

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: P417761

Luminaire Tested: **VHB-1215-W-UNV-L950-CD-U-LEVEL2**

Issue Date: 11/17/2020

Test Information

Test Method: LM-79-08
Report Number: P417761
Test Lab: INNOVATION CENTER(G3)
Issue Date: 11/17/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-1215-W-UNV-L950-CD-U-LEVEL2
Description: VHB LED HIGH BAY LUMINAIRE WITH WIDE DISTRIBUTION LENS
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14381.5 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.14 / 1.25
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')
CIE Type: Direct

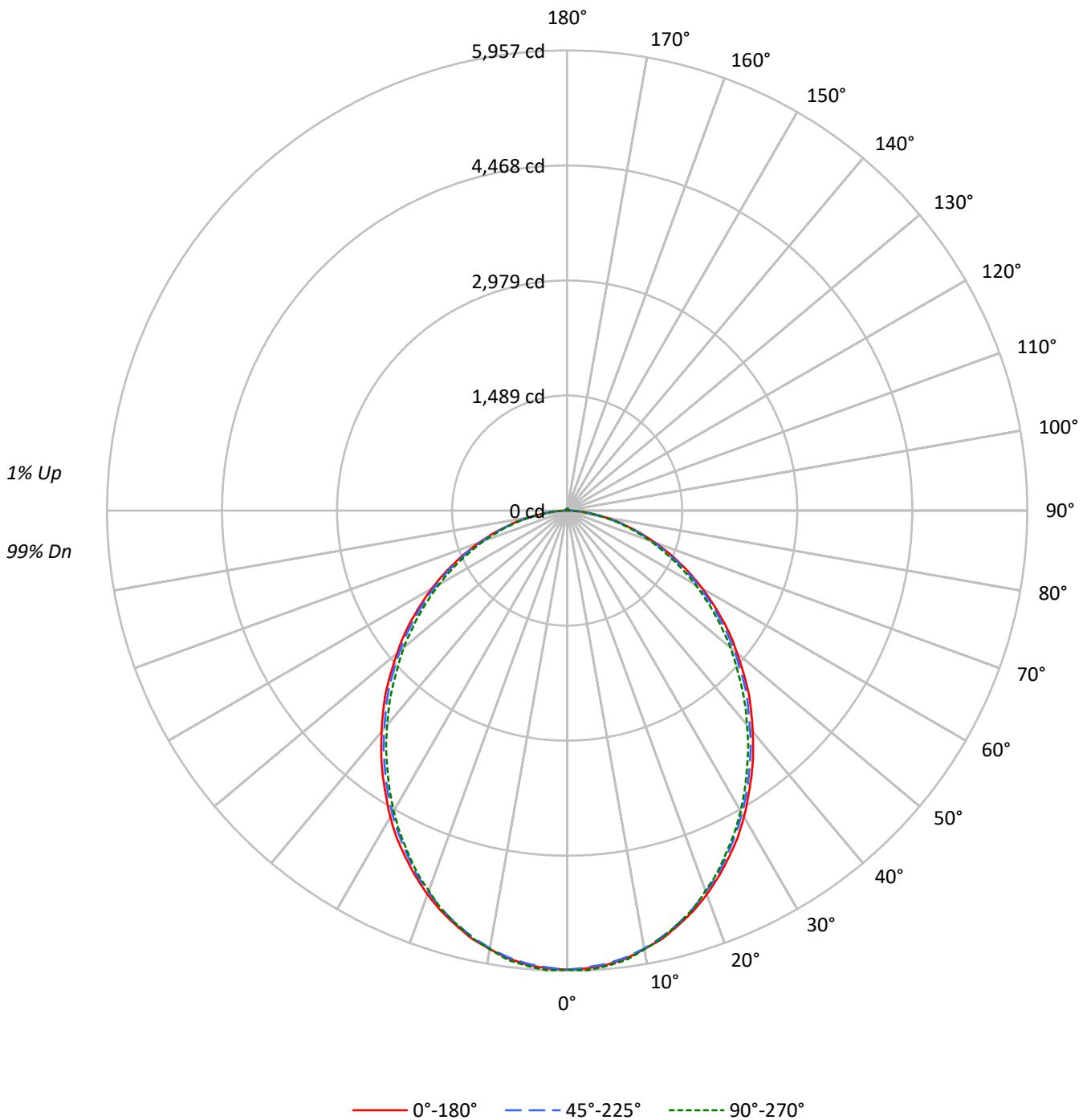
Input Watts (W): 109.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P417761

