

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: P364414

Luminaire Tested: **VHB-15-W-UNV-L850-CD-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P364414  
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-15-W-UNV-L850-CD-U  
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS AND 5000K, 80CRI LEDS

Light Source: -  
Ballast/Driver: -

**Summary**

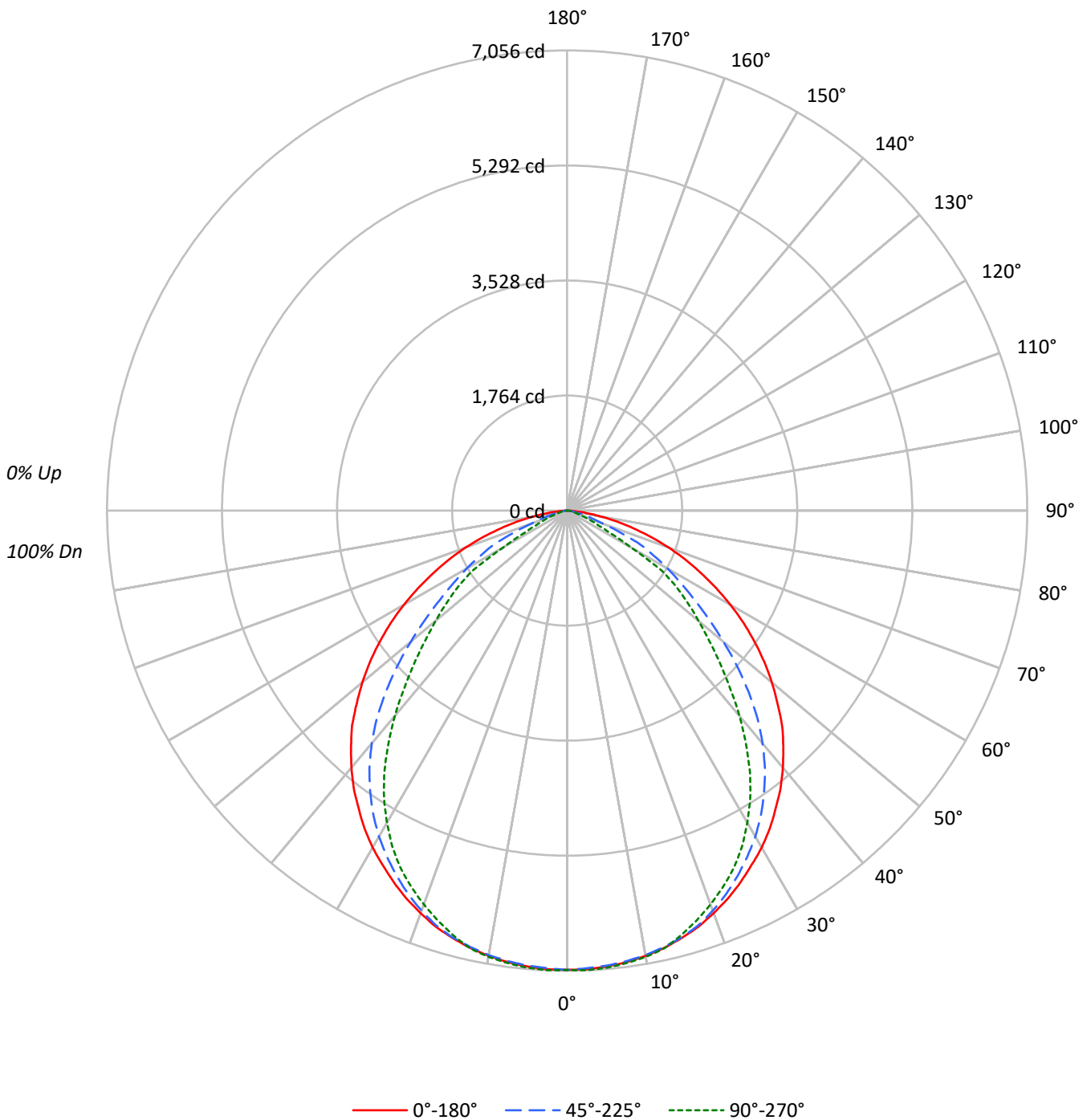
Lumens per Lamp: N/A  
Luminaire Lumens: 15841.0 lumens  
Efficiency: N/A  
Efficacy: 141.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.17 / 1.28  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 111.6  
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°	43319	43319	43319
5°	43326	43238	43436
10°	43310	43216	43395
15°	43207	43162	42939
20°	42999	42733	42065
25°	42680	41954	41034
30°	42370	40987	39234
35°	41865	39551	36685
40°	41313	37425	33008
45°	40562	34227	28841
50°	39222	29966	25195
55°	37620	25526	21993
60°	35539	21894	14041
65°	32931	18262	7444
70°	29723	10378	4823
75°	24972	6357	3001
80°	18975	3209	2628
85°	11532	2922	2364



