

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P565457

Luminaire Tested: **VHB-18-N-UNV-L940-CD1-U**

Issue Date: 9/7/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P565457  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-2)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 9/7/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-18-N-UNV-L940-CD1-U  
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 4000K,  
90 CRI LEDS  
  
Light Source: -  
Ballast/Driver: -

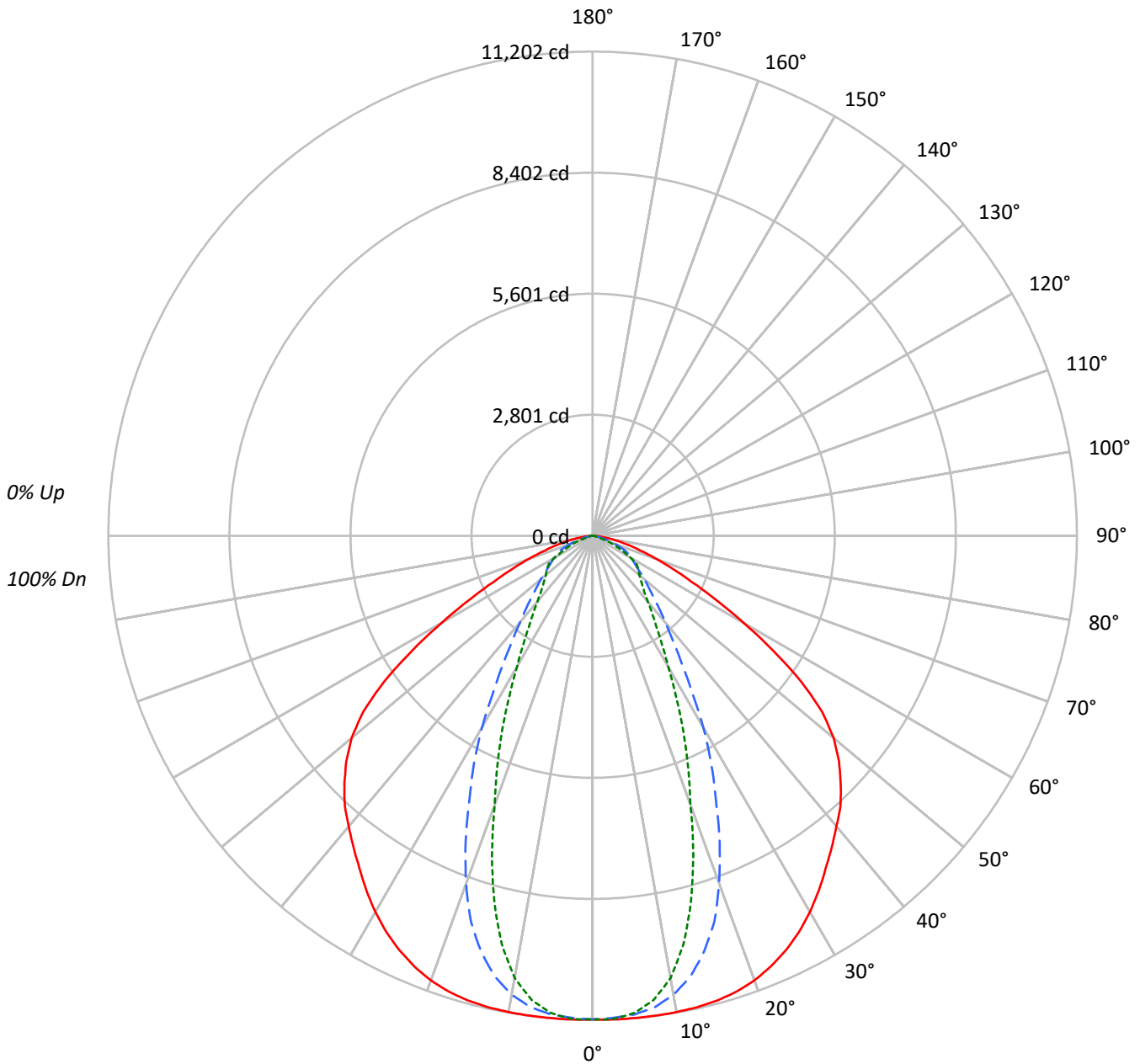
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15783.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 133.8  
Input Voltage (V): NR  
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: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89																			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78																			
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69																			
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62																			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55																			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50																			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46																			
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42																			
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39																			
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36																			

