

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: P621915

Luminaire Tested: VLT-BB-M-025U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621915  
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-025U-050D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

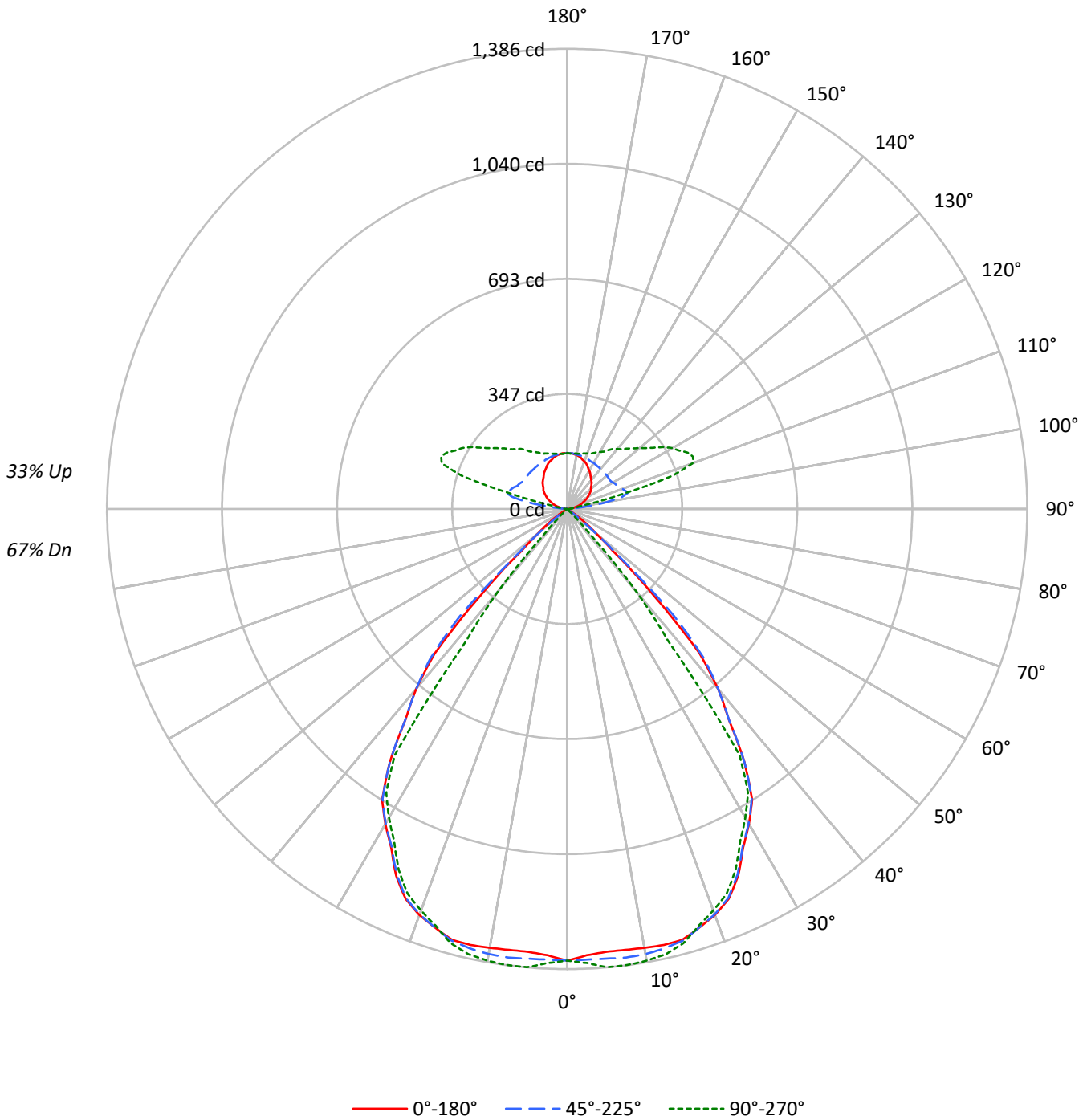
Lumens per Lamp: N/A  
Luminaire Lumens: 2777.1 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 27.4  
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



