

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: P563353

Luminaire Tested: **VHB-24-W-UNV-L840-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563353
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-L840-CD
Description: 24000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 80CRI, 4000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Summary

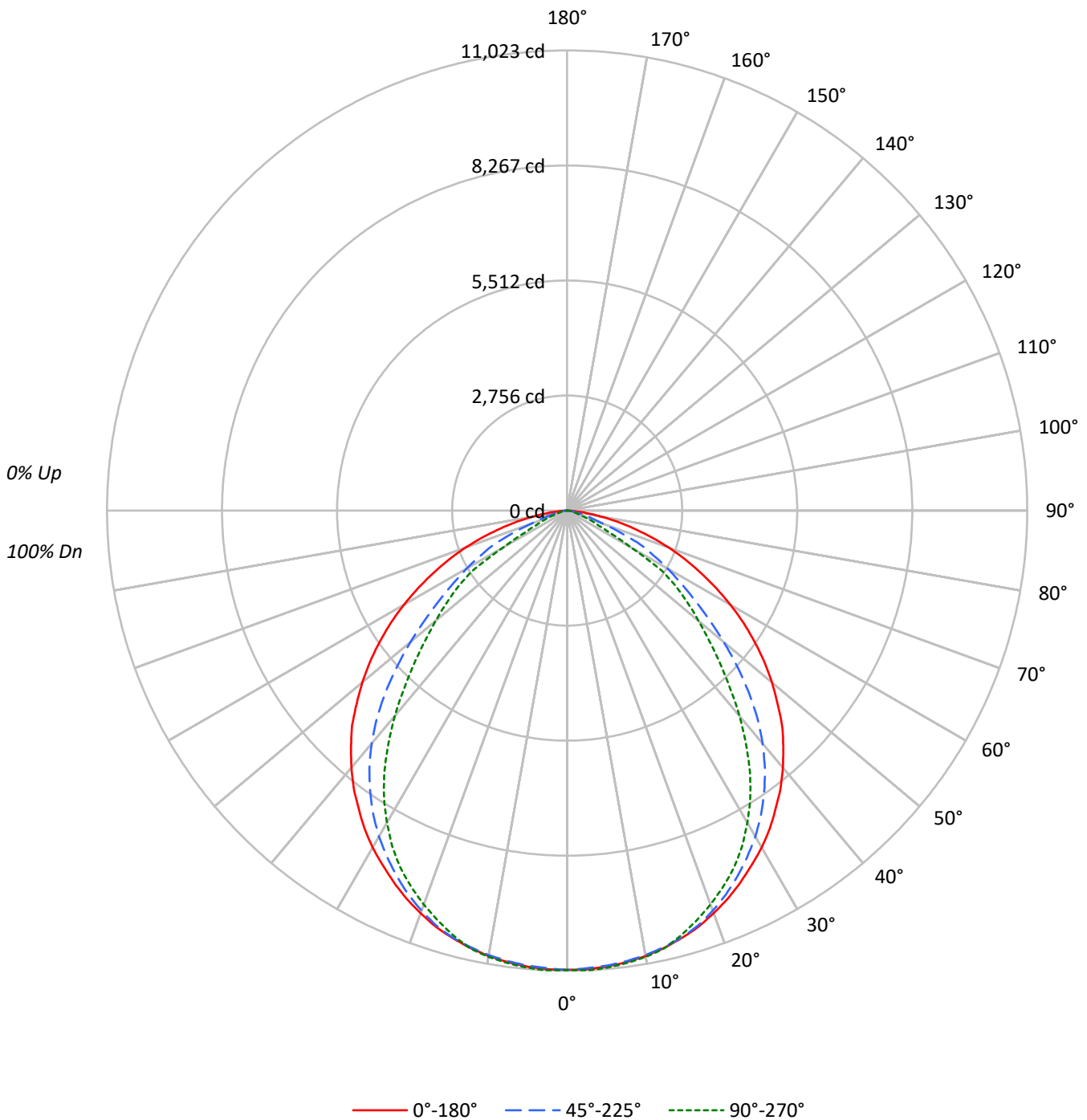
Lumens per Lamp: N/A
Luminaire Lumens: 24749.0 lumens
Efficiency: N/A
Efficacy: 150.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

