

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: P470132

Luminaire Tested: **VHB2-15-N-UNV-L835-CD-U**

Issue Date: 01/20/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P470132  
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-L835-CD-U  
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15426.8 lumens  
Efficiency: N/A  
Efficacy: 139.5 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

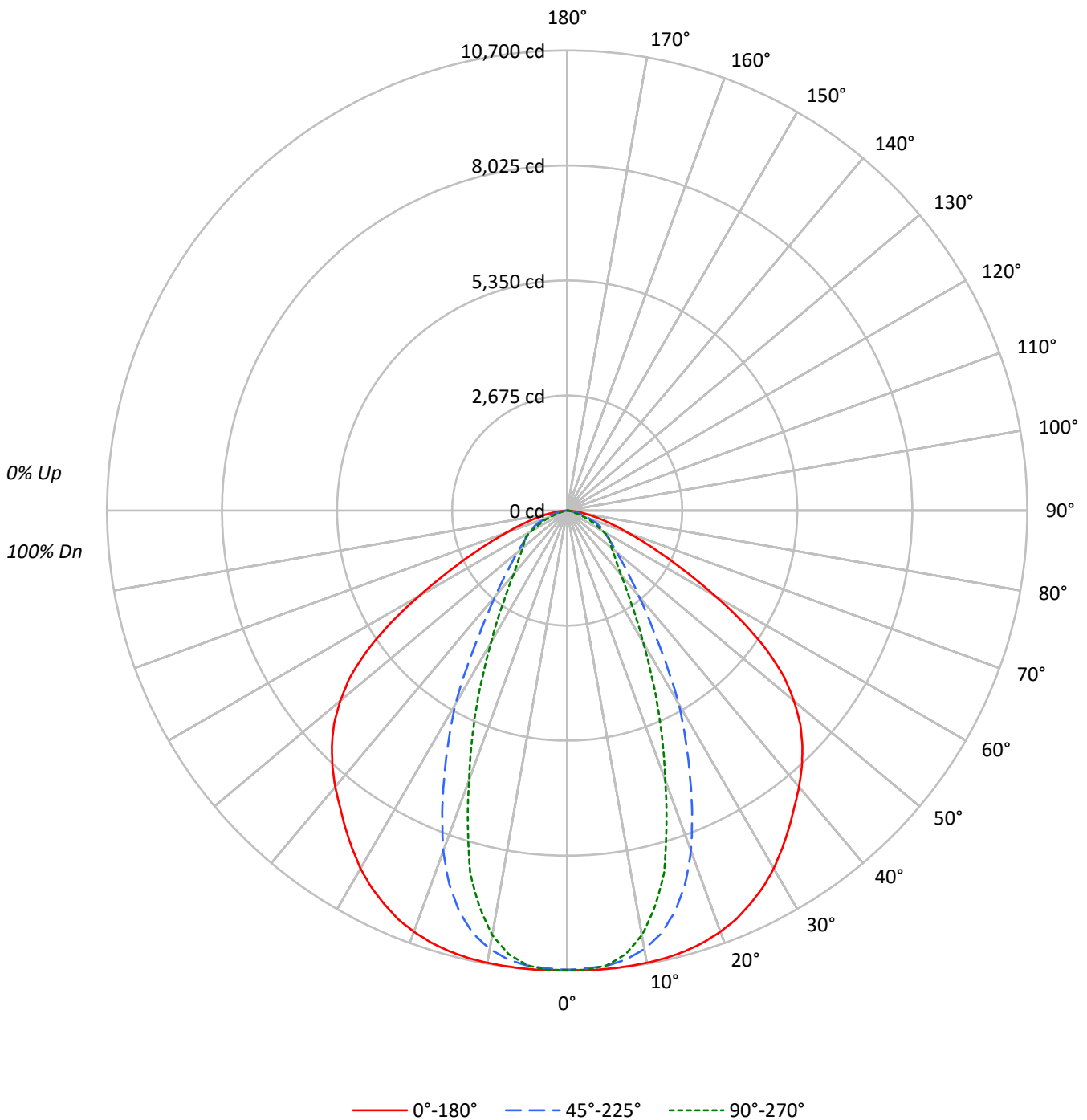
Input Watts (W): 110.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	65698	65698	65698
5°	66064	65581	65531
10°	66695	64645	62607
15°	67537	61540	55483
20°	68206	55112	43619
25°	68449	45761	33659
30°	68231	36845	25062
35°	67555	27104	19225
40°	67346	20811	15578
45°	67291	16817	13836
50°	65893	14434	12912
55°	60909	12920	12941
60°	48830	12199	11811
65°	36276	11899	9545
70°	27213	9785	6483
75°	20504	7410	3517
80°	14905	3616	2961
85°	9577	3098	2371



