

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: P563356

Luminaire Tested: **VHB-24-W-UNV-L940-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563356  
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-L940-CD  
Description: 24000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 90CRI, 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

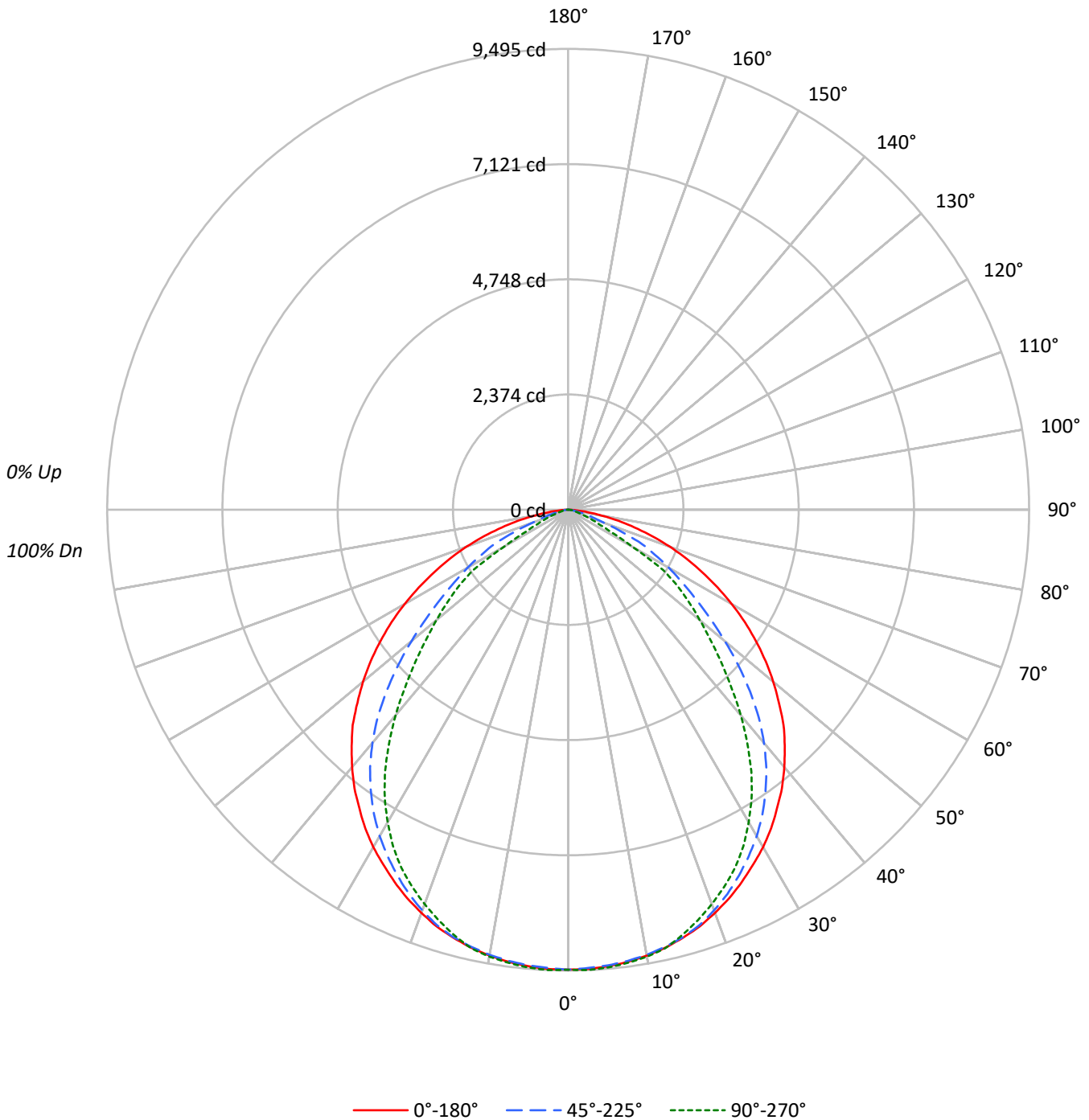
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21317.0 lumens  
Efficiency: N/A  
Efficacy: 129.2 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°	55227	55227	55227
5°	55236	55123	55376
10°	55215	55096	55324
15°	55084	55027	54743
20°	54819	54480	53628
25°	54412	53487	52314
30°	54017	52254	50019
35°	53373	50422	46770
40°	52670	47712	42082
45°	51712	43636	36769
50°	50003	38203	32120
55°	47962	32544	28039
60°	45310	27912	17900
65°	41984	23283	9489
70°	37895	13231	6149
75°	31836	8105	3825
80°	24195	4091	3349
85°	14696	3717	3022



