

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: P827216

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

Issue Date: 5/3/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P827216  
REPORT IS A COMBINATION OF REPORTS P826256 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-W-UNV-L840-CD-UPL24  
Description: 48000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND WIDE LENS AND 2400 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

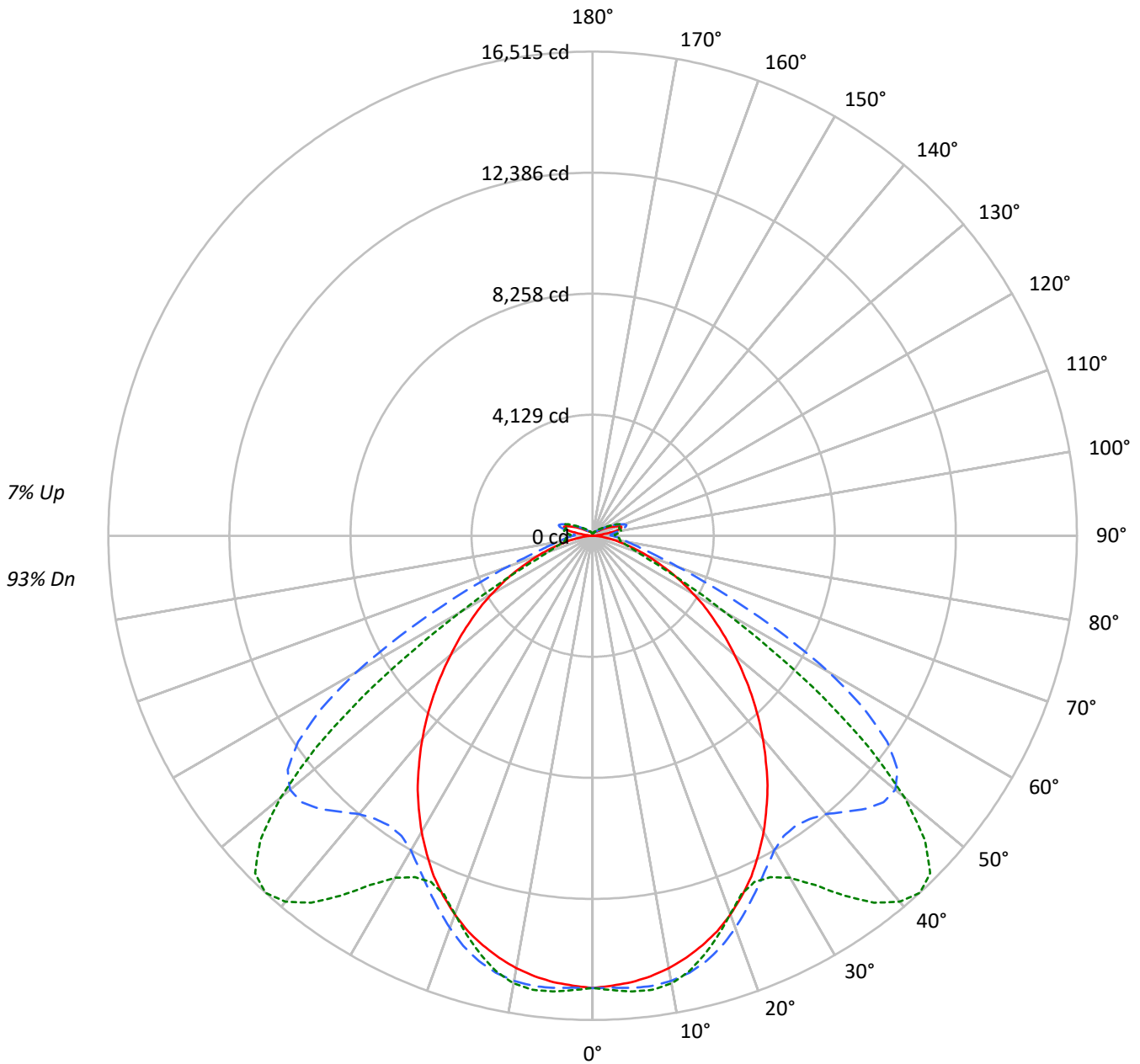
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 48609.3 lumens  
Efficiency: N/A  
Efficacy: 171.5 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.58 / 1.62  
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	114	114	114	114	107	107	107	101	101	101	96	96	96	93																			
1	108	103	99	95	104	100	96	93	95	92	89	89	87	85	85	83	81	79																			
2	98	90	84	78	95	88	82	77	83	78	74	79	75	71	75	71	69	66																			
3	90	79	71	65	86	77	70	64	73	67	62	70	64	60	66	62	58	56																			
4	82	70	62	55	79	68	60	54	65	58	53	62	56	51	59	54	50	48																			
5	75	63	54	47	73	61	53	47	58	51	45	55	49	44	53	48	43	41																			
6	69	56	47	41	67	55	47	41	52	45	40	50	44	39	48	42	38	36																			
7	64	51	42	36	62	50	41	36	47	40	35	45	39	34	43	38	33	31																			
8	59	46	38	32	58	45	37	32	43	36	31	41	35	30	40	34	30	28																			
9	55	42	34	28	54	41	34	28	40	33	28	38	32	27	37	31	27	25																			
10	52	39	31	26	50	38	30	25	37	30	25	35	29	25	34	28	24	22																			

