39	34	30	31	28	25	25	22	20	17				
7	58	46	39	33	52	42	36	31	35	30	27	29	25	22	23	20	18	15				
8	54	42	35	30	49	39	32	28	32	27	24	26	23	20	21	18	16	14				
9	50	38	31	26	45	35	29	25	30	25	21	24	21	18	19	17	15	13				
10	47	35	28	24	42	32	26	22	27	23	19	22	19	16	18	15	14	12				

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

	0°	90°	180°	270°
0°	8518	8518	8518	8518
5°	8533	10716	8403	7307
10°	8420	10022	8297	6344
15°	8191	9868	8217	5822
20°	7940	9562	8032	6824
25°	7697	9666	7783	7324
30°	7424	8845	7525	6914
35°	6802	8199	6632	6199
40°	5543	7296	5351	5045
45°	5037	2709	5085	4595
50°	5123	2063	5028	4367
55°	4834	1601	4668	2614
60°	4453	1230	4419	1455
65°	4101	1272	4019	1538
70°	3649	1343	3548	1597
75°	3114	1406	2981	1641
80°	2347	1446	2194	1698
85°	1589	1293	1391	1589

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 9326 cd/sqm



TEST NUMBER: P621681

CATALOG NUMBER: VLT-FA-100U-075D-840-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.5	1.8
10°-20°	313.7	4.8
20°-30°	469.4	7.2
30°-40°	533.8	8.2
40°-50°	456.5	7.0
50°-60°	307.9	4.7
60°-70°	158.9	2.4
70°-80°	71.7	1.1
80°-90°	23.1	0.4
90°-100°	93.7	1.4
100°-110°	667.6	10.2
110°-120°	906.4	13.9
120°-130°	737.7	11.3
130°-140°	593.3	9.1
140°-150°	467.8	7.1
150°-160°	342.0	5.2
160°-170°	212.4	3.2
170°-180°	72.4	1.1
0°-30°	897.6	13.7
0°-40°	1431.3	21.9
0°-60°	2195.7	33.6
0°-90°	2449.4	37.4
90°-120°	1667.7	25.5
90°-150°	3466.6	53.0
90°-180°	4094.0	62.6
0°-180°	6542.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1187	1187	1187	1187	1187	
5°	1185	1488	1166	1014	1185	112
15°	1102	1328	1106	784	1102	310
25°	972	1221	983	925	972	447
35°	776	936	757	708	776	475
45°	496	267	501	453	496	394
55°	386	128	373	209	386	344
65°	242	75	237	91	242	239
75°	112	51	108	59	112	120
85°	19	16	17	19	19	25
90°	0	14	0	14	0	2
95°	38	53	38	53	38	43
105°	149	733	149	733	149	157
115°	264	1816	264	1816	264	262
125°	379	1457	379	1457	379	336
135°	470	1165	470	1165	470	361
145°	556	978	556	978	556	349
155°	652	839	652	839	652	299
165°	724	781	724	781	724	203
175°	762	752	762	752	762	72
180°	762	762	762	762	762	



