

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: P621680

Luminaire Tested: VLT-FA-100U-075D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621680
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-075D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

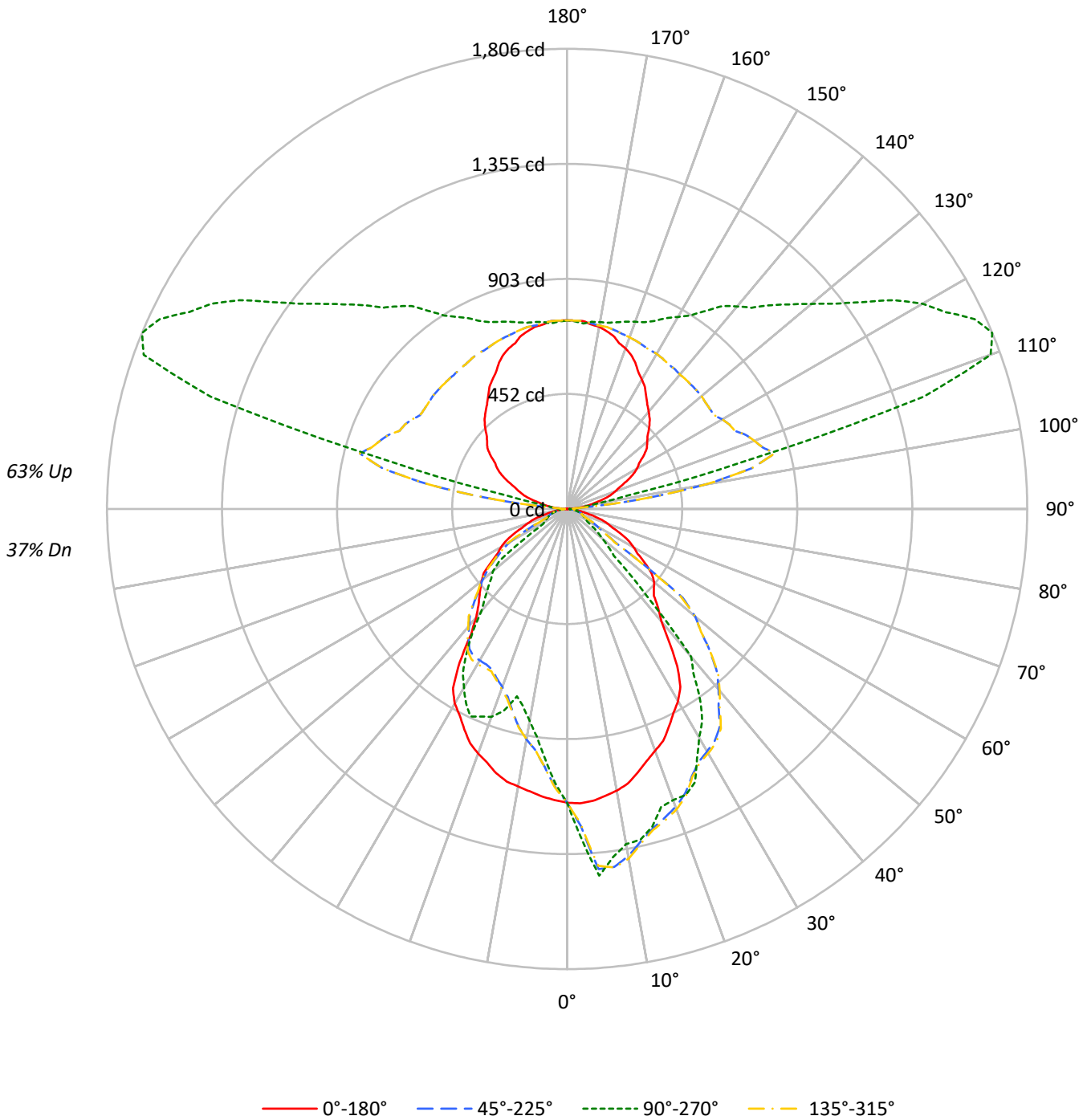
Lumens per Lamp: N/A
Luminaire Lumens: 6353.6 lumens
Efficiency: N/A
Efficacy: 125.6 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 50.6
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	94	94	94	94	76	76	76	60	60	60	45	45	45	37				
1	96	92	88	85	87	83	80	78	68	66	64	54	52	51	40	40	39	33				
2	88	81	75	70	79	74	69	65	60	57	54	48	45	44	36	35	34	28				
3	80	71	65	59	73	65	59	55	54	49	46	43	40	37	33	31	29	25				
4	74	64	56	50	67	58	52	47	48	43	40	38	35	33	30	27	26	22				
5	68	57	49	44	61	52	45	40	43	38	34	35	31	29	27	25	23	19				
6	62	51	43	38	57	47	40	35	39	34	30	31	28	25	25	22	20	17				
7	58	46	39	33	52	42	36	31	35	30	27	29	25	22	23	20	18	15				
8	54	42	35	30	49	39	32	28	32	27	24	26	23	20	21	18	16	14				
9	50	38	31	26	45	35	29	25	30	25	21	24	21	18	19	17	15	13				
10	47	35	28	24	42	32	26	22	27	23	19	22	19	16	18	15	14	12				

