

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: P621597

Luminaire Tested: VLT-FA-025U-125D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621597
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-025U-125D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

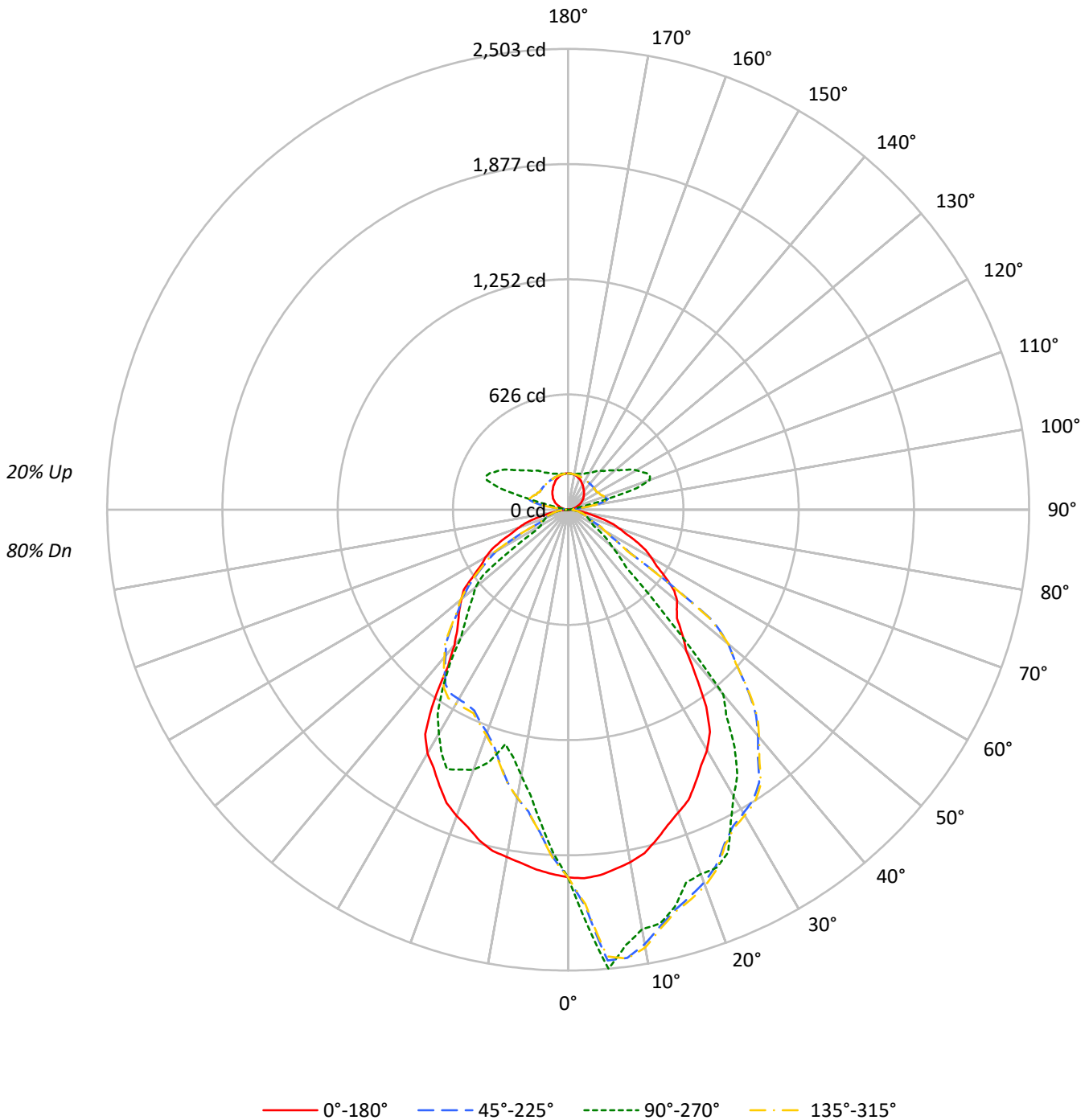
Lumens per Lamp: N/A
Luminaire Lumens: 5176.3 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47
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: P621597
CATALOG NUMBER: VLT-FA-025U-125D-840-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621597

CATALOG NUMBER: VLT-FA-025U-125D-840-UNV-STD-W-4

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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	80
1	106	102	98	95	101	98	94	92	90	87	85	82	81	79	76	74	73	70
2	97	90	85	80	93	87	82	77	80	76	73	74	71	68	68	66	64	61
3	90	81	74	68	86	78	71	66	72	67	63	67	63	59	62	58	56	53
4	83	72	65	59	79	70	63	57	65	59	55	60	56	52	56	52	49	46
5	77	65	57	52	73	63	56	50	59	53	48	55	50	46	51	47	43	41
6	71	59	51	46	68	57	50	45	53	47	43	50	45	41	47	42	39	37
7	66	54	46	41	63	52	45	40	49	43	38	46	41	37	43	38	35	33
8	62	49	42	36	59	48	41	36	45	39	34	42	37	33	40	35	32	30
9	58	45	38	33	55	44	37	32	42	35	31	39	34	30	37	32	29	27
10	54	42	35	30	52	41	34	29	38	33	28	36	31	27	34	30	26	25

