

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: P364422

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P364422  
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-9-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: 9195.0 lumens  
Efficiency: N/A  
Efficacy: 142.3 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

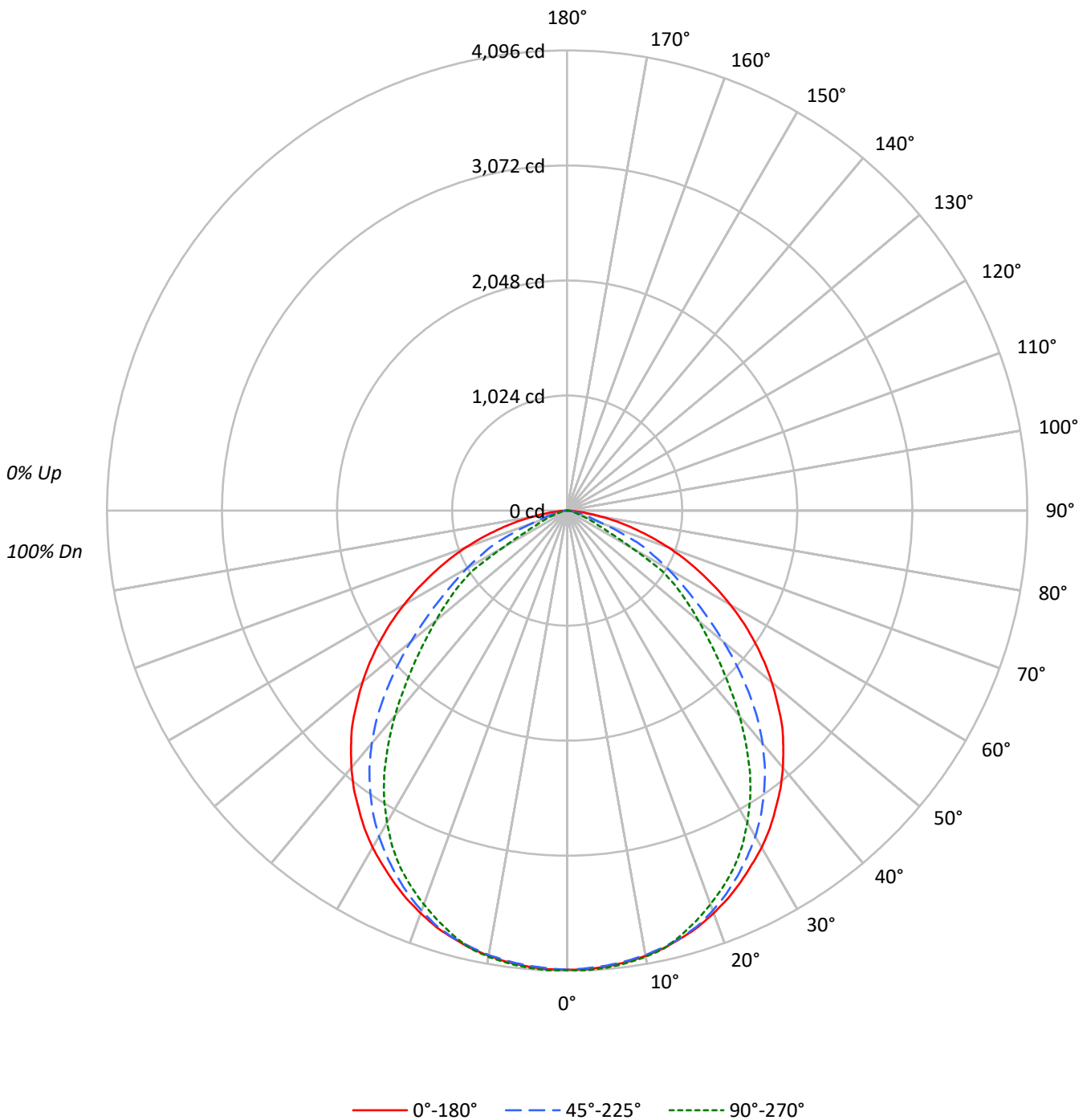
Input Watts (W): 64.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	25145	25145	25145
5°	25149	25098	25213
10°	25139	25085	25189
15°	25080	25053	24925
20°	24959	24804	24417
25°	24774	24353	23818
30°	24594	23791	22774
35°	24301	22958	21294
40°	23980	21723	19160
45°	23544	19867	16741
50°	22766	17393	14624
55°	21837	14817	12765
60°	20630	12709	8150
65°	19115	10600	4321
70°	17254	6025	2800
75°	14494	3691	1742
80°	11016	1863	1527
85°	6690	1694	1376



