

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P621967

Luminaire Tested: VLT-BB-M-100U-100D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621967  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2203-563-26, G2-2203-563-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/28/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: VLT-BB-M-100U-100D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

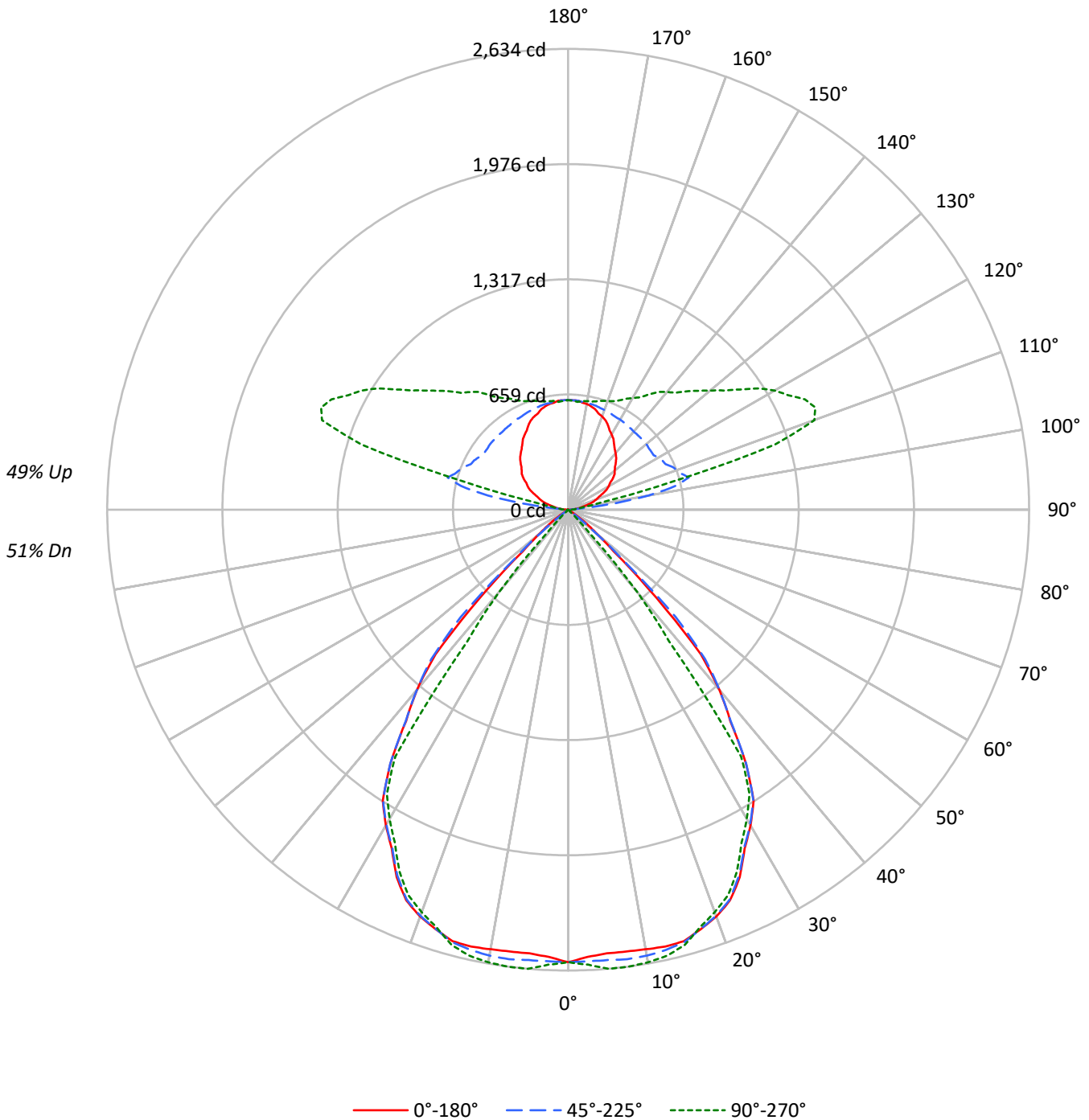
Lumens per Lamp: N/A  
Luminaire Lumens: 6925.6 lumens  
Efficiency: N/A  
Efficacy: 96.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 71.7  
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	
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	100	97	94	91	93	90	87	85	77	75	73	65	64	63	54	53	53	48
2	93	87	82	78	86	81	77	73	70	67	65	60	58	56	50	49	48	44
3	87	79	73	68	80	74	69	64	64	60	57	55	53	50	47	45	44	40
4	81	72	65	60	75	67	61	57	59	54	51	51	48	45	44	42	40	37
5	75	65	58	53	70	61	55	51	54	49	46	47	44	41	41	38	36	34
6	70	59	53	48	65	56	50	45	50	45	41	44	40	37	38	35	33	31
7	65	55	48	43	61	52	45	41	46	41	38	40	37	34	35	33	31	28
8	61	50	43	39	57	48	41	37	42	38	34	38	34	31	33	30	28	26
9	57	46	40	35	54	44	38	34	39	35	31	35	31	29	31	28	26	24
10	54	43	37	32	50	41	35	31	37	32	29	33	29	27	29	26	24	22

