

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: P621474

Luminaire Tested: VLT-F-075U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621474  
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-075U-100D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

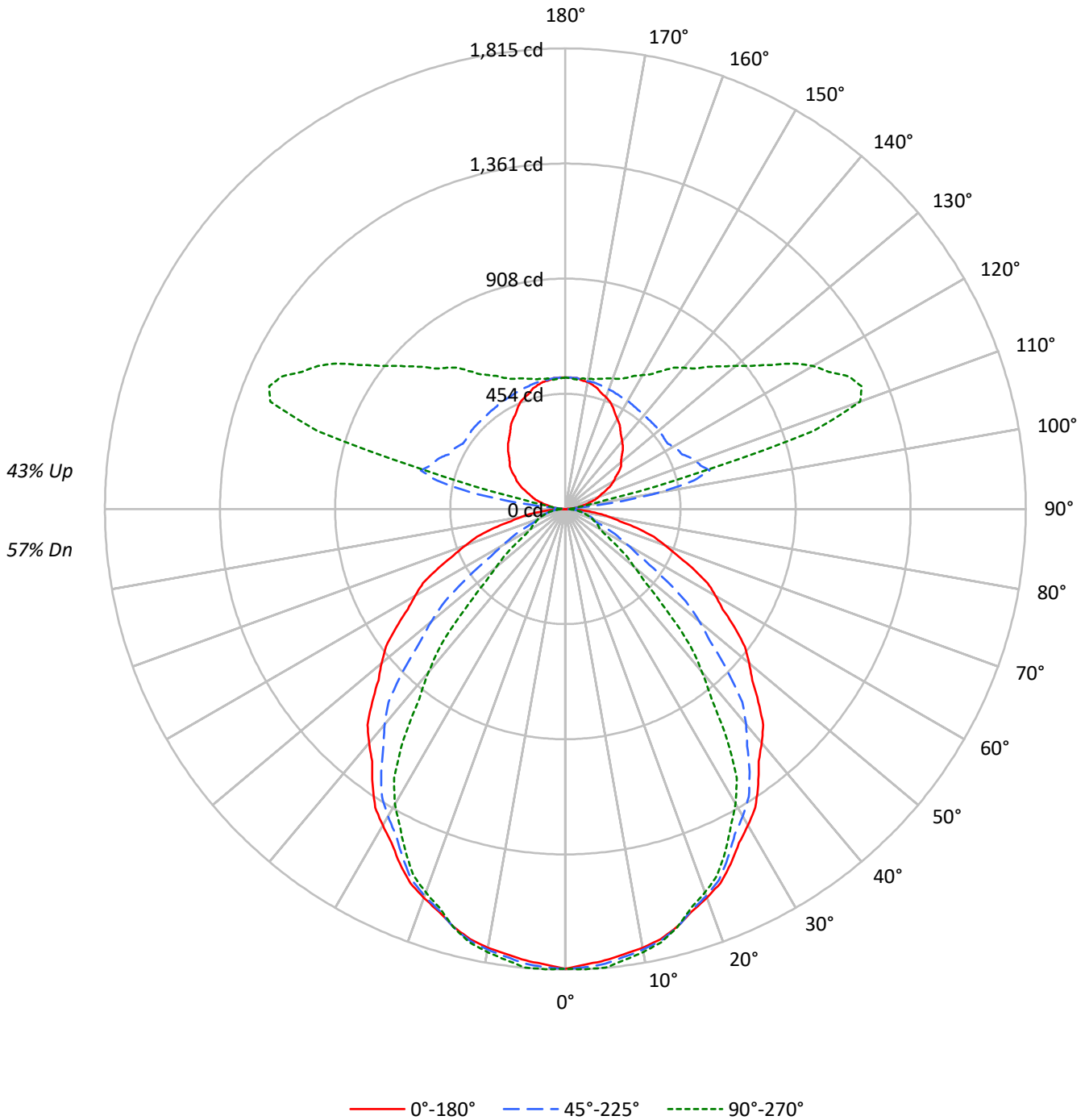
Lumens per Lamp: N/A  
Luminaire Lumens: 6477.9 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 50  
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



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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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63	57				57
1	100	96	92	89	93	90	87	84	78	75	73	67	65	64	57	55	54	50				50
2	92	85	79	74	85	79	74	70	69	65	62	60	57	54	51	49	47	43				43
3	84	75	68	63	78	71	65	60	62	57	53	53	50	47	46	43	41	37				37
4	78	67	60	54	72	63	56	51	55	50	46	48	44	41	41	39	36	33				33
5	72	60	53	47	67	57	50	45	50	45	40	44	39	36	38	35	32	29				29
6	66	55	47	41	62	51	44	39	45	40	36	40	35	32	35	31	29	26				26
7	61	50	42	36	57	47	40	35	41	36	32	36	32	29	32	28	26	23				23
8	57	45	38	32	53	43	36	31	38	32	28	33	29	26	29	26	23	21				21
9	53	41	34	29	50	39	33	28	35	29	26	31	27	23	27	24	21	19				19
10	50	38	31	26	47	36	30	25	32	27	23	29	24	21	25	22	19	17				17

