

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: P621531

Luminaire Tested: VLT-F-125U-050D-840-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621531  
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-125U-050D-840-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

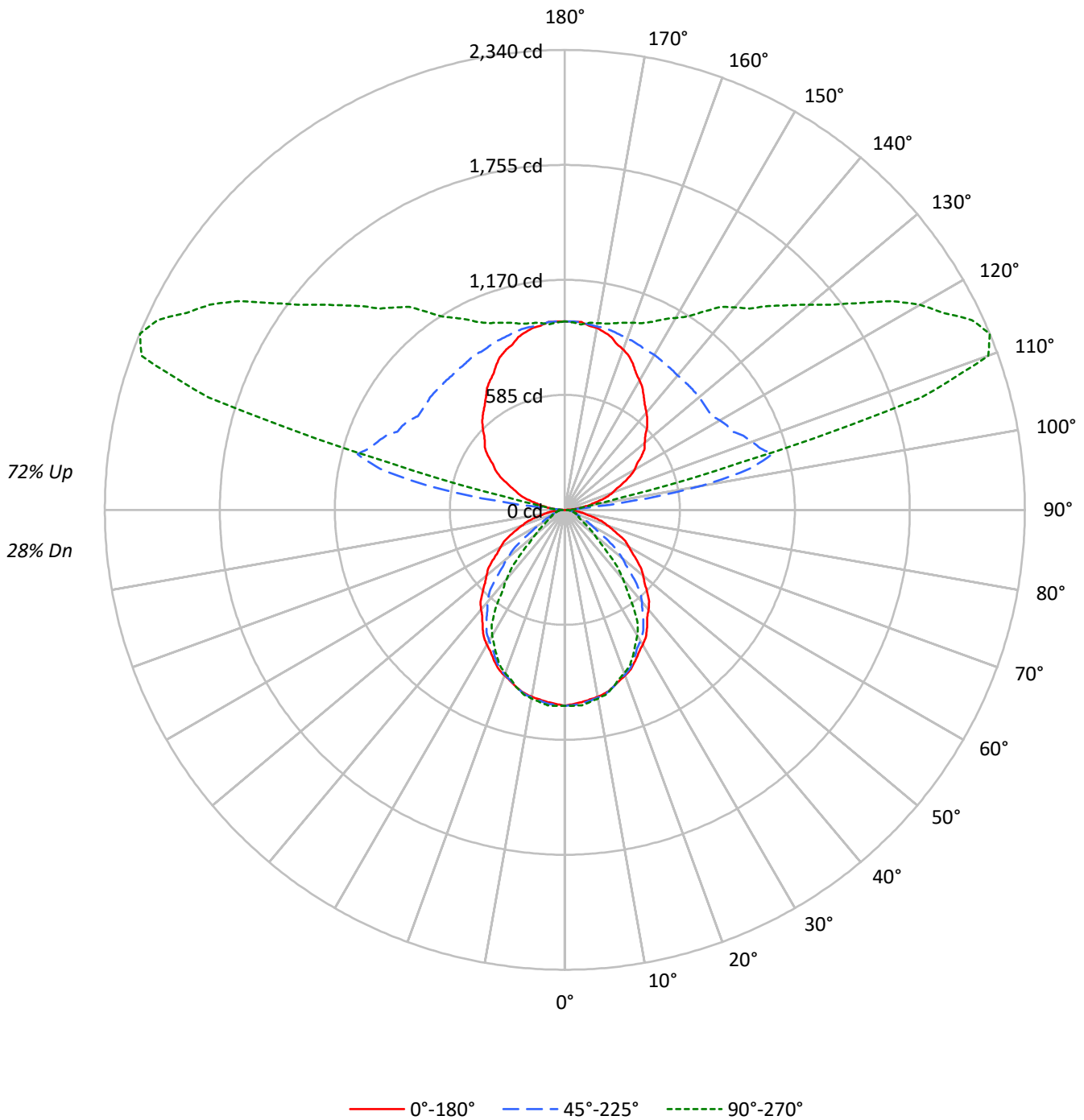
Lumens per Lamp: N/A  
Luminaire Lumens: 7185.4 lumens  
Efficiency: N/A  
Efficacy: 136.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 52.6  
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



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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	93	89	86	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25				
2	85	78	73	68	76	70	66	62	56	52	50	42	40	38	29	28	27	21				
3	78	69	62	57	70	62	57	52	49	45	42	37	35	33	26	25	23	19				
4	71	61	54	48	64	55	49	44	44	40	36	33	31	28	24	22	20	16				
5	66	55	47	42	59	49	43	38	39	35	31	30	27	25	21	20	18	14				
6	60	49	42	36	54	44	38	33	36	31	27	27	24	22	20	18	16	13				
7	56	44	37	32	50	40	34	29	32	28	24	25	22	19	18	16	14	12				
8	52	40	33	28	46	36	30	26	29	25	21	23	20	17	17	14	13	10				
9	48	37	30	25	43	33	27	23	27	22	19	21	18	15	15	13	12	9				
10	45	34	27	22	40	31	25	20	25	20	17	19	16	14	14	12	11	9				

