

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: P417753

Luminaire Tested: **VHB-1215-W-UNV-L935-CD-U-LEVEL2**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417753
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-L935-CD-U-LEVEL2
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13742.3 lumens
Efficiency: N/A
Efficacy: 125.0 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

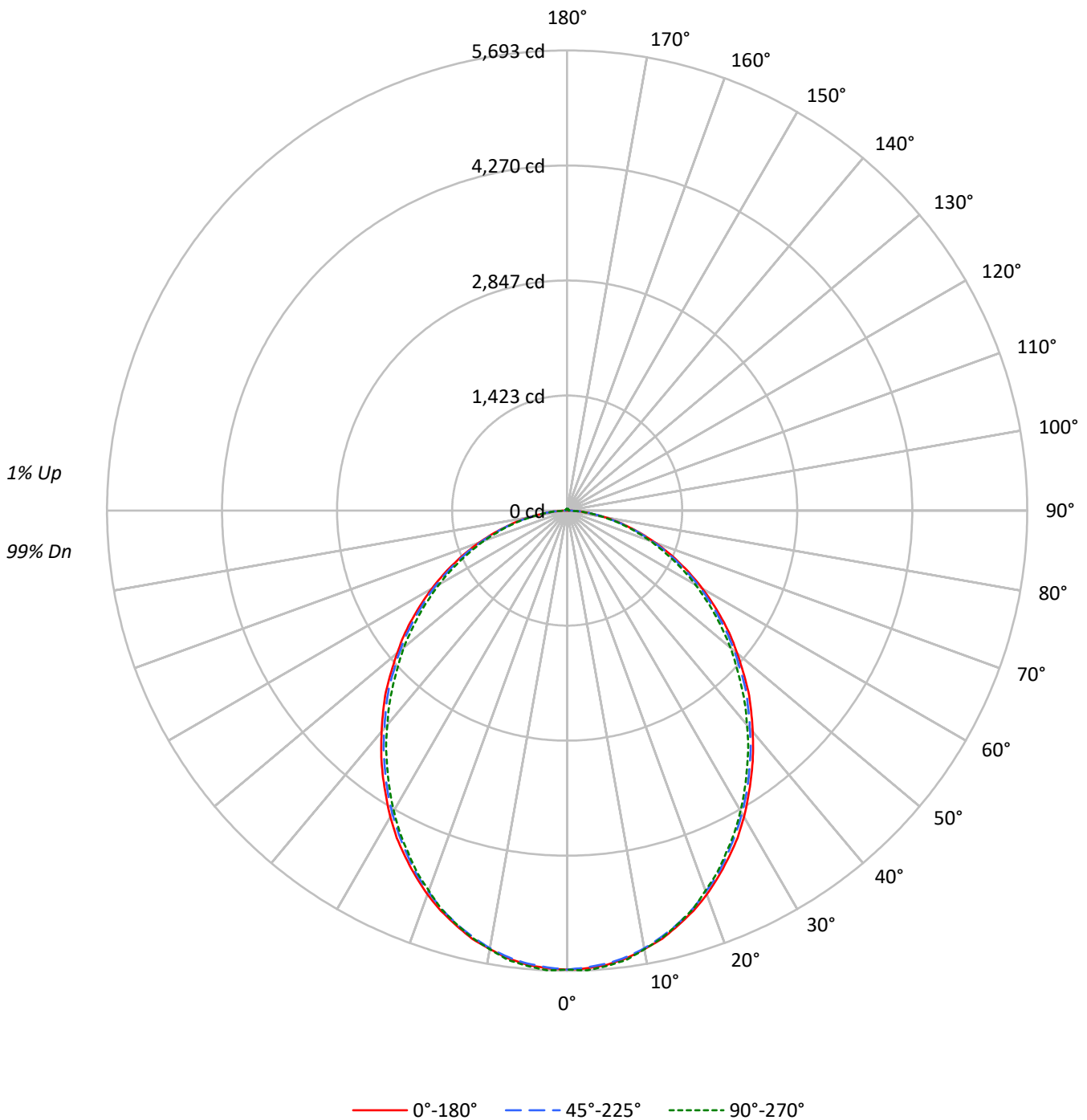
Input Watts (W): 109.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	34931	34931	34931
5°	34826	34738	34914
10°	34407	34339	34416
15°	33817	33703	33722
20°	33081	32842	32753
25°	32120	31833	31644
30°	31079	30723	30475
35°	29876	29490	29135
40°	28669	28227	27790
45°	27587	27151	26473
50°	26248	25844	25241
55°	25089	24544	23877
60°	23791	23264	22507
65°	22391	21850	21070
70°	20748	20361	19654
75°	18903	18646	17999
80°	16899	16620	16039
85°	14333	14333	13980



