

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: P827214

Luminaire Tested: **OHBL-48HE-N-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P827214  
REPORT IS A COMBINATION OF REPORTS P826254 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-48HE-N-UNV-L840-CD-UPL24  
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NARROW LENS AND 2400 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

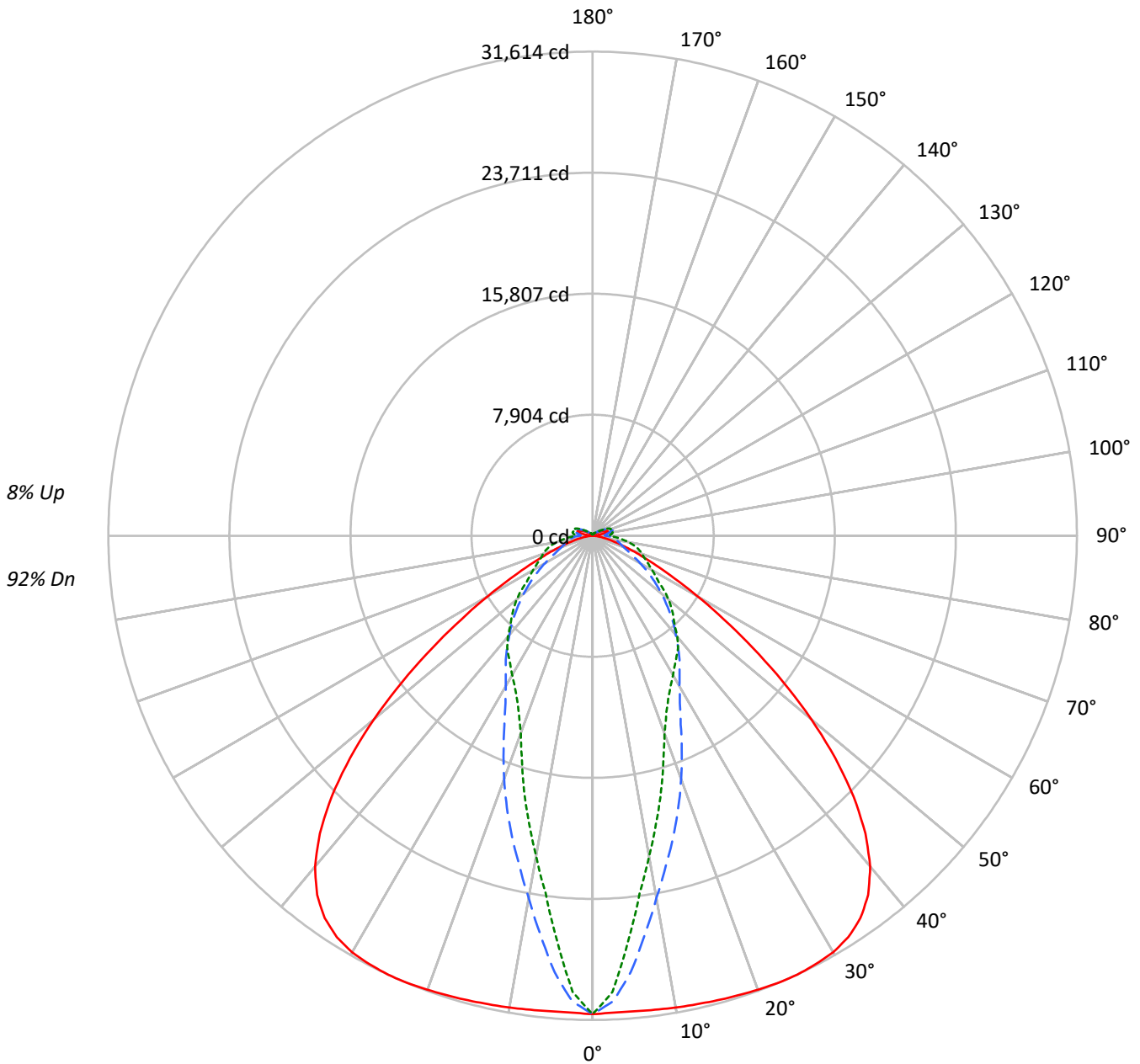
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 48513.3 lumens  
Efficiency: N/A  
Efficacy: 171.2 lumens/watt  
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78  
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 283.4  
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									
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	107	107	107	100	100	100	95	95	95	92																			
1	108	103	99	96	104	100	97	93	94	92	89	89	87	85	84	83	81	78																			
2	99	92	85	80	96	89	83	79	84	80	76	80	76	73	76	73	70	67																			
3	91	82	74	68	88	80	73	67	76	70	65	72	67	63	68	64	61	59																			
4	84	74	66	59	82	72	64	59	68	62	57	65	60	55	62	58	54	52																			
5	78	67	58	52	76	65	57	52	62	55	50	59	54	49	57	52	48	46																			
6	73	61	52	47	70	59	52	46	57	50	45	54	49	44	52	47	43	41																			
7	68	56	48	42	66	54	47	41	52	45	41	50	44	40	48	43	39	37																			
8	64	51	43	38	62	50	43	38	48	42	37	46	41	36	45	39	36	34																			
9	60	47	40	35	58	46	39	34	45	38	34	43	37	33	42	36	33	31																			
10	56	44	37	32	55	43	36	32	42	35	31	40	35	31	39	34	30	28																			

