

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: P364411

Luminaire Tested: **VHB-12-W-UNV-L850-CD-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P364411  
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-12-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: 12773.0 lumens  
Efficiency: N/A  
Efficacy: 146.8 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

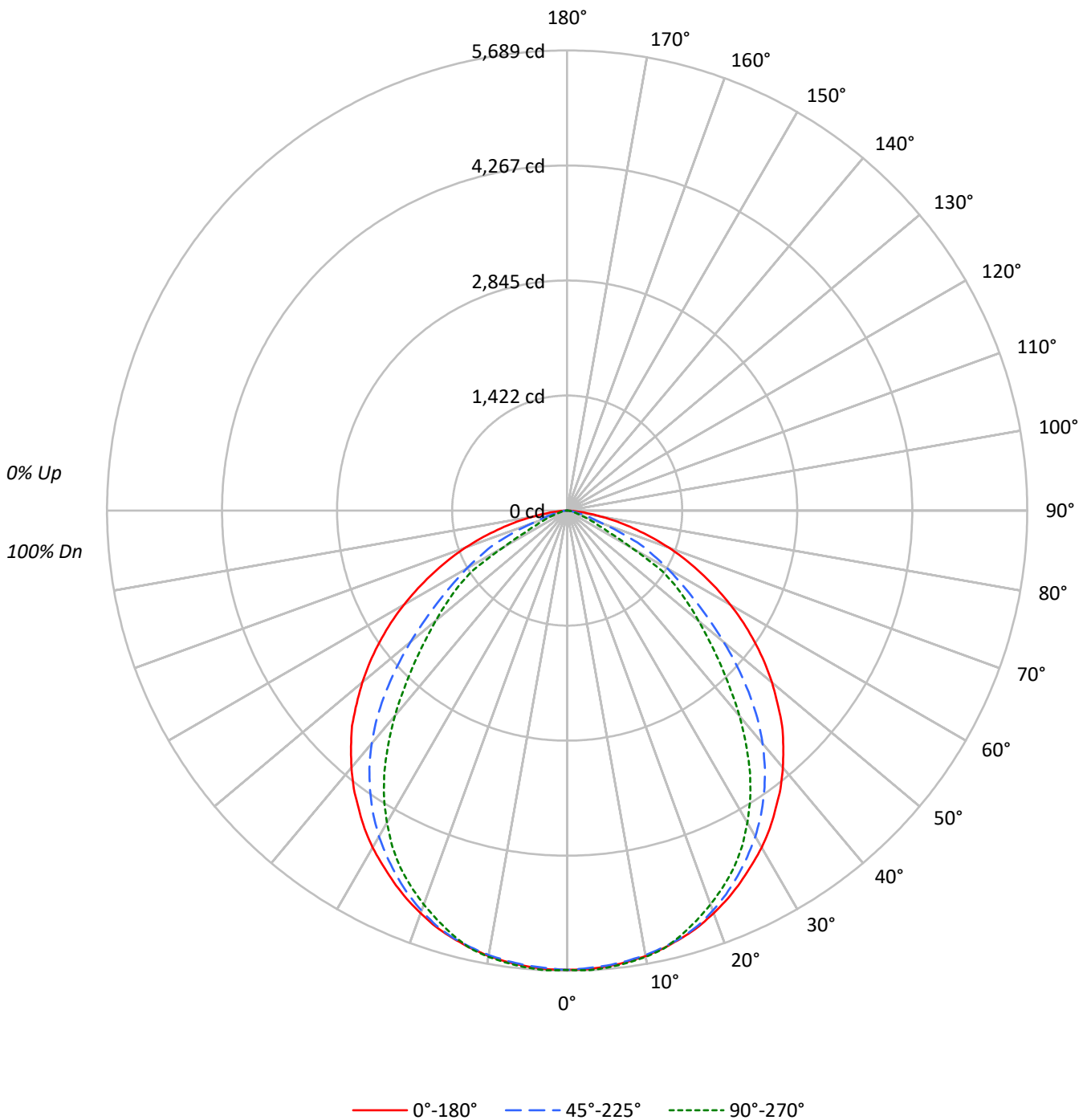
Input Watts (W): 87  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	34929	34929	34929
5°	34935	34864	35024
10°	34922	34847	34990
15°	34839	34802	34623
20°	34671	34456	33918
25°	34414	33829	33087
30°	34164	33049	31636
35°	33757	31891	29581
40°	33312	30176	26615
45°	32706	27598	23256
50°	31625	24163	20315
55°	30335	20583	17734
60°	28657	17654	11321
65°	26554	14726	6002
70°	23967	8368	3890
75°	20136	5126	2419
80°	15302	2586	2118
85°	9294	2357	1905



