

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: P827145

Luminaire Tested: **OHBL-24SE-A-UNV-L840-CD-UPL12**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827145
REPORT IS A COMBINATION OF REPORTS P826077 AND G3-2310-221-12
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-UPL12
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND AISLE LENS AND 1200 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

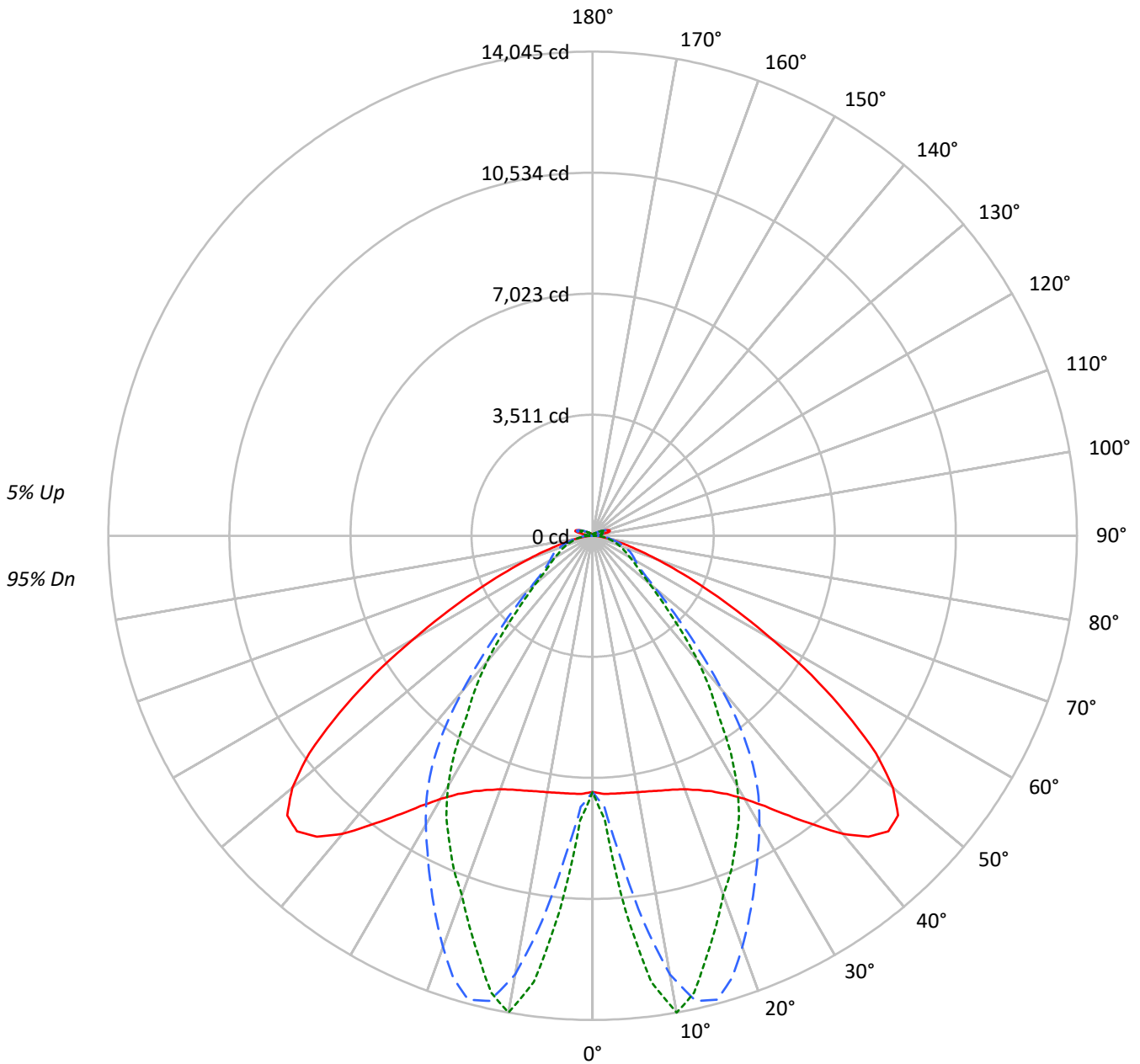
Lumens per Lamp: N/A
Luminaire Lumens: 25095.3 lumens
Efficiency: N/A
Efficacy: 171.4 lumens/watt
Spacing Criteria (0/90/45): 2.18 / 1.37 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Direct

Input Watts (W): 146.4
Input Voltage (V): NR
Input Current (A_{in}): 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: P827145

