

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: P364428

Luminaire Tested: **VHB-15-N-UNV-L840-CD-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P364428  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-15-N-UNV-L840-CD-U  
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 4000K, 80CRI LEDS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15117.0 lumens  
Efficiency: N/A  
Efficacy: 135.5 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct

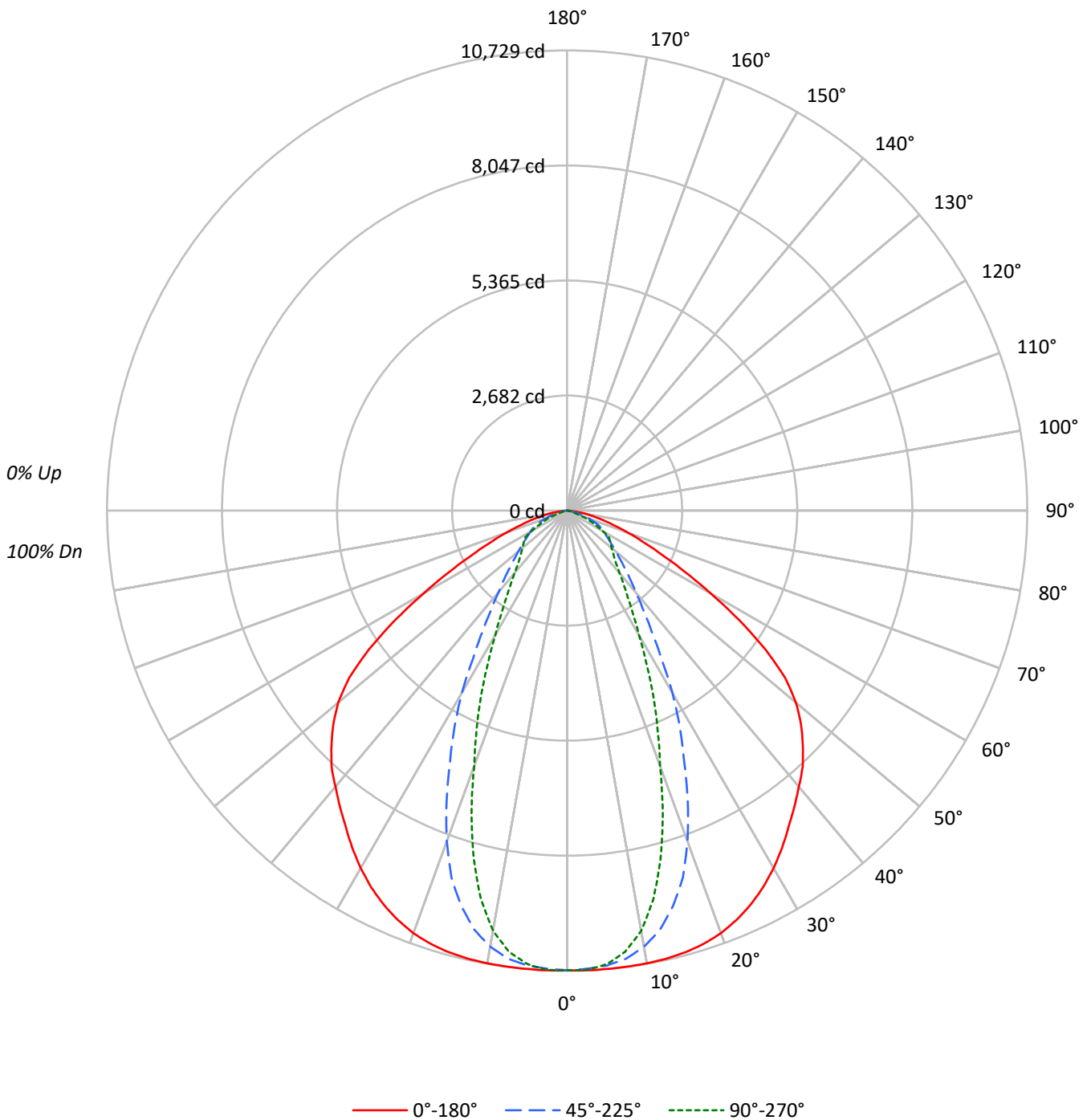
Input Watts (W): 111.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	65932	65932	65932
5°	66241	65738	65547
10°	66936	64477	62123
15°	67891	60749	53564
20°	68623	53669	41471
25°	68760	43824	32135
30°	68374	34806	23784
35°	67594	25792	18495
40°	67488	20029	15263
45°	67630	16483	13558
50°	66671	14257	12932
55°	60524	12709	13067
60°	47583	12144	11905
65°	35342	11771	8959
70°	27105	9423	5469
75°	20635	6718	3018
80°	15153	3124	2437
85°	9478	2689	2167