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°	64119	64119	64119
5°	64129	63998	64292
10°	64105	63967	64231
15°	63953	63886	63556
20°	63644	63251	62262
25°	63173	62098	60736
30°	62714	60667	58072
35°	61966	58541	54299
40°	61150	55394	48857
45°	60037	50661	42689
50°	58055	44354	37292
55°	55685	37784	32553
60°	52604	32406	20782
65°	48743	27031	11017
70°	43994	15361	7139
75°	36960	9411	4440
80°	28088	4752	3889
85°	17063	4319	3503



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1041.7	4.2
10°-20°	2980.4	12.0
20°-30°	4442.8	18.0
30°-40°	5116.6	20.7
40°-50°	4761.8	19.2
50°-60°	3623.4	14.6
60°-70°	1945.0	7.9
70°-80°	715.6	2.9
80°-90°	121.7	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°	8465.0	34.2
0°-40°	13581.6	54.9
0°-60°	21966.8	88.8
0°-90°	24749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	24749.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11003	11003	11003	11003	11003	
5°	10963	10932	10941	10979	10991	###
15°	10601	10584	10590	10570	10535	2992
25°	9825	9817	9658	9521	9446	4529
35°	8711	8605	8229	7816	7633	5453
45°	7285	6934	6148	5418	5180	5599
55°	5481	4861	3719	3311	3204	4896
65°	3535	2597	1960	971	799	3506
75°	1642	1076	418	216	197	1760
85°	255	82	65	56	52	340
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11003.4	11003.4	11003.4	11003.4	11003.4
2.5°	10995.5	10962.0	10973.3	11008.9	11023.4
5°	10963.2	10931.9	10940.8	10978.8	10991.1
7.5°	10909.7	10879.6	10886.3	10922.0	10934.2
10°	10833.9	10802.8	10810.5	10845.0	10855.1
12.5°	10731.3	10702.4	10709.1	10733.6	10744.8
15°	10601.0	10584.2	10589.9	10569.7	10535.2
17.5°	10455.0	10430.5	10423.8	10334.6	10297.8
20°	10263.3	10254.4	10199.8	10089.5	10040.4
22.5°	10061.6	10044.8	9950.1	9817.4	9758.4
25°	9825.3	9817.4	9658.2	9521.0	9446.3
27.5°	9571.2	9552.3	9347.1	9175.6	9074.1
30°	9320.4	9273.6	9016.2	8775.4	8630.6
32.5°	9036.2	8948.1	8640.6	8333.0	8165.9
35°	8710.8	8604.9	8229.3	7815.8	7633.0
37.5°	8395.4	8236.0	7783.5	7266.5	7032.4
40°	8038.8	7810.3	7282.1	6681.3	6422.7
42.5°	7663.1	7384.5	6748.2	6049.4	5784.1
45°	7285.3	6934.4	6147.5	5417.5	5180.1
47.5°	6836.2	6464.1	5523.4	4814.6	4610.6
50°	6403.9	5969.2	4892.6	4252.9	4113.6
52.5°	5951.4	5424.2	4279.7	3778.1	3643.2
55°	5481.1	4861.3	3719.1	3311.1	3204.2
57.5°	5008.4	4283.0	3222.0	2886.6	2694.9
60°	4513.7	3709.0	2780.6	2346.0	1783.2
62.5°	4026.6	3111.6	2340.4	1471.1	1134.5
65°	3535.1	2596.7	1960.4	970.7	799.0
67.5°	3066.0	2098.6	1398.7	703.2	598.4
70°	2582.2	1716.3	901.6	503.8	419.0
72.5°	2097.5	1380.8	618.6	331.1	268.5
75°	1641.6	1075.5	418.0	216.2	197.2
77.5°	1230.3	742.2	232.9	160.4	150.5
80°	837.0	444.7	141.6	122.6	115.9
82.5°	501.6	212.9	102.6	90.3	86.9
85°	255.2	82.4	64.6	55.7	52.4
87.5°	75.8	41.2	28.9	22.3	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)