

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: P621512

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621512
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-1)
Test Lab: INNOVATION CENTER
Issue Date: 9/2/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: VLT-F-100U-075D-835-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

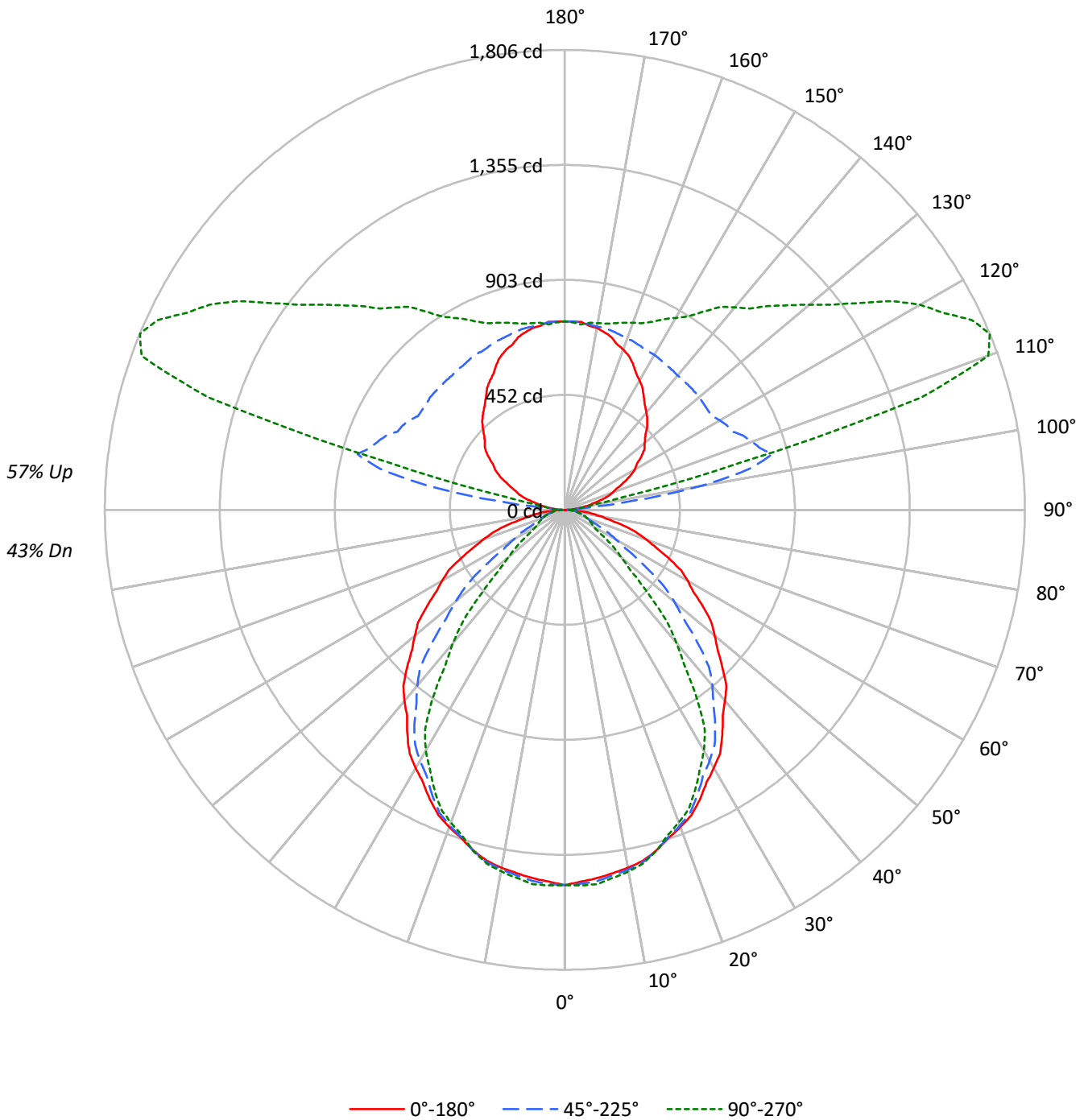
Lumens per Lamp: N/A
Luminaire Lumens: 6981.4 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 50.6
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: P621512
CATALOG NUMBER: VLT-F-100U-075D-835-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621512

