

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: P563309

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

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563309
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-L850-CD
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 80CRI, 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

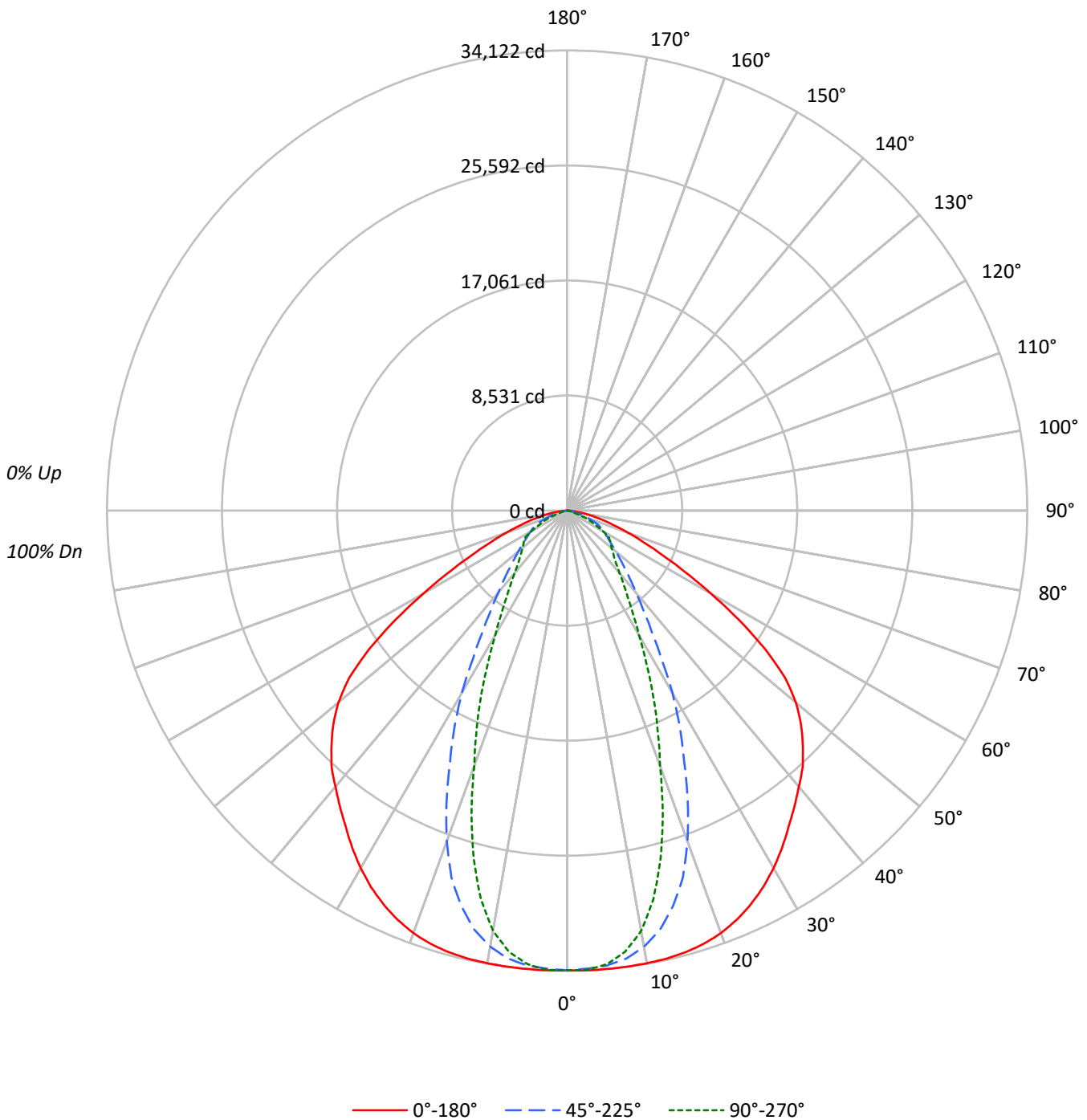
Lumens per Lamp: N/A
Luminaire Lumens: 48076.0 lumens
Efficiency: N/A
Efficacy: 148.4 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.75' x L: 1.58' x H: 0')
CIE Type: Direct