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



TEST NUMBER: P621597

CATALOG NUMBER: VLT-FA-025U-125D-840-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.6	3.7
10°-20°	527.7	10.2
20°-30°	789.6	15.3
30°-40°	898.0	17.3
40°-50°	768.0	14.8
50°-60°	517.9	10.0
60°-70°	267.3	5.2
70°-80°	120.7	2.3
80°-90°	36.4	0.7
90°-100°	24.2	0.5
100°-110°	172.6	3.3
110°-120°	234.3	4.5
120°-130°	190.7	3.7
130°-140°	153.4	3.0
140°-150°	120.9	2.3
150°-160°	88.4	1.7
160°-170°	54.9	1.1
170°-180°	18.7	0.4
0°-30°	1509.9	29.2
0°-40°	2407.9	46.5
0°-60°	3693.7	71.4
0°-90°	4118.0	79.6
90°-120°	431.2	8.3
90°-150°	896.2	17.3
90°-180°	1058.0	20.4
0°-180°	5176.3	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	4	0	4	0	2
95°	10	14	10	14	10	11
105°	38	190	38	190	38	40
115°	68	470	68	470	68	68
125°	98	377	98	377	98	87
135°	121	301	121	301	121	93
145°	144	253	144	253	144	90
155°	168	217	168	217	168	77
165°	187	202	187	202	187	53
175°	197	194	197	194	197	19
180°	197	197	197	197	197	



TEST NUMBER: P621597

CATALOG NUMBER: VLT-FA-025U-125D-840-UNV-STD-W-4

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	14.8	13.5	10.5	10.5	10.5	11.9	13.1	8.1	16.3	15.1
90°	0.0	1.2	2.5	3.7	3.7	3.7	2.5	1.2	0.0	1.2	2.5
92.5°	3.0	4.2	5.5	7.7	8.7	7.7	5.5	4.2	3.0	4.2	5.5
95°	9.9	18.4	9.9	11.2	13.6	11.2	9.9	18.4	9.9	18.4	9.9
97.5°	17.6	35.3	72.9	21.5	18.6	21.5	72.9	35.3	17.6	35.3	72.9
100°	23.5	44.1	146.2	43.0	28.5	43.0	146.2	44.1	23.5	44.1	146.2
102.5°	29.5	51.1	197.8	113.6	62.2	113.6	197.8	51.1	29.5	51.1	197.8
105°	38.4	59.0	224.3	286.5	189.6	286.5	224.3	59.0	38.4	59.0	224.3
107.5°	47.3	62.8	214.1	417.0	390.5	417.0	214.1	62.8	47.3	62.8	214.1
110°	53.3	67.8	208.2	438.1	470.8	438.1	208.2	67.8	53.3	67.8	208.2



