

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: P621470

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621470  
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-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

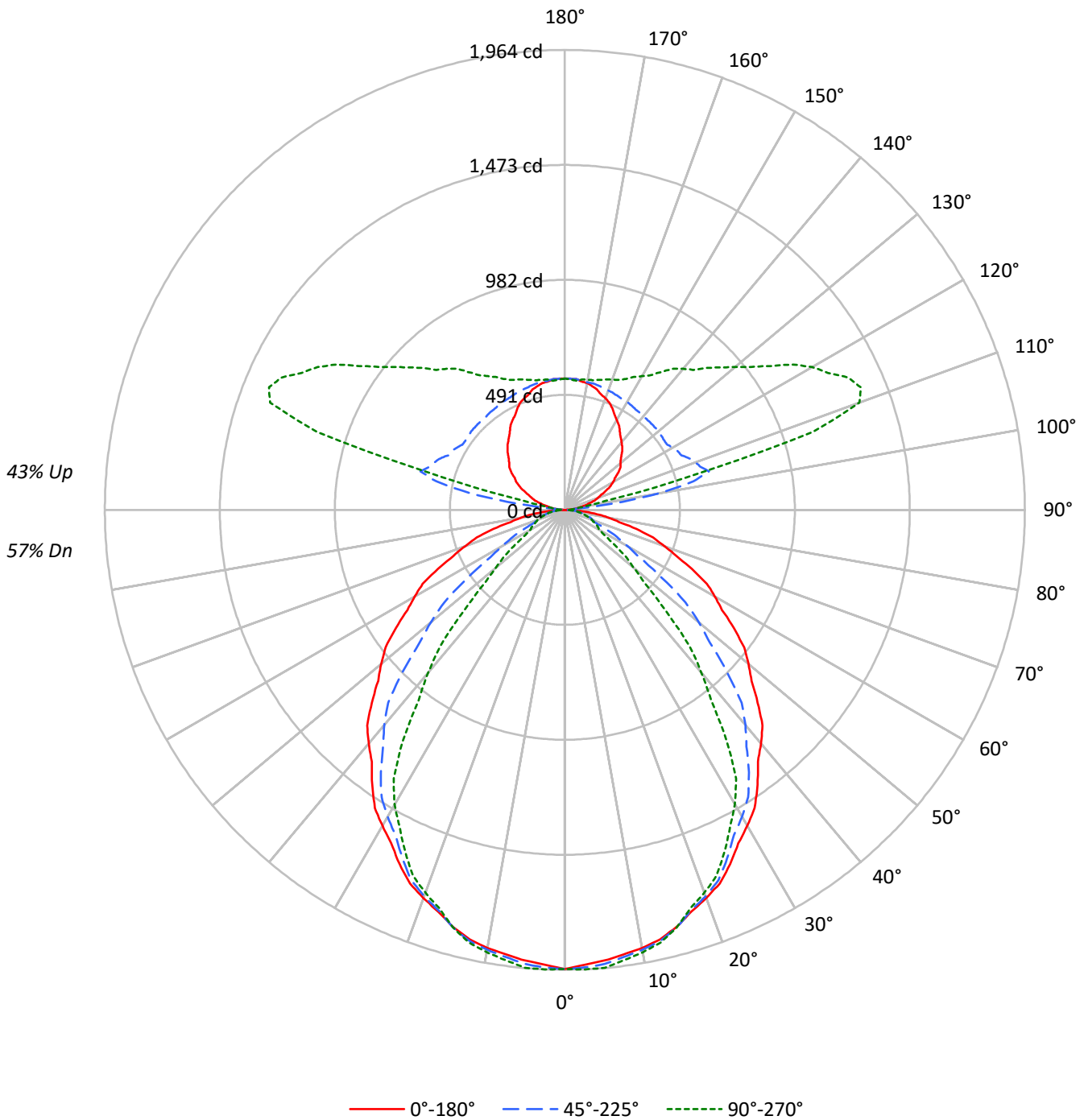
Lumens per Lamp: N/A  
Luminaire Lumens: 7009.4 lumens  
Efficiency: N/A  
Efficacy: 140.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

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°	14071	14071	14071
5°	13920	14023	14139
10°	13845	13904	13978
15°	13695	13710	13710
20°	13474	13412	13288
25°	13216	12991	12767
30°	12908	12538	12035
35°	12564	11996	10559
40°	12201	11234	8501
45°	11821	9949	6167
50°	11421	8323	4275
55°	11025	6336	3193
60°	10612	4390	2413
65°	10147	3129	2476
70°	9477	2635	2549
75°	8761	2695	2584
80°	7616	2847	2678
85°	6175	3170	2668

