

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: P364424

Luminaire Tested: **VHB-12-N-UNV-L835-CD-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P364424  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1909-491-2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-12-N-UNV-L835-CD-U  
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 3500K, 80CRI LEDS

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11953.0 lumens  
Efficiency: N/A  
Efficacy: 137.4 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct

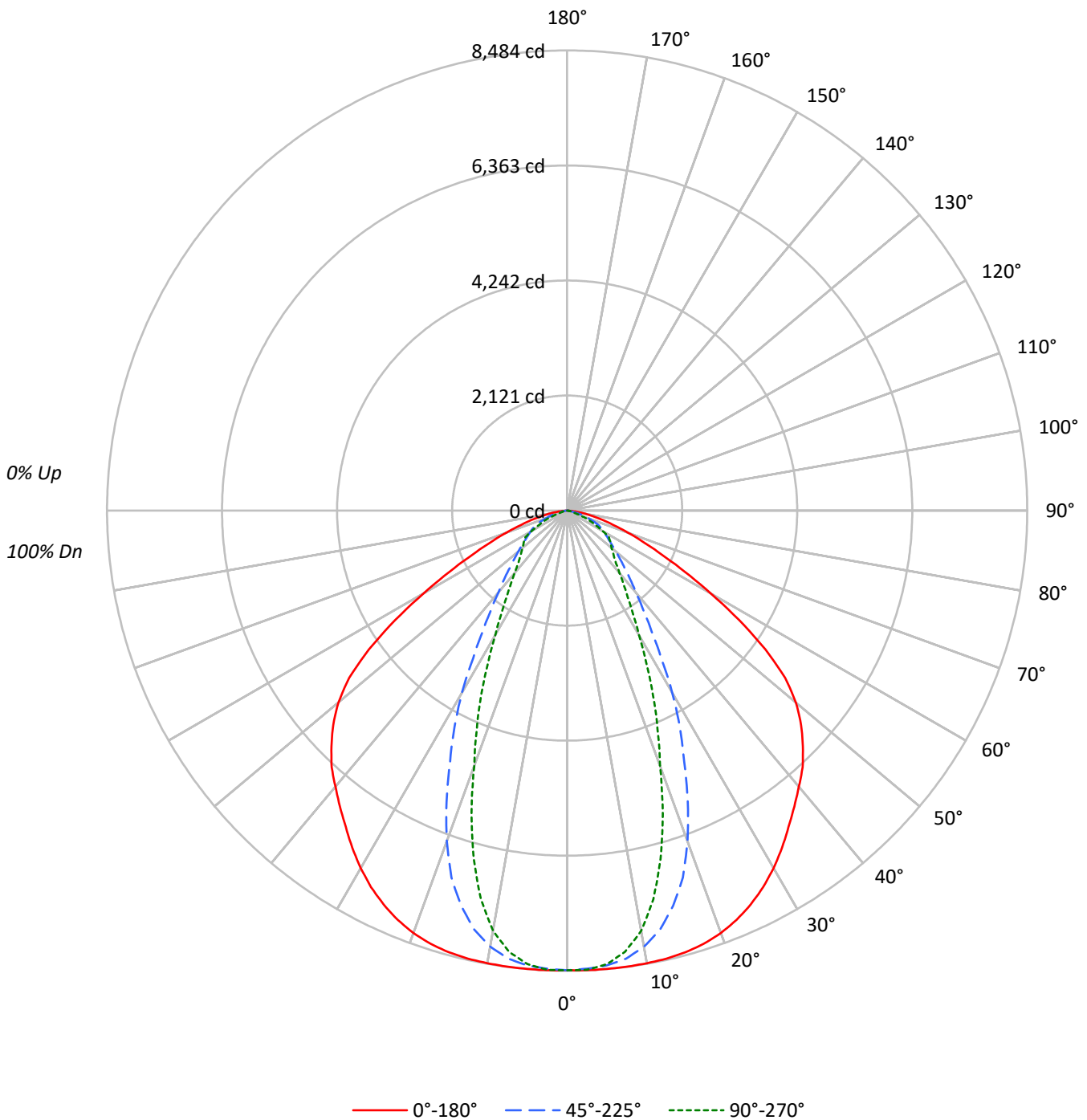
Input Watts (W): 87  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	108	104	101	109	105	102	100	101	99	96	97	95	94	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	74	68	64	71	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	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	57	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42					42			
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39					39			
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36					36			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	52132	52132	52132
5°	52376	51979	51828
10°	52926	50982	49120
15°	53682	48035	42353
20°	54260	42436	32791
25°	54369	34652	25409
30°	54064	27521	18806
35°	53446	20394	14623
40°	53363	15837	12069
45°	53475	13033	10721
50°	52716	11272	10225
55°	47856	10048	10332
60°	37624	9603	9414
65°	27945	9307	7085
70°	21433	7451	4325
75°	16315	5314	2386
80°	11979	2472	1927
85°	7495	2124	1715



