

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: P621938

Luminaire Tested: VLT-BB-M-075U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621938  
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-935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

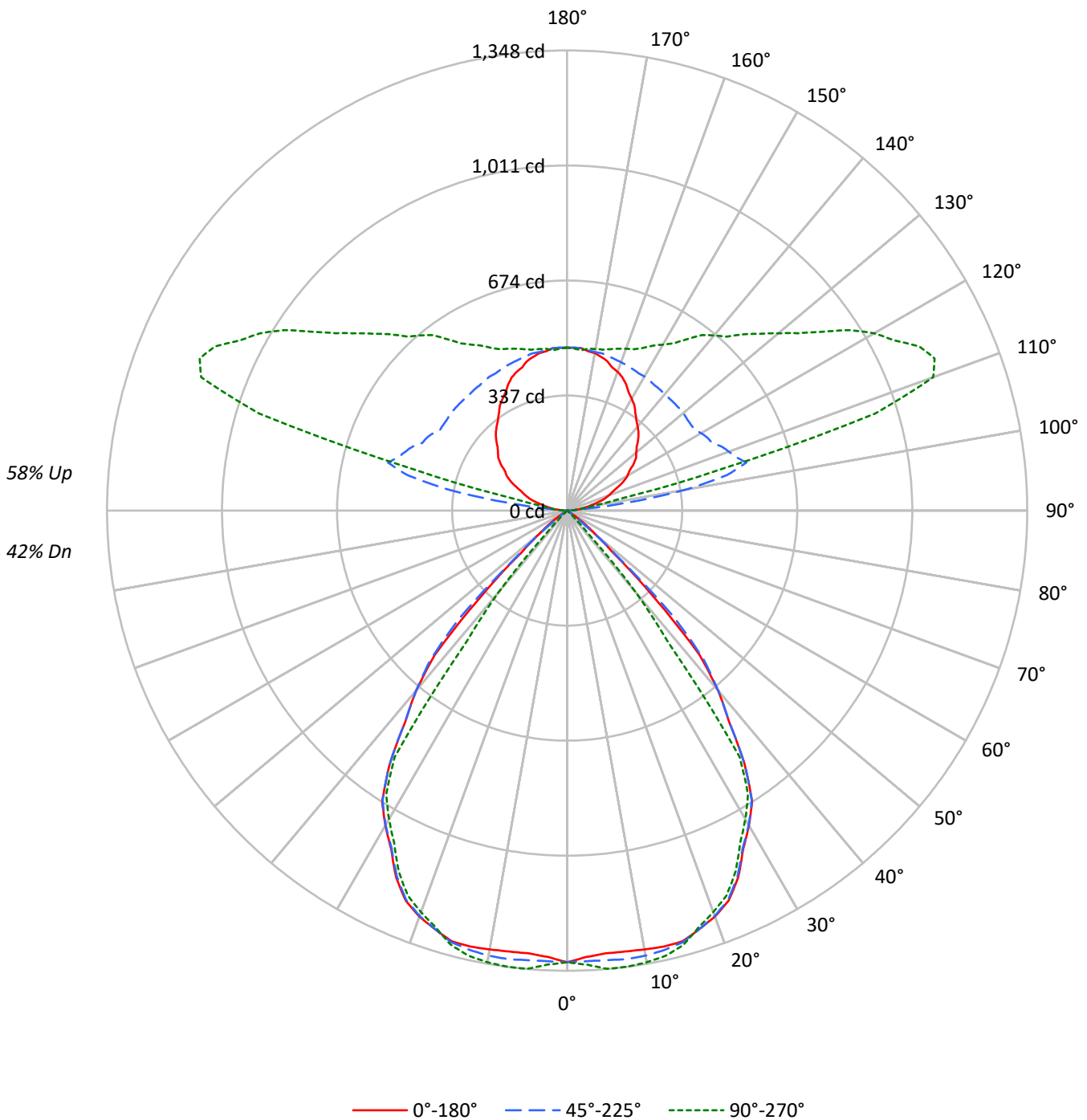
Lumens per Lamp: N/A  
Luminaire Lumens: 4387.2 lumens  
Efficiency: N/A  
Efficacy: 104.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 42  
Input Voltage (V): 120  
Input Current (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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42																				
1	98	94	91	88	89	86	83	81	71	70	68	58	57	56	45	45	44	38																				
2	90	84	79	75	83	77	73	70	65	62	59	53	51	49	42	41	40	35																				
3	84	76	70	65	77	70	65	60	59	55	52	49	46	44	39	38	36	32																				
4	78	68	62	57	71	63	58	53	54	50	46	45	42	40	36	35	33	30																				
5	72	62	55	50	66	58	52	47	49	45	41	41	38	36	34	32	30	27																				
6	67	56	49	44	62	53	46	42	45	40	37	38	35	32	32	29	28	25																				
7	62	52	45	40	57	48	42	38	41	37	33	35	32	29	29	27	25	23																				
8	58	47	40	36	54	44	38	34	38	34	30	33	29	27	27	25	23	21																				
9	55	44	37	32	50	41	35	31	35	31	28	30	27	25	26	23	22	20																				
10	51	40	34	29	47	38	32	28	33	28	25	28	25	23	24	22	20	18																				

