

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: P470162

Luminaire Tested: **VHB2-15-W-UNV-L735-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470162
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-L735-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS
Light Source: 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

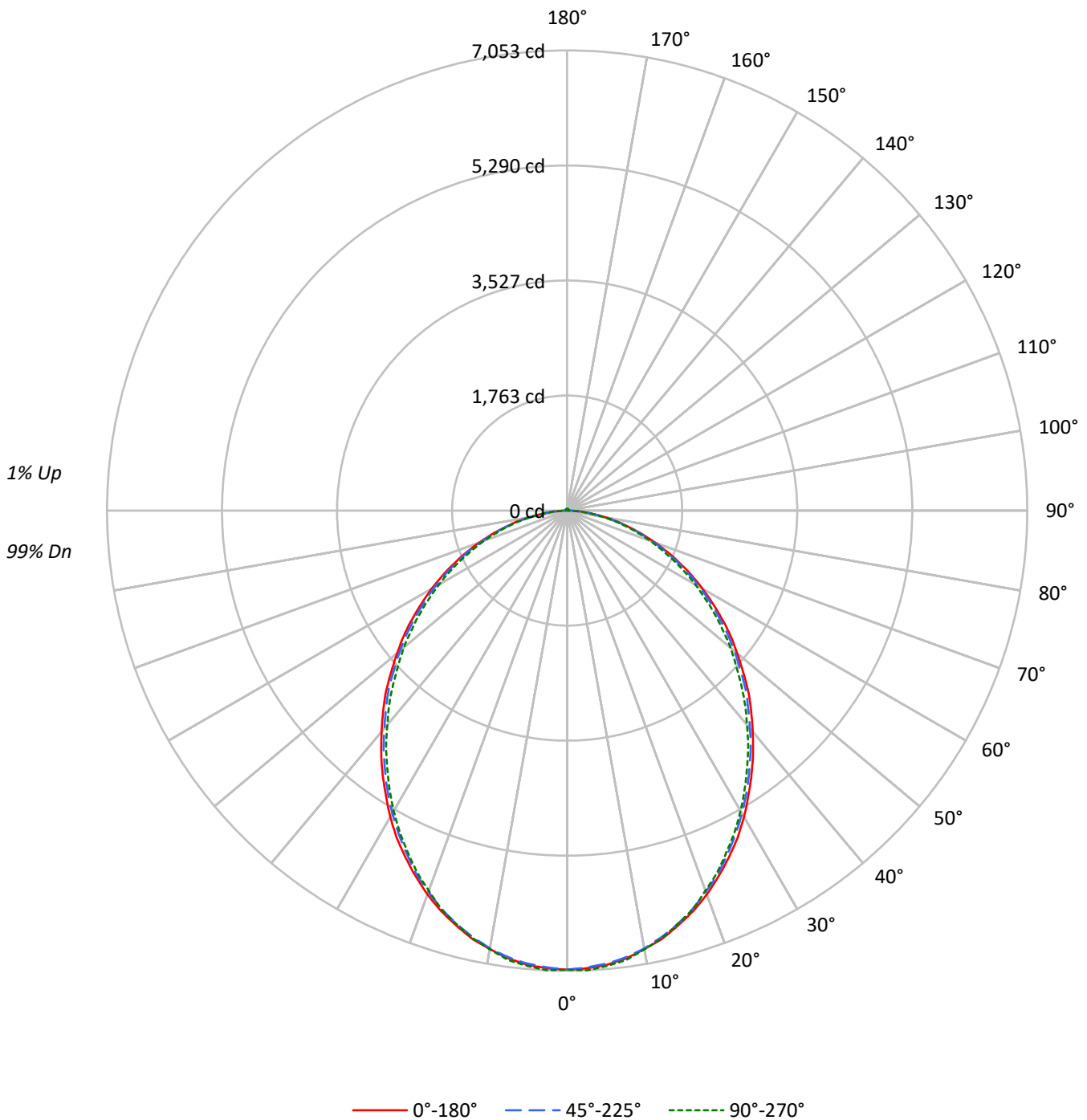
Lumens per Lamp: N/A
Luminaire Lumens: 17026.1 lumens
Efficiency: N/A
Efficacy: 153.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.14 / 1.25
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	43278	43278	43278
5°	43148	43038	43257
10°	42628	42546	42639
15°	41899	41757	41780
20°	40986	40690	40580
25°	39796	39441	39206
30°	38506	38065	37757
35°	37016	36537	36097
40°	35519	34972	34431
45°	34179	33639	32799
50°	32519	32020	31273
55°	31083	30409	29582
60°	29477	28823	27885
65°	27741	27072	26104
70°	25706	25228	24352
75°	23418	23102	22301
80°	20937	20590	19868
85°	17763	17763	17326



