

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: P621939

Luminaire Tested: VLT-BB-M-075U-050D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621939
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-940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

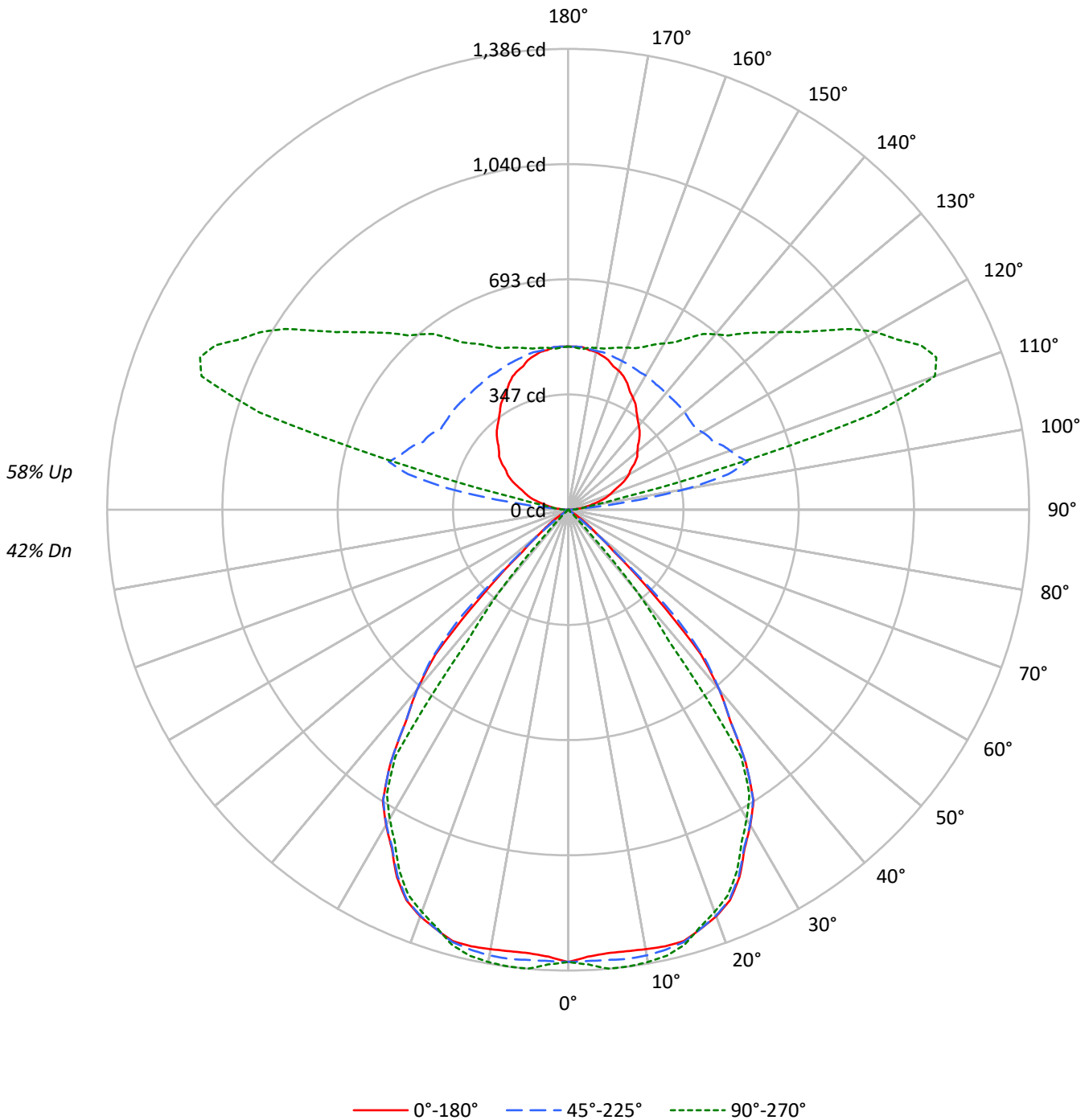
Lumens per Lamp: N/A
Luminaire Lumens: 4511.1 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 42
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	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°	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	2.9
10°-20°	379.3	8.4
20°-30°	554.0	12.3
30°-40°	548.7	12.2
40°-50°	229.7	5.1
50°-60°	24.6	0.5
60°-70°	3.4	0.1
70°-80°	2.1	0.0
80°-90°	2.1	0.0
90°-100°	60.4	1.3
100°-110°	430.1	9.5
110°-120°	583.9	12.9
120°-130°	475.3	10.5
130°-140°	382.3	8.5
140°-150°	301.4	6.7
150°-160°	220.3	4.9
160°-170°	136.9	3.0
170°-180°	46.7	1.0
0°-30°	1063.3	23.6
0°-40°	1612.0	35.7
0°-60°	1866.3	41.4
0°-90°	1873.9	41.5
90°-120°	1074.4	23.8
90°-150°	2233.3	49.5
90°-180°	2637.0	58.5
0°-180°	4511.1	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	3	6	9	9	1
95°	25	46	25	28	34	28
105°	96	147	559	714	472	101
115°	170	206	482	1001	1170	169
125°	244	277	454	794	939	217
135°	303	336	457	654	750	233
145°	358	388	460	570	630	225
155°	420	435	469	516	540	193
165°	466	472	482	494	503	131
175°	491	494	491	488	485	46
180°	491	491	491	491	491	



