

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: P563317

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

Issue Date: 6/3/2022



**Test Information**

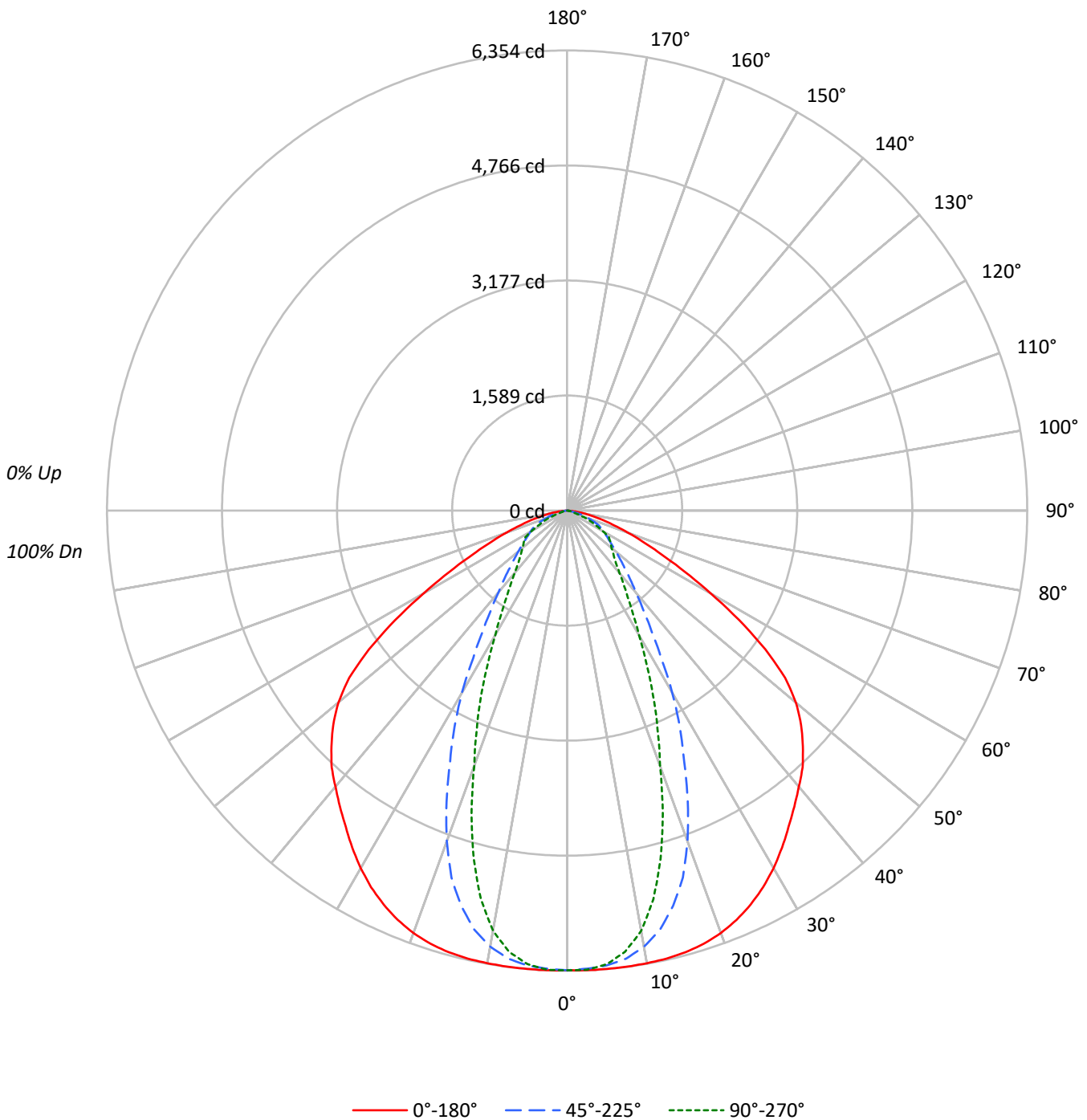
Test Method: LM-79-08  
Report Number: P563317  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364424)  
Test Lab: INNOVATION CENTER  
Issue Date: 6/3/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-9-N-UNV-L840-CD  
Description: 9000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 80CRI, 4000K CCT  
LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8952.0 lumens  
Efficiency: N/A  
Efficacy: 159.9 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86  
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

