

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: P364416

Luminaire Tested: **VHB-18-W-UNV-L840-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364416
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-18-W-UNV-L840-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 4000K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18647.0 lumens
Efficiency: N/A
Efficacy: 139.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

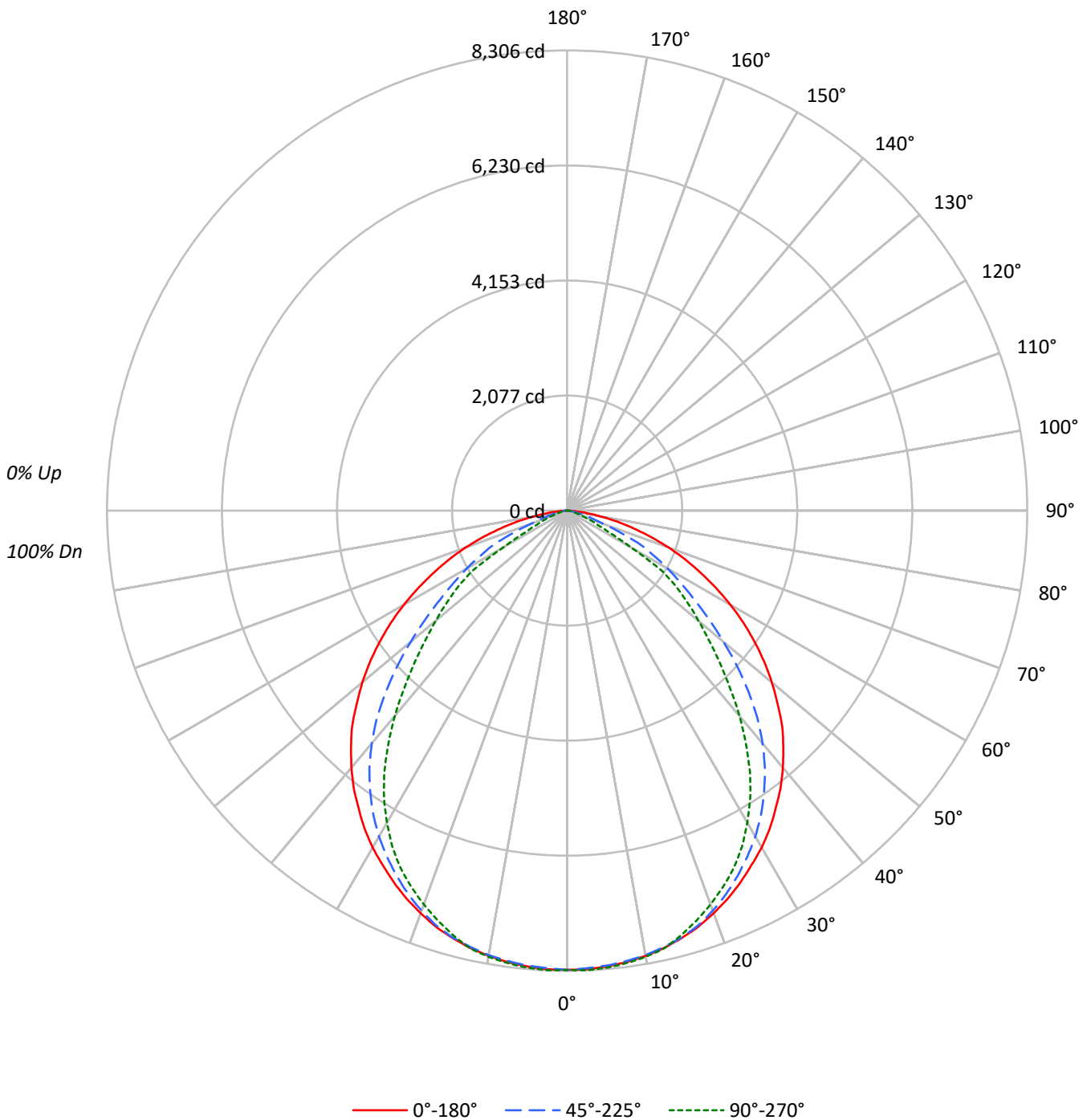
Input Watts (W): 133.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	100	108	104	101	98	100	97	95		96	94	92		93	91	89	87
2	102	95	89	84	99	93	87	83	89	85	81		86	82	79		83	80	77	75
3	94	84	77	71	91	83	76	71	80	74	70		77	72	68		75	71	67	65
4	86	76	68	62	84	74	67	61	72	65	60		70	64	60		68	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53		63	57	52		61	56	52	50
6	74	62	53	48	72	61	53	47	59	52	47		57	51	47		56	50	46	44
7	69	56	48	42	67	56	48	42	54	47	42		53	46	42		51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38		48	42	38		47	42	37	36
9	60	48	40	34	59	47	39	34	46	39	34		45	39	34		44	38	34	32
10	57	44	36	31	55	43	36	31	42	36	31		42	35	31		41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	50993	50993	50993
5°	51001	50897	51130
10°	50982	50872	51082
15°	50861	50808	50545
20°	50615	50302	49516
25°	50240	49386	48303
30°	49875	48247	46184
35°	49281	46557	43183
40°	48632	44053	38855
45°	47747	40290	33950
50°	46169	35274	29657
55°	44285	30049	25888
60°	41835	25773	16527
65°	38765	21496	8763
70°	34989	12216	5677
75°	29395	7484	3531
80°	22336	3776	3092
85°	13571	3437	2788



