

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: P621409

Luminaire Tested: VLT-F-025U-050D-830-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621409  
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-050D-830-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

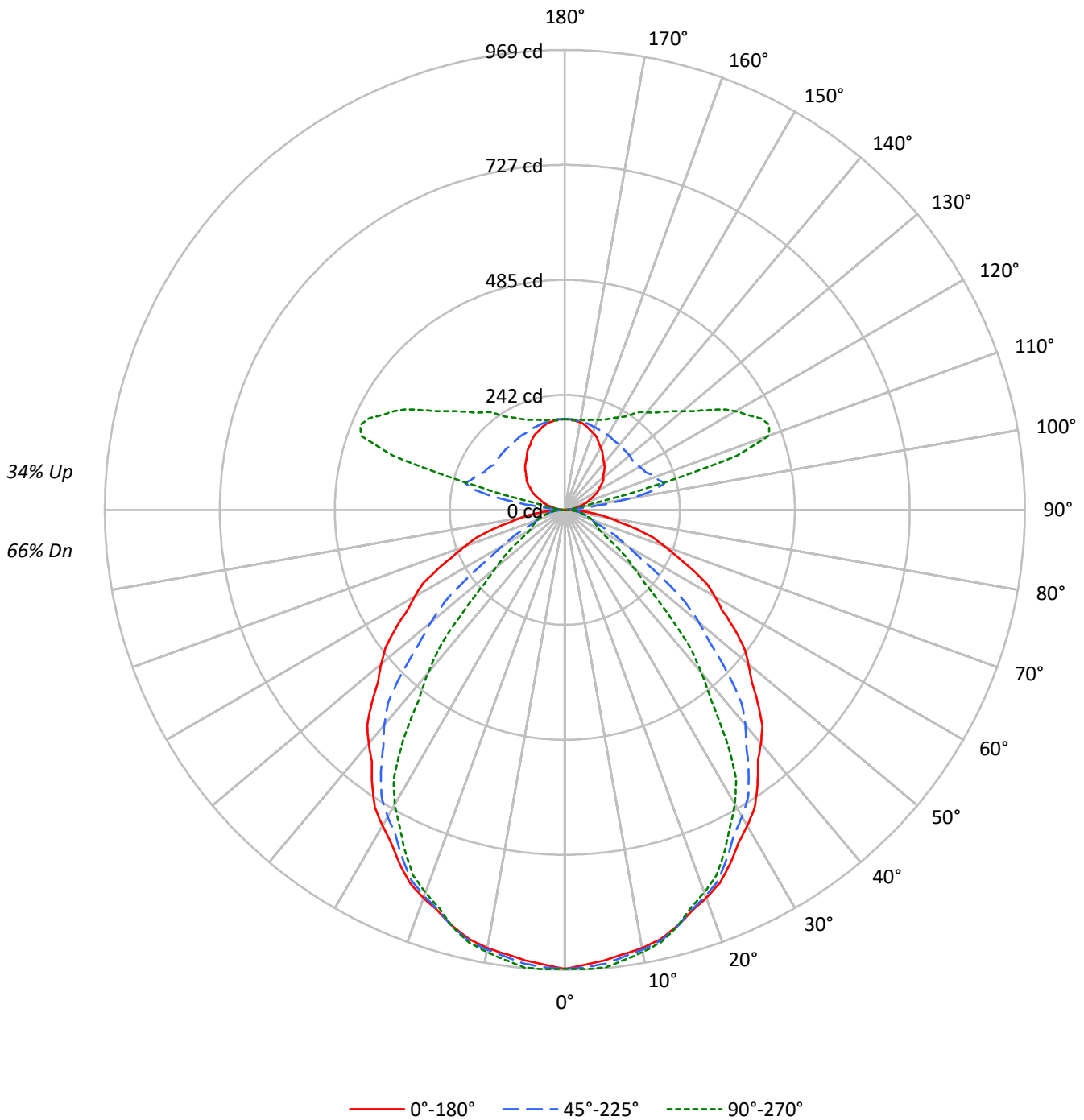
Lumens per Lamp: N/A  
Luminaire Lumens: 2999.2 lumens  
Efficiency: N/A  
Efficacy: 132.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 22.7  
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66				
1	102	98	95	91	96	93	89	87	82	80	78	73	71	69	64	63	61	57				
2	94	87	81	76	88	82	77	73	73	69	66	65	62	59	57	55	53	49				
3	86	77	70	65	81	73	67	62	65	61	57	58	55	51	52	49	46	43				
4	79	69	61	56	75	66	59	53	59	53	49	53	48	45	47	44	41	38				
5	73	62	54	48	69	59	52	47	53	47	43	48	43	40	43	39	36	33				
6	68	56	48	43	64	53	46	41	48	42	38	44	39	35	39	35	32	30				
7	63	51	43	38	59	49	42	37	44	38	34	40	35	32	36	32	29	27				
8	59	47	39	34	55	45	38	33	41	35	31	37	32	28	33	29	26	24				
9	55	43	35	30	52	41	34	30	37	32	28	34	29	26	31	27	24	22				
10	51	40	32	28	49	38	31	27	35	29	25	32	27	24	29	25	22	20				

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

	0°	45°	90°
0°	6940	6940	6940
5°	6866	6916	6974
10°	6829	6858	6894
15°	6755	6762	6762
20°	6645	6615	6554
25°	6519	6408	6297
30°	6366	6184	5936
35°	6197	5917	5208
40°	6018	5541	4193
45°	5830	4908	3041
50°	5632	4105	2108
55°	5437	3125	1575
60°	5234	2166	1190
65°	5004	1543	1221
70°	4675	1299	1257
75°	4322	1331	1275
80°	3756	1405	1322
85°	3046	1564	1317

