

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: P417729

Luminaire Tested: **VHB-1215-W-UNV-L735-CD-U-LEVEL2**

Issue Date: 11/17/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P417729  
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-L735-CD-U-LEVEL2  
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS  
Light Source: 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

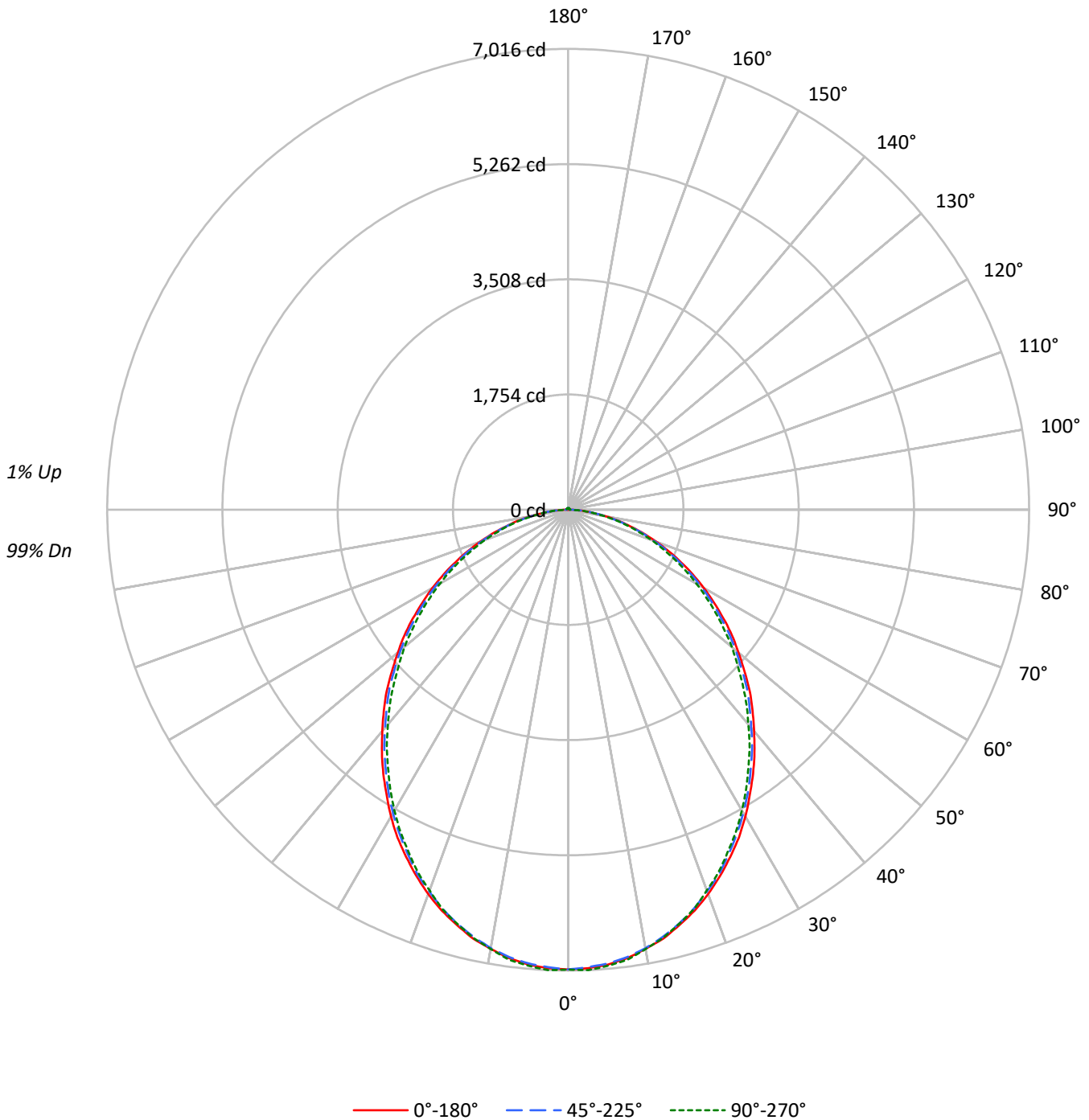
Lumens per Lamp: N/A  
Luminaire Lumens: 16938.2 lumens  
Efficiency: N/A  
Efficacy: 154.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.14 / 1.25  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 109.9  
Input Voltage (V): 120  
Input Current (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°	43054	43054	43054
5°	42925	42816	43034
10°	42408	42326	42419
15°	41682	41541	41564
20°	40774	40480	40370
25°	39590	39236	39004
30°	38306	37868	37561
35°	36825	36348	35911
40°	35336	34791	34253
45°	34003	33465	32629
50°	32352	31854	31111
55°	30924	30252	29430
60°	29325	28674	27741
65°	27599	26931	25969
70°	25573	25098	24226
75°	23297	22983	22187
80°	20828	20484	19765
85°	17671	17671	17234