TEST NUMBER: P621681

CATALOG NUMBER: VLT-FA-100U-075D-840-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1190.9	1231.5	1282.7	1317.8	1332.9	1317.8	1274.0	1231.2	1177.4	1161.3	1123.3
5°	1184.6	1309.8	1461.1	1479.4	1487.7	1479.4	1447.9	1302.3	1166.5	1108.6	1045.7
7.5°	1170.1	1389.0	1459.5	1418.6	1418.9	1426.4	1461.6	1382.2	1151.3	1060.4	983.2
10°	1155.6	1433.1	1423.7	1364.8	1375.4	1370.7	1434.6	1424.5	1138.7	1033.6	945.5
12.5°	1136.3	1446.8	1376.4	1357.1	1368.6	1362.0	1383.4	1439.3	1128.1	1014.5	902.0
15°	1102.5	1427.2	1336.8	1328.3	1328.3	1334.2	1342.8	1433.2	1106.1	979.8	848.9
17.5°	1067.7	1387.9	1309.2	1267.4	1262.9	1270.7	1319.1	1398.0	1075.0	941.3	797.5
20°	1039.7	1360.9	1281.2	1232.2	1252.2	1234.5	1292.1	1368.2	1051.8	917.2	765.6
22.5°	1014.6	1327.2	1245.5	1224.6	1251.3	1225.1	1255.4	1334.6	1024.7	890.1	741.4
25°	972.1	1270.8	1191.9	1211.4	1220.8	1211.4	1196.7	1275.8	983.0	855.4	716.1
27.5°	929.8	1211.3	1151.8	1164.9	1136.1	1158.3	1158.3	1211.5	940.0	815.0	708.4
30°	896.0	1169.9	1131.5	1112.4	1067.5	1102.9	1139.9	1170.2	908.1	788.8	706.4
32.5°	851.6	1132.1	1111.2	1045.1	1016.3	1040.4	1120.6	1131.3	858.8	765.1	704.5
35°	776.5	1078.7	1074.7	965.4	935.9	958.3	1083.2	1075.9	757.1	727.6	689.5
37.5°	675.8	1031.1	1004.9	884.8	837.8	878.9	1012.9	1026.0	636.9	693.3	654.5
40°	591.7	999.1	952.8	824.9	778.9	819.0	958.8	996.2	571.2	669.2	615.9
42.5°	544.4	970.6	897.7	761.5	476.5	751.8	903.7	967.0	530.6	638.0	582.0
45°	496.3	919.0	817.5	421.5	266.9	401.5	818.7	906.1	501.1	590.9	530.1
47.5°	475.3	855.5	733.7	253.9	225.3	246.6	733.0	841.6	475.5	543.5	480.6
50°	458.9	815.5	673.8	223.7	184.8	215.5	675.0	802.3	450.4	511.8	446.8
52.5°	431.8	767.6	587.8	185.4	159.6	180.9	573.6	752.6	424.3	477.2	404.3
55°	386.4	675.7	245.1	145.7	128.0	139.8	233.1	653.0	373.1	422.7	355.0
57.5°	338.4	575.2	172.0	113.4	99.3	112.2	170.7	552.2	332.1	358.1	309.6
60°	310.3	507.5	140.1	95.2	85.7	94.0	138.9	487.4	307.9	315.0	268.1
62.5°	282.3	438.9	115.9	83.7	80.9	82.6	115.7	416.8	278.0	278.5	188.9
65°	241.5	332.4	85.7	76.0	74.9	74.9	83.3	320.5	236.7	229.6	108.7
67.5°	200.0	238.7	68.8	70.0	68.8	68.8	67.6	232.0	195.1	183.1	82.1
70°	173.9	183.3	64.0	65.2	64.0	64.0	62.8	178.5	169.1	141.9	77.3
72.5°	148.8	125.2	59.2	59.4	59.2	59.2	58.0	117.5	143.9	99.8	70.5
75°	112.3	62.7	50.7	50.7	50.7	50.7	49.5	60.2	107.5	65.0	60.4
77.5°	78.0	41.4	42.0	41.8	41.8	40.8	40.8	41.1	73.4	44.8	48.8
80°	56.8	34.3	36.2	35.0	35.0	35.0	35.0	33.1	53.1	37.8	41.1
82.5°	40.3	27.3	29.5	28.3	28.3	28.3	28.3	27.0	36.7	30.8	33.3
85°	19.3	18.1	19.3	16.9	15.7	16.9	18.1	18.1	16.9	20.4	21.7
87.5°	5.8	9.6	9.6	8.7	8.7	8.7	8.7	8.6	4.8	10.5	10.6
90°	0.0	4.7	9.6	14.4	14.4	14.4	9.6	4.7	0.0	4.7	9.6
92.5°	11.5	16.2	21.1	29.8	33.5	29.8	21.1	16.2	11.5	16.2	21.1
95°	38.3	71.1	38.3	43.3	52.7	43.3	38.3	71.1	38.3	71.1	38.3
97.5°	68.1	136.5	281.8	83.1	71.9	83.1	281.8	136.5	68.1	136.5	281.8
100°	91.1	170.7	565.5	166.5	110.2	166.5	565.5	170.7	91.1	170.7	565.5
102.5°	114.1	197.5	764.9	439.3	240.6	439.3	764.9	197.5	114.1	197.5	764.9
105°	148.6	228.2	867.5	1108.2	733.3	1108.2	867.5	228.2	148.6	228.2	867.5
107.5°	183.1	243.1	828.2	1612.8	1510.7	1612.8	828.2	243.1	183.1	243.1	828.2
110°	206.1	262.3	805.2	1694.7	1821.3	1694.7	805.2	262.3	206.1	262.3	805.2



