

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: P470133

Luminaire Tested: **VHB2-18-N-UNV-L835-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470133
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-18-N-UNV-L835-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17701.3 lumens
Efficiency: N/A
Efficacy: 144.7 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

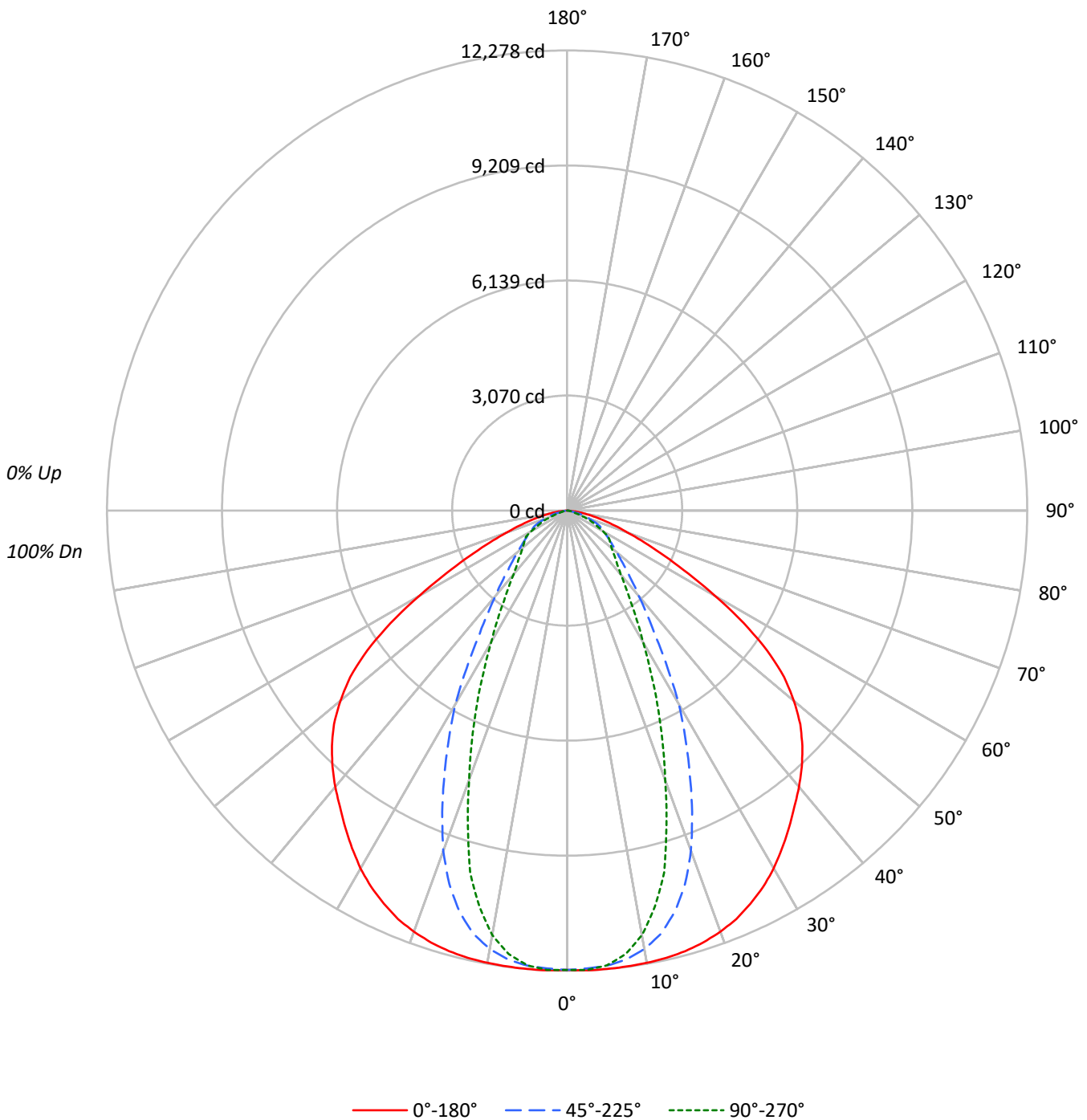
Input Watts (W): 122.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	75385	75385	75385
5°	75804	75251	75193
10°	76529	74176	71838
15°	77494	70613	63664
20°	78262	63238	50051
25°	78541	52508	38622
30°	78290	42278	28757
35°	77515	31100	22059
40°	77276	23879	17875
45°	77212	19296	15876
50°	75607	16562	14816
55°	69889	14824	14850
60°	56029	13998	13553
65°	41624	13653	10952
70°	31225	11229	7438
75°	23527	8503	4038
80°	17101	4151	3397
85°	10988	3550	2717



