

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: P364437

Luminaire Tested: **VHB-9-N-UNV-L840-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364437
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-L840-CD-U
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS AND 4000K, 80CRI LEDS

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9016.0 lumens
Efficiency: N/A
Efficacy: 139.6 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

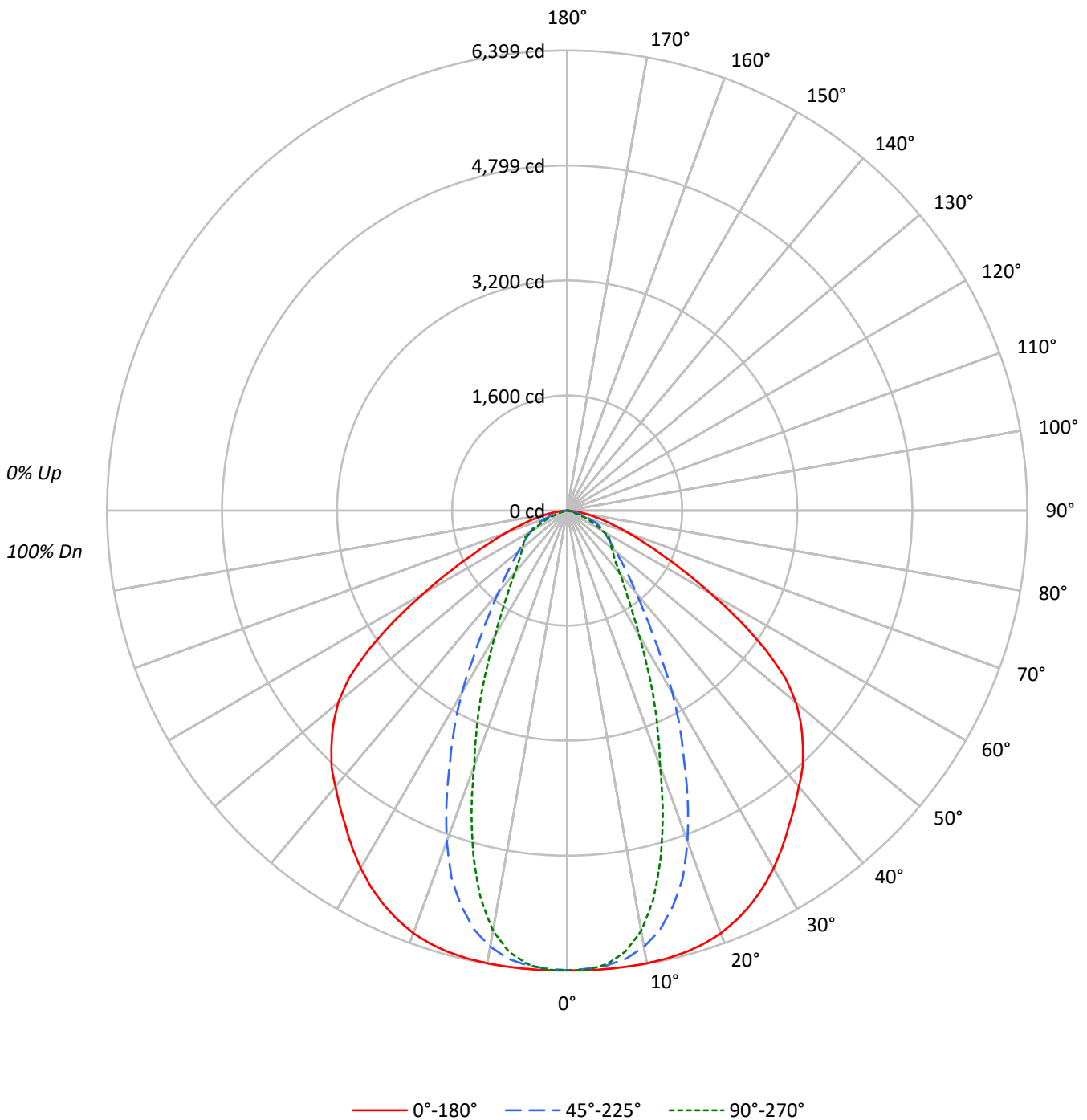
Input Watts (W): 64.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	39323	39323	39323
5°	39507	39207	39094
10°	39922	38455	37051
15°	40491	36232	31946
20°	40927	32009	24734
25°	41010	26137	19165
30°	40779	20759	14185
35°	40314	15382	11030
40°	40251	11945	9103
45°	40335	9831	8086
50°	39764	8503	7714
55°	36098	7579	7793
60°	28380	7243	7100
65°	21079	7021	5344
70°	16166	5620	3262
75°	12305	4007	1799
80°	9036	1863	1456
85°	5653	1602	1291



