

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: P417741

Luminaire Tested: **VHB-1215-W-UNV-L835-CD-U-LEVEL2**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417741
Test Lab: INNOVATION CENTER(G3)
Issue Date: 11/17/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-1215-W-UNV-L835-CD-U-LEVEL2
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15659.8 lumens
Efficiency: N/A
Efficacy: 142.5 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

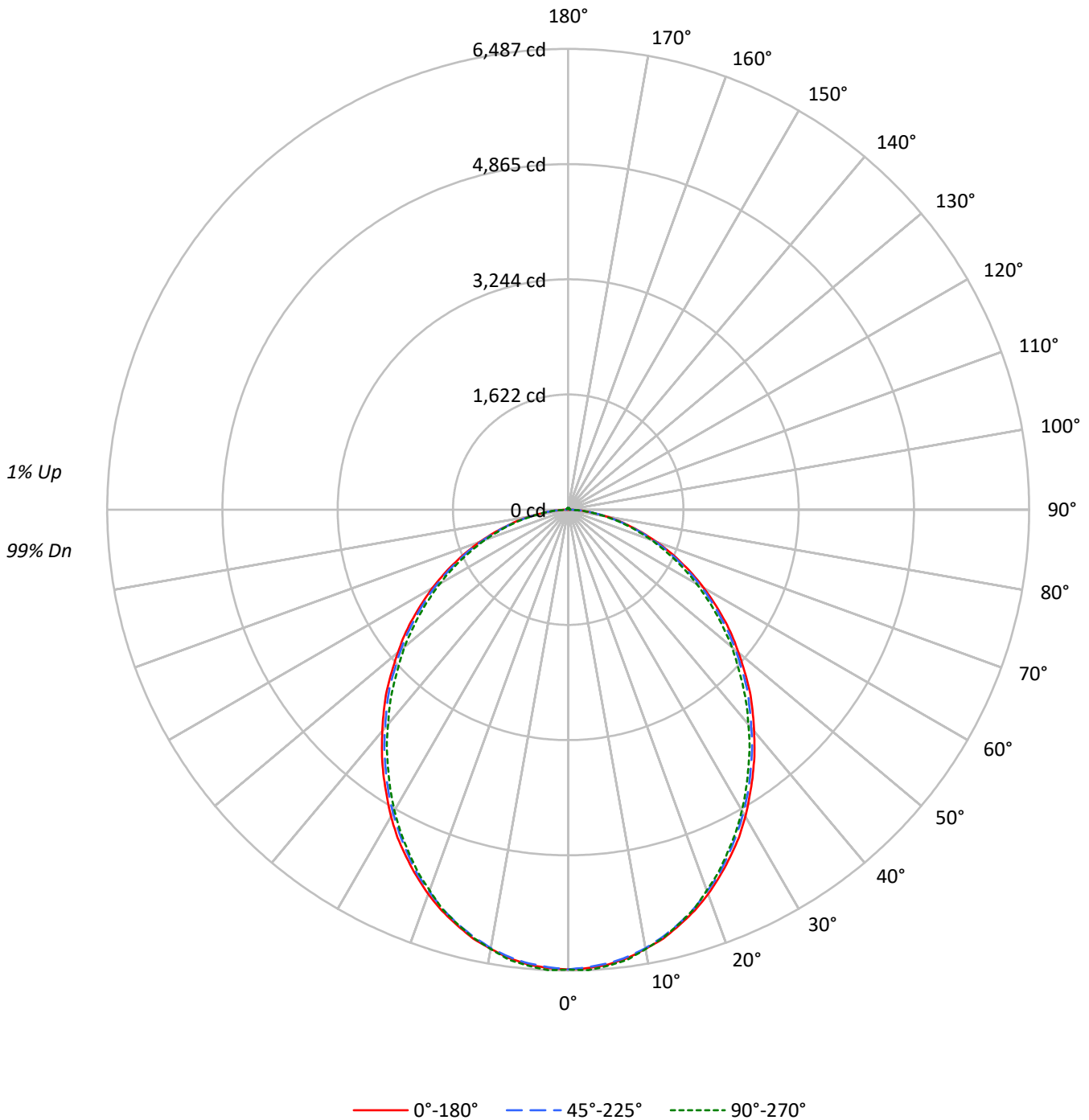
Input Watts (W): 109.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	39805	39805	39805
5°	39685	39585	39786
10°	39207	39131	39218
15°	38536	38407	38427
20°	37697	37425	37323
25°	36602	36275	36059
30°	35416	35010	34727
35°	34045	33605	33201
40°	32669	32165	31668
45°	31436	30940	30167
50°	29910	29449	28763
55°	28589	27969	27209
60°	27111	26510	25648
65°	25516	24899	24010
70°	23643	23203	22397
75°	21538	21248	20511
80°	19255	18940	18274
85°	16338	16338	15935



