

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: P470159

Luminaire Tested: **VHB2-24-N-UNV-L950-CD-U**

Issue Date: 01/20/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P470159  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/20/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB2-24-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: 20131.6 lumens  
Efficiency: N/A  
Efficacy: 126.5 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

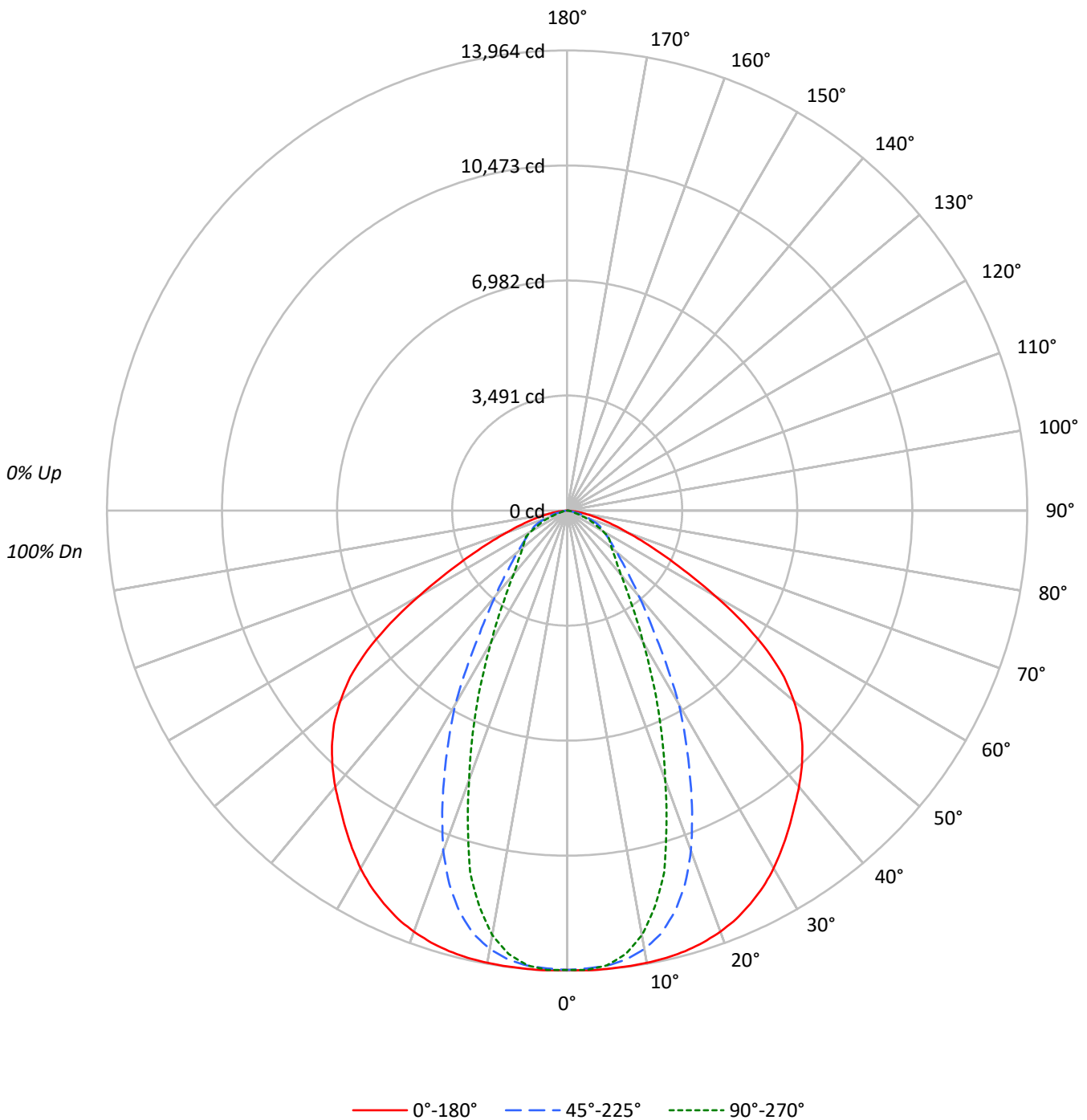
Input Watts (W): 159.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	85735	85735	85735
5°	86212	85582	85516
10°	87035	84360	81702
15°	88133	80308	72404
20°	89007	71920	56923
25°	89324	59717	43925
30°	89039	48083	32705
35°	88158	35369	25088
40°	87885	27157	20329
45°	87813	21946	18056
50°	85988	18835	16850
55°	79484	16860	16889
60°	63721	15919	15413
65°	47340	15528	12457
70°	35512	12770	8460
75°	26759	9670	4591
80°	19450	4722	3864
85°	12498	4037	3091



