

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: P621709

Luminaire Tested: VLT-FA-125U-100D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621709
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-100D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

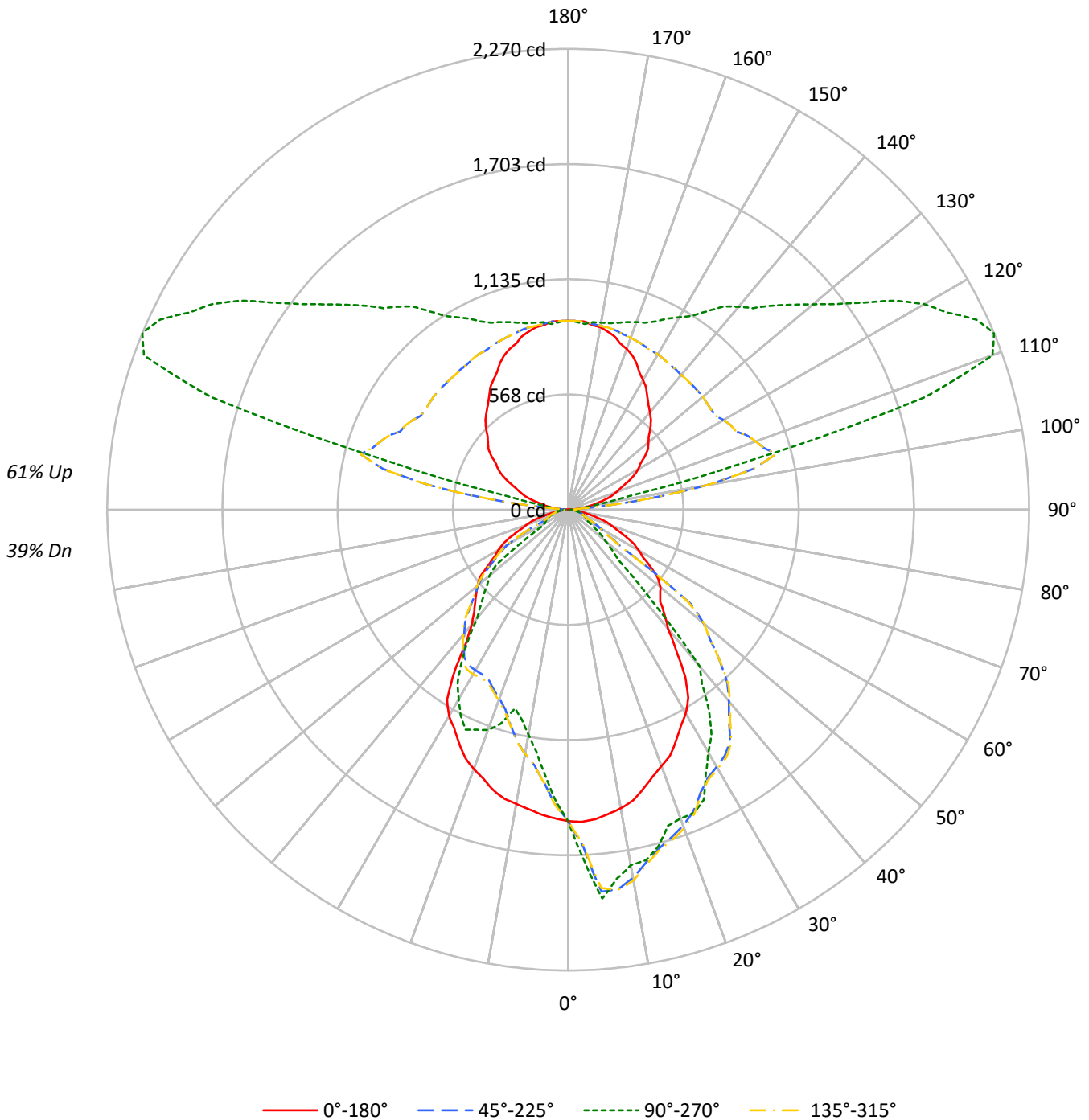
Lumens per Lamp: N/A
Luminaire Lumens: 8162.1 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 67.4
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	
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	96	92	88	85	87	84	81	78	68	66	65	54	53	52	41	41	40	34
2	88	81	75	71	80	74	69	65	61	57	54	49	46	44	37	36	35	30
3	81	72	65	59	73	66	60	55	54	50	46	43	41	38	34	32	30	26
4	74	64	56	51	67	58	52	47	48	44	40	39	36	33	30	28	26	23
5	68	57	49	44	62	52	46	41	44	39	35	35	32	29	28	25	23	20
6	63	51	44	38	57	47	40	36	39	34	31	32	28	26	25	23	21	18
7	58	46	39	34	53	43	36	31	36	31	27	29	26	23	23	21	19	16
8	54	42	35	30	49	39	32	28	33	28	24	27	23	20	21	19	17	14
9	50	39	31	27	46	36	29	25	30	25	22	25	21	18	20	17	15	13
10	47	35	28	24	43	33	27	22	28	23	20	23	19	17	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11008	11008	11008	11008
5°	11028	13849	10859	9442
10°	10882	12951	10723	8198
15°	10584	12753	10619	7524
20°	10260	12358	10380	8819
25°	9946	12492	10058	9465
30°	9594	11431	9724	8935
35°	8790	10595	8571	8011
40°	7163	9428	6914	6520
45°	6509	3500	6572	5939
50°	6620	2666	6498	5644
55°	6248	2069	6033	3378
60°	5757	1590	5711	1882
65°	5299	1644	5194	1987
70°	4714	1735	4584	2062
75°	4023	1816	3851	2121
80°	3029	1872	2839	2194
85°	2058	1671	1795	2058

