

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: P470148

Luminaire Tested: **VHB2-18-N-UNV-L935-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470148
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-L935-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15533.8 lumens
Efficiency: N/A
Efficacy: 127.0 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

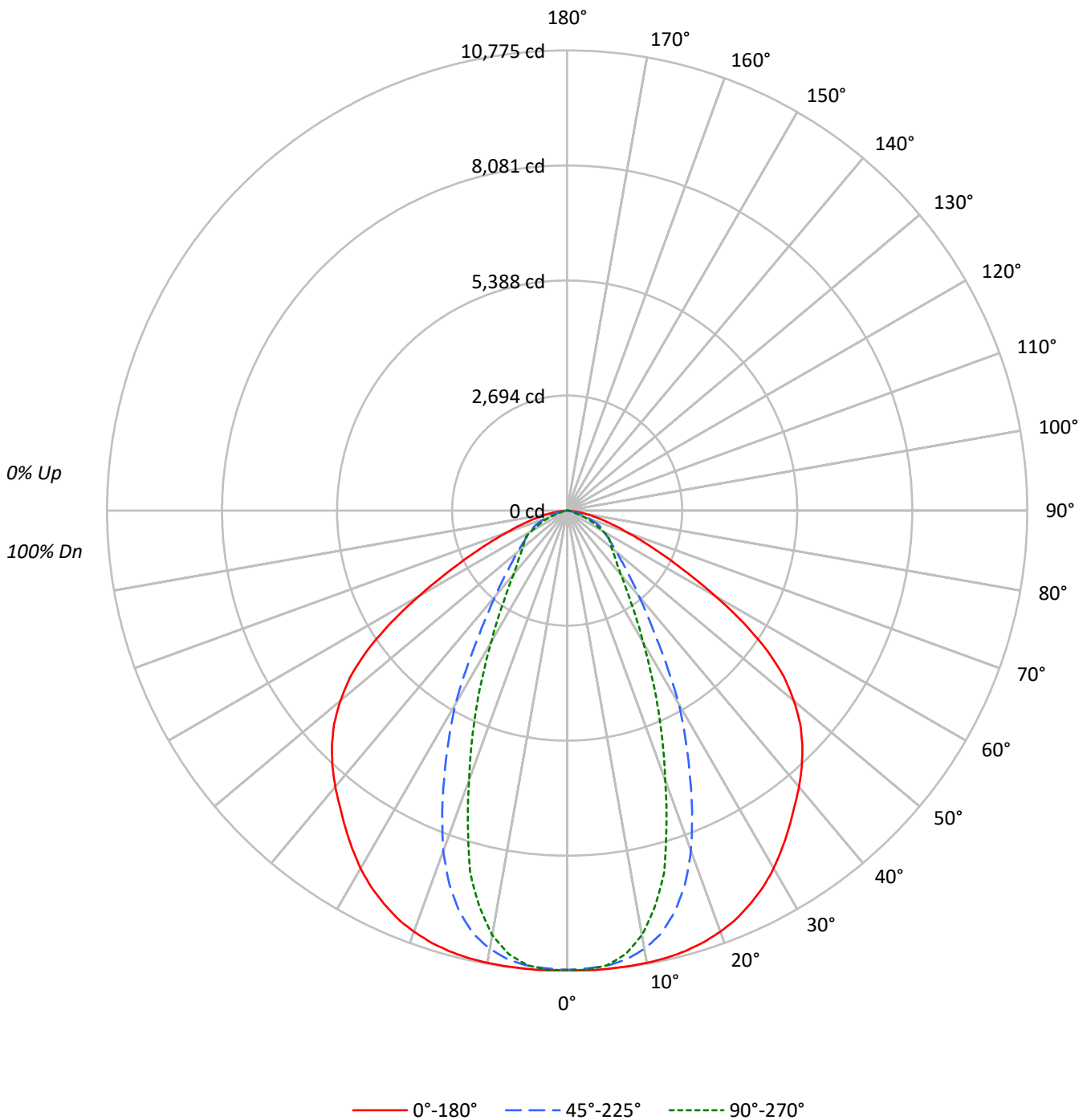
Input Watts (W): 122.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	66154	66154	66154
5°	66522	66036	65985
10°	67158	65093	63042
15°	68005	61967	55868
20°	68679	55494	43922
25°	68924	46079	33893
30°	68704	37101	25236
35°	68023	27291	19358
40°	67814	20955	15686
45°	67757	16933	13932
50°	66349	14533	13001
55°	61331	13009	13031
60°	49168	12283	11893
65°	36528	11982	9611
70°	27402	9853	6528
75°	20647	7462	3543
80°	15008	3641	2982
85°	9640	3119	2385



