

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: P621722

Luminaire Tested: VLT-FA-150U-050D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621722
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-050D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

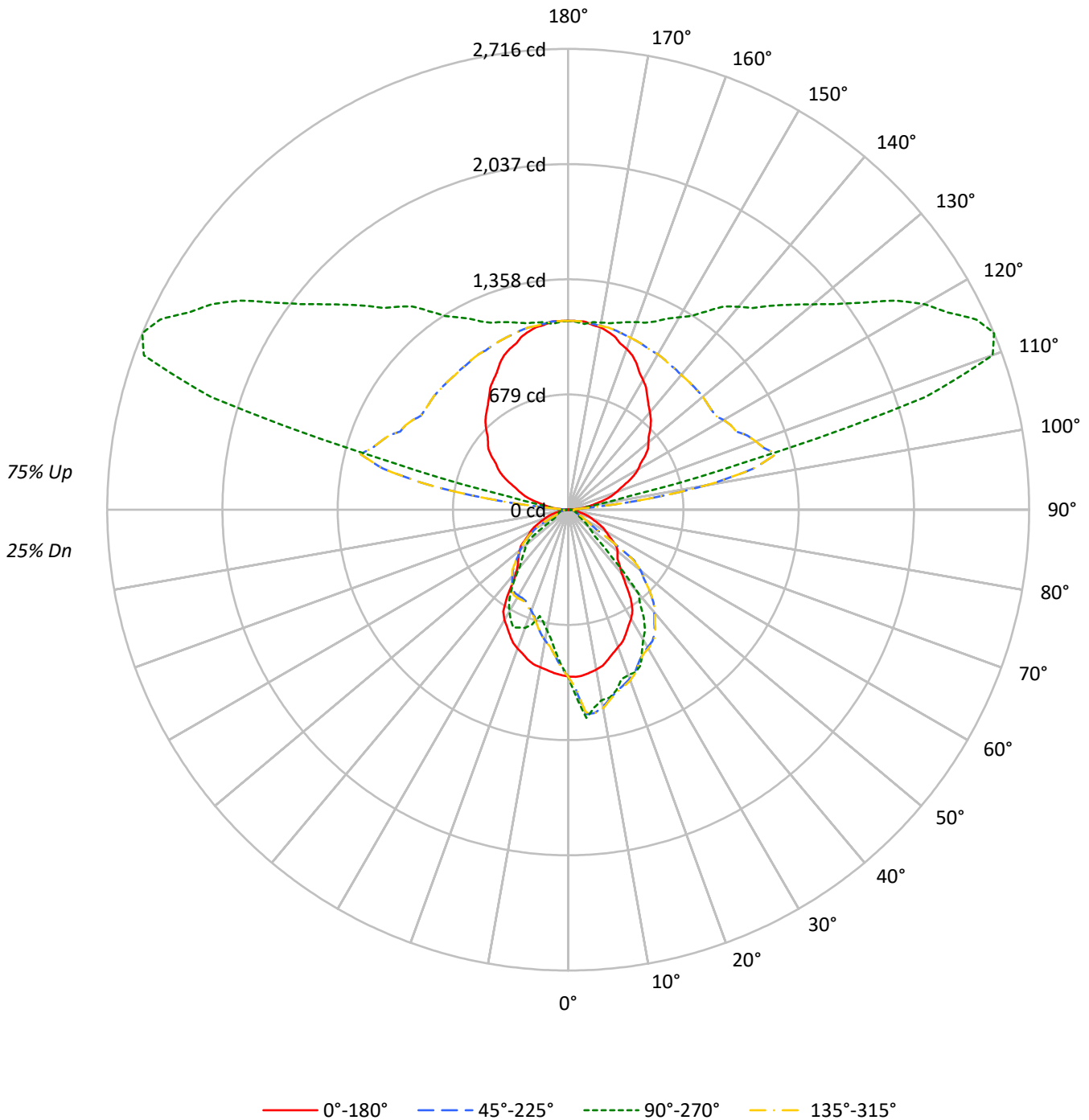
Lumens per Lamp: N/A
Luminaire Lumens: 8008.7 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 63
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			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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	93	89	85	82	82	79	76	74	61	60	58	45	44	43	30	30	29	22
2	85	78	72	67	75	70	65	61	54	51	48	40	38	37	27	26	25	19
3	77	69	62	57	69	62	56	51	48	44	41	36	33	31	24	23	22	17
4	71	61	54	48	63	55	49	44	43	39	35	32	29	27	22	20	19	15
5	65	54	47	41	58	49	42	38	39	34	31	29	26	24	20	18	17	13
6	60	49	41	36	53	44	37	33	35	30	27	26	23	21	18	16	15	12
7	55	44	36	31	49	40	33	29	31	27	23	24	21	18	17	15	13	10
8	51	40	33	28	46	36	30	25	29	24	21	22	19	16	15	13	12	9
9	48	36	29	24	43	33	27	22	26	22	19	20	17	15	14	12	11	9
10	44	33	26	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7054	7054	7054	7054
5°	7066	8875	6958	6051
10°	6973	8299	6871	5254
15°	6783	8172	6805	4821
20°	6575	7919	6651	5651
25°	6374	8005	6445	6065
30°	6148	7325	6231	5726
35°	5633	6789	5493	5133
40°	4590	6042	4431	4178
45°	4171	2243	4212	3806
50°	4242	1708	4164	3617
55°	4003	1326	3866	2164
60°	3688	1019	3660	1206
65°	3396	1053	3328	1273
70°	3021	1112	2937	1322
75°	2578	1164	2468	1359
80°	1942	1198	1818	1405
85°	1317	1070	1153	1317

