

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: P417745

Luminaire Tested: **VHB-1215-W-UNV-L840-CD-U-LEVEL2**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417745
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-L840-CD-U-LEVEL2
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15979.4 lumens
Efficiency: N/A
Efficacy: 145.4 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

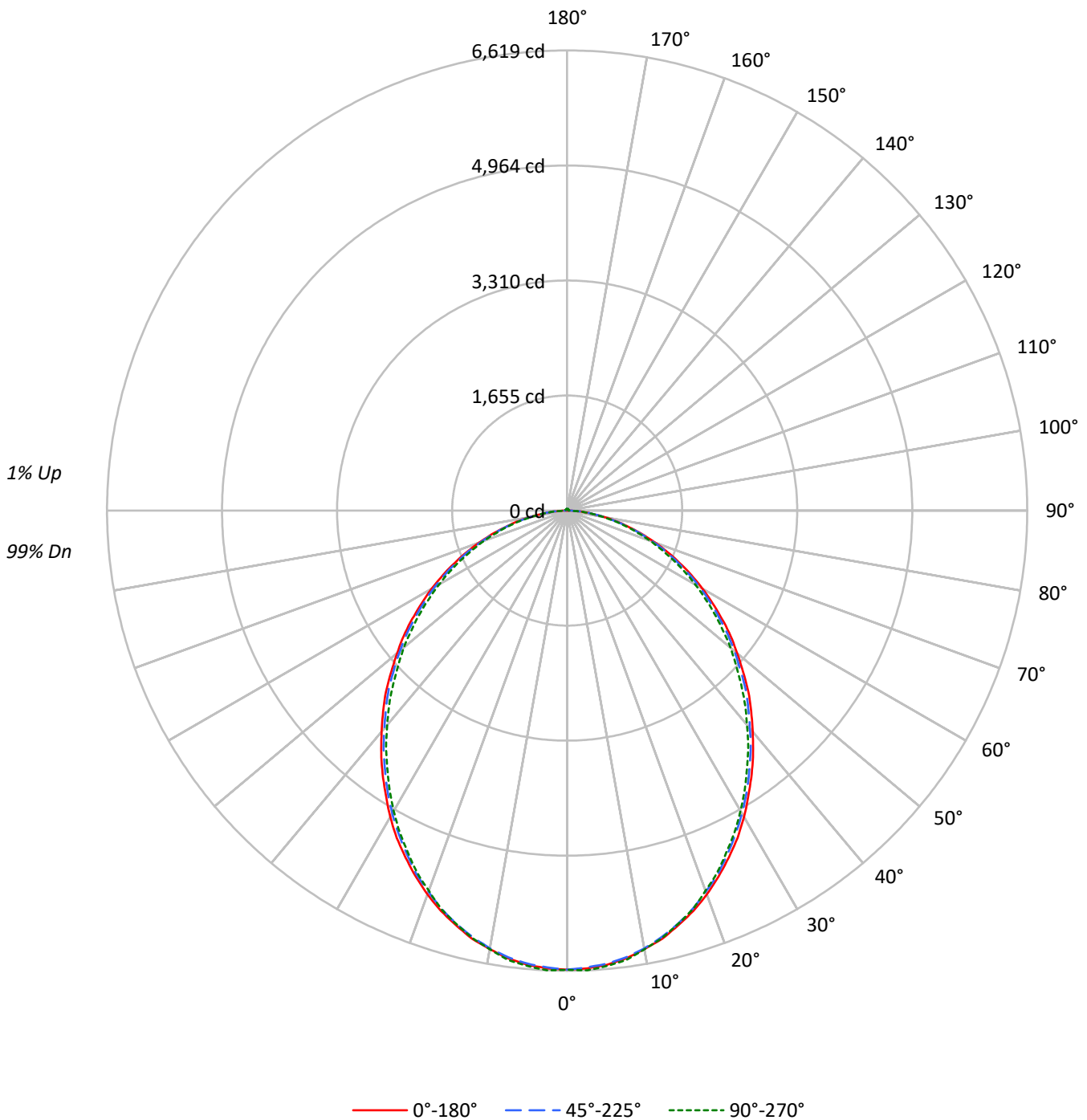
Input Watts (W): 109.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	40617	40617	40617
5°	40495	40392	40598
10°	40007	39930	40018
15°	39323	39190	39211
20°	38466	38189	38085
25°	37349	37016	36796
30°	36139	35725	35436
35°	34741	34291	33879
40°	33336	32821	32314
45°	32078	31571	30782
50°	30520	30050	29351
55°	29172	28540	27763
60°	27665	27051	26172
65°	26037	25407	24499
70°	24125	23677	22854
75°	21978	21683	20932
80°	19648	19326	18649
85°	16669	16669	16260



