

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: P621934

Luminaire Tested: VLT-BB-M-050U-125D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621934  
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-050U-125D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

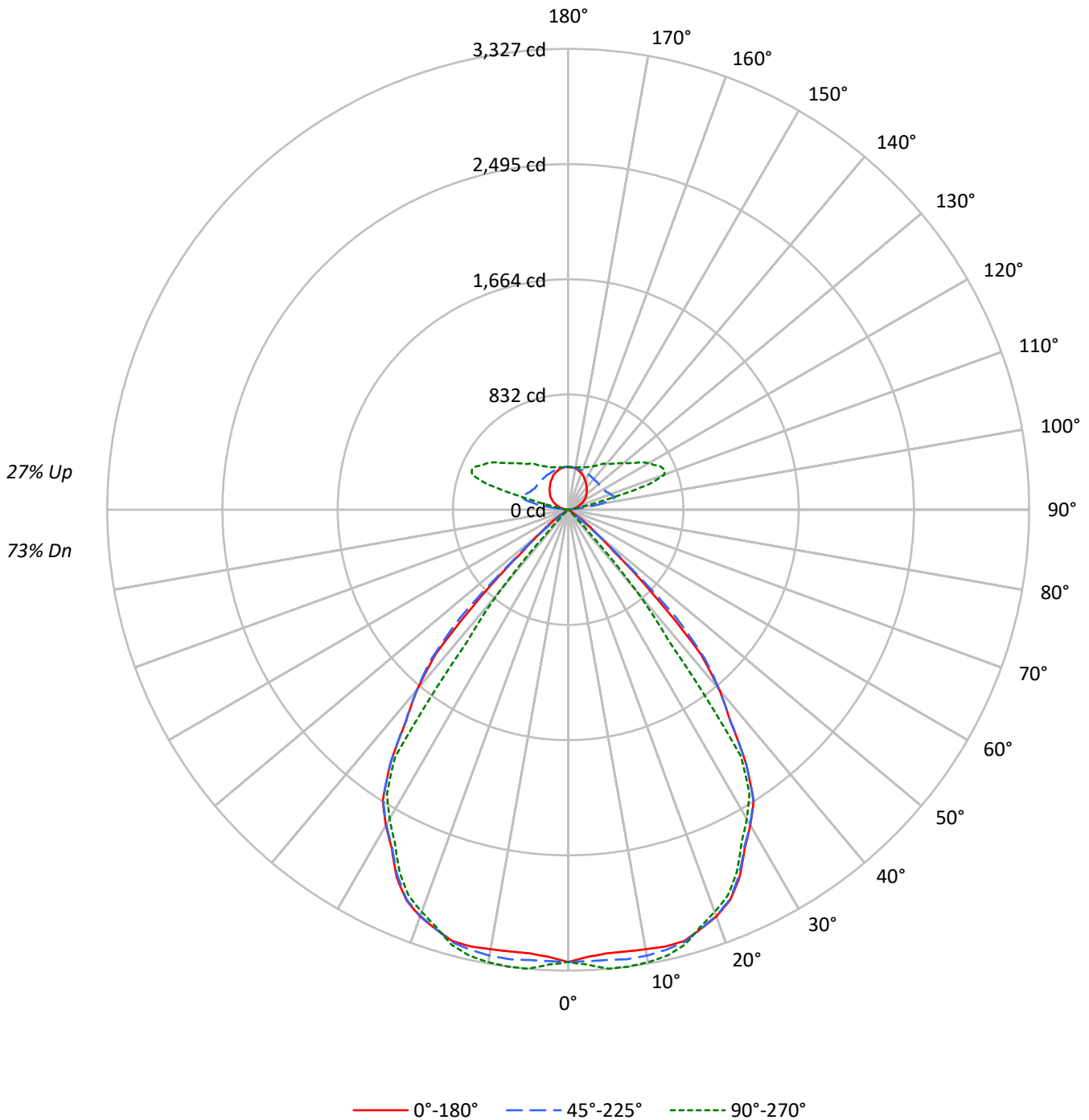
Lumens per Lamp: N/A  
Luminaire Lumens: 6157.2 lumens  
Efficiency: N/A  
Efficacy: 93.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 65.6  
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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	77	77	77	73	
1	106	103	100	97	101	98	95	93	89	87	85	81	79	78	73	72	71	71	71	71	68	
2	99	94	89	85	94	89	85	82	82	79	76	75	72	70	68	67	65	65	65	65	62	
3	93	85	80	75	88	82	77	73	75	71	68	69	66	64	64	61	60	60	60	60	57	
4	87	78	72	67	83	75	70	65	70	65	61	64	61	58	59	57	54	54	54	54	52	
5	81	72	65	60	78	69	63	59	64	59	56	60	56	53	55	52	50	50	50	50	48	
6	76	66	59	54	73	64	58	53	60	54	51	56	51	48	52	48	46	46	46	46	44	
7	72	61	54	49	68	59	53	48	55	50	46	52	47	44	48	45	42	42	42	42	40	
8	67	57	50	45	64	55	49	44	51	46	43	48	44	41	45	42	39	39	39	39	37	
9	63	52	46	41	61	51	45	41	48	43	39	45	41	38	42	39	36	36	36	36	34	
10	60	49	42	38	57	47	42	38	45	40	36	42	38	35	40	36	34	34	34	34	32	