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	666.8	4.2
10°-20°	1907.7	12.0
20°-30°	2843.7	18.0
30°-40°	3275.0	20.7
40°-50°	3047.9	19.2
50°-60°	2319.2	14.6
60°-70°	1244.9	7.9
70°-80°	458.0	2.9
80°-90°	77.9	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°	5418.1	34.2
0°-40°	8693.1	54.9
0°-60°	14060.2	88.8
0°-90°	15841.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15841.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7043	7043	7043	7043	7043	
5°	7017	6997	7003	7027	7035	667
15°	6785	6775	6778	6765	6743	1915
25°	6289	6284	6182	6094	6046	2899
35°	5576	5508	5267	5003	4886	3490
45°	4663	4438	3935	3468	3316	3583
55°	3508	3112	2380	2119	2051	3134
65°	2263	1662	1255	621	512	2244
75°	1051	688	268	138	126	1126
85°	163	53	41	36	34	218
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7042.8	7042.8	7042.8	7042.8	7042.8
2.5°	7037.9	7016.5	7023.6	7046.4	7055.7
5°	7017.2	6997.2	7002.9	7027.2	7035.0
7.5°	6982.9	6963.7	6967.9	6990.8	6998.6
10°	6934.4	6914.4	6919.4	6941.5	6948.0
12.5°	6868.8	6850.2	6854.5	6870.2	6877.3
15°	6785.3	6774.6	6778.2	6765.4	6743.2
17.5°	6691.9	6676.2	6671.9	6614.8	6591.3
20°	6569.2	6563.5	6528.5	6457.9	6426.5
22.5°	6440.1	6429.4	6368.7	6283.8	6246.0
25°	6288.8	6283.8	6181.8	6094.1	6046.3
27.5°	6126.2	6114.1	5982.8	5873.0	5808.0
30°	5965.7	5935.7	5771.0	5616.9	5524.1
32.5°	5783.8	5727.4	5530.6	5333.7	5226.7
35°	5575.5	5507.7	5267.3	5002.7	4885.7
37.5°	5373.6	5271.6	4982.0	4651.0	4501.2
40°	5145.3	4999.1	4661.0	4276.5	4111.0
42.5°	4905.0	4726.6	4319.3	3872.0	3702.3
45°	4663.1	4438.4	3934.8	3467.6	3315.6
47.5°	4375.7	4137.4	3535.3	3081.6	2951.1
50°	4098.9	3820.7	3131.6	2722.1	2633.0
52.5°	3809.3	3471.8	2739.2	2418.2	2331.9
55°	3508.2	3111.6	2380.4	2119.3	2050.9
57.5°	3205.8	2741.4	2062.3	1847.6	1724.9
60°	2889.0	2374.0	1779.8	1501.6	1141.4
62.5°	2577.3	1991.7	1498.0	941.6	726.2
65°	2262.7	1662.1	1254.8	621.3	511.5
67.5°	1962.4	1343.2	895.2	450.1	383.1
70°	1652.8	1098.5	577.1	322.4	268.2
72.5°	1342.5	883.8	395.9	211.9	171.9
75°	1050.8	688.4	267.5	138.4	126.3
77.5°	787.5	475.1	149.1	102.7	96.3
80°	535.7	284.6	90.6	78.5	74.2
82.5°	321.0	136.2	65.6	57.8	55.6
85°	163.4	52.8	41.4	35.7	33.5
87.5°	48.5	26.4	18.5	14.3	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)