

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: P859923

Luminaire Tested: **SPHB-15SE-N-L935-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: P859923  
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-15SE-N-L935-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 3500K 90CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

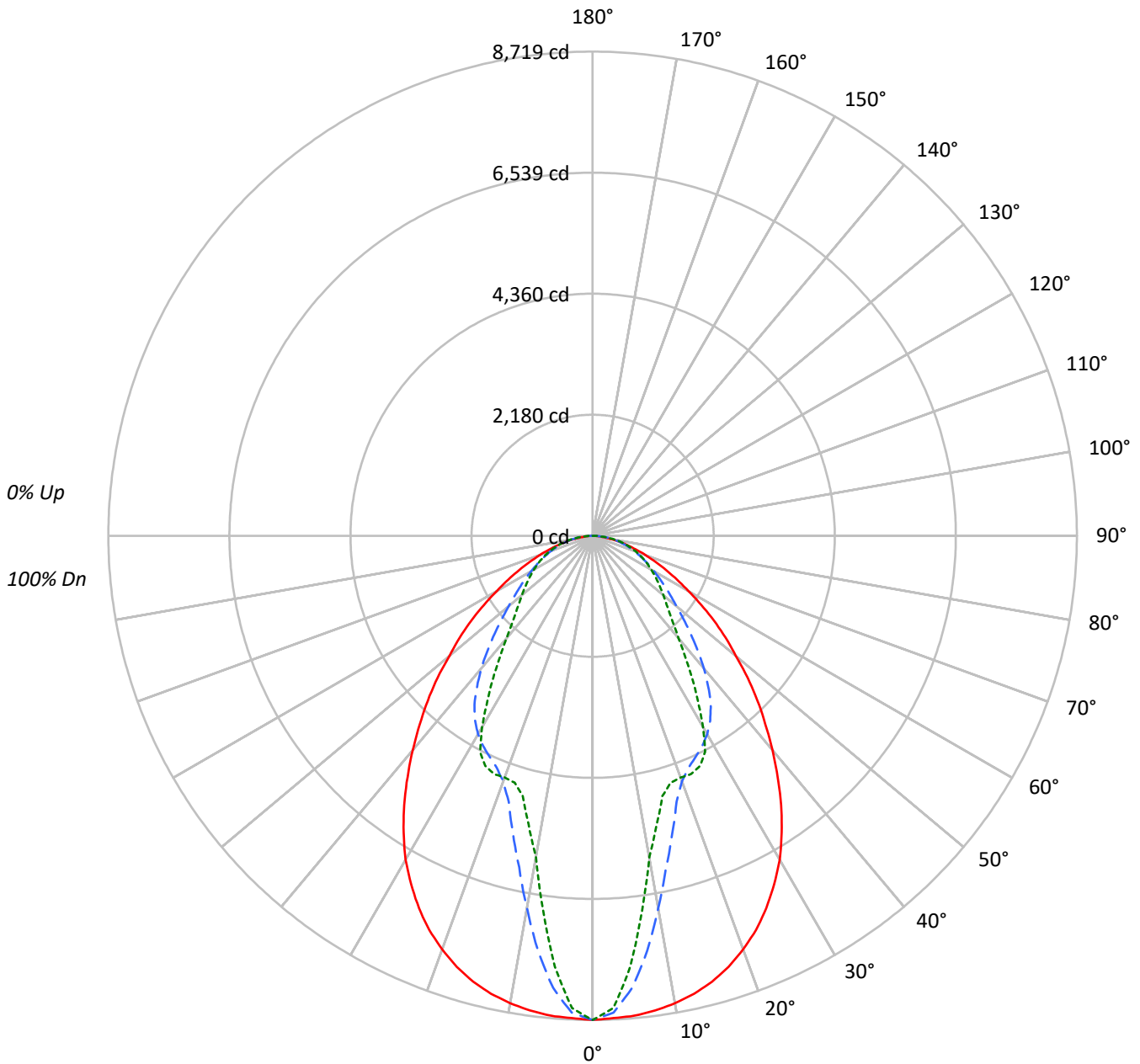
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12779.0 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
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 (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	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°	68010	68010	68010
5°	67932	63991	60963
10°	67699	53939	46500
15°	67136	44776	39185
20°	65783	39030	38466
25°	63669	37764	39368
30°	60659	37159	35827
35°	56322	35310	29689
40°	51287	31699	24515
45°	46295	27505	21521
50°	40856	23917	20153
55°	36253	21570	19399
60°	31069	19948	19002
65°	26893	18748	18907
70°	23013	18035	18885
75°	19318	17512	18718
80°	14742	16925	18327
85°	9647	15008	14122



