

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: P417726

Luminaire Tested: **VHB-1824-N-UNV-L950-CD-U-LEVEL1**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417726
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-L950-CD-U-LEVEL1
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16567.2 lumens
Efficiency: N/A
Efficacy: 132.0 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

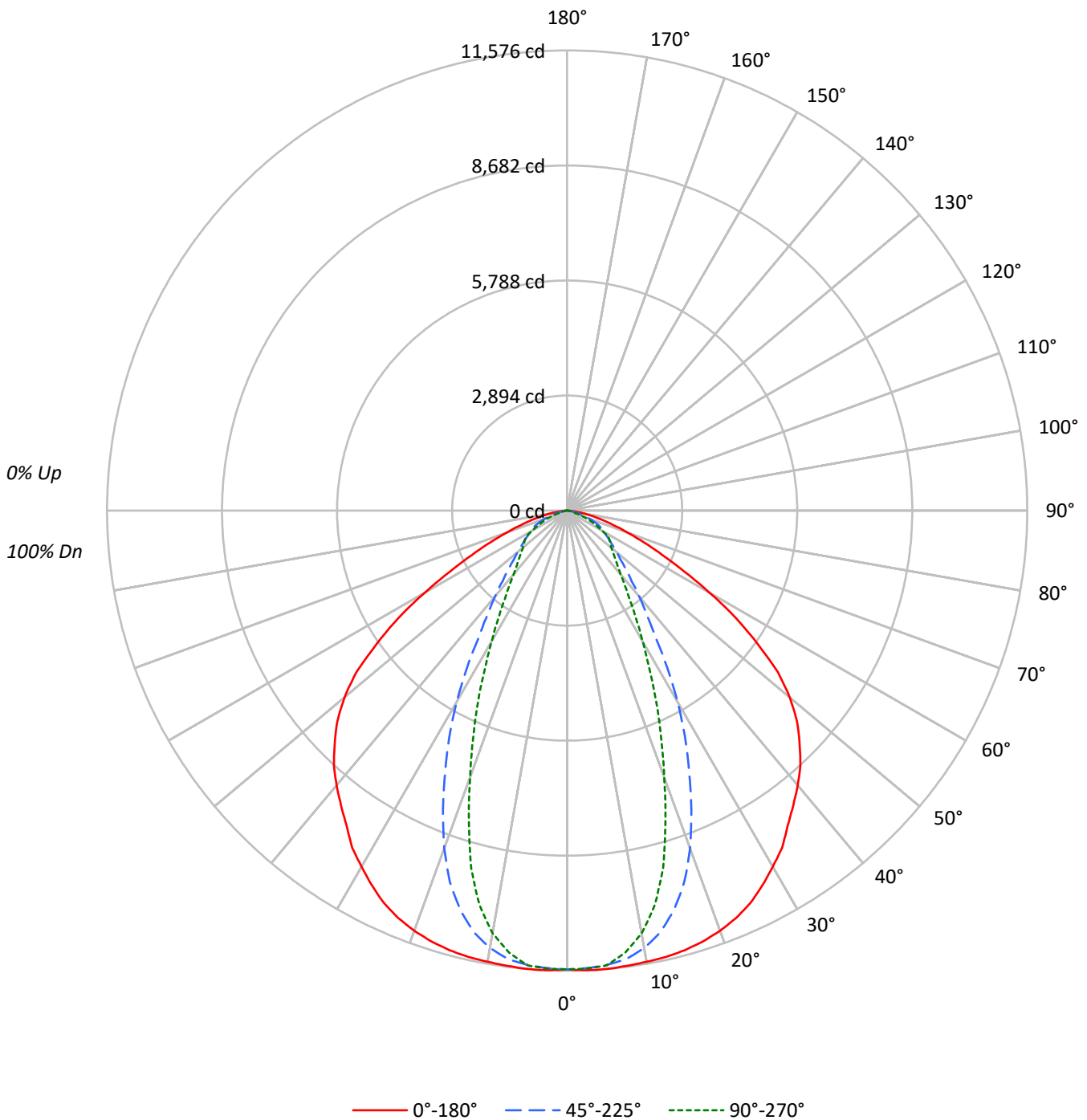
Input Watts (W): 125.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	70994	70994	70994
5°	71475	70838	70916
10°	71982	69775	67440
15°	72887	66178	59320
20°	73624	59198	46690
25°	73963	49262	35977
30°	73468	39428	26933
35°	72629	29005	20617
40°	72451	22636	16768
45°	71938	18213	14867
50°	69990	15522	13865
55°	62743	13962	13991
60°	50984	13127	12586
65°	38459	12725	10231
70°	29171	10546	6999
75°	22078	7928	3750
80°	15943	3907	3082
85°	10254	3352	2597



