

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: P621428

Luminaire Tested: VLT-F-025U-125D-835-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621428  
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-025U-125D-835-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

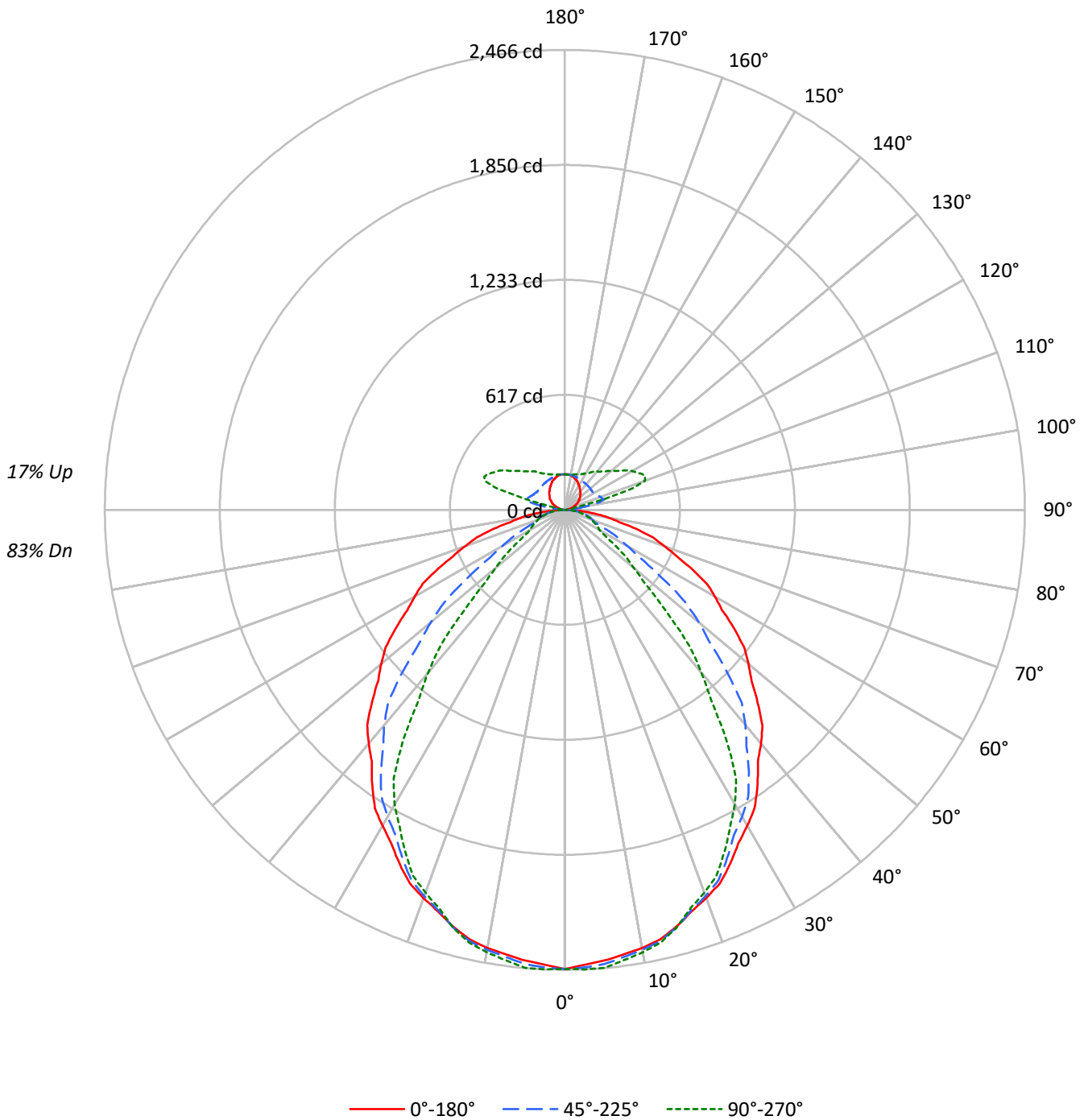
Lumens per Lamp: N/A  
Luminaire Lumens: 6048.2 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 47  
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: P621428  
CATALOG NUMBER: VLT-F-025U-125D-835-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621428

CATALOG NUMBER: VLT-F-025U-125D-835-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	50	30	10	0	
RCR																						
0	115	115	115	115	110	110	110	110	102	102	102	94	94	94	86	86	86	83				
1	106	102	99	95	102	98	95	92	91	89	86	84	82	81	78	77	75	72				
2	98	91	85	80	94	87	82	78	81	77	73	76	72	69	70	68	65	62				
3	90	81	74	68	86	78	72	66	73	68	63	68	64	60	63	60	57	54				
4	83	73	65	59	80	70	63	58	66	60	55	61	57	53	58	54	50	48				
5	77	65	57	52	74	63	56	51	59	53	48	56	51	46	52	48	45	42				
6	71	59	51	46	68	58	50	45	54	48	43	51	46	41	48	43	40	38				
7	66	54	46	41	64	53	45	40	50	43	39	47	41	37	44	39	36	34				
8	62	50	42	37	60	48	41	36	46	39	35	43	38	34	41	36	32	31				
9	58	46	38	33	56	45	37	33	42	36	32	40	35	31	38	33	30	28				
10	54	42	35	30	52	41	34	30	39	33	29	37	32	28	35	31	27	25				

