

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: P621643

Luminaire Tested: VLT-FA-075U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621643
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-075U-125D-830-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

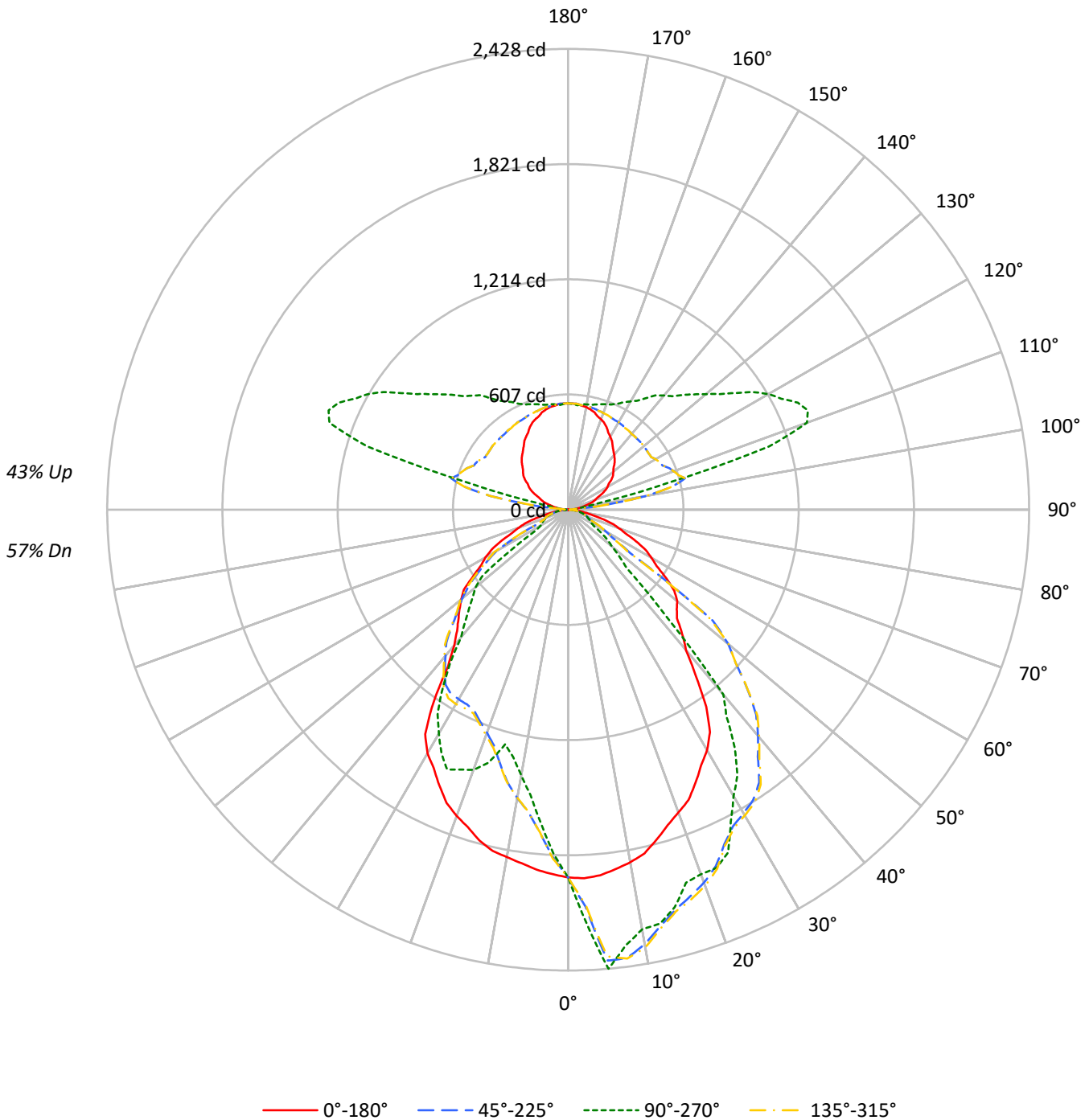
Lumens per Lamp: N/A
Luminaire Lumens: 7003.0 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 59.5
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: P621643
CATALOG NUMBER: VLT-FA-075U-125D-830-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621643

