

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: P417713

Luminaire Tested: **VHB-1215-N-UNV-L850-CD-U-LEVEL2**

Issue Date: 11/17/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P417713  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 11/17/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-1215-N-UNV-L850-CD-U-LEVEL2  
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15670.0 lumens  
Efficiency: N/A  
Efficacy: 142.6 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.74 / 0.88  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct

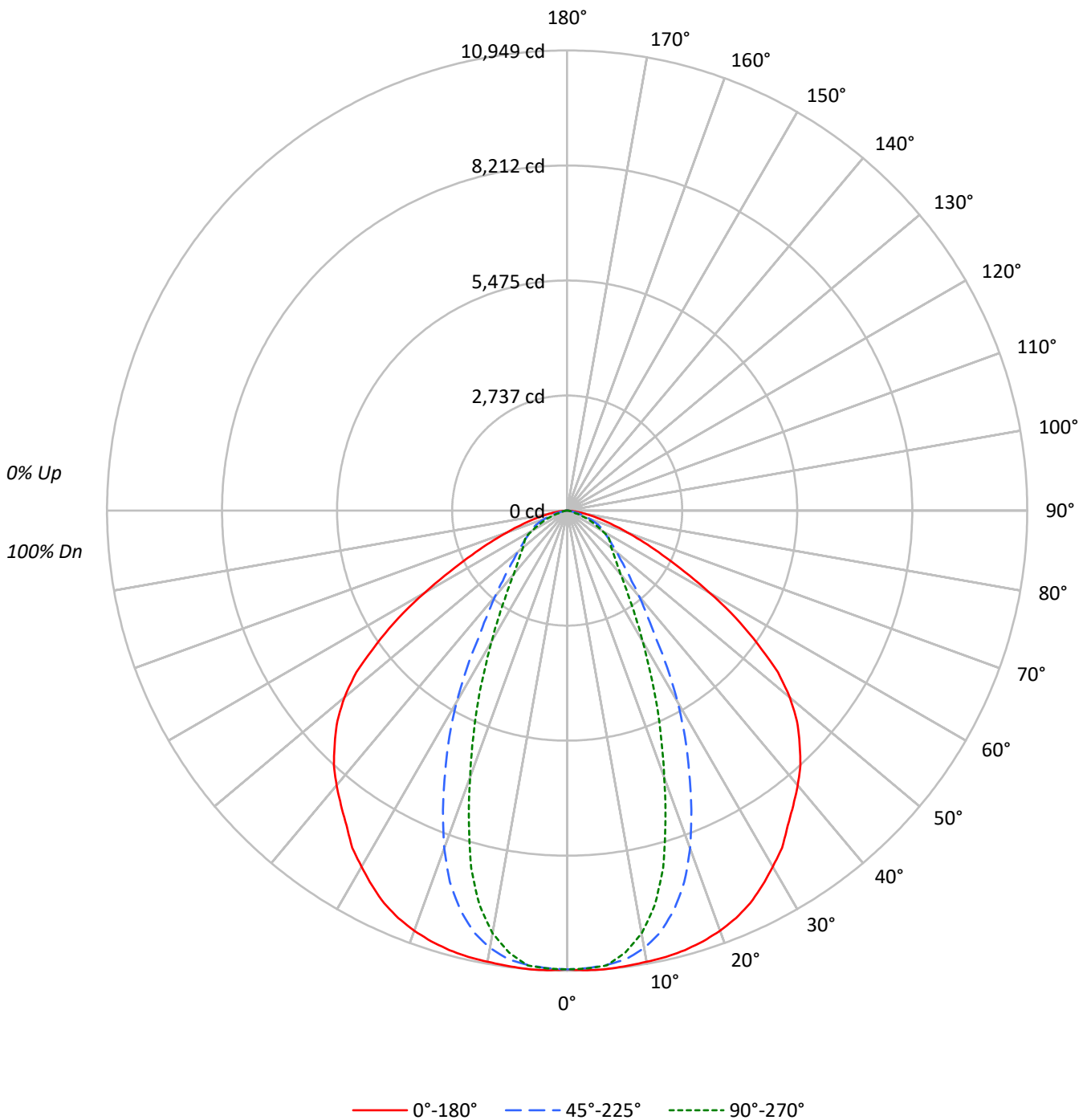
Input Watts (W): 109.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	107	104	101	109	105	102	99	101	99	96	97	95	93	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	73	68	64	71	67	63	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	67	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	56	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42					42			
9	65	53	46	41	63	52	45	41	51	45	40	50	44	40	49	44	40	38					38			
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36					36			

