

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: P470123

Luminaire Tested: **VHB2-18-N-UNV-L740-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470123
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-18-N-UNV-L740-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19326.9 lumens
Efficiency: N/A
Efficacy: 158.0 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

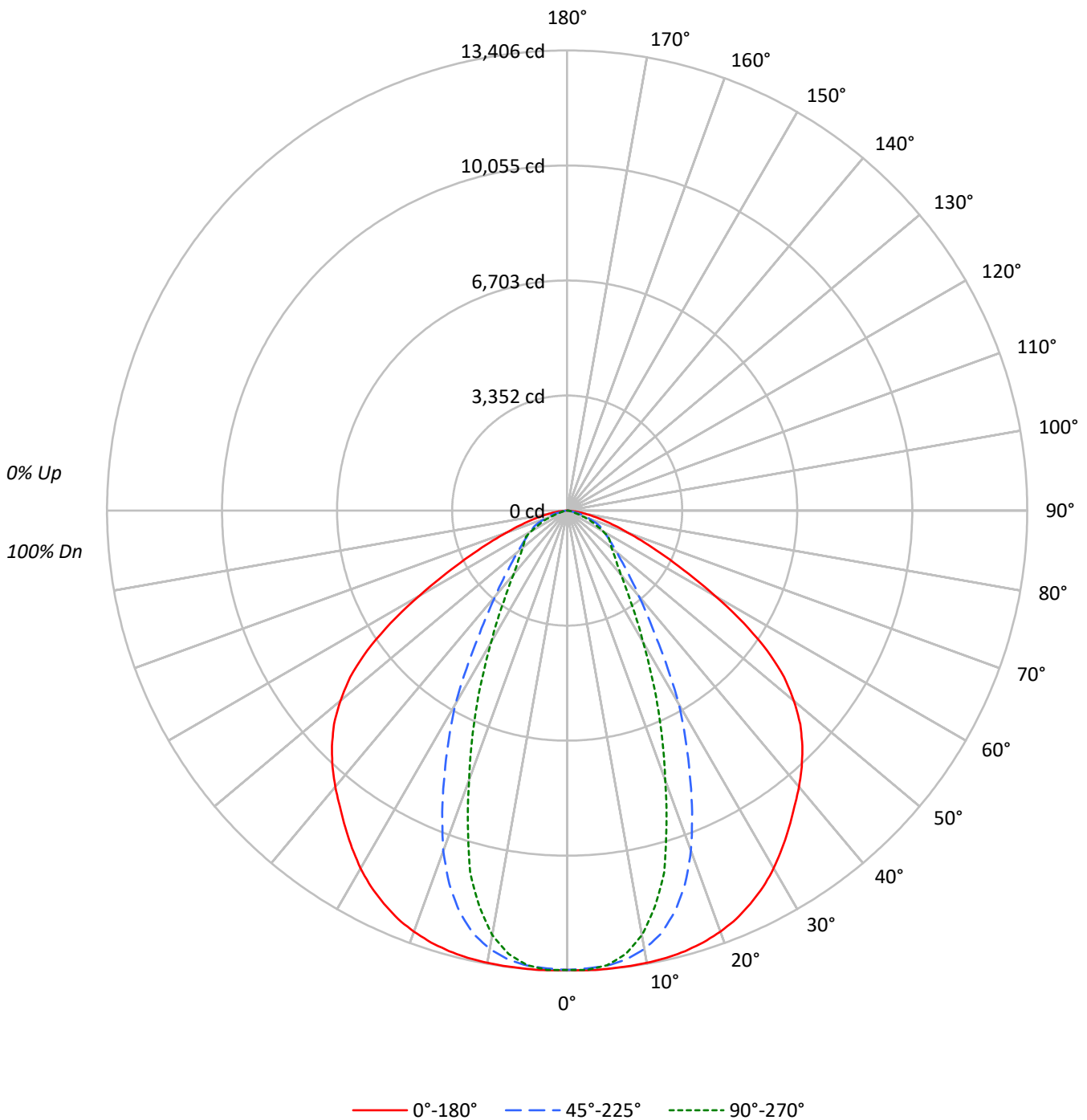
Input Watts (W): 122.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	82309	82309	82309
5°	82766	82162	82098
10°	83557	80988	78436
15°	84610	77098	69510
20°	85450	69046	54647
25°	85754	57330	42169
30°	85480	46161	31398
35°	84634	33955	24085
40°	84373	26072	19516
45°	84303	21068	17334
50°	82551	18082	16176
55°	76308	16186	16214
60°	61175	15283	14798
65°	45446	14908	11959
70°	34092	12259	8121
75°	25687	9285	4408
80°	18674	4530	3709
85°	11997	3874	2971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1260.9	6.5
10°-20°	3359.8	17.4
20°-30°	4115.7	21.3
30°-40°	3696.1	19.1
40°-50°	2863.6	14.8
50°-60°	2142.9	11.1
60°-70°	1285.7	6.7
70°-80°	509.8	2.6
80°-90°	92.5	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
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0°-30°	8736.3	45.2
0°-40°	12432.4	64.3
0°-60°	17438.9	90.2
0°-90°	19326.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19326.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13382	13382	13382	13382	13382	
5°	13405	13346	13307	13304	13297	###
15°	13287	12939	12108	11212	10916	3755
25°	12636	11313	8448	6754	6214	5821
35°	11271	8335	4522	3466	3208	7060
45°	9692	4343	2422	2042	1993	7451
55°	7116	2304	1509	1462	1512	6245
