

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: P417718

Luminaire Tested: **VHB-1824-N-UNV-L935-CD-U-LEVEL1**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417718
Test Lab: INNOVATION CENTER(G3)
Issue Date: 11/17/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-1824-N-UNV-L935-CD-U-LEVEL1
Description: VHB 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: 15830.9 lumens
Efficiency: N/A
Efficacy: 126.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.74 / 0.88
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

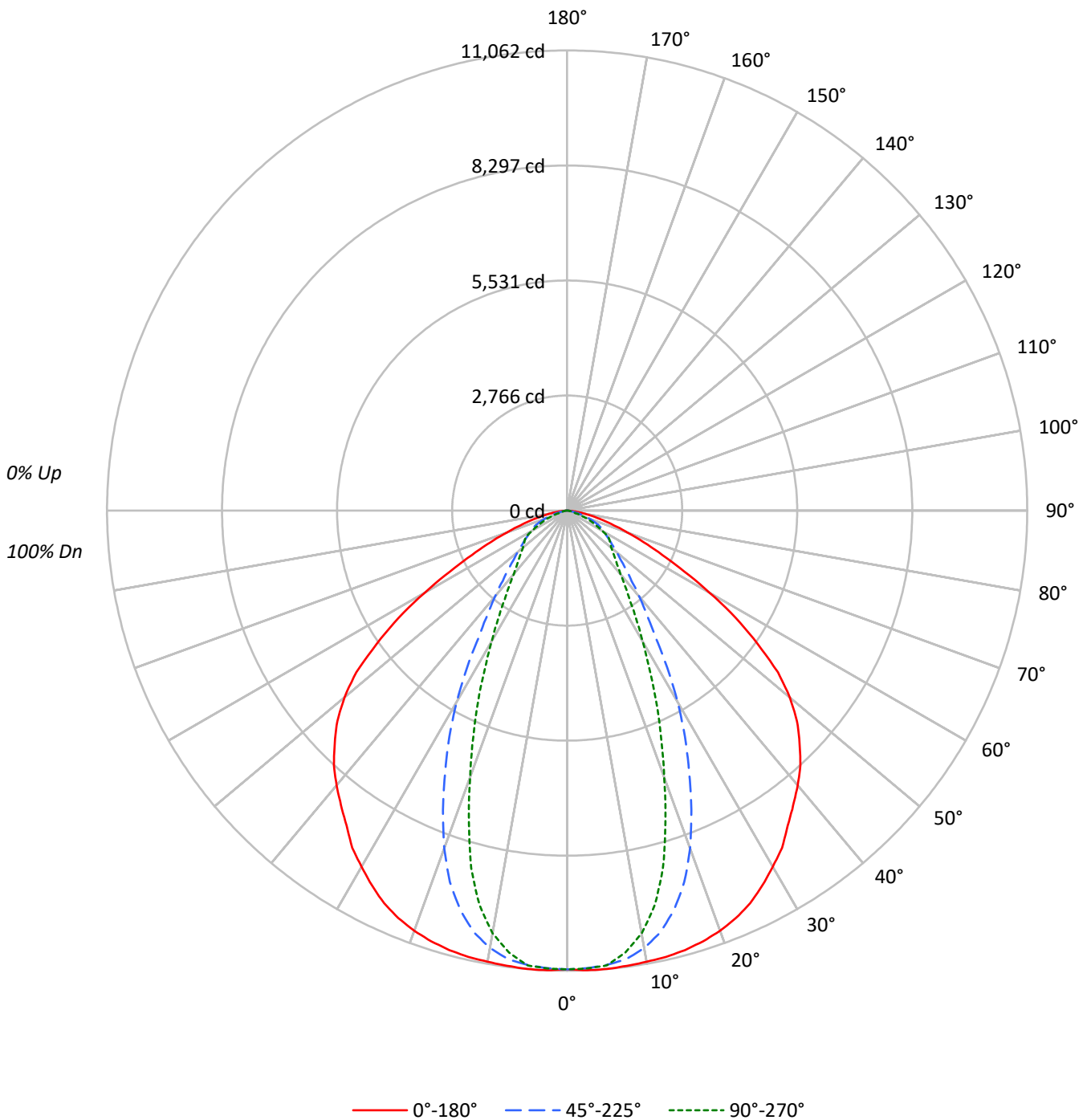
Input Watts (W): 125.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	66	58	53	64	57	53	62	57	52	61	56	52	50				50
7	73	61	54	48	71	61	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°	67838	67838	67838
5°	68298	67690	67764
10°	68783	66674	64443
15°	69647	63236	56684
20°	70352	56567	44615
25°	70676	47073	34378
30°	70202	37676	25736
35°	69401	27716	19700
40°	69231	21630	16023
45°	68741	17403	14206
50°	66879	14832	13249
55°	59953	13341	13369
60°	48718	12543	12026
65°	36750	12158	9777
70°	27875	10078	6688
75°	21096	7574	3584
80°	15235	3733	2943
85°	9795	3204	2477



