

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: P621784

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

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621784  
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-100D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
LIGHT SHAPING LENS - BATWING  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

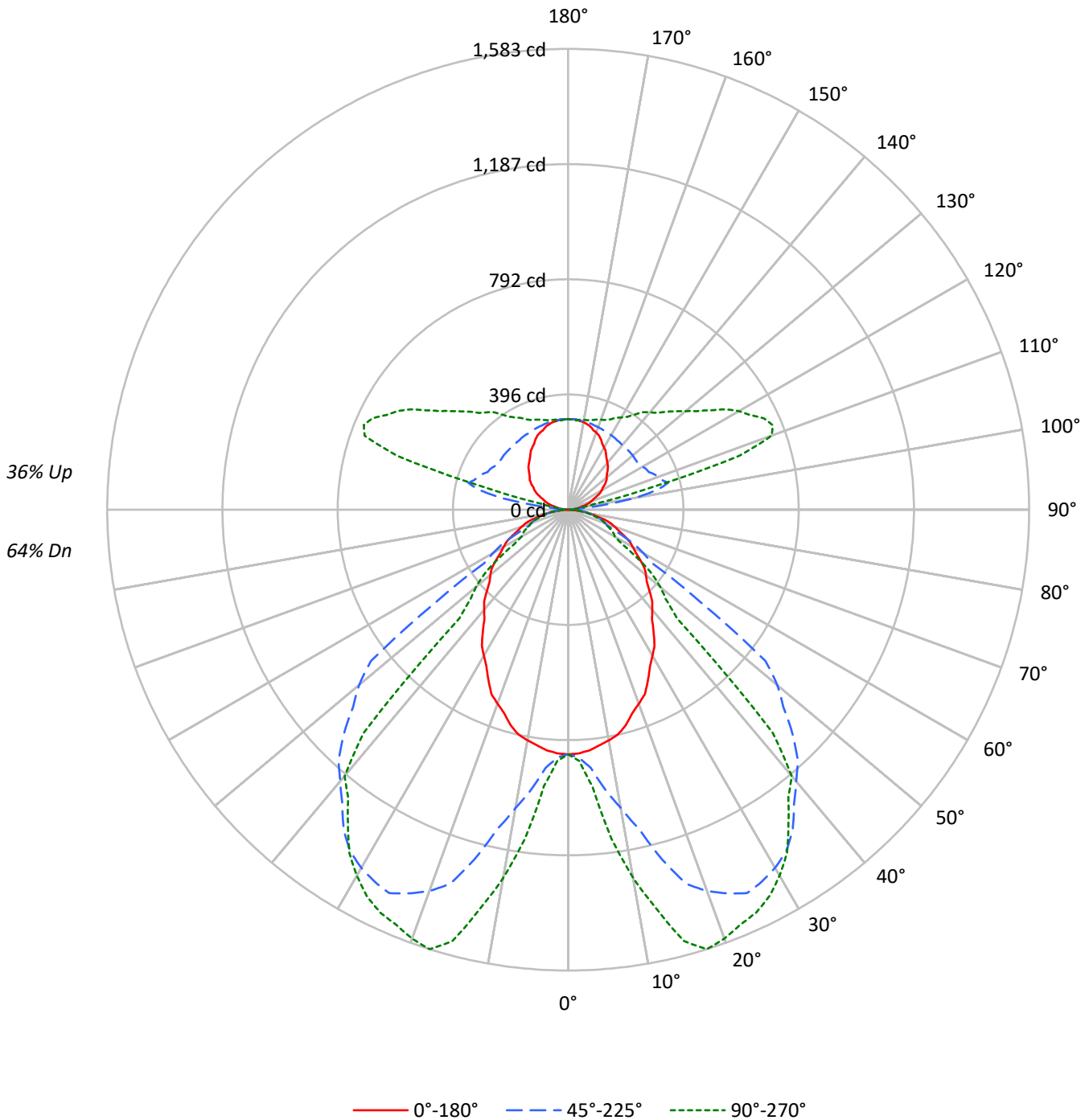
Lumens per Lamp: N/A  
Luminaire Lumens: 4684.4 lumens  
Efficiency: N/A  
Efficacy: 107.0 lumens/watt  
Spacing Criteria (0/90/45): 1.05 / 1.83 / 1.75  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 43.8  
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