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.8	2.6
10°-20°	480.2	7.4
20°-30°	698.5	10.8
30°-40°	772.8	11.9
40°-50°	663.4	10.2
50°-60°	459.4	7.1
60°-70°	273.7	4.2
70°-80°	134.9	2.1
80°-90°	42.8	0.7
90°-100°	63.7	1.0
100°-110°	453.7	7.0
110°-120°	615.9	9.5
120°-130°	501.3	7.7
130°-140°	403.2	6.2
140°-150°	317.8	4.9
150°-160°	232.4	3.6
160°-170°	144.4	2.2
170°-180°	49.2	0.8
0°-30°	1349.5	20.8
0°-40°	2122.2	32.8
0°-60°	3245.0	50.1
0°-90°	3696.5	57.1
90°-120°	1133.2	17.5
90°-150°	2355.5	36.4
90°-180°	2781.0	42.9
0°-180°	6477.9	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	3	6	10	10	4
95°	26	48	26	30	36	29
105°	101	155	589	753	498	106
115°	179	217	508	1056	1234	178
125°	257	292	479	837	990	229
135°	319	354	482	689	791	246
145°	378	410	485	601	664	237
155°	443	459	495	544	570	203
165°	492	498	508	521	531	138
175°	518	521	518	514	511	49
180°	518	518	518	518	518	

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**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	17.3	17.8	15.4	13.9
90°	0.0	3.2	6.5	9.8	9.8
92.5°	7.8	11.0	14.3	20.2	22.8
95°	26.1	48.3	26.1	29.5	35.8
97.5°	46.2	92.7	191.5	56.5	48.8
100°	61.9	116.0	384.3	113.1	74.9
102.5°	77.5	134.2	519.7	298.5	163.5
105°	101.0	155.1	589.4	753.0	498.3
107.5°	124.4	165.2	562.7	1095.9	1026.5
110°	140.0	178.2	547.1	1151.5	1237.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	155.7	193.9	531.5	1119.0	1263.5
115°	179.1	217.3	508.0	1055.9	1234.2
117.5°	203.2	240.8	502.2	987.6	1171.1
120°	221.4	256.5	491.7	935.7	1126.8
122.5°	234.5	272.0	478.7	891.1	1066.8
125°	257.3	292.3	478.7	837.2	990.0
127.5°	276.2	311.8	479.4	774.6	925.5
130°	286.6	324.8	482.0	732.7	876.0
132.5°	299.6	337.8	482.0	713.9	831.7
135°	319.1	354.2	482.0	689.4	791.3
137.5°	335.4	373.0	482.0	662.4	749.7
140°	348.5	383.5	482.0	646.6	726.2
142.5°	361.5	394.0	484.6	628.3	702.8
145°	377.8	409.6	485.2	600.7	664.3
147.5°	397.3	425.3	489.1	580.8	629.8
150°	410.3	435.8	491.7	567.6	609.0
152.5°	423.4	446.3	491.7	557.0	590.7
155°	442.9	458.8	495.0	544.4	569.9
157.5°	458.5	473.8	498.9	536.4	554.9
160°	468.9	481.7	501.5	531.2	547.1
162.5°	476.8	489.5	504.1	528.5	539.3
165°	491.7	498.1	508.0	521.3	530.8
167.5°	500.2	505.9	511.3	517.9	523.7
170°	508.0	511.2	511.3	517.9	521.0
172.5°	510.6	516.4	513.9	515.3	518.4
175°	517.8	521.0	517.8	514.5	511.3
177.5°	517.8	520.3	517.8	517.7	515.2
180°	517.8	517.8	517.8	517.8	517.8

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**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	17.17	18.04	18.08	18.96	20.13	9.41	10.28	10.31	11.19	12.36
	3H	18.67	19.44	19.59	20.37	21.57	10.76	11.54	11.68	12.46	13.66
	4H	19.18	19.92	20.11	20.85	22.05	11.42	12.15	12.35	13.08	14.29
	6H	19.58	20.25	20.52	21.19	22.41	12.01	12.68	12.95	13.62	14.83
	8H	19.71	20.35	20.66	21.31	22.52	12.23	12.87	13.18	13.83	15.04
	12H	19.79	20.40	20.75	21.35	22.59	12.40	13.01	13.35	13.95	15.19
4H	2H	17.00	17.74	17.94	18.67	19.87	10.03	10.76	10.96	11.69	12.90
	3H	18.64	19.25	19.59	20.21	21.43	11.58	12.19	12.53	13.15	14.37
	4H	19.23	19.79	20.19	20.74	21.99	12.37	12.93	13.33	13.88	15.13
	6H	19.73	20.20	20.70	21.18	22.43	13.11	13.59	14.08	14.57	15.81
	8H	19.91	20.36	20.89	21.33	22.59	13.41	13.85	14.38	14.82	16.08
	12H	20.04	20.44	21.03	21.43	22.70	13.62	14.02	14.61	15.01	16.28
8H	4H	19.15	19.59	20.12	20.57	21.83	12.83	13.27	13.80	14.25	15.50
	6H	19.69	20.05	20.68	21.07	22.32	13.71	14.08	14.71	15.09	16.35
	8H	19.92	20.24	20.93	21.25	22.52	14.11	14.43	15.11	15.43	16.71
	12H	20.11	20.40	21.12	21.39	22.71	14.43	14.71	15.43	15.71	17.03
12H	4H	19.10	19.50	20.09	20.49	21.75	12.88	13.28	13.87	14.27	15.53
	6H	19.66	19.98	20.66	20.99	22.26	13.83	14.15	14.83	15.15	16.43
	8H	19.90	20.19	20.91	21.18	22.50	14.27	14.55	15.28	15.55	16.87