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1007.1	6.7
10°-20°	2651.1	17.5
20°-30°	3201.5	21.2
30°-40°	2862.5	18.9
40°-50°	2241.5	14.8
50°-60°	1693.7	11.2
60°-70°	1005.9	6.7
70°-80°	386.6	2.6
80°-90°	67.2	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°	6859.6	45.4
0°-40°	9722.2	64.3
0°-60°	13657.4	90.3
0°-90°	15117.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15117.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10719	10719	10719	10719	10719	
5°	10728	10682	10647	10633	10616	###
15°	10662	10310	9540	8743	8412	3012
25°	10132	8940	6457	5091	4735	4665
35°	9002	6406	3435	2678	2463	5645
45°	7775	3313	1895	1601	1559	5985
55°	5644	1797	1185	1180	1218	4956
65°	2428	1009	809	674	616	2502
75°	868	485	283	140	127	950
85°	134	47	38	33	31	179
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10719.2	10719.2	10719.2	10719.2	10719.2
2.5°	10729.2	10693.8	10691.1	10713.8	10717.2
5°	10728.5	10681.7	10647.0	10632.9	10616.2
7.5°	10725.2	10654.3	10537.4	10425.1	10372.9
10°	10717.2	10591.5	10323.5	10068.1	9946.5
12.5°	10699.8	10479.2	10006.0	9536.8	9281.4
15°	10661.7	10310.1	9540.1	8742.7	8411.8
17.5°	10592.8	10076.8	8969.3	7843.7	7417.9
20°	10483.9	9780.1	8199.3	6818.4	6335.8
22.5°	10327.5	9392.4	7351.1	5895.3	5509.6
25°	10131.6	8939.9	6457.4	5091.2	4735.0
27.5°	9899.0	8411.8	5687.4	4342.6	3991.7
30°	9627.0	7794.9	4900.7	3635.4	3348.7
32.5°	9322.9	7145.2	4079.3	3096.0	2860.1
35°	9002.0	6406.0	3434.9	2678.3	2463.1
37.5°	8699.9	5614.6	2908.9	2308.7	2157.6
40°	8405.2	4783.1	2494.5	2016.6	1900.9
42.5°	8127.1	3987.7	2177.7	1771.9	1696.4
45°	7774.9	3312.6	1894.9	1600.8	1558.7
47.5°	7401.2	2795.9	1670.3	1461.8	1447.1
50°	6967.4	2381.5	1489.9	1340.8	1351.5
52.5°	6404.6	2054.0	1318.8	1255.3	1286.7
55°	5644.0	1797.3	1185.1	1180.4	1218.5
57.5°	4753.0	1552.0	1079.5	1108.9	1151.7
60°	3868.0	1354.9	987.2	1030.0	967.8
62.5°	3090.0	1173.7	899.7	821.5	768.0
65°	2428.3	1009.3	808.8	674.4	615.6
67.5°	1936.4	856.2	680.4	536.7	487.9
70°	1507.2	719.9	524.0	403.0	304.1
72.5°	1155.0	601.6	409.1	229.3	173.1
75°	868.3	485.3	282.7	139.7	127.0
77.5°	618.9	360.3	151.1	100.9	93.6
80°	427.8	231.3	88.2	72.9	68.8
82.5°	265.4	111.6	60.2	52.1	48.8
85°	134.3	46.8	38.1	33.4	30.7
87.5°	44.8	22.7	17.4	16.0	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)