

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: P621703

Luminaire Tested: VLT-FA-125U-075D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621703  
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-125U-075D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

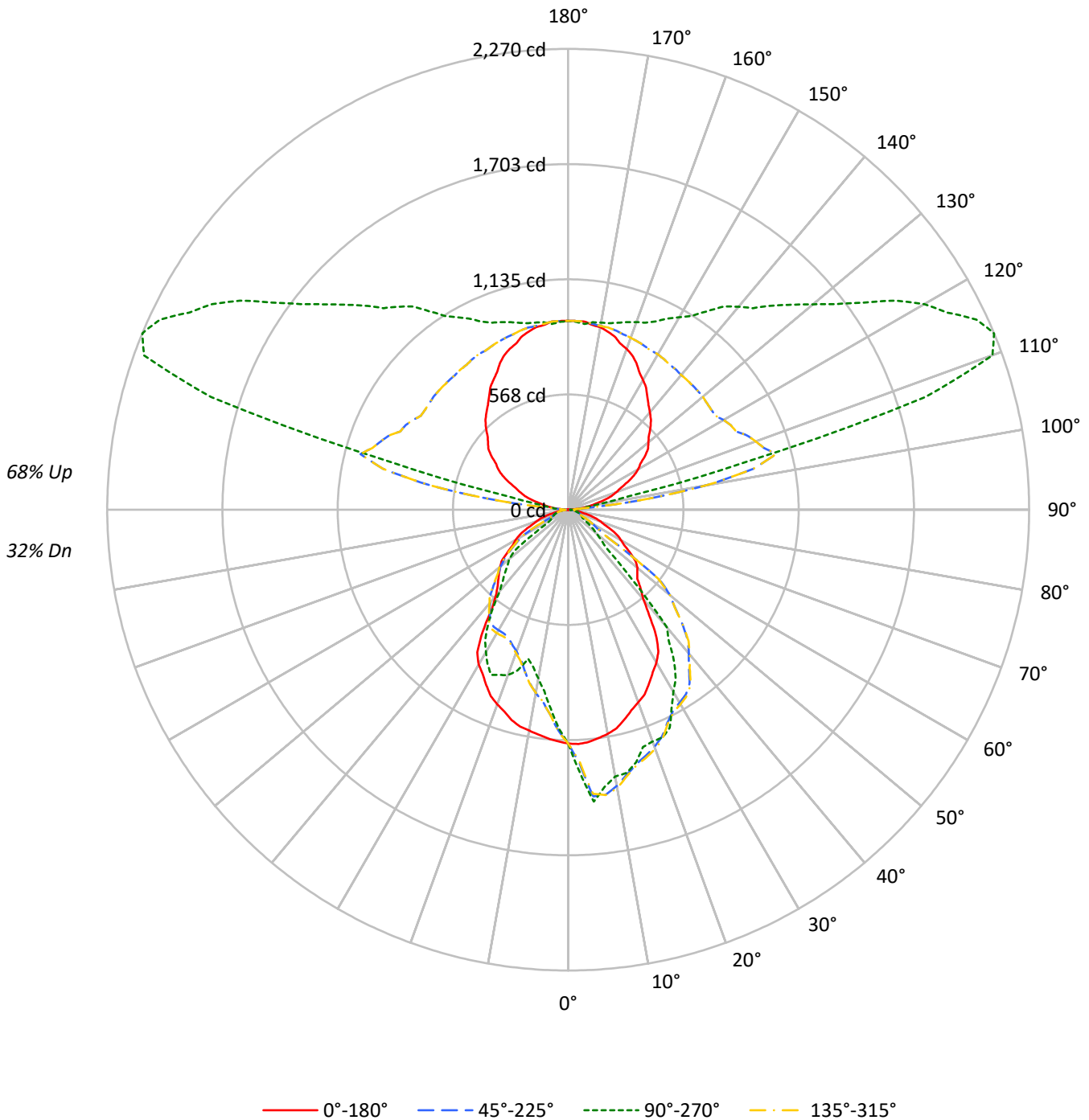
Lumens per Lamp: N/A  
Luminaire Lumens: 7373.7 lumens  
Efficiency: N/A  
Efficacy: 123.3 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 59.8  
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: P621703  
CATALOG NUMBER: VLT-FA-125U-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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32				32
1	94	90	87	84	85	82	79	76	65	63	61	50	49	48	36	35	35	28				28
2	86	79	74	69	78	72	67	63	58	54	52	44	42	41	32	31	30	25				25
3	79	70	63	58	71	64	58	53	51	47	44	40	37	35	29	27	26	21				21
4	72	62	55	49	65	57	50	45	46	41	38	36	33	30	26	24	23	19				19
5	67	56	48	43	60	51	44	39	41	36	33	32	29	26	24	22	20	17				17
6	61	50	42	37	55	46	39	34	37	32	29	29	26	23	22	20	18	15				15
7	57	45	38	32	51	41	35	30	34	29	25	27	23	21	20	18	16	13				13
8	53	41	34	29	47	37	31	27	31	26	23	24	21	18	18	16	15	12				12
9	49	37	30	26	44	34	28	24	28	23	20	22	19	17	17	15	13	11				11
10	46	34	27	23	41	31	25	21	26	21	18	21	17	15	16	14	12	10				10

