

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: P827140

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

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827140
REPORT IS A COMBINATION OF REPORTS P826243 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-24HE-NL-UNV-L840-CD-UPL24
Description: 24000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

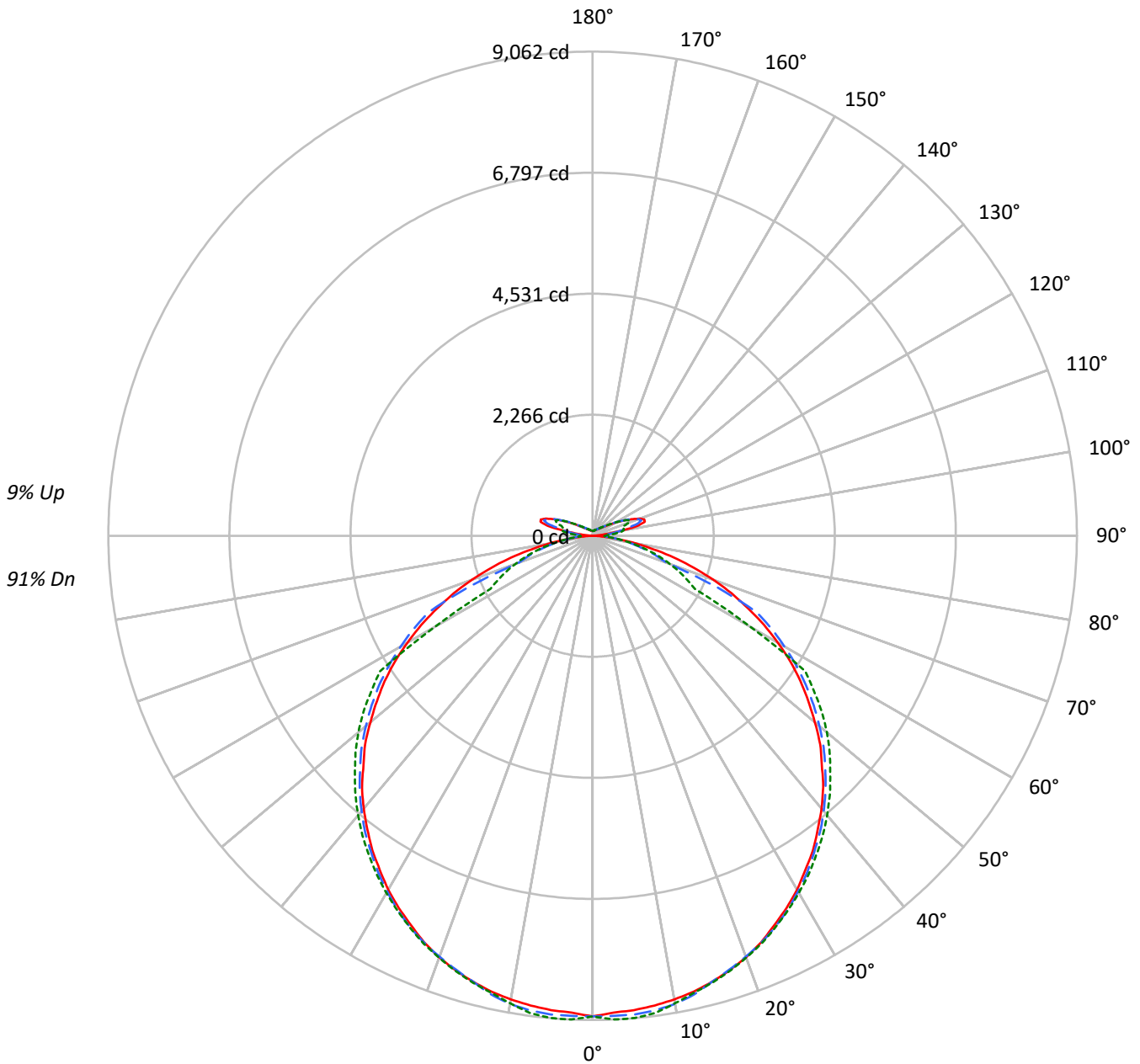
Lumens per Lamp: N/A
Luminaire Lumens: 27676.3 lumens
Efficiency: N/A
Efficacy: 184.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.8' x H: 0.1')
CIE Type: Direct

Input Watts (W): 150.4
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	100	100	100	94	94	94	91																			
1	107	103	99	95	104	99	96	93	94	91	88	88	86	84	83	81	80	77																			
2	98	90	83	78	94	87	81	76	82	77	73	78	74	70	73	70	67	65																			
3	89	79	71	65	86	77	70	64	72	66	61	69	63	59	65	61	57	55																			
4	82	70	61	55	79	68	60	54	64	58	52	61	55	51	58	53	49	47																			
5	75	63	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	50	43	39	47	42	38	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	58	45	37	32	43	36	31	41	35	30	39	34	30	28																			
9	56	42	34	29	54	42	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	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14226	14226	14226
5°	14079	14204	14350
10°	14014	14141	14202
15°	13942	13930	14078
20°	13850	13817	14008
25°	13679	13733	13944
30°	13534	13585	13883
35°	13358	13409	13829
40°	13145	13244	13788
45°	12846	13010	13702
50°	12526	12747	13647
55°	12137	12411	13416
60°	11550	11914	10364
65°	10704	11273	6903
70°	9612	5804	6600
75°	8005	5257	6154
80°	5651	4414	5388
85°	2294	3565	4662



