

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: P621696

Luminaire Tested: VLT-FA-100U-125D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621696  
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-125D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

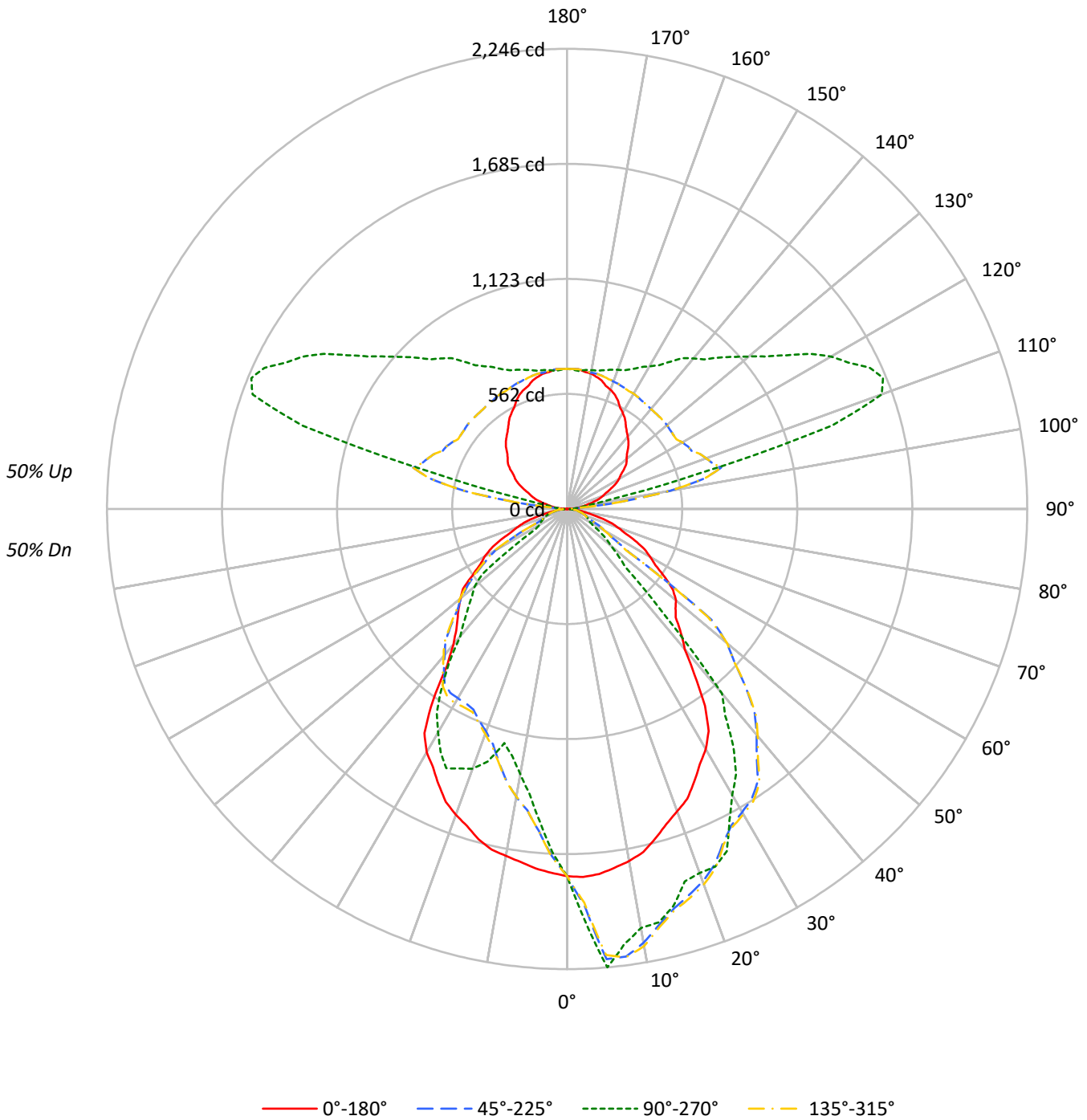
Lumens per Lamp: N/A  
Luminaire Lumens: 7370.3 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 67.7  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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: P621696  
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### 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	83	83	83	69	69	69	56	56	56	50				
1	99	95	91	88	91	88	85	82	74	72	70	62	61	59	51	50	49	44				
2	91	84	78	73	83	78	73	68	66	63	59	56	53	51	46	44	43	38				
3	83	74	67	62	77	69	63	58	59	55	51	50	47	44	41	39	37	33				
4	76	66	59	53	70	62	55	50	53	48	44	45	41	38	38	35	33	29				
5	70	59	52	46	65	55	49	43	48	43	39	41	37	34	34	31	29	26				
6	65	54	46	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23				
7	60	49	41	36	56	45	39	34	39	34	30	34	30	27	29	26	23	21				
8	56	44	37	32	52	41	35	30	36	31	27	31	27	24	26	23	21	19				
9	52	40	33	28	48	38	31	27	33	28	24	29	25	22	25	21	19	17				
10	49	37	30	26	45	35	29	24	31	26	22	27	23	20	23	20	17	16				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	12859	12859	12859	12859
5°	12882	16178	12685	11030
10°	12712	15130	12526	9578
15°	12365	14898	12406	8789
20°	11986	14437	12125	10302
25°	11619	14593	11749	11056
30°	11209	13353	11359	10438
35°	10269	12376	10013	9359
40°	8368	11014	8078	7617
45°	7604	4089	7677	6937
50°	7733	3114	7591	6594
55°	7299	2417	7047	3946
60°	6724	1857	6672	2197
65°	6191	1919	6067	2321
70°	5508	2027	5354	2409
75°	4700	2124	4497	2476
80°	3542	2186	3314	2562
85°	2404	1951	2100	2404

