

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: P563304

Luminaire Tested: **VHB-48-N-UNV-L735-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563304
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-L735-CD
Description: 48000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 70CRI, 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

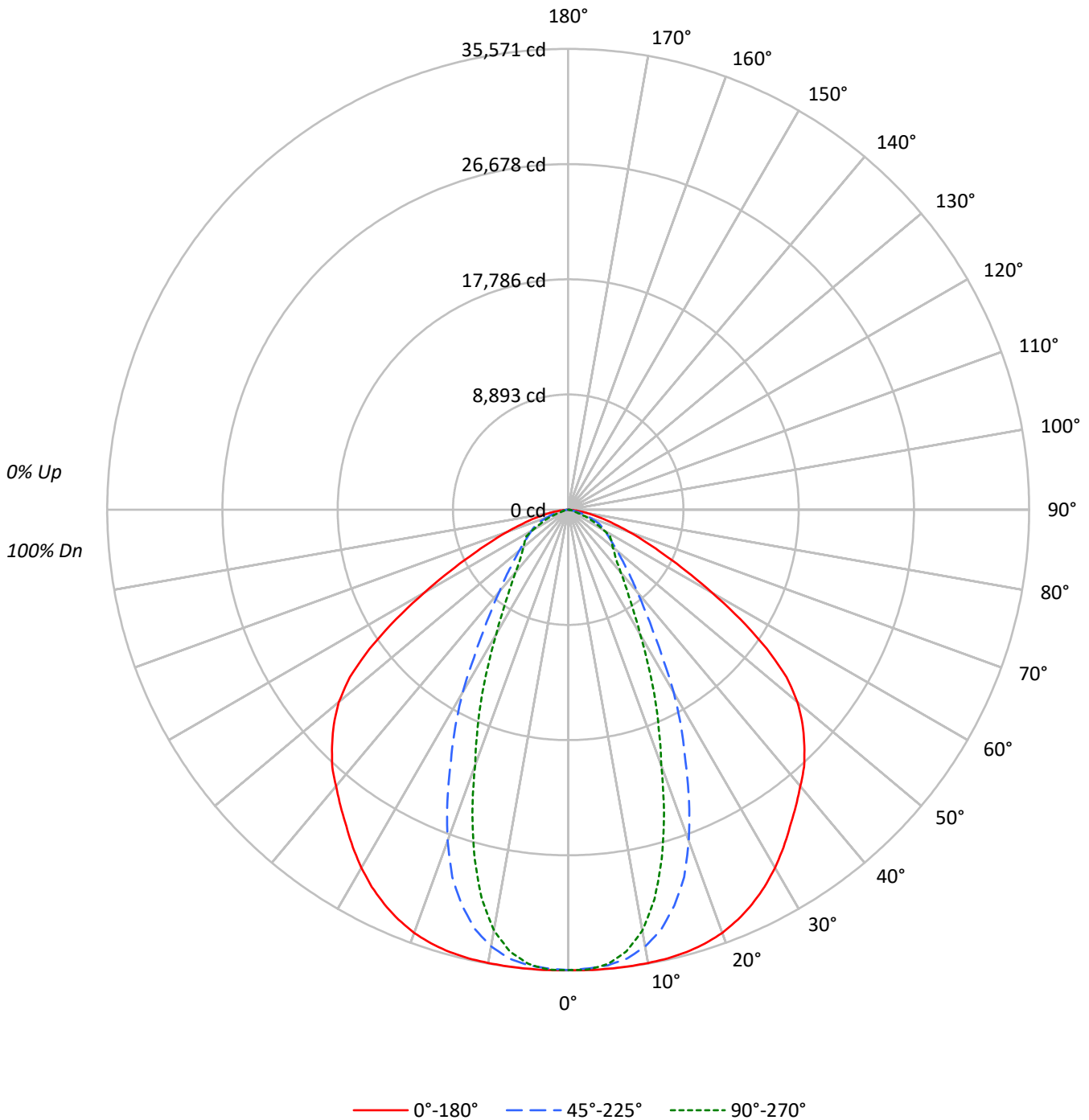
Lumens per Lamp: N/A
Luminaire Lumens: 50118.0 lumens
Efficiency: N/A
Efficacy: 154.7 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.75' x L: 1.58' x H: 0')
CIE Type: Direct

