

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: P470151

Luminaire Tested: **VHB2-12-N-UNV-L940-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470151
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-12-N-UNV-L940-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10576.5 lumens
Efficiency: N/A
Efficacy: 129.9 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

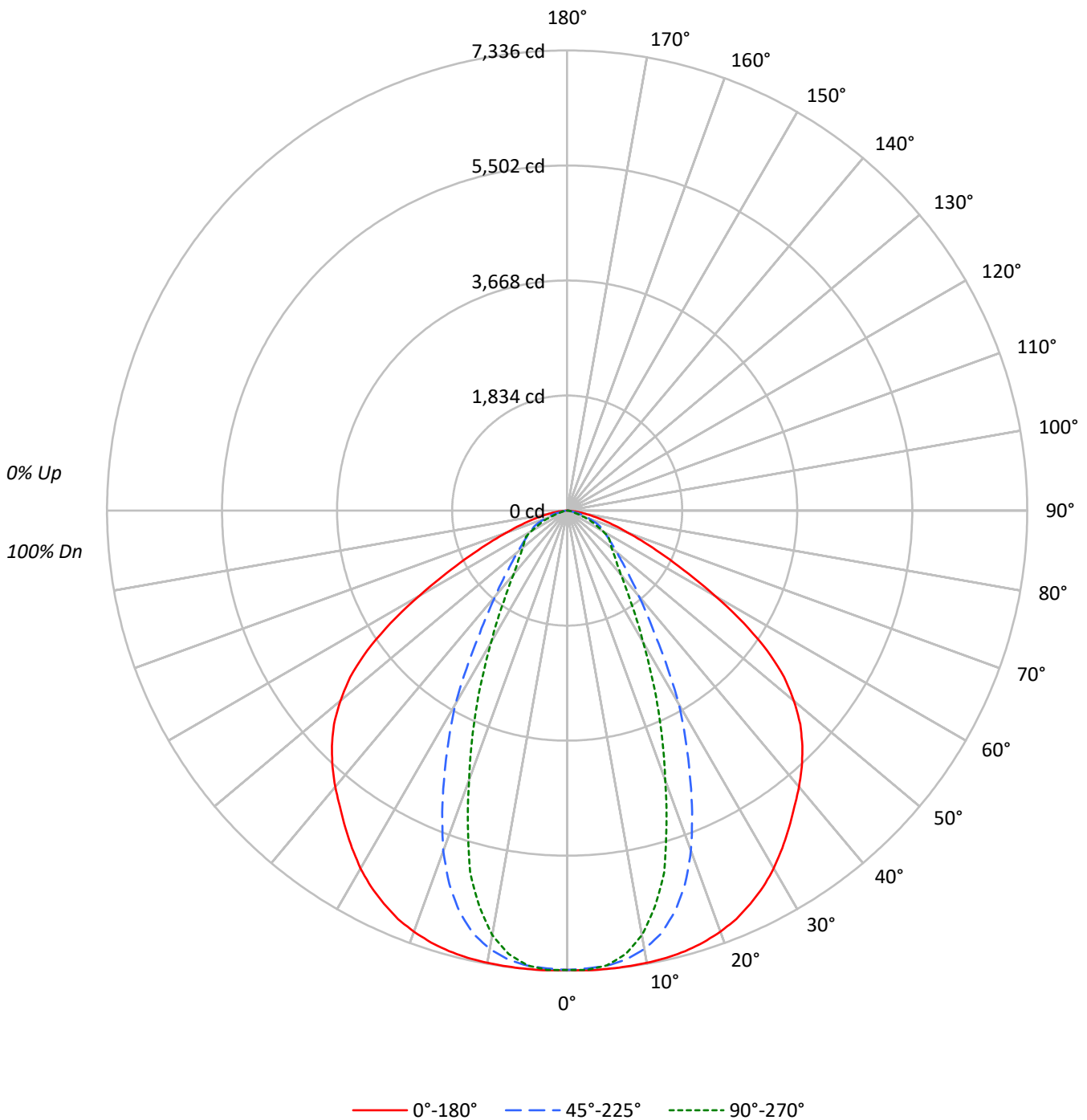
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	45043	45043	45043
5°	45293	44962	44927
10°	45726	44320	42923
15°	46303	42192	38039
20°	46761	37785	29905
25°	46928	31373	23077
30°	46778	25262	17183
35°	46315	18582	13181
40°	46172	14268	10680
45°	46134	11529	9486
50°	45175	9895	8852
55°	41759	8858	8873
60°	33478	8364	8098
65°	24870	8158	6543
70°	18656	6710	4444
75°	14057	5081	2412
80°	10219	2479	2030
85°	6563	2124	1623