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°	132431	132431	132431
5°	133053	132043	131661
10°	134450	129511	124782
15°	136369	122024	107591
20°	137838	107801	83300
25°	138114	88027	64546
30°	137339	69914	47772
35°	135771	51807	37148
40°	135559	40231	30659
45°	135844	33108	27235
50°	133916	28635	25976
55°	121570	25525	26247
60°	95578	24393	23916
65°	70990	23643	17998
70°	54447	18927	10987
75°	41445	13498	6061
80°	30432	6280	4895
85°	19037	5398	4355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3202.8	6.7
10°-20°	8431.1	17.5
20°-30°	10181.5	21.2
30°-40°	9103.5	18.9
40°-50°	7128.7	14.8
50°-60°	5386.2	11.2
60°-70°	3199.1	6.7
70°-80°	1229.4	2.6
80°-90°	213.6	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°	21815.4	45.4
0°-40°	30919.0	64.3
0°-60°	43433.9	90.3
0°-90°	48076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	48076.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	34090	34090	34090	34090	34090	
5°	34119	33970	33860	33816	33762	###
15°	33907	32789	30340	27804	26752	9580
25°	32221	28431	20536	16191	15058	14836
35°	28629	20373	10924	8518	7833	17953
45°	24726	10535	6026	5091	4957	19033
55°	17949	5716	3769	3754	3875	15763
65°	7723	3210	2572	2145	1958	7957
75°	2761	1543	899	444	404	3023
85°	427	149	121	106	98	569
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	34089.6	34089.6	34089.6	34089.6	34089.6
2.5°	34121.7	34009.1	34000.3	34072.7	34083.5
5°	34119.3	33970.5	33860.3	33815.7	33762.2
7.5°	34108.9	33883.6	33511.6	33154.4	32988.7
10°	34083.5	33683.7	32831.5	32019.4	31632.5
12.5°	34028.0	33326.6	31821.5	30329.3	29517.3
15°	33907.0	32788.8	30340.2	27803.9	26751.7
17.5°	33687.8	32046.8	28524.6	24945.0	23590.7
20°	33341.5	31103.2	26076.0	21684.3	20149.4
22.5°	32843.9	29870.4	23378.4	18748.5	17522.2
25°	32221.3	28431.3	20536.4	16191.3	15058.3
27.5°	31481.6	26751.7	18087.3	13810.6	12694.5
30°	30616.5	24789.7	15585.6	11561.5	10649.7
32.5°	29649.2	22723.6	12973.2	9846.1	9095.9
35°	28628.8	20372.7	10924.0	8517.6	7833.0
37.5°	27667.9	17855.6	9251.2	7342.3	6861.7
40°	26730.8	15211.5	7933.2	6413.2	6045.6
42.5°	25846.3	12682.0	6925.6	5635.3	5394.8
45°	24726.2	10535.0	6026.3	5091.2	4957.2
47.5°	23537.6	8891.6	5312.0	4648.7	4602.1
50°	22158.1	7574.0	4738.0	4264.2	4298.0
52.5°	20368.2	6532.3	4193.8	3991.9	4092.1
55°	17949.3	5716.2	3768.7	3753.8	3875.3
57.5°	15115.8	4935.9	3432.8	3526.6	3662.5
60°	12301.5	4308.9	3139.6	3275.6	3078.1
62.5°	9827.2	3732.9	2861.3	2612.3	2442.6
65°	7722.8	3209.6	2572.1	2145.0	1958.0
67.5°	6158.2	2723.0	2163.9	1707.0	1551.7
70°	4793.5	2289.4	1666.3	1281.8	967.3
72.5°	3673.4	1913.3	1300.7	729.2	550.6
75°	2761.2	1543.3	899.3	444.4	403.8
77.5°	1968.4	1145.9	480.2	321.0	297.6
80°	1360.3	735.6	280.7	231.7	218.8
82.5°	843.8	355.1	191.5	165.7	155.3
85°	427.1	148.8	121.1	106.2	97.7
87.5°	142.4	72.4	55.1	51.1	46.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)