

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: P621510

Luminaire Tested: VLT-F-100U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621510
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-100U-050D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

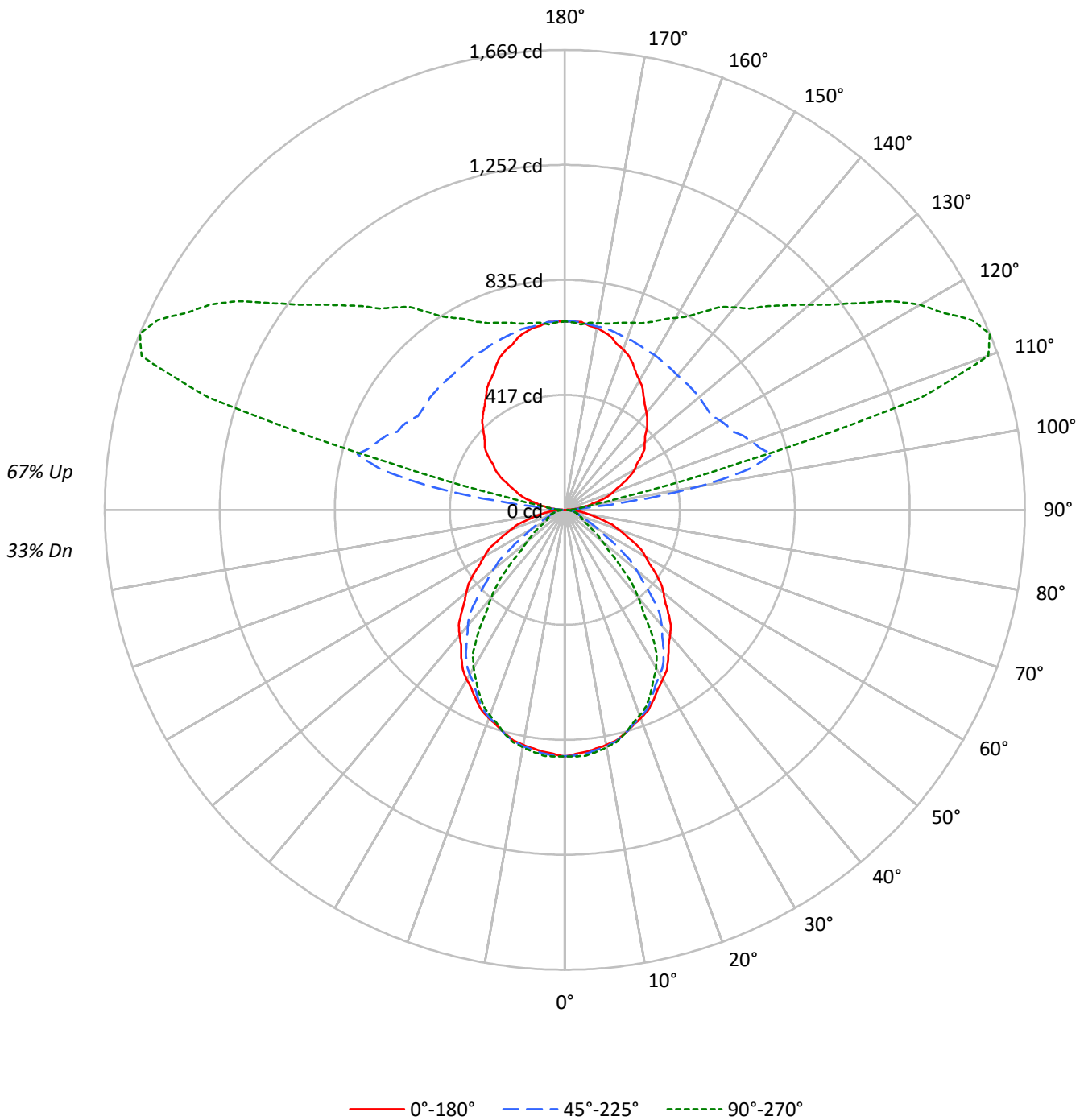
Lumens per Lamp: N/A
Luminaire Lumens: 5499.3 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 43.4
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33				
1	94	90	87	84	85	82	79	76	65	63	62	50	49	48	37	36	35	29				
2	86	79	74	69	78	72	67	63	58	55	52	45	43	41	33	32	30	25				
3	79	70	63	58	71	64	58	53	51	47	44	40	37	35	30	28	26	22				
4	73	62	55	49	65	57	50	45	46	41	38	36	33	30	27	25	23	19				
5	67	56	48	42	60	51	44	39	41	36	33	32	29	27	24	22	20	17				
6	61	50	42	37	55	46	39	34	37	32	29	29	26	23	22	20	18	15				
7	57	45	38	32	51	41	35	30	34	29	25	27	23	21	20	18	16	13				
8	53	41	34	29	48	38	31	27	31	26	23	25	21	19	19	16	15	12				
9	49	37	30	26	44	34	28	24	28	24	20	23	19	17	17	15	13	11				
10	46	34	27	23	41	31	25	21	26	21	18	21	18	15	16	14	12	10				

