

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: P621972

Luminaire Tested: VLT-BB-M-100U-125D-940-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621972
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-125D-940-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

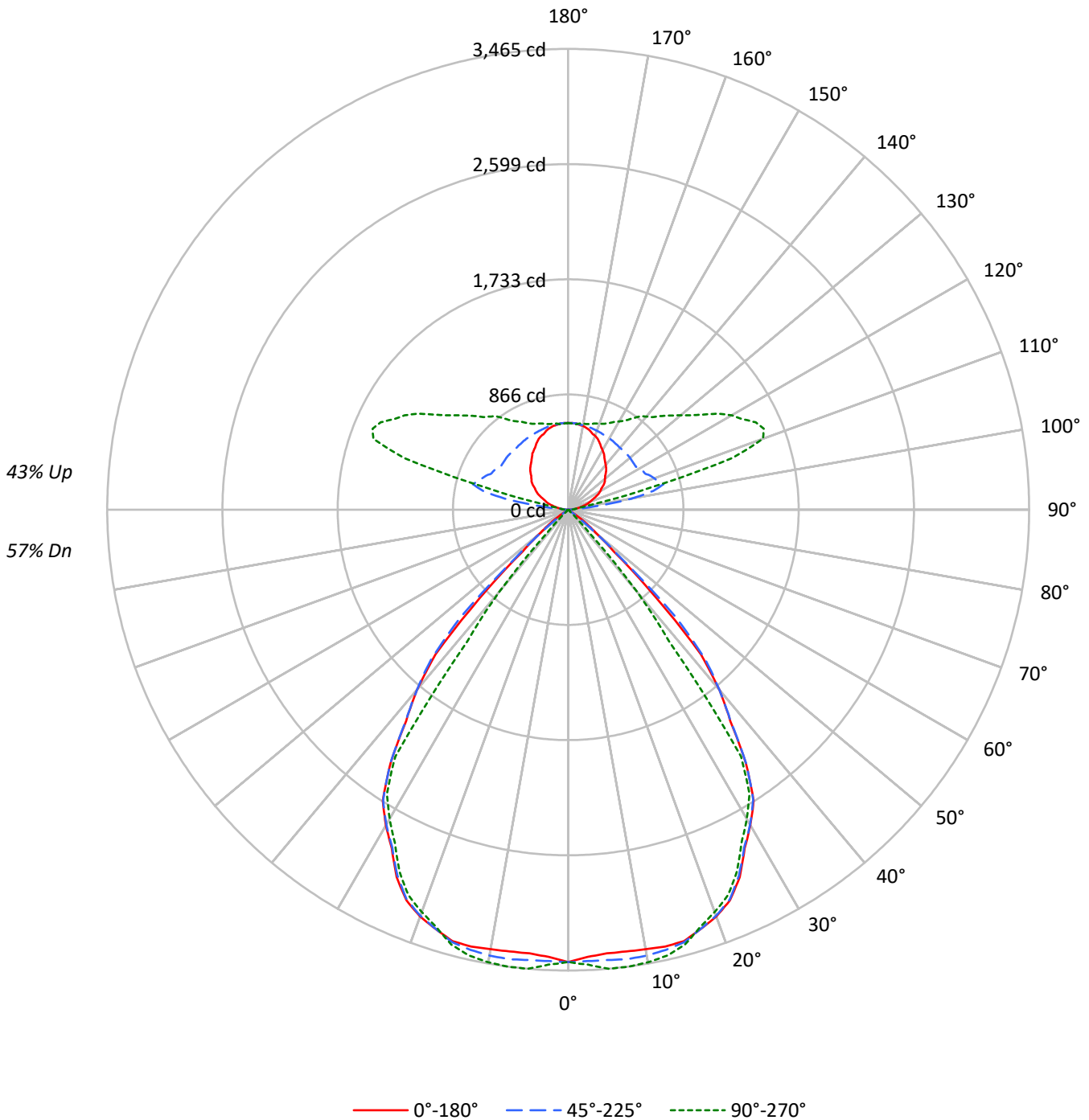
Lumens per Lamp: N/A
Luminaire Lumens: 8187.9 lumens
Efficiency: N/A
Efficacy: 98.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 82.8
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			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	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57
1	102	98	95	92	95	92	89	87	80	78	77	69	68	67	59	58	58	53
2	95	89	84	80	88	83	79	76	73	70	68	64	62	60	55	54	53	48
3	88	81	75	70	83	76	71	67	67	63	60	59	56	54	51	50	48	44
4	82	73	67	62	77	69	64	59	62	57	54	55	51	49	48	46	44	41
5	77	67	60	55	72	63	57	53	57	52	48	50	47	44	45	42	40	37
6	72	61	54	49	67	58	52	48	52	47	44	47	43	40	42	39	37	34
7	67	56	49	45	63	54	47	43	48	43	40	43	40	37	39	36	34	32
8	63	52	45	40	59	49	43	39	45	40	36	40	37	34	36	33	31	29
9	59	48	41	37	55	46	40	36	42	37	33	38	34	31	34	31	29	27
10	55	45	38	34	52	43	37	33	39	34	31	35	31	29	32	29	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24410	24410	24410
5°	24119	24484	24960
10°	24453	24804	25174
15°	24950	25007	25157
20°	24852	24814	24581
25°	24141	24041	23760
30°	22700	22657	22237
35°	20399	20421	19844
40°	16562	16562	7580
45°	9524	11584	154
50°	3002	2775	142
55°	1047	223	126
60°	73	145	145
65°	42	129	129
70°	52	159	159
75°	0	141	141
80°	0	211	211
85°	0	206	206

