

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: P621608

Luminaire Tested: VLT-FA-050U-075D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621608  
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-075D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - ASYMMETRIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

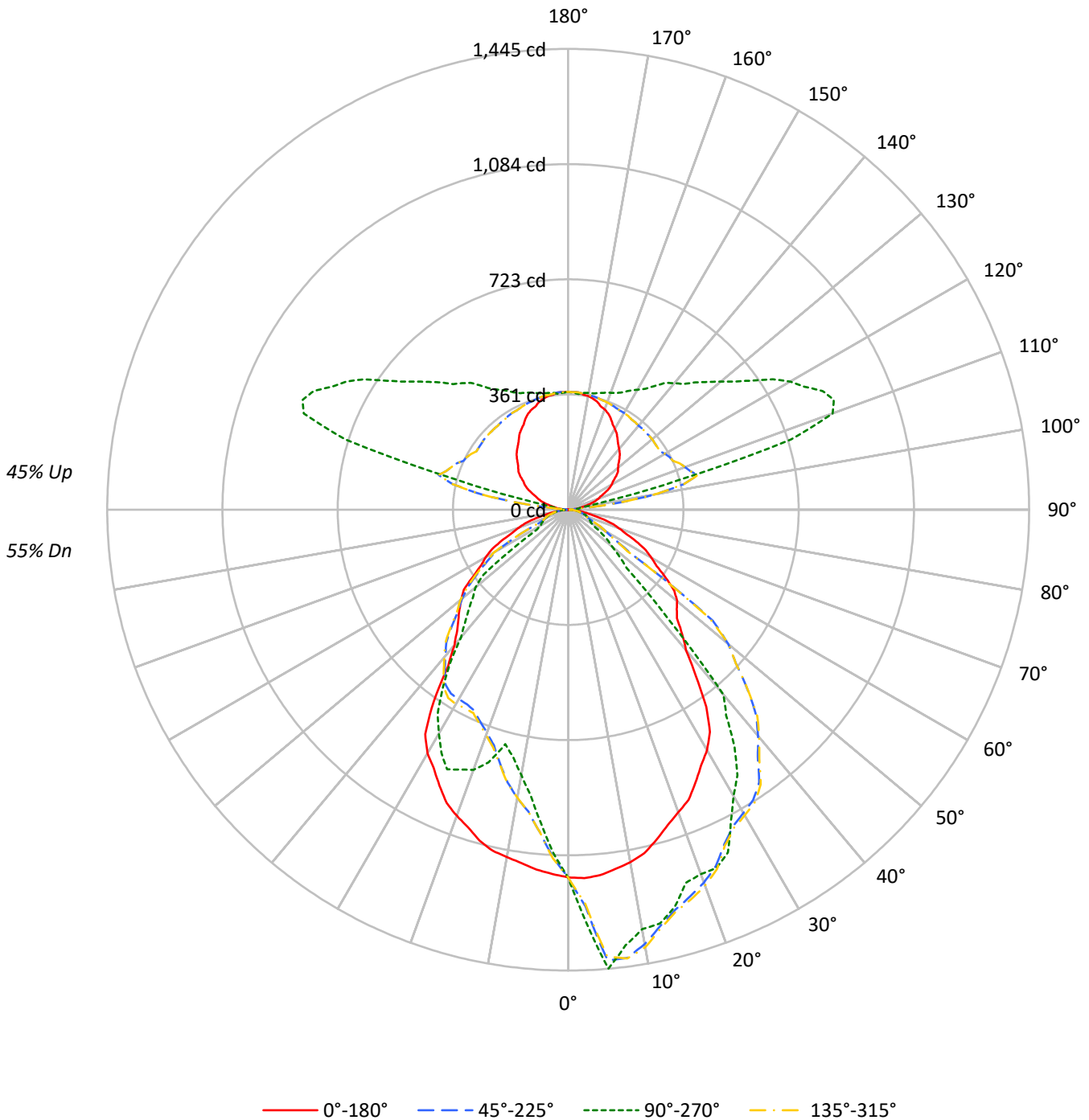
Lumens per Lamp: N/A  
Luminaire Lumens: 4360.9 lumens  
Efficiency: N/A  
Efficacy: 120.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.2  
Input Voltage (V): 120  
Input Current (Ain): 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: P621608  
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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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55				55
1	100	96	92	89	92	89	86	83	77	74	72	65	64	62	55	54	53				48	
2	92	85	79	74	85	79	74	70	68	65	61	58	56	53	49	47	46				41	
3	84	75	68	63	78	70	64	59	61	56	53	52	49	46	44	42	40				36	
4	77	67	60	54	72	63	56	51	55	50	46	47	43	40	40	37	35				32	
5	71	60	53	47	66	57	50	44	49	44	40	43	39	36	37	34	31				28	
6	66	54	47	41	61	51	44	39	45	39	35	39	35	31	34	30	28				25	
7	61	49	42	36	57	46	40	35	41	35	31	36	31	28	31	28	25				23	
8	57	45	37	32	53	42	36	31	37	32	28	33	28	25	28	25	23				20	
9	53	41	34	29	49	39	32	28	34	29	25	30	26	23	26	23	21				18	
10	50	38	31	26	46	36	29	25	32	27	23	28	24	21	24	21	19				17	

