

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P621741

Luminaire Tested: VLT-FA-150U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621741
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-125D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

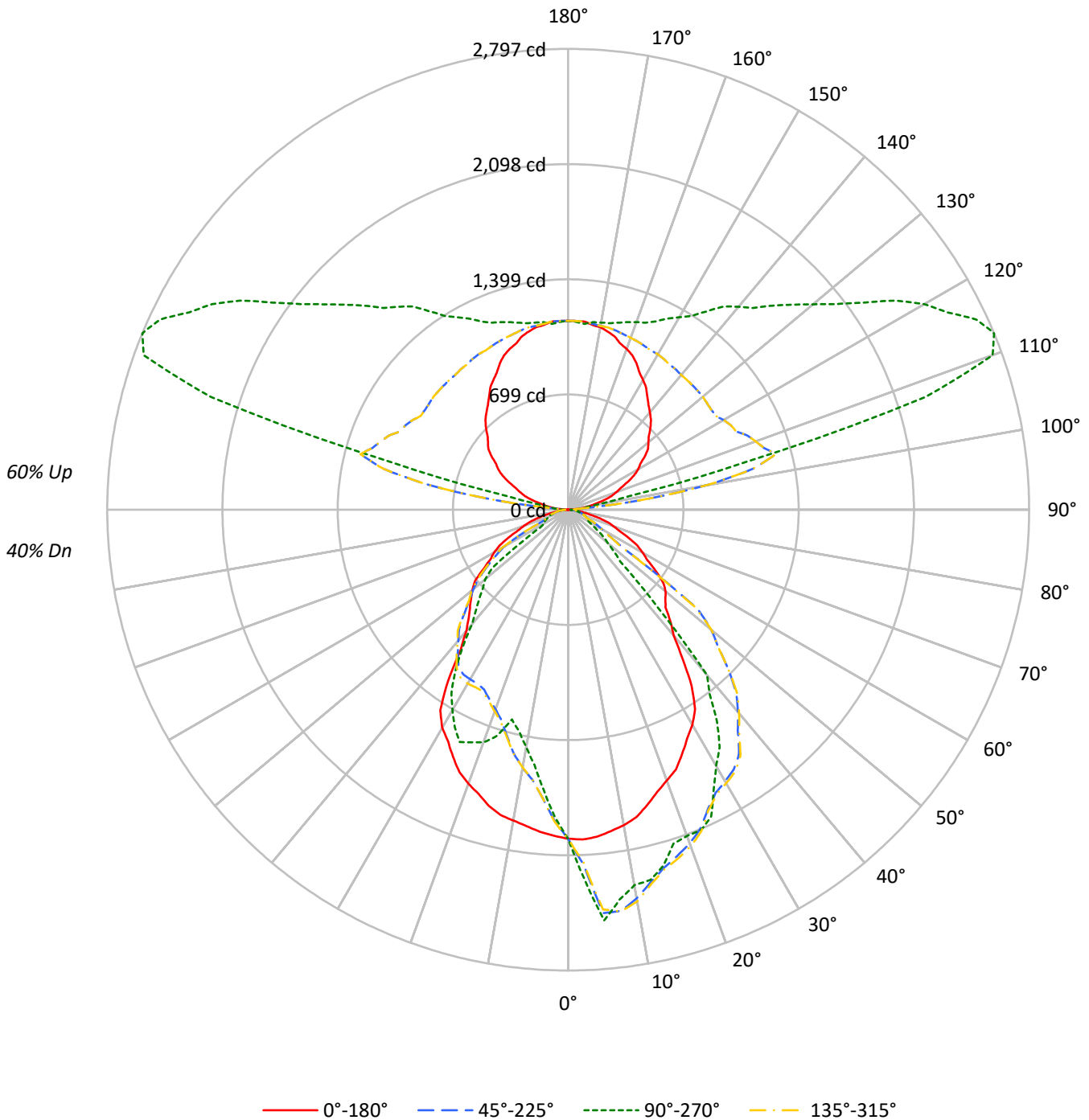
Lumens per Lamp: N/A
Luminaire Lumens: 10277.7 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 87.3
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	50	30	10	0	
RCR																						
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	96	92	89	85	88	84	81	78	69	67	65	55	54	53	43	42	41	35				
2	88	81	76	71	80	74	70	65	61	58	55	49	47	45	38	37	36	31				
3	81	72	65	60	73	66	60	55	55	50	47	44	41	39	35	33	31	27				
4	74	64	57	51	67	59	52	47	49	44	41	40	36	34	31	29	27	23				
5	68	57	50	44	62	53	46	41	44	39	35	36	32	30	28	26	24	21				
6	63	52	44	38	57	48	41	36	40	35	31	33	29	26	26	23	21	18				
7	58	47	39	34	53	43	36	32	36	31	27	30	26	23	24	21	19	17				
8	54	42	35	30	49	39	33	28	33	28	24	27	24	21	22	19	17	15				
9	50	39	32	27	46	36	29	25	30	25	22	25	21	19	20	18	16	14				
10	47	36	29	24	43	33	27	23	28	23	20	23	20	17	19	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	14330	14330	14330	14330
5°	14355	18028	14135	12292
10°	14165	16860	13958	10672
15°	13779	16600	13824	9795
20°	13356	16087	13511	11479
25°	12948	16261	13093	12320
30°	12490	14880	12658	11631
35°	11443	13791	11158	10428
40°	9324	12273	9000	8487
45°	8473	4556	8555	7731
50°	8617	3470	8459	7348
55°	8132	2694	7853	4396
60°	7493	2070	7434	2448
65°	6899	2138	6761	2588
70°	6137	2260	5967	2686
75°	5237	2365	5013	2759
80°	3947	2434	3694	2856
85°	2676	2174	2338	2676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15689 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.6	1.9
10°-20°	527.7	5.1
20°-30°	789.6	7.7
30°-40°	898.0	8.7
40°-50°	768.0	7.5
50°-60°	517.9	5.0
60°-70°	267.3	2.6
70°-80°	120.7	1.2
80°-90°	38.5	0.4
90°-100°	140.9	1.4
100°-110°	1004.3	9.8
110°-120°	1363.4	13.3
120°-130°	1109.7	10.8
130°-140°	892.5	8.7
140°-150°	703.6	6.8
150°-160°	514.5	5.0
160°-170°	319.6	3.1
170°-180°	109.0	1.1
0°-30°	1509.9	14.7
0°-40°	2407.9	23.4
0°-60°	3693.7	35.9
0°-90°	4120.2	40.1
90°-120°	2508.7	24.4
90°-150°	5214.5	50.7
90°-180°	6158.0	59.9
0°-180°	10277.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1997	1997	1997	1997	1997	
5°	1993	2503	1962	1706	1993	188
