

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: P621638

Luminaire Tested: VLT-FA-075U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621638
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-100D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

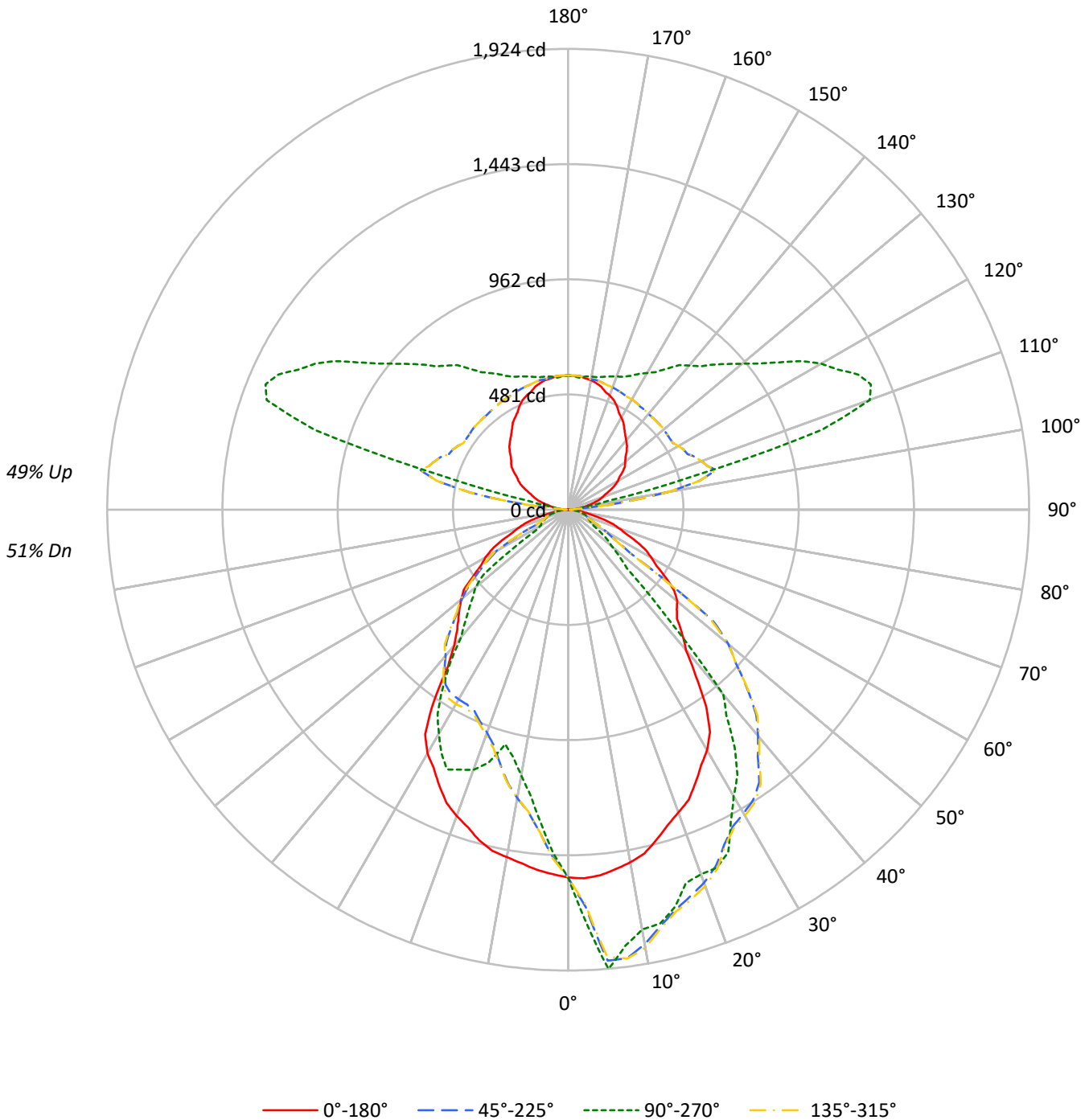
Lumens per Lamp: N/A
Luminaire Lumens: 6176.9 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50
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: P621638
CATALOG NUMBER: VLT-FA-075U-100D-835-UNV-STD-W-4

