

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: P827102

Luminaire Tested: **OHBL-18HE-N-UNV-L840-CD-UPL24**

Issue Date: 5/3/2024



Test Information

Test Method: LM-79-08
Report Number: P827102
REPORT IS A COMBINATION OF REPORTS P826230 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-18HE-N-UNV-L840-CD-UPL24
Description: 18000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NARROW LENS AND 2400 LUMEN UPLIGHT MODULE
Light Source: -
Ballast/Driver: -

Summary

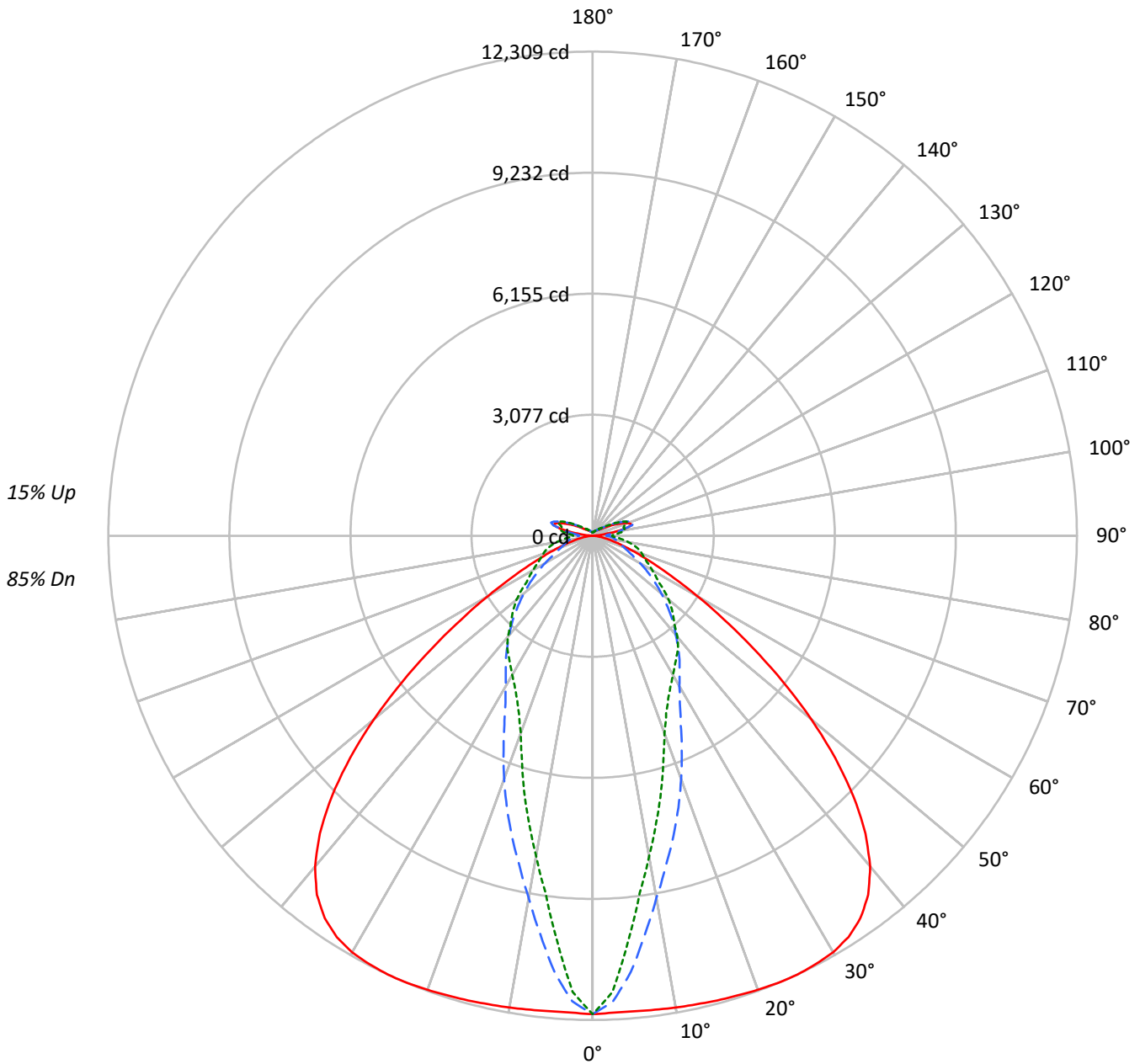
Lumens per Lamp: N/A
Luminaire Lumens: 20367.2 lumens
Efficiency: N/A
Efficacy: 169.2 lumens/watt
Spacing Criteria (0/90/45): 1.47 / 0.53 / 0.78
Luminous Opening: Rectangular w/ Sides (W: 3.78' x L: 1.67' x H: 0.17')
CIE Type: Semi-Direct