CATALOG NUMBER: VLT-FA-075U-125D-830-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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63	57
1	100	96	93	90	93	90	87	84	78	76	74	67	65	64	57	56	55	50
2	92	85	80	75	86	80	75	71	69	66	63	60	57	55	51	49	48	43
3	85	76	69	63	79	71	65	60	62	58	54	54	50	48	46	44	42	38
4	78	68	60	54	72	64	57	52	56	51	47	49	45	42	42	39	37	33
5	72	61	53	47	67	57	50	45	50	45	41	44	40	37	38	35	32	29
6	66	55	47	41	62	52	45	40	46	40	36	40	36	32	35	32	29	26
7	62	50	42	37	57	47	40	35	42	36	32	37	32	29	32	29	26	24
8	57	45	38	33	54	43	36	31	38	33	29	34	29	26	30	26	24	21
9	54	42	34	29	50	39	33	28	35	30	26	31	27	24	27	24	21	19
10	50	38	31	27	47	36	30	26	33	27	24	29	25	22	25	22	20	18

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	13902	13902	13902	13902
5°	13927	17490	13714	11925
10°	13743	16356	13542	10354
15°	13367	16106	13412	9503
20°	12958	15607	13109	11137
25°	12562	15776	12702	11953
30°	12117	14436	12280	11284
35°	11101	13380	10825	10117
40°	9046	11908	8732	8234
45°	8220	4420	8300	7501
50°	8361	3366	8206	7128
55°	7891	2614	7619	4265
60°	7269	2008	7213	2375
65°	6693	2075	6559	2510
70°	5954	2193	5789	2606
75°	5082	2296	4863	2678
80°	3827	2364	3583	2769
85°	2594	2108	2272	2594

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15221 cd/sqm



TEST NUMBER: P621643

CATALOG NUMBER: VLT-FA-075U-125D-830-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.9	2.7
10°-20°	511.9	7.3
20°-30°	766.0	10.9
30°-40°	871.2	12.4
40°-50°	745.1	10.6
50°-60°	502.4	7.2
60°-70°	259.3	3.7
70°-80°	117.1	1.7
80°-90°	36.1	0.5
90°-100°	68.8	1.0
100°-110°	490.4	7.0
110°-120°	665.8	9.5
120°-130°	541.9	7.7
130°-140°	435.8	6.2
140°-150°	343.6	4.9
150°-160°	251.2	3.6
160°-170°	156.1	2.2
170°-180°	53.2	0.8
0°-30°	1464.9	20.9
0°-40°	2336.0	33.4
0°-60°	3583.5	51.2
0°-90°	3996.1	57.1
90°-120°	1225.1	17.5
90°-150°	2546.4	36.4
90°-180°	3007.0	42.9
0°-180°	7003.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1937	1937	1937	1937	1937	
5°	1933	2428	1904	1656	1933	183
15°	1799	2168	1805	1279	1799	506
25°	1586	1992	1604	1510	1586	730
35°	1267	1527	1236	1155	1267	775
45°	810	436	818	739	810	643
55°	631	209	609	341	631	562
65°	394	122	386	148	394	390
75°	183	83	175	97	183	195
85°	32	26	28	32	32	40
90°	0	11	0	11	0	2
95°	28	39	28	39	28	31
105°	109	539	109	539	109	115
115°	194	1334	194	1334	194	192
125°	278	1070	278	1070	278	247
135°	345	856	345	856	345	265
145°	408	718	408	718	408	257
155°	479	616	479	616	479	220
165°	532	574	532	574	532	149
175°	560	553	560	553	560	53
180°	560	560	560	560	560	



