

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: P563312

Luminaire Tested: **VHB-48-N-UNV-L950-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563312  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364424)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/3/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-48-N-UNV-L950-CD  
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 90CRI, 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

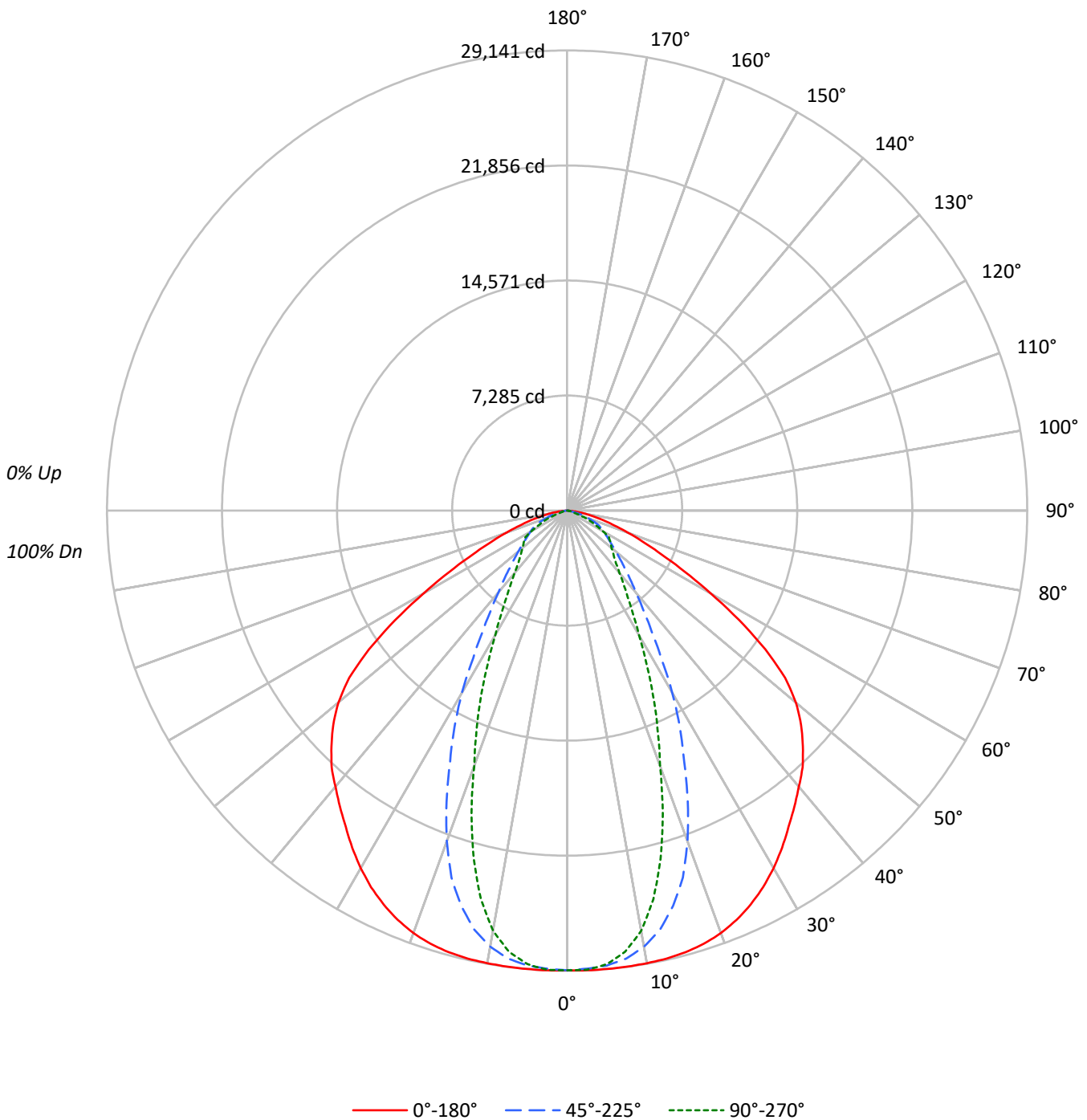
Lumens per Lamp: N/A  
Luminaire Lumens: 41058.0 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86  
Luminous Opening: Rectangular (W 1.75' x L: 1.58' x H: 0')  
CIE Type: Direct

Input Watts (W): 324  
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

TEST NUMBER: P563312

CATALOG NUMBER: VHB-48-N-UNV-L950-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P563312

