

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: P826993

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

Issue Date: 5/3/2024

Test Information

Test Method: LM-79-08
Report Number: P826993
REPORT IS A COMBINATION OF REPORTS P826206 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-N-UNV-L840-CD-UPL24
Description: 24000 LUMEN OHB HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NARROW LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

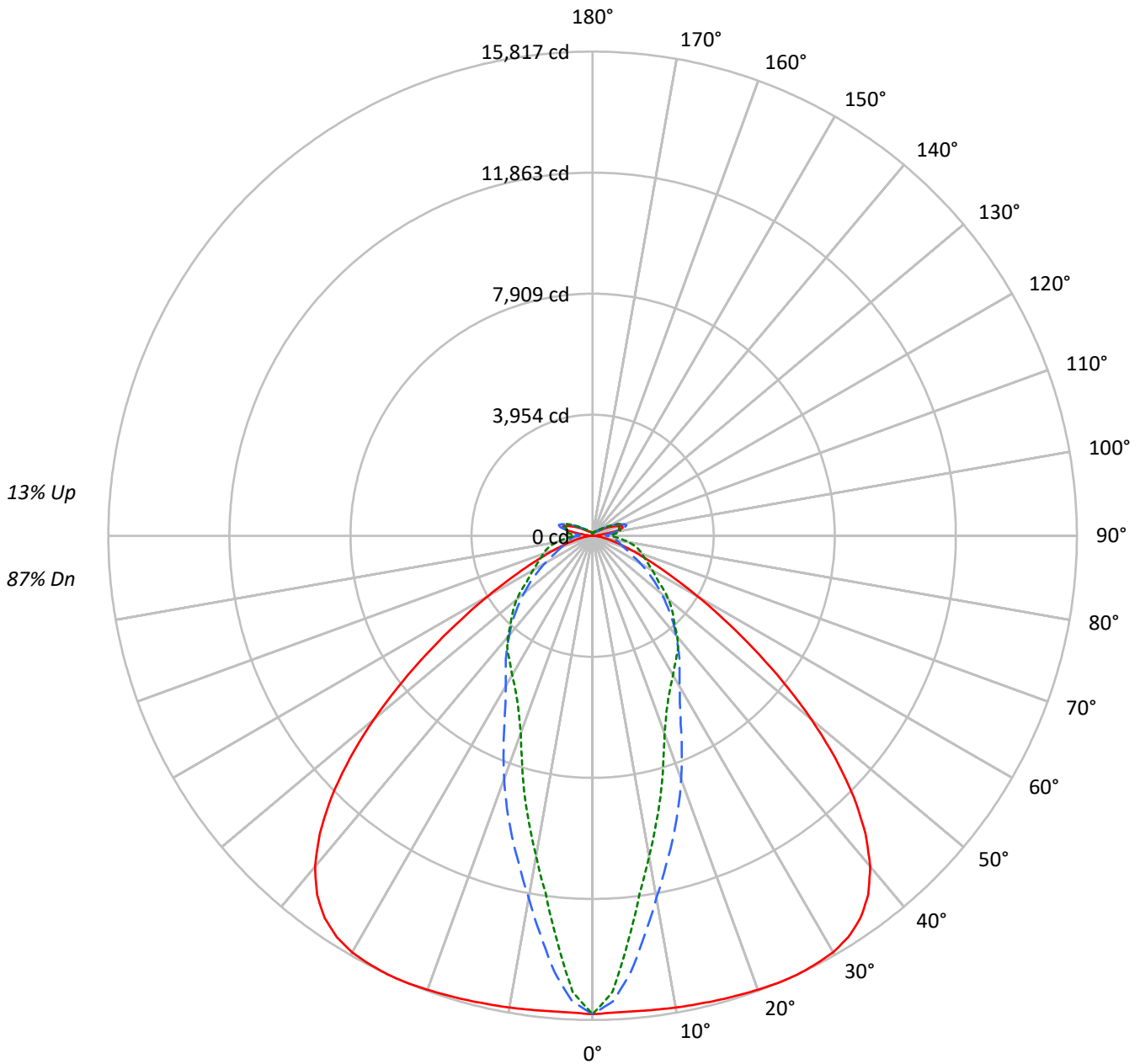
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25481.3 lumens
Efficiency: N/A
Efficacy: 172.9 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 1.93' x L: 1.8' x H: 0.17')
CIE Type: Semi-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

