

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: P417712

Luminaire Tested: **VHB-1215-N-UNV-L850-CD-U-LEVEL1**

Issue Date: 11/17/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P417712  
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-LEVEL1  
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: 12011.0 lumens  
Efficiency: N/A  
Efficacy: 149.0 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

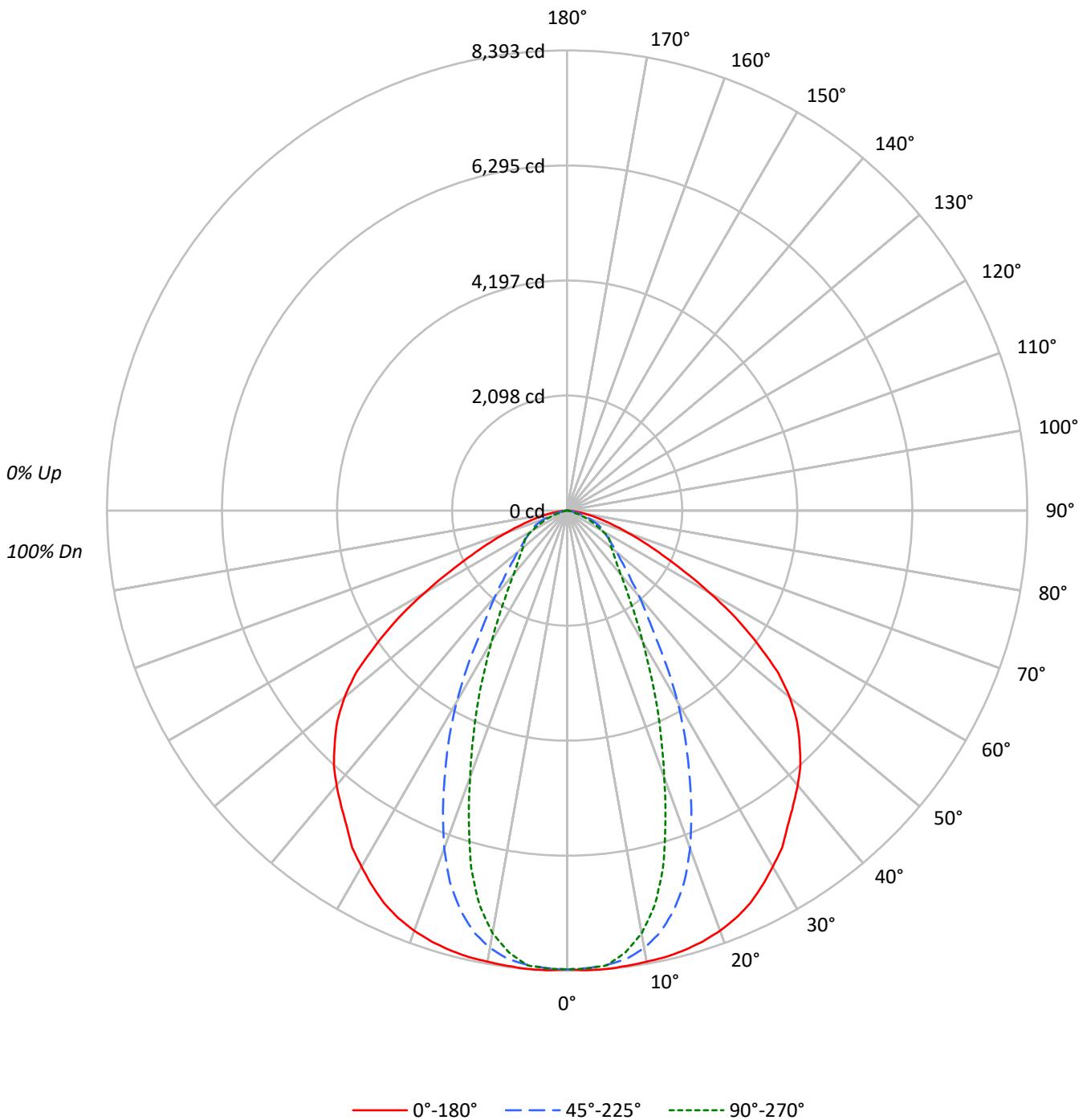
Input Watts (W): 80.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	51469	51469	51469
5°	51818	51357	51413
10°	52186	50586	48893
15°	52842	47978	43006
20°	53377	42918	33850
25°	53623	35715	26083
30°	53263	28585	19526
35°	52655	21029	14947
40°	52526	16411	12157
45°	52154	13204	10778
50°	50742	11253	10052
55°	45487	10122	10143
60°	36963	9517	9124
65°	27883	9224	7418
70°	21149	7647	5073
75°	16006	5746	2719
80°	11558	2834	2235
85°	7431	2435	1884