**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: P621703

CATALOG NUMBER: VLT-FA-125U-075D-830-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.1	1.5
10°-20°	304.3	4.1
20°-30°	455.4	6.2
30°-40°	517.9	7.0
40°-50°	442.9	6.0
50°-60°	298.7	4.1
60°-70°	154.2	2.1
70°-80°	69.6	0.9
80°-90°	22.8	0.3
90°-100°	114.4	1.6
100°-110°	815.0	11.1
110°-120°	1106.4	15.0
120°-130°	900.5	12.2
130°-140°	724.3	9.8
140°-150°	571.0	7.7
150°-160°	417.5	5.7
160°-170°	259.3	3.5
170°-180°	88.4	1.2
0°-30°	870.8	11.8
0°-40°	1388.7	18.8
0°-60°	2130.2	28.9
0°-90°	2376.8	32.2
90°-120°	2035.8	27.6
90°-150°	4231.6	57.4
90°-180°	4997.0	67.8
0°-180°	7373.7	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	18	0	18	0	3
95°	47	64	47	64	47	52
105°	181	895	181	895	181	191
115°	322	2217	322	2217	322	319
125°	462	1778	462	1778	462	411
135°	573	1422	573	1422	573	441
145°	679	1194	679	1194	679	426
155°	796	1024	796	1024	796	365
165°	883	954	883	954	883	248
175°	930	918	930	918	930	88
180°	930	930	930	930	930	



TEST NUMBER: P621703

CATALOG NUMBER: VLT-FA-125U-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	9.5	9.8	9.1	9.1	9.1	8.9	8.6	4.7	10.4	10.8
90°	0.0	5.7	11.7	17.6	17.6	17.6	11.7	5.7	0.0	5.7	11.7
92.5°	14.0	19.8	25.7	36.4	41.0	36.4	25.7	19.8	14.0	19.8	25.7
95°	46.8	86.8	46.8	52.9	64.4	52.9	46.8	86.8	46.8	86.8	46.8
97.5°	83.1	166.6	344.0	101.5	87.8	101.5	344.0	166.6	83.1	166.6	344.0
100°	111.2	208.4	690.3	203.2	134.6	203.2	690.3	208.4	111.2	208.4	690.3
102.5°	139.2	241.1	933.7	536.2	293.7	536.2	933.7	241.1	139.2	241.1	933.7
105°	181.4	278.6	1058.9	1352.7	895.1	1352.7	1058.9	278.6	181.4	278.6	1058.9
107.5°	223.5	296.7	1011.0	1968.8	1844.0	1968.8	1011.0	296.7	223.5	296.7	1011.0
110°	251.6	320.2	982.9	2068.7	2223.2	2068.7	982.9	320.2	251.6	320.2	982.9



