

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: P827098

Luminaire Tested: **OHBL-18HE-MFL-UNV-L840-CD-UPL18**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P827098  
REPORT IS A COMBINATION OF REPORTS P826157 AND G3-2310-221-8  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-18HE-MFL-UNV-L840-CD-UPL18  
Description: 18000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 1800 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

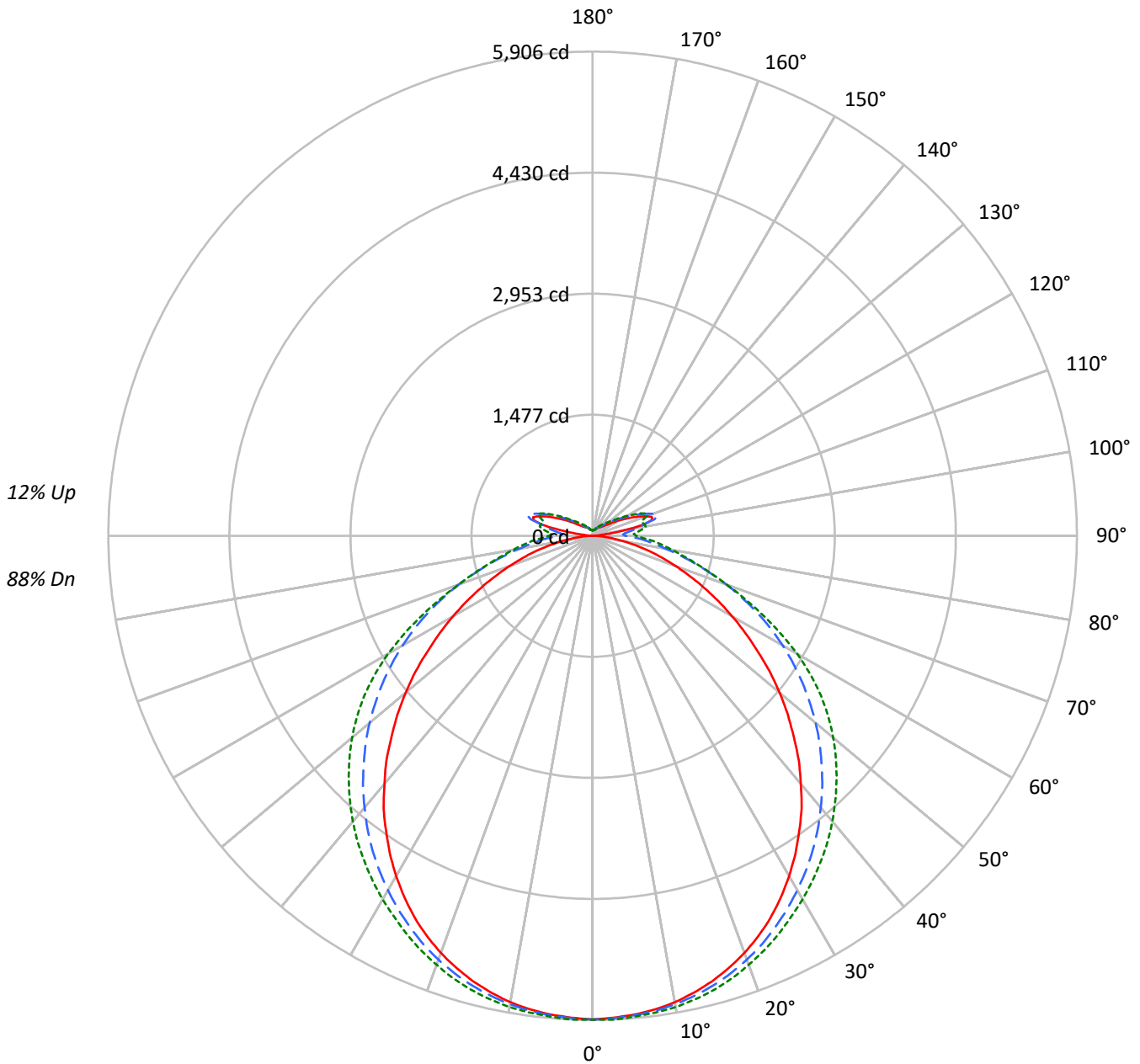
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19449.9 lumens  
Efficiency: N/A  
Efficacy: 168.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.29 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')  
CIE Type: Semi-Direct  
  
