

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: P621589

Luminaire Tested: VLT-FA-025U-100D-830-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621589
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-830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

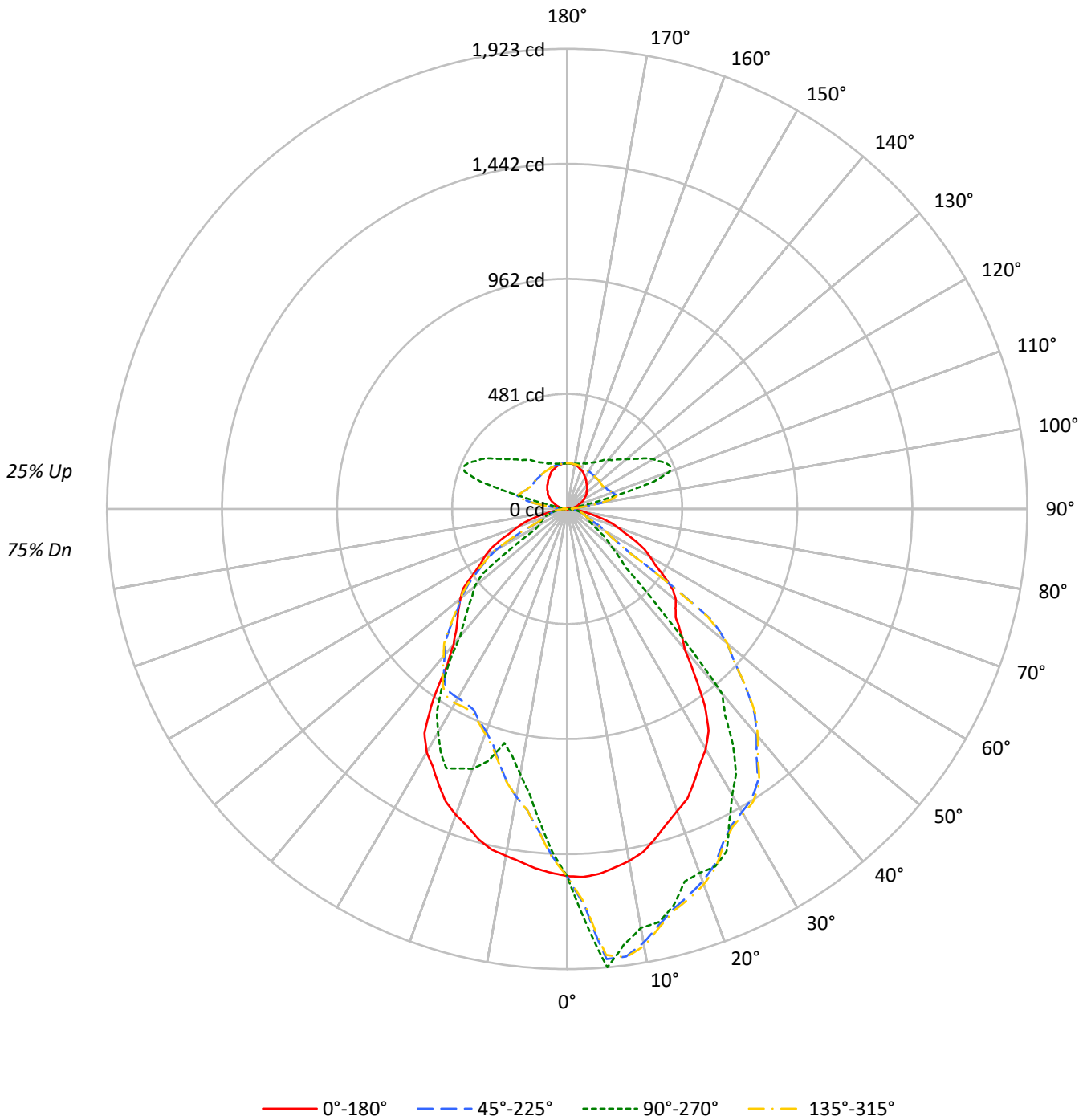
Lumens per Lamp: N/A
Luminaire Lumens: 4190.3 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.19 / 1.3
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