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	784.9	4.2
10°-20°	2245.6	12.0
20°-30°	3347.4	18.0
30°-40°	3855.1	20.7
40°-50°	3587.7	19.2
50°-60°	2730.0	14.6
60°-70°	1465.4	7.9
70°-80°	539.1	2.9
80°-90°	91.7	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°	6377.9	34.2
0°-40°	10233.0	54.9
0°-60°	16550.8	88.8
0°-90°	18647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18647.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8290	8290	8290	8290	8290	
5°	8260	8237	8243	8272	8281	785
15°	7987	7975	7979	7964	7938	2254
25°	7403	7397	7277	7174	7117	3412
35°	6563	6483	6200	5889	5751	4109
45°	5489	5225	4632	4082	3903	4218
55°	4130	3663	2802	2495	2414	3689
65°	2664	1956	1477	731	602	2641
75°	1237	810	315	163	149	1326
85°	192	62	49	42	40	256
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8290.4	8290.4	8290.4	8290.4	8290.4
2.5°	8284.5	8259.3	8267.7	8294.6	8305.5
5°	8260.2	8236.6	8243.4	8271.9	8281.1
7.5°	8219.8	8197.2	8202.2	8229.1	8238.3
10°	8162.7	8139.2	8145.1	8171.1	8178.7
12.5°	8085.5	8063.7	8068.7	8087.2	8095.6
15°	7987.2	7974.7	7978.9	7963.7	7937.7
17.5°	7877.2	7858.8	7853.7	7786.6	7758.8
20°	7732.8	7726.1	7685.0	7601.8	7564.9
22.5°	7580.8	7568.2	7496.9	7396.9	7352.4
25°	7402.8	7396.9	7276.9	7173.6	7117.3
27.5°	7211.4	7197.1	7042.6	6913.3	6836.9
30°	7022.4	6987.2	6793.2	6611.8	6502.7
32.5°	6808.3	6742.0	6510.2	6278.5	6152.5
35°	6563.1	6483.3	6200.4	5888.8	5751.1
37.5°	6325.5	6205.4	5864.5	5474.9	5298.5
40°	6056.8	5884.6	5486.6	5034.0	4839.2
42.5°	5773.8	5563.9	5084.4	4557.9	4358.1
45°	5489.1	5224.6	4631.8	4081.8	3902.9
47.5°	5150.7	4870.3	4161.6	3627.5	3473.8
50°	4824.9	4497.4	3686.3	3204.3	3099.3
52.5°	4484.0	4086.8	3224.5	2846.6	2745.0
55°	4129.7	3662.8	2802.1	2494.8	2414.1
57.5°	3773.6	3227.0	2427.6	2174.8	2030.4
60°	3400.8	2794.5	2095.1	1767.6	1343.5
62.5°	3033.8	2344.4	1763.4	1108.4	854.8
65°	2663.5	1956.5	1477.0	731.4	602.1
67.5°	2310.0	1581.2	1053.8	529.9	450.9
70°	1945.6	1293.1	679.3	379.5	315.7
72.5°	1580.3	1040.4	466.0	249.4	202.4
75°	1236.9	810.3	314.9	162.9	148.6
77.5°	927.0	559.2	175.5	120.9	113.4
80°	630.6	335.0	106.6	92.4	87.3
82.5°	377.9	160.4	77.3	68.0	65.5
85°	192.3	62.1	48.7	42.0	39.5
87.5°	57.1	31.1	21.8	16.8	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)