

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: P417732

Luminaire Tested: **VHB-1215-W-UNV-L740-CD-U-LEVEL1**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417732
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-L740-CD-U-LEVEL1
Description: VHB 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: 13105.9 lumens
Efficiency: N/A
Efficacy: 162.6 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

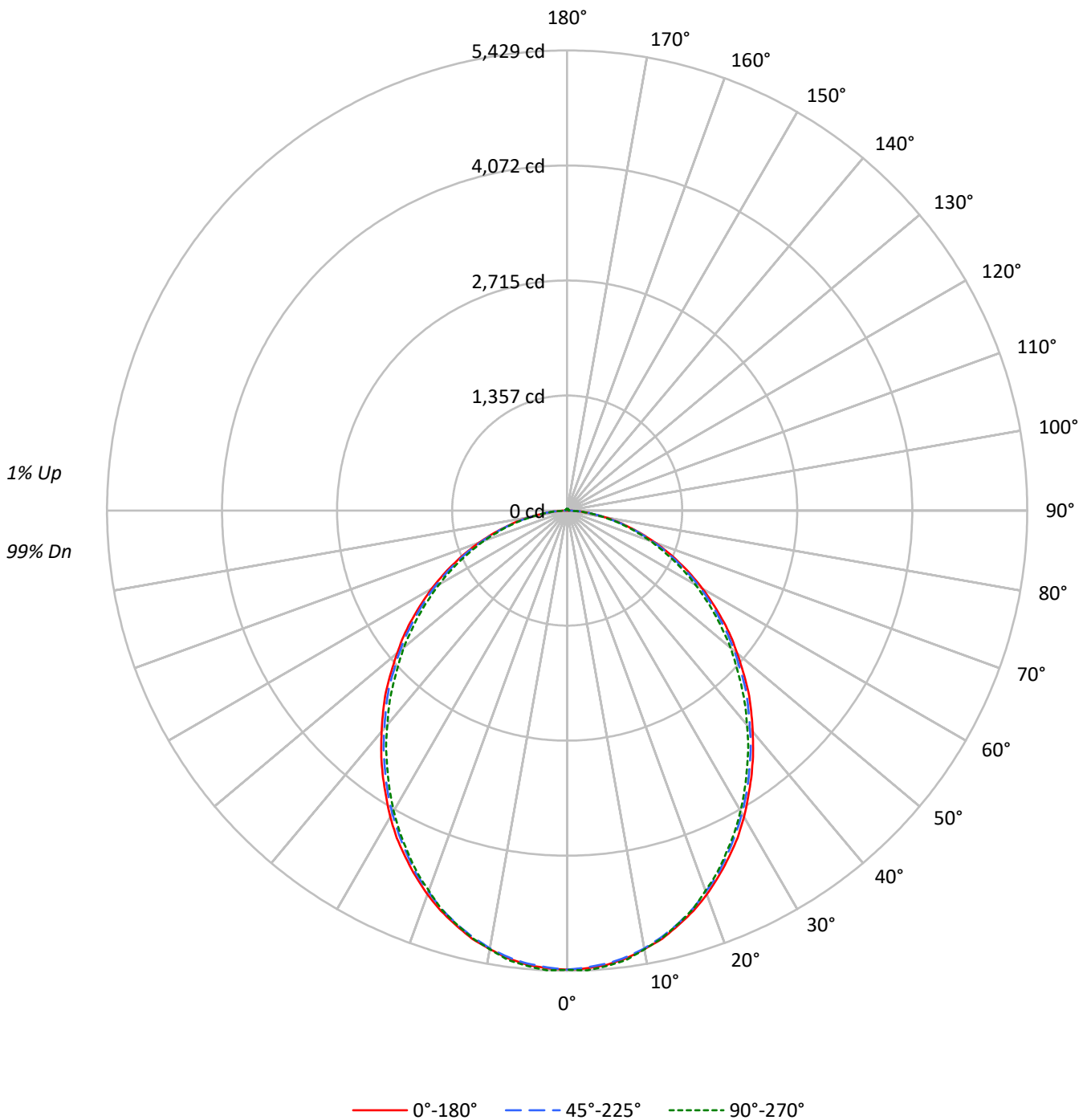
Input Watts (W): 80.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	33313	33313	33313
5°	33213	33129	33297
10°	32814	32749	32822
15°	32251	32143	32160
20°	31549	31321	31237
25°	30632	30359	30179
30°	29640	29301	29063
35°	28493	28125	27787
40°	27341	26920	26503
45°	26310	25894	25247
50°	25032	24647	24073
55°	23926	23407	22772
60°	22690	22186	21465
65°	21355	20838	20093
70°	19787	19419	18744
75°	18026	17783	17168
80°	16117	15851	15295
85°	13670	13670	13331