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

	0°	45°	90°
0°	9492	9492	9492
5°	9379	9521	9707
10°	9510	9646	9790
15°	9703	9725	9783
20°	9665	9649	9559
25°	9388	9349	9240
30°	8828	8811	8648
35°	7933	7941	7717
40°	6441	6441	2948
45°	3704	4505	60
50°	1168	1080	55
55°	408	86	49
60°	29	56	56
65°	17	51	51
70°	21	63	63
75°	0	55	55
80°	0	83	83
85°	0	82	82

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 4505 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.4	2.9
10°-20°	368.9	8.4
20°-30°	538.8	12.3
30°-40°	533.6	12.2
40°-50°	223.4	5.1
50°-60°	23.9	0.5
60°-70°	3.4	0.1
70°-80°	2.0	0.0
80°-90°	2.1	0.0
90°-100°	58.7	1.3
100°-110°	418.3	9.5
110°-120°	567.9	12.9
120°-130°	462.2	10.5
130°-140°	371.7	8.5
140°-150°	293.1	6.7
150°-160°	214.3	4.9
160°-170°	133.1	3.0
170°-180°	45.4	1.0
0°-30°	1034.1	23.6
0°-40°	1567.7	35.7
0°-60°	1815.0	41.4
0°-90°	1822.5	41.5
90°-120°	1044.9	23.8
90°-150°	2171.9	49.5
90°-180°	2565.0	58.5
0°-180°	4387.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1302	1325	1322	1325	1348	125
15°	1306	1333	1309	1300	1317	367
25°	1186	1206	1181	1152	1167	541
35°	906	908	906	889	881	555
45°	365	434	444	9	6	286
55°	33	43	7	5	4	37
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	45	24	27	33	27
105°	93	143	544	694	459	98
115°	165	200	468	974	1138	164
125°	237	270	441	772	913	211
135°	294	327	444	636	730	226
145°	348	378	447	554	613	219
155°	408	423	456	502	526	187
165°	453	459	468	481	490	127
175°	478	480	478	474	471	45
180°	478	478	478	478	478	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1322.8	1322.8	1322.8	1322.8	1322.8
2.5°	1308.6	1327.1	1321.2	1319.9	1331.5
5°	1302.1	1325.3	1321.8	1325.3	1347.5
7.5°	1302.7	1324.1	1325.4	1325.3	1347.5
10°	1305.1	1327.3	1323.8	1321.4	1343.5
12.5°	1308.2	1331.2	1318.3	1314.2	1335.6
15°	1306.1	1333.1	1309.0	1299.5	1316.9
17.5°	1286.1	1317.4	1285.7	1267.5	1280.2
20°	1265.6	1298.4	1263.6	1238.3	1251.8
22.5°	1236.4	1266.9	1233.6	1204.4	1220.2
25°	1185.7	1206.0	1180.8	1152.5	1167.0
27.5°	1116.7	1128.2	1113.9	1088.4	1097.3
30°	1065.4	1073.1	1063.4	1037.9	1043.7
32.5°	1008.5	1012.4	1006.6	983.4	986.1
