

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: P621985

Luminaire Tested: VLT-BB-M-150U-050D-930-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621985  
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-150U-050D-930-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

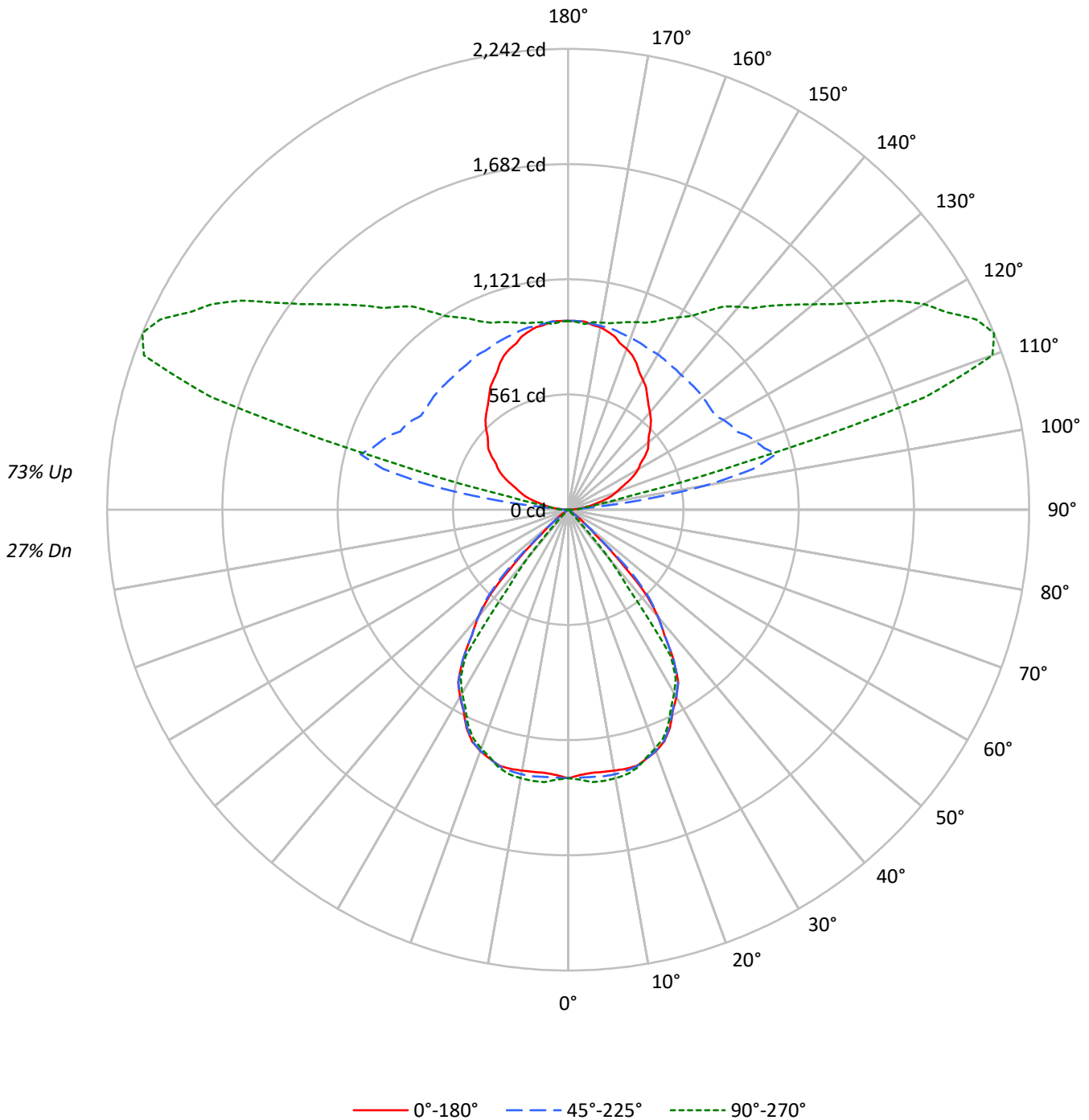
Lumens per Lamp: N/A  
Luminaire Lumens: 6735.6 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 74.6  
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	0
RCR																		
0	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27
1	94	90	87	84	84	81	78	75	63	61	60	47	46	45	32	32	31	25
2	86	80	75	70	77	72	67	64	57	54	51	43	41	40	30	29	28	23
3	79	71	65	60	71	64	59	55	51	48	45	39	37	35	28	27	26	21
4	73	64	57	52	66	58	52	47	46	42	39	36	33	31	26	24	23	19
5	68	57	50	45	61	52	46	42	42	38	35	33	30	28	24	22	21	17
6	63	52	45	40	56	47	41	37	38	34	31	30	27	25	22	20	19	16
7	58	47	40	35	52	43	37	33	35	31	27	27	25	22	20	19	18	15
8	54	43	36	31	49	39	33	29	32	28	25	25	22	20	19	17	16	14
9	50	39	33	28	45	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	24	27	23	20	22	19	17	17	15	14	12

