

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: P621590

Luminaire Tested: VLT-FA-025U-100D-835-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621590
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-025U-100D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
LIGHT SHAPING LENS - ASYMMETRIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

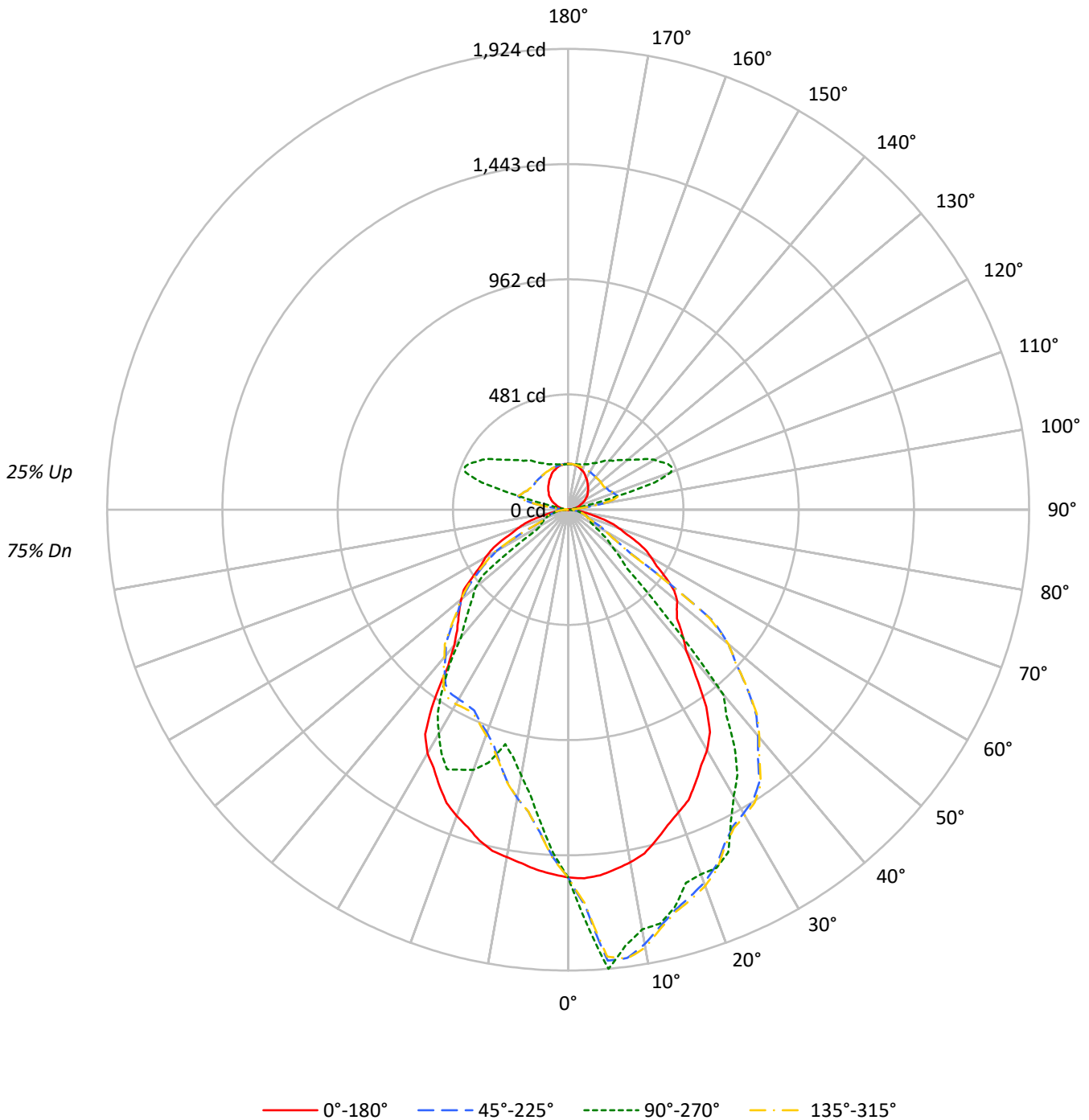
Lumens per Lamp: N/A
Luminaire Lumens: 4194.1 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 37.5
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



TEST NUMBER: P621590
CATALOG NUMBER: VLT-FA-025U-100D-835-UNV-STD-W-4

Luminous Intensity Polar Plot





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CATALOG NUMBER: VLT-FA-025U-100D-835-UNV-STD-W-4