Input Watts (W): 115.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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																	
RC	80									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	50	30	10	50	30	10	0															
RCR																																													
0	116	116	116	116	112	112	112	112	104	104	104	97	97	97	91	91	91	88																											
1	105	101	96	92	101	97	93	89	91	87	84	85	82	80	79	77	75	72																											
2	96	87	81	75	92	85	78	73	79	74	69	74	70	66	69	66	63	60																											
3	87	77	69	62	84	74	67	61	69	63	58	65	60	56	61	57	53	50																											
4	80	68	59	52	77	66	58	51	62	55	49	58	52	47	54	50	46	43																											
5	73	61	52	45	70	59	50	44	55	48	43	52	46	41	49	44	40	37																											
6	68	54	46	39	65	53	45	39	50	43	37	47	41	36	44	39	35	32																											
7	63	49	41	35	60	48	40	34	45	38	33	43	37	32	41	35	31	29																											
8	58	45	37	31	56	44	36	30	41	34	29	39	33	28	37	32	28	26																											
9	54	41	33	28	52	40	32	27	38	31	26	36	30	26	34	29	25	23																											
10	51	38	30	25	49	37	30	25	35	29	24	33	28	23	32	27	23	21																											

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

	0°	45°	90°
0°	10079	10079	10079
5°	9965	9978	10056
10°	9847	9886	10046
15°	9689	9776	10019
20°	9495	9643	9962
25°	9252	9478	9904
30°	8934	9299	9849
35°	8560	9109	9812
40°	8122	8890	9781
45°	7614	8652	9732
50°	7063	8411	9669
55°	6401	8116	9519
60°	5723	7770	9144
65°	4988	7328	8468
70°	4198	6767	7745
75°	3394	6117	7365
80°	2420	5635	7716
85°	1347	5805	9673



