

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: P621961

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

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621961
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-100U-050D-930-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

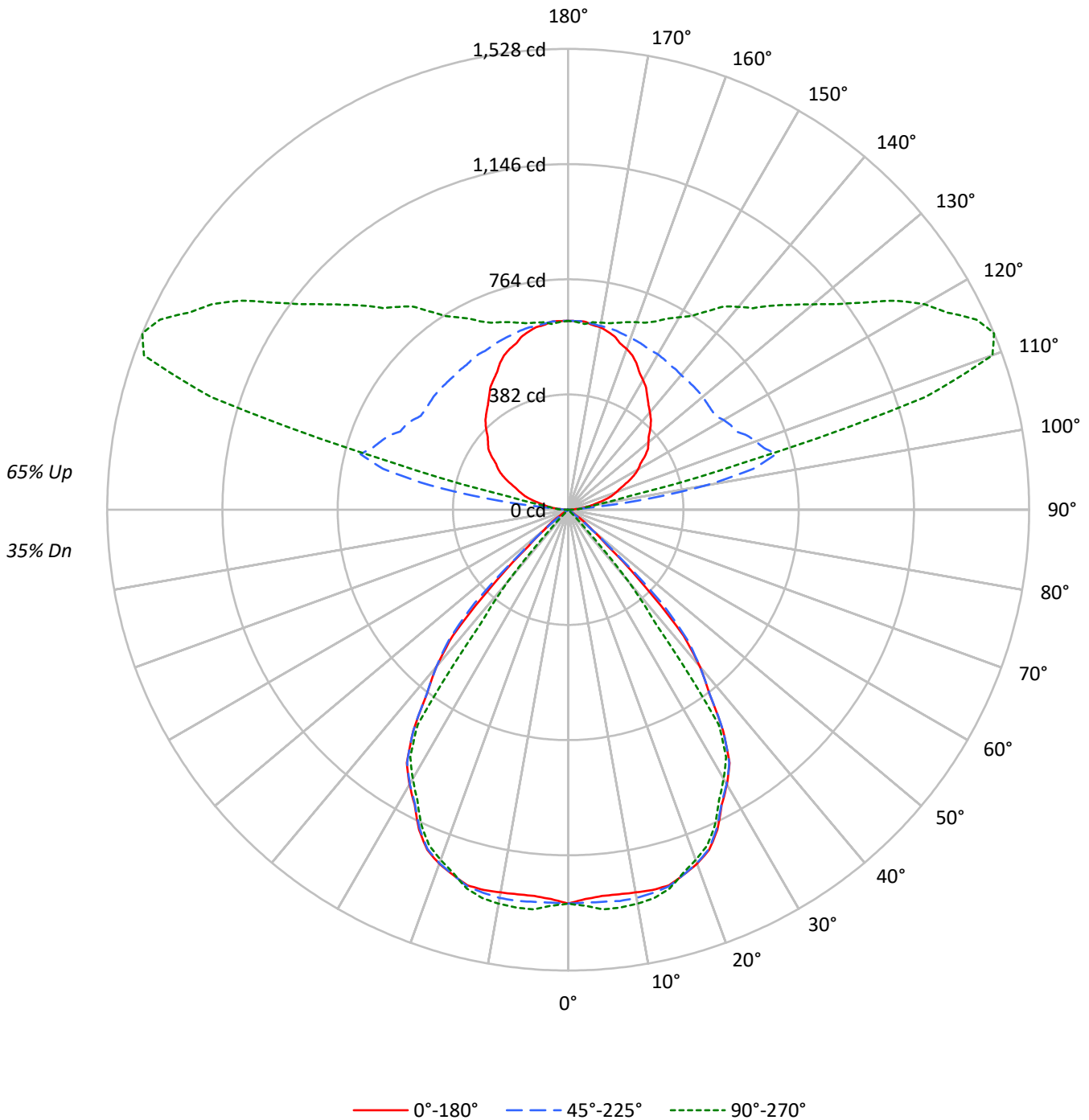
Lumens per Lamp: N/A
Luminaire Lumens: 5163.0 lumens
Efficiency: N/A
Efficacy: 100.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 51.6
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35				
1	96	92	89	86	87	84	81	78	68	66	64	53	52	51	39	39	38	32				
2	89	82	77	73	80	75	71	67	61	58	56	48	47	45	37	36	35	30				
3	82	74	68	63	74	67	62	58	55	52	49	44	42	40	34	33	32	27				
4	76	66	60	54	69	61	55	51	50	46	43	41	38	36	32	30	29	25				
5	70	60	53	48	64	55	49	45	46	42	38	37	34	32	29	28	26	23				
6	65	54	47	42	59	50	44	40	42	38	34	34	31	29	27	25	24	21				
7	60	50	43	38	55	46	40	35	39	34	31	32	29	26	25	23	22	19				
8	56	45	38	34	51	42	36	32	35	31	28	29	26	24	24	22	20	18				
9	53	42	35	30	48	39	33	29	33	28	25	27	24	22	22	20	19	16				
10	49	38	32	28	45	36	30	26	30	26	23	25	22	20	21	19	17	15				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9372	9372	9372
5°	9260	9400	9583
10°	9389	9524	9665
15°	9579	9601	9659
20°	9542	9527	9438
25°	9269	9231	9122
30°	8715	8700	8538
35°	7832	7840	7619
40°	6359	6359	2910
45°	3656	4448	59
50°	1152	1065	55
55°	402	85	49
60°	27	56	56
65°	17	49	49
70°	21	61	61
75°	0	53	53
80°	0	79	79
85°	0	82	82

