

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: P470201

Luminaire Tested: **VHB2-12-W-UNV-L950-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470201
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-12-W-UNV-L950-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

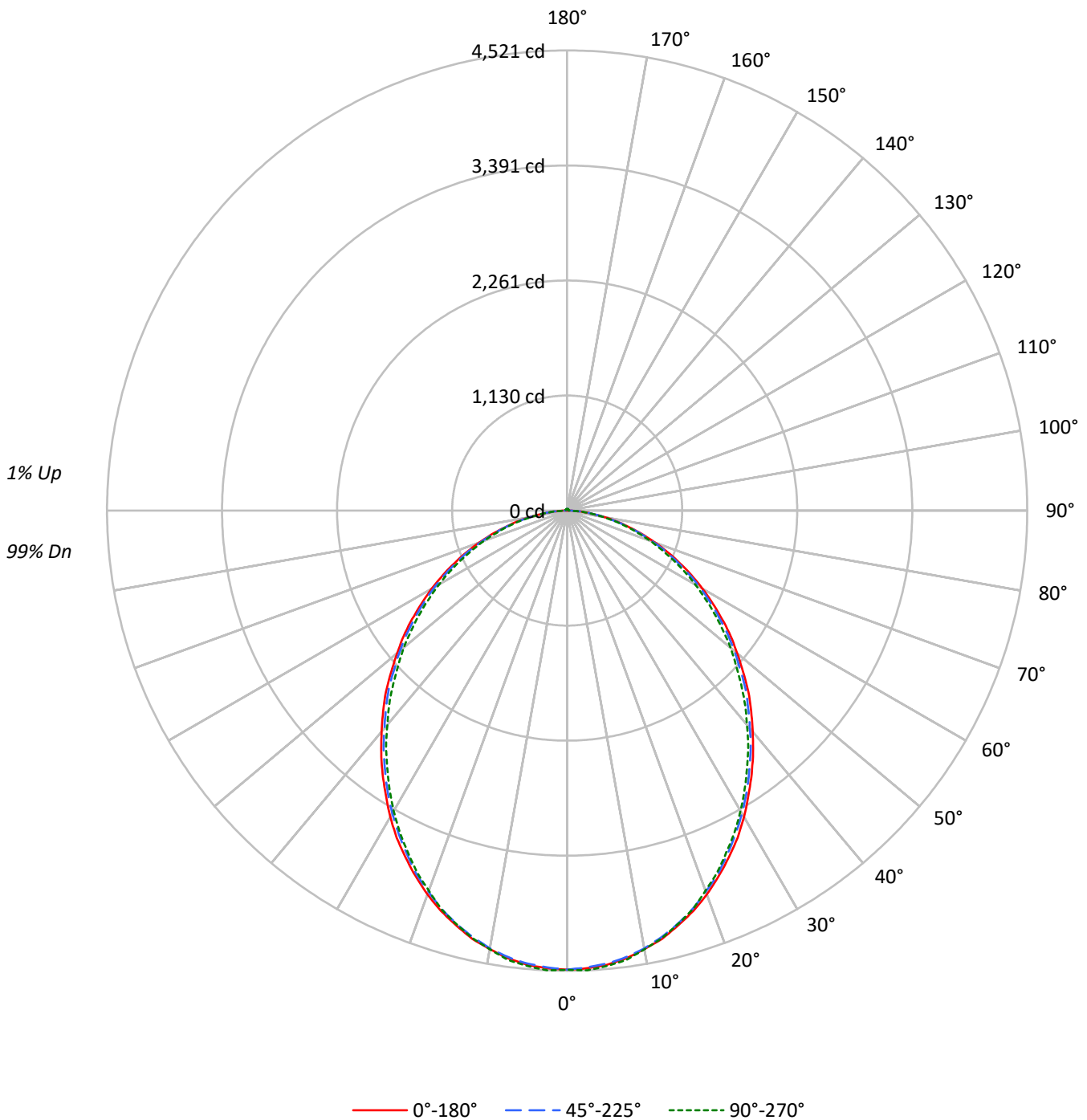
Lumens per Lamp: N/A
Luminaire Lumens: 10913.9 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.14 / 1.25
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 81.4
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	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°	27741	27741	27741
5°	27658	27588	27728
10°	27325	27272	27332
15°	26857	26767	26782
20°	26272	26083	26012
25°	25509	25282	25131
30°	24683	24400	24203
35°	23728	23420	23139
40°	22769	22417	22070
45°	21909	21563	21024
50°	20845	20524	20046
55°	19925	19492	18963
60°	18895	18476	17874
65°	17784	17353	16733
70°	16477	16171	15610
75°	15012	14808	14297
80°	13421	13198	12737
85°	11383	11383	11101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.1	3.9
10°-20°	1184.5	10.9
20°-30°	1716.3	15.7
30°-40°	1952.1	17.9
40°-50°	1903.6	17.4
50°-60°	1625.1	14.9
60°-70°	1179.8	10.8
70°-80°	658.8	6.0
80°-90°	185.0	1.7
90°-100°	13.1	0.1
100°-110°	13.0	0.1
110°-120°	12.8	0.1
120°-130°	12.3	0.1
130°-140°	11.6	0.1
140°-150°	10.0	0.1
150°-160°	7.0	0.1
160°-170°	3.8	0.0
170°-180°	1.2	0.0
0°-30°	3324.9	30.5
0°-40°	5277.0	48.4
0°-60°	8805.7	80.7
0°-90°	10829.2	99.2
90°-120°	38.9	0.4
90°-150°	72.7	0.7
90°-180°	85.0	0.8
0°-180°	10913.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4510	4510	4510	4510	4510	
5°	4480	4469	4468	4484	4491	424
15°	4218	4210	4204	4203	4206	1188
25°	3759	3746	3725	3712	3703	1731
35°	3160	3150	3119	3090	3082	1976
45°	2519	2495	2479	2433	2417	1938
55°	1858	1850	1818	1780	1768	1662
65°	1222	1213	1192	1164	1150	1212
75°	632	635	623	608	602	675
85°	161	165	161	157	157	176
90°	11	12	15	18	16	14
95°	5	8	12	15	15	5
105°	10	10	12	15	16	10
115°	11	11	12	14	15	11
125°	12	13	13	15	15	11
135°	14	15	15	15	15	11
145°	13	15	16	18	18	8
155°	12	14	16	16	16	6
165°	10	12	14	15	15	3
175°	11	11	12	12	13	1
180°	11	11	11	11	11	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4510.2	4510.2	4510.2	4510.2	4510.2
2.5°	4501.1	4489.2	4491.5	4506.3	4521.0
5°	4479.6	4469.3	4468.2	4483.5	4490.9
7.5°	4437.5	4426.7	4426.2	4443.8	4452.3
10°	4375.0	4372.2	4366.5	4378.4	4376.2
