

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: P827221

Luminaire Tested: **OHBL-48SE-NL-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827221
REPORT IS A COMBINATION OF REPORTS P826261 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-48SE-NL-UNV-L840-CD-UPL24
Description: 48000 LUMEN OHBL SE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

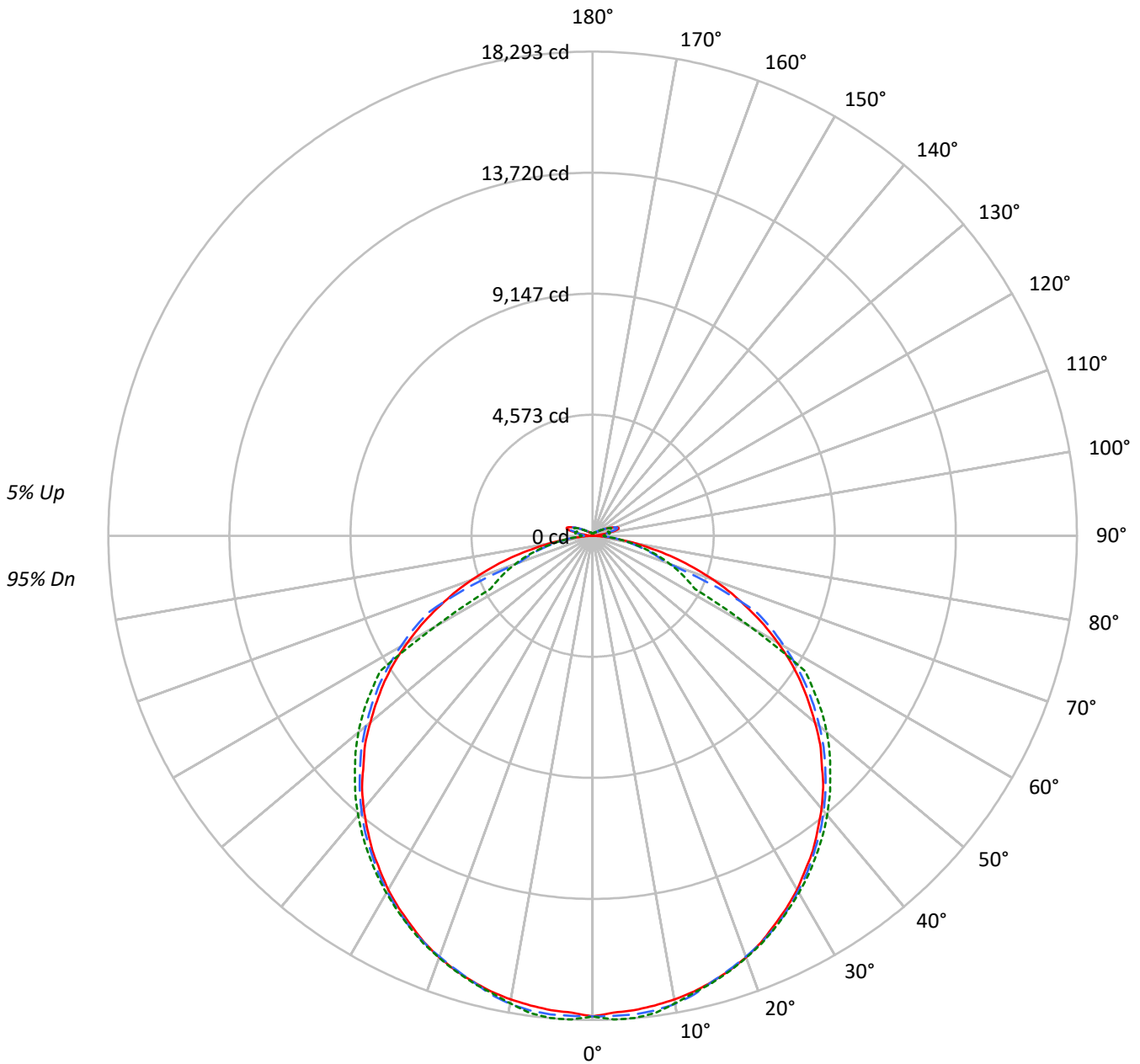
Lumens per Lamp: N/A
Luminaire Lumens: 53404.3 lumens
Efficiency: N/A
Efficacy: 174.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.1')
CIE Type: Direct

Input Watts (W): 306.2
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	115	115	115	115	108	108	108	103	103	103	97	97	97	95																			
1	108	104	99	96	105	101	97	94	96	93	90	91	89	86	87	85	83	80																			
2	99	91	84	79	95	88	82	77	84	79	75	80	76	72	76	73	70	68																			
3	90	80	72	66	87	78	70	65	74	68	63	71	66	61	68	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	57	50	45	54	49	44	42																			
6	70	57	48	42	68	56	47	41	53	46	41	51	45	40	49	43	39	37																			
7	65	51	43	37	63	50	42	36	48	41	36	47	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°	31016	31016	31016
5°	30683	30958	31286
10°	30530	30814	30963
15°	30360	30345	30692
20°	30147	30090	30540
25°	29762	29899	30400
30°	29434	29567	30268
35°	29036	29173	30149
40°	28557	28802	30060
45°	27889	28280	29873
50°	27174	27693	29754
55°	26305	26947	29249
60°	25004	25846	22596
65°	23138	24432	15050
70°	20736	12560	14389
75°	17214	11351	13416
80°	12089	9496	11746
85°	4851	7608	10164



