

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: P621711

Luminaire Tested: VLT-FA-125U-100D-840-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621711
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-125U-100D-840-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

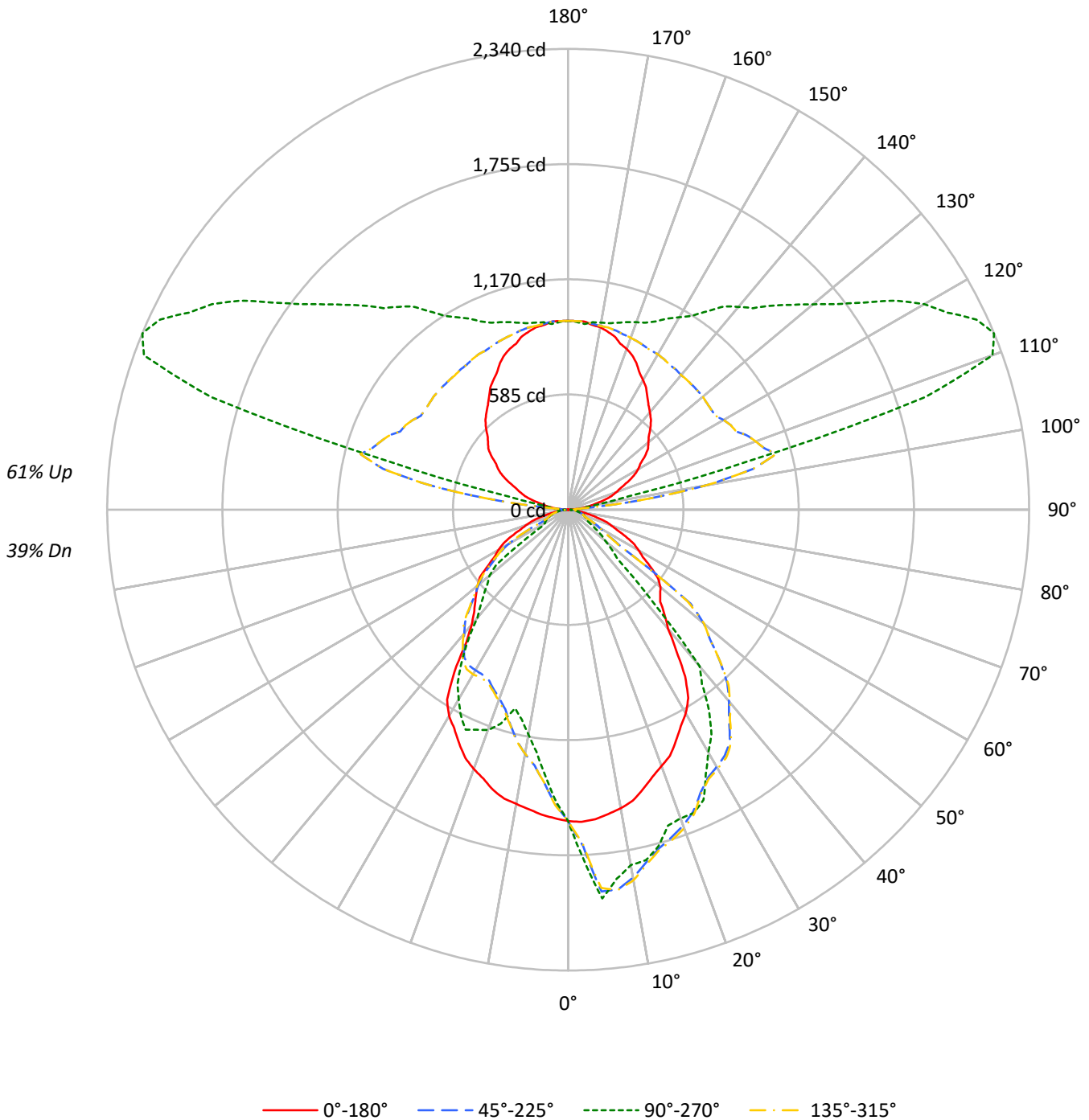
Lumens per Lamp: N/A
Luminaire Lumens: 8413.0 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 67.4
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					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	95	95	95	95	77	77	77	61	61	61	46	46	46	39				
1	96	92	88	85	87	84	81	78	68	66	65	54	53	52	41	41	40	34				
2	88	81	75	71	80	74	69	65	61	57	54	49	46	44	37	36	35	30				
3	81	72	65	59	73	66	60	55	54	50	46	43	41	38	34	32	30	26				
4	74	64	56	51	67	58	52	47	48	44	40	39	36	33	30	28	26	23				
5	68	57	49	44	62	52	46	41	44	39	35	35	32	29	28	25	23	20				
6	63	51	44	38	57	47	40	36	39	34	31	32	28	26	25	23	21	18				
7	58	46	39	34	53	43	36	31	36	31	27	29	26	23	23	21	19	16				
8	54	42	35	30	49	39	32	28	33	28	24	27	23	20	21	19	17	14				
9	50	39	31	27	46	36	29	25	30	25	22	25	21	18	20	17	15	13				
10	47	35	28	24	43	33	27	22	28	23	20	23	19	17	18	16	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11346	11346	11346	11346
5°	11366	14275	11193	9732
10°	11216	13350	11052	8450
15°	10910	13144	10946	7755
20°	10576	12738	10699	9090
25°	10252	12876	10367	9755
30°	9889	11782	10023	9210
35°	9061	10920	8835	8257
40°	7383	9719	7127	6720
45°	6709	3608	6774	6121
50°	6823	2747	6698	5817
55°	6439	2133	6218	3482
60°	5933	1639	5887	1939
65°	5462	1693	5354	2048
70°	4859	1788	4725	2125
75°	4148	1874	3970	2185
80°	3124	1926	2926	2260
85°	2116	1721	1853	2116

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 12423 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.5	1.8
10°-20°	417.8	5.0
20°-30°	625.2	7.4
30°-40°	711.0	8.5
40°-50°	608.1	7.2
50°-60°	410.1	4.9
60°-70°	211.7	2.5
70°-80°	95.6	1.1
80°-90°	30.6	0.4
90°-100°	117.9	1.4
100°-110°	840.0	10.0
110°-120°	1140.5	13.6
120°-130°	928.2	11.0
130°-140°	746.5	8.9
140°-150°	588.6	7.0
150°-160°	430.4	5.1
160°-170°	267.3	3.2
170°-180°	91.2	1.1
0°-30°	1195.6	14.2
0°-40°	1906.6	22.7
0°-60°	2924.7	34.8
0°-90°	3262.5	38.8
90°-120°	2098.4	24.9
90°-150°	4361.7	51.8
90°-180°	5150.0	61.2
0°-180°	8413.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1581	1581	1581	1581	1581	
