

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: P859930

Luminaire Tested: **SPHB-15SE-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: P859930  
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-15SE-W-L840-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 4000K 80CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

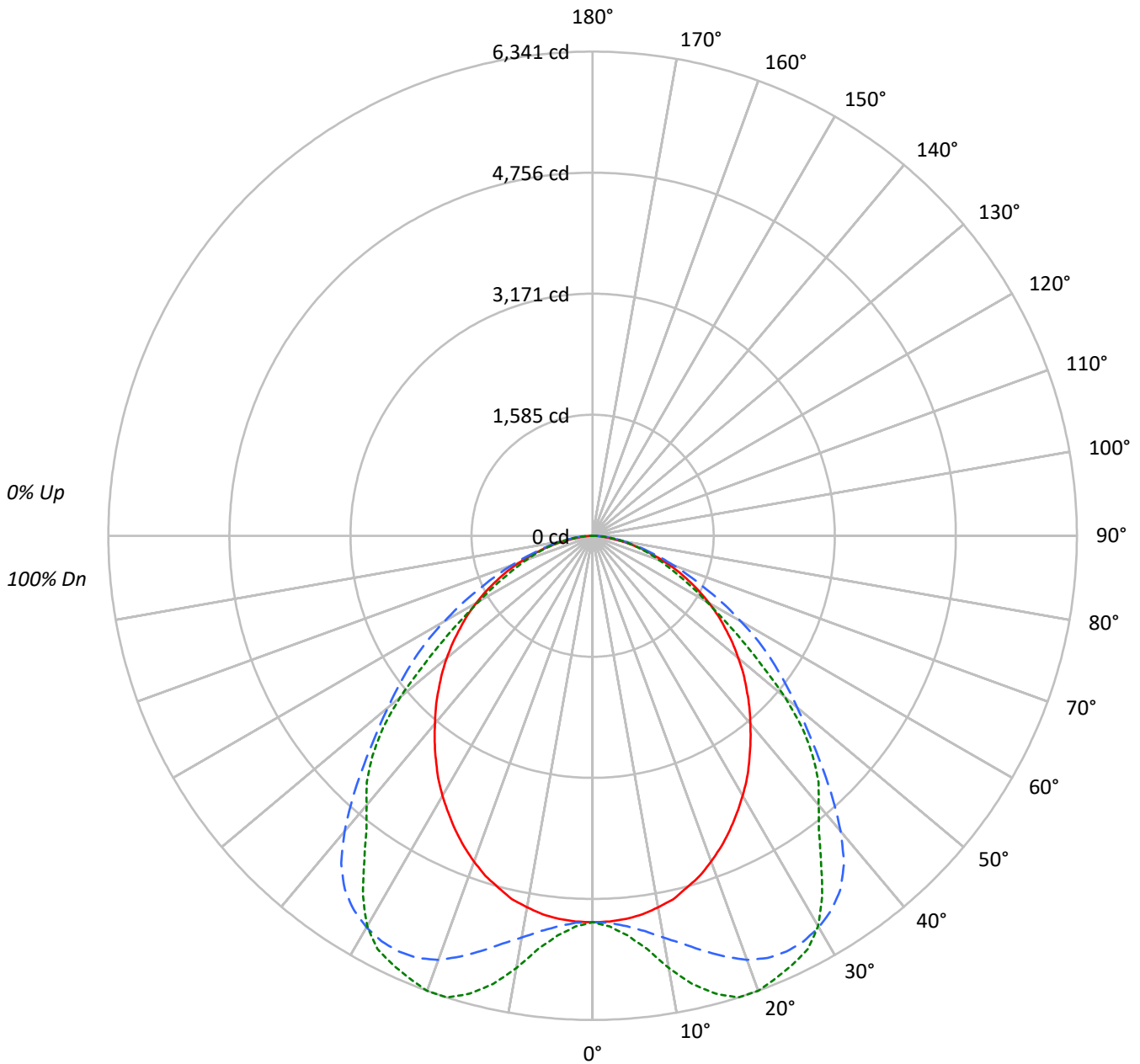
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15926.0 lumens  
Efficiency: N/A  
Efficacy: 166.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 95.9  
Input Voltage (V): NR  
Input Current (Ain): 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: P859930  
CATALOG NUMBER: SPHB-15SE-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			100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72			72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62			62
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53			53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46			46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40			40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36			36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32			32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29			29
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26			26