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

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43		
1	97	93	89	86	88	85	82	79	71	68	66	57	56	54	45	44	43	37		
2	89	82	76	71	81	75	70	66	63	59	56	51	49	46	40	39	37	32		
3	81	72	65	60	74	67	61	56	56	51	48	46	43	40	36	34	32	28		
4	75	64	57	51	68	59	53	48	50	45	41	41	38	35	33	30	28	25		
5	69	58	50	44	63	53	46	41	45	40	36	37	33	30	30	27	25	22		
6	63	52	44	39	58	48	41	36	41	35	32	34	30	27	27	25	22	19		
7	59	47	39	34	54	44	37	32	37	32	28	31	27	24	25	22	20	18		
8	55	43	35	30	50	40	33	28	34	29	25	28	24	22	23	20	18	16		
9	51	39	32	27	47	36	30	25	31	26	22	26	22	19	21	19	17	14		
10	48	36	29	24	44	33	27	23	29	24	20	24	20	18	20	17	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10574	10574	10574
5°	10461	10538	10625
10°	10404	10448	10504
15°	10291	10302	10302
20°	10125	10079	9985
25°	9931	9763	9594
30°	9700	9422	9043
35°	9441	9014	7934
40°	9169	8442	6389
45°	8883	7477	4635
50°	8582	6254	3212
55°	8285	4762	2400
60°	7974	3299	1813
65°	7626	2352	1861
70°	7123	1981	1916
75°	6585	2027	1941
80°	5723	2141	2013
85°	4635	2379	2009

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8883 cd/sqm



TEST NUMBER: P621512

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	2.0
10°-20°	390.5	5.6
20°-30°	568.0	8.1
30°-40°	628.3	9.0
40°-50°	539.5	7.7
50°-60°	373.5	5.4
60°-70°	222.6	3.2
70°-80°	109.7	1.6
80°-90°	35.5	0.5
90°-100°	91.0	1.3
100°-110°	648.3	9.3
110°-120°	880.2	12.6
120°-130°	716.4	10.3
130°-140°	576.2	8.3
140°-150°	454.2	6.5
150°-160°	332.1	4.8
160°-170°	206.3	3.0
170°-180°	70.3	1.0
0°-30°	1097.3	15.7
0°-40°	1725.6	24.7
0°-60°	2638.6	37.8
0°-90°	3006.4	43.1
90°-120°	1619.5	23.2
90°-150°	3366.3	48.2
90°-180°	3975.0	56.9
0°-180°	6981.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1474	1474	1474	1474	1474	
5°	1452	1474	1463	1462	1475	138
15°	1385	1403	1387	1379	1387	390
25°	1254	1263	1233	1212	1212	577
35°	1078	1075	1029	946	906	673
45°	875	860	737	533	457	675
55°	662	634	381	219	192	592
65°	449	361	138	111	110	445
75°	238	104	73	72	70	251
85°	56	28	29	26	24	65
90°	0	5	9	14	14	4
95°	37	69	37	42	51	42
105°	144	222	842	1076	712	152
115°	256	311	726	1509	1764	254
125°	368	418	684	1196	1415	327
135°	456	506	689	985	1131	351
145°	540	585	693	858	949	339
155°	633	656	707	778	814	291
165°	703	712	726	745	759	197
175°	740	744	740	735	731	70
180°	740	740	740	740	740	

TEST NUMBER: P621512

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1473.5	1473.5	1473.5	1473.5	1473.5
2.5°	1461.3	1478.0	1469.9	1470.0	1476.0
5°	1452.2	1474.5	1462.9	1461.6	1475.0
7.5°	1438.8	1459.3	1447.3	1445.8	1457.4
10°	1427.8	1447.2	1433.9	1431.1	1441.5
12.5°	1412.0	1431.4	1416.9	1411.6	1422.1
15°	1385.2	1403.1	1386.7	1379.3	1386.7
17.5°	1351.4	1366.3	1347.8	1336.0	1340.5
20°	1325.9	1340.7	1319.8	1303.1	1307.6
22.5°	1297.8	1310.4	1286.9	1267.8	1271.1
25°	1254.3	1263.2	1233.0	1211.7	1211.7
27.5°	1205.9	1211.3	1176.1	1153.7	1147.5
30°	1170.6	1173.6	1137.1	1110.8	1091.4
32.5°	1134.1	1135.8	1094.5	1052.1	1022.0
35°	1077.7	1074.8	1029.0	945.9	905.7
37.5°	1017.8	1011.2	957.2	830.7	770.9
40°	978.8	969.9	901.2	748.9	682.0
42.5°	938.6	926.1	839.1	664.7	590.6
45°	875.3	860.4	736.8	532.6	456.7
47.5°	812.6	792.9	632.0	412.6	347.4
50°	768.7	747.9	560.2	339.8	287.7
52.5°	724.9	704.0	487.1	285.2	243.9
55°	662.2	633.9	380.6	218.6	191.8
57.5°	598.2	557.8	283.4	170.3	149.5
60°	555.6	502.0	229.9	141.2	126.3
62.5°	514.2	446.3	188.5	123.2	120.3
65°	449.1	361.2	138.5	111.1	109.6
67.5°	386.9	275.6	102.9	100.1	98.6
70°	339.5	217.4	94.4	92.8	91.3
72.5°	296.8	166.5	85.9	84.3	82.8
75°	237.5	103.5	73.1	71.5	70.0
77.5°	177.5	65.3	60.3	58.7	57.2
80°	138.5	53.7	51.8	50.2	48.7
82.5°	104.4	43.4	42.0	40.5	39.0
85°	56.3	28.0	28.9	25.8	24.4
87.5°	19.5	14.4	15.3	13.7	12.5
90°	0.0	4.6	9.3	14.0	14.0
92.5°	11.2	15.7	20.5	28.9	32.6
95°	37.2	69.1	37.2	42.1	51.2
97.5°	66.1	132.5	273.7	80.7	69.8
100°	88.4	165.8	549.2	161.6	107.0
102.5°	110.8	191.8	742.8	426.6	233.6
105°	144.3	221.6	842.4	1076.1	712.1
107.5°	177.8	236.0	804.2	1566.2	1466.9
110°	200.1	254.7	781.9	1645.7	1768.5



