

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: P364423

Luminaire Tested: **VHB-9-W-UNV-L850-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364423
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-9-W-UNV-L850-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 5000K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9448.0 lumens
Efficiency: N/A
Efficacy: 146.3 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

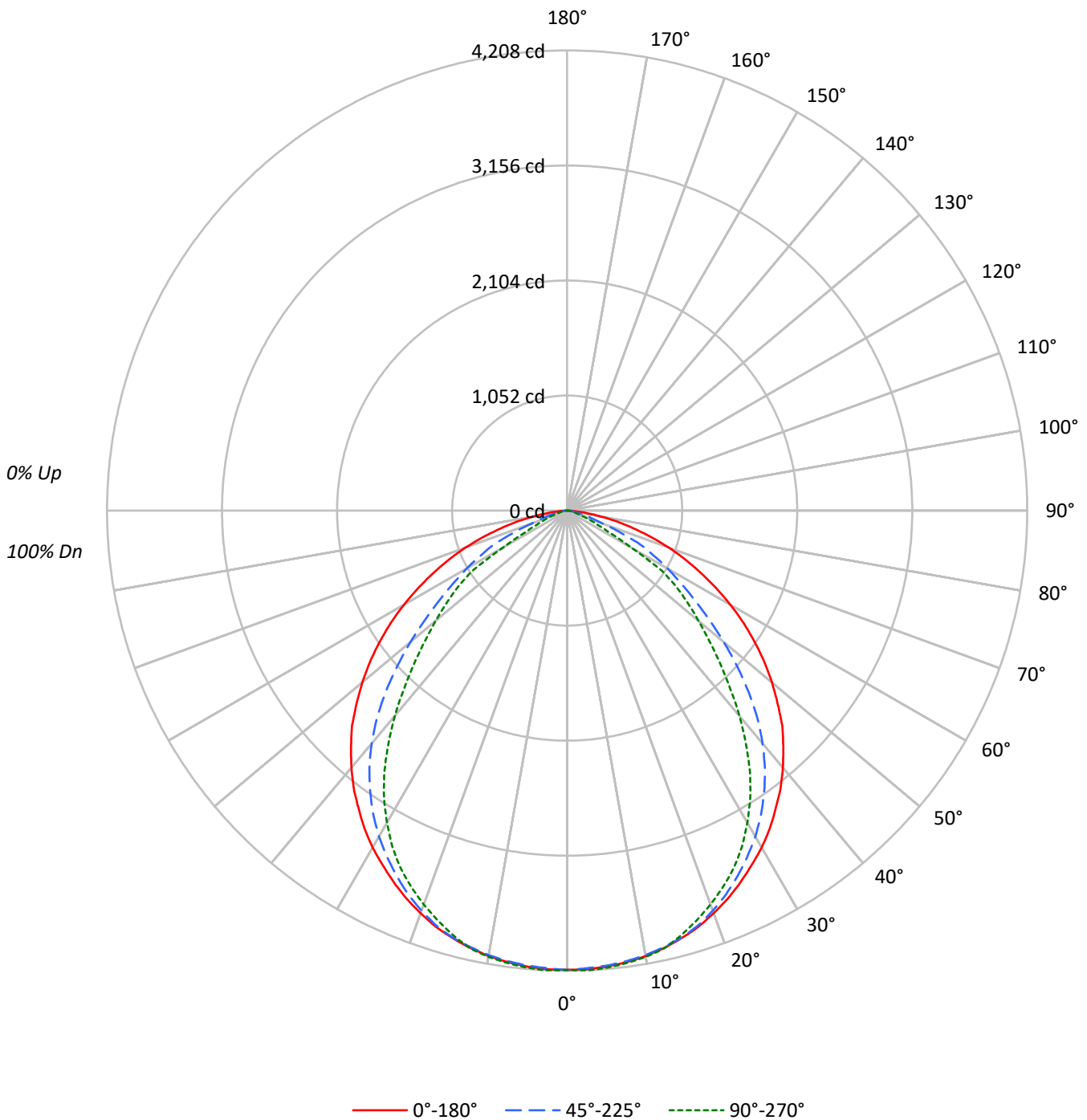
Input Watts (W): 64.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	25836	25836	25836
5°	25841	25788	25907
10°	25831	25775	25882
15°	25770	25743	25611
20°	25645	25487	25088
25°	25455	25022	24474
30°	25271	24446	23400
35°	24970	23589	21880
40°	24640	22321	19687
45°	24192	20414	17201
50°	23393	17873	15027
55°	22438	15225	13117
60°	21197	13058	8374
65°	19642	10892	4440
70°	17728	6190	2877
75°	14893	3790	1789
80°	11317	1913	1566
85°	6874	1743	1411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	397.7	4.2
10°-20°	1137.8	12.0
20°-30°	1696.1	18.0
30°-40°	1953.3	20.7
40°-50°	1817.8	19.2
50°-60°	1383.2	14.6
60°-70°	742.5	7.9
70°-80°	273.2	2.9
80°-90°	46.5	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°	3231.5	34.2
0°-40°	5184.8	54.9
0°-60°	8385.9	88.8
0°-90°	9448.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9448.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4200	4200	4200	4200	4200	
5°	4185	4173	4177	4191	4196	398
15°	4047	4041	4043	4035	4022	1142
25°	3751	3748	3687	3635	3606	1729
35°	3325	3285	3142	2984	2914	2082
45°	2781	2647	2347	2068	1978	2137
