

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: P621624

Luminaire Tested: VLT-FA-050U-125D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621624
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-050U-125D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

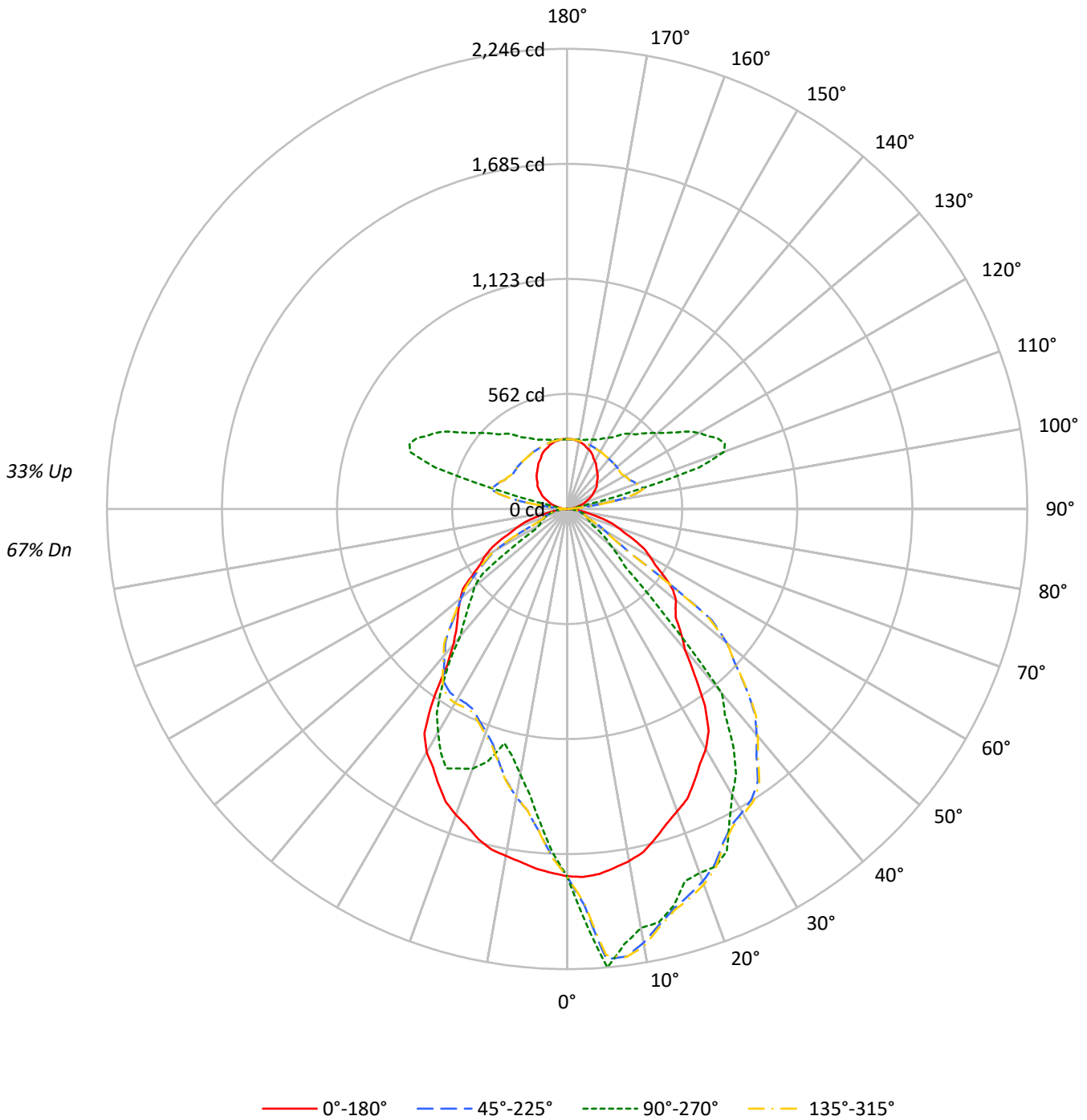
Lumens per Lamp: N/A
Luminaire Lumens: 5528.8 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 53.3
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



TEST NUMBER: P621624
CATALOG NUMBER: VLT-FA-050U-125D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621624