Input Watts (W): 120.4
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: P827102

CATALOG NUMBER: OHBL-18HE-N-UNV-L840-CD-UPL24

Luminous Intensity Polar Plot





TEST NUMBER: P827102

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				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	111	111	111	111	103	103	103	95	95	95	88	88	88	85	85	85	85
1	106	102	98	94	102	98	95	91	91	88	86	85	83	81	79	77	76	73	73	73	73
2	98	90	84	79	94	87	81	77	81	77	73	76	72	69	71	68	65	63	63	63	63
3	90	80	73	67	86	78	71	66	73	67	63	68	64	60	64	60	57	54	54	54	54
4	83	72	64	58	80	70	63	57	66	60	55	62	57	53	58	54	50	48	48	48	48
5	77	65	57	51	74	63	56	50	60	53	48	56	51	47	53	48	45	42	42	42	42
6	71	59	51	45	69	58	50	45	55	48	43	52	46	42	49	44	40	38	38	38	38
7	67	54	46	41	64	53	45	40	50	44	39	47	42	38	45	40	36	34	34	34	34
8	62	50	42	37	60	49	41	36	46	40	35	44	38	34	42	37	33	31	31	31	31
9	59	46	39	34	56	45	38	33	43	37	32	41	35	31	39	34	30	29	29	29	29
10	55	43	36	31	53	42	35	30	40	34	30	38	33	29	36	32	28	26	26	26	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20769	20769	20769
5°	20626	18914	17671
10°	20758	15932	14239
15°	21058	13626	11745
20°	21539	11521	9548
25°	22164	9536	8412
30°	22798	8215	7859
35°	23127	7487	7535
40°	22573	6763	7199
45°	20602	6112	6718
50°	17222	5399	6364
55°	12943	4729	5726
60°	8946	4056	5557
65°	5912	3493	5538
70°	3940	3278	5954
75°	2636	3381	6598
80°	1707	3745	7222
85°	879	4683	8611



TEST NUMBER: P827102

CATALOG NUMBER: OHBL-18HE-N-UNV-L840-CD-UPL24

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1023.6	5.0
10°-20°	2408.0	11.8
20°-30°	3018.4	14.8
30°-40°	3202.9	15.7
40°-50°	2895.9	14.2
50°-60°	2099.7	10.3
60°-70°	1317.7	6.5
70°-80°	872.0	4.3
80°-90°	508.5	2.5
90°-100°	475.2	2.3
100°-110°	972.9	4.8
110°-120°	794.1	3.9
120°-130°	381.4	1.9
130°-140°	188.8	0.9
140°-150°	108.7	0.5
150°-160°	61.5	0.3
160°-170°	29.0	0.1
170°-180°	8.8	0.0
0°-30°	6450.0	31.7
0°-40°	9652.9	47.4
0°-60°	14648.5	71.9
0°-90°	17346.7	85.2
90°-120°	2242.2	11.0
90°-150°	2921.2	14.3
90°-180°	3021.0	14.8
0°-180°	20367.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12160	12160	12160	12160	12160	
5°	12136	11824	11130	10614	10346	###
15°	12228	9967	7916	7040	6721	3468
25°	12309	7707	5301	4704	4555	5687
35°	11868	5124	3847	3727	3725	7378
45°	9382	3245	2788	2855	2904	7148
55°	4967	2011	1819	1973	2044	4488
65°	1776	1167	1053	1349	1500	1849
75°	549	628	707	1098	1164	612
85°	96	260	517	720	661	115
90°	5	143	347	484	495	10
95°	58	187	436	587	633	169
105°	1012	1043	1036	856	814	961
115°	705	735	829	859	856	710
125°	352	374	429	445	441	329
135°	212	218	240	258	260	167
145°	159	164	169	180	180	101
155°	130	135	138	141	138	59
165°	100	101	102	102	102	29
175°	90	91	91	92	92	9
180°	90	90	90	90	90	



