

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: P417740

Luminaire Tested: **VHB-1215-W-UNV-L835-CD-U-LEVEL1**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417740
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-LEVEL1
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: 12003.5 lumens
Efficiency: N/A
Efficacy: 148.9 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

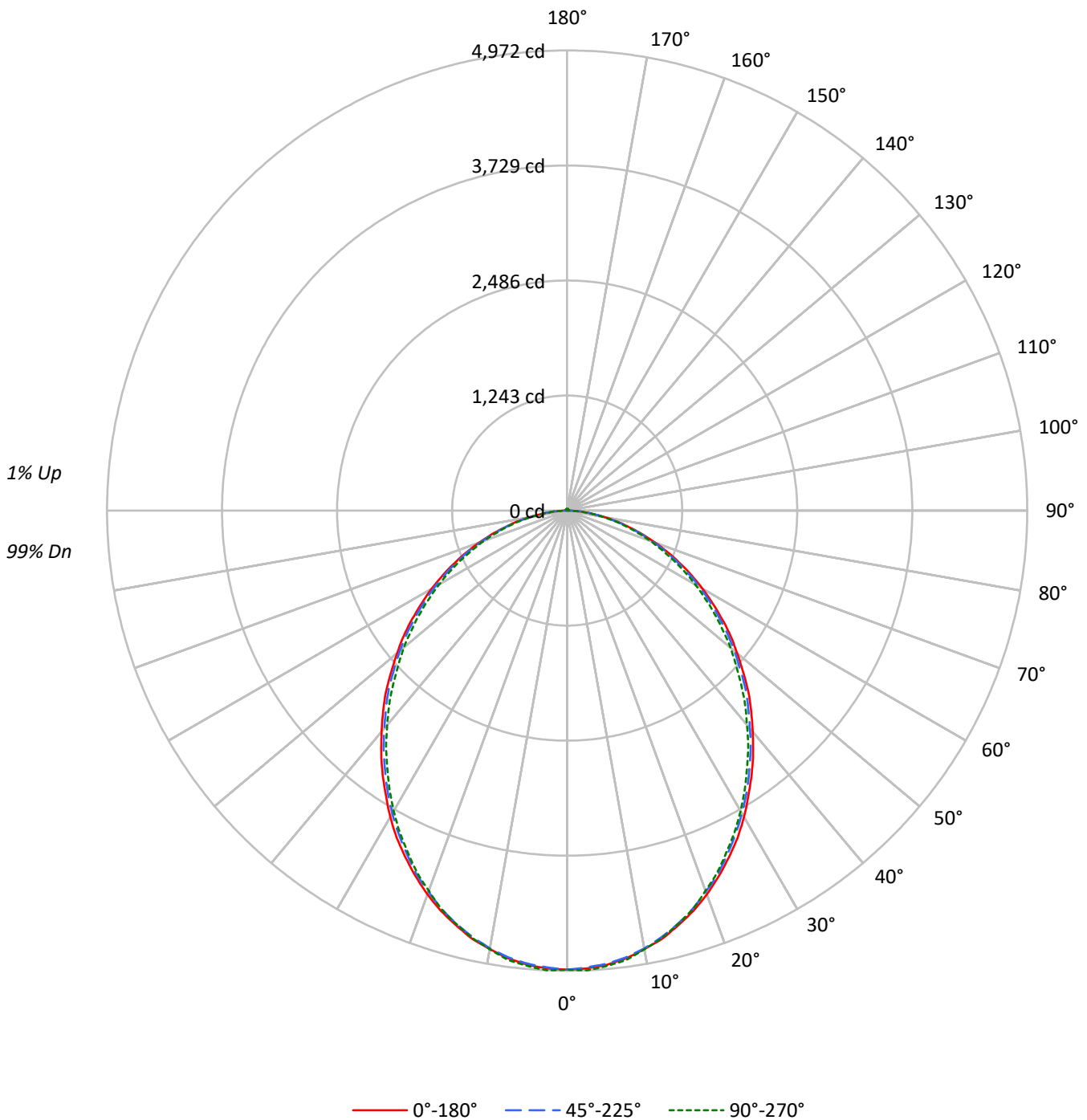
Input Watts (W): 80.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	30511	30511	30511
5°	30419	30342	30497
10°	30054	29995	30061
15°	29539	29439	29455
20°	28895	28686	28609
25°	28056	27806	27641
30°	27146	26836	26619
35°	26097	25759	25449
40°	25042	24656	24274
45°	24097	23716	23123
50°	22926	22574	22048
55°	21915	21439	20856
60°	20781	20320	19659
65°	19558	19086	18404
70°	18122	17786	17167
75°	16509	16288	15723
80°	14760	14516	14009
85°	12520	12520	12216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.4	3.9
10°-20°	1302.8	10.9
20°-30°	1887.6	15.7
30°-40°	2147.0	17.9
40°-50°	2093.6	17.4
50°-60°	1787.4	14.9
60°-70°	1297.6	10.8
70°-80°	724.5	6.0
80°-90°	203.4	1.7
90°-100°	14.4	0.1
100°-110°	14.3	0.1
110°-120°	14.0	0.1
120°-130°	13.5	0.1
130°-140°	12.7	0.1
140°-150°	11.0	0.1
150°-160°	7.7	0.1
160°-170°	4.2	0.0
170°-180°	1.3	0.0
0°-30°	3656.8	30.5
0°-40°	5803.9	48.4
0°-60°	9684.9	80.7
0°-90°	11910.4	99.2
90°-120°	42.7	0.4
90°-150°	79.9	0.7
90°-180°	93.0	0.8
0°-180°	12003.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4960	4960	4960	4960	4960	
5°	4927	4916	4914	4931	4939	467
15°	4639	4631	4623	4623	4626	1307
25°	4134	4120	4097	4082	4073	1903
35°	3476	3464	3430	3399	3389	2173
45°	2770	2744	2726	2676	2658	2132
55°	2044	2035	1999	1957	1945	1828
65°	1344	1334	1311	1281	1264	1333
75°	695	698	685	668	662	743
85°	177	181	177	172	173	194
90°	12	14	16	19	18	15
95°	6	9	14	16	17	6
105°	11	11	13	16	18	11
115°	12	12	14	16	17	12
125°	13	14	14	16	16	12
135°	15	16	17	17	17	12
145°	14	17	18	19	19	9
155°	14	15	18	18	18	6
165°	11	13	15	17	17	3
175°	12	12	13	14	14	1
180°	12	12	12	12	12	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4960.5	4960.5	4960.5	4960.5	4960.5
2.5°	4950.5	4937.4	4939.9	4956.2	4972.4
5°	4926.8	4915.6	4914.3	4931.2	4939.3
7.5°	4880.6	4868.7	4868.1	4887.4	4896.8
10°	4811.9	4808.7	4802.5	4815.6	4813.1
12.5°	4740.0	4722.5	4719.4	4730.0	4730.6
