

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: P621774

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621774  
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-050U-050D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

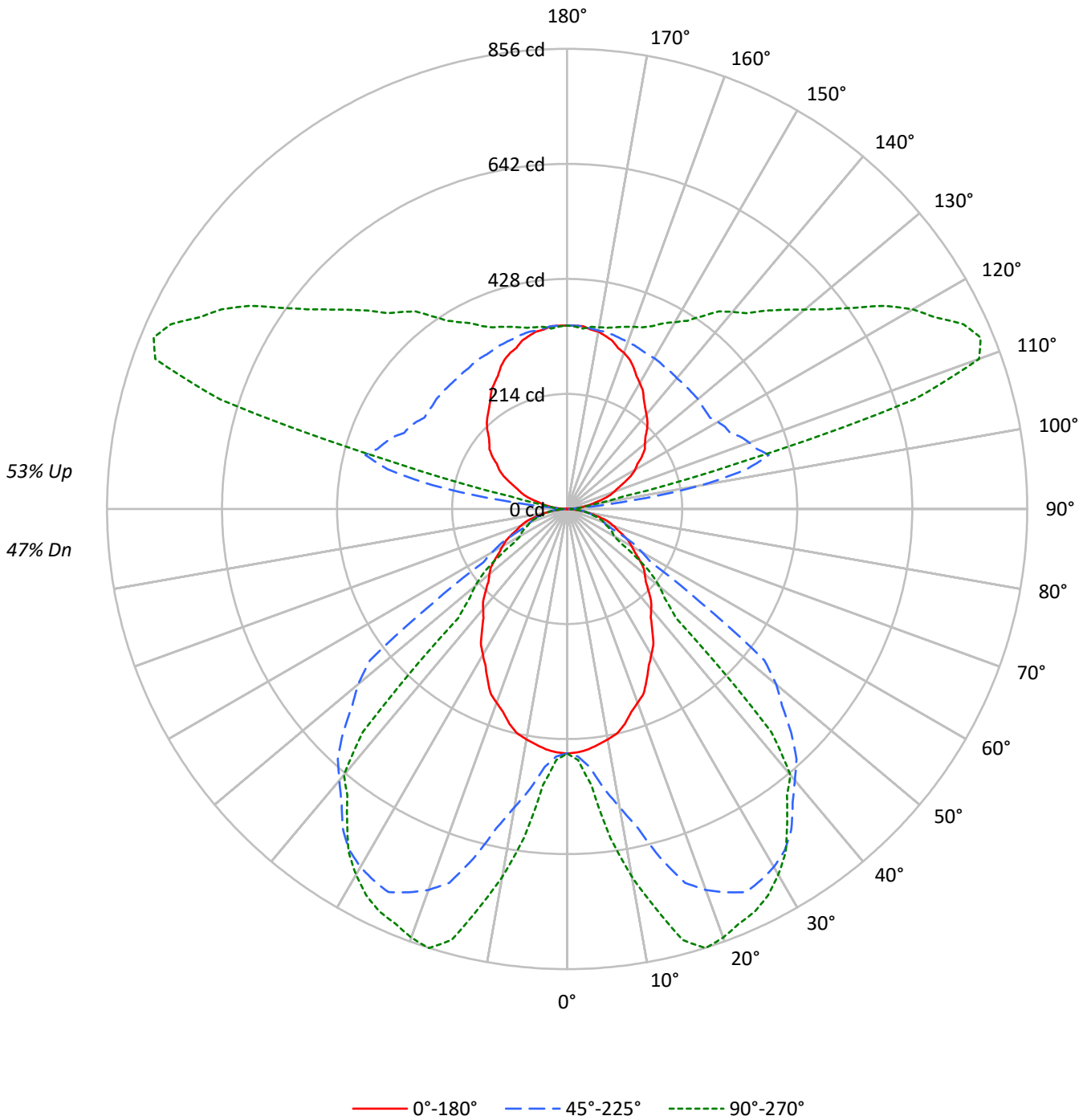
Lumens per Lamp: N/A  
Luminaire Lumens: 3463.0 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 29  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47				47
1	98	94	90	87	90	86	83	80	72	70	68	60	58	57	48	47	46				41	
2	89	82	77	72	82	76	71	67	64	61	57	53	51	48	43	41	40				35	
3	82	73	66	60	75	67	61	56	57	53	49	47	44	42	39	36	35				30	
4	75	65	57	51	69	60	53	48	51	46	42	43	39	36	35	32	30				26	
5	69	58	50	44	63	54	47	42	46	41	37	38	35	31	32	29	26				23	
6	64	52	44	39	59	48	41	36	41	36	32	35	31	28	29	26	23				21	
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21				18	
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19				16	
9	51	39	32	27	47	36	30	25	31	26	22	27	23	20	22	19	17				15	
10	47	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15				13	

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

	0°	45°	90°
0°	3263	3263	3263
5°	3235	3468	3715
10°	3172	4101	5064
15°	3076	4998	6165
20°	2929	5759	6479
25°	2774	6227	6542
30°	2596	6371	6509
35°	2420	6371	6250
40°	2277	6172	6051
45°	2167	5983	2898
50°	2104	5665	2496
55°	2047	3792	1977
60°	1989	2308	1432
65°	1946	1757	1491
70°	1920	1532	1532
75°	1871	1589	1539
80°	1641	1603	1529
85°	1219	1671	1449