15°	1855	2234	1861	1318	1855	522
25°	1635	2054	1654	1556	1635	753
35°	1306	1574	1274	1190	1306	799
45°	835	449	843	762	835	662
55°	650	215	628	351	650	579
65°	406	126	398	152	406	402
75°	189	85	181	100	189	201
85°	32	26	28	32	32	42
90°	0	22	0	22	0	4
95°	58	79	58	79	58	65
105°	224	1103	224	1103	224	236
115°	396	2732	396	2732	396	394
125°	570	2192	570	2192	570	506
135°	706	1752	706	1752	706	544
145°	836	1471	836	1471	836	525
155°	980	1262	980	1262	980	450
165°	1089	1175	1089	1175	1089	306
175°	1146	1132	1146	1132	1146	108
180°	1146	1146	1146	1146	1146	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9
2.5°	2003.4	2071.7	2157.7	2216.8	2242.3	2216.8	2143.1	2071.2	1980.6	1953.6	1889.6
5°	1992.8	2203.3	2458.0	2488.8	2502.7	2488.8	2435.6	2190.7	1962.3	1865.0	1759.2
7.5°	1968.4	2336.7	2455.1	2386.5	2386.9	2399.6	2458.8	2325.2	1936.7	1783.8	1654.0
10°	1944.0	2410.8	2395.0	2295.9	2313.8	2305.8	2413.3	2396.3	1915.6	1738.8	1590.6
12.5°	1911.5	2433.9	2315.4	2282.9	2302.4	2291.3	2327.2	2421.3	1897.7	1706.6	1517.4
15°	1854.7	2400.9	2248.8	2234.5	2234.5	2244.5	2258.9	2410.9	1860.8	1648.2	1428.1
17.5°	1796.2	2334.8	2202.4	2132.0	2124.4	2137.5	2219.1	2351.8	1808.3	1583.5	1341.5
20°	1749.0	2289.3	2155.3	2072.8	2106.6	2076.8	2173.6	2301.7	1769.3	1542.9	1287.9
22.5°	1706.8	2232.7	2095.2	2060.0	2104.9	2060.8	2111.8	2245.0	1723.8	1497.4	1247.3
25°	1635.3	2137.8	2005.0	2037.8	2053.7	2037.8	2013.1	2146.1	1653.6	1439.0	1204.6
27.5°	1564.2	2037.7	1937.5	1959.6	1911.1	1948.5	1948.5	2038.1	1581.2	1371.1	1191.6
30°	1507.3	1968.1	1903.4	1871.2	1795.8	1855.3	1917.6	1968.6	1527.6	1327.0	1188.4
32.5°	1432.5	1904.5	1869.3	1758.1	1709.6	1750.1	1885.1	1903.2	1444.7	1287.0	1185.1
35°	1306.2	1814.7	1807.9	1624.0	1574.3	1612.1	1822.2	1810.0	1273.7	1224.0	1159.9
37.5°	1136.8	1734.6	1690.5	1488.4	1409.4	1478.5	1703.9	1726.0	1071.4	1166.3	1101.0
40°	995.4	1680.6	1602.8	1387.7	1310.2	1377.8	1612.9	1675.9	960.8	1125.7	1036.0
42.5°	915.8	1632.8	1510.1	1281.1	801.6	1264.8	1520.3	1626.7	892.6	1073.3	979.1
45°	834.9	1546.0	1375.3	709.1	448.9	675.4	1377.3	1524.3	843.0	994.0	891.8
47.5°	799.6	1439.1	1234.3	427.1	379.1	414.8	1233.1	1415.7	800.0	914.4	808.5
50°	771.9	1371.8	1133.5	376.3	310.8	362.4	1135.5	1349.6	757.7	861.0	751.6
52.5°	726.4	1291.3	988.9	311.9	268.6	304.3	964.9	1266.0	713.8	802.8	680.1
55°	650.0	1136.7	412.4	245.1	215.3	235.2	392.1	1098.4	627.7	711.1	597.2