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

	0°	45°	90°
0°	7154	7154	7154
5°	7077	7129	7188
10°	7039	7069	7106
15°	6962	6970	6970
20°	6850	6818	6755
25°	6719	6604	6490
30°	6562	6374	6118
35°	6387	6099	5367
40°	6203	5710	4322
45°	6009	5058	3135
50°	5806	4231	2172
55°	5605	3222	1624
60°	5395	2232	1227
65°	5158	1591	1258
70°	4817	1339	1297
75°	4456	1370	1314
80°	3872	1446	1364
85°	3137	1614	1359

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6009 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	93.9	1.3
10°-20°	264.2	3.7
20°-30°	384.2	5.3
30°-40°	425.1	5.9
40°-50°	365.0	5.1
50°-60°	252.7	3.5
60°-70°	150.6	2.1
70°-80°	74.2	1.0
80°-90°	25.1	0.3
90°-100°	117.9	1.6
100°-110°	840.0	11.7
110°-120°	1140.5	15.9
120°-130°	928.2	12.9
130°-140°	746.5	10.4
140°-150°	588.6	8.2
150°-160°	430.4	6.0
160°-170°	267.3	3.7
170°-180°	91.2	1.3
0°-30°	742.3	10.3
0°-40°	1167.4	16.2
0°-60°	1785.1	24.8
0°-90°	2034.9	28.3
90°-120°	2098.4	29.2
90°-150°	4361.7	60.7
90°-180°	5150.0	71.7
0°-180°	7185.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	997	997	997	997	997	
5°	982	998	990	989	998	93
15°	937	949	938	933	938	264
25°	849	855	834	820	820	390
35°	729	727	696	640	613	456
45°	592	582	498	360	309	457
55°	448	429	258	148	130	400
65°	304	244	94	75	74	301
75°	161	70	49	48	47	170
85°	38	19	20	18	16	44
90°	0	6	12	18	18	4
95°	48	90	48	54	66	54
105°	187	287	1092	1394	923	197
115°	332	402	941	1955	2286	329
125°	476	541	886	1550	1833	423
135°	591	656	892	1277	1465	455
145°	700	758	898	1112	1230	439
155°	820	850	917	1008	1055	376
165°	911	922	941	965	983	256
175°	959	965	959	953	947	91
180°	959	959	959	959	959	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	996.9	996.9	996.9	996.9	996.9
2.5°	988.6	999.9	994.4	994.5	998.5
5°	982.4	997.5	989.7	988.8	997.9
7.5°	973.4	987.3	979.1	978.1	985.9
10°	966.0	979.1	970.1	968.2	975.2
12.5°	955.3	968.3	958.6	955.0	962.1
15°	937.1	949.2	938.2	933.1	938.2
17.5°	914.3	924.3	911.8	903.8	906.9
20°	897.0	907.0	892.8	881.6	884.6
22.5°	878.0	886.5	870.6	857.7	859.9
25°	848.6	854.6	834.1	819.7	819.7
27.5°	815.8	819.4	795.6	780.5	776.3
30°	791.9	793.9	769.3	751.5	738.4
32.5°	767.2	768.4	740.4	711.8	691.4
35°	729.1	727.1	696.2	639.9	612.7
37.5°	688.5	684.1	647.5	562.0	521.5
40°	662.2	656.1	609.6	506.7	461.4
42.5°	635.0	626.5	567.6	449.7	399.6
45°	592.1	582.1	498.4	360.3	308.9
47.5°	549.7	536.4	427.6	279.1	235.0
50°	520.1	506.0	379.0	229.9	194.6
52.5°	490.4	476.3	329.5	193.0	165.0
55°	448.0	428.8	257.5	147.9	129.8
57.5°	404.7	377.3	191.8	115.2	101.1
60°	375.9	339.6	155.5	95.5	85.5
62.5°	347.9	302.0	127.5	83.4	81.4
65°	303.8	244.4	93.7	75.2	74.1
67.5°	261.8	186.5	69.6	67.7	66.7
70°	229.6	147.1	63.8	62.8	61.8
72.5°	200.8	112.6	58.1	57.0	56.0
75°	160.7	70.0	49.4	48.4	47.4
77.5°	120.1	44.2	40.8	39.7	38.7
80°	93.7	36.3	35.0	34.0	33.0
82.5°	70.6	29.4	28.4	27.4	26.4
85°	38.1	19.0	19.6	17.5	16.5
87.5°	13.2	10.3	11.5	11.0	10.2
90°	0.0	5.9	12.1	18.1	18.1
92.5°	14.5	20.4	26.5	37.5	42.2
95°	48.2	89.5	48.2	54.5	66.3
97.5°	85.6	171.7	354.6	104.6	90.5
100°	114.6	214.8	711.6	209.5	138.7
102.5°	143.5	248.5	962.4	552.7	302.7
105°	186.9	287.2	1091.5	1394.3	922.6
107.5°	230.4	305.8	1042.0	2029.3	1900.7
110°	259.3	330.1	1013.1	2132.3	2291.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	288.2	359.0	984.1	2072.1	2339.7
115°	331.7	402.4	940.7	1955.3	2285.5
117.5°	376.3	445.9	929.9	1828.9	2168.5
120°	410.1	474.9	910.6	1732.7	2086.5
122.5°	434.2	503.8	886.4	1650.0	1975.5
125°	476.4	541.2	886.4	1550.2	1833.2
127.5°	511.4	577.4	887.7	1434.3	1713.8
130°	530.7	601.4	892.5	1356.8	1622.1
132.5°	554.8	625.5	892.5	1322.0	1540.1
135°	591.0	655.8	892.5	1276.7	1465.4
137.5°	621.1	690.7	892.5	1226.6	1388.2
140°	645.2	710.1	892.5	1197.3	1344.7
142.5°	669.4	729.5	897.3	1163.4	1301.3
145°	699.5	758.5	898.5	1112.2	1230.2
147.5°	735.7	787.6	905.7	1075.5	1166.3
150°	759.8	807.0	910.6	1051.0	1127.7
152.5°	783.9	826.4	910.6	1031.4	1093.9
155°	820.1	849.6	916.6	1008.1	1055.3
157.5°	849.1	877.4	923.8	993.4	1027.6
160°	868.4	891.9	928.7	983.6	1013.1
162.5°	882.8	906.4	933.5	978.6	998.6
165°	910.6	922.4	940.7	965.2	982.9
167.5°	926.2	936.9	946.8	959.1	969.7
170°	940.7	946.6	946.8	958.9	964.8
172.5°	945.5	956.2	951.6	954.1	960.0
175°	958.8	964.7	958.8	952.6	946.8
177.5°	958.8	963.5	958.8	958.7	954.0
180°	958.8	958.8	958.8	958.8	958.8