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	1.8
10°-20°	304.6	4.8
20°-30°	455.8	7.2
30°-40°	518.3	8.2
40°-50°	443.3	7.0
50°-60°	298.9	4.7
60°-70°	154.3	2.4
70°-80°	69.7	1.1
80°-90°	22.4	0.4
90°-100°	91.0	1.4
100°-110°	648.3	10.2
110°-120°	880.2	13.9
120°-130°	716.4	11.3
130°-140°	576.2	9.1
140°-150°	454.2	7.1
150°-160°	332.1	5.2
160°-170°	206.3	3.2
170°-180°	70.3	1.1
0°-30°	871.6	13.7
0°-40°	1389.9	21.9
0°-60°	2132.2	33.6
0°-90°	2378.5	37.4
90°-120°	1619.5	25.5
90°-150°	3366.3	53.0
90°-180°	3975.0	62.6
0°-180°	6353.6	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	14	0	14	0	2
95°	37	51	37	51	37	42
105°	144	712	144	712	144	152
115°	256	1764	256	1764	256	254
125°	368	1415	368	1415	368	327
135°	456	1131	456	1131	456	351
145°	540	949	540	949	540	339
155°	633	814	633	814	633	291
165°	703	759	703	759	703	197
175°	740	731	740	731	740	70
180°	740	740	740	740	740	



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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	9.3	9.4	8.4	8.4	8.4	8.4	8.4	4.7	10.2	10.3
90°	0.0	4.6	9.3	14.0	14.0	14.0	9.3	4.6	0.0	4.6	9.3
92.5°	11.2	15.7	20.5	28.9	32.6	28.9	20.5	15.7	11.2	15.7	20.5
95°	37.2	69.1	37.2	42.1	51.2	42.1	37.2	69.1	37.2	69.1	37.2
97.5°	66.1	132.5	273.7	80.7	69.8	80.7	273.7	132.5	66.1	132.5	273.7
100°	88.4	165.8	549.2	161.6	107.0	161.6	549.2	165.8	88.4	165.8	549.2
102.5°	110.8	191.8	742.8	426.6	233.6	426.6	742.8	191.8	110.8	191.8	742.8
105°	144.3	221.6	842.4	1076.1	712.1	1076.1	842.4	221.6	144.3	221.6	842.4
107.5°	177.8	236.0	804.2	1566.2	1466.9	1566.2	804.2	236.0	177.8	236.0	804.2
110°	200.1	254.7	781.9	1645.7	1768.5	1645.7	781.9	254.7	200.1	254.7	781.9