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	113	113	113	113	108	108	108	108	97	97	97	88	88	88	80	80	80	80	80	80	80	80	80	75														
1	105	101	97	94	100	96	93	90	88	85	83	80	78	76	72	71	70	72	71	70	72	71	70	66														
2	96	90	84	79	92	86	81	76	78	74	71	71	68	66	65	63	61	65	63	61	65	63	61	57														
3	89	80	73	67	84	76	70	65	70	65	61	64	60	57	59	56	53	59	56	53	59	56	53	50														
4	82	72	64	58	78	69	62	56	63	58	53	58	54	50	53	50	47	53	50	47	53	50	47	44														
5	76	64	57	51	72	62	55	49	57	51	47	53	48	44	49	45	41	49	45	41	49	45	41	39														
6	70	58	51	45	67	56	49	44	52	46	41	48	43	39	45	40	37	45	40	37	45	40	37	35														
7	65	53	45	40	62	51	44	39	48	42	37	44	39	35	41	37	33	41	37	33	41	37	33	31														
8	61	49	41	36	58	47	40	35	44	38	33	41	36	32	38	33	30	38	33	30	38	33	30	28														
9	57	45	37	32	54	43	36	32	40	34	30	38	33	29	35	31	27	35	31	27	35	31	27	26														
10	53	41	34	29	51	40	33	29	37	32	28	35	30	26	33	28	25	33	28	25	33	28	25	23														

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



TEST NUMBER: P621590

CATALOG NUMBER: VLT-FA-025U-100D-835-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	3.5
10°-20°	405.7	9.7
20°-30°	607.1	14.5
30°-40°	690.4	16.5
40°-50°	590.5	14.1
50°-60°	398.2	9.5
60°-70°	205.5	4.9
70°-80°	92.8	2.2
80°-90°	28.0	0.7
90°-100°	23.5	0.6
100°-110°	167.6	4.0
110°-120°	227.5	5.4
120°-130°	185.2	4.4
130°-140°	149.0	3.6
140°-150°	117.4	2.8
150°-160°	85.9	2.0
160°-170°	53.3	1.3
170°-180°	18.2	0.4
0°-30°	1160.9	27.7
0°-40°	1851.4	44.1
0°-60°	2840.1	67.7
0°-90°	3166.4	75.5
90°-120°	418.7	10.0
90°-150°	870.3	20.8
90°-180°	1028.0	24.5
0°-180°	4194.1	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	4	0	4	0	1
95°	10	13	10	13	10	11
105°	37	184	37	184	37	39
115°	66	456	66	456	66	66
125°	95	366	95	366	95	84
135°	118	292	118	292	118	91
145°	140	245	140	245	140	88
155°	164	211	164	211	164	75
165°	182	196	182	196	182	51
175°	191	189	191	189	191	18
180°	191	191	191	191	191	



TEST NUMBER: P621590

CATALOG NUMBER: VLT-FA-025U-100D-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°	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	11.4	10.5	8.2	8.2	8.2	9.2	10.1	6.2	12.6	11.7
90°	0.0	1.2	2.4	3.6	3.6	3.6	2.4	1.2	0.0	1.2	2.4
92.5°	2.9	4.1	5.3	7.5	8.4	7.5	5.3	4.1	2.9	4.1	5.3
95°	9.6	17.9	9.6	10.9	13.2	10.9	9.6	17.9	9.6	17.9	9.6
97.5°	17.1	34.3	70.7	20.9	18.0	20.9	70.7	34.3	17.1	34.3	70.7
100°	22.9	42.9	142.0	41.8	27.7	41.8	142.0	42.9	22.9	42.9	142.0
102.5°	28.6	49.6	192.0	110.3	60.4	110.3	192.0	49.6	28.6	49.6	192.0
105°	37.3	57.3	217.8	278.2	184.1	278.2	217.8	57.3	37.3	57.3	217.8
107.5°	46.0	61.0	207.9	404.9	379.2	404.9	207.9	61.0	46.0	61.0	207.9
110°	51.7	65.9	202.1	425.4	457.2	425.4	202.1	65.9	51.7	65.9	202.1