TEST NUMBER: P621643

CATALOG NUMBER: VLT-FA-075U-125D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1943.6	2009.9	2093.4	2150.7	2175.4	2150.7	2079.2	2009.4	1921.5	1895.3	1833.2
5°	1933.4	2137.6	2384.7	2414.5	2428.0	2414.5	2363.0	2125.4	1903.8	1809.4	1706.7
7.5°	1909.7	2267.0	2381.9	2315.3	2315.7	2328.0	2385.5	2255.9	1879.0	1730.6	1604.6
10°	1886.1	2338.9	2323.6	2227.4	2244.7	2237.0	2341.3	2324.8	1858.5	1687.0	1543.1
12.5°	1854.5	2361.3	2246.3	2214.8	2233.7	2222.9	2257.8	2349.1	1841.1	1655.7	1472.2
15°	1799.3	2329.3	2181.7	2167.9	2167.9	2177.5	2191.5	2339.0	1805.3	1599.1	1385.5
17.5°	1742.6	2265.2	2136.7	2068.4	2061.1	2073.8	2152.9	2281.6	1754.4	1536.3	1301.5
20°	1696.9	2221.0	2091.0	2011.0	2043.7	2014.8	2108.8	2233.0	1716.6	1496.9	1249.5
22.5°	1655.9	2166.1	2032.7	1998.6	2042.1	1999.4	2048.8	2178.1	1672.4	1452.7	1210.1
25°	1586.5	2074.0	1945.2	1977.1	1992.5	1977.1	1953.1	2082.1	1604.2	1396.1	1168.7
27.5°	1517.5	1976.9	1879.8	1901.2	1854.1	1890.4	1890.4	1977.3	1534.1	1330.2	1156.1
30°	1462.3	1909.4	1846.6	1815.4	1742.2	1800.0	1860.4	1909.8	1482.0	1287.4	1152.9
32.5°	1389.8	1847.7	1813.5	1705.6	1658.6	1697.9	1828.9	1846.4	1401.6	1248.6	1149.8
35°	1267.2	1760.5	1754.0	1575.5	1527.4	1564.0	1767.8	1756.0	1235.7	1187.5	1125.3
37.5°	1102.9	1682.9	1640.1	1444.0	1367.3	1434.4	1653.1	1674.5	1039.4	1131.5	1068.2
40°	965.7	1630.5	1555.0	1346.3	1271.2	1336.7	1564.8	1625.9	932.2	1092.1	1005.1
42.5°	888.4	1584.1	1465.1	1242.9	777.7	1227.1	1475.0	1578.2	866.0	1041.3	949.9
45°	810.0	1499.9	1334.2	688.0	435.5	655.2	1336.2	1478.8	817.9	964.3	865.2
47.5°	775.7	1396.2	1197.5	414.4	367.8	402.4	1196.3	1373.5	776.1	887.1	784.4
50°	748.9	1330.9	1099.7	365.1	301.5	351.6	1101.7	1309.4	735.1	835.3	729.2
52.5°	704.8	1252.8	959.4	302.5	260.5	295.2	936.1	1228.2	692.5	778.9	659.8
55°	630.7	1102.8	400.1	237.8	208.9	228.2	380.4	1065.7	609.0	689.9	579.4
57.5°	552.2	938.8	280.6	185.1	162.0	183.2	278.7	901.2	542.0	584.4	505.3
60°	506.5	828.3	228.6	155.3	139.9	153.4	226.6	795.5	502.6	514.1	437.5
62.5°	460.8	716.3	189.2	136.7	132.0	134.7	188.8	680.3	453.7	454.5	308.2
65°	394.2	542.5	139.9	124.1	122.2	122.2	136.0	523.1	386.3	374.7	177.4
67.5°	326.4	389.6	112.3	114.3	112.3	112.3	110.4	378.6	318.5	298.8	134.0
70°	283.8	299.2	104.5	106.4	104.5	104.5	102.5	291.3	275.9	231.6	126.1
72.5°	242.8	204.3	96.6	97.0	96.6	96.6	94.6	191.8	234.9	162.8	115.1
75°	183.3	102.4	82.8	82.8	82.8	82.8	80.8	98.3	175.4	106.0	98.5
77.5°	127.3	67.6	68.6	68.2	68.2	66.6	66.6	67.0	119.8	73.2	79.6
80°	92.6	56.0	59.1	57.2	57.2	57.2	57.2	54.0	86.7	61.7	67.0
82.5°	65.8	44.6	48.1	46.1	46.1	46.1	46.1	44.1	59.9	50.3	54.4
85°	31.5	29.6	31.5	27.5	25.6	27.5	29.6	29.5	27.6	33.4	35.5
87.5°	9.5	14.8	14.0	11.6	11.6	11.6	12.4	13.2	7.9	16.3	15.6
90°	0.0	3.4	7.0	10.6	10.6	10.6	7.0	3.4	0.0	3.4	7.0
92.5°	8.4	11.9	15.5	21.9	24.6	21.9	15.5	11.9	8.4	11.9	15.5
95°	28.2	52.3	28.2	31.8	38.7	31.8	28.2	52.3	28.2	52.3	28.2
97.5°	50.0	100.3	207.0	61.1	52.8	61.1	207.0	100.3	50.0	100.3	207.0
100°	66.9	125.4	415.4	122.3	81.0	122.3	415.4	125.4	66.9	125.4	415.4
102.5°	83.8	145.1	561.9	322.7	176.7	322.7	561.9	145.1	83.8	145.1	561.9
105°	109.1	167.7	637.2	814.0	538.6	814.0	637.2	167.7	109.1	167.7	637.2
107.5°	134.5	178.5	608.4	1184.7	1109.7	1184.7	608.4	178.5	134.5	178.5	608.4
110°	151.4	192.7	591.5	1244.9	1337.8	1244.9	591.5	192.7	151.4	192.7	591.5



