

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: P563285

Luminaire Tested: **VHB-24-N-UNV-L950-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563285
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-24-N-UNV-L950-CD
Description: 24000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 90CRI, 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

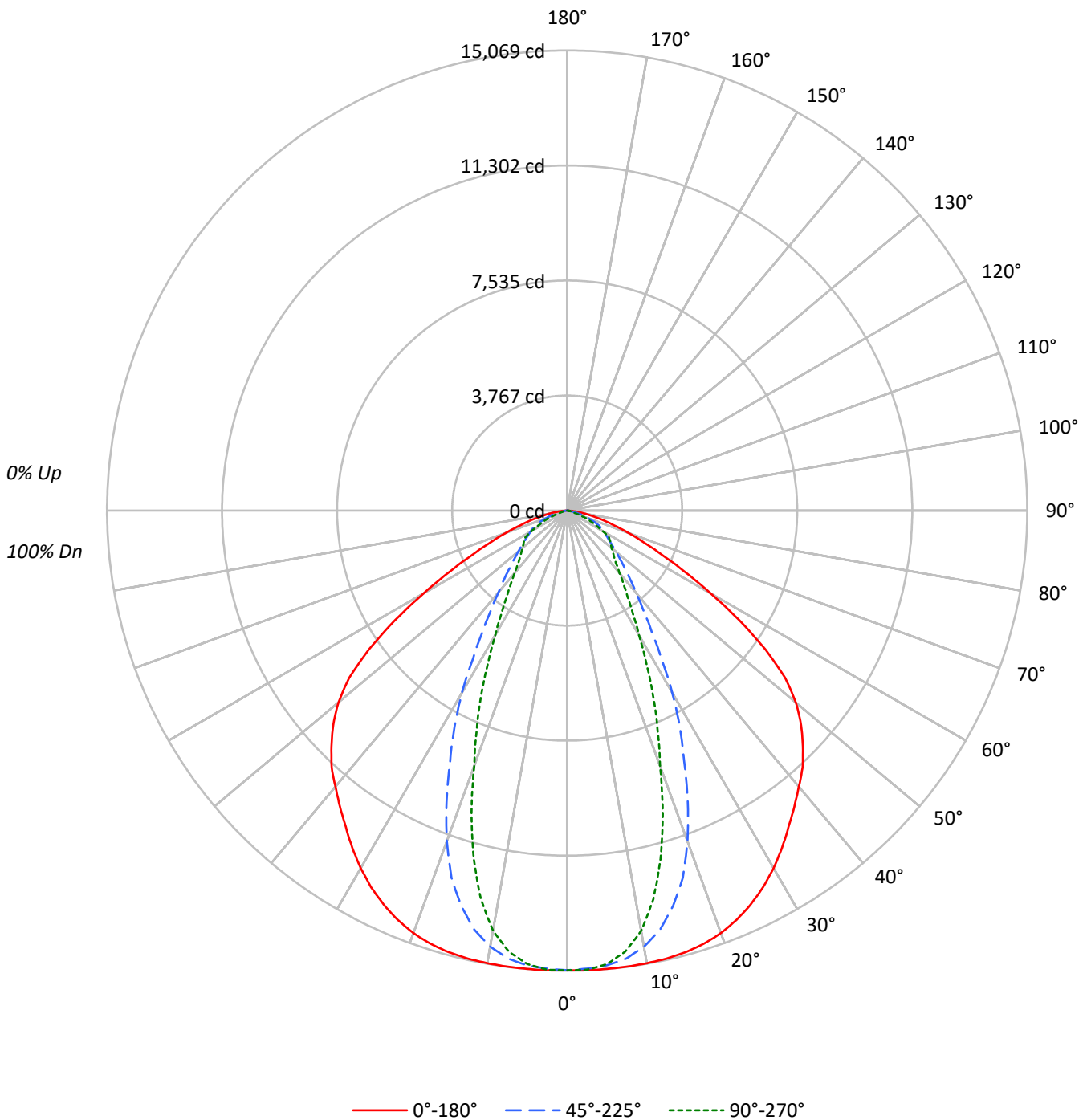
Lumens per Lamp: N/A
Luminaire Lumens: 21231.0 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 165
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	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	87725	87725	87725
5°	88137	87468	87214
10°	89062	85791	82657
15°	90333	80830	71270
20°	91306	71410	55180
25°	91489	58311	42756
30°	90976	46312	31645
35°	89938	34318	24608
40°	89797	26650	20309
45°	89986	21931	18041
50°	88709	18969	17207
55°	80530	16908	17387
60°	63312	16159	15842
65°	47025	15662	11923
70°	36067	12538	7278
75°	27454	8943	4014
80°	20158	4161	3242
85°	12610	3577	2888



