

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: P563381

Luminaire Tested: **VHB-48-W-UNV-L850-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563381
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-L850-CD
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 80CRI, 5000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Summary

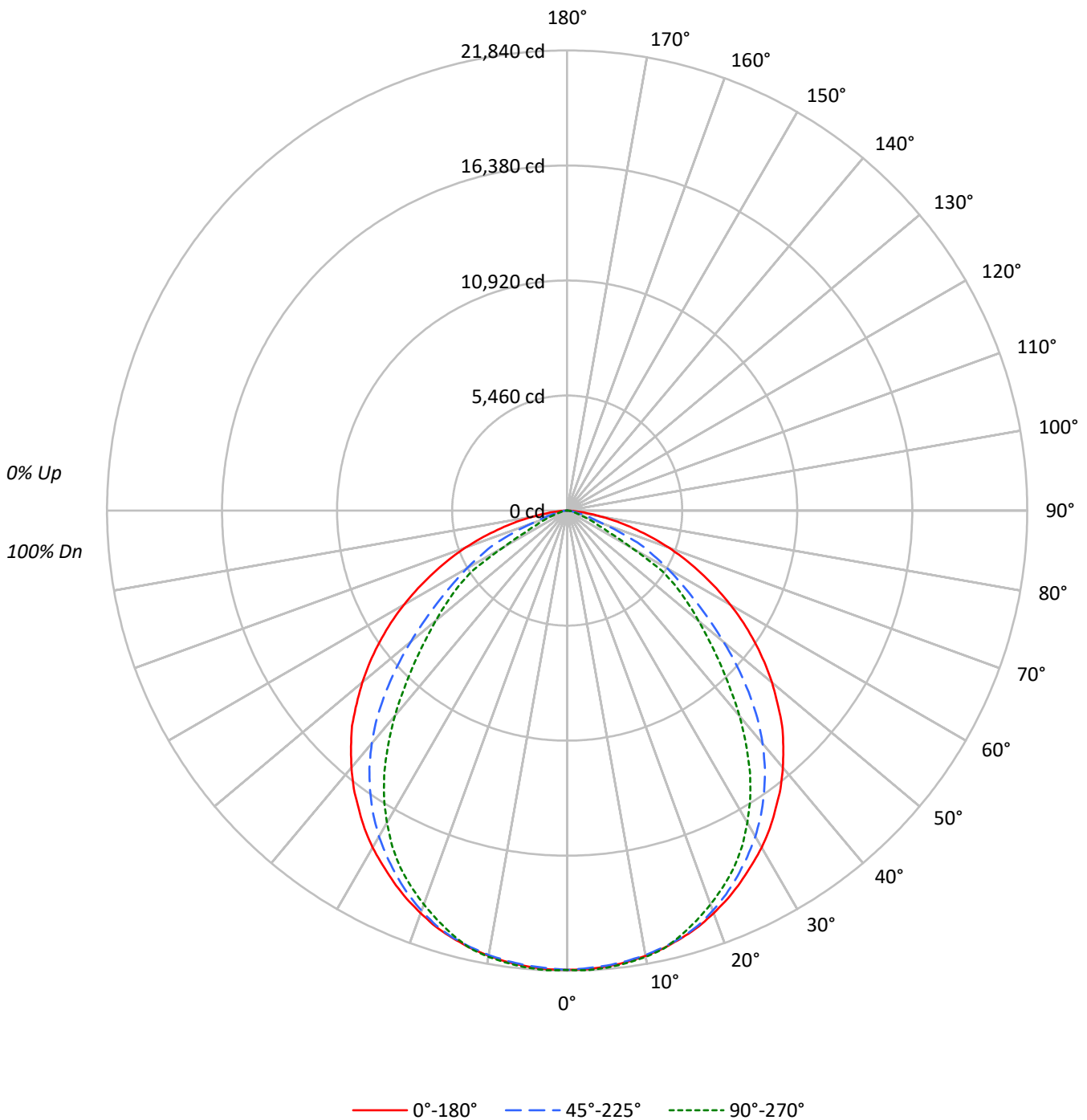
Lumens per Lamp: N/A
Luminaire Lumens: 49033.0 lumens
Efficiency: N/A
Efficacy: 151.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.75' x L: 1.58' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	84689	84689	84689
5°	84702	84529	84917
10°	84671	84488	84836
15°	84470	84382	83946
20°	84062	83542	82236
25°	83439	82020	80221
30°	82833	80130	76703
35°	81846	77321	71719
40°	80767	73165	64531
45°	79298	66913	56384
50°	76679	58583	49255
55°	73549	49905	42996
60°	69480	42803	27449
65°	64381	35703	14552
70°	58110	20290	9430
75°	48818	12430	5866
80°	37099	6275	5137
85°	22541	5705	4631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2063.9	4.2
10°-20°	5904.8	12.0
20°-30°	8802.2	18.0
30°-40°	10137.1	20.7
40°-50°	9434.1	19.2
50°-60°	7178.7	14.6
60°-70°	3853.4	7.9
70°-80°	1417.7	2.9
80°-90°	241.1	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°	16770.9	34.2
0°-40°	26908.0	54.9
0°-60°	43520.9	88.8
0°-90°	49033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	49033.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	21800	21800	21800	21800	21800	
5°	21720	21658	21676	21751	21776	###
15°	21003	20970	20981	20941	20872	5928
25°	19466	19450	19135	18863	18715	8973
35°	17258	17048	16304	15485	15123	10804
45°	14434	13738	12179	10733	10263	11092
55°	10859	9631	7368	6560	6348	9699
65°	7004	5145	3884	1923	1583	6945
75°	3252	2131	828	428	391	3486
85°	506	163	128	110	104	674
