

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: P470120

Luminaire Tested: **VHB2-9-N-UNV-L740-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470120
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-9-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: 10016.0 lumens
Efficiency: N/A
Efficacy: 156.0 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

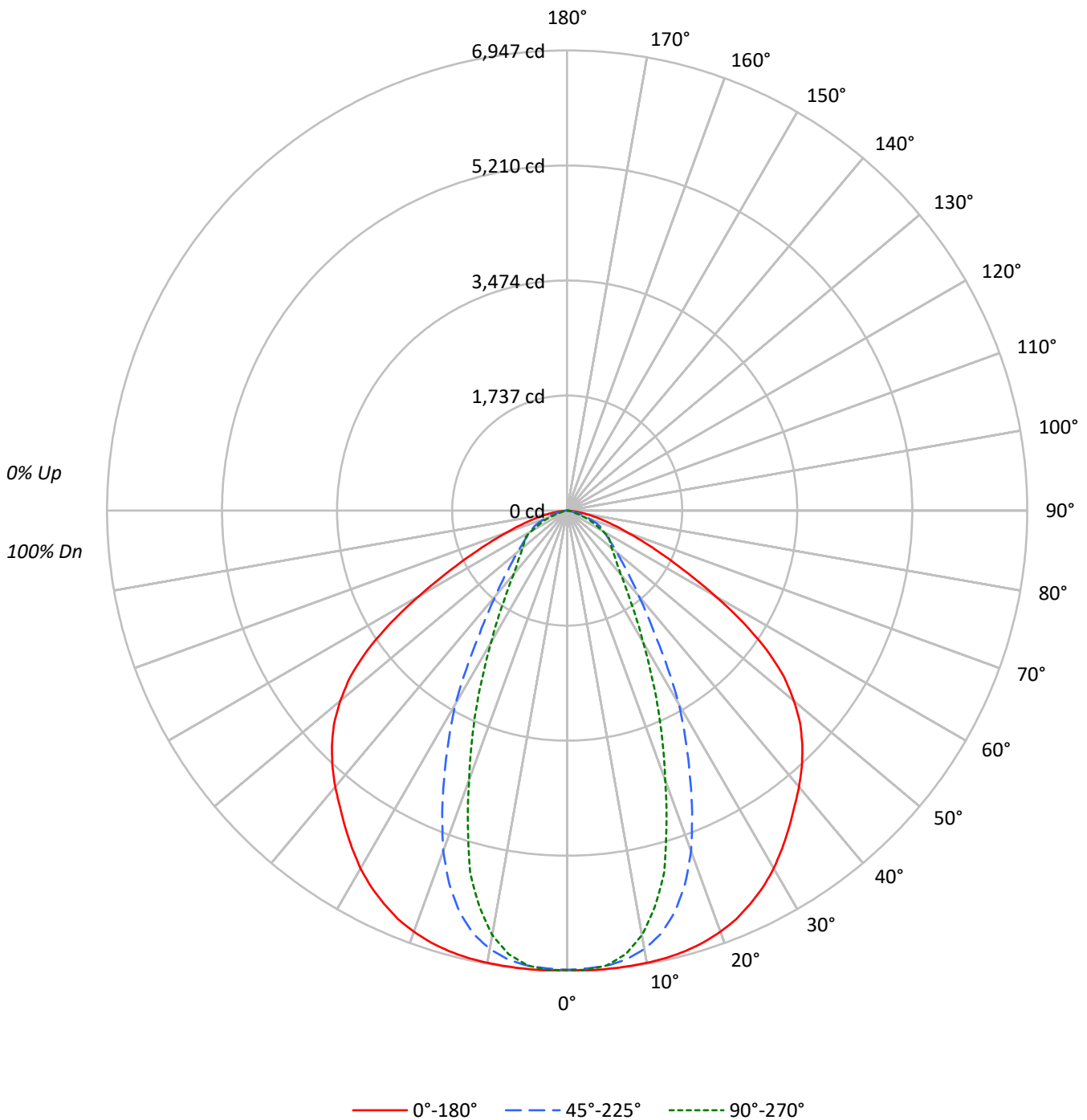
Input Watts (W): 64.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	42656	42656	42656
5°	42893	42580	42546
10°	43303	41972	40649
15°	43848	39956	36023
20°	44284	35782	28321
25°	44441	29711	21854
30°	44299	23923	16271
35°	43861	17597	12482
40°	43725	13512	10114
45°	43689	10918	8983
50°	42782	9371	8383
55°	39545	8388	8403
60°	31704	7920	7669
65°	23553	7725	6197
70°	17667	6354	4208
75°	13313	4812	2284
80°	9677	2348	1923
85°	6217	2011	1538



