

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: P470121

Luminaire Tested: **VHB2-12-N-UNV-L740-CD-U**

Issue Date: 01/20/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P470121  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/20/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB2-12-N-UNV-L740-CD-U  
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS  
Light Source: 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

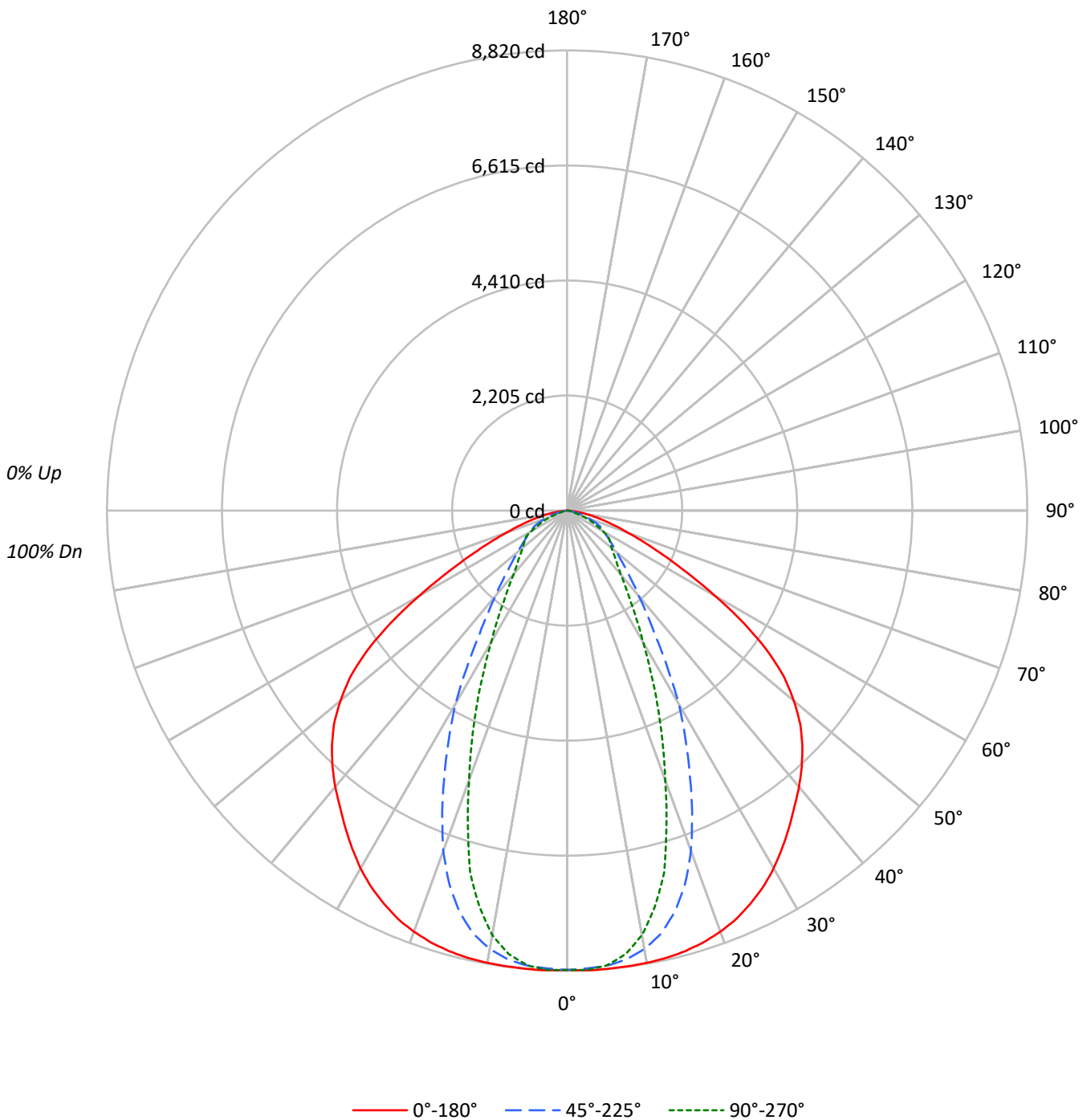
Lumens per Lamp: N/A  
Luminaire Lumens: 12715.6 lumens  
Efficiency: N/A  
Efficacy: 156.2 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.75 / 0.88  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 81.4  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89				89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78				78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69				69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62				62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55				55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50				50
7	73	61	54	48	71	60	53	48	59	53	48	58	52	48	56	51	47	46				46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42				42
9	65	53	46	41	63	52	45	41	51	45	40	50	44	40	49	44	40	38				38
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36				36

