

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: P621773

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621773  
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-935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

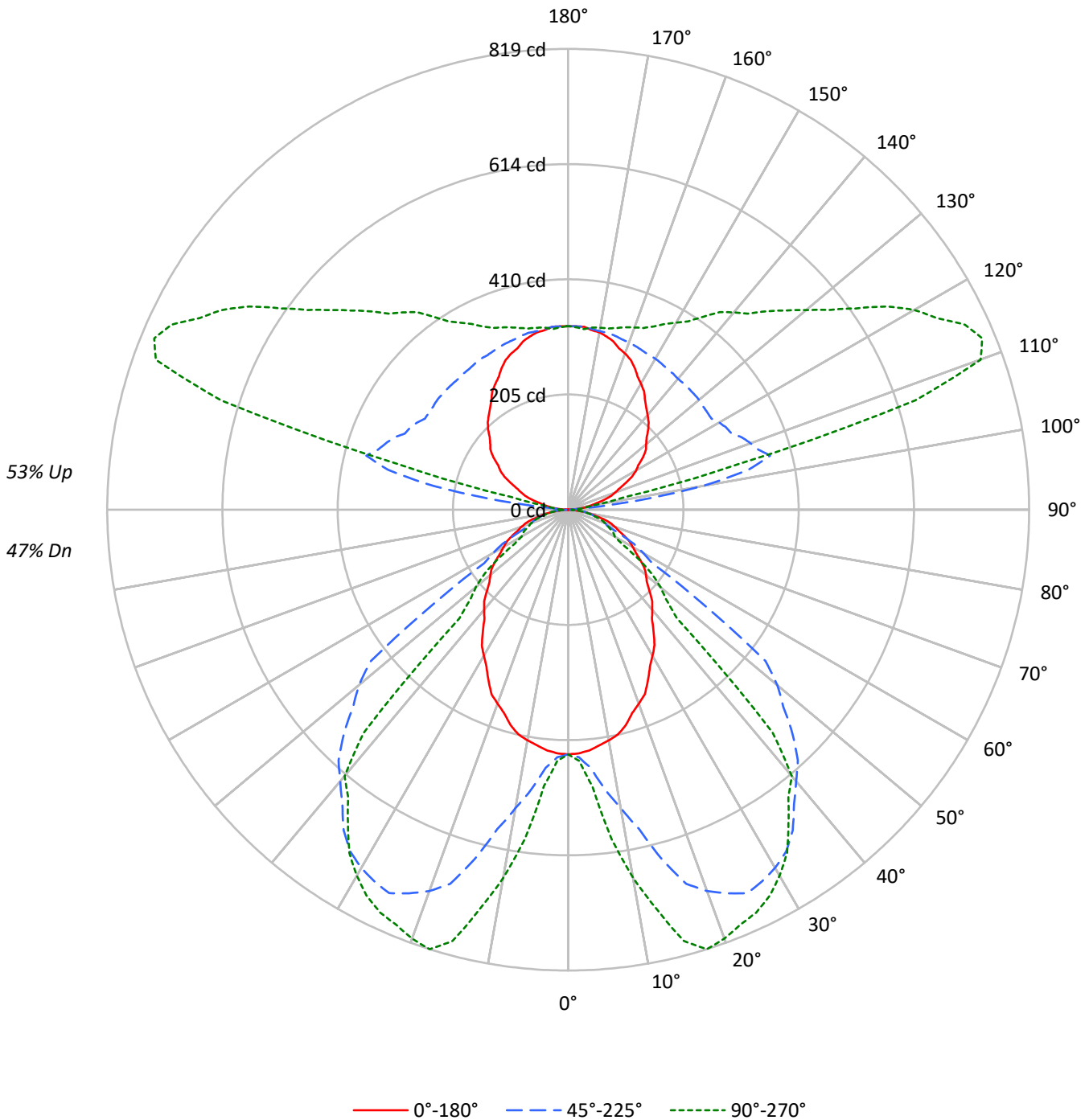
Lumens per Lamp: N/A  
Luminaire Lumens: 3311.2 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

