

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: P364419

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364419
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-24-W-UNV-L840-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 4000K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23057.0 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

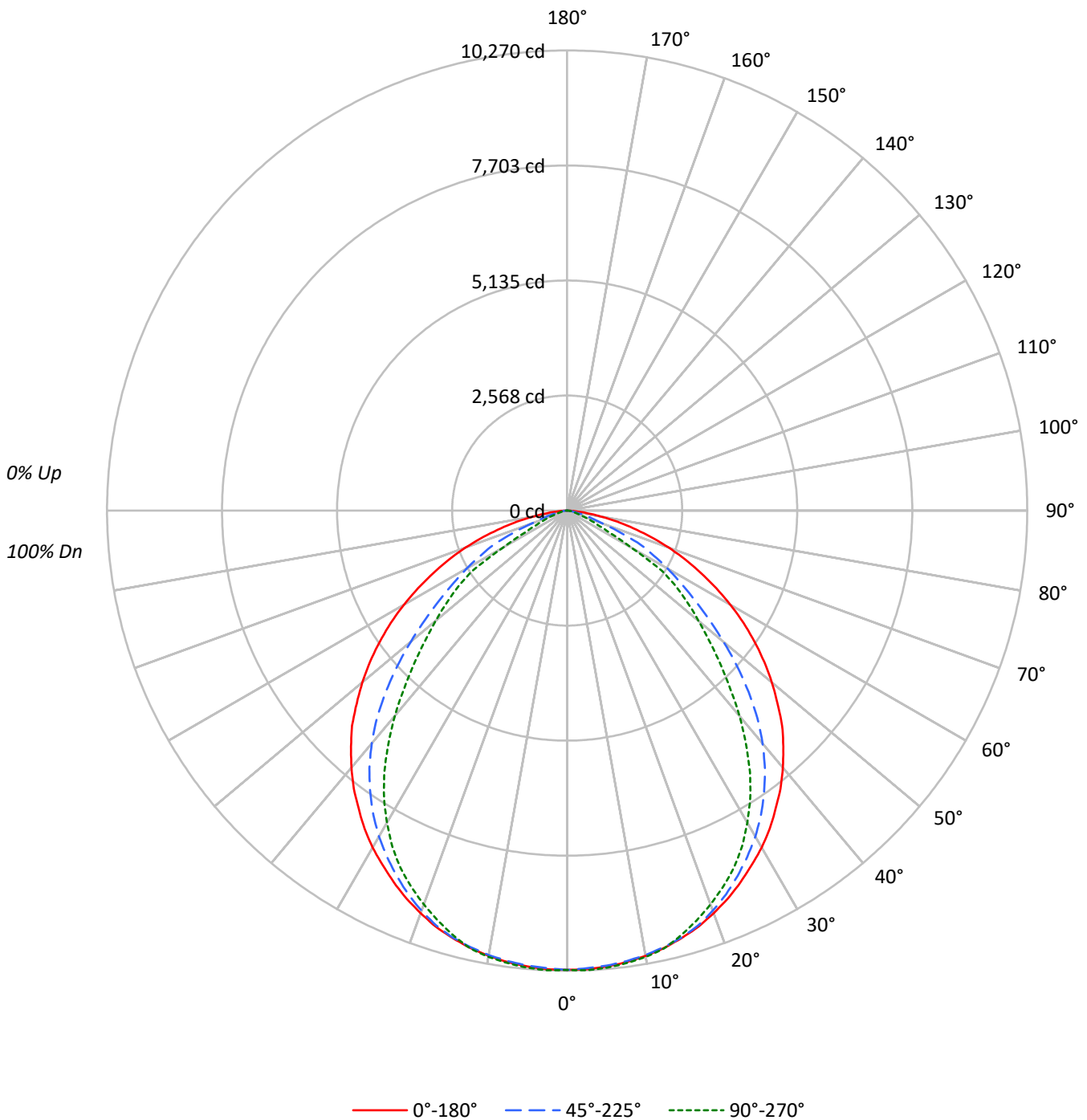
Input Watts (W): 174.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	63052	63052	63052
5°	63062	62934	63222
10°	63039	62903	63163
15°	62889	62823	62500
20°	62586	62198	61227
25°	62122	61065	59727
30°	61671	59658	57106
35°	60936	57567	53397
40°	60133	54472	48045
45°	59040	49818	41979
50°	57088	43616	36671
55°	54758	37155	32011
60°	51729	31867	20437
65°	47934	26581	10835
70°	43263	15106	7021
75°	36346	9254	4368
80°	27621	4672	3825
85°	16782	4248	3444



