

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: P470118

Luminaire Tested: **VHB2-18-N-UNV-L735-CD-U**

Issue Date: 01/20/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P470118  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/20/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB2-18-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: 19146.3 lumens  
Efficiency: N/A  
Efficacy: 156.6 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

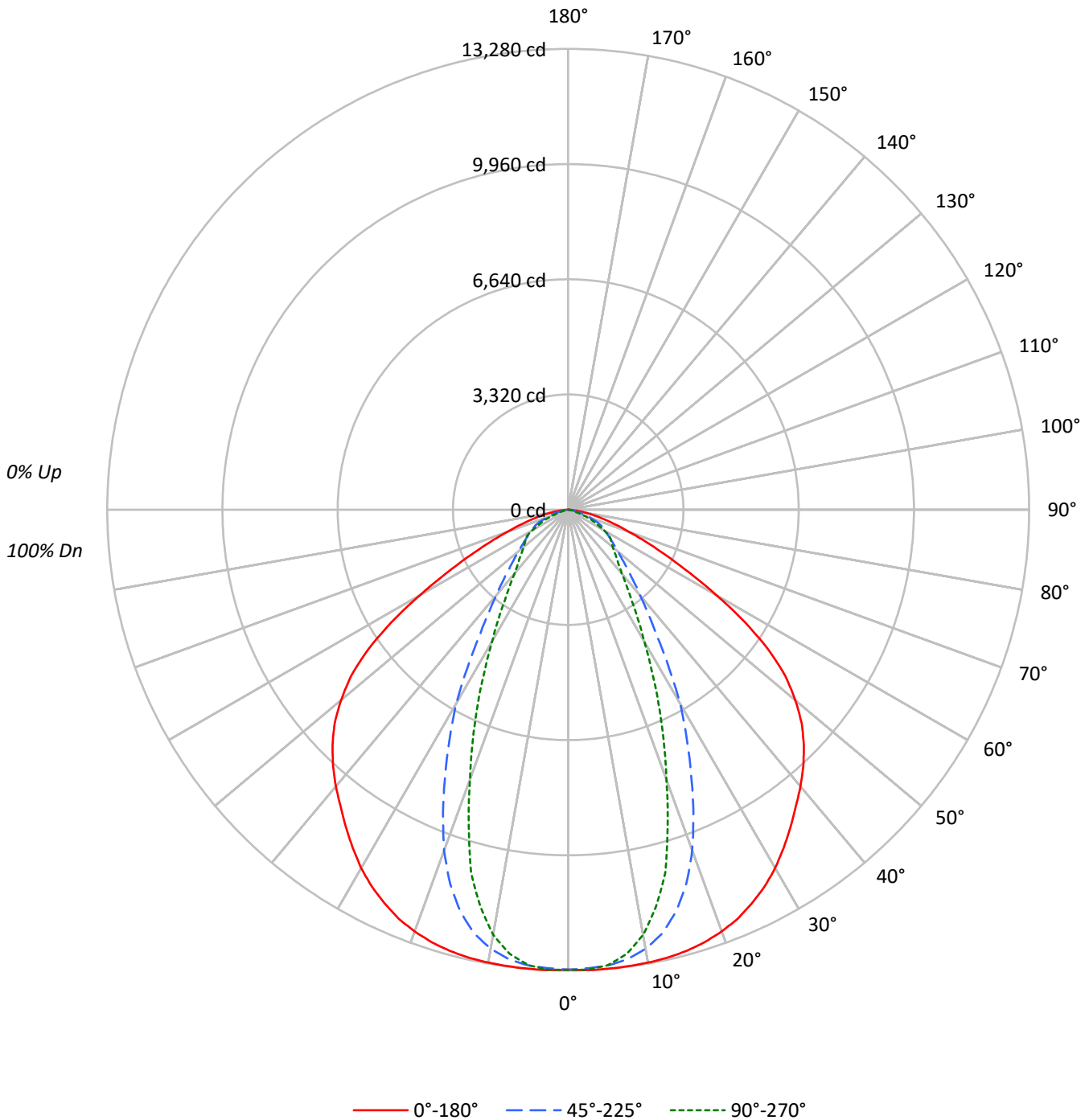
Input Watts (W): 122.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	81539	81539	81539
5°	81993	81394	81331
10°	82776	80231	77702
15°	83820	76378	68860
20°	84651	68400	54137
25°	84953	56795	41775
30°	84681	45730	31105
35°	83842	33638	23860
40°	83584	25829	19334
45°	83515	20871	17172
50°	81779	17914	16025
55°	75595	16035	16062
60°	60603	15140	14659
65°	45023	14768	11847
70°	33773	12144	8046
75°	25447	9197	4366
80°	18497	4488	3677
85°	11884	3839	2943