36% Up  
64% Dn



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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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64				
1	102	98	94	91	96	92	89	86	81	79	77	71	70	68	62	61	60	56				
2	93	86	80	75	88	81	76	72	72	68	65	64	61	58	56	54	52	48				
3	86	76	69	64	80	72	66	61	64	59	55	57	53	50	50	47	45	41				
4	79	68	60	55	74	65	58	52	58	52	48	51	47	44	45	42	39	36				
5	73	61	53	47	68	58	51	45	52	46	42	46	42	38	41	37	35	32				
6	67	55	47	41	63	52	45	40	47	41	37	42	37	34	37	34	31	28				
7	62	50	42	36	58	47	40	35	43	37	32	38	34	30	34	30	27	25				
8	58	45	38	32	54	43	36	31	39	33	29	35	30	27	31	28	25	22				
9	54	42	34	29	51	40	33	28	36	30	26	32	28	24	29	25	22	20				
10	50	38	31	26	47	36	30	25	33	27	24	30	25	22	27	23	20	18				

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

	0°	45°	90°
0°	6031	6031	6031
5°	5980	6410	6866
10°	5862	7580	9359
15°	5685	9237	11395
20°	5413	10644	11974
25°	5125	11508	12090
30°	4798	11775	12030
35°	4474	11775	11551
40°	4208	11408	11184
45°	4005	11059	5356
50°	3889	10468	4614
55°	3782	7009	3654
60°	3677	4265	2648
65°	3596	3248	2756
70°	3548	2830	2830
75°	3457	2936	2842
80°	3033	2963	2822
85°	2248	3096	2676

