

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: P859916

Luminaire Tested: **SPHB-15SE-M-L950-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: P859916  
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-L950-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens  
and, 5000K 90CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

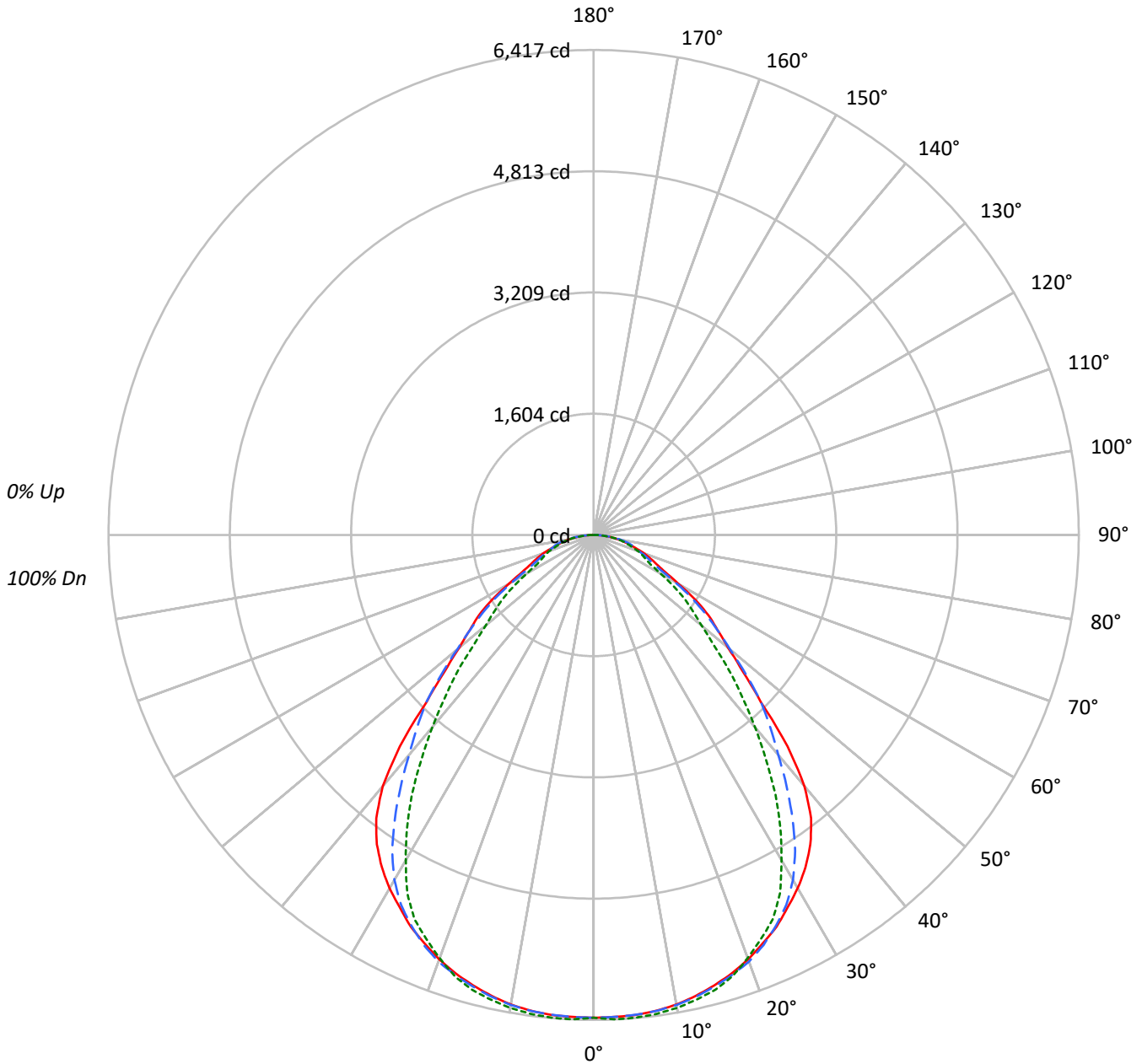
Lumens per Lamp: N/A  
Luminaire Lumens: 13259.0 lumens  
Efficiency: N/A  
Efficacy: 138.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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°	49825	49825	49825
5°	49923	49911	50194
10°	49967	50020	50327
15°	49821	49950	50297
20°	49603	49855	49457
25°	49241	49103	48269
30°	48618	47472	44763
35°	47597	43673	39895
40°	44171	38655	33791
45°	34460	34554	27964
50°	28145	28544	22584
55°	25218	24266	19843
60°	20188	19110	15878
65°	16919	15487	14041
70°	16062	14757	14294
75°	14574	15665	13788
80°	14648	16009	14531
85°	12744	14928	12135



