

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: P621614

Luminaire Tested: VLT-FA-050U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621614
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-050U-100D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

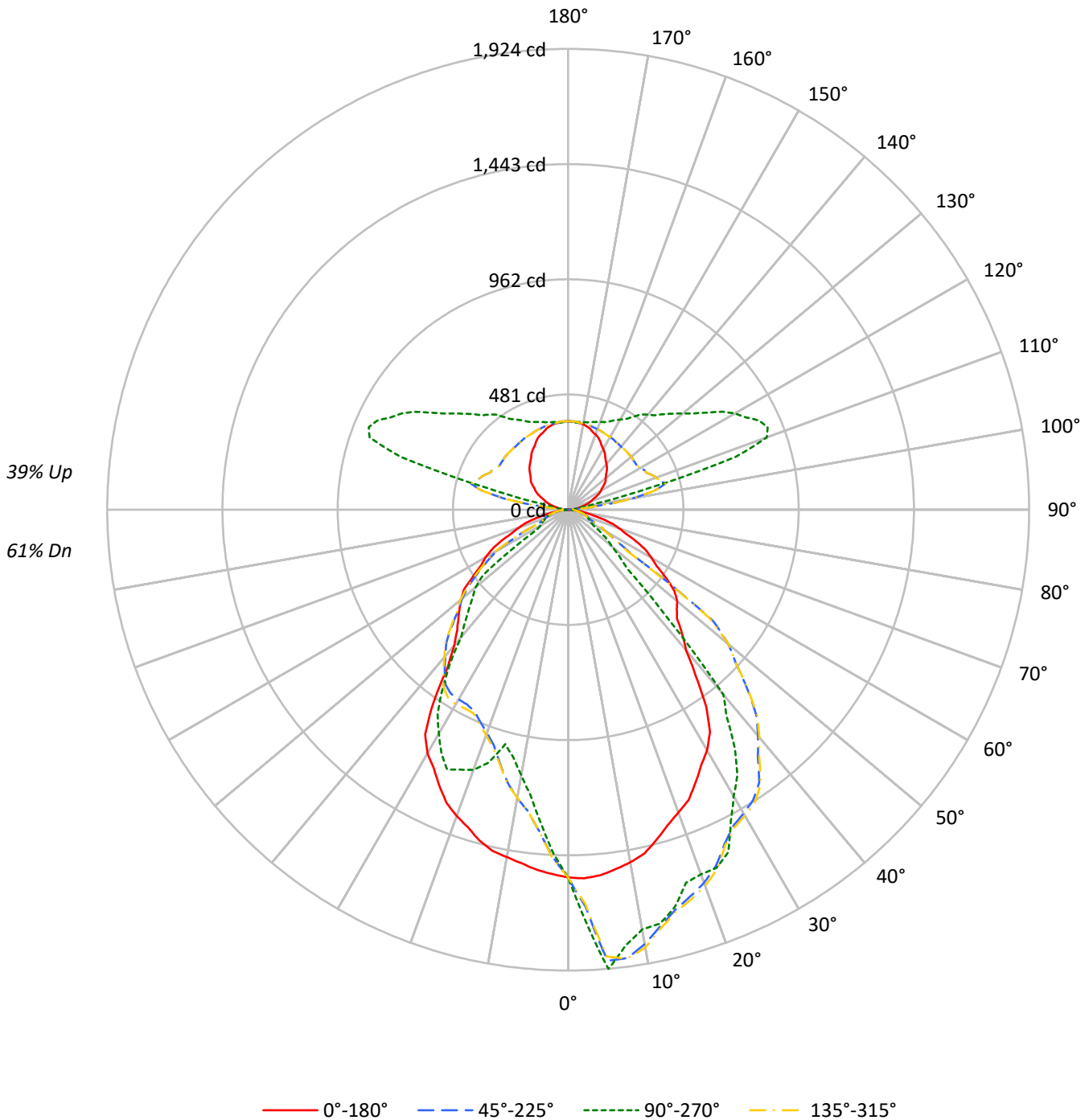
Lumens per Lamp: N/A
Luminaire Lumens: 5150.1 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 43.8
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	61	61	61	61	61	61	61														
1	101	97	94	91	95	91	88	86	80	78	76	70	68	67	61	59	58	54	54	54	54	54	54	54														
2	93	86	81	76	87	81	76	72	72	68	65	63	60	57	55	53	51	47	47	47	47	47	47	47														
3	86	77	70	64	80	72	66	61	64	59	55	56	53	50	49	47	44	41	41	41	41	41	41	41														
4	79	69	61	55	74	65	58	53	58	52	48	51	47	44	45	42	39	36	36	36	36	36	36	36														
5	73	62	54	48	68	58	51	46	52	46	42	46	42	38	41	37	35	32	32	32	32	32	32	32														
6	67	56	48	42	63	53	46	41	47	42	37	42	38	34	37	34	31	28	28	28	28	28	28	28														
7	63	51	43	37	59	48	41	36	43	37	33	38	34	30	34	31	28	25	25	25	25	25	25	25														
8	58	46	39	33	55	44	37	32	40	34	30	35	31	27	32	28	25	23	23	23	23	23	23	23														
9	54	42	35	30	51	40	34	29	36	31	27	33	28	25	29	26	23	21	21	21	21	21	21	21														
10	51	39	32	27	48	37	31	26	34	28	25	30	26	23	27	24	21	19	19	19	19	19	19	19														