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1037.7	6.6
10°-20°	2758.0	17.4
20°-30°	3373.8	21.3
30°-40°	3027.0	19.1
40°-50°	2347.0	14.8
50°-60°	1741.9	11.0
60°-70°	1050.7	6.6
70°-80°	419.1	2.6
80°-90°	75.7	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°	7169.6	45.3
0°-40°	10196.6	64.4
0°-60°	14285.5	90.2
0°-90°	15830.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15830.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11029	11029	11029	11029	11029	
5°	11062	10992	10963	10932	10975	###
15°	10938	10638	9931	9192	8902	3091
25°	10414	9266	6936	5503	5066	4790
35°	9243	6793	3691	2820	2624	5801
45°	7903	3569	2001	1675	1633	6082
55°	5591	1907	1244	1202	1247	4967
65°	2525	1058	835	713	672	2576
75°	888	515	319	168	151	973
85°	139	57	45	39	35	182
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11029.2	11029.2	11029.2	11029.2	11029.2
2.5°	11060.9	10994.9	11011.2	11011.2	11014.6
5°	11061.7	10992.3	10963.2	10931.5	10975.2
7.5°	11036.9	10956.3	10875.8	10741.3	10713.0
10°	11012.9	10895.5	10675.3	10417.4	10318.0
12.5°	10988.9	10809.8	10378.8	9891.3	9719.9
15°	10937.5	10638.5	9930.7	9192.1	8901.7
17.5°	10857.8	10396.8	9366.1	8302.7	7856.3
20°	10748.1	10096.9	8642.0	7307.9	6816.1
22.5°	10604.2	9740.5	7798.1	6356.9	5901.0
25°	10414.0	9265.8	6936.1	5502.6	5065.6
27.5°	10161.2	8734.6	6127.2	4705.7	4271.3
30°	9884.4	8159.6	5304.7	3951.7	3623.6
32.5°	9612.8	7533.3	4477.8	3317.7	3082.9
35°	9242.7	6793.0	3691.2	2819.8	2623.6
37.5°	8928.2	5995.3	3128.3	2428.3	2286.9
40°	8622.3	5147.9	2693.9	2123.2	1995.6
42.5°	8300.2	4309.0	2292.0	1863.6	1788.2
45°	7902.6	3568.7	2000.7	1675.1	1633.1
47.5°	7493.9	3022.1	1735.1	1532.9	1500.3
50°	6989.2	2560.2	1550.0	1392.4	1384.6
52.5°	6384.3	2198.6	1379.5	1287.8	1304.1
55°	5590.8	1907.3	1244.1	1202.1	1246.7
57.5°	4814.6	1649.4	1124.2	1137.0	1174.7
60°	3960.3	1418.1	1019.6	1041.9	977.6
62.5°	3174.6	1231.3	928.8	865.4	812.3
65°	2525.1	1058.2	835.4	712.9	671.8
67.5°	1987.0	902.2	705.2	583.5	532.1
70°	1550.0	760.9	560.4	454.1	371.9
72.5°	1182.4	635.8	443.8	275.0	220.2
75°	887.7	515.0	318.7	167.9	150.8
77.5°	635.8	386.4	185.9	122.5	115.7
80°	430.1	252.8	105.4	90.0	83.1
82.5°	268.2	139.7	72.0	63.4	59.1
85°	138.8	57.4	45.4	38.6	35.1
87.5°	48.8	25.7	20.6	16.3	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)