

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: P621966

Luminaire Tested: VLT-BB-M-100U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621966  
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-075D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

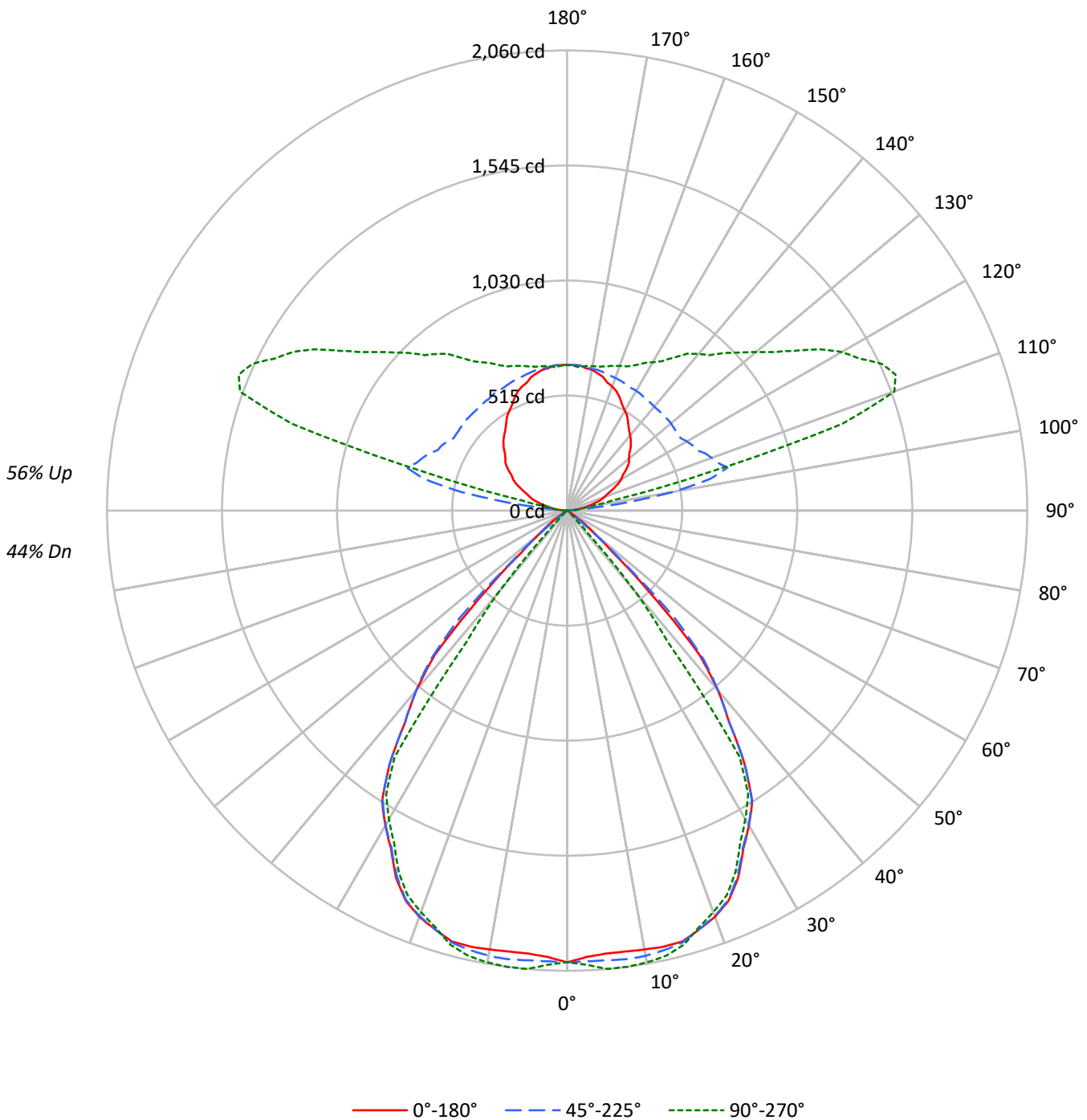
Lumens per Lamp: N/A  
Luminaire Lumens: 6288.5 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 61.3  
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44				44
1	98	95	92	89	90	87	84	82	73	71	69	60	59	58	48	47	46	41				41
2	91	85	80	76	84	79	74	71	66	63	61	55	53	51	44	43	42	38				38
3	85	77	71	66	78	71	66	62	60	57	54	51	48	46	41	40	38	34				34
4	78	69	63	58	72	64	59	54	55	51	48	46	44	41	38	37	35	31				31
5	73	63	56	51	67	59	53	48	50	46	43	43	40	37	36	34	32	29				29
6	68	57	50	45	63	54	47	43	46	42	38	40	36	34	33	31	29	27				27
7	63	52	45	41	58	49	43	39	43	38	35	37	33	31	31	29	27	24				24
8	59	48	41	37	55	45	39	35	39	35	31	34	31	28	29	27	25	23				23
9	55	44	38	33	51	42	36	32	37	32	29	32	28	26	27	25	23	21				21
10	52	41	35	30	48	39	33	29	34	29	26	30	26	24	25	23	21	19				19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	14510	14510	14510
5°	14338	14555	14837
10°	14536	14745	14965
15°	14831	14865	14955
20°	14774	14751	14612
25°	14351	14291	14124
30°	13494	13469	13219
35°	12126	12139	11796
40°	9845	9845	4506
45°	5662	6886	91
50°	1784	1650	84
55°	623	133	75
60°	43	86	86
65°	25	76	76
70°	31	94	94
75°	0	83	83
80°	0	124	124
85°	0	124	124

