

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: P364436

Luminaire Tested: **VHB-9-N-UNV-L835-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364436
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-9-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: 8842.0 lumens
Efficiency: N/A
Efficacy: 136.9 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

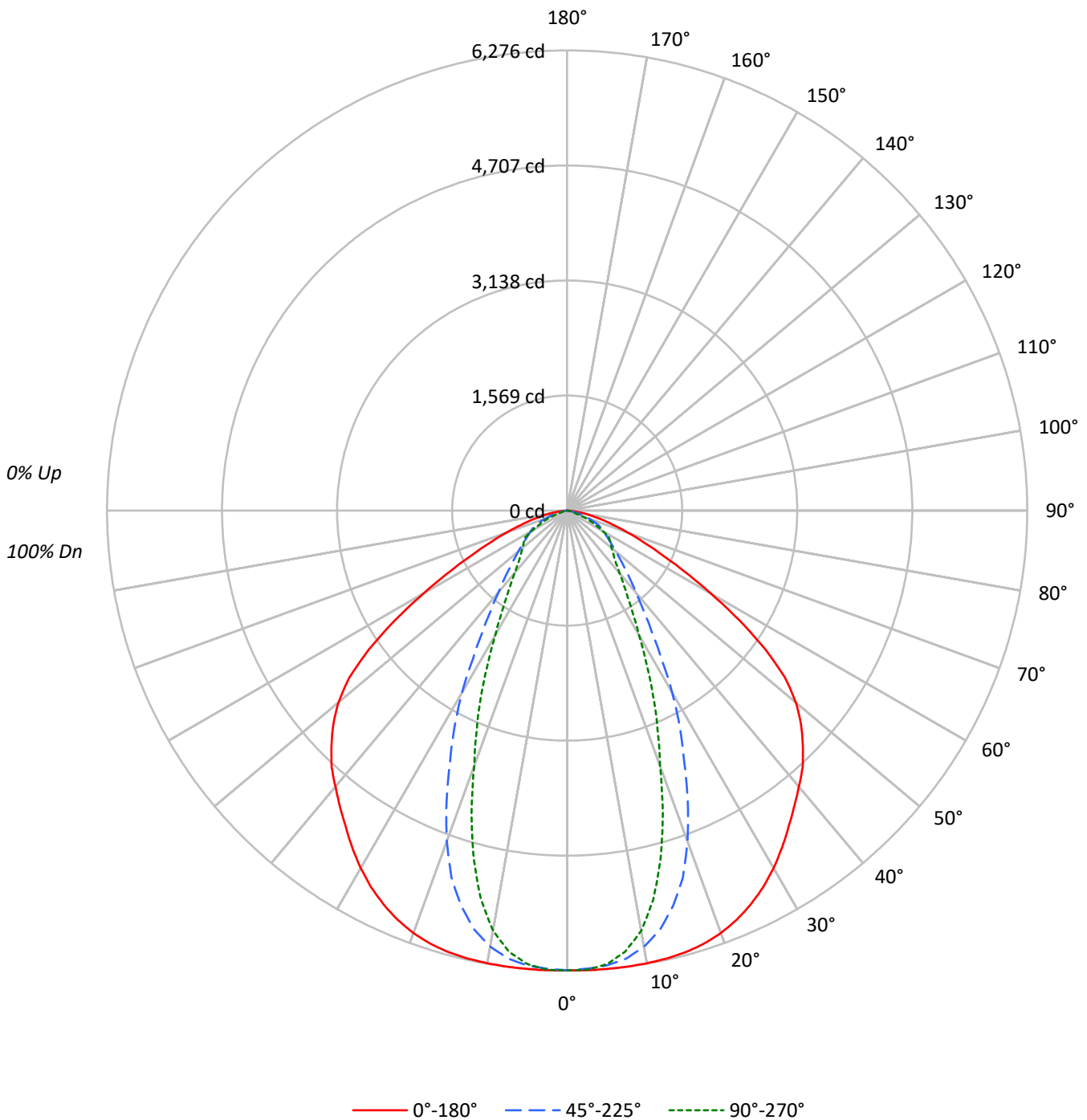
Input Watts (W): 64.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	38564	38564	38564
5°	38745	38450	38339
10°	39151	37713	36335
15°	39710	35532	31330
20°	40138	31391	24256
25°	40218	25633	18796
30°	39992	20359	13911
35°	39536	15086	10818
40°	39474	11715	8928
45°	39557	9641	7930
50°	38996	8338	7564
55°	35401	7434	7643
60°	27831	7103	6964
65°	20671	6886	5241
70°	15854	5512	3199
75°	12068	3931	1766
80°	8862	1828	1427
85°	5547	1574	1270