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

	0°	45°	90°
0°	49390	49390	49390
5°	49082	44999	42023
10°	49426	37921	33860
15°	50174	32447	27930
20°	51354	27448	22707
25°	52881	22730	20003
30°	54435	19592	18690
35°	55264	17866	17919
40°	53989	16148	17119
45°	49325	14603	15975
50°	41282	12912	15133
55°	31066	11320	13616
60°	21510	9720	13215
65°	14245	8384	13170
70°	9521	7884	14159
75°	6398	8155	15690
80°	4171	9075	17173
85°	2175	11454	20478



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2629.0	5.4
10°-20°	6184.4	12.7
20°-30°	7752.1	16.0
30°-40°	8225.9	17.0
40°-50°	7437.5	15.3
50°-60°	5392.7	11.1
60°-70°	3384.2	7.0
70°-80°	2239.5	4.6
80°-90°	1296.4	2.7
90°-100°	856.9	1.8
100°-110°	1236.3	2.5
110°-120°	956.7	2.0
120°-130°	460.2	0.9
130°-140°	225.1	0.5
140°-150°	128.5	0.3
150°-160°	70.1	0.1
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	16565.5	34.1
0°-40°	24791.4	51.1
0°-60°	37621.6	77.5
0°-90°	44541.7	91.8
90°-120°	3049.9	6.3
90°-150°	3863.6	8.0
90°-180°	3972.0	8.2
0°-180°	48513.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	31230	31230	31230	31230	31230	
5°	31168	30368	28585	27259	26573	###
15°	31406	25598	20331	18081	17260	8906
25°	31614	19793	13613	12083	11699	14605
35°	30481	13159	9880	9571	9568	18949
45°	24097	8334	7160	7333	7458	18357
55°	12757	5166	4672	5068	5249	11527
65°	4563	2996	2705	3466	3852	4748
75°	1409	1614	1816	2821	2990	1571
85°	247	669	1329	1849	1697	296
90°	5	313	817	1147	1163	20
95°	65	307	850	1149	1221	175
105°	1027	1123	1337	1255	1224	976
115°	725	791	1032	1113	1116	730
125°	374	404	532	576	570	348
135°	230	240	285	329	331	181
145°	181	188	197	221	219	114
155°	152	163	168	172	166	65
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°	31230.5	31230.5	31230.5	31230.5	31230.5
2.5°	31165.1	30986.7	30430.9	30092.1	29806.7
5°	31168.0	30368.5	28585.1	27259.4	26572.8
7.5°	31212.6	29435.2	26222.1	24287.1	23532.1
10°	31281.0	28278.9	24016.6	21953.8	21249.3
12.5°	31331.5	26977.0	22075.6	19956.3	19183.5
15°	31405.8	25597.9	20330.9	18080.8	17260.4
17.5°	31474.2	24298.9	18606.9	16255.8	15343.3
20°	31542.6	22899.0	16882.9	14460.5	13708.5
22.5°	31608.0	21421.7	15200.6	13066.4	12552.2
