

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: P621921

Luminaire Tested: VLT-BB-M-025U-100D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621921
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-100D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

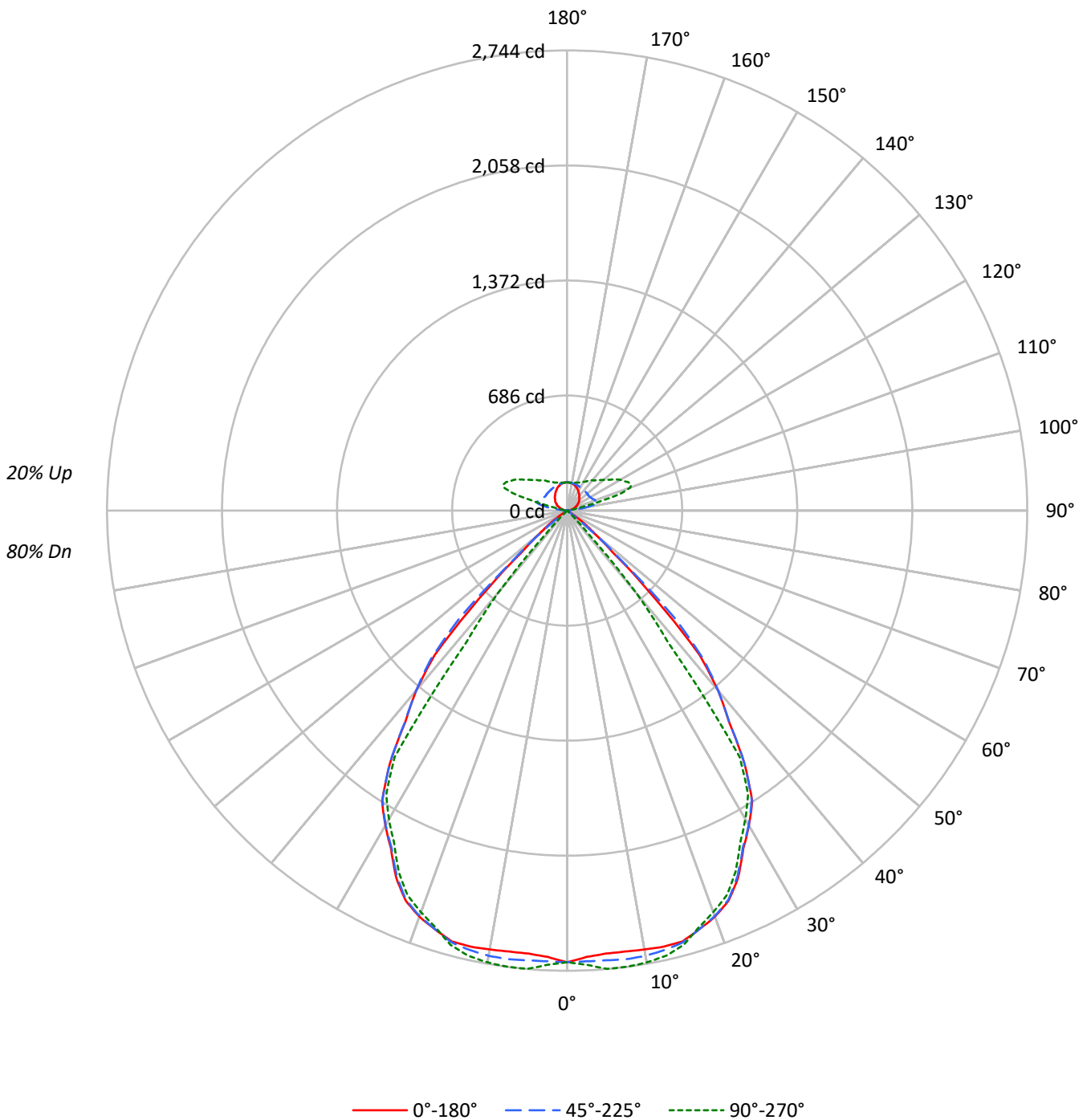
Lumens per Lamp: N/A
Luminaire Lumens: 4612.8 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 47.5
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				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	114	114	114	114	109	109	109	109	100	100	100		92	92	92		84	84	84	80
1	108	105	102	99	103	101	98	96	93	91	89		86	84	83		79	78	77	74
2	101	96	91	87	97	92	88	85	86	83	80		80	77	75		74	73	71	68
3	95	88	82	77	91	85	80	76	79	75	72		74	71	68		70	67	65	62
4	89	80	74	69	86	78	72	68	73	69	65		69	65	62		65	62	59	57
5	84	74	67	63	80	72	66	61	68	63	59		64	60	57		61	57	55	52
6	78	68	62	57	76	66	60	56	63	58	54		60	55	52		57	53	50	48
7	74	63	56	52	71	62	55	51	58	53	49		56	51	48		53	49	46	44
8	69	59	52	47	67	57	51	47	54	49	45		52	47	44		49	46	43	41
9	65	55	48	44	63	53	47	43	51	46	42		49	44	41		46	42	40	38
10	62	51	44	40	60	50	44	40	48	42	39		45	41	38		44	40	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19328	19328	19328
5°	19098	19387	19763
10°	19363	19640	19933
15°	19756	19801	19920
20°	19678	19648	19464
25°	19115	19036	18813
30°	17974	17941	17608
35°	16152	16170	15712
40°	13114	13114	6002
45°	7541	9172	123
50°	2377	2197	112
55°	829	176	100
60°	57	115	115
65°	34	102	102
70°	42	126	126
75°	0	111	111
80°	0	165	165
85°	0	165	165

