

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: P621644

Luminaire Tested: VLT-FA-075U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621644
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-835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

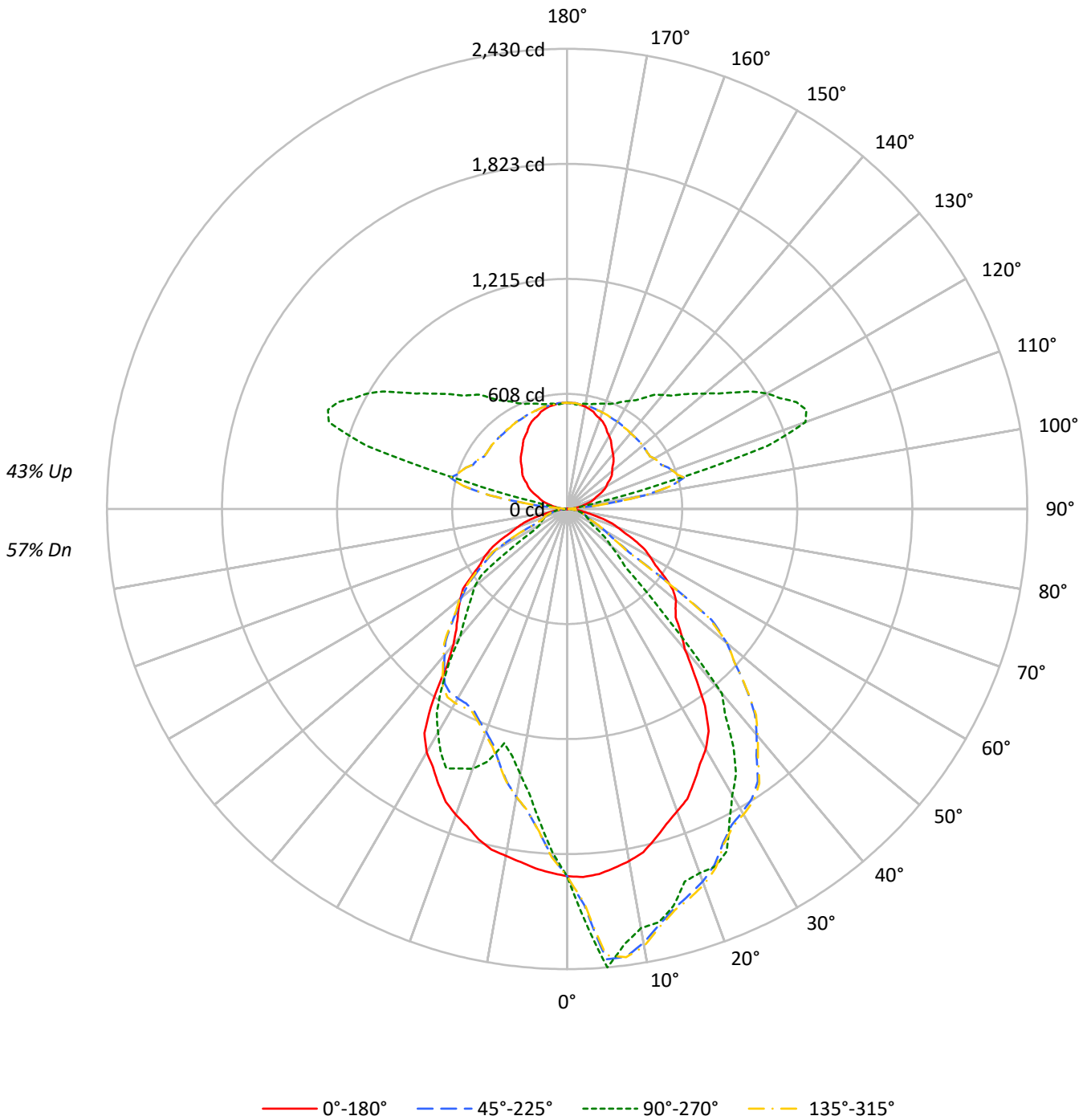
Lumens per Lamp: N/A
Luminaire Lumens: 7009.3 lumens
Efficiency: N/A
Efficacy: 117.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

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



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Luminous Intensity Polar Plot