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 12052 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	1.8
10°-20°	405.4	5.0
20°-30°	606.5	7.4
30°-40°	689.8	8.5
40°-50°	590.0	7.2
50°-60°	397.8	4.9
60°-70°	205.3	2.5
70°-80°	92.7	1.1
80°-90°	29.7	0.4
90°-100°	114.4	1.4
100°-110°	815.0	10.0
110°-120°	1106.4	13.6
120°-130°	900.5	11.0
130°-140°	724.3	8.9
140°-150°	571.0	7.0
150°-160°	417.5	5.1
160°-170°	259.3	3.2
170°-180°	88.4	1.1
0°-30°	1159.9	14.2
0°-40°	1849.7	22.7
0°-60°	2837.5	34.8
0°-90°	3165.2	38.8
90°-120°	2035.8	24.9
90°-150°	4231.6	51.8
90°-180°	4997.0	61.2
0°-180°	8162.1	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1534	1534	1534	1534	1534	
5°	1531	1923	1508	1311	1531	145
15°	1425	1717	1429	1013	1425	401
25°	1256	1578	1270	1195	1256	578
35°	1003	1209	978	914	1003	613
45°	641	345	648	585	641	509
55°	499	165	482	270	499	445
65°	312	97	306	117	312	309
75°	145	66	139	76	145	155
85°	25	20	22	25	25	32
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0
2.5°	1539.0	1591.5	1657.6	1703.0	1722.5	1703.0	1646.3	1591.1	1521.5	1500.7	1451.6
5°	1530.9	1692.6	1888.2	1911.9	1922.6	1911.9	1871.1	1682.9	1507.5	1432.7	1351.4
7.5°	1512.1	1795.0	1886.0	1833.3	1833.6	1843.4	1888.8	1786.2	1487.8	1370.3	1270.6
10°	1493.4	1852.0	1839.8	1763.7	1777.4	1771.3	1853.9	1840.8	1471.6	1335.8	1221.9
12.5°	1468.4	1869.7	1778.7	1753.7	1768.7	1760.1	1787.7	1860.0	1457.8	1311.0	1165.7
15°	1424.7	1844.4	1727.5	1716.6	1716.6	1724.2	1735.3	1852.1	1429.4	1266.2	1097.0
17.5°	1379.8	1793.6	1691.9	1637.8	1632.0	1642.1	1704.7	1806.6	1389.2	1216.4	1030.6
20°	1343.6	1758.6	1655.7	1592.3	1618.3	1595.4	1669.7	1768.1	1359.2	1185.3	989.4
22.5°	1311.1	1715.2	1609.5	1582.5	1617.0	1583.1	1622.3	1724.6	1324.3	1150.3	958.2
25°	1256.2	1642.2	1540.2	1565.5	1577.7	1565.5	1546.5	1648.7	1270.3	1105.5	925.4
27.5°	1201.6	1565.4	1488.4	1505.4	1468.1	1496.8	1496.8	1565.6	1214.7	1053.3	915.4
30°	1157.9	1511.9	1462.2	1437.5	1379.5	1425.3	1473.1	1512.2	1173.5	1019.4	912.9
32.5°	1100.5	1463.0	1436.0	1350.6	1313.3	1344.5	1448.2	1462.0	1109.8	988.7	910.4
35°	1003.4	1394.0	1388.9	1247.5	1209.4	1238.4	1399.8	1390.4	978.4	940.3	891.1
37.5°	873.3	1332.5	1298.7	1143.4	1082.7	1135.8	1309.0	1325.9	823.0	895.9	845.8
40°	764.7	1291.1	1231.2	1066.0	1006.5	1058.4	1239.0	1287.4	738.1	864.8	795.9
42.5°	703.5	1254.3	1160.1	984.1	615.8	971.6	1167.9	1249.6	685.7	824.5	752.2
45°	641.4	1187.6	1056.5	544.8	344.9	518.8	1058.0	1171.0	647.6	763.6	685.1
47.5°	614.2	1105.5	948.2	328.1	291.2	318.7	947.2	1087.5	614.5	702.4	621.1
50°	593.0	1053.8	870.8	289.1	238.8	278.4	872.3	1036.8	582.1	661.4	577.4
52.5°	558.0	992.0	759.7	239.6	206.3	233.8	741.2	972.5	548.4	616.7	522.5
55°	499.4	873.2	316.8	188.3	165.4	180.7	301.2	843.8	482.2	546.3	458.8
57.5°	437.3	743.3	222.2	146.6	128.3	145.1	220.7	713.6	429.1	462.7	400.1
60°	401.1	655.9	181.0	123.0	110.8	121.5	179.5	629.9	397.9	407.1	346.4
62.5°	364.8	567.2	149.8	108.2	104.6	106.7	149.5	538.7	359.2	359.8	244.1
65°	312.1	429.6	110.8	98.3	96.8	96.8	107.7	414.2	305.9	296.7	140.4
67.5°	258.4	308.5	88.9	90.5	88.9	88.9	87.4	299.8	252.2	236.6	106.1
70°	224.7	236.9	82.7	84.2	82.7	82.7	81.1	230.7	218.5	183.4	99.9
72.5°	192.3	161.7	76.5	76.8	76.5	76.5	74.9	151.8	186.0	128.9	91.1
75°	145.1	81.0	65.5	65.5	65.5	65.5	64.0	77.9	138.9	84.0	78.0
77.5°	100.8	53.5	54.3	54.0	54.0	52.8	52.7	53.1	94.9	58.0	63.0
80°	73.3	44.4	46.8	45.3	45.3	45.3	45.3	42.7	68.7	48.8	53.1
82.5°	52.1	35.3	38.1	36.5	36.5	36.5	36.5	34.9	47.4	39.8	43.1
85°	25.0	23.4	25.0	21.8	20.3	21.8	23.4	23.4	21.8	26.4	28.1
87.5°	7.5	12.3	12.3	11.0	11.0	11.0	11.1	11.0	6.2	13.5	13.6
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