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	787.3	6.6
10°-20°	2092.5	17.4
20°-30°	2559.8	21.3
30°-40°	2296.6	19.1
40°-50°	1780.7	14.8
50°-60°	1321.6	11.0
60°-70°	797.1	6.6
70°-80°	318.0	2.6
80°-90°	57.4	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°	5439.6	45.3
0°-40°	7736.2	64.4
0°-60°	10838.5	90.2
0°-90°	12011.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12011.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8368	8368	8368	8368	8368	
5°	8393	8340	8318	8294	8327	800
15°	8298	8072	7534	6974	6754	2345
25°	7901	7030	5262	4175	3843	3634
35°	7012	5154	2801	2139	1991	4401
45°	5996	2708	1518	1271	1239	4615
55°	4242	1447	944	912	946	3769
65°	1916	803	634	541	510	1954
75°	674	391	242	127	114	738
85°	105	44	34	29	27	138
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8367.9	8367.9	8367.9	8367.9	8367.9
2.5°	8392.0	8341.9	8354.3	8354.3	8356.9
5°	8392.6	8340.0	8317.9	8293.8	8327.0
7.5°	8373.8	8312.7	8251.5	8149.5	8128.0
10°	8355.6	8266.5	8099.4	7903.8	7828.3
12.5°	8337.4	8201.5	7874.5	7504.6	7374.6
15°	8298.4	8071.5	7534.5	6974.1	6753.7
17.5°	8237.9	7888.2	7106.1	6299.3	5960.6
20°	8154.7	7660.6	6556.8	5544.6	5171.4
22.5°	8045.5	7390.2	5916.4	4823.0	4477.1
25°	7901.2	7030.0	5262.5	4174.9	3843.3
27.5°	7709.4	6627.0	4648.8	3570.3	3240.7
30°	7499.4	6190.8	4024.7	2998.2	2749.2
32.5°	7293.3	5715.6	3397.4	2517.1	2339.0
35°	7012.5	5153.9	2800.6	2139.4	1990.6
37.5°	6773.9	4548.7	2373.5	1842.3	1735.1
40°	6541.8	3905.7	2043.9	1610.9	1514.1
42.5°	6297.4	3269.3	1739.0	1413.9	1356.7
45°	5995.7	2707.6	1518.0	1270.9	1239.1
47.5°	5685.7	2292.9	1316.4	1163.0	1138.3
50°	5302.8	1942.5	1176.0	1056.4	1050.5
52.5°	4843.8	1668.1	1046.6	977.1	989.4
55°	4241.8	1447.1	943.9	912.1	945.9
57.5°	3652.8	1251.4	852.9	862.7	891.3
60°	3004.7	1075.9	773.6	790.5	741.7
62.5°	2408.6	934.2	704.7	656.6	616.3
65°	1915.8	802.9	633.8	540.9	509.7
67.5°	1507.6	684.5	535.0	442.7	403.7
70°	1176.0	577.3	425.2	344.5	282.1
72.5°	897.1	482.4	336.7	208.7	167.1
75°	673.5	390.7	241.8	127.4	114.4
77.5°	482.4	293.2	141.1	93.0	87.8
80°	326.3	191.8	80.0	68.3	63.1
82.5°	203.5	106.0	54.6	48.1	44.9
85°	105.3	43.6	34.5	29.3	26.7
87.5°	37.1	19.5	15.6	12.4	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)