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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	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°	13915	13915	13915	13915
5°	13939	17506	13726	11936
10°	13756	16372	13554	10363
15°	13380	16120	13424	9511
20°	12970	15621	13120	11147
25°	12573	15790	12714	11964
30°	12128	14449	12292	11295
35°	11111	13393	10835	10126
40°	9055	11918	8740	8242
45°	8227	4424	8307	7507
50°	8368	3369	8214	7135
55°	7897	2616	7625	4270
60°	7276	2011	7219	2378
65°	6699	2077	6564	2511
70°	5961	2193	5795	2608
75°	5088	2296	4869	2681
80°	3831	2364	3587	2773
85°	2602	2108	2272	2602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15235 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.1	2.7
10°-20°	512.4	7.3
20°-30°	766.7	10.9
30°-40°	872.0	12.4
40°-50°	745.7	10.6
50°-60°	502.9	7.2
60°-70°	259.6	3.7
70°-80°	117.2	1.7
80°-90°	36.1	0.5
90°-100°	68.9	1.0
100°-110°	490.9	7.0
110°-120°	666.4	9.5
120°-130°	542.4	7.7
130°-140°	436.2	6.2
140°-150°	343.9	4.9
150°-160°	251.5	3.6
160°-170°	156.2	2.2
170°-180°	53.3	0.8
0°-30°	1466.2	20.9
0°-40°	2338.2	33.4
0°-60°	3586.8	51.2
0°-90°	3999.7	57.1
90°-120°	1226.2	17.5
90°-150°	2548.7	36.4
90°-180°	3010.0	42.9
0°-180°	7009.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1939	1939	1939	1939	1939	
5°	1935	2430	1906	1657	1935	183
15°	1801	2170	1807	1280	1801	507
25°	1588	1994	1606	1511	1588	731
35°	1268	1529	1237	1156	1268	775
45°	811	436	819	740	811	643
55°	631	209	610	341	631	562
65°	394	122	387	148	394	390
75°	184	83	176	97	184	196
85°	32	26	28	32	32	40
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1945.4	2011.7	2095.3	2152.7	2177.3	2152.7	2081.1	2011.2	1923.3	1897.0	1834.9
5°	1935.1	2139.6	2386.8	2416.7	2430.2	2416.7	2365.1	2127.3	1905.5	1811.0	1708.3
7.5°	1911.4	2269.0	2384.1	2317.4	2317.8	2330.1	2387.6	2257.9	1880.7	1732.1	1606.1
10°	1887.8	2341.0	2325.7	2229.4	2246.8	2239.1	2343.4	2326.9	1860.1	1688.5	1544.5
12.5°	1856.2	2363.5	2248.4	2216.8	2235.7	2224.9	2259.8	2351.2	1842.8	1657.2	1473.5
15°	1801.0	2331.4	2183.7	2169.8	2169.8	2179.5	2193.5	2341.2	1806.9	1600.5	1386.7
17.5°	1744.2	2267.2	2138.7	2070.3	2062.9	2075.7	2154.9	2283.7	1756.0	1537.7	1302.7
20°	1698.4	2223.0	2092.9	2012.8	2045.6	2016.6	2110.7	2235.0	1718.1	1498.2	1250.6
22.5°	1657.4	2168.1	2034.5	2000.4	2044.0	2001.2	2050.7	2180.0	1673.9	1454.1	1211.2
25°	1587.9	2075.9	1946.9	1978.9	1994.3	1978.9	1954.8	2084.0	1605.7	1397.4	1169.7
27.5°	1518.9	1978.7	1881.5	1902.9	1855.8	1892.1	1892.1	1979.1	1535.5	1331.4	1157.1
30°	1463.7	1911.1	1848.3	1817.1	1743.8	1801.6	1862.1	1911.6	1483.4	1288.6	1154.0
32.5°	1391.1	1849.3	1815.2	1707.2	1660.1	1699.5	1830.6	1848.1	1402.9	1249.8	1150.8
35°	1268.4	1762.1	1755.6	1577.0	1528.8	1565.4	1769.4	1757.6	1236.8	1188.6	1126.3
37.5°	1103.9	1684.4	1641.6	1445.3	1368.6	1435.7	1654.6	1676.1	1040.3	1132.5	1069.1
40°	966.6	1632.0	1556.4	1347.5	1272.3	1337.9	1566.2	1627.4	933.0	1093.1	1006.0
42.5°	889.2	1585.5	1466.4	1244.0	778.4	1228.2	1476.3	1579.6	866.8	1042.3	950.8
45°	810.7	1501.2	1335.4	688.6	435.9	655.8	1337.4	1480.2	818.6	965.2	866.0
47.5°	776.4	1397.5	1198.5	414.8	368.1	402.8	1197.4	1374.7	776.8	887.9	785.1
50°	749.6	1332.1	1100.7	365.5	301.8	352.0	1102.7	1310.5	735.8	836.1	729.9
52.5°	705.4	1253.9	960.3	302.8	260.8	295.5	937.0	1229.4	693.2	779.6	660.4
55°	631.2	1103.8	400.4	238.0	209.1	228.4	380.7	1066.6	609.5	690.5	579.9
57.5°	552.7	939.6	280.9	185.3	162.1	183.4	278.9	902.0	542.5	584.9	505.8
60°	507.0	829.1	228.8	155.5	140.1	153.6	226.8	796.2	503.0	514.6	437.9
62.5°	461.2	716.9	189.4	136.8	132.2	134.9	189.0	680.9	454.1	454.9	308.5
65°	394.5	543.0	140.1	124.2	122.3	122.3	136.1	523.6	386.6	375.1	177.5
67.5°	326.7	389.9	112.4	114.4	112.4	112.4	110.5	378.9	318.8	299.1	134.1
70°	284.1	299.5	104.5	106.5	104.5	104.5	102.6	291.6	276.2	231.8	126.2
72.5°	243.0	204.4	96.7	97.0	96.7	96.7	94.7	191.9	235.1	163.0	115.2
75°	183.5	102.4	82.8	82.8	82.8	82.8	80.9	98.4	175.6	106.1	98.6
77.5°	127.4	67.6	68.6	68.3	68.3	66.7	66.7	67.1	119.9	73.3	79.7
80°	92.7	56.1	59.2	57.2	57.2	57.2	57.2	54.0	86.8	61.7	67.1
82.5°	65.9	44.7	48.1	46.2	46.2	46.2	46.2	44.2	60.0	50.3	54.4
85°	31.6	29.6	31.6	27.6	25.6	27.6	29.6	29.5	27.6	33.4	35.5
87.5°	9.5	14.8	14.0	11.6	11.6	11.6	12.5	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°	8.5	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