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1086.0	6.6
10°-20°	2886.2	17.4
20°-30°	3530.8	21.3
30°-40°	3167.8	19.1
40°-50°	2456.1	14.8
50°-60°	1823.0	11.0
60°-70°	1099.5	6.6
70°-80°	438.6	2.6
80°-90°	79.2	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°	7503.0	45.3
0°-40°	10670.8	64.4
0°-60°	14949.9	90.2
0°-90°	16567.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16567.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11542	11542	11542	11542	11542	
5°	11576	11504	11473	11440	11486	###
15°	11446	11133	10393	9620	9316	3234
25°	10898	9697	7259	5758	5301	5013
35°	9673	7109	3863	2951	2746	6070
45°	8270	3735	2094	1753	1709	6365
55°	5851	1996	1302	1258	1305	5198
65°	2642	1107	874	746	703	2696
75°	929	539	334	176	158	1018
85°	145	60	48	40	37	191
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11542.2	11542.2	11542.2	11542.2	11542.2
2.5°	11575.3	11506.3	11523.3	11523.3	11526.9
5°	11576.2	11503.6	11473.1	11439.9	11485.7
7.5°	11550.2	11465.9	11381.7	11240.9	11211.3
10°	11525.1	11402.3	11171.8	10901.9	10797.9
12.5°	11500.0	11312.6	10861.6	10351.4	10172.0
15°	11446.2	11133.3	10392.6	9619.7	9315.7
17.5°	11362.8	10880.4	9801.7	8688.9	8221.7
20°	11248.0	10566.6	9044.0	7647.8	7133.1
22.5°	11097.4	10193.5	8160.8	6652.5	6175.5
25°	10898.3	9696.8	7258.7	5758.5	5301.2
27.5°	10633.8	9140.8	6412.2	4924.6	4470.0
30°	10344.2	8539.2	5551.4	4135.5	3792.1
32.5°	10059.9	7883.7	4686.1	3472.0	3226.3
35°	9672.6	7108.9	3862.9	2951.0	2745.7
37.5°	9343.5	6274.1	3273.8	2541.2	2393.3
40°	9023.4	5387.3	2819.2	2222.0	2088.4
42.5°	8686.2	4509.4	2398.6	1950.3	1871.4
45°	8270.1	3734.7	2093.8	1753.0	1709.1
47.5°	7842.4	3162.6	1815.8	1604.2	1570.1
50°	7314.3	2679.3	1622.1	1457.1	1449.0
52.5°	6681.2	2300.9	1443.7	1347.7	1364.8
55°	5850.9	1996.0	1302.0	1258.1	1304.7
57.5°	5038.5	1726.1	1176.5	1189.9	1229.4
60°	4144.5	1484.0	1067.1	1090.4	1023.1
62.5°	3322.2	1288.5	972.0	905.7	850.1
65°	2642.5	1107.4	874.3	746.0	703.0
67.5°	2079.4	944.2	738.0	610.6	556.8
70°	1622.1	796.3	586.4	475.2	389.2
72.5°	1237.4	665.3	464.5	287.8	230.4
75°	929.0	538.9	333.6	175.8	157.8
77.5°	665.3	404.4	194.6	128.2	121.1
80°	450.1	264.5	110.3	94.2	87.0
82.5°	280.7	146.2	75.3	66.4	61.9
85°	145.3	60.1	47.5	40.4	36.8
87.5°	51.1	26.9	21.5	17.0	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)