Luminous Intensity Polar Plot





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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51				51
1	99	95	91	88	91	88	85	82	75	73	71	63	62	60	52	51	50				45	
2	91	84	78	73	84	78	73	69	67	63	60	56	54	52	47	45	44				39	
3	83	74	68	62	77	69	63	59	60	55	51	51	47	45	42	40	38				34	
4	77	66	59	53	71	62	55	50	53	48	45	46	42	39	38	36	33				30	
5	71	60	52	46	65	56	49	44	48	43	39	41	37	34	35	32	30				26	
6	65	54	46	40	60	50	43	38	44	38	34	38	33	30	32	29	26				24	
7	61	49	41	36	56	46	39	34	40	34	30	34	30	27	29	26	24				21	
8	56	44	37	32	52	42	35	30	36	31	27	32	27	24	27	24	21				19	
9	52	41	33	29	49	38	32	27	34	28	25	29	25	22	25	22	19				17	
10	49	37	30	26	46	35	29	25	31	26	22	27	23	20	23	20	18				16	

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11018	11018	11018	11018
5°	11037	13861	10868	9451
10°	10892	12963	10732	8205
15°	10594	12764	10629	7531
20°	10270	12369	10389	8826
25°	9955	12503	10067	9473
30°	9603	11441	9733	8943
35°	8798	10604	8579	8018
40°	7169	9437	6921	6525
45°	6515	3503	6578	5944
50°	6626	2668	6504	5650
55°	6253	2072	6038	3380
60°	5761	1592	5716	1883
65°	5304	1644	5197	1988
70°	4719	1737	4589	2065
75°	4029	1819	3854	2121
80°	3033	1872	2839	2194
85°	2058	1671	1803	2058

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 12063 cd/sqm



TEST NUMBER: P621638

CATALOG NUMBER: VLT-FA-075U-100D-835-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	2.4
10°-20°	405.7	6.6
20°-30°	607.1	9.8
30°-40°	690.4	11.2
40°-50°	590.5	9.6
50°-60°	398.2	6.4
60°-70°	205.5	3.3
70°-80°	92.8	1.5
80°-90°	28.9	0.5
90°-100°	68.9	1.1
100°-110°	490.9	7.9
110°-120°	666.4	10.8
120°-130°	542.4	8.8
130°-140°	436.2	7.1
140°-150°	343.9	5.6
150°-160°	251.5	4.1
160°-170°	156.2	2.5
170°-180°	53.3	0.9
0°-30°	1160.9	18.8
0°-40°	1851.4	30.0
0°-60°	2840.1	46.0
0°-90°	3167.3	51.3
90°-120°	1226.2	19.9
90°-150°	2548.7	41.3
90°-180°	3010.0	48.7
0°-180°	6176.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1535	1535	1535	1535	1535	
5°	1532	1924	1509	1312	1532	145
15°	1426	1718	1431	1014	1426	401
25°	1257	1579	1271	1196	1257	579
35°	1004	1210	979	915	1004	614
45°	642	345	648	586	642	509
55°	500	166	483	270	500	445
65°	312	97	306	117	312	309
75°	145	66	139	76	145	155
85°	25	20	22	25	25	32
90°	0	11	0	11	0	2
95°	28	39	28	39	28	32
105°	109	539	109	539	109	115
115°	194	1336	194	1336	194	192
125°	278	1071	278	1071	278	247
135°	345	856	345	856	345	266
145°	409	719	409	719	409	257
155°	479	617	479	617	479	220
165°	532	574	532	574	532	149
175°	560	553	560	553	560	53
180°	560	560	560	560	560	