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	1.5
10°-20°	237.1	4.3
20°-30°	344.8	6.3
30°-40°	381.5	6.9
40°-50°	327.5	6.0
50°-60°	226.8	4.1
60°-70°	135.1	2.5
70°-80°	66.6	1.2
80°-90°	22.1	0.4
90°-100°	84.1	1.5
100°-110°	599.2	10.9
110°-120°	813.4	14.8
120°-130°	662.0	12.0
130°-140°	532.5	9.7
140°-150°	419.8	7.6
150°-160°	306.9	5.6
160°-170°	190.7	3.5
170°-180°	65.0	1.2
0°-30°	666.2	12.1
0°-40°	1047.6	19.1
0°-60°	1601.9	29.1
0°-90°	1825.7	33.2
90°-120°	1496.6	27.2
90°-150°	3111.0	56.6
90°-180°	3674.0	66.8
0°-180°	5499.3	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	40
90°	0	4	9	13	13	3
95°	34	64	34	39	47	38
105°	133	205	778	994	658	141
115°	237	287	671	1395	1630	235
125°	340	386	632	1106	1308	302
135°	422	468	637	911	1045	324
145°	499	541	641	793	877	313
155°	585	606	654	719	753	269
165°	650	658	671	688	701	182
175°	684	688	684	680	675	65
180°	684	684	684	684	684	



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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	9.1	9.9	9.2	8.5
90°	0.0	4.2	8.6	12.9	12.9
92.5°	10.3	14.5	18.9	26.7	30.1
95°	34.4	63.8	34.4	38.9	47.3
97.5°	61.1	122.5	252.9	74.6	64.5
100°	81.7	153.2	507.5	149.4	98.9
102.5°	102.4	177.2	686.5	394.2	215.9
105°	133.3	204.8	778.5	994.5	658.1
107.5°	164.3	218.1	743.2	1447.4	1355.7
110°	184.9	235.4	722.6	1520.9	1634.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	205.6	256.1	701.9	1477.9	1668.8
115°	236.6	287.0	671.0	1394.6	1630.1
117.5°	268.4	318.0	663.2	1304.4	1546.7
120°	292.5	338.7	649.5	1235.9	1488.2
122.5°	309.7	359.3	632.3	1176.9	1409.0
125°	339.8	386.0	632.3	1105.7	1307.5
127.5°	364.7	411.8	633.1	1023.0	1222.4
130°	378.5	429.0	636.6	967.7	1157.0
132.5°	395.7	446.2	636.6	942.9	1098.5
135°	421.5	467.8	636.6	910.6	1045.2
137.5°	443.0	492.6	636.6	874.9	990.1
140°	460.2	506.5	636.6	854.0	959.1
142.5°	477.4	520.3	640.0	829.8	928.2
145°	498.9	541.0	640.9	793.3	877.4
147.5°	524.7	561.7	646.0	767.1	831.8
150°	541.9	575.6	649.5	749.6	804.3
152.5°	559.1	589.4	649.5	735.6	780.2
155°	585.0	606.0	653.8	719.0	752.7
157.5°	605.6	625.8	658.9	708.5	732.9
160°	619.4	636.2	662.4	701.6	722.6
162.5°	629.7	646.5	665.8	698.0	712.3
165°	649.5	657.9	671.0	688.5	701.1
167.5°	660.7	668.2	675.3	684.0	691.6
170°	671.0	675.2	675.3	684.0	688.2
172.5°	674.4	682.0	678.7	680.5	684.7
175°	683.9	688.1	683.9	679.5	675.3
177.5°	683.9	687.2	683.9	683.8	680.4
180°	683.9	683.9	683.9	683.9	683.9



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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	12.26	12.96	13.36	14.05	15.55	4.49	5.19	5.59	6.28	7.78
	3H	13.74	14.37	14.85	15.47	16.98	5.84	6.46	6.94	7.56	9.07
	4H	14.25	14.84	15.37	15.94	17.46	6.48	7.08	7.60	8.17	9.69
	6H	14.64	15.18	15.76	16.29	17.82	7.07	7.61	8.19	8.71	10.24
	8H	14.77	15.28	15.89	16.40	17.92	7.29	7.80	8.41	8.92	10.44
	12H	14.84	15.33	15.97	16.44	17.99	7.45	7.94	8.58	9.05	10.60
4H	2H	12.07	12.66	13.20	13.76	15.28	5.09	5.68	6.22	6.78	8.30
	3H	13.69	14.19	14.82	15.31	16.84	6.63	7.12	7.76	8.25	9.78
	4H	14.28	14.73	15.41	15.84	17.40	7.42	7.87	8.55	8.99	10.54
	6H	14.76	15.15	15.90	16.29	17.83	8.15	8.54	9.29	9.68	11.22
	8H	14.95	15.31	16.09	16.44	18.00	8.44	8.80	9.58	9.93	11.49
	12H	15.07	15.40	16.22	16.54	18.10	8.65	8.98	9.81	10.12	11.68
8H	4H	14.18	14.55	15.32	15.67	17.23	7.86	8.22	9.00	9.35	10.91
	6H	14.72	15.01	15.87	16.18	17.74	8.74	9.04	9.90	10.21	11.77
	8H	14.95	15.21	16.11	16.36	17.94	9.14	9.40	10.30	10.55	12.12
	12H	15.13	15.36	16.30	16.51	18.12	9.45	9.68	10.62	10.83	12.44
12H	4H	14.13	14.45	15.28	15.60	17.16	7.91	8.23	9.06	9.37	10.94
	6H	14.69	14.95	15.85	16.10	17.67	8.86	9.12	10.02	10.27	11.84
	8H	14.92	15.15	16.09	16.30	17.91	9.29	9.52	10.46	10.67	12.28