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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	11.98	12.65	13.11	13.77	15.32	4.21	4.88	5.34	6.00	7.55
	3H	13.46	14.06	14.60	15.18	16.75	5.55	6.15	6.69	7.28	8.85
	4H	13.96	14.53	15.11	15.66	17.23	6.20	6.77	7.35	7.89	9.47
	6H	14.35	14.87	15.51	16.00	17.59	6.78	7.30	7.93	8.43	10.02
	8H	14.48	14.97	15.64	16.12	17.70	7.00	7.50	8.16	8.64	10.22
	12H	14.55	15.02	15.71	16.16	17.76	7.16	7.63	8.32	8.77	10.37
4H	2H	11.78	12.35	12.94	13.48	15.05	4.81	5.38	5.96	6.50	8.08
	3H	13.40	13.88	14.56	15.03	16.62	6.34	6.81	7.50	7.97	9.55
	4H	13.99	14.42	15.15	15.56	17.17	7.13	7.57	8.29	8.71	10.31
	6H	14.47	14.84	15.64	16.01	17.60	7.86	8.23	9.03	9.40	10.99
	8H	14.66	15.00	15.82	16.16	17.77	8.15	8.50	9.32	9.65	11.27
	12H	14.78	15.09	15.96	16.26	17.87	8.36	8.68	9.54	9.84	11.46
8H	4H	13.89	14.24	15.06	15.39	17.01	7.57	7.92	8.74	9.07	10.69
	6H	14.42	14.71	15.61	15.90	17.51	8.45	8.74	9.64	9.93	11.54
	8H	14.66	14.91	15.85	16.08	17.71	8.84	9.09	10.04	10.27	11.90
	12H	14.84	15.06	16.03	16.23	17.89	9.16	9.38	10.35	10.55	12.21
12H	4H	13.83	14.15	15.02	15.31	16.93	7.61	7.93	8.79	9.09	10.71
	6H	14.39	14.64	15.59	15.82	17.45	8.56	8.81	9.75	9.99	11.62
	8H	14.63	14.85	15.82	16.02	17.68	9.00	9.22	10.19	10.39	12.05