

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: P621990

Luminaire Tested: VLT-BB-M-150U-075D-940-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621990  
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-150U-075D-940-UNV-STD-W-4  
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE  
BLACK BAFFLE WITH MEDIUM OPTIC  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

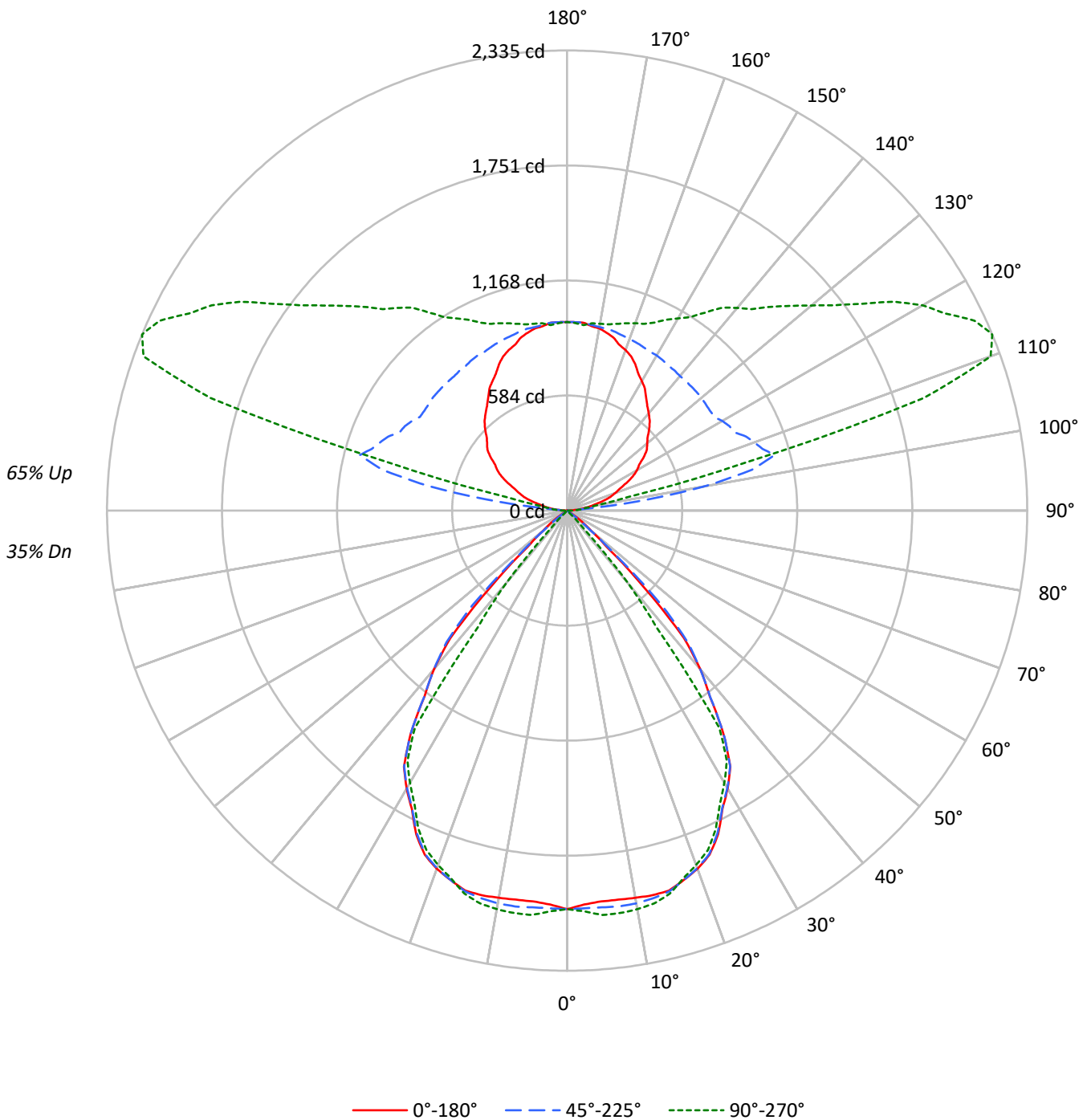
Lumens per Lamp: N/A  
Luminaire Lumens: 7926.4 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	79	68	66	64	53	52	51	40	39	39	32				
2	89	82	77	73	80	75	71	67	61	58	56	49	47	45	37	36	35	30				
3	82	74	68	63	74	68	62	58	56	52	49	45	42	40	34	33	32	27				
4	76	66	60	55	69	61	55	51	51	46	43	41	38	36	32	30	29	25				
5	70	60	53	48	64	55	49	45	46	42	38	37	35	32	30	28	26	23				
6	65	55	47	42	59	50	44	40	42	38	34	35	31	29	27	26	24	21				
7	61	50	43	38	55	46	40	35	39	34	31	32	29	26	26	24	22	19				
8	56	45	39	34	52	42	36	32	36	31	28	30	26	24	24	22	20	18				
9	53	42	35	31	48	39	33	29	33	28	25	27	24	22	22	20	19	17				
10	49	39	32	28	45	36	30	26	31	26	23	26	22	20	21	19	17	15				

