

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: P417720

Luminaire Tested: **VHB-1215-N-UNV-L940-CD-U-LEVEL1**

Issue Date: 11/17/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P417720  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 11/17/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: VHB-1215-N-UNV-L940-CD-U-LEVEL1  
Description: VHB LED HIGH BAY LUMINAIRE WITH NARROW DISTRIBUTION LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10689.8 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Spacing Criteria (0/90/45): 1.32 / 0.74 / 0.88  
Luminous Opening: Rectangular (W 1.17' x L: 1.5' x H: 0')  
CIE Type: Direct

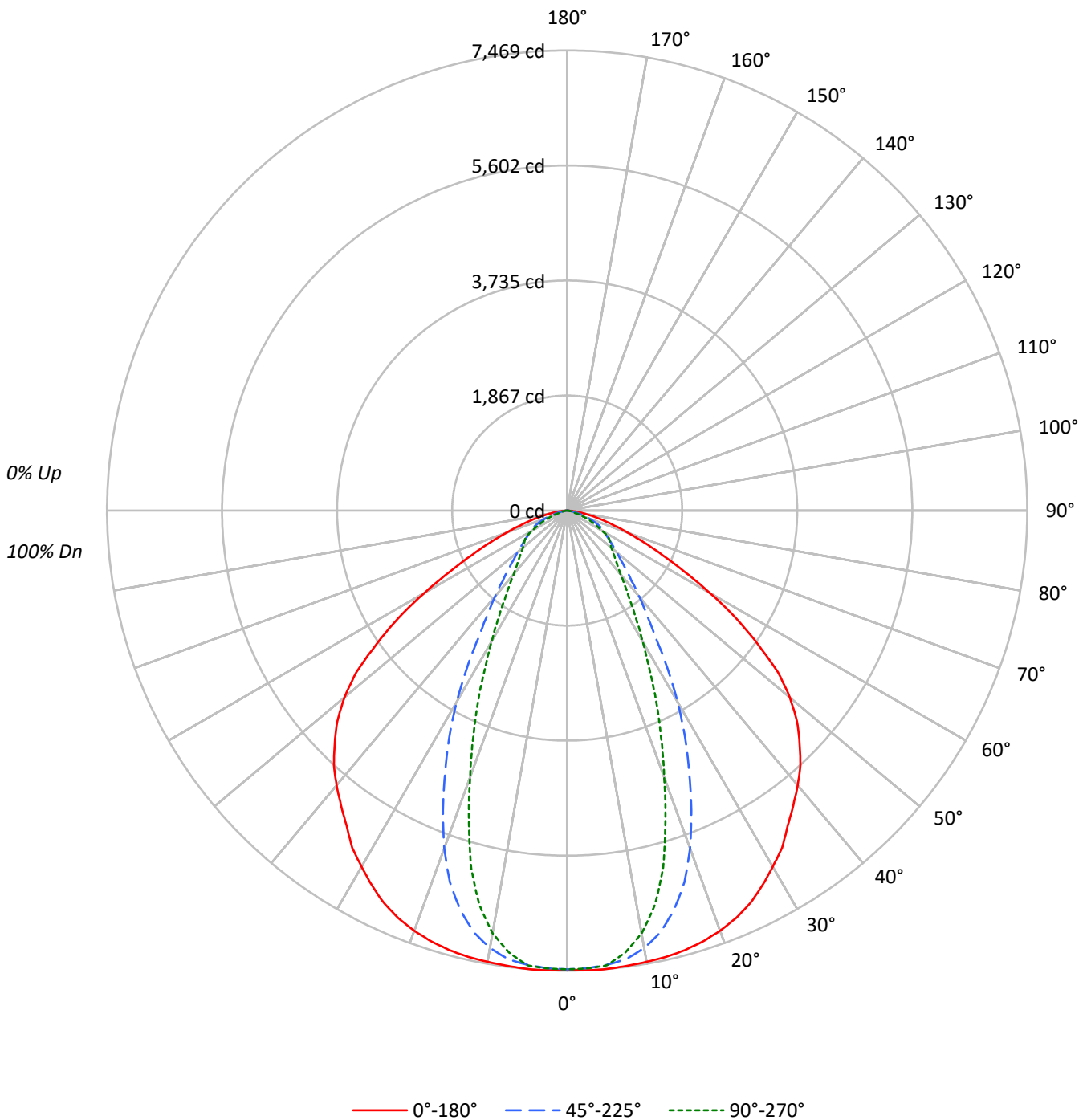
Input Watts (W): 80.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	109	105	102	99	101	99	96	97	95	93	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	73	68	64	71	67	63	62				62
5	83	72	65	59	81	71	64	59	69	63	58	67	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	56	51	47	46				46
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42				42
9	65	53	46	41	63	52	45	41	51	45	40	50	44	40	49	44	40	38				38
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36				36

