

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: P417693

Luminaire Tested: **VHB-1215-N-UNV-L735-CD-U-LEVEL2**

Issue Date: 11/17/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P417693  
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-L735-CD-U-LEVEL2  
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS  
Light Source: 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

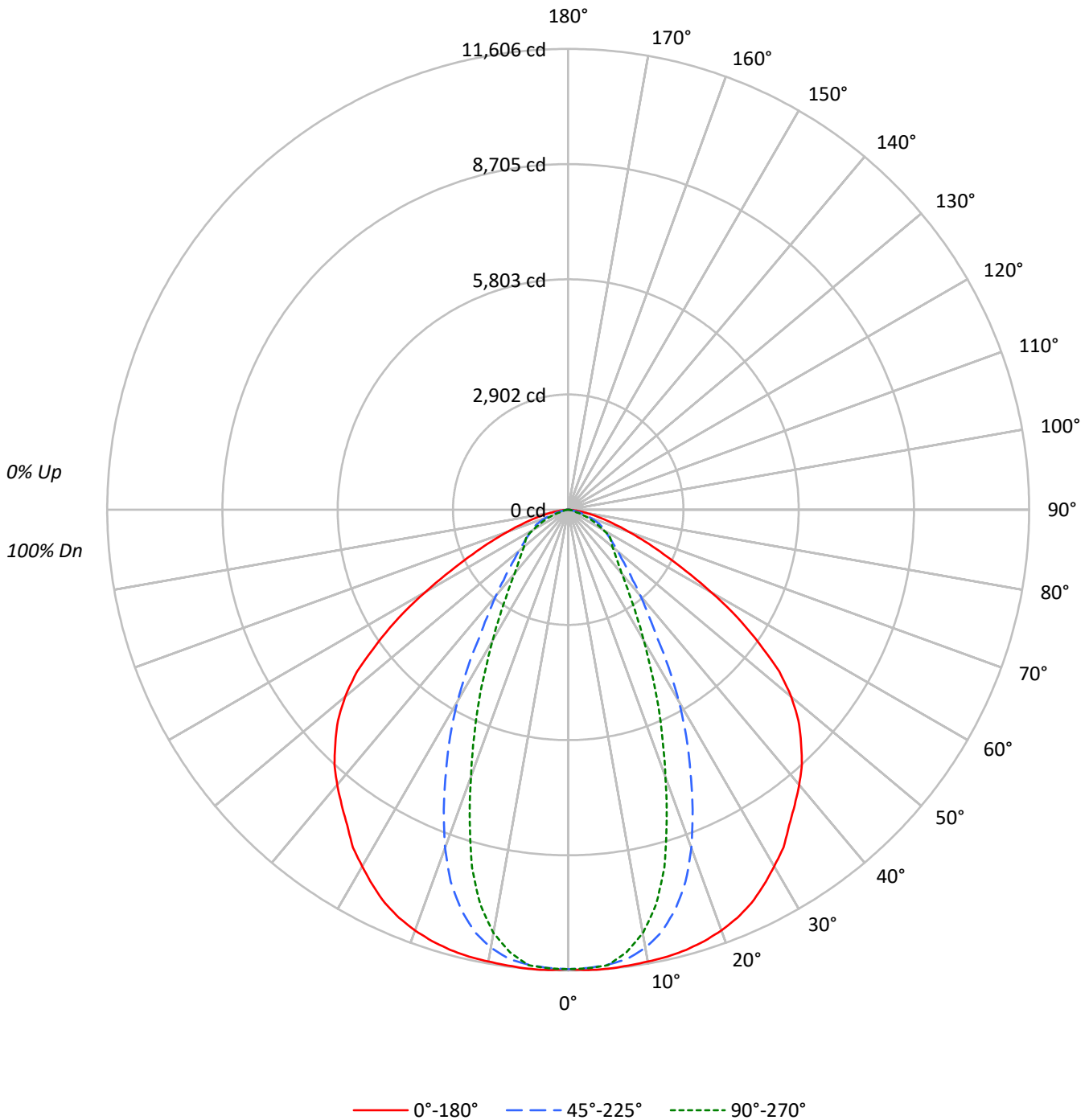
Lumens per Lamp: N/A  
Luminaire Lumens: 16610.2 lumens  
Efficiency: N/A  
Efficacy: 151.1 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.74 / 0.88  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 109.9  
Input Voltage (V): 120  
Input Current (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	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°	71178	71178	71178
5°	71661	71022	71100
10°	72169	69957	67615
15°	73076	66350	59474
20°	73815	59352	46812
25°	74155	49390	36071
30°	73658	39530	27002
35°	72817	29081	20670
40°	72639	22695	16812
45°	72125	18260	14905
50°	70172	15562	13902
55°	62906	13999	14028
60°	51116	13160	12619
65°	38559	12757	10258
70°	29247	10574	7017
75°	22135	7947	3760
80°	15985	3918	3089
85°	10275	3359	2604



