

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: P470167

Luminaire Tested: **VHB2-15-W-UNV-L740-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470167
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-15-W-UNV-L740-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS
Light Source: 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

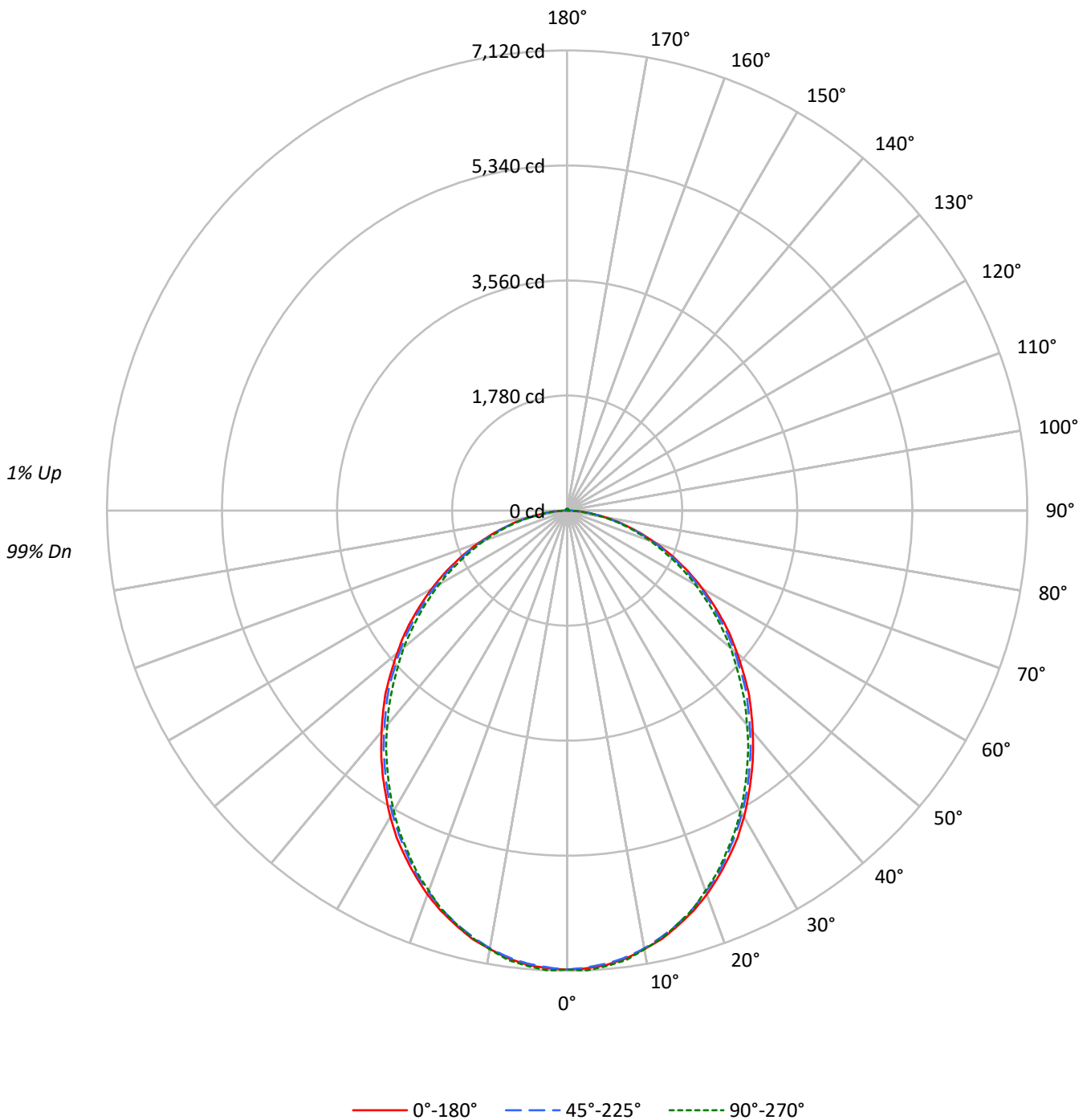
Lumens per Lamp: N/A
Luminaire Lumens: 17186.8 lumens
Efficiency: N/A
Efficacy: 155.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.14 / 1.25
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	100	92	85	79	97	90	84	78	86	81	76	83	78	75	79	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	63	58	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	46	42	40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	37	35
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	43686	43686	43686
5°	43555	43444	43665
10°	43030	42947	43041
15°	42294	42151	42174
20°	41372	41074	40963
25°	40171	39813	39576
30°	38869	38424	38113
35°	37365	36881	36438
40°	35855	35302	34756
45°	34501	33956	33108
50°	32826	32321	31568
55°	31377	30696	29862
60°	29755	29094	28148
65°	28003	27327	26350
70°	25949	25465	24580
75°	23639	23320	22512
80°	21132	20785	20055
85°	17925	17925	17488