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	608.5	3.9
10°-20°	1699.6	10.9
20°-30°	2462.6	15.7
30°-40°	2801.0	17.9
40°-50°	2731.3	17.4
50°-60°	2331.8	14.9
60°-70°	1692.8	10.8
70°-80°	945.2	6.0
80°-90°	265.4	1.7
90°-100°	18.8	0.1
100°-110°	18.6	0.1
110°-120°	18.3	0.1
120°-130°	17.6	0.1
130°-140°	16.6	0.1
140°-150°	14.3	0.1
150°-160°	10.0	0.1
160°-170°	5.5	0.0
170°-180°	1.6	0.0
0°-30°	4770.7	30.5
0°-40°	7571.7	48.4
0°-60°	12634.9	80.7
0°-90°	15538.3	99.2
90°-120°	55.8	0.4
90°-150°	104.3	0.7
90°-180°	121.0	0.8
0°-180°	15659.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6472	6472	6472	6472	6472	
5°	6428	6413	6411	6433	6444	609
15°	6052	6041	6031	6031	6035	1705
25°	5393	5374	5345	5326	5313	2483
35°	4534	4520	4475	4434	4422	2835
45°	3614	3580	3557	3491	3468	2781
55°	2666	2655	2608	2554	2537	2385
65°	1753	1740	1711	1671	1650	1739
75°	906	911	894	872	863	969
85°	232	236	232	225	226	253
90°	16	18	21	25	24	19
95°	7	12	18	21	22	7
105°	14	14	17	21	23	15
115°	16	16	18	20	22	16
125°	17	19	19	21	21	16
135°	20	21	22	22	22	15
145°	19	22	24	25	25	12
155°	18	20	23	24	24	8
165°	15	17	20	22	22	4
175°	16	16	17	18	19	2
180°	16	16	16	16	16	



