

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: P470202

Luminaire Tested: **VHB2-15-W-UNV-L950-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470202
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-15-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

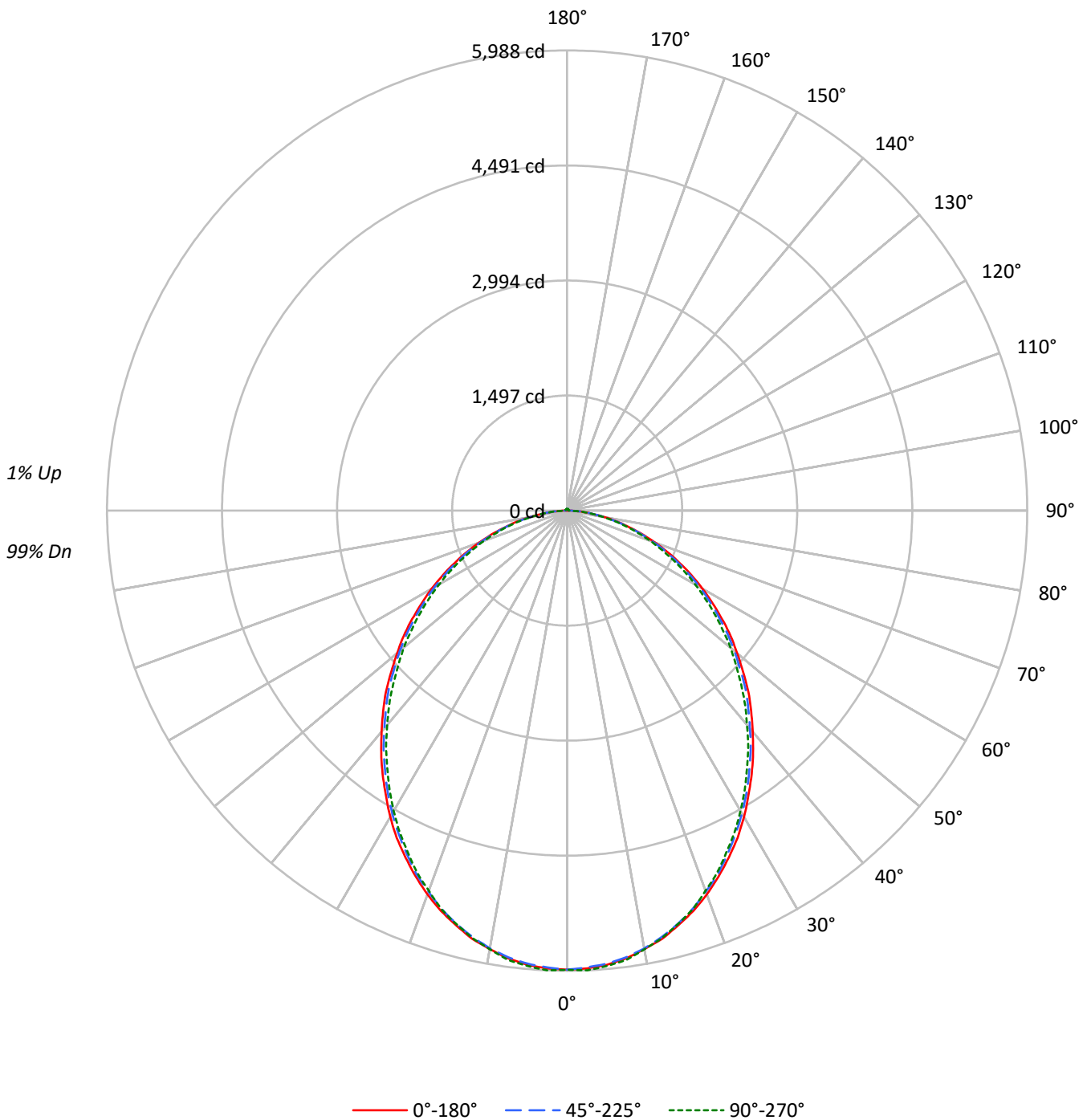
Lumens per Lamp: N/A
Luminaire Lumens: 14456.3 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.14 / 1.25
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 110.6
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	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°	36745	36745	36745
5°	36635	36542	36728
10°	36194	36123	36203
15°	35574	35454	35474
20°	34799	34548	34454
25°	33789	33487	33288
30°	32693	32319	32058
35°	31429	31022	30649
40°	30158	29693	29234
45°	29020	28562	27848
50°	27611	27186	26553
55°	26392	25819	25117
60°	25028	24473	23677
65°	23554	22985	22164
70°	21825	21420	20676
75°	19884	19615	18936
80°	17778	17484	16871
85°	15081	15081	14707