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	387.0	4.2
10°-20°	1107.3	12.0
20°-30°	1650.6	18.0
30°-40°	1901.0	20.7
40°-50°	1769.2	19.2
50°-60°	1346.2	14.6
60°-70°	722.6	7.9
70°-80°	265.9	2.9
80°-90°	45.2	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°	3145.0	34.2
0°-40°	5046.0	54.9
0°-60°	8161.3	88.8
0°-90°	9195.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9195.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4088	4088	4088	4088	4088	
5°	4073	4062	4065	4079	4084	387
15°	3939	3932	3934	3927	3914	1112
25°	3650	3648	3588	3537	3510	1683
35°	3236	3197	3058	2904	2836	2026
45°	2707	2576	2284	2013	1925	2080
55°	2036	1806	1382	1230	1190	1819
65°	1313	965	728	361	297	1302
75°	610	400	155	80	73	654
85°	95	31	24	21	20	126
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4088.1	4088.1	4088.1	4088.1	4088.1
2.5°	4085.2	4072.7	4076.9	4090.1	4095.5
5°	4073.2	4061.6	4064.9	4079.0	4083.5
7.5°	4053.3	4042.1	4044.6	4057.8	4062.4
10°	4025.1	4013.5	4016.4	4029.3	4033.0
12.5°	3987.0	3976.3	3978.7	3987.9	3992.0
15°	3938.6	3932.4	3934.4	3927.0	3914.2
17.5°	3884.3	3875.2	3872.7	3839.6	3826.0
20°	3813.1	3809.8	3789.5	3748.5	3730.3
22.5°	3738.2	3732.0	3696.8	3647.5	3625.5
25°	3650.4	3647.5	3588.3	3537.4	3509.6
27.5°	3556.0	3548.9	3472.8	3409.0	3371.3
30°	3462.8	3445.4	3349.8	3260.3	3206.5
32.5°	3357.2	3324.5	3210.2	3096.0	3033.9
35°	3236.3	3197.0	3057.5	2903.8	2835.9
37.5°	3119.1	3059.9	2891.8	2699.7	2612.7
40°	2986.6	2901.8	2705.5	2482.3	2386.3
42.5°	2847.1	2743.6	2507.2	2247.5	2149.0
45°	2706.7	2576.3	2284.0	2012.8	1924.6
47.5°	2539.9	2401.6	2052.1	1788.8	1713.0
50°	2379.2	2217.7	1817.7	1580.1	1528.3
52.5°	2211.1	2015.3	1590.0	1403.7	1353.6
55°	2036.4	1806.1	1381.7	1230.2	1190.4
57.5°	1860.8	1591.3	1197.1	1072.4	1001.2
60°	1677.0	1378.0	1033.1	871.6	662.5
62.5°	1496.0	1156.1	869.5	546.6	421.5
65°	1313.4	964.8	728.3	360.7	296.9
67.5°	1139.1	779.7	519.7	261.3	222.4
70°	959.4	637.7	335.0	187.2	155.7
72.5°	779.3	513.0	229.8	123.0	99.8
75°	609.9	399.6	155.3	80.3	73.3
77.5°	457.1	275.8	86.5	59.6	55.9
80°	311.0	165.2	52.6	45.5	43.1
82.5°	186.3	79.1	38.1	33.5	32.3
85°	94.8	30.6	24.0	20.7	19.5
87.5°	28.2	15.3	10.8	8.3	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)