

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: P621989

Luminaire Tested: VLT-BB-M-150U-075D-935-UNV-STD-W-4

Issue Date: 9/2/2020

**Test Information**

Test Method: LM-79-2019  
Report Number: P621989  
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-935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

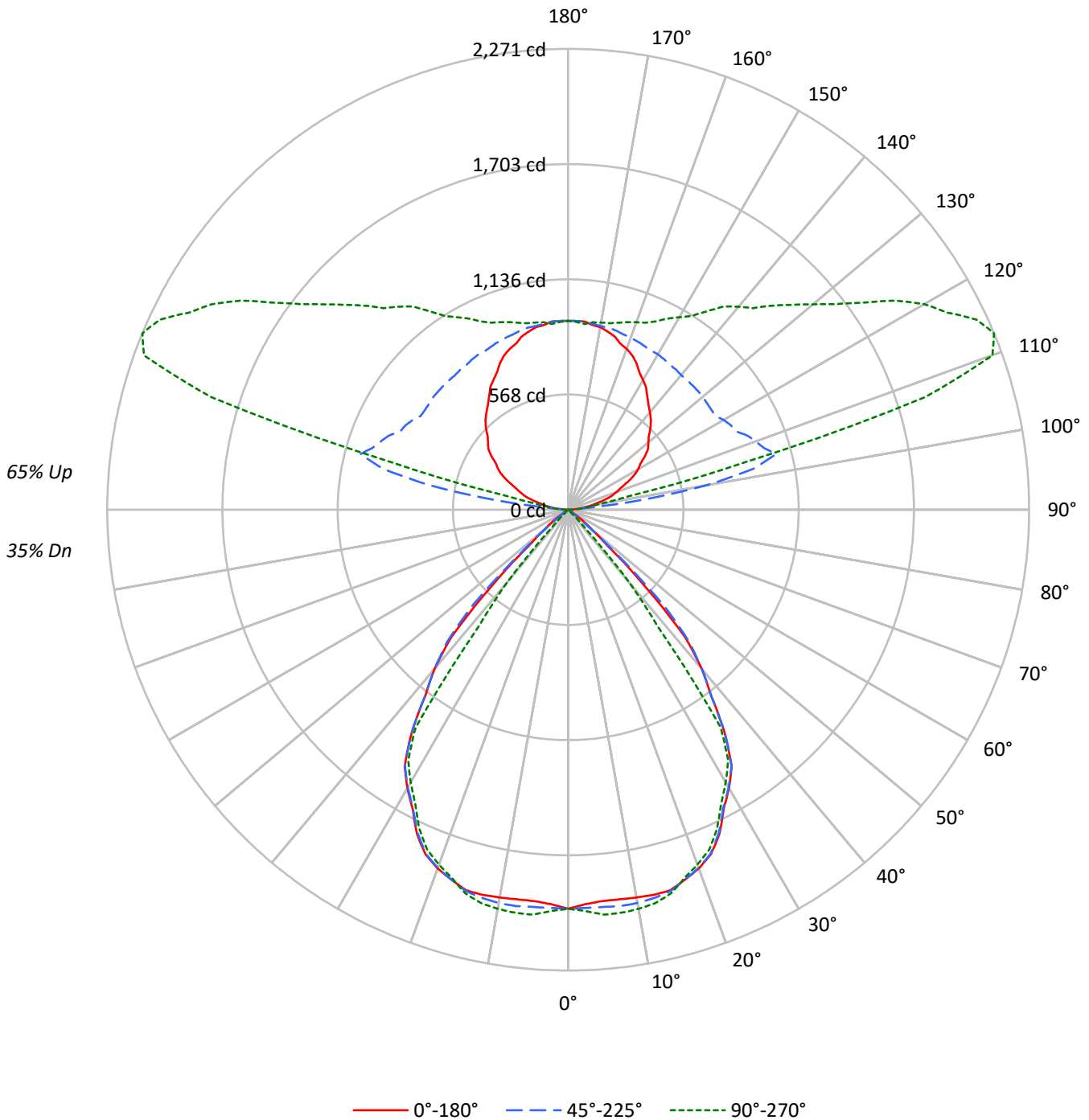
Lumens per Lamp: N/A  
Luminaire Lumens: 7708.8 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14  
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.3  
Input Voltage (V): 120  
Input Current (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	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°	14111	14111	14111
5°	13944	14155	14430
10°	14137	14340	14554
15°	14424	14457	14544
20°	14368	14345	14211
25°	13957	13899	13736
30°	13123	13099	12856
35°	11793	11806	11472
40°	9575	9575	4382
45°	5506	6697	89
50°	1735	1604	81
55°	606	129	74
60°	42	85	85
65°	25	75	75
70°	31	92	92
75°	0	80	80
80°	0	120	120
85°	0	124	124