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL12

Luminous Intensity Polar Plot





TEST NUMBER: P827145

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL12

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	118	118	118	118	115	115	115	115	108	108	108	103	103	103	97	97	97	95								
1	109	105	102	99	106	103	99	97	98	95	93	93	91	89	89	87	86	83								
2	101	94	88	84	98	92	87	82	88	83	80	84	80	77	80	77	75	73								
3	94	85	78	72	91	83	76	71	79	74	69	76	71	67	73	69	66	64								
4	87	76	69	63	84	75	68	62	72	66	61	69	64	60	66	62	58	56								
5	80	69	61	55	78	68	60	55	65	59	54	63	57	53	61	56	52	50								
6	75	63	55	49	73	62	54	49	60	53	48	58	52	47	56	51	47	45								
7	70	58	50	44	68	57	49	44	55	48	43	53	47	43	51	46	42	40								
8	65	53	45	40	64	52	45	40	51	44	39	49	43	39	48	42	38	37								
9	61	49	42	37	60	48	41	36	47	40	36	45	40	35	44	39	35	33								
10	58	46	38	33	56	45	38	33	44	37	33	42	37	33	41	36	32	31								

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: P827145

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	970.3	3.9
10°-20°	3424.6	13.6
20°-30°	5046.4	20.1
30°-40°	5303.0	21.1
40°-50°	4057.7	16.2
50°-60°	2450.2	9.8
60°-70°	1495.2	6.0
70°-80°	816.1	3.3
80°-90°	289.6	1.2
90°-100°	119.0	0.5
100°-110°	413.9	1.6
110°-120°	355.5	1.4
120°-130°	170.4	0.7
130°-140°	85.2	0.3
140°-150°	49.6	0.2
150°-160°	28.9	0.1
160°-170°	15.0	0.1
170°-180°	4.6	0.0
0°-30°	9441.3	37.6
0°-40°	14744.3	58.8
0°-60°	21252.2	84.7
0°-90°	23853.2	95.1
90°-120°	888.4	3.5
90°-150°	1193.7	4.8
90°-180°	1242.0	4.9
0°-180°	25095.3	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°	3	18	24	31	35	10
95°	25	58	86	116	134	82
105°	517	511	436	309	284	489
115°	360	360	361	358	352	360
125°	176	183	187	185	186	164
135°	102	105	109	110	110	81
145°	75	77	78	79	80	48
155°	60	61	62	63	63	28
165°	52	52	53	53	53	15
175°	47	47	47	47	47	5
180°	46	46	46	46	46	



TEST NUMBER: P827145

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL12

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°	3.0	18.0	24.0	31.0	35.0
92.5°	9.0	23.0	38.0	54.0	59.0
95°	25.0	58.0	86.0	116.0	134.0
97.5°	135.0	147.0	166.0	196.0	206.0
100°	276.0	297.0	247.0	258.0	263.0
102.5°	439.0	433.0	316.0	286.0	281.0
105°	517.0	511.0	436.0	309.0	284.0



TEST NUMBER: P827145

CATALOG NUMBER: OHBL-24SE-A-UNV-L840-CD-UPL12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	418.0	421.0	418.0	402.0	385.0
115°	360.0	360.0	361.0	358.0	352.0
117.5°	302.0	306.0	309.0	306.0	304.0
120°	253.0	259.0	261.0	257.0	257.0
122.5°	213.0	218.0	221.0	218.0	219.0
125°	176.0	183.0	187.0	185.0	186.0
127.5°	147.0	153.0	160.0	159.0	159.0
130°	128.0	132.0	137.0	138.0	138.0
132.5°	114.0	117.0	121.0	122.0	123.0
135°	102.0	105.0	109.0	110.0	110.0
137.5°	94.0	96.0	99.0	100.0	101.0
140°	86.0	89.0	91.0	92.0	92.0
142.5°	80.0	82.0	84.0	85.0	86.0
145°	75.0	77.0	78.0	79.0	80.0
147.5°	70.0	72.0	74.0	74.0	75.0
150°	67.0	68.0	69.0	70.0	70.0
152.5°	63.0	64.0	65.0	66.0	66.0
155°	60.0	61.0	62.0	63.0	63.0
157.5°	57.0	59.0	59.0	60.0	60.0
160°	55.0	56.0	57.0	57.0	57.0
162.5°	53.0	54.0	54.0	55.0	55.0
165°	52.0	52.0	53.0	53.0	53.0
167.5°	50.0	50.0	51.0	51.0	51.0
170°	49.0	49.0	49.0	50.0	50.0
172.5°	48.0	48.0	48.0	48.0	48.0
175°	47.0	47.0	47.0	47.0	47.0
177.5°	46.0	47.0	47.0	47.0	47.0
180°	46.0	46.0	46.0	46.0	46.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	520.0	522.0	481.0	373.0	309.0
110°	476.0	483.0	461.0	420.0	369.0



(END OF REPORT)