

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: P621508

Luminaire Tested: VLT-F-100U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621508
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-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
FROSTED LENS
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

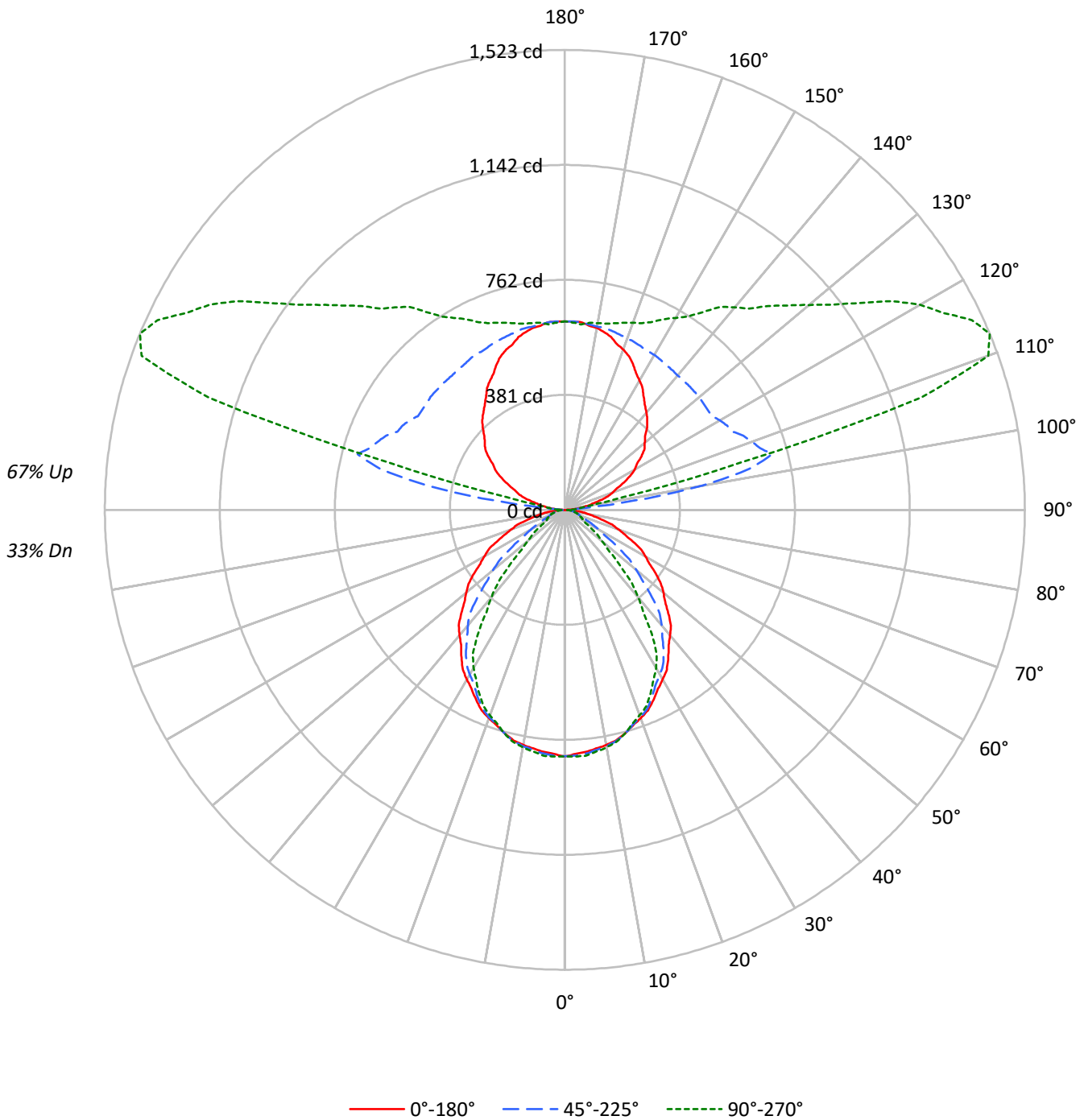
Lumens per Lamp: N/A
Luminaire Lumens: 5017.5 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.23
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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



TEST NUMBER: P621508
CATALOG NUMBER: VLT-F-100U-050D-930-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621508

