

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: P470158

Luminaire Tested: **VHB2-18-N-UNV-L950-CD-U**

Issue Date: 01/20/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P470158  
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-L950-CD-U  
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16256.3 lumens  
Efficiency: N/A  
Efficacy: 132.9 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

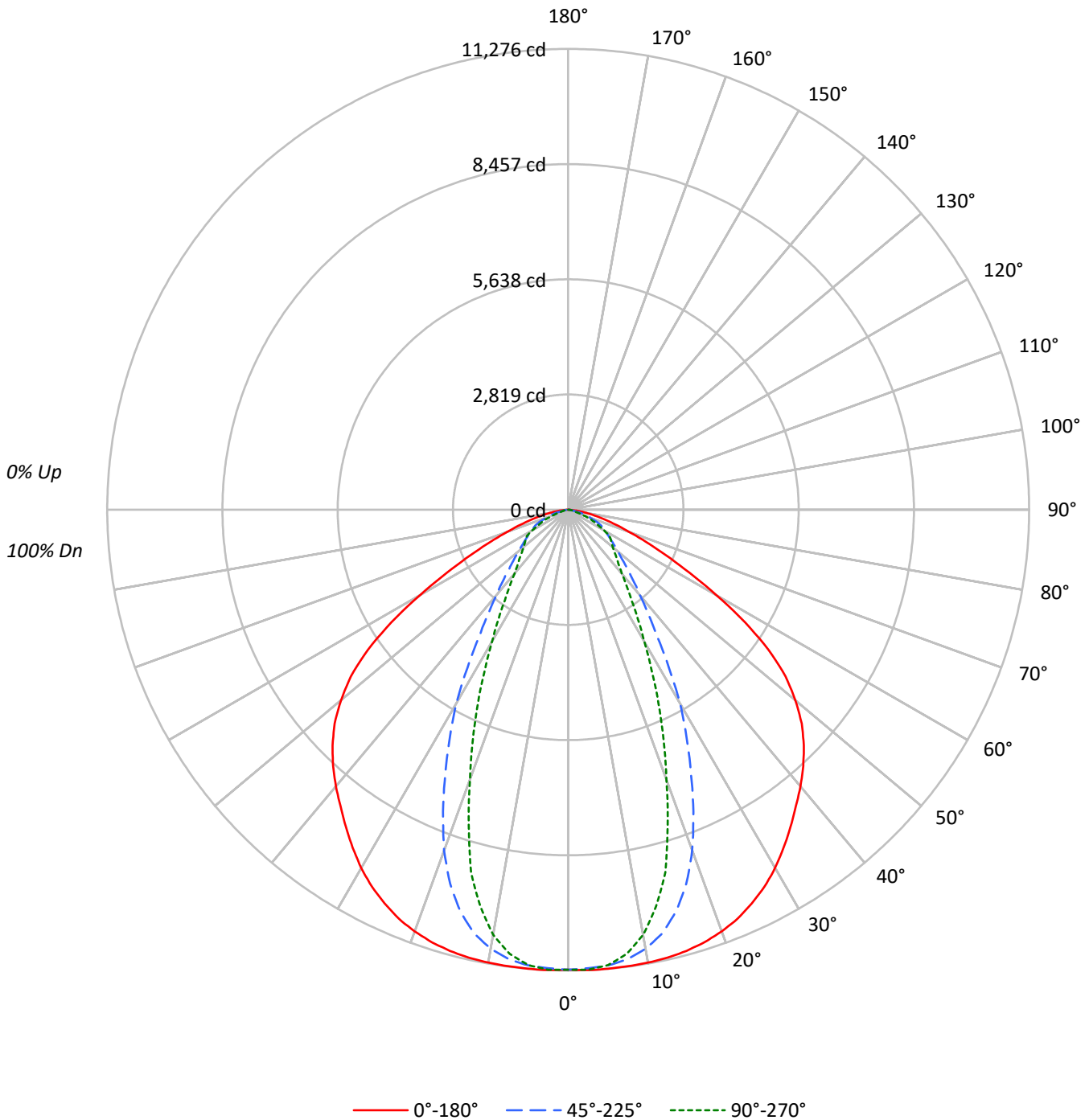
Input Watts (W): 122.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	69231	69231	69231
5°	69616	69108	69054
10°	70281	68121	65974
15°	71168	64849	58466
20°	71873	58075	45965
25°	72129	48222	35469
30°	71899	38827	26409
35°	71187	28561	20259
40°	70968	21930	16416
45°	70909	17721	14580
50°	69435	15210	13606
55°	64184	13615	13637
60°	51455	12855	12447
65°	38226	12538	10058
70°	28675	10312	6832
75°	21607	7809	3707
80°	15706	3811	3121
85°	10092	3260	2498