57.5°	569.2	967.6	289.3	190.8	167.0	188.8	287.2	928.9	558.6	602.3	520.8
60°	522.1	853.8	235.6	160.1	144.2	158.1	233.6	819.9	518.0	529.9	451.0
62.5°	474.9	738.3	195.0	140.9	136.1	138.9	194.6	701.2	467.6	468.4	317.7
65°	406.3	559.2	144.2	127.9	125.9	125.9	140.2	539.2	398.2	386.2	182.8
67.5°	336.4	401.5	115.8	117.8	115.8	115.8	113.8	390.2	328.3	308.0	138.1
70°	292.5	308.4	107.7	109.7	107.7	107.7	105.6	300.3	284.4	238.7	130.0
72.5°	250.3	210.5	99.5	99.9	99.5	99.5	97.5	197.6	242.1	167.9	118.6
75°	188.9	105.5	85.3	85.3	85.3	85.3	83.3	101.3	180.8	109.3	101.6
77.5°	131.2	69.7	70.7	70.3	70.3	68.7	68.7	69.1	123.5	75.4	82.1
80°	95.5	57.7	60.9	58.9	58.9	58.9	58.9	55.6	89.4	63.6	69.1
82.5°	67.8	46.0	49.6	47.5	47.5	47.5	47.5	45.5	61.8	51.8	56.1
85°	32.5	30.5	32.5	28.4	26.4	28.4	30.5	30.4	28.4	34.4	36.6
87.5°	9.8	15.9	15.9	14.1	14.1	14.1	14.3	14.3	8.1	17.5	17.5
90°	0.0	7.0	14.4	21.6	21.6	21.6	14.4	7.0	0.0	7.0	14.4
92.5°	17.3	24.4	31.7	44.8	50.5	44.8	31.7	24.4	17.3	24.4	31.7
95°	57.7	107.0	57.7	65.2	79.3	65.2	57.7	107.0	57.7	107.0	57.7
97.5°	102.4	205.3	423.9	125.1	108.1	125.1	423.9	205.3	102.4	205.3	423.9
100°	137.0	256.8	850.7	250.4	165.8	250.4	850.7	256.8	137.0	256.8	850.7
102.5°	171.6	297.1	1150.6	660.8	361.9	660.8	1150.6	297.1	171.6	297.1	1150.6
105°	223.5	343.3	1304.9	1667.0	1103.0	1667.0	1304.9	343.3	223.5	343.3	1304.9
107.5°	275.4	365.6	1245.8	2426.1	2272.4	2426.1	1245.8	365.6	275.4	365.6	1245.8
110°	310.0	394.6	1211.2	2549.2	2739.5	2549.2	1211.2	394.6	310.0	394.6	1211.2



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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°	344.6	429.2	1176.6	2477.2	2797.2	2477.2	1176.6	429.2	344.6	429.2	1176.6
115°	396.5	481.1	1124.7	2337.6	2732.3	2337.6	1124.7	481.1	396.5	481.1	1124.7
117.5°	449.9	533.0	1111.7	2186.4	2592.5	2186.4	1111.7	533.0	449.9	533.0	1111.7
120°	490.2	567.8	1088.6	2071.5	2494.4	2071.5	1088.6	567.8	490.2	567.8	1088.6
122.5°	519.1	602.3	1059.8	1972.7	2361.8	1972.7	1059.8	602.3	519.1	602.3	1059.8
125°	569.5	647.1	1059.8	1853.3	2191.6	1853.3	1059.8	647.1	569.5	647.1	1059.8
127.5°	611.4	690.3	1061.2	1714.8	2048.9	1714.8	1061.2	690.3	611.4	690.3	1061.2
130°	634.4	719.0	1067.0	1622.1	1939.3	1622.1	1067.0	719.0	634.4	719.0	1067.0
132.5°	663.3	747.8	1067.0	1580.4	1841.3	1580.4	1067.0	747.8	663.3	747.8	1067.0
135°	706.5	784.1	1067.0	1526.3	1751.9	1526.3	1067.0	784.1	706.5	784.1	1067.0
137.5°	742.6	825.7	1067.0	1466.4	1659.6	1466.4	1067.0	825.7	742.6	825.7	1067.0