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 11059 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	1.9
10°-20°	334.1	7.1
20°-30°	565.9	12.1
30°-40°	686.5	14.7
40°-50°	604.3	12.9
50°-60°	373.9	8.0
60°-70°	202.7	4.3
70°-80°	115.5	2.5
80°-90°	38.5	0.8
90°-100°	38.3	0.8
100°-110°	272.7	5.8
110°-120°	370.3	7.9
120°-130°	301.4	6.4
130°-140°	242.4	5.2
140°-150°	191.1	4.1
150°-160°	139.7	3.0
160°-170°	86.8	1.9
170°-180°	29.6	0.6
0°-30°	990.7	21.1
0°-40°	1677.2	35.8
0°-60°	2655.5	56.7
0°-90°	3012.2	64.3
90°-120°	681.3	14.5
90°-150°	1416.2	30.2
90°-180°	1672.0	35.7
0°-180°	4684.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	840	840	840	840	840	
5°	830	857	890	928	953	78
15°	765	882	1243	1470	1534	214
25°	647	886	1454	1497	1527	297
35°	511	821	1344	1325	1319	320
45°	395	675	1090	924	528	306
55°	302	471	560	324	292	271
65°	212	265	191	164	162	210
75°	125	110	106	104	102	130
85°	27	37	38	34	32	33
90°	0	2	4	6	6	2
95°	16	29	16	18	22	18
105°	61	93	354	453	300	64
115°	108	131	305	635	742	107
125°	155	176	288	503	595	137
135°	192	213	290	414	476	148
145°	227	246	292	361	399	143
155°	266	276	298	327	343	122
165°	296	300	305	313	319	83
175°	311	313	311	309	307	29
180°	311	311	311	311	311	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	840.4	840.4	840.4	840.4	840.4
2.5°	837.6	847.0	851.3	859.6	863.6
5°	830.1	856.8	889.9	928.0	953.1
7.5°	816.8	864.5	969.1	1089.5	1141.0
10°	804.5	869.6	1040.2	1214.3	1284.4
12.5°	790.8	874.7	1123.5	1334.6	1406.1
15°	765.2	882.1	1243.4	1470.4	1533.8
17.5°	732.1	886.7	1347.3	1542.3	1583.0
20°	708.8	887.5	1393.8	1551.3	1568.0
22.5°	687.0	888.4	1426.6	1529.4	1543.4
25°	647.3	886.2	1453.5	1496.9	1527.0
27.5°	607.7	876.3	1440.2	1475.2	1496.9
30°	579.0	866.3	1421.1	1450.2	1451.8
32.5°	551.7	849.6	1392.4	1400.9	1398.5
35°	510.7	821.3	1344.2	1325.3	1318.6
37.5°	472.4	783.7	1273.9	1243.4	1241.7
40°	449.2	756.5	1217.8	1188.9	1193.9
42.5°	427.4	725.3	1167.3	1133.4	1039.5
45°	394.6	675.1	1089.7	923.6	527.8
47.5°	366.2	618.1	1001.9	494.8	454.3
50°	348.4	578.9	937.7	435.1	413.3
52.5°	330.7	542.4	854.4	391.2	362.8
55°	302.3	471.0	560.2	323.8	292.1
57.5°	275.3	395.9	342.3	251.7	217.3
60°	256.2	351.4	297.2	202.8	184.5
62.5°	238.4	314.9	253.5	179.9	176.3
65°	211.8	265.2	191.3	163.9	162.3
67.5°	186.9	217.9	145.9	147.5	145.9
70°	169.1	184.1	134.9	136.6	134.9
72.5°	152.7	151.7	124.0	122.9	121.3
75°	124.7	109.7	105.9	104.2	102.5
77.5°	95.3	80.9	85.4	83.7	82.0
80°	73.4	68.4	71.7	70.0	68.3
82.5°	54.3	56.0	58.1	55.0	53.3
85°	27.3	37.3	37.6	34.1	32.5
87.5°	8.2	16.6	15.8	13.4	12.1
90°	0.0	1.9	3.9	5.9	5.9
92.5°	4.7	6.6	8.6	12.2	13.7
95°	15.7	29.1	15.7	17.7	21.5
97.5°	27.8	55.8	115.1	34.0	29.4
100°	37.2	69.7	231.0	68.0	45.0
102.5°	46.6	80.7	312.5	179.5	98.3
105°	60.7	93.2	354.4	452.7	299.6
107.5°	74.8	99.3	338.3	658.9	617.1
110°	84.2	107.2	328.9	692.3	744.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	93.6	116.6	319.5	672.7	759.7
115°	107.7	130.7	305.4	634.8	742.0
117.5°	122.2	144.8	301.9	593.8	704.1
120°	133.1	154.2	295.6	562.6	677.4
122.5°	141.0	163.6	287.8	535.7	641.4
125°	154.7	175.7	287.8	503.3	595.2
127.5°	166.0	187.5	288.2	465.7	556.4
130°	172.3	195.3	289.8	440.5	526.7
132.5°	180.1	203.1	289.8	429.2	500.0
135°	191.9	212.9	289.8	414.5	475.8
137.5°	201.7	224.3	289.8	398.2	450.7
140°	209.5	230.6	289.8	388.7	436.6
142.5°	217.3	236.9	291.3	377.7	422.5
145°	227.1	246.3	291.7	361.1	399.4
147.5°	238.9	255.7	294.1	349.2	378.7
150°	246.7	262.0	295.6	341.2	366.1
152.5°	254.5	268.3	295.6	334.9	355.2
155°	266.3	275.8	297.6	327.3	342.6
157.5°	275.7	284.9	299.9	322.5	333.6
160°	281.9	289.6	301.5	319.4	328.9
162.5°	286.6	294.3	303.1	317.7	324.2
165°	295.6	299.5	305.4	313.4	319.1
167.5°	300.7	304.2	307.4	311.4	314.8
170°	305.4	307.3	307.4	311.3	313.3
172.5°	307.0	310.4	309.0	309.8	311.7
175°	311.3	313.2	311.3	309.3	307.4
177.5°	311.3	312.8	311.3	311.3	309.7
180°	311.3	311.3	311.3	311.3	311.3

(END OF REPORT)