

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: P827099

Luminaire Tested: **OHBL-18HE-MFL-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P827099  
REPORT IS A COMBINATION OF REPORTS P826229 AND G3-2310-221-6  
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-UPL24  
Description: 18000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND MEDIUM FROSTED LENS AND 2400 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

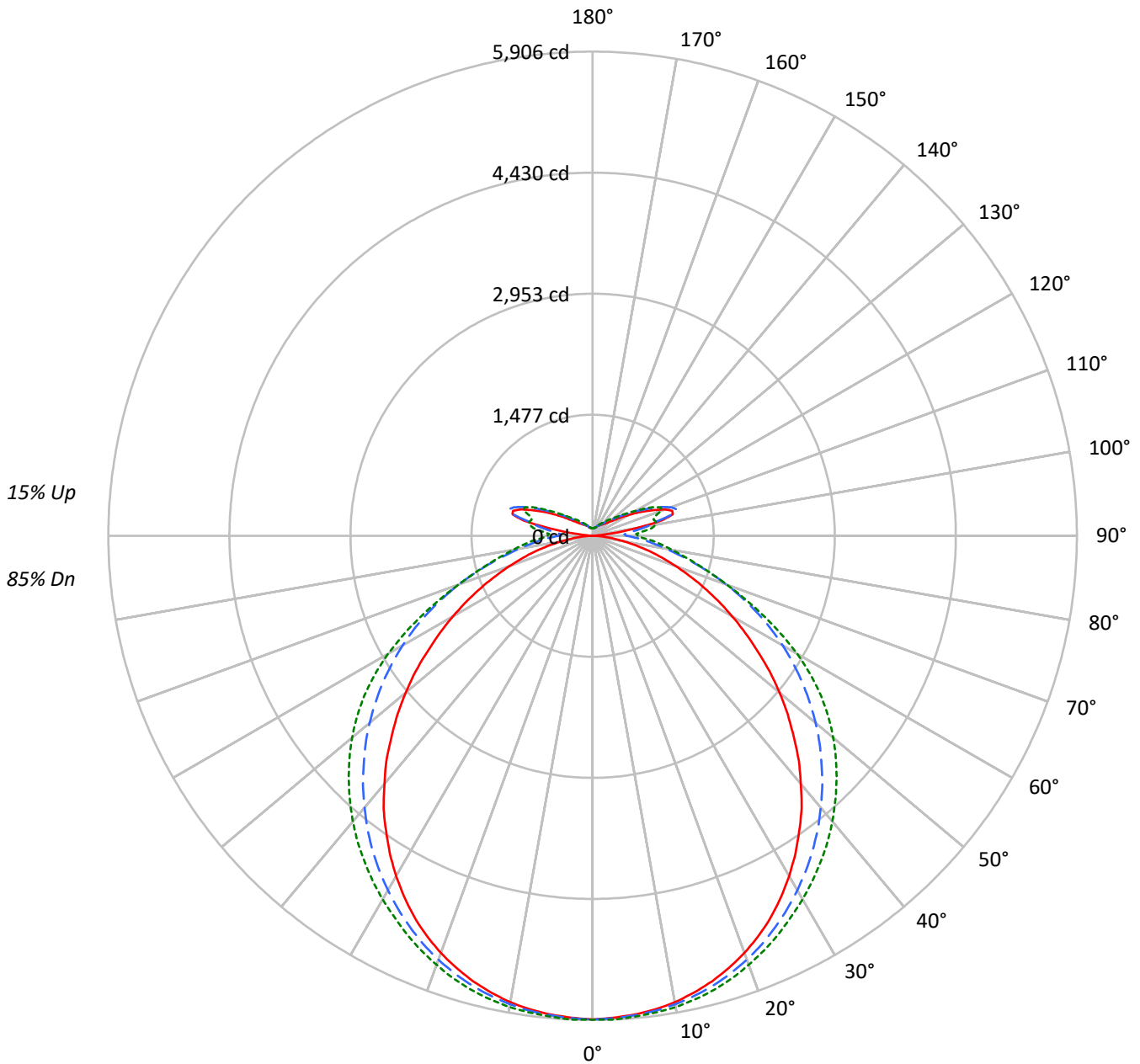
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20080.3 lumens  
Efficiency: N/A  
Efficacy: 166.8 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): 120.4  
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				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	116	116	116	116	111	111	111	111	103	103	103	95	95	95	88	88	88	85			
1	105	100	96	92	101	96	92	89	89	86	83	83	80	78	77	75	73	70			
2	95	87	80	74	91	84	78	72	78	73	68	72	68	65	67	64	61	58			
3	87	76	68	62	83	74	66	60	68	62	57	64	59	54	59	55	52	49			
4	79	67	59	52	76	65	57	51	61	54	49	57	51	46	53	48	44	42			
5	73	60	51	45	70	58	50	44	54	47	42	51	45	40	48	43	38	36			
6	67	54	45	39	64	52	44	38	49	42	37	46	40	35	43	38	34	31			
7	62	49	40	34	60	47	39	34	45	38	32	42	36	31	39	34	30	28			
8	58	45	36	31	56	43	35	30	41	34	29	38	32	28	36	31	27	25			
9	54	41	33	27	52	40	32	27	37	31	26	35	29	25	33	28	24	22			
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	31	26	22	20			