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	658.1	3.9
10°-20°	1838.4	10.9
20°-30°	2663.6	15.7
30°-40°	3029.7	17.9
40°-50°	2954.3	17.4
50°-60°	2522.1	14.9
60°-70°	1831.0	10.8
70°-80°	1022.4	6.0
80°-90°	287.1	1.7
90°-100°	20.4	0.1
100°-110°	20.2	0.1
110°-120°	19.8	0.1
120°-130°	19.0	0.1
130°-140°	18.0	0.1
140°-150°	15.5	0.1
150°-160°	10.8	0.1
160°-170°	6.0	0.0
170°-180°	1.8	0.0
0°-30°	5160.2	30.5
0°-40°	8189.8	48.4
0°-60°	13666.3	80.7
0°-90°	16806.8	99.2
90°-120°	60.3	0.4
90°-150°	112.8	0.7
90°-180°	131.0	0.8
0°-180°	16938.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7000	7000	7000	7000	7000	
5°	6952	6936	6935	6958	6970	658
15°	6546	6534	6524	6523	6527	1845
25°	5834	5813	5781	5760	5747	2686
35°	4904	4888	4841	4796	4783	3067
45°	3909	3872	3847	3776	3751	3008
55°	2884	2871	2821	2762	2744	2579
65°	1896	1882	1850	1807	1784	1881
75°	980	986	967	943	934	1048
85°	250	256	250	243	244	274
90°	18	19	23	27	26	21
95°	8	13	19	23	24	8
105°	15	15	18	23	25	16
115°	18	18	19	22	24	17
125°	18	20	20	23	23	17
135°	21	23	24	24	24	16
145°	20	24	26	27	27	13
155°	19	21	25	26	26	9
165°	16	18	21	24	24	5
175°	18	18	18	19	20	2
180°	18	18	18	18	18	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6999.8	6999.8	6999.8	6999.8	6999.8
2.5°	6985.7	6967.2	6970.7	6993.6	7016.5
5°	6952.2	6936.3	6934.6	6958.4	6969.8
7.5°	6887.0	6870.2	6869.3	6896.6	6909.9
10°	6790.0	6785.6	6776.8	6795.3	6791.7
12.5°	6688.6	6663.9	6659.5	6674.5	6675.4
15°	6545.8	6534.3	6523.7	6522.9	6527.3
17.5°	6399.4	6374.8	6368.6	6365.1	6373.9
20°	6229.3	6202.0	6184.3	6180.8	6167.6
22.5°	6036.2	6019.5	6002.7	5973.6	5976.3
25°	5833.5	5813.2	5781.4	5760.3	5747.1
27.5°	5626.3	5594.5	5561.0	5541.7	5530.2
30°	5393.5	5374.2	5331.8	5295.7	5288.6
32.5°	5146.7	5133.5	5091.2	5059.4	5038.3
35°	4904.3	4888.4	4840.8	4795.8	4782.6
37.5°	4657.4	4638.0	4597.5	4557.8	4535.8
40°	4400.9	4386.8	4333.0	4285.4	4266.0
42.5°	4153.2	4134.6	4086.2	4028.0	4016.5
45°	3909.0	3871.9	3847.2	3775.8	3751.1
47.5°	3638.3	3628.6	3575.7	3518.4	3491.1
50°	3380.9	3374.7	3328.9	3264.5	3251.3
52.5°	3144.6	3119.9	3077.6	3019.4	2989.5
55°	2883.7	2871.3	2821.1	2762.0	2744.4
57.5°	2628.0	2628.0	2574.2	2524.0	2494.0
60°	2383.8	2368.8	2330.9	2282.4	2255.1
62.5°	2137.8	2125.5	2092.9	2044.4	2019.7
65°	1896.3	1882.2	1850.4	1807.3	1784.3
67.5°	1665.3	1648.6	1628.3	1571.9	1556.9
70°	1422.0	1418.5	1395.6	1356.8	1347.1
72.5°	1203.4	1199.8	1173.4	1139.0	1128.4
75°	980.3	985.6	967.1	943.3	933.6
77.5°	786.4	781.1	763.5	749.3	732.6
80°	588.0	586.3	578.3	558.9	558.0
82.5°	406.4	413.5	407.3	393.2	387.9
85°	250.4	255.7	250.4	243.3	244.2
87.5°	112.0	113.7	107.6	97.0	89.9
90°	17.6	19.4	22.9	27.3	25.6
92.5°	6.2	13.2	19.4	22.9	23.8
95°	7.9	13.2	19.4	22.9	23.8
97.5°	11.5	13.2	19.4	22.9	24.7
100°	13.2	14.1	19.4	22.9	24.7
102.5°	14.1	14.1	19.4	22.9	24.7
105°	15.0	15.0	18.5	22.9	24.7
107.5°	15.9	15.0	18.5	22.9	24.7
110°	15.9	15.9	18.5	22.9	23.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	16.8	16.8	19.4	22.0	23.8
115°	17.6	17.6	19.4	22.0	23.8
117.5°	17.6	18.5	19.4	22.9	23.8
120°	18.5	19.4	19.4	22.9	22.9
122.5°	18.5	20.3	20.3	22.9	22.9
125°	18.5	20.3	20.3	22.9	22.9
127.5°	19.4	21.2	20.3	22.9	22.9
130°	20.3	21.2	22.0	22.9	22.9
132.5°	20.3	22.0	22.9	23.8	22.9
135°	21.2	22.9	23.8	23.8	23.8
137.5°	22.0	22.9	24.7	24.7	24.7
140°	22.0	23.8	24.7	25.6	25.6
142.5°	20.3	23.8	24.7	26.4	26.4
145°	20.3	23.8	25.6	27.3	27.3
147.5°	19.4	22.9	24.7	27.3	27.3
150°	19.4	22.0	24.7	26.4	26.4
152.5°	20.3	21.2	24.7	25.6	26.4
155°	19.4	21.2	24.7	25.6	25.6
157.5°	18.5	20.3	23.8	25.6	26.4
160°	17.6	20.3	22.9	25.6	25.6
162.5°	16.8	19.4	22.0	24.7	25.6
165°	15.9	18.5	21.2	23.8	23.8
167.5°	15.9	18.5	20.3	22.0	22.9
170°	16.8	17.6	19.4	20.3	21.2
172.5°	17.6	17.6	19.4	19.4	19.4
175°	17.6	17.6	18.5	19.4	20.3
177.5°	18.5	17.6	17.6	19.4	19.4
180°	17.6	17.6	17.6	17.6	17.6

(END OF REPORT)