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	559.1	2.9
10°-20°	1604.1	8.2
20°-30°	2425.9	12.5
30°-40°	2912.3	15.0
40°-50°	3007.9	15.5
50°-60°	2706.2	13.9
60°-70°	2038.5	10.5
70°-80°	1230.9	6.3
80°-90°	606.5	3.1
90°-100°	424.6	2.2
100°-110°	739.3	3.8
110°-120°	595.8	3.1
120°-130°	293.4	1.5
130°-140°	147.8	0.8
140°-150°	83.4	0.4
150°-160°	46.1	0.2
160°-170°	21.5	0.1
170°-180°	6.6	0.0
0°-30°	4589.0	23.6
0°-40°	7501.3	38.6
0°-60°	13215.4	67.9
0°-90°	17091.3	87.9
90°-120°	1759.7	9.0
90°-150°	2284.4	11.7
90°-180°	2359.0	12.1
0°-180°	19449.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5901	5901	5901	5901	5901	
5°	5863	5879	5872	5895	5888	557
15°	5626	5654	5680	5728	5733	1586
25°	5138	5195	5268	5350	5364	2363
35°	4393	4496	4680	4822	4851	2746
45°	3467	3642	3947	4162	4207	2677
55°	2456	2711	3122	3358	3398	2202
65°	1499	1805	2210	2319	2293	1489
75°	706	1014	1280	1313	1300	753
85°	147	388	641	729	742	170
90°	4	177	401	507	531	12
95°	45	184	403	516	554	126
105°	751	793	785	649	624	713
115°	525	552	616	643	648	529
125°	262	278	328	353	356	246
135°	158	164	186	210	217	125
145°	122	123	127	140	144	77
155°	100	104	103	103	104	45
165°	74	75	75	76	76	21
175°	67	67	68	68	68	6
180°	67	67	67	67	67	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5900.8	5900.8	5900.8	5900.8	5900.8
2.5°	5883.4	5897.9	5889.2	5908.0	5906.5
5°	5863.2	5879.1	5871.9	5895.0	5887.8
7.5°	5828.6	5845.9	5844.4	5870.4	5867.6
10°	5778.0	5796.8	5802.6	5837.2	5837.2
12.5°	5708.7	5733.2	5747.7	5789.6	5791.0
15°	5626.4	5653.8	5679.8	5727.5	5733.2
17.5°	5526.7	5561.4	5597.5	5652.4	5659.6
20°	5414.1	5453.1	5502.2	5560.0	5568.6
22.5°	5284.1	5330.3	5393.9	5461.7	5471.9
25°	5138.3	5194.6	5268.2	5350.5	5363.5
27.5°	4972.2	5037.2	5136.8	5229.2	5240.8
30°	4791.7	4868.2	4992.4	5102.2	5120.9
32.5°	4601.0	4689.1	4842.2	4965.0	4991.0
35°	4393.1	4495.6	4680.5	4822.0	4850.9
37.5°	4188.0	4300.7	4510.1	4671.8	4706.5
40°	3948.3	4088.4	4328.1	4507.2	4549.1
42.5°	3723.0	3874.6	4146.1	4341.1	4381.5
45°	3467.4	3642.1	3946.8	4162.0	4206.8
47.5°	3227.7	3416.8	3754.8	3977.2	4023.4
50°	2974.9	3182.9	3549.7	3782.2	3829.9
52.5°	2722.2	2946.1	3337.4	3578.6	3623.4
55°	2456.5	2710.7	3122.2	3357.6	3398.1
57.5°	2209.5	2478.1	2901.3	3125.1	3149.7
60°	1965.5	2244.2	2676.0	2872.4	2881.1
62.5°	1727.2	2020.4	2444.9	2600.9	2589.3
65°	1499.0	1805.2	2209.5	2319.3	2293.3
67.5°	1279.5	1595.8	1968.4	2039.1	2004.5
70°	1071.6	1392.2	1734.4	1770.5	1738.7
72.5°	888.1	1198.6	1497.6	1527.9	1504.8
75°	706.2	1013.8	1279.5	1312.7	1299.7
77.5°	535.8	834.7	1078.8	1122.1	1125.0
80°	385.6	671.5	904.0	971.9	980.6
82.5°	254.2	521.3	758.2	844.8	857.8
85°	147.3	388.5	641.2	729.3	742.3
87.5°	63.5	280.2	515.6	595.0	610.9
90°	4.0	176.6	400.8	507.1	530.9
92.5°	17.3	158.6	369.8	477.5	501.4
95°	45.2	184.5	403.4	516.5	553.5
97.5°	203.7	299.6	476.3	586.7	615.7
100°	410.7	497.1	560.5	638.2	655.7
102.5°	637.7	694.4	634.5	644.0	648.1
105°	751.1	793.2	784.9	649.0	623.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	613.6	645.0	703.8	725.3	706.1
115°	524.6	552.2	616.2	643.4	648.2
117.5°	450.0	468.9	528.6	558.4	563.8
120°	378.0	396.6	452.5	478.4	482.2
122.5°	318.0	334.2	386.9	411.3	413.6
125°	261.6	277.9	328.2	353.2	355.5
127.5°	222.1	234.0	280.5	305.5	307.9
130°	194.1	202.6	240.3	265.9	271.2
132.5°	175.1	181.0	210.1	234.2	242.0
135°	158.1	164.0	186.3	210.0	216.8
137.5°	145.1	151.0	166.6	188.8	195.5
140°	135.6	140.0	150.2	169.5	176.3
142.5°	128.0	131.0	136.9	153.8	159.1
145°	122.4	123.0	127.4	140.0	144.3
147.5°	115.4	117.4	119.4	127.2	131.6
150°	109.4	112.9	113.4	115.9	121.2
152.5°	105.4	107.9	108.4	108.0	110.9
155°	100.4	103.9	103.4	103.0	104.4
157.5°	83.0	84.0	85.0	86.0	86.0
160°	80.0	80.0	81.0	82.0	82.0
162.5°	77.0	77.0	78.0	79.0	79.0
165°	74.0	75.0	75.0	76.0	76.0
167.5°	72.0	72.0	73.0	73.0	74.0
170°	70.0	70.0	71.0	71.0	71.0
172.5°	68.0	69.0	69.0	69.0	69.0
175°	67.0	67.0	68.0	68.0	68.0
177.5°	66.0	67.0	67.0	67.0	67.0
180°	67.0	67.0	67.0	67.0	67.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	758.1	800.0	830.1	720.9	641.1
110°	695.1	739.2	787.2	767.6	705.9



(END OF REPORT)