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11821 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.8	2.6
10°-20°	519.6	7.4
20°-30°	755.8	10.8
30°-40°	836.2	11.9
40°-50°	717.9	10.2
50°-60°	497.1	7.1
60°-70°	296.2	4.2
70°-80°	145.9	2.1
80°-90°	46.3	0.7
90°-100°	68.9	1.0
100°-110°	490.9	7.0
110°-120°	666.4	9.5
120°-130°	542.4	7.7
130°-140°	436.2	6.2
140°-150°	343.9	4.9
150°-160°	251.5	3.6
160°-170°	156.2	2.2
170°-180°	53.3	0.8
0°-30°	1460.2	20.8
0°-40°	2296.3	32.8
0°-60°	3511.3	50.1
0°-90°	3999.7	57.1
90°-120°	1226.2	17.5
90°-150°	2548.7	36.4
90°-180°	3010.0	42.9
0°-180°	7009.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1961	1961	1961	1961	1961	
5°	1932	1962	1947	1945	1963	183
15°	1843	1867	1845	1836	1845	519
25°	1669	1681	1641	1612	1612	768
35°	1434	1430	1369	1259	1205	896
45°	1165	1145	980	709	608	899
55°	881	844	506	291	255	788
65°	598	481	184	148	146	592
75°	316	138	97	95	93	334
85°	75	37	38	34	32	87
90°	0	3	7	11	11	5
95°	28	52	28	32	39	32
105°	109	168	638	815	539	115
115°	194	235	550	1143	1336	192
125°	278	316	518	906	1071	247
135°	345	383	522	746	856	266
145°	409	443	525	650	719	257
155°	479	496	536	589	617	220
165°	532	539	550	564	574	149
175°	560	564	560	557	553	53
180°	560	560	560	560	560	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1960.9	1960.9	1960.9	1960.9	1960.9
2.5°	1944.7	1966.8	1956.0	1956.2	1964.1
5°	1932.5	1962.2	1946.7	1945.1	1962.9
7.5°	1914.7	1942.0	1926.0	1923.9	1939.4
10°	1900.1	1925.8	1908.2	1904.5	1918.3
12.5°	1879.0	1904.8	1885.5	1878.5	1892.4
15°	1843.4	1867.1	1845.4	1835.5	1845.4
17.5°	1798.4	1818.2	1793.5	1777.9	1783.8
20°	1764.4	1784.2	1756.3	1734.1	1740.1
22.5°	1727.1	1743.7	1712.5	1687.1	1691.4
25°	1669.2	1681.0	1640.8	1612.4	1612.4
27.5°	1604.7	1611.9	1565.0	1535.3	1527.0
30°	1557.8	1561.7	1513.2	1478.2	1452.4
32.5°	1509.1	1511.5	1456.5	1400.1	1360.0
35°	1434.2	1430.2	1369.4	1258.8	1205.3
37.5°	1354.4	1345.7	1273.8	1105.4	1025.8
40°	1302.5	1290.6	1199.2	996.6	907.5
42.5°	1249.0	1232.4	1116.6	884.6	786.0
45°	1164.8	1145.0	980.4	708.7	607.7
47.5°	1081.3	1055.2	841.1	549.0	462.3
50°	1023.0	995.2	745.5	452.2	382.9
52.5°	964.6	936.9	648.2	379.6	324.5
55°	881.2	843.5	506.4	290.9	255.2
57.5°	796.1	742.2	377.2	226.7	198.9
60°	739.4	668.1	305.9	187.9	168.1
62.5°	684.3	594.0	250.8	164.0	160.0
65°	597.6	480.7	184.3	147.8	145.8
67.5°	514.9	366.8	136.9	133.2	131.3
70°	451.7	289.3	125.6	123.5	121.5
72.5°	395.0	221.5	114.2	112.2	110.2
75°	316.0	137.7	97.2	95.2	93.2
77.5°	236.2	86.9	80.2	78.1	76.2
80°	184.3	71.4	68.9	66.8	64.8
82.5°	139.0	57.8	55.9	53.8	51.9
85°	75.0	37.3	38.5	34.4	32.4
87.5°	25.9	18.7	19.2	16.7	15.1
90°	0.0	3.4	7.0	10.6	10.6
92.5°	8.5	11.9	15.5	21.9	24.7
95°	28.2	52.3	28.2	31.9	38.8
97.5°	50.0	100.3	207.2	61.1	52.9
100°	67.0	125.5	415.8	122.4	81.0
102.5°	83.9	145.2	562.4	323.0	176.9
105°	109.2	167.8	637.8	814.8	539.1
107.5°	134.6	178.7	608.9	1185.8	1110.7
110°	151.5	192.9	592.0	1246.0	1339.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	168.4	209.8	575.1	1210.8	1367.2
115°	193.8	235.2	549.7	1142.6	1335.5
117.5°	219.9	260.5	543.4	1068.7	1267.1
120°	239.6	277.5	532.1	1012.5	1219.2
122.5°	253.7	294.4	518.0	964.2	1154.4
125°	278.4	316.3	518.0	905.8	1071.2
127.5°	298.8	337.4	518.7	838.1	1001.5
130°	310.1	351.4	521.5	792.8	947.9
132.5°	324.2	365.5	521.5	772.5	900.0
135°	345.3	383.2	521.5	746.0	856.3
137.5°	362.9	403.6	521.5	716.8	811.2
140°	377.0	414.9	521.5	699.7	785.8
142.5°	391.1	426.3	524.3	679.8	760.4
145°	408.8	443.2	525.0	649.9	718.8
147.5°	429.9	460.2	529.3	628.4	681.5
150°	444.0	471.6	532.1	614.2	658.9
152.5°	458.1	482.9	532.1	602.7	639.2
155°	479.2	496.5	535.6	589.1	616.7
157.5°	496.1	512.7	539.8	580.5	600.4
160°	507.4	521.2	542.7	574.8	592.0
162.5°	515.9	529.7	545.5	571.8	583.5
165°	532.1	539.0	549.7	564.0	574.4
167.5°	541.2	547.5	553.2	560.4	566.6
170°	549.7	553.2	553.2	560.4	563.8
172.5°	552.5	558.7	556.0	557.5	561.0
175°	560.3	563.7	560.3	556.7	553.2
177.5°	560.3	563.0	560.3	560.2	557.5
180°	560.3	560.3	560.3	560.3	560.3