**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	2.8
10°-20°	1604.1	8.0
20°-30°	2425.9	12.1
30°-40°	2912.3	14.5
40°-50°	3007.9	15.0
50°-60°	2706.2	13.5
60°-70°	2038.5	10.2
70°-80°	1230.9	6.1
80°-90°	608.2	3.0
90°-100°	485.2	2.4
100°-110°	949.6	4.7
110°-120°	775.4	3.9
120°-130°	379.3	1.9
130°-140°	191.0	1.0
140°-150°	108.4	0.5
150°-160°	60.6	0.3
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	4589.0	22.9
0°-40°	7501.3	37.4
0°-60°	13215.4	65.8
0°-90°	17093.0	85.1
90°-120°	2210.2	11.0
90°-150°	2888.8	14.4
90°-180°	2987.0	14.9
0°-180°	20080.3	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°	5	186	414	524	550	13
95°	60	214	446	578	620	171
105°	1013	1051	1003	809	769	962
115°	704	732	797	828	828	710
125°	350	372	422	447	448	328
135°	210	217	241	265	273	166
145°	159	162	166	179	184	101
155°	130	134	134	134	135	59
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



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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°	5.0	185.6	413.8	524.1	549.9
92.5°	21.3	170.6	386.8	503.5	532.4
95°	60.2	213.5	446.4	577.5	620.5
97.5°	277.7	377.6	551.3	683.7	729.7
100°	560.7	661.1	679.5	767.2	787.7
102.5°	861.7	914.4	798.5	788.0	790.1
105°	1013.1	1051.2	1002.9	809.0	768.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	819.6	859.0	913.8	928.3	902.1
115°	703.6	732.2	797.2	828.4	828.2
117.5°	605.0	621.9	683.6	714.4	719.8
120°	503.0	525.6	586.5	610.4	610.2
122.5°	424.0	443.2	496.9	522.3	520.6
125°	349.6	371.9	422.2	447.2	448.5
127.5°	296.1	312.0	359.5	386.5	389.9
130°	259.1	268.6	310.3	335.9	341.2
132.5°	231.1	241.0	271.1	298.2	303.0
135°	210.1	217.0	241.3	265.0	272.8
137.5°	193.1	199.0	216.6	239.8	245.5
140°	179.6	185.0	197.2	216.5	223.3
142.5°	168.0	172.0	178.9	196.8	201.1
145°	159.4	162.0	166.4	179.0	184.3
147.5°	150.4	154.4	156.4	164.2	168.6
150°	143.4	146.9	148.4	150.9	156.2
152.5°	136.4	139.9	141.4	141.0	143.9
155°	130.4	133.9	134.4	134.0	135.4
157.5°	111.0	113.0	115.0	116.0	116.0
160°	107.0	108.0	110.0	111.0	111.0
162.5°	103.0	104.0	105.0	106.0	106.0
165°	100.0	101.0	102.0	102.0	102.0
167.5°	97.0	97.0	98.0	99.0	99.0
170°	94.0	95.0	95.0	96.0	96.0
172.5°	92.0	93.0	93.0	93.0	94.0
175°	90.0	91.0	91.0	92.0	92.0
177.5°	90.0	90.0	90.0	90.0	90.0
180°	90.0	90.0	90.0	90.0	90.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	1017.1	1063.0	1073.1	913.9	799.1
110°	939.1	984.2	1017.2	980.6	889.9



(END OF REPORT)