

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: P827157

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

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P827157
REPORT IS A COMBINATION OF REPORTS P826081 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-NL-UNV-L840-CD-UPL12
Description: 24000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 1200 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

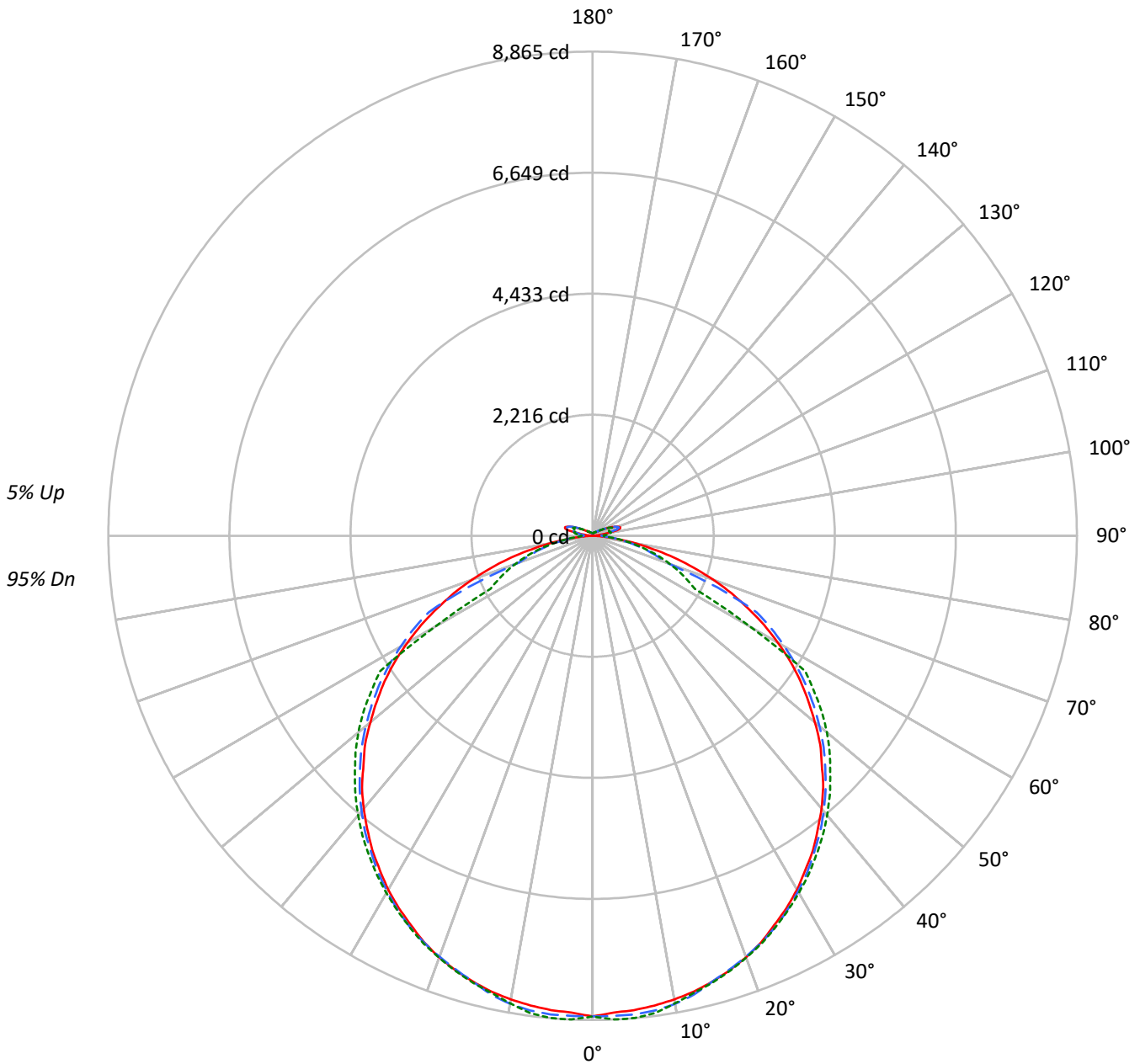
Lumens per Lamp: N/A
Luminaire Lumens: 25952.3 lumens
Efficiency: N/A
Efficacy: 177.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.1')
CIE Type: Direct

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

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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	0																
RCR																																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	97	97	97	95																			
1	108	103	99	96	105	101	97	94	96	93	90	91	88	86	86	84	83	80																			
2	99	91	84	78	95	88	82	77	84	79	75	80	76	72	76	73	70	67																			
3	90	80	72	65	87	78	70	65	74	68	63	71	65	61	67	63	59	57																			
4	82	71	62	56	80	69	61	55	66	59	54	63	57	52	60	55	51	49																			
5	76	63	54	48	73	62	53	47	59	52	46	56	50	45	54	49	44	42																			
6	70	57	48	42	68	56	47	41	53	46	40	51	45	40	49	43	39	37																			
7	65	51	43	37	63	50	42	36	48	41	36	46	40	35	45	39	35	33																			
8	60	47	38	33	58	46	38	32	44	37	32	43	36	31	41	35	31	29																			
9	56	43	35	29	55	42	34	29	41	34	29	39	33	28	38	32	28	26																			
10	53	40	32	27	51	39	31	26	38	31	26	36	30	26	35	29	25	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15030	15030	15030
5°	14869	15002	15161
10°	14795	14932	15005
15°	14712	14705	14874
20°	14609	14581	14800
25°	14423	14489	14732
30°	14264	14328	14668
35°	14071	14137	14610
40°	13839	13957	14567
45°	13515	13705	14477
50°	13168	13420	14419
55°	12748	13059	14174
60°	12117	12525	10950
65°	11213	11840	7293
70°	10049	6087	6973
75°	8342	5501	6501
80°	5859	4602	5692
85°	2351	3687	4925