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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	17.45	18.32	18.35	19.23	20.40	9.68	10.55	10.59	11.47	12.64
	3H	18.94	19.72	19.86	20.64	21.84	11.03	11.81	11.95	12.74	13.93
	4H	19.46	20.19	20.39	21.12	22.33	11.69	12.42	12.62	13.35	14.56
	6H	19.85	20.53	20.80	21.46	22.68	12.28	12.95	13.22	13.89	15.11
	8H	19.99	20.63	20.94	21.58	22.80	12.50	13.15	13.46	14.10	15.32
	12H	20.07	20.68	21.02	21.62	22.86	12.67	13.28	13.63	14.23	15.47
4H	2H	17.28	18.01	18.22	18.94	20.15	10.30	11.03	11.24	11.96	13.17
	3H	18.92	19.52	19.86	20.49	21.71	11.85	12.46	12.80	13.42	14.64
	4H	19.51	20.06	20.46	21.02	22.26	12.65	13.20	13.60	14.16	15.40
	6H	20.00	20.48	20.97	21.46	22.70	13.39	13.86	14.36	14.84	16.09
	8H	20.19	20.63	21.16	21.60	22.86	13.68	14.12	14.65	15.10	16.35
	12H	20.32	20.72	21.31	21.71	22.97	13.90	14.30	14.89	15.29	16.55
8H	4H	19.42	19.87	20.40	20.84	22.10	13.10	13.55	14.07	14.52	15.78
	6H	19.96	20.33	20.96	21.34	22.60	13.99	14.35	14.98	15.37	16.62
	8H	20.19	20.52	21.20	21.52	22.80	14.38	14.70	15.38	15.71	16.98
	12H	20.38	20.67	21.39	21.67	22.99	14.70	14.99	15.71	15.98	17.30
12H	4H	19.37	19.77	20.36	20.77	22.03	13.15	13.55	14.14	14.54	15.81
	6H	19.93	20.26	20.94	21.26	22.53	14.10	14.42	15.10	15.43	16.70
	8H	20.17	20.46	21.18	21.46	22.78	14.54	14.83	15.55	15.83	17.15