CATALOG NUMBER: VLT-FA-050U-125D-940-UNV-STD-W-4

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	103	99	95	92	97	93	90	87	83	81	79	74	72	70	65	64	63	59
2	94	88	82	77	89	83	78	74	74	70	67	66	63	61	59	56	55	51
3	87	78	71	65	82	74	68	63	66	62	58	59	56	53	53	50	48	44
4	80	70	62	56	75	66	60	54	60	54	50	54	49	46	48	45	42	39
5	74	63	55	49	70	60	53	47	54	48	44	49	44	41	44	40	37	34
6	68	57	49	43	65	54	47	42	49	43	39	44	40	36	40	36	33	31
7	64	52	44	38	60	49	42	37	45	39	35	41	36	32	37	33	30	28
8	59	47	40	34	56	45	38	33	41	35	31	37	33	29	34	30	27	25
9	55	43	36	31	52	41	35	30	38	32	28	35	30	26	31	28	25	23
10	52	40	33	28	49	38	32	27	35	30	26	32	27	24	29	25	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12859	12859	12859	12859
5°	12882	16178	12685	11030
10°	12712	15130	12526	9578
15°	12365	14898	12406	8789
20°	11986	14437	12125	10302
25°	11619	14593	11749	11056
30°	11209	13353	11359	10438
35°	10269	12376	10013	9359
40°	8368	11014	8078	7617
45°	7604	4089	7677	6937
50°	7733	3114	7591	6594
55°	7299	2417	7047	3946
60°	6724	1857	6672	2197
65°	6191	1919	6067	2321
70°	5508	2027	5354	2409
75°	4700	2124	4497	2476
80°	3542	2186	3314	2562
85°	2404	1951	2100	2404

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 14080 cd/sqm



TEST NUMBER: P621624

CATALOG NUMBER: VLT-FA-050U-125D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.9	3.1
10°-20°	473.5	8.6
20°-30°	708.6	12.8
30°-40°	805.8	14.6
40°-50°	689.2	12.5
50°-60°	464.8	8.4
60°-70°	239.9	4.3
70°-80°	108.3	2.0
80°-90°	33.0	0.6
90°-100°	41.9	0.8
100°-110°	298.9	5.4
110°-120°	405.8	7.3
120°-130°	330.3	6.0
130°-140°	265.7	4.8
140°-150°	209.4	3.8
150°-160°	153.1	2.8
160°-170°	95.1	1.7
170°-180°	32.4	0.6
0°-30°	1355.0	24.5
0°-40°	2160.8	39.1
0°-60°	3314.8	60.0
0°-90°	3696.0	66.8
90°-120°	746.7	13.5
90°-150°	1552.1	28.1
90°-180°	1833.0	33.2
0°-180°	5528.8	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1792	1792	1792	1792	1792	
5°	1788	2246	1761	1531	1788	169
15°	1664	2005	1670	1183	1664	468
25°	1468	1843	1484	1396	1468	675
35°	1172	1413	1143	1068	1172	717
45°	749	403	756	684	749	594
55°	583	193	563	315	583	520
65°	365	113	357	137	365	360
75°	170	77	162	89	170	181
85°	29	24	26	29	29	37
90°	0	6	0	6	0	2
95°	17	24	17	24	17	19
105°	66	328	66	328	66	70
115°	118	813	118	813	118	117
125°	170	652	170	652	170	151
135°	210	522	210	522	210	162
145°	249	438	249	438	249	156
155°	292	376	292	376	292	134
165°	324	350	324	350	324	91
175°	341	337	341	337	341	32
180°	341	341	341	341	341	