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1060.5	6.5
10°-20°	2826.0	17.4
20°-30°	3461.8	21.3
30°-40°	3108.9	19.1
40°-50°	2408.6	14.8
50°-60°	1802.4	11.1
60°-70°	1081.4	6.7
70°-80°	428.8	2.6
80°-90°	77.8	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°	7348.3	45.2
0°-40°	10457.2	64.3
0°-60°	14668.3	90.2
0°-90°	16256.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16256.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11256	11256	11256	11256	11256	
5°	11275	11225	11193	11190	11184	###
15°	11176	10883	10184	9431	9182	3158
25°	10628	9515	7105	5681	5226	4896
35°	9481	7011	3804	2915	2698	5939
45°	8152	3653	2037	1717	1676	6268
55°	5985	1938	1270	1230	1272	5253
65°	2626	1076	862	732	691	2690
75°	909	526	329	173	156	1002
85°	143	57	46	40	35	189
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11255.7	11255.7	11255.7	11255.7	11255.7
2.5°	11275.9	11234.8	11229.0	11257.1	11265.1
5°	11275.2	11225.4	11192.9	11190.0	11184.2
7.5°	11265.8	11200.1	11095.4	11012.3	10963.2
10°	11252.8	11137.3	10906.9	10667.9	10563.1
12.5°	11228.3	11039.0	10618.7	10158.7	9937.7
15°	11176.3	10883.1	10184.0	9430.8	9181.6
17.5°	11096.1	10649.1	9599.8	8510.7	8092.6
20°	10980.5	10353.7	8872.5	7545.2	7022.4
22.5°	10831.8	9973.1	7996.6	6512.5	6089.3
25°	10628.1	9515.3	7105.4	5681.3	5226.3
27.5°	10400.6	9000.4	6264.8	4810.4	4412.4
30°	10123.3	8374.2	5466.8	4047.7	3718.4
32.5°	9807.7	7729.4	4588.6	3399.2	3171.0
35°	9480.6	7010.8	3803.7	2915.4	2698.0
37.5°	9145.5	6195.5	3211.5	2500.1	2343.4
40°	8838.6	5286.3	2731.2	2169.4	2044.5
42.5°	8509.3	4432.7	2361.5	1905.1	1828.5
45°	8151.8	3652.7	2037.2	1717.3	1676.1
47.5°	7748.1	3081.5	1784.5	1573.6	1535.3
50°	7256.3	2617.1	1589.5	1424.1	1421.9
52.5°	6703.9	2252.4	1416.2	1315.8	1334.6
55°	5985.3	1938.3	1269.6	1229.9	1271.7
57.5°	5131.0	1681.9	1149.7	1163.4	1196.6
60°	4182.8	1450.8	1045.0	1056.5	1011.8
62.5°	3344.4	1248.6	950.4	889.7	832.7
65°	2626.5	1076.0	861.5	731.6	691.1
67.5°	2048.1	916.4	721.4	600.1	549.6
70°	1594.5	778.5	573.4	460.0	379.9
72.5°	1218.3	647.8	452.1	282.4	214.5
75°	909.2	525.7	328.6	172.6	156.0
77.5°	660.1	393.6	183.4	126.4	117.7
80°	443.4	265.8	107.6	92.4	88.1
82.5°	282.4	139.4	74.4	65.0	59.9
85°	143.0	57.1	46.2	39.7	35.4
87.5°	49.8	27.4	20.9	16.6	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)