

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: P563389

Luminaire Tested: **VHB-9-W-UNV-L840-CD**

Issue Date: 6/3/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P563389  
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-9-W-UNV-L840-CD  
Description: 9000 LUMEN, VHB LED LUMINAIRE WITH, WIDE LENS AND 80CRI, 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

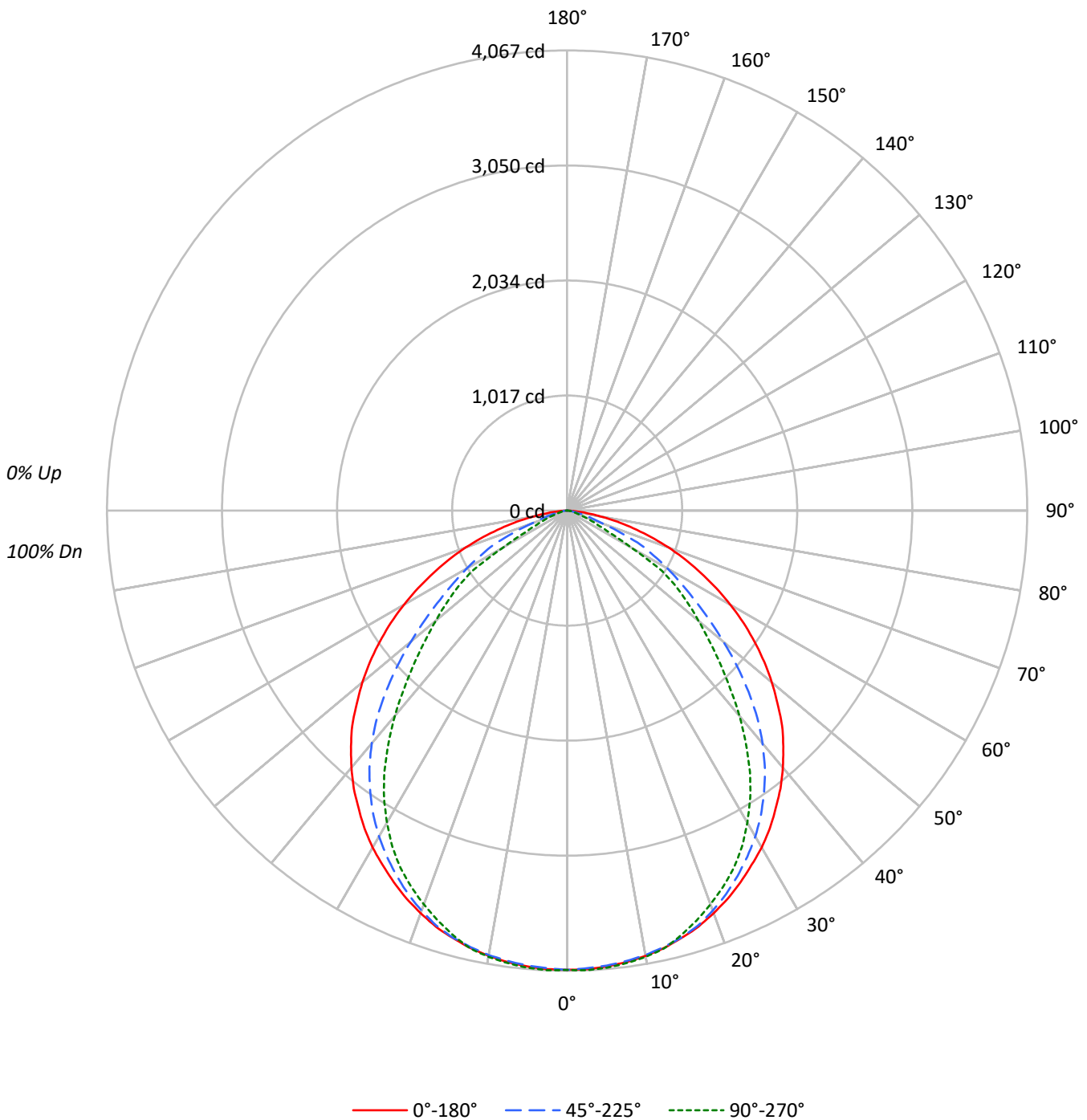
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9130.0 lumens  
Efficiency: N/A  
Efficacy: 163.0 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): 56  
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