TEST NUMBER: P621512

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	222.5	277.1	759.5	1599.2	1805.8
115°	256.0	310.6	726.0	1509.0	1763.9
117.5°	290.4	344.1	717.7	1411.5	1673.6
120°	316.5	366.5	702.8	1337.3	1610.3
122.5°	335.1	388.8	684.1	1273.5	1524.7
125°	367.7	417.7	684.1	1196.4	1414.8
127.5°	394.7	445.6	685.1	1107.0	1322.7
130°	409.6	464.2	688.8	1047.2	1251.9
132.5°	428.2	482.8	688.8	1020.3	1188.6
135°	456.1	506.2	688.8	985.3	1130.9
137.5°	479.4	533.1	688.8	946.7	1071.4
140°	498.0	548.0	688.8	924.1	1037.8
142.5°	516.6	563.0	692.5	897.9	1004.3
145°	539.9	585.4	693.4	858.4	949.4
147.5°	567.8	607.8	699.0	830.0	900.1
150°	586.4	622.8	702.8	811.1	870.3
152.5°	605.0	637.8	702.8	796.0	844.2
155°	632.9	655.7	707.4	778.0	814.5
157.5°	655.3	677.1	713.0	766.7	793.0
160°	670.2	688.4	716.7	759.1	781.9
162.5°	681.3	699.6	720.4	755.2	770.7
165°	702.8	711.9	726.0	745.0	758.6
167.5°	714.9	723.0	730.7	740.2	748.4
170°	726.0	730.6	730.7	740.1	744.6
172.5°	729.8	737.9	734.4	736.4	740.9
175°	740.0	744.5	740.0	735.2	730.7
177.5°	740.0	743.6	740.0	739.9	736.3
180°	740.0	740.0	740.0	740.0	740.0



TEST NUMBER: P621512

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

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.13	15.89	16.15	16.91	18.29	7.36	8.12	8.38	9.15	10.52
	3H	16.61	17.29	17.65	18.33	19.72	8.71	9.39	9.74	10.42	11.81
	4H	17.12	17.77	18.17	18.80	20.20	9.36	10.00	10.40	11.04	12.44
	6H	17.52	18.11	18.57	19.15	20.56	9.94	10.53	11.00	11.57	12.98
	8H	17.64	18.21	18.71	19.26	20.67	10.16	10.73	11.22	11.78	13.19
	12H	17.72	18.26	18.79	19.31	20.73	10.33	10.86	11.39	11.91	13.34
4H	2H	14.94	15.59	16.00	16.63	18.02	7.97	8.61	9.02	9.65	11.04
	3H	16.57	17.11	17.63	18.17	19.58	9.51	10.04	10.57	11.11	12.52
	4H	17.16	17.65	18.23	18.70	20.14	10.30	10.79	11.37	11.85	13.28
	6H	17.65	18.07	18.72	19.15	20.58	11.03	11.45	12.11	12.53	13.96
	8H	17.83	18.22	18.91	19.30	20.74	11.33	11.72	12.40	12.79	14.23
	12H	17.96	18.31	19.05	19.40	20.84	11.54	11.89	12.63	12.98	14.43
8H	4H	17.07	17.46	18.15	18.53	19.98	10.75	11.14	11.82	12.21	13.65
	6H	17.60	17.92	18.70	19.04	20.48	11.63	11.95	12.73	13.06	14.50
	8H	17.84	18.12	18.94	19.22	20.68	12.02	12.31	13.13	13.40	14.86
	12H	18.02	18.27	19.13	19.36	20.86	12.34	12.59	13.45	13.68	15.18
12H	4H	17.02	17.37	18.11	18.46	19.90	10.79	11.15	11.89	12.23	13.68
	6H	17.57	17.86	18.68	18.95	20.41	11.74	12.03	12.85	13.12	14.58
	8H	17.81	18.06	18.92	19.15	20.65	12.18	12.43	13.29	13.52	15.02