

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: P563273

Luminaire Tested: **VHB-18-N-UNV-L850-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563273  
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-18-N-UNV-L850-CD  
Description: 18000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 80CRI, 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

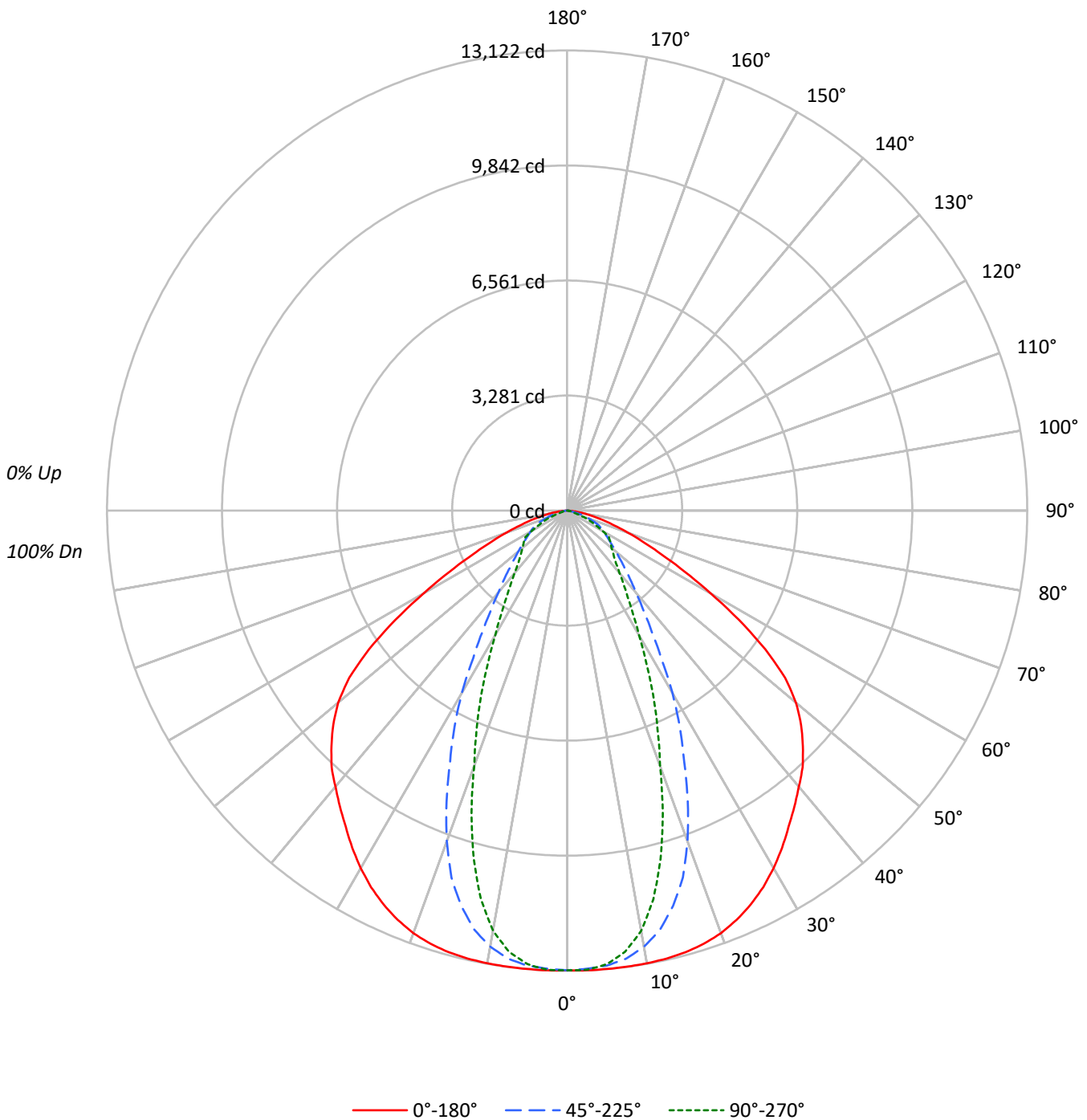
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18489.0 lumens  
Efficiency: N/A  
Efficacy: 147.9 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86  
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 125  
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	108	104	101	109	105	102	100	101	99	96	97	95	94	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	74	68	64	71	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42					42			
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39					39			
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36					36			

