

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: P826996

Luminaire Tested: **OHB-24HE-NL-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P826996
REPORT IS A COMBINATION OF REPORTS P826207 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: OHB-24HE-NL-UNV-L840-CD-UPL24
Description: 24000 LUMEN OHB HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

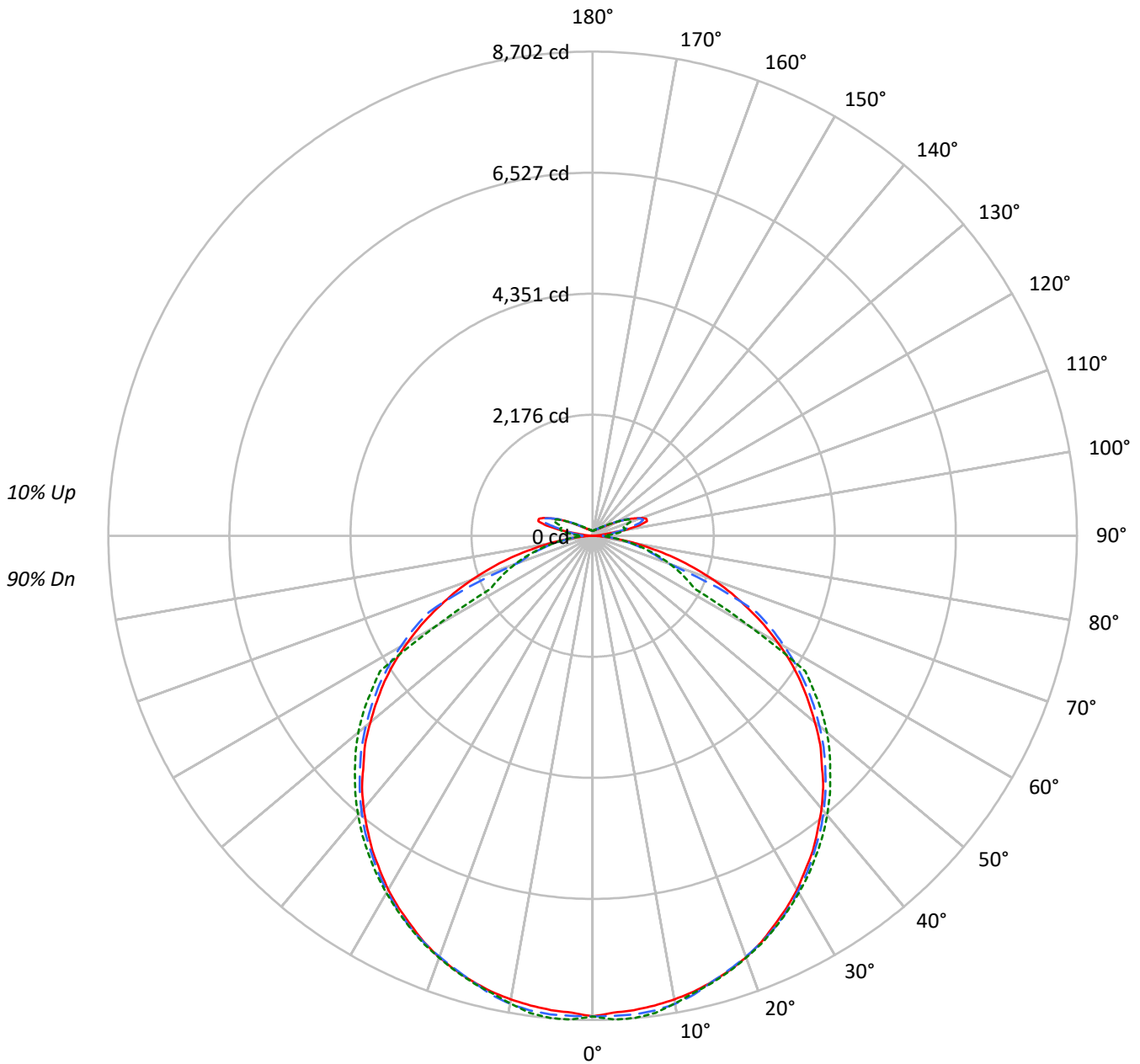
Lumens per Lamp: N/A
Luminaire Lumens: 26673.2 lumens
Efficiency: N/A
Efficacy: 181.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1.93' x L: 1.8' x H: 0.1')
CIE Type: Direct

Input Watts (W): 147.4
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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90																			
1	107	103	98	95	103	99	96	92	93	90	88	88	86	83	83	81	79	77																			
2	98	90	83	78	94	87	81	76	82	77	73	77	73	70	73	70	67	64																			
3	89	79	71	65	86	77	69	64	72	66	61	68	63	59	65	61	57	54																			
4	82	70	61	55	79	68	60	54	64	58	52	61	55	51	58	53	49	47																			
5	75	62	54	47	72	61	53	47	58	51	45	55	49	44	52	47	43	40																			
6	69	56	47	41	67	55	47	41	52	45	40	49	43	38	47	42	37	35																			
7	64	51	42	36	62	50	42	36	47	40	35	45	39	34	43	37	33	31																			
8	60	46	38	32	57	45	37	32	43	36	31	41	35	30	39	34	30	28																			
9	56	42	34	29	54	41	34	29	40	33	28	38	32	27	36	31	27	25																			
10	52	39	31	26	50	38	31	26	37	30	25	35	29	25	34	28	24	22																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26719	26719	26719
5°	26443	26635	26892
10°	26321	26477	26556
15°	26184	26040	26264
20°	26012	25786	26072
25°	25691	25586	25887
30°	25419	25263	25705
35°	25088	24886	25529
40°	24689	24523	25369
45°	24126	24029	25116
50°	23525	23472	24905
55°	22794	22773	24350
60°	21692	21763	18683
65°	20102	20475	12333
70°	18053	10458	11642
75°	15034	9360	10643
80°	10614	7703	8997
85°	4309	5963	7166



