

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: P621616

Luminaire Tested: VLT-FA-050U-100D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621616
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-100D-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

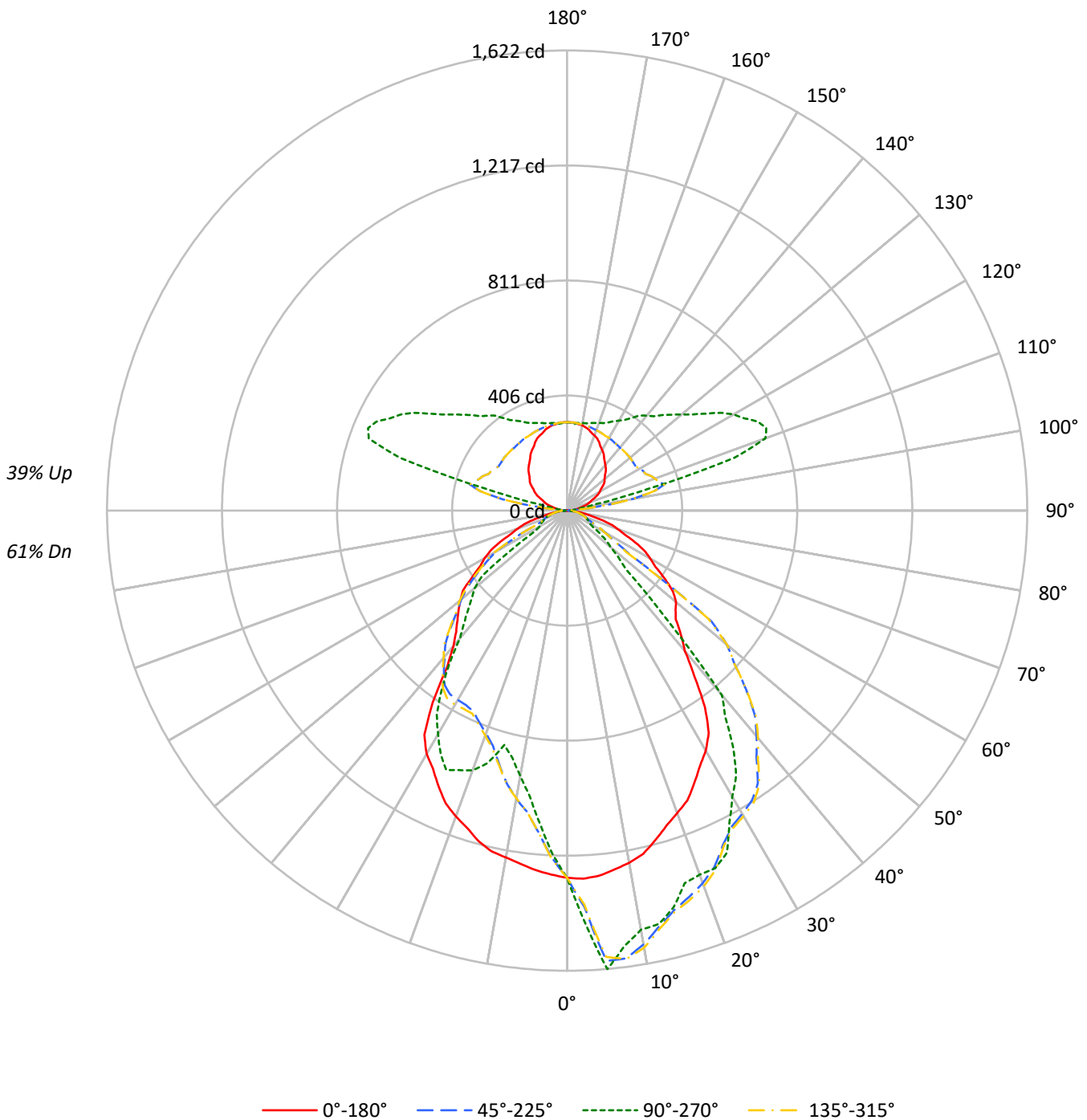
Lumens per Lamp: N/A
Luminaire Lumens: 4342.5 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 43.8
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: P621616
CATALOG NUMBER: VLT-FA-050U-100D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621616