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 7723 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.8	1.2
10°-20°	259.8	3.2
20°-30°	388.7	4.9
30°-40°	442.0	5.5
40°-50°	378.0	4.7
50°-60°	254.9	3.2
60°-70°	131.6	1.6
70°-80°	59.4	0.7
80°-90°	20.2	0.3
90°-100°	136.8	1.7
100°-110°	975.2	12.2
110°-120°	1324.0	16.5
120°-130°	1077.6	13.5
130°-140°	866.7	10.8
140°-150°	683.3	8.5
150°-160°	499.6	6.2
160°-170°	310.3	3.9
170°-180°	105.8	1.3
0°-30°	743.3	9.3
0°-40°	1185.3	14.8
0°-60°	1818.3	22.7
0°-90°	2029.5	25.3
90°-120°	2436.0	30.4
90°-150°	5063.5	63.2
90°-180°	5979.0	74.7
0°-180°	8008.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	983	983	983	983	983	
5°	981	1232	966	840	981	93
15°	913	1100	916	649	913	257
25°	805	1011	814	766	805	370
35°	643	775	627	586	643	393
45°	411	221	415	375	411	326
55°	320	106	309	173	320	285
65°	200	62	196	75	200	198
75°	93	42	89	49	93	99
85°	16	13	14	16	16	20
90°	0	21	0	21	0	3
95°	56	77	56	77	56	63
105°	217	1071	217	1071	217	229
115°	385	2653	385	2653	385	382
125°	553	2128	553	2128	553	491
135°	686	1701	686	1701	686	528
145°	812	1428	812	1428	812	510
155°	952	1225	952	1225	952	437
165°	1057	1141	1057	1141	1057	297
175°	1113	1099	1113	1099	1113	105
180°	1113	1113	1113	1113	1113	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	986.2	1019.8	1062.2	1091.3	1103.8	1091.3	1055.0	1019.6	975.0	961.7	930.2
5°	981.0	1084.6	1210.0	1225.2	1232.0	1225.2	1199.0	1078.4	966.0	918.1	866.0
7.5°	969.0	1150.3	1208.6	1174.8	1175.0	1181.3	1210.4	1144.7	953.4	878.1	814.2
10°	957.0	1186.8	1179.0	1130.2	1139.0	1135.1	1188.0	1179.6	943.0	856.0	783.0
12.5°	941.0	1198.2	1139.8	1123.8	1133.4	1127.9	1145.6	1191.9	934.2	840.1	747.0
15°	913.0	1181.9	1107.0	1100.0	1100.0	1104.9	1112.0	1186.8	916.0	811.4	703.0
17.5°	884.2	1149.4	1084.2	1049.5	1045.8	1052.3	1092.4	1157.7	890.2	779.5	660.4
20°	861.0	1127.0	1061.0	1020.4	1037.0	1022.3	1070.0	1133.0	871.0	759.5	634.0
22.5°	840.2	1099.1	1031.4	1014.1	1036.2	1014.5	1039.6	1105.2	848.6	737.1	614.0
25°	805.0	1052.4	987.0	1003.2	1011.0	1003.2	991.0	1056.5	814.0	708.4	593.0
27.5°	770.0	1003.1	953.8	964.7	940.8	959.2	959.2	1003.3	778.4	675.0	586.6
