

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: P621684

Luminaire Tested: VLT-FA-100U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621684
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-100U-075D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

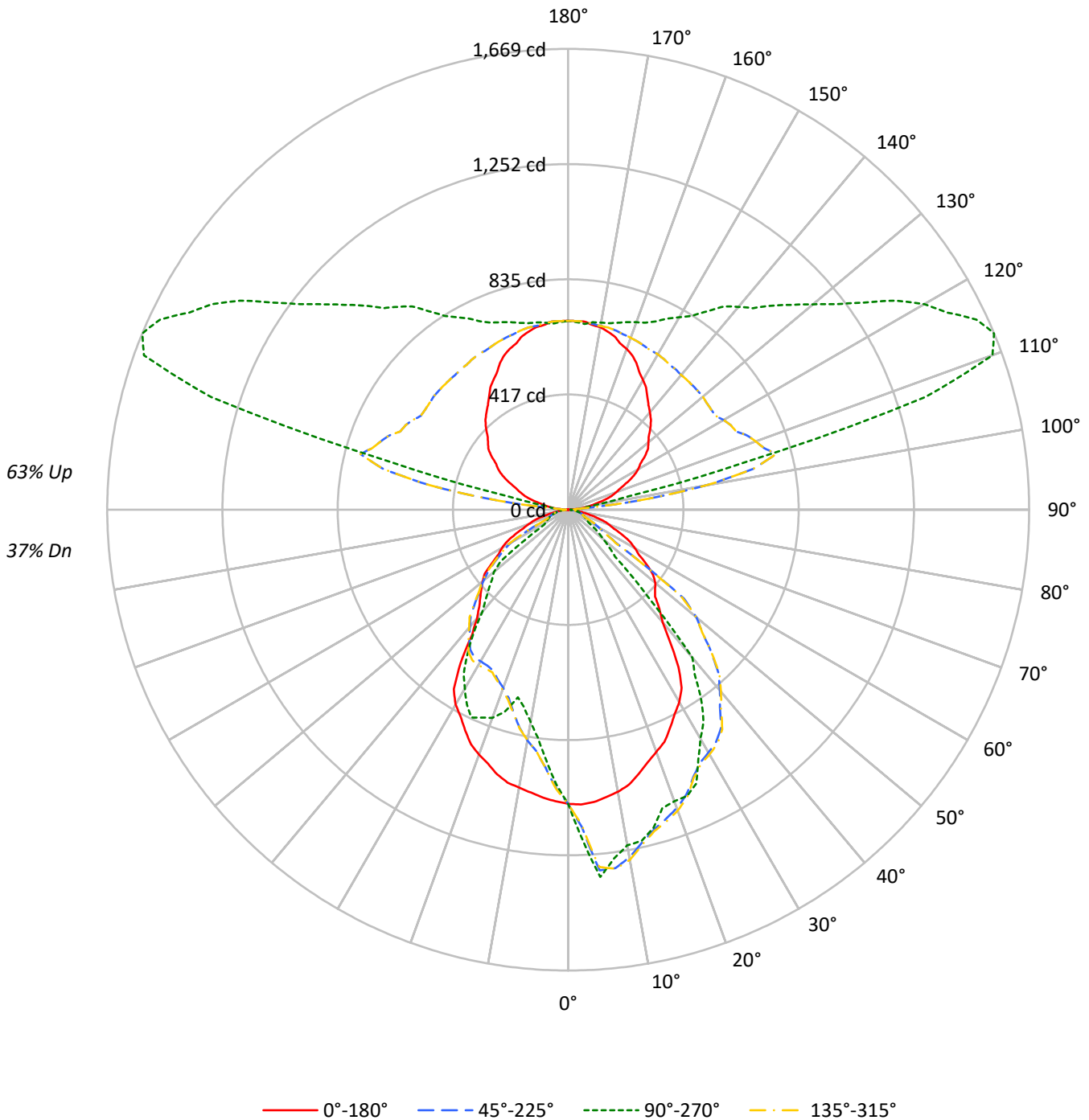
Lumens per Lamp: N/A
Luminaire Lumens: 5871.7 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 50.6
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: P621684
CATALOG NUMBER: VLT-FA-100U-075D-940-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621684