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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°	222.5	277.1	759.5	1599.2	1805.8	1599.2	759.5	277.1	222.5	277.1	759.5
115°	256.0	310.6	726.0	1509.0	1763.9	1509.0	726.0	310.6	256.0	310.6	726.0
117.5°	290.4	344.1	717.7	1411.5	1673.6	1411.5	717.7	344.1	290.4	344.1	717.7
120°	316.5	366.5	702.8	1337.3	1610.3	1337.3	702.8	366.5	316.5	366.5	702.8
122.5°	335.1	388.8	684.1	1273.5	1524.7	1273.5	684.1	388.8	335.1	388.8	684.1
125°	367.7	417.7	684.1	1196.4	1414.8	1196.4	684.1	417.7	367.7	417.7	684.1
127.5°	394.7	445.6	685.1	1107.0	1322.7	1107.0	685.1	445.6	394.7	445.6	685.1
130°	409.6	464.2	688.8	1047.2	1251.9	1047.2	688.8	464.2	409.6	464.2	688.8
132.5°	428.2	482.8	688.8	1020.3	1188.6	1020.3	688.8	482.8	428.2	482.8	688.8
135°	456.1	506.2	688.8	985.3	1130.9	985.3	688.8	506.2	456.1	506.2	688.8
137.5°	479.4	533.1	688.8	946.7	1071.4	946.7	688.8	533.1	479.4	533.1	688.8
140°	498.0	548.0	688.8	924.1	1037.8	924.1	688.8	548.0	498.0	548.0	688.8
142.5°	516.6	563.0	692.5	897.9	1004.3	897.9	692.5	563.0	516.6	563.0	692.5
145°	539.9	585.4	693.4	858.4	949.4	858.4	693.4	585.4	539.9	585.4	693.4
147.5°	567.8	607.8	699.0	830.0	900.1	830.0	699.0	607.8	567.8	607.8	699.0
150°	586.4	622.8	702.8	811.1	870.3	811.1	702.8	622.8	586.4	622.8	702.8
152.5°	605.0	637.8	702.8	796.0	844.2	796.0	702.8	637.8	605.0	637.8	702.8
155°	632.9	655.7	707.4	778.0	814.5	778.0	707.4	655.7	632.9	655.7	707.4
157.5°	655.3	677.1	713.0	766.7	793.0	766.7	713.0	677.1	655.3	677.1	713.0
160°	670.2	688.4	716.7	759.1	781.9	759.1	716.7	688.4	670.2	688.4	716.7
162.5°	681.3	699.6	720.4	755.2	770.7	755.2	720.4	699.6	681.3	699.6	720.4
165°	702.8	711.9	726.0	745.0	758.6	745.0	726.0	711.9	702.8	711.9	726.0
167.5°	714.9	723.0	730.7	740.2	748.4	740.2	730.7	723.0	714.9	723.0	730.7
170°	726.0	730.6	730.7	740.1	744.6	740.1	730.7	730.6	726.0	730.6	730.7
172.5°	729.8	737.9	734.4	736.4	740.9	736.4	734.4	737.9	729.8	737.9	734.4
175°	740.0	744.5	740.0	735.2	730.7	735.2	740.0	744.5	740.0	744.5	740.0
177.5°	740.0	743.6	740.0	739.9	736.3	739.9	740.0	743.6	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0	740.0



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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°	10.3	9.4	11.2	12.2	11.1	5.6
90°	14.0	14.0	14.0	9.3	4.6	0.0
92.5°	28.9	32.6	28.9	20.5	15.7	11.2
95°	42.1	51.2	42.1	37.2	69.1	37.2
97.5°	80.7	69.8	80.7	273.7	132.5	66.1
100°	161.6	107.0	161.6	549.2	165.8	88.4
102.5°	426.6	233.6	426.6	742.8	191.8	110.8
105°	1076.1	712.1	1076.1	842.4	221.6	144.3
107.5°	1566.2	1466.9	1566.2	804.2	236.0	177.8
110°	1645.7	1768.5	1645.7	781.9	254.7	200.1



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CATALOG NUMBER: VLT-FA-100U-075D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	1599.2	1805.8	1599.2	759.5	277.1	222.5
115°	1509.0	1763.9	1509.0	726.0	310.6	256.0
117.5°	1411.5	1673.6	1411.5	717.7	344.1	290.4
120°	1337.3	1610.3	1337.3	702.8	366.5	316.5
122.5°	1273.5	1524.7	1273.5	684.1	388.8	335.1
125°	1196.4	1414.8	1196.4	684.1	417.7	367.7
127.5°	1107.0	1322.7	1107.0	685.1	445.6	394.7
130°	1047.2	1251.9	1047.2	688.8	464.2	409.6
132.5°	1020.3	1188.6	1020.3	688.8	482.8	428.2
135°	985.3	1130.9	985.3	688.8	506.2	456.1
137.5°	946.7	1071.4	946.7	688.8	533.1	479.4
140°	924.1	1037.8	924.1	688.8	548.0	498.0
142.5°	897.9	1004.3	897.9	692.5	563.0	516.6
145°	858.4	949.4	858.4	693.4	585.4	539.9
147.5°	830.0	900.1	830.0	699.0	607.8	567.8
150°	811.1	870.3	811.1	702.8	622.8	586.4
152.5°	796.0	844.2	796.0	702.8	637.8	605.0
155°	778.0	814.5	778.0	707.4	655.7	632.9
157.5°	766.7	793.0	766.7	713.0	677.1	655.3
160°	759.1	781.9	759.1	716.7	688.4	670.2
162.5°	755.2	770.7	755.2	720.4	699.6	681.3
165°	745.0	758.6	745.0	726.0	711.9	702.8
167.5°	740.2	748.4	740.2	730.7	723.0	714.9
170°	740.1	744.6	740.1	730.7	730.6	726.0
172.5°	736.4	740.9	736.4	734.4	737.9	729.8
175°	735.2	730.7	735.2	740.0	744.5	740.0
177.5°	739.9	736.3	739.9	740.0	743.6	740.0
180°	740.0	740.0	740.0	740.0	740.0	740.0

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