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	21800.0	21800.0	21800.0	21800.0	<i>21800.0</i>
2.5°	<i>21784.4</i>	<i>21718.1</i>	<i>21740.3</i>	<i>21811.0</i>	<i>21839.6</i>
5°	21720.4	21658.4	21676.1	21751.3	<i>21775.7</i>
7.5°	21614.4	21554.8	21568.1	21638.7	<i>21663.1</i>
10°	21464.2	21402.5	21417.9	21486.2	<i>21506.2</i>
12.5°	21261.0	21203.7	21217.0	21265.6	<i>21287.6</i>
15°	21002.8	20969.5	20980.8	20940.9	<i>20872.5</i>
17.5°	20713.6	20665.0	20651.7	20475.1	<i>20402.2</i>
20°	20333.8	20316.2	20207.9	19989.4	<i>19892.1</i>
22.5°	19934.1	19900.8	19713.3	19450.4	<i>19333.5</i>
25°	19466.0	19450.4	19134.9	18863.1	<i>18715.2</i>
27.5°	18962.7	18925.0	18518.6	18178.8	<i>17977.6</i>
30°	18465.7	18373.0	17863.0	17386.0	<i>17099.1</i>
32.5°	17902.7	17728.1	17118.8	16509.5	<i>16178.3</i>
35°	17258.0	17048.2	16304.0	15484.8	<i>15122.7</i>
37.5°	16633.1	16317.3	15420.8	14396.4	<i>13932.7</i>
40°	15926.5	15473.8	14427.4	13237.1	<i>12724.8</i>
42.5°	15182.3	14630.3	13369.7	11985.2	<i>11459.5</i>
45°	14433.8	13738.4	12179.4	10733.3	<i>10262.9</i>
47.5°	13544.0	12806.7	10943.1	9538.7	<i>9134.6</i>
50°	12687.4	11826.3	9693.2	8425.9	<i>8149.8</i>
52.5°	11790.9	10746.6	8478.9	7485.2	<i>7218.0</i>
55°	10859.2	9631.3	7368.3	6560.1	<i>6348.2</i>
57.5°	9922.8	8485.6	6383.5	5718.9	<i>5339.1</i>
60°	8942.6	7348.3	5509.0	4647.9	<i>3532.9</i>
62.5°	7977.6	6164.7	4636.9	2914.6	<i>2247.7</i>
65°	7003.8	5144.6	3884.0	1923.2	<i>1583.1</i>
67.5°	6074.4	4157.8	2771.0	1393.2	<i>1185.6</i>
70°	5116.0	3400.3	1786.3	998.1	<i>830.2</i>
72.5°	4155.5	2735.7	1225.6	655.9	<i>532.0</i>
75°	3252.4	2130.7	828.1	428.4	<i>390.8</i>
77.5°	2437.6	1470.5	461.4	317.8	<i>298.1</i>
80°	1658.3	881.1	280.5	242.9	<i>229.6</i>
82.5°	993.7	421.7	203.2	178.9	<i>172.2</i>
85°	505.7	163.3	128.0	110.3	<i>103.9</i>
87.5°	150.2	81.6	57.3	44.3	<i>42.0</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)