CATALOG NUMBER: VLT-F-100U-050D-930-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	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°	5857	5857	5857
5°	5794	5837	5886
10°	5763	5788	5818
15°	5700	5706	5706
20°	5608	5582	5531
25°	5501	5408	5314
30°	5373	5219	5010
35°	5230	4993	4395
40°	5079	4676	3538
45°	4920	4142	2568
50°	4754	3464	1780
55°	4589	2637	1329
60°	4418	1827	1005
65°	4223	1302	1031
70°	3944	1097	1062
75°	3646	1123	1076
80°	3170	1186	1116
85°	2569	1317	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4920 cd/sqm



TEST NUMBER: P621508

CATALOG NUMBER: VLT-F-100U-050D-930-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.9	1.5
10°-20°	216.3	4.3
20°-30°	314.6	6.3
30°-40°	348.1	6.9
40°-50°	298.8	6.0
50°-60°	206.9	4.1
60°-70°	123.3	2.5
70°-80°	60.7	1.2
80°-90°	20.2	0.4
90°-100°	76.7	1.5
100°-110°	546.7	10.9
110°-120°	742.1	14.8
120°-130°	604.0	12.0
130°-140°	485.8	9.7
140°-150°	383.0	7.6
150°-160°	280.1	5.6
160°-170°	173.9	3.5
170°-180°	59.3	1.2
0°-30°	607.8	12.1
0°-40°	955.8	19.1
0°-60°	1461.6	29.1
0°-90°	1665.8	33.2
90°-120°	1365.5	27.2
90°-150°	2838.4	56.6
90°-180°	3352.0	66.8
0°-180°	5017.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	804	817	810	810	817	76
15°	767	777	768	764	768	216
25°	695	700	683	671	671	320
35°	597	595	570	524	502	373
45°	485	477	408	295	253	374
55°	367	351	211	121	106	328
65°	249	200	77	62	61	246
75°	132	57	40	40	39	139
85°	31	16	16	14	14	36
90°	0	4	8	12	12	3
95°	31	58	31	36	43	35
105°	122	187	710	907	600	128
115°	216	262	612	1272	1487	214
125°	310	352	577	1009	1193	275
135°	385	427	581	831	954	296
145°	455	494	585	724	800	286
155°	534	553	596	656	687	245
165°	593	600	612	628	640	166
175°	624	628	624	620	616	59
180°	624	624	624	624	624	



TEST NUMBER: P621508

CATALOG NUMBER: VLT-F-100U-050D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	816.2	816.2	816.2	816.2	816.2
2.5°	809.5	818.7	814.2	814.3	817.6
5°	804.4	816.8	810.3	809.6	817.1
7.5°	797.0	808.4	801.7	800.8	807.3
10°	790.9	801.6	794.3	792.7	798.5
12.5°	782.1	792.9	784.8	781.9	787.7
15°	767.3	777.2	768.1	764.0	768.1
17.5°	748.6	756.8	746.6	740.0	742.5
20°	734.4	742.7	731.0	721.8	724.3
22.5°	718.9	725.8	712.8	702.3	704.1
25°	694.8	699.7	683.0	671.2	671.2
27.5°	668.0	670.9	651.4	639.1	635.6
30°	648.4	650.1	629.9	615.3	604.6
32.5°	628.2	629.2	606.3	582.8	566.1
35°	597.0	595.3	570.0	524.0	501.7
37.5°	563.8	560.1	530.2	460.1	427.0
40°	542.2	537.2	499.2	414.9	377.7
42.5°	519.9	513.0	464.8	368.2	327.2
45°	484.8	476.6	408.1	295.0	253.0
47.5°	450.1	439.2	350.1	228.5	192.4
50°	425.8	414.3	310.3	188.2	159.4
52.5°	401.5	390.0	269.8	158.0	135.1
55°	366.8	351.1	210.8	121.1	106.2
57.5°	331.4	308.9	157.0	94.3	82.8
60°	307.8	278.1	127.3	78.2	70.0
62.5°	284.8	247.2	104.4	68.3	66.6
65°	248.7	200.1	76.7	61.5	60.7
67.5°	214.3	152.7	57.0	55.5	54.6
70°	188.0	120.4	52.3	51.4	50.6
72.5°	164.4	92.2	47.6	46.7	45.9
75°	131.5	57.3	40.5	39.6	38.8
77.5°	98.3	36.2	33.4	32.5	31.7
80°	76.7	29.7	28.7	27.8	27.0
82.5°	57.8	24.0	23.3	22.4	21.6
85°	31.2	15.5	16.0	14.3	13.5
87.5°	10.8	8.3	9.0	8.4	7.8
90°	0.0	3.8	7.8	11.8	11.8
92.5°	9.4	13.3	17.3	24.4	27.5
95°	31.4	58.3	31.4	35.5	43.2
97.5°	55.7	111.7	230.7	68.1	58.9
100°	74.6	139.8	463.1	136.3	90.3
102.5°	93.4	161.7	626.3	359.7	197.0
105°	121.7	186.9	710.3	907.4	600.4
107.5°	149.9	199.0	678.1	1320.6	1236.9
110°	168.7	214.8	659.3	1387.6	1491.2



