

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: P860080

Luminaire Tested: **SPHB-30SE-N-L740-CD**

Issue Date: 7/11/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P860080  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-30SE-N-L740-CD  
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 4000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

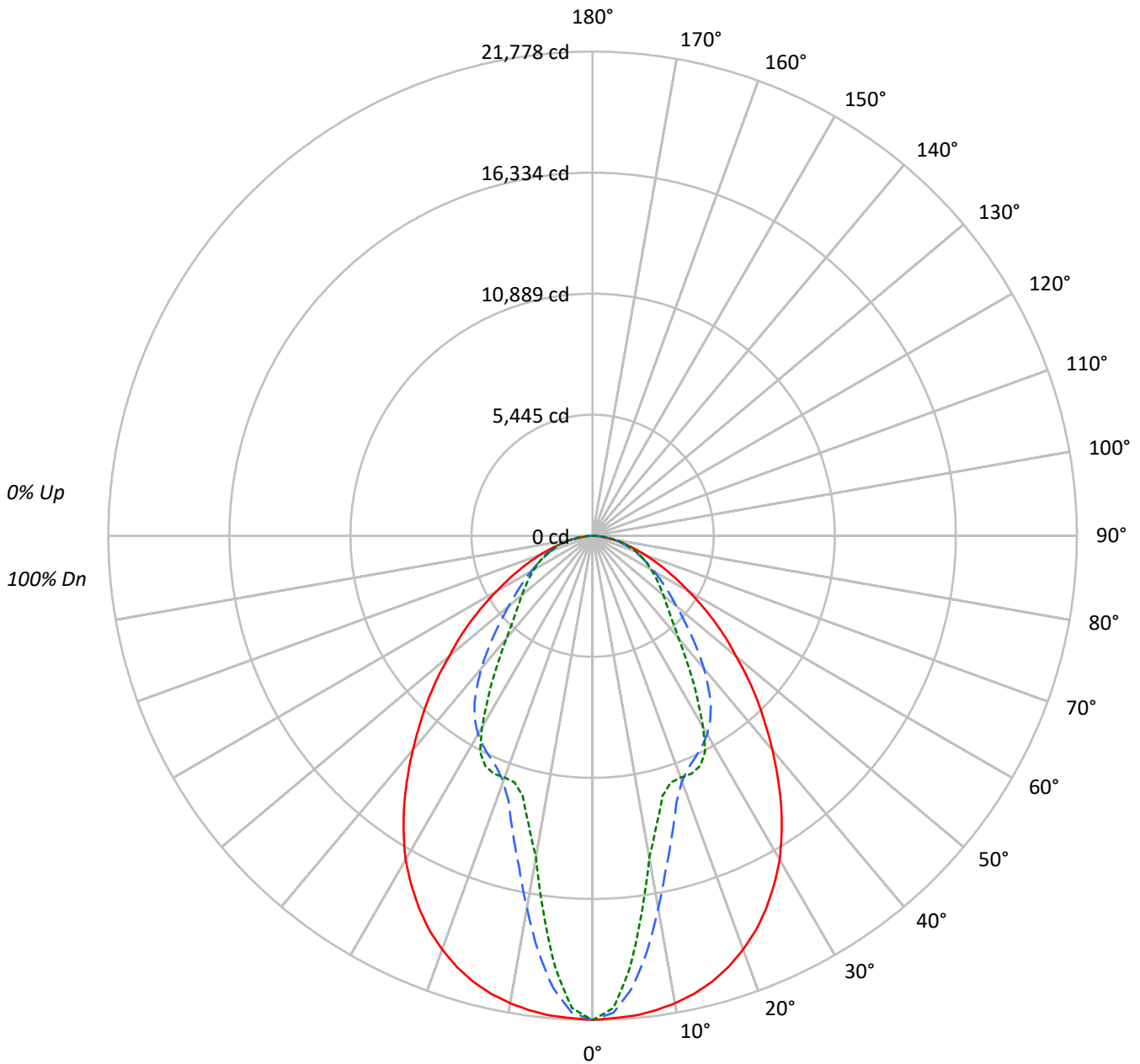
Lumens per Lamp: N/A  
Luminaire Lumens: 31917.0 lumens  
Efficiency: N/A  
Efficacy: 163.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

