

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: P565453

Luminaire Tested: **VHB-18-N-UNV-L735-CD1-U**

Issue Date: 9/7/2021



**Test Information**

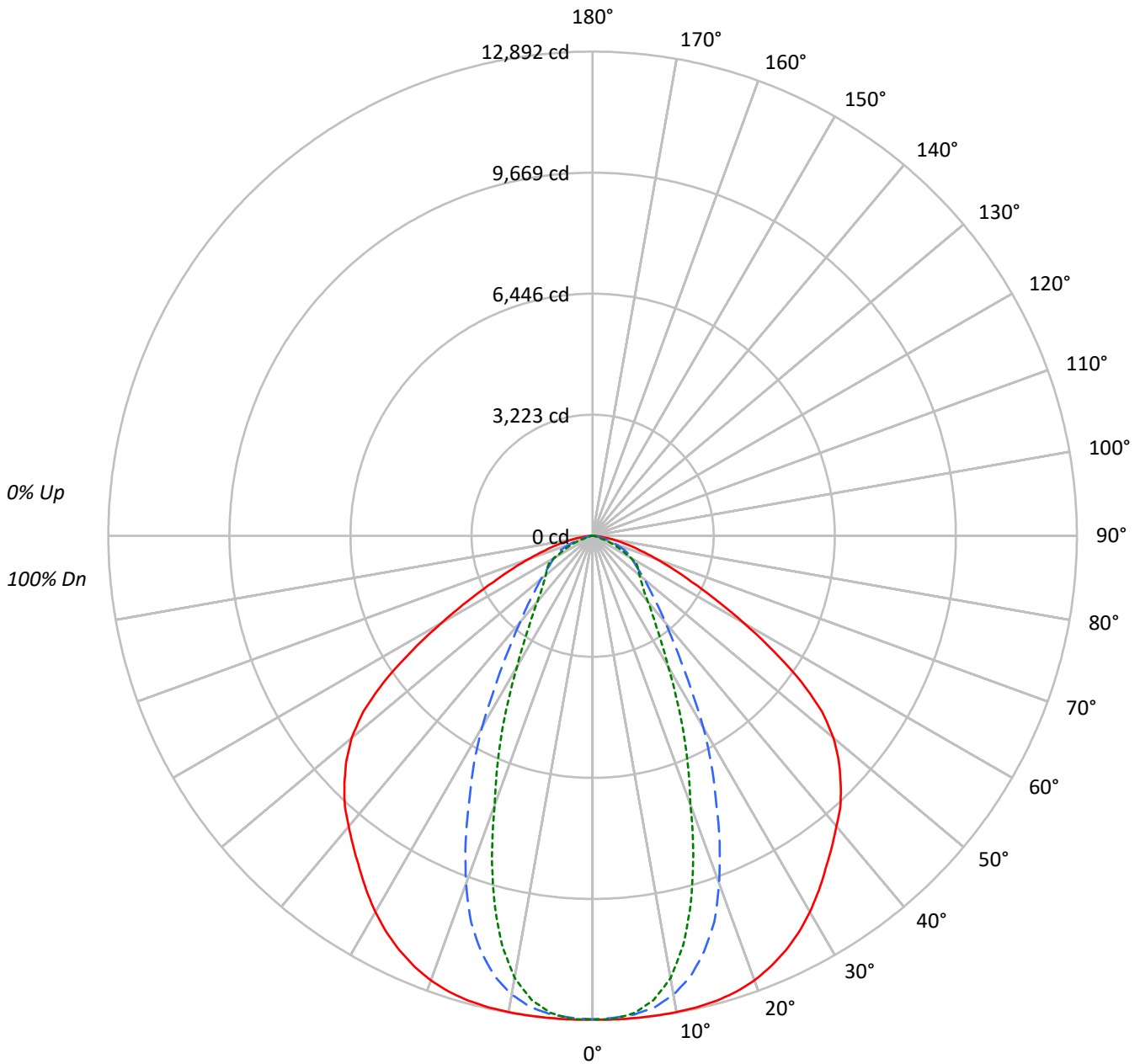
Test Method: LM-79-08  
Report Number: P565453  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-2)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 9/7/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-18-N-UNV-L735-CD1-U  
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 3500K,  
70 CRI LEDS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18164.0 lumens  
Efficiency: N/A  
Efficacy: 135.8 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

