

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: P470140

Luminaire Tested: **VHB2-9-N-UNV-L850-CD-U**

Issue Date: 01/20/2021

Test Information

Test Method: LM-79-08
Report Number: P470140
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/20/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB2-9-N-UNV-L850-CD-U
Description: VHB2 LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9360.8 lumens
Efficiency: N/A
Efficacy: 145.8 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

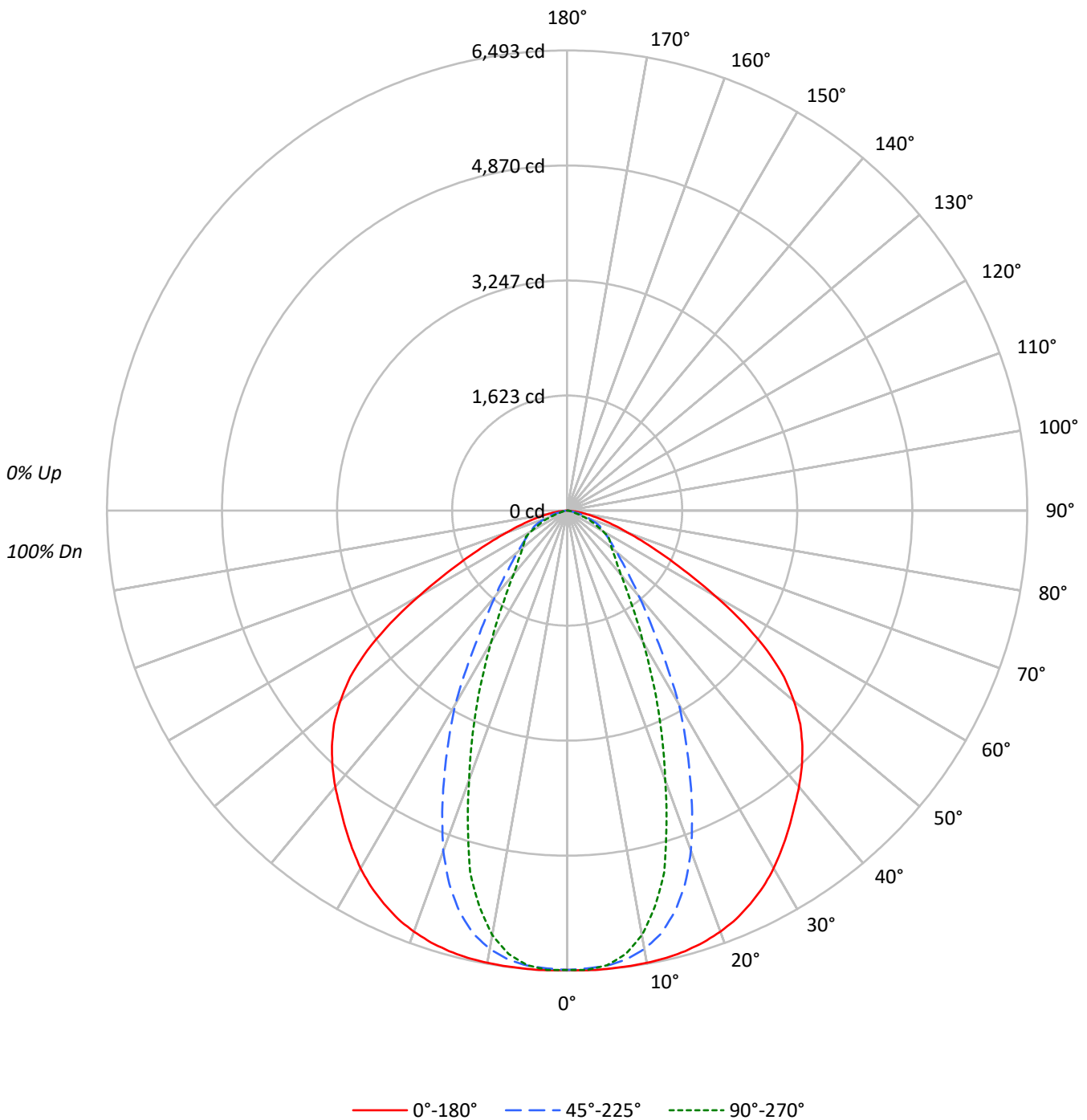
Input Watts (W): 64.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62
5	83	72	65	59	81	71	64	59	69	63	58	67	62	58	66	61	57	55
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	54	48	71	60	53	48	59	53	48	58	52	48	56	51	47	46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42
9	65	53	46	41	63	52	45	41	51	45	40	50	44	40	49	44	40	38
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39865	39865	39865
5°	40087	39794	39763
10°	40469	39225	37989
15°	40980	37342	33666
20°	41387	33441	26468
25°	41534	27768	20424
30°	41402	22357	15207
35°	40992	16446	11666
40°	40865	12628	9452
45°	40831	10204	8396
50°	39983	8758	7835
55°	36959	7839	7853
60°	29630	7402	7167
65°	22011	7220	5792
70°	16513	5938	3933
75°	12441	4496	2134
80°	9043	2196	1796
85°	5808	1877	1440



