

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: P470137

Luminaire Tested: **VHB2-15-N-UNV-L840-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470137
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-L840-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15741.6 lumens
Efficiency: N/A
Efficacy: 142.3 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

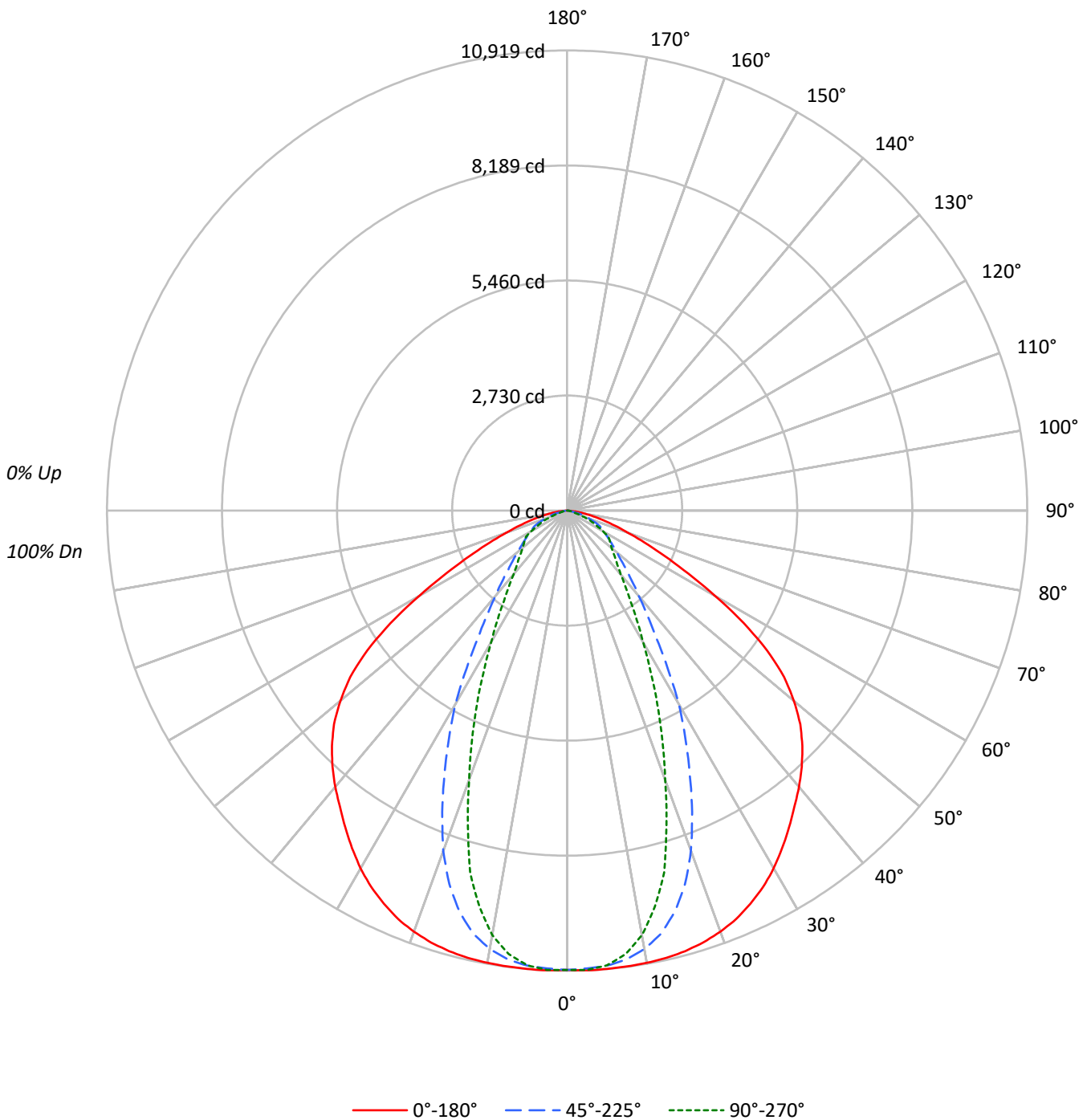
Input Watts (W): 110.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	67039	67039	67039
5°	67412	66920	66868
10°	68056	65964	63885
15°	68915	62796	56615
20°	69598	56237	44510
25°	69845	46695	34347
30°	69623	37598	25573
35°	68933	27656	19617
40°	68721	21236	15896
45°	68664	17160	14119
50°	67237	14729	13175
55°	62152	13184	13206
60°	49826	12448	12052
65°	37017	12142	9740
70°	27769	9985	6614
75°	20923	7562	3588
80°	15210	3691	3021
85°	9774	3162	2421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1027.0	6.5
10°-20°	2736.5	17.4
20°-30°	3352.2	21.3
30°-40°	3010.5	19.1
40°-50°	2332.4	14.8
50°-60°	1745.4	11.1
60°-70°	1047.2	6.7
70°-80°	415.2	2.6
80°-90°	75.3	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°	7115.6	45.2
0°-40°	10126.1	64.3
0°-60°	14203.8	90.2
0°-90°	15741.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15741.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10899	10899	10899	10899	10899	
5°	10918	10870	10838	10836	10830	###
15°	10822	10538	9862	9132	8891	3058
25°	10292	9214	6880	5501	5061	4741
35°	9180	6789	3683	2823	2613	5751
45°	7894	3537	1973	1663	1623	6069
55°	5796	1877	1229	1191	1232	5087
