

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: P364425

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P364425
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-12-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: 12188.0 lumens
Efficiency: N/A
Efficacy: 140.1 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

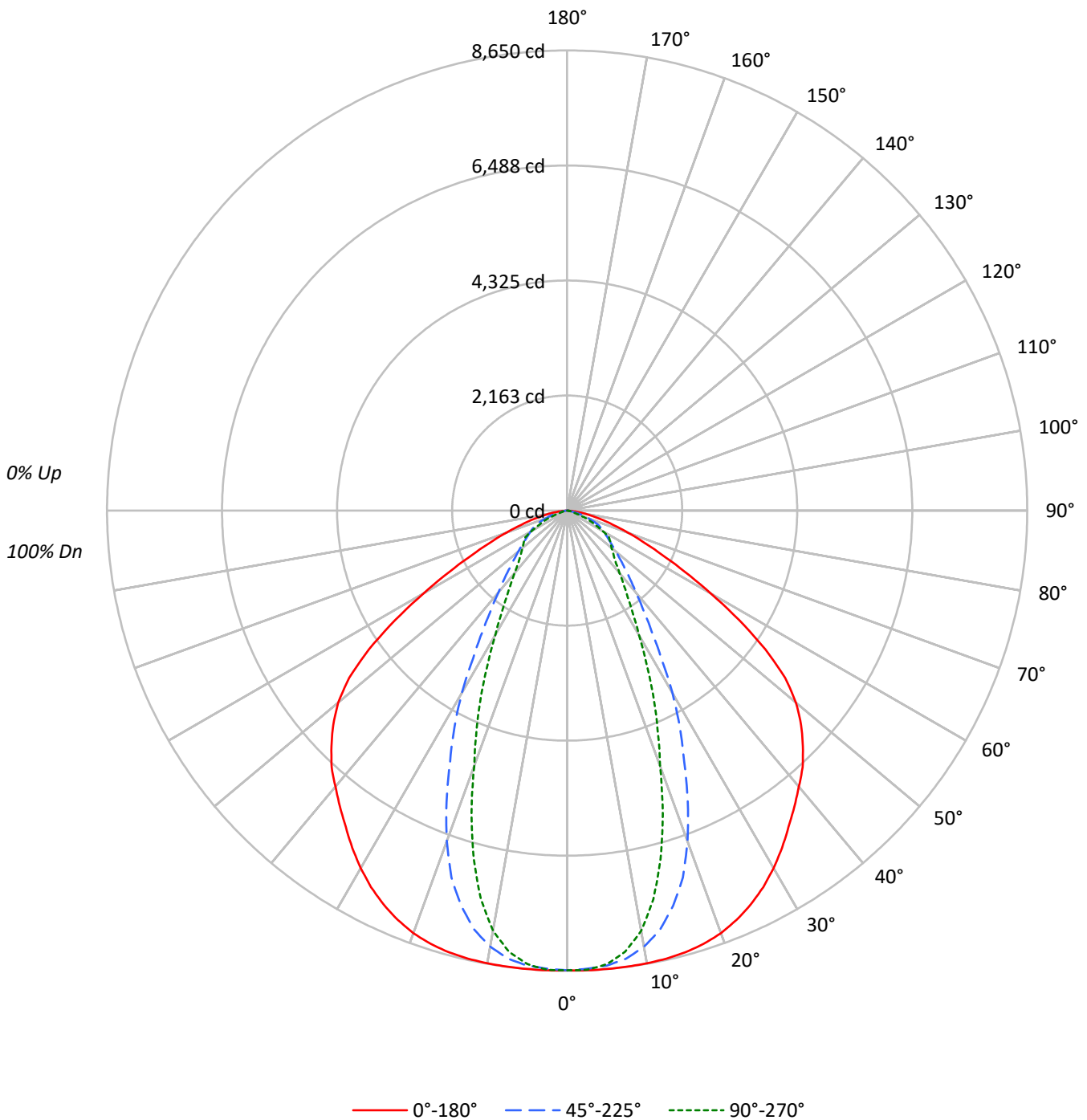
Input Watts (W): 87
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P364425

