

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: P860092

Luminaire Tested: **SPHB-30SE-W-L840-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: P860092  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-30SE-W-L840-CD  
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 4000K 80CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

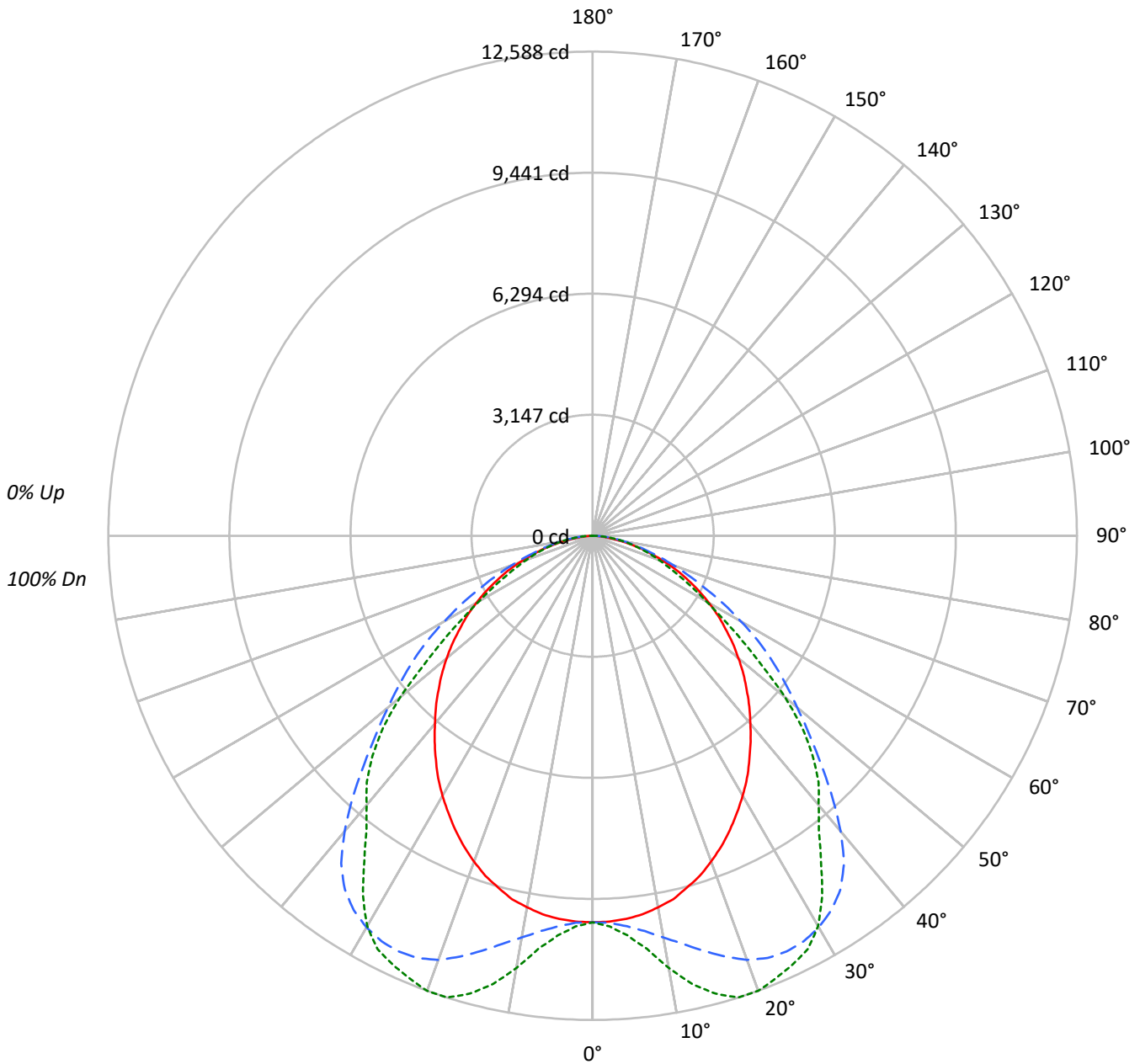
Lumens per Lamp: N/A  
Luminaire Lumens: 31618.0 lumens  
Efficiency: N/A  
Efficacy: 162.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P860092

CATALOG NUMBER: SPHB-30SE-W-L840-CD

### 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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85								
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72								
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62								
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53								
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46								
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40								
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36								
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32								
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29								
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26								

