

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: P364426

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364426
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-L850-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 5000K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12524.0 lumens
Efficiency: N/A
Efficacy: 144.0 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

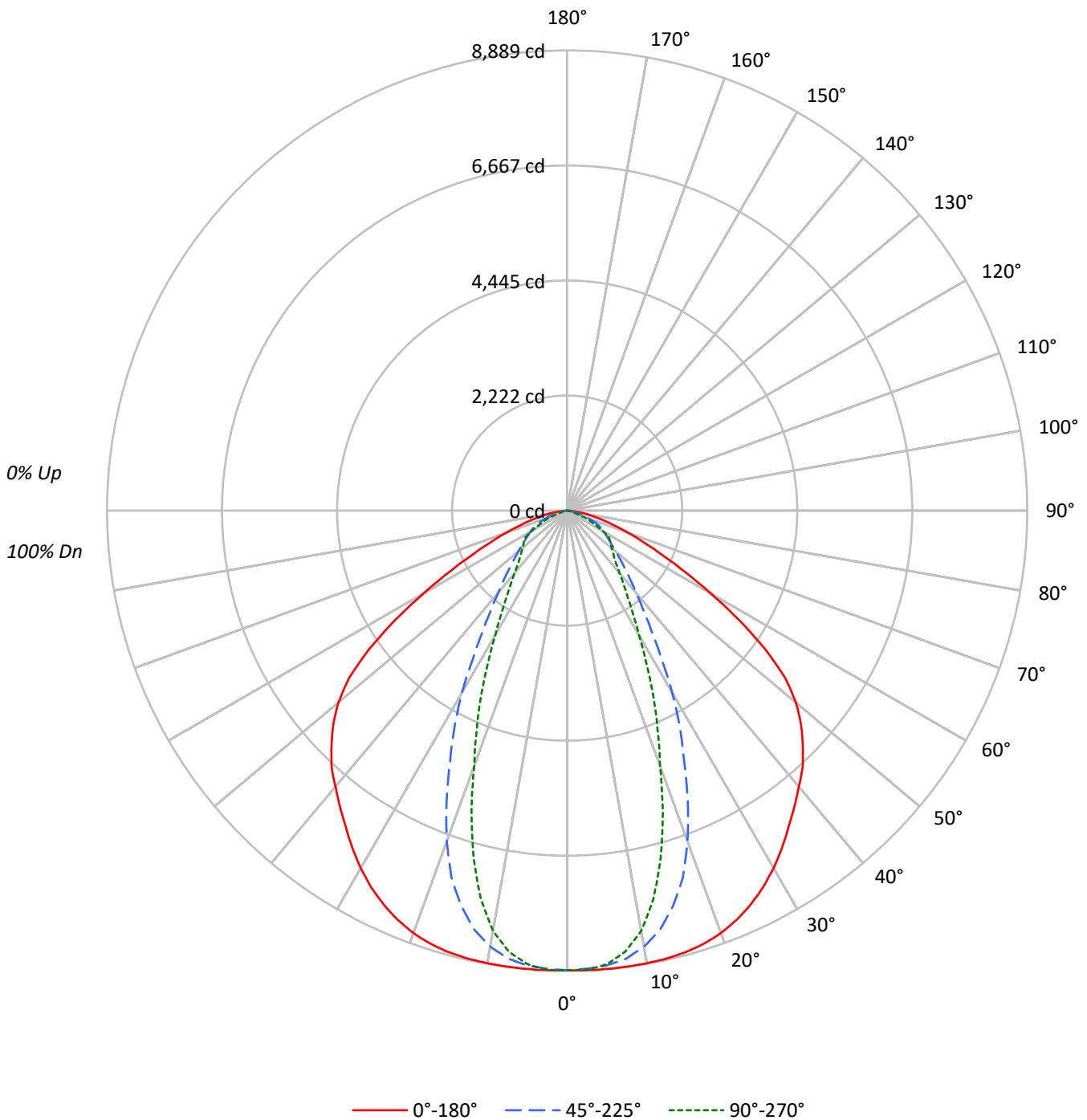
Input Watts (W): 87
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	54622	54622	54622
5°	54879	54462	54304
10°	55455	53417	51467
15°	56246	50329	44377
20°	56852	44463	34358
25°	56966	36307	26623
30°	56646	28836	19704
35°	55999	21368	15322
40°	55911	16593	12645
45°	56029	13656	11232
50°	55235	11811	10714
55°	50142	10528	10825
60°	39422	10061	9863
65°	29280	9751	7423
70°	22456	7807	4532
75°	17094	5566	2500
80°	12553	2589	2019
85°	7855	2230	1800