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	620.9	3.9
10°-20°	1734.3	10.9
20°-30°	2512.9	15.7
30°-40°	2858.2	17.9
40°-50°	2787.1	17.4
50°-60°	2379.4	14.9
60°-70°	1727.4	10.8
70°-80°	964.5	6.0
80°-90°	270.8	1.7
90°-100°	19.2	0.1
100°-110°	19.0	0.1
110°-120°	18.7	0.1
120°-130°	17.9	0.1
130°-140°	17.0	0.1
140°-150°	14.6	0.1
150°-160°	10.2	0.1
160°-170°	5.6	0.0
170°-180°	1.7	0.0
0°-30°	4868.1	30.5
0°-40°	7726.2	48.4
0°-60°	12892.7	80.7
0°-90°	15855.4	99.2
90°-120°	57.0	0.4
90°-150°	106.4	0.7
90°-180°	124.0	0.8
0°-180°	15979.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6604	6604	6604	6604	6604	
5°	6559	6544	6542	6564	6575	621
15°	6175	6164	6154	6154	6158	1740
25°	5503	5484	5454	5434	5422	2534
35°	4627	4612	4567	4524	4512	2893
45°	3688	3653	3630	3562	3539	2838
55°	2720	2709	2661	2606	2589	2433
65°	1789	1776	1746	1705	1683	1774
75°	925	930	912	890	881	989
85°	236	241	236	230	230	258
90°	17	18	22	26	24	20
95°	8	12	18	22	22	7
105°	14	14	18	22	23	15
115°	17	17	18	21	22	16
125°	18	19	19	22	22	16
135°	20	22	22	22	22	15
145°	19	22	24	26	26	12
155°	18	20	23	24	24	8
165°	15	18	20	22	22	4
175°	17	17	18	18	19	2
180°	17	17	17	17	17	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6603.6	6603.6	6603.6	6603.6	6603.6
2.5°	6590.3	6572.8	6576.1	6597.8	6619.4
5°	6558.7	6543.7	6542.0	6564.5	6575.3
7.5°	6497.1	6481.3	6480.5	6506.3	6518.7
10°	6405.6	6401.5	6393.2	6410.6	6407.3
12.5°	6310.0	6286.7	6282.6	6296.7	6297.5
15°	6175.3	6164.5	6154.5	6153.6	6157.8
17.5°	6037.2	6013.9	6008.1	6004.8	6013.1
20°	5876.7	5850.9	5834.3	5830.9	5818.5
22.5°	5694.5	5678.7	5662.9	5635.5	5638.0
25°	5503.3	5484.1	5454.2	5434.2	5421.8
27.5°	5307.8	5277.9	5246.3	5228.0	5217.2
30°	5088.3	5070.0	5030.0	4995.9	4989.3
32.5°	4855.4	4842.9	4803.0	4773.0	4753.1
35°	4626.7	4611.7	4566.8	4524.4	4511.9
37.5°	4393.8	4375.5	4337.2	4299.8	4279.0
40°	4151.8	4138.5	4087.7	4042.8	4024.5
42.5°	3918.1	3900.6	3854.9	3800.0	3789.2
45°	3687.7	3652.8	3629.5	3562.1	3538.8
47.5°	3432.4	3423.2	3373.3	3319.3	3293.5
50°	3189.5	3183.7	3140.4	3079.7	3067.3
52.5°	2966.6	2943.3	2903.4	2848.5	2820.2
55°	2720.4	2708.8	2661.4	2605.7	2589.0
57.5°	2479.3	2479.3	2428.5	2381.1	2352.8
60°	2248.9	2234.7	2199.0	2153.2	2127.5
62.5°	2016.8	2005.2	1974.4	1928.7	1905.4
65°	1789.0	1775.6	1745.7	1705.0	1683.3
67.5°	1571.1	1555.3	1536.1	1482.9	1468.8
70°	1341.5	1338.2	1316.6	1280.0	1270.8
72.5°	1135.3	1131.9	1107.0	1074.5	1064.6
75°	924.8	929.8	912.4	889.9	880.8
77.5°	741.9	736.9	720.2	706.9	691.1
80°	554.7	553.1	545.6	527.3	526.5
82.5°	383.4	390.1	384.2	370.9	365.9
85°	236.2	241.2	236.2	229.5	230.4
87.5°	105.6	107.3	101.5	91.5	84.8
90°	16.6	18.3	21.6	25.8	24.1
92.5°	5.8	12.5	18.3	21.6	22.5
95°	7.5	12.5	18.3	21.6	22.5
97.5°	10.8	12.5	18.3	21.6	23.3
100°	12.5	13.3	18.3	21.6	23.3
102.5°	13.3	13.3	18.3	21.6	23.3
105°	14.1	14.1	17.5	21.6	23.3
107.5°	15.0	14.1	17.5	21.6	23.3
110°	15.0	15.0	17.5	21.6	22.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	15.8	15.8	18.3	20.8	22.5
115°	16.6	16.6	18.3	20.8	22.5
117.5°	16.6	17.5	18.3	21.6	22.5
120°	17.5	18.3	18.3	21.6	21.6
122.5°	17.5	19.1	19.1	21.6	21.6
125°	17.5	19.1	19.1	21.6	21.6
127.5°	18.3	20.0	19.1	21.6	21.6
130°	19.1	20.0	20.8	21.6	21.6
132.5°	19.1	20.8	21.6	22.5	21.6
135°	20.0	21.6	22.5	22.5	22.5
137.5°	20.8	21.6	23.3	23.3	23.3
140°	20.8	22.5	23.3	24.1	24.1
142.5°	19.1	22.5	23.3	25.0	25.0
145°	19.1	22.5	24.1	25.8	25.8
147.5°	18.3	21.6	23.3	25.8	25.8
150°	18.3	20.8	23.3	25.0	25.0
152.5°	19.1	20.0	23.3	24.1	25.0
155°	18.3	20.0	23.3	24.1	24.1
157.5°	17.5	19.1	22.5	24.1	25.0
160°	16.6	19.1	21.6	24.1	24.1
162.5°	15.8	18.3	20.8	23.3	24.1
165°	15.0	17.5	20.0	22.5	22.5
167.5°	15.0	17.5	19.1	20.8	21.6
170°	15.8	16.6	18.3	19.1	20.0
172.5°	16.6	16.6	18.3	18.3	18.3
175°	16.6	16.6	17.5	18.3	19.1
177.5°	17.5	16.6	16.6	18.3	18.3
180°	16.6	16.6	16.6	16.6	16.6

(END OF REPORT)