TEST NUMBER: P621703

CATALOG NUMBER: VLT-FA-125U-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°	279.6	348.3	954.8	2010.3	2270.0	2010.3	954.8	348.3	279.6	348.3	954.8
115°	321.8	390.4	912.7	1897.0	2217.3	1897.0	912.7	390.4	321.8	390.4	912.7
117.5°	365.1	432.6	902.1	1774.3	2103.8	1774.3	902.1	432.6	365.1	432.6	902.1
120°	397.8	460.8	883.4	1681.0	2024.2	1681.0	883.4	460.8	397.8	460.8	883.4
122.5°	421.2	488.7	860.0	1600.8	1916.6	1600.8	860.0	488.7	421.2	488.7	860.0
125°	462.2	525.1	860.0	1503.9	1778.5	1503.9	860.0	525.1	462.2	525.1	860.0
127.5°	496.1	560.2	861.2	1391.5	1662.7	1391.5	861.2	560.2	496.1	560.2	861.2
130°	514.8	583.5	865.9	1316.3	1573.8	1316.3	865.9	583.5	514.8	583.5	865.9
132.5°	538.2	606.9	865.9	1282.5	1494.2	1282.5	865.9	606.9	538.2	606.9	865.9
135°	573.3	636.3	865.9	1238.6	1421.7	1238.6	865.9	636.3	573.3	636.3	865.9
137.5°	602.6	670.1	865.9	1190.0	1346.8	1190.0	865.9	670.1	602.6	670.1	865.9
140°	626.0	688.9	865.9	1161.6	1304.6	1161.6	865.9	688.9	626.0	688.9	865.9
142.5°	649.4	707.7	870.5	1128.7	1262.5	1128.7	870.5	707.7	649.4	707.7	870.5
145°	678.6	735.9	871.7	1079.1	1193.5	1079.1	871.7	735.9	678.6	735.9	871.7
147.5°	713.8	764.1	878.7	1043.4	1131.5	1043.4	878.7	764.1	713.8	764.1	878.7
150°	737.2	782.9	883.4	1019.7	1094.0	1019.7	883.4	782.9	737.2	782.9	883.4
152.5°	760.6	801.7	883.4	1000.6	1061.3	1000.6	883.4	801.7	760.6	801.7	883.4
155°	795.7	824.3	889.3	978.1	1023.8	978.1	889.3	824.3	795.7	824.3	889.3
157.5°	823.7	851.2	896.3	963.7	996.9	963.7	896.3	851.2	823.7	851.2	896.3
160°	842.5	865.3	901.0	954.3	982.9	954.3	901.0	865.3	842.5	865.3	901.0
162.5°	856.5	879.4	905.6	949.4	968.8	949.4	905.6	879.4	856.5	879.4	905.6
165°	883.4	894.9	912.7	936.5	953.6	936.5	912.7	894.9	883.4	894.9	912.7
167.5°	898.6	908.9	918.5	930.4	940.7	930.4	918.5	908.9	898.6	908.9	918.5
170°	912.7	918.4	918.5	930.3	936.1	930.3	918.5	918.4	912.7	918.4	918.5
172.5°	917.3	927.6	923.2	925.7	931.4	925.7	923.2	927.6	917.3	927.6	923.2
175°	930.2	935.9	930.2	924.2	918.5	924.2	930.2	935.9	930.2	935.9	930.2
177.5°	930.2	934.8	930.2	930.1	925.5	930.1	930.2	934.8	930.2	934.8	930.2
180°	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2	930.2



TEST NUMBER: P621703

CATALOG NUMBER: VLT-FA-125U-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°	11.0	10.1	11.9	12.6	11.3	5.6
90°	17.6	17.6	17.6	11.7	5.7	0.0
92.5°	36.4	41.0	36.4	25.7	19.8	14.0
95°	52.9	64.4	52.9	46.8	86.8	46.8
97.5°	101.5	87.8	101.5	344.0	166.6	83.1
100°	203.2	134.6	203.2	690.3	208.4	111.2
102.5°	536.2	293.7	536.2	933.7	241.1	139.2
105°	1352.7	895.1	1352.7	1058.9	278.6	181.4
107.5°	1968.8	1844.0	1968.8	1011.0	296.7	223.5
110°	2068.7	2223.2	2068.7	982.9	320.2	251.6





TEST NUMBER: P621703

CATALOG NUMBER: VLT-FA-125U-075D-830-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2010.3	2270.0	2010.3	954.8	348.3	279.6
115°	1897.0	2217.3	1897.0	912.7	390.4	321.8
117.5°	1774.3	2103.8	1774.3	902.1	432.6	365.1
120°	1681.0	2024.2	1681.0	883.4	460.8	397.8
122.5°	1600.8	1916.6	1600.8	860.0	488.7	421.2
125°	1503.9	1778.5	1503.9	860.0	525.1	462.2
127.5°	1391.5	1662.7	1391.5	861.2	560.2	496.1
130°	1316.3	1573.8	1316.3	865.9	583.5	514.8
132.5°	1282.5	1494.2	1282.5	865.9	606.9	538.2
135°	1238.6	1421.7	1238.6	865.9	636.3	573.3
137.5°	1190.0	1346.8	1190.0	865.9	670.1	602.6
140°	1161.6	1304.6	1161.6	865.9	688.9	626.0
142.5°	1128.7	1262.5	1128.7	870.5	707.7	649.4
145°	1079.1	1193.5	1079.1	871.7	735.9	678.6
147.5°	1043.4	1131.5	1043.4	878.7	764.1	713.8
150°	1019.7	1094.0	1019.7	883.4	782.9	737.2
152.5°	1000.6	1061.3	1000.6	883.4	801.7	760.6
155°	978.1	1023.8	978.1	889.3	824.3	795.7
157.5°	963.7	996.9	963.7	896.3	851.2	823.7
160°	954.3	982.9	954.3	901.0	865.3	842.5
162.5°	949.4	968.8	949.4	905.6	879.4	856.5
165°	936.5	953.6	936.5	912.7	894.9	883.4
167.5°	930.4	940.7	930.4	918.5	908.9	898.6
170°	930.3	936.1	930.3	918.5	918.4	912.7
172.5°	925.7	931.4	925.7	923.2	927.6	917.3
175°	924.2	918.5	924.2	930.2	935.9	930.2
177.5°	930.1	925.5	930.1	930.2	934.8	930.2
180°	930.2	930.2	930.2	930.2	930.2	930.2

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