TEST NUMBER: P826993
CATALOG NUMBER: OHB-24HE-N-UNV-L840-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P826993

CATALOG NUMBER: OHB-24HE-N-UNV-L840-CD-UPL24

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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	91	91	91	87				87															
1	107	102	98	95	103	99	95	92	92	89	87	86	84	82	81	79	77	75				75															
2	98	91	84	79	94	88	82	77	82	78	74	77	73	70	72	70	67	64				64															
3	90	81	74	68	87	78	72	66	74	68	64	69	65	61	65	62	58	56				56															
4	83	73	65	59	80	71	63	58	67	60	56	63	58	54	59	55	52	49				49															
5	77	66	58	52	74	64	56	51	60	54	49	57	52	47	54	50	46	44				44															
6	72	60	52	46	69	58	51	45	55	49	44	52	47	43	50	45	41	39				39															
7	67	55	47	41	65	53	46	41	51	44	39	48	43	38	46	41	37	35				35															
8	63	50	43	37	61	49	42	37	47	40	36	45	39	35	43	38	34	32				32															
9	59	47	39	34	57	46	38	34	44	37	33	42	36	32	40	35	31	29				29															
10	55	43	36	31	54	42	35	31	41	34	30	39	33	29	37	32	29	27				27															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	48330	48330	48330
5°	48028	43919	40970
10°	48365	36916	32891
15°	49097	31505	27028
20°	50251	26580	21888
25°	51746	21950	19204
30°	53266	18864	17865
35°	54078	17147	17046
40°	52830	15444	16199
45°	48266	13911	15026
50°	40395	12245	14133
55°	30399	10678	12609
60°	21048	9109	12110
65°	13938	7792	11904
70°	9316	7246	12558
75°	6260	7377	13526
80°	4082	8006	14107
85°	2127	9647	15177



TEST NUMBER: P826993

CATALOG NUMBER: OHB-24HE-N-UNV-L840-CD-UPL24

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1315.3	5.2
10°-20°	3094.2	12.1
20°-30°	3878.5	15.2
30°-40°	4115.5	16.2
40°-50°	3721.1	14.6
50°-60°	2698.0	10.6
60°-70°	1693.2	6.6
70°-80°	1120.5	4.4
80°-90°	651.7	2.6
90°-100°	544.6	2.1
100°-110°	1020.8	4.0
110°-120°	823.7	3.2
120°-130°	395.7	1.6
130°-140°	195.4	0.8
140°-150°	112.3	0.4
150°-160°	63.0	0.2
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	8288.0	32.5
0°-40°	12403.5	48.7
0°-60°	18822.7	73.9
0°-90°	22288.0	87.5
90°-120°	2389.0	9.4
90°-150°	3092.4	12.1
90°-180°	3193.0	12.5
0°-180°	25481.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15625	15625	15625	15625	15625	
5°	15594	15194	14302	13638	13295	###
15°	15713	12807	10172	9046	8636	4456
25°	15817	9903	6811	6045	5853	7307
35°	15250	6583	4943	4788	4787	9480
45°	12056	4170	3582	3669	3731	9184
55°	6383	2585	2338	2536	2626	5767
65°	2283	1499	1353	1734	1927	2375
75°	705	808	909	1411	1496	786
85°	123	335	665	925	849	148
90°	5	174	432	605	616	12
95°	59	209	511	689	740	170
105°	1015	1057	1091	928	888	964
115°	708	745	866	905	904	714
125°	356	380	448	469	465	333
135°	215	222	248	271	273	170
145°	163	168	174	187	187	103
155°	134	140	144	146	143	60
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P826993