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	667.8	3.9
10°-20°	1865.4	10.9
20°-30°	2702.7	15.7
30°-40°	3074.1	17.9
40°-50°	2997.7	17.4
50°-60°	2559.2	14.9
60°-70°	1857.9	10.8
70°-80°	1037.4	6.0
80°-90°	291.3	1.7
90°-100°	20.7	0.1
100°-110°	20.5	0.1
110°-120°	20.1	0.1
120°-130°	19.3	0.1
130°-140°	18.3	0.1
140°-150°	15.7	0.1
150°-160°	11.0	0.1
160°-170°	6.1	0.0
170°-180°	1.8	0.0
0°-30°	5235.9	30.5
0°-40°	8310.0	48.4
0°-60°	13866.8	80.7
0°-90°	17053.4	99.2
90°-120°	61.3	0.4
90°-150°	114.5	0.7
90°-180°	133.0	0.8
0°-180°	17186.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7102	7102	7102	7102	7102	
5°	7054	7038	7036	7060	7072	668
15°	6642	6630	6620	6619	6623	1872
25°	5919	5898	5866	5845	5831	2725
35°	4976	4960	4912	4866	4853	3112
45°	3966	3929	3904	3831	3806	3052
55°	2926	2914	2862	2802	2785	2617
65°	1924	1910	1878	1834	1810	1908
75°	995	1000	981	957	947	1063
85°	254	259	254	247	248	278
90°	18	20	23	28	26	21
95°	8	13	20	23	24	8
105°	15	15	19	23	25	16
115°	18	18	20	22	24	17
125°	19	21	21	23	23	17
135°	22	23	24	24	24	17
145°	21	24	26	28	28	13
155°	20	22	25	26	26	9
165°	16	19	22	24	24	5
175°	18	18	19	20	21	2
180°	18	18	18	18	18	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7102.5	7102.5	7102.5	7102.5	7102.5
2.5°	7088.2	7069.4	7073.0	7096.3	7119.5
5°	7054.2	7038.1	7036.3	7060.5	7072.1
7.5°	6988.0	6971.0	6970.1	6997.9	7011.3
10°	6889.6	6885.2	6876.2	6895.0	6891.4
12.5°	6786.8	6761.7	6757.2	6772.5	6773.3
15°	6641.9	6630.2	6619.5	6618.6	6623.1
17.5°	6493.4	6468.3	6462.1	6458.5	6467.4
20°	6320.7	6293.0	6275.1	6271.5	6258.1
22.5°	6124.8	6107.8	6090.8	6061.3	6064.0
25°	5919.1	5898.5	5866.3	5844.8	5831.4
27.5°	5708.9	5676.7	5642.7	5623.0	5611.4
30°	5472.7	5453.0	5410.1	5373.4	5366.3
32.5°	5222.2	5208.8	5165.9	5133.7	5112.2
35°	4976.2	4960.1	4911.8	4866.2	4852.8
37.5°	4725.8	4706.1	4664.9	4624.7	4602.3
40°	4465.5	4451.2	4396.6	4348.3	4328.6
42.5°	4214.1	4195.3	4146.1	4087.1	4075.5
45°	3966.3	3928.8	3903.7	3831.3	3806.2
47.5°	3691.7	3681.9	3628.2	3570.1	3542.3
50°	3430.5	3424.2	3377.7	3312.4	3299.0
52.5°	3190.8	3165.7	3122.8	3063.7	3033.3
55°	2926.0	2913.5	2862.5	2802.5	2784.7
57.5°	2666.6	2666.6	2612.0	2561.0	2530.6
60°	2418.8	2403.6	2365.1	2315.9	2288.2
62.5°	2169.2	2156.7	2123.6	2074.4	2049.4
65°	1924.1	1909.8	1877.6	1833.8	1810.5
67.5°	1689.8	1672.8	1652.2	1594.9	1579.7
70°	1442.9	1439.3	1416.0	1376.7	1366.8
72.5°	1221.0	1217.4	1190.6	1155.7	1145.0
75°	994.7	1000.1	981.3	957.1	947.3
77.5°	797.9	792.5	774.7	760.3	743.4
80°	596.6	594.9	586.8	567.1	566.2
82.5°	412.4	419.5	413.3	399.0	393.6
85°	254.0	259.4	254.0	246.9	247.8
87.5°	113.6	115.4	109.1	98.4	91.2
90°	17.9	19.7	23.3	27.7	25.9
92.5°	6.3	13.4	19.7	23.3	24.2
95°	8.1	13.4	19.7	23.3	24.2
97.5°	11.6	13.4	19.7	23.3	25.0
100°	13.4	14.3	19.7	23.3	25.0
102.5°	14.3	14.3	19.7	23.3	25.0
105°	15.2	15.2	18.8	23.3	25.0
107.5°	16.1	15.2	18.8	23.3	25.0
110°	16.1	16.1	18.8	23.3	24.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	17.0	17.0	19.7	22.4	24.2
115°	17.9	17.9	19.7	22.4	24.2
117.5°	17.9	18.8	19.7	23.3	24.2
120°	18.8	19.7	19.7	23.3	23.3
122.5°	18.8	20.6	20.6	23.3	23.3
125°	18.8	20.6	20.6	23.3	23.3
127.5°	19.7	21.5	20.6	23.3	23.3
130°	20.6	21.5	22.4	23.3	23.3
132.5°	20.6	22.4	23.3	24.2	23.3
135°	21.5	23.3	24.2	24.2	24.2
137.5°	22.4	23.3	25.0	25.0	25.0
140°	22.4	24.2	25.0	25.9	25.9
142.5°	20.6	24.2	25.0	26.8	26.8
145°	20.6	24.2	25.9	27.7	27.7
147.5°	19.7	23.3	25.0	27.7	27.7
150°	19.7	22.4	25.0	26.8	26.8
152.5°	20.6	21.5	25.0	25.9	26.8
155°	19.7	21.5	25.0	25.9	25.9
157.5°	18.8	20.6	24.2	25.9	26.8
160°	17.9	20.6	23.3	25.9	25.9
162.5°	17.0	19.7	22.4	25.0	25.9
165°	16.1	18.8	21.5	24.2	24.2
167.5°	16.1	18.8	20.6	22.4	23.3
170°	17.0	17.9	19.7	20.6	21.5
172.5°	17.9	17.9	19.7	19.7	19.7
175°	17.9	17.9	18.8	19.7	20.6
177.5°	18.8	17.9	17.9	19.7	19.7
180°	17.9	17.9	17.9	17.9	17.9

(END OF REPORT)