

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: P621931

Luminaire Tested: VLT-BB-M-050U-100D-930-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621931
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-050U-100D-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

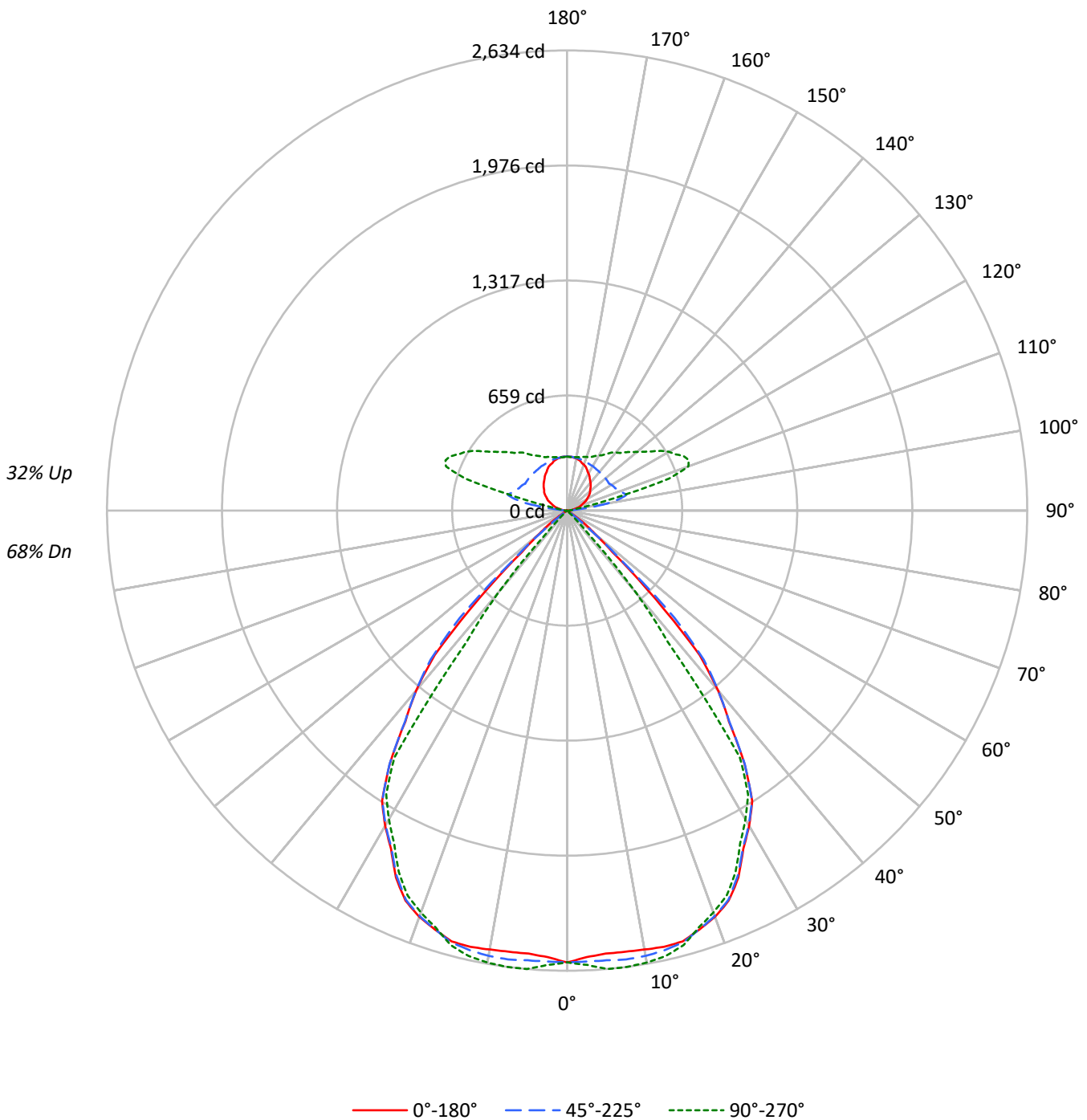
Lumens per Lamp: N/A
Luminaire Lumens: 5221.0 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 54.5
Input Voltage (V): 120
Input Current (A_{in}): 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	111	111	111	111	105	105	105	105	93	93	93		83	83	83		73	73	73	68
1	105	101	98	96	99	96	93	91	86	84	83		77	76	75		69	68	67	63
2	98	92	87	83	93	88	83	80	79	76	73		71	69	67		64	63	61	58
3	91	84	78	73	87	80	75	71	73	69	66		66	63	61		60	58	56	53
4	85	77	70	65	81	73	68	63	67	63	59		61	58	55		56	53	51	48
5	80	70	64	59	76	67	61	57	62	57	53		57	53	50		52	49	47	44
6	75	65	58	53	71	62	56	51	57	52	49		53	49	46		49	46	43	41
7	70	60	53	48	67	57	51	47	53	48	44		49	45	42		45	42	40	38
8	66	55	48	44	63	53	47	43	49	44	41		46	42	39		43	39	37	35
9	62	51	45	40	59	49	43	39	46	41	37		43	39	36		40	36	34	32
10	58	48	41	37	56	46	40	36	43	38	35		40	36	33		37	34	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18558	18558	18558
5°	18337	18615	18976
10°	18591	18858	19139
15°	18969	19012	19126
20°	18895	18865	18689
25°	18353	18277	18064
30°	17258	17226	16906
35°	15509	15526	15086
40°	12592	12592	5763
45°	7241	8807	118
50°	2282	2110	107
55°	796	169	96
60°	56	111	111
65°	32	98	98
70°	40	122	122
75°	0	108	108
80°	0	161	161
85°	0	156	156