TEST NUMBER: P621915  
CATALOG NUMBER: VLT-BB-M-025U-050D-940-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P621915

CATALOG NUMBER: VLT-BB-M-025U-050D-940-UNV-STD-W-4

**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	111	111	111	111	105	105	105	105	93	93	93		82	82	82		72	72	72	67
1	104	101	98	95	99	96	93	91	86	84	82		77	75	74		68	67	66	62
2	98	92	87	83	92	87	83	80	79	76	73		71	69	67		64	62	61	57
3	91	84	78	73	86	80	75	71	72	69	65		66	63	60		59	57	55	52
4	85	76	70	65	81	73	67	63	67	62	59		61	57	55		55	53	51	48
5	80	70	63	58	76	67	61	57	62	57	53		56	53	50		52	49	46	44
6	75	64	58	53	71	62	56	51	57	52	48		52	48	45		48	45	43	40
7	70	59	53	48	66	57	51	47	53	48	44		49	45	42		45	42	39	37
8	66	55	48	44	62	53	47	42	49	44	40		45	41	38		42	39	36	34
9	62	51	44	40	59	49	43	39	46	41	37		42	38	35		39	36	34	32
10	58	47	41	37	55	46	40	36	43	38	34		40	36	33		37	34	31	29

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

	0°	45°	90°
0°	9761	9761	9761
5°	9645	9791	9980
10°	9778	9919	10066
15°	9977	10000	10060
20°	9938	9922	9830
25°	9653	9613	9501
30°	9077	9060	8892
35°	8157	8165	7935
40°	6623	6623	3031
45°	3809	4632	62
50°	1200	1110	57
55°	419	89	51
60°	29	59	59
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: 4632 cd/sqm



TEST NUMBER: P621915

CATALOG NUMBER: VLT-BB-M-025U-050D-940-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.0	4.7
10°-20°	379.3	13.7
20°-30°	554.0	20.0
30°-40°	548.7	19.8
40°-50°	229.7	8.3
50°-60°	24.6	0.9
60°-70°	3.4	0.1
70°-80°	2.1	0.1
80°-90°	1.4	0.0
90°-100°	20.7	0.7
100°-110°	147.4	5.3
110°-120°	200.2	7.2
120°-130°	162.9	5.9
130°-140°	131.0	4.7
140°-150°	103.3	3.7
150°-160°	75.5	2.7
160°-170°	46.9	1.7
170°-180°	16.0	0.6
0°-30°	1063.3	38.3
0°-40°	1612.0	58.0
0°-60°	1866.3	67.2
0°-90°	1873.2	67.4
90°-120°	368.3	13.3
90°-150°	765.5	27.6
90°-180°	904.0	32.6
0°-180°	2777.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1339	1363	1359	1363	1386	128
15°	1343	1371	1346	1336	1354	377
25°	1219	1240	1214	1185	1200	557
35°	931	933	932	914	906	571
45°	375	446	456	9	6	294
55°	34	44	7	5	4	38
65°	1	4	3	3	3	1
75°	0	2	2	2	2	0
85°	0	1	1	1	1	0
90°	0	1	2	3	3	0
95°	8	16	8	10	12	9
105°	33	50	192	245	162	35
115°	58	71	165	343	401	58
125°	84	95	156	272	322	74
135°	104	115	157	224	257	80
145°	123	133	158	195	216	77
155°	144	149	161	177	185	66
165°	160	162	165	169	172	45
175°	168	169	168	167	166	16
180°	168	168	168	168	168	