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

	0°	45°	90°
0°	54152	54152	54152
5°	54453	54056	54014
10°	54974	53284	51604
15°	55667	50725	45732
20°	56219	45426	35953
25°	56419	37719	27744
30°	56239	30370	20657
35°	55682	22340	15846
40°	55510	17154	12840
45°	55464	13861	11405
50°	54312	11897	10643
55°	50205	10649	10667
60°	40248	10055	9735
65°	29900	9808	7868
70°	22429	8066	5343
75°	16902	6108	2899
80°	12284	2982	2441
85°	7890	2555	1955



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	829.5	6.5
10°-20°	2210.5	17.4
20°-30°	2707.8	21.3
30°-40°	2431.8	19.1
40°-50°	1884.0	14.8
50°-60°	1409.8	11.1
60°-70°	845.9	6.7
70°-80°	335.4	2.6
80°-90°	60.9	0.5
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°	5747.8	45.2
0°-40°	8179.6	64.3
0°-60°	11473.4	90.2
0°-90°	12715.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12715.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8804	8804	8804	8804	8804	
5°	8819	8780	8755	8753	8748	841
15°	8742	8513	7966	7377	7182	2470
25°	8313	7443	5558	4444	4088	3830
35°	7416	5484	2975	2280	2110	4645
45°	6376	2857	1594	1343	1311	4902
55°	4682	1516	993	962	995	4109
65°	2054	842	674	572	541	2104
75°	711	411	257	135	122	784
85°	112	45	36	31	28	148
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8804.1	8804.1	8804.1	8804.1	8804.1
2.5°	8819.9	8787.7	8783.2	8805.3	8811.5
5°	8819.4	8780.4	8755.0	8752.7	8748.2
7.5°	8812.0	8760.6	8678.7	8613.8	8575.4
10°	8801.9	8711.5	8531.3	8344.3	8262.4
12.5°	8782.7	8634.7	8305.9	7946.1	7773.2
15°	8742.0	8512.7	7965.9	7376.7	7181.8
17.5°	8679.3	8329.6	7508.9	6657.0	6330.0
20°	8588.9	8098.6	6940.0	5901.8	5492.8
22.5°	8472.5	7800.9	6254.9	5094.0	4763.0
25°	8313.3	7442.8	5557.8	4443.9	4088.0
27.5°	8135.3	7040.0	4900.3	3762.6	3451.4
30°	7918.4	6550.3	4276.1	3166.1	2908.5
32.5°	7671.6	6045.8	3589.2	2658.9	2480.4
35°	7415.7	5483.8	2975.2	2280.4	2110.4
37.5°	7153.6	4846.1	2512.0	1955.6	1833.0
40°	6913.5	4134.9	2136.4	1696.9	1599.2
42.5°	6655.9	3467.2	1847.1	1490.1	1430.3
45°	6376.3	2857.1	1593.5	1343.3	1311.1
47.5°	6060.5	2410.3	1395.8	1230.9	1200.9
50°	5675.9	2047.1	1243.3	1113.9	1112.2
52.5°	5243.7	1761.8	1107.7	1029.2	1043.9
55°	4681.7	1516.1	993.0	962.0	994.7
57.5°	4013.4	1315.6	899.3	910.0	936.0
60°	3271.8	1134.8	817.4	826.4	791.4
62.5°	2615.9	976.7	743.4	695.9	651.3
65°	2054.4	841.7	673.9	572.2	540.6
67.5°	1602.0	716.8	564.3	469.4	429.9
70°	1247.2	608.9	448.5	359.8	297.1
72.5°	952.9	506.7	353.6	220.9	167.8
75°	711.2	411.2	257.0	135.0	122.0
77.5°	516.3	307.9	143.5	98.9	92.1
80°	346.8	207.9	84.2	72.3	68.9
82.5°	220.9	109.0	58.2	50.8	46.9
85°	111.8	44.6	36.2	31.1	27.7
87.5°	39.0	21.5	16.4	13.0	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)