CATALOG NUMBER: VLT-FA-100U-075D-940-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	50	30	10	0	
RCR																						
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37				
1	96	92	88	85	87	83	80	78	68	66	64	54	52	51	40	40	39	33				
2	88	81	75	70	79	74	69	65	60	57	54	48	45	44	36	35	34	28				
3	80	71	65	59	73	65	59	55	54	49	46	43	40	37	33	31	29	25				
4	74	64	56	50	67	58	52	47	48	43	40	38	35	33	30	27	26	22				
5	68	57	49	44	61	52	45	40	43	38	34	35	31	29	27	25	23	19				
6	62	51	43	38	57	47	40	35	39	34	30	31	28	25	25	22	20	17				
7	58	46	39	33	52	42	36	31	35	30	27	29	25	22	23	20	18	15				
8	54	42	35	30	49	39	32	28	32	27	24	26	23	20	21	18	16	14				
9	50	38	31	26	45	35	29	25	30	25	21	24	21	18	19	17	15	13				
10	47	35	28	24	42	32	26	22	27	23	19	22	19	16	18	15	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	7645	7645	7645	7645
5°	7658	9617	7540	6557
10°	7557	8994	7446	5693
15°	7350	8856	7375	5225
20°	7126	8582	7208	6124
25°	6907	8675	6984	6573
30°	6663	7938	6752	6205
35°	6104	7358	5953	5563
40°	4974	6548	4802	4527
45°	4520	2431	4564	4124
50°	4597	1851	4512	3920
55°	4339	1437	4190	2346
60°	3997	1104	3965	1306
65°	3680	1141	3606	1380
70°	3275	1204	3183	1433
75°	2795	1262	2673	1472
80°	2103	1298	1971	1521
85°	1424	1161	1251	1424

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 8369 cd/sqm



TEST NUMBER: P621684

CATALOG NUMBER: VLT-FA-100U-075D-940-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.8	1.8
10°-20°	281.5	4.8
20°-30°	421.2	7.2
30°-40°	479.0	8.2
40°-50°	409.7	7.0
50°-60°	276.3	4.7
60°-70°	142.6	2.4
70°-80°	64.4	1.1
80°-90°	20.7	0.4
90°-100°	84.1	1.4
100°-110°	599.2	10.2
110°-120°	813.4	13.9
120°-130°	662.0	11.3
130°-140°	532.5	9.1
140°-150°	419.8	7.1
150°-160°	306.9	5.2
160°-170°	190.7	3.2
170°-180°	65.0	1.1
0°-30°	805.5	13.7
0°-40°	1284.5	21.9
0°-60°	1970.5	33.6
0°-90°	2198.1	37.4
90°-120°	1496.6	25.5
90°-150°	3111.0	53.0
90°-180°	3674.0	62.6
0°-180°	5871.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1065	1065	1065	1065	1065	
5°	1063	1335	1047	910	1063	101
15°	989	1192	993	703	989	278
25°	872	1096	882	830	872	402
35°	697	840	680	635	697	426
45°	445	240	450	406	445	353
55°	347	115	335	188	347	309
65°	217	67	212	81	217	214
75°	101	46	96	53	101	107
85°	17	14	15	17	17	22
90°	0	13	0	13	0	2
95°	34	47	34	47	34	38
105°	133	658	133	658	133	141
115°	237	1630	237	1630	237	235
125°	340	1308	340	1308	340	302
135°	422	1045	422	1045	422	324
145°	499	877	499	877	499	313
155°	585	753	585	753	585	269
165°	650	701	650	701	650	182
175°	684	675	684	675	684	65
180°	684	684	684	684	684	