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	661.6	3.9
10°-20°	1847.9	10.9
20°-30°	2677.5	15.7
30°-40°	3045.4	17.9
40°-50°	2969.6	17.4
50°-60°	2535.3	14.9
60°-70°	1840.5	10.8
70°-80°	1027.7	6.0
80°-90°	288.6	1.7
90°-100°	20.5	0.1
100°-110°	20.3	0.1
110°-120°	19.9	0.1
120°-130°	19.1	0.1
130°-140°	18.1	0.1
140°-150°	15.6	0.1
150°-160°	10.9	0.1
160°-170°	6.0	0.0
170°-180°	1.8	0.0
0°-30°	5187.0	30.5
0°-40°	8232.4	48.4
0°-60°	13737.2	80.7
0°-90°	16894.0	99.2
90°-120°	60.7	0.4
90°-150°	113.4	0.7
90°-180°	132.0	0.8
0°-180°	17026.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7036	7036	7036	7036	7036	
5°	6988	6972	6971	6994	7006	662
15°	6580	6568	6558	6557	6561	1854
25°	5864	5843	5812	5790	5777	2700
35°	4930	4914	4866	4821	4807	3083
45°	3929	3892	3867	3795	3771	3023
55°	2899	2886	2836	2776	2759	2593
65°	1906	1892	1860	1817	1794	1890
75°	985	991	972	948	938	1054
85°	252	257	252	245	246	275
90°	18	20	23	28	26	21
95°	8	13	20	23	24	8
105°	15	15	19	23	25	16
115°	18	18	20	22	24	17
125°	19	20	20	23	23	17
135°	21	23	24	24	24	16
145°	20	24	26	28	28	13
155°	20	21	25	26	26	9
165°	16	19	21	24	24	5
175°	18	18	19	20	20	2
180°	18	18	18	18	18	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7036.2	7036.2	7036.2	7036.2	7036.2
2.5°	7022.0	7003.4	7006.9	7029.9	7053.0
5°	6988.3	6972.3	6970.6	6994.5	7006.0
7.5°	6922.7	6905.9	6905.0	6932.5	6945.8
10°	6825.2	6820.8	6812.0	6830.6	6827.0
12.5°	6723.3	6698.5	6694.1	6709.2	6710.0
15°	6579.8	6568.3	6557.6	6556.7	6561.2
17.5°	6432.7	6407.9	6401.7	6398.1	6407.0
20°	6261.6	6234.2	6216.4	6212.9	6199.6
22.5°	6067.6	6050.7	6033.9	6004.7	6007.3
25°	5863.8	5843.4	5811.5	5790.2	5776.9
27.5°	5655.5	5623.6	5589.9	5570.4	5558.9
30°	5421.6	5402.1	5359.5	5323.2	5316.1
32.5°	5173.4	5160.1	5117.6	5085.7	5064.4
35°	4929.7	4913.8	4865.9	4820.7	4807.4
37.5°	4681.6	4662.1	4621.4	4581.5	4559.3
40°	4423.7	4409.6	4355.5	4307.6	4288.2
42.5°	4174.7	4156.1	4107.4	4048.9	4037.4
45°	3929.3	3892.0	3867.2	3795.4	3770.6
47.5°	3657.2	3647.5	3594.3	3536.7	3509.2
50°	3398.4	3392.2	3346.2	3281.5	3268.2
52.5°	3161.0	3136.1	3093.6	3035.1	3005.0
55°	2898.6	2886.2	2835.7	2776.4	2758.6
57.5°	2641.7	2641.7	2587.6	2537.1	2507.0
60°	2396.2	2381.1	2343.0	2294.3	2266.8
62.5°	2149.0	2136.5	2103.8	2055.0	2030.2
65°	1906.1	1892.0	1860.1	1816.6	1793.6
67.5°	1674.0	1657.1	1636.7	1580.0	1565.0
70°	1429.4	1425.8	1402.8	1363.8	1354.1
72.5°	1209.6	1206.1	1179.5	1144.9	1134.3
75°	985.4	990.7	972.1	948.2	938.4
77.5°	790.5	785.1	767.4	753.2	736.4
80°	591.1	589.3	581.3	561.8	560.9
82.5°	408.5	415.6	409.4	395.2	389.9
85°	251.7	257.0	251.7	244.6	245.5
87.5°	112.5	114.3	108.1	97.5	90.4
90°	17.7	19.5	23.0	27.5	25.7
92.5°	6.2	13.3	19.5	23.0	23.9
95°	8.0	13.3	19.5	23.0	23.9
97.5°	11.5	13.3	19.5	23.0	24.8
100°	13.3	14.2	19.5	23.0	24.8
102.5°	14.2	14.2	19.5	23.0	24.8
105°	15.1	15.1	18.6	23.0	24.8
107.5°	16.0	15.1	18.6	23.0	24.8
110°	16.0	16.0	18.6	23.0	23.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	16.8	16.8	19.5	22.2	23.9
115°	17.7	17.7	19.5	22.2	23.9
117.5°	17.7	18.6	19.5	23.0	23.9
120°	18.6	19.5	19.5	23.0	23.0
122.5°	18.6	20.4	20.4	23.0	23.0
125°	18.6	20.4	20.4	23.0	23.0
127.5°	19.5	21.3	20.4	23.0	23.0
130°	20.4	21.3	22.2	23.0	23.0
132.5°	20.4	22.2	23.0	23.9	23.0
135°	21.3	23.0	23.9	23.9	23.9
137.5°	22.2	23.0	24.8	24.8	24.8
140°	22.2	23.9	24.8	25.7	25.7
142.5°	20.4	23.9	24.8	26.6	26.6
145°	20.4	23.9	25.7	27.5	27.5
147.5°	19.5	23.0	24.8	27.5	27.5
150°	19.5	22.2	24.8	26.6	26.6
152.5°	20.4	21.3	24.8	25.7	26.6
155°	19.5	21.3	24.8	25.7	25.7
157.5°	18.6	20.4	23.9	25.7	26.6
160°	17.7	20.4	23.0	25.7	25.7
162.5°	16.8	19.5	22.2	24.8	25.7
165°	16.0	18.6	21.3	23.9	23.9
167.5°	16.0	18.6	20.4	22.2	23.0
170°	16.8	17.7	19.5	20.4	21.3
172.5°	17.7	17.7	19.5	19.5	19.5
175°	17.7	17.7	18.6	19.5	20.4
177.5°	18.6	17.7	17.7	19.5	19.5
180°	17.7	17.7	17.7	17.7	17.7

(END OF REPORT)