TEST NUMBER: P417741

CATALOG NUMBER: VHB-1215-W-UNV-L835-CD-U-LEVEL2

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6471.5	6471.5	6471.5	6471.5	6471.5
2.5°	6458.5	6441.4	6444.6	6465.8	6487.0
5°	6427.5	6412.8	6411.2	6433.2	6443.8
7.5°	6367.2	6351.7	6350.9	6376.1	6388.4
10°	6277.5	6273.5	6265.3	6282.4	6279.2
12.5°	6183.8	6161.0	6156.9	6170.8	6171.6
15°	6051.8	6041.2	6031.4	6030.6	6034.6
17.5°	5916.5	5893.6	5887.9	5884.7	5892.8
20°	5759.2	5733.9	5717.6	5714.3	5702.1
22.5°	5580.7	5565.2	5549.7	5522.8	5525.2
25°	5393.2	5374.4	5345.1	5325.5	5313.3
27.5°	5201.7	5172.3	5141.3	5123.4	5112.8
30°	4986.5	4968.6	4929.4	4896.0	4889.5
32.5°	4758.3	4746.0	4706.9	4677.6	4658.0
35°	4534.1	4519.5	4475.4	4433.9	4421.7
37.5°	4305.9	4288.0	4250.5	4213.8	4193.4
40°	4068.7	4055.7	4006.0	3962.0	3944.0
42.5°	3839.7	3822.6	3777.8	3724.0	3713.4
45°	3613.9	3579.7	3556.9	3490.9	3468.0
47.5°	3363.7	3354.8	3305.8	3252.9	3227.6
50°	3125.7	3120.0	3077.6	3018.1	3005.9
52.5°	2907.3	2884.5	2845.3	2791.6	2763.8
55°	2666.0	2654.6	2608.2	2553.6	2537.3
57.5°	2429.7	2429.7	2380.0	2333.5	2305.8
60°	2203.9	2190.0	2155.0	2110.2	2084.9
62.5°	1976.5	1965.1	1934.9	1890.1	1867.3
65°	1753.2	1740.1	1710.8	1670.9	1649.7
67.5°	1539.6	1524.1	1505.4	1453.2	1439.4
70°	1314.7	1311.4	1290.2	1254.4	1245.4
72.5°	1112.5	1109.3	1084.8	1053.0	1043.3
75°	906.3	911.2	894.1	872.1	863.1
77.5°	727.0	722.1	705.8	692.8	677.3
80°	543.6	542.0	534.7	516.7	515.9
82.5°	375.7	382.3	376.6	363.5	358.6
85°	231.5	236.4	231.5	225.0	225.8
87.5°	103.5	105.1	99.4	89.7	83.1
90°	16.3	17.9	21.2	25.3	23.6
92.5°	5.7	12.2	17.9	21.2	22.0
95°	7.3	12.2	17.9	21.2	22.0
97.5°	10.6	12.2	17.9	21.2	22.8
100°	12.2	13.0	17.9	21.2	22.8
102.5°	13.0	13.0	17.9	21.2	22.8
105°	13.9	13.9	17.1	21.2	22.8
107.5°	14.7	13.9	17.1	21.2	22.8
110°	14.7	14.7	17.1	21.2	22.0



TEST NUMBER: P417741

CATALOG NUMBER: VHB-1215-W-UNV-L835-CD-U-LEVEL2

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	15.5	15.5	17.9	20.4	22.0
115°	16.3	16.3	17.9	20.4	22.0
117.5°	16.3	17.1	17.9	21.2	22.0
120°	17.1	17.9	17.9	21.2	21.2
122.5°	17.1	18.7	18.7	21.2	21.2
125°	17.1	18.7	18.7	21.2	21.2
127.5°	17.9	19.6	18.7	21.2	21.2
130°	18.7	19.6	20.4	21.2	21.2
132.5°	18.7	20.4	21.2	22.0	21.2
135°	19.6	21.2	22.0	22.0	22.0
137.5°	20.4	21.2	22.8	22.8	22.8
140°	20.4	22.0	22.8	23.6	23.6
142.5°	18.7	22.0	22.8	24.5	24.5
145°	18.7	22.0	23.6	25.3	25.3
147.5°	17.9	21.2	22.8	25.3	25.3
150°	17.9	20.4	22.8	24.5	24.5
152.5°	18.7	19.6	22.8	23.6	24.5
155°	17.9	19.6	22.8	23.6	23.6
157.5°	17.1	18.7	22.0	23.6	24.5
160°	16.3	18.7	21.2	23.6	23.6
162.5°	15.5	17.9	20.4	22.8	23.6
165°	14.7	17.1	19.6	22.0	22.0
167.5°	14.7	17.1	18.7	20.4	21.2
170°	15.5	16.3	17.9	18.7	19.6
172.5°	16.3	16.3	17.9	17.9	17.9
175°	16.3	16.3	17.1	17.9	18.7
177.5°	17.1	16.3	16.3	17.9	17.9
180°	16.3	16.3	16.3	16.3	16.3

(END OF REPORT)