

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: P621937

Luminaire Tested: VLT-BB-M-075U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621937  
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-075U-050D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

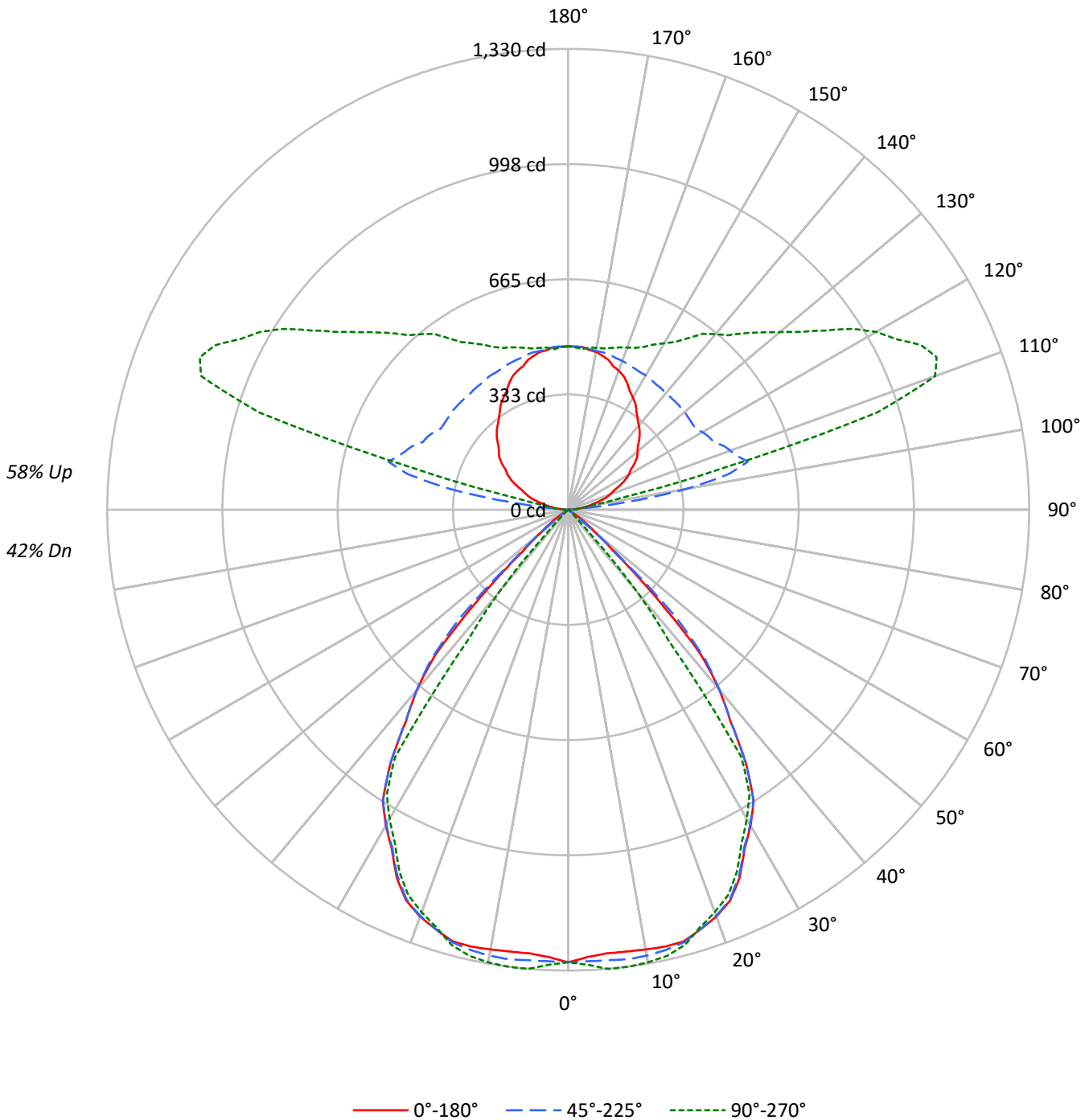
Lumens per Lamp: N/A  
Luminaire Lumens: 4331.4 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 42  
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									
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42	42	42	42	42	42	42													
1	98	94	91	88	89	86	83	81	71	70	68	58	57	56	45	45	44	38	38	38	38	38	38	38													
2	90	84	79	75	83	77	73	70	65	62	59	53	51	49	42	41	40	35	35	35	35	35	35	35													
3	84	76	70	65	77	70	65	60	59	55	52	49	46	44	39	38	36	32	32	32	32	32	32	32													
4	78	68	62	57	71	63	58	53	54	50	46	45	42	40	36	35	33	30	30	30	30	30	30	30													
5	72	62	55	50	66	58	52	47	49	45	41	41	38	36	34	32	30	27	27	27	27	27	27	27													
6	67	56	49	44	62	53	46	42	45	40	37	38	35	32	32	29	28	25	25	25	25	25	25	25													
7	62	52	45	40	57	48	42	38	41	37	33	35	32	29	29	27	25	23	23	23	23	23	23	23													
8	58	47	40	36	54	44	38	34	38	34	30	33	29	27	27	25	23	21	21	21	21	21	21	21													
9	55	44	37	32	50	41	35	31	35	31	28	30	27	25	26	23	22	20	20	20	20	20	20	20													
10	51	40	34	29	47	38	32	28	33	28	25	28	25	23	24	22	20	18	18	18	18	18	18	18													