CATALOG NUMBER: OHB-24HE-N-UNV-L840-CD-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15625.1	15625.1	15625.1	15625.1	15625.1
2.5°	15592.3	15503.1	15225.0	15055.5	14912.7
5°	15593.8	15193.8	14301.5	13638.3	13294.8
7.5°	15616.1	14726.8	13119.3	12151.2	11773.4
10°	15650.3	14148.4	12015.8	10983.8	10631.3
12.5°	15675.6	13497.0	11044.8	9984.5	9597.8
15°	15712.8	12807.0	10171.8	9046.1	8635.6
17.5°	15747.0	12157.1	9309.3	8133.0	7676.5
20°	15781.2	11456.7	8446.8	7234.8	6858.5
22.5°	15813.9	10717.6	7605.1	6537.3	6280.1
25°	15816.9	9902.7	6811.0	6045.1	5853.3
27.5°	15778.2	9058.0	6167.0	5633.2	5514.2
30°	15711.3	8238.6	5667.4	5335.7	5251.0
32.5°	15544.8	7402.8	5280.7	5048.7	4999.7
35°	15250.3	6583.4	4943.2	4788.5	4787.0
37.5°	14786.3	5856.2	4577.3	4550.6	4583.3
40°	14100.8	5219.8	4230.8	4302.2	4302.2
42.5°	13186.2	4666.5	3917.0	3989.9	3970.6
45°	12056.0	4169.9	3582.4	3668.7	3731.2
47.5°	10745.9	3732.6	3240.4	3407.0	3493.2
50°	9321.2	3316.3	2928.1	3140.8	3238.9
52.5°	7828.1	2931.1	2623.3	2867.1	2946.0
55°	6382.7	2584.6	2337.7	2535.5	2626.2
57.5°	5074.0	2254.5	2058.2	2245.5	2432.9
60°	3948.3	1970.4	1794.9	2062.6	2250.0
62.5°	3015.9	1717.6	1548.1	1891.6	2079.0
65°	2282.7	1499.0	1353.3	1734.0	1927.3
67.5°	1720.6	1310.1	1201.6	1619.5	1808.3
70°	1292.3	1127.2	1079.6	1548.1	1717.6
72.5°	954.7	959.2	983.0	1485.6	1615.0
75°	704.9	807.5	908.6	1411.3	1496.0
77.5°	504.1	669.2	841.7	1322.0	1351.8
80°	349.5	545.8	771.8	1204.6	1179.3
82.5°	218.6	437.2	709.4	1075.2	1005.3
85°	123.4	334.6	664.7	925.0	849.1
87.5°	55.0	249.8	581.5	721.2	673.7
90°	5.0	173.8	432.2	604.8	616.3
92.5°	20.0	161.0	427.4	598.7	626.6
95°	58.9	209.1	511.1	689.0	739.8
97.5°	276.4	377.3	631.2	807.3	858.1
100°	560.9	663.3	766.0	894.1	918.0
102.5°	863.4	919.4	887.2	912.4	916.3
105°	1014.9	1057.4	1090.9	928.2	888.1



TEST NUMBER: P826993

CATALOG NUMBER: OHB-24HE-N-UNV-L840-CD-UPL24

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	822.9	870.6	989.9	1016.0	991.4
115°	708.4	745.1	865.6	905.2	903.7
117.5°	609.8	633.2	742.7	778.9	781.4
120°	507.8	536.7	634.9	661.1	655.1
122.5°	428.8	452.7	533.1	556.4	548.9
125°	355.8	379.8	447.8	469.1	464.6
127.5°	302.4	318.3	377.4	399.2	396.7
130°	265.4	276.3	322.0	343.8	344.8
132.5°	235.9	245.8	279.6	304.4	303.4
135°	214.9	221.8	248.2	271.0	273.0
137.5°	197.9	205.3	223.2	245.6	245.6
140°	182.9	189.8	203.8	223.6	224.6
142.5°	171.4	176.8	186.8	203.7	203.7
145°	162.8	168.3	174.3	187.2	186.7
147.5°	153.8	160.8	164.3	173.7	172.3
150°	146.8	153.3	156.3	161.8	161.3
152.5°	139.8	146.3	149.3	153.3	151.8
155°	133.8	140.3	143.8	146.3	143.3
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°	1018.9	1072.0	1159.0	1022.0	910.4
110°	942.4	993.0	1099.7	1077.7	990.1



(END OF REPORT)