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

	0°	45°	90°
0°	39479	39479	39479
5°	39437	40181	41134
10°	39125	42301	45508
15°	38513	45451	50127
20°	37680	49065	52631
25°	36592	51713	53321
30°	35401	53331	53177
35°	34073	53867	49619
40°	32700	51434	46866
45°	31463	46622	44965
50°	30237	42392	39862
55°	28854	39167	32439
60°	27426	34919	26715
65°	25538	30004	23164
70°	23234	25617	20951
75°	19953	21499	19209
80°	15596	18439	17815
85°	10542	15653	14686



TEST NUMBER: P859930

CATALOG NUMBER: SPHB-15SE-W-L840-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	497.0	3.1
10°-20°	1575.8	9.9
20°-30°	2578.9	16.2
30°-40°	3146.0	19.8
40°-50°	3115.8	19.6
50°-60°	2491.6	15.6
60°-70°	1554.4	9.8
70°-80°	761.6	4.8
80°-90°	199.7	1.3
90°-100°	5.2	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°	4651.6	29.2
0°-40°	7797.6	49.0
0°-60°	13405.1	84.2
0°-90°	15920.8	100.0
90°-120°	5.2	0.0
90°-150°	5.2	0.0
90°-180°	5.0	0.0
0°-180°	15926.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5062	5062	5062	5062	5062	
5°	5037	5059	5132	5221	5254	478
15°	4769	5047	5629	6076	6208	1345
25°	4252	4972	6009	6183	6196	1957
35°	3578	4782	5657	5355	5211	2238
45°	2852	4431	4226	4085	4076	2203
55°	2122	3402	2880	2602	2385	1901
65°	1384	1909	1626	1348	1255	1372
75°	662	811	713	653	637	703
85°	118	167	175	166	164	146
90°	1	17	31	39	40	7
95°	1	2	2	2	1	0
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: P859930

CATALOG NUMBER: SPHB-15SE-W-L840-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5061.5	5061.5	5061.5	5061.5	5061.5
2.5°	5056.5	5054.6	5072.9	5106.5	5121.7
5°	5036.8	5059.0	5131.8	5221.2	5253.5
7.5°	5001.3	5060.9	5221.8	5385.9	5455.6
10°	4939.9	5062.2	5340.9	5630.5	5745.8
12.5°	4876.5	5057.7	5473.3	5883.2	6009.3
15°	4769.4	5046.9	5628.6	6076.5	6207.6
17.5°	4670.0	5034.3	5778.1	6240.6	6340.0
20°	4539.5	5015.9	5911.1	6290.6	6340.7
22.5°	4402.6	5001.3	5984.6	6257.1	6272.3
25°	4251.8	4971.6	6008.7	6182.9	6195.6
27.5°	4090.9	4944.9	5985.9	6091.1	6101.8
30°	3930.6	4896.8	5921.3	5947.9	5904.2
32.5°	3762.7	4848.6	5816.7	5697.0	5595.0
35°	3578.4	4781.5	5657.1	5354.9	5211.0
37.5°	3396.5	4716.9	5408.1	4972.2	4863.8
40°	3211.5	4637.0	5051.4	4614.9	4602.8
42.5°	3036.7	4550.9	4647.8	4336.7	4377.3
45°	2852.3	4431.1	4226.5	4084.6	4076.3
47.5°	2677.4	4265.8	3843.2	3805.8	3721.5
50°	2491.8	4037.7	3493.5	3458.0	3285.0
52.5°	2310.0	3746.9	3181.1	3048.1	2795.9
55°	2121.8	3402.2	2880.2	2602.0	2385.4
57.5°	1946.9	3023.4	2574.2	2213.7	2019.2
60°	1758.1	2639.4	2238.4	1872.8	1712.5
62.5°	1573.1	2261.2	1934.3	1582.6	1476.2
65°	1383.7	1908.9	1625.7	1348.2	1255.1
67.5°	1202.5	1604.2	1359.0	1136.6	1074.5
70°	1018.8	1301.3	1123.3	954.8	918.7
72.5°	829.3	1039.7	908.5	805.9	778.6
75°	662.1	811.0	713.4	653.2	637.4
77.5°	492.9	603.2	557.5	522.1	517.6
80°	347.2	435.3	410.5	403.6	396.6
82.5°	221.7	284.5	292.1	287.6	282.6
85°	117.8	167.3	174.9	166.0	164.1
87.5°	47.5	72.9	78.6	86.8	89.3
90°	0.6	17.1	31.0	39.3	40.5
92.5°	0.6	3.8	4.4	4.4	3.8
95°	0.6	2.5	2.5	1.9	1.3
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



TEST NUMBER: P859930

CATALOG NUMBER: SPHB-15SE-W-L840-CD

**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)