

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: P470117

Luminaire Tested: **VHB2-15-N-UNV-L735-CD-U**

Issue Date: 01/20/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P470117  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/20/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB2-15-N-UNV-L735-CD-U  
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS  
Light Source: 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16686.1 lumens  
Efficiency: N/A  
Efficacy: 150.9 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

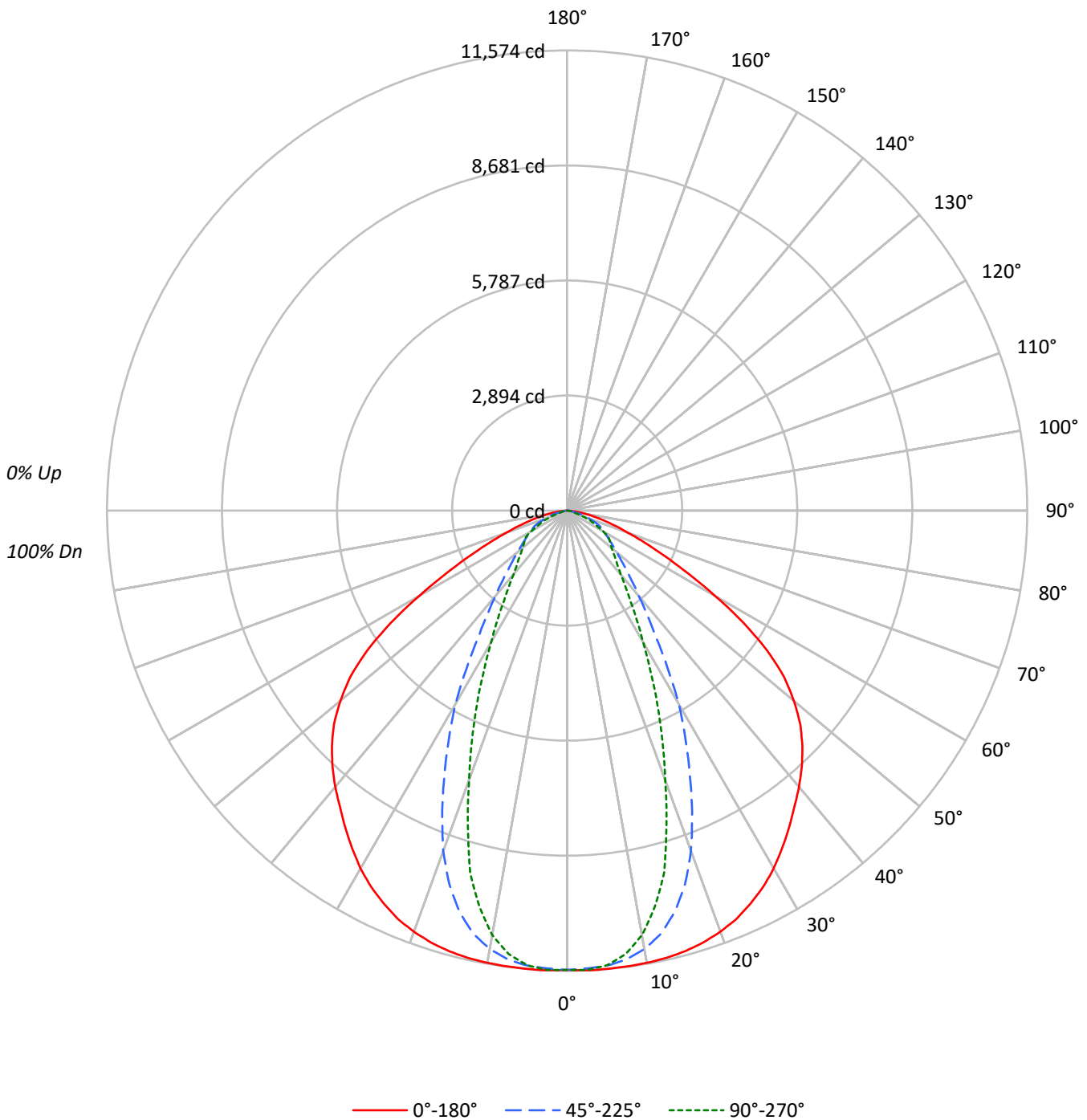
Input Watts (W): 110.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	71062	71062	71062
5°	71457	70935	70880
10°	72139	69922	67718
15°	73050	66564	60012
20°	73774	59611	47180
25°	74036	49497	36407
30°	73800	39853	27108
35°	73070	29316	20795
40°	72844	22509	16849
45°	72784	18190	14966
50°	71271	15612	13966
55°	65881	13974	13999
60°	52816	13195	12775
65°	39238	12870	10325
70°	29434	10585	7012
75°	22177	8016	3805
80°	16120	3910	3202
85°	10360	3345	2562