30°	742.0	968.8	937.0	921.2	884.0	913.3	944.0	969.1	752.0	653.2	585.0
32.5°	705.2	937.5	920.2	865.5	841.6	861.5	928.0	936.9	711.2	633.6	583.4
35°	643.0	893.3	890.0	799.4	775.0	793.6	897.0	891.0	627.0	602.6	571.0
37.5°	559.6	853.9	832.2	732.7	693.8	727.8	838.8	849.7	527.4	574.1	542.0
40°	490.0	827.3	789.0	683.1	645.0	678.2	794.0	825.0	473.0	554.2	510.0
42.5°	450.8	803.8	743.4	630.6	394.6	622.6	748.4	800.8	439.4	528.4	482.0
45°	411.0	761.0	677.0	349.1	221.0	332.5	678.0	750.4	415.0	489.3	439.0
47.5°	393.6	708.4	607.6	210.3	186.6	204.2	607.0	696.9	393.8	450.1	398.0
50°	380.0	675.3	558.0	185.3	153.0	178.4	559.0	664.4	373.0	423.8	370.0
52.5°	357.6	635.7	486.8	153.5	132.2	149.8	475.0	623.2	351.4	395.2	334.8
55°	320.0	559.6	203.0	120.7	106.0	115.8	193.0	540.7	309.0	350.1	294.0
57.5°	280.2	476.3	142.4	93.9	82.2	93.0	141.4	457.3	275.0	296.5	256.4
60°	257.0	420.3	116.0	78.8	71.0	77.8	115.0	403.6	255.0	260.9	222.0
62.5°	233.8	363.5	96.0	69.3	67.0	68.4	95.8	345.2	230.2	230.6	156.4
65°	200.0	275.3	71.0	63.0	62.0	62.0	69.0	265.4	196.0	190.1	90.0
67.5°	165.6	197.7	57.0	58.0	57.0	57.0	56.0	192.1	161.6	151.6	68.0
70°	144.0	151.8	53.0	54.0	53.0	53.0	52.0	147.8	140.0	117.5	64.0
72.5°	123.2	103.6	49.0	49.2	49.0	49.0	48.0	97.3	119.2	82.6	58.4
75°	93.0	51.9	42.0	42.0	42.0	42.0	41.0	49.9	89.0	53.8	50.0
77.5°	64.6	34.3	34.8	34.6	34.6	33.8	33.8	34.0	60.8	37.1	40.4
80°	47.0	28.4	30.0	29.0	29.0	29.0	29.0	27.4	44.0	31.3	34.0
82.5°	33.4	22.6	24.4	23.4	23.4	23.4	23.4	22.4	30.4	25.5	27.6
85°	16.0	15.0	16.0	14.0	13.0	14.0	15.0	15.0	14.0	16.9	18.0
87.5°	4.8	8.5	9.2	9.0	9.0	9.0	8.4	7.7	4.0	9.3	10.0
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	103.9	56.0	63.3	77.0	63.3	56.0	103.9	56.0	103.9	56.0
97.5°	99.4	199.3	411.6	121.4	105.0	121.4	411.6	199.3	99.4	199.3	411.6
100°	133.0	249.4	826.1	243.2	161.0	243.2	826.1	249.4	133.0	249.4	826.1
102.5°	166.6	288.5	1117.3	641.7	351.4	641.7	1117.3	288.5	166.6	288.5	1117.3
105°	217.0	333.4	1267.1	1618.7	1071.1	1618.7	1267.1	333.4	217.0	333.4	1267.1
107.5°	267.4	355.0	1209.7	2355.8	2206.6	2355.8	1209.7	355.0	267.4	355.0	1209.7
110°	301.0	383.2	1176.1	2475.4	2660.2	2475.4	1176.1	383.2	301.0	383.2	1176.1