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

	0°	45°	90°
0°	9372	9372	9372
5°	9260	9400	9583
10°	9389	9524	9665
15°	9579	9601	9659
20°	9542	9527	9438
25°	9269	9231	9122
30°	8715	8700	8538
35°	7832	7840	7619
40°	6359	6359	2910
45°	3656	4448	59
50°	1152	1065	55
55°	402	85	49
60°	27	56	56
65°	17	49	49
70°	21	61	61
75°	0	53	53
80°	0	79	79
85°	0	82	82

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4448 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.8	2.9
10°-20°	364.2	8.4
20°-30°	532.0	12.3
30°-40°	526.9	12.2
40°-50°	220.6	5.1
50°-60°	23.6	0.5
60°-70°	3.3	0.1
70°-80°	2.0	0.0
80°-90°	2.0	0.0
90°-100°	57.9	1.3
100°-110°	413.0	9.5
110°-120°	560.7	12.9
120°-130°	456.3	10.5
130°-140°	367.0	8.5
140°-150°	289.3	6.7
150°-160°	211.6	4.9
160°-170°	131.4	3.0
170°-180°	44.8	1.0
0°-30°	1020.9	23.6
0°-40°	1547.8	35.7
0°-60°	1791.9	41.4
0°-90°	1799.2	41.5
90°-120°	1031.6	23.8
90°-150°	2144.3	49.5
90°-180°	2532.0	58.5
0°-180°	4331.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1306	1306	1306	1306	1306	
5°	1286	1308	1305	1308	1330	123
15°	1289	1316	1292	1283	1300	362
25°	1171	1191	1166	1138	1152	535
35°	894	896	895	877	870	548
45°	360	428	438	9	6	283
55°	32	43	7	5	4	36
65°	1	4	3	3	3	1
75°	0	2	2	2	2	0
85°	0	1	1	1	1	0
90°	0	3	6	9	9	1
95°	24	44	24	27	33	27
105°	92	141	537	686	454	97
115°	163	198	462	961	1124	162
125°	234	266	436	762	901	208
135°	290	322	439	628	720	224
145°	344	373	442	547	605	216
155°	403	418	451	496	519	185
165°	448	454	462	474	483	126
175°	471	474	471	468	465	45
180°	471	471	471	471	471	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1306.0	1306.0	1306.0	1306.0	1306.0
2.5°	1292.0	1310.3	1304.4	1303.1	1314.6
5°	1285.5	1308.4	1305.0	1308.4	1330.3
7.5°	1286.1	1307.3	1308.5	1308.4	1330.3
10°	1288.5	1310.4	1307.0	1304.5	1326.4
12.5°	1291.6	1314.2	1301.5	1297.5	1318.7
15°	1289.4	1316.1	1292.4	1283.0	1300.1
17.5°	1269.8	1300.6	1269.4	1251.4	1263.9
20°	1249.5	1281.9	1247.6	1222.5	1235.9
22.5°	1220.7	1250.8	1218.0	1189.1	1204.7
25°	1170.6	1190.6	1165.8	1137.8	1152.1
27.5°	1102.4	1113.9	1099.7	1074.6	1083.4
30°	1051.8	1059.4	1049.9	1024.7	1030.4
32.5°	995.7	999.5	993.8	970.8	973.5
35°	894.0	895.9	895.0	877.3	869.7
37.5°	768.4	772.2	770.0	693.0	478.2