TEST NUMBER: P621638

CATALOG NUMBER: VLT-FA-075U-100D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4
2.5°	1540.4	1592.9	1659.1	1704.5	1724.0	1704.5	1647.8	1592.5	1522.9	1502.1	1452.9
5°	1532.2	1694.1	1889.9	1913.6	1924.3	1913.6	1872.7	1684.4	1508.8	1434.0	1352.6
7.5°	1513.5	1796.6	1887.7	1835.0	1835.3	1845.0	1890.6	1787.9	1489.1	1371.5	1271.7
10°	1494.8	1853.7	1841.5	1765.3	1779.0	1772.9	1855.6	1842.5	1472.9	1337.0	1223.0
12.5°	1469.8	1871.4	1780.3	1755.3	1770.3	1761.7	1789.3	1861.7	1459.1	1312.2	1166.8
15°	1426.0	1846.0	1729.0	1718.1	1718.1	1725.8	1736.9	1853.8	1430.7	1267.3	1098.0
17.5°	1381.1	1795.2	1693.4	1639.3	1633.5	1643.5	1706.2	1808.3	1390.4	1217.5	1031.5
20°	1344.8	1760.2	1657.2	1593.8	1619.7	1596.8	1671.3	1769.7	1360.4	1186.3	990.3
22.5°	1312.3	1716.7	1611.0	1583.9	1618.5	1584.6	1623.8	1726.2	1325.4	1151.3	959.0
25°	1257.3	1643.7	1541.6	1566.9	1579.1	1566.9	1547.9	1650.2	1271.4	1106.5	926.2
27.5°	1202.7	1566.8	1489.8	1506.7	1469.5	1498.2	1498.2	1567.1	1215.8	1054.2	916.2
30°	1158.9	1513.3	1463.5	1438.8	1380.7	1426.6	1474.5	1513.6	1174.6	1020.3	913.7
32.5°	1101.5	1464.3	1437.3	1351.8	1314.5	1345.7	1449.5	1463.3	1110.8	989.6	911.2
35°	1004.3	1395.3	1390.1	1248.7	1210.5	1239.5	1401.0	1391.7	979.3	941.1	891.9
37.5°	874.1	1333.7	1299.8	1144.4	1083.7	1136.8	1310.1	1327.1	823.8	896.8	846.6
40°	765.3	1292.2	1232.4	1067.0	1007.4	1059.4	1240.2	1288.6	738.8	865.5	796.6
42.5°	704.1	1255.4	1161.1	985.0	616.3	972.5	1168.9	1250.8	686.3	825.3	752.8
45°	642.0	1188.7	1057.4	545.2	345.2	519.3	1059.0	1172.0	648.2	764.3	685.7
47.5°	614.8	1106.5	949.0	328.4	291.5	318.9	948.1	1088.5	615.1	703.1	621.6
50°	593.5	1054.7	871.6	289.4	239.0	278.7	873.1	1037.7	582.6	662.0	577.9
52.5°	558.5	992.9	760.3	239.8	206.5	234.0	741.9	973.4	548.9	617.3	522.9
55°	499.8	874.0	317.1	188.5	165.6	180.8	301.5	844.6	482.6	546.8	459.2
57.5°	437.7	744.0	222.4	146.7	128.4	145.2	220.9	714.2	429.5	463.1	400.5
60°	401.4	656.5	181.2	123.1	110.9	121.6	179.6	630.4	398.3	407.5	346.7
62.5°	365.2	567.7	149.9	108.3	104.6	106.8	149.6	539.2	359.6	360.2	244.3
65°	312.4	430.0	110.9	98.4	96.8	96.8	107.8	414.6	306.1	297.0	140.6
67.5°	258.7	308.7	89.0	90.6	89.0	89.0	87.5	300.1	252.4	236.8	106.2
70°	224.9	237.1	82.8	84.3	82.8	82.8	81.2	230.9	218.7	183.5	100.0
72.5°	192.4	161.9	76.5	76.8	76.5	76.5	75.0	152.0	186.2	129.1	91.2
75°	145.3	81.1	65.6	65.6	65.6	65.6	64.0	77.9	139.0	84.0	78.1
77.5°	100.9	53.6	54.4	54.0	54.0	52.8	52.8	53.1	95.0	58.0	63.1
80°	73.4	44.4	46.9	45.3	45.3	45.3	45.3	42.8	68.7	48.9	53.1
82.5°	52.2	35.4	38.1	36.5	36.5	36.5	36.5	35.0	47.5	39.8	43.1
85°	25.0	23.5	25.0	21.8	20.3	21.8	23.4	23.4	21.9	26.4	28.1
87.5°	7.5	11.9	11.4	9.6	9.6	9.6	10.2	10.6	6.2	13.0	12.7
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°	8.5	11.9	15.5	21.9	24.7	21.9	15.5	11.9	8.5	11.9	15.5
95°	28.2	52.3	28.2	31.9	38.8	31.9	28.2	52.3	28.2	52.3	28.2
97.5°	50.0	100.3	207.2	61.1	52.9	61.1	207.2	100.3	50.0	100.3	207.2
100°	67.0	125.5	415.8	122.4	81.0	122.4	415.8	125.5	67.0	125.5	415.8
102.5°	83.9	145.2	562.4	323.0	176.9	323.0	562.4	145.2	83.9	145.2	562.4
105°	109.2	167.8	637.8	814.8	539.1	814.8	637.8	167.8	109.2	167.8	637.8
107.5°	134.6	178.7	608.9	1185.8	1110.7	1185.8	608.9	178.7	134.6	178.7	608.9
110°	151.5	192.9	592.0	1246.0	1339.0	1246.0	592.0	192.9	151.5	192.9	592.0