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

	0°	45°	90°
0°	18558	18558	18558
5°	18337	18615	18976
10°	18591	18858	19139
15°	18969	19012	19126
20°	18895	18865	18689
25°	18353	18277	18064
30°	17258	17226	16906
35°	15509	15526	15086
40°	12592	12592	5763
45°	7241	8807	118
50°	2282	2110	107
55°	796	169	96
60°	56	111	111
65°	32	98	98
70°	40	122	122
75°	0	108	108
80°	0	161	161
85°	0	156	156

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 8807 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.1	3.6
10°-20°	721.1	10.4
20°-30°	1053.4	15.2
30°-40°	1043.3	15.1
40°-50°	436.8	6.3
50°-60°	46.7	0.7
60°-70°	6.6	0.1
70°-80°	4.0	0.1
80°-90°	3.3	0.0
90°-100°	77.0	1.1
100°-110°	548.6	7.9
110°-120°	744.7	10.8
120°-130°	606.1	8.8
130°-140°	487.5	7.0
140°-150°	384.3	5.5
150°-160°	281.0	4.1
160°-170°	174.6	2.5
170°-180°	59.5	0.9
0°-30°	2021.6	29.2
0°-40°	3064.9	44.3
0°-60°	3548.4	51.2
0°-90°	3562.2	51.4
90°-120°	1370.3	19.8
90°-150°	2848.3	41.1
90°-180°	3363.0	48.6
0°-180°	6925.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2586	2586	2586	2586	2586	
5°	2546	2591	2584	2591	2634	243
15°	2553	2606	2559	2541	2574	717
25°	2318	2358	2308	2253	2281	1059
35°	1770	1774	1772	1737	1722	1086
45°	714	847	868	17	12	560
55°	64	84	14	10	8	71
65°	2	8	6	6	6	2
75°	0	4	4	4	4	0
85°	0	2	2	2	2	0
90°	0	4	8	12	12	1
95°	32	58	32	36	43	35
105°	122	188	713	910	602	129
115°	217	263	614	1277	1492	215
125°	311	353	579	1012	1197	276
135°	386	428	583	834	957	297
145°	457	495	587	726	803	287
155°	536	555	599	658	689	246
165°	595	602	614	630	642	167
175°	626	630	626	622	618	59
180°	626	626	626	626	626	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2558.3	2594.5	2583.0	2580.5	2603.1
5°	2545.6	2590.9	2584.2	2591.0	2634.3
7.5°	2546.8	2588.6	2591.1	2591.0	2634.3
10°	2551.4	2594.8	2588.0	2583.2	2626.6
12.5°	2557.6	2602.4	2577.2	2569.3	2611.2
15°	2553.3	2606.1	2559.1	2540.6	2574.5
17.5°	2514.4	2575.5	2513.6	2477.9	2502.8
20°	2474.3	2538.4	2470.4	2420.9	2447.3
22.5°	2417.2	2476.8	2411.8	2354.6	2385.5
25°	2318.0	2357.6	2308.4	2253.1	2281.4
27.5°	2183.1	2205.7	2177.7	2127.9	2145.3
30°	2082.8	2097.9	2078.9	2029.0	2040.3
32.5°	1971.7	1979.2	1967.8	1922.4	1927.7
