

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: P470160

Luminaire Tested: **VHB2-9-W-UNV-L735-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470160
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-9-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

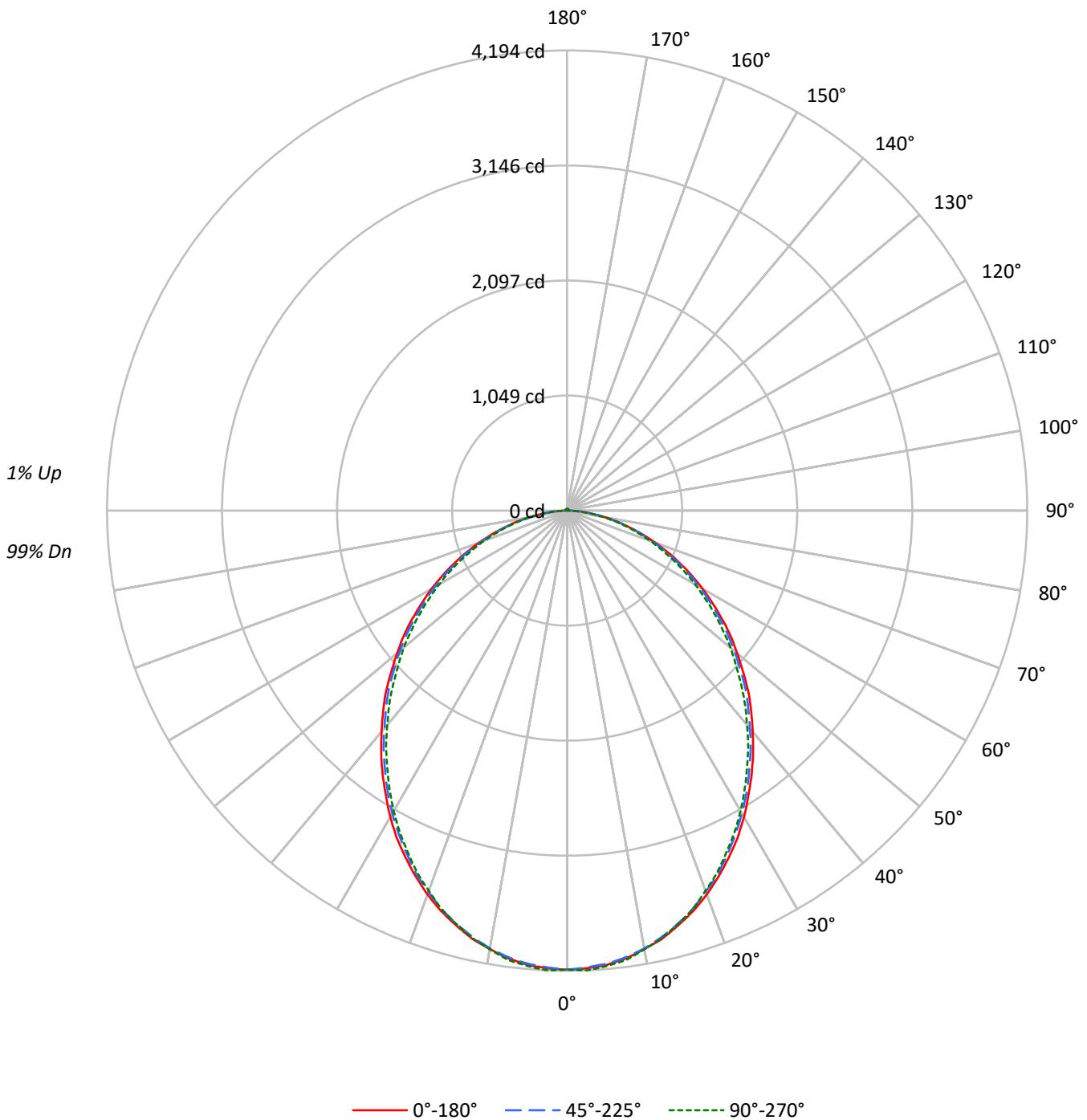
Lumens per Lamp: N/A
Luminaire Lumens: 10124.7 lumens
Efficiency: N/A
Efficacy: 157.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.14 / 1.25
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

Input Watts (W): 64.2
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°	25736	25736	25736
5°	25658	25593	25723
10°	25349	25300	25356
15°	24915	24831	24845
20°	24372	24197	24131
25°	23664	23453	23314
30°	22898	22636	22453
35°	22012	21727	21466
40°	21122	20796	20475
45°	20325	20004	19504
50°	19338	19040	18596
55°	18484	18083	17591
60°	17529	17140	16583
65°	16497	16098	15523
70°	15286	15002	14480
75°	13926	13738	13263
80°	12450	12245	11816
85°	10565	10565	10304