**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	1.9
10°-20°	364.2	5.4
20°-30°	532.0	7.9
30°-40°	526.9	7.8
40°-50°	220.6	3.3
50°-60°	23.6	0.4
60°-70°	3.3	0.0
70°-80°	2.0	0.0
80°-90°	3.0	0.0
90°-100°	113.0	1.7
100°-110°	805.0	12.0
110°-120°	1092.8	16.2
120°-130°	889.4	13.2
130°-140°	715.4	10.6
140°-150°	564.0	8.4
150°-160°	412.4	6.1
160°-170°	256.1	3.8
170°-180°	87.3	1.3
0°-30°	1020.9	15.2
0°-40°	1547.8	23.0
0°-60°	1791.9	26.6
0°-90°	1800.3	26.7
90°-120°	2010.7	29.9
90°-150°	4179.5	62.1
90°-180°	4935.0	73.3
0°-180°	6735.6	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	6	12	17	17	2
95°	46	86	46	52	64	52
105°	179	275	1046	1336	884	189
115°	318	386	901	1874	2190	315
125°	456	519	849	1486	1757	406
135°	566	628	855	1223	1404	436
145°	670	727	861	1066	1179	421
155°	786	814	878	966	1011	361
165°	872	884	901	925	942	245
175°	919	924	919	913	907	87
180°	919	919	919	919	919	



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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	1.9	3.1	4.2	4.2
90°	0.0	5.7	11.6	17.3	17.3
92.5°	13.9	19.5	25.4	35.9	40.4
95°	46.2	85.8	46.2	52.3	63.6
97.5°	82.1	164.5	339.8	100.2	86.7
100°	109.8	205.8	681.9	200.7	132.9
102.5°	137.5	238.1	922.2	529.6	290.1
105°	179.1	275.2	1045.9	1336.1	884.1
107.5°	220.7	293.1	998.5	1944.5	1821.4
110°	248.5	316.3	970.8	2043.3	2195.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	276.2	344.0	943.0	1985.5	2242.0
115°	317.8	385.6	901.4	1873.6	2190.0
117.5°	360.6	427.2	891.0	1752.5	2077.9
120°	392.9	455.1	872.5	1660.3	1999.3
122.5°	416.0	482.7	849.4	1581.1	1893.0
125°	456.5	518.6	849.4	1485.5	1756.7
127.5°	490.0	553.3	850.6	1374.4	1642.2
130°	508.5	576.3	855.2	1300.2	1554.4
132.5°	531.6	599.4	855.2	1266.8	1475.8
135°	566.3	628.4	855.2	1223.4	1404.2
137.5°	595.2	661.9	855.2	1175.4	1330.2
140°	618.3	680.4	855.2	1147.3	1288.6
142.5°	641.4	699.0	859.8	1114.8	1247.0
145°	670.3	726.8	861.0	1065.8	1178.8
147.5°	705.0	754.7	867.9	1030.5	1117.6
150°	728.1	773.3	872.5	1007.1	1080.6
152.5°	751.2	791.9	872.5	988.3	1048.2
155°	785.9	814.1	878.3	966.0	1011.2
157.5°	813.6	840.7	885.3	951.9	984.7
160°	832.1	854.7	889.9	942.5	970.8
162.5°	846.0	868.6	894.5	937.7	956.9
165°	872.5	883.8	901.4	924.9	941.9
167.5°	887.6	897.7	907.2	919.0	929.2
170°	901.4	907.1	907.2	918.9	924.6
172.5°	906.1	916.2	911.8	914.3	919.9
175°	918.8	924.4	918.8	912.9	907.2
177.5°	918.8	923.3	918.8	918.7	914.2
180°	918.8	918.8	918.8	918.8	918.8



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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