TEST NUMBER: P621624

CATALOG NUMBER: VLT-FA-050U-125D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0
2.5°	1797.8	1859.2	1936.4	1989.4	2012.2	1989.4	1923.3	1858.7	1777.4	1753.2	1695.8
5°	1788.4	1977.3	2205.8	2233.5	2245.9	2233.5	2185.8	1966.0	1761.0	1673.7	1578.7
7.5°	1766.5	2097.0	2203.3	2141.7	2142.0	2153.4	2206.6	2086.7	1738.1	1600.8	1484.3
10°	1744.6	2163.5	2149.3	2060.4	2076.4	2069.3	2165.7	2150.5	1719.1	1560.4	1427.4
12.5°	1715.4	2184.2	2077.9	2048.7	2066.2	2056.2	2088.4	2172.9	1703.0	1531.6	1361.8
15°	1664.4	2154.6	2018.1	2005.3	2005.3	2014.2	2027.2	2163.6	1669.9	1479.1	1281.6
17.5°	1611.9	2095.3	1976.5	1913.3	1906.5	1918.3	1991.4	2110.5	1622.8	1421.1	1203.9
20°	1569.6	2054.4	1934.2	1860.2	1890.5	1863.7	1950.6	2065.5	1587.8	1384.6	1155.8
22.5°	1531.7	2003.7	1880.2	1848.7	1889.0	1849.4	1895.2	2014.7	1547.0	1343.8	1119.3
25°	1467.5	1918.5	1799.3	1828.8	1843.1	1828.8	1806.6	1926.0	1483.9	1291.4	1081.0
27.5°	1403.7	1828.7	1738.8	1758.6	1715.1	1748.6	1748.6	1829.0	1419.0	1230.4	1069.4
30°	1352.7	1766.2	1708.2	1679.3	1611.5	1665.0	1720.9	1766.6	1370.9	1190.9	1066.5
32.5°	1285.6	1709.1	1677.5	1577.7	1534.2	1570.6	1691.7	1707.9	1296.5	1155.0	1063.5
35°	1172.2	1628.5	1622.5	1457.4	1412.8	1446.7	1635.2	1624.3	1143.0	1098.5	1040.9
37.5°	1020.2	1556.7	1517.1	1335.7	1264.8	1326.8	1529.1	1549.0	961.5	1046.7	988.1
40°	893.3	1508.2	1438.3	1245.4	1175.8	1236.4	1447.5	1504.0	862.3	1010.2	929.7
42.5°	821.8	1465.3	1355.2	1149.7	719.4	1135.0	1364.3	1459.8	801.0	963.2	878.7
45°	749.3	1387.4	1234.2	636.4	402.9	606.1	1236.0	1367.9	756.5	892.0	800.3
47.5°	717.5	1291.5	1107.7	383.3	340.2	372.3	1106.6	1270.5	717.9	820.6	725.6
50°	692.7	1231.1	1017.2	337.7	278.9	325.3	1019.1	1211.2	680.0	772.7	674.5
52.5°	651.9	1158.8	887.4	279.9	241.0	273.1	865.9	1136.1	640.6	720.5	610.3
55°	583.4	1020.1	370.1	220.0	193.2	211.1	351.8	985.8	563.3	638.2	536.0
57.5°	510.8	868.4	259.6	171.2	149.9	169.5	257.8	833.6	501.3	540.5	467.4
60°	468.5	766.2	211.5	143.7	129.4	141.9	209.6	735.8	464.9	475.6	404.7
62.5°	426.2	662.6	175.0	126.4	122.1	124.6	174.6	629.3	419.7	420.4	285.1
65°	364.6	501.9	129.4	114.8	113.0	113.0	125.8	483.9	357.3	346.6	164.1
67.5°	301.9	360.4	103.9	105.7	103.9	103.9	102.1	350.2	294.6	276.4	124.0
70°	262.5	276.8	96.6	98.4	96.6	96.6	94.8	269.5	255.2	214.2	116.7
72.5°	224.6	188.9	89.3	89.7	89.3	89.3	87.5	177.4	217.3	150.6	106.5
75°	169.5	94.7	76.6	76.6	76.6	76.6	74.7	90.9	162.2	98.1	91.2
77.5°	117.8	62.5	63.4	63.1	63.1	61.6	61.6	62.0	110.8	67.7	73.6
80°	85.7	51.8	54.7	52.9	52.9	52.9	52.9	49.9	80.2	57.0	62.0
82.5°	60.9	41.3	44.5	42.7	42.7	42.7	42.7	40.8	55.4	46.5	50.3
85°	29.2	27.4	29.2	25.5	23.7	25.5	27.3	27.3	25.5	30.9	32.8
87.5°	8.8	13.4	12.5	10.0	10.0	10.0	11.1	12.0	7.3	14.8	14.0
90°	0.0	2.1	4.3	6.4	6.4	6.4	4.3	2.1	0.0	2.1	4.3
92.5°	5.2	7.2	9.4	13.3	15.0	13.3	9.4	7.2	5.2	7.2	9.4
95°	17.2	31.9	17.2	19.4	23.6	19.4	17.2	31.9	17.2	31.9	17.2
97.5°	30.5	61.1	126.2	37.2	32.2	37.2	126.2	61.1	30.5	61.1	126.2
100°	40.8	76.4	253.2	74.5	49.4	74.5	253.2	76.4	40.8	76.4	253.2
102.5°	51.1	88.4	342.5	196.7	107.7	196.7	342.5	88.4	51.1	88.4	342.5
105°	66.5	102.2	388.4	496.2	328.3	496.2	388.4	102.2	66.5	102.2	388.4
107.5°	82.0	108.8	370.8	722.1	676.4	722.1	370.8	108.8	82.0	108.8	370.8
110°	92.3	117.5	360.5	758.8	815.4	758.8	360.5	117.5	92.3	117.5	360.5



