

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: P563357

Luminaire Tested: **VHB-24-W-UNV-L950-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563357  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364417)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/3/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-24-W-UNV-L950-CD  
Description: 24000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 90CRI, 5000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

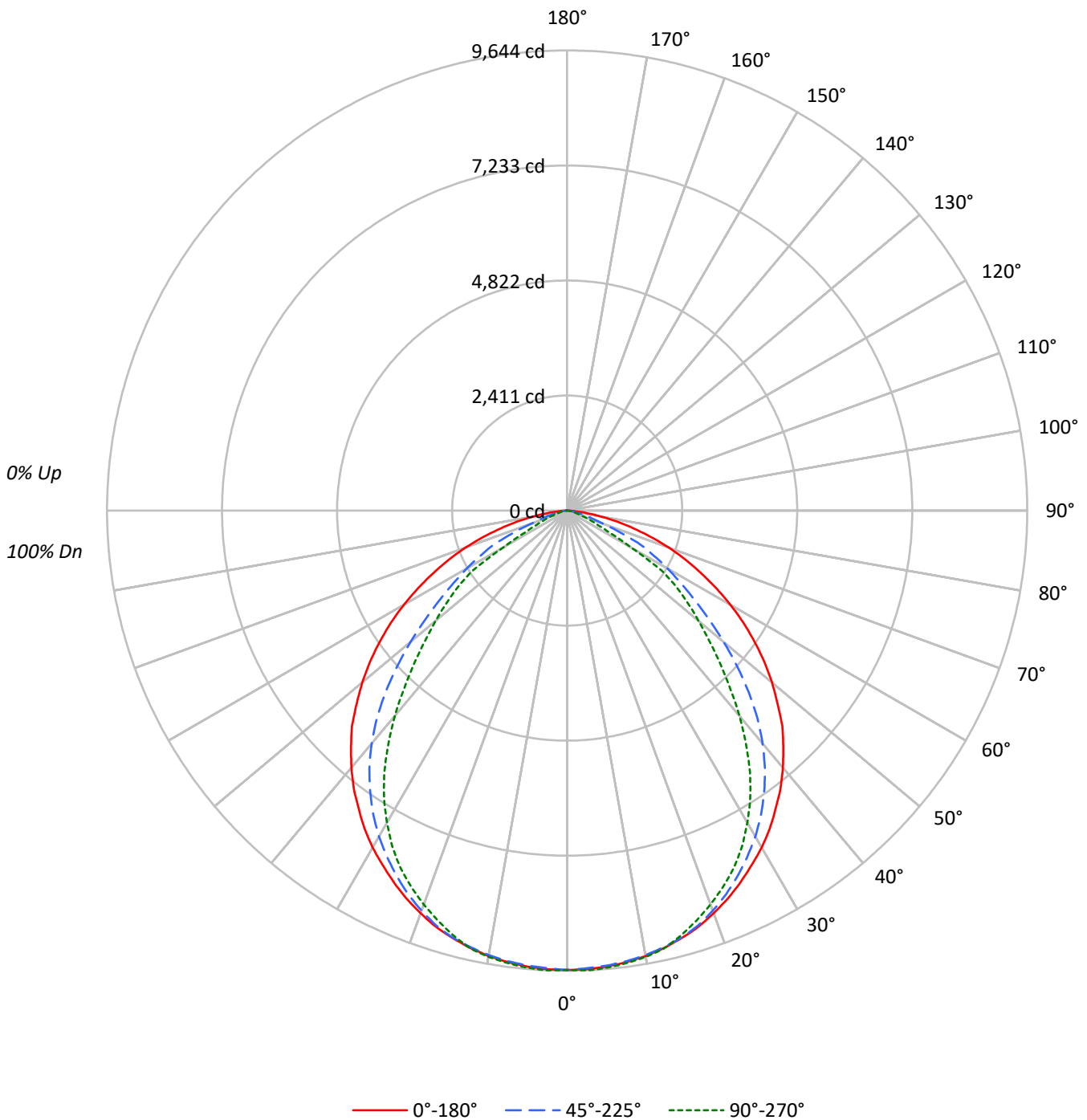
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21653.0 lumens  
Efficiency: N/A  
Efficacy: 131.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28  
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 165  
Input Voltage (V): NR  
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: 25 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	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89					87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	70	77	72	68	75	71	67					65				
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59					57				
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52					50				
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46					44				
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41					39				
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37					36				
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34					32				
10	57	44	36	31	55	43	36	31	42	36	31	42	35	31	41	35	31					29				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	56098	56098	56098
5°	56106	55992	56249
10°	56086	55965	56195
15°	55953	55894	55606
20°	55683	55338	54474
25°	55270	54330	53138
30°	54869	53078	50808
35°	54215	51217	47507
40°	53501	48464	42745
45°	52527	44323	37349
50°	50792	38805	32627
55°	48718	33057	28481
60°	46024	28353	18182
65°	42646	23650	9639
70°	38491	13439	6246
75°	32338	8234	3886
80°	24574	4158	3403
85°	14930	3778	3069



