

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: P621992

Luminaire Tested: VLT-BB-M-150U-100D-935-UNV-STD-W-4

Issue Date: 9/2/2020

Test Information

Test Method: LM-79-2019
Report Number: P621992
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-100D-935-UNV-STD-W-4
Description: CORELITE VAULT SUSPENDED LED LUMINAIRE
BLACK BAFFLE WITH MEDIUM OPTIC
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

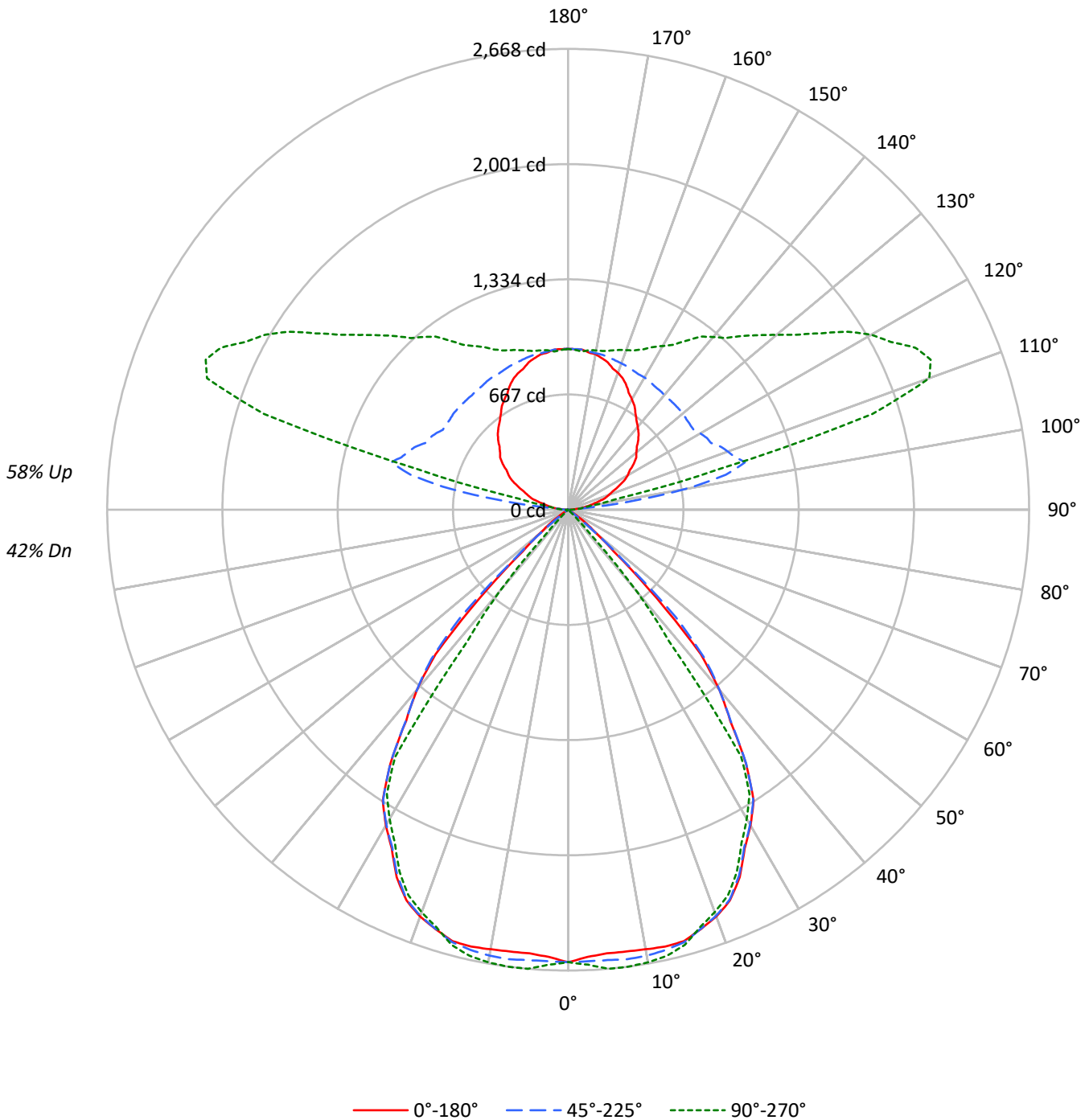
Lumens per Lamp: N/A
Luminaire Lumens: 8607.8 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.14
Luminous Opening: Rectangular (W 0.38' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 94.7
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



TEST NUMBER: P621992
CATALOG NUMBER: VLT-BB-M-150U-100D-935-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P621992