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	2.9
10°-20°	405.7	7.9
20°-30°	607.1	11.8
30°-40°	690.4	13.4
40°-50°	590.5	11.5
50°-60°	398.2	7.7
60°-70°	205.5	4.0
70°-80°	92.8	1.8
80°-90°	28.4	0.6
90°-100°	45.4	0.9
100°-110°	323.5	6.3
110°-120°	439.1	8.5
120°-130°	357.4	6.9
130°-140°	287.5	5.6
140°-150°	226.6	4.4
150°-160°	165.7	3.2
160°-170°	102.9	2.0
170°-180°	35.1	0.7
0°-30°	1160.9	22.5
0°-40°	1851.4	35.9
0°-60°	2840.1	55.1
0°-90°	3166.8	61.5
90°-120°	808.0	15.7
90°-150°	1679.5	32.6
90°-180°	1983.0	38.5
0°-180°	5150.1	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	7	0	7	0	2
95°	19	26	19	26	19	21
105°	72	355	72	355	72	76
115°	128	880	128	880	128	127
125°	183	706	183	706	183	163
135°	228	564	228	564	228	175
145°	269	474	269	474	269	169
155°	316	406	316	406	316	145
165°	351	378	351	378	351	98
175°	369	365	369	365	369	35
180°	369	369	369	369	369	



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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	11.6	10.9	8.9	8.9	8.9	9.7	10.4	6.2	12.8	12.2
90°	0.0	2.3	4.6	7.0	7.0	7.0	4.6	2.3	0.0	2.3	4.6
92.5°	5.6	7.8	10.2	14.4	16.3	14.4	10.2	7.8	5.6	7.8	10.2
95°	18.6	34.5	18.6	21.0	25.5	21.0	18.6	34.5	18.6	34.5	18.6
97.5°	33.0	66.1	136.5	40.3	34.8	40.3	136.5	66.1	33.0	66.1	136.5
100°	44.1	82.7	274.0	80.7	53.4	80.7	274.0	82.7	44.1	82.7	274.0
102.5°	55.3	95.7	370.6	212.8	116.6	212.8	370.6	95.7	55.3	95.7	370.6
105°	72.0	110.6	420.3	536.9	355.3	536.9	420.3	110.6	72.0	110.6	420.3
107.5°	88.7	117.8	401.2	781.4	731.9	781.4	401.2	117.8	88.7	117.8	401.2
110°	99.8	127.1	390.1	821.1	882.4	821.1	390.1	127.1	99.8	127.1	390.1



