

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: P470146

Luminaire Tested: **VHB2-12-N-UNV-L935-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470146
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-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: 10220.0 lumens
Efficiency: N/A
Efficacy: 125.6 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

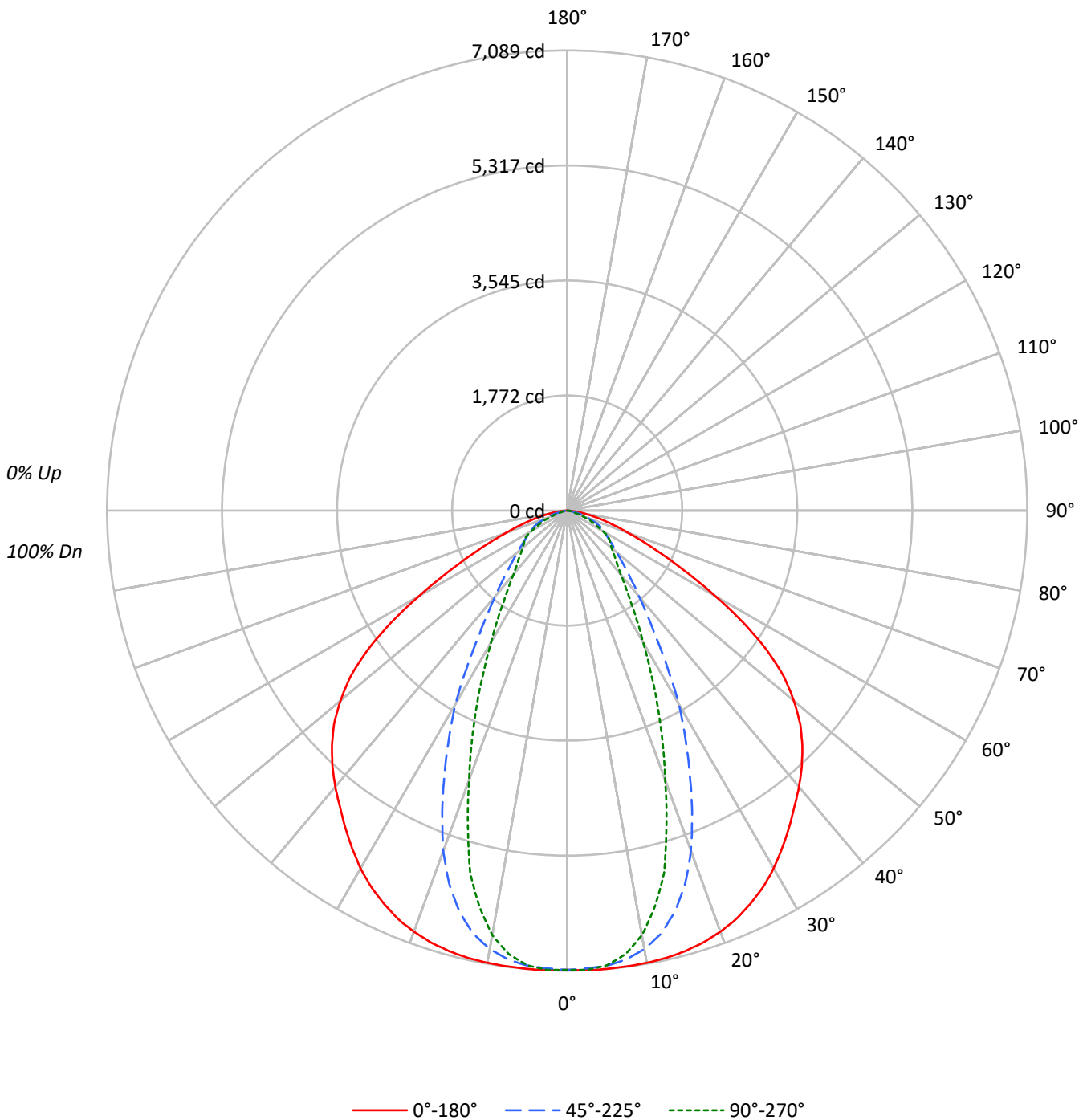
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	43524	43524	43524
5°	43766	43447	43413
10°	44184	42826	41476
15°	44742	40770	36757
20°	45185	36511	28897
25°	45346	30316	22299
30°	45201	24410	16603
35°	44754	17956	12736
40°	44616	13787	10320
45°	44579	11141	9167
50°	43653	9562	8554
55°	40351	8560	8573
60°	32348	8082	7825
65°	24032	7882	6324
70°	18029	6483	4295
75°	13584	4910	2331
80°	9875	2394	1962
85°	6344	2054	1567