140°	771.4	848.9	1067.0	1431.5	1607.7	1431.5	1067.0	848.9	771.4	848.9	1067.0
142.5°	800.2	872.1	1072.7	1390.8	1555.8	1390.8	1072.7	872.1	800.2	872.1	1072.7
145°	836.3	906.8	1074.2	1329.7	1470.7	1329.7	1074.2	906.8	836.3	906.8	1074.2
147.5°	879.5	941.6	1082.8	1285.7	1394.3	1285.7	1082.8	941.6	879.5	941.6	1082.8
150°	908.4	964.8	1088.6	1256.5	1348.1	1256.5	1088.6	964.8	908.4	964.8	1088.6
152.5°	937.2	988.0	1088.6	1233.1	1307.8	1233.1	1088.6	988.0	937.2	988.0	1088.6
155°	980.5	1015.7	1095.8	1205.2	1261.6	1205.2	1095.8	1015.7	980.5	1015.7	1095.8
157.5°	1015.1	1048.9	1104.5	1187.6	1228.5	1187.6	1104.5	1048.9	1015.1	1048.9	1104.5
160°	1038.1	1066.3	1110.2	1175.9	1211.2	1175.9	1110.2	1066.3	1038.1	1066.3	1110.2
162.5°	1055.4	1083.6	1116.0	1169.9	1193.9	1169.9	1116.0	1083.6	1055.4	1083.6	1116.0
165°	1088.6	1102.7	1124.7	1154.0	1175.1	1154.0	1124.7	1102.7	1088.6	1102.7	1124.7
167.5°	1107.4	1120.0	1131.9	1146.6	1159.3	1146.6	1131.9	1120.0	1107.4	1120.0	1131.9
170°	1124.7	1131.7	1131.9	1146.4	1153.5	1146.4	1131.9	1131.7	1124.7	1131.7	1131.9
172.5°	1130.4	1143.1	1137.6	1140.7	1147.7	1140.7	1137.6	1143.1	1130.4	1143.1	1137.6
175°	1146.3	1153.3	1146.3	1138.9	1131.9	1138.9	1146.3	1153.3	1146.3	1153.3	1146.3
177.5°	1146.3	1151.9	1146.3	1146.2	1140.5	1146.2	1146.3	1151.9	1146.3	1151.9	1146.3
180°	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1996.9	1996.9	1996.9	1996.9	1996.9	1996.9
2.5°	1866.8	1865.2	1868.4	1896.1	1952.5	2003.4
5°	1700.4	1706.4	1712.3	1759.2	1857.7	1992.8
7.5°	1572.5	1563.8	1577.3	1653.6	1774.6	1968.4
10°	1484.5	1464.6	1484.5	1588.5	1729.5	1944.0
12.5°	1401.5	1376.9	1407.9	1521.9	1692.3	1911.5
15°	1294.5	1318.4	1304.5	1432.1	1636.2	1854.7
17.5°	1319.9	1439.9	1345.3	1354.1	1580.5	1796.2
20°	1380.1	1503.2	1419.8	1302.1	1544.4	1749.0
22.5°	1434.7	1527.6	1452.1	1258.2	1508.5	1706.8
25°	1476.6	1556.0	1472.6	1218.8	1456.5	1635.3
27.5°	1478.7	1489.8	1479.5	1215.6	1392.2	1564.2
30°	1451.4	1403.7	1447.4	1218.8	1346.4	1507.3
32.5°	1373.2	1319.2	1356.5	1212.3	1300.3	1432.5
35°	1261.9	1190.4	1242.0	1178.2	1228.7	1306.2
37.5°	1144.5	1053.9	1125.4	1110.8	1167.8	1136.8
40°	1064.9	906.0	1049.0	1044.1	1134.4	995.4
42.5°	963.1	828.0	948.8	990.5	1097.7	915.8
45°	777.7	761.8	769.7	899.9	1019.6	834.9
47.5°	711.1	700.4	707.2	817.4	931.4	799.6
50°	672.1	658.2	668.1	763.8	875.2	771.9
52.5°	617.9	580.2	613.9	690.7	817.0	726.4
