

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: P621971

Luminaire Tested: VLT-BB-M-100U-125D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621971  
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-935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

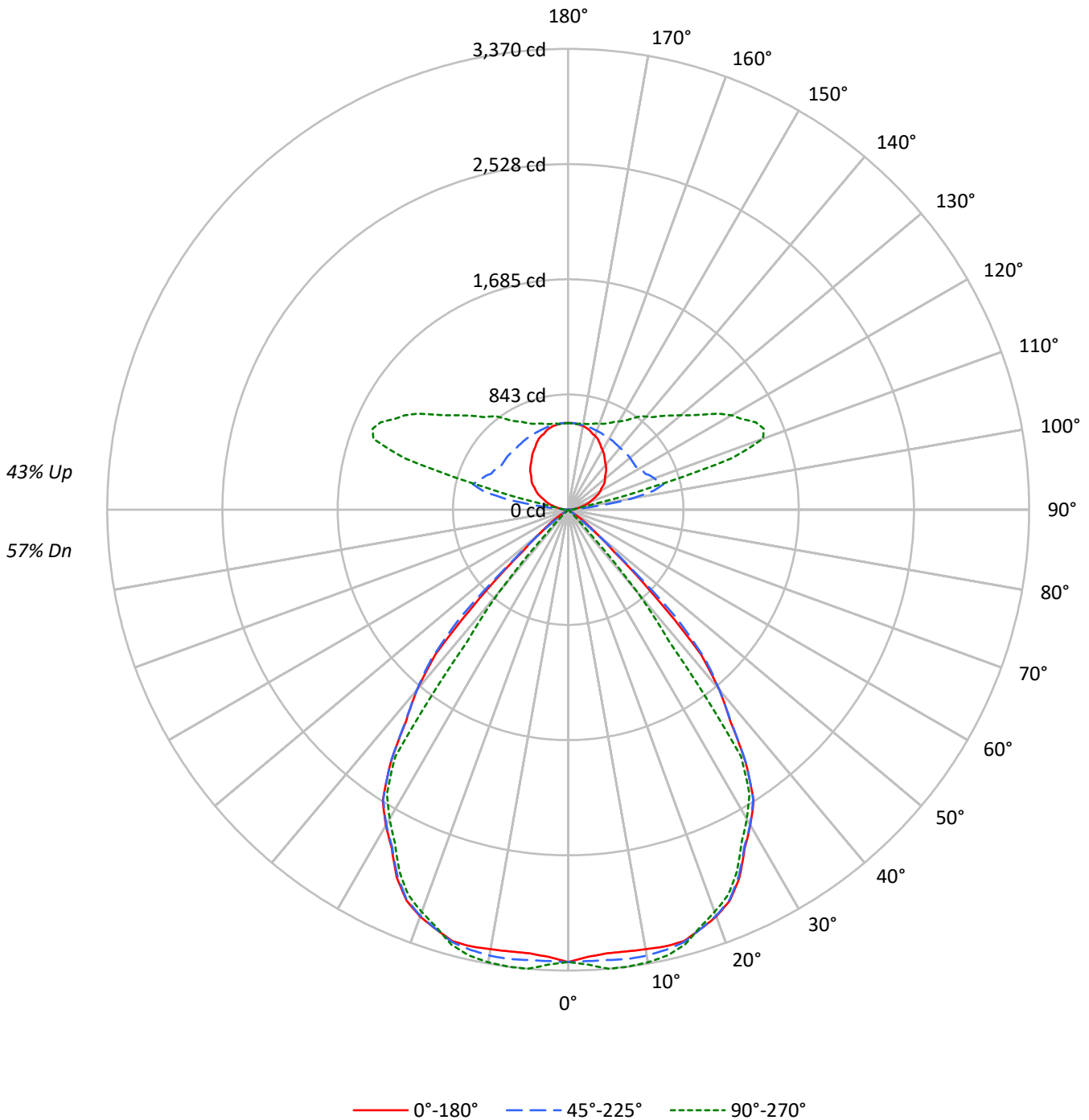
Lumens per Lamp: N/A  
Luminaire Lumens: 7963.1 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

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									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	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°	23739	23739	23739
5°	23456	23812	24274
10°	23781	24123	24483
15°	24265	24320	24466
20°	24170	24132	23906
25°	23478	23380	23107
30°	22077	22035	21627
35°	19838	19860	19299
40°	16107	16107	7371
45°	9263	11266	150
50°	2919	2699	137
55°	1018	216	124
60°	70	142	142
65°	42	126	126
70°	52	155	155
75°	0	136	136
80°	0	202	202
85°	0	206	206