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	970.5	4.2
10°-20°	2776.7	12.0
20°-30°	4139.1	18.0
30°-40°	4766.8	20.7
40°-50°	4436.2	19.2
50°-60°	3375.7	14.6
60°-70°	1812.0	7.9
70°-80°	666.6	2.9
80°-90°	113.4	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°	7886.2	34.2
0°-40°	12653.1	54.9
0°-60°	20465.0	88.8
0°-90°	23057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23057.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10251	10251	10251	10251	10251	
5°	10214	10185	10193	10228	10240	971
15°	9876	9861	9866	9847	9815	2788
25°	9154	9146	8998	8870	8801	4219
35°	8115	8017	7667	7282	7111	5080
45°	6787	6460	5727	5047	4826	5216
55°	5106	4529	3465	3085	2985	4561
65°	3294	2419	1826	904	744	3266
75°	1529	1002	389	201	184	1639
85°	238	77	60	52	49	317
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10251.0	10251.0	10251.0	10251.0	10251.0
2.5°	10243.8	10212.6	10223.0	10256.2	10269.7
5°	10213.7	10184.6	10192.9	10228.2	10239.6
7.5°	10163.8	10135.8	10142.0	10175.3	10186.7
10°	10093.2	10064.2	10071.4	10103.6	10113.0
12.5°	9997.7	9970.7	9976.9	9999.8	10010.2
15°	9876.2	9860.7	9865.8	9847.2	9815.0
17.5°	9740.2	9717.4	9711.1	9628.1	9593.8
20°	9561.6	9553.3	9502.4	9399.7	9354.0
22.5°	9373.7	9358.1	9269.9	9146.3	9091.3
25°	9153.6	9146.3	8997.8	8870.1	8800.6
27.5°	8916.8	8899.2	8708.1	8548.3	8453.8
30°	8683.2	8639.6	8399.8	8175.5	8040.5
32.5°	8418.5	8336.4	8049.9	7763.3	7607.6
35°	8115.3	8016.6	7666.7	7281.5	7111.3
37.5°	7821.4	7673.0	7251.4	6769.7	6551.6
40°	7489.2	7276.3	6784.2	6224.6	5983.7
42.5°	7139.3	6879.7	6286.9	5635.8	5388.7
45°	6787.3	6460.2	5727.2	5047.1	4826.0
47.5°	6368.9	6022.1	5145.8	4485.4	4295.4
50°	5966.0	5561.1	4558.1	3962.1	3832.3
52.5°	5544.5	5053.4	3987.0	3519.8	3394.2
55°	5106.3	4529.0	3464.8	3084.8	2985.1
57.5°	4666.1	3990.2	3001.7	2689.2	2510.6
60°	4205.1	3455.4	2590.5	2185.6	1661.3
62.5°	3751.3	2898.9	2180.4	1370.5	1057.0
65°	3293.5	2419.2	1826.4	904.4	744.5
67.5°	2856.3	1955.1	1303.1	655.2	557.6
70°	2405.7	1599.0	840.0	469.3	390.4
72.5°	1954.1	1286.4	576.3	308.4	250.2
75°	1529.4	1002.0	389.4	201.4	183.8
77.5°	1146.3	691.5	217.0	149.5	140.2
80°	779.8	414.3	131.9	114.2	108.0
82.5°	467.2	198.3	95.5	84.1	81.0
85°	237.8	76.8	60.2	51.9	48.8
87.5°	70.6	38.4	27.0	20.8	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)