5°	1578	1982	1554	1351	1578	149
15°	1468	1769	1473	1044	1468	413
25°	1295	1626	1309	1232	1295	596
35°	1034	1247	1008	943	1034	632
45°	661	356	668	603	661	525
55°	515	170	497	278	515	459
65°	322	100	315	121	322	318
75°	150	68	143	79	150	159
85°	26	21	22	26	26	33
90°	0	18	0	18	0	3
95°	48	66	48	66	48	54
105°	187	923	187	923	187	197
115°	332	2286	332	2286	332	329
125°	476	1833	476	1833	476	423
135°	591	1465	591	1465	591	455
145°	700	1230	700	1230	700	439
155°	820	1055	820	1055	820	376
165°	911	983	911	983	911	256
175°	959	947	959	947	959	91
180°	959	959	959	959	959	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1
2.5°	1586.3	1640.4	1708.5	1755.3	1775.4	1755.3	1697.0	1640.0	1568.3	1546.9	1496.2
5°	1577.9	1744.6	1946.3	1970.6	1981.7	1970.6	1928.6	1734.7	1553.8	1476.7	1392.9
7.5°	1558.6	1850.2	1944.0	1889.7	1890.0	1900.0	1946.9	1841.2	1533.5	1412.4	1309.6
10°	1539.3	1908.9	1896.4	1817.9	1832.1	1825.8	1910.9	1897.4	1516.8	1376.8	1259.4
12.5°	1513.6	1927.2	1833.4	1807.6	1823.1	1814.3	1842.7	1917.2	1502.6	1351.4	1201.5
15°	1468.5	1901.1	1780.6	1769.3	1769.3	1777.2	1788.6	1909.0	1473.4	1305.1	1130.8
17.5°	1422.2	1848.8	1743.9	1688.1	1682.2	1692.5	1757.1	1862.2	1431.9	1253.8	1062.2
20°	1384.9	1812.7	1706.6	1641.3	1668.0	1644.4	1721.1	1822.5	1401.0	1221.7	1019.8
22.5°	1351.5	1767.9	1659.0	1631.2	1666.7	1631.8	1672.2	1777.6	1365.0	1185.7	987.6
25°	1294.8	1692.7	1587.6	1613.6	1626.2	1613.6	1594.0	1699.3	1309.3	1139.5	953.8
27.5°	1238.5	1613.5	1534.2	1551.6	1513.3	1542.8	1542.9	1613.8	1252.0	1085.6	943.5
30°	1193.5	1558.4	1507.2	1481.7	1421.9	1469.1	1518.4	1558.7	1209.6	1050.7	941.0
32.5°	1134.3	1508.0	1480.1	1392.1	1353.7	1385.8	1492.7	1506.9	1144.0	1019.1	938.4
35°	1034.3	1436.9	1431.6	1285.9	1246.6	1276.5	1442.8	1433.2	1008.5	969.2	918.4
37.5°	900.1	1373.5	1338.6	1178.6	1116.0	1170.7	1349.2	1366.7	848.3	923.5	871.8
40°	788.2	1330.8	1269.1	1098.8	1037.5	1090.9	1277.1	1327.0	760.8	891.4	820.3
42.5°	725.1	1292.9	1195.7	1014.4	634.7	1001.5	1203.8	1288.1	706.8	849.9	775.3
45°	661.1	1224.1	1088.9	561.5	355.5	534.8	1090.6	1207.0	667.5	787.1	706.1
47.5°	633.1	1139.5	977.3	338.2	300.1	328.5	976.4	1121.0	633.4	724.0	640.2
50°	611.2	1086.2	897.5	298.0	246.1	287.0	899.1	1068.6	600.0	681.7	595.1
52.5°	575.2	1022.5	783.0	246.9	212.6	241.0	764.0	1002.4	565.2	635.7	538.5
55°	514.7	900.0	326.5	194.1	170.5	186.2	310.4	869.8	497.0	563.1	472.9