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	911.4	4.2
10°-20°	2607.6	12.0
20°-30°	3887.0	18.0
30°-40°	4476.6	20.7
40°-50°	4166.1	19.2
50°-60°	3170.1	14.6
60°-70°	1701.7	7.9
70°-80°	626.1	2.9
80°-90°	106.5	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°	7406.0	34.2
0°-40°	11882.6	54.9
0°-60°	19218.8	88.8
0°-90°	21653.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21653.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9627	9627	9627	9627	9627	
5°	9592	9564	9572	9605	9616	912
15°	9275	9260	9265	9248	9217	2618
25°	8596	8589	8450	8330	8265	3962
35°	7621	7528	7200	6838	6678	4771
45°	6374	6067	5378	4740	4532	4898
55°	4795	4253	3254	2897	2803	4283
65°	3093	2272	1715	849	699	3067
75°	1436	941	366	189	173	1540
85°	223	72	56	49	46	298
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9626.9	9626.9	9626.9	9626.9	9626.9
2.5°	9620.0	9590.7	9600.5	9631.7	9644.4
5°	9591.7	9564.4	9572.2	9605.4	9616.1
7.5°	9544.9	9518.6	9524.5	9555.7	9566.4
10°	9478.6	9451.4	9458.2	9488.3	9497.1
12.5°	9388.9	9363.6	9369.4	9390.9	9400.6
15°	9274.8	9260.2	9265.1	9247.5	9217.3
17.5°	9147.1	9125.7	9119.8	9041.8	9009.6
20°	8979.4	8971.6	8923.8	8827.3	8784.4
22.5°	8802.9	8788.2	8705.4	8589.3	8537.7
25°	8596.2	8589.3	8450.0	8330.0	8264.6
27.5°	8373.9	8357.3	8177.8	8027.8	7938.9
30°	8154.5	8113.5	7888.3	7677.7	7551.0
32.5°	7905.8	7828.8	7559.7	7290.6	7144.4
35°	7621.2	7528.5	7199.8	6838.1	6678.2
37.5°	7345.2	7205.7	6809.8	6357.5	6152.7
40°	7033.2	6833.2	6371.1	5845.5	5619.3
42.5°	6704.5	6460.7	5904.1	5292.7	5060.5
45°	6374.0	6066.9	5378.4	4739.8	4532.1
47.5°	5981.0	5655.4	4832.5	4212.3	4033.8
50°	5602.8	5222.5	4280.5	3720.9	3599.0
52.5°	5206.9	4745.7	3744.3	3305.5	3187.5
55°	4795.4	4253.2	3253.8	2896.9	2803.4
57.5°	4381.9	3747.2	2819.0	2525.5	2357.8
60°	3949.1	3245.0	2432.8	2052.5	1560.1
62.5°	3522.9	2722.3	2047.7	1287.1	992.6
65°	3092.9	2271.9	1715.2	849.3	699.1
67.5°	2682.4	1836.1	1223.7	615.2	523.6
70°	2259.2	1501.6	788.8	440.7	366.6
72.5°	1835.1	1208.1	541.2	289.6	235.0
75°	1436.3	940.9	365.7	189.2	172.6
77.5°	1076.4	649.4	203.8	140.4	131.7
80°	732.3	389.1	123.9	107.2	101.4
82.5°	438.8	186.2	89.7	79.0	76.1
85°	223.3	72.1	56.5	48.7	45.9
87.5°	66.3	36.1	25.3	19.6	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)