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	610.7	6.5
10°-20°	1627.3	17.4
20°-30°	1993.4	21.3
30°-40°	1790.2	19.1
40°-50°	1387.0	14.8
50°-60°	1037.9	11.1
60°-70°	622.7	6.7
70°-80°	246.9	2.6
80°-90°	44.8	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°	4231.3	45.2
0°-40°	6021.5	64.3
0°-60°	8446.3	90.2
0°-90°	9360.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9360.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6481	6481	6481	6481	6481	
5°	6492	6464	6445	6444	6440	619
15°	6436	6267	5864	5430	5287	1818
25°	6120	5479	4092	3271	3009	2819
35°	5459	4037	2190	1679	1554	3420
45°	4694	2103	1173	989	965	3609
55°	3446	1116	731	708	732	3025
65°	1512	620	496	421	398	1549
75°	524	303	189	99	90	577
85°	82	33	27	23	20	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6481.3	6481.3	6481.3	6481.3	6481.3
2.5°	6492.9	6469.2	6465.9	6482.1	6486.7
5°	6492.5	6463.8	6445.1	6443.5	6440.1
7.5°	6487.1	6449.3	6389.0	6341.2	6312.9
10°	6479.6	6413.1	6280.4	6142.8	6082.5
12.5°	6465.5	6356.5	6114.5	5849.6	5722.4
15°	6435.6	6266.7	5864.2	5430.5	5287.0
17.5°	6389.4	6132.0	5527.8	4900.7	4659.9
20°	6322.9	5961.9	5109.0	4344.7	4043.6
22.5°	6237.2	5742.8	4604.6	3750.1	3506.4
25°	6119.9	5479.1	4091.5	3271.4	3009.4
27.5°	5988.9	5182.6	3607.4	2769.9	2540.8
30°	5829.3	4822.1	3147.9	2330.8	2141.2
32.5°	5647.5	4450.7	2642.3	1957.4	1826.0
35°	5459.2	4037.0	2190.2	1678.8	1553.6
37.5°	5266.2	3567.5	1849.2	1439.6	1349.4
40°	5089.5	3044.0	1572.7	1249.2	1177.2
42.5°	4899.9	2552.4	1359.8	1097.0	1052.9
45°	4694.0	2103.3	1173.1	988.9	965.2
47.5°	4461.6	1774.4	1027.5	906.1	884.1
50°	4178.4	1507.0	915.3	820.0	818.8
52.5°	3860.3	1297.0	815.5	757.7	768.5
55°	3446.5	1116.1	731.0	708.2	732.3
57.5°	2954.6	968.5	662.0	669.9	689.0
60°	2408.6	835.4	601.7	608.4	582.6
62.5°	1925.8	719.0	547.2	512.3	479.5
65°	1512.4	619.6	496.1	421.2	398.0
67.5°	1179.3	527.7	415.4	345.6	316.5
70°	918.2	448.3	330.2	264.9	218.7
72.5°	701.5	373.0	260.3	162.6	123.5
75°	523.5	302.7	189.2	99.4	89.8
77.5°	380.1	226.6	105.6	72.8	67.8
80°	255.3	153.0	62.0	53.2	50.7
82.5°	162.6	80.3	42.8	37.4	34.5
85°	82.3	32.9	26.6	22.9	20.4
87.5°	28.7	15.8	12.1	9.6	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)