57.5°	450.7	766.2	229.0	151.1	132.2	149.5	227.4	735.5	442.3	476.9	412.4
60°	413.4	676.0	186.6	126.8	114.2	125.2	185.0	649.2	410.2	419.6	357.1
62.5°	376.1	584.6	154.4	111.5	107.8	110.0	154.1	555.2	370.3	370.9	251.6
65°	321.7	442.8	114.2	101.3	99.7	99.7	111.0	426.9	315.3	305.8	144.8
67.5°	266.4	318.0	91.7	93.3	91.7	91.7	90.1	309.0	259.9	243.9	109.4
70°	231.6	244.2	85.2	86.8	85.2	85.2	83.6	237.8	225.2	189.0	102.9
72.5°	198.2	166.7	78.8	79.1	78.8	78.8	77.2	156.5	191.7	132.9	93.9
75°	149.6	83.5	67.6	67.6	67.6	67.6	65.9	80.2	143.2	86.5	80.4
77.5°	103.9	55.2	56.0	55.7	55.7	54.4	54.4	54.7	97.8	59.7	65.0
80°	75.6	45.7	48.3	46.6	46.6	46.6	46.6	44.0	70.8	50.3	54.7
82.5°	53.7	36.4	39.2	37.6	37.6	37.6	37.6	36.0	48.9	41.0	44.4
85°	25.7	24.2	25.7	22.5	20.9	22.5	24.1	24.1	22.5	27.2	29.0
87.5°	7.7	12.7	12.7	11.3	11.3	11.3	11.4	11.4	6.4	13.9	14.0
90°	0.0	5.9	12.1	18.1	18.1	18.1	12.1	5.9	0.0	5.9	12.1
92.5°	14.5	20.4	26.5	37.5	42.2	37.5	26.5	20.4	14.5	20.4	26.5
95°	48.2	89.5	48.2	54.5	66.3	54.5	48.2	89.5	48.2	89.5	48.2
97.5°	85.6	171.7	354.6	104.6	90.5	104.6	354.6	171.7	85.6	171.7	354.6
100°	114.6	214.8	711.6	209.5	138.7	209.5	711.6	214.8	114.6	214.8	711.6
102.5°	143.5	248.5	962.4	552.7	302.7	552.7	962.4	248.5	143.5	248.5	962.4
105°	186.9	287.2	1091.5	1394.3	922.6	1394.3	1091.5	287.2	186.9	287.2	1091.5
107.5°	230.4	305.8	1042.0	2029.3	1900.7	2029.3	1042.0	305.8	230.4	305.8	1042.0
110°	259.3	330.1	1013.1	2132.3	2291.5	2132.3	1013.1	330.1	259.3	330.1	1013.1



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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°	288.2	359.0	984.1	2072.1	2339.7	2072.1	984.1	359.0	288.2	359.0	984.1
115°	331.7	402.4	940.7	1955.3	2285.5	1955.3	940.7	402.4	331.7	402.4	940.7
117.5°	376.3	445.9	929.9	1828.9	2168.5	1828.9	929.9	445.9	376.3	445.9	929.9
120°	410.1	474.9	910.6	1732.7	2086.5	1732.7	910.6	474.9	410.1	474.9	910.6
122.5°	434.2	503.8	886.4	1650.0	1975.5	1650.0	886.4	503.8	434.2	503.8	886.4
125°	476.4	541.2	886.4	1550.2	1833.2	1550.2	886.4	541.2	476.4	541.2	886.4
127.5°	511.4	577.4	887.7	1434.3	1713.8	1434.3	887.7	577.4	511.4	577.4	887.7
130°	530.7	601.4	892.5	1356.8	1622.1	1356.8	892.5	601.4	530.7	601.4	892.5
132.5°	554.8	625.5	892.5	1322.0	1540.1	1322.0	892.5	625.5	554.8	625.5	892.5
135°	591.0	655.8	892.5	1276.7	1465.4	1276.7	892.5	655.8	591.0	655.8	892.5