Input Watts (W): 195  
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				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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86			
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74			
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45			
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40			
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	114907	114907	114907
5°	114774	108117	103001
10°	114382	91133	78564
15°	113430	75650	66206
20°	111145	65944	64992
25°	107573	63804	66515
30°	102488	62782	60533
35°	95160	59660	50161
40°	86652	53558	41420
45°	78219	46472	36362
50°	69027	40410	34050
55°	61252	36445	32775
60°	52493	33703	32106
65°	45437	31675	31944
70°	38883	30470	31907
75°	32639	29589	31622
80°	24904	28593	30966
85°	16303	25366	23853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1856.7	5.8
10°-20°	4263.3	13.4
20°-30°	5761.6	18.1
30°-40°	6063.8	19.0
40°-50°	5145.3	16.1
50°-60°	3985.8	12.5
60°-70°	2776.0	8.7
70°-80°	1589.6	5.0
80°-90°	462.6	1.4
90°-100°	12.4	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	11881.6	37.2
0°-40°	17945.4	56.2
0°-60°	27076.5	84.8
0°-90°	31904.6	100.0
90°-120°	12.4	0.0
90°-150°	12.4	0.0
90°-180°	12.0	0.0
0°-180°	31917.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	21778	21778	21778	21778	21778	
5°	21670	21272	20413	19630	19447	###
15°	20765	17624	13849	12466	12120	5843
25°	18477	13052	10959	11277	11425	8482
35°	14773	10038	9262	8366	7787	9209
45°	10482	7538	6228	5117	4873	8073
55°	6658	5077	3962	3601	3563	5953
65°	3639	2979	2537	2537	2559	3635
75°	1601	1423	1451	1543	1551	1707
85°	269	349	419	394	394	342
90°	2	32	62	78	82	15
95°	2	5	10	10	8	1
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P860080

CATALOG NUMBER: SPHB-30SE-N-L740-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	21777.5	21777.5	21777.5	21777.5	21777.5
2.5°	21714.3	21642.9	21468.3	21355.2	21267.1
5°	21669.5	21272.1	20412.6	19629.5	19446.6
7.5°	21534.8	20662.0	18824.9	17376.8	17011.0
10°	21348.6	19785.8	17009.4	15195.6	14663.5
12.5°	21100.9	18849.8	15270.4	13561.3	13300.3
15°	20765.0	17624.5	13848.9	12465.7	12119.9
17.5°	20329.5	16357.7	12537.2	11737.5	11641.1
20°	19794.1	15195.6	11744.1	11471.5	11574.6
22.5°	19192.3	14066.7	11283.6	11398.3	11591.2
25°	18477.4	13052.5	10959.4	11277.0	11424.9
27.5°	17674.4	12136.5	10661.8	10952.8	10952.8
30°	16821.5	11373.4	10304.4	10277.8	9935.3
32.5°	15825.7	10725.0	9837.2	9310.2	8801.5
35°	14773.3	10038.4	9262.0	8365.9	7787.3
37.5°	13669.3	9400.0	8533.8	7351.7	6813.1
40°	12580.4	8769.9	7775.7	6440.7	6013.4
42.5°	11496.4	8128.1	6986.0	5702.5	5365.0
45°	10482.3	7537.9	6227.8	5117.3	4872.9
47.5°	9451.5	6911.2	5527.9	4646.8	4477.2
50°	8409.1	6276.1	4922.8	4272.7	4148.0
52.5°	7531.3	5684.2	4409.0	3918.6	3843.8
55°	6658.4	5077.4	3961.8	3601.0	3562.8
57.5°	5792.3	4512.1	3552.8	3310.1	3301.8
60°	4974.3	3983.4	3193.7	3060.7	3042.4
62.5°	4277.7	3458.1	2852.9	2789.7	2798.0
65°	3639.3	2979.3	2537.0	2537.0	2558.6
67.5°	3047.4	2538.7	2247.7	2286.0	2315.9
70°	2520.4	2139.7	1975.1	2041.6	2068.2
72.5°	2021.6	1768.9	1714.1	1787.2	1808.8
75°	1601.0	1423.1	1451.4	1542.8	1551.1
77.5°	1187.0	1120.5	1193.7	1293.5	1311.7
80°	819.6	826.3	941.0	1010.8	1019.1
82.5°	528.7	576.9	704.9	741.5	728.2
85°	269.3	349.1	419.0	394.0	394.0
87.5°	103.1	151.3	177.9	209.5	221.1
90°	1.7	31.6	61.5	78.1	81.5
92.5°	1.7	8.3	13.3	15.0	13.3
95°	1.7	5.0	10.0	10.0	8.3
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)