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

	0°	45°	90°
0°	68836	68836	68836
5°	69159	68633	68435
10°	69885	67318	64859
15°	70882	63426	55924
20°	71646	56033	43298
25°	71789	45755	33550
30°	71386	36340	24831
35°	70572	26928	19309
40°	70461	20911	15936
45°	70609	17209	14156
50°	69608	14884	13503
55°	63190	13268	13643
60°	49680	12679	12431
65°	36899	12289	9354
70°	28301	9839	5710
75°	21543	7015	3151
80°	15819	3262	2547
85°	9901	2809	2265



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1051.5	6.7
10°-20°	2767.9	17.5
20°-30°	3342.5	21.2
30°-40°	2988.6	18.9
40°-50°	2340.3	14.8
50°-60°	1768.3	11.2
60°-70°	1050.2	6.7
70°-80°	403.6	2.6
80°-90°	70.1	0.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	7161.8	45.4
0°-40°	10150.5	64.3
0°-60°	14259.0	90.3
0°-90°	15783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15783.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11191	11191	11191	11191	11191	
5°	11201	11152	11116	11101	11084	###
15°	11131	10764	9960	9128	8782	3145
25°	10578	9334	6742	5316	4944	4870
35°	9399	6688	3586	2796	2572	5894
45°	8117	3458	1978	1671	1627	6248
55°	5893	1876	1237	1232	1272	5175
65°	2535	1054	844	704	643	2612
75°	906	507	295	146	133	992
85°	140	49	40	35	32	187
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11191.4	11191.4	11191.4	11191.4	11191.4
2.5°	11201.9	11164.9	11162.1	11185.8	11189.3
5°	11201.2	11152.3	11116.0	11101.4	11083.9
7.5°	11197.7	11123.7	11001.6	10884.4	10829.9
10°	11189.3	11058.1	10778.3	10511.7	10384.7
12.5°	11171.2	10940.9	10446.8	9956.9	9690.3
15°	11131.4	10764.3	9960.4	9127.9	8782.4
17.5°	11059.5	10520.8	9364.4	8189.3	7744.7
20°	10945.8	10210.9	8560.5	7118.8	6614.9
22.5°	10782.5	9806.2	7674.9	6155.0	5752.4
25°	10578.0	9333.7	6741.9	5315.5	4943.6
27.5°	10335.2	8782.4	5938.0	4533.9	4167.6
30°	10051.1	8138.3	5116.6	3795.6	3496.2
32.5°	9733.6	7460.0	4259.0	3232.4	2986.1
35°	9398.6	6688.2	3586.2	2796.3	2571.6
37.5°	9083.2	5861.9	3037.0	2410.4	2252.7
40°	8775.5	4993.8	2604.4	2105.4	1984.7
42.5°	8485.2	4163.4	2273.6	1850.0	1771.1
45°	8117.4	3458.5	1978.4	1671.3	1627.4
47.5°	7727.3	2919.1	1743.9	1526.2	1510.8
50°	7274.4	2486.4	1555.5	1399.9	1411.1
52.5°	6686.8	2144.5	1376.9	1310.6	1343.4
55°	5892.6	1876.5	1237.3	1232.4	1272.2
57.5°	4962.4	1620.4	1127.0	1157.7	1202.4
60°	4038.5	1414.5	1030.7	1075.4	1010.5
62.5°	3226.2	1225.4	939.3	857.7	801.8
65°	2535.3	1053.8	844.4	704.1	642.7
67.5°	2021.7	893.9	710.4	560.4	509.4
70°	1573.7	751.6	547.1	420.8	317.5
72.5°	1205.9	628.1	427.1	239.4	180.7
75°	906.5	506.6	295.2	145.9	132.6
77.5°	646.2	376.1	157.7	105.4	97.7
80°	446.6	241.5	92.1	76.1	71.9
82.5°	277.0	116.5	62.8	54.4	50.9
85°	140.3	48.8	39.8	34.9	32.1
87.5°	46.8	23.7	18.1	16.7	15.4
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)