

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: P621845

Luminaire Tested: VLT-FB-100U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621845  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-FB-100U-050D-935-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

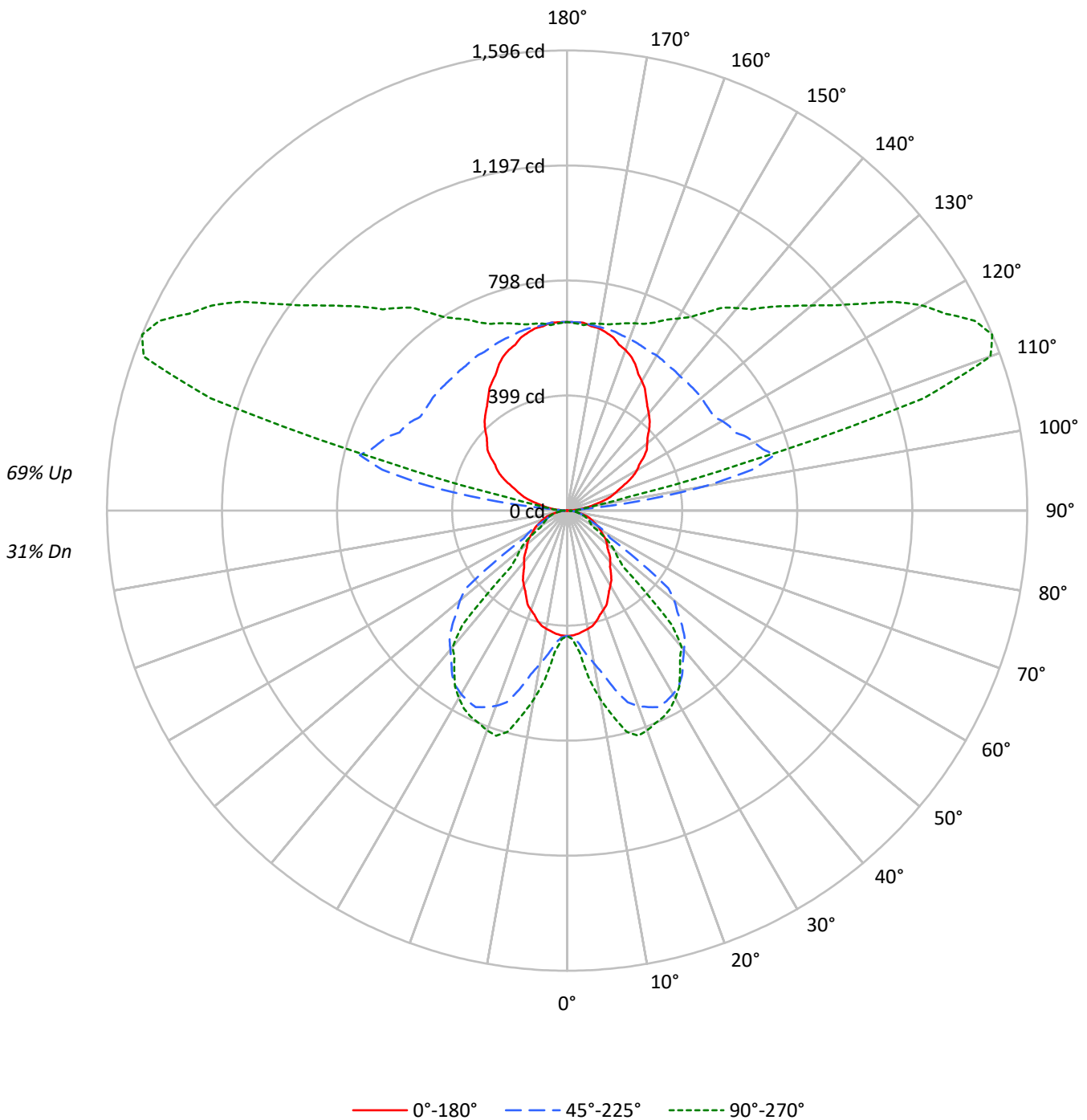
Lumens per Lamp: N/A  
Luminaire Lumens: 5072.0 lumens  
Efficiency: N/A  
Efficacy: 116.9 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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			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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	38	38	38	31
1	94	90	86	83	84	81	78	75	64	62	60	49	47	46	34	34	33	27
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	28	23
3	78	70	63	57	70	63	57	52	50	46	43	38	36	34	28	26	25	20
4	72	62	54	49	64	56	49	44	45	40	37	34	31	29	25	23	21	17
5	66	55	47	42	59	50	43	38	40	35	32	31	28	25	22	20	19	15
6	61	49	41	36	54	45	38	33	36	31	28	28	25	22	20	18	17	13
7	56	44	37	31	50	40	34	29	33	28	24	25	22	19	19	16	15	12
8	52	40	33	28	47	37	30	26	30	25	21	23	20	17	17	15	13	11
9	48	36	29	25	43	33	27	23	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