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 5983 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.0	1.4
10°-20°	180.8	5.2
20°-30°	306.2	8.8
30°-40°	371.5	10.7
40°-50°	327.0	9.4
50°-60°	202.3	5.8
60°-70°	109.7	3.2
70°-80°	62.5	1.8
80°-90°	21.2	0.6
90°-100°	41.9	1.2
100°-110°	298.9	8.6
110°-120°	405.8	11.7
120°-130°	330.3	9.5
130°-140°	265.7	7.7
140°-150°	209.4	6.0
150°-160°	153.1	4.4
160°-170°	95.1	2.7
170°-180°	32.4	0.9
0°-30°	536.0	15.5
0°-40°	907.5	26.2
0°-60°	1436.8	41.5
0°-90°	1630.2	47.1
90°-120°	746.7	21.6
90°-150°	1552.1	44.8
90°-180°	1833.0	52.9
0°-180°	3463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	455	455	455	455	455	
5°	449	464	482	502	516	42
15°	414	477	673	796	830	116
25°	350	480	786	810	826	161
35°	276	444	727	717	714	173
45°	214	365	590	500	286	166
55°	164	255	303	175	158	146
65°	115	144	104	89	88	114
75°	68	59	57	56	56	70
85°	15	20	20	18	18	18
90°	0	2	4	6	6	1
95°	17	32	17	19	24	19
105°	66	102	388	496	328	70
115°	118	143	335	696	813	117
125°	170	193	315	552	652	151
135°	210	233	318	454	522	162
145°	249	270	320	396	438	156
155°	292	302	326	359	376	134
165°	324	328	335	344	350	91
175°	341	343	341	339	337	32
180°	341	341	341	341	341	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	454.7	454.7	454.7	454.7	454.7
2.5°	453.2	458.3	460.6	465.1	467.3
5°	449.1	463.6	481.5	502.1	515.7
7.5°	441.9	467.8	524.4	589.5	617.3
10°	435.3	470.5	562.8	657.0	695.0
12.5°	427.9	473.3	607.9	722.1	760.8
15°	414.0	477.3	672.8	795.6	829.9
17.5°	396.1	479.8	729.0	834.5	856.5
20°	383.5	480.2	754.1	839.4	848.4
22.5°	371.7	480.7	771.9	827.5	835.1
25°	350.3	479.5	786.5	809.9	826.2
27.5°	328.8	474.1	779.3	798.2	809.9
30°	313.3	468.7	768.9	784.6	785.5
32.5°	298.5	459.7	753.4	758.0	756.7
35°	276.3	444.4	727.3	717.1	713.5
37.5°	255.6	424.1	689.2	672.8	671.9
40°	243.1	409.3	658.9	643.3	646.0
42.5°	231.2	392.4	631.6	613.2	562.4
45°	213.5	365.3	589.6	499.7	285.6
47.5°	198.1	334.4	542.1	267.7	245.8
50°	188.5	313.2	507.4	235.4	223.6
52.5°	178.9	293.5	462.3	211.7	196.3
55°	163.6	254.8	303.1	175.2	158.0
57.5°	149.0	214.2	185.2	136.2	117.6
60°	138.6	190.1	160.8	109.8	99.8
62.5°	129.0	170.4	137.1	97.4	95.4
65°	114.6	143.5	103.5	88.7	87.8
67.5°	101.1	117.9	78.9	79.8	78.9
70°	91.5	99.6	73.0	73.9	73.0
72.5°	82.6	82.1	67.1	66.5	65.6
75°	67.5	59.3	57.3	56.4	55.5
77.5°	51.6	43.8	46.2	45.3	44.4
80°	39.7	37.0	38.8	37.9	37.0
82.5°	29.4	30.3	31.4	29.7	28.8
85°	14.8	20.2	20.3	18.5	17.6
87.5°	4.4	9.2	9.0	7.9	7.2
90°	0.0	2.1	4.3	6.4	6.4
92.5°	5.2	7.2	9.4	13.3	15.0
95°	17.2	31.9	17.2	19.4	23.6
97.5°	30.5	61.1	126.2	37.2	32.2
100°	40.8	76.4	253.2	74.5	49.4
102.5°	51.1	88.4	342.5	196.7	107.7
105°	66.5	102.2	388.4	496.2	328.3
107.5°	82.0	108.8	370.8	722.1	676.4
110°	92.3	117.5	360.5	758.8	815.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	102.6	127.8	350.2	737.4	832.6
115°	118.0	143.2	334.8	695.8	813.3
117.5°	133.9	158.7	330.9	650.8	771.7
120°	145.9	169.0	324.0	616.6	742.5
122.5°	154.5	179.3	315.4	587.2	703.0
125°	169.5	192.6	315.4	551.6	652.4
127.5°	182.0	205.5	315.9	510.4	609.9
130°	188.8	214.0	317.6	482.8	577.2
132.5°	197.4	222.6	317.6	470.4	548.1
135°	210.3	233.4	317.6	454.3	521.5
137.5°	221.0	245.8	317.6	436.5	494.0
140°	229.6	252.7	317.6	426.1	478.5
142.5°	238.2	259.6	319.3	414.0	463.1
145°	248.9	269.9	319.7	395.8	437.8
147.5°	261.8	280.3	322.3	382.7	415.0
150°	270.4	287.2	324.0	374.0	401.3
152.5°	279.0	294.1	324.0	367.0	389.3
155°	291.8	302.3	326.2	358.7	375.5
157.5°	302.1	312.2	328.8	353.5	365.7
160°	309.0	317.4	330.5	350.0	360.5
162.5°	314.2	322.6	332.2	348.2	355.4
165°	324.0	328.2	334.8	343.5	349.8
167.5°	329.6	333.4	336.9	341.3	345.1
170°	334.8	336.9	336.9	341.2	343.3
172.5°	336.5	340.3	338.6	339.5	341.6
175°	341.2	343.3	341.2	339.0	336.9
177.5°	341.2	342.9	341.2	341.2	339.5
180°	341.2	341.2	341.2	341.2	341.2

(END OF REPORT)