CATALOG NUMBER: VLT-BB-M-150U-100D-935-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0														
RCR																																						
0	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49	42																				
1	98	94	91	88	89	86	84	81	72	70	68	58	57	56	46	45	44	39																				
2	90	84	79	75	83	78	73	70	65	62	59	53	51	50	43	41	40	36																				
3	84	76	70	65	77	70	65	61	59	55	52	49	46	44	40	38	37	33																				
4	78	69	62	57	71	63	58	53	54	50	46	45	42	40	37	35	33	30																				
5	72	62	55	50	66	58	52	47	49	45	41	41	38	36	34	32	31	27																				
6	67	57	50	44	62	53	47	42	45	41	37	38	35	33	32	30	28	25																				
7	63	52	45	40	58	48	42	38	42	37	34	35	32	30	30	27	26	23																				
8	58	47	41	36	54	44	38	34	38	34	31	33	30	27	28	25	24	21																				
9	55	44	37	32	50	41	35	31	36	31	28	31	27	25	26	24	22	20																				
10	51	40	34	30	47	38	32	28	33	29	25	29	25	23	24	22	20	18																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18797	18797	18797
5°	18573	18855	19221
10°	18831	19101	19386
15°	19213	19257	19373
20°	19138	19108	18929
25°	18590	18513	18296
30°	17480	17448	17124
35°	15709	15725	15280
40°	12754	12754	5837
45°	7334	8920	119
50°	2312	2137	109
55°	807	171	98
60°	56	112	112
65°	34	100	100
70°	42	124	124
75°	0	108	108
80°	0	161	161
85°	0	165	165

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 8920 cd/sqm



TEST NUMBER: P621992

CATALOG NUMBER: VLT-BB-M-150U-100D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.3	2.9
10°-20°	730.4	8.5
20°-30°	1067.0	12.4
30°-40°	1056.7	12.3
40°-50°	442.4	5.1
50°-60°	47.3	0.6
60°-70°	6.7	0.1
70°-80°	4.0	0.0
80°-90°	4.0	0.0
90°-100°	114.4	1.3
100°-110°	815.3	9.5
110°-120°	1106.9	12.9
120°-130°	900.9	10.5
130°-140°	724.6	8.4
140°-150°	571.2	6.6
150°-160°	417.7	4.9
160°-170°	259.4	3.0
170°-180°	88.5	1.0
0°-30°	2047.7	23.8
0°-40°	3104.4	36.1
0°-60°	3594.1	41.8
0°-90°	3608.8	41.9
90°-120°	2036.7	23.7
90°-150°	4233.4	49.2
90°-180°	4999.0	58.1
0°-180°	8607.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2619	2619	2619	2619	2619	
5°	2578	2624	2618	2624	2668	247
15°	2586	2640	2592	2573	2608	727
25°	2348	2388	2338	2282	2311	1072
35°	1793	1797	1795	1760	1744	1100
45°	723	858	879	17	12	567
55°	64	86	14	10	8	72
65°	2	8	6	6	6	2
75°	0	4	4	4	4	0
85°	0	2	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	



TEST NUMBER: P621992

CATALOG NUMBER: VLT-BB-M-150U-100D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2619.4	2619.4	2619.4	2619.4	2619.4
2.5°	2591.3	2628.0	2616.3	2613.7	2636.6
5°	2578.4	2624.3	2617.5	2624.3	2668.3
7.5°	2579.6	2622.0	2624.5	2624.3	2668.3
10°	2584.3	2628.2	2621.4	2616.5	2660.5
12.5°	2590.5	2636.0	2610.5	2602.4	2644.8
15°	2586.2	2639.7	2592.1	2573.3	2607.7
17.5°	2546.8	2608.7	2546.0	2509.8	2535.1
20°	2506.1	2571.1	2502.2	2452.1	2478.8
22.5°	2448.3	2508.7	2442.9	2385.0	2416.3
25°	2347.9	2388.0	2338.2	2282.2	2310.8
27.5°	2211.2	2234.1	2205.7	2155.3	2172.9
30°	2109.6	2124.9	2105.7	2055.2	2066.6
32.5°	1997.1	2004.7	1993.2	1947.2	1952.6
35°	1793.2	1797.0	1795.1	1759.6	1744.3
37.5°	1541.2	1548.8	1544.3	1390.0	959.1
40°	1361.5	1369.1	1361.5	814.1	623.1
42.5°	1136.5	1185.4	1172.4	555.2	177.8
45°	722.7	858.3	879.0	17.4	11.7
47.5°	357.1	503.4	413.3	11.3	11.3
50°	207.1	296.8	191.4	9.8	9.8
52.5°	138.3	180.7	55.5	9.8	9.8
55°	64.5	85.5	13.7	9.7	7.8
57.5°	22.7	42.9	9.4	7.8	7.8
60°	3.9	21.1	7.8	7.8	7.8
62.5°	2.3	11.9	7.8	6.3	7.8
65°	2.0	7.7	5.9	5.9	5.9
67.5°	2.0	5.8	5.9	5.9	5.9
70°	2.0	5.8	5.9	5.9	5.9
72.5°	0.4	4.2	4.3	4.3	5.9
75°	0.0	3.8	3.9	3.9	3.9
77.5°	0.0	3.8	3.9	3.9	3.9
80°	0.0	3.8	3.9	3.9	3.9
82.5°	0.0	2.3	2.3	2.4	3.9
85°	0.0	1.9	2.0	2.0	2.0
87.5°	0.0	2.7	3.9	5.1	5.1
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



TEST NUMBER: P621992

CATALOG NUMBER: VLT-BB-M-150U-100D-935-UNV-STD-W-4

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



TEST NUMBER: P621992

CATALOG NUMBER: VLT-BB-M-150U-100D-935-UNV-STD-W-4

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