

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: P621970

Luminaire Tested: VLT-BB-M-100U-125D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621970  
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-125D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

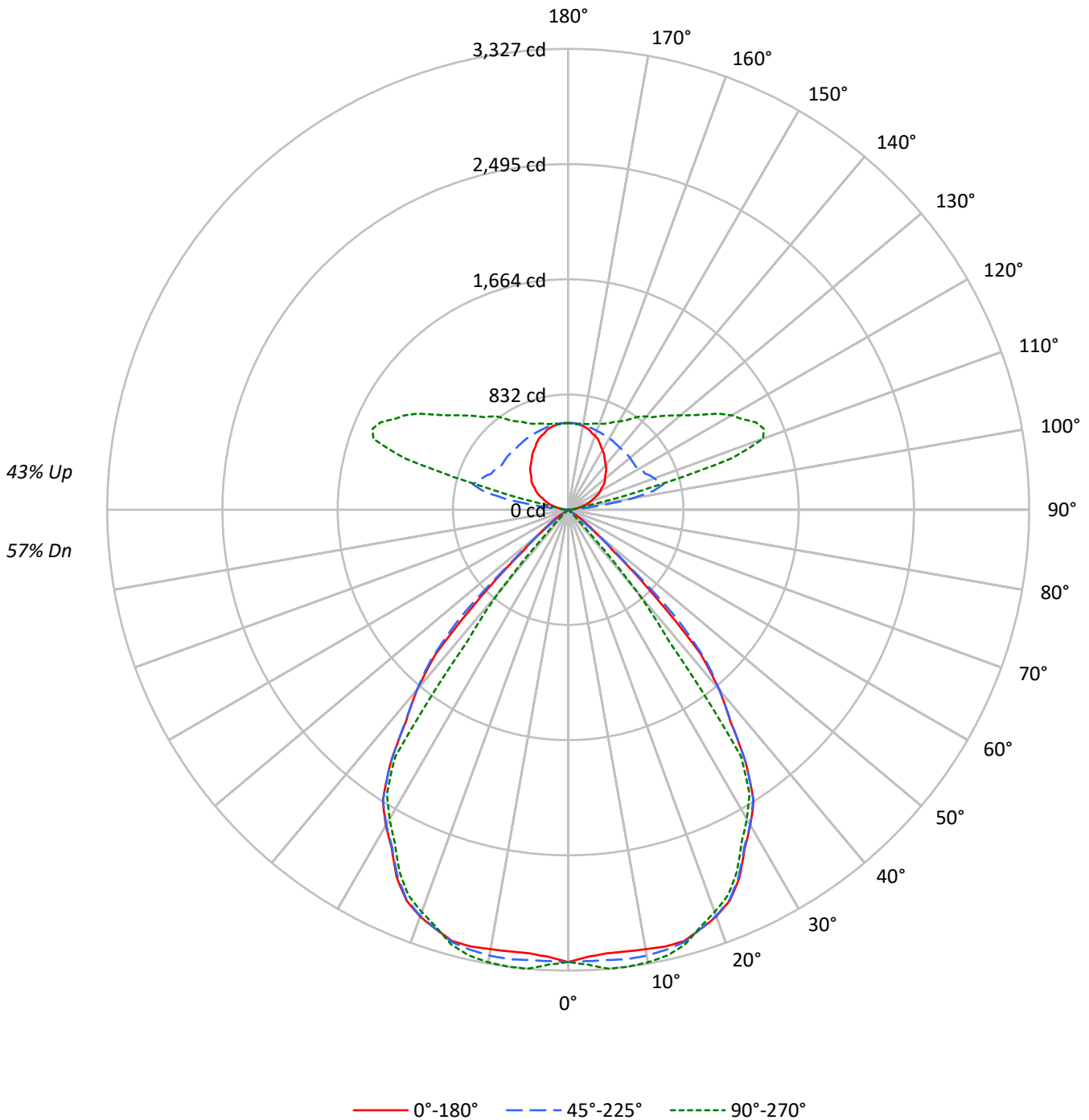
Lumens per Lamp: N/A  
Luminaire Lumens: 7861.8 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 82.8  
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									
RC	80									70									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57																			
1	102	98	95	92	95	92	89	87	80	78	77	69	68	67	59	58	58	53																			
2	95	89	84	80	88	83	79	76	73	70	68	64	62	60	55	54	53	48																			
3	88	81	75	70	83	76	71	67	67	63	60	59	56	54	51	50	48	44																			
4	82	73	67	62	77	69	64	59	62	57	54	55	51	49	48	46	44	41																			
5	77	67	60	55	72	63	57	53	57	52	48	50	47	44	45	42	40	37																			
6	72	61	54	49	67	58	52	48	52	47	44	47	43	40	42	39	37	34																			
7	67	56	49	45	63	54	47	43	48	43	40	43	40	37	39	36	34	32																			
8	63	52	45	40	59	49	43	39	45	40	36	40	37	34	36	33	31	29																			
9	59	48	41	37	55	46	40	36	42	37	33	38	34	31	34	31	29	27																			
10	55	45	38	34	52	43	37	33	39	34	31	35	31	29	32	29	27	25																			

