

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: P621427

Luminaire Tested: VLT-F-025U-125D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621427  
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-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

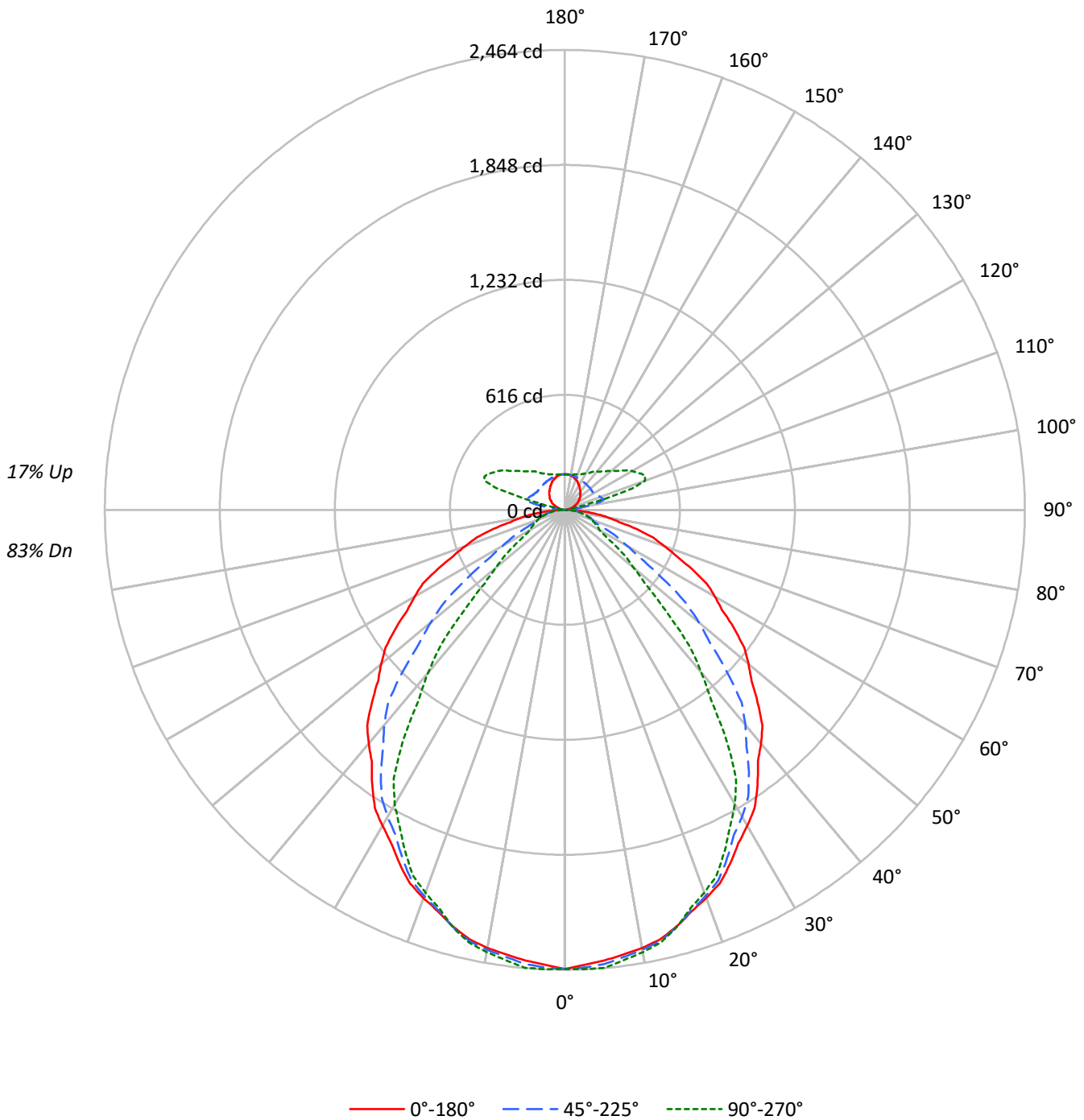
Lumens per Lamp: N/A  
Luminaire Lumens: 6042.7 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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