65°	2543	1042	834	708	669	2605
75°	880	509	318	167	151	971
85°	138	55	45	38	34	183
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10899.3	10899.3	10899.3	10899.3	10899.3
2.5°	10918.9	10879.0	10873.5	10900.7	10908.4
5°	10918.2	10870.0	10838.5	10835.7	10830.1
7.5°	10909.1	10845.5	10744.1	10663.7	10616.1
10°	10896.5	10784.6	10561.6	10330.1	10228.7
12.5°	10872.8	10689.5	10282.5	9837.1	9623.1
15°	10822.4	10538.5	9861.6	9132.2	8890.9
17.5°	10744.8	10311.9	9295.8	8241.3	7836.4
20°	10632.9	10025.9	8591.6	7306.3	6800.0
22.5°	10488.8	9657.4	7743.4	6306.3	5896.5
25°	10291.6	9214.0	6880.4	5501.4	5060.9
27.5°	10071.4	8715.4	6066.4	4658.1	4272.7
30°	9802.8	8109.1	5293.7	3919.6	3600.7
32.5°	9497.2	7484.6	4443.4	3291.6	3070.6
35°	9180.4	6788.8	3683.2	2823.1	2612.6
37.5°	8856.0	5999.3	3109.8	2421.0	2269.2
40°	8558.8	5118.9	2644.8	2100.7	1979.7
42.5°	8239.9	4292.3	2286.7	1844.8	1770.6
45°	7893.7	3537.1	1972.7	1662.9	1623.1
47.5°	7502.8	2983.9	1728.0	1523.8	1486.7
50°	7026.6	2534.3	1539.2	1379.0	1376.9
52.5°	6491.6	2181.1	1371.3	1274.1	1292.3
55°	5795.8	1876.9	1229.4	1190.9	1231.5
57.5°	4968.5	1628.7	1113.3	1126.6	1158.7
60°	4050.4	1404.9	1011.9	1023.1	979.7
62.5°	3238.5	1209.1	920.3	861.5	806.3
65°	2543.4	1042.0	834.3	708.4	669.2
67.5°	1983.2	887.4	698.6	581.1	532.2
70°	1544.1	753.8	555.2	445.5	367.8
72.5°	1179.7	627.3	437.8	273.4	207.7
75°	880.4	509.1	318.2	167.1	151.0
77.5°	639.2	381.1	177.6	122.4	114.0
80°	429.4	257.3	104.2	89.5	85.3
82.5°	273.4	135.0	72.0	62.9	58.0
85°	138.5	55.2	44.8	38.5	34.3
87.5°	48.3	26.6	20.3	16.1	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)