

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: P470116

Luminaire Tested: **VHB2-12-N-UNV-L735-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470116
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-12-N-UNV-L735-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 3500K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12596.7 lumens
Efficiency: N/A
Efficacy: 154.8 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.75 / 0.88
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

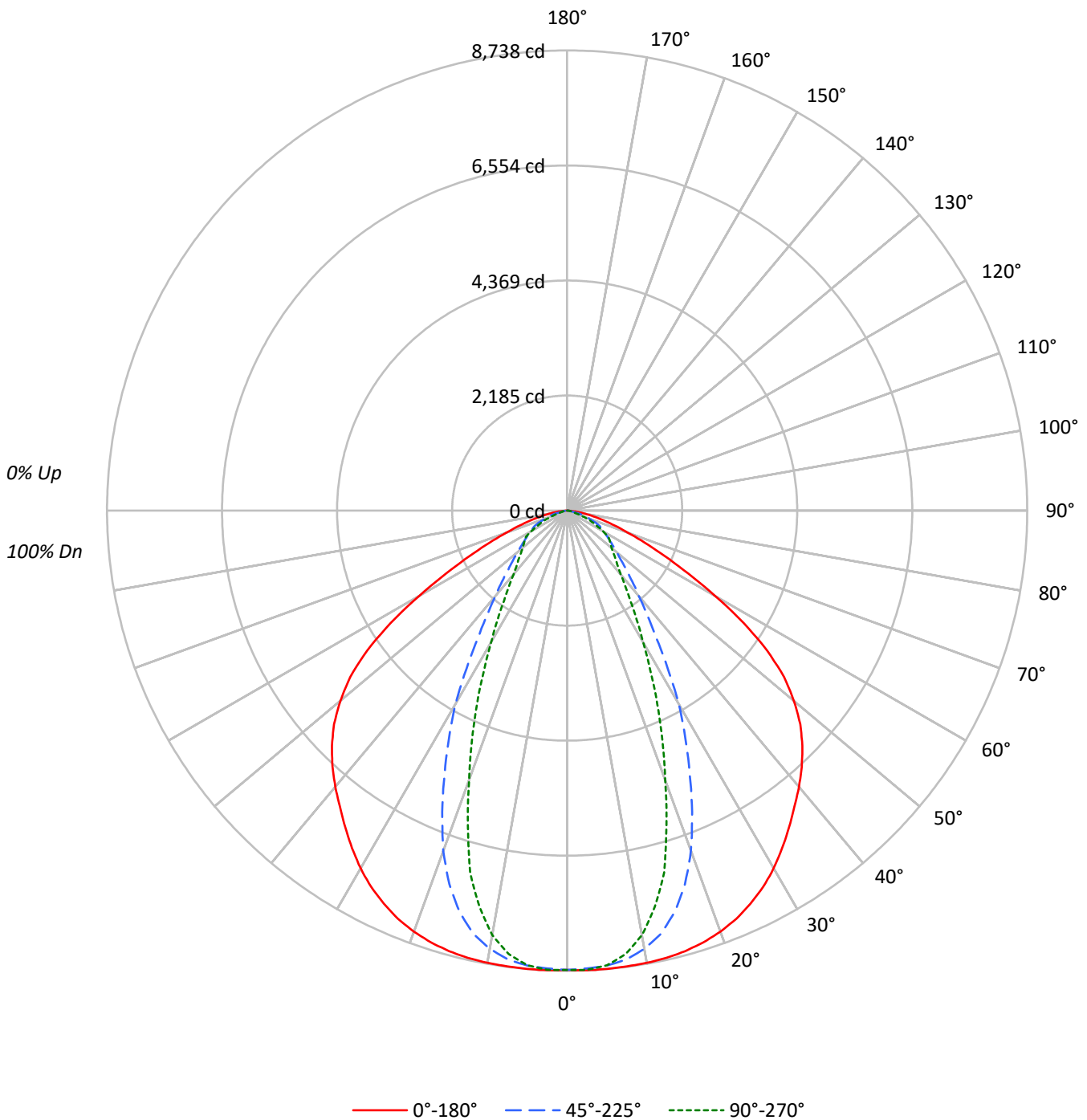
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	102	102	102	100					100			
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89					89			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78					78			
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55					55			
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	60	53	48	59	53	48	58	52	48	56	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42					42			
9	65	53	46	41	63	52	45	41	51	45	40	50	44	40	49	44	40	38					38			
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	53646	53646	53646
5°	53945	53551	53509
10°	54460	52786	51122
15°	55147	50251	45305
20°	55693	45002	35618
25°	55892	37367	27485
30°	55713	30086	20465
35°	55162	22131	15698
40°	54992	16993	12720
45°	54946	13732	11298
50°	53804	11786	10543
55°	49735	10550	10567
60°	39872	9961	9644
65°	29620	9716	7794
70°	22221	7990	5293
75°	16742	6051	2873
80°	12171	2954	2419
85°	7819	2526	1934