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 45°  
 Luminance: 6697 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.9	2.4
10°-20°	548.3	7.1
20°-30°	801.0	10.4
30°-40°	793.3	10.3
40°-50°	332.1	4.3
50°-60°	35.5	0.5
60°-70°	5.0	0.1
70°-80°	3.0	0.0
80°-90°	3.5	0.0
90°-100°	114.4	1.5
100°-110°	815.3	10.6
110°-120°	1106.9	14.4
120°-130°	900.9	11.7
130°-140°	724.6	9.4
140°-150°	571.2	7.4
150°-160°	417.7	5.4
160°-170°	259.4	3.4
170°-180°	88.5	1.1
0°-30°	1537.3	19.9
0°-40°	2330.6	30.2
0°-60°	2698.3	35.0
0°-90°	2709.8	35.2
90°-120°	2036.7	26.4
90°-150°	4233.4	54.9
90°-180°	4999.0	64.8
0°-180°	7708.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1966	1966	1966	1966	1966	
5°	1936	1970	1965	1970	2003	185
15°	1942	1982	1946	1932	1958	545
25°	1763	1793	1755	1713	1735	805
35°	1346	1349	1348	1321	1310	826
45°	543	644	660	13	9	426
55°	48	64	10	7	6	54
65°	2	6	4	4	4	2
75°	0	3	3	3	3	0
85°	0	1	2	2	2	0
90°	0	6	12	18	18	2
95°	47	87	47	53	64	52
105°	181	279	1059	1353	896	191
115°	322	391	913	1898	2218	320
125°	462	525	860	1505	1779	411
135°	574	636	866	1239	1422	441
145°	679	736	872	1080	1194	426
155°	796	825	890	978	1024	365
165°	884	895	913	937	954	248
175°	931	936	931	925	919	88
180°	931	931	931	931	931	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1966.5	1966.5	1966.5	1966.5	1966.5
2.5°	1945.4	1972.9	1964.2	1962.2	1979.4
5°	1935.7	1970.1	1965.1	1970.2	2003.2
7.5°	1936.6	1968.4	1970.3	1970.2	2003.2
10°	1940.1	1973.1	1968.0	1964.3	1997.3
12.5°	1944.8	1978.9	1959.8	1953.8	1985.6
15°	1941.6	1981.7	1946.0	1931.9	1957.7
17.5°	1912.0	1958.4	1911.4	1884.2	1903.2
20°	1881.5	1930.2	1878.5	1840.9	1860.9
22.5°	1838.1	1883.4	1834.0	1790.5	1814.0
25°	1762.7	1792.8	1755.4	1713.3	1734.8
27.5°	1660.0	1677.2	1655.9	1618.1	1631.3
30°	1583.8	1595.3	1580.8	1542.9	1551.5
32.5°	1499.3	1505.0	1496.4	1461.9	1465.9
35°	1346.2	1349.1	1347.7	1321.0	1309.6
37.5°	1157.0	1162.8	1159.4	1043.5	720.0
40°	1022.1	1027.9	1022.1	611.2	467.8
42.5°	853.2	889.9	880.2	416.8	133.4
45°	542.6	644.4	659.9	13.1	8.8
47.5°	268.1	377.9	310.3	8.5	8.5
50°	155.4	222.8	143.7	7.3	7.3
52.5°	103.8	135.7	41.6	7.3	7.3
55°	48.4	64.2	10.3	7.3	5.9
57.5°	17.0	32.2	7.0	5.9	5.9
60°	2.9	15.8	5.9	5.9	5.9
62.5°	1.8	8.9	5.9	4.7	5.9
65°	1.5	5.8	4.4	4.4	4.4
67.5°	1.5	4.3	4.4	4.4	4.4
70°	1.5	4.3	4.4	4.4	4.4
72.5°	0.3	3.2	3.2	3.3	4.4
75°	0.0	2.9	2.9	2.9	2.9
77.5°	0.0	2.9	2.9	2.9	2.9
80°	0.0	2.9	2.9	2.9	2.9
82.5°	0.0	1.7	1.8	1.8	2.9
85°	0.0	1.4	1.5	1.5	1.5
87.5°	0.0	2.3	3.5	4.7	4.7
90°	0.0	5.7	11.7	17.6	17.6
92.5°	14.0	19.8	25.8	36.4	41.0
95°	46.8	86.9	46.8	52.9	64.4
97.5°	83.1	166.7	344.2	101.5	87.8
100°	111.2	208.5	690.6	203.3	134.6
102.5°	139.3	241.2	934.1	536.5	293.8
105°	181.4	278.7	1059.4	1353.3	895.5
107.5°	223.6	296.8	1011.4	1969.6	1844.8
110°	251.7	320.4	983.3	2069.6	2224.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	279.8	348.4	955.2	2011.1	2270.9
115°	321.9	390.6	913.1	1897.8	2218.3
117.5°	365.2	432.8	902.5	1775.1	2104.7
120°	398.0	461.0	883.8	1681.7	2025.1
122.5°	421.4	488.9	860.4	1601.5	1917.4
125°	462.4	525.3	860.4	1504.6	1779.3
127.5°	496.3	560.4	861.6	1392.1	1663.4
130°	515.1	583.7	866.2	1316.9	1574.4
132.5°	538.5	607.1	866.2	1283.1	1494.8
135°	573.6	636.5	866.2	1239.1	1422.3
137.5°	602.9	670.4	866.2	1190.5	1347.3
140°	626.3	689.2	866.2	1162.1	1305.2
142.5°	649.7	708.0	870.9	1129.1	1263.1
145°	678.9	736.2	872.1	1079.5	1194.0
147.5°	714.1	764.4	879.1	1043.8	1132.0
150°	737.5	783.3	883.8	1020.1	1094.5
152.5°	760.9	802.1	883.8	1001.1	1061.7
155°	796.0	824.6	889.6	978.5	1024.3
157.5°	824.1	851.6	896.7	964.1	997.3
160°	842.8	865.7	901.4	954.7	983.3
162.5°	856.9	879.8	906.0	949.8	969.2
165°	883.8	895.2	913.1	936.9	954.0
167.5°	899.0	909.3	918.9	930.9	941.2
170°	913.1	918.8	918.9	930.7	936.5
172.5°	917.7	928.0	923.6	926.1	931.8
175°	930.6	936.3	930.6	924.6	918.9
177.5°	930.6	935.2	930.6	930.5	925.9
180°	930.6	930.6	930.6	930.6	930.6



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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