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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°	334.6	416.8	1142.5	2405.5	2716.2	2405.5	1142.5	416.8	334.6	416.8	1142.5
115°	385.0	467.2	1092.1	2269.9	2653.2	2269.9	1092.1	467.2	385.0	467.2	1092.1
117.5°	436.8	517.6	1079.5	2123.1	2517.4	2123.1	1079.5	517.6	436.8	517.6	1079.5
120°	476.0	551.3	1057.1	2011.5	2422.2	2011.5	1057.1	551.3	476.0	551.3	1057.1
122.5°	504.0	584.8	1029.1	1915.6	2293.4	1915.6	1029.1	584.8	504.0	584.8	1029.1
125°	553.0	628.3	1029.1	1799.6	2128.2	1799.6	1029.1	628.3	553.0	628.3	1029.1
127.5°	593.7	670.3	1030.5	1665.1	1989.6	1665.1	1030.5	670.3	593.7	670.3	1030.5
130°	616.1	698.2	1036.1	1575.1	1883.2	1575.1	1036.1	698.2	616.1	698.2	1036.1
132.5°	644.1	726.2	1036.1	1534.7	1788.0	1534.7	1036.1	726.2	644.1	726.2	1036.1
135°	686.1	761.4	1036.1	1482.1	1701.2	1482.1	1036.1	761.4	686.1	761.4	1036.1
137.5°	721.1	801.8	1036.1	1424.0	1611.5	1424.0	1036.1	801.8	721.1	801.8	1036.1
140°	749.1	824.4	1036.1	1390.0	1561.1	1390.0	1036.1	824.4	749.1	824.4	1036.1
142.5°	777.1	846.9	1041.7	1350.6	1510.7	1350.6	1041.7	846.9	777.1	846.9	1041.7
145°	812.1	880.5	1043.1	1291.2	1428.1	1291.2	1043.1	880.5	812.1	880.5	1043.1
147.5°	854.1	914.3	1051.5	1248.5	1353.9	1248.5	1051.5	914.3	854.1	914.3	1051.5
150°	882.1	936.8	1057.1	1220.1	1309.1	1220.1	1057.1	936.8	882.1	936.8	1057.1
152.5°	910.1	959.4	1057.1	1197.4	1269.9	1197.4	1057.1	959.4	910.1	959.4	1057.1
155°	952.1	986.3	1064.1	1170.3	1225.1	1170.3	1064.1	986.3	952.1	986.3	1064.1
157.5°	985.7	1018.5	1072.5	1153.2	1192.9	1153.2	1072.5	1018.5	985.7	1018.5	1072.5
160°	1008.1	1035.5	1078.1	1141.9	1176.1	1141.9	1078.1	1035.5	1008.1	1035.5	1078.1
162.5°	1024.9	1052.3	1083.7	1136.0	1159.3	1136.0	1083.7	1052.3	1024.9	1052.3	1083.7
165°	1057.1	1070.8	1092.1	1120.6	1141.1	1120.6	1092.1	1070.8	1057.1	1070.8	1092.1
167.5°	1075.3	1087.6	1099.1	1113.4	1125.7	1113.4	1099.1	1087.6	1075.3	1087.6	1099.1
170°	1092.1	1098.9	1099.1	1113.3	1120.1	1113.3	1099.1	1098.9	1092.1	1098.9	1099.1
172.5°	1097.7	1110.0	1104.7	1107.7	1114.5	1107.7	1104.7	1110.0	1097.7	1110.0	1104.7
175°	1113.1	1119.9	1113.1	1105.9	1099.1	1105.9	1113.1	1119.9	1113.1	1119.9	1113.1
177.5°	1113.1	1118.6	1113.1	1113.0	1107.5	1113.0	1113.1	1118.6	1113.1	1118.6	1113.1
180°	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1