55°	464.6	351.4	462.7	607.4	729.5	650.0
57.5°	272.7	203.1	266.7	528.6	618.1	569.2
60°	184.5	170.6	186.5	465.2	543.9	522.1
62.5°	168.5	164.1	168.9	323.8	477.7	474.9
65°	154.3	152.4	154.3	186.9	394.4	406.3
67.5°	139.7	137.7	141.3	143.4	311.4	336.4
70°	130.0	128.0	130.0	132.0	238.9	292.5
72.5°	118.6	116.6	118.6	120.7	168.0	250.3
75°	101.5	99.5	101.5	103.6	111.5	188.9
77.5°	82.1	82.1	84.1	84.1	78.0	131.2
80°	69.1	69.1	71.1	71.1	67.7	95.5
82.5°	56.0	54.4	58.0	59.7	55.9	67.8
85°	34.5	32.5	36.5	38.6	36.5	32.5
87.5°	17.3	15.7	18.9	20.8	19.1	9.8
90°	21.6	21.6	21.6	14.4	7.0	0.0
92.5°	44.8	50.5	44.8	31.7	24.4	17.3
95°	65.2	79.3	65.2	57.7	107.0	57.7
97.5°	125.1	108.1	125.1	423.9	205.3	102.4
100°	250.4	165.8	250.4	850.7	256.8	137.0
102.5°	660.8	361.9	660.8	1150.6	297.1	171.6
105°	1667.0	1103.0	1667.0	1304.9	343.3	223.5
107.5°	2426.1	2272.4	2426.1	1245.8	365.6	275.4
110°	2549.2	2739.5	2549.2	1211.2	394.6	310.0



TEST NUMBER: P621741

CATALOG NUMBER: VLT-FA-150U-125D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2477.2	2797.2	2477.2	1176.6	429.2	344.6
115°	2337.6	2732.3	2337.6	1124.7	481.1	396.5
117.5°	2186.4	2592.5	2186.4	1111.7	533.0	449.9
120°	2071.5	2494.4	2071.5	1088.6	567.8	490.2
122.5°	1972.7	2361.8	1972.7	1059.8	602.3	519.1
125°	1853.3	2191.6	1853.3	1059.8	647.1	569.5
127.5°	1714.8	2048.9	1714.8	1061.2	690.3	611.4
130°	1622.1	1939.3	1622.1	1067.0	719.0	634.4
132.5°	1580.4	1841.3	1580.4	1067.0	747.8	663.3
135°	1526.3	1751.9	1526.3	1067.0	784.1	706.5
137.5°	1466.4	1659.6	1466.4	1067.0	825.7	742.6
140°	1431.5	1607.7	1431.5	1067.0	848.9	771.4
142.5°	1390.8	1555.8	1390.8	1072.7	872.1	800.2
145°	1329.7	1470.7	1329.7	1074.2	906.8	836.3
147.5°	1285.7	1394.3	1285.7	1082.8	941.6	879.5
150°	1256.5	1348.1	1256.5	1088.6	964.8	908.4
152.5°	1233.1	1307.8	1233.1	1088.6	988.0	937.2
155°	1205.2	1261.6	1205.2	1095.8	1015.7	980.5
157.5°	1187.6	1228.5	1187.6	1104.5	1048.9	1015.1
160°	1175.9	1211.2	1175.9	1110.2	1066.3	1038.1
162.5°	1169.9	1193.9	1169.9	1116.0	1083.6	1055.4
165°	1154.0	1175.1	1154.0	1124.7	1102.7	1088.6
167.5°	1146.6	1159.3	1146.6	1131.9	1120.0	1107.4
170°	1146.4	1153.5	1146.4	1131.9	1131.7	1124.7
172.5°	1140.7	1147.7	1140.7	1137.6	1143.1	1130.4
175°	1138.9	1131.9	1138.9	1146.3	1153.3	1146.3
177.5°	1146.2	1140.5	1146.2	1146.3	1151.9	1146.3
180°	1146.3	1146.3	1146.3	1146.3	1146.3	1146.3

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