

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: P859914

Luminaire Tested: **SPHB-15SE-M-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: P859914  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-15SE-M-L935-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens  
and, 3500K 90CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

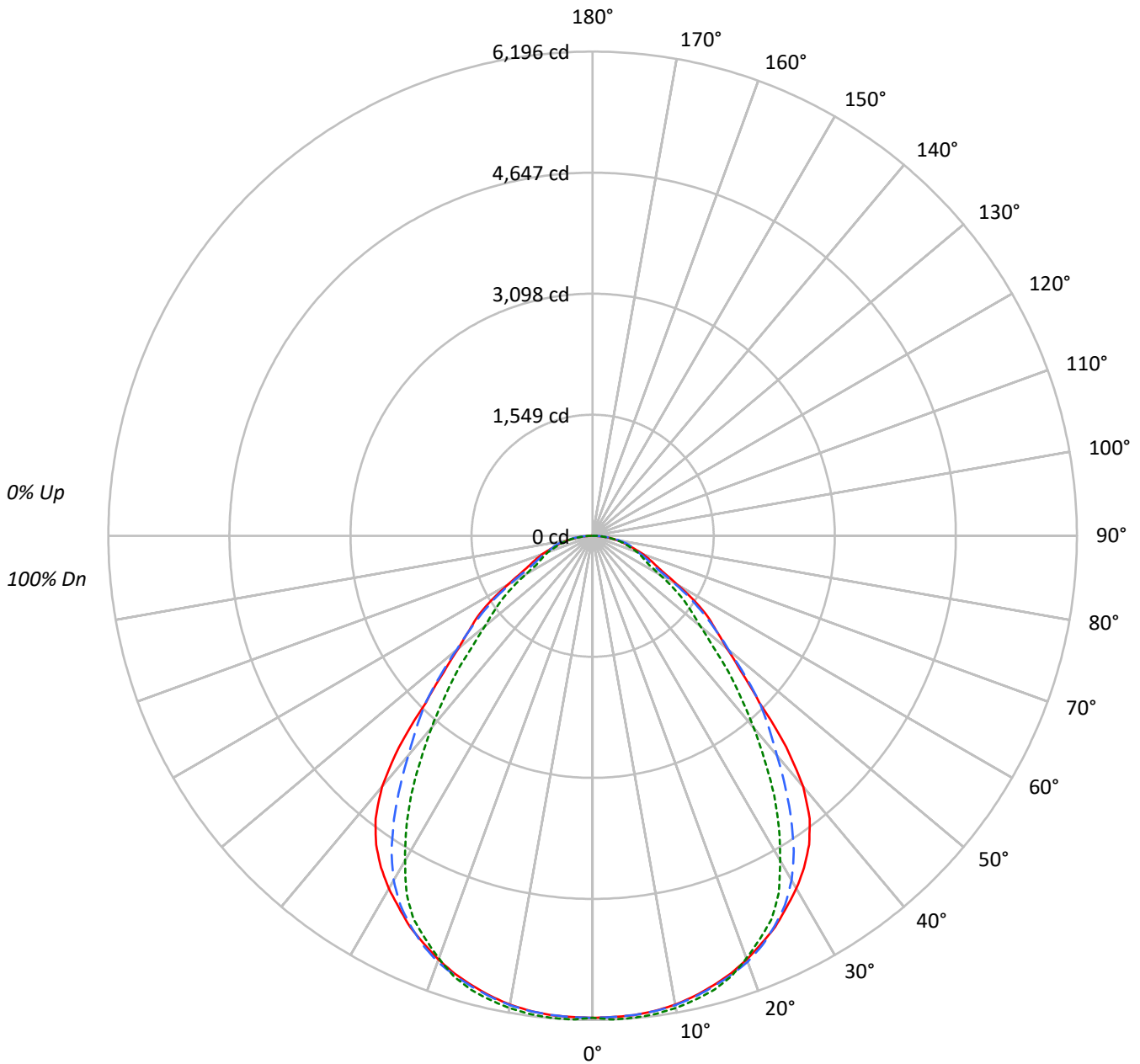
Lumens per Lamp: N/A  
Luminaire Lumens: 12804.0 lumens  
Efficiency: N/A  
Efficacy: 133.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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					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	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46								
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41								
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31								