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

	0°	45°	90°
0°	24396	24396	24396
5°	24067	24373	24674
10°	23665	24347	24703
15°	23103	23955	23912
20°	22374	23143	22740
25°	21434	22156	22285
30°	20221	21426	23980
35°	18857	21834	28061
40°	17297	23662	32440
45°	15676	26859	34870
50°	13997	29723	32450
55°	12416	29714	24794
60°	10813	25167	15159
65°	9134	17403	9183
70°	7263	11273	6630
75°	5350	8100	6147
80°	3637	7146	6935
85°	2200	7919	10963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1474.2	3.0
10°-20°	4174.4	8.6
20°-30°	6108.5	12.6
30°-40°	7933.1	16.3
40°-50°	9687.3	19.9
50°-60°	8531.2	17.6
60°-70°	4445.7	9.1
70°-80°	1906.5	3.9
80°-90°	921.7	1.9
90°-100°	662.0	1.4
100°-110°	1072.3	2.2
110°-120°	848.6	1.7
120°-130°	417.2	0.9
130°-140°	208.9	0.4
140°-150°	116.8	0.2
150°-160°	63.2	0.1
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	11757.0	24.2
0°-40°	19690.1	40.5
0°-60°	37908.7	78.0
0°-90°	45182.6	93.0
90°-120°	2582.8	5.3
90°-150°	3325.6	6.8
90°-180°	3427.0	7.1
0°-180°	48609.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15426	15426	15426	15426	15426	
5°	15283	15400	15483	15619	15603	###
15°	14461	14867	15010	14897	14777	4072
25°	12814	13499	13270	13020	13033	5880
35°	10401	11499	12075	14082	14984	6483
45°	7658	9635	13170	15946	16278	5905
55°	5099	8440	12264	10754	9559	4576
65°	2926	5848	5615	3122	2686	2894
75°	1178	2736	1804	1235	1172	1285
85°	250	975	919	899	909	278
90°	8	387	653	754	778	21
95°	60	317	655	794	840	170
105°	1016	1108	1157	977	935	966
115°	712	766	892	933	934	719
125°	361	389	476	508	509	337
135°	220	224	264	303	308	174
145°	172	169	175	196	204	108
155°	143	145	140	141	141	63
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P827216