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5830 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.1	3.0
10°-20°	256.3	8.5
20°-30°	372.8	12.4
30°-40°	412.4	13.8
40°-50°	354.1	11.8
50°-60°	245.2	8.2
60°-70°	146.1	4.9
70°-80°	72.0	2.4
80°-90°	22.7	0.8
90°-100°	23.5	0.8
100°-110°	167.4	5.6
110°-120°	227.3	7.6
120°-130°	185.0	6.2
130°-140°	148.8	5.0
140°-150°	117.3	3.9
150°-160°	85.8	2.9
160°-170°	53.3	1.8
170°-180°	18.2	0.6
0°-30°	720.2	24.0
0°-40°	1132.6	37.8
0°-60°	1731.8	57.7
0°-90°	1972.5	65.8
90°-120°	418.3	13.9
90°-150°	869.5	29.0
90°-180°	1027.0	34.2
0°-180°	2999.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	953	968	960	959	968	90
15°	909	921	910	905	910	256
25°	823	829	809	795	795	379
35°	707	705	675	621	594	442
45°	574	565	484	350	300	443
55°	435	416	250	144	126	388
65°	295	237	91	73	72	292
75°	156	68	48	47	46	164
85°	37	18	19	17	16	43
90°	0	1	2	4	4	2
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°	967.1	967.1	967.1	967.1	967.1
2.5°	959.1	970.1	964.7	964.8	968.7
5°	953.1	967.8	960.1	959.3	968.1
7.5°	944.3	957.8	949.9	948.9	956.5
10°	937.2	949.9	941.2	939.3	946.1
12.5°	926.8	939.5	930.0	926.5	933.4
15°	909.2	920.9	910.2	905.3	910.2
17.5°	887.0	896.8	884.6	876.9	879.8
20°	870.2	880.0	866.2	855.3	858.2
22.5°	851.8	860.0	844.6	832.1	834.2
25°	823.3	829.1	809.3	795.3	795.3
27.5°	791.5	795.0	771.9	757.2	753.1
30°	768.3	770.3	746.3	729.1	716.4
32.5°	744.3	745.5	718.4	690.5	670.8
35°	707.4	705.4	675.4	620.8	594.5
37.5°	668.0	663.7	628.2	545.2	505.9
40°	642.4	636.6	591.5	491.6	447.6
42.5°	616.0	607.8	550.7	436.3	387.7
45°	574.5	564.7	483.6	349.6	299.7
47.5°	533.3	520.4	414.8	270.8	228.0
50°	504.5	490.9	367.7	223.0	188.8
52.5°	475.8	462.1	319.7	187.2	160.1
55°	434.6	416.0	249.8	143.5	125.9
57.5°	392.6	366.1	186.0	111.8	98.1
60°	364.7	329.5	150.9	92.7	82.9
62.5°	337.5	292.9	123.7	80.9	78.9
65°	294.7	237.1	90.9	72.9	71.9
67.5°	254.0	180.9	67.5	65.7	64.7
70°	222.8	142.7	61.9	60.9	59.9
72.5°	194.8	109.2	56.3	55.3	54.4
75°	155.9	67.9	48.0	46.9	46.0
77.5°	116.5	42.8	39.6	38.5	37.6
80°	90.9	35.2	34.0	32.9	32.0
82.5°	68.5	28.5	27.6	26.6	25.6
85°	37.0	18.4	19.0	17.0	16.0
87.5°	12.8	9.1	9.3	7.9	7.1
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	15.72	16.67	16.54	17.51	18.54	7.95	8.91	8.78	9.74	10.77
	3H	17.22	18.07	18.06	18.92	19.98	9.31	10.16	10.15	11.01	12.07
	4H	17.74	18.54	18.59	19.39	20.46	9.97	10.77	10.82	11.62	12.70
	6H	18.14	18.88	19.00	19.74	20.82	10.57	11.30	11.43	12.16	13.25
	8H	18.28	18.98	19.15	19.85	20.94	10.80	11.50	11.67	12.37	13.46
	12H	18.36	19.03	19.23	19.89	21.00	10.96	11.63	11.84	12.50	13.61
4H	2H	15.56	16.36	16.42	17.21	18.28	8.58	9.38	9.44	10.23	11.31
	3H	17.21	17.87	18.07	18.75	19.84	10.14	10.80	11.01	11.69	12.77
	4H	17.80	18.40	18.68	19.28	20.40	10.94	11.54	11.82	12.42	13.54
	6H	18.30	18.82	19.19	19.72	20.84	11.68	12.20	12.58	13.11	14.23
	8H	18.49	18.97	19.38	19.87	21.00	11.98	12.46	12.87	13.36	14.49
	12H	18.62	19.05	19.53	19.97	21.11	12.20	12.64	13.11	13.55	14.69
8H	4H	17.72	18.21	18.62	19.11	20.24	11.40	11.89	12.30	12.79	13.91
	6H	18.26	18.66	19.18	19.60	20.73	12.29	12.69	13.21	13.63	14.76
	8H	18.50	18.85	19.43	19.78	20.93	12.68	13.04	13.61	13.97	15.12
	12H	18.69	19.00	19.62	19.93	21.12	13.01	13.32	13.94	14.24	15.44
12H	4H	17.68	18.11	18.59	19.03	20.17	11.45	11.89	12.37	12.81	13.94
	6H	18.23	18.59	19.17	19.52	20.67	12.40	12.76	13.33	13.69	14.84
	8H	18.48	18.79	19.41	19.72	20.92	12.85	13.16	13.78	14.09	15.28