65°	3123	1279	1024	870	822	3199
75°	1081	625	391	205	186	1192
85°	170	68	55	47	42	225
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13381.8	13381.8	13381.8	13381.8	13381.8
2.5°	13405.8	13356.9	13350.0	13383.5	13392.9
5°	13405.0	13345.7	13307.1	13303.6	13296.8
7.5°	13393.8	13315.7	13191.2	13092.4	13034.0
10°	13378.3	13241.0	12967.1	12682.9	12558.4
12.5°	13349.1	13124.2	12624.5	12077.6	11814.9
15°	13287.3	12938.7	12107.6	11212.1	10915.9
17.5°	13192.0	12660.6	11413.1	10118.3	9621.2
20°	13054.7	12309.4	10548.5	8970.4	8348.8
22.5°	12877.8	11856.9	9507.0	7742.6	7239.5
25°	12635.7	11312.6	8447.5	6754.4	6213.5
27.5°	12365.2	10700.4	7448.1	5719.0	5245.9
30°	12035.5	9956.1	6499.4	4812.3	4420.8
32.5°	11660.3	9189.3	5455.4	4041.3	3770.0
35°	11271.4	8335.1	4522.1	3466.1	3207.6
37.5°	10873.0	7365.7	3818.1	2972.4	2786.1
40°	10508.1	6284.8	3247.1	2579.2	2430.6
42.5°	10116.6	5269.9	2807.5	2264.9	2173.9
45°	9691.6	4342.7	2422.0	2041.7	1992.8
47.5°	9211.7	3663.5	2121.5	1870.8	1825.3
50°	8627.0	3111.5	1889.7	1693.1	1690.5
52.5°	7970.2	2677.9	1683.7	1564.3	1586.6
55°	7115.9	2304.4	1509.4	1462.2	1512.0
57.5°	6100.2	1999.6	1366.9	1383.2	1422.7
60°	4972.9	1724.9	1242.4	1256.1	1202.9
62.5°	3976.1	1484.5	1129.9	1057.8	989.9
65°	3122.6	1279.3	1024.3	869.7	821.7
67.5°	2434.9	1089.5	857.7	713.5	653.4
70°	1895.7	925.5	681.7	546.9	451.6
72.5°	1448.4	770.1	537.5	335.7	255.0
75°	1080.9	625.0	390.7	205.2	185.5
77.5°	784.7	467.9	218.1	150.3	139.9
80°	527.2	316.0	127.9	109.9	104.7
82.5°	335.7	165.7	88.4	77.3	71.3
85°	170.0	67.8	54.9	47.2	42.1
87.5°	59.2	32.6	24.9	19.7	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)