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	393.4	3.9
10°-20°	1098.9	10.9
20°-30°	1592.2	15.7
30°-40°	1811.0	17.9
40°-50°	1765.9	17.4
50°-60°	1507.6	14.9
60°-70°	1094.5	10.8
70°-80°	611.1	6.0
80°-90°	171.6	1.7
90°-100°	12.2	0.1
100°-110°	12.1	0.1
110°-120°	11.8	0.1
120°-130°	11.3	0.1
130°-140°	10.7	0.1
140°-150°	9.2	0.1
150°-160°	6.5	0.1
160°-170°	3.6	0.0
170°-180°	1.1	0.0
0°-30°	3084.5	30.5
0°-40°	4895.4	48.4
0°-60°	8169.0	80.7
0°-90°	10046.2	99.2
90°-120°	36.1	0.4
90°-150°	67.4	0.7
90°-180°	79.0	0.8
0°-180°	10124.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4184	4184	4184	4184	4184	
5°	4156	4146	4145	4159	4166	394
15°	3913	3906	3900	3899	3902	1103
25°	3487	3475	3456	3443	3435	1605
35°	2932	2922	2894	2867	2859	1833
45°	2337	2314	2300	2257	2242	1798
55°	1724	1716	1686	1651	1640	1542
65°	1134	1125	1106	1080	1067	1124
75°	586	589	578	564	558	627
85°	150	153	150	145	146	164
90°	10	12	14	16	15	13
95°	5	8	12	14	14	5
105°	9	9	11	14	15	9
115°	10	10	12	13	14	10
125°	11	12	12	14	14	10
135°	13	14	14	14	14	10
145°	12	14	15	16	16	8
155°	12	13	15	15	15	5
165°	10	11	13	14	14	3
175°	10	10	11	12	12	1
180°	10	10	10	10	10	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4184.1	4184.1	4184.1	4184.1	4184.1
2.5°	4175.7	4164.6	4166.7	4180.4	4194.1
5°	4155.7	4146.2	4145.1	4159.3	4166.2
7.5°	4116.7	4106.6	4106.1	4122.5	4130.4
10°	4058.7	4056.1	4050.8	4061.9	4059.7
12.5°	3998.1	3983.3	3980.7	3989.7	3990.2
15°	3912.7	3905.9	3899.5	3899.0	3901.7
17.5°	3825.2	3810.5	3806.8	3804.7	3810.0
20°	3723.5	3707.2	3696.7	3694.6	3686.7
22.5°	3608.1	3598.1	3588.1	3570.7	3572.3
25°	3486.9	3474.8	3455.8	3443.2	3435.3
27.5°	3363.1	3344.1	3324.1	3312.5	3305.7
30°	3224.0	3212.4	3187.1	3165.5	3161.3
32.5°	3076.4	3068.5	3043.2	3024.3	3011.6
35°	2931.5	2922.0	2893.6	2866.7	2858.8
37.5°	2784.0	2772.4	2748.1	2724.4	2711.2
40°	2630.6	2622.2	2590.0	2561.6	2550.0
42.5°	2482.5	2471.5	2442.5	2407.7	2400.9
45°	2336.6	2314.4	2299.7	2257.0	2242.2
47.5°	2174.8	2169.0	2137.4	2103.1	2086.8
50°	2020.9	2017.2	1989.8	1951.4	1943.4
52.5°	1879.7	1864.9	1839.6	1804.9	1786.9
55°	1723.7	1716.3	1686.3	1651.0	1640.4
57.5°	1570.9	1570.9	1538.7	1508.7	1490.8
60°	1424.9	1416.0	1393.3	1364.3	1348.0
62.5°	1277.9	1270.5	1251.0	1222.0	1207.3
65°	1133.5	1125.1	1106.1	1080.3	1066.6
67.5°	995.4	985.4	973.3	939.6	930.6
70°	850.0	847.9	834.2	811.0	805.2
72.5°	719.3	717.2	701.4	680.8	674.5
75°	586.0	589.1	578.1	563.9	558.1
77.5°	470.1	466.9	456.4	447.9	437.9
80°	351.5	350.4	345.7	334.1	333.6
82.5°	242.9	247.1	243.5	235.0	231.9
85°	149.7	152.8	149.7	145.4	146.0
87.5°	66.9	68.0	64.3	58.0	53.8
90°	10.5	11.6	13.7	16.3	15.3
92.5°	3.7	7.9	11.6	13.7	14.2
95°	4.7	7.9	11.6	13.7	14.2
97.5°	6.9	7.9	11.6	13.7	14.8
100°	7.9	8.4	11.6	13.7	14.8
102.5°	8.4	8.4	11.6	13.7	14.8
105°	9.0	9.0	11.1	13.7	14.8
107.5°	9.5	9.0	11.1	13.7	14.8
110°	9.5	9.5	11.1	13.7	14.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	10.0	10.0	11.6	13.2	14.2
115°	10.5	10.5	11.6	13.2	14.2
117.5°	10.5	11.1	11.6	13.7	14.2
120°	11.1	11.6	11.6	13.7	13.7
122.5°	11.1	12.1	12.1	13.7	13.7
125°	11.1	12.1	12.1	13.7	13.7
127.5°	11.6	12.6	12.1	13.7	13.7
130°	12.1	12.6	13.2	13.7	13.7
132.5°	12.1	13.2	13.7	14.2	13.7
135°	12.6	13.7	14.2	14.2	14.2
137.5°	13.2	13.7	14.8	14.8	14.8
140°	13.2	14.2	14.8	15.3	15.3
142.5°	12.1	14.2	14.8	15.8	15.8
145°	12.1	14.2	15.3	16.3	16.3
147.5°	11.6	13.7	14.8	16.3	16.3
150°	11.6	13.2	14.8	15.8	15.8
152.5°	12.1	12.6	14.8	15.3	15.8
155°	11.6	12.6	14.8	15.3	15.3
157.5°	11.1	12.1	14.2	15.3	15.8
160°	10.5	12.1	13.7	15.3	15.3
162.5°	10.0	11.6	13.2	14.8	15.3
165°	9.5	11.1	12.6	14.2	14.2
167.5°	9.5	11.1	12.1	13.2	13.7
170°	10.0	10.5	11.6	12.1	12.6
172.5°	10.5	10.5	11.6	11.6	11.6
175°	10.5	10.5	11.1	11.6	12.1
177.5°	11.1	10.5	10.5	11.6	11.6
180°	10.5	10.5	10.5	10.5	10.5

(END OF REPORT)