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	836.0	3.2
10°-20°	2393.8	9.2
20°-30°	3642.3	14.0
30°-40°	4428.6	17.1
40°-50°	4656.4	17.9
50°-60°	4251.9	16.4
60°-70°	2725.7	10.5
70°-80°	1287.6	5.0
80°-90°	360.2	1.4
90°-100°	213.5	0.8
100°-110°	439.8	1.7
110°-120°	362.7	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°	6872.2	26.5
0°-40°	11300.8	43.5
0°-60°	20209.1	77.9
0°-90°	24582.5	94.7
90°-120°	1016.1	3.9
90°-150°	1321.3	5.1
90°-180°	1370.0	5.3
0°-180°	25952.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8800	8800	8800	8800	8800	
5°	8718	8752	8797	8845	8863	829
15°	8454	8517	8453	8465	8471	2387
25°	7867	7880	7907	7920	7914	3630
35°	7032	6990	7070	7157	7137	4395
45°	5931	5920	6020	6163	6152	4584
55°	4648	4612	4768	4927	4940	4145
65°	3132	3132	3314	1901	1907	3105
75°	1547	1577	1024	1078	1082	1631
85°	202	256	320	346	327	299
90°	3	104	166	199	200	11
95°	30	103	188	254	272	85
105°	525	528	461	334	307	497
115°	368	371	376	369	354	365
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8800.0	8800.0	8800.0	8800.0	<i>8800.0</i>
2.5°	<i>8738.2</i>	<i>8767.6</i>	<i>8800.0</i>	<i>8841.7</i>	<i>8864.7</i>
5°	8718.1	8752.1	8796.9	8844.8	<i>8863.3</i>
7.5°	8674.9	8722.7	8766.0	8800.0	<i>8810.8</i>
10°	8620.8	8678.0	8702.7	8699.6	<i>8691.9</i>
12.5°	8548.2	8608.6	8600.9	8565.2	<i>8571.5</i>
15°	8454.1	8517.3	8452.6	8464.9	<i>8471.1</i>
17.5°	8342.9	8404.7	8329.0	8353.7	<i>8355.3</i>
20°	8213.3	8259.5	8200.8	8220.9	<i>8220.9</i>
22.5°	8057.3	8089.7	8065.0	8078.9	<i>8082.0</i>
25°	7867.3	7879.6	7907.4	7919.8	<i>7913.6</i>
27.5°	7685.2	7669.7	7723.8	7753.1	<i>7737.5</i>
30°	7482.8	7458.1	7521.4	7569.3	<i>7550.8</i>
32.5°	7251.2	7235.8	7308.4	7365.5	<i>7354.7</i>
35°	7032.0	6990.3	7070.5	7157.0	<i>7136.9</i>
37.5°	6772.5	6747.8	6838.9	6930.1	<i>6919.3</i>
40°	6519.3	6477.6	6581.1	6689.1	<i>6678.3</i>
42.5°	6247.6	6198.0	6310.8	6440.6	<i>6428.2</i>
45°	5930.9	5920.1	6020.5	6162.6	<i>6151.8</i>
47.5°	5650.1	5595.9	5736.4	5873.9	<i>5886.3</i>
50°	5310.2	5290.2	5418.4	5585.2	<i>5597.4</i>
52.5°	4978.3	4964.4	5098.6	5267.0	<i>5288.6</i>
55°	4647.8	4612.3	4768.2	4927.3	<i>4939.7</i>
57.5°	4294.3	4257.2	4416.3	4589.2	<i>4615.4</i>
60°	3915.9	3880.4	4054.8	4215.5	<i>3352.3</i>
62.5°	3537.6	3512.9	3695.2	2617.3	<i>2109.4</i>
65°	3131.5	3131.5	3313.6	1900.8	<i>1907.0</i>
67.5°	2751.7	2727.0	2470.7	1707.7	<i>1707.7</i>
70°	2344.0	2353.3	1423.6	1496.3	<i>1497.8</i>
72.5°	1934.8	1968.8	1229.2	1287.7	<i>1290.8</i>
75°	1547.2	1576.6	1023.7	1077.8	<i>1082.4</i>
77.5°	1136.5	874.0	823.0	864.8	<i>866.3</i>
80°	798.3	551.3	630.1	670.1	<i>665.5</i>
82.5°	466.2	386.0	461.7	491.1	<i>489.5</i>
85°	202.2	256.3	319.6	345.9	<i>327.3</i>
87.5°	64.7	159.1	199.1	214.7	<i>213.0</i>
90°	3.0	104.5	166.1	199.2	<i>200.3</i>
92.5°	9.0	90.8	161.6	208.5	<i>215.0</i>
95°	29.6	102.8	188.0	253.5	<i>271.5</i>
97.5°	138.1	179.4	238.6	304.1	<i>317.2</i>
100°	279.1	323.2	294.9	335.2	<i>341.8</i>
102.5°	446.7	454.6	345.3	335.4	<i>332.0</i>
105°	524.7	528.0	460.7	333.7	<i>307.2</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	427.3	433.4	435.0	414.4	386.5
115°	367.7	370.8	376.4	368.8	353.5
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°	527.7	537.4	502.6	386.9	313.6
110°	485.3	496.9	479.5	432.4	370.5



(END OF REPORT)