

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: P621728

Luminaire Tested: VLT-FA-150U-075D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621728
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-835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

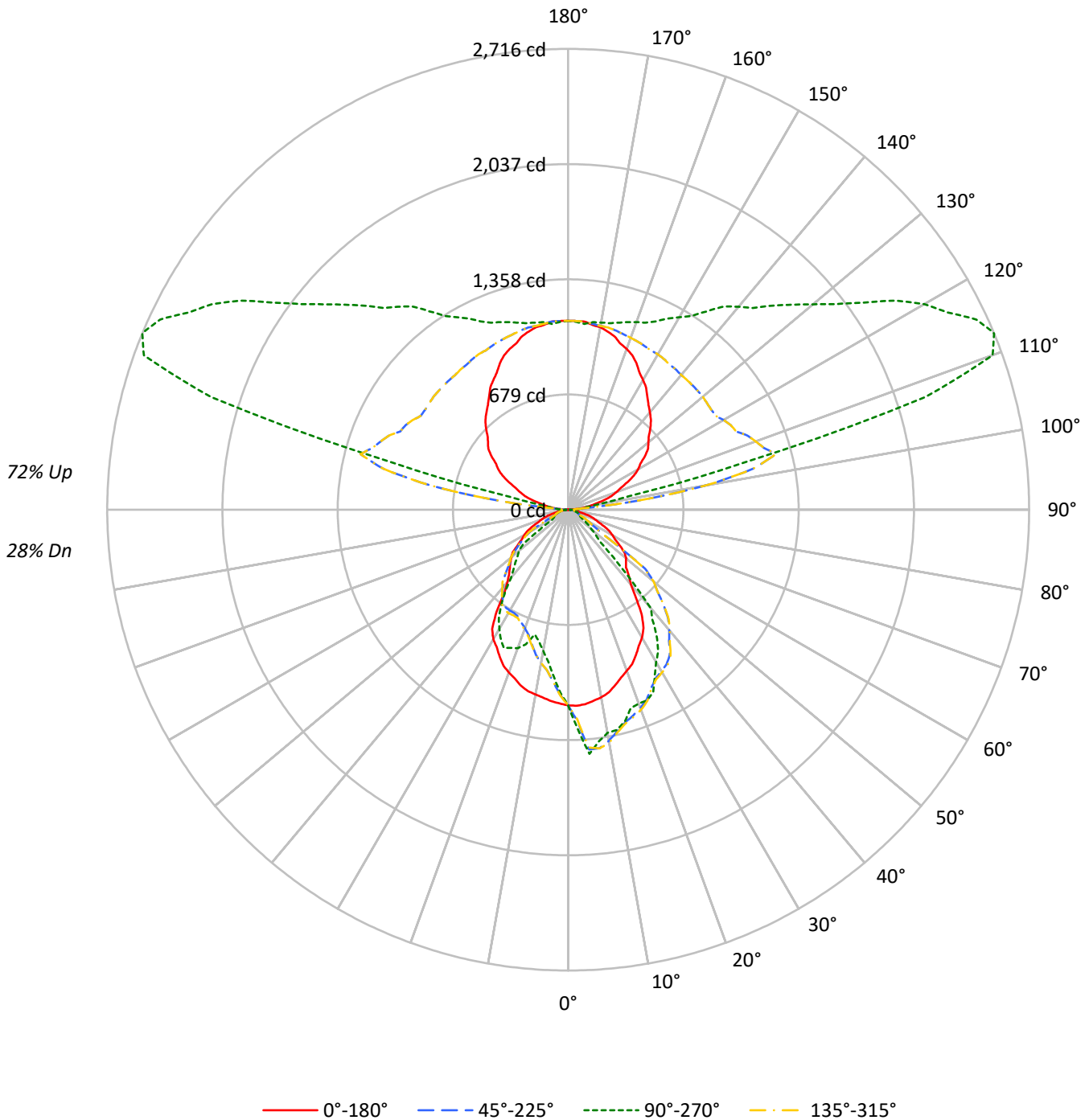
Lumens per Lamp: N/A
Luminaire Lumens: 8358.6 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 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



