

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: P621451

Luminaire Tested: VLT-F-050U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621451  
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-050U-125D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

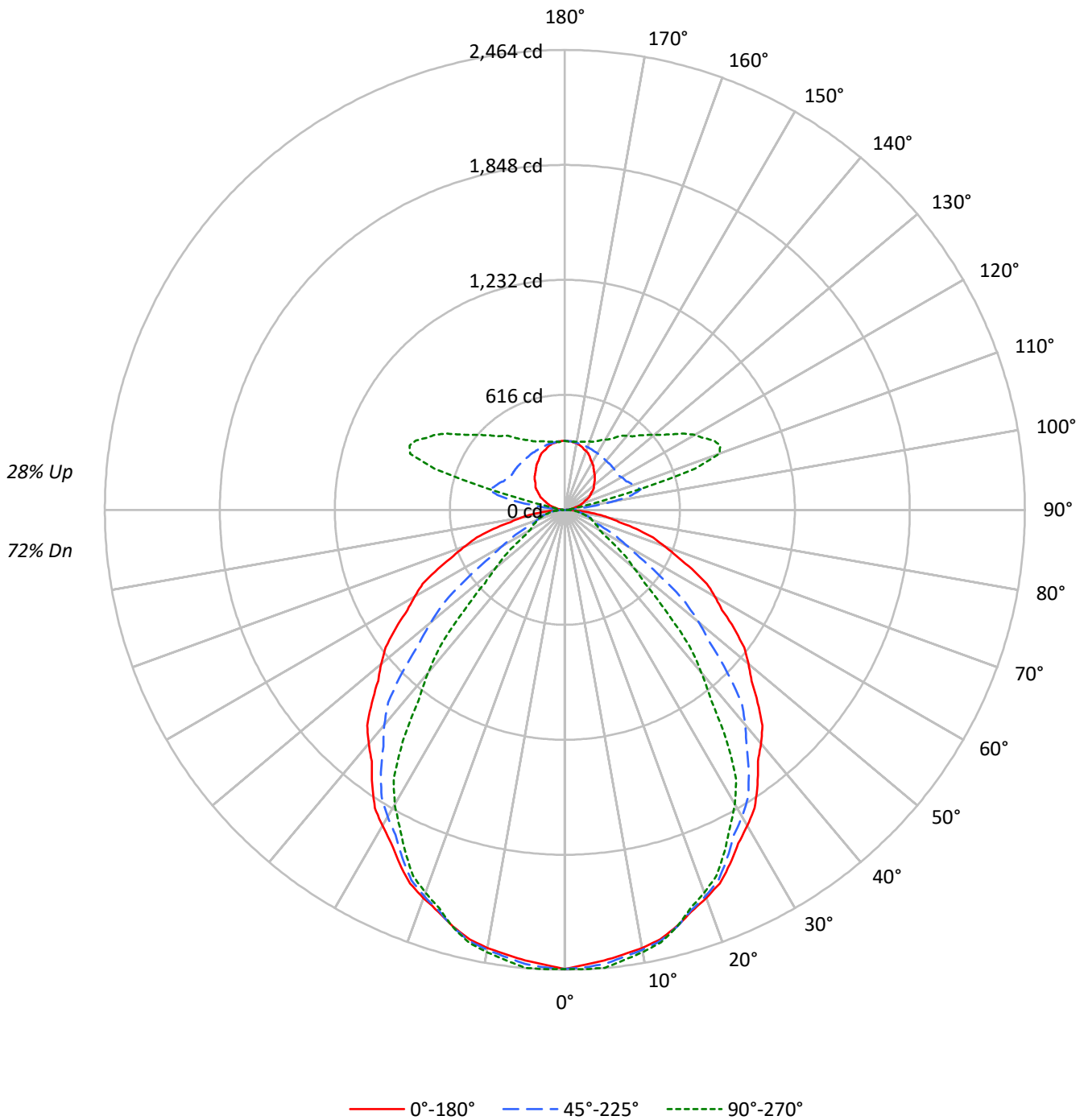
Lumens per Lamp: N/A  
Luminaire Lumens: 6997.8 lumens  
Efficiency: N/A  
Efficacy: 131.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 53.3  
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	0
RCR																		
0	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	104	100	96	93	98	95	91	88	85	83	81	77	75	73	69	67	66	62
2	95	88	82	77	90	84	79	74	76	72	68	69	66	63	62	59	57	54
3	88	79	71	66	83	75	69	63	68	63	59	62	58	54	56	53	50	47
4	81	70	63	57	76	67	60	55	61	56	51	56	51	48	51	47	44	41
5	75	63	55	49	71	61	53	48	55	49	45	51	46	42	46	42	39	36
6	69	57	49	44	65	55	48	42	50	44	40	46	41	37	42	38	35	32
7	64	52	44	39	61	50	43	38	46	40	36	42	37	33	39	35	31	29
8	60	48	40	35	57	46	39	34	42	36	32	39	34	30	36	32	28	26
9	56	44	36	31	53	42	35	31	39	33	29	36	31	27	33	29	26	24
10	53	40	33	29	50	39	32	28	36	30	26	33	29	25	31	27	24	22