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	509.2	3.9
10°-20°	1422.4	10.9
20°-30°	2061.0	15.7
30°-40°	2344.2	17.9
40°-50°	2285.9	17.4
50°-60°	1951.5	14.9
60°-70°	1416.8	10.8
70°-80°	791.1	6.0
80°-90°	222.1	1.7
90°-100°	15.7	0.1
100°-110°	15.6	0.1
110°-120°	15.3	0.1
120°-130°	14.7	0.1
130°-140°	13.9	0.1
140°-150°	12.0	0.1
150°-160°	8.4	0.1
160°-170°	4.6	0.0
170°-180°	1.4	0.0
0°-30°	3992.7	30.5
0°-40°	6336.9	48.4
0°-60°	10574.3	80.7
0°-90°	13004.2	99.2
90°-120°	46.7	0.4
90°-150°	87.2	0.7
90°-180°	102.0	0.8
0°-180°	13105.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5416	5416	5416	5416	5416	
5°	5379	5367	5366	5384	5393	509
15°	5065	5056	5048	5047	5050	1427
25°	4514	4498	4473	4457	4447	2078
35°	3795	3782	3746	3711	3701	2373
45°	3025	2996	2977	2922	2902	2327
55°	2231	2222	2183	2137	2124	1996
65°	1467	1456	1432	1398	1381	1455
75°	758	763	748	730	722	811
85°	194	198	194	188	189	212
90°	14	15	18	21	20	16
95°	6	10	15	18	18	6
105°	12	12	14	18	19	12
115°	14	14	15	17	18	13
125°	14	16	16	18	18	13
135°	16	18	18	18	18	13
145°	16	18	20	21	21	10
155°	15	16	19	20	20	7
165°	12	14	16	18	18	4
175°	14	14	14	15	16	1
180°	14	14	14	14	14	