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	897.3	4.2
10°-20°	2567.1	12.0
20°-30°	3826.7	18.0
30°-40°	4407.1	20.7
40°-50°	4101.5	19.2
50°-60°	3120.9	14.6
60°-70°	1675.3	7.9
70°-80°	616.3	2.9
80°-90°	104.8	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°	7291.1	34.2
0°-40°	11698.2	54.9
0°-60°	18920.6	88.8
0°-90°	21317.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21317.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9478	9478	9478	9478	9478	
5°	9443	9416	9424	9456	9467	898
15°	9131	9116	9121	9104	9074	2577
25°	8463	8456	8319	8201	8136	3901
35°	7503	7412	7088	6732	6575	4697
45°	6275	5973	5295	4666	4462	4822
55°	4721	4187	3203	2852	2760	4217
65°	3045	2237	1689	836	688	3019
75°	1414	926	360	186	170	1516
85°	220	71	56	48	45	293
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9477.5	9477.5	9477.5	9477.5	9477.5
2.5°	9470.7	9441.9	9451.6	9482.3	9494.7
5°	9442.9	9416.0	9423.6	9456.4	9466.9
7.5°	9396.8	9370.9	9376.7	9407.4	9418.0
10°	9331.5	9304.7	9311.4	9341.1	9349.8
12.5°	9243.2	9218.3	9224.0	9245.2	9254.8
15°	9130.9	9116.5	9121.4	9104.0	9074.3
17.5°	9005.2	8984.1	8978.3	8901.5	8869.8
20°	8840.1	8832.4	8785.4	8690.3	8648.1
22.5°	8666.3	8651.8	8570.3	8456.0	8405.2
25°	8462.8	8456.0	8318.9	8200.7	8136.4
27.5°	8244.0	8227.6	8050.9	7903.2	7815.7
30°	8027.9	7987.6	7765.9	7558.5	7433.8
32.5°	7783.1	7707.3	7442.4	7177.5	7033.5
35°	7502.9	7411.7	7088.1	6732.0	6574.6
37.5°	7231.2	7093.9	6704.2	6258.8	6057.2
40°	6924.0	6727.2	6272.3	5754.8	5532.1
42.5°	6600.5	6360.5	5812.4	5210.5	4982.0
45°	6275.0	5972.8	5295.0	4666.3	4461.8
47.5°	5888.2	5567.7	4757.5	4146.9	3971.2
50°	5515.8	5141.4	4214.1	3663.2	3543.1
52.5°	5126.1	4672.0	3686.2	3254.2	3138.0
55°	4721.0	4187.2	3203.3	2852.0	2759.9
57.5°	4313.9	3689.1	2775.2	2486.3	2321.2
60°	3887.8	3194.7	2395.0	2020.7	1535.9
62.5°	3468.2	2680.1	2015.9	1267.1	977.2
65°	3044.9	2236.6	1688.6	836.1	688.2
67.5°	2640.8	1807.6	1204.7	605.7	515.5
70°	2224.2	1478.3	776.6	433.9	360.9
72.5°	1806.6	1189.3	532.8	285.2	231.3
75°	1414.0	926.3	360.0	186.2	169.9
77.5°	1059.7	639.3	200.6	138.2	129.6
80°	721.0	383.1	121.9	105.6	99.8
82.5°	432.0	183.4	88.3	77.8	74.9
85°	219.8	71.0	55.6	48.0	45.2
87.5°	65.3	35.5	24.9	19.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)