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1013.4	6.5
10°-20°	2700.4	17.4
20°-30°	3307.9	21.3
30°-40°	2970.7	19.1
40°-50°	2301.6	14.8
50°-60°	1722.3	11.1
60°-70°	1033.4	6.7
70°-80°	409.8	2.6
80°-90°	74.3	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°	7021.7	45.2
0°-40°	9992.4	64.3
0°-60°	14016.3	90.2
0°-90°	15533.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15533.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10755	10755	10755	10755	10755	
5°	10774	10726	10695	10693	10687	###
15°	10680	10399	9731	9012	8774	3018
25°	10156	9092	6790	5429	4994	4679
35°	9059	6699	3635	2786	2578	5675
45°	7790	3490	1947	1641	1602	5989
55°	5719	1852	1213	1175	1215	5020
65°	2510	1028	823	699	660	2571
75°	869	502	314	165	149	958
85°	137	54	44	38	34	181
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10755.4	10755.4	10755.4	10755.4	10755.4
2.5°	10774.8	10735.4	10729.9	10756.8	10764.4
5°	10774.1	10726.5	10695.4	10692.6	10687.1
7.5°	10765.1	10702.3	10602.2	10522.9	10476.0
10°	10752.7	10642.3	10422.1	10193.7	10093.7
12.5°	10729.2	10548.4	10146.8	9707.2	9496.1
15°	10679.5	10399.4	9731.4	9011.6	8773.6
17.5°	10602.9	10175.8	9173.1	8132.5	7732.9
20°	10492.5	9893.5	8478.2	7209.9	6710.2
22.5°	10350.4	9529.9	7641.2	6223.1	5818.7
25°	10155.8	9092.4	6789.6	5428.8	4994.0
27.5°	9938.4	8600.4	5986.4	4596.6	4216.3
30°	9673.4	8002.1	5223.8	3867.8	3553.2
32.5°	9371.8	7385.8	4384.7	3248.2	3030.1
35°	9059.2	6699.2	3634.6	2785.8	2578.1
37.5°	8739.1	5920.1	3068.7	2389.0	2239.3
40°	8445.8	5051.3	2609.8	2073.0	1953.6
42.5°	8131.1	4235.7	2256.5	1820.4	1747.3
45°	7789.5	3490.4	1946.7	1641.0	1601.7
47.5°	7403.8	2944.5	1705.2	1503.7	1467.1
50°	6933.8	2500.8	1518.8	1360.8	1358.7
52.5°	6405.9	2152.3	1353.2	1257.3	1275.3
55°	5719.3	1852.1	1213.1	1175.2	1215.2
57.5°	4903.0	1607.2	1098.6	1111.7	1143.4
60°	3996.9	1386.4	998.5	1009.6	966.8
62.5°	3195.7	1193.1	908.1	850.2	795.7
65°	2509.8	1028.2	823.3	699.0	660.4
67.5°	1957.0	875.7	689.4	573.4	525.1
70°	1523.7	743.9	547.9	439.6	363.0
72.5°	1164.1	619.0	432.0	269.8	205.0
75°	868.8	502.4	314.0	164.9	149.1
77.5°	630.7	376.1	175.3	120.8	112.5
80°	423.7	253.9	102.8	88.3	84.2
82.5°	269.8	133.2	71.1	62.1	57.3
85°	136.6	54.5	44.2	38.0	33.8
87.5°	47.6	26.2	20.0	15.9	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)