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	653.4	6.5
10°-20°	1741.2	17.4
20°-30°	2132.9	21.3
30°-40°	1915.5	19.1
40°-50°	1484.0	14.8
50°-60°	1110.5	11.1
60°-70°	666.3	6.7
70°-80°	264.2	2.6
80°-90°	47.9	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°	4527.5	45.2
0°-40°	6443.0	64.3
0°-60°	9037.6	90.2
0°-90°	10016.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10016.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6935	6935	6935	6935	6935	
5°	6947	6916	6896	6894	6891	663
15°	6886	6705	6275	5811	5657	1946
25°	6548	5863	4378	3500	3220	3017
35°	5841	4320	2344	1796	1662	3659
45°	5023	2251	1255	1058	1033	3862
55°	3688	1194	782	758	784	3237
65°	1618	663	531	451	426	1658
75°	560	324	202	106	96	618
85°	88	35	28	24	22	117
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6935.0	6935.0	6935.0	6935.0	6935.0
2.5°	6947.4	6922.1	6918.5	6935.9	6940.8
5°	6947.0	6916.3	6896.3	6894.5	6890.9
7.5°	6941.2	6900.7	6836.2	6785.0	6754.8
10°	6933.2	6862.0	6720.1	6572.8	6508.3
12.5°	6918.1	6801.5	6542.5	6259.1	6123.0
15°	6886.0	6705.4	6274.7	5810.6	5657.1
17.5°	6836.7	6561.2	5914.7	5243.7	4986.1
20°	6765.5	6379.2	5466.7	4648.8	4326.7
22.5°	6673.8	6144.8	4926.9	4012.6	3751.8
25°	6548.3	5862.7	4377.9	3500.4	3220.1
27.5°	6408.2	5545.4	3859.9	2963.8	2718.6
30°	6237.3	5159.6	3368.3	2493.9	2291.0
32.5°	6042.9	4762.3	2827.2	2094.4	1953.8
35°	5841.3	4319.6	2343.6	1796.3	1662.3
37.5°	5634.8	3817.2	1978.7	1540.4	1443.9
40°	5445.7	3257.0	1682.8	1336.6	1259.7
42.5°	5242.8	2731.1	1455.0	1173.8	1126.6
45°	5022.6	2250.6	1255.2	1058.1	1032.7
47.5°	4773.9	1898.6	1099.5	969.5	946.0
50°	4470.9	1612.5	979.3	877.4	876.1
52.5°	4130.5	1387.8	872.5	810.7	822.3
55°	3687.7	1194.2	782.2	757.7	783.6
57.5°	3161.4	1036.3	708.4	716.8	737.3
60°	2577.2	893.9	643.8	651.0	623.4
62.5°	2060.6	769.3	585.6	548.2	513.0
65°	1618.3	663.0	530.8	450.7	425.8
67.5°	1261.9	564.6	444.5	369.8	338.6
70°	982.4	479.7	353.3	283.4	234.0
72.5°	750.6	399.1	278.5	174.0	132.2
75°	560.2	323.9	202.5	106.3	96.1
77.5°	406.7	242.5	113.0	77.9	72.5
80°	273.2	163.7	66.3	57.0	54.3
82.5°	174.0	85.9	45.8	40.0	36.9
85°	88.1	35.2	28.5	24.5	21.8
87.5°	30.7	16.9	12.9	10.2	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)