

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: P827146

Luminaire Tested: **OHBL-24SE-A-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P827146  
REPORT IS A COMBINATION OF REPORTS P826245 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-24SE-A-UNV-L840-CD-UPL24  
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND AISLE LENS AND 2400 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

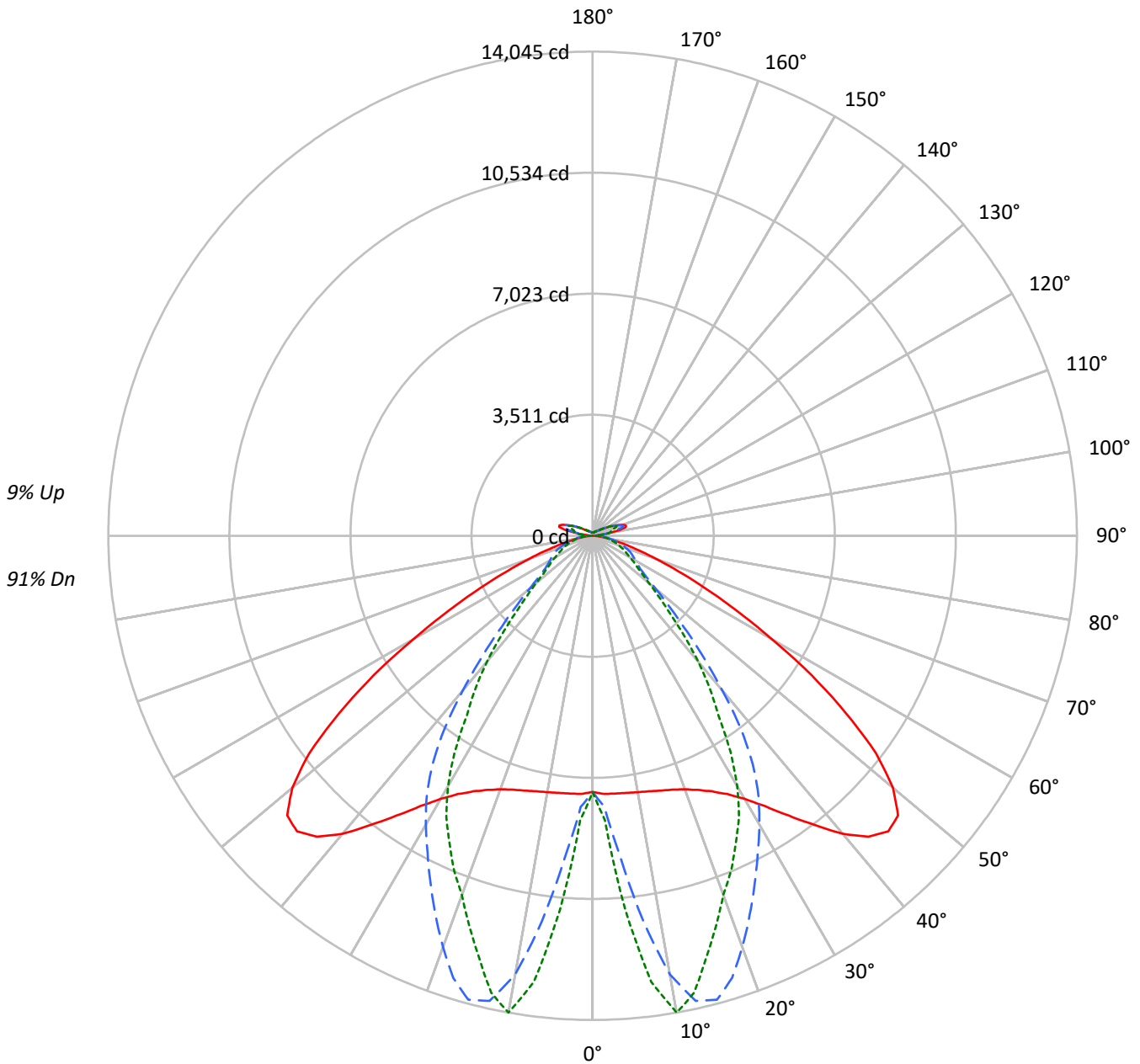
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26270.3 lumens  
Efficiency: N/A  
Efficacy: 169.0 lumens/watt  
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 155.4  
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