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	690.0	6.5
10°-20°	1838.6	17.4
20°-30°	2252.3	21.3
30°-40°	2022.7	19.1
40°-50°	1567.1	14.8
50°-60°	1172.7	11.1
60°-70°	703.6	6.7
70°-80°	279.0	2.6
80°-90°	50.6	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°	4780.9	45.2
0°-40°	6803.6	64.3
0°-60°	9543.3	90.2
0°-90°	10576.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10576.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7323	7323	7323	7323	7323	
5°	7336	7303	7282	7280	7276	700
15°	7271	7081	6626	6136	5974	2055
25°	6915	6191	4623	3696	3400	3186
35°	6168	4561	2475	1897	1755	3864
45°	5304	2376	1325	1117	1090	4078
55°	3894	1261	826	800	827	3418
65°	1709	700	560	476	450	1750
75°	592	342	214	112	102	652
85°	93	37	30	26	23	123
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7323.1	7323.1	7323.1	7323.1	7323.1
2.5°	7336.2	7309.4	7305.7	7324.0	7329.2
5°	7335.7	7303.3	7282.2	7280.3	7276.5
7.5°	7329.6	7286.9	7218.8	7164.7	7132.8
10°	7321.2	7246.0	7096.1	6940.6	6872.5
12.5°	7305.2	7182.1	6908.7	6609.4	6465.6
15°	7271.4	7080.6	6625.8	6135.8	5973.7
17.5°	7219.2	6928.4	6245.7	5537.2	5265.1
20°	7144.0	6736.2	5772.6	4909.0	4568.8
22.5°	7047.3	6488.6	5202.6	4237.1	3961.8
25°	6914.8	6190.7	4622.8	3696.3	3400.3
27.5°	6766.8	5855.7	4075.9	3129.7	2870.8
30°	6586.3	5448.4	3556.8	2633.5	2419.3
32.5°	6381.0	5028.8	2985.4	2211.6	2063.1
35°	6168.2	4561.3	2474.7	1896.8	1755.4
37.5°	5950.2	4030.8	2089.4	1626.6	1524.7
40°	5750.5	3439.3	1777.0	1411.4	1330.1
42.5°	5536.2	2883.9	1536.4	1239.5	1189.7
45°	5303.7	2376.5	1325.4	1117.3	1090.5
47.5°	5041.0	2004.8	1161.0	1023.8	998.9
50°	4721.0	1702.7	1034.1	926.5	925.1
52.5°	4361.6	1465.5	921.4	856.1	868.3
55°	3894.1	1261.1	826.0	800.2	827.4
57.5°	3338.3	1094.3	748.0	756.9	778.5
60°	2721.4	943.9	679.9	687.4	658.3
62.5°	2175.9	812.4	618.3	578.9	541.7
65°	1708.8	700.1	560.5	476.0	449.6
67.5°	1332.5	596.2	469.4	390.4	357.6
70°	1037.4	506.5	373.1	299.3	247.1
72.5°	792.6	421.5	294.1	183.7	139.5
75°	591.5	342.0	213.8	112.3	101.5
77.5°	429.4	256.1	119.3	82.2	76.6
80°	288.5	172.9	70.0	60.1	57.3
82.5°	183.7	90.7	48.4	42.3	39.0
85°	93.0	37.1	30.1	25.8	23.0
87.5°	32.4	17.9	13.6	10.8	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)