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

	0°	90°	180°	270°
0°	8272	8272	8272	8272
5°	8286	10406	8159	7095
10°	8177	9732	8058	6160
15°	7954	9583	7980	5654
20°	7710	9286	7799	6626
25°	7474	9387	7558	7112
30°	7210	8589	7307	6714
35°	6605	7961	6441	6019
40°	5383	7085	5195	4899
45°	4890	2629	4938	4462
50°	4975	2003	4883	4241
55°	4694	1555	4533	2538
60°	4326	1196	4291	1414
65°	3982	1234	3902	1493
70°	3544	1303	3445	1550
75°	3025	1364	2895	1594
80°	2277	1405	2132	1649
85°	1548	1251	1350	1548

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 9056 cd/sqm



TEST NUMBER: P621608

CATALOG NUMBER: VLT-FA-050U-075D-835-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.2	2.6
10°-20°	304.6	7.0
20°-30°	455.8	10.5
30°-40°	518.3	11.9
40°-50°	443.3	10.2
50°-60°	298.9	6.9
60°-70°	154.3	3.5
70°-80°	69.7	1.6
80°-90°	21.6	0.5
90°-100°	45.4	1.0
100°-110°	323.5	7.4
110°-120°	439.1	10.1
120°-130°	357.4	8.2
130°-140°	287.5	6.6
140°-150°	226.6	5.2
150°-160°	165.7	3.8
160°-170°	102.9	2.4
170°-180°	35.1	0.8
0°-30°	871.6	20.0
0°-40°	1389.9	31.9
0°-60°	2132.2	48.9
0°-90°	2377.7	54.5
90°-120°	808.0	18.5
90°-150°	1679.5	38.5
90°-180°	1983.0	45.5
0°-180°	4360.9	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	1153	1153	1153	1153	1153	
5°	1150	1445	1133	985	1150	109
15°	1071	1290	1074	761	1071	301
25°	944	1186	954	898	944	434
35°	754	909	735	687	754	461
45°	482	259	487	440	482	382
55°	375	124	362	203	375	334
65°	234	73	230	88	234	232
75°	109	49	104	58	109	116
85°	19	15	16	19	19	24
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	



TEST NUMBER: P621608

CATALOG NUMBER: VLT-FA-050U-075D-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°	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7
2.5°	1156.4	1195.9	1245.5	1279.6	1294.3	1279.6	1237.1	1195.6	1143.3	1127.7	1090.8
5°	1150.3	1271.9	1418.8	1436.6	1444.6	1436.6	1405.9	1264.6	1132.7	1076.6	1015.5
7.5°	1136.3	1348.8	1417.2	1377.6	1377.8	1385.1	1419.3	1342.2	1118.0	1029.7	954.7
10°	1122.2	1391.6	1382.5	1325.3	1335.6	1331.0	1393.1	1383.2	1105.8	1003.7	918.1
12.5°	1103.4	1405.0	1336.5	1317.8	1329.0	1322.6	1343.3	1397.7	1095.4	985.1	875.9
15°	1070.6	1385.9	1298.1	1289.9	1289.9	1295.6	1303.9	1391.7	1074.1	951.4	824.3
17.5°	1036.8	1347.8	1271.3	1230.7	1226.3	1233.9	1281.0	1357.5	1043.9	914.1	774.4
20°	1009.6	1321.5	1244.1	1196.5	1216.0	1198.8	1254.7	1328.6	1021.3	890.6	743.4
22.5°	985.2	1288.8	1209.4	1189.1	1215.1	1189.6	1219.0	1295.9	995.1	864.4	720.0
25°	943.9	1234.0	1157.4	1176.3	1185.5	1176.3	1162.0	1238.8	954.5	830.7	695.4
27.5°	902.9	1176.2	1118.4	1131.2	1103.2	1124.7	1124.8	1176.5	912.8	791.4	687.8
30°	870.1	1136.1	1098.7	1080.1	1036.6	1071.0	1106.9	1136.3	881.8	766.0	686.0
32.5°	826.9	1099.3	1079.0	1014.8	986.9	1010.3	1088.2	1098.6	834.0	742.9	684.1
35°	754.0	1047.5	1043.6	937.4	908.8	930.6	1051.8	1044.8	735.2	706.6	669.6
37.5°	656.2	1001.3	975.8	859.2	813.6	853.5	983.6	996.3	618.4	673.2	635.6
40°	574.6	970.1	925.2	801.0	756.3	795.3	931.0	967.4	554.6	649.8	598.0
42.5°	528.6	942.5	871.7	739.5	462.7	730.1	877.6	939.0	515.2	619.6	565.2
45°	481.9	892.4	793.9	409.3	259.1	389.9	795.0	879.9	486.6	573.8	514.8
47.5°	461.5	830.7	712.5	246.6	218.8	239.4	711.8	817.2	461.8	527.8	466.7
50°	445.6	791.8	654.3	217.2	179.4	209.2	655.5	779.1	437.4	497.0	433.9
52.5°	419.3	745.4	570.8	180.0	155.0	175.7	557.0	730.8	412.1	463.4	392.6
55°	375.2	656.1	238.0	141.5	124.3	135.8	226.3	634.1	362.3	410.5	344.7
57.5°	328.6	558.6	167.0	110.1	96.4	109.0	165.8	536.2	322.5	347.7	300.7
60°	301.4	492.8	136.0	92.4	83.3	91.3	134.8	473.3	299.0	305.9	260.3
62.5°	274.2	426.2	112.6	81.3	78.6	80.2	112.3	404.8	269.9	270.4	183.4
65°	234.5	322.8	83.3	73.8	72.7	72.7	80.9	311.2	229.8	223.0	105.5
67.5°	194.2	231.8	66.8	68.0	66.8	66.8	65.7	225.3	189.5	177.8	79.7
70°	168.9	178.0	62.1	63.3	62.1	62.1	61.0	173.3	164.2	137.8	75.0
72.5°	144.5	121.5	57.5	57.7	57.5	57.5	56.3	114.1	139.8	96.9	68.5
75°	109.1	60.9	49.2	49.2	49.2	49.2	48.1	58.5	104.4	63.1	58.6
77.5°	75.8	40.2	40.8	40.6	40.6	39.7	39.6	39.9	71.3	43.5	47.4
80°	55.1	33.3	35.2	34.0	34.0	34.0	34.0	32.1	51.6	36.7	39.9
82.5°	39.2	26.6	28.6	27.4	27.4	27.4	27.4	26.2	35.6	29.9	32.4
85°	18.8	17.6	18.8	16.4	15.2	16.4	17.6	17.6	16.4	19.9	21.1
87.5°	5.6	8.8	8.4	7.0	7.0	7.0	7.5	7.9	4.7	9.7	9.4
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