TEST NUMBER: P827146

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL24

### 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	0																
RCR																																					
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	91																			
1	108	104	101	98	105	101	98	95	95	93	91	90	88	86	85	84	82	80																			
2	100	93	87	83	97	91	85	81	86	81	78	81	78	75	77	74	72	69																			
3	93	84	77	71	90	81	75	70	77	72	68	73	69	65	70	66	63	61																			
4	86	75	68	62	83	73	66	61	70	64	59	67	62	58	64	59	56	54																			
5	80	68	60	55	77	67	59	54	64	57	53	61	55	51	58	54	50	48																			
6	74	62	54	49	72	61	53	48	58	52	47	56	50	46	53	49	45	43																			
7	69	57	49	44	67	56	48	43	53	47	42	51	46	41	49	44	40	39																			
8	65	52	45	39	63	51	44	39	49	43	38	47	42	38	46	41	37	35																			
9	60	48	41	36	59	47	40	35	46	39	35	44	38	34	42	37	34	32																			
10	57	45	38	33	55	44	37	32	42	36	32	41	35	31	40	34	31	29																			

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

	0°	45°	90°
0°	12694	12694	12694
5°	12759	15966	18609
10°	12873	22012	24171
15°	13179	23979	22184
20°	13724	22249	19826
25°	14725	20009	18135
30°	16420	18017	16126
35°	19303	15769	12850
40°	23210	12009	10227
45°	26624	8182	7279
50°	26991	5612	5384
55°	23363	4417	4398
60°	17452	4133	3957
65°	11962	4146	3748
70°	7648	3999	3630
75°	4599	3701	3473
80°	2706	3252	3583
85°	1303	2793	3323



TEST NUMBER: P827146

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	970.3	3.7
10°-20°	3424.6	13.0
20°-30°	5046.4	19.2
30°-40°	5303.0	20.2
40°-50°	4057.7	15.4
50°-60°	2450.2	9.3
60°-70°	1495.2	5.7
70°-80°	816.1	3.1
80°-90°	292.6	1.1
90°-100°	231.8	0.9
100°-110°	804.9	3.1
110°-120°	690.5	2.6
120°-130°	331.2	1.3
130°-140°	165.7	0.6
140°-150°	96.1	0.4
150°-160°	56.0	0.2
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	9441.3	35.9
0°-40°	14744.3	56.1
0°-60°	21252.2	80.9
0°-90°	23856.2	90.8
90°-120°	1727.2	6.6
90°-150°	2320.3	8.8
90°-180°	2414.0	9.2
0°-180°	26270.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7432	7432	7432	7432	7432	
5°	7507	8054	9395	10491	10895	718
15°	7653	11920	13931	13000	12694	2176
25°	8178	13834	11122	10069	9821	3822
35°	9906	11079	8103	6748	6353	6284
45°	12125	6322	3732	3284	3146	9161
55°	8967	2144	1699	1575	1570	7923
65°	3595	1357	1250	1070	1015	3683
75°	957	844	774	639	613	1101
85°	142	262	308	281	255	176
90°	5	34	47	62	69	11
95°	53	111	172	228	258	165
105°	1003	992	844	601	552	952
115°	692	699	699	697	691	698
125°	338	356	363	362	359	317
135°	200	204	211	213	215	158
145°	145	149	152	153	154	92
155°	116	118	120	121	121	54
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P827146

