

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: P563307

Luminaire Tested: **VHB-48-N-UNV-L835-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563307  
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-L835-CD  
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 80CRI, 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

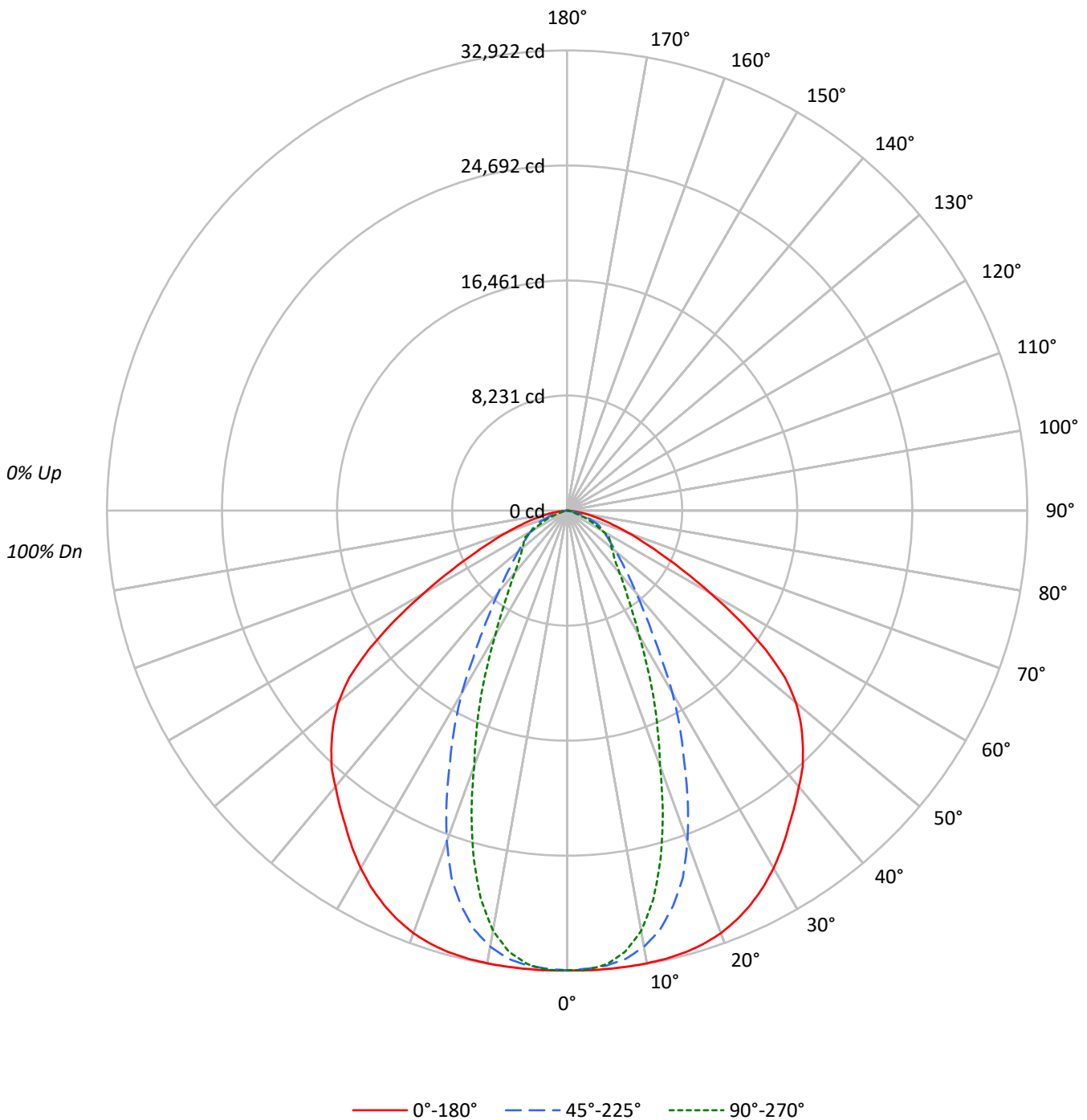
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 46386.0 lumens  
Efficiency: N/A  
Efficacy: 143.2 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