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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°	111.0	138.2	378.9	797.9	900.9	797.9	378.9	138.2	111.0	138.2	378.9
115°	127.7	155.0	362.2	752.9	880.0	752.9	362.2	155.0	127.7	155.0	362.2
117.5°	144.9	171.7	358.0	704.2	835.0	704.2	358.0	171.7	144.9	171.7	358.0
120°	157.9	182.9	350.6	667.2	803.4	667.2	350.6	182.9	157.9	182.9	350.6
122.5°	167.2	194.0	341.3	635.4	760.7	635.4	341.3	194.0	167.2	194.0	341.3
125°	183.4	208.4	341.3	596.9	705.9	596.9	341.3	208.4	183.4	208.4	341.3
127.5°	196.9	222.3	341.8	552.3	659.9	552.3	341.8	222.3	196.9	222.3	341.8
130°	204.3	231.6	343.7	522.4	624.6	522.4	343.7	231.6	204.3	231.6	343.7
132.5°	213.6	240.9	343.7	509.0	593.0	509.0	343.7	240.9	213.6	240.9	343.7
135°	227.6	252.5	343.7	491.6	564.2	491.6	343.7	252.5	227.6	252.5	343.7
137.5°	239.2	266.0	343.7	472.3	534.5	472.3	343.7	266.0	239.2	266.0	343.7
140°	248.5	273.4	343.7	461.0	517.8	461.0	343.7	273.4	248.5	273.4	343.7
142.5°	257.7	280.9	345.5	448.0	501.1	448.0	345.5	280.9	257.7	280.9	345.5
145°	269.4	292.1	346.0	428.3	473.7	428.3	346.0	292.1	269.4	292.1	346.0
147.5°	283.3	303.3	348.8	414.1	449.1	414.1	348.8	303.3	283.3	303.3	348.8
150°	292.6	310.7	350.6	404.7	434.2	404.7	350.6	310.7	292.6	310.7	350.6
152.5°	301.9	318.2	350.6	397.1	421.2	397.1	350.6	318.2	301.9	318.2	350.6
155°	315.8	327.1	352.9	388.2	406.3	388.2	352.9	327.1	315.8	327.1	352.9
157.5°	326.9	337.8	355.7	382.5	395.7	382.5	355.7	337.8	326.9	337.8	355.7
160°	334.4	343.4	357.6	378.7	390.1	378.7	357.6	343.4	334.4	343.4	357.6
162.5°	339.9	349.0	359.4	376.8	384.5	376.8	359.4	349.0	339.9	349.0	359.4
165°	350.6	355.2	362.2	371.7	378.5	371.7	362.2	355.2	350.6	355.2	362.2
167.5°	356.7	360.7	364.6	369.3	373.4	369.3	364.6	360.7	356.7	360.7	364.6
170°	362.2	364.5	364.6	369.2	371.5	369.2	364.6	364.5	362.2	364.5	364.6
172.5°	364.1	368.2	366.4	367.4	369.7	367.4	366.4	368.2	364.1	368.2	366.4
175°	369.2	371.5	369.2	366.8	364.6	366.8	369.2	371.5	369.2	371.5	369.2
177.5°	369.2	371.0	369.2	369.2	367.3	369.2	369.2	371.0	369.2	371.0	369.2
180°	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2	369.2

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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°	11.4	10.1	12.6	14.7	14.1	7.5
90°	7.0	7.0	7.0	4.6	2.3	0.0
92.5°	14.4	16.3	14.4	10.2	7.8	5.6
95°	21.0	25.5	21.0	18.6	34.5	18.6
97.5°	40.3	34.8	40.3	136.5	66.1	33.0
100°	80.7	53.4	80.7	274.0	82.7	44.1
102.5°	212.8	116.6	212.8	370.6	95.7	55.3
105°	536.9	355.3	536.9	420.3	110.6	72.0
107.5°	781.4	731.9	781.4	401.2	117.8	88.7
110°	821.1	882.4	821.1	390.1	127.1	99.8



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CATALOG NUMBER: VLT-FA-050U-100D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	797.9	900.9	797.9	378.9	138.2	111.0
115°	752.9	880.0	752.9	362.2	155.0	127.7
117.5°	704.2	835.0	704.2	358.0	171.7	144.9
120°	667.2	803.4	667.2	350.6	182.9	157.9
122.5°	635.4	760.7	635.4	341.3	194.0	167.2
125°	596.9	705.9	596.9	341.3	208.4	183.4
127.5°	552.3	659.9	552.3	341.8	222.3	196.9
130°	522.4	624.6	522.4	343.7	231.6	204.3
132.5°	509.0	593.0	509.0	343.7	240.9	213.6
135°	491.6	564.2	491.6	343.7	252.5	227.6
137.5°	472.3	534.5	472.3	343.7	266.0	239.2
140°	461.0	517.8	461.0	343.7	273.4	248.5
142.5°	448.0	501.1	448.0	345.5	280.9	257.7
145°	428.3	473.7	428.3	346.0	292.1	269.4
147.5°	414.1	449.1	414.1	348.8	303.3	283.3
150°	404.7	434.2	404.7	350.6	310.7	292.6
152.5°	397.1	421.2	397.1	350.6	318.2	301.9
155°	388.2	406.3	388.2	352.9	327.1	315.8
157.5°	382.5	395.7	382.5	355.7	337.8	326.9
160°	378.7	390.1	378.7	357.6	343.4	334.4
162.5°	376.8	384.5	376.8	359.4	349.0	339.9
165°	371.7	378.5	371.7	362.2	355.2	350.6
167.5°	369.3	373.4	369.3	364.6	360.7	356.7
170°	369.2	371.5	369.2	364.6	364.5	362.2
172.5°	367.4	369.7	367.4	366.4	368.2	364.1
175°	366.8	364.6	366.8	369.2	371.5	369.2
177.5°	369.2	367.3	369.2	369.2	371.0	369.2
180°	369.2	369.2	369.2	369.2	369.2	369.2

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