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	666.7	6.5
10°-20°	1776.6	17.4
20°-30°	2176.3	21.3
30°-40°	1954.5	19.1
40°-50°	1514.3	14.8
50°-60°	1133.1	11.1
60°-70°	679.9	6.7
70°-80°	269.6	2.6
80°-90°	48.9	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°	4619.7	45.2
0°-40°	6574.2	64.3
0°-60°	9221.6	90.2
0°-90°	10220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7076	7076	7076	7076	7076	
5°	7088	7057	7037	7035	7031	676
15°	7026	6842	6402	5929	5772	1985
25°	6682	5982	4467	3572	3286	3078
35°	5960	4408	2391	1833	1696	3733
45°	5125	2296	1281	1080	1054	3940
55°	3763	1219	798	773	800	3303
65°	1651	676	542	460	434	1691
75°	572	330	207	108	98	630
85°	90	36	29	25	22	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7076.2	7076.2	7076.2	7076.2	7076.2
2.5°	7088.9	7063.0	7059.4	7077.1	7082.1
5°	7088.5	7057.1	7036.7	7034.9	7031.3
7.5°	7082.6	7041.3	6975.4	6923.2	6892.3
10°	7074.4	7001.8	6856.9	6706.6	6640.8
12.5°	7059.0	6940.0	6675.8	6386.6	6247.6
15°	7026.3	6841.9	6402.5	5928.9	5772.3
17.5°	6975.9	6694.8	6035.2	5350.5	5087.6
20°	6903.2	6509.2	5578.0	4743.5	4414.8
22.5°	6809.7	6269.9	5027.3	4094.3	3828.2
25°	6681.7	5982.0	4467.0	3571.7	3285.7
27.5°	6538.7	5658.3	3938.5	3024.2	2774.0
30°	6364.3	5264.7	3436.9	2544.7	2337.7
32.5°	6165.9	4859.3	2884.8	2137.0	1993.6
35°	5960.3	4407.5	2391.3	1832.8	1696.2
37.5°	5749.6	3895.0	2019.0	1571.8	1473.3
40°	5556.6	3323.4	1717.1	1363.8	1285.3
42.5°	5349.6	2786.7	1484.6	1197.7	1149.6
45°	5124.9	2296.4	1280.8	1079.6	1053.8
47.5°	4871.1	1937.3	1121.9	989.3	965.2
50°	4561.9	1645.3	999.3	895.3	893.9
52.5°	4214.6	1416.1	890.3	827.2	839.0
55°	3762.8	1218.6	798.2	773.2	799.5
57.5°	3225.7	1057.4	722.8	731.4	752.3
60°	2629.6	912.1	657.0	664.2	636.1
62.5°	2102.5	785.0	597.5	559.3	523.5
65°	1651.2	676.5	541.6	459.9	434.5
67.5°	1287.6	576.1	453.6	377.3	345.5
70°	1002.5	489.4	360.5	289.2	238.8
72.5°	765.9	407.2	284.2	177.5	134.8
75°	571.6	330.5	206.6	108.5	98.1
77.5°	415.0	247.4	115.3	79.5	74.0
80°	278.8	167.1	67.6	58.1	55.4
82.5°	177.5	87.6	46.8	40.9	37.7
85°	89.9	35.9	29.1	25.0	22.2
87.5°	31.3	17.3	13.2	10.4	8.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)