12.5°	4309.7	4293.8	4291.0	4300.6	4301.2
15°	4217.7	4210.3	4203.5	4202.9	4205.8
17.5°	4123.4	4107.5	4103.5	4101.2	4106.9
20°	4013.8	3996.2	3984.8	3982.5	3974.0
22.5°	3889.4	3878.6	3867.8	3849.0	3850.7
25°	3758.7	3745.6	3725.2	3711.6	3703.0
27.5°	3625.2	3604.8	3583.2	3570.7	3563.3
30°	3475.3	3462.8	3435.5	3412.2	3407.7
32.5°	3316.2	3307.7	3280.4	3260.0	3246.3
35°	3160.0	3149.8	3119.1	3090.1	3081.6
37.5°	3000.9	2988.5	2962.3	2936.8	2922.6
40°	2835.7	2826.6	2791.9	2761.2	2748.7
42.5°	2676.0	2664.1	2632.9	2595.4	2588.0
45°	2518.7	2494.8	2478.9	2432.9	2417.0
47.5°	2344.3	2338.0	2304.0	2267.0	2249.4
50°	2178.4	2174.5	2144.9	2103.4	2094.9
52.5°	2026.2	2010.3	1983.0	1945.5	1926.2
55°	1858.1	1850.1	1817.7	1779.7	1768.3
57.5°	1693.3	1693.3	1658.7	1626.3	1607.0
60°	1536.0	1526.3	1501.9	1470.7	1453.0
62.5°	1377.5	1369.5	1348.5	1317.3	1301.4
65°	1221.9	1212.8	1192.3	1164.5	1149.7
67.5°	1073.0	1062.2	1049.2	1012.8	1003.2
70°	916.2	914.0	899.2	874.2	868.0
72.5°	775.4	773.1	756.1	733.9	727.1
75°	631.7	635.1	623.1	607.8	601.6
77.5°	506.7	503.3	491.9	482.8	472.0
80°	378.9	377.7	372.6	360.1	359.6
82.5°	261.9	266.4	262.4	253.3	249.9
85°	161.3	164.7	161.3	156.8	157.3
87.5°	72.1	73.3	69.3	62.5	57.9
90°	11.4	12.5	14.8	17.6	16.5
92.5°	4.0	8.5	12.5	14.8	15.3
95°	5.1	8.5	12.5	14.8	15.3
97.5°	7.4	8.5	12.5	14.8	15.9
100°	8.5	9.1	12.5	14.8	15.9
102.5°	9.1	9.1	12.5	14.8	15.9
105°	9.7	9.7	11.9	14.8	15.9
107.5°	10.2	9.7	11.9	14.8	15.9
110°	10.2	10.2	11.9	14.8	15.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.8	10.8	12.5	14.2	15.3
115°	11.4	11.4	12.5	14.2	15.3
117.5°	11.4	11.9	12.5	14.8	15.3
120°	11.9	12.5	12.5	14.8	14.8
122.5°	11.9	13.1	13.1	14.8	14.8
125°	11.9	13.1	13.1	14.8	14.8
127.5°	12.5	13.6	13.1	14.8	14.8
130°	13.1	13.6	14.2	14.8	14.8
132.5°	13.1	14.2	14.8	15.3	14.8
135°	13.6	14.8	15.3	15.3	15.3
137.5°	14.2	14.8	15.9	15.9	15.9
140°	14.2	15.3	15.9	16.5	16.5
142.5°	13.1	15.3	15.9	17.0	17.0
145°	13.1	15.3	16.5	17.6	17.6
147.5°	12.5	14.8	15.9	17.6	17.6
150°	12.5	14.2	15.9	17.0	17.0
152.5°	13.1	13.6	15.9	16.5	17.0
155°	12.5	13.6	15.9	16.5	16.5
157.5°	11.9	13.1	15.3	16.5	17.0
160°	11.4	13.1	14.8	16.5	16.5
162.5°	10.8	12.5	14.2	15.9	16.5
165°	10.2	11.9	13.6	15.3	15.3
167.5°	10.2	11.9	13.1	14.2	14.8
170°	10.8	11.4	12.5	13.1	13.6
172.5°	11.4	11.4	12.5	12.5	12.5
175°	11.4	11.4	11.9	12.5	13.1
177.5°	11.9	11.4	11.4	12.5	12.5
180°	11.4	11.4	11.4	11.4	11.4

(END OF REPORT)