TEST NUMBER: P621624

CATALOG NUMBER: VLT-FA-050U-125D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
112.5°	102.6	127.8	350.2	737.4	832.6	737.4	350.2	127.8	102.6	127.8	350.2
115°	118.0	143.2	334.8	695.8	813.3	695.8	334.8	143.2	118.0	143.2	334.8
117.5°	133.9	158.7	330.9	650.8	771.7	650.8	330.9	158.7	133.9	158.7	330.9
120°	145.9	169.0	324.0	616.6	742.5	616.6	324.0	169.0	145.9	169.0	324.0
122.5°	154.5	179.3	315.4	587.2	703.0	587.2	315.4	179.3	154.5	179.3	315.4
125°	169.5	192.6	315.4	551.6	652.4	551.6	315.4	192.6	169.5	192.6	315.4
127.5°	182.0	205.5	315.9	510.4	609.9	510.4	315.9	205.5	182.0	205.5	315.9
130°	188.8	214.0	317.6	482.8	577.2	482.8	317.6	214.0	188.8	214.0	317.6
132.5°	197.4	222.6	317.6	470.4	548.1	470.4	317.6	222.6	197.4	222.6	317.6
135°	210.3	233.4	317.6	454.3	521.5	454.3	317.6	233.4	210.3	233.4	317.6
137.5°	221.0	245.8	317.6	436.5	494.0	436.5	317.6	245.8	221.0	245.8	317.6
140°	229.6	252.7	317.6	426.1	478.5	426.1	317.6	252.7	229.6	252.7	317.6
142.5°	238.2	259.6	319.3	414.0	463.1	414.0	319.3	259.6	238.2	259.6	319.3
145°	248.9	269.9	319.7	395.8	437.8	395.8	319.7	269.9	248.9	269.9	319.7
147.5°	261.8	280.3	322.3	382.7	415.0	382.7	322.3	280.3	261.8	280.3	322.3
150°	270.4	287.2	324.0	374.0	401.3	374.0	324.0	287.2	270.4	287.2	324.0
152.5°	279.0	294.1	324.0	367.0	389.3	367.0	324.0	294.1	279.0	294.1	324.0
155°	291.8	302.3	326.2	358.7	375.5	358.7	326.2	302.3	291.8	302.3	326.2
157.5°	302.1	312.2	328.8	353.5	365.7	353.5	328.8	312.2	302.1	312.2	328.8
160°	309.0	317.4	330.5	350.0	360.5	350.0	330.5	317.4	309.0	317.4	330.5
162.5°	314.2	322.6	332.2	348.2	355.4	348.2	332.2	322.6	314.2	322.6	332.2
165°	324.0	328.2	334.8	343.5	349.8	343.5	334.8	328.2	324.0	328.2	334.8
167.5°	329.6	333.4	336.9	341.3	345.1	341.3	336.9	333.4	329.6	333.4	336.9
170°	334.8	336.9	336.9	341.2	343.3	341.2	336.9	336.9	334.8	336.9	336.9
172.5°	336.5	340.3	338.6	339.5	341.6	339.5	338.6	340.3	336.5	340.3	338.6
175°	341.2	343.3	341.2	339.0	336.9	339.0	341.2	343.3	341.2	343.3	341.2
177.5°	341.2	342.9	341.2	341.2	339.5	341.2	341.2	342.9	341.2	342.9	341.2
180°	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2	341.2