CATALOG NUMBER: VHB-1215-W-UNV-L950-CD-U-LEVEL2

Luminous Intensity Polar Plot





TEST NUMBER: P417761

CATALOG NUMBER: VHB-1215-W-UNV-L950-CD-U-LEVEL2

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	101	101	101	99								
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84								
2	100	92	85	79	97	90	84	78	86	81	76	83	78	75	79	76	73	71								
3	91	81	73	67	89	79	72	66	76	70	65	73	68	64	71	66	62	60								
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	63	58	54	52								
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45								
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	46	42	40								
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	37	35								
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32								
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29								
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	36555	36555	36555
5°	36446	36353	36538
10°	36007	35936	36016
15°	35390	35271	35290
20°	34619	34369	34276
25°	33614	33314	33116
30°	32524	32152	31892
35°	31266	30862	30491
40°	30002	29540	29083
45°	28870	28414	27704
50°	27469	27046	26415
55°	26256	25686	24987
60°	24898	24346	23554
65°	23433	22866	22049
70°	21714	21309	20568
75°	19782	19513	18838
80°	17686	17392	16782
85°	15004	15004	14630



TEST NUMBER: P417761

CATALOG NUMBER: VHB-1215-W-UNV-L950-CD-U-LEVEL2

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	558.8	3.9
10°-20°	1560.9	10.9
20°-30°	2261.6	15.7
30°-40°	2572.3	17.9
40°-50°	2508.4	17.4
50°-60°	2141.5	14.9
60°-70°	1554.7	10.8
70°-80°	868.1	6.0
80°-90°	243.7	1.7
90°-100°	17.3	0.1
100°-110°	17.1	0.1
110°-120°	16.8	0.1
120°-130°	16.1	0.1
130°-140°	15.3	0.1
140°-150°	13.1	0.1
150°-160°	9.2	0.1
160°-170°	5.1	0.0
170°-180°	1.5	0.0
0°-30°	4381.3	30.5
0°-40°	6953.6	48.4
0°-60°	11603.4	80.7
0°-90°	14269.9	99.2
90°-120°	51.3	0.4
90°-150°	95.9	0.7
90°-180°	112.0	0.8
0°-180°	14381.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5943	5943	5943	5943	5943	
5°	5903	5889	5888	5908	5918	559
15°	5558	5548	5539	5538	5542	1566
25°	4953	4936	4909	4891	4880	2280
35°	4164	4150	4110	4072	4061	2604
45°	3319	3288	3266	3206	3185	2554
55°	2448	2438	2395	2345	2330	2190
65°	1610	1598	1571	1534	1515	1597
75°	832	837	821	801	793	890
85°	213	217	213	207	207	232
90°	15	16	20	23	22	18
95°	7	11	16	20	20	7
105°	13	13	16	20	21	13
115°	15	15	16	19	20	15
125°	16	17	17	20	20	14
135°	18	20	20	20	20	14
145°	17	20	22	23	23	11
155°	16	18	21	22	22	8
165°	14	16	18	20	20	4
175°	15	15	16	16	17	1
180°	15	15	15	15	15	



