

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: P621926

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621926
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-050D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

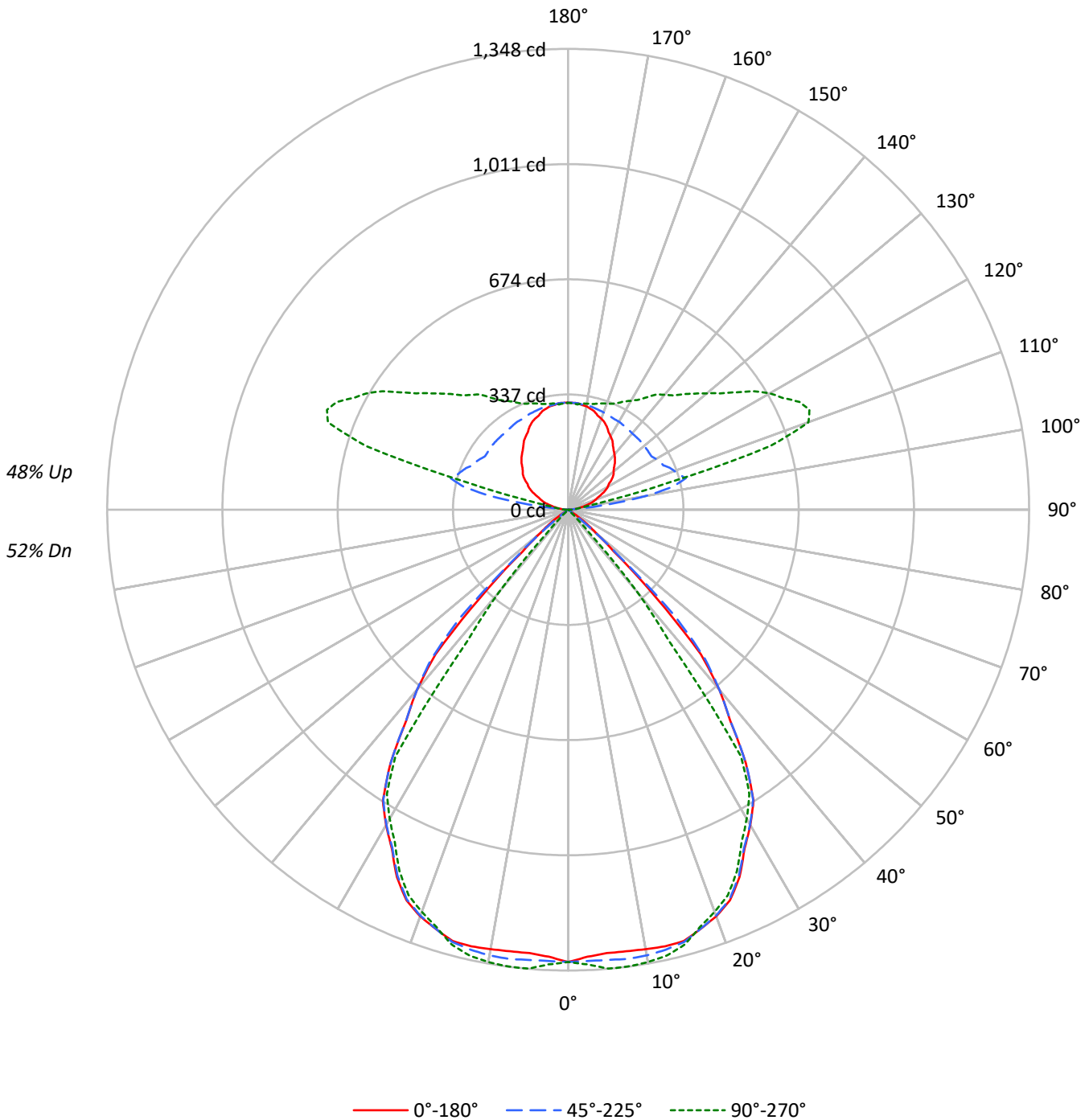
Lumens per Lamp: N/A
Luminaire Lumens: 3503.0 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 34.4
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	50	30	10	0	
RCR																						
0	108	108	108	108	100	100	100	100	84	84	84	71	71	71	58	58	58	52				
1	100	97	94	91	93	90	87	85	77	75	74	65	64	63	55	54	53	48				
2	93	87	82	78	87	81	77	74	70	67	65	60	58	56	51	50	48	44				
3	87	79	73	68	81	74	69	65	64	61	57	56	53	51	47	46	44	40				
4	81	72	65	60	75	67	62	57	59	55	51	51	48	46	44	42	40	37				
5	75	65	58	53	70	61	55	51	54	50	46	47	44	41	41	39	37	34				
6	70	60	53	48	65	56	50	46	50	45	42	44	40	38	38	36	34	31				
7	65	55	48	43	61	52	46	41	46	41	38	41	37	34	36	33	31	29				
8	61	50	44	39	57	48	42	37	43	38	34	38	34	31	33	31	29	26				
9	57	47	40	35	54	44	38	34	40	35	32	35	32	29	31	28	26	24				
10	54	43	37	32	51	41	35	31	37	32	29	33	29	27	29	27	25	23				