TEST NUMBER: P621684

CATALOG NUMBER: VLT-FA-100U-075D-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°	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3
2.5°	1068.7	1105.2	1151.1	1182.6	1196.2	1182.6	1143.3	1104.9	1056.6	1042.2	1008.0
5°	1063.1	1175.4	1311.3	1327.7	1335.1	1327.7	1299.3	1168.7	1046.8	994.9	938.5
7.5°	1050.1	1246.5	1309.7	1273.1	1273.3	1280.1	1311.7	1240.4	1033.2	951.6	882.3
10°	1037.1	1286.1	1277.7	1224.8	1234.3	1230.1	1287.4	1278.3	1021.9	927.6	848.5
12.5°	1019.7	1298.4	1235.2	1217.9	1228.2	1222.3	1241.5	1291.7	1012.4	910.4	809.5
15°	989.4	1280.8	1199.6	1192.1	1192.1	1197.3	1205.1	1286.2	992.7	879.3	761.8
17.5°	958.2	1245.6	1174.9	1137.3	1133.3	1140.3	1183.8	1254.6	964.7	844.7	715.7
20°	933.1	1221.3	1149.8	1105.8	1123.8	1107.9	1159.5	1227.9	943.9	823.1	687.1
22.5°	910.5	1191.1	1117.7	1099.0	1122.9	1099.4	1126.6	1197.7	919.6	798.8	665.4
25°	872.4	1140.4	1069.6	1087.1	1095.6	1087.1	1073.9	1144.9	882.1	767.7	642.6
27.5°	834.4	1087.0	1033.6	1045.4	1019.5	1039.4	1039.5	1087.2	843.5	731.4	635.7
30°	804.1	1049.9	1015.4	998.2	958.0	989.8	1023.0	1050.2	814.9	707.9	634.0
32.5°	764.2	1016.0	997.2	937.9	912.0	933.6	1005.7	1015.3	770.7	686.6	632.2
35°	696.8	968.1	964.5	866.3	839.9	860.0	972.1	965.6	679.5	653.0	618.8
37.5°	606.4	925.4	901.8	794.0	751.9	788.7	909.0	920.8	571.5	622.2	587.4
40°	531.0	896.6	855.0	740.3	699.0	735.0	860.4	894.0	512.6	600.5	552.7
42.5°	488.5	871.0	805.6	683.4	427.6	674.7	811.0	867.8	476.2	572.6	522.3
45°	445.4	824.7	733.7	378.3	239.5	360.3	734.7	813.2	449.7	530.3	475.7
47.5°	426.5	767.7	658.4	227.9	202.2	221.3	657.8	755.2	426.8	487.8	431.3
50°	411.8	731.8	604.7	200.8	165.8	193.4	605.8	720.0	404.2	459.3	401.0
52.5°	387.5	688.9	527.5	166.4	143.3	162.3	514.7	675.4	380.8	428.3	362.8
55°	346.8	606.4	220.0	130.8	114.9	125.5	209.2	586.0	334.9	379.4	318.6
57.5°	303.6	516.2	154.3	101.8	89.1	100.7	153.2	495.5	298.0	321.3	277.9
60°	278.5	455.5	125.7	85.4	76.9	84.4	124.6	437.4	276.3	282.7	240.6
62.5°	253.4	393.9	104.0	75.1	72.6	74.1	103.8	374.1	249.5	249.9	169.5
65°	216.7	298.3	76.9	68.2	67.2	67.2	74.8	287.6	212.4	206.0	97.5
67.5°	179.5	214.2	61.8	62.8	61.8	61.8	60.7	208.2	175.1	164.3	73.7
70°	156.1	164.5	57.4	58.5	57.4	57.4	56.4	160.2	151.7	127.3	69.4
72.5°	133.5	112.3	53.1	53.3	53.1	53.1	52.0	105.4	129.2	89.5	63.3
75°	100.8	56.3	45.5	45.5	45.5	45.5	44.4	54.1	96.4	58.3	54.2
77.5°	70.0	37.2	37.7	37.5	37.5	36.6	36.6	36.9	65.9	40.2	43.8
80°	50.9	30.8	32.5	31.4	31.4	31.4	31.4	29.7	47.7	33.9	36.8
82.5°	36.2	24.5	26.4	25.4	25.4	25.4	25.4	24.3	32.9	27.6	29.9
85°	17.3	16.3	17.3	15.1	14.1	15.1	16.3	16.2	15.2	18.4	19.5
87.5°	5.2	8.6	8.7	7.8	7.8	7.8	7.8	7.7	4.3	9.4	9.5
90°	0.0	4.2	8.6	12.9	12.9	12.9	8.6	4.2	0.0	4.2	8.6
92.5°	10.3	14.5	18.9	26.7	30.1	26.7	18.9	14.5	10.3	14.5	18.9
95°	34.4	63.8	34.4	38.9	47.3	38.9	34.4	63.8	34.4	63.8	34.4
97.5°	61.1	122.5	252.9	74.6	64.5	74.6	252.9	122.5	61.1	122.5	252.9
100°	81.7	153.2	507.5	149.4	98.9	149.4	507.5	153.2	81.7	153.2	507.5
102.5°	102.4	177.2	686.5	394.2	215.9	394.2	686.5	177.2	102.4	177.2	686.5
105°	133.3	204.8	778.5	994.5	658.1	994.5	778.5	204.8	133.3	204.8	778.5
107.5°	164.3	218.1	743.2	1447.4	1355.7	1447.4	743.2	218.1	164.3	218.1	743.2
110°	184.9	235.4	722.6	1520.9	1634.4	1520.9	722.6	235.4	184.9	235.4	722.6



