

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: P621962

Luminaire Tested: VLT-BB-M-100U-050D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621962
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-935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

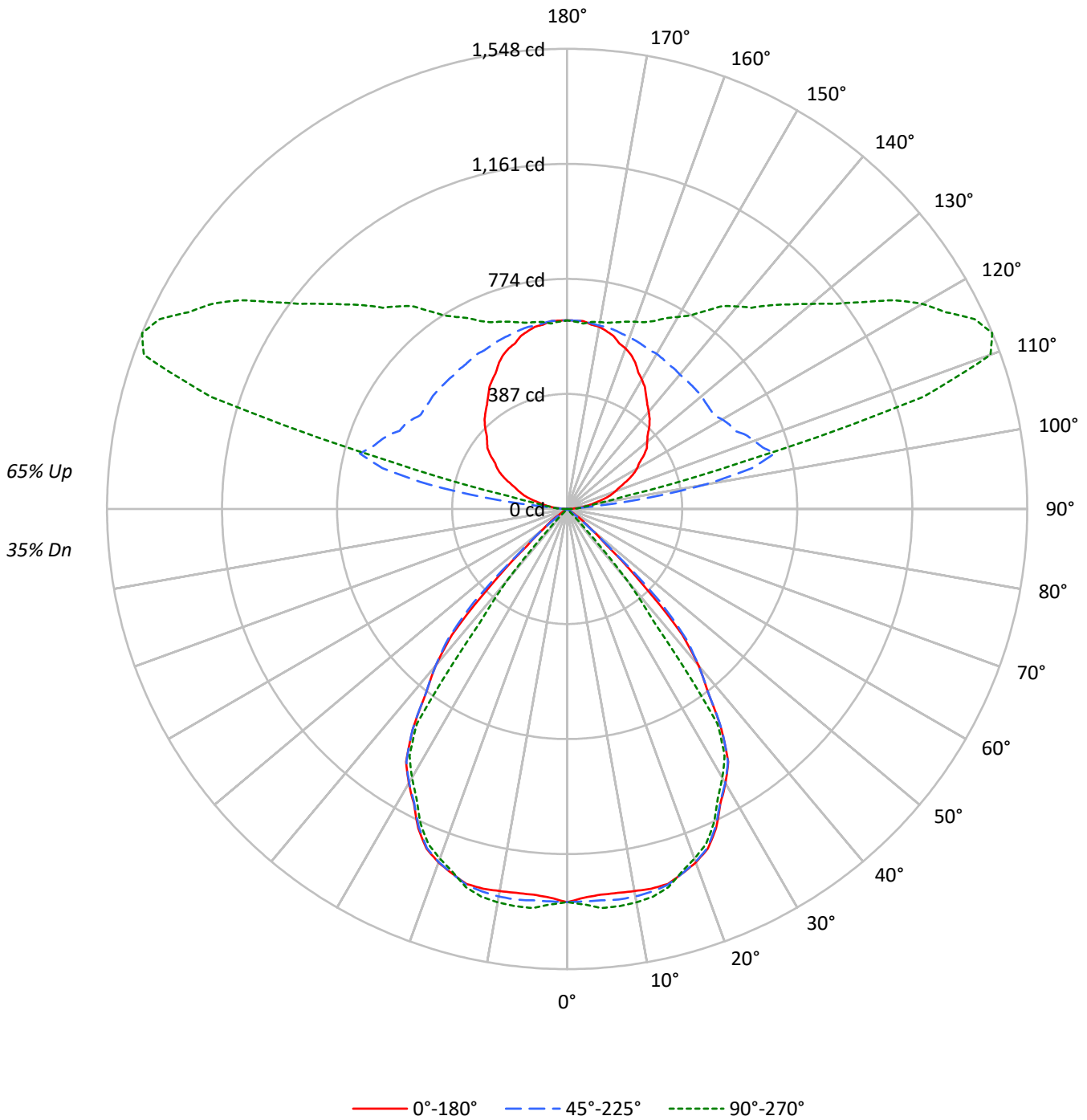
Lumens per Lamp: N/A
Luminaire Lumens: 5229.5 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 51.6
Input Voltage (V): 120
Input Current (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	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°	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	2.4
10°-20°	368.9	7.1
20°-30°	538.8	10.3
30°-40°	533.6	10.2
40°-50°	223.4	4.3
50°-60°	23.9	0.5
60°-70°	3.4	0.1
70°-80°	2.0	0.0
80°-90°	2.4	0.0
90°-100°	78.0	1.5
100°-110°	555.6	10.6
110°-120°	754.3	14.4
120°-130°	613.9	11.7
130°-140°	493.8	9.4
140°-150°	389.3	7.4
150°-160°	284.7	5.4
160°-170°	176.8	3.4
170°-180°	60.3	1.2
0°-30°	1034.1	19.8
0°-40°	1567.7	30.0
0°-60°	1815.0	34.7
0°-90°	1822.9	34.9
90°-120°	1387.9	26.5
90°-150°	2884.9	55.2
90°-180°	3407.0	65.1
0°-180°	5229.5	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	4	8	12	12	1
95°	32	59	32	36	44	36
105°	124	190	722	922	610	130
115°	219	266	622	1293	1512	218
125°	315	358	586	1025	1212	280
135°	391	434	590	844	969	301
145°	463	502	594	736	814	291
155°	542	562	606	667	698	249
165°	602	610	622	638	650	169
175°	634	638	634	630	626	60
180°	634	634	634	634	634	