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

	0°	45°	90°
0°	23437	23437	23437
5°	23158	23509	23965
10°	23479	23816	24171
15°	23956	24011	24155
20°	23862	23825	23602
25°	23179	23083	22813
30°	21796	21755	21352
35°	19586	19608	19053
40°	15902	15902	7278
45°	9145	11123	148
50°	2882	2665	136
55°	1006	213	121
60°	70	139	139
65°	41	124	124
70°	50	153	153
75°	0	136	136
80°	0	202	202
85°	0	198	198

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 11123 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	312.1	4.0
10°-20°	910.7	11.6
20°-30°	1330.4	16.9
30°-40°	1317.6	16.8
40°-50°	551.6	7.0
50°-60°	59.0	0.8
60°-70°	8.3	0.1
70°-80°	5.0	0.1
80°-90°	3.8	0.0
90°-100°	77.0	1.0
100°-110°	548.6	7.0
110°-120°	744.7	9.5
120°-130°	606.1	7.7
130°-140°	487.5	6.2
140°-150°	384.3	4.9
150°-160°	281.0	3.6
160°-170°	174.6	2.2
170°-180°	59.5	0.8
0°-30°	2553.2	32.5
0°-40°	3870.7	49.2
0°-60°	4481.3	57.0
0°-90°	4498.4	57.2
90°-120°	1370.3	17.4
90°-150°	2848.3	36.2
90°-180°	3363.0	42.8
0°-180°	7861.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3266	3266	3266	3266	3266	
5°	3215	3272	3264	3272	3327	307
15°	3225	3291	3232	3209	3251	906
25°	2928	2978	2915	2846	2881	1337
35°	2236	2241	2238	2194	2175	1371
45°	901	1070	1096	22	15	707
55°	80	107	17	12	10	90
65°	2	10	7	7	7	3
75°	0	5	5	5	5	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°	3266.1	3266.1	3266.1	3266.1	3266.1
2.5°	3231.0	3276.7	3262.2	3258.9	3287.5
5°	3214.9	3272.1	3263.6	3272.2	3326.9
7.5°	3216.4	3269.2	3272.4	3272.2	3326.9
10°	3222.2	3277.0	3268.5	3262.4	3317.2
12.5°	3230.0	3286.7	3254.8	3244.8	3297.7
15°	3224.6	3291.3	3232.0	3208.6	3251.4
17.5°	3175.4	3252.6	3174.5	3129.4	3160.8
20°	3124.8	3205.8	3119.9	3057.4	3090.7
22.5°	3052.7	3128.0	3045.9	2973.7	3012.8
25°	2927.5	2977.5	2915.3	2845.5	2881.2
27.5°	2757.0	2785.6	2750.2	2687.4	2709.3
30°	2630.4	2649.4	2625.5	2562.5	2576.8
32.5°	2490.1	2499.6	2485.2	2427.9	2434.6
35°	2235.8	2240.6	2238.3	2194.0	2174.9
37.5°	1921.6	1931.2	1925.5	1733.1	1195.8
40°	1697.6	1707.1	1697.6	1015.1	776.9
42.5°	1417.0	1478.0	1461.8	692.2	221.6
45°	901.1	1070.2	1096.0	21.8	14.6
47.5°	445.2	627.6	515.4	14.1	14.1
50°	258.2	370.1	238.7	12.2	12.2
52.5°	172.4	225.3	69.2	12.2	12.2
55°	80.4	106.6	17.0	12.1	9.7
57.5°	28.3	53.5	11.7	9.7	9.7
60°	4.9	26.3	9.7	9.7	9.7
62.5°	2.9	14.8	9.7	7.8	9.7
65°	2.4	9.6	7.3	7.3	7.3
67.5°	2.4	7.2	7.3	7.3	7.3
70°	2.4	7.2	7.3	7.3	7.3
72.5°	0.5	5.2	5.4	5.4	7.3
75°	0.0	4.8	4.9	4.9	4.9
77.5°	0.0	4.8	4.9	4.9	4.9
80°	0.0	4.8	4.9	4.9	4.9
82.5°	0.0	2.9	2.9	3.0	4.9
85°	0.0	2.4	2.4	2.4	2.4
87.5°	0.0	2.7	3.5	4.3	4.3
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	0.65	1.83	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.45	1.65	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.32	1.53	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.17	1.40	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.10	1.32	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.01	1.25	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.28	1.49	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.12	1.35	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00