55°	2092	1856	1420	1264	1223	1869
65°	1350	991	748	371	305	1338
75°	627	411	160	82	75	672
85°	97	32	25	21	20	130
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4200.5	4200.5	4200.5	4200.5	4200.5
2.5°	4197.6	4184.8	4189.1	4202.7	4208.2
5°	4185.2	4173.3	4176.7	4191.2	4195.9
7.5°	4164.8	4153.3	4155.9	4169.5	4174.2
10°	4135.9	4124.0	4126.9	4140.1	4144.0
12.5°	4096.7	4085.7	4088.2	4097.6	4101.8
15°	4047.0	4040.6	4042.7	4035.0	4021.9
17.5°	3991.2	3981.9	3979.3	3945.3	3931.2
20°	3918.0	3914.6	3893.8	3851.7	3832.9
22.5°	3841.0	3834.6	3798.5	3747.9	3725.3
25°	3750.8	3747.9	3687.0	3634.7	3606.2
27.5°	3653.8	3646.6	3568.3	3502.8	3464.1
30°	3558.1	3540.2	3442.0	3350.1	3294.7
32.5°	3449.6	3416.0	3298.6	3181.1	3117.3
35°	3325.4	3285.0	3141.6	2983.7	2914.0
37.5°	3205.0	3144.1	2971.4	2774.0	2684.6
40°	3068.8	2981.6	2779.9	2550.6	2451.9
42.5°	2925.4	2819.1	2576.1	2309.4	2208.1
45°	2781.2	2647.2	2346.8	2068.1	1977.5
47.5°	2609.8	2467.7	2108.6	1838.0	1760.1
50°	2444.7	2278.8	1867.8	1623.5	1570.4
52.5°	2271.9	2070.7	1633.8	1442.3	1390.8
55°	2092.4	1855.8	1419.8	1264.0	1223.2
57.5°	1912.0	1635.0	1230.0	1101.9	1028.8
60°	1723.1	1415.9	1061.5	895.6	680.7
62.5°	1537.2	1187.9	893.5	561.6	433.1
65°	1349.6	991.3	748.4	370.6	305.1
67.5°	1170.4	801.1	533.9	268.5	228.5
70°	985.8	655.2	344.2	192.3	160.0
72.5°	800.7	527.1	236.1	126.4	102.5
75°	626.7	410.6	159.5	82.5	75.3
77.5°	469.7	283.4	88.9	61.3	57.4
80°	319.5	169.8	54.0	46.8	44.2
82.5°	191.5	81.3	39.1	34.5	33.2
85°	97.4	31.5	24.7	21.3	20.0
87.5°	28.9	15.7	11.1	8.5	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)