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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	1.6	2.4	3.2	3.2
90°	0.0	3.9	8.0	12.0	12.0
92.5°	9.6	13.5	17.5	24.8	27.9
95°	31.9	59.2	31.9	36.1	43.9
97.5°	56.6	113.6	234.5	69.2	59.8
100°	75.8	142.1	470.7	138.5	91.7
102.5°	94.9	164.3	636.6	365.6	200.2
105°	123.6	189.9	721.9	922.3	610.3
107.5°	152.4	202.3	689.2	1342.2	1257.2
110°	171.5	218.3	670.1	1410.4	1515.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	190.7	237.5	650.9	1370.5	1547.6
115°	219.4	266.2	622.2	1293.3	1511.7
117.5°	248.9	294.9	615.0	1209.7	1434.3
120°	271.2	314.1	602.3	1146.1	1380.1
122.5°	287.2	333.2	586.3	1091.4	1306.7
125°	315.1	358.0	586.3	1025.3	1212.5
127.5°	338.2	381.9	587.1	948.7	1133.6
130°	351.0	397.8	590.3	897.4	1072.9
132.5°	367.0	413.8	590.3	874.4	1018.7
135°	390.9	433.8	590.3	844.4	969.2
137.5°	410.8	456.8	590.3	811.3	918.2
140°	426.8	469.7	590.3	792.0	889.5
142.5°	442.7	482.5	593.5	769.5	860.7
145°	462.7	501.7	594.3	735.7	813.7
147.5°	486.6	520.9	599.1	711.3	771.4
150°	502.6	533.8	602.3	695.2	745.9
152.5°	518.5	546.6	602.3	682.2	723.5
155°	542.5	562.0	606.3	666.8	698.0
157.5°	561.6	580.3	611.1	657.0	679.7
160°	574.4	590.0	614.2	650.6	670.1
162.5°	583.9	599.5	617.4	647.3	660.5
165°	602.3	610.1	622.2	638.4	650.1
167.5°	612.7	619.7	626.2	634.4	641.4
170°	622.2	626.1	626.2	634.3	638.2
172.5°	625.4	632.4	629.4	631.1	635.0
175°	634.2	638.1	634.2	630.1	626.2
177.5°	634.2	637.3	634.2	634.1	631.0
180°	634.2	634.2	634.2	634.2	634.2



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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