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	589.1	6.7
10°-20°	1550.6	17.5
20°-30°	1872.6	21.2
30°-40°	1674.3	18.9
40°-50°	1311.1	14.8
50°-60°	990.6	11.2
60°-70°	588.4	6.7
70°-80°	226.1	2.6
80°-90°	39.3	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°	4012.2	45.4
0°-40°	5686.5	64.3
0°-60°	7988.2	90.3
0°-90°	8842.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8842.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6270	6270	6270	6270	6270	
5°	6275	6248	6228	6219	6210	599
15°	6236	6030	5580	5114	4920	1762
25°	5926	5229	3777	2978	2770	2729
35°	5265	3747	2009	1566	1441	3302
45°	4548	1938	1108	936	912	3500
55°	3301	1051	693	690	713	2899
65°	1420	590	473	394	360	1463
75°	508	284	165	82	74	556
85°	79	27	22	20	18	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6269.7	6269.7	6269.7	6269.7	6269.7
2.5°	6275.6	6254.8	6253.3	6266.6	6268.5
5°	6275.2	6247.8	6227.5	6219.3	6209.5
7.5°	6273.2	6231.8	6163.3	6097.7	6067.2
10°	6268.5	6195.0	6038.2	5888.9	5817.7
12.5°	6258.3	6129.3	5852.5	5578.1	5428.8
15°	6236.1	6030.4	5580.0	5113.6	4920.1
17.5°	6195.8	5894.0	5246.2	4587.8	4338.8
20°	6132.1	5720.4	4795.8	3988.1	3705.8
22.5°	6040.6	5493.6	4299.7	3448.2	3222.6
25°	5926.0	5229.0	3777.0	2977.9	2769.5
27.5°	5790.0	4920.1	3326.6	2540.0	2334.8
30°	5630.9	4559.3	2866.5	2126.4	1958.7
32.5°	5453.0	4179.3	2386.0	1810.9	1672.9
35°	5265.3	3746.9	2009.1	1566.5	1440.7
37.5°	5088.6	3284.0	1701.4	1350.3	1262.0
40°	4916.2	2797.6	1459.0	1179.5	1111.9
42.5°	4753.6	2332.4	1273.7	1036.4	992.2
45°	4547.5	1937.6	1108.3	936.3	911.7
47.5°	4329.0	1635.3	977.0	855.0	846.4
50°	4075.3	1393.0	871.4	784.2	790.5
52.5°	3746.1	1201.4	771.3	734.2	752.6
55°	3301.2	1051.3	693.2	690.4	712.7
57.5°	2780.1	907.8	631.4	648.6	673.6
60°	2262.4	792.5	577.4	602.5	566.1
62.5°	1807.4	686.5	526.2	480.5	449.2
65°	1420.3	590.3	473.1	394.5	360.1
67.5°	1132.6	500.8	398.0	313.9	285.4
70°	881.6	421.1	306.5	235.7	177.9
72.5°	675.6	351.9	239.3	134.1	101.3
75°	507.8	283.8	165.4	81.7	74.3
77.5°	362.0	210.7	88.4	59.0	54.7
80°	250.2	135.3	51.6	42.6	40.3
82.5°	155.2	65.3	35.2	30.5	28.5
85°	78.6	27.4	22.3	19.5	18.0
87.5°	26.2	13.3	10.2	9.4	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)