

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: P563380

Luminaire Tested: **VHB-48-W-UNV-L840-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563380  
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-48-W-UNV-L840-CD  
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 80CRI, 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

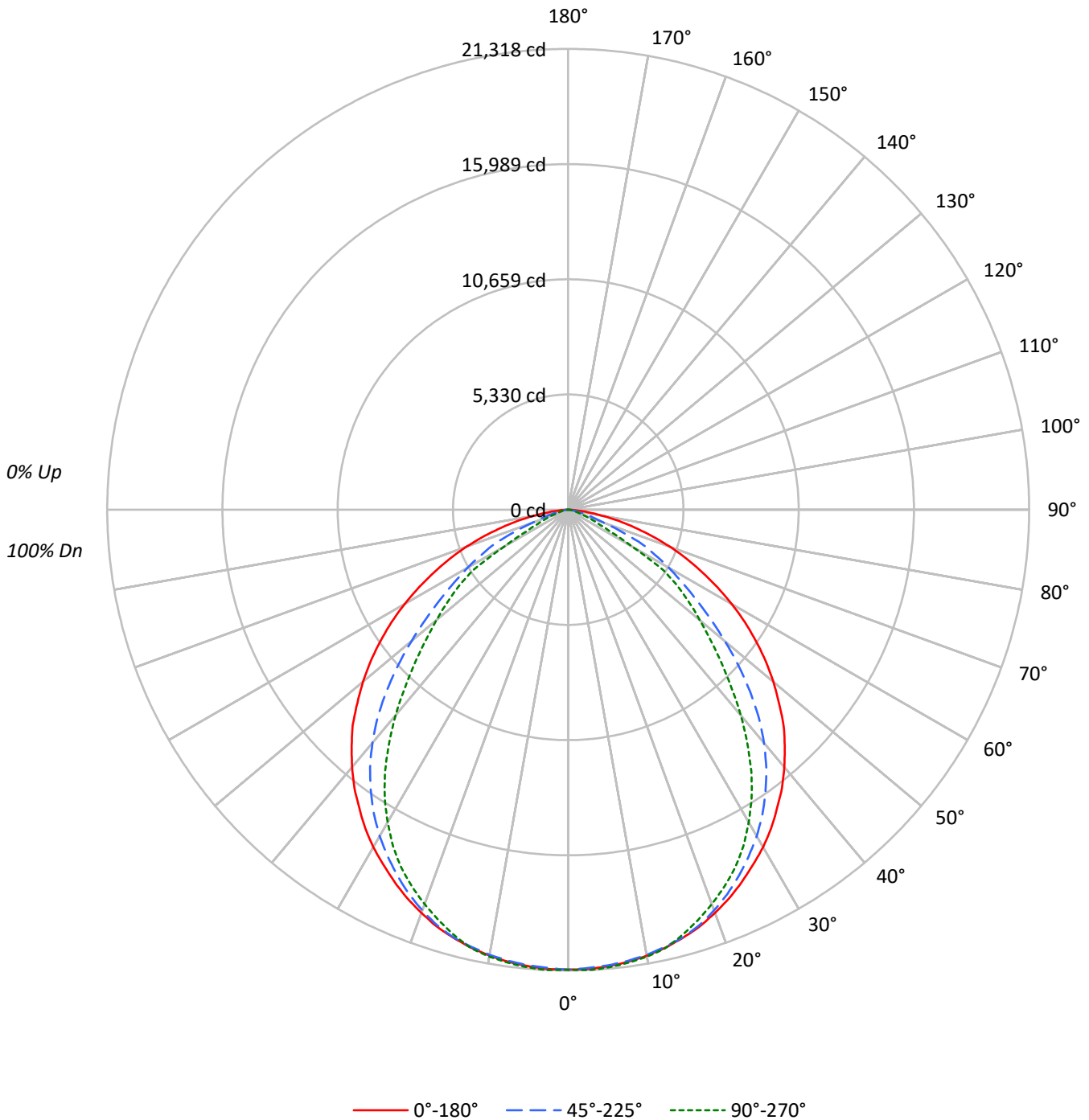
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47862.0 lumens  
Efficiency: N/A  
Efficacy: 147.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28  
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