TEST NUMBER: P621638

CATALOG NUMBER: VLT-FA-075U-100D-835-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°	168.4	209.8	575.1	1210.8	1367.2	1210.8	575.1	209.8	168.4	209.8	575.1
115°	193.8	235.2	549.7	1142.6	1335.5	1142.6	549.7	235.2	193.8	235.2	549.7
117.5°	219.9	260.5	543.4	1068.7	1267.1	1068.7	543.4	260.5	219.9	260.5	543.4
120°	239.6	277.5	532.1	1012.5	1219.2	1012.5	532.1	277.5	239.6	277.5	532.1
122.5°	253.7	294.4	518.0	964.2	1154.4	964.2	518.0	294.4	253.7	294.4	518.0
125°	278.4	316.3	518.0	905.8	1071.2	905.8	518.0	316.3	278.4	316.3	518.0
127.5°	298.8	337.4	518.7	838.1	1001.5	838.1	518.7	337.4	298.8	337.4	518.7
130°	310.1	351.4	521.5	792.8	947.9	792.8	521.5	351.4	310.1	351.4	521.5
132.5°	324.2	365.5	521.5	772.5	900.0	772.5	521.5	365.5	324.2	365.5	521.5
135°	345.3	383.2	521.5	746.0	856.3	746.0	521.5	383.2	345.3	383.2	521.5
137.5°	362.9	403.6	521.5	716.8	811.2	716.8	521.5	403.6	362.9	403.6	521.5
140°	377.0	414.9	521.5	699.7	785.8	699.7	521.5	414.9	377.0	414.9	521.5
142.5°	391.1	426.3	524.3	679.8	760.4	679.8	524.3	426.3	391.1	426.3	524.3
145°	408.8	443.2	525.0	649.9	718.8	649.9	525.0	443.2	408.8	443.2	525.0
147.5°	429.9	460.2	529.3	628.4	681.5	628.4	529.3	460.2	429.9	460.2	529.3
150°	444.0	471.6	532.1	614.2	658.9	614.2	532.1	471.6	444.0	471.6	532.1
152.5°	458.1	482.9	532.1	602.7	639.2	602.7	532.1	482.9	458.1	482.9	532.1
155°	479.2	496.5	535.6	589.1	616.7	589.1	535.6	496.5	479.2	496.5	535.6
157.5°	496.1	512.7	539.8	580.5	600.4	580.5	539.8	512.7	496.1	512.7	539.8
160°	507.4	521.2	542.7	574.8	592.0	574.8	542.7	521.2	507.4	521.2	542.7
162.5°	515.9	529.7	545.5	571.8	583.5	571.8	545.5	529.7	515.9	529.7	545.5
165°	532.1	539.0	549.7	564.0	574.4	564.0	549.7	539.0	532.1	539.0	549.7
167.5°	541.2	547.5	553.2	560.4	566.6	560.4	553.2	547.5	541.2	547.5	553.2
170°	549.7	553.2	553.2	560.4	563.8	560.4	553.2	553.2	549.7	553.2	553.2
172.5°	552.5	558.7	556.0	557.5	561.0	557.5	556.0	558.7	552.5	558.7	556.0
175°	560.3	563.7	560.3	556.7	553.2	556.7	560.3	563.7	560.3	563.7	560.3
177.5°	560.3	563.0	560.3	560.2	557.5	560.2	560.3	563.0	560.3	563.0	560.3
180°	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3	560.3