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1154.8	6.5
10°-20°	3077.2	17.4
20°-30°	3769.5	21.3
30°-40°	3385.2	19.1
40°-50°	2622.7	14.8
50°-60°	1962.6	11.1
60°-70°	1177.6	6.7
70°-80°	467.0	2.6
80°-90°	84.7	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°	8001.5	45.2
0°-40°	11386.7	64.3
0°-60°	15972.1	90.2
0°-90°	17701.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17701.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12256	12256	12256	12256	12256	
5°	12277	12223	12188	12185	12178	###
15°	12170	11850	11089	10269	9998	3439
25°	11573	10361	7737	6186	5691	5331
35°	10323	7634	4142	3174	2938	6466
45°	8876	3977	2218	1870	1825	6825
55°	6517	2111	1382	1339	1385	5720
65°	2860	1172	938	797	752	2929
75°	990	572	358	188	170	1091
85°	156	62	50	43	38	206
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12256.2	12256.2	12256.2	12256.2	12256.2
2.5°	12278.2	12233.4	12227.1	12257.8	12266.4
5°	12277.4	12223.2	12187.8	12184.6	12178.4
7.5°	12267.2	12195.7	12081.6	11991.2	11937.7
10°	12253.1	12127.2	11876.4	11616.1	11502.1
12.5°	12226.3	12020.3	11562.6	11061.7	10821.1
15°	12169.7	11850.4	11089.2	10269.1	9997.8
17.5°	12082.4	11595.7	10453.1	9267.2	8811.9
20°	11956.6	11274.0	9661.2	8215.9	7646.6
22.5°	11794.6	10859.6	8707.4	7091.4	6630.6
25°	11572.9	10361.1	7737.0	6186.3	5690.9
27.5°	11325.2	9800.4	6821.7	5237.9	4804.7
30°	11023.2	9118.6	5952.7	4407.5	4049.0
32.5°	10679.5	8416.4	4996.5	3701.4	3452.9
35°	10323.3	7634.0	4141.8	3174.5	2937.8
37.5°	9958.5	6746.2	3496.9	2722.4	2551.7
40°	9624.3	5756.2	2974.0	2362.2	2226.2
42.5°	9265.7	4826.7	2571.4	2074.4	1991.1
45°	8876.4	3977.4	2218.3	1870.0	1825.1
47.5°	8436.9	3355.4	1943.1	1713.5	1671.8
50°	7901.3	2849.8	1730.8	1550.7	1548.3
52.5°	7299.8	2452.7	1542.1	1432.7	1453.2
55°	6517.3	2110.6	1382.4	1339.2	1384.8
57.5°	5587.1	1831.4	1251.9	1266.8	1303.0
60°	4554.6	1579.8	1137.9	1150.4	1101.7
62.5°	3641.6	1359.6	1034.8	968.8	906.7
65°	2860.0	1171.7	938.1	796.6	752.5
67.5°	2230.1	997.9	785.6	653.5	598.4
70°	1736.3	847.7	624.4	500.9	413.6
72.5°	1326.6	705.4	492.3	307.5	233.5
75°	990.0	572.5	357.8	187.9	169.9
77.5°	718.7	428.6	199.7	137.6	128.2
80°	482.8	289.4	117.2	100.7	95.9
82.5°	307.5	151.8	81.0	70.8	65.3
85°	155.7	62.1	50.3	43.2	38.5
87.5°	54.3	29.9	22.8	18.1	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)