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	854.6	3.1
10°-20°	2447.0	8.8
20°-30°	3723.3	13.5
30°-40°	4527.0	16.4
40°-50°	4759.9	17.2
50°-60°	4346.4	15.7
60°-70°	2786.3	10.1
70°-80°	1316.2	4.8
80°-90°	371.1	1.3
90°-100°	328.5	1.2
100°-110°	831.4	3.0
110°-120°	697.8	2.5
120°-130°	331.2	1.2
130°-140°	165.7	0.6
140°-150°	96.1	0.3
150°-160°	56.0	0.2
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	7024.9	25.4
0°-40°	11551.9	41.7
0°-60°	20658.2	74.6
0°-90°	25131.7	90.8
90°-120°	1857.7	6.7
90°-150°	2450.7	8.9
90°-180°	2545.0	9.2
0°-180°	27676.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8996	8996	8996	8996	8996	
5°	8912	8947	8992	9041	9060	848
15°	8642	8707	8640	8653	8659	2440
25°	8042	8055	8083	8096	8089	3711
35°	7188	7146	7228	7316	7296	4492
45°	6063	6052	6154	6300	6288	4686
55°	4751	4715	4874	5037	5050	4237
65°	3201	3201	3387	1943	1949	3174
75°	1582	1612	1046	1102	1106	1667
85°	207	262	327	354	335	306
90°	5	122	192	234	238	13
95°	58	157	276	368	398	167
105°	1011	1009	869	626	576	960
115°	700	710	715	708	692	704
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°	8995.5	8995.5	8995.5	8995.5	8995.5
2.5°	8932.4	8962.4	8995.5	9038.2	9061.7
5°	8911.8	8946.6	8992.4	9041.3	9060.2
7.5°	8867.7	8916.5	8960.8	8995.5	9006.6
10°	8812.4	8870.9	8896.1	8892.9	8885.1
12.5°	8738.2	8799.8	8792.0	8755.6	8761.9
15°	8641.9	8706.6	8640.4	8653.0	8659.3
17.5°	8528.3	8591.5	8514.1	8539.3	8541.0
20°	8395.8	8443.1	8383.1	8403.6	8403.6
22.5°	8236.3	8269.4	8244.2	8258.4	8261.6
25°	8042.2	8054.7	8083.1	8095.8	8089.4
27.5°	7856.0	7840.1	7895.4	7925.3	7909.5
30°	7649.1	7623.9	7688.5	7737.5	7718.6
32.5°	7412.3	7396.6	7470.8	7529.1	7518.1
35°	7188.2	7145.6	7227.6	7316.0	7295.5
37.5°	6923.0	6897.8	6990.8	7084.1	7073.1
40°	6664.1	6621.5	6727.3	6837.8	6826.7
42.5°	6386.4	6335.8	6451.1	6583.8	6571.1
45°	6062.7	6051.7	6154.3	6299.5	6288.5
47.5°	5775.6	5720.3	5863.8	6004.4	6017.1
50°	5428.2	5407.8	5538.8	5709.3	5721.8
52.5°	5088.9	5074.7	5211.9	5384.1	5406.1
55°	4751.0	4714.8	4874.2	5036.8	5049.5
57.5°	4389.7	4351.8	4514.4	4691.2	4717.9
60°	4002.9	3966.6	4144.9	4309.2	3426.8
62.5°	3616.2	3590.9	3777.3	2675.5	2156.3
65°	3201.1	3201.1	3387.2	1943.0	1949.4
67.5°	2812.8	2787.6	2525.6	1745.7	1745.7
70°	2396.1	2405.6	1455.2	1529.6	1531.1
72.5°	1977.8	2012.5	1256.5	1316.4	1319.5
75°	1581.6	1611.6	1046.5	1101.8	1106.5
77.5°	1161.8	893.4	841.2	884.0	885.5
80°	816.0	563.5	644.1	685.0	680.3
82.5°	476.6	394.6	471.9	502.0	500.3
85°	206.7	262.0	326.7	353.6	334.6
87.5°	66.2	162.6	203.5	219.4	217.7
90°	5.0	122.4	192.2	234.0	238.0
92.5°	17.0	114.4	198.3	259.9	274.4
95°	57.7	156.8	276.3	368.5	398.5
97.5°	272.2	324.1	387.2	489.5	525.6
100°	555.2	612.7	522.0	578.9	589.5
102.5°	860.9	870.1	647.9	604.5	598.1
105°	1010.9	1009.4	869.2	626.2	575.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	817.5	832.7	821.4	793.7	750.5
115°	699.9	710.0	714.7	708.0	692.5
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°	1014.9	1026.7	955.1	743.2	611.7
110°	938.5	952.2	911.9	828.7	719.5



(END OF REPORT)