

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: P621686

Luminaire Tested: VLT-FA-100U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621686  
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-835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

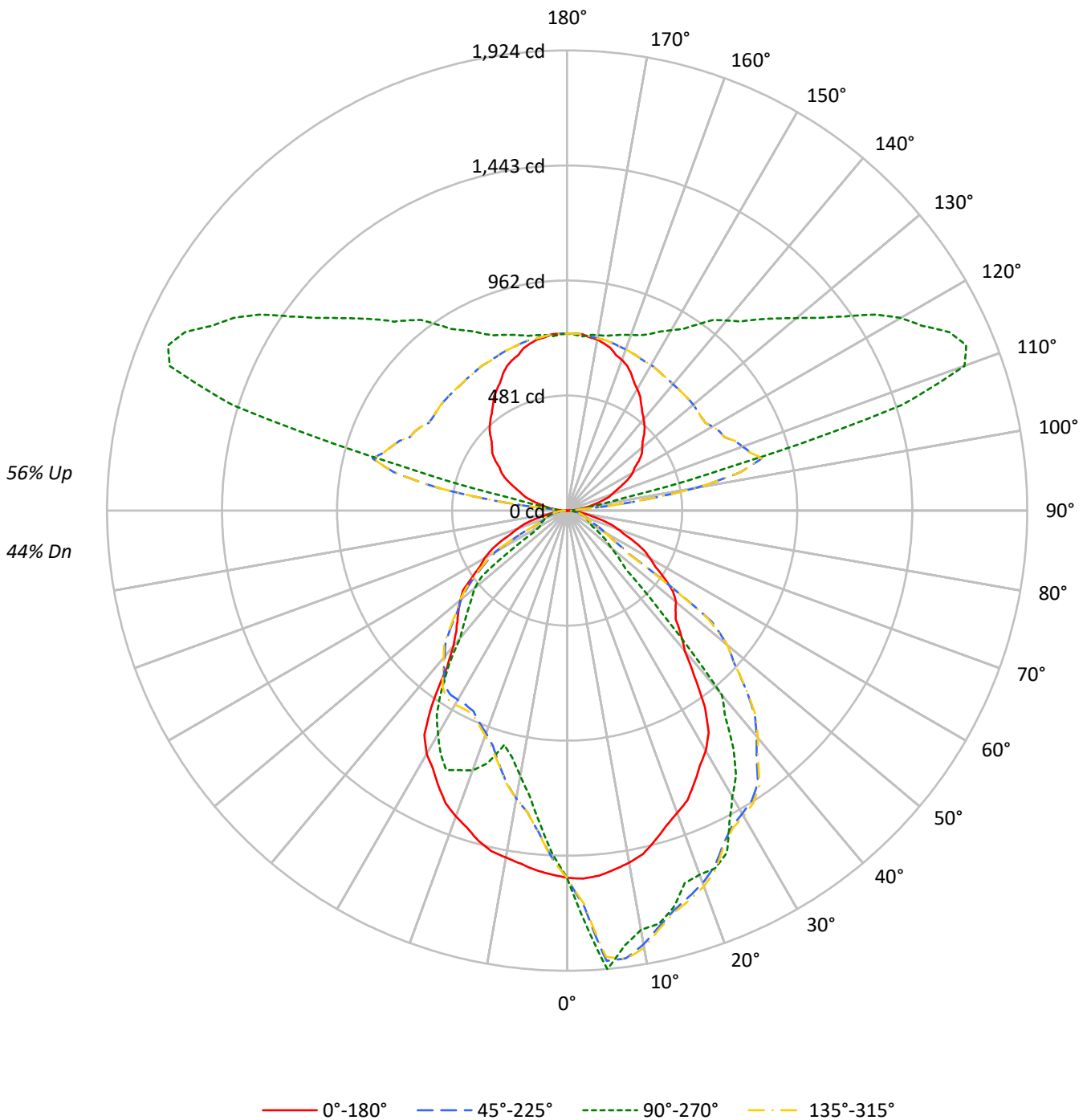
Lumens per Lamp: N/A  
Luminaire Lumens: 7142.7 lumens  
Efficiency: N/A  
Efficacy: 122.7 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