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	743.4	5.8
10°-20°	1706.9	13.4
20°-30°	2306.8	18.1
30°-40°	2427.8	19.0
40°-50°	2060.1	16.1
50°-60°	1595.8	12.5
60°-70°	1111.5	8.7
70°-80°	636.4	5.0
80°-90°	185.2	1.4
90°-100°	4.9	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°	4757.2	37.2
0°-40°	7185.0	56.2
0°-60°	10841.0	84.8
0°-90°	12774.1	100.0
90°-120°	4.9	0.0
90°-150°	4.9	0.0
90°-180°	5.0	0.0
0°-180°	12779.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8719	8719	8719	8719	8719	
5°	8676	8517	8173	7859	7786	824
15°	8314	7056	5545	4991	4853	2339
25°	7398	5226	4388	4515	4574	3396
35°	5915	4019	3708	3350	3118	3687
45°	4197	3018	2494	2049	1951	3232
55°	2666	2033	1586	1442	1426	2383
65°	1457	1193	1016	1016	1024	1455
75°	641	570	581	618	621	684
85°	108	140	168	158	158	137
90°	1	13	25	31	33	6
95°	1	2	4	4	3	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



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CATALOG NUMBER: SPHB-15SE-N-L935-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8719.3	8719.3	8719.3	8719.3	8719.3
2.5°	8694.0	8665.4	8595.5	8550.3	8515.0
5°	8676.1	8517.0	8172.8	7859.3	7786.1
7.5°	8622.1	8272.7	7537.1	6957.4	6810.9
10°	8547.6	7921.9	6810.3	6084.0	5871.0
12.5°	8448.4	7547.1	6114.0	5429.7	5325.2
15°	8314.0	7056.5	5544.9	4991.0	4852.6
17.5°	8139.6	6549.3	5019.7	4699.5	4660.9
20°	7925.2	6084.0	4702.1	4593.0	4634.2
22.5°	7684.2	5632.1	4517.8	4563.7	4640.9
25°	7398.0	5226.0	4388.0	4515.1	4574.3
27.5°	7076.5	4859.2	4268.8	4385.3	4385.3
30°	6735.0	4553.7	4125.7	4115.0	3977.9
32.5°	6336.3	4294.1	3938.6	3727.6	3523.9
35°	5915.0	4019.2	3708.3	3349.5	3117.9
37.5°	5473.0	3763.6	3416.8	2943.5	2727.8
40°	5037.0	3511.3	3113.2	2578.7	2407.7
42.5°	4603.0	3254.4	2797.1	2283.2	2148.0
45°	4196.9	3018.1	2493.5	2048.9	1951.0
47.5°	3784.2	2767.1	2213.3	1860.5	1792.6
50°	3366.9	2512.8	1971.0	1710.7	1660.8
52.5°	3015.4	2275.9	1765.3	1568.9	1539.0
55°	2665.9	2032.9	1586.2	1441.8	1426.5
57.5°	2319.1	1806.6	1422.5	1325.3	1322.0
60°	1991.6	1594.9	1278.7	1225.5	1218.1
62.5°	1712.7	1384.5	1142.3	1117.0	1120.3
65°	1457.1	1192.8	1015.8	1015.8	1024.4
67.5°	1220.1	1016.4	900.0	915.3	927.2
70°	1009.1	856.7	790.8	817.4	828.1
72.5°	809.4	708.3	686.3	715.6	724.2
75°	641.0	569.8	581.1	617.7	621.1
77.5°	475.3	448.6	477.9	517.9	525.2
80°	328.2	330.8	376.8	404.7	408.0
82.5°	211.7	231.0	282.2	296.9	291.6
85°	107.8	139.8	167.7	157.8	157.8
87.5°	41.3	60.6	71.2	83.9	88.5
90°	0.7	12.6	24.6	31.3	32.6
92.5°	0.7	3.3	5.3	6.0	5.3
95°	0.7	2.0	4.0	4.0	3.3
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)