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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°	82666	82666	82666
5°	82679	82510	82889
10°	82648	82470	82810
15°	82453	82366	81941
20°	82055	81547	80273
25°	81447	80061	78305
30°	80855	78216	74871
35°	79891	75474	70006
40°	78838	71417	62989
45°	77405	65315	55037
50°	74847	57183	48079
55°	71792	48713	41969
60°	67822	41781	26793
65°	62844	34850	14205
70°	56722	19805	9205
75°	47651	12134	5725
80°	36213	6125	5013
85°	22001	5567	4520



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2014.6	4.2
10°-20°	5763.8	12.0
20°-30°	8592.0	18.0
30°-40°	9895.0	20.7
40°-50°	9208.8	19.2
50°-60°	7007.3	14.6
60°-70°	3761.4	7.9
70°-80°	1383.8	2.9
80°-90°	235.3	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°	16370.4	34.2
0°-40°	26265.4	54.9
0°-60°	42481.5	88.8
0°-90°	47862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	47862.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	21279	21279	21279	21279	21279	
5°	21202	21141	21158	21232	21256	###
15°	20501	20469	20480	20441	20374	5786
25°	19001	18986	18678	18413	18268	8758
35°	16846	16641	15915	15115	14762	10546
45°	14089	13410	11889	10477	10018	10827
55°	10600	9401	7192	6403	6197	9468
65°	6837	5022	3791	1877	1545	6779
75°	3175	2080	808	418	381	3403
85°	494	159	125	108	101	658
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	21279.3	21279.3	21279.3	21279.3	21279.3
2.5°	21264.1	21199.4	21221.1	21290.1	21318.1
5°	21201.7	21141.2	21158.4	21231.9	21255.6
7.5°	21098.2	21040.0	21053.0	21122.0	21145.7
10°	20951.6	20891.4	20906.4	20973.1	20992.6
12.5°	20753.3	20697.3	20710.3	20757.8	20779.2
15°	20501.2	20468.7	20479.7	20440.8	20374.1
17.5°	20218.9	20171.5	20158.5	19986.1	19914.9
20°	19848.2	19831.0	19725.3	19512.0	19417.1
22.5°	19458.0	19425.6	19242.5	18985.9	18871.8
25°	19001.2	18985.9	18677.9	18412.6	18268.2
27.5°	18509.8	18473.1	18076.4	17744.7	17548.3
30°	18024.7	17934.3	17436.4	16970.8	16690.7
32.5°	17475.1	17304.8	16710.0	16115.2	15792.0
35°	16845.9	16641.0	15914.6	15115.0	14761.5
37.5°	16235.9	15927.6	15052.5	14052.6	13599.9
40°	15546.1	15104.2	14082.8	12921.0	12420.9
42.5°	14819.7	14280.9	13050.4	11699.0	11185.9
45°	14089.1	13410.3	11888.6	10476.9	10017.8
47.5°	13220.5	12500.8	10681.8	9310.9	8916.4
50°	12384.4	11543.8	9461.7	8224.7	7955.2
52.5°	11509.4	10489.9	8276.4	7306.4	7045.7
55°	10599.8	9401.3	7192.3	6403.4	6196.6
57.5°	9685.8	8282.9	6231.0	5582.3	5211.6
60°	8729.1	7172.8	5377.5	4536.9	3448.5
62.5°	7787.1	6017.5	4526.2	2845.0	2194.0
65°	6836.6	5021.8	3791.2	1877.3	1545.3
67.5°	5929.3	4058.5	2704.9	1359.9	1157.3
70°	4993.8	3319.1	1743.6	974.2	810.4
72.5°	4056.3	2670.4	1196.3	640.2	519.3
75°	3174.7	2079.8	808.4	418.2	381.4
77.5°	2379.4	1435.4	450.4	310.3	291.0
80°	1618.7	860.1	273.8	237.1	224.1
82.5°	970.0	411.7	198.3	174.6	168.1
85°	493.6	159.4	124.9	107.7	101.4
87.5°	146.6	79.7	56.0	43.2	41.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)