

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: P827104

Luminaire Tested: **OHBL-18HE-NL-UNV-L840-CD-UPL18**

Issue Date: 5/3/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P827104  
REPORT IS A COMBINATION OF REPORTS P826159 AND G3-2310-221-8  
Test Lab: INNOVATION CENTER  
Issue Date: 5/3/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: OHBL-18HE-NL-UNV-L840-CD-UPL18  
Description: 18000 LUMEN OHBL HE LED LUMINAIRE WITH 80CRI, 4000K LEDS AND NO LENS AND 1800 LUMEN UPLIGHT MODULE  
Light Source: -  
Ballast/Driver: -

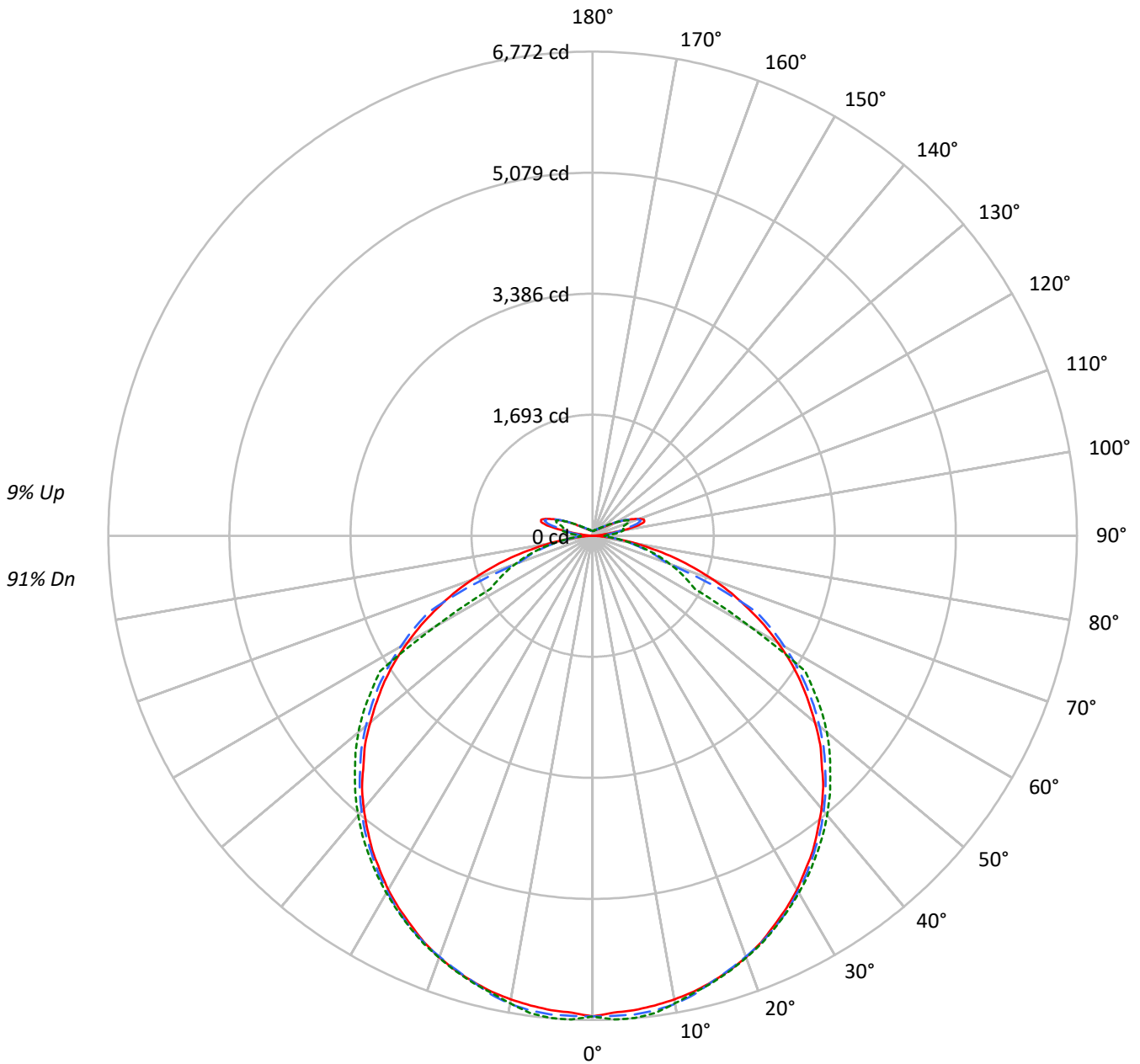
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20663.9 lumens  
Efficiency: N/A  
Efficacy: 179.2 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): 115.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	100	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	73	66	61	69	64	59	65	61	57	55																			
4	82	70	62	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	38	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°	11482	11482	11482
5°	11359	11460	11582
10°	11302	11407	11462
15°	11239	11234	11362
20°	11160	11139	11306
25°	11018	11068	11254
30°	10896	10945	11205
35°	10749	10800	11161
40°	10572	10662	11128
45°	10324	10469	11059
50°	10059	10252	11015
55°	9738	9976	10828
60°	9257	9568	8365
65°	8566	9045	5572
70°	7676	4650	5327
75°	6373	4202	4967
80°	4475	3515	4348
85°	1796	2817	3762