CATALOG NUMBER: VLT-FA-050U-100D-930-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61	61	61	61	61	61	61	61	61	61	61	61	61																
1	101	97	94	91	95	91	88	86	80	78	76	70	68	67	61	59	58	54	54	54	54	54	54	54	54	54	54	54	54	54																
2	93	86	81	76	87	81	76	72	72	68	65	63	60	57	55	53	51	47	47	47	47	47	47	47	47	47	47	47	47	47																
3	86	77	70	64	80	72	66	61	64	59	55	56	53	50	49	47	44	41	41	41	41	41	41	41	41	41	41	41	41	41																
4	79	69	61	55	74	65	58	53	58	52	48	51	47	44	45	42	39	36	36	36	36	36	36	36	36	36	36	36	36	36																
5	73	62	54	48	68	58	51	46	52	46	42	46	42	38	41	37	35	32	32	32	32	32	32	32	32	32	32	32	32	32																
6	67	56	48	42	63	53	46	41	47	42	37	42	38	34	37	34	31	28	28	28	28	28	28	28	28	28	28	28	28	28																
7	63	51	43	37	59	48	41	36	43	37	33	38	34	30	34	31	28	25	25	25	25	25	25	25	25	25	25	25	25	25																
8	58	46	39	33	55	44	37	32	40	34	30	35	31	27	32	28	25	23	23	23	23	23	23	23	23	23	23	23	23	23																
9	54	42	35	30	51	40	34	29	36	31	27	33	28	25	29	26	23	21	21	21	21	21	21	21	21	21	21	21	21	21																
10	51	39	32	27	48	37	31	26	34	28	25	30	26	23	27	24	21	19	19	19	19	19	19	19	19	19	19	19	19	19																

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	9290	9290	9290	9290
5°	9307	11687	9164	7969
10°	9184	10931	9049	6919
15°	8933	10763	8962	6350
20°	8659	10429	8760	7443
25°	8394	10543	8488	7987
30°	8097	9647	8207	7540
35°	7418	8942	7234	6761
40°	6045	7958	5835	5502
45°	5493	2954	5547	5012
50°	5587	2250	5484	4764
55°	5272	1747	5092	2850
60°	4858	1342	4819	1587
65°	4472	1387	4382	1678
70°	3978	1464	3869	1741
75°	3396	1533	3249	1788
80°	2558	1579	2393	1851
85°	1737	1408	1515	1737

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 10172 cd/sqm



TEST NUMBER: P621616
 CATALOG NUMBER: VLT-FA-050U-100D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.9	2.9
10°-20°	342.1	7.9
20°-30°	511.9	11.8
30°-40°	582.2	13.4
40°-50°	497.9	11.5
50°-60°	335.8	7.7
60°-70°	173.3	4.0
70°-80°	78.2	1.8
80°-90°	24.0	0.6
90°-100°	38.3	0.9
100°-110°	272.7	6.3
110°-120°	370.3	8.5
120°-130°	301.4	6.9
130°-140°	242.4	5.6
140°-150°	191.1	4.4
150°-160°	139.7	3.2
160°-170°	86.8	2.0
170°-180°	29.6	0.7
0°-30°	978.9	22.5
0°-40°	1561.1	35.9
0°-60°	2394.7	55.1
0°-90°	2670.2	61.5
90°-120°	681.3	15.7
90°-150°	1416.2	32.6
90°-180°	1672.0	38.5
0°-180°	4342.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1295	1295	1295	1295	1295	
5°	1292	1622	1272	1106	1292	122
15°	1202	1449	1206	855	1202	338
25°	1060	1332	1072	1009	1060	488
35°	847	1021	826	772	847	518
45°	541	291	547	494	541	429
55°	421	140	407	228	421	375
65°	263	82	258	99	263	260
75°	122	55	117	64	122	131
85°	21	17	18	21	21	27
90°	0	6	0	6	0	2
95°	16	22	16	22	16	18
105°	61	300	61	300	61	64
115°	108	742	108	742	108	107
125°	155	595	155	595	155	137
135°	192	476	192	476	192	148
145°	227	399	227	399	227	143
155°	266	343	266	343	266	122
165°	296	319	296	319	296	83
175°	311	307	311	307	311	29
180°	311	311	311	311	311	