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1725.2	3.2
10°-20°	4939.7	9.2
20°-30°	7516.2	14.1
30°-40°	9138.6	17.1
40°-50°	9608.8	18.0
50°-60°	8774.0	16.4
60°-70°	5624.6	10.5
70°-80°	2657.0	5.0
80°-90°	742.9	1.4
90°-100°	427.0	0.8
100°-110°	858.3	1.6
110°-120°	705.3	1.3
120°-130°	331.2	0.6
130°-140°	165.7	0.3
140°-150°	96.1	0.2
150°-160°	56.0	0.1
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	14181.0	26.6
0°-40°	23319.6	43.7
0°-60°	41702.4	78.1
0°-90°	50726.8	95.0
90°-120°	1990.5	3.7
90°-150°	2583.6	4.8
90°-180°	2677.0	5.0
0°-180°	53404.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18159	18159	18159	18159	18159	
5°	17990	18060	18153	18252	18290	###
15°	17445	17576	17442	17468	17480	4925
25°	16235	16260	16317	16343	16330	7491
35°	14511	14425	14590	14769	14727	9068
45°	12239	12216	12424	12717	12694	9460
55°	9591	9518	9840	10168	10193	8553
65°	6462	6462	6838	3922	3935	6406
75°	3193	3253	2112	2224	2234	3366
85°	417	529	660	714	675	617
90°	5	212	340	409	410	22
95°	62	203	382	512	542	170
105°	1019	1027	895	652	600	968
115°	708	721	731	719	694	709
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: P827221

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18159.2	18159.2	18159.2	18159.2	18159.2
2.5°	18031.7	18092.4	18159.2	18245.2	18292.8
5°	17990.2	18060.3	18152.8	18251.6	18289.7
7.5°	17901.1	17999.6	18089.0	18159.2	18181.5
10°	17789.5	17907.5	17958.5	17952.1	17936.2
12.5°	17639.7	17764.2	17748.3	17674.8	17687.6
15°	17445.4	17575.9	17442.3	17467.6	17480.4
17.5°	17216.0	17343.5	17187.3	17238.2	17241.6
20°	16948.4	17043.9	16922.8	16964.3	16964.3
22.5°	16626.6	16693.4	16642.5	16671.1	16677.5
25°	16234.6	16259.9	16317.3	16342.9	16330.1
27.5°	15858.8	15826.8	15938.4	15998.8	15966.8
30°	15441.2	15390.2	15520.8	15619.6	15581.5
32.5°	14963.1	14931.4	15081.2	15198.9	15176.7
35°	14510.8	14424.7	14590.4	14768.8	14727.3
37.5°	13975.4	13924.4	14112.3	14300.6	14278.3
40°	13452.8	13366.8	13580.3	13803.3	13781.1
42.5°	12892.2	12789.9	13022.7	13290.6	13264.9
45°	12238.7	12216.4	12423.6	12716.7	12694.5
47.5°	11659.1	11547.5	11837.3	12121.0	12146.6
50°	10957.8	10916.6	11181.1	11525.2	11550.5
52.5°	10273.0	10244.3	10521.3	10868.7	10913.3
55°	9590.8	9517.6	9839.5	10167.7	10193.4
57.5°	8861.5	8784.9	9113.2	9470.1	9524.1
60°	8080.5	8007.3	8367.3	8698.9	6917.7
62.5°	7299.9	7249.0	7625.1	5401.0	4352.8
65°	6461.9	6461.9	6837.7	3922.4	3935.2
67.5°	5678.3	5627.3	5098.4	3524.0	3524.0
70°	4836.9	4856.1	2937.6	3087.8	3090.8
72.5°	3992.5	4062.7	2536.5	2657.3	2663.7
75°	3192.7	3253.4	2112.5	2224.1	2233.6
77.5°	2345.3	1803.5	1698.2	1784.6	1787.6
80°	1647.3	1137.5	1300.1	1382.8	1373.3
82.5°	962.1	796.5	952.7	1013.4	1010.0
85°	417.3	529.0	659.5	713.8	675.4
87.5°	133.6	328.2	410.9	442.9	439.6
90°	5.0	212.5	340.2	409.1	410.1
92.5°	17.0	185.0	327.0	420.8	436.8
95°	62.4	203.4	382.5	511.7	541.7
97.5°	275.4	357.8	462.8	602.0	641.4
100°	558.4	640.0	571.8	659.2	671.6
102.5°	868.9	892.5	678.4	655.9	651.3
105°	1018.9	1027.1	894.9	651.9	599.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	827.2	845.6	839.1	806.6	752.0
115°	707.9	721.3	730.7	719.3	694.0
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°	1022.9	1042.7	977.5	757.7	616.4
110°	948.2	966.7	931.1	841.6	721.0



(END OF REPORT)