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	638.7	3.1
10°-20°	1828.6	8.8
20°-30°	2782.4	13.5
30°-40°	3383.1	16.4
40°-50°	3557.1	17.2
50°-60°	3248.1	15.7
60°-70°	2082.2	10.1
70°-80°	983.6	4.8
80°-90°	277.2	1.3
90°-100°	243.4	1.2
100°-110°	614.4	3.0
110°-120°	516.3	2.5
120°-130°	245.3	1.2
130°-140°	122.6	0.6
140°-150°	71.2	0.3
150°-160°	41.5	0.2
160°-170°	21.5	0.1
170°-180°	6.6	0.0
0°-30°	5249.7	25.4
0°-40°	8632.8	41.8
0°-60°	15438.0	74.7
0°-90°	18781.0	90.9
90°-120°	1374.2	6.7
90°-150°	1813.3	8.8
90°-180°	1883.0	9.1
0°-180°	20663.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6722	6722	6722	6722	6722	
5°	6660	6686	6720	6757	6771	633
15°	6458	6506	6457	6466	6471	1823
25°	6010	6019	6041	6050	6045	2773
35°	5372	5340	5401	5467	5452	3357
45°	4531	4522	4599	4708	4699	3502
55°	3550	3523	3642	3764	3774	3166
65°	2392	2392	2531	1452	1457	2372
75°	1182	1204	782	823	827	1246
85°	154	196	244	264	250	228
90°	4	91	142	174	176	10
95°	42	116	207	272	296	122
105°	747	747	645	460	425	709
115°	519	527	530	520	512	522
125°	250	262	269	268	266	235
135°	148	151	156	158	159	117
145°	108	110	113	114	114	68
155°	86	88	89	90	90	40
165°	74	75	75	76	76	21
175°	67	67	68	68	68	6
180°	67	67	67	67	67	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6722.4	6722.4	6722.4	6722.4	6722.4
2.5°	6675.2	6697.7	6722.4	6754.3	6771.9
5°	6659.9	6685.8	6720.1	6756.7	6770.8
7.5°	6626.9	6663.4	6696.5	6722.4	6730.7
10°	6585.6	6629.3	6648.1	6645.8	6639.9
12.5°	6530.1	6576.2	6570.3	6543.1	6547.8
15°	6458.2	6506.5	6457.1	6466.4	6471.2
17.5°	6373.3	6420.5	6362.6	6381.5	6382.7
20°	6274.2	6309.6	6264.7	6280.1	6280.1
22.5°	6155.1	6179.8	6161.0	6171.6	6173.9
25°	6010.0	6019.3	6040.6	6050.1	6045.3
27.5°	5870.8	5859.0	5900.3	5922.7	5910.8
30°	5716.2	5697.4	5745.7	5782.3	5768.2
32.5°	5539.3	5527.5	5583.0	5626.6	5618.3
35°	5371.8	5340.0	5401.3	5467.3	5452.0
37.5°	5173.6	5154.8	5224.3	5294.0	5285.8
40°	4980.2	4948.3	5027.4	5109.9	5101.7
42.5°	4772.6	4734.8	4820.9	4920.1	4910.6
45°	4530.7	4522.5	4599.1	4707.7	4699.4