TEST NUMBER: P621616

CATALOG NUMBER: VLT-FA-050U-100D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1298.8	1343.1	1398.9	1437.2	1453.7	1437.2	1389.4	1342.8	1284.1	1266.6	1225.1
5°	1292.0	1428.5	1593.6	1613.5	1622.5	1613.5	1579.1	1420.3	1272.2	1209.1	1140.5
7.5°	1276.2	1514.9	1591.7	1547.2	1547.5	1555.7	1594.1	1507.5	1255.6	1156.5	1072.3
10°	1260.4	1563.0	1552.7	1488.5	1500.1	1494.9	1564.6	1553.6	1241.9	1127.3	1031.2
12.5°	1239.3	1578.0	1501.1	1480.1	1492.7	1485.5	1508.8	1569.8	1230.3	1106.5	983.8
15°	1202.4	1556.5	1457.9	1448.7	1448.7	1455.1	1464.5	1563.1	1206.4	1068.6	925.8
17.5°	1164.5	1513.7	1427.9	1382.2	1377.3	1385.8	1438.7	1524.7	1172.4	1026.6	869.7
20°	1133.9	1484.2	1397.3	1343.8	1365.7	1346.4	1409.2	1492.2	1147.1	1000.3	835.0
22.5°	1106.5	1447.5	1358.4	1335.6	1364.7	1336.1	1369.2	1455.5	1117.6	970.8	808.6
25°	1060.2	1386.0	1299.9	1321.2	1331.5	1321.2	1305.1	1391.4	1072.0	933.0	781.0
27.5°	1014.1	1321.1	1256.2	1270.5	1239.0	1263.2	1263.3	1321.3	1025.2	888.9	772.6
30°	977.2	1276.0	1234.0	1213.2	1164.2	1202.9	1243.2	1276.3	990.4	860.3	770.4
32.5°	928.7	1234.7	1211.9	1139.8	1108.4	1134.7	1222.2	1233.9	936.6	834.4	768.3
35°	846.8	1176.5	1172.1	1052.9	1020.7	1045.1	1181.3	1173.4	825.8	793.6	752.0
37.5°	737.0	1124.6	1096.0	965.0	913.7	958.5	1104.7	1119.0	694.6	756.1	713.8
40°	645.3	1089.6	1039.1	899.7	849.5	893.2	1045.7	1086.5	622.9	729.8	671.7
42.5°	593.7	1058.6	979.1	830.5	519.7	820.0	985.6	1054.6	578.7	695.9	634.8
45°	541.3	1002.3	891.6	459.7	291.1	437.9	892.9	988.2	546.6	644.4	578.2
47.5°	518.4	933.0	800.2	276.9	245.8	268.9	799.4	917.8	518.6	592.8	524.2
50°	500.5	889.4	734.9	244.0	201.5	235.0	736.2	875.0	491.2	558.2	487.3
52.5°	471.0	837.2	641.1	202.2	174.1	197.3	625.6	820.8	462.8	520.5	440.9
55°	421.4	736.9	267.4	158.9	139.6	152.5	254.2	712.1	407.0	461.0	387.2
57.5°	369.0	627.3	187.5	123.7	108.3	122.4	186.2	602.2	362.2	390.5	337.7
60°	338.5	553.5	152.8	103.8	93.5	102.5	151.5	531.6	335.8	343.6	292.4
62.5°	307.9	478.7	126.4	91.3	88.2	90.0	126.2	454.6	303.2	303.7	206.0
65°	263.4	362.6	93.5	82.9	81.7	81.7	90.9	349.6	258.1	250.4	118.5
67.5°	218.1	260.3	75.1	76.4	75.1	75.1	73.8	253.0	212.8	199.7	89.6
70°	189.6	199.9	69.8	71.1	69.8	69.8	68.5	194.7	184.4	154.8	84.3
72.5°	162.3	136.5	64.5	64.8	64.5	64.5	63.2	128.1	157.0	108.8	76.9
75°	122.5	68.4	55.3	55.3	55.3	55.3	54.0	65.7	117.2	70.9	65.8
77.5°	85.1	45.2	45.8	45.6	45.6	44.5	44.5	44.8	80.1	48.9	53.2
80°	61.9	37.4	39.5	38.2	38.2	38.2	38.2	36.1	57.9	41.2	44.8
82.5°	44.0	29.8	32.1	30.8	30.8	30.8	30.8	29.5	40.0	33.6	36.3
85°	21.1	19.8	21.1	18.4	17.1	18.4	19.8	19.7	18.4	22.3	23.7
87.5°	6.3	9.8	9.2	7.5	7.5	7.5	8.2	8.7	5.3	10.8	10.3
90°	0.0	1.9	3.9	5.9	5.9	5.9	3.9	1.9	0.0	1.9	3.9
92.5°	4.7	6.6	8.6	12.2	13.7	12.2	8.6	6.6	4.7	6.6	8.6
95°	15.7	29.1	15.7	17.7	21.5	17.7	15.7	29.1	15.7	29.1	15.7
97.5°	27.8	55.8	115.1	34.0	29.4	34.0	115.1	55.8	27.8	55.8	115.1
100°	37.2	69.7	231.0	68.0	45.0	68.0	231.0	69.7	37.2	69.7	231.0
102.5°	46.6	80.7	312.5	179.5	98.3	179.5	312.5	80.7	46.6	80.7	312.5
105°	60.7	93.2	354.4	452.7	299.6	452.7	354.4	93.2	60.7	93.2	354.4
107.5°	74.8	99.3	338.3	658.9	617.1	658.9	338.3	99.3	74.8	99.3	338.3
110°	84.2	107.2	328.9	692.3	744.0	692.3	328.9	107.2	84.2	107.2	328.9