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



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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	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°	11008	11008	11008	11008
5°	11028	13849	10859	9442
10°	10882	12951	10723	8198
15°	10584	12753	10619	7524
20°	10260	12358	10380	8819
25°	9946	12492	10058	9465
30°	9594	11431	9724	8935
35°	8790	10595	8571	8011
40°	7163	9428	6914	6520
45°	6509	3500	6572	5939
50°	6620	2666	6498	5644
55°	6248	2069	6033	3378
60°	5757	1590	5711	1882
65°	5299	1644	5194	1987
70°	4714	1735	4584	2062
75°	4023	1816	3851	2121
80°	3029	1872	2839	2194
85°	2058	1671	1795	2058

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 12052 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.0	3.5
10°-20°	405.4	9.7
20°-30°	606.5	14.5
30°-40°	689.8	16.5
40°-50°	590.0	14.1
50°-60°	397.8	9.5
60°-70°	205.3	4.9
70°-80°	92.7	2.2
80°-90°	28.0	0.7
90°-100°	23.5	0.6
100°-110°	167.4	4.0
110°-120°	227.3	5.4
120°-130°	185.0	4.4
130°-140°	148.8	3.6
140°-150°	117.3	2.8
150°-160°	85.8	2.0
160°-170°	53.3	1.3
170°-180°	18.2	0.4
0°-30°	1159.9	27.7
0°-40°	1849.7	44.1
0°-60°	2837.5	67.7
0°-90°	3163.6	75.5
90°-120°	418.3	10.0
90°-150°	869.5	20.7
90°-180°	1027.0	24.5
0°-180°	4190.3	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1534	1534	1534	1534	1534	
5°	1531	1923	1508	1311	1531	145
15°	1425	1717	1429	1013	1425	401
25°	1256	1578	1270	1195	1256	578
35°	1003	1209	978	914	1003	613
45°	641	345	648	585	641	509
55°	499	165	482	270	499	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	365	95	365	95	84
135°	118	292	118	292	118	91
145°	139	245	139	245	139	88
155°	164	210	164	210	164	75
165°	182	196	182	196	182	51
175°	191	189	191	189	191	18
180°	191	191	191	191	191	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0
2.5°	1539.0	1591.5	1657.6	1703.0	1722.5	1703.0	1646.3	1591.1	1521.5	1500.7	1451.6
5°	1530.9	1692.6	1888.2	1911.9	1922.6	1911.9	1871.1	1682.9	1507.5	1432.7	1351.4
7.5°	1512.1	1795.0	1886.0	1833.3	1833.6	1843.4	1888.8	1786.2	1487.8	1370.3	1270.6
10°	1493.4	1852.0	1839.8	1763.7	1777.4	1771.3	1853.9	1840.8	1471.6	1335.8	1221.9
12.5°	1468.4	1869.7	1778.7	1753.7	1768.7	1760.1	1787.7	1860.0	1457.8	1311.0	1165.7
15°	1424.7	1844.4	1727.5	1716.6	1716.6	1724.2	1735.3	1852.1	1429.4	1266.2	1097.0
17.5°	1379.8	1793.6	1691.9	1637.8	1632.0	1642.1	1704.7	1806.6	1389.2	1216.4	1030.6