TEST NUMBER: P621681

CATALOG NUMBER: VLT-FA-100U-075D-840-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°	229.1	285.3	782.2	1646.8	1859.6	1646.8	782.2	285.3	229.1	285.3	782.2
115°	263.6	319.8	747.7	1554.0	1816.5	1554.0	747.7	319.8	263.6	319.8	747.7
117.5°	299.1	354.4	739.0	1453.6	1723.5	1453.6	739.0	354.4	299.1	354.4	739.0
120°	325.9	377.5	723.7	1377.1	1658.3	1377.1	723.7	377.5	325.9	377.5	723.7
122.5°	345.1	400.4	704.5	1311.4	1570.1	1311.4	704.5	400.4	345.1	400.4	704.5
125°	378.6	430.2	704.5	1232.1	1457.0	1232.1	704.5	430.2	378.6	430.2	704.5
127.5°	406.4	458.9	705.5	1140.0	1362.1	1140.0	705.5	458.9	406.4	458.9	705.5
130°	421.8	478.0	709.3	1078.4	1289.3	1078.4	709.3	478.0	421.8	478.0	709.3
132.5°	440.9	497.2	709.3	1050.7	1224.1	1050.7	709.3	497.2	440.9	497.2	709.3
135°	469.7	521.2	709.3	1014.7	1164.6	1014.7	709.3	521.2	469.7	521.2	709.3
137.5°	493.7	549.0	709.3	974.9	1103.3	974.9	709.3	549.0	493.7	549.0	709.3
140°	512.8	564.4	709.3	951.6	1068.8	951.6	709.3	564.4	512.8	564.4	709.3
142.5°	532.0	579.8	713.2	924.6	1034.3	924.6	713.2	579.8	532.0	579.8	713.2
145°	556.0	602.8	714.1	884.0	977.7	884.0	714.1	602.8	556.0	602.8	714.1
147.5°	584.7	626.0	719.9	854.8	926.9	854.8	719.9	626.0	584.7	626.0	719.9
150°	603.9	641.4	723.7	835.3	896.2	835.3	723.7	641.4	603.9	641.4	723.7
152.5°	623.1	656.8	723.7	819.7	869.4	819.7	723.7	656.8	623.1	656.8	723.7
155°	651.8	675.2	728.5	801.2	838.7	801.2	728.5	675.2	651.8	675.2	728.5
157.5°	674.8	697.3	734.3	789.5	816.7	789.5	734.3	697.3	674.8	697.3	734.3
160°	690.2	708.9	738.1	781.8	805.2	781.8	738.1	708.9	690.2	708.9	738.1
162.5°	701.7	720.4	741.9	777.7	793.7	777.7	741.9	720.4	701.7	720.4	741.9
165°	723.7	733.1	747.7	767.2	781.2	767.2	747.7	733.1	723.7	733.1	747.7
167.5°	736.2	744.6	752.5	762.2	770.7	762.2	752.5	744.6	736.2	744.6	752.5
170°	747.7	752.4	752.5	762.2	766.8	762.2	752.5	752.4	747.7	752.4	752.5
172.5°	751.5	759.9	756.3	758.3	763.0	758.3	756.3	759.9	751.5	759.9	756.3
175°	762.1	766.7	762.1	757.2	752.5	757.2	762.1	766.7	762.1	766.7	762.1
177.5°	762.1	765.8	762.1	762.0	758.2	762.0	762.1	765.8	762.1	765.8	762.1
180°	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1	762.1