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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



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1939.1	1939.1	1939.1	1939.1	1939.1	1939.1
2.5°	1812.8	1811.2	1814.3	1841.2	1896.0	1945.4
5°	1651.2	1657.0	1662.8	1708.3	1804.0	1935.1
7.5°	1527.0	1518.5	1531.6	1605.7	1723.2	1911.4
10°	1441.5	1422.2	1441.5	1542.6	1679.5	1887.8
12.5°	1360.9	1337.0	1367.1	1477.9	1643.3	1856.2
15°	1257.1	1280.2	1266.7	1390.7	1588.8	1801.0
17.5°	1281.7	1398.2	1306.4	1314.9	1534.7	1744.2
20°	1340.1	1459.7	1378.7	1264.4	1499.7	1698.4
22.5°	1393.1	1483.4	1410.1	1221.8	1464.9	1657.4
25°	1433.9	1511.0	1430.0	1183.6	1414.3	1587.9
27.5°	1435.9	1446.7	1436.7	1180.4	1351.9	1518.9
30°	1409.3	1363.1	1405.5	1183.6	1307.4	1463.7
32.5°	1333.5	1281.0	1317.3	1177.2	1262.6	1391.1
35°	1225.4	1155.9	1206.1	1144.1	1193.2	1268.4
37.5°	1111.3	1023.4	1092.8	1078.6	1133.9	1103.9
40°	1034.1	879.8	1018.6	1013.9	1101.6	966.6
42.5°	935.2	804.0	921.3	961.8	1065.9	889.2
45°	755.1	739.7	747.4	873.9	990.1	810.7
47.5°	690.6	680.1	686.7	793.8	904.5	776.4
50°	652.6	639.1	648.8	741.7	849.9	749.6
52.5°	600.0	563.4	596.2	670.7	793.3	705.4
55°	451.2	341.3	449.3	589.8	708.4	631.2
57.5°	264.8	197.3	259.0	513.3	600.2	552.7
60°	179.2	165.7	181.1	451.7	528.2	507.0
62.5°	163.6	159.4	164.0	314.4	463.9	461.2
65°	149.9	147.9	149.9	181.5	382.9	394.5
67.5°	135.7	133.7	137.2	139.3	302.4	326.7
70°	126.2	124.3	126.2	128.2	232.0	284.1
72.5°	115.2	113.2	115.2	117.2	163.2	243.0
75°	98.6	96.7	98.6	100.6	108.2	183.5
77.5°	79.7	79.7	81.6	81.7	75.7	127.4
80°	67.1	67.1	69.0	69.0	65.7	92.7
82.5°	54.4	52.9	56.3	58.0	54.3	65.9
85°	33.5	31.6	35.4	37.5	35.4	31.6
87.5°	14.7	13.2	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	24.7	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: P621644

CATALOG NUMBER: VLT-FA-075U-125D-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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