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	834.3	6.7
10°-20°	2196.4	17.5
20°-30°	2652.3	21.2
30°-40°	2371.5	18.9
40°-50°	1857.0	14.8
50°-60°	1403.1	11.2
60°-70°	833.4	6.7
70°-80°	320.3	2.6
80°-90°	55.7	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°	5683.0	45.4
0°-40°	8054.5	64.3
0°-60°	11314.7	90.3
0°-90°	12524.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12524.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8880	8880	8880	8880	8880	
5°	8888	8850	8821	8809	8795	848
15°	8833	8542	7904	7243	6969	2496
25°	8394	7406	5350	4218	3923	3865
35°	7458	5307	2846	2219	2041	4677
45°	6441	2744	1570	1326	1291	4958
55°	4676	1489	982	978	1010	4106
65°	2012	836	670	559	510	2073
75°	719	402	234	116	105	787
85°	111	39	32	28	26	148
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8880.5	8880.5	8880.5	8880.5	8880.5
2.5°	8888.8	8859.5	8857.3	8876.1	8878.9
5°	8888.3	8849.5	8820.7	8809.1	8795.2
7.5°	8885.5	8826.8	8729.9	8636.9	8593.7
10°	8878.9	8774.8	8552.7	8341.2	8240.4
12.5°	8864.5	8681.7	8289.7	7900.9	7689.4
15°	8832.9	8541.6	7903.7	7243.1	6969.0
17.5°	8775.9	8348.4	7430.8	6498.3	6145.5
20°	8685.6	8102.5	6792.9	5648.8	5249.0
22.5°	8556.0	7781.3	6090.2	4884.1	4564.6
25°	8393.8	7406.4	5349.8	4217.9	3922.8
27.5°	8201.1	6969.0	4711.9	3597.7	3307.0
30°	7975.7	6457.9	4060.1	3011.9	2774.3
32.5°	7723.7	5919.6	3379.5	2565.0	2369.5
35°	7457.9	5307.2	2845.7	2218.9	2040.6
37.5°	7207.6	4651.5	2409.9	1912.7	1787.5
40°	6963.4	3962.6	2066.6	1670.7	1574.9
42.5°	6733.1	3303.7	1804.1	1468.0	1405.4
45°	6441.2	2744.4	1569.9	1326.2	1291.3
47.5°	6131.7	2316.3	1383.8	1211.1	1198.9
50°	5772.3	1973.0	1234.3	1110.8	1119.7
52.5°	5306.1	1701.7	1092.6	1039.9	1066.0
55°	4675.9	1489.0	981.8	977.9	1009.5
57.5°	3937.7	1285.8	894.3	918.7	954.1
60°	3204.6	1122.5	817.9	853.3	801.8
62.5°	2560.0	972.4	745.4	680.6	636.3
65°	2011.8	836.2	670.0	558.7	510.0
67.5°	1604.2	709.4	563.7	444.7	404.2
70°	1248.7	596.4	434.1	333.9	252.0
72.5°	956.9	498.4	338.9	189.9	143.4
75°	719.3	402.0	234.2	115.7	105.2
77.5°	512.8	298.5	125.1	83.6	77.5
80°	354.4	191.6	73.1	60.4	57.0
82.5°	219.8	92.5	49.8	43.2	40.4
85°	111.3	38.8	31.6	27.7	25.5
87.5°	37.1	18.8	14.4	13.3	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)