TEST NUMBER: P621681

CATALOG NUMBER: VLT-FA-100U-075D-840-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1109.7	1108.8	1110.7	1127.1	1160.7	1190.9
5°	1010.8	1014.4	1017.9	1045.7	1104.3	1184.6
7.5°	934.8	929.6	937.6	983.0	1054.9	1170.1
10°	882.5	870.7	882.5	944.3	1028.1	1155.6
12.5°	833.1	818.5	836.9	904.7	1006.0	1136.3
15°	769.5	783.7	775.4	851.3	972.6	1102.5
17.5°	784.6	855.9	799.7	805.0	939.5	1067.7
20°	820.4	893.6	844.0	774.0	918.1	1039.7
22.5°	852.8	908.1	863.2	748.0	896.8	1014.6
25°	877.8	925.0	875.4	724.5	865.8	972.1
27.5°	879.0	885.6	879.5	722.6	827.6	929.8
30°	862.8	834.4	860.4	724.5	800.4	896.0
32.5°	816.3	784.2	806.4	720.7	772.9	851.6
35°	750.1	707.6	738.3	700.4	730.4	776.5
37.5°	680.3	626.5	669.0	660.3	694.2	675.8
40°	633.0	538.6	623.6	620.7	674.4	591.7
42.5°	572.5	492.2	564.0	588.8	652.5	544.4
45°	462.3	452.8	457.6	534.9	606.1	496.3
47.5°	422.7	416.4	420.4	485.9	553.7	475.3
50°	399.5	391.2	397.2	454.0	520.3	458.9
52.5°	367.3	344.9	365.0	410.6	485.7	431.8
55°	276.2	208.9	275.0	361.1	433.6	386.4
57.5°	162.1	120.8	158.5	314.2	367.4	338.4
60°	109.7	101.4	110.9	276.5	323.3	310.3
62.5°	100.2	97.6	100.4	192.5	284.0	282.3
65°	91.7	90.6	91.7	111.1	234.4	241.5
67.5°	83.1	81.9	84.0	85.3	185.1	200.0
70°	77.3	76.1	77.3	78.5	142.0	173.9
72.5°	70.5	69.3	70.5	71.7	99.9	148.8
75°	60.4	59.2	60.4	61.6	66.3	112.3
77.5°	48.8	48.8	50.0	50.0	46.4	78.0
80°	41.1	41.1	42.2	42.3	40.2	56.8
82.5°	33.3	32.4	34.5	35.5	33.2	40.3
85°	20.5	19.3	21.7	22.9	21.7	19.3
87.5°	10.6	9.6	11.5	12.5	11.5	5.8
90°	14.4	14.4	14.4	9.6	4.7	0.0
92.5°	29.8	33.5	29.8	21.1	16.2	11.5
95°	43.3	52.7	43.3	38.3	71.1	38.3
97.5°	83.1	71.9	83.1	281.8	136.5	68.1
100°	166.5	110.2	166.5	565.5	170.7	91.1
102.5°	439.3	240.6	439.3	764.9	197.5	114.1
105°	1108.2	733.3	1108.2	867.5	228.2	148.6
107.5°	1612.8	1510.7	1612.8	828.2	243.1	183.1
110°	1694.7	1821.3	1694.7	805.2	262.3	206.1





TEST NUMBER: P621681

CATALOG NUMBER: VLT-FA-100U-075D-840-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1646.8	1859.6	1646.8	782.2	285.3	229.1
115°	1554.0	1816.5	1554.0	747.7	319.8	263.6
117.5°	1453.6	1723.5	1453.6	739.0	354.4	299.1
120°	1377.1	1658.3	1377.1	723.7	377.5	325.9
122.5°	1311.4	1570.1	1311.4	704.5	400.4	345.1
125°	1232.1	1457.0	1232.1	704.5	430.2	378.6
127.5°	1140.0	1362.1	1140.0	705.5	458.9	406.4
130°	1078.4	1289.3	1078.4	709.3	478.0	421.8
132.5°	1050.7	1224.1	1050.7	709.3	497.2	440.9
135°	1014.7	1164.6	1014.7	709.3	521.2	469.7
137.5°	974.9	1103.3	974.9	709.3	549.0	493.7
140°	951.6	1068.8	951.6	709.3	564.4	512.8
142.5°	924.6	1034.3	924.6	713.2	579.8	532.0
145°	884.0	977.7	884.0	714.1	602.8	556.0
147.5°	854.8	926.9	854.8	719.9	626.0	584.7
150°	835.3	896.2	835.3	723.7	641.4	603.9
152.5°	819.7	869.4	819.7	723.7	656.8	623.1
155°	801.2	838.7	801.2	728.5	675.2	651.8
157.5°	789.5	816.7	789.5	734.3	697.3	674.8
160°	781.8	805.2	781.8	738.1	708.9	690.2
162.5°	777.7	793.7	777.7	741.9	720.4	701.7
165°	767.2	781.2	767.2	747.7	733.1	723.7
167.5°	762.2	770.7	762.2	752.5	744.6	736.2
170°	762.2	766.8	762.2	752.5	752.4	747.7
172.5°	758.3	763.0	758.3	756.3	759.9	751.5
175°	757.2	752.5	757.2	762.1	766.7	762.1
177.5°	762.0	758.2	762.0	762.1	765.8	762.1
180°	762.1	762.1	762.1	762.1	762.1	762.1

(END OF REPORT)