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	600.6	6.7
10°-20°	1581.2	17.5
20°-30°	1909.4	21.2
30°-40°	1707.2	18.9
40°-50°	1336.9	14.8
50°-60°	1010.1	11.2
60°-70°	599.9	6.7
70°-80°	230.5	2.6
80°-90°	40.1	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°	4091.2	45.4
0°-40°	5798.4	64.3
0°-60°	8145.5	90.3
0°-90°	9016.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9016.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6393	6393	6393	6393	6393	
5°	6399	6371	6350	6342	6332	611
15°	6359	6149	5690	5214	5017	1797
25°	6043	5332	3851	3036	2824	2782
35°	5369	3821	2049	1597	1469	3367
45°	4637	1976	1130	955	930	3569
55°	3366	1072	707	704	727	2956
65°	1448	602	482	402	367	1492
75°	518	289	169	83	76	567
85°	80	28	23	20	18	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6393.1	6393.1	6393.1	6393.1	6393.1
2.5°	6399.0	6377.9	6376.3	6389.9	6391.9
5°	6398.6	6370.7	6350.0	6341.6	6331.7
7.5°	6396.7	6354.4	6284.6	6217.7	6186.6
10°	6391.9	6316.9	6157.1	6004.8	5932.2
12.5°	6381.5	6250.0	5967.7	5687.9	5535.6
15°	6358.8	6149.1	5689.9	5214.3	5016.9
17.5°	6317.7	6010.0	5349.4	4678.1	4424.2
20°	6252.7	5833.0	4890.2	4066.6	3778.8
22.5°	6159.5	5601.8	4384.3	3516.0	3286.0
25°	6042.7	5331.9	3851.3	3036.5	2824.0
27.5°	5903.9	5016.9	3392.1	2590.0	2380.7
30°	5741.7	4649.0	2922.9	2168.2	1997.2
32.5°	5560.3	4261.5	2432.9	1846.5	1705.8
35°	5368.9	3820.6	2048.6	1597.4	1469.0
37.5°	5188.8	3348.6	1734.9	1376.9	1286.8
40°	5013.0	2852.7	1487.7	1202.7	1133.7
42.5°	4847.1	2378.3	1298.8	1056.8	1011.8
45°	4637.0	1975.7	1130.2	954.8	929.6
47.5°	4414.2	1667.5	996.2	871.8	863.1
50°	4155.5	1420.4	888.6	799.7	806.1
52.5°	3819.8	1225.0	786.5	748.7	767.4
55°	3366.2	1072.0	706.8	704.0	726.7
57.5°	2834.8	925.7	643.8	661.4	686.9
60°	2307.0	808.1	588.8	614.3	577.2
62.5°	1842.9	700.0	536.6	489.9	458.0
65°	1448.3	602.0	482.4	402.2	367.2
67.5°	1154.9	510.7	405.8	320.1	291.0
70°	898.9	429.3	312.5	240.4	181.4
72.5°	688.9	358.8	244.0	136.7	103.2
75°	517.8	289.4	168.6	83.3	75.7
77.5°	369.1	214.9	90.1	60.2	55.8
80°	255.1	137.9	52.6	43.5	41.1
82.5°	158.3	66.6	35.9	31.1	29.1
85°	80.1	27.9	22.7	19.9	18.3
87.5°	26.7	13.6	10.4	9.6	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)