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8807 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.1	4.7
10°-20°	721.1	13.8
20°-30°	1053.4	20.2
30°-40°	1043.3	20.0
40°-50°	436.8	8.4
50°-60°	46.7	0.9
60°-70°	6.6	0.1
70°-80°	4.0	0.1
80°-90°	2.6	0.0
90°-100°	38.0	0.7
100°-110°	270.7	5.2
110°-120°	367.5	7.0
120°-130°	299.1	5.7
130°-140°	240.5	4.6
140°-150°	189.6	3.6
150°-160°	138.7	2.7
160°-170°	86.1	1.6
170°-180°	29.4	0.6
0°-30°	2021.6	38.7
0°-40°	3064.9	58.7
0°-60°	3548.4	68.0
0°-90°	3561.5	68.2
90°-120°	676.1	12.9
90°-150°	1405.3	26.9
90°-180°	1659.0	31.8
0°-180°	5221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2586	2586	2586	2586	2586	
5°	2546	2591	2584	2591	2634	243
15°	2553	2606	2559	2541	2574	717
25°	2318	2358	2308	2253	2281	1059
35°	1770	1774	1772	1737	1722	1086
45°	714	847	868	17	12	560
55°	64	84	14	10	8	71
65°	2	8	6	6	6	2
75°	0	4	4	4	4	0
85°	0	2	2	2	2	0
90°	0	2	4	6	6	1
95°	16	29	16	18	21	17
105°	60	92	352	449	297	63
115°	107	130	303	630	736	106
125°	154	174	286	500	591	136
135°	190	211	288	411	472	146
145°	225	244	290	358	396	142
155°	264	274	295	325	340	121
165°	293	297	303	311	317	82
175°	309	311	309	307	305	29
180°	309	309	309	309	309	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2586.1	2586.1	2586.1	2586.1	2586.1
2.5°	2558.3	2594.5	2583.0	2580.5	2603.1
5°	2545.6	2590.9	2584.2	2591.0	2634.3
7.5°	2546.8	2588.6	2591.1	2591.0	2634.3
10°	2551.4	2594.8	2588.0	2583.2	2626.6
12.5°	2557.6	2602.4	2577.2	2569.3	2611.2
15°	2553.3	2606.1	2559.1	2540.6	2574.5
17.5°	2514.4	2575.5	2513.6	2477.9	2502.8
20°	2474.3	2538.4	2470.4	2420.9	2447.3
22.5°	2417.2	2476.8	2411.8	2354.6	2385.5
25°	2318.0	2357.6	2308.4	2253.1	2281.4
27.5°	2183.1	2205.7	2177.7	2127.9	2145.3
30°	2082.8	2097.9	2078.9	2029.0	2040.3
32.5°	1971.7	1979.2	1967.8	1922.4	1927.7
35°	1770.4	1774.1	1772.3	1737.2	1722.1
37.5°	1521.6	1529.1	1524.7	1372.3	946.9
40°	1344.2	1351.7	1344.2	803.8	615.2
42.5°	1122.0	1170.3	1157.5	548.1	175.5
45°	713.5	847.4	867.8	17.2	11.6
47.5°	352.5	497.0	408.1	11.2	11.2
50°	204.4	293.0	189.0	9.6	9.6
52.5°	136.5	178.4	54.8	9.6	9.6
55°	63.6	84.4	13.5	9.6	7.7
57.5°	22.4	42.4	9.3	7.7	7.7
60°	3.9	20.8	7.7	7.7	7.7
62.5°	2.3	11.7	7.7	6.2	7.7
65°	1.9	7.6	5.8	5.8	5.8
67.5°	1.9	5.7	5.8	5.8	5.8