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

	0°	45°	90°
0°	76395	76395	76395
5°	76754	76171	75950
10°	77560	74711	71982
15°	78666	70391	62066
20°	79514	62187	48053
25°	79673	50780	37234
30°	79226	40331	27558
35°	78322	29885	21429
40°	78199	23208	17686
45°	78364	19099	15710
50°	77252	16518	14984
55°	70129	14725	15141
60°	55136	14071	13796
65°	40951	13639	10383
70°	31409	10918	6338
75°	23908	7788	3497
80°	17554	3624	2822
85°	10985	3116	2514



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1231.7	6.7
10°-20°	3242.4	17.5
20°-30°	3915.6	21.2
30°-40°	3501.0	18.9
40°-50°	2741.5	14.8
50°-60°	2071.4	11.2
60°-70°	1230.3	6.7
70°-80°	472.8	2.6
80°-90°	82.1	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°	8389.8	45.4
0°-40°	11890.8	64.3
0°-60°	16703.7	90.3
0°-90°	18489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18489.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13110	13110	13110	13110	13110	
5°	13122	13064	13022	13005	12984	###
15°	13040	12610	11668	10693	10288	3684
25°	12392	10934	7898	6227	5791	5705
35°	11010	7835	4201	3276	3012	6904
45°	9509	4052	2318	1958	1906	7320
55°	6903	2198	1449	1444	1490	6062
65°	2970	1234	989	825	753	3060
75°	1062	594	346	171	155	1163
85°	164	57	47	41	38	219
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13110.1	13110.1	13110.1	13110.1	13110.1
2.5°	13122.5	13079.2	13075.8	13103.6	13107.8
5°	13121.6	13064.3	13021.9	13004.8	12984.2
7.5°	13117.5	13030.9	12887.8	12750.5	12686.8
10°	13107.8	12954.0	12626.3	12314.0	12165.2
12.5°	13086.5	12816.7	12237.9	11664.0	11351.7
15°	13039.9	12609.9	11668.2	10692.8	10288.1
17.5°	12955.6	12324.5	10970.0	9593.3	9072.5
20°	12822.4	11961.6	10028.3	8339.3	7749.0
22.5°	12631.1	11487.5	8990.8	7210.3	6738.7
25°	12391.6	10934.1	7897.8	6226.8	5791.1
27.5°	12107.2	10288.1	6956.0	5311.3	4882.0
30°	11774.4	9533.6	5993.9	4446.3	4095.6
32.5°	11402.4	8739.0	4989.2	3786.6	3498.1
35°	11010.0	7834.9	4201.1	3275.7	3012.4
37.5°	10640.5	6866.9	3557.8	2823.7	2638.9
40°	10280.1	5850.0	3050.9	2466.4	2325.0
42.5°	9939.9	4877.2	2663.4	2167.2	2074.7
45°	9509.2	4051.6	2317.6	1957.9	1906.4
47.5°	9052.1	3419.5	2042.9	1787.8	1769.9
50°	8521.5	2912.8	1822.1	1639.9	1652.9
52.5°	7833.2	2512.2	1612.9	1535.2	1573.7
55°	6902.9	2198.3	1449.4	1443.6	1490.3
57.5°	5813.2	1898.2	1320.2	1356.2	1408.5
60°	4730.9	1657.1	1207.4	1259.7	1183.8
62.5°	3779.3	1435.6	1100.4	1004.7	939.4
65°	2970.0	1234.4	989.2	824.9	753.0
67.5°	2368.3	1047.2	832.2	656.5	596.8
70°	1843.5	880.4	640.8	493.0	372.0
72.5°	1412.7	735.8	500.2	280.4	211.8
75°	1061.9	593.5	345.9	170.9	155.3
77.5°	757.0	440.7	184.7	123.4	114.5
80°	523.1	282.9	108.0	89.1	84.1
82.5°	324.5	136.6	73.6	63.7	59.7
85°	164.3	57.2	46.6	40.8	37.6
87.5°	54.8	27.8	21.2	19.6	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)