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

	0°	45°	90°
0°	17666	17666	17666
5°	17477	17606	17752
10°	17383	17457	17550
15°	17194	17212	17212
20°	16916	16838	16683
25°	16592	16311	16029
30°	16206	15742	15110
35°	15774	15061	13256
40°	15319	14104	10673
45°	14841	12492	7743
50°	14338	10448	5366
55°	13841	7954	4010
60°	13323	5511	3030
65°	12740	3929	3109
70°	11898	3309	3202
75°	10999	3385	3244
80°	9563	3575	3364
85°	7748	3977	3351

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14841 cd/sqm



TEST NUMBER: P621428

CATALOG NUMBER: VLT-F-025U-125D-835-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.0	3.8
10°-20°	652.4	10.8
20°-30°	948.9	15.7
30°-40°	1049.8	17.4
40°-50°	901.3	14.9
50°-60°	624.1	10.3
60°-70°	371.9	6.1
70°-80°	183.2	3.0
80°-90°	57.0	0.9
90°-100°	23.5	0.4
100°-110°	167.6	2.8
110°-120°	227.5	3.8
120°-130°	185.2	3.1
130°-140°	149.0	2.5
140°-150°	117.4	1.9
150°-160°	85.9	1.4
160°-170°	53.3	0.9
170°-180°	18.2	0.3
0°-30°	1833.3	30.3
0°-40°	2883.1	47.7
0°-60°	4408.4	72.9
0°-90°	5020.5	83.0
90°-120°	418.7	6.9
90°-150°	870.3	14.4
90°-180°	1028.0	17.0
0°-180°	6048.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2462	2462	2462	2462	2462	
5°	2426	2464	2444	2442	2464	230
15°	2314	2344	2317	2304	2317	652
25°	2096	2111	2060	2024	2024	964
35°	1801	1796	1719	1580	1513	1125
45°	1462	1438	1231	890	763	1128
55°	1106	1059	636	365	320	989
65°	750	604	231	186	183	743
75°	397	173	122	120	117	419
85°	94	47	48	43	41	109
90°	0	1	2	4	4	5
95°	10	18	10	11	13	11
105°	37	57	218	278	184	39
115°	66	80	188	390	456	66
125°	95	108	177	309	366	84
135°	118	131	178	255	292	91
145°	140	151	179	222	245	88
155°	164	170	183	201	211	75
165°	182	184	188	193	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	

TEST NUMBER: P621428

CATALOG NUMBER: VLT-F-025U-125D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2461.9	2461.9	2461.9	2461.9	2461.9
2.5°	2441.5	2469.4	2455.8	2456.0	2465.9
5°	2426.3	2463.6	2444.1	2442.0	2464.4
7.5°	2403.9	2438.2	2418.1	2415.5	2434.9
10°	2385.6	2417.9	2395.7	2391.1	2408.5
12.5°	2359.1	2391.5	2367.3	2358.5	2375.9
15°	2314.4	2344.2	2316.9	2304.5	2316.9
17.5°	2257.9	2282.8	2251.8	2232.1	2239.6
20°	2215.2	2240.0	2205.0	2177.2	2184.7
22.5°	2168.4	2189.3	2150.1	2118.1	2123.6
25°	2095.6	2110.6	2060.0	2024.4	2024.4
27.5°	2014.8	2023.7	1964.9	1927.6	1917.1
30°	1955.8	1960.7	1899.8	1855.8	1823.5
32.5°	1894.7	1897.7	1828.6	1757.8	1707.5
35°	1800.6	1795.7	1719.2	1580.4	1513.2
37.5°	1700.4	1689.5	1599.2	1387.9	1287.9
40°	1635.3	1620.4	1505.6	1251.3	1139.4
42.5°	1568.2	1547.3	1401.8	1110.6	986.8
45°	1462.4	1437.5	1230.9	889.8	763.0
47.5°	1357.6	1324.8	1056.0	689.3	580.4
50°	1284.3	1249.5	935.9	567.7	480.7
52.5°	1211.1	1176.3	813.8	476.6	407.4
55°	1106.3	1059.1	635.8	365.2	320.5
57.5°	999.5	931.9	473.6	284.6	249.7
60°	928.3	838.8	384.0	236.0	211.1
62.5°	859.1	745.7	314.9	205.9	200.9
65°	750.3	603.5	231.4	185.6	183.1
67.5°	646.5	460.5	171.9	167.3	164.8
70°	567.1	363.2	157.7	155.1	152.6
72.5°	495.9	278.1	143.4	140.8	138.4
75°	396.7	172.9	122.1	119.5	117.0
77.5°	296.5	109.0	100.7	98.1	95.6
80°	231.4	89.7	86.5	83.9	81.4
82.5°	174.5	72.5	70.2	67.6	65.1
85°	94.1	46.9	48.3	43.2	40.7
87.5°	32.6	22.8	22.9	19.0	17.0
90°	0.0	1.2	2.4	3.6	3.6
92.5°	2.9	4.1	5.3	7.5	8.4
95°	9.6	17.9	9.6	10.9	13.2
97.5°	17.1	34.3	70.7	20.9	18.0
100°	22.9	42.9	142.0	41.8	27.7
102.5°	28.6	49.6	192.0	110.3	60.4
105°	37.3	57.3	217.8	278.2	184.1
107.5°	46.0	61.0	207.9	404.9	379.2
110°	51.7	65.9	202.1	425.4	457.2



