

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: P364433

Luminaire Tested: **VHB-24-N-UNV-L835-CD-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364433
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-24-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: 22172.0 lumens
Efficiency: N/A
Efficacy: 127.4 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

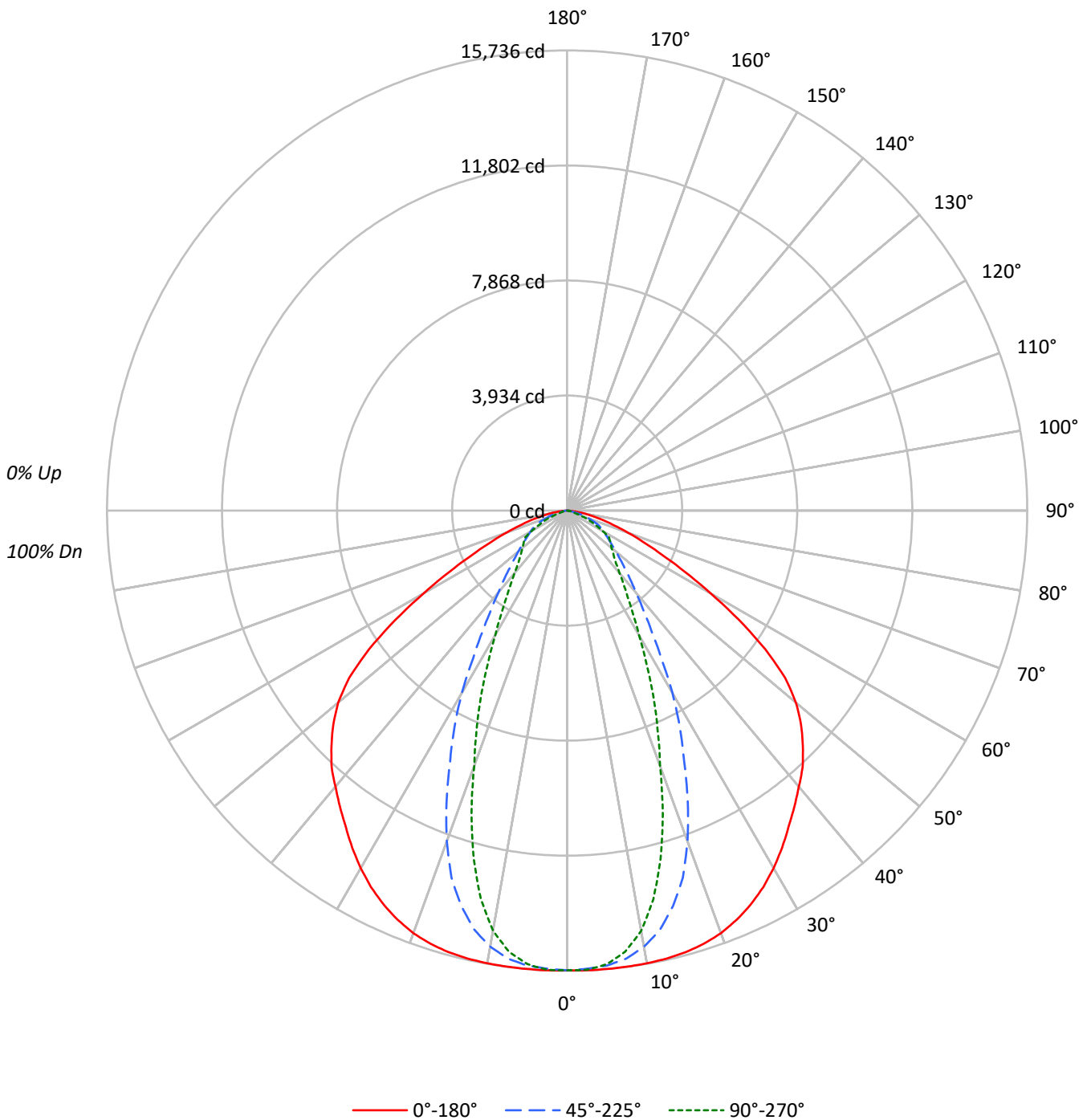
Input Watts (W): 174.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	96701	96701	96701
5°	97155	96417	96139
10°	98175	94568	91115
15°	99575	89100	78563
20°	100648	78715	60826
25°	100850	64277	47131
30°	100283	51051	34883
35°	99139	37829	27126
40°	98983	29376	22386
45°	99192	24176	19887
50°	97786	20910	18968
55°	88770	18639	19165
60°	69789	17813	17462
65°	51836	17264	13141
70°	39757	13822	8023
75°	30265	9855	4427
80°	22223	4583	3578
85°	13903	3945	3183



