

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: P417752

Luminaire Tested: **VHB-1215-W-UNV-L935-CD-U-LEVEL1**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417752
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-LEVEL1
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: 10533.9 lumens
Efficiency: N/A
Efficacy: 130.7 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

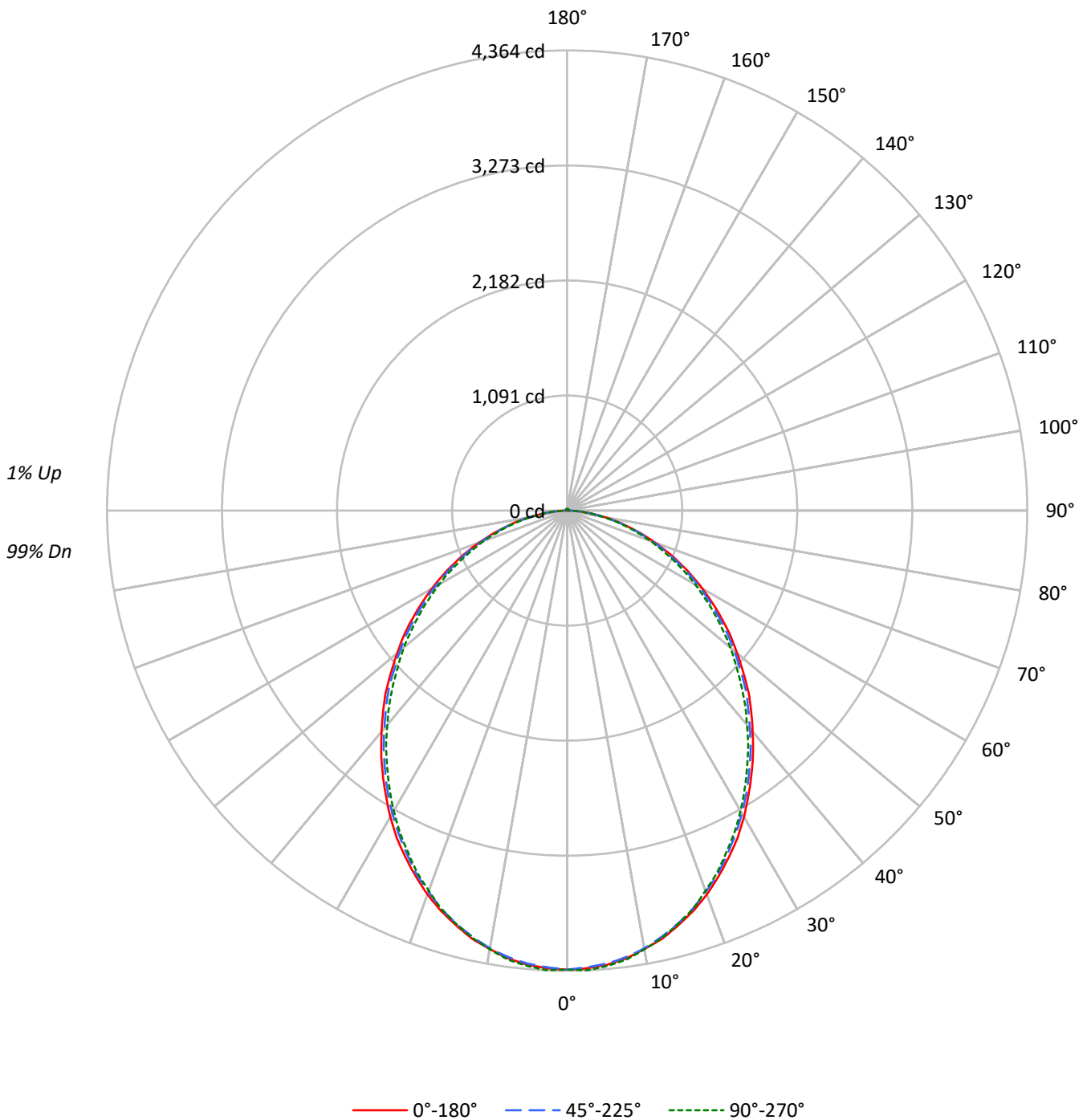
Input Watts (W): 80.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	26775	26775	26775
5°	26695	26627	26762
10°	26373	26322	26380
15°	25922	25835	25849
20°	25357	25174	25106
25°	24621	24401	24256
30°	23823	23550	23360
35°	22901	22605	22333
40°	21975	21637	21302
45°	21146	20812	20292
50°	20120	19810	19348
55°	19231	18813	18302
60°	18237	17832	17252
65°	17164	16749	16151
70°	15903	15608	15065
75°	14489	14292	13798
80°	12953	12741	12291
85°	10988	10988	10720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	409.3	3.9
10°-20°	1143.3	10.9
20°-30°	1656.5	15.7
30°-40°	1884.1	17.9
40°-50°	1837.3	17.4
50°-60°	1568.5	14.9
60°-70°	1138.7	10.8
70°-80°	635.8	6.0
80°-90°	178.5	1.7
90°-100°	12.7	0.1
100°-110°	12.6	0.1
110°-120°	12.3	0.1
120°-130°	11.8	0.1
130°-140°	11.2	0.1
140°-150°	9.6	0.1
150°-160°	6.7	0.1
160°-170°	3.7	0.0
170°-180°	1.1	0.0
0°-30°	3209.1	30.5
0°-40°	5093.2	48.4
0°-60°	8499.0	80.7
0°-90°	10452.0	99.2
90°-120°	37.6	0.4
90°-150°	70.3	0.7
90°-180°	82.0	0.8
0°-180°	10533.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4353	4353	4353	4353	4353	
5°	4324	4314	4313	4327	4334	409
15°	4071	4064	4057	4056	4059	1147
25°	3628	3615	3595	3582	3574	1670
35°	3050	3040	3010	2982	2974	1907
45°	2431	2408	2393	2348	2333	1871
55°	1793	1786	1754	1718	1707	1604
65°	1179	1170	1151	1124	1110	1169
75°	610	613	601	587	581	652
85°	156	159	156	151	152	170
90°	11	12	14	17	16	13
95°	5	8	12	14	15	5
105°	9	9	12	14	15	10
115°	11	11	12	14	15	11
125°	12	13	13	14	14	11
135°	13	14	15	15	15	10
145°	13	15	16	17	17	8
155°	12	13	15	16	16	6
165°	10	12	13	15	15	3
175°	11	11	12	12	13	1
180°	11	11	11	11	11	