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°

Vertical Angle: 45°

Luminance: 9172 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.4	5.6
10°-20°	751.0	16.3
20°-30°	1097.1	23.8
30°-40°	1086.6	23.6
40°-50°	454.9	9.9
50°-60°	48.7	1.1
60°-70°	6.8	0.1
70°-80°	4.1	0.1
80°-90°	2.3	0.1
90°-100°	20.7	0.4
100°-110°	147.4	3.2
110°-120°	200.2	4.3
120°-130°	162.9	3.5
130°-140°	131.0	2.8
140°-150°	103.3	2.2
150°-160°	75.5	1.6
160°-170°	46.9	1.0
170°-180°	16.0	0.3
0°-30°	2105.5	45.6
0°-40°	3192.1	69.2
0°-60°	3695.6	80.1
0°-90°	3708.8	80.4
90°-120°	368.3	8.0
90°-150°	765.5	16.6
90°-180°	904.0	19.6
0°-180°	4612.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2693	2693	2693	2693	2693	
5°	2651	2698	2691	2698	2744	254
15°	2659	2714	2665	2646	2681	747
25°	2414	2456	2404	2347	2376	1102
35°	1844	1848	1846	1809	1794	1131
45°	743	883	904	18	12	583
55°	66	88	14	10	8	74
65°	2	8	6	6	6	2
75°	0	4	4	4	4	0
85°	0	2	2	2	2	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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2693.4	2693.4	2693.4	2693.4	2693.4
2.5°	2664.5	2702.2	2690.2	2687.5	2711.1
5°	2651.2	2698.4	2691.4	2698.5	2743.6
7.5°	2652.4	2696.0	2698.6	2698.5	2743.6
10°	2657.3	2702.4	2695.4	2690.4	2735.6
12.5°	2663.7	2710.4	2684.2	2675.9	2719.5
15°	2659.3	2714.3	2665.3	2646.0	2681.4
17.5°	2618.7	2682.3	2617.9	2580.7	2606.6
20°	2576.9	2643.7	2572.9	2521.3	2548.8
22.5°	2517.5	2579.5	2511.8	2452.3	2484.5
25°	2414.2	2455.5	2404.2	2346.6	2376.1
27.5°	2273.6	2297.2	2268.0	2216.2	2234.3
30°	2169.2	2184.9	2165.2	2113.2	2125.0
32.5°	2053.5	2061.4	2049.5	2002.2	2007.7
35°	1843.8	1847.7	1845.8	1809.3	1793.6
37.5°	1584.7	1592.6	1587.9	1429.2	986.2
40°	1399.9	1407.8	1399.9	837.1	640.7
42.5°	1168.6	1218.8	1205.5	570.8	182.8
45°	743.1	882.6	903.8	17.9	12.1
47.5°	367.2	517.6	425.0	11.6	11.6
50°	212.9	305.2	196.8	10.0	10.0
52.5°	142.2	185.8	57.0	10.0	10.0
55°	66.3	87.9	14.1	10.0	8.0
57.5°	23.3	44.1	9.6	8.0	8.0
60°	4.0	21.7	8.0	8.0	8.0
62.5°	2.4	12.2	8.0	6.5	8.0
65°	2.0	7.9	6.0	6.0	6.0
67.5°	2.0	5.9	6.0	6.0	6.0
70°	2.0	5.9	6.0	6.0	6.0
72.5°	0.4	4.3	4.4	4.5	6.0
75°	0.0	3.9	4.0	4.0	4.0
77.5°	0.0	3.9	4.0	4.0	4.0
80°	0.0	3.9	4.0	4.0	4.0
82.5°	0.0	2.4	2.4	2.4	4.0
85°	0.0	2.0	2.0	2.0	2.0
87.5°	0.0	1.8	2.0	2.2	2.2
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



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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



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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	0.34	1.20	1.02	1.86	2.63	0.00	0.00	0.00	0.00	0.00
	3H	0.21	0.96	0.91	1.64	2.45	0.00	0.00	0.00	0.00	0.00
	4H	0.12	0.82	0.83	1.51	2.34	0.00	0.00	0.00	0.00	0.00
	6H	0.02	0.66	0.74	1.36	2.20	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.57	0.70	1.29	2.13	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.48	0.64	1.19	2.05	0.00	0.00	0.00	0.00	0.00
4H	2H	0.08	0.78	0.80	1.47	2.30	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.57	0.73	1.30	2.14	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.44	0.67	1.17	2.05	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.31	0.63	1.07	1.95	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.24	0.59	0.99	1.88	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.13	0.55	0.91	1.80	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.24	0.59	0.99	1.88	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.18	0.64	0.98	1.87	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.15	0.66	0.95	1.86	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.10	0.64	0.88	1.85	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.15	0.56	0.92	1.82	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.13	0.65	0.93	1.84	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.14	0.68	0.92	1.89	0.00	0.00	0.00	0.00	0.00