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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	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°	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	3.8
10°-20°	651.8	10.8
20°-30°	948.1	15.7
30°-40°	1048.9	17.4
40°-50°	900.5	14.9
50°-60°	623.5	10.3
60°-70°	371.5	6.1
70°-80°	183.1	3.0
80°-90°	56.9	0.9
90°-100°	23.5	0.4
100°-110°	167.4	2.8
110°-120°	227.3	3.8
120°-130°	185.0	3.1
130°-140°	148.8	2.5
140°-150°	117.3	1.9
150°-160°	85.8	1.4
160°-170°	53.3	0.9
170°-180°	18.2	0.3
0°-30°	1831.6	30.3
0°-40°	2880.5	47.7
0°-60°	4404.5	72.9
0°-90°	5016.0	83.0
90°-120°	418.3	6.9
90°-150°	869.5	14.4
90°-180°	1027.0	17.0
0°-180°	6042.7	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	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	365	84
135°	118	131	178	254	292	91
145°	139	151	179	222	245	88
155°	164	169	183	201	210	75
165°	182	184	188	192	196	51
175°	191	192	191	190	189	18
180°	191	191	191	191	191	

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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	22.8	22.8	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	17.8	9.6	10.9	13.2
97.5°	17.1	34.2	70.7	20.9	18.0
100°	22.8	42.8	141.8	41.8	27.6
102.5°	28.6	49.5	191.9	110.2	60.3
105°	37.3	57.2	217.6	277.9	183.9
107.5°	45.9	61.0	207.7	404.5	378.9
110°	51.7	65.8	201.9	425.1	456.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	57.5	71.6	196.2	413.0	466.4
115°	66.1	80.2	187.5	389.8	455.6
117.5°	75.0	88.9	185.4	364.6	432.3
120°	81.7	94.7	181.5	345.4	415.9
122.5°	86.5	100.4	176.7	328.9	393.8
125°	95.0	107.9	176.7	309.0	365.4
127.5°	101.9	115.1	176.9	285.9	341.6
130°	105.8	119.9	177.9	270.5	323.4
132.5°	110.6	124.7	177.9	263.5	307.0
135°	117.8	130.7	177.9	254.5	292.1
137.5°	123.8	137.7	177.9	244.5	276.7
140°	128.6	141.6	177.9	238.7	268.1
142.5°	133.4	145.4	178.9	231.9	259.4
145°	139.4	151.2	179.1	221.7	245.2
147.5°	146.7	157.0	180.6	214.4	232.5
150°	151.5	160.9	181.5	209.5	224.8
152.5°	156.3	164.7	181.5	205.6	218.1
155°	163.5	169.4	182.7	201.0	210.4
157.5°	169.3	174.9	184.2	198.0	204.8
160°	173.1	177.8	185.1	196.1	201.9
162.5°	176.0	180.7	186.1	195.1	199.1
165°	181.5	183.9	187.5	192.4	195.9
167.5°	184.6	186.8	188.7	191.2	193.3
170°	187.5	188.7	188.7	191.2	192.3
172.5°	188.5	190.6	189.7	190.2	191.4
175°	191.1	192.3	191.1	189.9	188.7
177.5°	191.1	192.1	191.1	191.1	190.2
180°	191.1	191.1	191.1	191.1	191.1

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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	20.29	21.45	20.91	22.08	22.79	12.53	13.69	13.15	14.31	15.02
	3H	21.81	22.85	22.44	23.48	24.23	13.90	14.94	14.54	15.57	16.32
	4H	22.34	23.31	22.99	23.96	24.72	14.57	15.54	15.22	16.19	16.95
	6H	22.75	23.64	23.41	24.30	25.08	15.17	16.07	15.84	16.73	17.50
	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	24.46	25.27	15.58	16.40	16.27	17.07	17.87
4H	2H	20.16	21.13	20.81	21.78	22.54	13.18	14.15	13.84	14.80	15.56
	3H	21.82	22.63	22.49	23.31	24.09	14.76	15.56	15.43	16.25	17.03
	4H	22.42	23.15	23.11	23.84	24.65	15.56	16.29	16.25	16.98	17.79
	6H	22.93	23.56	23.64	24.28	25.10	16.32	16.95	17.02	17.66	18.48
	8H	23.12	23.71	23.83	24.42	25.25	16.61	17.20	17.33	17.92	18.75
	12H	23.26	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	22.90	23.39	23.64	24.15	24.98	16.93	17.42	17.67	18.17	19.01
	8H	23.14	23.57	23.89	24.33	25.18	17.32	17.76	18.08	18.52	19.37
	12H	23.34	23.72	24.09	24.47	25.38	17.66	18.04	18.41	18.79	19.70
12H	4H	22.32	22.85	23.05	23.59	24.42	16.10	16.63	16.83	17.36	18.20
	6H	22.88	23.31	23.63	24.07	24.92	17.04	17.48	17.80	18.24	19.09
	8H	23.13	23.51	23.88	24.26	25.17	17.50	17.88	18.25	18.63	19.54