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	821.8	6.5
10°-20°	2189.8	17.4
20°-30°	2682.5	21.3
30°-40°	2409.0	19.1
40°-50°	1866.4	14.8
50°-60°	1396.7	11.1
60°-70°	838.0	6.7
70°-80°	332.3	2.6
80°-90°	60.3	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	5694.1	45.2
0°-40°	8103.1	64.3
0°-60°	11366.2	90.2
0°-90°	12596.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12596.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8722	8722	8722	8722	8722	
5°	8737	8698	8673	8671	8666	833
15°	8660	8433	7891	7308	7115	2447
25°	8236	7373	5506	4402	4050	3794
35°	7346	5432	2947	2259	2091	4602
45°	6317	2830	1579	1331	1299	4857
55°	4638	1502	984	953	985	4071
65°	2035	834	668	567	536	2085
75°	704	407	255	134	121	777
85°	111	44	36	31	27	147
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8721.8	8721.8	8721.8	8721.8	8721.8
2.5°	8737.5	8705.6	8701.1	8723.0	8729.1
5°	8737.0	8698.3	8673.2	8670.9	8666.4
7.5°	8729.7	8678.8	8597.6	8533.3	8495.2
10°	8719.6	8630.1	8451.6	8266.3	8185.2
12.5°	8700.6	8554.0	8228.3	7871.8	7700.6
15°	8660.3	8433.1	7891.4	7307.7	7114.7
17.5°	8598.2	8251.8	7438.7	6594.8	6270.8
20°	8508.6	8022.9	6875.2	5846.6	5441.5
22.5°	8393.4	7728.0	6196.4	5046.4	4718.5
25°	8235.6	7373.2	5505.9	4402.3	4049.8
27.5°	8059.3	6974.2	4854.5	3727.5	3419.1
30°	7844.4	6489.1	4236.1	3136.5	2881.4
32.5°	7599.9	5989.3	3555.7	2634.0	2457.2
35°	7346.4	5432.5	2947.4	2259.1	2090.6
37.5°	7086.7	4800.8	2488.5	1937.3	1815.9
40°	6848.9	4096.2	2116.4	1681.0	1584.2
42.5°	6593.7	3434.8	1829.9	1476.2	1416.9
45°	6316.7	2830.4	1578.6	1330.7	1298.8
47.5°	6003.9	2387.8	1382.8	1219.4	1189.7
50°	5622.8	2028.0	1231.7	1103.5	1101.8
52.5°	5194.7	1745.4	1097.4	1019.6	1034.1
55°	4637.9	1502.0	983.8	953.0	985.4
57.5°	3975.9	1303.3	890.9	901.5	927.2
60°	3241.2	1124.2	809.7	818.7	784.0
62.5°	2591.5	967.5	736.4	689.4	645.2
65°	2035.2	833.8	667.6	566.9	535.5
67.5°	1587.0	710.1	559.0	465.0	425.9
70°	1235.6	603.2	444.3	356.5	294.3
72.5°	944.0	502.0	350.3	218.8	166.2
75°	704.5	407.4	254.6	133.7	120.9
77.5°	511.5	305.0	142.1	97.9	91.2
80°	343.6	205.9	83.4	71.6	68.3
82.5°	218.8	108.0	57.6	50.4	46.4
85°	110.8	44.2	35.8	30.8	27.4
87.5°	38.6	21.3	16.2	12.9	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)