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

	0°	45°	90°
0°	3120	3120	3120
5°	3094	3316	3552
10°	3033	3921	4842
15°	2941	4779	5895
20°	2800	5507	6195
25°	2652	5954	6255
30°	2483	6092	6224
35°	2314	6092	5976
40°	2177	5902	5786
45°	2071	5722	2770
50°	2013	5416	2387
55°	1957	3626	1890
60°	1902	2207	1369
65°	1861	1681	1425
70°	1836	1464	1464
75°	1788	1519	1469
80°	1570	1533	1459
85°	1161	1597	1383

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5722 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.9	0.9
10°-20°	172.9	3.4
20°-30°	292.8	5.8
30°-40°	355.2	7.0
40°-50°	312.6	6.2
50°-60°	193.5	3.8
60°-70°	104.9	2.1
70°-80°	59.8	1.2
80°-90°	21.0	0.4
90°-100°	80.4	1.6
100°-110°	572.9	11.3
110°-120°	777.8	15.3
120°-130°	633.0	12.5
130°-140°	509.1	10.0
140°-150°	401.4	7.9
150°-160°	293.5	5.8
160°-170°	182.3	3.6
170°-180°	62.2	1.2
0°-30°	512.5	10.1
0°-40°	867.7	17.1
0°-60°	1373.8	27.1
0°-90°	1559.5	30.7
90°-120°	1431.1	28.2
90°-150°	2974.6	58.6
90°-180°	3513.0	69.3
0°-180°	5072.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	435	435	435	435	435	
5°	430	443	460	480	493	41
15°	396	456	643	761	794	111
25°	335	458	752	774	790	154
35°	264	425	695	686	682	166
45°	204	349	564	478	273	158
55°	156	244	290	168	151	140
65°	110	137	99	85	84	109
75°	64	57	55	54	53	67
85°	14	19	19	18	17	17
90°	0	4	8	12	12	2
95°	33	61	33	37	45	37
105°	128	196	744	951	629	134
115°	226	274	642	1334	1559	225
125°	325	369	604	1057	1250	289
135°	403	447	609	871	999	310
145°	477	517	613	758	839	300
155°	559	579	625	688	720	257
165°	621	629	642	658	670	174
175°	654	658	654	650	646	62
180°	654	654	654	654	654	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	434.8	434.8	434.8	434.8	434.8
2.5°	433.3	438.2	440.4	444.7	446.8
5°	429.5	443.3	460.4	480.1	493.1
7.5°	422.6	447.3	501.4	563.7	590.3
10°	416.2	449.9	538.1	628.2	664.5
12.5°	409.1	452.5	581.3	690.4	727.4
15°	395.9	456.4	643.3	760.7	793.5
17.5°	378.7	458.7	697.0	797.9	819.0
20°	366.7	459.2	721.1	802.6	811.2
22.5°	355.4	459.6	738.0	791.2	798.5
25°	334.9	458.5	752.0	774.4	790.0
27.5°	314.4	453.3	745.1	763.2	774.4
30°	299.6	448.2	735.2	750.2	751.1