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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°	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



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0
2.5°	1434.1	1432.9	1435.3	1456.6	1499.9	1539.0
5°	1306.3	1310.8	1315.4	1351.4	1427.1	1530.9
7.5°	1208.0	1201.3	1211.7	1270.3	1363.2	1512.1
10°	1140.4	1125.1	1140.4	1220.3	1328.6	1493.4
12.5°	1076.6	1057.7	1081.5	1169.1	1300.0	1468.4
15°	994.5	1012.8	1002.1	1100.2	1256.9	1424.7
17.5°	1013.9	1106.1	1033.5	1040.2	1214.1	1379.8
20°	1060.2	1154.8	1090.7	1000.3	1186.4	1343.6
22.5°	1102.1	1173.5	1115.5	966.6	1158.9	1311.1
25°	1134.3	1195.4	1131.3	936.3	1118.9	1256.2
27.5°	1135.9	1144.5	1136.5	933.8	1069.5	1201.6
30°	1114.9	1078.3	1111.9	936.3	1034.3	1157.9
32.5°	1054.9	1013.4	1042.1	931.3	998.9	1100.5
35°	969.4	914.5	954.1	905.1	943.9	1003.4
37.5°	879.2	809.6	864.5	853.3	897.1	873.3
40°	818.1	696.0	805.8	802.1	871.5	764.7
42.5°	739.8	636.1	728.8	760.9	843.2	703.5
45°	597.4	585.2	591.3	691.3	783.3	641.4
47.5°	546.3	538.1	543.3	628.0	715.5	614.2
50°	516.3	505.6	513.2	586.8	672.3	593.0
52.5°	474.7	445.7	471.6	530.6	627.6	558.0
55°	356.9	270.0	355.4	466.6	560.4	499.4
57.5°	209.5	156.1	204.9	406.0	474.8	437.3
60°	141.8	131.1	143.3	357.4	417.8	401.1
62.5°	129.4	126.1	129.8	248.7	367.0	364.8
65°	118.6	117.0	118.6	143.6	302.9	312.1
67.5°	107.3	105.8	108.5	110.2	239.2	258.4
70°	99.8	98.3	99.8	101.4	183.5	224.7
72.5°	91.1	89.6	91.1	92.7	129.1	192.3
75°	78.0	76.5	78.0	79.6	85.6	145.1
77.5°	63.0	63.0	64.6	64.6	59.9	100.8
80°	53.1	53.1	54.6	54.6	52.0	73.3
82.5°	43.0	41.8	44.6	45.9	43.0	52.1
85°	26.5	25.0	28.0	29.6	28.0	25.0
87.5°	13.5	12.2	14.7	16.1	14.7	7.5
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: P621709

CATALOG NUMBER: VLT-FA-125U-100D-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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