

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: P621486

Luminaire Tested: VLT-F-0U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621486  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-F-0U-050D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
FROSTED LENS  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

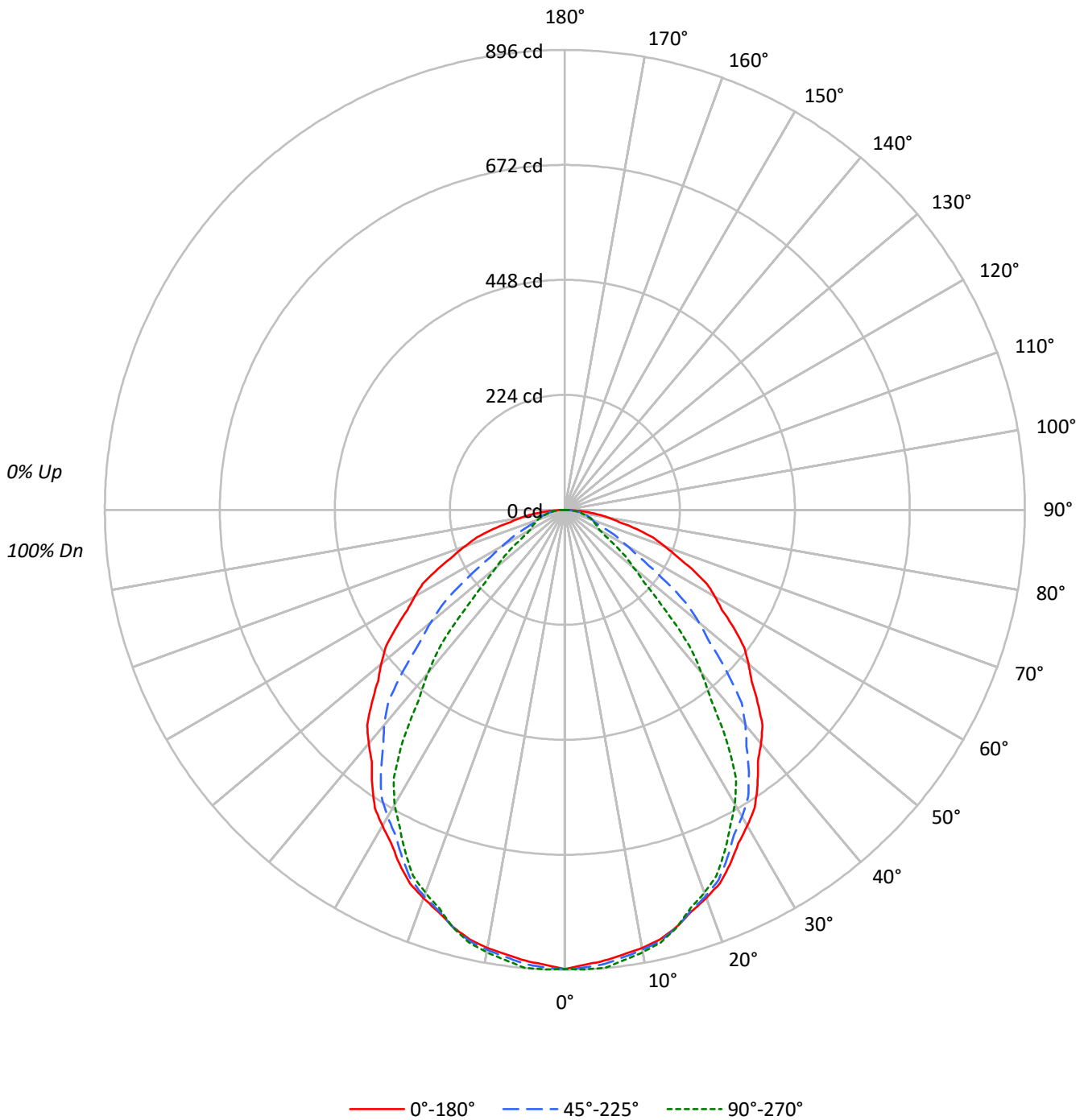
Lumens per Lamp: N/A  
Luminaire Lumens: 1824.2 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.4  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	74	70	78	73	69	75	71	67	65				
4	87	76	68	62	85	75	67	62	72	66	61	70	65	60	68	63	59	57				
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51				
6	75	63	54	49	73	62	54	48	60	53	48	58	52	48	57	51	47	45				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33				
10	57	45	38	33	56	45	37	33	44	37	32	43	37	32	42	36	32	31				

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

	0°	45°	90°
0°	6420	6420	6420
5°	6351	6397	6451
10°	6317	6344	6377
15°	6248	6255	6255
20°	6147	6119	6063
25°	6029	5927	5824
30°	5889	5721	5490
35°	5732	5473	4817
40°	5566	5125	3878
45°	5393	4539	2814
50°	5210	3797	1950
55°	5029	2890	1456
60°	4841	2002	1101
65°	4629	1428	1129
70°	4324	1202	1164
75°	3998	1231	1178
80°	3475	1298	1223
85°	2816	1449	1219