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 4448 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.8	2.4
10°-20°	364.2	7.1
20°-30°	532.0	10.3
30°-40°	526.9	10.2
40°-50°	220.6	4.3
50°-60°	23.6	0.5
60°-70°	3.3	0.1
70°-80°	2.0	0.0
80°-90°	2.4	0.0
90°-100°	77.0	1.5
100°-110°	548.6	10.6
110°-120°	744.7	14.4
120°-130°	606.1	11.7
130°-140°	487.5	9.4
140°-150°	384.3	7.4
150°-160°	281.0	5.4
160°-170°	174.6	3.4
170°-180°	59.5	1.2
0°-30°	1020.9	19.8
0°-40°	1547.8	30.0
0°-60°	1791.9	34.7
0°-90°	1799.6	34.9
90°-120°	1370.3	26.5
90°-150°	2848.3	55.2
90°-180°	3363.0	65.1
0°-180°	5163.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1306	1306	1306	1306	1306	
5°	1286	1308	1305	1308	1330	123
15°	1289	1316	1292	1283	1300	362
25°	1171	1191	1166	1138	1152	535
35°	894	896	895	877	870	548
45°	360	428	438	9	6	283
55°	32	43	7	5	4	36
65°	1	4	3	3	3	1
75°	0	2	2	2	2	0
85°	0	1	1	1	1	0
90°	0	4	8	12	12	1
95°	32	58	32	36	43	35
105°	122	188	713	910	602	129
115°	217	263	614	1277	1492	215
125°	311	353	579	1012	1197	276
135°	386	428	583	834	957	297
145°	457	495	587	726	803	287
155°	536	555	599	658	689	246
165°	595	602	614	630	642	167
175°	626	630	626	622	618	59
180°	626	626	626	626	626	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1306.0	1306.0	1306.0	1306.0	1306.0
2.5°	1292.0	1310.3	1304.4	1303.1	1314.6
5°	1285.5	1308.4	1305.0	1308.4	1330.3
7.5°	1286.1	1307.3	1308.5	1308.4	1330.3
10°	1288.5	1310.4	1307.0	1304.5	1326.4
12.5°	1291.6	1314.2	1301.5	1297.5	1318.7
15°	1289.4	1316.1	1292.4	1283.0	1300.1
17.5°	1269.8	1300.6	1269.4	1251.4	1263.9
20°	1249.5	1281.9	1247.6	1222.5	1235.9
22.5°	1220.7	1250.8	1218.0	1189.1	1204.7
25°	1170.6	1190.6	1165.8	1137.8	1152.1
27.5°	1102.4	1113.9	1099.7	1074.6	1083.4
30°	1051.8	1059.4	1049.9	1024.7	1030.4
32.5°	995.7	999.5	993.8	970.8	973.5
35°	894.0	895.9	895.0	877.3	869.7
37.5°	768.4	772.2	770.0	693.0	478.2
40°	678.8	682.6	678.8	405.9	310.7
42.5°	566.6	591.0	584.5	276.8	88.6