TEST NUMBER: P621597

CATALOG NUMBER: VLT-FA-025U-125D-840-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°	59.2	73.8	202.2	425.7	480.7	425.7	202.2	73.8	59.2	73.8	202.2
115°	68.1	82.7	193.3	401.8	469.6	401.8	193.3	82.7	68.1	82.7	193.3
117.5°	77.3	91.6	191.1	375.8	445.6	375.8	191.1	91.6	77.3	91.6	191.1
120°	84.3	97.6	187.1	356.0	428.7	356.0	187.1	97.6	84.3	97.6	187.1
122.5°	89.2	103.5	182.1	339.0	405.9	339.0	182.1	103.5	89.2	103.5	182.1
125°	97.9	111.2	182.1	318.5	376.7	318.5	182.1	111.2	97.9	111.2	182.1
127.5°	105.1	118.6	182.4	294.7	352.1	294.7	182.4	118.6	105.1	118.6	182.4
130°	109.0	123.6	183.4	278.8	333.3	278.8	183.4	123.6	109.0	123.6	183.4
132.5°	114.0	128.5	183.4	271.6	316.4	271.6	183.4	128.5	114.0	128.5	183.4
135°	121.4	134.8	183.4	262.3	301.1	262.3	183.4	134.8	121.4	134.8	183.4
137.5°	127.6	141.9	183.4	252.0	285.2	252.0	183.4	141.9	127.6	141.9	183.4
140°	132.6	145.9	183.4	246.0	276.3	246.0	183.4	145.9	132.6	145.9	183.4
142.5°	137.5	149.9	184.4	239.0	267.4	239.0	184.4	149.9	137.5	149.9	184.4
145°	143.7	155.8	184.6	228.5	252.8	228.5	184.6	155.8	143.7	155.8	184.6
147.5°	151.2	161.8	186.1	221.0	239.6	221.0	186.1	161.8	151.2	161.8	186.1
150°	156.1	165.8	187.1	216.0	231.7	216.0	187.1	165.8	156.1	165.8	187.1
152.5°	161.1	169.8	187.1	211.9	224.8	211.9	187.1	169.8	161.1	169.8	187.1
155°	168.5	174.6	188.3	207.1	216.8	207.1	188.3	174.6	168.5	174.6	188.3
157.5°	174.5	180.3	189.8	204.1	211.1	204.1	189.8	180.3	174.5	180.3	189.8
160°	178.4	183.3	190.8	202.1	208.2	202.1	190.8	183.3	178.4	183.3	190.8
162.5°	181.4	186.2	191.8	201.1	205.2	201.1	191.8	186.2	181.4	186.2	191.8
165°	187.1	189.5	193.3	198.3	202.0	198.3	193.3	189.5	187.1	189.5	193.3
167.5°	190.3	192.5	194.5	197.1	199.2	197.1	194.5	192.5	190.3	192.5	194.5
170°	193.3	194.5	194.5	197.0	198.2	197.0	194.5	194.5	193.3	194.5	194.5
172.5°	194.3	196.5	195.5	196.0	197.3	196.0	195.5	196.5	194.3	196.5	195.5
175°	197.0	198.2	197.0	195.7	194.5	195.7	197.0	198.2	197.0	198.2	197.0
177.5°	197.0	198.0	197.0	197.0	196.0	197.0	197.0	198.0	197.0	198.0	197.0
180°	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0



TEST NUMBER: P621597

CATALOG NUMBER: VLT-FA-025U-125D-840-UNV-STD-W-4

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°	13.7	12.1	15.3	18.4	17.9	9.8
90°	3.7	3.7	3.7	2.5	1.2	0.0
92.5°	7.7	8.7	7.7	5.5	4.2	3.0
95°	11.2	13.6	11.2	9.9	18.4	9.9
97.5°	21.5	18.6	21.5	72.9	35.3	17.6
100°	43.0	28.5	43.0	146.2	44.1	23.5
102.5°	113.6	62.2	113.6	197.8	51.1	29.5
105°	286.5	189.6	286.5	224.3	59.0	38.4
107.5°	417.0	390.5	417.0	214.1	62.8	47.3
110°	438.1	470.8	438.1	208.2	67.8	53.3



TEST NUMBER: P621597

CATALOG NUMBER: VLT-FA-025U-125D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	425.7	480.7	425.7	202.2	73.8	59.2
115°	401.8	469.6	401.8	193.3	82.7	68.1
117.5°	375.8	445.6	375.8	191.1	91.6	77.3
120°	356.0	428.7	356.0	187.1	97.6	84.3
122.5°	339.0	405.9	339.0	182.1	103.5	89.2
125°	318.5	376.7	318.5	182.1	111.2	97.9
127.5°	294.7	352.1	294.7	182.4	118.6	105.1
130°	278.8	333.3	278.8	183.4	123.6	109.0
132.5°	271.6	316.4	271.6	183.4	128.5	114.0
135°	262.3	301.1	262.3	183.4	134.8	121.4
137.5°	252.0	285.2	252.0	183.4	141.9	127.6
140°	246.0	276.3	246.0	183.4	145.9	132.6
142.5°	239.0	267.4	239.0	184.4	149.9	137.5
145°	228.5	252.8	228.5	184.6	155.8	143.7
147.5°	221.0	239.6	221.0	186.1	161.8	151.2
150°	216.0	231.7	216.0	187.1	165.8	156.1
152.5°	211.9	224.8	211.9	187.1	169.8	161.1
155°	207.1	216.8	207.1	188.3	174.6	168.5
157.5°	204.1	211.1	204.1	189.8	180.3	174.5
160°	202.1	208.2	202.1	190.8	183.3	178.4
162.5°	201.1	205.2	201.1	191.8	186.2	181.4
165°	198.3	202.0	198.3	193.3	189.5	187.1
167.5°	197.1	199.2	197.1	194.5	192.5	190.3
170°	197.0	198.2	197.0	194.5	194.5	193.3
172.5°	196.0	197.3	196.0	195.5	196.5	194.3
175°	195.7	194.5	195.7	197.0	198.2	197.0
177.5°	197.0	196.0	197.0	197.0	198.0	197.0
180°	197.0	197.0	197.0	197.0	197.0	197.0

(END OF REPORT)