

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: P563254

Luminaire Tested: **VHB-12-N-UNV-L840-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563254
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-L840-CD
Description: 12000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 80CRI, 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

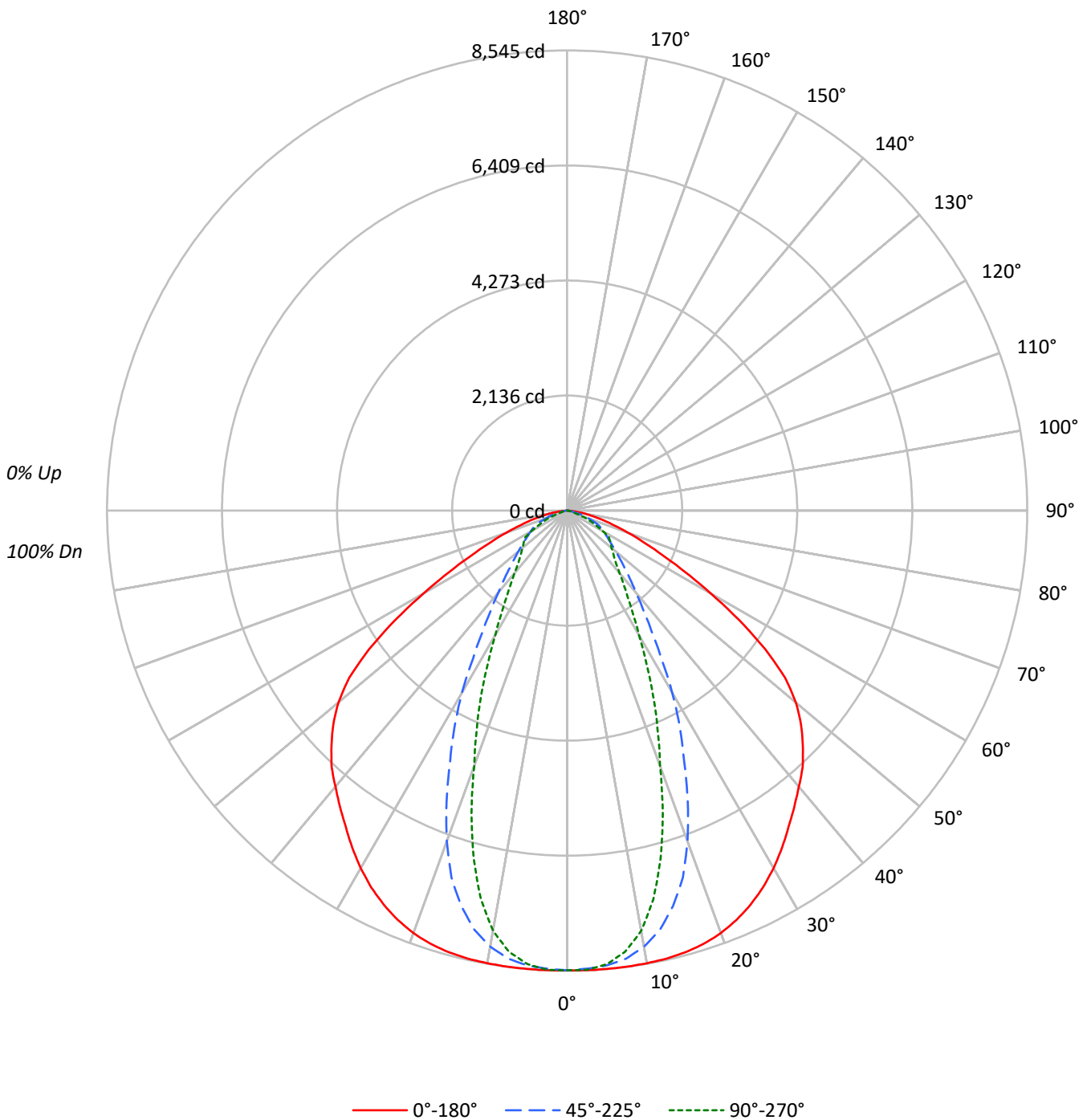
Lumens per Lamp: N/A
Luminaire Lumens: 12039.0 lumens
Efficiency: N/A
Efficacy: 150.5 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P563254