**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	5.1
10°-20°	910.7	14.8
20°-30°	1330.4	21.6
30°-40°	1317.6	21.4
40°-50°	551.6	9.0
50°-60°	59.0	1.0
60°-70°	8.3	0.1
70°-80°	5.0	0.1
80°-90°	3.1	0.0
90°-100°	38.0	0.6
100°-110°	270.7	4.4
110°-120°	367.5	6.0
120°-130°	299.1	4.9
130°-140°	240.5	3.9
140°-150°	189.6	3.1
150°-160°	138.7	2.3
160°-170°	86.1	1.4
170°-180°	29.4	0.5
0°-30°	2553.2	41.5
0°-40°	3870.7	62.9
0°-60°	4481.3	72.8
0°-90°	4497.7	73.0
90°-120°	676.1	11.0
90°-150°	1405.3	22.8
90°-180°	1659.0	26.9
0°-180°	6157.2	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	2	4	6	6	1
95°	16	29	16	18	21	17
105°	60	92	352	449	297	63
115°	107	130	303	630	736	106
125°	154	174	286	500	591	136
135°	190	211	288	411	472	146
145°	225	244	290	358	396	142
155°	264	274	295	325	340	121
165°	293	297	303	311	317	82
175°	309	311	309	307	305	29
180°	309	309	309	309	309	



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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	2.3	2.7	3.1	3.1
90°	0.0	1.9	3.9	5.8	5.8
92.5°	4.7	6.6	8.5	12.1	13.6
95°	15.5	28.8	15.5	17.6	21.4
97.5°	27.6	55.3	114.2	33.7	29.1
100°	36.9	69.2	229.3	67.5	44.7
102.5°	46.2	80.1	310.1	178.1	97.5
105°	60.2	92.5	351.7	449.3	297.3
107.5°	74.2	98.5	335.7	653.8	612.4
110°	83.5	106.3	326.4	687.0	738.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	92.9	115.7	317.1	667.6	753.9
115°	106.9	129.7	303.1	630.0	736.4
117.5°	121.2	143.7	299.6	589.3	698.7
120°	132.1	153.0	293.4	558.3	672.3
122.5°	139.9	162.3	285.6	531.6	636.5
125°	153.5	174.4	285.6	499.5	590.7
127.5°	164.8	186.0	286.0	462.1	552.2
130°	171.0	193.8	287.6	437.2	522.7
132.5°	178.8	201.5	287.6	425.9	496.2
135°	190.4	211.3	287.6	411.3	472.1
137.5°	200.1	222.5	287.6	395.2	447.3
140°	207.9	228.8	287.6	385.8	433.3
142.5°	215.7	235.0	289.1	374.8	419.3
145°	225.4	244.4	289.5	358.4	396.4
147.5°	237.0	253.8	291.8	346.5	375.8
150°	244.8	260.0	293.4	338.6	363.3
152.5°	252.6	266.3	293.4	332.3	352.5
155°	264.2	273.7	295.3	324.8	340.0
157.5°	273.6	282.7	297.7	320.1	331.1
160°	279.8	287.4	299.2	316.9	326.4
162.5°	284.4	292.0	300.8	315.3	321.8
165°	293.4	297.2	303.1	311.0	316.7
167.5°	298.4	301.9	305.0	309.0	312.4
170°	303.1	305.0	305.0	309.0	310.9
172.5°	304.7	308.1	306.6	307.4	309.3
175°	308.9	310.8	308.9	306.9	305.0
177.5°	308.9	310.4	308.9	308.9	307.4
180°	308.9	308.9	308.9	308.9	308.9



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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	0.40	1.20	1.17	1.96	2.88	0.00	0.00	0.00	0.00	0.00
	3H	0.27	0.98	1.05	1.75	2.70	0.00	0.00	0.00	0.00	0.00
	4H	0.17	0.84	0.98	1.62	2.58	0.00	0.00	0.00	0.00	0.00
	6H	0.07	0.68	0.89	1.47	2.44	0.00	0.00	0.00	0.00	0.00
	8H	0.02	0.59	0.84	1.40	2.37	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.50	0.78	1.30	2.29	0.00	0.00	0.00	0.00	0.00
4H	2H	0.13	0.80	0.94	1.58	2.54	0.00	0.00	0.00	0.00	0.00
	3H	0.05	0.60	0.87	1.41	2.39	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.47	0.81	1.29	2.29	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.35	0.77	1.19	2.20	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.27	0.73	1.11	2.12	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.17	0.68	1.02	2.05	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.28	0.73	1.11	2.13	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.23	0.79	1.11	2.13	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.20	0.80	1.07	2.11	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.15	0.78	1.01	2.10	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.19	0.70	1.04	2.06	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.18	0.79	1.06	2.10	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.18	0.82	1.05	2.14	0.00	0.00	0.00	0.00	0.00