TEST NUMBER: P621638

CATALOG NUMBER: VLT-FA-075U-100D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1535.4	1535.4	1535.4	1535.4	1535.4	1535.4
2.5°	1435.4	1434.2	1436.6	1457.9	1501.3	1540.4
5°	1307.4	1312.0	1316.6	1352.6	1428.4	1532.2
7.5°	1209.1	1202.4	1212.8	1271.4	1364.4	1513.5
10°	1141.4	1126.1	1141.4	1221.4	1329.8	1494.8
12.5°	1077.6	1058.7	1082.5	1170.2	1301.2	1469.8
15°	995.4	1013.7	1003.0	1101.2	1258.0	1426.0
17.5°	1014.8	1107.1	1034.4	1041.2	1215.2	1381.1
20°	1061.1	1155.8	1091.7	1001.2	1187.5	1344.8
22.5°	1103.1	1174.6	1116.5	967.5	1159.9	1312.3
25°	1135.3	1196.4	1132.3	937.2	1119.9	1257.3
27.5°	1137.0	1145.5	1137.6	934.7	1070.4	1202.7
30°	1115.9	1079.3	1112.9	937.2	1035.2	1158.9
32.5°	1055.9	1014.3	1043.0	932.2	999.8	1101.5
35°	970.3	915.3	955.0	905.9	944.8	1004.3
37.5°	880.0	810.3	865.3	854.1	897.9	874.1
40°	818.8	696.6	806.6	802.8	872.2	765.3
42.5°	740.5	636.6	729.5	761.6	844.0	704.1
45°	597.9	585.7	591.8	691.9	784.0	642.0
47.5°	546.8	538.6	543.7	628.5	716.2	614.8
50°	516.8	506.1	513.7	587.3	672.9	593.5
52.5°	475.1	446.1	472.0	531.1	628.2	558.5
55°	357.3	270.2	355.7	467.0	560.9	499.8
57.5°	209.6	156.2	205.1	406.4	475.2	437.7
60°	141.9	131.2	143.4	357.7	418.2	401.4
62.5°	129.6	126.2	129.9	249.0	367.3	365.2
65°	118.7	117.1	118.7	143.7	303.2	312.4
67.5°	107.4	105.9	108.6	110.3	239.4	258.7
70°	99.9	98.4	99.9	101.5	183.7	224.9
72.5°	91.2	89.7	91.2	92.8	129.2	192.4
75°	78.1	76.5	78.1	79.7	85.7	145.3
77.5°	63.1	63.1	64.6	64.7	60.0	100.9
80°	53.1	53.1	54.6	54.7	52.0	73.4
82.5°	43.1	41.9	44.6	45.9	43.0	52.2
85°	26.5	25.0	28.0	29.7	28.0	25.0
87.5°	12.1	10.9	13.3	15.2	14.3	7.5
90°	10.6	10.6	10.6	7.0	3.4	0.0
92.5°	21.9	24.7	21.9	15.5	11.9	8.5
95°	31.9	38.8	31.9	28.2	52.3	28.2
97.5°	61.1	52.9	61.1	207.2	100.3	50.0
100°	122.4	81.0	122.4	415.8	125.5	67.0
102.5°	323.0	176.9	323.0	562.4	145.2	83.9
105°	814.8	539.1	814.8	637.8	167.8	109.2
107.5°	1185.8	1110.7	1185.8	608.9	178.7	134.6
110°	1246.0	1339.0	1246.0	592.0	192.9	151.5



TEST NUMBER: P621638

CATALOG NUMBER: VLT-FA-075U-100D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1210.8	1367.2	1210.8	575.1	209.8	168.4
115°	1142.6	1335.5	1142.6	549.7	235.2	193.8
117.5°	1068.7	1267.1	1068.7	543.4	260.5	219.9
120°	1012.5	1219.2	1012.5	532.1	277.5	239.6
122.5°	964.2	1154.4	964.2	518.0	294.4	253.7
125°	905.8	1071.2	905.8	518.0	316.3	278.4
127.5°	838.1	1001.5	838.1	518.7	337.4	298.8
130°	792.8	947.9	792.8	521.5	351.4	310.1
132.5°	772.5	900.0	772.5	521.5	365.5	324.2
135°	746.0	856.3	746.0	521.5	383.2	345.3
137.5°	716.8	811.2	716.8	521.5	403.6	362.9
140°	699.7	785.8	699.7	521.5	414.9	377.0
142.5°	679.8	760.4	679.8	524.3	426.3	391.1
145°	649.9	718.8	649.9	525.0	443.2	408.8
147.5°	628.4	681.5	628.4	529.3	460.2	429.9
150°	614.2	658.9	614.2	532.1	471.6	444.0
152.5°	602.7	639.2	602.7	532.1	482.9	458.1
155°	589.1	616.7	589.1	535.6	496.5	479.2
157.5°	580.5	600.4	580.5	539.8	512.7	496.1
160°	574.8	592.0	574.8	542.7	521.2	507.4
162.5°	571.8	583.5	571.8	545.5	529.7	515.9
165°	564.0	574.4	564.0	549.7	539.0	532.1
167.5°	560.4	566.6	560.4	553.2	547.5	541.2
170°	560.4	563.8	560.4	553.2	553.2	549.7
172.5°	557.5	561.0	557.5	556.0	558.7	552.5
175°	556.7	553.2	556.7	560.3	563.7	560.3
177.5°	560.2	557.5	560.2	560.3	563.0	560.3
180°	560.3	560.3	560.3	560.3	560.3	560.3

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