TEST NUMBER: P621590

CATALOG NUMBER: VLT-FA-025U-100D-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°	57.5	71.6	196.4	413.4	466.8	413.4	196.4	71.6	57.5	71.6	196.4
115°	66.2	80.3	187.7	390.1	456.0	390.1	187.7	80.3	66.2	80.3	187.7
117.5°	75.1	89.0	185.5	364.9	432.7	364.9	185.5	89.0	75.1	89.0	185.5
120°	81.8	94.8	181.7	345.7	416.3	345.7	181.7	94.8	81.8	94.8	181.7
122.5°	86.6	100.5	176.9	329.2	394.2	329.2	176.9	100.5	86.6	100.5	176.9
125°	95.1	108.0	176.9	309.3	365.8	309.3	176.9	108.0	95.1	108.0	176.9
127.5°	102.0	115.2	177.1	286.2	341.9	286.2	177.1	115.2	102.0	115.2	177.1
130°	105.9	120.0	178.1	270.7	323.7	270.7	178.1	120.0	105.9	120.0	178.1
132.5°	110.7	124.8	178.1	263.8	307.3	263.8	178.1	124.8	110.7	124.8	178.1
135°	117.9	130.9	178.1	254.7	292.4	254.7	178.1	130.9	117.9	130.9	178.1
137.5°	123.9	137.8	178.1	244.7	277.0	244.7	178.1	137.8	123.9	137.8	178.1
140°	128.7	141.7	178.1	238.9	268.3	238.9	178.1	141.7	128.7	141.7	178.1
142.5°	133.6	145.6	179.0	232.1	259.6	232.1	179.0	145.6	133.6	145.6	179.0
145°	139.6	151.3	179.3	221.9	245.4	221.9	179.3	151.3	139.6	151.3	179.3
147.5°	146.8	157.1	180.7	214.6	232.7	214.6	180.7	157.1	146.8	157.1	180.7
150°	151.6	161.0	181.7	209.7	225.0	209.7	181.7	161.0	151.6	161.0	181.7
152.5°	156.4	164.9	181.7	205.8	218.3	205.8	181.7	164.9	156.4	164.9	181.7
155°	163.6	169.5	182.9	201.1	210.6	201.1	182.9	169.5	163.6	169.5	182.9
157.5°	169.4	175.1	184.3	198.2	205.0	198.2	184.3	175.1	169.4	175.1	184.3
160°	173.3	178.0	185.3	196.2	202.1	196.2	185.3	178.0	173.3	178.0	185.3
162.5°	176.1	180.8	186.3	195.2	199.2	195.2	186.3	180.8	176.1	180.8	186.3
165°	181.7	184.0	187.7	192.6	196.1	192.6	187.7	184.0	181.7	184.0	187.7
167.5°	184.8	186.9	188.9	191.4	193.5	191.4	188.9	186.9	184.8	186.9	188.9
170°	187.7	188.9	188.9	191.3	192.5	191.3	188.9	188.9	187.7	188.9	188.9
172.5°	188.7	190.8	189.9	190.4	191.5	190.4	189.9	190.8	188.7	190.8	189.9
175°	191.3	192.5	191.3	190.1	188.9	190.1	191.3	192.5	191.3	192.5	191.3
177.5°	191.3	192.2	191.3	191.3	190.3	191.3	191.3	192.2	191.3	192.2	191.3
180°	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3



TEST NUMBER: P621590

CATALOG NUMBER: VLT-FA-025U-100D-835-UNV-STD-W-4

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°	10.7	9.5	11.9	14.2	13.8	7.5
90°	3.6	3.6	3.6	2.4	1.2	0.0
92.5°	7.5	8.4	7.5	5.3	4.1	2.9
95°	10.9	13.2	10.9	9.6	17.9	9.6
97.5°	20.9	18.0	20.9	70.7	34.3	17.1
100°	41.8	27.7	41.8	142.0	42.9	22.9
102.5°	110.3	60.4	110.3	192.0	49.6	28.6
105°	278.2	184.1	278.2	217.8	57.3	37.3
107.5°	404.9	379.2	404.9	207.9	61.0	46.0
110°	425.4	457.2	425.4	202.1	65.9	51.7



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CATALOG NUMBER: VLT-FA-025U-100D-835-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	413.4	466.8	413.4	196.4	71.6	57.5
115°	390.1	456.0	390.1	187.7	80.3	66.2
117.5°	364.9	432.7	364.9	185.5	89.0	75.1
120°	345.7	416.3	345.7	181.7	94.8	81.8
122.5°	329.2	394.2	329.2	176.9	100.5	86.6
125°	309.3	365.8	309.3	176.9	108.0	95.1
127.5°	286.2	341.9	286.2	177.1	115.2	102.0
130°	270.7	323.7	270.7	178.1	120.0	105.9
132.5°	263.8	307.3	263.8	178.1	124.8	110.7
135°	254.7	292.4	254.7	178.1	130.9	117.9
137.5°	244.7	277.0	244.7	178.1	137.8	123.9
140°	238.9	268.3	238.9	178.1	141.7	128.7
142.5°	232.1	259.6	232.1	179.0	145.6	133.6
145°	221.9	245.4	221.9	179.3	151.3	139.6
147.5°	214.6	232.7	214.6	180.7	157.1	146.8
150°	209.7	225.0	209.7	181.7	161.0	151.6
152.5°	205.8	218.3	205.8	181.7	164.9	156.4
155°	201.1	210.6	201.1	182.9	169.5	163.6
157.5°	198.2	205.0	198.2	184.3	175.1	169.4
160°	196.2	202.1	196.2	185.3	178.0	173.3
162.5°	195.2	199.2	195.2	186.3	180.8	176.1
165°	192.6	196.1	192.6	187.7	184.0	181.7
167.5°	191.4	193.5	191.4	188.9	186.9	184.8
170°	191.3	192.5	191.3	188.9	188.9	187.7
172.5°	190.4	191.5	190.4	189.9	190.8	188.7
175°	190.1	188.9	190.1	191.3	192.5	191.3
177.5°	191.3	190.3	191.3	191.3	192.2	191.3
180°	191.3	191.3	191.3	191.3	191.3	191.3

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