47.5°	4316.1	4274.8	4382.1	4487.1	4496.6
50°	4056.5	4041.3	4139.2	4266.6	4275.9
52.5°	3803.0	3792.4	3894.9	4023.5	4040.0
55°	3550.5	3523.4	3642.5	3764.0	3773.5
57.5°	3280.5	3252.1	3373.6	3505.8	3525.8
60°	2991.4	2964.3	3097.5	3220.3	2560.9
62.5°	2702.4	2683.5	2822.8	1999.4	1611.4
65°	2392.2	2392.2	2531.3	1452.0	1456.8
67.5°	2102.1	2083.2	1887.4	1304.5	1304.5
70°	1790.6	1797.7	1087.5	1143.1	1144.2
72.5°	1478.0	1504.0	939.0	983.7	986.1
75°	1181.9	1204.4	782.0	823.4	826.9
77.5°	868.2	667.6	628.7	660.6	661.8
80°	609.8	421.1	481.3	511.9	508.4
82.5°	356.2	294.9	352.7	375.2	373.9
85°	154.5	195.8	244.2	264.3	250.0
87.5°	49.5	121.5	152.1	164.0	162.7
90°	4.0	91.1	142.5	173.5	176.3
92.5°	13.0	84.8	149.4	194.0	203.1
95°	41.5	116.2	206.9	272.0	296.0
97.5°	197.4	237.7	293.4	364.5	382.9
100°	404.4	442.0	390.6	429.9	437.2
102.5°	634.9	644.5	476.4	447.7	443.0
105°	746.9	747.0	644.9	459.9	424.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	609.1	615.5	607.0	587.5	554.1
115°	518.9	527.2	529.7	520.2	512.1
117.5°	437.0	440.0	442.0	440.0	441.0
120°	365.0	372.0	376.0	373.0	371.0
122.5°	305.0	314.0	319.0	316.0	314.0
125°	250.0	262.0	269.0	268.0	266.0
127.5°	212.0	221.0	230.0	229.0	227.0
130°	184.0	191.0	197.0	198.0	199.0
132.5°	165.0	168.0	174.0	175.0	177.0
135°	148.0	151.0	156.0	158.0	159.0
137.5°	135.0	138.0	142.0	144.0	145.0
140°	124.0	127.0	130.0	132.0	133.0
142.5°	115.0	118.0	121.0	122.0	123.0
145°	108.0	110.0	113.0	114.0	114.0
147.5°	101.0	103.0	105.0	107.0	107.0
150°	95.0	97.0	99.0	100.0	101.0
152.5°	91.0	92.0	94.0	95.0	95.0
155°	86.0	88.0	89.0	90.0	90.0
157.5°	83.0	84.0	85.0	86.0	86.0
160°	80.0	80.0	81.0	82.0	82.0
162.5°	77.0	77.0	78.0	79.0	79.0
165°	74.0	75.0	75.0	76.0	76.0
167.5°	72.0	72.0	73.0	73.0	74.0
170°	70.0	70.0	71.0	71.0	71.0
172.5°	68.0	69.0	69.0	69.0	69.0
175°	67.0	67.0	68.0	68.0	68.0
177.5°	66.0	67.0	67.0	67.0	67.0
180°	67.0	67.0	67.0	67.0	67.0



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	753.9	759.7	706.5	546.6	452.5
110°	692.1	703.6	677.1	612.5	535.1



(END OF REPORT)