45°	360.3	428.0	438.3	8.7	5.8
47.5°	178.0	251.0	206.1	5.6	5.6
50°	103.2	148.0	95.4	4.9	4.9
52.5°	69.0	90.1	27.7	4.9	4.9
55°	32.1	42.6	6.8	4.8	3.9
57.5°	11.3	21.4	4.7	3.9	3.9
60°	1.9	10.5	3.9	3.9	3.9
62.5°	1.2	5.9	3.9	3.1	3.9
65°	1.0	3.8	2.9	2.9	2.9
67.5°	1.0	2.9	2.9	2.9	2.9
70°	1.0	2.9	2.9	2.9	2.9
72.5°	0.2	2.1	2.1	2.2	2.9
75°	0.0	1.9	1.9	1.9	1.9
77.5°	0.0	1.9	1.9	1.9	1.9
80°	0.0	1.9	1.9	1.9	1.9
82.5°	0.0	1.1	1.2	1.2	1.9
85°	0.0	1.0	1.0	1.0	1.0
87.5°	0.0	1.5	2.4	3.1	3.1
90°	0.0	3.9	7.9	11.8	11.8
92.5°	9.5	13.3	17.3	24.5	27.6
95°	31.5	58.5	31.5	35.6	43.3
97.5°	55.9	112.1	231.5	68.3	59.1
100°	74.8	140.3	464.7	136.8	90.6
102.5°	93.7	162.3	628.5	360.9	197.7
105°	122.1	187.5	712.8	910.5	602.5
107.5°	150.4	199.7	680.5	1325.2	1241.2
110°	169.3	215.5	661.6	1392.4	1496.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.2	234.4	642.7	1353.1	1527.9
115°	216.6	262.8	614.3	1276.8	1492.5
117.5°	245.7	291.2	607.2	1194.3	1416.1
120°	267.8	310.1	594.6	1131.5	1362.5
122.5°	283.5	329.0	578.9	1077.5	1290.0
125°	311.1	353.4	578.9	1012.3	1197.1
127.5°	333.9	377.1	579.7	936.6	1119.1
130°	346.5	392.7	582.8	886.0	1059.3
132.5°	362.3	408.5	582.8	863.3	1005.7
135°	385.9	428.3	582.8	833.7	956.9
137.5°	405.6	451.0	582.8	801.0	906.5
140°	421.4	463.7	582.8	781.9	878.1
142.5°	437.1	476.4	586.0	759.7	849.8
145°	456.8	495.3	586.7	726.3	803.3
147.5°	480.4	514.3	591.5	702.3	761.6
150°	496.2	527.0	594.6	686.3	736.4
152.5°	511.9	539.6	594.6	673.5	714.3
155°	535.6	554.8	598.6	658.3	689.1
157.5°	554.5	572.9	603.3	648.7	671.0
160°	567.1	582.5	606.4	642.3	661.6
162.5°	576.5	591.9	609.6	639.0	652.1
165°	594.6	602.3	614.3	630.3	641.9
167.5°	604.9	611.8	618.2	626.3	633.2
170°	614.3	618.2	618.2	626.2	630.1
172.5°	617.5	624.4	621.4	623.1	626.9
175°	626.1	630.0	626.1	622.1	618.2
177.5°	626.1	629.2	626.1	626.1	623.0
180°	626.1	626.1	626.1	626.1	626.1



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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