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	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°	138056	138056	138056
5°	138704	137652	137253
10°	140161	135012	130081
15°	142161	127207	112161
20°	143692	112380	86838
25°	143980	91766	67288
30°	143172	72883	49801
35°	141538	54007	38726
40°	141316	41940	31961
45°	141614	34515	28392
50°	139604	29852	27079
55°	126733	26610	27362
60°	99637	25430	24931
65°	74005	24648	18762
70°	56759	19731	11454
75°	43204	14072	6319
80°	31723	6548	5103
85°	19848	5625	4542



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3338.9	6.7
10°-20°	8789.2	17.5
20°-30°	10613.9	21.2
30°-40°	9490.2	18.9
40°-50°	7431.5	14.8
50°-60°	5615.0	11.2
60°-70°	3335.0	6.7
70°-80°	1281.6	2.6
80°-90°	222.7	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°	22742.0	45.4
0°-40°	32232.2	64.3
0°-60°	45278.7	90.3
0°-90°	50118.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	50118.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	35538	35538	35538	35538	35538	
5°	35568	35413	35298	35252	35196	###
15°	35347	34182	31629	28985	27888	9987
25°	33590	29639	21409	16879	15698	15466
35°	29845	21238	11388	8879	8166	18716
45°	25776	10982	6282	5307	5168	19841
55°	18712	5959	3929	3913	4040	16432
65°	8051	3346	2681	2236	2041	8295
75°	2878	1609	938	463	421	3151
85°	445	155	126	111	102	593
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	35537.5	35537.5	35537.5	35537.5	35537.5
2.5°	35571.0	35453.6	35444.4	35519.9	35531.2
5°	35568.5	35413.4	35298.5	35252.0	35196.2
7.5°	35557.6	35322.8	34935.0	34562.6	34389.9
10°	35531.2	35114.4	34226.0	33379.4	32976.0
12.5°	35473.3	34742.1	33173.1	31617.5	30771.0
15°	35347.1	34181.5	31628.9	28984.8	27887.9
17.5°	35118.6	33407.9	29736.2	26004.5	24592.7
20°	34757.6	32424.3	27183.5	22605.3	21005.3
22.5°	34239.0	31139.1	24371.3	19544.9	18266.5
25°	33589.9	29638.9	21408.6	16879.0	15697.9
27.5°	32818.8	27887.9	18855.6	14397.2	13233.7
30°	31916.9	25842.6	16247.6	12052.5	11102.0
32.5°	30908.5	23688.7	13524.3	10264.3	9482.3
35°	29844.8	21238.0	11388.0	8879.3	8165.7
37.5°	28843.1	18614.0	9644.1	7654.2	7153.1
40°	27866.1	15857.6	8270.1	6685.6	6302.4
42.5°	26944.1	13220.7	7219.8	5874.7	5624.0
45°	25776.4	10982.5	6282.3	5307.4	5167.8
47.5°	24537.4	9269.3	5537.6	4846.2	4797.5
50°	23099.2	7895.7	4939.3	4445.3	4480.6
52.5°	21233.4	6809.7	4372.0	4161.5	4265.9
55°	18711.7	5959.0	3928.8	3913.3	4039.9
57.5°	15757.8	5145.5	3578.7	3676.4	3818.1
60°	12824.0	4491.9	3273.0	3414.7	3208.8
62.5°	10244.6	3891.4	2982.8	2723.3	2546.4
65°	8050.8	3345.9	2681.4	2236.1	2041.1
67.5°	6419.8	2838.6	2255.8	1779.5	1617.6
70°	4997.1	2386.6	1737.1	1336.3	1008.4
72.5°	3829.4	1994.6	1356.0	760.2	574.0
75°	2878.4	1608.8	937.5	463.3	421.0
77.5°	2052.0	1194.6	500.6	334.6	310.3
80°	1418.0	766.9	292.7	241.5	228.1
82.5°	879.7	370.2	199.6	172.7	161.8
85°	445.3	155.1	126.2	110.7	101.9
87.5°	148.4	75.5	57.4	53.3	48.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)