15°	4638.8	4630.7	4623.2	4622.6	4625.7
17.5°	4535.1	4517.6	4513.2	4510.7	4517.0
20°	4414.5	4395.1	4382.6	4380.1	4370.8
22.5°	4277.7	4265.8	4253.9	4233.3	4235.2
25°	4134.0	4119.6	4097.1	4082.1	4072.8
27.5°	3987.2	3964.7	3940.9	3927.2	3919.1
30°	3822.2	3808.5	3778.5	3752.9	3747.9
32.5°	3647.3	3637.9	3608.0	3585.5	3570.5
35°	3475.5	3464.3	3430.5	3398.7	3389.3
37.5°	3300.6	3286.8	3258.1	3230.0	3214.4
40°	3118.8	3108.8	3070.7	3036.9	3023.2
42.5°	2943.2	2930.1	2895.7	2854.5	2846.4
45°	2770.2	2743.9	2726.4	2675.8	2658.3
47.5°	2578.4	2571.5	2534.0	2493.4	2474.0
50°	2395.9	2391.6	2359.1	2313.5	2304.1
52.5°	2228.5	2211.0	2181.0	2139.8	2118.5
55°	2043.6	2034.8	1999.2	1957.4	1944.9
57.5°	1862.4	1862.4	1824.3	1788.7	1767.4
60°	1689.3	1678.7	1651.8	1617.5	1598.1
62.5°	1515.0	1506.3	1483.2	1448.8	1431.3
65°	1343.8	1333.8	1311.4	1280.7	1264.5
67.5°	1180.2	1168.3	1153.9	1113.9	1103.3
70°	1007.7	1005.2	989.0	961.5	954.6
72.5°	852.8	850.3	831.5	807.2	799.7
75°	694.7	698.5	685.4	668.5	661.6
77.5°	557.3	553.5	541.0	531.0	519.2
80°	416.7	415.5	409.8	396.1	395.5
82.5°	288.0	293.0	288.6	278.6	274.9
85°	177.4	181.2	177.4	172.4	173.1
87.5°	79.3	80.6	76.2	68.7	63.7
90°	12.5	13.7	16.2	19.4	18.1
92.5°	4.4	9.4	13.7	16.2	16.9
95°	5.6	9.4	13.7	16.2	16.9
97.5°	8.1	9.4	13.7	16.2	17.5
100°	9.4	10.0	13.7	16.2	17.5
102.5°	10.0	10.0	13.7	16.2	17.5
105°	10.6	10.6	13.1	16.2	17.5
107.5°	11.2	10.6	13.1	16.2	17.5
110°	11.2	11.2	13.1	16.2	16.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	11.9	11.9	13.7	15.6	16.9
115°	12.5	12.5	13.7	15.6	16.9
117.5°	12.5	13.1	13.7	16.2	16.9
120°	13.1	13.7	13.7	16.2	16.2
122.5°	13.1	14.4	14.4	16.2	16.2
125°	13.1	14.4	14.4	16.2	16.2
127.5°	13.7	15.0	14.4	16.2	16.2
130°	14.4	15.0	15.6	16.2	16.2
132.5°	14.4	15.6	16.2	16.9	16.2
135°	15.0	16.2	16.9	16.9	16.9
137.5°	15.6	16.2	17.5	17.5	17.5
140°	15.6	16.9	17.5	18.1	18.1
142.5°	14.4	16.9	17.5	18.7	18.7
145°	14.4	16.9	18.1	19.4	19.4
147.5°	13.7	16.2	17.5	19.4	19.4
150°	13.7	15.6	17.5	18.7	18.7
152.5°	14.4	15.0	17.5	18.1	18.7
155°	13.7	15.0	17.5	18.1	18.1
157.5°	13.1	14.4	16.9	18.1	18.7
160°	12.5	14.4	16.2	18.1	18.1
162.5°	11.9	13.7	15.6	17.5	18.1
165°	11.2	13.1	15.0	16.9	16.9
167.5°	11.2	13.1	14.4	15.6	16.2
170°	11.9	12.5	13.7	14.4	15.0
172.5°	12.5	12.5	13.7	13.7	13.7
175°	12.5	12.5	13.1	13.7	14.4
177.5°	13.1	12.5	12.5	13.7	13.7
180°	12.5	12.5	12.5	12.5	12.5

(END OF REPORT)