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1088.8	6.6
10°-20°	2893.7	17.4
20°-30°	3539.9	21.3
30°-40°	3176.0	19.1
40°-50°	2462.5	14.8
50°-60°	1827.7	11.0
60°-70°	1102.4	6.6
70°-80°	439.7	2.6
80°-90°	79.4	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°	7522.5	45.3
0°-40°	10698.5	64.4
0°-60°	14988.7	90.2
0°-90°	16610.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16610.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11572	11572	11572	11572	11572	
5°	11606	11534	11503	11470	11516	###
15°	11476	11162	10420	9645	9340	3243
25°	10927	9722	7278	5774	5315	5026
35°	9698	7127	3873	2959	2753	6086
45°	8292	3744	2099	1758	1714	6381
55°	5866	2001	1305	1261	1308	5212
65°	2649	1110	876	748	705	2703
75°	931	540	334	176	158	1021
85°	146	60	48	40	37	191
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11572.1	11572.1	11572.1	11572.1	11572.1
2.5°	11605.4	11536.2	11553.2	11553.2	11556.8
5°	11606.3	11533.5	11502.9	11469.6	11515.5
7.5°	11580.2	11495.7	11411.2	11270.1	11240.4
10°	11555.0	11431.9	11200.8	10930.2	10825.9
12.5°	11529.9	11342.0	10889.8	10378.2	10198.4
15°	11475.9	11162.2	10419.6	9644.6	9339.9
17.5°	11392.3	10908.6	9827.1	8711.5	8243.1
20°	11277.2	10594.0	9067.5	7667.7	7151.7
22.5°	11126.2	10220.0	8181.9	6669.8	6191.5
25°	10926.6	9721.9	7277.5	5773.5	5315.0
27.5°	10661.4	9164.6	6428.9	4937.4	4481.6
30°	10371.0	8561.3	5565.8	4146.3	3801.9
32.5°	10086.0	7904.1	4698.3	3481.0	3234.7
35°	9697.7	7127.4	3873.0	2958.7	2752.8
37.5°	9367.7	6290.4	3282.3	2547.8	2399.5
40°	9046.8	5401.3	2826.5	2227.8	2093.8
42.5°	8708.8	4521.1	2404.9	1955.4	1876.2
45°	8291.6	3744.4	2099.2	1757.6	1713.5
47.5°	7862.8	3170.8	1820.5	1608.3	1574.2
50°	7333.3	2686.3	1626.3	1460.9	1452.8
52.5°	6698.6	2306.9	1447.4	1351.2	1368.3
55°	5866.1	2001.2	1305.4	1261.3	1308.1
57.5°	5051.6	1730.6	1179.5	1193.0	1232.5
60°	4155.2	1487.9	1069.8	1093.2	1025.8
62.5°	3330.9	1291.9	974.5	908.0	852.3
65°	2649.4	1110.3	876.5	748.0	704.8
67.5°	2084.8	946.7	739.9	612.2	558.3
70°	1626.3	798.3	588.0	476.5	390.2
72.5°	1240.6	667.1	465.7	288.6	231.0
75°	931.4	540.3	334.4	176.2	158.2
77.5°	667.1	405.5	195.1	128.6	121.4
80°	451.3	265.2	110.6	94.4	87.2
82.5°	281.4	146.5	75.5	66.5	62.0
85°	145.6	60.2	47.6	40.5	36.9
87.5°	51.2	27.0	21.6	17.1	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)