

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: P621522

Luminaire Tested: VLT-F-100U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621522  
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-100D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

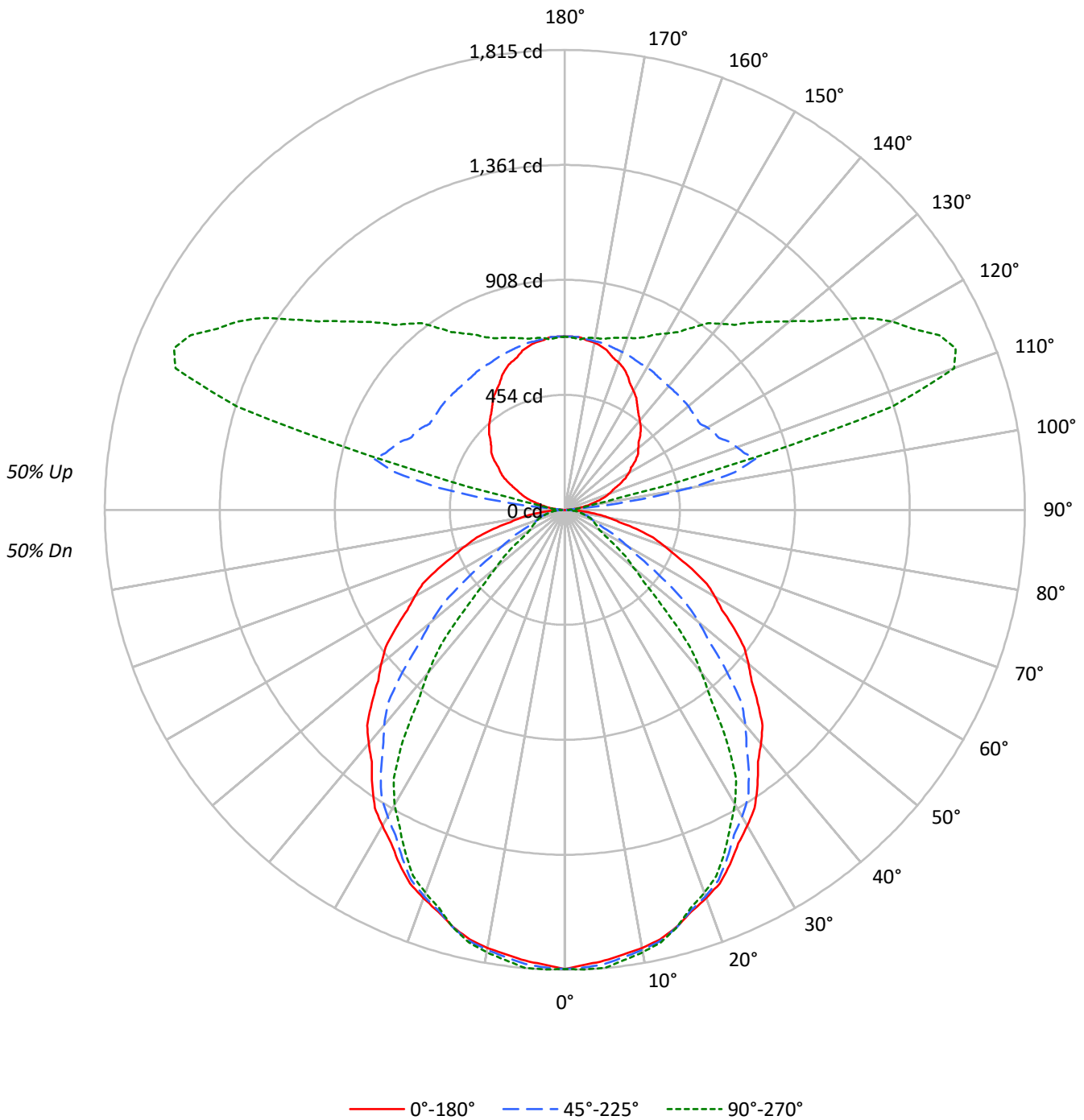
Lumens per Lamp: N/A  
Luminaire Lumens: 7370.4 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.2  
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: P621522  
CATALOG NUMBER: VLT-F-100U-100D-940-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621522

CATALOG NUMBER: VLT-F-100U-100D-940-UNV-STD-W-4

**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	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	99	94	91	88	91	87	84	81	74	72	70	62	60	59	51	50	49	44
2	90	83	78	73	83	77	72	68	66	62	59	55	53	50	46	44	42	38
3	83	74	67	61	76	69	63	58	59	54	51	50	46	44	41	39	37	33
4	76	66	58	53	70	61	55	50	53	48	44	45	41	38	37	35	32	29
5	70	59	51	46	65	55	48	43	47	42	38	40	36	33	34	31	29	25
6	65	53	45	40	60	50	43	38	43	38	34	37	33	30	31	28	26	23
7	60	48	41	35	56	45	38	33	39	34	30	34	29	26	28	25	23	20
8	56	44	36	31	52	41	34	30	36	31	27	31	27	24	26	23	21	18
9	52	40	33	28	48	38	31	27	33	28	24	29	24	21	24	21	19	17
10	49	37	30	25	45	35	28	24	30	25	22	26	22	20	23	20	17	15