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

	0°	45°	90°
0°	67149	67149	67149
5°	67604	67002	67076
10°	68084	65997	63788
15°	68939	62594	56108
20°	69637	55992	44162
25°	69957	46594	34029
30°	69489	37293	25474
35°	68695	27435	19500
40°	68528	21410	15860
45°	68043	17227	14061
50°	66200	14682	13115
55°	59344	13206	13233
60°	48222	12416	11904
65°	36376	12035	9677
70°	27592	9976	6620
75°	20882	7498	3548
80°	15082	3694	2915
85°	9697	3176	2456



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1027.2	6.6
10°-20°	2729.9	17.4
20°-30°	3339.6	21.3
30°-40°	2996.3	19.1
40°-50°	2323.1	14.8
50°-60°	1724.2	11.0
60°-70°	1040.0	6.6
70°-80°	414.8	2.6
80°-90°	74.9	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°	7096.7	45.3
0°-40°	10093.0	64.4
0°-60°	14140.3	90.2
0°-90°	15670.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15670.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10917	10917	10917	10917	10917	
5°	10949	10881	10852	10820	10864	###
15°	10826	10530	9830	9099	8811	3059
25°	10308	9172	6866	5447	5014	4741
35°	9149	6724	3654	2791	2597	5742
45°	7822	3532	1980	1658	1616	6020
55°	5534	1888	1232	1190	1234	4917
65°	2499	1047	827	706	665	2550
75°	879	510	316	166	149	963
85°	137	57	45	38	35	181
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10917.1	10917.1	10917.1	10917.1	10917.1
2.5°	10948.5	10883.2	10899.3	10899.3	10902.7
5°	10949.3	10880.6	10851.8	10820.4	10863.7
7.5°	10924.7	10845.0	10765.3	10632.1	10604.1
10°	10901.0	10784.8	10566.8	10311.5	10213.1
12.5°	10877.2	10700.0	10273.4	9790.8	9621.2
15°	10826.3	10530.3	9829.8	9098.7	8811.2
17.5°	10747.5	10291.2	9270.9	8218.4	7776.5
20°	10638.9	9994.3	8554.2	7233.7	6746.9
22.5°	10496.4	9641.5	7718.8	6292.3	5841.1
25°	10308.1	9171.6	6865.6	5446.7	5014.1
27.5°	10057.9	8645.8	6065.0	4657.9	4227.9
30°	9784.0	8076.7	5250.8	3911.6	3586.7
32.5°	9515.1	7456.7	4432.3	3283.9	3051.6
35°	9148.7	6724.0	3653.7	2791.2	2597.0
37.5°	8837.5	5934.3	3096.5	2403.6	2263.7
40°	8534.7	5095.5	2666.5	2101.7	1975.3
42.5°	8215.8	4265.2	2268.7	1844.7	1770.0
45°	7822.3	3532.5	1980.4	1658.1	1616.5
47.5°	7417.7	2991.3	1717.5	1517.3	1485.1
50°	6918.2	2534.2	1534.3	1378.2	1370.6
52.5°	6319.4	2176.3	1365.5	1274.7	1290.8
55°	5534.0	1887.9	1231.5	1189.9	1234.0
57.5°	4765.6	1632.6	1112.7	1125.5	1162.8
60°	3920.0	1403.7	1009.3	1031.3	967.7
62.5°	3142.3	1218.8	919.4	856.6	804.0
65°	2499.4	1047.4	826.9	705.6	664.9
67.5°	1966.8	893.1	698.0	577.6	526.7
70°	1534.3	753.1	554.7	449.5	368.1
72.5°	1170.4	629.3	439.3	272.2	218.0
75°	878.7	509.7	315.5	166.2	149.3
77.5°	629.3	382.5	184.0	121.3	114.5
80°	425.8	250.2	104.3	89.1	82.3
82.5°	265.5	138.2	71.2	62.8	58.5
85°	137.4	56.8	45.0	38.2	34.8
87.5°	48.3	25.4	20.4	16.1	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)