

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: P859927

Luminaire Tested: **SPHB-15SE-W-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: P859927  
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-L740-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 4000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

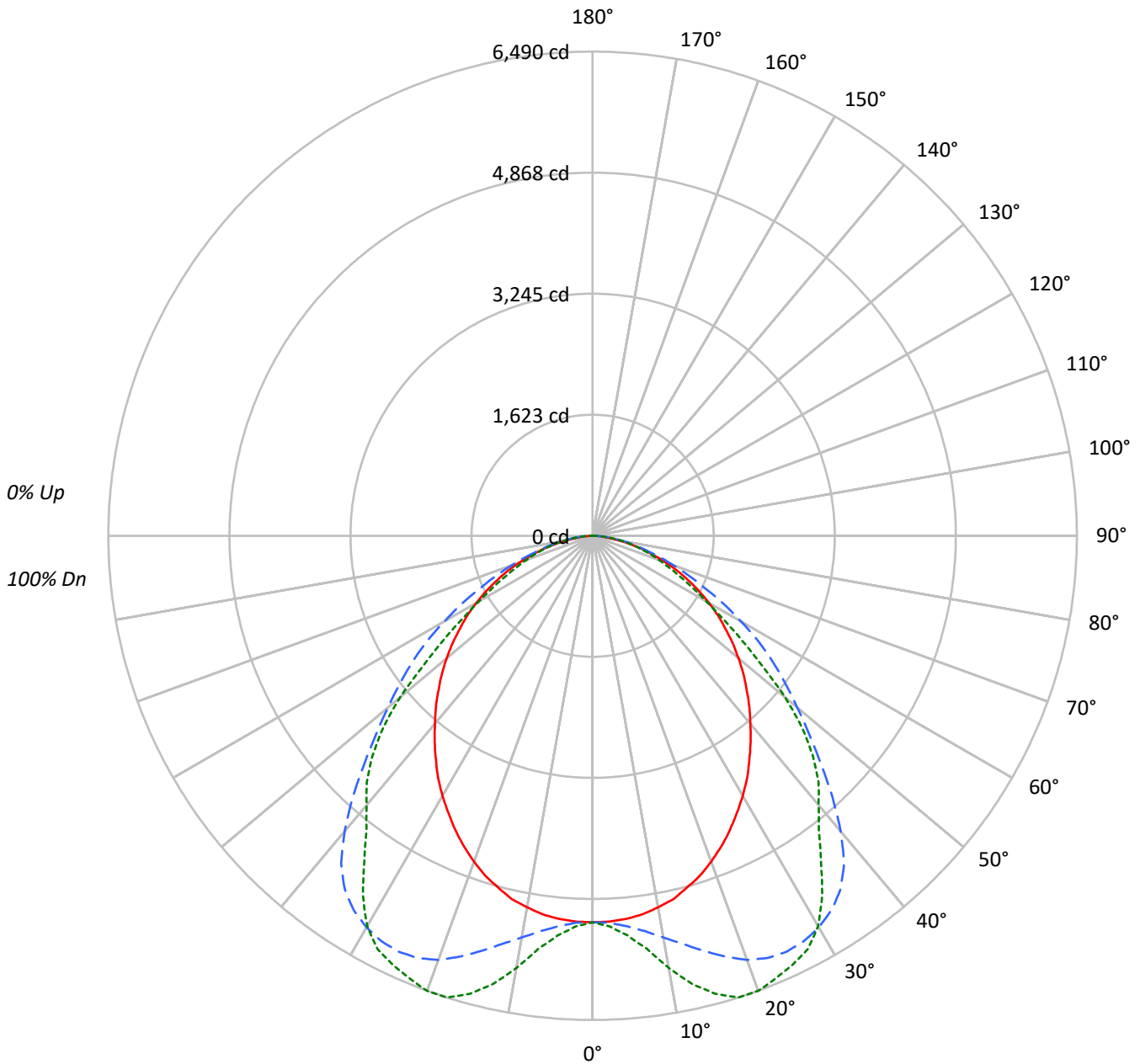
Lumens per Lamp: N/A  
Luminaire Lumens: 16302.0 lumens  
Efficiency: N/A  
Efficacy: 170.0 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 95.9  
Input Voltage (V): NR  
Input Current (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	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°	40411	40411	40411
5°	40368	41130	42104
10°	40049	43300	46582
15°	39423	46524	51311
20°	38569	50224	53874
25°	37456	52934	54580
30°	36237	54590	54431
35°	34877	55138	50791
40°	33472	52648	47973
45°	32205	47722	46027
50°	30950	43392	40804
55°	29535	40092	33204
60°	28074	35742	27345
65°	26141	30713	23711
70°	23782	26222	21446
75°	20424	22006	19661
80°	15964	18875	18237
85°	10793	16019	15035