20°	1343.6	1758.6	1655.7	1592.3	1618.3	1595.4	1669.7	1768.1	1359.2	1185.3	989.4
22.5°	1311.1	1715.2	1609.5	1582.5	1617.0	1583.1	1622.3	1724.6	1324.3	1150.3	958.2
25°	1256.2	1642.2	1540.2	1565.5	1577.7	1565.5	1546.5	1648.7	1270.3	1105.5	925.4
27.5°	1201.6	1565.4	1488.4	1505.4	1468.1	1496.8	1496.8	1565.6	1214.7	1053.3	915.4
30°	1157.9	1511.9	1462.2	1437.5	1379.5	1425.3	1473.1	1512.2	1173.5	1019.4	912.9
32.5°	1100.5	1463.0	1436.0	1350.6	1313.3	1344.5	1448.2	1462.0	1109.8	988.7	910.4
35°	1003.4	1394.0	1388.9	1247.5	1209.4	1238.4	1399.8	1390.4	978.4	940.3	891.1
37.5°	873.3	1332.5	1298.7	1143.4	1082.7	1135.8	1309.0	1325.9	823.0	895.9	845.8
40°	764.7	1291.1	1231.2	1066.0	1006.5	1058.4	1239.0	1287.4	738.1	864.8	795.9
42.5°	703.5	1254.3	1160.1	984.1	615.8	971.6	1167.9	1249.6	685.7	824.5	752.2
45°	641.4	1187.6	1056.5	544.8	344.9	518.8	1058.0	1171.0	647.6	763.6	685.1
47.5°	614.2	1105.5	948.2	328.1	291.2	318.7	947.2	1087.5	614.5	702.4	621.1
50°	593.0	1053.8	870.8	289.1	238.8	278.4	872.3	1036.8	582.1	661.4	577.4
52.5°	558.0	992.0	759.7	239.6	206.3	233.8	741.2	972.5	548.4	616.7	522.5
55°	499.4	873.2	316.8	188.3	165.4	180.7	301.2	843.8	482.2	546.3	458.8
57.5°	437.3	743.3	222.2	146.6	128.3	145.1	220.7	713.6	429.1	462.7	400.1
60°	401.1	655.9	181.0	123.0	110.8	121.5	179.5	629.9	397.9	407.1	346.4
62.5°	364.8	567.2	149.8	108.2	104.6	106.7	149.5	538.7	359.2	359.8	244.1
65°	312.1	429.6	110.8	98.3	96.8	96.8	107.7	414.2	305.9	296.7	140.4
67.5°	258.4	308.5	88.9	90.5	88.9	88.9	87.4	299.8	252.2	236.6	106.1
70°	224.7	236.9	82.7	84.2	82.7	82.7	81.1	230.7	218.5	183.4	99.9
72.5°	192.3	161.7	76.5	76.8	76.5	76.5	74.9	151.8	186.0	128.9	91.1
75°	145.1	81.0	65.5	65.5	65.5	65.5	64.0	77.9	138.9	84.0	78.0
77.5°	100.8	53.5	54.3	54.0	54.0	52.8	52.7	53.1	94.9	58.0	63.0
80°	73.3	44.4	46.8	45.3	45.3	45.3	45.3	42.7	68.7	48.8	53.1
82.5°	52.1	35.3	38.1	36.5	36.5	36.5	36.5	34.9	47.4	39.8	43.1
85°	25.0	23.4	25.0	21.8	20.3	21.8	23.4	23.4	21.8	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	17.8	9.6	10.9	13.2	10.9	9.6	17.8	9.6	17.8	9.6
97.5°	17.1	34.2	70.7	20.9	18.0	20.9	70.7	34.2	17.1	34.2	70.7
100°	22.8	42.8	141.8	41.8	27.6	41.8	141.8	42.8	22.8	42.8	141.8
102.5°	28.6	49.5	191.9	110.2	60.3	110.2	191.9	49.5	28.6	49.5	191.9
105°	37.3	57.2	217.6	277.9	183.9	277.9	217.6	57.2	37.3	57.2	217.6
107.5°	45.9	61.0	207.7	404.5	378.9	404.5	207.7	61.0	45.9	61.0	207.7
110°	51.7	65.8	201.9	425.1	456.8	425.1	201.9	65.8	51.7	65.8	201.9