TEST NUMBER: P621643

CATALOG NUMBER: VLT-FA-075U-125D-830-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°	168.3	209.6	574.6	1209.7	1366.0	1209.7	574.6	209.6	168.3	209.6	574.6
115°	193.6	234.9	549.2	1141.5	1334.3	1141.5	549.2	234.9	193.6	234.9	549.2
117.5°	219.7	260.3	542.9	1067.7	1266.0	1067.7	542.9	260.3	219.7	260.3	542.9
120°	239.4	277.3	531.6	1011.6	1218.1	1011.6	531.6	277.3	239.4	277.3	531.6
122.5°	253.5	294.1	517.5	963.3	1153.3	963.3	517.5	294.1	253.5	294.1	517.5
125°	278.1	316.0	517.5	905.0	1070.3	905.0	517.5	316.0	278.1	316.0	517.5
127.5°	298.5	337.1	518.2	837.4	1000.5	837.4	518.2	337.1	298.5	337.1	518.2
130°	309.8	351.1	521.0	792.1	947.0	792.1	521.0	351.1	309.8	351.1	521.0
132.5°	323.9	365.2	521.0	771.8	899.2	771.8	521.0	365.2	323.9	365.2	521.0
135°	345.0	382.9	521.0	745.3	855.5	745.3	521.0	382.9	345.0	382.9	521.0
137.5°	362.6	403.2	521.0	716.1	810.4	716.1	521.0	403.2	362.6	403.2	521.0
140°	376.7	414.6	521.0	699.0	785.1	699.0	521.0	414.6	376.7	414.6	521.0
142.5°	390.8	425.9	523.9	679.2	759.7	679.2	523.9	425.9	390.8	425.9	523.9
145°	408.4	442.8	524.6	649.4	718.2	649.4	524.6	442.8	408.4	442.8	524.6
147.5°	429.5	459.8	528.8	627.9	680.9	627.9	528.8	459.8	429.5	459.8	528.8
150°	443.6	471.1	531.6	613.6	658.3	613.6	531.6	471.1	443.6	471.1	531.6
152.5°	457.7	482.5	531.6	602.1	638.6	602.1	531.6	482.5	457.7	482.5	531.6
155°	478.8	496.0	535.1	588.6	616.1	588.6	535.1	496.0	478.8	496.0	535.1
157.5°	495.7	512.2	539.4	579.9	599.9	579.9	539.4	512.2	495.7	512.2	539.4
160°	507.0	520.7	542.2	574.2	591.5	574.2	542.2	520.7	507.0	520.7	542.2
162.5°	515.4	529.2	545.0	571.3	583.0	571.3	545.0	529.2	515.4	529.2	545.0
165°	531.6	538.5	549.2	563.5	573.9	563.5	549.2	538.5	531.6	538.5	549.2
167.5°	540.8	547.0	552.7	559.9	566.1	559.9	552.7	547.0	540.8	547.0	552.7
170°	549.2	552.7	552.7	559.9	563.3	559.9	552.7	552.7	549.2	552.7	552.7
172.5°	552.0	558.2	555.5	557.0	560.5	557.0	555.5	558.2	552.0	558.2	555.5
175°	559.8	563.2	559.8	556.2	552.7	556.2	559.8	563.2	559.8	563.2	559.8
177.5°	559.8	562.5	559.8	559.7	557.0	559.7	559.8	562.5	559.8	562.5	559.8
180°	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8	559.8