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	45807	45807	45807
5°	46118	45708	45758
10°	46446	45022	43515
15°	47029	42700	38275
20°	47506	38196	30126
25°	47724	31786	23214
30°	47404	25441	17378
35°	46863	18716	13302
40°	46748	14605	10819
45°	46417	11752	9593
50°	45161	10015	8947
55°	40484	9009	9027
60°	32897	8470	8122
65°	24816	8210	6602
70°	18822	6805	4516
75°	14245	5114	2419
80°	10286	2522	1987
85°	6613	2167	1673



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	700.7	6.6
10°-20°	1862.3	17.4
20°-30°	2278.2	21.3
30°-40°	2044.0	19.1
40°-50°	1584.8	14.8
50°-60°	1176.2	11.0
60°-70°	709.5	6.6
70°-80°	283.0	2.6
80°-90°	51.1	0.5
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°	4841.2	45.3
0°-40°	6885.2	64.4
0°-60°	9646.3	90.2
0°-90°	10689.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10689.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7447	7447	7447	7447	7447	
5°	7469	7423	7403	7382	7411	712
15°	7386	7184	6706	6207	6011	2087
25°	7032	6257	4684	3716	3420	3234
35°	6241	4587	2492	1904	1772	3917
45°	5336	2410	1351	1131	1103	4107
55°	3775	1288	840	812	842	3354
65°	1705	714	564	481	454	1739
75°	599	348	215	113	102	657
85°	94	39	31	26	24	123
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7447.4	7447.4	7447.4	7447.4	7447.4
2.5°	7468.9	7424.3	7435.3	7435.3	7437.6
5°	7469.4	7422.6	7402.9	7381.5	7411.0
7.5°	7452.7	7398.3	7343.9	7253.0	7233.9
10°	7436.5	7357.2	7208.5	7034.3	6967.2
12.5°	7420.3	7299.3	7008.3	6679.1	6563.4
15°	7385.5	7183.6	6705.7	6207.0	6010.8
17.5°	7331.7	7020.5	6324.4	5606.4	5305.0
20°	7257.7	6818.0	5835.5	4934.7	4602.6
22.5°	7160.5	6577.3	5265.6	4292.5	3984.7
25°	7032.0	6256.7	4683.6	3715.6	3420.5
27.5°	6861.3	5898.0	4137.4	3177.5	2884.2
30°	6674.5	5509.8	3582.0	2668.4	2446.8
32.5°	6491.1	5086.8	3023.6	2240.3	2081.7
35°	6241.1	4587.0	2492.5	1904.1	1771.6
37.5°	6028.8	4048.3	2112.4	1639.7	1544.2
40°	5822.2	3476.1	1819.0	1433.7	1347.5
42.5°	5604.7	2909.7	1547.7	1258.4	1207.5
45°	5336.2	2409.8	1351.0	1131.1	1102.8
47.5°	5060.2	2040.6	1171.6	1035.1	1013.1
50°	4719.5	1728.8	1046.6	940.2	935.0
52.5°	4311.0	1484.6	931.5	869.6	880.6
55°	3775.2	1287.9	840.1	811.7	841.8
57.5°	3251.0	1113.8	759.1	767.8	793.2
60°	2674.2	957.5	688.5	703.5	660.2
62.5°	2143.6	831.4	627.2	584.4	548.5
65°	1705.1	714.5	564.1	481.4	453.6
67.5°	1341.7	609.2	476.2	394.0	359.3
70°	1046.6	513.8	378.4	306.6	251.1
72.5°	798.4	429.3	299.7	185.7	148.7
75°	599.4	347.7	215.2	113.4	101.8
77.5°	429.3	260.9	125.6	82.7	78.1
80°	290.4	170.7	71.2	60.8	56.1
82.5°	181.1	94.3	48.6	42.8	39.9
85°	93.7	38.8	30.7	26.0	23.7
87.5°	33.0	17.4	13.9	11.0	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)