35°	1770.4	1774.1	1772.3	1737.2	1722.1
37.5°	1521.6	1529.1	1524.7	1372.3	946.9
40°	1344.2	1351.7	1344.2	803.8	615.2
42.5°	1122.0	1170.3	1157.5	548.1	175.5
45°	713.5	847.4	867.8	17.2	11.6
47.5°	352.5	497.0	408.1	11.2	11.2
50°	204.4	293.0	189.0	9.6	9.6
52.5°	136.5	178.4	54.8	9.6	9.6
55°	63.6	84.4	13.5	9.6	7.7
57.5°	22.4	42.4	9.3	7.7	7.7
60°	3.9	20.8	7.7	7.7	7.7
62.5°	2.3	11.7	7.7	6.2	7.7
65°	1.9	7.6	5.8	5.8	5.8
67.5°	1.9	5.7	5.8	5.8	5.8
70°	1.9	5.7	5.8	5.8	5.8
72.5°	0.4	4.2	4.2	4.3	5.8
75°	0.0	3.8	3.9	3.9	3.9
77.5°	0.0	3.8	3.9	3.9	3.9
80°	0.0	3.8	3.9	3.9	3.9
82.5°	0.0	2.3	2.3	2.3	3.9
85°	0.0	1.9	1.9	1.9	1.9
87.5°	0.0	2.3	3.1	3.9	3.9
90°	0.0	3.9	7.9	11.8	11.8
92.5°	9.5	13.3	17.3	24.5	27.6
95°	31.5	58.5	31.5	35.6	43.3
97.5°	55.9	112.1	231.5	68.3	59.1
100°	74.8	140.3	464.7	136.8	90.6
102.5°	93.7	162.3	628.5	360.9	197.7
105°	122.1	187.5	712.8	910.5	602.5
107.5°	150.4	199.7	680.5	1325.2	1241.2
110°	169.3	215.5	661.6	1392.4	1496.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	188.2	234.4	642.7	1353.1	1527.9
115°	216.6	262.8	614.3	1276.8	1492.5
117.5°	245.7	291.2	607.2	1194.3	1416.1
120°	267.8	310.1	594.6	1131.5	1362.5
122.5°	283.5	329.0	578.9	1077.5	1290.0
125°	311.1	353.4	578.9	1012.3	1197.1
127.5°	333.9	377.1	579.7	936.6	1119.1
130°	346.5	392.7	582.8	886.0	1059.3
132.5°	362.3	408.5	582.8	863.3	1005.7
135°	385.9	428.3	582.8	833.7	956.9
137.5°	405.6	451.0	582.8	801.0	906.5
140°	421.4	463.7	582.8	781.9	878.1
142.5°	437.1	476.4	586.0	759.7	849.8
145°	456.8	495.3	586.7	726.3	803.3
147.5°	480.4	514.3	591.5	702.3	761.6
150°	496.2	527.0	594.6	686.3	736.4
152.5°	511.9	539.6	594.6	673.5	714.3
155°	535.6	554.8	598.6	658.3	689.1
157.5°	554.5	572.9	603.3	648.7	671.0
160°	567.1	582.5	606.4	642.3	661.6
162.5°	576.5	591.9	609.6	639.0	652.1
165°	594.6	602.3	614.3	630.3	641.9
167.5°	604.9	611.8	618.2	626.3	633.2
170°	614.3	618.2	618.2	626.2	630.1
172.5°	617.5	624.4	621.4	623.1	626.9
175°	626.1	630.0	626.1	622.1	618.2
177.5°	626.1	629.2	626.1	626.1	623.0
180°	626.1	626.1	626.1	626.1	626.1



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**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	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00