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 14080 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	172.9	2.3
10°-20°	473.5	6.4
20°-30°	708.6	9.6
30°-40°	805.8	10.9
40°-50°	689.2	9.4
50°-60°	464.8	6.3
60°-70°	239.9	3.3
70°-80°	108.3	1.5
80°-90°	33.8	0.5
90°-100°	84.1	1.1
100°-110°	599.2	8.1
110°-120°	813.4	11.0
120°-130°	662.0	9.0
130°-140°	532.5	7.2
140°-150°	419.8	5.7
150°-160°	306.9	4.2
160°-170°	190.7	2.6
170°-180°	65.0	0.9
0°-30°	1355.0	18.4
0°-40°	2160.8	29.3
0°-60°	3314.8	45.0
0°-90°	3696.7	50.2
90°-120°	1496.6	20.3
90°-150°	3111.0	42.2
90°-180°	3674.0	49.8
0°-180°	7370.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1792	1792	1792	1792	1792	
5°	1788	2246	1761	1531	1788	169
15°	1664	2005	1670	1183	1664	468
25°	1468	1843	1484	1396	1468	675
35°	1172	1413	1143	1068	1172	717
45°	749	403	756	684	749	594
55°	583	193	563	315	583	520
65°	365	113	357	137	365	360
75°	170	77	162	89	170	181
85°	29	24	26	29	29	37
90°	0	13	0	13	0	3
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0
2.5°	1797.8	1859.2	1936.4	1989.4	2012.2	1989.4	1923.3	1858.7	1777.4	1753.2	1695.8
5°	1788.4	1977.3	2205.8	2233.5	2245.9	2233.5	2185.8	1966.0	1761.0	1673.7	1578.7
7.5°	1766.5	2097.0	2203.3	2141.7	2142.0	2153.4	2206.6	2086.7	1738.1	1600.8	1484.3
10°	1744.6	2163.5	2149.3	2060.4	2076.4	2069.3	2165.7	2150.5	1719.1	1560.4	1427.4
12.5°	1715.4	2184.2	2077.9	2048.7	2066.2	2056.2	2088.4	2172.9	1703.0	1531.6	1361.8
15°	1664.4	2154.6	2018.1	2005.3	2005.3	2014.2	2027.2	2163.6	1669.9	1479.1	1281.6
17.5°	1611.9	2095.3	1976.5	1913.3	1906.5	1918.3	1991.4	2110.5	1622.8	1421.1	1203.9
20°	1569.6	2054.4	1934.2	1860.2	1890.5	1863.7	1950.6	2065.5	1587.8	1384.6	1155.8
22.5°	1531.7	2003.7	1880.2	1848.7	1889.0	1849.4	1895.2	2014.7	1547.0	1343.8	1119.3
25°	1467.5	1918.5	1799.3	1828.8	1843.1	1828.8	1806.6	1926.0	1483.9	1291.4	1081.0
27.5°	1403.7	1828.7	1738.8	1758.6	1715.1	1748.6	1748.6	1829.0	1419.0	1230.4	1069.4
30°	1352.7	1766.2	1708.2	1679.3	1611.5	1665.0	1720.9	1766.6	1370.9	1190.9	1066.5
32.5°	1285.6	1709.1	1677.5	1577.7	1534.2	1570.6	1691.7	1707.9	1296.5	1155.0	1063.5
35°	1172.2	1628.5	1622.5	1457.4	1412.8	1446.7	1635.2	1624.3	1143.0	1098.5	1040.9
37.5°	1020.2	1556.7	1517.1	1335.7	1264.8	1326.8	1529.1	1549.0	961.5	1046.7	988.1
40°	893.3	1508.2	1438.3	1245.4	1175.8	1236.4	1447.5	1504.0	862.3	1010.2	929.7
42.5°	821.8	1465.3	1355.2	1149.7	719.4	1135.0	1364.3	1459.8	801.0	963.2	878.7
45°	749.3	1387.4	1234.2	636.4	402.9	606.1	1236.0	1367.9	756.5	892.0	800.3
47.5°	717.5	1291.5	1107.7	383.3	340.2	372.3	1106.6	1270.5	717.9	820.6	725.6
50°	692.7	1231.1	1017.2	337.7	278.9	325.3	1019.1	1211.2	680.0	772.7	674.5
52.5°	651.9	1158.8	887.4	279.9	241.0	273.1	865.9	1136.1	640.6	720.5	610.3
55°	583.4	1020.1	370.1	220.0	193.2	211.1	351.8	985.8	563.3	638.2	536.0
57.5°	510.8	868.4	259.6	171.2	149.9	169.5	257.8	833.6	501.3	540.5	467.4
60°	468.5	766.2	211.5	143.7	129.4	141.9	209.6	735.8	464.9	475.6	404.7
62.5°	426.2	662.6	175.0	126.4	122.1	124.6	174.6	629.3	419.7	420.4	285.1
65°	364.6	501.9	129.4	114.8	113.0	113.0	125.8	483.9	357.3	346.6	164.1
67.5°	301.9	360.4	103.9	105.7	103.9	103.9	102.1	350.2	294.6	276.4	124.0
70°	262.5	276.8	96.6	98.4	96.6	96.6	94.8	269.5	255.2	214.2	116.7
72.5°	224.6	188.9	89.3	89.7	89.3	89.3	87.5	177.4	217.3	150.6	106.5
75°	169.5	94.7	76.6	76.6	76.6	76.6	74.7	90.9	162.2	98.1	91.2
77.5°	117.8	62.5	63.4	63.1	63.1	61.6	61.6	62.0	110.8	67.7	73.6
80°	85.7	51.8	54.7	52.9	52.9	52.9	52.9	49.9	80.2	57.0	62.0
82.5°	60.9	41.3	44.5	42.7	42.7	42.7	42.7	40.8	55.4	46.5	50.3
85°	29.2	27.4	29.2	25.5	23.7	25.5	27.3	27.3	25.5	30.9	32.8
87.5°	8.8	13.9	13.4	11.3	11.3	11.3	11.9	12.4	7.3	15.3	14.8
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