TEST NUMBER: P621915

CATALOG NUMBER: VLT-BB-M-025U-050D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1360.2	1360.2	1360.2	1360.2	1360.2
2.5°	1345.6	1364.6	1358.6	1357.2	1369.1
5°	1338.9	1362.7	1359.2	1362.7	1385.5
7.5°	1339.5	1361.5	1362.8	1362.7	1385.5
10°	1341.9	1364.7	1361.2	1358.7	1381.5
12.5°	1345.2	1368.8	1355.5	1351.3	1373.4
15°	1342.9	1370.7	1346.0	1336.2	1354.1
17.5°	1322.4	1354.6	1322.0	1303.3	1316.4
20°	1301.4	1335.1	1299.3	1273.3	1287.2
22.5°	1271.3	1302.7	1268.5	1238.4	1254.7
25°	1219.2	1240.0	1214.1	1185.0	1199.9
27.5°	1148.2	1160.1	1145.4	1119.2	1128.3
30°	1095.4	1103.4	1093.4	1067.2	1073.1
32.5°	1037.0	1041.0	1035.0	1011.1	1013.9
35°	931.1	933.1	932.1	913.7	905.8
37.5°	800.3	804.3	801.9	721.8	498.0
40°	707.0	710.9	707.0	422.7	323.6
42.5°	590.1	615.5	608.8	288.3	92.3
45°	375.3	445.7	456.4	9.1	6.1
47.5°	185.4	261.4	214.6	5.9	5.9
50°	107.5	154.1	99.4	5.1	5.1
52.5°	71.8	93.8	28.8	5.1	5.1
55°	33.5	44.4	7.1	5.0	4.1
57.5°	11.8	22.3	4.9	4.1	4.1
60°	2.0	11.0	4.1	4.1	4.1
62.5°	1.2	6.2	4.1	3.3	4.1
65°	1.0	4.0	3.0	3.0	3.0
67.5°	1.0	3.0	3.0	3.0	3.0
70°	1.0	3.0	3.0	3.0	3.0
72.5°	0.2	2.2	2.2	2.2	3.0
75°	0.0	2.0	2.0	2.0	2.0
77.5°	0.0	2.0	2.0	2.0	2.0
80°	0.0	2.0	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	1.0	1.2	1.4	1.4
90°	0.0	1.0	2.1	3.2	3.2
92.5°	2.5	3.6	4.7	6.6	7.4
95°	8.5	15.7	8.5	9.6	11.6
97.5°	15.0	30.1	62.2	18.4	15.9
100°	20.1	37.7	124.9	36.8	24.3
102.5°	25.2	43.6	168.9	97.0	53.1
105°	32.8	50.4	191.6	244.7	161.9
107.5°	40.4	53.7	182.9	356.2	333.6
110°	45.5	57.9	177.8	374.3	402.2

TEST NUMBER: P621915

CATALOG NUMBER: VLT-BB-M-025U-050D-940-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	50.6	63.0	172.7	363.7	410.7
115°	58.2	70.6	165.1	343.2	401.1
117.5°	66.0	78.3	163.2	321.0	380.6
120°	72.0	83.4	159.8	304.1	366.2
122.5°	76.2	88.4	155.6	289.6	346.7
125°	83.6	95.0	155.6	272.1	321.8
127.5°	89.8	101.3	155.8	251.7	300.8
130°	93.1	105.6	156.6	238.1	284.7
132.5°	97.4	109.8	156.6	232.0	270.3
135°	103.7	115.1	156.6	224.1	257.2
137.5°	109.0	121.2	156.6	215.3	243.6
140°	113.2	124.6	156.6	210.2	236.0
142.5°	117.5	128.0	157.5	204.2	228.4
145°	122.8	133.1	157.7	195.2	215.9
147.5°	129.1	138.2	159.0	188.8	204.7
150°	133.4	141.6	159.8	184.5	197.9
152.5°	137.6	145.0	159.8	181.0	192.0
155°	143.9	149.1	160.9	176.9	185.2
157.5°	149.0	154.0	162.1	174.3	180.4
160°	152.4	156.5	163.0	172.6	177.8
162.5°	155.0	159.1	163.8	171.8	175.3
165°	159.8	161.9	165.1	169.4	172.5
167.5°	162.6	164.4	166.2	168.3	170.2
170°	165.1	166.1	166.2	168.3	169.3
172.5°	166.0	167.8	167.0	167.5	168.5
175°	168.3	169.3	168.3	167.2	166.2
177.5°	168.3	169.1	168.3	168.3	167.4
180°	168.3	168.3	168.3	168.3	168.3



TEST NUMBER: P621915

CATALOG NUMBER: VLT-BB-M-025U-050D-940-UNV-STD-W-4

**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