32.5°	285.4	439.6	720.4	724.7	723.5
35°	264.2	424.9	695.4	685.6	682.2
37.5°	244.4	405.5	659.0	643.3	642.4
40°	232.4	391.4	630.0	615.1	617.7
42.5°	221.1	375.2	603.9	586.3	537.8
45°	204.1	349.3	563.8	477.8	273.0
47.5°	189.5	319.7	518.4	256.0	235.1
50°	180.3	299.5	485.1	225.1	213.8
52.5°	171.1	280.6	442.0	202.4	187.7
55°	156.4	243.7	289.8	167.5	151.1
57.5°	142.4	204.8	177.1	130.2	112.4
60°	132.5	181.8	153.8	104.9	95.4
62.5°	123.4	162.9	131.1	93.1	91.2
65°	109.6	137.2	99.0	84.8	83.9
67.5°	96.7	112.7	75.5	76.3	75.5
70°	87.5	95.3	69.8	70.7	69.8
72.5°	79.0	78.5	64.2	63.6	62.7
75°	64.5	56.7	54.8	53.9	53.0
77.5°	49.3	41.9	44.2	43.3	42.4
80°	38.0	35.4	37.1	36.2	35.3
82.5°	28.1	29.0	30.0	28.4	27.6
85°	14.1	19.3	19.4	17.7	16.8
87.5°	4.2	9.2	9.4	8.8	8.1
90°	0.0	4.0	8.2	12.3	12.3
92.5°	9.9	13.9	18.1	25.6	28.8
95°	32.9	61.0	32.9	37.2	45.2
97.5°	58.4	117.1	241.8	71.3	61.7
100°	78.1	146.5	485.3	142.8	94.6
102.5°	97.9	169.5	656.4	376.9	206.5
105°	127.5	195.8	744.4	950.9	629.2
107.5°	157.1	208.6	710.6	1383.9	1296.3
110°	176.8	225.1	690.9	1454.2	1562.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	196.6	244.8	671.2	1413.1	1595.7
115°	226.2	274.4	641.6	1333.5	1558.7
117.5°	256.6	304.1	634.2	1247.3	1478.9
120°	279.7	323.9	621.0	1181.7	1422.9
122.5°	296.1	343.6	604.5	1125.3	1347.3
125°	324.9	369.1	604.5	1057.2	1250.2
127.5°	348.7	393.8	605.4	978.2	1168.8
130°	361.9	410.2	608.7	925.3	1106.3
132.5°	378.4	426.6	608.7	901.6	1050.3
135°	403.0	447.3	608.7	870.7	999.3
137.5°	423.6	471.0	608.7	836.5	946.7
140°	440.0	484.3	608.7	816.6	917.1
142.5°	456.5	497.5	611.9	793.4	887.5
145°	477.1	517.3	612.8	758.5	839.0
147.5°	501.7	537.1	617.7	733.4	795.4
150°	518.2	550.4	621.0	716.8	769.0
152.5°	534.6	563.6	621.0	703.4	746.0
155°	559.3	579.4	625.1	687.5	719.7
157.5°	579.0	598.3	630.0	677.5	700.8
160°	592.2	608.3	633.3	670.8	690.9
162.5°	602.1	618.2	636.6	667.4	681.0
165°	621.0	629.0	641.6	658.3	670.3
167.5°	631.7	638.9	645.7	654.1	661.3
170°	641.6	645.6	645.7	654.0	658.0
172.5°	644.8	652.1	649.0	650.7	654.7
175°	653.9	657.9	653.9	649.7	645.7
177.5°	653.9	657.1	653.9	653.8	650.6
180°	653.9	653.9	653.9	653.9	653.9

(END OF REPORT)