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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°	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



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1792.0	1792.0	1792.0	1792.0	1792.0	1792.0
2.5°	1675.3	1673.9	1676.7	1701.6	1752.2	1797.8
5°	1526.0	1531.3	1536.7	1578.7	1667.2	1788.4
7.5°	1411.2	1403.3	1415.5	1483.9	1592.5	1766.5
10°	1332.2	1314.4	1332.2	1425.6	1552.1	1744.6
12.5°	1257.7	1235.6	1263.4	1365.8	1518.7	1715.4
15°	1161.7	1183.1	1170.7	1285.2	1468.3	1664.4
17.5°	1184.5	1292.1	1207.3	1215.2	1418.3	1611.9
20°	1238.5	1349.0	1274.2	1168.5	1386.0	1569.6
22.5°	1287.5	1370.9	1303.2	1129.2	1353.8	1531.7
25°	1325.1	1396.4	1321.6	1093.8	1307.1	1467.5
27.5°	1327.0	1337.0	1327.7	1090.9	1249.3	1403.7
30°	1302.5	1259.7	1298.9	1093.8	1208.3	1352.7
32.5°	1232.3	1183.9	1217.4	1088.0	1166.9	1285.6
35°	1132.4	1068.3	1114.6	1057.3	1102.7	1172.2
37.5°	1027.1	945.8	1009.9	996.8	1048.0	1020.2
40°	955.7	813.1	941.4	937.0	1018.0	893.3
42.5°	864.3	743.1	851.4	888.9	985.1	821.8
45°	697.9	683.6	690.8	807.6	915.0	749.3
47.5°	638.2	628.6	634.6	733.6	835.9	717.5
50°	603.1	590.7	599.6	685.4	785.4	692.7
52.5°	554.5	520.6	551.0	619.8	733.2	651.9
55°	417.0	315.4	415.2	545.1	654.7	583.4
57.5°	244.7	182.3	239.3	474.3	554.7	510.8
60°	165.6	153.1	167.4	417.5	488.1	468.5
62.5°	151.2	147.3	151.6	290.6	428.7	426.2
65°	138.5	136.7	138.5	167.7	353.9	364.6
67.5°	125.4	123.6	126.8	128.7	279.4	301.9
70°	116.6	114.8	116.6	118.5	214.4	262.5
72.5°	106.4	104.6	106.4	108.3	150.8	224.6
75°	91.1	89.3	91.1	93.0	100.0	169.5
77.5°	73.6	73.6	75.4	75.5	70.0	117.8
80°	62.0	62.0	63.8	63.8	60.7	85.7
82.5°	50.3	48.9	52.1	53.6	50.2	60.9
85°	31.0	29.2	32.7	34.6	32.7	29.2
87.5°	14.2	12.8	15.6	17.8	16.7	8.8
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





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CATALOG NUMBER: VLT-FA-100U-125D-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

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