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

	0°	45°	90°
0°	48115	48115	48115
5°	48210	48197	48472
10°	48252	48304	48600
15°	48111	48237	48572
20°	47901	48145	47760
25°	47551	47418	46612
30°	46949	45843	43226
35°	45963	42175	38526
40°	42655	37329	32632
45°	33278	33368	27004
50°	27179	27565	21808
55°	24351	23433	19163
60°	19495	18455	15332
65°	16337	14955	13560
70°	15512	14249	13804
75°	14074	15129	13314
80°	14145	15461	14032
85°	12305	14418	11724



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	586.5	4.6
10°-20°	1686.9	13.2
20°-30°	2518.2	19.7
30°-40°	2747.8	21.5
40°-50°	2247.8	17.6
50°-60°	1477.9	11.5
60°-70°	847.9	6.6
70°-80°	513.8	4.0
80°-90°	172.5	1.3
90°-100°	4.5	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°	4791.6	37.4
0°-40°	7539.4	58.9
0°-60°	11265.2	88.0
0°-90°	12799.5	100.0
90°-120°	4.5	0.0
90°-150°	4.5	0.0
90°-180°	4.0	0.0
0°-180°	12804.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6169	6169	6169	6169	6169	
5°	6157	6148	6156	6181	6191	586
15°	5958	5957	5974	6012	6015	1682
25°	5525	5538	5510	5443	5416	2542
35°	4827	4718	4429	4127	4046	2992
45°	3017	3242	3025	2670	2448	2395
55°	1791	1742	1723	1481	1409	1577
65°	885	872	810	788	735	905
75°	467	505	502	482	442	505
85°	138	156	161	141	131	149
90°	1	11	23	27	28	6
95°	1	2	2	2	2	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-M-L935-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6168.7	6168.7	6168.7	6168.7	6168.7
2.5°	6164.7	6155.7	6163.8	6189.1	6196.4
5°	6157.3	6147.6	6155.7	6180.9	6190.7
7.5°	6132.1	6126.4	6134.6	6159.8	6172.0
10°	6092.2	6085.7	6098.8	6120.7	6136.2
12.5°	6032.9	6030.4	6042.6	6074.3	6080.9
15°	5958.0	5957.2	5973.5	6011.7	6015.0
17.5°	5873.4	5872.6	5892.9	5918.1	5909.2
20°	5770.9	5776.6	5800.2	5776.6	5753.8
22.5°	5648.0	5665.9	5671.6	5597.6	5586.2
25°	5525.2	5538.2	5509.7	5443.0	5416.1
27.5°	5366.5	5382.0	5329.1	5233.9	5157.4
30°	5212.7	5198.1	5089.9	4906.0	4799.4
32.5°	5036.2	4984.1	4789.7	4535.8	4439.0
35°	4827.1	4718.1	4429.2	4127.4	4046.0
37.5°	4562.7	4363.3	4047.7	3732.8	3609.9
40°	4189.2	3959.0	3666.1	3340.6	3204.8
42.5°	3666.1	3580.7	3338.2	2972.1	2810.2
45°	3016.8	3242.2	3025.0	2670.2	2448.1
47.5°	2582.4	2895.6	2634.4	2378.2	2072.2
50°	2239.8	2455.4	2271.6	2040.5	1797.2
52.5°	1992.5	2057.6	1983.6	1729.7	1591.4
55°	1790.7	1741.9	1723.2	1480.8	1409.2
57.5°	1540.1	1513.3	1465.3	1291.2	1196.8
60°	1249.7	1306.6	1183.0	1133.3	982.8
62.5°	1026.8	1082.9	950.3	947.0	821.7
65°	885.2	872.2	810.3	788.4	734.7
67.5°	783.5	742.8	721.7	693.2	674.5
70°	680.2	663.1	624.8	630.5	605.3
72.5°	567.1	589.0	550.8	561.4	515.8
75°	467.0	505.2	502.0	481.7	441.8
77.5°	384.8	425.5	432.8	414.1	381.6
80°	314.9	342.5	344.2	332.8	312.4
82.5°	231.1	247.3	259.5	240.0	227.0
85°	137.5	156.2	161.1	140.8	131.0
87.5°	44.7	62.6	70.0	72.4	73.2
90°	0.8	11.4	22.8	26.8	28.5
92.5°	0.8	3.3	4.9	7.3	8.1
95°	0.8	1.6	2.4	2.4	1.6
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)