

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: P563256

Luminaire Tested: **VHB-12-N-UNV-L935-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563256
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364424)
Test Lab: INNOVATION CENTER
Issue Date: 6/3/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-12-N-UNV-L935-CD
Description: 12000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 90CRI, 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

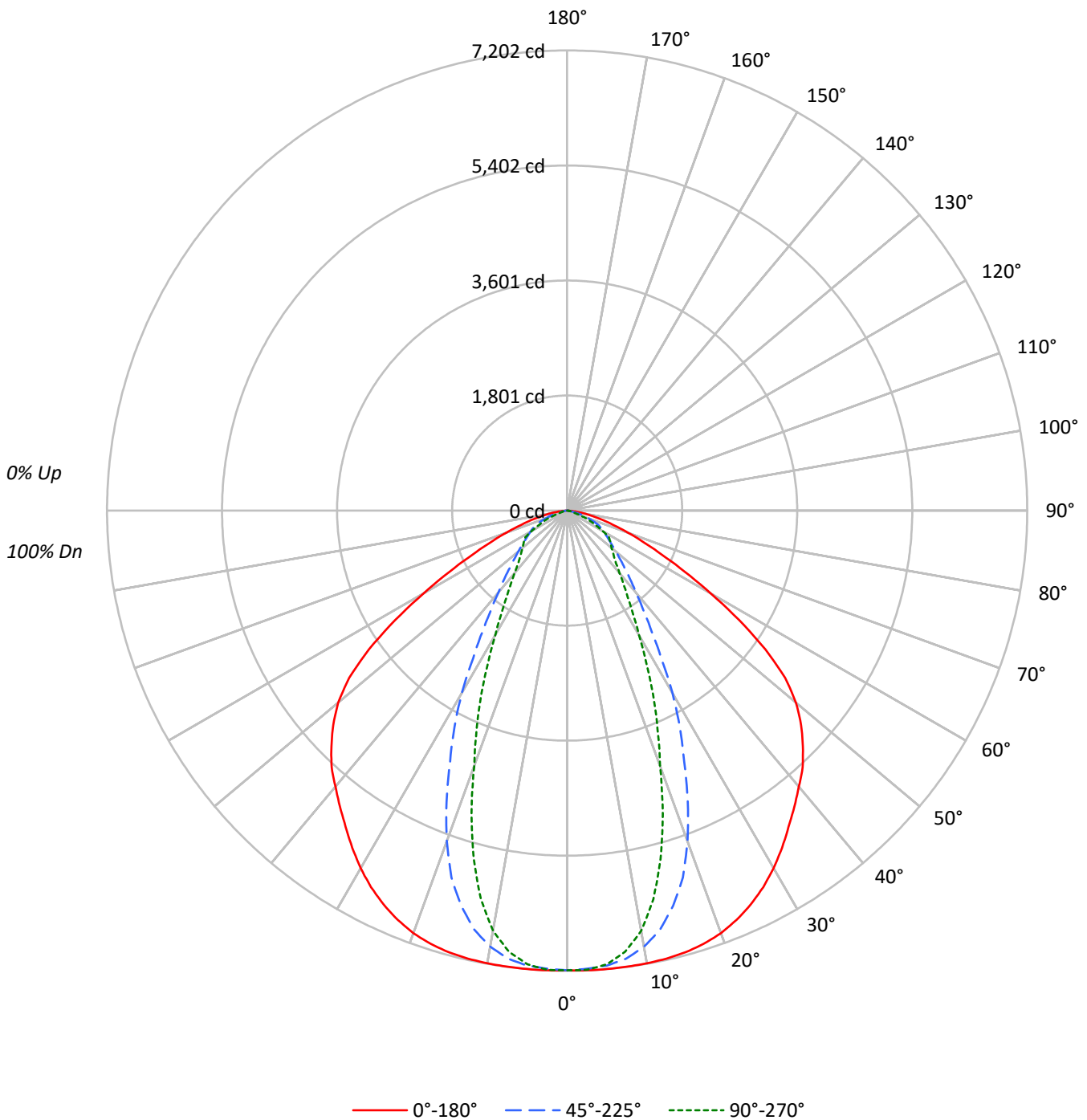
Lumens per Lamp: N/A
Luminaire Lumens: 10148.0 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 80
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°	41931	41931	41931
5°	42128	41808	41687
10°	42570	41006	39509
15°	43178	38636	34066
20°	43643	34132	26375
25°	43730	27872	20436
30°	43485	22136	15126
35°	42988	16403	11762
40°	42921	12738	9707
45°	43012	10482	8623
50°	42401	9066	8224
55°	38492	8082	8310
60°	30262	7723	7572
65°	22476	7486	5699
70°	17239	5992	3479
75°	13121	4273	1918
80°	9634	1990	1550
85°	6031	1712	1377