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	534.0	3.9
10°-20°	1491.5	10.9
20°-30°	2161.1	15.7
30°-40°	2458.0	17.9
40°-50°	2396.9	17.4
50°-60°	2046.3	14.9
60°-70°	1485.6	10.8
70°-80°	829.5	6.0
80°-90°	232.9	1.7
90°-100°	16.5	0.1
100°-110°	16.4	0.1
110°-120°	16.1	0.1
120°-130°	15.4	0.1
130°-140°	14.6	0.1
140°-150°	12.6	0.1
150°-160°	8.8	0.1
160°-170°	4.8	0.0
170°-180°	1.4	0.0
0°-30°	4186.5	30.5
0°-40°	6644.6	48.4
0°-60°	11087.7	80.7
0°-90°	13635.7	99.2
90°-120°	48.9	0.4
90°-150°	91.5	0.7
90°-180°	107.0	0.8
0°-180°	13742.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5679	5679	5679	5679	5679	
5°	5640	5628	5626	5646	5655	534
15°	5311	5301	5293	5292	5296	1496
25°	4733	4716	4691	4673	4663	2179
35°	3979	3966	3927	3891	3880	2488
45°	3171	3141	3121	3063	3043	2440
55°	2340	2330	2289	2241	2227	2093
65°	1538	1527	1501	1466	1448	1526
75°	795	800	785	765	757	850
85°	203	207	203	197	198	222
90°	14	16	19	22	21	17
95°	6	11	16	19	19	6
105°	12	12	15	19	20	13
115°	14	14	16	18	19	14
125°	15	16	16	19	19	14
135°	17	19	19	19	19	13
145°	16	19	21	22	22	10
155°	16	17	20	21	21	7
165°	13	15	17	19	19	4
175°	14	14	15	16	16	1
180°	14	14	14	14	14	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5679.1	5679.1	5679.1	5679.1	5679.1
2.5°	5667.6	5652.6	5655.5	5674.1	5692.7
5°	5640.5	5627.6	5626.2	5645.5	5654.8
7.5°	5587.5	5573.9	5573.2	5595.4	5606.1
10°	5508.9	5505.3	5498.1	5513.1	5510.3
12.5°	5426.6	5406.6	5403.0	5415.2	5415.9
15°	5310.7	5301.4	5292.8	5292.1	5295.7
17.5°	5192.0	5172.0	5167.0	5164.1	5171.3
20°	5054.0	5031.8	5017.5	5014.6	5003.9
22.5°	4897.3	4883.7	4870.1	4846.5	4848.7
25°	4732.8	4716.4	4690.6	4673.4	4662.7
27.5°	4564.7	4539.0	4511.8	4496.1	4486.8
30°	4375.9	4360.2	4325.8	4296.5	4290.8
32.5°	4175.6	4164.9	4130.6	4104.8	4087.6
35°	3978.9	3966.1	3927.4	3891.0	3880.2
37.5°	3778.7	3762.9	3730.0	3697.8	3680.0
40°	3570.5	3559.1	3515.5	3476.8	3461.1
42.5°	3369.5	3354.5	3315.2	3268.0	3258.7
45°	3171.4	3141.4	3121.3	3063.4	3043.4
47.5°	2951.8	2944.0	2901.1	2854.6	2832.4
50°	2743.0	2738.0	2700.8	2648.6	2637.8
52.5°	2551.3	2531.3	2496.9	2449.7	2425.4
55°	2339.6	2329.6	2288.8	2240.9	2226.6
57.5°	2132.2	2132.2	2088.5	2047.8	2023.4
60°	1934.0	1921.9	1891.1	1851.8	1829.6
62.5°	1734.5	1724.5	1698.0	1658.7	1638.6
65°	1538.5	1527.1	1501.3	1466.3	1447.7
67.5°	1351.1	1337.5	1321.1	1275.3	1263.1
70°	1153.7	1150.8	1132.2	1100.8	1092.9
72.5°	976.3	973.5	952.0	924.1	915.5
75°	795.4	799.6	784.6	765.3	757.4
77.5°	638.0	633.7	619.4	608.0	594.4
80°	477.1	475.6	469.2	453.5	452.8
82.5°	329.7	335.5	330.4	319.0	314.7
85°	203.1	207.4	203.1	197.4	198.1
87.5°	90.8	92.3	87.3	78.7	73.0
90°	14.3	15.7	18.6	22.2	20.7
92.5°	5.0	10.7	15.7	18.6	19.3
95°	6.4	10.7	15.7	18.6	19.3
97.5°	9.3	10.7	15.7	18.6	20.0
100°	10.7	11.4	15.7	18.6	20.0
102.5°	11.4	11.4	15.7	18.6	20.0
105°	12.2	12.2	15.0	18.6	20.0
107.5°	12.9	12.2	15.0	18.6	20.0
110°	12.9	12.9	15.0	18.6	19.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	13.6	13.6	15.7	17.9	19.3
115°	14.3	14.3	15.7	17.9	19.3
117.5°	14.3	15.0	15.7	18.6	19.3
120°	15.0	15.7	15.7	18.6	18.6
122.5°	15.0	16.5	16.5	18.6	18.6
125°	15.0	16.5	16.5	18.6	18.6
127.5°	15.7	17.2	16.5	18.6	18.6
130°	16.5	17.2	17.9	18.6	18.6
132.5°	16.5	17.9	18.6	19.3	18.6
135°	17.2	18.6	19.3	19.3	19.3
137.5°	17.9	18.6	20.0	20.0	20.0
140°	17.9	19.3	20.0	20.7	20.7
142.5°	16.5	19.3	20.0	21.5	21.5
145°	16.5	19.3	20.7	22.2	22.2
147.5°	15.7	18.6	20.0	22.2	22.2
150°	15.7	17.9	20.0	21.5	21.5
152.5°	16.5	17.2	20.0	20.7	21.5
155°	15.7	17.2	20.0	20.7	20.7
157.5°	15.0	16.5	19.3	20.7	21.5
160°	14.3	16.5	18.6	20.7	20.7
162.5°	13.6	15.7	17.9	20.0	20.7
165°	12.9	15.0	17.2	19.3	19.3
167.5°	12.9	15.0	16.5	17.9	18.6
170°	13.6	14.3	15.7	16.5	17.2
172.5°	14.3	14.3	15.7	15.7	15.7
175°	14.3	14.3	15.0	15.7	16.5
177.5°	15.0	14.3	14.3	15.7	15.7
180°	14.3	14.3	14.3	14.3	14.3

(END OF REPORT)