TEST NUMBER: P621684

CATALOG NUMBER: VLT-FA-100U-075D-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°	205.6	256.1	701.9	1477.9	1668.8	1477.9	701.9	256.1	205.6	256.1	701.9
115°	236.6	287.0	671.0	1394.6	1630.1	1394.6	671.0	287.0	236.6	287.0	671.0
117.5°	268.4	318.0	663.2	1304.4	1546.7	1304.4	663.2	318.0	268.4	318.0	663.2
120°	292.5	338.7	649.5	1235.9	1488.2	1235.9	649.5	338.7	292.5	338.7	649.5
122.5°	309.7	359.3	632.3	1176.9	1409.0	1176.9	632.3	359.3	309.7	359.3	632.3
125°	339.8	386.0	632.3	1105.7	1307.5	1105.7	632.3	386.0	339.8	386.0	632.3
127.5°	364.7	411.8	633.1	1023.0	1222.4	1023.0	633.1	411.8	364.7	411.8	633.1
130°	378.5	429.0	636.6	967.7	1157.0	967.7	636.6	429.0	378.5	429.0	636.6
132.5°	395.7	446.2	636.6	942.9	1098.5	942.9	636.6	446.2	395.7	446.2	636.6
135°	421.5	467.8	636.6	910.6	1045.2	910.6	636.6	467.8	421.5	467.8	636.6
137.5°	443.0	492.6	636.6	874.9	990.1	874.9	636.6	492.6	443.0	492.6	636.6
140°	460.2	506.5	636.6	854.0	959.1	854.0	636.6	506.5	460.2	506.5	636.6
142.5°	477.4	520.3	640.0	829.8	928.2	829.8	640.0	520.3	477.4	520.3	640.0
145°	498.9	541.0	640.9	793.3	877.4	793.3	640.9	541.0	498.9	541.0	640.9
147.5°	524.7	561.7	646.0	767.1	831.8	767.1	646.0	561.7	524.7	561.7	646.0
150°	541.9	575.6	649.5	749.6	804.3	749.6	649.5	575.6	541.9	575.6	649.5
152.5°	559.1	589.4	649.5	735.6	780.2	735.6	649.5	589.4	559.1	589.4	649.5
155°	585.0	606.0	653.8	719.0	752.7	719.0	653.8	606.0	585.0	606.0	653.8
157.5°	605.6	625.8	658.9	708.5	732.9	708.5	658.9	625.8	605.6	625.8	658.9
160°	619.4	636.2	662.4	701.6	722.6	701.6	662.4	636.2	619.4	636.2	662.4
162.5°	629.7	646.5	665.8	698.0	712.3	698.0	665.8	646.5	629.7	646.5	665.8
165°	649.5	657.9	671.0	688.5	701.1	688.5	671.0	657.9	649.5	657.9	671.0
167.5°	660.7	668.2	675.3	684.0	691.6	684.0	675.3	668.2	660.7	668.2	675.3
170°	671.0	675.2	675.3	684.0	688.2	684.0	675.3	675.2	671.0	675.2	675.3
172.5°	674.4	682.0	678.7	680.5	684.7	680.5	678.7	682.0	674.4	682.0	678.7
175°	683.9	688.1	683.9	679.5	675.3	679.5	683.9	688.1	683.9	688.1	683.9
177.5°	683.9	687.2	683.9	683.8	680.4	683.8	683.9	687.2	683.9	687.2	683.9
180°	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9	683.9