CATALOG NUMBER: VHB-12-N-UNV-L840-CD

Luminous Intensity Polar Plot





TEST NUMBER: P563254

CATALOG NUMBER: VHB-12-N-UNV-L840-CD

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°	49744	49744	49744
5°	49978	49599	49455
10°	50503	48647	46871
15°	51223	45835	40413
20°	51775	40492	31289
25°	51878	33065	24245
30°	51588	26261	17944
35°	50999	19459	13953
40°	50919	15112	11516
45°	51026	12436	10230
50°	50302	10756	9757
55°	45664	9587	9859
60°	35901	9163	8983
65°	26665	8881	6760
70°	20452	7110	4126
75°	15567	5070	2276
80°	11430	2359	1839
85°	7154	2026	1638



TEST NUMBER: P563254

CATALOG NUMBER: VHB-12-N-UNV-L840-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	802.0	6.7
10°-20°	2111.3	17.5
20°-30°	2549.6	21.2
30°-40°	2279.7	18.9
40°-50°	1785.1	14.8
50°-60°	1348.8	11.2
60°-70°	801.1	6.7
70°-80°	307.9	2.6
80°-90°	53.5	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°	5462.9	45.4
0°-40°	7742.6	64.3
0°-60°	10876.5	90.3
0°-90°	12039.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12039.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8537	8537	8537	8537	8537	
5°	8544	8507	8479	8468	8455	815
15°	8491	8211	7598	6962	6699	2399
25°	8069	7120	5143	4055	3771	3715
35°	7169	5102	2736	2133	1962	4496
45°	6192	2638	1509	1275	1241	4766
55°	4495	1431	944	940	970	3947
65°	1934	804	644	537	490	1993
75°	691	386	225	111	101	757
85°	107	37	30	27	24	143
90°	0	0	0	0	0	



TEST NUMBER: P563254

CATALOG NUMBER: VHB-12-N-UNV-L840-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8536.6	8536.6	8536.6	8536.6	8536.6
2.5°	8544.6	8516.4	8514.2	8532.3	8535.1
5°	8544.0	8506.8	8479.2	8468.0	8454.6
7.5°	8541.4	8485.0	8391.8	8302.4	8260.9
10°	8535.1	8434.9	8221.5	8018.2	7921.3
12.5°	8521.2	8345.5	7968.6	7594.9	7391.6
15°	8490.8	8210.8	7597.7	6962.5	6699.0
17.5°	8436.0	8025.0	7143.0	6246.6	5907.5
20°	8349.2	7788.7	6529.8	5430.1	5045.7
22.5°	8224.6	7480.0	5854.3	4694.9	4387.8
25°	8068.7	7119.7	5142.6	4054.6	3770.8
27.5°	7883.5	6699.0	4529.4	3458.4	3178.9
30°	7666.9	6207.7	3902.9	2895.2	2666.8
32.5°	7424.6	5690.3	3248.7	2465.6	2277.8
35°	7169.1	5101.6	2735.5	2132.9	1961.5
37.5°	6928.5	4471.3	2316.6	1838.6	1718.3
40°	6693.8	3809.2	1986.6	1606.0	1513.9
42.5°	6472.3	3175.8	1734.3	1411.2	1350.9
45°	6191.8	2638.1	1509.1	1274.9	1241.4
47.5°	5894.2	2226.6	1330.2	1164.1	1152.4
50°	5548.7	1896.6	1186.5	1067.8	1076.3
52.5°	5100.5	1635.8	1050.2	999.6	1024.7
55°	4494.8	1431.4	943.7	940.0	970.4
57.5°	3785.2	1236.0	859.6	883.1	917.2
60°	3080.5	1079.0	786.2	820.3	770.8
62.5°	2460.9	934.8	716.5	654.2	611.7
65°	1933.9	803.7	644.1	537.1	490.3
67.5°	1542.1	681.9	541.9	427.5	388.6
70°	1200.4	573.3	417.3	321.0	242.2
72.5°	919.9	479.1	325.7	182.6	137.9
75°	691.4	386.5	225.2	111.3	101.1
77.5°	492.9	286.9	120.3	80.4	74.5
80°	340.6	184.2	70.3	58.0	54.8
82.5°	211.3	88.9	47.9	41.5	38.9
85°	107.0	37.3	30.3	26.6	24.5
87.5°	35.7	18.1	13.8	12.8	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)