**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	2.4
10°-20°	563.8	7.1
20°-30°	823.6	10.4
30°-40°	815.7	10.3
40°-50°	341.5	4.3
50°-60°	36.5	0.5
60°-70°	5.1	0.1
70°-80°	3.1	0.0
80°-90°	3.6	0.0
90°-100°	117.7	1.5
100°-110°	838.3	10.6
110°-120°	1138.2	14.4
120°-130°	926.4	11.7
130°-140°	745.1	9.4
140°-150°	587.4	7.4
150°-160°	429.5	5.4
160°-170°	266.8	3.4
170°-180°	91.0	1.1
0°-30°	1580.7	19.9
0°-40°	2396.4	30.2
0°-60°	2774.4	35.0
0°-90°	2786.3	35.2
90°-120°	2094.2	26.4
90°-150°	4353.0	54.9
90°-180°	5140.0	64.8
0°-180°	7926.4	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	6	12	18	18	2
95°	48	89	48	54	66	54
105°	187	287	1089	1392	921	197
115°	331	402	939	1951	2281	329
125°	475	540	885	1547	1830	422
135°	590	654	891	1274	1462	454
145°	698	757	897	1110	1228	438
155°	818	848	915	1006	1053	376
165°	909	920	939	963	981	255
175°	957	963	957	951	945	90
180°	957	957	957	957	957	



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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	2.4	3.6	4.8	4.8
90°	0.0	5.9	12.0	18.1	18.1
92.5°	14.4	20.3	26.5	37.4	42.1
95°	48.1	89.3	48.1	54.4	66.2
97.5°	85.5	171.4	353.9	104.4	90.3
100°	114.3	214.4	710.2	209.0	138.4
102.5°	143.2	248.0	960.5	551.6	302.1
105°	186.6	286.6	1089.3	1391.5	920.8
107.5°	229.9	305.2	1039.9	2025.2	1896.9
110°	258.8	329.4	1011.1	2128.0	2286.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	287.7	358.3	982.2	2067.9	2335.1
115°	331.0	401.6	938.8	1951.4	2280.9
117.5°	375.5	445.0	928.0	1825.2	2164.2
120°	409.2	474.0	908.8	1729.2	2082.3
122.5°	433.3	502.7	884.7	1646.7	1971.6
125°	475.4	540.2	884.7	1547.1	1829.5
127.5°	510.3	576.3	885.9	1431.5	1710.4
130°	529.6	600.2	890.7	1354.1	1618.9
132.5°	553.7	624.3	890.7	1319.3	1537.1
135°	589.8	654.5	890.7	1274.1	1462.4
137.5°	619.9	689.3	890.7	1224.2	1385.4
140°	643.9	708.7	890.7	1195.0	1342.1
142.5°	668.0	728.0	895.5	1161.0	1298.7
145°	698.1	757.0	896.7	1110.0	1227.7
147.5°	734.2	786.0	903.9	1073.3	1163.9
150°	758.3	805.4	908.8	1048.9	1125.4
152.5°	782.4	824.7	908.8	1029.3	1091.7
155°	818.5	847.9	914.8	1006.1	1053.2
157.5°	847.4	875.6	922.0	991.4	1025.5
160°	866.6	890.2	926.8	981.6	1011.1
162.5°	881.1	904.6	931.6	976.6	996.6
165°	908.8	920.5	938.8	963.3	981.0
167.5°	924.4	935.0	944.9	957.1	967.7
170°	938.8	944.7	944.9	957.0	962.9
172.5°	943.7	954.2	949.7	952.2	958.1
175°	956.9	962.8	956.9	950.7	944.9
177.5°	956.9	961.6	956.9	956.8	952.1
180°	956.9	956.9	956.9	956.9	956.9



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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