TEST NUMBER: P621643

CATALOG NUMBER: VLT-FA-075U-125D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1937.3	1937.3	1937.3	1937.3	1937.3	1937.3
2.5°	1811.1	1809.6	1812.7	1839.5	1894.3	1943.6
5°	1649.7	1655.5	1661.3	1706.7	1802.3	1933.4
7.5°	1525.6	1517.1	1530.2	1604.2	1721.6	1909.7
10°	1440.2	1421.0	1440.2	1541.2	1677.9	1886.1
12.5°	1359.7	1335.8	1365.9	1476.5	1641.8	1854.5
15°	1255.9	1279.1	1265.6	1389.4	1587.4	1799.3
17.5°	1280.5	1396.9	1305.2	1313.7	1533.3	1742.6
20°	1338.9	1458.4	1377.5	1263.3	1498.4	1696.9
22.5°	1391.9	1482.0	1408.8	1220.7	1463.6	1655.9
25°	1432.6	1509.6	1428.7	1182.5	1413.1	1586.5
27.5°	1434.6	1445.4	1435.4	1179.3	1350.6	1517.5
30°	1408.1	1361.8	1404.2	1182.5	1306.2	1462.3
32.5°	1332.3	1279.8	1316.1	1176.2	1261.5	1389.8
35°	1224.3	1154.9	1205.0	1143.1	1192.1	1267.2
37.5°	1110.3	1022.5	1091.8	1077.6	1132.9	1102.9
40°	1033.1	879.0	1017.7	1013.0	1100.6	965.7
42.5°	934.3	803.3	920.5	961.0	1065.0	888.4
45°	754.5	739.1	746.8	873.1	989.2	810.0
47.5°	689.9	679.5	686.1	793.1	903.7	775.7
50°	652.0	638.5	648.2	741.0	849.1	748.9
52.5°	599.5	562.9	595.6	670.1	792.6	704.8
55°	450.8	340.9	448.9	589.3	707.7	630.7
57.5°	264.5	197.1	258.7	512.8	599.6	552.2
60°	179.0	165.5	181.0	451.3	527.7	506.5
62.5°	163.5	159.2	163.9	314.1	463.5	460.8
65°	149.7	147.8	149.7	181.3	382.6	394.2
67.5°	135.5	133.6	137.1	139.1	302.1	326.4
70°	126.1	124.2	126.1	128.1	231.8	283.8
72.5°	115.1	113.1	115.1	117.1	163.0	242.8
75°	98.5	96.6	98.5	100.5	108.1	183.3
77.5°	79.6	79.6	81.5	81.6	75.7	127.3
80°	67.0	67.0	68.9	69.0	65.6	92.6
82.5°	54.4	52.8	56.3	57.9	54.3	65.8
85°	33.5	31.5	35.4	37.4	35.4	31.5
87.5°	14.7	13.1	16.2	18.8	17.9	9.5
90°	10.6	10.6	10.6	7.0	3.4	0.0
92.5°	21.9	24.6	21.9	15.5	11.9	8.4
95°	31.8	38.7	31.8	28.2	52.3	28.2
97.5°	61.1	52.8	61.1	207.0	100.3	50.0
100°	122.3	81.0	122.3	415.4	125.4	66.9
102.5°	322.7	176.7	322.7	561.9	145.1	83.8
105°	814.0	538.6	814.0	637.2	167.7	109.1
107.5°	1184.7	1109.7	1184.7	608.4	178.5	134.5
110°	1244.9	1337.8	1244.9	591.5	192.7	151.4



TEST NUMBER: P621643

CATALOG NUMBER: VLT-FA-075U-125D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1209.7	1366.0	1209.7	574.6	209.6	168.3
115°	1141.5	1334.3	1141.5	549.2	234.9	193.6
117.5°	1067.7	1266.0	1067.7	542.9	260.3	219.7
120°	1011.6	1218.1	1011.6	531.6	277.3	239.4
122.5°	963.3	1153.3	963.3	517.5	294.1	253.5
125°	905.0	1070.3	905.0	517.5	316.0	278.1
127.5°	837.4	1000.5	837.4	518.2	337.1	298.5
130°	792.1	947.0	792.1	521.0	351.1	309.8
132.5°	771.8	899.2	771.8	521.0	365.2	323.9
135°	745.3	855.5	745.3	521.0	382.9	345.0
137.5°	716.1	810.4	716.1	521.0	403.2	362.6
140°	699.0	785.1	699.0	521.0	414.6	376.7
142.5°	679.2	759.7	679.2	523.9	425.9	390.8
145°	649.4	718.2	649.4	524.6	442.8	408.4
147.5°	627.9	680.9	627.9	528.8	459.8	429.5
150°	613.6	658.3	613.6	531.6	471.1	443.6
152.5°	602.1	638.6	602.1	531.6	482.5	457.7
155°	588.6	616.1	588.6	535.1	496.0	478.8
157.5°	579.9	599.9	579.9	539.4	512.2	495.7
160°	574.2	591.5	574.2	542.2	520.7	507.0
162.5°	571.3	583.0	571.3	545.0	529.2	515.4
165°	563.5	573.9	563.5	549.2	538.5	531.6
167.5°	559.9	566.1	559.9	552.7	547.0	540.8
170°	559.9	563.3	559.9	552.7	552.7	549.2
172.5°	557.0	560.5	557.0	555.5	558.2	552.0
175°	556.2	552.7	556.2	559.8	563.2	559.8
177.5°	559.7	557.0	559.7	559.8	562.5	559.8
180°	559.8	559.8	559.8	559.8	559.8	559.8

(END OF REPORT)