TEST NUMBER: P621616

CATALOG NUMBER: VLT-FA-050U-100D-930-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°	93.6	116.6	319.5	672.7	759.7	672.7	319.5	116.6	93.6	116.6	319.5
115°	107.7	130.7	305.4	634.8	742.0	634.8	305.4	130.7	107.7	130.7	305.4
117.5°	122.2	144.8	301.9	593.8	704.1	593.8	301.9	144.8	122.2	144.8	301.9
120°	133.1	154.2	295.6	562.6	677.4	562.6	295.6	154.2	133.1	154.2	295.6
122.5°	141.0	163.6	287.8	535.7	641.4	535.7	287.8	163.6	141.0	163.6	287.8
125°	154.7	175.7	287.8	503.3	595.2	503.3	287.8	175.7	154.7	175.7	287.8
127.5°	166.0	187.5	288.2	465.7	556.4	465.7	288.2	187.5	166.0	187.5	288.2
130°	172.3	195.3	289.8	440.5	526.7	440.5	289.8	195.3	172.3	195.3	289.8
132.5°	180.1	203.1	289.8	429.2	500.0	429.2	289.8	203.1	180.1	203.1	289.8
135°	191.9	212.9	289.8	414.5	475.8	414.5	289.8	212.9	191.9	212.9	289.8
137.5°	201.7	224.3	289.8	398.2	450.7	398.2	289.8	224.3	201.7	224.3	289.8
140°	209.5	230.6	289.8	388.7	436.6	388.7	289.8	230.6	209.5	230.6	289.8
142.5°	217.3	236.9	291.3	377.7	422.5	377.7	291.3	236.9	217.3	236.9	291.3
145°	227.1	246.3	291.7	361.1	399.4	361.1	291.7	246.3	227.1	246.3	291.7
147.5°	238.9	255.7	294.1	349.2	378.7	349.2	294.1	255.7	238.9	255.7	294.1
150°	246.7	262.0	295.6	341.2	366.1	341.2	295.6	262.0	246.7	262.0	295.6
152.5°	254.5	268.3	295.6	334.9	355.2	334.9	295.6	268.3	254.5	268.3	295.6
155°	266.3	275.8	297.6	327.3	342.6	327.3	297.6	275.8	266.3	275.8	297.6
157.5°	275.7	284.9	299.9	322.5	333.6	322.5	299.9	284.9	275.7	284.9	299.9
160°	281.9	289.6	301.5	319.4	328.9	319.4	301.5	289.6	281.9	289.6	301.5
162.5°	286.6	294.3	303.1	317.7	324.2	317.7	303.1	294.3	286.6	294.3	303.1
165°	295.6	299.5	305.4	313.4	319.1	313.4	305.4	299.5	295.6	299.5	305.4
167.5°	300.7	304.2	307.4	311.4	314.8	311.4	307.4	304.2	300.7	304.2	307.4
170°	305.4	307.3	307.4	311.3	313.3	311.3	307.4	307.3	305.4	307.3	307.4
172.5°	307.0	310.4	309.0	309.8	311.7	309.8	309.0	310.4	307.0	310.4	309.0
175°	311.3	313.2	311.3	309.3	307.4	309.3	311.3	313.2	311.3	313.2	311.3
177.5°	311.3	312.8	311.3	311.3	309.7	311.3	311.3	312.8	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3	311.3