CATALOG NUMBER: VHB-48-N-UNV-L950-CD

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36

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

	0°	45°	90°
0°	113099	113099	113099
5°	113631	112768	112441
10°	114824	110606	106567
15°	116462	104211	91885
20°	117717	92065	71140
25°	117952	75177	55124
30°	117291	59708	40799
35°	115951	44244	31725
40°	115770	34358	26183
45°	116014	28275	23259
50°	114368	24455	22184
55°	103824	21799	22416
60°	81626	20833	20425
65°	60626	20193	15370
70°	46499	16164	9383
75°	35394	11529	5177
80°	25989	5365	4181
85°	16260	4609	3722



TEST NUMBER: P563312

CATALOG NUMBER: VHB-48-N-UNV-L950-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2735.3	6.7
10°-20°	7200.4	17.5
20°-30°	8695.2	21.2
30°-40°	7774.6	18.9
40°-50°	6088.1	14.8
50°-60°	4600.0	11.2
60°-70°	2732.1	6.7
70°-80°	1050.0	2.6
80°-90°	182.4	0.4
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°	18630.9	45.4
0°-40°	26405.5	64.3
0°-60°	37093.5	90.3
0°-90°	41058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	41058.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	29113	29113	29113	29113	29113	
5°	29139	29012	28918	28879	28834	###
15°	28957	28002	25911	23745	22846	8182
25°	27518	24281	17538	13828	12860	12670
35°	24450	17399	9329	7274	6690	15332
45°	21117	8997	5147	4348	4234	16254
55°	15329	4882	3218	3206	3310	13462
65°	6595	2741	2197	1832	1672	6796
75°	2358	1318	768	380	345	2582
85°	365	127	103	91	84	486
90°	0	0	0	0	0	



TEST NUMBER: P563312

CATALOG NUMBER: VHB-48-N-UNV-L950-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	29113.3	29113.3	29113.3	29113.3	29113.3
2.5°	29140.7	29044.6	29037.0	29098.8	29108.1
5°	29138.7	29011.6	28917.5	28879.3	28833.7
7.5°	29129.8	28937.4	28619.7	28314.6	28173.1
10°	29108.1	28766.7	28038.8	27345.3	27014.9
12.5°	29060.7	28461.7	27176.3	25901.9	25208.4
15°	28957.3	28002.4	25911.2	23745.1	22846.5
17.5°	28770.1	27368.7	24360.7	21303.6	20147.0
20°	28474.4	26562.8	22269.5	18518.8	17208.1
22.5°	28049.5	25510.0	19965.7	16011.7	14964.4
25°	27517.7	24281.0	17538.5	13827.7	12860.1
27.5°	26886.0	22846.5	15447.0	11794.6	10841.4
30°	26147.2	21171.0	13310.4	9873.8	9095.1
32.5°	25321.1	19406.4	11079.4	8408.8	7768.1
35°	24449.6	17398.7	9329.3	7274.2	6689.6
37.5°	23629.0	15249.1	7900.7	6270.5	5860.0
40°	22828.7	12991.0	6775.1	5477.0	5163.1
42.5°	22073.3	10830.7	5914.6	4812.7	4607.3
45°	21116.7	8997.2	5146.6	4348.0	4233.6
47.5°	20101.7	7593.6	4536.5	3970.1	3930.3
50°	18923.5	6468.4	4046.4	3641.7	3670.6
52.5°	17394.9	5578.7	3581.6	3409.2	3494.7
55°	15329.2	4881.8	3218.5	3205.8	3309.6
57.5°	12909.2	4215.4	2931.7	3011.8	3127.9
60°	10505.8	3679.9	2681.3	2797.4	2628.8
62.5°	8392.6	3188.0	2443.6	2231.0	2086.0
65°	6595.4	2741.1	2196.7	1831.9	1672.1
67.5°	5259.3	2325.5	1848.0	1457.8	1325.2
70°	4093.8	1955.2	1423.1	1094.7	826.1
72.5°	3137.1	1634.0	1110.9	622.8	470.2
75°	2358.1	1318.0	768.1	379.6	344.9
77.5°	1681.1	978.6	410.1	274.1	254.2
80°	1161.7	628.3	239.8	197.9	186.9
82.5°	720.7	303.3	163.5	141.5	132.6
85°	364.8	127.1	103.4	90.7	83.5
87.5°	121.6	61.8	47.1	43.6	39.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)