35°	905.6	907.5	906.5	888.6	880.9
37.5°	778.3	782.2	779.9	701.9	484.3
40°	687.6	691.4	687.6	411.1	314.7
42.5°	573.9	598.6	592.1	280.4	89.8
45°	365.0	433.5	443.9	8.8	5.9
47.5°	180.3	254.2	208.7	5.7	5.7
50°	104.6	149.9	96.7	4.9	4.9
52.5°	69.8	91.3	28.0	4.9	4.9
55°	32.6	43.2	6.9	4.9	3.9
57.5°	11.4	21.7	4.7	3.9	3.9
60°	2.0	10.7	3.9	3.9	3.9
62.5°	1.2	6.0	3.9	3.2	3.9
65°	1.0	3.9	3.0	3.0	3.0
67.5°	1.0	2.9	3.0	3.0	3.0
70°	1.0	2.9	3.0	3.0	3.0
72.5°	0.2	2.1	2.2	2.2	3.0
75°	0.0	1.9	2.0	2.0	2.0
77.5°	0.0	1.9	2.0	2.0	2.0
80°	0.0	1.9	2.0	2.0	2.0
82.5°	0.0	1.2	1.2	1.2	2.0
85°	0.0	1.0	1.0	1.0	1.0
87.5°	0.0	1.4	2.0	2.6	2.6
90°	0.0	2.9	6.0	9.0	9.0
92.5°	7.2	10.1	13.2	18.7	21.0
95°	24.0	44.6	24.0	27.2	33.0
97.5°	42.6	85.5	176.6	52.1	45.0
100°	57.1	107.0	354.3	104.3	69.1
102.5°	71.5	123.7	479.3	275.2	150.7
105°	93.1	143.0	543.5	694.3	459.4
107.5°	114.7	152.3	518.9	1010.5	946.5
110°	129.1	164.4	504.5	1061.8	1141.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	143.5	178.8	490.1	1031.8	1165.1
115°	165.2	200.4	468.4	973.7	1138.1
117.5°	187.4	222.0	463.0	910.7	1079.8
120°	204.2	236.5	453.4	862.8	1039.0
122.5°	216.2	250.9	441.4	821.7	983.7
125°	237.2	269.5	441.4	771.9	912.9
127.5°	254.6	287.5	442.0	714.2	853.4
130°	264.3	299.5	444.4	675.6	807.8
132.5°	276.3	311.5	444.4	658.3	766.9
135°	294.3	326.6	444.4	635.7	729.7
137.5°	309.3	343.9	444.4	610.8	691.3
140°	321.3	353.6	444.4	596.2	669.6
142.5°	333.3	363.3	446.8	579.3	648.0
145°	348.3	377.7	447.4	553.9	612.6
147.5°	366.3	392.2	451.0	535.5	580.8
150°	378.4	401.8	453.4	523.4	561.5
152.5°	390.4	411.5	453.4	513.6	544.7
155°	408.4	423.1	456.4	502.0	525.5
157.5°	422.8	436.9	460.0	494.7	511.7
160°	432.4	444.2	462.4	489.8	504.5
162.5°	439.6	451.4	464.8	487.3	497.3
165°	453.4	459.3	468.4	480.7	489.5
167.5°	461.2	466.5	471.4	477.6	482.9
170°	468.4	471.4	471.4	477.5	480.5
172.5°	470.8	476.1	473.8	475.1	478.1
175°	477.5	480.4	477.5	474.4	471.4
177.5°	477.5	479.8	477.5	477.4	475.1
180°	477.5	477.5	477.5	477.5	477.5



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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