TEST NUMBER: P621428

CATALOG NUMBER: VLT-F-025U-125D-835-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	57.5	71.6	196.4	413.4	466.8
115°	66.2	80.3	187.7	390.1	456.0
117.5°	75.1	89.0	185.5	364.9	432.7
120°	81.8	94.8	181.7	345.7	416.3
122.5°	86.6	100.5	176.9	329.2	394.2
125°	95.1	108.0	176.9	309.3	365.8
127.5°	102.0	115.2	177.1	286.2	341.9
130°	105.9	120.0	178.1	270.7	323.7
132.5°	110.7	124.8	178.1	263.8	307.3
135°	117.9	130.9	178.1	254.7	292.4
137.5°	123.9	137.8	178.1	244.7	277.0
140°	128.7	141.7	178.1	238.9	268.3
142.5°	133.6	145.6	179.0	232.1	259.6
145°	139.6	151.3	179.3	221.9	245.4
147.5°	146.8	157.1	180.7	214.6	232.7
150°	151.6	161.0	181.7	209.7	225.0
152.5°	156.4	164.9	181.7	205.8	218.3
155°	163.6	169.5	182.9	201.1	210.6
157.5°	169.4	175.1	184.3	198.2	205.0
160°	173.3	178.0	185.3	196.2	202.1
162.5°	176.1	180.8	186.3	195.2	199.2
165°	181.7	184.0	187.7	192.6	196.1
167.5°	184.8	186.9	188.9	191.4	193.5
170°	187.7	188.9	188.9	191.3	192.5
172.5°	188.7	190.8	189.9	190.4	191.5
175°	191.3	192.5	191.3	190.1	188.9
177.5°	191.3	192.2	191.3	191.3	190.3
180°	191.3	191.3	191.3	191.3	191.3

-----



TEST NUMBER: P621428

CATALOG NUMBER: VLT-F-025U-125D-835-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	20.29	21.46	20.92	22.08	22.79	12.53	13.69	13.15	14.31	15.02
	3H	21.81	22.85	22.45	23.48	24.23	13.91	14.94	14.54	15.58	16.32
	4H	22.34	23.31	22.99	23.96	24.72	14.57	15.55	15.23	16.19	16.96
	6H	22.75	23.65	23.42	24.31	25.08	15.18	16.07	15.84	16.73	17.51
	8H	22.89	23.74	23.57	24.42	25.20	15.41	16.26	16.09	16.94	17.72
	12H	22.98	23.79	23.66	24.47	25.27	15.59	16.40	16.27	17.07	17.87
4H	2H	20.16	21.14	20.82	21.78	22.54	13.18	14.16	13.84	14.80	15.56
	3H	21.82	22.63	22.49	23.32	24.10	14.76	15.57	15.43	16.25	17.03
	4H	22.42	23.15	23.11	23.84	24.65	15.57	16.30	16.25	16.99	17.80
	6H	22.93	23.56	23.64	24.28	25.10	16.32	16.95	17.03	17.67	18.49
	8H	23.13	23.71	23.84	24.43	25.26	16.62	17.21	17.33	17.92	18.75
	12H	23.27	23.79	24.00	24.53	25.37	16.85	17.37	17.58	18.11	18.95
8H	4H	22.36	22.95	23.07	23.66	24.49	16.04	16.63	16.75	17.34	18.17
	6H	22.91	23.39	23.65	24.15	24.98	16.93	17.42	17.67	18.18	19.01
	8H	23.14	23.57	23.90	24.33	25.18	17.33	17.76	18.08	18.52	19.37
	12H	23.34	23.73	24.10	24.47	25.39	17.66	18.04	18.41	18.79	19.70
12H	4H	22.33	22.85	23.06	23.59	24.43	16.10	16.63	16.83	17.37	18.20
	6H	22.88	23.31	23.63	24.07	24.92	17.05	17.48	17.80	18.24	19.09
	8H	23.13	23.52	23.89	24.26	25.18	17.50	17.89	18.26	18.63	19.55