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

	0°	45°	90°
0°	17651	17651	17651
5°	17462	17590	17736
10°	17367	17441	17534
15°	17178	17197	17197
20°	16901	16823	16668
25°	16578	16296	16014
30°	16191	15728	15096
35°	15760	15047	13245
40°	15305	14092	10664
45°	14828	12480	7736
50°	14325	10439	5361
55°	13828	7947	4006
60°	13311	5507	3027
65°	12728	3926	3106
70°	11888	3305	3200
75°	10990	3383	3241
80°	9554	3570	3360
85°	7739	3977	3351

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14828 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.8	3.3
10°-20°	651.8	9.3
20°-30°	948.1	13.5
30°-40°	1048.9	15.0
40°-50°	900.5	12.9
50°-60°	623.5	8.9
60°-70°	371.5	5.3
70°-80°	183.1	2.6
80°-90°	57.3	0.8
90°-100°	45.4	0.6
100°-110°	323.2	4.6
110°-120°	438.7	6.3
120°-130°	357.1	5.1
130°-140°	287.2	4.1
140°-150°	226.4	3.2
150°-160°	165.6	2.4
160°-170°	102.8	1.5
170°-180°	35.1	0.5
0°-30°	1831.6	26.2
0°-40°	2880.5	41.2
0°-60°	4404.5	62.9
0°-90°	5016.4	71.7
90°-120°	807.3	11.5
90°-150°	1677.9	24.0
90°-180°	1981.0	28.3
0°-180°	6997.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2460	2460	2460	2460	2460	
5°	2424	2461	2442	2440	2462	230
15°	2312	2342	2315	2302	2315	651
25°	2094	2109	2058	2023	2023	963
35°	1799	1794	1718	1579	1512	1124
45°	1461	1436	1230	889	762	1127
55°	1105	1058	635	365	320	988
65°	750	603	231	185	183	742
75°	396	173	122	119	117	418
85°	94	47	48	43	41	109
90°	0	2	5	7	7	5
95°	19	34	19	21	26	21
105°	72	110	420	536	355	76
115°	128	155	362	752	879	127
125°	183	208	341	596	705	163
135°	227	252	343	491	564	175
145°	269	292	346	428	473	169
155°	316	327	353	388	406	145
165°	350	355	362	371	378	98
175°	369	371	369	366	364	35
180°	369	369	369	369	369	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2459.7	2459.7	2459.7	2459.7	2459.7
2.5°	2439.3	2467.2	2453.6	2453.8	2463.7
5°	2424.1	2461.3	2441.9	2439.8	2462.2
7.5°	2401.7	2436.0	2415.9	2413.3	2432.7
10°	2383.4	2415.7	2393.6	2388.9	2406.3
12.5°	2357.0	2389.3	2365.1	2356.4	2373.8
15°	2312.3	2342.1	2314.8	2302.4	2314.8
17.5°	2255.9	2280.7	2249.8	2230.1	2237.6
20°	2213.2	2238.0	2203.0	2175.2	2182.7
22.5°	2166.4	2187.3	2148.1	2116.2	2121.7
25°	2093.8	2108.7	2058.2	2022.6	2022.6
27.5°	2013.0	2021.9	1963.1	1925.8	1915.4
30°	1954.0	1959.0	1898.1	1854.2	1821.9
32.5°	1893.0	1896.0	1827.0	1756.2	1706.0
35°	1799.0	1794.0	1717.7	1579.0	1511.9
37.5°	1698.9	1688.0	1597.8	1386.6	1286.7
40°	1633.8	1618.9	1504.3	1250.2	1138.4
42.5°	1566.8	1545.9	1400.6	1109.6	985.9
45°	1461.1	1436.2	1229.8	889.0	762.3
47.5°	1356.4	1323.6	1055.0	688.7	579.8
50°	1283.2	1248.4	935.1	567.2	480.2
52.5°	1210.0	1175.2	813.1	476.1	407.1
55°	1105.3	1058.1	635.2	364.9	320.2
57.5°	998.6	931.0	473.1	284.3	249.5
60°	927.5	838.0	383.7	235.7	210.9
62.5°	858.3	745.0	314.6	205.7	200.7
65°	749.6	603.0	231.2	185.4	182.9
67.5°	645.9	460.1	171.8	167.1	164.7
70°	566.6	362.9	157.5	154.9	152.5
72.5°	495.5	277.8	143.3	140.7	138.2
75°	396.4	172.8	122.0	119.4	116.9
77.5°	296.3	108.9	100.6	98.0	95.5
80°	231.2	89.6	86.4	83.8	81.3
82.5°	174.3	72.4	70.1	67.5	65.0
85°	94.0	46.8	48.3	43.1	40.7
87.5°	32.5	23.0	23.3	19.6	17.7
90°	0.0	2.3	4.6	7.0	7.0
92.5°	5.6	7.8	10.2	14.4	16.2
95°	18.6	34.4	18.6	21.0	25.5
97.5°	32.9	66.1	136.4	40.2	34.8
100°	44.1	82.6	273.7	80.6	53.4
102.5°	55.2	95.6	370.3	212.6	116.5
105°	71.9	110.5	419.9	536.4	354.9
107.5°	88.6	117.7	400.9	780.7	731.2
110°	99.8	127.0	389.7	820.3	881.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.9	138.1	378.6	797.1	900.1
115°	127.6	154.8	361.9	752.2	879.2
117.5°	144.8	171.5	357.7	703.6	834.2
120°	157.8	182.7	350.3	666.6	802.7
122.5°	167.0	193.8	341.0	634.8	760.0
125°	183.3	208.2	341.0	596.4	705.2
127.5°	196.7	222.1	341.5	551.8	659.3
130°	204.2	231.4	343.3	522.0	624.1
132.5°	213.4	240.6	343.3	508.6	592.5
135°	227.3	252.3	343.3	491.1	563.7
137.5°	238.9	265.7	343.3	471.9	534.0
140°	248.2	273.2	343.3	460.6	517.3
142.5°	257.5	280.6	345.2	447.6	500.6
145°	269.1	291.8	345.7	427.9	473.3
147.5°	283.0	303.0	348.4	413.7	448.7
150°	292.3	310.5	350.3	404.3	433.8
152.5°	301.6	317.9	350.3	396.8	420.8
155°	315.5	326.8	352.6	387.8	406.0
157.5°	326.6	337.5	355.4	382.2	395.3
160°	334.1	343.1	357.3	378.4	389.7
162.5°	339.6	348.7	359.1	376.5	384.2
165°	350.3	354.8	361.9	371.3	378.1
167.5°	356.3	360.4	364.2	369.0	373.0
170°	361.9	364.2	364.2	368.9	371.2
172.5°	363.8	367.8	366.1	367.1	369.3
175°	368.9	371.1	368.9	366.5	364.2
177.5°	368.9	370.7	368.9	368.8	367.0
180°	368.9	368.9	368.9	368.9	368.9