TEST NUMBER: P417732

CATALOG NUMBER: VHB-1215-W-UNV-L740-CD-U-LEVEL1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5416.1	5416.1	5416.1	5416.1	5416.1
2.5°	5405.2	5390.9	5393.6	5411.3	5429.1
5°	5379.3	5367.0	5365.6	5384.0	5392.9
7.5°	5328.8	5315.8	5315.2	5336.3	5346.5
10°	5253.8	5250.3	5243.5	5257.9	5255.1
12.5°	5175.3	5156.2	5152.8	5164.4	5165.1
15°	5064.8	5055.9	5047.8	5047.1	5050.5
17.5°	4951.6	4932.5	4927.7	4925.0	4931.8
20°	4819.9	4798.8	4785.1	4782.4	4772.2
22.5°	4670.5	4657.6	4644.6	4622.1	4624.2
25°	4513.6	4498.0	4473.4	4457.0	4446.8
27.5°	4353.3	4328.8	4302.9	4287.9	4279.0
30°	4173.3	4158.3	4125.5	4097.5	4092.1
32.5°	3982.3	3972.0	3939.3	3914.7	3898.4
35°	3794.7	3782.4	3745.6	3710.8	3700.6
37.5°	3603.7	3588.7	3557.3	3526.6	3509.6
40°	3405.2	3394.3	3352.7	3315.8	3300.8
42.5°	3213.5	3199.2	3161.7	3116.6	3107.8
45°	3024.6	2995.9	2976.8	2921.6	2902.5
47.5°	2815.1	2807.6	2766.7	2722.4	2701.2
50°	2616.0	2611.2	2575.7	2525.9	2515.7
52.5°	2433.2	2414.1	2381.3	2336.3	2313.1
55°	2231.2	2221.7	2182.8	2137.1	2123.5
57.5°	2033.4	2033.4	1991.8	1952.9	1929.7
60°	1844.5	1832.9	1803.5	1766.0	1744.9
62.5°	1654.2	1644.6	1619.4	1581.9	1562.8
65°	1467.3	1456.3	1431.8	1398.4	1380.6
67.5°	1288.5	1275.6	1259.9	1216.2	1204.6
70°	1100.3	1097.5	1079.8	1049.8	1042.3
72.5°	931.1	928.4	907.9	881.3	873.1
75°	758.5	762.6	748.3	729.9	722.4
77.5°	608.5	604.4	590.7	579.8	566.8
80°	455.0	453.6	447.5	432.5	431.8
82.5°	314.5	319.9	315.1	304.2	300.1
85°	193.7	197.8	193.7	188.3	188.9
87.5°	86.6	88.0	83.2	75.0	69.6
90°	13.6	15.0	17.7	21.1	19.8
92.5°	4.8	10.2	15.0	17.7	18.4
95°	6.1	10.2	15.0	17.7	18.4
97.5°	8.9	10.2	15.0	17.7	19.1
100°	10.2	10.9	15.0	17.7	19.1
102.5°	10.9	10.9	15.0	17.7	19.1
105°	11.6	11.6	14.3	17.7	19.1
107.5°	12.3	11.6	14.3	17.7	19.1
110°	12.3	12.3	14.3	17.7	18.4



TEST NUMBER: P417732

CATALOG NUMBER: VHB-1215-W-UNV-L740-CD-U-LEVEL1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	13.0	13.0	15.0	17.1	18.4
115°	13.6	13.6	15.0	17.1	18.4
117.5°	13.6	14.3	15.0	17.7	18.4
120°	14.3	15.0	15.0	17.7	17.7
122.5°	14.3	15.7	15.7	17.7	17.7
125°	14.3	15.7	15.7	17.7	17.7
127.5°	15.0	16.4	15.7	17.7	17.7
130°	15.7	16.4	17.1	17.7	17.7
132.5°	15.7	17.1	17.7	18.4	17.7
135°	16.4	17.7	18.4	18.4	18.4
137.5°	17.1	17.7	19.1	19.1	19.1
140°	17.1	18.4	19.1	19.8	19.8
142.5°	15.7	18.4	19.1	20.5	20.5
145°	15.7	18.4	19.8	21.1	21.1
147.5°	15.0	17.7	19.1	21.1	21.1
150°	15.0	17.1	19.1	20.5	20.5
152.5°	15.7	16.4	19.1	19.8	20.5
155°	15.0	16.4	19.1	19.8	19.8
157.5°	14.3	15.7	18.4	19.8	20.5
160°	13.6	15.7	17.7	19.8	19.8
162.5°	13.0	15.0	17.1	19.1	19.8
165°	12.3	14.3	16.4	18.4	18.4
167.5°	12.3	14.3	15.7	17.1	17.7
170°	13.0	13.6	15.0	15.7	16.4
172.5°	13.6	13.6	15.0	15.0	15.0
175°	13.6	13.6	14.3	15.0	15.7
177.5°	14.3	13.6	13.6	15.0	15.0
180°	13.6	13.6	13.6	13.6	13.6

(END OF REPORT)