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL24

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7432.3	7432.3	7432.3	7432.3	7432.3
2.5°	7493.2	7569.7	7871.2	8184.1	8260.3
5°	7506.9	8053.8	9395.2	10490.6	10895.4
7.5°	7522.8	8838.1	11283.6	12624.7	13054.0
10°	7553.1	9830.0	12919.8	13882.7	14044.9
12.5°	7590.7	10880.7	13820.2	13785.1	13580.5
15°	7653.2	11920.1	13931.1	12999.8	12694.2
17.5°	7718.8	12799.4	13447.3	12145.1	11878.9
20°	7825.6	13452.1	12694.8	11385.3	11082.8
22.5°	7979.5	13811.0	11905.7	10698.1	10500.8
25°	8178.1	13834.2	11122.0	10069.3	9820.7
27.5°	8444.2	13513.3	10370.8	9453.2	9190.6
30°	8806.3	12898.8	9672.8	8710.3	8384.6
32.5°	9298.0	12014.4	8953.2	7813.5	7448.2
35°	9906.1	11078.7	8102.6	6747.7	6353.2
37.5°	10569.7	10039.7	7070.3	5804.0	5574.2
40°	11283.6	8969.1	5846.7	4920.9	4756.4
42.5°	11840.7	7805.2	4710.2	4089.4	3914.4
45°	12124.7	6321.6	3732.4	3284.3	3146.3
47.5°	12014.1	4907.2	2958.9	2609.6	2568.2
50°	11368.7	3623.4	2368.6	2149.7	2132.5
52.5°	10359.7	2700.7	1956.6	1821.1	1791.5
55°	8966.6	2143.6	1699.0	1574.7	1570.0
57.5°	7528.2	1821.1	1542.2	1446.0	1412.5
60°	5994.0	1623.8	1423.4	1314.7	1246.8
62.5°	4698.4	1485.8	1336.0	1188.5	1125.0
65°	3594.7	1357.1	1250.0	1069.6	1015.1
67.5°	2679.7	1234.4	1144.8	944.7	912.8
70°	1952.4	1108.5	1025.0	840.1	814.9
72.5°	1391.5	982.9	905.1	742.0	714.2
75°	957.1	843.9	774.1	638.7	612.9
77.5°	645.7	702.1	645.1	545.3	534.5
80°	431.2	556.8	521.7	462.1	455.4
82.5°	261.7	404.1	411.8	375.8	357.6
85°	142.5	261.7	308.5	281.1	255.0
87.5°	55.8	145.0	212.6	190.9	179.8
90°	5.0	34.0	47.0	62.0	69.0
92.5°	17.0	45.0	72.0	102.0	115.0
95°	53.0	111.0	172.0	228.0	258.0
97.5°	269.0	291.0	313.0	379.0	412.0
100°	552.0	586.0	473.0	500.0	509.0
102.5°	853.0	848.0	618.0	554.0	546.0
105°	1003.0	992.0	844.0	601.0	552.0



TEST NUMBER: P827146

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL24

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	808.0	820.0	804.0	781.0	749.0
115°	692.0	699.0	699.0	697.0	691.0
117.5°	592.0	593.0	597.0	596.0	597.0
120°	490.0	501.0	510.0	505.0	499.0
122.5°	411.0	423.0	429.0	427.0	421.0
125°	338.0	356.0	363.0	362.0	359.0
127.5°	286.0	299.0	309.0	310.0	309.0
130°	249.0	257.0	267.0	268.0	269.0
132.5°	221.0	228.0	235.0	239.0	238.0
135°	200.0	204.0	211.0	213.0	215.0
137.5°	183.0	186.0	192.0	195.0	195.0
140°	168.0	172.0	177.0	179.0	180.0
142.5°	155.0	159.0	163.0	165.0	165.0
145°	145.0	149.0	152.0	153.0	154.0
147.5°	136.0	140.0	142.0	144.0	144.0
150°	129.0	131.0	134.0	135.0	136.0
152.5°	122.0	124.0	127.0	128.0	128.0
155°	116.0	118.0	120.0	121.0	121.0
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°	1007.0	1011.0	933.0	729.0	607.0
110°	929.0	938.0	893.0	816.0	718.0



(END OF REPORT)