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	561.7	3.9
10°-20°	1569.0	10.9
20°-30°	2273.3	15.7
30°-40°	2585.7	17.9
40°-50°	2521.4	17.4
50°-60°	2152.6	14.9
60°-70°	1562.7	10.8
70°-80°	872.6	6.0
80°-90°	245.0	1.7
90°-100°	17.4	0.1
100°-110°	17.2	0.1
110°-120°	16.9	0.1
120°-130°	16.2	0.1
130°-140°	15.3	0.1
140°-150°	13.2	0.1
150°-160°	9.3	0.1
160°-170°	5.1	0.0
170°-180°	1.5	0.0
0°-30°	4404.0	30.5
0°-40°	6989.7	48.4
0°-60°	11663.7	80.7
0°-90°	14344.0	99.2
90°-120°	51.6	0.4
90°-150°	96.4	0.7
90°-180°	112.0	0.8
0°-180°	14456.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5974	5974	5974	5974	5974	
5°	5934	5920	5918	5939	5948	562
15°	5587	5577	5568	5567	5571	1574
25°	4979	4961	4934	4916	4905	2292
35°	4186	4172	4132	4093	4082	2618
45°	3336	3305	3284	3222	3202	2567
55°	2461	2451	2408	2357	2342	2201
65°	1618	1606	1579	1542	1523	1605
75°	837	841	825	805	797	894
85°	214	218	214	208	208	234
90°	15	17	20	23	22	18
95°	7	11	17	20	20	7
105°	13	13	16	20	21	13
115°	15	15	17	19	20	15
125°	16	17	17	20	20	15
135°	18	20	20	20	20	14
145°	17	20	22	23	23	11
155°	17	18	21	22	22	8
165°	14	16	18	20	20	4
175°	15	15	16	17	17	1
180°	15	15	15	15	15	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5974.1	5974.1	5974.1	5974.1	5974.1
2.5°	5962.1	5946.3	5949.3	5968.8	5988.4
5°	5933.5	5919.9	5918.4	5938.7	5948.5
7.5°	5877.8	5863.5	5862.7	5886.1	5897.3
10°	5795.0	5791.3	5783.7	5799.5	5796.5
12.5°	5708.5	5687.4	5683.7	5696.5	5697.2
15°	5586.6	5576.8	5567.8	5567.0	5570.8
17.5°	5461.7	5440.6	5435.4	5432.4	5439.9
20°	5316.5	5293.2	5278.1	5275.1	5263.8
22.5°	5151.7	5137.4	5123.1	5098.3	5100.6
25°	4978.7	4961.4	4934.3	4916.2	4904.9
27.5°	4801.8	4774.8	4746.2	4729.6	4719.8
30°	4603.2	4586.7	4550.5	4519.7	4513.7
32.5°	4392.5	4381.3	4345.1	4318.0	4300.0
35°	4185.6	4172.1	4131.5	4093.1	4081.8
37.5°	3975.0	3958.4	3923.8	3889.9	3871.1
40°	3756.0	3744.0	3698.1	3657.4	3640.9
42.5°	3544.6	3528.8	3487.4	3437.7	3428.0
45°	3336.2	3304.6	3283.5	3222.5	3201.5
47.5°	3105.2	3096.9	3051.8	3002.8	2979.5
50°	2885.5	2880.2	2841.1	2786.2	2774.9
52.5°	2683.8	2662.8	2626.6	2577.0	2551.4
55°	2461.1	2450.6	2407.7	2357.3	2342.2
57.5°	2242.9	2242.9	2197.0	2154.1	2128.6
60°	2034.5	2021.7	1989.4	1948.0	1924.7
62.5°	1824.6	1814.0	1786.2	1744.8	1723.8
65°	1618.4	1606.4	1579.3	1542.4	1522.9
67.5°	1421.3	1407.0	1389.7	1341.5	1328.7
70°	1213.6	1210.6	1191.1	1158.0	1149.7
72.5°	1027.0	1024.0	1001.5	972.1	963.1
75°	836.7	841.2	825.4	805.1	796.8
77.5°	671.1	666.6	651.6	639.5	625.2
80°	501.9	500.3	493.6	477.0	476.3
82.5°	346.9	352.9	347.6	335.6	331.1
85°	213.7	218.2	213.7	207.7	208.4
87.5°	95.6	97.1	91.8	82.8	76.7
90°	15.0	16.6	19.6	23.3	21.8
92.5°	5.3	11.3	16.6	19.6	20.3
95°	6.8	11.3	16.6	19.6	20.3
97.5°	9.8	11.3	16.6	19.6	21.1
100°	11.3	12.0	16.6	19.6	21.1
102.5°	12.0	12.0	16.6	19.6	21.1
105°	12.8	12.8	15.8	19.6	21.1
107.5°	13.5	12.8	15.8	19.6	21.1
110°	13.5	13.5	15.8	19.6	20.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	14.3	14.3	16.6	18.8	20.3
115°	15.0	15.0	16.6	18.8	20.3
117.5°	15.0	15.8	16.6	19.6	20.3
120°	15.8	16.6	16.6	19.6	19.6
122.5°	15.8	17.3	17.3	19.6	19.6
125°	15.8	17.3	17.3	19.6	19.6
127.5°	16.6	18.1	17.3	19.6	19.6
130°	17.3	18.1	18.8	19.6	19.6
132.5°	17.3	18.8	19.6	20.3	19.6
135°	18.1	19.6	20.3	20.3	20.3
137.5°	18.8	19.6	21.1	21.1	21.1
140°	18.8	20.3	21.1	21.8	21.8
142.5°	17.3	20.3	21.1	22.6	22.6
145°	17.3	20.3	21.8	23.3	23.3
147.5°	16.6	19.6	21.1	23.3	23.3
150°	16.6	18.8	21.1	22.6	22.6
152.5°	17.3	18.1	21.1	21.8	22.6
155°	16.6	18.1	21.1	21.8	21.8
157.5°	15.8	17.3	20.3	21.8	22.6
160°	15.0	17.3	19.6	21.8	21.8
162.5°	14.3	16.6	18.8	21.1	21.8
165°	13.5	15.8	18.1	20.3	20.3
167.5°	13.5	15.8	17.3	18.8	19.6
170°	14.3	15.0	16.6	17.3	18.1
172.5°	15.0	15.0	16.6	16.6	16.6
175°	15.0	15.0	15.8	16.6	17.3
177.5°	15.8	15.0	15.0	16.6	16.6
180°	15.0	15.0	15.0	15.0	15.0

(END OF REPORT)