TEST NUMBER: P621722

CATALOG NUMBER: VLT-FA-150U-050D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	983.0	983.0	983.0	983.0	983.0	983.0
2.5°	919.0	918.2	919.8	933.4	961.2	986.2
5°	837.1	840.0	842.9	866.0	914.5	981.0
7.5°	774.1	769.8	776.5	814.0	873.6	969.0
10°	730.8	721.0	730.8	782.0	851.4	957.0
12.5°	689.9	677.8	693.1	749.2	833.1	941.0
15°	637.3	649.0	642.2	705.0	805.4	913.0
17.5°	649.7	708.8	662.3	666.6	778.0	884.2
20°	679.4	740.0	698.9	641.0	760.3	861.0
22.5°	706.2	752.0	714.8	619.4	742.6	840.2
25°	726.9	766.0	724.9	600.0	717.0	805.0
27.5°	727.9	733.4	728.3	598.4	685.3	770.0
30°	714.5	691.0	712.5	600.0	662.8	742.0
32.5°	676.0	649.4	667.8	596.8	640.1	705.2
35°	621.2	586.0	611.4	580.0	604.9	643.0
37.5°	563.4	518.8	554.0	546.8	574.9	559.6
40°	524.2	446.0	516.4	514.0	558.4	490.0
42.5°	474.1	407.6	467.0	487.6	540.4	450.8
45°	382.8	375.0	378.9	443.0	501.9	411.0
47.5°	350.1	344.8	348.1	402.4	458.5	393.6
50°	330.8	324.0	328.9	376.0	430.8	380.0
52.5°	304.2	285.6	302.2	340.0	402.2	357.6
55°	228.7	173.0	227.8	299.0	359.1	320.0
57.5°	134.2	100.0	131.3	260.2	304.3	280.2
60°	90.8	84.0	91.8	229.0	267.8	257.0
62.5°	83.0	80.8	83.1	159.4	235.2	233.8
65°	76.0	75.0	76.0	92.0	194.1	200.0
67.5°	68.8	67.8	69.6	70.6	153.3	165.6
70°	64.0	63.0	64.0	65.0	117.6	144.0
72.5°	58.4	57.4	58.4	59.4	82.7	123.2
75°	50.0	49.0	50.0	51.0	54.9	93.0
77.5°	40.4	40.4	41.4	41.4	38.4	64.6
80°	34.0	34.0	35.0	35.0	33.3	47.0
82.5°	27.6	26.8	28.6	29.4	27.5	33.4
85°	17.0	16.0	18.0	19.0	18.0	16.0
87.5°	10.6	9.8	11.4	11.6	10.1	4.8
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	77.0	63.3	56.0	103.9	56.0
97.5°	121.4	105.0	121.4	411.6	199.3	99.4
100°	243.2	161.0	243.2	826.1	249.4	133.0
102.5°	641.7	351.4	641.7	1117.3	288.5	166.6
105°	1618.7	1071.1	1618.7	1267.1	333.4	217.0
107.5°	2355.8	2206.6	2355.8	1209.7	355.0	267.4
110°	2475.4	2660.2	2475.4	1176.1	383.2	301.0



TEST NUMBER: P621722

CATALOG NUMBER: VLT-FA-150U-050D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2405.5	2716.2	2405.5	1142.5	416.8	334.6
115°	2269.9	2653.2	2269.9	1092.1	467.2	385.0
117.5°	2123.1	2517.4	2123.1	1079.5	517.6	436.8
120°	2011.5	2422.2	2011.5	1057.1	551.3	476.0
122.5°	1915.6	2293.4	1915.6	1029.1	584.8	504.0
125°	1799.6	2128.2	1799.6	1029.1	628.3	553.0
127.5°	1665.1	1989.6	1665.1	1030.5	670.3	593.7
130°	1575.1	1883.2	1575.1	1036.1	698.2	616.1
132.5°	1534.7	1788.0	1534.7	1036.1	726.2	644.1
135°	1482.1	1701.2	1482.1	1036.1	761.4	686.1
137.5°	1424.0	1611.5	1424.0	1036.1	801.8	721.1
140°	1390.0	1561.1	1390.0	1036.1	824.4	749.1
142.5°	1350.6	1510.7	1350.6	1041.7	846.9	777.1
145°	1291.2	1428.1	1291.2	1043.1	880.5	812.1
147.5°	1248.5	1353.9	1248.5	1051.5	914.3	854.1
150°	1220.1	1309.1	1220.1	1057.1	936.8	882.1
152.5°	1197.4	1269.9	1197.4	1057.1	959.4	910.1
155°	1170.3	1225.1	1170.3	1064.1	986.3	952.1
157.5°	1153.2	1192.9	1153.2	1072.5	1018.5	985.7
160°	1141.9	1176.1	1141.9	1078.1	1035.5	1008.1
162.5°	1136.0	1159.3	1136.0	1083.7	1052.3	1024.9
165°	1120.6	1141.1	1120.6	1092.1	1070.8	1057.1
167.5°	1113.4	1125.7	1113.4	1099.1	1087.6	1075.3
170°	1113.3	1120.1	1113.3	1099.1	1098.9	1092.1
172.5°	1107.7	1114.5	1107.7	1104.7	1110.0	1097.7
175°	1105.9	1099.1	1105.9	1113.1	1119.9	1113.1
177.5°	1113.0	1107.5	1113.0	1113.1	1118.6	1113.1
180°	1113.1	1113.1	1113.1	1113.1	1113.1	1113.1

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