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: P621686  
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### 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				44
1	97	93	90	86	89	86	83	80	71	69	67	58	57	56	46	45	44	39				39
2	89	82	77	72	82	76	71	67	63	60	57	52	50	48	42	40	39	34				34
3	82	73	66	61	75	67	61	57	57	52	49	47	44	41	37	35	34	29				29
4	75	65	58	52	69	60	54	49	51	46	42	42	39	36	34	32	30	26				26
5	69	58	51	45	63	54	47	42	46	41	37	38	34	31	31	28	26	23				23
6	64	52	45	39	58	49	42	37	41	36	32	35	31	28	28	25	23	20				20
7	59	47	40	35	54	44	37	33	38	32	29	32	28	25	26	23	21	18				18
8	55	43	36	31	50	40	34	29	34	29	26	29	25	22	24	21	19	17				17
9	51	39	32	27	47	37	30	26	32	27	23	27	23	20	22	19	17	15				15
10	48	36	29	25	44	34	28	23	29	24	21	25	21	18	21	18	16	14				14

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

	0°	90°	180°	270°
0°	11018	11018	11018	11018
5°	11037	13861	10868	9451
10°	10892	12963	10732	8205
15°	10594	12764	10629	7531
20°	10270	12369	10389	8826
25°	9955	12503	10067	9473
30°	9603	11441	9733	8943
35°	8798	10604	8579	8018
40°	7169	9437	6921	6525
45°	6515	3503	6578	5944
50°	6626	2668	6504	5650
55°	6253	2072	6038	3380
60°	5761	1592	5716	1883
65°	5304	1644	5197	1988
70°	4719	1737	4589	2065
75°	4029	1819	3854	2121
80°	3033	1872	2839	2194
85°	2058	1671	1803	2058

