

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: P563354

Luminaire Tested: **VHB-24-W-UNV-L850-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563354
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-L850-CD
Description: 24000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 80CRI, 5000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Summary

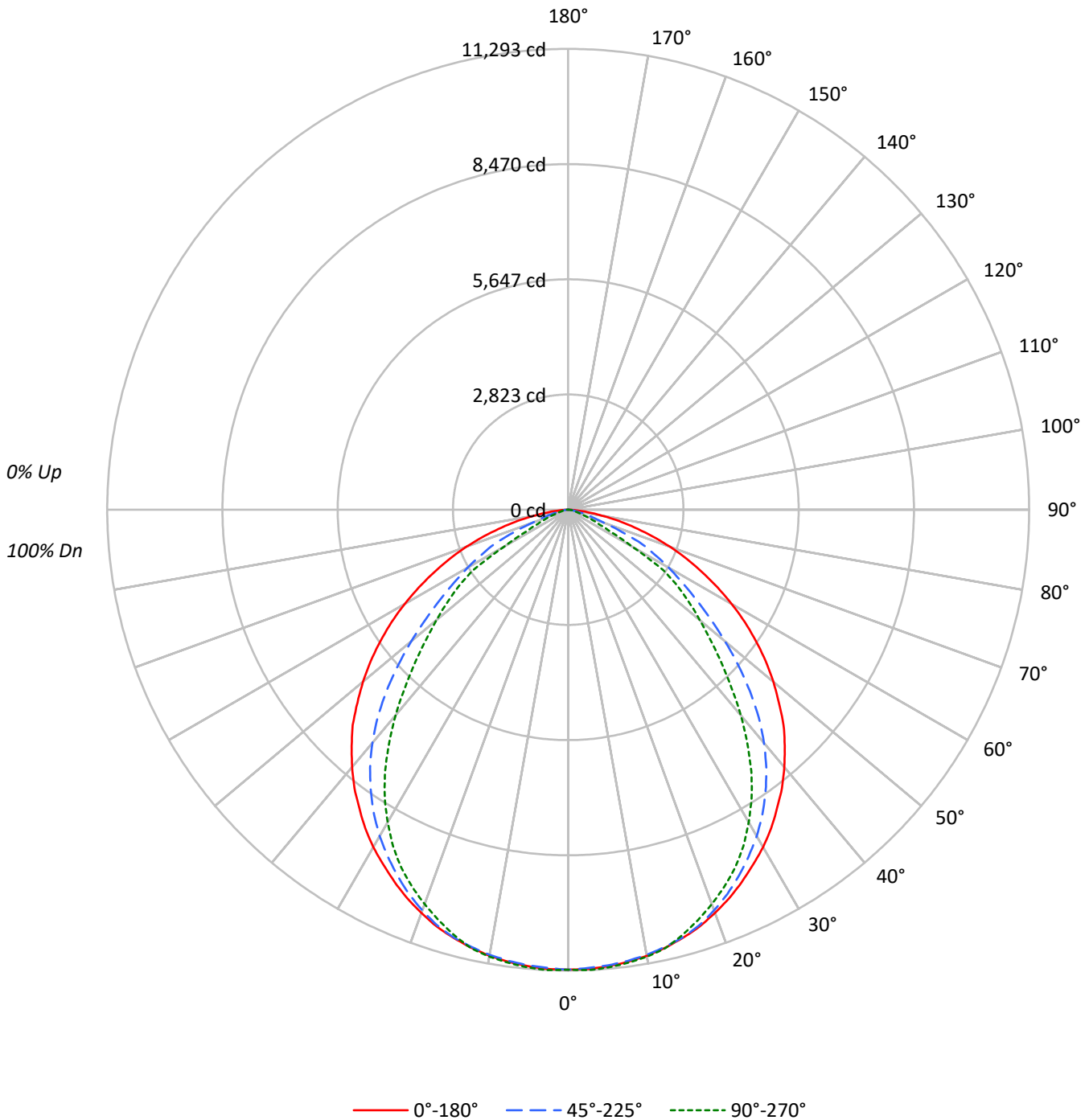
Lumens per Lamp: N/A
Luminaire Lumens: 25355.0 lumens
Efficiency: N/A
Efficacy: 153.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