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 6886 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.2	3.1
10°-20°	563.8	9.0
20°-30°	823.6	13.1
30°-40°	815.7	13.0
40°-50°	341.5	5.4
50°-60°	36.5	0.6
60°-70°	5.1	0.1
70°-80°	3.1	0.0
80°-90°	2.9	0.0
90°-100°	80.2	1.3
100°-110°	571.3	9.1
110°-120°	775.6	12.3
120°-130°	631.3	10.0
130°-140°	507.7	8.1
140°-150°	400.3	6.4
150°-160°	292.7	4.7
160°-170°	181.8	2.9
170°-180°	62.0	1.0
0°-30°	1580.7	25.1
0°-40°	2396.4	38.1
0°-60°	2774.4	44.1
0°-90°	2785.6	44.3
90°-120°	1427.1	22.7
90°-150°	2966.4	47.2
90°-180°	3503.0	55.7
0°-180°	6288.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2022	2022	2022	2022	2022	
5°	1990	2026	2021	2026	2060	190
15°	1996	2038	2001	1986	2013	561
25°	1812	1843	1805	1762	1784	828
35°	1384	1387	1386	1358	1346	849
45°	558	663	678	14	9	438
55°	50	66	11	8	6	56
65°	2	6	4	4	4	2
75°	0	3	3	3	3	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°	2022.1	2022.1	2022.1	2022.1	2022.1
2.5°	2000.3	2028.7	2019.6	2017.6	2035.3
5°	1990.4	2025.8	2020.6	2025.8	2059.8
7.5°	1991.3	2024.0	2026.0	2025.8	2059.8
10°	1994.9	2028.8	2023.6	2019.8	2053.7
12.5°	1999.7	2034.8	2015.1	2008.9	2041.7
15°	1996.4	2037.7	2000.9	1986.5	2013.0
17.5°	1966.0	2013.7	1965.4	1937.5	1956.9
20°	1934.6	1984.7	1931.6	1892.9	1913.5
22.5°	1890.0	1936.6	1885.7	1841.1	1865.2
25°	1812.5	1843.4	1804.9	1761.7	1783.8
27.5°	1706.9	1724.6	1702.7	1663.8	1677.4
30°	1628.5	1640.3	1625.5	1586.5	1595.3
32.5°	1541.7	1547.5	1538.6	1503.1	1507.3
35°	1384.2	1387.2	1385.7	1358.3	1346.5
37.5°	1189.7	1195.6	1192.1	1073.0	740.4
40°	1051.0	1056.9	1051.0	628.4	481.0
42.5°	877.3	915.0	905.0	428.6	137.2
45°	557.9	662.6	678.5	13.5	9.0
47.5°	275.6	388.6	319.1	8.7	8.7
50°	159.8	229.1	147.8	7.5	7.5
52.5°	106.8	139.5	42.8	7.5	7.5
55°	49.8	66.0	10.6	7.5	6.0
57.5°	17.5	33.1	7.2	6.0	6.0
60°	3.0	16.3	6.0	6.0	6.0
62.5°	1.8	9.2	6.0	4.9	6.0
65°	1.5	5.9	4.5	4.5	4.5
67.5°	1.5	4.5	4.5	4.5	4.5
70°	1.5	4.5	4.5	4.5	4.5
72.5°	0.3	3.3	3.3	3.3	4.5
75°	0.0	2.9	3.0	3.0	3.0
77.5°	0.0	2.9	3.0	3.0	3.0
80°	0.0	2.9	3.0	3.0	3.0
82.5°	0.0	1.8	1.8	1.8	3.0
85°	0.0	1.5	1.5	1.5	1.5
87.5°	0.0	2.0	2.8	3.7	3.7
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	0.00	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