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1088.6	6.5
10°-20°	2900.7	17.4
20°-30°	3553.3	21.3
30°-40°	3191.1	19.1
40°-50°	2472.3	14.8
50°-60°	1850.1	11.1
60°-70°	1110.0	6.7
70°-80°	440.2	2.6
80°-90°	79.8	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°	7542.6	45.2
0°-40°	10733.7	64.3
0°-60°	15056.1	90.2
0°-90°	16686.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16686.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11553	11553	11553	11553	11553	
5°	11573	11522	11489	11486	11480	###
15°	11472	11171	10453	9680	9424	3242
25°	10909	9767	7293	5832	5364	5026
35°	9731	7196	3904	2992	2769	6096
45°	8367	3749	2091	1763	1720	6433
55°	6144	1990	1303	1262	1305	5392
65°	2696	1104	884	751	709	2761
75°	933	540	337	177	160	1029
85°	147	59	47	41	36	194
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11553.3	11553.3	11553.3	11553.3	11553.3
2.5°	11574.0	11531.8	11525.9	11554.8	11562.9
5°	11573.3	11522.2	11488.8	11485.8	11479.9
7.5°	11563.7	11496.2	11388.7	11303.5	11253.1
10°	11550.3	11431.7	11195.3	10949.9	10842.4
12.5°	11525.1	11330.9	10899.5	10427.3	10200.5
15°	11471.8	11170.8	10453.3	9680.1	9424.4
17.5°	11389.5	10930.6	9853.6	8735.8	8306.6
20°	11270.9	10627.5	9107.1	7744.7	7208.0
22.5°	11118.2	10236.8	8208.0	6684.7	6250.3
25°	10909.1	9766.9	7293.3	5831.5	5364.5
27.5°	10675.6	9238.3	6430.4	4937.5	4529.1
30°	10391.0	8595.7	5611.3	4154.8	3816.8
32.5°	10067.1	7933.7	4710.0	3489.1	3254.9
35°	9731.3	7196.2	3904.2	2992.5	2769.4
37.5°	9387.3	6359.3	3296.4	2566.2	2405.4
40°	9072.3	5426.0	2803.4	2226.7	2098.5
42.5°	8734.3	4549.9	2423.9	1955.4	1876.9
45°	8367.4	3749.3	2091.1	1762.7	1720.5
47.5°	7953.0	3163.0	1831.7	1615.2	1575.9
50°	7448.2	2686.3	1631.5	1461.8	1459.5
52.5°	6881.1	2312.0	1453.6	1350.6	1369.8
55°	6143.6	1989.5	1303.1	1262.4	1305.4
57.5°	5266.7	1726.4	1180.1	1194.2	1228.3
60°	4293.4	1489.2	1072.6	1084.5	1038.5
62.5°	3432.8	1281.6	975.5	913.2	854.7
65°	2696.0	1104.5	884.3	750.9	709.4
67.5°	2102.2	940.7	740.5	616.0	564.1
70°	1636.7	799.1	588.6	472.2	389.9
72.5°	1250.5	664.9	464.0	289.8	220.2
75°	933.2	539.6	337.3	177.2	160.1
77.5°	677.5	404.0	188.3	129.7	120.8
80°	455.1	272.8	110.4	94.9	90.4
82.5°	289.8	143.1	76.3	66.7	61.5
85°	146.8	58.6	47.4	40.8	36.3
87.5°	51.1	28.2	21.5	17.0	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)