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 12063 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.1	2.1
10°-20°	405.7	5.7
20°-30°	607.1	8.5
30°-40°	690.4	9.7
40°-50°	590.5	8.3
50°-60°	398.2	5.6
60°-70°	205.5	2.9
70°-80°	92.8	1.3
80°-90°	29.3	0.4
90°-100°	91.0	1.3
100°-110°	648.3	9.1
110°-120°	880.2	12.3
120°-130°	716.4	10.0
130°-140°	576.2	8.1
140°-150°	454.2	6.4
150°-160°	332.1	4.6
160°-170°	206.3	2.9
170°-180°	70.3	1.0
0°-30°	1160.9	16.3
0°-40°	1851.4	25.9
0°-60°	2840.1	39.8
0°-90°	3167.7	44.3
90°-120°	1619.5	22.7
90°-150°	3366.3	47.1
90°-180°	3975.0	55.7
0°-180°	7142.7	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1535	1535	1535	1535	1535	
5°	1532	1924	1509	1312	1532	145
15°	1426	1718	1431	1014	1426	401
25°	1257	1579	1271	1196	1257	579
35°	1004	1210	979	915	1004	614
45°	642	345	648	586	642	509
55°	500	166	483	270	500	445
65°	312	97	306	117	312	309
75°	145	66	139	76	145	155
85°	25	20	22	25	25	32
90°	0	14	0	14	0	3
95°	37	51	37	51	37	42
105°	144	712	144	712	144	152
115°	256	1764	256	1764	256	254
125°	368	1415	368	1415	368	327
135°	456	1131	456	1131	456	351
145°	540	949	540	949	540	339
155°	633	814	633	814	633	291
165°	703	759	703	759	703	197
175°	740	731	740	731	740	70
180°	740	740	740	740	740	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4
2.5°	1540.4	1592.9	1659.1	1704.5	1724.0	1704.5	1647.8	1592.5	1522.9	1502.1	1452.9
5°	1532.2	1694.1	1889.9	1913.6	1924.3	1913.6	1872.7	1684.4	1508.8	1434.0	1352.6
7.5°	1513.5	1796.6	1887.7	1835.0	1835.3	1845.0	1890.6	1787.9	1489.1	1371.5	1271.7
10°	1494.8	1853.7	1841.5	1765.3	1779.0	1772.9	1855.6	1842.5	1472.9	1337.0	1223.0
12.5°	1469.8	1871.4	1780.3	1755.3	1770.3	1761.7	1789.3	1861.7	1459.1	1312.2	1166.8
15°	1426.0	1846.0	1729.0	1718.1	1718.1	1725.8	1736.9	1853.8	1430.7	1267.3	1098.0
17.5°	1381.1	1795.2	1693.4	1639.3	1633.5	1643.5	1706.2	1808.3	1390.4	1217.5	1031.5
20°	1344.8	1760.2	1657.2	1593.8	1619.7	1596.8	1671.3	1769.7	1360.4	1186.3	990.3
22.5°	1312.3	1716.7	1611.0	1583.9	1618.5	1584.6	1623.8	1726.2	1325.4	1151.3	959.0
25°	1257.3	1643.7	1541.6	1566.9	1579.1	1566.9	1547.9	1650.2	1271.4	1106.5	926.2
27.5°	1202.7	1566.8	1489.8	1506.7	1469.5	1498.2	1498.2	1567.1	1215.8	1054.2	916.2
30°	1158.9	1513.3	1463.5	1438.8	1380.7	1426.6	1474.5	1513.6	1174.6	1020.3	913.7
32.5°	1101.5	1464.3	1437.3	1351.8	1314.5	1345.7	1449.5	1463.3	1110.8	989.6	911.2
35°	1004.3	1395.3	1390.1	1248.7	1210.5	1239.5	1401.0	1391.7	979.3	941.1	891.9
37.5°	874.1	1333.7	1299.8	1144.4	1083.7	1136.8	1310.1	1327.1	823.8	896.8	846.6
40°	765.3	1292.2	1232.4	1067.0	1007.4	1059.4	1240.2	1288.6	738.8	865.5	796.6
42.5°	704.1	1255.4	1161.1	985.0	616.3	972.5	1168.9	1250.8	686.3	825.3	752.8
45°	642.0	1188.7	1057.4	545.2	345.2	519.3	1059.0	1172.0	648.2	764.3	685.7
47.5°	614.8	1106.5	949.0	328.4	291.5	318.9	948.1	1088.5	615.1	703.1	621.6
50°	593.5	1054.7	871.6	289.4	239.0	278.7	873.1	1037.7	582.6	662.0	577.9
52.5°	558.5	992.9	760.3	239.8	206.5	234.0	741.9	973.4	548.9	617.3	522.9
55°	499.8	874.0	317.1	188.5	165.6	180.8	301.5	844.6	482.6	546.8	459.2
57.5°	437.7	744.0	222.4	146.7	128.4	145.2	220.9	714.2	429.5	463.1	400.5
60°	401.4	656.5	181.2	123.1	110.9	121.6	179.6	630.4	398.3	407.5	346.7
62.5°	365.2	567.7	149.9	108.3	104.6	106.8	149.6	539.2	359.6	360.2	244.3
65°	312.4	430.0	110.9	98.4	96.8	96.8	107.8	414.6	306.1	297.0	140.6
67.5°	258.7	308.7	89.0	90.6	89.0	89.0	87.5	300.1	252.4	236.8	106.2
70°	224.9	237.1	82.8	84.3	82.8	82.8	81.2	230.9	218.7	183.5	100.0
72.5°	192.4	161.9	76.5	76.8	76.5	76.5	75.0	152.0	186.2	129.1	91.2
75°	145.3	81.1	65.6	65.6	65.6	65.6	64.0	77.9	139.0	84.0	78.1
77.5°	100.9	53.6	54.4	54.0	54.0	52.8	52.8	53.1	95.0	58.0	63.1
80°	73.4	44.4	46.9	45.3	45.3	45.3	45.3	42.8	68.7	48.9	53.1
82.5°	52.2	35.4	38.1	36.5	36.5	36.5	36.5	35.0	47.5	39.8	43.1
85°	25.0	23.5	25.0	21.8	20.3	21.8	23.4	23.4	21.9	26.4	28.1
87.5°	7.5	12.1	11.9	10.3	10.3	10.3	10.6	10.8	6.2	13.3	13.1
90°	0.0	4.6	9.3	14.0	14.0	14.0	9.3	4.6	0.0	4.6	9.3
92.5°	11.2	15.7	20.5	28.9	32.6	28.9	20.5	15.7	11.2	15.7	20.5
95°	37.2	69.1	37.2	42.1	51.2	42.1	37.2	69.1	37.2	69.1	37.2
97.5°	66.1	132.5	273.7	80.7	69.8	80.7	273.7	132.5	66.1	132.5	273.7
100°	88.4	165.8	549.2	161.6	107.0	161.6	549.2	165.8	88.4	165.8	549.2
102.5°	110.8	191.8	742.8	426.6	233.6	426.6	742.8	191.8	110.8	191.8	742.8
105°	144.3	221.6	842.4	1076.1	712.1	1076.1	842.4	221.6	144.3	221.6	842.4
107.5°	177.8	236.0	804.2	1566.2	1466.9	1566.2	804.2	236.0	177.8	236.0	804.2
110°	200.1	254.7	781.9	1645.7	1768.5	1645.7	781.9	254.7	200.1	254.7	781.9