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1414.4	6.7
10°-20°	3723.3	17.5
20°-30°	4496.3	21.2
30°-40°	4020.2	18.9
40°-50°	3148.1	14.8
50°-60°	2378.6	11.2
60°-70°	1412.8	6.7
70°-80°	542.9	2.6
80°-90°	94.3	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°	9634.0	45.4
0°-40°	13654.2	64.3
0°-60°	19181.0	90.3
0°-90°	21231.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21231.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15054	15054	15054	15054	15054	
5°	15068	15002	14953	14933	14910	###
15°	14974	14480	13399	12279	11814	4231
25°	14229	12556	9069	7150	6650	6552
35°	12643	8997	4824	3762	3459	7928
45°	10919	4652	2661	2248	2189	8405
55°	7927	2524	1664	1658	1711	6961
65°	3410	1417	1136	947	865	3514
75°	1219	682	397	196	178	1335
85°	189	66	54	47	43	251
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15054.4	15054.4	15054.4	15054.4	15054.4
2.5°	15068.6	15018.9	15015.0	15046.9	15051.7
5°	15067.5	15001.8	14953.2	14933.4	14909.8
7.5°	15062.9	14963.5	14799.2	14641.4	14568.3
10°	15051.7	14875.2	14498.8	14140.2	13969.3
12.5°	15027.2	14717.5	14052.8	13393.8	13035.2
15°	14973.8	14480.0	13398.6	12278.6	11813.9
17.5°	14877.0	14152.3	12596.8	11016.0	10418.0
20°	14724.0	13735.6	11515.5	9576.1	8898.3
22.5°	14504.3	13191.2	10324.2	8279.6	7738.0
25°	14229.4	12555.6	9069.1	7150.3	6649.9
27.5°	13902.7	11813.9	7987.6	6099.0	5606.1
30°	13520.7	10947.5	6882.8	5105.7	4703.0
32.5°	13093.5	10035.0	5729.2	4348.2	4016.9
35°	12642.9	8996.8	4824.2	3761.5	3459.2
37.5°	12218.5	7885.3	4085.4	3242.5	3030.2
40°	11804.7	6717.6	3503.4	2832.2	2669.8
42.5°	11414.1	5600.6	3058.4	2488.6	2382.4
45°	10919.4	4652.4	2661.3	2248.3	2189.2
47.5°	10394.5	3926.7	2345.8	2052.9	2032.3
50°	9785.3	3344.8	2092.4	1883.1	1898.1
52.5°	8994.9	2884.7	1852.0	1762.9	1807.1
55°	7926.7	2524.3	1664.3	1657.7	1711.4
57.5°	6675.3	2179.8	1516.0	1557.4	1617.4
60°	5432.5	1902.8	1386.5	1446.5	1359.3
62.5°	4339.8	1648.5	1263.6	1153.6	1078.7
65°	3410.5	1417.4	1135.9	947.3	864.7
67.5°	2719.5	1202.5	955.6	753.8	685.3
70°	2116.9	1011.0	735.9	566.1	427.2
72.5°	1622.2	844.9	574.4	322.0	243.2
75°	1219.4	681.5	397.2	196.3	178.3
77.5°	869.3	506.0	212.1	141.7	131.4
80°	600.7	324.9	124.0	102.3	96.6
82.5°	372.6	156.8	84.5	73.2	68.6
85°	188.6	65.7	53.5	46.9	43.2
87.5°	62.9	32.0	24.3	22.6	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)