TEST NUMBER: P417761

CATALOG NUMBER: VHB-1215-W-UNV-L950-CD-U-LEVEL2

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5943.2	5943.2	5943.2	5943.2	5943.2
2.5°	5931.2	5915.5	5918.5	5938.0	5957.4
5°	5902.8	5889.3	5887.8	5908.0	5917.8
7.5°	5847.4	5833.2	5832.4	5855.6	5866.9
10°	5765.1	5761.3	5753.8	5769.6	5766.6
12.5°	5679.0	5658.0	5654.3	5667.0	5667.8
15°	5557.7	5548.0	5539.0	5538.3	5542.0
17.5°	5433.5	5412.5	5407.3	5404.3	5411.8
20°	5289.0	5265.8	5250.8	5247.9	5236.6
22.5°	5125.1	5110.9	5096.7	5071.9	5074.2
25°	4952.9	4935.7	4908.8	4890.8	4879.6
27.5°	4777.0	4750.1	4721.6	4705.2	4695.4
30°	4579.4	4563.0	4527.0	4496.3	4490.4
32.5°	4369.8	4358.6	4322.7	4295.7	4277.8
35°	4164.0	4150.5	4110.1	4071.9	4060.7
37.5°	3954.4	3937.9	3903.5	3869.8	3851.1
40°	3736.6	3724.6	3679.0	3638.5	3622.1
42.5°	3526.3	3510.5	3469.4	3420.0	3410.2
45°	3318.9	3287.5	3266.5	3205.9	3184.9
47.5°	3089.1	3080.9	3036.0	2987.3	2964.1
50°	2870.6	2865.3	2826.4	2771.8	2760.5
52.5°	2670.0	2649.0	2613.1	2563.7	2538.2
55°	2448.4	2437.9	2395.3	2345.1	2330.1
57.5°	2231.3	2231.3	2185.7	2143.0	2117.6
60°	2024.0	2011.3	1979.1	1937.9	1914.7
62.5°	1815.2	1804.7	1777.0	1735.8	1714.9
65°	1610.1	1598.1	1571.1	1534.5	1515.0
67.5°	1413.9	1399.7	1382.5	1334.6	1321.9
70°	1207.4	1204.4	1184.9	1152.0	1143.7
72.5°	1021.7	1018.7	996.3	967.1	958.1
75°	832.4	836.8	821.1	800.9	792.7
77.5°	667.7	663.2	648.2	636.2	622.0
80°	499.3	497.8	491.0	474.6	473.8
82.5°	345.1	351.1	345.8	333.8	329.3
85°	212.6	217.1	212.6	206.6	207.3
87.5°	95.1	96.6	91.3	82.3	76.3
90°	15.0	16.5	19.5	23.2	21.7
92.5°	5.2	11.2	16.5	19.5	20.2
95°	6.7	11.2	16.5	19.5	20.2
97.5°	9.7	11.2	16.5	19.5	21.0
100°	11.2	12.0	16.5	19.5	21.0
102.5°	12.0	12.0	16.5	19.5	21.0
105°	12.7	12.7	15.7	19.5	21.0
107.5°	13.5	12.7	15.7	19.5	21.0
110°	13.5	13.5	15.7	19.5	20.2



TEST NUMBER: P417761

CATALOG NUMBER: VHB-1215-W-UNV-L950-CD-U-LEVEL2

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	14.2	14.2	16.5	18.7	20.2
115°	15.0	15.0	16.5	18.7	20.2
117.5°	15.0	15.7	16.5	19.5	20.2
120°	15.7	16.5	16.5	19.5	19.5
122.5°	15.7	17.2	17.2	19.5	19.5
125°	15.7	17.2	17.2	19.5	19.5
127.5°	16.5	18.0	17.2	19.5	19.5
130°	17.2	18.0	18.7	19.5	19.5
132.5°	17.2	18.7	19.5	20.2	19.5
135°	18.0	19.5	20.2	20.2	20.2
137.5°	18.7	19.5	21.0	21.0	21.0
140°	18.7	20.2	21.0	21.7	21.7
142.5°	17.2	20.2	21.0	22.5	22.5
145°	17.2	20.2	21.7	23.2	23.2
147.5°	16.5	19.5	21.0	23.2	23.2
150°	16.5	18.7	21.0	22.5	22.5
152.5°	17.2	18.0	21.0	21.7	22.5
155°	16.5	18.0	21.0	21.7	21.7
157.5°	15.7	17.2	20.2	21.7	22.5
160°	15.0	17.2	19.5	21.7	21.7
162.5°	14.2	16.5	18.7	21.0	21.7
165°	13.5	15.7	18.0	20.2	20.2
167.5°	13.5	15.7	17.2	18.7	19.5
170°	14.2	15.0	16.5	17.2	18.0
172.5°	15.0	15.0	16.5	16.5	16.5
175°	15.0	15.0	15.7	16.5	17.2
177.5°	15.7	15.0	15.0	16.5	16.5
180°	15.0	15.0	15.0	15.0	15.0

(END OF REPORT)