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

	0°	45°	90°
0°	53021	53021	53021
5°	52964	53963	55242
10°	52545	56811	61117
15°	51724	61041	67321
20°	50604	65895	70683
25°	49144	69450	71610
30°	47544	71623	71416
35°	45760	72343	66639
40°	43916	69075	62942
45°	42255	62613	60388
50°	40608	56932	53535
55°	38751	52601	43565
60°	36834	46896	35879
65°	34298	40296	31109
70°	31203	34404	28136
75°	26796	28873	25797
80°	20945	24767	23926
85°	14166	21020	19724



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	986.6	3.1
10°-20°	3128.4	9.9
20°-30°	5119.8	16.2
30°-40°	6245.8	19.8
40°-50°	6185.8	19.6
50°-60°	4946.6	15.6
60°-70°	3085.9	9.8
70°-80°	1511.9	4.8
80°-90°	396.5	1.3
90°-100°	10.4	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°	9234.9	29.2
0°-40°	15480.7	49.0
0°-60°	26613.2	84.2
0°-90°	31607.5	100.0
90°-120°	10.4	0.0
90°-150°	10.4	0.0
90°-180°	10.0	0.0
0°-180°	31618.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10049	10049	10049	10049	10049	
5°	10000	10044	10188	10366	10430	949
15°	9469	10020	11174	12064	12324	2669
25°	8441	9870	11929	12275	12300	3884
35°	7104	9493	11231	10631	10346	4444
45°	5663	8797	8391	8109	8093	4374
55°	4212	6754	5718	5166	4736	3774
65°	2747	3790	3228	2677	2492	2724
75°	1314	1610	1416	1297	1265	1395
85°	234	332	347	330	326	290
90°	1	34	62	78	80	13
95°	1	5	5	4	2	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



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CATALOG NUMBER: SPHB-30SE-W-L840-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10048.7	10048.7	10048.7	10048.7	10048.7
2.5°	10038.6	10034.8	10071.3	10138.0	10168.2
5°	9999.6	10043.6	10188.3	10365.6	10429.8
7.5°	9929.2	10047.4	10366.9	10692.7	10831.0
10°	9807.2	10049.9	10603.4	11178.2	11407.1
12.5°	9681.4	10041.1	10866.3	11680.1	11930.4
15°	9468.8	10019.7	11174.4	12063.7	12324.1
17.5°	9271.3	9994.6	11471.3	12389.5	12586.9
20°	9012.2	9958.1	11735.4	12488.8	12588.2
22.5°	8740.5	9929.2	11881.3	12422.2	12452.4
25°	8441.2	9870.1	11929.1	12275.0	12300.2
27.5°	8121.7	9817.2	11883.8	12092.6	12114.0
30°	7803.5	9721.6	11755.5	11808.4	11721.6
32.5°	7470.2	9626.0	11548.0	11310.3	11107.8
35°	7104.1	9492.7	11231.0	10631.0	10345.5
37.5°	6743.1	9364.4	10736.7	9871.3	9656.2
40°	6375.9	9205.9	10028.5	9161.9	9138.0
42.5°	6028.7	9034.9	9227.3	8609.7	8690.2
45°	5662.7	8797.1	8390.9	8109.1	8092.8
47.5°	5315.5	8468.9	7629.9	7555.7	7388.4
50°	4947.0	8016.0	6935.6	6865.1	6521.8
52.5°	4586.0	7438.7	6315.5	6051.3	5550.7
55°	4212.4	6754.5	5718.0	5165.8	4735.7
57.5°	3865.3	6002.3	5110.5	4394.8	4008.7
60°	3490.4	5240.1	4443.9	3718.1	3399.9
62.5°	3123.2	4489.1	3840.1	3142.0	2930.7
65°	2747.1	3789.8	3227.5	2676.6	2491.7
67.5°	2387.3	3184.8	2698.0	2256.5	2133.3
70°	2022.6	2583.5	2230.1	1895.5	1823.8
72.5°	1646.5	2064.1	1803.7	1599.9	1545.9
75°	1314.4	1610.0	1416.3	1296.8	1265.4
77.5°	978.6	1197.4	1106.9	1036.4	1027.6
80°	689.3	864.1	815.1	801.2	787.4
82.5°	440.2	564.8	579.9	571.0	561.0
85°	234.0	332.1	347.2	329.5	325.8
87.5°	94.3	144.6	156.0	172.3	177.4
90°	1.3	34.0	61.6	78.0	80.5
92.5°	1.3	7.5	8.8	8.8	7.5
95°	1.3	5.0	5.0	3.8	2.5
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)