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	796.3	6.7
10°-20°	2096.2	17.5
20°-30°	2531.4	21.2
30°-40°	2263.4	18.9
40°-50°	1772.4	14.8
50°-60°	1339.2	11.2
60°-70°	795.4	6.7
70°-80°	305.7	2.6
80°-90°	53.1	0.4
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°	5423.9	45.4
0°-40°	7687.3	64.3
0°-60°	10798.9	90.3
0°-90°	11953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11953.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8476	8476	8476	8476	8476	
5°	8483	8446	8419	8408	8394	809
15°	8430	8152	7543	6913	6651	2382
25°	8011	7069	5106	4026	3744	3689
35°	7118	5065	2716	2118	1948	4464
45°	6148	2619	1498	1266	1232	4732
55°	4463	1421	937	933	964	3919
65°	1920	798	640	533	487	1978
75°	686	384	224	110	100	752
85°	106	37	30	26	24	142
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8475.6	8475.6	8475.6	8475.6	8475.6
2.5°	8483.6	8455.6	8453.4	8471.4	8474.1
5°	8483.0	8446.0	8418.6	8407.5	8394.2
7.5°	8480.4	8424.4	8331.9	8243.1	8201.9
10°	8474.1	8374.7	8162.8	7960.9	7864.7
12.5°	8460.3	8285.9	7911.7	7540.7	7338.8
15°	8430.2	8152.2	7543.4	6912.8	6651.2
17.5°	8375.7	7967.7	7092.0	6202.0	5865.3
20°	8289.6	7733.1	6483.2	5391.3	5009.7
22.5°	8165.9	7426.6	5812.5	4661.4	4356.5
25°	8011.1	7068.8	5105.9	4025.6	3743.9
27.5°	7827.2	6651.2	4497.0	3433.7	3156.2
30°	7612.1	6163.4	3875.0	2874.5	2647.8
32.5°	7371.6	5649.7	3225.5	2448.0	2261.5
35°	7117.9	5065.2	2716.0	2117.7	1947.5
37.5°	6879.0	4439.4	2300.1	1825.5	1706.0
40°	6646.0	3782.0	1972.4	1594.5	1503.1
42.5°	6426.1	3153.1	1721.9	1401.1	1341.3
45°	6147.6	2619.3	1498.3	1265.8	1232.5
47.5°	5852.1	2210.7	1320.7	1155.8	1144.2
50°	5509.1	1883.1	1178.0	1060.2	1068.6
52.5°	5064.1	1624.1	1042.7	992.5	1017.4
55°	4462.7	1421.2	937.0	933.3	963.5
57.5°	3758.2	1227.2	853.5	876.8	910.6
60°	3058.5	1071.3	780.6	814.4	765.3
62.5°	2443.3	928.1	711.4	649.5	607.3
65°	1920.1	798.0	639.5	533.3	486.8
67.5°	1531.1	677.0	538.0	424.4	385.8
70°	1191.8	569.2	414.3	318.7	240.5
72.5°	913.3	475.7	323.4	181.3	136.9
75°	686.5	383.7	223.6	110.5	100.4
77.5°	489.4	284.9	119.4	79.8	74.0
80°	338.2	182.9	69.8	57.6	54.4
82.5°	209.8	88.3	47.6	41.2	38.6
85°	106.2	37.0	30.1	26.4	24.3
87.5°	35.4	18.0	13.7	12.7	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)