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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°	57.5	71.6	196.2	413.0	466.4	413.0	196.2	71.6	57.5	71.6	196.2
115°	66.1	80.2	187.5	389.8	455.6	389.8	187.5	80.2	66.1	80.2	187.5
117.5°	75.0	88.9	185.4	364.6	432.3	364.6	185.4	88.9	75.0	88.9	185.4
120°	81.7	94.7	181.5	345.4	415.9	345.4	181.5	94.7	81.7	94.7	181.5
122.5°	86.5	100.4	176.7	328.9	393.8	328.9	176.7	100.4	86.5	100.4	176.7
125°	95.0	107.9	176.7	309.0	365.4	309.0	176.7	107.9	95.0	107.9	176.7
127.5°	101.9	115.1	176.9	285.9	341.6	285.9	176.9	115.1	101.9	115.1	176.9
130°	105.8	119.9	177.9	270.5	323.4	270.5	177.9	119.9	105.8	119.9	177.9
132.5°	110.6	124.7	177.9	263.5	307.0	263.5	177.9	124.7	110.6	124.7	177.9
135°	117.8	130.7	177.9	254.5	292.1	254.5	177.9	130.7	117.8	130.7	177.9
137.5°	123.8	137.7	177.9	244.5	276.7	244.5	177.9	137.7	123.8	137.7	177.9
140°	128.6	141.6	177.9	238.7	268.1	238.7	177.9	141.6	128.6	141.6	177.9
142.5°	133.4	145.4	178.9	231.9	259.4	231.9	178.9	145.4	133.4	145.4	178.9
145°	139.4	151.2	179.1	221.7	245.2	221.7	179.1	151.2	139.4	151.2	179.1
147.5°	146.7	157.0	180.6	214.4	232.5	214.4	180.6	157.0	146.7	157.0	180.6
150°	151.5	160.9	181.5	209.5	224.8	209.5	181.5	160.9	151.5	160.9	181.5
152.5°	156.3	164.7	181.5	205.6	218.1	205.6	181.5	164.7	156.3	164.7	181.5
155°	163.5	169.4	182.7	201.0	210.4	201.0	182.7	169.4	163.5	169.4	182.7
157.5°	169.3	174.9	184.2	198.0	204.8	198.0	184.2	174.9	169.3	174.9	184.2
160°	173.1	177.8	185.1	196.1	201.9	196.1	185.1	177.8	173.1	177.8	185.1
162.5°	176.0	180.7	186.1	195.1	199.1	195.1	186.1	180.7	176.0	180.7	186.1
165°	181.5	183.9	187.5	192.4	195.9	192.4	187.5	183.9	181.5	183.9	187.5
167.5°	184.6	186.8	188.7	191.2	193.3	191.2	188.7	186.8	184.6	186.8	188.7
170°	187.5	188.7	188.7	191.2	192.3	191.2	188.7	188.7	187.5	188.7	188.7
172.5°	188.5	190.6	189.7	190.2	191.4	190.2	189.7	190.6	188.5	190.6	189.7
175°	191.1	192.3	191.1	189.9	188.7	189.9	191.1	192.3	191.1	192.3	191.1
177.5°	191.1	192.1	191.1	191.1	190.2	191.1	191.1	192.1	191.1	192.1	191.1
180°	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1534.0	1534.0	1534.0	1534.0	1534.0	1534.0
2.5°	1434.1	1432.9	1435.3	1456.6	1499.9	1539.0
5°	1306.3	1310.8	1315.4	1351.4	1427.1	1530.9
7.5°	1208.0	1201.3	1211.7	1270.3	1363.2	1512.1
10°	1140.4	1125.1	1140.4	1220.3	1328.6	1493.4
12.5°	1076.6	1057.7	1081.5	1169.1	1300.0	1468.4
15°	994.5	1012.8	1002.1	1100.2	1256.9	1424.7
17.5°	1013.9	1106.1	1033.5	1040.2	1214.1	1379.8
20°	1060.2	1154.8	1090.7	1000.3	1186.4	1343.6
22.5°	1102.1	1173.5	1115.5	966.6	1158.9	1311.1
25°	1134.3	1195.4	1131.3	936.3	1118.9	1256.2
27.5°	1135.9	1144.5	1136.5	933.8	1069.5	1201.6
30°	1114.9	1078.3	1111.9	936.3	1034.3	1157.9
32.5°	1054.9	1013.4	1042.1	931.3	998.9	1100.5
35°	969.4	914.5	954.1	905.1	943.9	1003.4
37.5°	879.2	809.6	864.5	853.3	897.1	873.3
40°	818.1	696.0	805.8	802.1	871.5	764.7
42.5°	739.8	636.1	728.8	760.9	843.2	703.5
45°	597.4	585.2	591.3	691.3	783.3	641.4
47.5°	546.3	538.1	543.3	628.0	715.5	614.2
50°	516.3	505.6	513.2	586.8	672.3	593.0
52.5°	474.7	445.7	471.6	530.6	627.6	558.0
55°	356.9	270.0	355.4	466.6	560.4	499.4
57.5°	209.5	156.1	204.9	406.0	474.8	437.3
60°	141.8	131.1	143.3	357.4	417.8	401.1
62.5°	129.4	126.1	129.8	248.7	367.0	364.8
65°	118.6	117.0	118.6	143.6	302.9	312.1
67.5°	107.3	105.8	108.5	110.2	239.2	258.4
70°	99.8	98.3	99.8	101.4	183.5	224.7
72.5°	91.1	89.6	91.1	92.7	129.1	192.3
75°	78.0	76.5	78.0	79.6	85.6	145.1
77.5°	63.0	63.0	64.6	64.6	59.9	100.8
80°	53.1	53.1	54.6	54.6	52.0	73.3
82.5°	43.0	41.8	44.6	45.9	43.0	52.1
85°	26.5	25.0	28.0	29.6	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	17.8	9.6
97.5°	20.9	18.0	20.9	70.7	34.2	17.1
100°	41.8	27.6	41.8	141.8	42.8	22.8
102.5°	110.2	60.3	110.2	191.9	49.5	28.6
105°	277.9	183.9	277.9	217.6	57.2	37.3
107.5°	404.5	378.9	404.5	207.7	61.0	45.9
110°	425.1	456.8	425.1	201.9	65.8	51.7