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1313.4	6.5
10°-20°	3499.7	17.4
20°-30°	4287.0	21.3
30°-40°	3850.0	19.1
40°-50°	2982.8	14.8
50°-60°	2232.1	11.1
60°-70°	1339.2	6.7
70°-80°	531.1	2.6
80°-90°	96.3	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°	9100.0	45.2
0°-40°	12950.1	64.3
0°-60°	18165.0	90.2
0°-90°	20131.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20131.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13939	13939	13939	13939	13939	
5°	13963	13901	13861	13858	13850	###
15°	13840	13477	12612	11679	11370	3911
25°	13162	11784	8799	7036	6472	6063
35°	11741	8682	4710	3610	3341	7354
45°	10095	4524	2523	2127	2076	7762
55°	7412	2400	1572	1523	1575	6506
65°	3253	1332	1067	906	856	3332
75°	1126	651	407	214	193	1241
85°	177	71	57	49	44	235
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13938.9	13938.9	13938.9	13938.9	13938.9
2.5°	13964.0	13913.0	13905.8	13940.7	13950.5
5°	13963.1	13901.4	13861.1	13857.5	13850.4
7.5°	13951.4	13870.1	13740.4	13637.5	13576.7
10°	13935.3	13792.2	13507.0	13210.9	13081.3
12.5°	13904.9	13670.6	13150.1	12580.4	12306.8
15°	13840.5	13477.4	12611.7	11679.0	11370.4
17.5°	13741.3	13187.7	11888.2	10539.6	10021.8
20°	13598.2	12821.9	10987.6	9343.9	8696.4
22.5°	13413.9	12350.6	9902.8	8065.0	7540.9
25°	13161.7	11783.6	8799.2	7035.6	6472.2
27.5°	12880.0	11145.9	7758.3	5957.1	5464.3
30°	12536.6	10370.6	6770.0	5012.7	4604.9
32.5°	12145.8	9571.9	5682.5	4209.6	3927.0
35°	11740.7	8682.1	4710.4	3610.4	3341.2
37.5°	11325.7	7672.4	3977.1	3096.1	2902.1
40°	10945.6	6546.4	3382.3	2686.5	2531.8
42.5°	10537.8	5489.4	2924.4	2359.2	2264.4
45°	10095.1	4523.5	2522.9	2126.7	2075.7
47.5°	9595.2	3816.1	2209.9	1948.7	1901.3
50°	8986.2	3241.0	1968.4	1763.6	1760.9
52.5°	8302.0	2789.4	1753.8	1629.5	1652.7
55°	7412.1	2400.4	1572.2	1523.0	1574.9
57.5°	6354.2	2082.9	1423.8	1440.8	1481.9
60°	5179.9	1796.7	1294.1	1308.4	1252.9
62.5°	4141.6	1546.3	1176.9	1101.8	1031.2
65°	3252.7	1332.5	1066.9	905.9	855.9
67.5°	2536.3	1134.9	893.4	743.2	680.6
70°	1974.7	964.1	710.1	569.7	470.4
72.5°	1508.7	802.2	559.8	349.7	265.6
75°	1126.0	651.1	406.9	213.7	193.2
77.5°	817.4	487.4	227.2	156.5	145.8
80°	549.1	329.1	133.3	114.5	109.1
82.5°	349.7	172.6	92.1	80.5	74.2
85°	177.1	70.7	57.2	49.2	43.8
87.5°	61.7	34.0	25.9	20.6	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)