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

	0°	45°	90°
0°	13004	13004	13004
5°	12865	12960	13067
10°	12795	12850	12918
15°	12656	12670	12670
20°	12452	12395	12280
25°	12214	12007	11799
30°	11929	11587	11122
35°	11611	11086	9758
40°	11276	10382	7857
45°	10924	9195	5699
50°	10554	7691	3950
55°	10189	5855	2951
60°	9807	4057	2230
65°	9378	2893	2289
70°	8760	2436	2356
75°	8096	2493	2387
80°	7042	2632	2475
85°	5706	2931	2470

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10924 cd/sqm



TEST NUMBER: P621522

CATALOG NUMBER: VLT-F-100U-100D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.8	2.3
10°-20°	480.2	6.5
20°-30°	698.5	9.5
30°-40°	772.8	10.5
40°-50°	663.4	9.0
50°-60°	459.4	6.2
60°-70°	273.7	3.7
70°-80°	134.9	1.8
80°-90°	43.2	0.6
90°-100°	84.1	1.1
100°-110°	599.2	8.1
110°-120°	813.4	11.0
120°-130°	662.0	9.0
130°-140°	532.5	7.2
140°-150°	419.8	5.7
150°-160°	306.9	4.2
160°-170°	190.7	2.6
170°-180°	65.0	0.9
0°-30°	1349.5	18.3
0°-40°	2122.2	28.8
0°-60°	3245.0	44.0
0°-90°	3696.8	50.2
90°-120°	1496.6	20.3
90°-150°	3111.0	42.2
90°-180°	3674.0	49.8
0°-180°	7370.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1812	1812	1812	1812	1812	
5°	1786	1813	1799	1798	1814	169
15°	1704	1726	1706	1696	1706	480
25°	1543	1554	1516	1490	1490	710
35°	1325	1322	1266	1163	1114	828
45°	1076	1058	906	655	562	830
55°	814	780	468	269	236	728
65°	552	444	170	137	135	547
75°	292	127	90	88	86	308
85°	69	34	36	32	30	80
90°	0	4	9	13	13	5
95°	34	64	34	39	47	38
105°	133	205	778	994	658	141
115°	237	287	671	1395	1630	235
125°	340	386	632	1106	1308	302
135°	422	468	637	911	1045	324
145°	499	541	641	793	877	313
155°	585	606	654	719	753	269
165°	650	658	671	688	701	182
175°	684	688	684	680	675	65
180°	684	684	684	684	684	



TEST NUMBER: P621522

CATALOG NUMBER: VLT-F-100U-100D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1812.2	1812.2	1812.2	1812.2	1812.2
2.5°	1797.2	1817.7	1807.7	1807.8	1815.2
5°	1786.0	1813.4	1799.1	1797.6	1814.0
7.5°	1769.5	1794.7	1780.0	1778.0	1792.3
10°	1756.0	1779.8	1763.5	1760.0	1772.9
12.5°	1736.5	1760.3	1742.5	1736.1	1748.9
15°	1703.6	1725.6	1705.5	1696.3	1705.5
17.5°	1662.0	1680.3	1657.5	1643.1	1648.6
20°	1630.6	1648.9	1623.1	1602.6	1608.1
22.5°	1596.1	1611.5	1582.7	1559.2	1563.2
25°	1542.6	1553.6	1516.4	1490.2	1490.2
27.5°	1483.1	1489.6	1446.4	1418.9	1411.2
30°	1439.6	1443.3	1398.4	1366.1	1342.3
32.5°	1394.7	1396.9	1346.0	1293.9	1256.9
35°	1325.4	1321.8	1265.5	1163.3	1113.9
37.5°	1251.7	1243.6	1177.2	1021.6	948.0
40°	1203.7	1192.8	1108.3	921.1	838.7
42.5°	1154.3	1138.9	1031.9	817.5	726.4
45°	1076.4	1058.1	906.1	655.0	561.6
47.5°	999.3	975.2	777.3	507.4	427.2
50°	945.4	919.8	688.9	417.9	353.8
52.5°	891.5	865.9	599.1	350.8	299.9
55°	814.4	779.6	468.0	268.8	235.9
57.5°	735.7	685.9	348.6	209.5	183.8
60°	683.3	617.4	282.7	173.7	155.4
62.5°	632.4	548.9	231.8	151.6	147.9
65°	552.3	444.3	170.4	136.6	134.8
67.5°	475.9	339.0	126.6	123.1	121.3
70°	417.5	267.4	116.1	114.2	112.3
72.5°	365.1	204.7	105.6	103.7	101.8
75°	292.0	127.3	89.9	87.9	86.1
77.5°	218.3	80.3	74.1	72.2	70.4
80°	170.4	66.0	63.7	61.7	59.9
82.5°	128.4	53.4	51.7	49.8	47.9
85°	69.3	34.5	35.6	31.8	30.0
87.5°	24.0	17.5	18.2	16.0	14.6
90°	0.0	4.2	8.6	12.9	12.9
92.5°	10.3	14.5	18.9	26.7	30.1
95°	34.4	63.8	34.4	38.9	47.3
97.5°	61.1	122.5	252.9	74.6	64.5
100°	81.7	153.2	507.5	149.4	98.9
102.5°	102.4	177.2	686.5	394.2	215.9
105°	133.3	204.8	778.5	994.5	658.1
107.5°	164.3	218.1	743.2	1447.4	1355.7
110°	184.9	235.4	722.6	1520.9	1634.4