40°	678.8	682.6	678.8	405.9	310.7
42.5°	566.6	591.0	584.5	276.8	88.6
45°	360.3	428.0	438.3	8.7	5.8
47.5°	178.0	251.0	206.1	5.6	5.6
50°	103.2	148.0	95.4	4.9	4.9
52.5°	69.0	90.1	27.7	4.9	4.9
55°	32.1	42.6	6.8	4.8	3.9
57.5°	11.3	21.4	4.7	3.9	3.9
60°	1.9	10.5	3.9	3.9	3.9
62.5°	1.2	5.9	3.9	3.1	3.9
65°	1.0	3.8	2.9	2.9	2.9
67.5°	1.0	2.9	2.9	2.9	2.9
70°	1.0	2.9	2.9	2.9	2.9
72.5°	0.2	2.1	2.1	2.2	2.9
75°	0.0	1.9	1.9	1.9	1.9
77.5°	0.0	1.9	1.9	1.9	1.9
80°	0.0	1.9	1.9	1.9	1.9
82.5°	0.0	1.1	1.2	1.2	1.9
85°	0.0	1.0	1.0	1.0	1.0
87.5°	0.0	1.3	2.0	2.6	2.6
90°	0.0	2.9	5.9	8.9	8.9
92.5°	7.1	10.0	13.0	18.4	20.8
95°	23.7	44.0	23.7	26.8	32.6
97.5°	42.1	84.4	174.3	51.4	44.5
100°	56.3	105.6	349.8	103.0	68.2
102.5°	70.6	122.2	473.2	271.7	148.8
105°	91.9	141.2	536.6	685.5	453.6
107.5°	113.2	150.4	512.3	997.6	934.5
110°	127.5	162.3	498.1	1048.3	1126.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	176.5	483.8	1018.7	1150.3
115°	163.1	197.8	462.5	961.3	1123.6
117.5°	185.0	219.2	457.1	899.1	1066.1
120°	201.6	233.5	447.7	851.8	1025.8
122.5°	213.5	247.7	435.8	811.2	971.2
125°	234.2	266.1	435.8	762.1	901.2
127.5°	251.4	283.9	436.4	705.1	842.5
130°	260.9	295.7	438.8	667.0	797.5
132.5°	272.7	307.5	438.8	649.9	757.2
135°	290.5	322.4	438.8	627.6	720.4
137.5°	305.4	339.6	438.8	603.0	682.5
140°	317.2	349.1	438.8	588.6	661.1
142.5°	329.1	358.6	441.1	571.9	639.8
145°	343.9	372.9	441.7	546.8	604.8
147.5°	361.7	387.2	445.3	528.7	573.4
150°	373.5	396.7	447.7	516.7	554.4
152.5°	385.4	406.3	447.7	507.1	537.8
155°	403.2	417.7	450.6	495.6	518.8
157.5°	417.4	431.3	454.2	488.4	505.2
160°	426.9	438.5	456.6	483.6	498.1
162.5°	434.0	445.6	458.9	481.1	490.9
165°	447.7	453.5	462.5	474.5	483.2
167.5°	455.4	460.6	465.4	471.5	476.7
170°	462.5	465.4	465.4	471.4	474.3
172.5°	464.9	470.1	467.8	469.1	472.0
175°	471.4	474.3	471.4	468.3	465.4
177.5°	471.4	473.7	471.4	471.3	469.0
180°	471.4	471.4	471.4	471.4	471.4



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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	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	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
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	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