

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: P859909

Luminaire Tested: **SPHB-15SE-M-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: P859909  
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-L740-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens  
and, 4000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

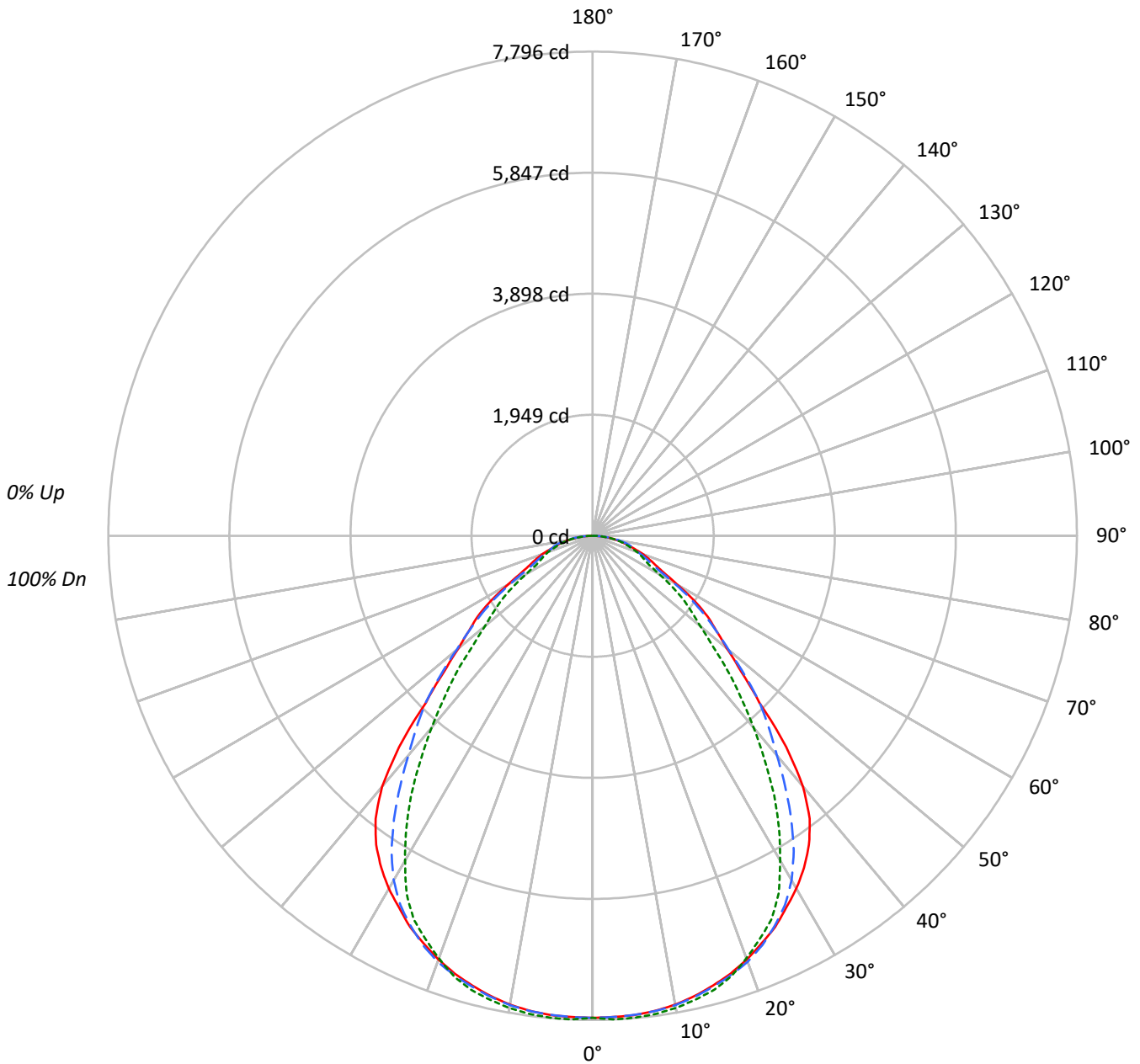
Lumens per Lamp: N/A  
Luminaire Lumens: 16109.0 lumens  
Efficiency: N/A  
Efficacy: 168.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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	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	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46					46			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41					41			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31					31			