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 11584 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.0	4.0
10°-20°	948.5	11.6
20°-30°	1385.6	16.9
30°-40°	1372.2	16.8
40°-50°	574.5	7.0
50°-60°	61.5	0.8
60°-70°	8.6	0.1
70°-80°	5.2	0.1
80°-90°	3.9	0.0
90°-100°	80.2	1.0
100°-110°	571.3	7.0
110°-120°	775.6	9.5
120°-130°	631.3	7.7
130°-140°	507.7	6.2
140°-150°	400.3	4.9
150°-160°	292.7	3.6
160°-170°	181.8	2.2
170°-180°	62.0	0.8
0°-30°	2659.1	32.5
0°-40°	4031.3	49.2
0°-60°	4667.3	57.0
0°-90°	4685.1	57.2
90°-120°	1427.1	17.4
90°-150°	2966.4	36.2
90°-180°	3503.0	42.8
0°-180°	8187.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3402	3402	3402	3402	3402	
5°	3348	3408	3399	3408	3465	320
15°	3358	3428	3366	3342	3386	943
25°	3049	3101	3036	2964	3001	1392
35°	2329	2334	2331	2285	2265	1428
45°	938	1115	1142	23	15	736
55°	84	111	18	13	10	94
65°	2	10	8	8	8	3
75°	0	5	5	5	5	0
85°	0	2	2	2	2	0
90°	0	4	8	12	12	1
95°	33	61	33	37	45	37
105°	127	195	742	948	628	134
115°	226	274	640	1330	1554	224
125°	324	368	603	1054	1247	288
135°	402	446	607	868	997	309
145°	476	516	611	756	837	299
155°	558	578	623	686	718	256
165°	619	627	640	656	668	174
175°	652	656	652	648	644	62
180°	652	652	652	652	652	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3401.6	3401.6	3401.6	3401.6	3401.6
2.5°	3365.0	3412.7	3397.5	3394.1	3423.9
5°	3348.3	3407.8	3399.0	3407.9	3465.0
7.5°	3349.8	3404.9	3408.2	3407.9	3465.0
10°	3355.9	3413.0	3404.1	3397.8	3454.8
12.5°	3364.0	3423.1	3389.9	3379.5	3434.5
15°	3358.4	3427.9	3366.1	3341.7	3386.3
17.5°	3307.2	3387.6	3306.2	3259.2	3292.0
20°	3254.4	3338.8	3249.4	3184.2	3218.9
22.5°	3179.4	3257.7	3172.3	3097.1	3137.8
25°	3049.0	3101.1	3036.3	2963.6	3000.8
27.5°	2871.4	2901.2	2864.3	2798.9	2821.7
30°	2739.5	2759.4	2734.4	2668.8	2683.7
32.5°	2593.4	2603.3	2588.3	2528.6	2535.6
35°	2328.6	2333.5	2331.1	2285.0	2265.2
37.5°	2001.4	2011.3	2005.4	1805.0	1245.5
40°	1768.0	1777.9	1768.0	1057.2	809.2
42.5°	1475.8	1539.3	1522.5	720.9	230.8
45°	938.5	1114.6	1141.5	22.7	15.2
47.5°	463.7	653.7	536.7	14.7	14.7
50°	268.9	385.4	248.6	12.7	12.7
52.5°	179.6	234.7	72.0	12.7	12.7
55°	83.7	111.0	17.8	12.6	10.1
57.5°	29.4	55.7	12.2	10.1	10.1
60°	5.1	27.4	10.1	10.1	10.1
62.5°	3.0	15.4	10.1	8.2	10.1
65°	2.5	10.0	7.6	7.6	7.6
67.5°	2.5	7.5	7.6	7.6	7.6
70°	2.5	7.5	7.6	7.6	7.6