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

Luminous Intensity Polar Plot





TEST NUMBER: P364425

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

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	45	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°	53157	53157	53157
5°	53406	53001	52848
10°	53967	51984	50086
15°	54737	48979	43186
20°	55327	43270	33436
25°	55437	35333	25908
30°	55126	28063	19176
35°	54497	20795	14911
40°	54411	16149	12306
45°	54526	13290	10931
50°	53753	11494	10426
55°	48797	10246	10535
60°	38364	9791	9599
65°	28494	9491	7223
70°	21854	7598	4410
75°	16635	5418	2434
80°	12217	2518	1966
85°	7643	2167	1750



TEST NUMBER: P364425

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	812.0	6.7
10°-20°	2137.4	17.5
20°-30°	2581.2	21.2
30°-40°	2307.9	18.9
40°-50°	1807.2	14.8
50°-60°	1365.5	11.2
60°-70°	811.0	6.7
70°-80°	311.7	2.6
80°-90°	54.1	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°	5530.6	45.4
0°-40°	7838.4	64.3
0°-60°	11011.2	90.3
0°-90°	12188.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12188.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8642	8642	8642	8642	8642	
5°	8650	8612	8584	8573	8559	825
15°	8596	8312	7692	7049	6782	2429
25°	8169	7208	5206	4105	3818	3761
35°	7258	5165	2769	2159	1986	4551
45°	6268	2671	1528	1291	1257	4825
55°	4550	1449	956	952	982	3996
65°	1958	814	652	544	496	2017
75°	700	391	228	113	102	766
85°	108	38	31	27	25	144
90°	0	0	0	0	0	



TEST NUMBER: P364425

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8642.3	8642.3	8642.3	8642.3	8642.3
2.5°	8650.4	8621.8	8619.6	8638.0	8640.7
5°	8649.8	8612.1	8584.1	8572.8	8559.3
7.5°	8647.1	8590.0	8495.7	8405.2	8363.1
10°	8640.7	8539.3	8323.2	8117.4	8019.3
12.5°	8626.6	8448.8	8067.3	7689.0	7483.1
15°	8595.9	8312.5	7691.7	7048.8	6782.0
17.5°	8540.4	8124.4	7231.4	6323.9	5980.7
20°	8452.6	7885.1	6610.6	5497.3	5108.2
22.5°	8326.5	7572.6	5926.8	4753.1	4442.1
25°	8168.6	7207.7	5206.3	4104.8	3817.5
27.5°	7981.0	6782.0	4585.5	3501.2	3218.3
30°	7761.7	6284.6	3951.2	2931.1	2699.9
32.5°	7516.5	5760.8	3288.9	2496.2	2305.9
35°	7257.8	5164.8	2769.4	2159.4	1985.8
37.5°	7014.3	4526.7	2345.3	1861.3	1739.6
40°	6776.6	3856.3	2011.2	1625.8	1532.6
42.5°	6552.4	3215.1	1755.7	1428.6	1367.7
45°	6268.4	2670.8	1527.8	1290.7	1256.7
47.5°	5967.2	2254.2	1346.7	1178.6	1166.7
50°	5617.4	1920.1	1201.2	1081.0	1089.6
52.5°	5163.7	1656.0	1063.2	1012.0	1037.4
55°	4550.4	1449.1	955.5	951.7	982.4
57.5°	3832.1	1251.3	870.3	894.0	928.5
60°	3118.6	1092.3	795.9	830.4	780.3
62.5°	2491.3	946.3	725.4	662.3	619.2
65°	1957.8	813.7	652.1	543.7	496.3
67.5°	1561.2	690.3	548.6	432.7	393.4
70°	1215.2	580.4	422.5	325.0	245.2
72.5°	931.2	485.0	329.8	184.8	139.6
75°	700.0	391.2	228.0	112.6	102.4
77.5°	499.0	290.5	121.8	81.4	75.4
80°	344.9	186.5	71.1	58.7	55.5
82.5°	213.9	90.0	48.5	42.0	39.3
85°	108.3	37.7	30.7	26.9	24.8
87.5°	36.1	18.3	14.0	12.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)