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	508.7	3.1
10°-20°	1613.0	9.9
20°-30°	2639.8	16.2
30°-40°	3220.3	19.8
40°-50°	3189.4	19.6
50°-60°	2550.4	15.6
60°-70°	1591.1	9.8
70°-80°	779.5	4.8
80°-90°	204.4	1.3
90°-100°	5.4	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°	4761.4	29.2
0°-40°	7981.7	49.0
0°-60°	13721.5	84.2
0°-90°	16296.6	100.0
90°-120°	5.4	0.0
90°-150°	5.4	0.0
90°-180°	5.0	0.0
0°-180°	16302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5181	5181	5181	5181	5181	
5°	5156	5178	5253	5344	5378	489
15°	4882	5166	5761	6220	6354	1376
25°	4352	5089	6151	6329	6342	2003
35°	3663	4894	5791	5481	5334	2291
45°	2920	4536	4326	4181	4173	2255
55°	2172	3482	2948	2664	2442	1946
65°	1416	1954	1664	1380	1285	1404
75°	678	830	730	669	652	719
85°	121	171	179	170	168	149
90°	1	18	32	40	42	7
95°	1	3	3	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5181.0	5181.0	5181.0	5181.0	<i>5181.0</i>
2.5°	5175.8	5173.9	5192.7	5227.1	<i>5242.6</i>
5°	5155.7	5178.4	5253.0	5344.4	<i>5377.5</i>
7.5°	5119.4	5180.4	5345.1	5513.1	<i>5584.4</i>
10°	5056.5	5181.7	5467.0	5763.4	<i>5881.4</i>
12.5°	4991.7	5177.1	5602.6	6022.1	<i>6151.2</i>
15°	4882.1	5166.1	5761.4	6219.9	<i>6354.2</i>
17.5°	4780.2	5153.1	5914.5	6387.9	<i>6489.7</i>
20°	<i>4646.6</i>	<i>5134.3</i>	<i>6050.7</i>	<i>6439.1</i>	<i>6490.4</i>
22.5°	4506.6	5119.4	6125.9	6404.8	<i>6420.3</i>
25°	4352.2	5088.9	6150.6	6328.9	<i>6341.9</i>
27.5°	4187.5	5061.7	6127.2	6234.9	<i>6245.9</i>
30°	4023.4	5012.4	6061.1	6088.3	<i>6043.5</i>
32.5°	3851.6	4963.1	5954.1	5831.5	<i>5727.1</i>
35°	3662.8	4894.4	5790.6	5481.3	<i>5334.1</i>
37.5°	3476.7	4828.2	5535.8	5089.6	<i>4978.7</i>
40°	3287.3	4746.5	5170.6	4723.8	<i>4711.5</i>
42.5°	3108.4	4658.3	4757.5	4439.1	<i>4480.6</i>
45°	2919.6	4535.7	4326.3	4181.0	<i>4172.6</i>
47.5°	2740.6	4366.5	3933.9	3895.7	<i>3809.4</i>
50°	2550.6	4133.0	3575.9	3539.6	<i>3362.6</i>
52.5°	2364.5	3835.3	3256.2	3120.0	<i>2861.9</i>
55°	2171.9	3482.5	2948.2	2663.5	<i>2441.7</i>
57.5°	1992.9	3094.7	2634.9	2265.9	<i>2066.8</i>
60°	1799.6	2701.7	2291.2	1917.0	<i>1752.9</i>
62.5°	1610.3	2314.6	1979.9	1620.0	<i>1511.0</i>
65°	1416.4	1954.0	1664.1	1380.0	<i>1284.7</i>
67.5°	1230.9	1642.1	1391.1	1163.4	<i>1099.9</i>
70°	1042.8	1332.1	1149.8	977.3	<i>940.4</i>
72.5°	848.9	1064.2	930.0	824.9	<i>797.0</i>
75°	677.7	830.1	730.2	668.6	<i>652.4</i>
77.5°	504.5	617.4	570.7	534.4	<i>529.8</i>
80°	355.4	445.5	420.2	413.1	<i>406.0</i>
82.5°	227.0	291.2	299.0	294.4	<i>289.2</i>
85°	120.6	171.2	179.0	169.9	<i>168.0</i>
87.5°	48.6	74.6	80.4	88.8	<i>91.4</i>
90°	0.6	17.5	31.8	40.2	<i>41.5</i>
92.5°	0.6	3.9	4.5	4.5	<i>3.9</i>
95°	0.6	2.6	2.6	1.9	<i>1.3</i>
97.5°	0.0	0.0	0.0	0.0	<i>0.0</i>
100°	0.0	0.0	0.0	0.0	<i>0.0</i>
102.5°	0.0	0.0	0.0	0.0	<i>0.0</i>
105°	0.0	0.0	0.0	0.0	<i>0.0</i>



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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)