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CATALOG NUMBER: VLT-FA-025U-100D-830-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
112.5°	413.0	466.4	413.0	196.2	71.6	57.5
115°	389.8	455.6	389.8	187.5	80.2	66.1
117.5°	364.6	432.3	364.6	185.4	88.9	75.0
120°	345.4	415.9	345.4	181.5	94.7	81.7
122.5°	328.9	393.8	328.9	176.7	100.4	86.5
125°	309.0	365.4	309.0	176.7	107.9	95.0
127.5°	285.9	341.6	285.9	176.9	115.1	101.9
130°	270.5	323.4	270.5	177.9	119.9	105.8
132.5°	263.5	307.0	263.5	177.9	124.7	110.6
135°	254.5	292.1	254.5	177.9	130.7	117.8
137.5°	244.5	276.7	244.5	177.9	137.7	123.8
140°	238.7	268.1	238.7	177.9	141.6	128.6
142.5°	231.9	259.4	231.9	178.9	145.4	133.4
145°	221.7	245.2	221.7	179.1	151.2	139.4
147.5°	214.4	232.5	214.4	180.6	157.0	146.7
150°	209.5	224.8	209.5	181.5	160.9	151.5
152.5°	205.6	218.1	205.6	181.5	164.7	156.3
155°	201.0	210.4	201.0	182.7	169.4	163.5
157.5°	198.0	204.8	198.0	184.2	174.9	169.3
160°	196.1	201.9	196.1	185.1	177.8	173.1
162.5°	195.1	199.1	195.1	186.1	180.7	176.0
165°	192.4	195.9	192.4	187.5	183.9	181.5
167.5°	191.2	193.3	191.2	188.7	186.8	184.6
170°	191.2	192.3	191.2	188.7	188.7	187.5
172.5°	190.2	191.4	190.2	189.7	190.6	188.5
175°	189.9	188.7	189.9	191.1	192.3	191.1
177.5°	191.1	190.2	191.1	191.1	192.1	191.1
180°	191.1	191.1	191.1	191.1	191.1	191.1

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