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1006.4	6.5
10°-20°	2681.8	17.4
20°-30°	3285.1	21.3
30°-40°	2950.3	19.1
40°-50°	2285.7	14.8
50°-60°	1710.4	11.1
60°-70°	1026.2	6.7
70°-80°	406.9	2.6
80°-90°	73.8	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°	6973.3	45.2
0°-40°	9923.6	64.3
0°-60°	13919.8	90.2
0°-90°	15426.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15426.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10681	10681	10681	10681	10681	
5°	10700	10653	10622	10619	10614	###
15°	10606	10328	9664	8950	8713	2997
25°	10086	9030	6743	5391	4960	4646
35°	8997	6653	3610	2767	2560	5636
45°	7736	3466	1933	1630	1591	5948
55°	5680	1839	1205	1167	1207	4985
65°	2492	1021	818	694	656	2553
75°	863	499	312	164	148	951
85°	136	54	44	38	34	180
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10681.3	10681.3	10681.3	10681.3	10681.3
2.5°	10700.5	10661.5	10656.0	10682.7	10690.3
5°	10699.8	10652.6	10621.7	10619.0	10613.5
7.5°	10690.9	10628.6	10529.2	10450.4	10403.8
10°	10678.6	10569.0	10350.3	10123.5	10024.1
12.5°	10655.3	10475.7	10076.9	9640.3	9430.6
15°	10606.0	10327.7	9664.3	8949.5	8713.1
17.5°	10529.9	10105.7	9109.9	8076.5	7679.7
20°	10420.2	9825.4	8419.8	7160.2	6664.0
22.5°	10279.1	9464.2	7588.5	6180.2	5778.6
25°	10085.8	9029.7	6742.8	5391.4	4959.6
27.5°	9869.9	8541.1	5945.1	4564.9	4187.3
30°	9606.8	7946.9	5187.8	3841.2	3528.7
32.5°	9307.3	7334.9	4354.5	3225.8	3009.2
35°	8996.8	6653.1	3609.6	2766.6	2560.3
37.5°	8678.8	5879.3	3047.6	2372.6	2223.9
40°	8387.6	5016.5	2591.9	2058.7	1940.1
42.5°	8075.1	4206.5	2241.0	1807.9	1735.2
45°	7735.9	3466.3	1933.3	1629.7	1590.6
47.5°	7352.8	2924.2	1693.4	1493.3	1457.0
50°	6886.1	2483.6	1508.4	1351.4	1349.4
52.5°	6361.8	2137.5	1343.9	1248.6	1266.5
55°	5679.9	1839.4	1204.8	1167.1	1206.8
57.5°	4869.2	1596.1	1091.0	1104.0	1135.6
60°	3969.4	1376.8	991.7	1002.6	960.1
62.5°	3173.7	1184.9	901.9	844.3	790.2
65°	2492.5	1021.1	817.6	694.2	655.8
67.5°	1943.6	869.7	684.6	569.5	521.5
70°	1513.2	738.8	544.1	436.5	360.5
72.5°	1156.1	614.7	429.0	268.0	203.5
75°	862.8	498.9	311.8	163.8	148.0
77.5°	626.4	373.5	174.1	119.9	111.7
80°	420.8	252.2	102.1	87.7	83.6
82.5°	268.0	132.3	70.6	61.7	56.9
85°	135.7	54.1	43.9	37.7	33.6
87.5°	47.3	26.0	19.9	15.8	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)