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	676.1	6.7
10°-20°	1779.7	17.5
20°-30°	2149.1	21.2
30°-40°	1921.6	18.9
40°-50°	1504.8	14.8
50°-60°	1136.9	11.2
60°-70°	675.3	6.7
70°-80°	259.5	2.6
80°-90°	45.1	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°	4604.9	45.4
0°-40°	6526.4	64.3
0°-60°	9168.1	90.3
0°-90°	10148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7196	7196	7196	7196	7196	
5°	7202	7171	7147	7138	7127	687
15°	7157	6921	6404	5869	5647	2022
25°	6801	6001	4335	3418	3178	3132
35°	6043	4300	2306	1798	1653	3790
45°	5219	2224	1272	1075	1046	4018
55°	3789	1207	796	792	818	3327
65°	1630	678	543	453	413	1680
75°	583	326	190	94	85	638
85°	90	31	26	22	21	120
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7195.7	7195.7	7195.7	7195.7	7195.7
2.5°	7202.5	7178.7	7176.9	7192.1	7194.4
5°	7202.0	7170.6	7147.3	7137.9	7126.6
7.5°	7199.8	7152.2	7073.7	6998.3	6963.3
10°	7194.4	7110.0	6930.1	6758.7	6677.1
12.5°	7182.7	7034.7	6717.0	6402.0	6230.6
15°	7157.2	6921.1	6404.3	5868.9	5646.8
17.5°	7110.9	6764.5	6021.0	5265.4	4979.6
20°	7037.8	6565.3	5504.2	4577.2	4253.2
22.5°	6932.8	6305.1	4934.8	3957.5	3698.6
25°	6801.4	6001.3	4334.9	3417.7	3178.5
27.5°	6645.2	5646.8	3817.9	2915.2	2679.6
30°	6462.6	5232.7	3289.8	2440.4	2248.0
32.5°	6258.4	4796.5	2738.4	2078.3	1920.0
35°	6043.0	4300.3	2305.9	1797.9	1653.4
37.5°	5840.2	3769.0	1952.8	1549.8	1448.4
40°	5642.4	3210.9	1674.6	1353.7	1276.1
42.5°	5455.7	2677.0	1461.9	1189.5	1138.8
45°	5219.3	2223.8	1272.0	1074.7	1046.4
47.5°	4968.4	1876.9	1121.3	981.3	971.4
50°	4677.2	1598.7	1000.1	900.1	907.2
52.5°	4299.4	1378.8	885.2	842.6	863.8
55°	3788.8	1206.6	795.5	792.4	818.0
57.5°	3190.7	1041.9	724.6	744.4	773.1
60°	2596.6	909.5	662.7	691.4	649.7
62.5°	2074.3	787.9	604.0	551.4	515.6
65°	1630.1	677.5	542.9	452.8	413.3
67.5°	1299.9	574.8	456.8	360.3	327.5
70°	1011.8	483.2	351.7	270.6	204.2
72.5°	775.4	403.9	274.6	153.9	116.2
75°	582.8	325.8	189.8	93.8	85.2
77.5°	415.5	241.9	101.4	67.7	62.8
80°	287.1	155.3	59.3	48.9	46.2
82.5°	178.1	75.0	40.4	35.0	32.8
85°	90.2	31.4	25.6	22.4	20.6
87.5°	30.1	15.3	11.6	10.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)