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5393 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	4.6
10°-20°	237.1	13.0
20°-30°	344.8	18.9
30°-40°	381.5	20.9
40°-50°	327.5	18.0
50°-60°	226.8	12.4
60°-70°	135.1	7.4
70°-80°	66.6	3.7
80°-90°	20.6	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	666.2	36.5
0°-40°	1047.6	57.4
0°-60°	1601.9	87.8
0°-90°	1824.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1824.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	882	895	888	887	896	84
15°	841	852	842	837	842	237
25°	762	767	749	736	736	350
35°	654	652	625	574	550	409
45°	531	522	447	323	277	410
55°	402	385	231	133	116	359
65°	273	219	84	67	66	270
75°	144	63	44	43	42	152
85°	34	17	18	16	15	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	894.6	894.6	894.6	894.6	894.6
2.5°	887.2	897.3	892.4	892.5	896.1
5°	881.7	895.2	888.1	887.4	895.5
7.5°	873.5	886.0	878.7	877.8	884.8
10°	866.9	878.6	870.6	868.9	875.2
12.5°	857.3	869.0	860.2	857.0	863.4
15°	841.0	851.8	841.9	837.4	841.9
17.5°	820.5	829.5	818.3	811.1	813.8
20°	805.0	814.0	801.3	791.2	793.9
22.5°	787.9	795.5	781.3	769.7	771.7
25°	761.5	766.9	748.6	735.6	735.6
27.5°	732.1	735.4	714.0	700.4	696.6
30°	710.7	712.5	690.4	674.4	662.6
32.5°	688.5	689.6	664.5	638.7	620.5
35°	654.3	652.5	624.7	574.3	549.9
37.5°	617.9	613.9	581.1	504.3	468.0
40°	594.2	588.8	547.1	454.7	414.0
42.5°	569.8	562.3	509.4	403.6	358.6
45°	531.4	522.4	447.3	323.3	277.3
47.5°	493.3	481.4	383.7	250.5	210.9
50°	466.7	454.1	340.1	206.3	174.7
52.5°	440.1	427.4	295.7	173.2	148.1
55°	402.0	384.8	231.0	132.7	116.4
57.5°	363.2	338.6	172.1	103.4	90.8
60°	337.3	304.8	139.5	85.7	76.7
62.5°	312.2	271.0	114.4	74.8	73.0
65°	272.6	219.3	84.1	67.4	66.5
67.5°	234.9	167.3	62.5	60.8	59.9
70°	206.1	132.0	57.3	56.4	55.5
72.5°	180.2	101.1	52.1	51.2	50.3
75°	144.2	62.8	44.4	43.4	42.5
77.5°	107.8	39.6	36.6	35.7	34.7
80°	84.1	32.6	31.4	30.5	29.6
82.5°	63.4	26.3	25.5	24.6	23.7
85°	34.2	17.0	17.6	15.7	14.8
87.5°	11.8	8.2	8.1	6.6	5.9
90°	0.0	0.0	0.0	0.0	0.0



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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	18.03	19.50	18.39	19.81	20.12	10.26	11.73	10.62	12.04	12.36
	3H	19.56	20.88	19.94	21.21	21.57	11.66	12.97	12.04	13.30	13.66
	4H	20.10	21.33	20.50	21.68	22.06	12.34	13.57	12.74	13.92	14.30
	6H	20.53	21.66	20.94	22.03	22.42	12.96	14.09	13.37	14.46	14.85
	8H	20.68	21.76	21.10	22.15	22.55	13.20	14.28	13.62	14.67	15.07
	12H	20.78	21.81	21.21	22.19	22.62	13.38	14.41	13.81	14.80	15.23
4H	2H	17.93	19.16	18.33	19.51	19.89	10.95	12.18	11.35	12.53	12.91
	3H	19.61	20.63	20.03	21.03	21.43	12.55	13.57	12.96	13.97	14.37
	4H	20.23	21.14	20.66	21.56	22.00	13.37	14.28	13.80	14.70	15.14
	6H	20.75	21.54	21.21	21.99	22.45	14.14	14.93	14.60	15.37	15.83
	8H	20.95	21.69	21.41	22.13	22.60	14.44	15.18	14.90	15.63	16.09
	12H	21.10	21.76	21.58	22.24	22.71	14.68	15.34	15.17	15.82	16.29
8H	4H	20.18	20.92	20.65	21.37	21.84	13.86	14.60	14.33	15.05	15.52
	6H	20.74	21.35	21.23	21.84	22.32	14.76	15.37	15.26	15.87	16.35
	8H	20.97	21.52	21.49	22.03	22.52	15.16	15.71	15.67	16.22	16.71
	12H	21.18	21.67	21.69	22.16	22.73	15.50	15.99	16.01	16.48	17.05
12H	4H	20.16	20.82	20.64	21.30	21.77	13.94	14.60	14.42	15.08	15.55
	6H	20.71	21.26	21.22	21.77	22.26	14.88	15.43	15.39	15.94	16.43
	8H	20.98	21.46	21.49	21.95	22.52	15.35	15.83	15.86	16.32	16.89