

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: P470147

Luminaire Tested: **VHB2-15-N-UNV-L935-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470147
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-15-N-UNV-L935-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13537.8 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.75 / 0.88
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

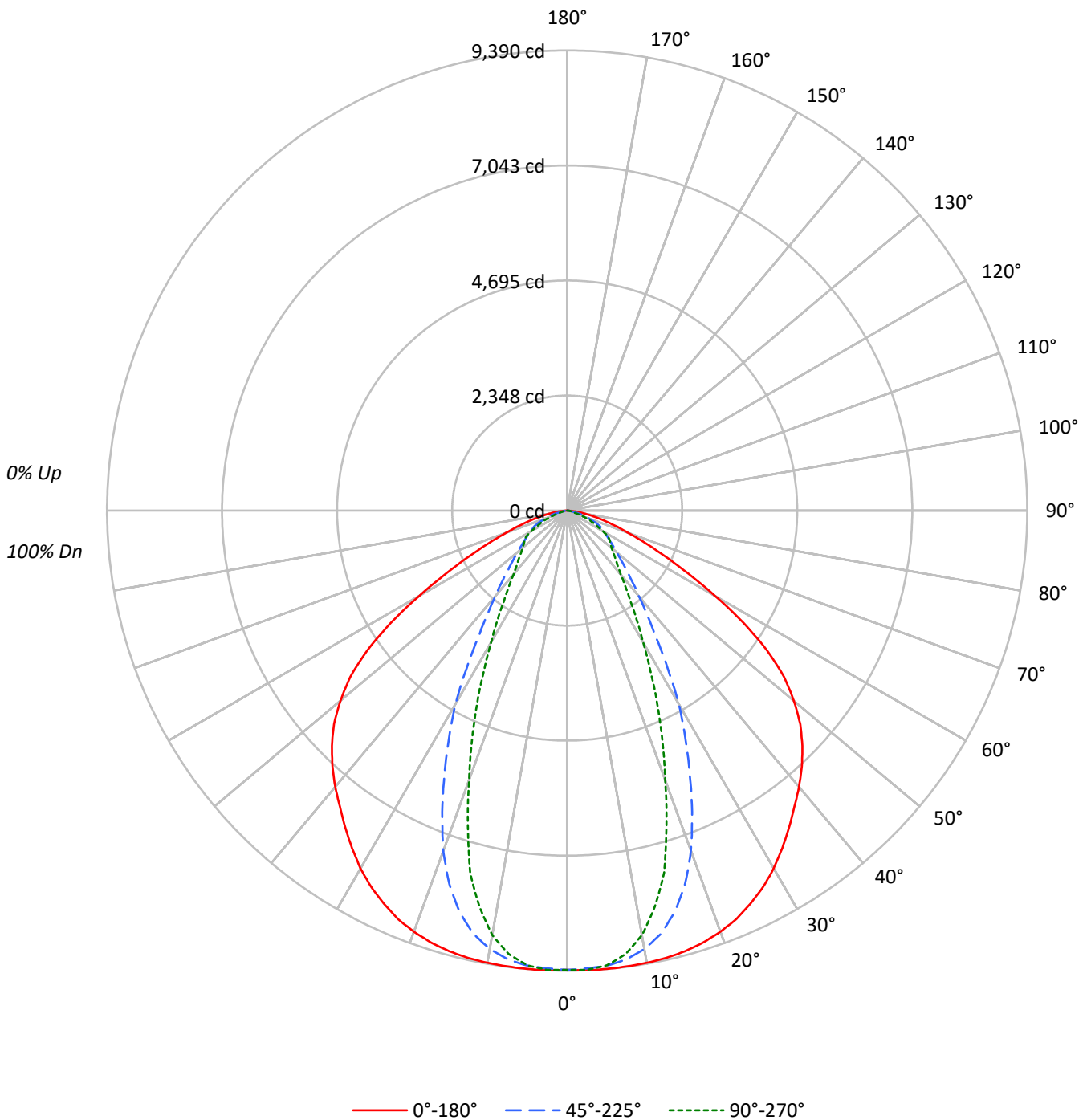
Input Watts (W): 110.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	65	58	53	64	57	53	62	57	52	61	56	52	50				50
7	73	61	54	48	71	60	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°	57654	57654	57654
5°	57975	57551	57507
10°	58528	56729	54941
15°	59267	54004	48689
20°	59854	48364	38278
25°	60067	40158	29538
30°	59875	32334	21993
35°	59283	23785	16871
40°	59100	18263	13671
45°	59051	14757	12141
50°	57824	12666	11332
55°	53451	11338	11357
60°	42850	10705	10365
65°	31834	10443	8376
70°	23881	8587	5688
75°	17995	6502	3087
80°	13081	3174	2600
85°	8405	2717	2082