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	537.6	4.2
10°-20°	1538.2	12.0
20°-30°	2292.9	18.0
30°-40°	2640.7	20.7
40°-50°	2457.6	19.2
50°-60°	1870.0	14.6
60°-70°	1003.8	7.9
70°-80°	369.3	2.9
80°-90°	62.8	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°	4368.8	34.2
0°-40°	7009.5	54.9
0°-60°	11337.1	88.8
0°-90°	12773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12773.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5679	5679	5679	5679	5679	
5°	5658	5642	5647	5666	5672	538
15°	5471	5463	5465	5455	5437	1544
25°	5071	5067	4985	4914	4875	2337
35°	4496	4441	4247	4034	3940	2814
45°	3760	3579	3173	2796	2674	2889
55°	2829	2509	1919	1709	1654	2527
65°	1824	1340	1012	501	412	1809
75°	847	555	216	112	102	908
85°	132	43	33	29	27	176
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5678.8	5678.8	5678.8	5678.8	5678.8
2.5°	5674.8	5657.5	5663.3	5681.7	5689.2
5°	5658.1	5642.0	5646.6	5666.2	5672.5
7.5°	5630.5	5615.0	5618.4	5636.8	5643.2
10°	5591.4	5575.3	5579.3	5597.1	5602.3
12.5°	5538.5	5523.5	5527.0	5539.6	5545.4
15°	5471.2	5462.6	5465.4	5455.1	5437.2
17.5°	5395.8	5383.2	5379.7	5333.7	5314.7
20°	5296.9	5292.3	5264.1	5207.2	5181.9
22.5°	5192.8	5184.2	5135.3	5066.8	5036.3
25°	5070.9	5066.8	4984.6	4913.8	4875.3
27.5°	4939.7	4929.9	4824.1	4735.5	4683.2
30°	4810.3	4786.1	4653.3	4529.0	4454.3
32.5°	4663.6	4618.2	4459.4	4300.7	4214.4
35°	4495.7	4441.0	4247.2	4033.8	3939.5
37.5°	4332.9	4250.6	4017.1	3750.2	3629.4
40°	4148.8	4030.9	3758.3	3448.2	3314.8
42.5°	3955.0	3811.2	3482.8	3122.1	2985.2
45°	3760.0	3578.8	3172.7	2796.0	2673.5
47.5°	3528.2	3336.1	2850.6	2484.8	2379.5
50°	3305.0	3080.7	2525.1	2194.9	2123.0
52.5°	3071.5	2799.4	2208.7	1949.9	1880.3
55°	2828.8	2509.0	1919.4	1708.9	1653.7
57.5°	2584.9	2210.4	1662.9	1489.7	1390.8
60°	2329.5	1914.2	1435.1	1210.8	920.3
62.5°	2078.2	1605.9	1207.9	759.2	585.5
65°	1824.5	1340.2	1011.8	501.0	412.4
67.5°	1582.3	1083.1	721.9	362.9	308.9
70°	1332.7	885.8	465.3	260.0	216.3
72.5°	1082.5	712.7	319.2	170.8	138.6
75°	847.3	555.1	215.7	111.6	101.8
77.5°	635.0	383.1	120.2	82.8	77.7
80°	432.0	229.5	73.0	63.3	59.8
82.5°	258.8	109.9	52.9	46.6	44.9
85°	131.7	42.6	33.4	28.8	27.0
87.5°	39.1	21.3	15.0	11.5	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)