TEST NUMBER: P417752

CATALOG NUMBER: VHB-1215-W-UNV-L935-CD-U-LEVEL1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4353.1	4353.1	4353.1	4353.1	4353.1
2.5°	4344.4	4332.8	4335.0	4349.3	4363.5
5°	4323.5	4313.7	4312.6	4327.4	4334.5
7.5°	4283.0	4272.5	4272.0	4289.0	4297.2
10°	4222.6	4219.9	4214.4	4225.9	4223.7
12.5°	4159.6	4144.2	4141.5	4150.8	4151.4
15°	4070.8	4063.7	4057.1	4056.5	4059.3
17.5°	3979.8	3964.4	3960.6	3958.4	3963.9
20°	3874.0	3857.0	3846.0	3843.8	3835.6
22.5°	3753.9	3743.5	3733.1	3715.0	3716.6
25°	3627.8	3615.2	3595.4	3582.3	3574.1
27.5°	3499.0	3479.2	3458.4	3446.3	3439.2
30°	3354.2	3342.2	3315.8	3293.4	3289.0
32.5°	3200.7	3192.5	3166.2	3146.4	3133.3
35°	3049.9	3040.1	3010.5	2982.5	2974.3
37.5°	2896.4	2884.4	2859.1	2834.5	2820.8
40°	2736.9	2728.1	2694.7	2665.1	2653.0
42.5°	2582.8	2571.3	2541.2	2505.0	2497.8
45°	2431.0	2407.9	2392.6	2348.2	2332.8
47.5°	2262.6	2256.6	2223.7	2188.1	2171.1
50°	2102.6	2098.7	2070.2	2030.2	2022.0
52.5°	1955.6	1940.3	1914.0	1877.8	1859.1
55°	1793.3	1785.7	1754.4	1717.7	1706.7
57.5°	1634.3	1634.3	1600.9	1569.6	1551.0
60°	1482.5	1473.2	1449.6	1419.4	1402.4
62.5°	1329.5	1321.8	1301.6	1271.4	1256.0
65°	1179.3	1170.5	1150.8	1123.9	1109.7
67.5°	1035.7	1025.2	1012.6	977.5	968.2
70°	884.3	882.1	867.9	843.8	837.7
72.5°	748.4	746.2	729.7	708.3	701.8
75°	609.7	612.9	601.4	586.6	580.6
77.5°	489.0	485.8	474.8	466.0	455.6
80°	365.7	364.6	359.7	347.6	347.0
82.5°	252.7	257.1	253.3	244.5	241.2
85°	155.7	159.0	155.7	151.3	151.9
87.5°	69.6	70.7	66.9	60.3	55.9
90°	11.0	12.1	14.3	17.0	15.9
92.5°	3.8	8.2	12.1	14.3	14.8
95°	4.9	8.2	12.1	14.3	14.8
97.5°	7.1	8.2	12.1	14.3	15.4
100°	8.2	8.8	12.1	14.3	15.4
102.5°	8.8	8.8	12.1	14.3	15.4
105°	9.3	9.3	11.5	14.3	15.4
107.5°	9.9	9.3	11.5	14.3	15.4
110°	9.9	9.9	11.5	14.3	14.8



TEST NUMBER: P417752

CATALOG NUMBER: VHB-1215-W-UNV-L935-CD-U-LEVEL1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.4	10.4	12.1	13.7	14.8
115°	11.0	11.0	12.1	13.7	14.8
117.5°	11.0	11.5	12.1	14.3	14.8
120°	11.5	12.1	12.1	14.3	14.3
122.5°	11.5	12.6	12.6	14.3	14.3
125°	11.5	12.6	12.6	14.3	14.3
127.5°	12.1	13.2	12.6	14.3	14.3
130°	12.6	13.2	13.7	14.3	14.3
132.5°	12.6	13.7	14.3	14.8	14.3
135°	13.2	14.3	14.8	14.8	14.8
137.5°	13.7	14.3	15.4	15.4	15.4
140°	13.7	14.8	15.4	15.9	15.9
142.5°	12.6	14.8	15.4	16.4	16.4
145°	12.6	14.8	15.9	17.0	17.0
147.5°	12.1	14.3	15.4	17.0	17.0
150°	12.1	13.7	15.4	16.4	16.4
152.5°	12.6	13.2	15.4	15.9	16.4
155°	12.1	13.2	15.4	15.9	15.9
157.5°	11.5	12.6	14.8	15.9	16.4
160°	11.0	12.6	14.3	15.9	15.9
162.5°	10.4	12.1	13.7	15.4	15.9
165°	9.9	11.5	13.2	14.8	14.8
167.5°	9.9	11.5	12.6	13.7	14.3
170°	10.4	11.0	12.1	12.6	13.2
172.5°	11.0	11.0	12.1	12.1	12.1
175°	11.0	11.0	11.5	12.1	12.6
177.5°	11.5	11.0	11.0	12.1	12.1
180°	11.0	11.0	11.0	11.0	11.0

(END OF REPORT)