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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°	222.5	277.1	759.5	1599.2	1805.8	1599.2	759.5	277.1	222.5	277.1	759.5
115°	256.0	310.6	726.0	1509.0	1763.9	1509.0	726.0	310.6	256.0	310.6	726.0
117.5°	290.4	344.1	717.7	1411.5	1673.6	1411.5	717.7	344.1	290.4	344.1	717.7
120°	316.5	366.5	702.8	1337.3	1610.3	1337.3	702.8	366.5	316.5	366.5	702.8
122.5°	335.1	388.8	684.1	1273.5	1524.7	1273.5	684.1	388.8	335.1	388.8	684.1
125°	367.7	417.7	684.1	1196.4	1414.8	1196.4	684.1	417.7	367.7	417.7	684.1
127.5°	394.7	445.6	685.1	1107.0	1322.7	1107.0	685.1	445.6	394.7	445.6	685.1
130°	409.6	464.2	688.8	1047.2	1251.9	1047.2	688.8	464.2	409.6	464.2	688.8
132.5°	428.2	482.8	688.8	1020.3	1188.6	1020.3	688.8	482.8	428.2	482.8	688.8
135°	456.1	506.2	688.8	985.3	1130.9	985.3	688.8	506.2	456.1	506.2	688.8
137.5°	479.4	533.1	688.8	946.7	1071.4	946.7	688.8	533.1	479.4	533.1	688.8
140°	498.0	548.0	688.8	924.1	1037.8	924.1	688.8	548.0	498.0	548.0	688.8
142.5°	516.6	563.0	692.5	897.9	1004.3	897.9	692.5	563.0	516.6	563.0	692.5
145°	539.9	585.4	693.4	858.4	949.4	858.4	693.4	585.4	539.9	585.4	693.4
147.5°	567.8	607.8	699.0	830.0	900.1	830.0	699.0	607.8	567.8	607.8	699.0
150°	586.4	622.8	702.8	811.1	870.3	811.1	702.8	622.8	586.4	622.8	702.8
152.5°	605.0	637.8	702.8	796.0	844.2	796.0	702.8	637.8	605.0	637.8	702.8
155°	632.9	655.7	707.4	778.0	814.5	778.0	707.4	655.7	632.9	655.7	707.4
157.5°	655.3	677.1	713.0	766.7	793.0	766.7	713.0	677.1	655.3	677.1	713.0
160°	670.2	688.4	716.7	759.1	781.9	759.1	716.7	688.4	670.2	688.4	716.7
162.5°	681.3	699.6	720.4	755.2	770.7	755.2	720.4	699.6	681.3	699.6	720.4
165°	702.8	711.9	726.0	745.0	758.6	745.0	726.0	711.9	702.8	711.9	726.0
167.5°	714.9	723.0	730.7	740.2	748.4	740.2	730.7	723.0	714.9	723.0	730.7
170°	726.0	730.6	730.7	740.1	744.6	740.1	730.7	730.6	726.0	730.6	730.7
172.5°	729.8	737.9	734.4	736.4	740.9	736.4	734.4	737.9	729.8	737.9	734.4
175°	740.0	744.5	740.0	735.2	730.7	735.2	740.0	744.5	740.0	744.5	740.0
177.5°	740.0	743.6	740.0	739.9	736.3	739.9	740.0	743.6	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4
2.5°	1435.4	1434.2	1436.6	1457.9	1501.3	1540.4
5°	1307.4	1312.0	1316.6	1352.6	1428.4	1532.2
7.5°	1209.1	1202.4	1212.8	1271.4	1364.4	1513.5
10°	1141.4	1126.1	1141.4	1221.4	1329.8	1494.8
12.5°	1077.6	1058.7	1082.5	1170.2	1301.2	1469.8
15°	995.4	1013.7	1003.0	1101.2	1258.0	1426.0
17.5°	1014.8	1107.1	1034.4	1041.2	1215.2	1381.1
20°	1061.1	1155.8	1091.7	1001.2	1187.5	1344.8
22.5°	1103.1	1174.6	1116.5	967.5	1159.9	1312.3
25°	1135.3	1196.4	1132.3	937.2	1119.9	1257.3
27.5°	1137.0	1145.5	1137.6	934.7	1070.4	1202.7
30°	1115.9	1079.3	1112.9	937.2	1035.2	1158.9
32.5°	1055.9	1014.3	1043.0	932.2	999.8	1101.5
35°	970.3	915.3	955.0	905.9	944.8	1004.3
37.5°	880.0	810.3	865.3	854.1	897.9	874.1
40°	818.8	696.6	806.6	802.8	872.2	765.3
42.5°	740.5	636.6	729.5	761.6	844.0	704.1
45°	597.9	585.7	591.8	691.9	784.0	642.0
47.5°	546.8	538.6	543.7	628.5	716.2	614.8
50°	516.8	506.1	513.7	587.3	672.9	593.5
52.5°	475.1	446.1	472.0	531.1	628.2	558.5
55°	357.3	270.2	355.7	467.0	560.9	499.8
57.5°	209.6	156.2	205.1	406.4	475.2	437.7
60°	141.9	131.2	143.4	357.7	418.2	401.4
62.5°	129.6	126.2	129.9	249.0	367.3	365.2
65°	118.7	117.1	118.7	143.7	303.2	312.4
67.5°	107.4	105.9	108.6	110.3	239.4	258.7
70°	99.9	98.4	99.9	101.5	183.7	224.9
72.5°	91.2	89.7	91.2	92.8	129.2	192.4
75°	78.1	76.5	78.1	79.7	85.7	145.3
77.5°	63.1	63.1	64.6	64.7	60.0	100.9
80°	53.1	53.1	54.6	54.7	52.0	73.4
82.5°	43.1	41.9	44.6	45.9	43.0	52.2
85°	26.5	25.0	28.0	29.7	28.0	25.0
87.5°	12.8	11.5	14.0	15.6	14.5	7.5
90°	14.0	14.0	14.0	9.3	4.6	0.0
92.5°	28.9	32.6	28.9	20.5	15.7	11.2
95°	42.1	51.2	42.1	37.2	69.1	37.2
97.5°	80.7	69.8	80.7	273.7	132.5	66.1
100°	161.6	107.0	161.6	549.2	165.8	88.4
102.5°	426.6	233.6	426.6	742.8	191.8	110.8
105°	1076.1	712.1	1076.1	842.4	221.6	144.3
107.5°	1566.2	1466.9	1566.2	804.2	236.0	177.8
110°	1645.7	1768.5	1645.7	781.9	254.7	200.1