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	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	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°	65689	65689	65689
5°	65699	65565	65866
10°	65675	65533	65803
15°	65519	65450	65113
20°	65203	64799	63786
25°	64720	63619	62223
30°	64249	62153	59495
35°	63483	59974	55628
40°	62647	56750	50053
45°	61508	51901	43734
50°	59476	45440	38205
55°	57048	38708	33350
60°	53892	33200	21291
65°	49937	27692	11287
70°	45073	15738	7314
75°	37865	9641	4550
80°	28776	4866	3983
85°	17484	4426	3590



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1067.2	4.2
10°-20°	3053.4	12.0
20°-30°	4551.6	18.0
30°-40°	5241.9	20.7
40°-50°	4878.4	19.2
50°-60°	3712.1	14.6
60°-70°	1992.6	7.9
70°-80°	733.1	2.9
80°-90°	124.7	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°	8672.2	34.2
0°-40°	13914.2	54.9
0°-60°	22504.7	88.8
0°-90°	25355.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	25355.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11273	11273	11273	11273	11273	
5°	11232	11200	11209	11248	11260	###
15°	10861	10843	10849	10828	10793	3065
25°	10066	10058	9895	9754	9678	4640
35°	8924	8816	8431	8007	7820	5587
45°	7464	7104	6298	5550	5307	5736
55°	5615	4980	3810	3392	3283	5016
65°	3622	2660	2008	994	819	3591
75°	1682	1102	428	222	202	1803
85°	262	84	66	57	54	348
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11272.8	11272.8	11272.8	11272.8	11272.8
2.5°	11264.7	11230.4	11241.9	11278.5	11293.3
5°	11231.6	11199.6	11208.7	11247.6	11260.2
7.5°	11176.8	11146.0	11152.9	11189.4	11202.0
10°	11099.2	11067.3	11075.2	11110.5	11120.9
12.5°	10994.1	10964.4	10971.3	10996.5	11007.8
15°	10860.6	10843.4	10849.2	10828.5	10793.2
17.5°	10711.0	10685.9	10679.0	10587.7	10550.0
20°	10514.6	10505.5	10449.5	10336.5	10286.2
22.5°	10307.9	10290.7	10193.7	10057.8	9997.4
25°	10065.9	10057.8	9894.7	9754.1	9677.6
27.5°	9805.6	9786.2	9576.0	9400.3	9296.3
30°	9548.6	9500.7	9237.0	8990.3	8842.0
32.5°	9257.5	9167.2	8852.1	8537.1	8365.8
35°	8924.1	8815.6	8430.8	8007.2	7819.9
37.5°	8601.0	8437.7	7974.1	7444.4	7204.6
40°	8235.6	8001.5	7460.4	6844.9	6580.0
42.5°	7850.8	7565.3	6913.5	6197.5	5925.7
45°	7463.7	7104.2	6298.0	5550.2	5306.9
47.5°	7003.6	6622.3	5658.7	4932.4	4723.5
50°	6560.7	6115.4	5012.4	4357.1	4214.3
52.5°	6097.1	5557.1	4384.5	3870.6	3732.4
55°	5615.3	4980.3	3810.1	3392.2	3282.7
57.5°	5131.1	4387.9	3300.9	2957.2	2760.9
60°	4624.2	3799.8	2848.7	2403.4	1826.9
62.5°	4125.2	3187.8	2397.7	1507.1	1162.3
65°	3621.7	2660.3	2008.4	994.5	818.6
67.5°	3141.1	2150.0	1432.9	720.4	613.1
70°	2645.5	1758.3	923.7	516.1	429.3
72.5°	2148.8	1414.6	633.7	339.2	275.1
75°	1681.8	1101.8	428.2	221.5	202.1
77.5°	1260.5	760.4	238.6	164.4	154.2
80°	857.5	455.6	145.0	125.6	118.7
82.5°	513.8	218.1	105.1	92.5	89.1
85°	261.5	84.4	66.2	57.0	53.7
87.5°	77.7	42.2	29.6	22.9	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)