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	607.4	4.6
10°-20°	1746.8	13.2
20°-30°	2607.7	19.7
30°-40°	2845.5	21.5
40°-50°	2327.7	17.6
50°-60°	1530.5	11.5
60°-70°	878.1	6.6
70°-80°	532.1	4.0
80°-90°	178.7	1.3
90°-100°	4.6	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°	4961.9	37.4
0°-40°	7807.4	58.9
0°-60°	11665.5	88.0
0°-90°	13254.4	100.0
90°-120°	4.6	0.0
90°-150°	4.6	0.0
90°-180°	5.0	0.0
0°-180°	13259.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6388	6388	6388	6388	6388	
5°	6376	6366	6374	6401	6411	606
15°	6170	6169	6186	6225	6229	1741
25°	5722	5735	5706	5636	5609	2632
35°	4999	4886	4587	4274	4190	3098
45°	3124	3357	3132	2765	2535	2480
55°	1854	1804	1784	1533	1459	1633
65°	917	903	839	816	761	937
75°	484	523	520	499	458	523
85°	142	162	167	146	136	154
90°	1	12	24	28	30	7
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-L950-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6387.9	6387.9	6387.9	6387.9	6387.9
2.5°	6383.7	6374.5	6382.9	6409.0	6416.6
5°	6376.1	6366.0	6374.5	6400.6	6410.7
7.5°	6350.0	6344.1	6352.5	6378.7	6391.3
10°	6308.7	6302.0	6315.5	6338.2	6354.2
12.5°	6247.2	6244.7	6257.3	6290.2	6296.9
15°	6169.7	6168.9	6185.7	6225.3	6228.7
17.5°	6082.1	6081.3	6102.3	6128.4	6119.2
20°	5975.9	5981.8	6006.3	5981.8	5958.3
22.5°	5848.7	5867.3	5873.2	5796.5	5784.7
25°	5721.5	5735.0	5705.5	5636.4	5608.6
27.5°	5557.2	5573.2	5518.5	5419.9	5340.7
30°	5398.0	5382.8	5270.8	5080.4	4970.0
32.5°	5215.2	5161.2	4959.9	4697.0	4596.8
35°	4998.6	4885.7	4586.6	4274.1	4189.8
37.5°	4724.8	4518.4	4191.5	3865.5	3738.2
40°	4338.1	4099.7	3796.4	3459.4	3318.7
42.5°	3796.4	3707.9	3456.8	3077.7	2910.0
45°	3124.0	3357.4	3132.5	2765.1	2535.1
47.5°	2674.1	2998.5	2728.1	2462.7	2145.9
50°	2319.4	2542.7	2352.3	2113.0	1861.1
52.5°	2063.3	2130.7	2054.0	1791.2	1648.0
55°	1854.4	1803.8	1784.4	1533.4	1459.2
57.5°	1594.9	1567.1	1517.4	1337.1	1239.3
60°	1294.1	1353.1	1225.0	1173.6	1017.8
62.5°	1063.3	1121.4	984.1	980.7	850.9
65°	916.7	903.2	839.1	816.4	760.8
67.5°	811.3	769.2	747.3	717.8	698.4
70°	704.3	686.6	647.1	652.9	626.8
72.5°	587.2	610.0	570.4	581.3	534.2
75°	483.6	523.2	519.8	498.8	457.5
77.5°	398.5	440.6	448.2	428.8	395.1
80°	326.1	354.7	356.4	344.6	323.5
82.5°	239.3	256.1	268.8	248.5	235.1
85°	142.4	161.8	166.8	145.8	135.6
87.5°	46.3	64.9	72.5	75.0	75.8
90°	0.8	11.8	23.6	27.8	29.5
92.5°	0.8	3.4	5.1	7.6	8.4
95°	0.8	1.7	2.5	2.5	1.7
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)