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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	1.4	2.0	2.7	2.7
90°	0.0	3.0	6.2	9.3	9.3
92.5°	7.4	10.4	13.6	19.2	21.6
95°	24.7	45.8	24.7	27.9	34.0
97.5°	43.8	87.9	181.6	53.6	46.3
100°	58.7	110.0	364.3	107.2	71.0
102.5°	73.5	127.2	492.8	283.0	155.0
105°	95.7	147.0	558.9	713.9	472.4
107.5°	117.9	156.6	533.5	1039.0	973.2
110°	132.8	169.0	518.7	1091.8	1173.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	147.6	183.8	503.9	1060.9	1198.0
115°	169.8	206.0	481.7	1001.2	1170.2
117.5°	192.7	228.3	476.1	936.4	1110.3
120°	210.0	243.2	466.2	887.2	1068.3
122.5°	222.3	257.9	453.9	844.9	1011.5
125°	243.9	277.1	453.9	793.7	938.6
127.5°	261.8	295.6	454.5	734.4	877.5
130°	271.7	307.9	457.0	694.7	830.6
132.5°	284.1	320.3	457.0	676.9	788.6
135°	302.6	335.8	457.0	653.7	750.3
137.5°	318.0	353.7	457.0	628.1	710.8
140°	330.4	363.6	457.0	613.1	688.5
142.5°	342.7	373.5	459.4	595.7	666.3
145°	358.2	388.4	460.1	569.5	629.9
147.5°	376.7	403.3	463.8	550.7	597.2
150°	389.0	413.2	466.2	538.1	577.4
152.5°	401.4	423.1	466.2	528.1	560.1
155°	419.9	435.0	469.3	516.2	540.3
157.5°	434.7	449.2	473.0	508.6	526.1
160°	444.6	456.7	475.5	503.6	518.7
162.5°	452.0	464.1	478.0	501.0	511.3
165°	466.2	472.3	481.7	494.2	503.3
167.5°	474.3	479.7	484.8	491.1	496.5
170°	481.7	484.7	484.8	491.0	494.0
172.5°	484.1	489.6	487.2	488.5	491.6
175°	490.9	494.0	490.9	487.8	484.8
177.5°	490.9	493.4	490.9	490.9	488.5
180°	490.9	490.9	490.9	490.9	490.9



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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