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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°	127776	127776	127776
5°	128376	127401	127032
10°	129724	124958	120395
15°	131575	117734	103809
20°	132992	104012	80372
25°	133258	84933	62277
30°	132511	67456	46093
35°	130998	49986	35842
40°	130793	38817	29581
45°	131069	31944	26278
50°	129208	27629	25063
55°	117297	24628	25325
60°	92218	23536	23075
65°	68494	22812	17365
70°	52533	18262	10601
75°	39987	13024	5848
80°	29363	6060	4723
85°	18369	5206	4203



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3090.2	6.7
10°-20°	8134.8	17.5
20°-30°	9823.6	21.2
30°-40°	8783.5	18.9
40°-50°	6878.1	14.8
50°-60°	5196.9	11.2
60°-70°	3086.6	6.7
70°-80°	1186.2	2.6
80°-90°	206.1	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°	21048.6	45.4
0°-40°	29832.1	64.3
0°-60°	41907.1	90.3
0°-90°	46386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	46386.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	32891	32891	32891	32891	32891	
5°	32920	32776	32670	32627	32575	###
15°	32715	31636	29274	26826	25811	9244
25°	31089	27432	19814	15622	14529	14314
35°	27622	19656	10540	8218	7558	17322
45°	23857	10165	5814	4912	4783	18364
55°	17318	5515	3636	3622	3739	15208
65°	7451	3097	2482	2070	1889	7677
75°	2664	1489	868	429	390	2917
85°	412	144	117	102	94	549
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	32891.2	32891.2	32891.2	32891.2	32891.2
2.5°	32922.3	32813.6	32805.1	32874.9	32885.4
5°	32919.9	32776.4	32670.0	32627.0	32575.3
7.5°	32909.9	32692.5	32333.6	31989.0	31829.1
10°	32885.4	32499.7	31677.3	30893.8	30520.5
12.5°	32831.9	32155.1	30702.9	29263.2	28479.7
15°	32715.0	31636.2	29273.6	26826.5	25811.3
17.5°	32503.5	30920.2	27521.9	24068.1	22761.4
20°	32169.4	30009.8	25159.3	20922.0	19441.1
22.5°	31689.4	28820.4	22556.5	18089.5	16906.3
25°	31088.6	27431.9	19814.4	15622.1	14528.9
27.5°	30375.0	25811.3	17451.5	13325.1	12248.3
30°	29540.2	23918.3	15037.7	11155.1	10275.3
32.5°	28606.9	21924.8	12517.2	9499.9	8776.2
35°	27622.4	19656.5	10540.0	8218.2	7557.7
37.5°	26695.3	17228.0	8926.0	7084.2	6620.5
40°	25791.1	14676.8	7654.3	6187.8	5833.1
42.5°	24937.7	12236.2	6682.2	5437.2	5205.2
45°	23857.0	10164.7	5814.4	4912.2	4783.0
47.5°	22710.2	8579.1	5125.2	4485.3	4440.3
50°	21379.1	7307.7	4571.5	4114.3	4146.9
52.5°	19652.2	6302.6	4046.4	3851.6	3948.2
55°	17318.4	5515.2	3636.2	3621.9	3739.1
57.5°	14584.4	4762.4	3312.2	3402.6	3533.8
60°	11869.1	4157.4	3029.3	3160.4	2969.9
62.5°	9481.7	3601.7	2760.7	2520.5	2356.7
65°	7451.3	3096.8	2481.7	2069.6	1889.1
67.5°	5941.7	2627.2	2087.8	1647.0	1497.2
70°	4625.0	2208.9	1607.8	1236.8	933.3
72.5°	3544.2	1846.0	1255.0	703.6	531.3
75°	2664.1	1489.0	867.7	428.8	389.6
77.5°	1899.2	1105.6	463.4	309.7	287.2
80°	1312.5	709.8	270.9	223.5	211.1
82.5°	814.2	342.7	184.7	159.9	149.8
85°	412.1	143.6	116.8	102.5	94.3
87.5°	137.4	69.9	53.2	49.3	45.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)