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 11266 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	316.1	4.0
10°-20°	922.4	11.6
20°-30°	1347.5	16.9
30°-40°	1334.6	16.8
40°-50°	558.7	7.0
50°-60°	59.8	0.8
60°-70°	8.4	0.1
70°-80°	5.0	0.1
80°-90°	3.8	0.0
90°-100°	78.0	1.0
100°-110°	555.6	7.0
110°-120°	754.3	9.5
120°-130°	613.9	7.7
130°-140°	493.8	6.2
140°-150°	389.3	4.9
150°-160°	284.7	3.6
160°-170°	176.8	2.2
170°-180°	60.3	0.8
0°-30°	2586.1	32.5
0°-40°	3920.6	49.2
0°-60°	4539.1	57.0
0°-90°	4556.4	57.2
90°-120°	1387.9	17.4
90°-150°	2884.9	36.2
90°-180°	3407.0	42.8
0°-180°	7963.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3308	3308	3308	3308	3308	
5°	3256	3314	3306	3314	3370	311
15°	3266	3334	3274	3250	3293	918
25°	2965	3016	2953	2882	2918	1354
35°	2265	2270	2267	2222	2203	1389
45°	913	1084	1110	22	15	716
55°	81	108	17	12	10	91
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	59	32	36	44	36
105°	124	190	722	922	610	130
115°	219	266	622	1293	1512	218
125°	315	358	586	1025	1212	280
135°	391	434	590	844	969	301
145°	463	502	594	736	814	291
155°	542	562	606	667	698	249
165°	602	610	622	638	650	169
175°	634	638	634	630	626	60
180°	634	634	634	634	634	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3308.1	3308.1	3308.1	3308.1	3308.1
2.5°	3272.6	3318.9	3304.2	3300.9	3329.9
5°	3256.3	3314.2	3305.7	3314.3	3369.8
7.5°	3257.8	3311.4	3314.6	3314.3	3369.8
10°	3263.7	3319.2	3310.6	3304.5	3360.0
12.5°	3271.6	3329.0	3296.8	3286.7	3340.2
15°	3266.2	3333.7	3273.6	3249.9	3293.3
17.5°	3216.4	3294.5	3215.4	3169.7	3201.6
20°	3165.1	3247.1	3160.1	3096.8	3130.5
22.5°	3092.0	3168.3	3085.1	3012.0	3051.6
25°	2965.2	3015.9	2952.9	2882.2	2918.4
27.5°	2792.6	2821.5	2785.7	2722.0	2744.2
30°	2664.3	2683.6	2659.3	2595.5	2610.0
32.5°	2522.2	2531.8	2517.3	2459.2	2465.9
35°	2264.6	2269.5	2267.1	2222.3	2203.0
37.5°	1946.4	1956.1	1950.4	1755.4	1211.3
40°	1719.4	1729.1	1719.4	1028.2	786.9
42.5°	1435.3	1497.0	1480.6	701.1	224.5
45°	912.8	1084.0	1110.1	22.0	14.8
47.5°	451.0	635.7	522.0	14.3	14.3
50°	261.5	374.9	241.8	12.3	12.3
52.5°	174.7	228.2	70.1	12.3	12.3
55°	81.4	107.9	17.3	12.3	9.9
57.5°	28.6	54.2	11.8	9.9	9.9
60°	4.9	26.6	9.9	9.9	9.9
62.5°	3.0	15.0	9.9	7.9	9.9
65°	2.5	9.7	7.4	7.4	7.4
67.5°	2.5	7.3	7.4	7.4	7.4
70°	2.5	7.3	7.4	7.4	7.4
72.5°	0.5	5.3	5.4	5.5	7.4
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	3.0	3.0	4.9
85°	0.0	2.4	2.5	2.5	2.5
87.5°	0.0	2.7	3.6	4.4	4.4
90°	0.0	3.9	8.0	12.0	12.0
92.5°	9.6	13.5	17.5	24.8	27.9
95°	31.9	59.2	31.9	36.1	43.9
97.5°	56.6	113.6	234.5	69.2	59.8
100°	75.8	142.1	470.7	138.5	91.7
102.5°	94.9	164.3	636.6	365.6	200.2
105°	123.6	189.9	721.9	922.3	610.3
107.5°	152.4	202.3	689.2	1342.2	1257.2
110°	171.5	218.3	670.1	1410.4	1515.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	190.7	237.5	650.9	1370.5	1547.6
115°	219.4	266.2	622.2	1293.3	1511.7
117.5°	248.9	294.9	615.0	1209.7	1434.3
120°	271.2	314.1	602.3	1146.1	1380.1
122.5°	287.2	333.2	586.3	1091.4	1306.7
125°	315.1	358.0	586.3	1025.3	1212.5
127.5°	338.2	381.9	587.1	948.7	1133.6
130°	351.0	397.8	590.3	897.4	1072.9
132.5°	367.0	413.8	590.3	874.4	1018.7
135°	390.9	433.8	590.3	844.4	969.2
137.5°	410.8	456.8	590.3	811.3	918.2
140°	426.8	469.7	590.3	792.0	889.5
142.5°	442.7	482.5	593.5	769.5	860.7
145°	462.7	501.7	594.3	735.7	813.7
147.5°	486.6	520.9	599.1	711.3	771.4
150°	502.6	533.8	602.3	695.2	745.9
152.5°	518.5	546.6	602.3	682.2	723.5
155°	542.5	562.0	606.3	666.8	698.0
157.5°	561.6	580.3	611.1	657.0	679.7
160°	574.4	590.0	614.2	650.6	670.1
162.5°	583.9	599.5	617.4	647.3	660.5
165°	602.3	610.1	622.2	638.4	650.1
167.5°	612.7	619.7	626.2	634.4	641.4
170°	622.2	626.1	626.2	634.3	638.2
172.5°	625.4	632.4	629.4	631.1	635.0
175°	634.2	638.1	634.2	630.1	626.2
177.5°	634.2	637.3	634.2	634.1	631.0
180°	634.2	634.2	634.2	634.2	634.2



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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	0.69	1.87	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.49	1.69	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.36	1.57	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.21	1.44	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.14	1.36	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.05	1.29	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.32	1.53	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.16	1.39	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.04	1.29	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	1.04	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00