72.5°	0.5	5.5	5.6	5.6	7.6
75°	0.0	5.0	5.1	5.1	5.1
77.5°	0.0	5.0	5.1	5.1	5.1
80°	0.0	5.0	5.1	5.1	5.1
82.5°	0.0	3.0	3.0	3.1	5.1
85°	0.0	2.5	2.5	2.5	2.5
87.5°	0.0	2.8	3.7	4.5	4.5
90°	0.0	4.0	8.2	12.3	12.3
92.5°	9.8	13.9	18.0	25.5	28.7
95°	32.8	60.9	32.8	37.1	45.1
97.5°	58.2	116.8	241.2	71.1	61.5
100°	77.9	146.1	483.9	142.5	94.3
102.5°	97.6	169.0	654.6	375.9	205.9
105°	127.1	195.3	742.3	948.3	627.5
107.5°	156.7	208.0	708.7	1380.1	1292.7
110°	176.4	224.5	689.0	1450.2	1558.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	196.0	244.2	669.3	1409.2	1591.3
115°	225.6	273.7	639.8	1329.8	1554.4
117.5°	255.9	303.2	632.4	1243.8	1474.8
120°	278.9	323.0	619.3	1178.4	1419.0
122.5°	295.3	342.6	602.9	1122.2	1343.6
125°	324.0	368.1	602.9	1054.3	1246.8
127.5°	347.8	392.7	603.7	975.5	1165.6
130°	360.9	409.0	607.0	922.8	1103.2
132.5°	377.3	425.4	607.0	899.1	1047.5
135°	401.9	446.0	607.0	868.3	996.6
137.5°	422.4	469.7	607.0	834.2	944.1
140°	438.8	482.9	607.0	814.3	914.6
142.5°	455.2	496.1	610.3	791.2	885.1
145°	475.7	515.8	611.1	756.5	836.7
147.5°	500.4	535.6	616.0	731.4	793.2
150°	516.8	548.8	619.3	714.8	766.9
152.5°	533.2	562.0	619.3	701.5	744.0
155°	557.8	577.8	623.4	685.6	717.7
157.5°	577.5	596.7	628.3	675.6	698.9
160°	590.6	606.6	631.6	669.0	689.0
162.5°	600.4	616.5	634.9	665.5	679.2
165°	619.3	627.3	639.8	656.5	668.5
167.5°	630.0	637.2	643.9	652.3	659.5
170°	639.8	643.8	643.9	652.2	656.2
172.5°	643.1	650.3	647.2	648.9	652.9
175°	652.1	656.1	652.1	647.9	643.9
177.5°	652.1	655.3	652.1	652.0	648.8
180°	652.1	652.1	652.1	652.1	652.1



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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	0.09	0.80	1.98	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.59	1.79	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.46	1.68	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.31	1.54	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.24	1.46	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.15	1.39	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.42	1.63	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.26	1.49	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.14	1.39	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.04	1.30	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.00