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	3.6
10°-20°	368.9	10.5
20°-30°	538.8	15.4
30°-40°	533.6	15.2
40°-50°	223.4	6.4
50°-60°	23.9	0.7
60°-70°	3.4	0.1
70°-80°	2.0	0.1
80°-90°	1.7	0.0
90°-100°	38.5	1.1
100°-110°	274.1	7.8
110°-120°	372.2	10.6
120°-130°	302.9	8.6
130°-140°	243.6	7.0
140°-150°	192.1	5.5
150°-160°	140.4	4.0
160°-170°	87.2	2.5
170°-180°	29.7	0.8
0°-30°	1034.1	29.5
0°-40°	1567.7	44.8
0°-60°	1815.0	51.8
0°-90°	1822.1	52.0
90°-120°	684.8	19.5
90°-150°	1423.4	40.6
90°-180°	1681.0	48.0
0°-180°	3503.0	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	2	4	6	6	1
95°	16	29	16	18	22	18
105°	61	94	356	455	301	64
115°	108	131	307	638	746	107
125°	156	177	289	506	598	138
135°	193	214	291	417	478	148
145°	228	248	293	363	402	143
155°	268	277	299	329	344	123
165°	297	301	307	315	321	83
175°	313	315	313	311	309	30
180°	313	313	313	313	313	



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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	1.2	1.6	2.0	2.0
90°	0.0	1.9	3.9	5.9	5.9
92.5°	4.7	6.6	8.7	12.2	13.8
95°	15.7	29.2	15.7	17.8	21.6
97.5°	27.9	56.0	115.7	34.1	29.5
100°	37.4	70.1	232.2	68.4	45.3
102.5°	46.8	81.1	314.1	180.4	98.8
105°	61.0	93.7	356.2	455.0	301.1
107.5°	75.2	99.8	340.1	662.3	620.3
110°	84.6	107.7	330.6	695.9	747.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	94.1	117.2	321.2	676.2	763.6
115°	108.2	131.3	307.0	638.1	745.9
117.5°	122.8	145.5	303.5	596.9	707.7
120°	133.8	155.0	297.2	565.5	680.9
122.5°	141.7	164.4	289.3	538.5	644.7
125°	155.5	176.6	289.3	505.9	598.3
127.5°	166.9	188.4	289.7	468.1	559.3
130°	173.2	196.3	291.3	442.8	529.4
132.5°	181.1	204.1	291.3	431.4	502.6
135°	192.9	214.0	291.3	416.6	478.2
137.5°	202.7	225.4	291.3	400.3	453.0
140°	210.6	231.7	291.3	390.8	438.9
142.5°	218.4	238.1	292.8	379.7	424.7
145°	228.3	247.5	293.2	363.0	401.5
147.5°	240.1	257.0	295.6	351.0	380.6
150°	248.0	263.4	297.2	343.0	368.0
152.5°	255.8	269.7	297.2	336.6	357.0
155°	267.6	277.3	299.1	329.0	344.4
157.5°	277.1	286.3	301.5	324.2	335.3
160°	283.4	291.1	303.1	321.0	330.6
162.5°	288.1	295.8	304.6	319.4	325.9
165°	297.2	301.0	307.0	315.0	320.8
167.5°	302.3	305.7	309.0	313.0	316.5
170°	307.0	308.9	309.0	313.0	314.9
172.5°	308.6	312.0	310.5	311.4	313.3
175°	312.9	314.8	312.9	310.9	309.0
177.5°	312.9	314.4	312.9	312.9	311.3
180°	312.9	312.9	312.9	312.9	312.9



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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	0.00	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