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1477.1	6.7
10°-20°	3888.3	17.5
20°-30°	4695.6	21.2
30°-40°	4198.4	18.9
40°-50°	3287.7	14.8
50°-60°	2484.1	11.2
60°-70°	1475.4	6.7
70°-80°	567.0	2.6
80°-90°	98.5	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°	10061.0	45.4
0°-40°	14259.4	64.3
0°-60°	20031.2	90.3
0°-90°	22172.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22172.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15722	15722	15722	15722	15722	
5°	15736	15667	15616	15595	15571	###
15°	15637	15122	13992	12823	12338	4418
25°	14860	13112	9471	7467	6945	6842
35°	13203	9396	5038	3928	3613	8280
45°	11403	4859	2779	2348	2286	8778
55°	8278	2636	1738	1731	1787	7269
65°	3562	1480	1186	989	903	3670
75°	1274	712	415	205	186	1394
85°	197	69	56	49	45	263
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15721.7	15721.7	15721.7	15721.7	15721.7
2.5°	15736.4	15684.5	15680.6	15713.9	15718.8
5°	15735.5	15666.8	15615.9	15595.3	15570.8
7.5°	15730.6	15626.6	15455.1	15290.4	15213.9
10°	15718.8	15534.5	15141.4	14766.9	14588.5
12.5°	15693.3	15369.8	14675.7	13987.5	13613.0
15°	15637.4	15121.8	13992.4	12822.9	12337.6
17.5°	15536.4	14779.6	13155.2	11504.3	10879.8
20°	15376.6	14344.3	12025.8	10000.5	9292.7
22.5°	15147.2	13775.8	10781.8	8646.6	8081.0
25°	14860.0	13112.1	9471.1	7467.3	6944.7
27.5°	14518.8	12337.6	8341.7	6369.3	5854.6
30°	14119.8	11432.7	7187.9	5332.1	4911.5
32.5°	13673.8	10479.8	5983.0	4540.9	4194.9
35°	13203.2	9395.6	5038.0	3928.2	3612.6
37.5°	12760.1	8234.9	4266.4	3386.1	3164.5
40°	12327.8	7015.3	3658.6	2957.7	2788.1
42.5°	11920.0	5848.7	3194.0	2598.9	2488.1
45°	11403.3	4858.6	2779.3	2347.9	2286.2
47.5°	10855.3	4100.8	2449.9	2144.0	2122.4
50°	10219.1	3493.0	2185.2	1966.6	1982.2
52.5°	9393.6	3012.6	1934.2	1841.1	1887.2
55°	8278.0	2636.1	1738.1	1731.3	1787.2
57.5°	6971.2	2276.4	1583.3	1626.4	1689.1
60°	5673.2	1987.2	1448.0	1510.7	1419.5
62.5°	4532.1	1721.5	1319.5	1204.8	1126.4
65°	3561.6	1480.3	1186.2	989.2	902.9
67.5°	2840.0	1255.8	998.0	787.2	715.6
70°	2210.7	1055.8	768.6	591.1	446.1
72.5°	1694.0	882.3	600.0	336.3	253.9
75°	1273.5	711.7	414.7	204.9	186.3
77.5°	907.8	528.4	221.6	148.0	137.2
80°	627.4	339.2	129.4	106.9	101.0
82.5°	389.2	163.7	88.2	76.5	71.6
85°	197.0	68.6	55.9	49.0	45.1
87.5°	65.7	33.3	25.5	23.5	21.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)