25°	31613.9	19792.9	13613.4	12082.6	11699.2
27.5°	31536.6	18104.6	12326.3	11259.3	11021.5
30°	31402.9	16466.8	11327.6	10664.8	10495.4
32.5°	31070.0	14796.4	10554.8	10091.1	9993.0
35°	30481.4	13158.6	9880.1	9571.0	9568.0
37.5°	29554.1	11705.1	9148.9	9095.4	9160.8
40°	28183.8	10432.9	8456.3	8599.0	8599.0
42.5°	26355.8	9327.2	7829.2	7974.8	7936.2
45°	24096.8	8334.5	7160.4	7332.8	7457.6
47.5°	21478.2	7460.6	6476.7	6809.7	6982.0
50°	18630.7	6628.3	5852.6	6277.6	6473.8
52.5°	15646.4	5858.5	5243.2	5730.7	5888.2
55°	12757.3	5165.9	4672.5	5067.9	5249.2
57.5°	10141.7	4506.1	4113.7	4488.2	4862.8
60°	7891.6	3938.4	3587.6	4122.6	4497.2
62.5°	6027.9	3433.1	3094.2	3780.8	4155.3
65°	4562.6	2996.1	2704.8	3465.8	3852.2
67.5°	3439.0	2618.6	2401.7	3236.9	3614.4
70°	2583.0	2253.0	2157.9	3094.2	3433.1
72.5°	1908.2	1917.2	1964.7	2969.4	3228.0
75°	1408.9	1614.0	1816.1	2820.8	2990.2
77.5°	1007.6	1337.6	1682.3	2642.4	2701.9
80°	698.5	1090.9	1542.6	2407.6	2357.1
82.5°	436.9	873.9	1417.8	2149.0	2009.3
85°	246.7	668.8	1328.6	1848.8	1697.2
87.5°	110.0	499.4	1162.2	1441.6	1346.5
90°	5.0	313.4	816.8	1146.9	1162.8
92.5°	22.9	276.8	782.4	1094.8	1137.5
95°	64.9	307.2	849.7	1149.4	1221.0
97.5°	283.9	463.4	949.1	1235.0	1303.7
100°	569.8	740.6	1058.6	1287.7	1326.4
102.5°	873.8	990.7	1156.0	1270.3	1286.1
105°	1026.8	1122.8	1337.4	1254.9	1223.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	837.7	921.1	1175.5	1250.6	1233.5
115°	724.7	791.1	1031.9	1113.1	1116.0
117.5°	627.7	673.3	888.3	961.6	965.6
120°	525.7	572.3	759.7	817.1	811.1
122.5°	446.7	482.4	637.1	685.6	676.6
125°	373.7	403.6	532.4	576.0	570.0
127.5°	318.7	337.6	445.7	488.3	484.4
130°	281.7	295.6	377.0	419.6	420.6
132.5°	250.7	263.7	324.2	369.8	368.8
135°	229.7	239.7	285.3	328.9	330.9
137.5°	212.7	224.6	254.4	296.1	296.1
140°	197.7	207.7	230.5	268.2	269.2
142.5°	187.7	194.7	210.6	242.3	242.3
145°	180.7	187.6	196.6	221.4	219.4
147.5°	171.7	181.6	186.6	203.4	200.5
150°	164.7	175.6	178.6	188.5	186.5
152.5°	157.7	168.6	171.6	178.5	175.6
155°	151.7	162.6	167.6	171.5	165.6
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°	1030.8	1132.9	1384.8	1314.6	1213.4
110°	955.8	1048.0	1306.2	1339.1	1261.9



(END OF REPORT)