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

	0°	45°	90°
0°	60535	60535	60535
5°	60655	60638	60983
10°	60707	60772	61145
15°	60530	60687	61108
20°	60266	60571	60087
25°	59825	59658	58645
30°	59068	57676	54385
35°	57828	53061	48471
40°	53666	46964	41054
45°	41867	41981	33975
50°	34195	34679	27439
55°	30638	29482	24109
60°	24528	23217	19289
65°	20555	18816	17059
70°	19515	17927	17369
75°	17708	19034	16750
80°	17792	19450	17657
85°	15483	18140	14749



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	737.9	4.6
10°-20°	2122.3	13.2
20°-30°	3168.2	19.7
30°-40°	3457.1	21.5
40°-50°	2828.0	17.6
50°-60°	1859.4	11.5
60°-70°	1066.8	6.6
70°-80°	646.5	4.0
80°-90°	217.1	1.3
90°-100°	5.6	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°	6028.5	37.4
0°-40°	9485.5	58.9
0°-60°	14173.0	88.0
0°-90°	16103.4	100.0
90°-120°	5.6	0.0
90°-150°	5.6	0.0
90°-180°	6.0	0.0
0°-180°	16109.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7761	7761	7761	7761	7761	
5°	7747	7734	7745	7776	7789	737
15°	7496	7495	7515	7564	7568	2116
25°	6951	6968	6932	6848	6814	3198
35°	6073	5936	5572	5193	5090	3764
45°	3796	4079	3806	3360	3080	3013
55°	2253	2192	2168	1863	1773	1984
65°	1114	1097	1020	992	924	1139
75°	588	636	632	606	556	636
85°	173	196	203	177	165	188
90°	1	14	29	34	36	8
95°	1	2	3	3	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-L740-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7761.0	7761.0	7761.0	7761.0	7761.0
2.5°	7755.9	7744.6	7754.9	7786.6	7795.8
5°	7746.7	7734.4	7744.6	7776.4	7788.6
7.5°	7714.9	7707.8	7718.0	7749.8	7765.1
10°	7664.8	7656.6	7673.0	7700.6	7720.1
12.5°	7590.1	7587.0	7602.4	7642.3	7650.5
15°	7495.9	7494.9	7515.3	7563.5	7567.5
17.5°	7389.4	7388.4	7414.0	7445.7	7434.5
20°	7260.5	7267.6	7297.3	7267.6	7239.0
22.5°	7105.9	7128.4	7135.6	7042.4	7028.1
25°	6951.3	6967.7	6931.9	6848.0	6814.2
27.5°	6751.7	6771.2	6704.6	6584.9	6488.7
30°	6558.3	6539.8	6403.7	6172.4	6038.3
32.5°	6336.1	6270.6	6026.0	5706.6	5584.8
35°	6073.1	5935.9	5572.5	5192.8	5090.4
37.5°	5740.4	5489.6	5092.5	4696.3	4541.8
40°	5270.6	4980.9	4612.4	4202.9	4032.0
42.5°	4612.4	4504.9	4199.9	3739.2	3535.5
45°	3795.5	4079.1	3805.8	3359.5	3080.0
47.5°	3248.9	3643.0	3314.4	2992.0	2607.1
50°	2818.0	3089.3	2857.9	2567.2	2261.2
52.5°	2506.8	2588.7	2495.6	2176.2	2002.2
55°	2253.0	2191.5	2168.0	1863.0	1772.9
57.5°	1937.7	1903.9	1843.5	1624.5	1505.7
60°	1572.3	1643.9	1488.3	1425.9	1236.5
62.5°	1291.8	1362.4	1195.6	1191.5	1033.8
65°	1113.7	1097.3	1019.5	991.9	924.3
67.5°	985.7	934.6	907.9	872.1	848.6
70°	855.7	834.2	786.1	793.3	761.6
72.5°	713.5	741.1	693.0	706.3	649.0
75°	587.6	635.7	631.6	606.0	555.8
77.5°	484.2	535.3	544.6	521.0	480.1
80°	396.1	430.9	433.0	418.7	393.1
82.5°	290.7	311.2	326.5	302.0	285.6
85°	173.0	196.5	202.7	177.1	164.8
87.5°	56.3	78.8	88.0	91.1	92.1
90°	1.0	14.3	28.7	33.8	35.8
92.5°	1.0	4.1	6.1	9.2	10.2
95°	1.0	2.0	3.1	3.1	2.0
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)