TEST NUMBER: P621608

CATALOG NUMBER: VLT-FA-050U-075D-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°	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



TEST NUMBER: P621608

CATALOG NUMBER: VLT-FA-050U-075D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1152.7	1152.7	1152.7	1152.7	1152.7	1152.7
2.5°	1077.6	1076.7	1078.5	1094.5	1127.1	1156.4
5°	981.5	985.0	988.4	1015.5	1072.4	1150.3
7.5°	907.7	902.7	910.5	954.5	1024.3	1136.3
10°	856.9	845.4	856.9	917.0	998.4	1122.2
12.5°	809.0	794.8	812.7	878.5	976.8	1103.4
15°	747.3	761.0	753.0	826.7	944.5	1070.6
17.5°	761.9	831.1	776.6	781.7	912.3	1036.8
20°	796.6	867.7	819.6	751.6	891.5	1009.6
22.5°	828.1	881.8	838.2	726.3	870.8	985.2
25°	852.4	898.2	850.1	703.6	840.8	943.9
27.5°	853.6	860.0	854.0	701.7	803.6	902.9
30°	837.8	810.3	835.5	703.6	777.2	870.1
32.5°	792.7	761.5	783.0	699.8	750.6	826.9
35°	728.4	687.1	717.0	680.1	709.3	754.0
37.5°	660.6	608.3	649.6	641.2	674.1	656.2
40°	614.7	523.0	605.5	602.7	654.8	574.6
42.5°	555.9	478.0	547.7	571.8	633.6	528.6
45°	448.9	439.7	444.3	519.5	588.6	481.9
47.5°	410.5	404.3	408.2	471.9	537.7	461.5
50°	387.9	379.9	385.7	440.9	505.2	445.6
52.5°	356.7	334.9	354.4	398.7	471.6	419.3
55°	268.2	202.9	267.1	350.6	421.1	375.2
57.5°	157.4	117.3	153.9	305.1	356.8	328.6
60°	106.5	98.5	107.7	268.5	314.0	301.4
62.5°	97.3	94.7	97.5	186.9	275.8	274.2
65°	89.1	87.9	89.1	107.9	227.6	234.5
67.5°	80.6	79.5	81.6	82.8	179.7	194.2
70°	75.0	73.9	75.0	76.2	137.9	168.9
72.5°	68.5	67.3	68.5	69.7	97.0	144.5
75°	58.6	57.5	58.6	59.8	64.3	109.1
77.5°	47.4	47.4	48.5	48.5	45.0	75.8
80°	39.9	39.9	41.0	41.0	39.1	55.1
82.5°	32.3	31.4	33.5	34.5	32.3	39.2
85°	19.9	18.8	21.1	22.3	21.1	18.8
87.5°	8.9	8.0	9.8	11.2	10.7	5.6
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-075D-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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