

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: P563352

Luminaire Tested: **VHB-24-W-UNV-L835-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563352
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364417)
Test Lab: INNOVATION CENTER
Issue Date: 6/3/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-24-W-UNV-L835-CD
Description: 24000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 80CRI, 3500K CCT
LEDS
Light Source: -
Ballast/Driver: -

Summary

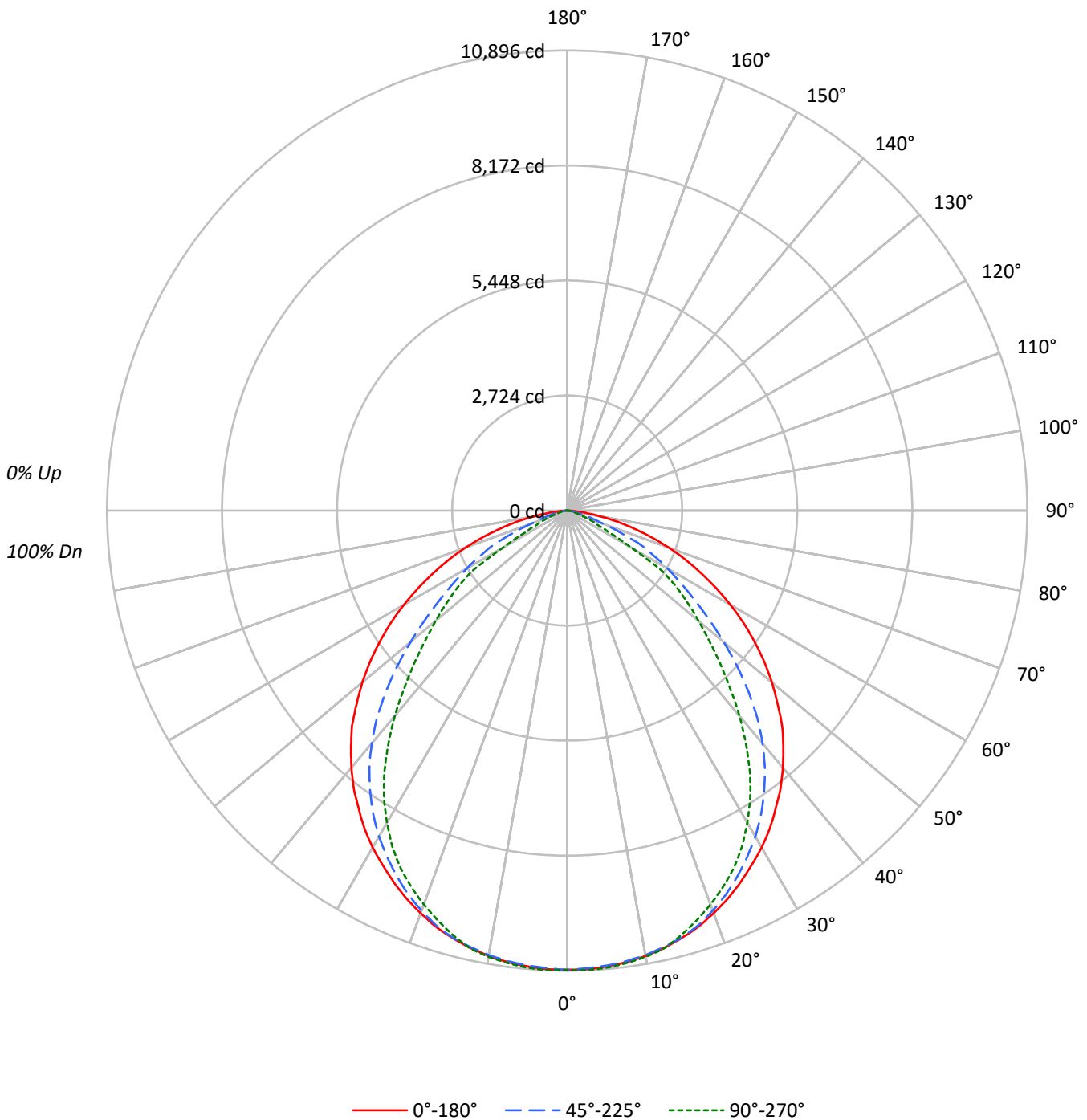
Lumens per Lamp: N/A
Luminaire Lumens: 24463.0 lumens
Efficiency: N/A
Efficacy: 148.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