TEST NUMBER: P621624

CATALOG NUMBER: VLT-FA-050U-125D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0
2.5°	1675.3	1673.9	1676.7	1701.6	1752.2	1797.8
5°	1526.0	1531.3	1536.7	1578.7	1667.2	1788.4
7.5°	1411.2	1403.3	1415.5	1483.9	1592.5	1766.5
10°	1332.2	1314.4	1332.2	1425.6	1552.1	1744.6
12.5°	1257.7	1235.6	1263.4	1365.8	1518.7	1715.4
15°	1161.7	1183.1	1170.7	1285.2	1468.3	1664.4
17.5°	1184.5	1292.1	1207.3	1215.2	1418.3	1611.9
20°	1238.5	1349.0	1274.2	1168.5	1386.0	1569.6
22.5°	1287.5	1370.9	1303.2	1129.2	1353.8	1531.7
25°	1325.1	1396.4	1321.6	1093.8	1307.1	1467.5
27.5°	1327.0	1337.0	1327.7	1090.9	1249.3	1403.7
30°	1302.5	1259.7	1298.9	1093.8	1208.3	1352.7
32.5°	1232.3	1183.9	1217.4	1088.0	1166.9	1285.6
35°	1132.4	1068.3	1114.6	1057.3	1102.7	1172.2
37.5°	1027.1	945.8	1009.9	996.8	1048.0	1020.2
40°	955.7	813.1	941.4	937.0	1018.0	893.3
42.5°	864.3	743.1	851.4	888.9	985.1	821.8
45°	697.9	683.6	690.8	807.6	915.0	749.3
47.5°	638.2	628.6	634.6	733.6	835.9	717.5
50°	603.1	590.7	599.6	685.4	785.4	692.7
52.5°	554.5	520.6	551.0	619.8	733.2	651.9
55°	417.0	315.4	415.2	545.1	654.7	583.4
57.5°	244.7	182.3	239.3	474.3	554.7	510.8
60°	165.6	153.1	167.4	417.5	488.1	468.5
62.5°	151.2	147.3	151.6	290.6	428.7	426.2
65°	138.5	136.7	138.5	167.7	353.9	364.6
67.5°	125.4	123.6	126.8	128.7	279.4	301.9
70°	116.6	114.8	116.6	118.5	214.4	262.5
72.5°	106.4	104.6	106.4	108.3	150.8	224.6
75°	91.1	89.3	91.1	93.0	100.0	169.5
77.5°	73.6	73.6	75.4	75.5	70.0	117.8
80°	62.0	62.0	63.8	63.8	60.7	85.7
82.5°	50.3	48.9	52.1	53.6	50.2	60.9
85°	31.0	29.2	32.7	34.6	32.7	29.2
87.5°	12.9	11.5	14.3	16.9	16.3	8.8
90°	6.4	6.4	6.4	4.3	2.1	0.0
92.5°	13.3	15.0	13.3	9.4	7.2	5.2
95°	19.4	23.6	19.4	17.2	31.9	17.2
97.5°	37.2	32.2	37.2	126.2	61.1	30.5
100°	74.5	49.4	74.5	253.2	76.4	40.8
102.5°	196.7	107.7	196.7	342.5	88.4	51.1
105°	496.2	328.3	496.2	388.4	102.2	66.5
107.5°	722.1	676.4	722.1	370.8	108.8	82.0
110°	758.8	815.4	758.8	360.5	117.5	92.3



TEST NUMBER: P621624

CATALOG NUMBER: VLT-FA-050U-125D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	737.4	832.6	737.4	350.2	127.8	102.6
115°	695.8	813.3	695.8	334.8	143.2	118.0
117.5°	650.8	771.7	650.8	330.9	158.7	133.9
120°	616.6	742.5	616.6	324.0	169.0	145.9
122.5°	587.2	703.0	587.2	315.4	179.3	154.5
125°	551.6	652.4	551.6	315.4	192.6	169.5
127.5°	510.4	609.9	510.4	315.9	205.5	182.0
130°	482.8	577.2	482.8	317.6	214.0	188.8
132.5°	470.4	548.1	470.4	317.6	222.6	197.4
135°	454.3	521.5	454.3	317.6	233.4	210.3
137.5°	436.5	494.0	436.5	317.6	245.8	221.0
140°	426.1	478.5	426.1	317.6	252.7	229.6
142.5°	414.0	463.1	414.0	319.3	259.6	238.2
145°	395.8	437.8	395.8	319.7	269.9	248.9
147.5°	382.7	415.0	382.7	322.3	280.3	261.8
150°	374.0	401.3	374.0	324.0	287.2	270.4
152.5°	367.0	389.3	367.0	324.0	294.1	279.0
155°	358.7	375.5	358.7	326.2	302.3	291.8
157.5°	353.5	365.7	353.5	328.8	312.2	302.1
160°	350.0	360.5	350.0	330.5	317.4	309.0
162.5°	348.2	355.4	348.2	332.2	322.6	314.2
165°	343.5	349.8	343.5	334.8	328.2	324.0
167.5°	341.3	345.1	341.3	336.9	333.4	329.6
170°	341.2	343.3	341.2	336.9	336.9	334.8
172.5°	339.5	341.6	339.5	338.6	340.3	336.5
175°	339.0	336.9	339.0	341.2	343.3	341.2
177.5°	341.2	339.5	341.2	341.2	342.9	341.2
180°	341.2	341.2	341.2	341.2	341.2	341.2

(END OF REPORT)