TEST NUMBER: P621684

CATALOG NUMBER: VLT-FA-100U-075D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1065.3	1065.3	1065.3	1065.3	1065.3	1065.3
2.5°	995.9	995.0	996.7	1011.5	1041.6	1068.7
5°	907.1	910.3	913.5	938.5	991.0	1063.1
7.5°	838.9	834.2	841.4	882.1	946.7	1050.1
10°	791.9	781.3	791.9	847.4	922.6	1037.1
12.5°	747.7	734.5	751.1	811.9	902.8	1019.7
15°	690.6	703.3	695.9	764.0	872.8	989.4
17.5°	704.1	768.1	717.7	722.4	843.1	958.2
20°	736.2	801.9	757.4	694.6	823.9	933.1
22.5°	765.3	814.9	774.7	671.2	804.8	910.5
25°	787.7	830.1	785.6	650.2	777.0	872.4
27.5°	788.8	794.8	789.3	648.5	742.7	834.4
30°	774.3	748.8	772.1	650.2	718.3	804.1
32.5°	732.6	703.7	723.7	646.7	693.6	764.2
35°	673.2	635.0	662.6	628.5	655.5	696.8
37.5°	610.5	562.2	600.4	592.6	623.0	606.4
40°	568.1	483.3	559.6	557.0	605.2	531.0
42.5°	513.8	441.7	506.1	528.4	585.6	488.5
45°	414.9	406.4	410.6	480.1	543.9	445.4
47.5°	379.4	373.7	377.3	436.1	496.9	426.5
50°	358.5	351.1	356.4	407.5	466.9	411.8
52.5°	329.6	309.5	327.5	368.5	435.8	387.5
55°	247.9	187.5	246.8	324.0	389.2	346.8
57.5°	145.5	108.4	142.3	282.0	329.7	303.6
60°	98.4	91.0	99.5	248.2	290.2	278.5
62.5°	89.9	87.6	90.1	172.7	254.8	253.4
65°	82.3	81.3	82.3	99.7	210.4	216.7
67.5°	74.5	73.5	75.4	76.5	166.1	179.5
70°	69.3	68.3	69.3	70.4	127.4	156.1
72.5°	63.3	62.2	63.3	64.4	89.6	133.5
75°	54.2	53.1	54.2	55.3	59.5	100.8
77.5°	43.8	43.8	44.8	44.9	41.6	70.0
80°	36.8	36.8	37.9	37.9	36.1	50.9
82.5°	29.9	29.0	30.9	31.9	29.8	36.2
85°	18.4	17.3	19.5	20.6	19.5	17.3
87.5°	9.5	8.6	10.3	11.3	10.3	5.2
90°	12.9	12.9	12.9	8.6	4.2	0.0
92.5°	26.7	30.1	26.7	18.9	14.5	10.3
95°	38.9	47.3	38.9	34.4	63.8	34.4
97.5°	74.6	64.5	74.6	252.9	122.5	61.1
100°	149.4	98.9	149.4	507.5	153.2	81.7
102.5°	394.2	215.9	394.2	686.5	177.2	102.4
105°	994.5	658.1	994.5	778.5	204.8	133.3
107.5°	1447.4	1355.7	1447.4	743.2	218.1	164.3
110°	1520.9	1634.4	1520.9	722.6	235.4	184.9



TEST NUMBER: P621684

CATALOG NUMBER: VLT-FA-100U-075D-940-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1477.9	1668.8	1477.9	701.9	256.1	205.6
115°	1394.6	1630.1	1394.6	671.0	287.0	236.6
117.5°	1304.4	1546.7	1304.4	663.2	318.0	268.4
120°	1235.9	1488.2	1235.9	649.5	338.7	292.5
122.5°	1176.9	1409.0	1176.9	632.3	359.3	309.7
125°	1105.7	1307.5	1105.7	632.3	386.0	339.8
127.5°	1023.0	1222.4	1023.0	633.1	411.8	364.7
130°	967.7	1157.0	967.7	636.6	429.0	378.5
132.5°	942.9	1098.5	942.9	636.6	446.2	395.7
135°	910.6	1045.2	910.6	636.6	467.8	421.5
137.5°	874.9	990.1	874.9	636.6	492.6	443.0
140°	854.0	959.1	854.0	636.6	506.5	460.2
142.5°	829.8	928.2	829.8	640.0	520.3	477.4
145°	793.3	877.4	793.3	640.9	541.0	498.9
147.5°	767.1	831.8	767.1	646.0	561.7	524.7
150°	749.6	804.3	749.6	649.5	575.6	541.9
152.5°	735.6	780.2	735.6	649.5	589.4	559.1
155°	719.0	752.7	719.0	653.8	606.0	585.0
157.5°	708.5	732.9	708.5	658.9	625.8	605.6
160°	701.6	722.6	701.6	662.4	636.2	619.4
162.5°	698.0	712.3	698.0	665.8	646.5	629.7
165°	688.5	701.1	688.5	671.0	657.9	649.5
167.5°	684.0	691.6	684.0	675.3	668.2	660.7
170°	684.0	688.2	684.0	675.3	675.2	671.0
172.5°	680.5	684.7	680.5	678.7	682.0	674.4
175°	679.5	675.3	679.5	683.9	688.1	683.9
177.5°	683.8	680.4	683.8	683.9	687.2	683.9
180°	683.9	683.9	683.9	683.9	683.9	683.9

(END OF REPORT)