70°	1.9	5.7	5.8	5.8	5.8
72.5°	0.4	4.2	4.2	4.3	5.8
75°	0.0	3.8	3.9	3.9	3.9
77.5°	0.0	3.8	3.9	3.9	3.9
80°	0.0	3.8	3.9	3.9	3.9
82.5°	0.0	2.3	2.3	2.3	3.9
85°	0.0	1.9	1.9	1.9	1.9
87.5°	0.0	1.9	2.3	2.7	2.7
90°	0.0	1.9	3.9	5.8	5.8
92.5°	4.7	6.6	8.5	12.1	13.6
95°	15.5	28.8	15.5	17.6	21.4
97.5°	27.6	55.3	114.2	33.7	29.1
100°	36.9	69.2	229.3	67.5	44.7
102.5°	46.2	80.1	310.1	178.1	97.5
105°	60.2	92.5	351.7	449.3	297.3
107.5°	74.2	98.5	335.7	653.8	612.4
110°	83.5	106.3	326.4	687.0	738.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	92.9	115.7	317.1	667.6	753.9
115°	106.9	129.7	303.1	630.0	736.4
117.5°	121.2	143.7	299.6	589.3	698.7
120°	132.1	153.0	293.4	558.3	672.3
122.5°	139.9	162.3	285.6	531.6	636.5
125°	153.5	174.4	285.6	499.5	590.7
127.5°	164.8	186.0	286.0	462.1	552.2
130°	171.0	193.8	287.6	437.2	522.7
132.5°	178.8	201.5	287.6	425.9	496.2
135°	190.4	211.3	287.6	411.3	472.1
137.5°	200.1	222.5	287.6	395.2	447.3
140°	207.9	228.8	287.6	385.8	433.3
142.5°	215.7	235.0	289.1	374.8	419.3
145°	225.4	244.4	289.5	358.4	396.4
147.5°	237.0	253.8	291.8	346.5	375.8
150°	244.8	260.0	293.4	338.6	363.3
152.5°	252.6	266.3	293.4	332.3	352.5
155°	264.2	273.7	295.3	324.8	340.0
157.5°	273.6	282.7	297.7	320.1	331.1
160°	279.8	287.4	299.2	316.9	326.4
162.5°	284.4	292.0	300.8	315.3	321.8
165°	293.4	297.2	303.1	311.0	316.7
167.5°	298.4	301.9	305.0	309.0	312.4
170°	303.1	305.0	305.0	309.0	310.9
172.5°	304.7	308.1	306.6	307.4	309.3
175°	308.9	310.8	308.9	306.9	305.0
177.5°	308.9	310.4	308.9	308.9	307.4
180°	308.9	308.9	308.9	308.9	308.9



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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	0.76	1.77	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.55	1.58	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.42	1.47	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.28	1.33	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.20	1.26	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.11	1.18	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.38	1.43	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.22	1.28	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.10	1.18	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.00	0.00	0.00