TEST NUMBER: P621522

CATALOG NUMBER: VLT-F-100U-100D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	205.6	256.1	701.9	1477.9	1668.8
115°	236.6	287.0	671.0	1394.6	1630.1
117.5°	268.4	318.0	663.2	1304.4	1546.7
120°	292.5	338.7	649.5	1235.9	1488.2
122.5°	309.7	359.3	632.3	1176.9	1409.0
125°	339.8	386.0	632.3	1105.7	1307.5
127.5°	364.7	411.8	633.1	1023.0	1222.4
130°	378.5	429.0	636.6	967.7	1157.0
132.5°	395.7	446.2	636.6	942.9	1098.5
135°	421.5	467.8	636.6	910.6	1045.2
137.5°	443.0	492.6	636.6	874.9	990.1
140°	460.2	506.5	636.6	854.0	959.1
142.5°	477.4	520.3	640.0	829.8	928.2
145°	498.9	541.0	640.9	793.3	877.4
147.5°	524.7	561.7	646.0	767.1	831.8
150°	541.9	575.6	649.5	749.6	804.3
152.5°	559.1	589.4	649.5	735.6	780.2
155°	585.0	606.0	653.8	719.0	752.7
157.5°	605.6	625.8	658.9	708.5	732.9
160°	619.4	636.2	662.4	701.6	722.6
162.5°	629.7	646.5	665.8	698.0	712.3
165°	649.5	657.9	671.0	688.5	701.1
167.5°	660.7	668.2	675.3	684.0	691.6
170°	671.0	675.2	675.3	684.0	688.2
172.5°	674.4	682.0	678.7	680.5	684.7
175°	683.9	688.1	683.9	679.5	675.3
177.5°	683.9	687.2	683.9	683.8	680.4
180°	683.9	683.9	683.9	683.9	683.9

-----



TEST NUMBER: P621522

CATALOG NUMBER: VLT-F-100U-100D-940-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	16.55	17.36	17.51	18.34	19.61	8.78	9.60	9.75	10.57	11.84
	3H	18.04	18.77	19.02	19.75	21.04	10.13	10.86	11.11	11.84	13.14
	4H	18.55	19.24	19.54	20.22	21.53	10.78	11.47	11.78	12.46	13.76
	6H	18.95	19.58	19.95	20.57	21.88	11.37	12.00	12.37	12.99	14.31
	8H	19.08	19.68	20.08	20.68	22.00	11.59	12.19	12.60	13.20	14.52
	12H	19.16	19.73	20.17	20.73	22.06	11.76	12.33	12.77	13.33	14.67
4H	2H	16.37	17.06	17.37	18.05	19.35	9.39	10.08	10.39	11.07	12.37
	3H	18.01	18.58	19.01	19.59	20.91	10.94	11.51	11.95	12.53	13.84
	4H	18.59	19.11	19.61	20.12	21.46	11.74	12.26	12.75	13.26	14.60
	6H	19.09	19.53	20.11	20.56	21.90	12.47	12.92	13.50	13.95	15.29
	8H	19.27	19.69	20.30	20.71	22.06	12.76	13.18	13.79	14.20	15.56
	12H	19.40	19.77	20.44	20.81	22.17	12.98	13.35	14.02	14.39	15.75
8H	4H	18.51	18.92	19.53	19.95	21.30	12.19	12.60	13.21	13.63	14.98
	6H	19.04	19.39	20.09	20.45	21.80	13.07	13.41	14.12	14.48	15.83
	8H	19.28	19.58	20.33	20.63	22.00	13.46	13.76	14.52	14.82	16.19
	12H	19.46	19.73	20.52	20.78	22.19	13.78	14.05	14.84	15.09	16.51
12H	4H	18.46	18.83	19.50	19.87	21.23	12.23	12.61	13.28	13.65	15.01
	6H	19.01	19.32	20.07	20.37	21.74	13.18	13.48	14.24	14.54	15.91
	8H	19.25	19.52	20.31	20.57	21.98	13.62	13.89	14.68	14.94	16.35