TEST NUMBER: P621616

CATALOG NUMBER: VLT-FA-050U-100D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1294.6	1294.6	1294.6	1294.6	1294.6	1294.6
2.5°	1210.3	1209.3	1211.3	1229.3	1265.9	1298.8
5°	1102.4	1106.3	1110.1	1140.5	1204.4	1292.0
7.5°	1019.5	1013.8	1022.6	1072.0	1150.5	1276.2
10°	962.4	949.6	962.4	1029.9	1121.3	1260.4
12.5°	908.6	892.7	912.7	986.7	1097.1	1239.3
15°	839.3	854.7	845.7	928.5	1060.8	1202.4
17.5°	855.7	933.5	872.2	877.9	1024.6	1164.5
20°	894.7	974.6	920.5	844.2	1001.3	1133.9
22.5°	930.1	990.4	941.4	815.7	978.0	1106.5
25°	957.3	1008.8	954.7	790.2	944.3	1060.2
27.5°	958.7	965.9	959.2	788.1	902.6	1014.1
30°	941.0	910.0	938.4	790.2	872.9	977.2
32.5°	890.3	855.3	879.5	786.0	843.0	928.7
35°	818.1	771.8	805.2	763.9	796.6	846.8
37.5°	742.0	683.3	729.6	720.1	757.1	737.0
40°	690.4	587.4	680.1	676.9	735.5	645.3
42.5°	624.4	536.8	615.1	642.2	711.7	593.7
45°	504.2	493.9	499.0	583.4	661.0	541.3
47.5°	461.1	454.1	458.5	530.0	603.9	518.4
50°	435.7	426.7	433.1	495.2	567.4	500.5
52.5°	400.6	376.1	398.0	447.8	529.7	471.0
55°	301.2	227.8	300.0	393.8	472.9	421.4
57.5°	176.8	131.7	172.9	342.7	400.7	369.0
60°	119.6	110.6	120.9	301.6	352.6	338.5
62.5°	109.2	106.4	109.5	209.9	309.7	307.9
65°	100.1	98.8	100.1	121.2	255.7	263.4
67.5°	90.6	89.3	91.6	93.0	201.9	218.1
70°	84.3	83.0	84.3	85.6	154.9	189.6
72.5°	76.9	75.6	76.9	78.2	108.9	162.3
75°	65.8	64.5	65.8	67.2	72.3	122.5
77.5°	53.2	53.2	54.5	54.5	50.6	85.1
80°	44.8	44.8	46.1	46.1	43.9	61.9
82.5°	36.3	35.3	37.6	38.7	36.3	44.0
85°	22.4	21.1	23.6	25.0	23.6	21.1
87.5°	9.6	8.5	10.6	12.4	11.9	6.3
90°	5.9	5.9	5.9	3.9	1.9	0.0
92.5°	12.2	13.7	12.2	8.6	6.6	4.7
95°	17.7	21.5	17.7	15.7	29.1	15.7
97.5°	34.0	29.4	34.0	115.1	55.8	27.8
100°	68.0	45.0	68.0	231.0	69.7	37.2
102.5°	179.5	98.3	179.5	312.5	80.7	46.6
105°	452.7	299.6	452.7	354.4	93.2	60.7
107.5°	658.9	617.1	658.9	338.3	99.3	74.8
110°	692.3	744.0	692.3	328.9	107.2	84.2



TEST NUMBER: P621616

CATALOG NUMBER: VLT-FA-050U-100D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	672.7	759.7	672.7	319.5	116.6	93.6
115°	634.8	742.0	634.8	305.4	130.7	107.7
117.5°	593.8	704.1	593.8	301.9	144.8	122.2
120°	562.6	677.4	562.6	295.6	154.2	133.1
122.5°	535.7	641.4	535.7	287.8	163.6	141.0
125°	503.3	595.2	503.3	287.8	175.7	154.7
127.5°	465.7	556.4	465.7	288.2	187.5	166.0
130°	440.5	526.7	440.5	289.8	195.3	172.3
132.5°	429.2	500.0	429.2	289.8	203.1	180.1
135°	414.5	475.8	414.5	289.8	212.9	191.9
137.5°	398.2	450.7	398.2	289.8	224.3	201.7
140°	388.7	436.6	388.7	289.8	230.6	209.5
142.5°	377.7	422.5	377.7	291.3	236.9	217.3
145°	361.1	399.4	361.1	291.7	246.3	227.1
147.5°	349.2	378.7	349.2	294.1	255.7	238.9
150°	341.2	366.1	341.2	295.6	262.0	246.7
152.5°	334.9	355.2	334.9	295.6	268.3	254.5
155°	327.3	342.6	327.3	297.6	275.8	266.3
157.5°	322.5	333.6	322.5	299.9	284.9	275.7
160°	319.4	328.9	319.4	301.5	289.6	281.9
162.5°	317.7	324.2	317.7	303.1	294.3	286.6
165°	313.4	319.1	313.4	305.4	299.5	295.6
167.5°	311.4	314.8	311.4	307.4	304.2	300.7
170°	311.3	313.3	311.3	307.4	307.3	305.4
172.5°	309.8	311.7	309.8	309.0	310.4	307.0
175°	309.3	307.4	309.3	311.3	313.2	311.3
177.5°	311.3	309.7	311.3	311.3	312.8	311.3
180°	311.3	311.3	311.3	311.3	311.3	311.3

(END OF REPORT)