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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	19.43	20.45	20.19	21.22	22.15	11.67	12.68	12.42	13.45	14.38
	3H	20.94	21.85	21.71	22.63	23.59	13.03	13.94	13.80	14.72	15.68
	4H	21.46	22.31	22.25	23.10	24.07	13.69	14.55	14.48	15.34	16.31
	6H	21.86	22.65	22.66	23.45	24.43	14.29	15.08	15.09	15.87	16.86
	8H	22.00	22.75	22.81	23.56	24.55	14.52	15.27	15.33	16.08	17.07
	12H	22.08	22.80	22.90	23.61	24.62	14.69	15.40	15.51	16.21	17.22
4H	2H	19.28	20.13	20.07	20.92	21.90	12.30	13.16	13.09	13.94	14.92
	3H	20.93	21.64	21.74	22.46	23.45	13.87	14.57	14.67	15.40	16.39
	4H	21.53	22.17	22.35	22.99	24.01	14.67	15.31	15.49	16.13	17.15
	6H	22.03	22.58	22.86	23.43	24.45	15.42	15.97	16.25	16.82	17.84
	8H	22.22	22.73	23.06	23.58	24.61	15.71	16.23	16.55	17.07	18.10
	12H	22.35	22.82	23.21	23.68	24.72	15.94	16.40	16.79	17.26	18.30
8H	4H	21.46	21.97	22.29	22.81	23.85	15.13	15.65	15.97	16.49	17.53
	6H	22.00	22.42	22.86	23.31	24.34	16.02	16.45	16.89	17.33	18.37
	8H	22.23	22.61	23.11	23.49	24.54	16.42	16.79	17.29	17.68	18.73
	12H	22.43	22.76	23.30	23.63	24.74	16.74	17.08	17.62	17.95	19.05
12H	4H	21.41	21.88	22.27	22.74	23.78	15.19	15.65	16.05	16.52	17.55
	6H	21.97	22.35	22.84	23.23	24.28	16.14	16.51	17.01	17.40	18.45
	8H	22.22	22.55	23.09	23.42	24.53	16.58	16.92	17.46	17.79	18.90