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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	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89					89			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78					78			
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42					42			
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39					39			
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36					36			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	36989	36989	36989
5°	37163	36881	36774
10°	37553	36173	34852
15°	38089	34082	30051
20°	38499	30110	23266
25°	38576	24587	18028
30°	38360	19527	13343
35°	37922	14470	10375
40°	37862	11237	8563
45°	37942	9247	7607
50°	37403	7998	7255
55°	33956	7129	7331
60°	26696	6813	6680
65°	19828	6603	5027
70°	15208	5287	3068
75°	11575	3771	1693
80°	8500	1755	1366
85°	5315	1504	1217



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	596.4	6.7
10°-20°	1569.9	17.5
20°-30°	1895.8	21.2
30°-40°	1695.1	18.9
40°-50°	1327.4	14.8
50°-60°	1002.9	11.2
60°-70°	595.7	6.7
70°-80°	228.9	2.6
80°-90°	39.8	0.4
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°	4062.2	45.4
0°-40°	5757.3	64.3
0°-60°	8087.6	90.3
0°-90°	8952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8952.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6348	6348	6348	6348	6348	
5°	6353	6326	6305	6297	6287	606
15°	6314	6105	5650	5177	4981	1784
25°	6000	5294	3824	3015	2804	2762
35°	5331	3794	2034	1586	1458	3343
45°	4604	1962	1122	948	923	3544
55°	3342	1064	702	699	722	2935
65°	1438	598	479	399	365	1482
75°	514	287	168	83	75	563
85°	80	28	22	20	18	106
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6347.7	6347.7	6347.7	6347.7	6347.7
2.5°	6353.6	6332.7	6331.0	6344.5	6346.5
5°	6353.2	6325.5	6305.0	6296.7	6286.7
7.5°	6351.2	6309.3	6240.0	6173.5	6142.7
10°	6346.5	6272.1	6113.4	5962.2	5890.1
12.5°	6336.2	6205.6	5925.3	5647.5	5496.3
15°	6313.7	6105.4	5649.5	5177.2	4981.3
17.5°	6272.8	5967.3	5311.4	4644.9	4392.7
20°	6208.4	5791.6	4855.5	4037.7	3751.9
22.5°	6115.7	5562.0	4353.2	3491.1	3262.7
25°	5999.8	5294.1	3824.0	3014.9	2803.9
27.5°	5862.0	4981.3	3368.0	2571.6	2363.8
30°	5701.0	4616.0	2902.1	2152.8	1983.0
32.5°	5520.8	4231.2	2415.7	1833.4	1693.7
35°	5330.8	3793.5	2034.1	1586.0	1458.5
37.5°	5151.9	3324.8	1722.6	1367.2	1277.7
40°	4977.4	2832.5	1477.2	1194.2	1125.7
42.5°	4812.7	2361.5	1289.6	1049.3	1004.5
45°	4604.1	1961.7	1122.1	948.0	923.1
47.5°	4382.8	1655.7	989.1	865.6	856.9
50°	4125.9	1410.3	882.2	794.0	800.3
52.5°	3792.7	1216.3	780.9	743.3	762.0
55°	3342.3	1064.4	701.7	699.0	721.6
57.5°	2814.6	919.1	639.2	656.7	682.0
60°	2290.6	802.3	584.6	609.9	573.2
62.5°	1829.9	695.1	532.8	486.4	454.8
65°	1438.0	597.6	478.9	399.4	364.6
67.5°	1146.7	507.0	402.9	317.8	288.9
70°	892.6	426.3	310.3	238.7	180.1
72.5°	684.0	356.3	242.2	135.8	102.5
75°	514.1	287.4	167.5	82.8	75.2
77.5°	366.5	213.4	89.4	59.8	55.4
80°	253.3	137.0	52.3	43.1	40.7
82.5°	157.1	66.1	35.6	30.9	28.9
85°	79.5	27.7	22.5	19.8	18.2
87.5°	26.5	13.5	10.3	9.5	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)