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	8272	8272	8272	8272
5°	8286	10406	8159	7095
10°	8177	9732	8058	6160
15°	7954	9583	7980	5654
20°	7710	9286	7799	6626
25°	7474	9387	7558	7112
30°	7210	8589	7307	6714
35°	6605	7961	6441	6019
40°	5383	7085	5195	4899
45°	4890	2629	4938	4462
50°	4975	2003	4883	4241
55°	4694	1555	4533	2538
60°	4326	1196	4291	1414
65°	3982	1234	3902	1493
70°	3544	1303	3445	1550
75°	3025	1364	2895	1594
80°	2277	1405	2132	1649
85°	1548	1251	1350	1548

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 9056 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	1.3
10°-20°	304.6	3.6
20°-30°	455.8	5.5
30°-40°	518.3	6.2
40°-50°	443.3	5.3
50°-60°	298.9	3.6
60°-70°	154.3	1.8
70°-80°	69.7	0.8
80°-90°	23.2	0.3
90°-100°	136.8	1.6
100°-110°	975.2	11.7
110°-120°	1324.0	15.8
120°-130°	1077.6	12.9
130°-140°	866.7	10.4
140°-150°	683.3	8.2
150°-160°	499.6	6.0
160°-170°	310.3	3.7
170°-180°	105.8	1.3
0°-30°	871.6	10.4
0°-40°	1389.9	16.6
0°-60°	2132.2	25.5
0°-90°	2379.4	28.5
90°-120°	2436.0	29.1
90°-150°	5063.5	60.6
90°-180°	5979.0	71.5
0°-180°	8358.6	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1153	1153	1153	1153	1153	
5°	1150	1445	1133	985	1150	109
15°	1071	1290	1074	761	1071	301
25°	944	1186	954	898	944	434
35°	754	909	735	687	754	461
45°	482	259	487	440	482	382
55°	375	124	362	203	375	334
65°	234	73	230	88	234	232
75°	109	49	104	58	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	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°	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7
2.5°	1156.4	1195.9	1245.5	1279.6	1294.3	1279.6	1237.1	1195.6	1143.3	1127.7	1090.8
5°	1150.3	1271.9	1418.8	1436.6	1444.6	1436.6	1405.9	1264.6	1132.7	1076.6	1015.5
7.5°	1136.3	1348.8	1417.2	1377.6	1377.8	1385.1	1419.3	1342.2	1118.0	1029.7	954.7
10°	1122.2	1391.6	1382.5	1325.3	1335.6	1331.0	1393.1	1383.2	1105.8	1003.7	918.1
12.5°	1103.4	1405.0	1336.5	1317.8	1329.0	1322.6	1343.3	1397.7	1095.4	985.1	875.9
15°	1070.6	1385.9	1298.1	1289.9	1289.9	1295.6	1303.9	1391.7	1074.1	951.4	824.3
17.5°	1036.8	1347.8	1271.3	1230.7	1226.3	1233.9	1281.0	1357.5	1043.9	914.1	774.4
20°	1009.6	1321.5	1244.1	1196.5	1216.0	1198.8	1254.7	1328.6	1021.3	890.6	743.4
22.5°	985.2	1288.8	1209.4	1189.1	1215.1	1189.6	1219.0	1295.9	995.1	864.4	720.0
25°	943.9	1234.0	1157.4	1176.3	1185.5	1176.3	1162.0	1238.8	954.5	830.7	695.4
27.5°	902.9	1176.2	1118.4	1131.2	1103.2	1124.7	1124.8	1176.5	912.8	791.4	687.8
30°	870.1	1136.1	1098.7	1080.1	1036.6	1071.0	1106.9	1136.3	881.8	766.0	686.0
32.5°	826.9	1099.3	1079.0	1014.8	986.9	1010.3	1088.2	1098.6	834.0	742.9	684.1
35°	754.0	1047.5	1043.6	937.4	908.8	930.6	1051.8	1044.8	735.2	706.6	669.6
37.5°	656.2	1001.3	975.8	859.2	813.6	853.5	983.6	996.3	618.4	673.2	635.6
40°	574.6	970.1	925.2	801.0	756.3	795.3	931.0	967.4	554.6	649.8	598.0
42.5°	528.6	942.5	871.7	739.5	462.7	730.1	877.6	939.0	515.2	619.6	565.2
45°	481.9	892.4	793.9	409.3	259.1	389.9	795.0	879.9	486.6	573.8	514.8
47.5°	461.5	830.7	712.5	246.6	218.8	239.4	711.8	817.2	461.8	527.8	466.7
50°	445.6	791.8	654.3	217.2	179.4	209.2	655.5	779.1	437.4	497.0	433.9
52.5°	419.3	745.4	570.8	180.0	155.0	175.7	557.0	730.8	412.1	463.4	392.6
55°	375.2	656.1	238.0	141.5	124.3	135.8	226.3	634.1	362.3	410.5	344.7
57.5°	328.6	558.6	167.0	110.1	96.4	109.0	165.8	536.2	322.5	347.7	300.7
60°	301.4	492.8	136.0	92.4	83.3	91.3	134.8	473.3	299.0	305.9	260.3
62.5°	274.2	426.2	112.6	81.3	78.6	80.2	112.3	404.8	269.9	270.4	183.4
65°	234.5	322.8	83.3	73.8	72.7	72.7	80.9	311.2	229.8	223.0	105.5
67.5°	194.2	231.8	66.8	68.0	66.8	66.8	65.7	225.3	189.5	177.8	79.7
70°	168.9	178.0	62.1	63.3	62.1	62.1	61.0	173.3	164.2	137.8	75.0
72.5°	144.5	121.5	57.5	57.7	57.5	57.5	56.3	114.1	139.8	96.9	68.5
75°	109.1	60.9	49.2	49.2	49.2	49.2	48.1	58.5	104.4	63.1	58.6
77.5°	75.8	40.2	40.8	40.6	40.6	39.7	39.6	39.9	71.3	43.5	47.4
80°	55.1	33.3	35.2	34.0	34.0	34.0	34.0	32.1	51.6	36.7	39.9
82.5°	39.2	26.6	28.6	27.4	27.4	27.4	27.4	26.2	35.6	29.9	32.4
85°	18.8	17.6	18.8	16.4	15.2	16.4	17.6	17.6	16.4	19.9	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	103.9	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