TEST NUMBER: P621508

CATALOG NUMBER: VLT-F-100U-050D-930-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	187.6	233.6	640.4	1348.4	1522.6
115°	215.8	261.9	612.2	1272.4	1487.3
117.5°	244.9	290.1	605.1	1190.1	1411.2
120°	266.8	309.1	592.6	1127.6	1357.8
122.5°	282.5	327.8	576.9	1073.8	1285.6
125°	310.0	352.2	576.9	1008.8	1193.0
127.5°	332.8	375.7	577.6	933.4	1115.3
130°	345.3	391.4	580.8	883.0	1055.6
132.5°	361.0	407.1	580.8	860.3	1002.2
135°	384.6	426.8	580.8	830.8	953.6
137.5°	404.2	449.5	580.8	798.2	903.4
140°	419.9	462.1	580.8	779.2	875.1
142.5°	435.6	474.7	583.9	757.1	846.8
145°	455.2	493.6	584.7	723.8	800.5
147.5°	478.8	512.5	589.4	699.9	758.9
150°	494.5	525.1	592.6	683.9	733.8
152.5°	510.1	537.8	592.6	671.2	711.9
155°	533.7	552.9	596.5	656.0	686.7
157.5°	552.5	570.9	601.2	646.4	668.7
160°	565.1	580.4	604.3	640.1	659.3
162.5°	574.5	589.9	607.5	636.8	649.9
165°	592.6	600.2	612.2	628.1	639.6
167.5°	602.8	609.7	616.1	624.1	631.0
170°	612.2	616.0	616.1	624.0	627.9
172.5°	615.3	622.2	619.2	620.9	624.7
175°	624.0	627.8	624.0	619.9	616.1
177.5°	624.0	627.0	624.0	623.9	620.8
180°	624.0	624.0	624.0	624.0	624.0



TEST NUMBER: P621508

CATALOG NUMBER: VLT-F-100U-050D-930-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	11.94	12.64	13.04	13.73	15.23	4.18	4.88	5.27	5.97	7.46
	3H	13.43	14.05	14.53	15.15	16.66	5.52	6.14	6.62	7.24	8.75
	4H	13.93	14.52	15.05	15.62	17.14	6.16	6.76	7.28	7.86	9.37
	6H	14.32	14.86	15.44	15.97	17.50	6.75	7.29	7.87	8.39	9.92
	8H	14.45	14.96	15.58	16.08	17.60	6.97	7.48	8.10	8.60	10.13
	12H	14.52	15.01	15.65	16.12	17.67	7.13	7.62	8.26	8.73	10.28
4H	2H	11.75	12.35	12.88	13.44	14.96	4.77	5.37	5.90	6.46	7.98
	3H	13.38	13.87	14.50	14.99	16.52	6.31	6.80	7.44	7.93	9.46
	4H	13.96	14.41	15.09	15.53	17.08	7.10	7.55	8.23	8.67	10.22
	6H	14.44	14.83	15.58	15.97	17.51	7.83	8.22	8.97	9.36	10.90
	8H	14.63	14.99	15.77	16.12	17.68	8.12	8.48	9.26	9.61	11.17
	12H	14.75	15.08	15.90	16.22	17.78	8.33	8.66	9.49	9.80	11.36
8H	4H	13.87	14.23	15.00	15.36	16.91	7.54	7.91	8.68	9.03	10.59
	6H	14.40	14.69	15.55	15.86	17.42	8.42	8.72	9.58	9.89	11.45
	8H	14.63	14.89	15.79	16.04	17.62	8.82	9.08	9.98	10.23	11.80
	12H	14.81	15.04	15.98	16.19	17.80	9.13	9.36	10.30	10.51	12.12
12H	4H	13.81	14.14	14.96	15.28	16.84	7.59	7.91	8.74	9.05	10.62
	6H	14.37	14.63	15.53	15.78	17.35	8.54	8.80	9.70	9.95	11.52
	8H	14.60	14.83	15.77	15.98	17.59	8.97	9.20	10.14	10.35	11.96