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	883.2	6.5
10°-20°	2353.4	17.4
20°-30°	2882.9	21.3
30°-40°	2589.0	19.1
40°-50°	2005.9	14.8
50°-60°	1501.0	11.1
60°-70°	900.6	6.7
70°-80°	357.1	2.6
80°-90°	64.8	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°	6119.4	45.2
0°-40°	8708.4	64.3
0°-60°	12215.3	90.2
0°-90°	13537.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13537.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9373	9373	9373	9373	9373	
5°	9390	9348	9321	9319	9314	896
15°	9307	9063	8481	7854	7646	2630
25°	8851	7924	5917	4731	4352	4077
35°	7895	5838	3168	2428	2247	4945
45°	6789	3042	1696	1430	1396	5219
55°	4984	1614	1057	1024	1059	4375
65°	2187	896	718	609	576	2240
75°	757	438	274	144	130	835
85°	119	48	38	33	30	158
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9373.4	9373.4	9373.4	9373.4	9373.4
2.5°	9390.3	9356.0	9351.2	9374.6	9381.2
5°	9389.7	9348.2	9321.1	9318.7	9313.9
7.5°	9381.8	9327.1	9239.9	9170.8	9129.9
10°	9371.0	9274.8	9082.9	8883.9	8796.7
12.5°	9350.6	9193.0	8843.0	8459.9	8275.9
15°	9307.3	9063.1	8480.9	7853.7	7646.2
17.5°	9240.5	8868.2	7994.4	7087.5	6739.3
20°	9144.3	8622.3	7388.8	6283.4	5848.0
22.5°	9020.4	8305.3	6659.3	5423.4	5071.0
25°	8850.8	7924.0	5917.2	4731.2	4352.3
27.5°	8661.4	7495.3	5217.1	4005.9	3674.6
30°	8430.4	6973.8	4552.6	3370.8	3096.6
32.5°	8167.6	6436.8	3821.3	2830.8	2640.7
35°	7895.2	5838.4	3167.6	2427.9	2246.8
37.5°	7616.1	5159.4	2674.4	2082.0	1951.5
40°	7360.5	4402.2	2274.5	1806.6	1702.6
42.5°	7086.3	3691.4	1966.6	1586.5	1522.7
45°	6788.6	3041.9	1696.5	1430.1	1395.8
47.5°	6452.4	2566.2	1486.1	1310.5	1278.6
50°	6042.9	2179.5	1323.7	1186.0	1184.2
52.5°	5582.8	1875.8	1179.3	1095.8	1111.4
55°	4984.4	1614.2	1057.3	1024.2	1059.1
57.5°	4272.9	1400.7	957.4	968.9	996.5
60°	3483.3	1208.2	870.2	879.8	842.6
62.5°	2785.1	1039.8	791.4	740.9	693.4
65°	2187.3	896.1	717.5	609.2	575.5
67.5°	1705.6	763.2	600.8	499.8	457.7
70°	1327.9	648.3	477.5	383.1	316.3
72.5°	1014.6	539.5	376.5	235.1	178.6
75°	757.2	437.8	273.6	143.7	129.9
77.5°	549.7	327.8	152.8	105.2	98.0
80°	369.3	221.3	89.6	77.0	73.4
82.5°	235.1	116.1	61.9	54.1	49.9
85°	119.1	47.5	38.5	33.1	29.5
87.5°	41.5	22.9	17.4	13.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)