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	820.7	3.1
10°-20°	2349.8	8.8
20°-30°	3575.4	13.4
30°-40°	4347.2	16.3
40°-50°	4570.9	17.1
50°-60°	4173.8	15.6
60°-70°	2675.6	10.0
70°-80°	1263.9	4.7
80°-90°	356.6	1.3
90°-100°	324.7	1.2
100°-110°	830.3	3.1
110°-120°	697.5	2.6
120°-130°	331.2	1.2
130°-140°	165.7	0.6
140°-150°	96.1	0.4
150°-160°	56.0	0.2
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	6745.9	25.3
0°-40°	11093.1	41.6
0°-60°	19837.7	74.4
0°-90°	24133.9	90.5
90°-120°	1852.5	6.9
90°-150°	2445.5	9.2
90°-180°	2539.0	9.5
0°-180°	26673.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8638	8638	8638	8638	8638	
5°	8558	8591	8635	8682	8700	814
15°	8299	8361	8297	8309	8315	2343
25°	7723	7735	7762	7774	7768	3564
35°	6903	6862	6941	7026	7006	4314
45°	5822	5811	5910	6049	6039	4500
55°	4562	4528	4681	4837	4849	4069
65°	3074	3074	3253	1866	1872	3048
75°	1519	1548	1005	1058	1062	1601
85°	198	252	314	340	321	293
90°	5	119	186	227	231	12
95°	58	155	272	363	393	167
105°	1010	1009	868	625	575	959
115°	700	710	714	708	692	703
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8638.3	8638.3	8638.3	8638.3	8638.3
2.5°	8577.6	8606.5	8638.3	8679.2	8701.8
5°	8557.9	8591.3	8635.2	8682.3	8700.4
7.5°	8515.5	8562.4	8604.9	8638.3	8648.9
10°	8462.4	8518.6	8542.8	8539.8	8532.2
12.5°	8391.2	8450.4	8442.8	8407.8	8413.9
15°	8298.7	8360.8	8297.3	8309.3	8315.4
17.5°	8189.6	8250.3	8176.0	8200.2	8201.8
20°	8062.3	8107.8	8050.1	8069.9	8069.9
22.5°	7909.2	7941.0	7916.8	7930.4	7933.5
25°	7722.8	7734.8	7762.1	7774.3	7768.2
27.5°	7544.0	7528.8	7581.9	7610.6	7595.4
30°	7345.3	7321.1	7383.2	7430.2	7412.1
32.5°	7117.9	7102.9	7174.1	7230.1	7219.5
35°	6902.7	6861.8	6940.6	7025.5	7005.8
37.5°	6648.1	6623.8	6713.2	6802.8	6792.2
40°	6399.5	6358.6	6460.1	6566.2	6555.6
42.5°	6132.8	6084.1	6194.9	6322.3	6310.1
45°	5821.9	5811.3	5909.9	6049.3	6038.7
47.5°	5546.2	5493.1	5631.0	5765.9	5778.1
50°	5212.6	5193.0	5318.8	5482.5	5494.6
52.5°	4886.8	4873.2	5004.9	5170.2	5191.4
55°	4562.3	4527.5	4680.6	4836.8	4849.0
57.5°	4215.4	4179.0	4335.1	4504.9	4530.6
60°	3843.9	3809.1	3980.3	4138.0	3290.7
62.5°	3472.6	3448.3	3627.3	2569.2	2070.6
65°	3073.9	3073.9	3252.7	1865.9	1872.0
67.5°	2701.1	2676.9	2425.3	1676.3	1676.3
70°	2300.9	2310.1	1397.4	1468.8	1470.3
72.5°	1899.2	1932.6	1206.6	1264.1	1267.1
75°	1518.8	1547.6	1004.9	1058.0	1062.5
77.5°	1115.6	857.9	807.8	848.9	850.4
80°	783.6	541.1	618.5	657.8	653.3
82.5°	457.7	378.9	453.2	482.1	480.5
85°	198.5	251.6	313.7	339.6	321.3
87.5°	63.5	156.1	195.5	210.7	209.1
90°	5.0	118.9	186.5	227.1	231.2
92.5°	17.0	111.6	193.3	253.7	268.1
95°	57.5	155.0	272.1	363.0	393.0
97.5°	272.0	322.8	384.3	485.1	521.1
100°	555.0	611.7	520.0	575.7	586.3
102.5°	860.5	869.2	646.7	602.5	596.1
105°	1010.5	1008.7	868.2	625.2	574.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	817.1	832.2	820.7	793.2	750.4
115°	699.5	709.6	714.1	707.6	692.4
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°	1014.5	1026.1	954.2	742.6	611.5
110°	938.1	951.6	911.1	828.2	719.4



(END OF REPORT)