TEST NUMBER: P621686

CATALOG NUMBER: VLT-FA-100U-100D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1599.2	1805.8	1599.2	759.5	277.1	222.5
115°	1509.0	1763.9	1509.0	726.0	310.6	256.0
117.5°	1411.5	1673.6	1411.5	717.7	344.1	290.4
120°	1337.3	1610.3	1337.3	702.8	366.5	316.5
122.5°	1273.5	1524.7	1273.5	684.1	388.8	335.1
125°	1196.4	1414.8	1196.4	684.1	417.7	367.7
127.5°	1107.0	1322.7	1107.0	685.1	445.6	394.7
130°	1047.2	1251.9	1047.2	688.8	464.2	409.6
132.5°	1020.3	1188.6	1020.3	688.8	482.8	428.2
135°	985.3	1130.9	985.3	688.8	506.2	456.1
137.5°	946.7	1071.4	946.7	688.8	533.1	479.4
140°	924.1	1037.8	924.1	688.8	548.0	498.0
142.5°	897.9	1004.3	897.9	692.5	563.0	516.6
145°	858.4	949.4	858.4	693.4	585.4	539.9
147.5°	830.0	900.1	830.0	699.0	607.8	567.8
150°	811.1	870.3	811.1	702.8	622.8	586.4
152.5°	796.0	844.2	796.0	702.8	637.8	605.0
155°	778.0	814.5	778.0	707.4	655.7	632.9
157.5°	766.7	793.0	766.7	713.0	677.1	655.3
160°	759.1	781.9	759.1	716.7	688.4	670.2
162.5°	755.2	770.7	755.2	720.4	699.6	681.3
165°	745.0	758.6	745.0	726.0	711.9	702.8
167.5°	740.2	748.4	740.2	730.7	723.0	714.9
170°	740.1	744.6	740.1	730.7	730.6	726.0
172.5°	736.4	740.9	736.4	734.4	737.9	729.8
175°	735.2	730.7	735.2	740.0	744.5	740.0
177.5°	739.9	736.3	739.9	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0

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