TEST NUMBER: P565453  
CATALOG NUMBER: VHB-18-N-UNV-L735-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P565453

CATALOG NUMBER: VHB-18-N-UNV-L735-CD1-U

**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°	79220	79220	79220
5°	79593	78988	78760
10°	80427	77473	74644
15°	81576	72994	64361
20°	82454	64486	49830
25°	82619	52658	38611
30°	82155	41822	28578
35°	81218	30991	22222
40°	81090	24066	18340
45°	81262	19806	16291
50°	80109	17130	15539
55°	72723	15269	15700
60°	57174	14592	14306
65°	42466	14144	10766
70°	32568	11324	6571
75°	24794	8073	3627
80°	18206	3755	2929
85°	11390	3232	2604



TEST NUMBER: P565453

CATALOG NUMBER: VHB-18-N-UNV-L735-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1210.1	6.7
10°-20°	3185.4	17.5
20°-30°	3846.8	21.2
30°-40°	3439.5	18.9
40°-50°	2693.4	14.8
50°-60°	2035.0	11.2
60°-70°	1208.7	6.7
70°-80°	464.5	2.6
80°-90°	80.7	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°	8242.3	45.4
0°-40°	11681.8	64.3
0°-60°	16410.2	90.3
0°-90°	18164.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18164.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12880	12880	12880	12880	12880	
5°	12891	12835	12793	12776	12756	###
15°	12811	12388	11463	10505	10107	3620
25°	12174	10742	7759	6117	5689	5605
35°	10816	7697	4127	3218	2960	6783
45°	9342	3980	2277	1924	1873	7191
55°	6782	2160	1424	1418	1464	5955
65°	2918	1213	972	810	740	3006
75°	1043	583	340	168	153	1142
85°	161	56	46	40	37	215
90°	0	0	0	0	0	



TEST NUMBER: P565453

CATALOG NUMBER: VHB-18-N-UNV-L735-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12879.7	12879.7	12879.7	12879.7	12879.7
2.5°	12891.8	12849.2	12846.0	12873.3	12877.3
5°	12891.0	12834.8	12793.0	12776.1	12756.1
7.5°	12887.0	12801.8	12661.3	12526.4	12463.7
10°	12877.3	12726.3	12404.3	12097.5	11951.3
12.5°	12856.4	12591.4	12022.8	11459.0	11152.2
15°	12810.7	12388.2	11463.0	10504.9	10107.3
17.5°	12727.9	12107.9	10777.1	9424.7	8913.1
20°	12597.0	11751.3	9851.9	8192.7	7612.8
22.5°	12409.1	11285.5	8832.8	7083.6	6620.2
25°	12173.8	10741.8	7759.0	6117.4	5689.3
27.5°	11894.3	10107.3	6833.8	5217.9	4796.3
30°	11567.4	9366.1	5888.5	4368.2	4023.7
32.5°	11202.0	8585.4	4901.5	3720.1	3436.6
35°	10816.5	7697.2	4127.3	3218.1	2959.5
37.5°	10453.5	6746.3	3495.2	2774.0	2592.5
40°	10099.3	5747.2	2997.3	2423.0	2284.1
42.5°	9765.2	4791.5	2616.6	2129.1	2038.3
45°	9342.0	3980.3	2276.9	1923.5	1872.9
47.5°	8893.0	3359.5	2007.0	1756.4	1738.8
50°	8371.8	2861.5	1790.2	1611.1	1623.9
52.5°	7695.6	2468.0	1584.6	1508.3	1546.0
55°	6781.6	2159.6	1423.9	1418.3	1464.1
57.5°	5711.0	1864.9	1297.0	1332.4	1383.8
60°	4647.7	1627.9	1186.2	1237.6	1162.9
62.5°	3712.9	1410.3	1081.0	987.0	922.8
65°	2917.8	1212.7	971.8	810.4	739.7
67.5°	2326.7	1028.8	817.6	644.9	586.3
70°	1811.0	865.0	629.7	484.3	365.4
72.5°	1387.8	722.8	491.5	275.5	208.0
75°	1043.3	583.1	339.7	167.9	152.6
77.5°	743.7	432.9	181.5	121.3	112.4
80°	514.0	277.9	106.0	87.5	82.7
82.5°	318.8	134.1	72.3	62.6	58.6
85°	161.4	56.2	45.8	40.2	36.9
87.5°	53.8	27.3	20.9	19.3	17.7
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)