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7
2.5°	1077.6	1076.7	1078.5	1094.5	1127.1	1156.4
5°	981.5	985.0	988.4	1015.5	1072.4	1150.3
7.5°	907.7	902.7	910.5	954.5	1024.3	1136.3
10°	856.9	845.4	856.9	917.0	998.4	1122.2
12.5°	809.0	794.8	812.7	878.5	976.8	1103.4
15°	747.3	761.0	753.0	826.7	944.5	1070.6
17.5°	761.9	831.1	776.6	781.7	912.3	1036.8
20°	796.6	867.7	819.6	751.6	891.5	1009.6
22.5°	828.1	881.8	838.2	726.3	870.8	985.2
25°	852.4	898.2	850.1	703.6	840.8	943.9
27.5°	853.6	860.0	854.0	701.7	803.6	902.9
30°	837.8	810.3	835.5	703.6	777.2	870.1
32.5°	792.7	761.5	783.0	699.8	750.6	826.9
35°	728.4	687.1	717.0	680.1	709.3	754.0
37.5°	660.6	608.3	649.6	641.2	674.1	656.2
40°	614.7	523.0	605.5	602.7	654.8	574.6
42.5°	555.9	478.0	547.7	571.8	633.6	528.6
45°	448.9	439.7	444.3	519.5	588.6	481.9
47.5°	410.5	404.3	408.2	471.9	537.7	461.5
50°	387.9	379.9	385.7	440.9	505.2	445.6
52.5°	356.7	334.9	354.4	398.7	471.6	419.3
55°	268.2	202.9	267.1	350.6	421.1	375.2
57.5°	157.4	117.3	153.9	305.1	356.8	328.6
60°	106.5	98.5	107.7	268.5	314.0	301.4
62.5°	97.3	94.7	97.5	186.9	275.8	274.2
65°	89.1	87.9	89.1	107.9	227.6	234.5
67.5°	80.6	79.5	81.6	82.8	179.7	194.2
70°	75.0	73.9	75.0	76.2	137.9	168.9
72.5°	68.5	67.3	68.5	69.7	97.0	144.5
75°	58.6	57.5	58.6	59.8	64.3	109.1
77.5°	47.4	47.4	48.5	48.5	45.0	75.8
80°	39.9	39.9	41.0	41.0	39.1	55.1
82.5°	32.3	31.4	33.5	34.5	32.3	39.2
85°	19.9	18.8	21.1	22.3	21.1	18.8
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	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



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

(END OF REPORT)