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15426.3	15426.3	15426.3	15426.3	15426.3
2.5°	15359.7	15426.3	15429.6	15522.8	15512.8
5°	15283.2	15399.7	15482.9	15619.3	15602.7
7.5°	15156.7	15339.7	15486.2	15636.0	15622.6
10°	14977.0	15226.6	15419.6	15542.8	15502.8
12.5°	14744.0	15073.5	15263.2	15289.8	15213.3
15°	14461.1	14867.1	15010.3	14897.1	14777.3
17.5°	14141.6	14617.5	14667.4	14421.2	14271.4
20°	13742.2	14284.7	14234.8	13895.3	13728.9
22.5°	13299.6	13918.6	13758.8	13402.7	13243.0
25°	12813.6	13499.2	13269.6	13020.0	13033.3
27.5°	12244.5	13023.3	12800.3	12913.5	13126.5
30°	11665.4	12524.1	12387.6	13046.6	13466.0
32.5°	11029.7	12011.5	12134.7	13436.0	14121.6
35°	10400.7	11499.0	12074.8	14081.7	14983.6
37.5°	9705.1	10979.8	12171.3	14827.2	15772.4
40°	9029.5	10473.9	12390.9	15496.2	16294.9
42.5°	8340.5	10021.3	12760.4	15892.2	16514.6
45°	7658.2	9635.2	13169.8	15945.5	16278.3
47.5°	6975.9	9309.0	13452.7	15522.8	15369.7
50°	6317.0	9019.5	13472.6	14507.7	13882.0
52.5°	5701.2	8753.2	13106.5	12890.2	11918.3
55°	5098.8	8440.4	12264.5	10753.5	9558.6
57.5°	4549.7	8007.7	10966.5	8457.0	7152.3
60°	3967.2	7421.9	9289.1	6187.2	5158.7
62.5°	3431.4	6693.0	7408.6	4306.7	3707.6
65°	2925.5	5847.7	5614.7	3121.9	2685.9
67.5°	2389.7	4972.4	4143.6	2276.5	1996.9
70°	1970.3	4160.3	3085.3	1770.6	1607.5
72.5°	1541.0	3388.1	2306.5	1437.8	1347.9
75°	1178.2	2735.8	1803.9	1234.8	1171.5
77.5°	868.7	2163.3	1451.1	1091.7	1031.7
80°	609.1	1704.0	1214.8	975.2	951.9
82.5°	409.4	1318.0	1035.1	928.6	931.9
85°	249.6	975.2	918.6	898.6	908.6
87.5°	119.8	692.3	788.8	818.7	828.7
90°	8.3	386.8	652.7	754.3	777.9
92.5°	17.0	314.6	604.5	721.0	750.7
95°	59.7	317.3	654.6	793.8	840.4
97.5°	275.7	460.7	745.7	898.2	941.2
100°	562.0	732.4	859.1	969.3	988.3
102.5°	863.0	977.8	964.1	973.4	972.0
105°	1016.3	1108.5	1156.9	977.1	934.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	828.0	899.9	1023.7	1047.3	1021.9
115°	712.0	765.6	892.0	933.3	934.0
117.5°	615.3	652.9	766.7	805.7	810.0
120°	513.3	550.9	656.4	691.4	688.7
122.5°	434.3	462.9	558.8	593.4	590.7
125°	361.3	389.3	476.2	508.4	508.8
127.5°	306.0	322.3	405.5	439.8	442.1
130°	269.0	277.0	346.9	381.2	388.8
132.5°	241.0	248.0	301.6	338.8	344.5
135°	220.0	224.0	264.3	302.9	308.2
137.5°	203.0	206.0	235.3	271.5	278.2
140°	188.0	192.0	210.3	245.6	249.9
142.5°	178.3	179.0	193.0	221.6	224.9
145°	171.6	169.0	175.3	196.3	203.9
147.5°	162.6	163.3	165.3	180.6	183.9
150°	155.6	157.6	154.0	161.6	169.3
152.5°	148.6	150.6	147.0	148.0	154.6
155°	142.6	144.6	140.0	141.0	141.0
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°	1023.6	1114.2	1212.6	1065.1	949.8
110°	945.6	1027.9	1139.3	1115.5	1024.2



(END OF REPORT)