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1249.1	6.5
10°-20°	3328.4	17.4
20°-30°	4077.2	21.3
30°-40°	3661.6	19.1
40°-50°	2836.8	14.8
50°-60°	2122.9	11.1
60°-70°	1273.7	6.7
70°-80°	505.1	2.6
80°-90°	91.6	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°	8654.7	45.2
0°-40°	12316.3	64.3
0°-60°	17276.0	90.2
0°-90°	19146.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19146.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13257	13257	13257	13257	13257	
5°	13280	13221	13183	13179	13172	###
15°	13163	12818	11994	11107	10814	3719
25°	12518	11207	8369	6691	6155	5767
35°	11166	8257	4480	3434	3178	6994
45°	9601	4302	2399	2023	1974	7382
55°	7049	2283	1495	1448	1498	6187
65°	3094	1267	1015	862	814	3169
75°	1071	619	387	203	184	1180
85°	168	67	54	47	42	223
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13256.7	13256.7	13256.7	13256.7	13256.7
2.5°	13280.5	13232.0	13225.2	13258.4	13267.8
5°	13279.7	13221.0	13182.7	13179.3	13172.5
7.5°	13268.6	13191.2	13067.9	12970.1	12912.2
10°	13253.3	13117.2	12845.9	12564.4	12441.0
12.5°	13224.4	13001.5	12506.5	11964.7	11704.4
15°	13163.1	12817.8	11994.5	11107.4	10813.9
17.5°	13068.7	12542.2	11306.4	10023.8	9531.3
20°	12932.6	12194.4	10449.9	8886.6	8270.8
22.5°	12757.4	11746.1	9418.2	7670.3	7171.9
25°	12517.6	11206.9	8368.6	6691.3	6155.4
27.5°	12249.7	10600.4	7378.5	5665.5	5196.9
30°	11923.0	9863.0	6438.7	4767.3	4379.5
32.5°	11551.3	9103.5	5404.4	4003.5	3734.8
35°	11166.0	8257.2	4479.9	3433.7	3177.7
37.5°	10771.4	7296.9	3782.4	2944.6	2760.0
40°	10409.9	6226.0	3216.8	2555.1	2407.9
42.5°	10022.1	5220.7	2781.3	2243.8	2153.6
45°	9601.0	4302.1	2399.4	2022.6	1974.1
47.5°	9125.6	3629.3	2101.7	1853.4	1808.3
50°	8546.3	3082.4	1872.1	1677.3	1674.7
52.5°	7895.7	2652.9	1667.9	1549.7	1571.8
55°	7049.4	2282.9	1495.3	1448.5	1497.8
57.5°	6043.2	1980.9	1354.1	1370.2	1409.4
60°	4926.4	1708.8	1230.7	1244.4	1191.6
62.5°	3938.9	1470.6	1119.3	1047.9	980.7
65°	3093.5	1267.3	1014.7	861.6	814.0
67.5°	2412.2	1079.4	849.7	706.8	647.3
70°	1878.0	916.9	675.3	541.8	447.4
72.5°	1434.9	762.9	532.4	332.6	252.6
75°	1070.8	619.2	387.0	203.3	183.7
77.5°	777.4	463.6	216.0	148.8	138.6
80°	522.2	313.0	126.7	108.9	103.8
82.5°	332.6	164.2	87.6	76.5	70.6
85°	168.4	67.2	54.4	46.8	41.7
87.5°	58.7	32.3	24.7	19.6	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)