137.5°	621.1	690.7	892.5	1226.6	1388.2	1226.6	892.5	690.7	621.1	690.7	892.5
140°	645.2	710.1	892.5	1197.3	1344.7	1197.3	892.5	710.1	645.2	710.1	892.5
142.5°	669.4	729.5	897.3	1163.4	1301.3	1163.4	897.3	729.5	669.4	729.5	897.3
145°	699.5	758.5	898.5	1112.2	1230.2	1112.2	898.5	758.5	699.5	758.5	898.5
147.5°	735.7	787.6	905.7	1075.5	1166.3	1075.5	905.7	787.6	735.7	787.6	905.7
150°	759.8	807.0	910.6	1051.0	1127.7	1051.0	910.6	807.0	759.8	807.0	910.6
152.5°	783.9	826.4	910.6	1031.4	1093.9	1031.4	910.6	826.4	783.9	826.4	910.6
155°	820.1	849.6	916.6	1008.1	1055.3	1008.1	916.6	849.6	820.1	849.6	916.6
157.5°	849.1	877.4	923.8	993.4	1027.6	993.4	923.8	877.4	849.1	877.4	923.8
160°	868.4	891.9	928.7	983.6	1013.1	983.6	928.7	891.9	868.4	891.9	928.7
162.5°	882.8	906.4	933.5	978.6	998.6	978.6	933.5	906.4	882.8	906.4	933.5
165°	910.6	922.4	940.7	965.2	982.9	965.2	940.7	922.4	910.6	922.4	940.7
167.5°	926.2	936.9	946.8	959.1	969.7	959.1	946.8	936.9	926.2	936.9	946.8
170°	940.7	946.6	946.8	958.9	964.8	958.9	946.8	946.6	940.7	946.6	946.8
172.5°	945.5	956.2	951.6	954.1	960.0	954.1	951.6	956.2	945.5	956.2	951.6
175°	958.8	964.7	958.8	952.6	946.8	952.6	958.8	964.7	958.8	964.7	958.8
177.5°	958.8	963.5	958.8	958.7	954.0	958.7	958.8	963.5	958.8	963.5	958.8
180°	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8	958.8

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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1581.1	1581.1	1581.1	1581.1	1581.1	1581.1
2.5°	1478.2	1476.9	1479.4	1501.4	1546.0	1586.3
5°	1346.4	1351.1	1355.8	1392.9	1471.0	1577.9
7.5°	1245.1	1238.2	1248.9	1309.3	1405.1	1558.6
10°	1175.4	1159.7	1175.4	1257.8	1369.5	1539.3
12.5°	1109.7	1090.2	1114.8	1205.1	1340.0	1513.6
15°	1025.0	1043.9	1032.9	1134.0	1295.5	1468.5
17.5°	1045.1	1140.1	1065.2	1072.2	1251.4	1422.2
20°	1092.8	1190.3	1124.2	1031.0	1222.9	1384.9
22.5°	1136.0	1209.6	1149.8	996.3	1194.5	1351.5
25°	1169.2	1232.1	1166.0	965.1	1153.3	1294.8
27.5°	1170.9	1179.7	1171.5	962.5	1102.3	1238.5
30°	1149.2	1111.5	1146.1	965.1	1066.1	1193.5
32.5°	1087.3	1044.6	1074.1	959.9	1029.6	1134.3
35°	999.2	942.6	983.5	932.9	972.9	1034.3
37.5°	906.2	834.5	891.1	879.5	924.6	900.1
40°	843.2	717.4	830.6	826.8	898.3	788.2
42.5°	762.6	655.6	751.2	784.3	869.2	725.1
45°	615.8	603.2	609.5	712.6	807.4	661.1
47.5°	563.1	554.6	560.0	647.3	737.5	633.1
50°	532.2	521.1	529.0	604.8	693.0	611.2