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				41
2	89	82	77	72	82	76	71	67	64	61	57	53	51	48	43	41	40	35				35
3	82	73	66	60	75	67	61	56	57	53	49	47	44	42	39	36	35	30				30
4	75	65	57	51	69	60	53	48	51	46	42	43	39	36	35	32	30	26				26
5	69	58	50	44	63	54	47	42	46	41	37	38	35	31	32	29	26	23				23
6	64	52	44	39	59	48	41	36	41	36	32	35	31	28	29	26	23	21				21
7	59	47	39	34	54	44	37	32	38	32	28	32	28	25	26	23	21	18				18
8	55	43	35	30	50	40	33	28	34	29	25	29	25	22	24	21	19	16				16
9	51	39	32	27	47	36	30	25	31	26	22	27	23	20	22	19	17	15				15
10	47	36	29	24	44	33	27	23	29	24	20	25	21	18	21	18	15	13				13

**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	1.4
10°-20°	172.9	5.2
20°-30°	292.8	8.8
30°-40°	355.2	10.7
40°-50°	312.6	9.4
50°-60°	193.5	5.8
60°-70°	104.9	3.2
70°-80°	59.8	1.8
80°-90°	20.3	0.6
90°-100°	40.1	1.2
100°-110°	285.8	8.6
110°-120°	388.0	11.7
120°-130°	315.8	9.5
130°-140°	254.0	7.7
140°-150°	200.3	6.0
150°-160°	146.4	4.4
160°-170°	90.9	2.7
170°-180°	31.0	0.9
0°-30°	512.5	15.5
0°-40°	867.7	26.2
0°-60°	1373.8	41.5
0°-90°	1558.7	47.1
90°-120°	714.0	21.6
90°-150°	1484.1	44.8
90°-180°	1752.0	52.9
0°-180°	3311.2	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	2	4	6	6	1
95°	16	30	16	19	23	18
105°	64	98	371	474	314	67
115°	113	137	320	665	778	112
125°	162	184	302	528	624	144
135°	201	223	304	434	499	155
145°	238	258	306	378	419	149
155°	279	289	312	343	359	128
165°	310	314	320	328	334	87
175°	326	328	326	324	322	31
180°	326	326	326	326	326	

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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	8.8	8.6	7.6	6.9
90°	0.0	2.0	4.1	6.2	6.2
92.5°	4.9	6.9	9.0	12.8	14.4
95°	16.4	30.5	16.4	18.6	22.6
97.5°	29.1	58.4	120.6	35.6	30.8
100°	39.0	73.1	242.1	71.3	47.2
102.5°	48.8	84.5	327.5	188.1	103.0
105°	63.6	97.7	371.4	474.4	313.9
107.5°	78.4	104.1	354.6	690.5	646.7
110°	88.2	112.3	344.7	725.5	779.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	98.1	122.2	334.9	705.0	796.1
115°	112.9	136.9	320.1	665.3	777.6
117.5°	128.0	151.7	316.4	622.3	737.8
120°	139.5	161.6	309.8	589.6	709.9
122.5°	147.7	171.4	301.6	561.4	672.2
125°	162.1	184.2	301.6	527.5	623.8
127.5°	174.0	196.5	302.0	488.0	583.1
130°	180.6	204.6	303.7	461.7	551.9
132.5°	188.8	212.8	303.7	449.8	524.0
135°	201.1	223.1	303.7	434.4	498.6
137.5°	211.3	235.0	303.7	417.4	472.3
140°	219.5	241.6	303.7	407.4	457.6
142.5°	227.8	248.2	305.3	395.8	442.8
145°	238.0	258.1	305.7	378.4	418.6
147.5°	250.3	268.0	308.2	365.9	396.8
150°	258.5	274.6	309.8	357.6	383.7
152.5°	266.7	281.2	309.8	350.9	372.2
155°	279.0	289.1	311.9	343.0	359.1
157.5°	288.9	298.5	314.3	338.0	349.6
160°	295.5	303.5	316.0	334.7	344.7
162.5°	300.4	308.4	317.6	333.0	339.8
165°	309.8	313.8	320.1	328.4	334.4
167.5°	315.2	318.8	322.1	326.3	329.9
170°	320.1	322.1	322.1	326.3	328.3
172.5°	321.7	325.3	323.8	324.6	326.7
175°	326.2	328.2	326.2	324.1	322.1
177.5°	326.2	327.8	326.2	326.2	324.6
180°	326.2	326.2	326.2	326.2	326.2

(END OF REPORT)