TEST NUMBER: P563389

CATALOG NUMBER: VHB-9-W-UNV-L840-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P563389

CATALOG NUMBER: VHB-9-W-UNV-L840-CD

**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°	23654	23654	23654
5°	23658	23609	23718
10°	23649	23597	23695
15°	23592	23568	23446
20°	23479	23333	22968
25°	23305	22908	22406
30°	23135	22380	21423
35°	22860	21596	20031
40°	22558	20435	18024
45°	22148	18689	15748
50°	21416	16362	13757
55°	20542	13939	12008
60°	19406	11955	7666
65°	17981	9972	4065
70°	16230	5667	2634
75°	13635	3472	1639
80°	10363	1752	1433
85°	6298	1591	1290



TEST NUMBER: P563389

CATALOG NUMBER: VHB-9-W-UNV-L840-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	384.3	4.2
10°-20°	1099.5	12.0
20°-30°	1639.0	18.0
30°-40°	1887.5	20.7
40°-50°	1756.6	19.2
50°-60°	1336.7	14.6
60°-70°	717.5	7.9
70°-80°	264.0	2.9
80°-90°	44.9	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°	3122.8	34.2
0°-40°	5010.3	54.9
0°-60°	8103.6	88.8
0°-90°	9130.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9130.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4059	4059	4059	4059	4059	
5°	4044	4033	4036	4050	4055	385
15°	3911	3904	3907	3899	3886	1104
25°	3625	3622	3563	3512	3485	1671
35°	3214	3174	3036	2883	2816	2012
45°	2688	2558	2268	1998	1911	2065
55°	2022	1793	1372	1222	1182	1806
65°	1304	958	723	358	295	1293
75°	606	397	154	80	73	649
85°	94	30	24	20	19	125
90°	0	0	0	0	0	



TEST NUMBER: P563389

CATALOG NUMBER: VHB-9-W-UNV-L840-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4059.2	4059.2	4059.2	4059.2	4059.2
2.5°	4056.3	4043.9	4048.1	4061.2	4066.6
5°	4044.4	4032.8	4036.1	4050.1	4054.7
7.5°	4024.6	4013.5	4016.0	4029.2	4033.7
10°	3996.7	3985.2	3988.0	4000.8	4004.5
12.5°	3958.8	3948.2	3950.6	3959.7	3963.8
15°	3910.7	3904.5	3906.6	3899.2	3886.5
17.5°	3856.9	3847.8	3845.4	3812.5	3798.9
20°	3786.2	3782.9	3762.7	3722.0	3703.9
22.5°	3711.8	3705.6	3670.6	3621.7	3599.9
25°	3624.6	3621.7	3562.9	3512.3	3484.8
27.5°	3530.9	3523.9	3448.2	3384.9	3347.5
30°	3438.3	3421.1	3326.1	3237.3	3183.9
32.5°	3333.5	3301.0	3187.5	3074.1	3012.4
35°	3213.5	3174.4	3035.8	2883.3	2815.9
37.5°	3097.1	3038.3	2871.4	2680.6	2594.3
40°	2965.5	2881.2	2686.4	2464.8	2369.4
42.5°	2827.0	2724.2	2489.4	2231.7	2133.8
45°	2687.6	2558.1	2267.8	1998.5	1911.0
47.5°	2521.9	2384.6	2037.6	1776.1	1700.9
50°	2362.4	2202.1	1804.9	1568.9	1517.5
52.5°	2195.5	2001.0	1578.8	1393.8	1344.0
55°	2022.0	1793.4	1372.0	1221.5	1182.0
57.5°	1847.6	1580.0	1188.6	1064.9	994.1
60°	1665.1	1368.3	1025.8	865.4	657.8
62.5°	1485.4	1147.9	863.4	542.7	418.5
65°	1304.1	957.9	723.2	358.1	294.8
67.5°	1131.1	774.2	516.0	259.4	220.8
70°	952.6	633.1	332.6	185.8	154.6
72.5°	773.8	509.4	228.2	122.1	99.1
75°	605.6	396.7	154.2	79.8	72.8
77.5°	453.9	273.8	85.9	59.2	55.5
80°	308.8	164.1	52.2	45.2	42.7
82.5°	185.0	78.5	37.8	33.3	32.1
85°	94.2	30.4	23.8	20.5	19.3
87.5°	28.0	15.2	10.7	8.2	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)