52.5°	489.3	459.4	486.1	546.9	646.9	575.2
55°	367.9	278.3	366.3	480.9	577.6	514.7
57.5°	215.9	160.8	211.2	418.5	489.4	450.7
60°	146.1	135.1	147.7	368.3	430.7	413.4
62.5°	133.4	130.0	133.7	256.4	378.3	376.1
65°	122.2	120.6	122.2	148.0	312.3	321.7
67.5°	110.6	109.1	111.9	113.6	246.5	266.4
70°	102.9	101.3	102.9	104.6	189.2	231.6
72.5°	93.9	92.3	93.9	95.5	133.1	198.2
75°	80.4	78.8	80.4	82.0	88.3	149.6
77.5°	65.0	65.0	66.6	66.6	61.8	103.9
80°	54.7	54.7	56.3	56.3	53.6	75.6
82.5°	44.4	43.1	45.9	47.3	44.3	53.7
85°	27.3	25.7	28.9	30.6	28.9	25.7
87.5°	13.9	12.6	15.1	16.6	15.2	7.7
90°	18.1	18.1	18.1	12.1	5.9	0.0
92.5°	37.5	42.2	37.5	26.5	20.4	14.5
95°	54.5	66.3	54.5	48.2	89.5	48.2
97.5°	104.6	90.5	104.6	354.6	171.7	85.6
100°	209.5	138.7	209.5	711.6	214.8	114.6
102.5°	552.7	302.7	552.7	962.4	248.5	143.5
105°	1394.3	922.6	1394.3	1091.5	287.2	186.9
107.5°	2029.3	1900.7	2029.3	1042.0	305.8	230.4
110°	2132.3	2291.5	2132.3	1013.1	330.1	259.3



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CATALOG NUMBER: VLT-FA-125U-100D-840-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	2072.1	2339.7	2072.1	984.1	359.0	288.2
115°	1955.3	2285.5	1955.3	940.7	402.4	331.7
117.5°	1828.9	2168.5	1828.9	929.9	445.9	376.3
120°	1732.7	2086.5	1732.7	910.6	474.9	410.1
122.5°	1650.0	1975.5	1650.0	886.4	503.8	434.2
125°	1550.2	1833.2	1550.2	886.4	541.2	476.4
127.5°	1434.3	1713.8	1434.3	887.7	577.4	511.4
130°	1356.8	1622.1	1356.8	892.5	601.4	530.7
132.5°	1322.0	1540.1	1322.0	892.5	625.5	554.8
135°	1276.7	1465.4	1276.7	892.5	655.8	591.0
137.5°	1226.6	1388.2	1226.6	892.5	690.7	621.1
140°	1197.3	1344.7	1197.3	892.5	710.1	645.2
142.5°	1163.4	1301.3	1163.4	897.3	729.5	669.4
145°	1112.2	1230.2	1112.2	898.5	758.5	699.5
147.5°	1075.5	1166.3	1075.5	905.7	787.6	735.7
150°	1051.0	1127.7	1051.0	910.6	807.0	759.8
152.5°	1031.4	1093.9	1031.4	910.6	826.4	783.9
155°	1008.1	1055.3	1008.1	916.6	849.6	820.1
157.5°	993.4	1027.6	993.4	923.8	877.4	849.1
160°	983.6	1013.1	983.6	928.7	891.9	868.4
162.5°	978.6	998.6	978.6	933.5	906.4	882.8
165°	965.2	982.9	965.2	940.7	922.4	910.6
167.5°	959.1	969.7	959.1	946.8	936.9	926.2
170°	958.9	964.8	958.9	946.8	946.6	940.7
172.5°	954.1	960.0	954.1	951.6	956.2	945.5
175°	952.6	946.8	952.6	958.8	964.7	958.8
177.5°	958.7	954.0	958.7	958.8	963.5	958.8
180°	958.8	958.8	958.8	958.8	958.8	958.8

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