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	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	70	77	72	68	75	71	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	52	61	56	52	50
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	34	59	47	39	34	46	39	34	45	39	34	44	38	34	32
10	57	44	36	31	55	43	36	31	42	36	31	42	35	31	41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	63378	63378	63378
5°	63388	63258	63549
10°	63364	63228	63488
15°	63214	63148	62822
20°	62909	62520	61543
25°	62443	61381	60034
30°	61989	59966	57401
35°	61250	57864	53671
40°	60443	54753	48292
45°	59343	50075	42195
50°	57384	43841	36860
55°	55041	37347	32177
60°	51997	32032	20542
65°	48180	26719	10890
70°	43487	15184	7057
75°	36534	9303	4390
80°	27762	4695	3842
85°	16869	4266	3463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1029.7	4.2
10°-20°	2946.0	12.0
20°-30°	4391.5	18.0
30°-40°	5057.5	20.7
40°-50°	4706.8	19.2
50°-60°	3581.5	14.6
60°-70°	1922.5	7.9
70°-80°	707.3	2.9
80°-90°	120.3	0.5
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°	8367.1	34.2
0°-40°	13424.7	54.9
0°-60°	21712.9	88.8
0°-90°	24463.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	24463.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10876	10876	10876	10876	10876	
5°	10836	10806	10814	10852	10864	###
15°	10478	10462	10468	10448	10414	2958
25°	9712	9704	9547	9411	9337	4477
35°	8610	8506	8134	7726	7545	5390
45°	7201	6854	6076	5355	5120	5534
55°	5418	4805	3676	3273	3167	4839
65°	3494	2567	1938	960	790	3465
75°	1623	1063	413	214	195	1739
85°	252	82	64	55	52	336
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10876.2	10876.2	10876.2	10876.2	10876.2
2.5°	10868.4	10835.3	10846.4	10881.7	10896.0
5°	10836.5	10805.6	10814.4	10851.9	10864.1
7.5°	10783.6	10753.9	10760.5	10795.8	10807.9
10°	10708.7	10677.9	10685.6	10719.7	10729.6
12.5°	10607.3	10578.7	10585.3	10609.6	10620.6
15°	10478.5	10461.9	10467.5	10447.6	10413.5
17.5°	10334.2	10309.9	10303.3	10215.2	10178.8
20°	10144.7	10135.9	10081.9	9972.9	9924.4
22.5°	9945.3	9928.7	9835.1	9704.0	9645.6
25°	9711.8	9704.0	9546.6	9411.0	9337.2
27.5°	9460.6	9441.9	9239.1	9069.6	8969.2
30°	9212.7	9166.5	8912.0	8674.0	8530.9
32.5°	8931.8	8844.7	8540.7	8236.7	8071.5
35°	8610.2	8505.5	8134.2	7725.5	7544.8
37.5°	8298.4	8140.8	7693.6	7182.5	6951.1
40°	7945.9	7720.0	7197.9	6604.1	6348.5
42.5°	7574.6	7299.2	6670.2	5979.5	5717.3
45°	7201.1	6854.2	6076.4	5354.9	5120.2
47.5°	6757.2	6389.4	5459.6	4758.9	4557.3
50°	6329.9	5900.2	4836.0	4203.8	4066.0
52.5°	5882.6	5361.6	4230.2	3734.4	3601.1
55°	5417.7	4805.1	3676.1	3272.9	3167.2
57.5°	4950.6	4233.5	3184.8	2853.2	2663.7
60°	4461.6	3666.1	2748.5	2318.9	1762.6
62.5°	3980.1	3075.6	2313.4	1454.1	1121.4
65°	3494.3	2566.7	1937.8	959.5	789.8
67.5°	3030.6	2074.4	1382.5	695.1	591.5
70°	2552.4	1696.4	891.2	497.9	414.2
72.5°	2073.2	1364.9	611.4	327.2	265.4
75°	1622.7	1063.0	413.2	213.7	195.0
77.5°	1216.1	733.6	230.2	158.6	148.7
80°	827.3	439.6	139.9	121.2	114.5
82.5°	495.8	210.4	101.4	89.2	85.9
85°	252.3	81.5	63.8	55.0	51.8
87.5°	74.9	40.7	28.6	22.1	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)