TEST NUMBER: P827102

CATALOG NUMBER: OHBL-18HE-N-UNV-L840-CD-UPL24

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12160.0	12160.0	12160.0	12160.0	12160.0
2.5°	12134.6	12065.1	11848.7	11716.8	11605.7
5°	12135.7	11824.4	11130.0	10613.9	10346.5
7.5°	12153.1	11461.0	10210.0	9456.5	9162.6
10°	12179.7	11010.8	9351.2	8548.0	8273.7
12.5°	12199.4	10503.9	8595.5	7770.3	7469.4
15°	12228.3	9966.9	7916.1	7040.0	6720.6
17.5°	12255.0	9461.2	7244.9	6329.4	5974.1
20°	12281.6	8916.1	6573.6	5630.4	5337.6
22.5°	12307.0	8340.9	5918.6	5087.6	4887.4
25°	12309.3	7706.6	5300.6	4704.5	4555.2
27.5°	12279.3	7049.3	4799.4	4384.0	4291.4
30°	12227.2	6411.6	4410.6	4152.5	4086.5
32.5°	12097.6	5761.2	4109.7	3929.1	3890.9
35°	11868.4	5123.5	3847.0	3726.6	3725.4
37.5°	11507.3	4557.6	3562.3	3541.4	3566.9
40°	10973.8	4062.2	3292.6	3348.2	3348.2
42.5°	10262.0	3631.7	3048.4	3105.1	3090.1
45°	9382.5	3245.1	2788.0	2855.1	2903.7
47.5°	8362.9	2904.9	2521.8	2651.4	2718.6
50°	7254.1	2580.8	2278.8	2444.3	2520.7
52.5°	6092.2	2281.1	2041.5	2231.3	2292.7
55°	4967.3	2011.4	1819.3	1973.2	2043.8
57.5°	3948.8	1754.5	1601.7	1747.6	1893.4
60°	3072.7	1533.5	1396.9	1605.2	1751.0
62.5°	2347.1	1336.7	1204.8	1472.1	1617.9
65°	1776.5	1166.6	1053.2	1349.4	1499.9
67.5°	1339.0	1019.6	935.1	1260.3	1407.3
70°	1005.7	877.3	840.2	1204.8	1336.7
72.5°	743.0	746.5	765.0	1156.2	1256.9
75°	548.6	628.4	707.1	1098.3	1164.3
77.5°	392.3	520.8	655.0	1028.9	1052.0
80°	272.0	424.7	600.7	937.4	917.8
82.5°	170.1	340.3	552.0	836.7	782.4
85°	96.1	260.4	517.3	719.9	660.8
87.5°	42.8	194.4	452.5	561.3	524.3
90°	5.0	142.8	346.7	484.4	494.9
92.5°	19.3	135.3	348.6	488.5	513.1
95°	57.6	187.4	435.9	586.8	633.0
97.5°	274.8	358.1	560.7	712.3	759.2
100°	558.9	646.2	701.0	806.7	827.3
102.5°	861.1	903.6	827.5	832.9	834.2
105°	1012.3	1042.9	1036.1	855.6	813.6



TEST NUMBER: P827102

CATALOG NUMBER: OHBL-18HE-N-UNV-L840-CD-UPL24

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	819.6	859.3	948.7	963.9	937.6
115°	704.7	734.9	828.6	859.0	856.5
117.5°	605.9	624.2	710.4	738.4	740.5
120°	503.9	528.8	607.2	626.5	620.5
122.5°	424.9	446.1	510.0	527.7	520.5
125°	351.9	374.5	429.0	445.3	441.2
127.5°	298.7	314.0	362.2	379.4	377.3
130°	261.7	272.0	309.8	327.0	328.0
132.5°	232.6	241.9	269.7	289.9	288.9
135°	211.6	217.9	239.9	258.1	260.1
137.5°	194.6	201.0	216.3	234.3	234.3
140°	179.6	185.9	197.8	213.7	214.7
142.5°	167.7	172.9	181.5	195.1	195.1
145°	158.9	164.0	169.4	179.6	179.5
147.5°	149.9	156.2	159.4	167.1	166.0
150°	142.9	148.4	151.4	155.8	155.7
152.5°	135.9	141.4	144.4	147.7	146.5
155°	129.9	135.4	138.5	140.7	138.4
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°	1016.3	1058.5	1108.9	957.0	843.1
110°	939.4	980.8	1053.9	1019.7	929.8



(END OF REPORT)