

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: P860312

Luminaire Tested: **SPHB-9SE-W-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: P860312
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-9SE-W-L950-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

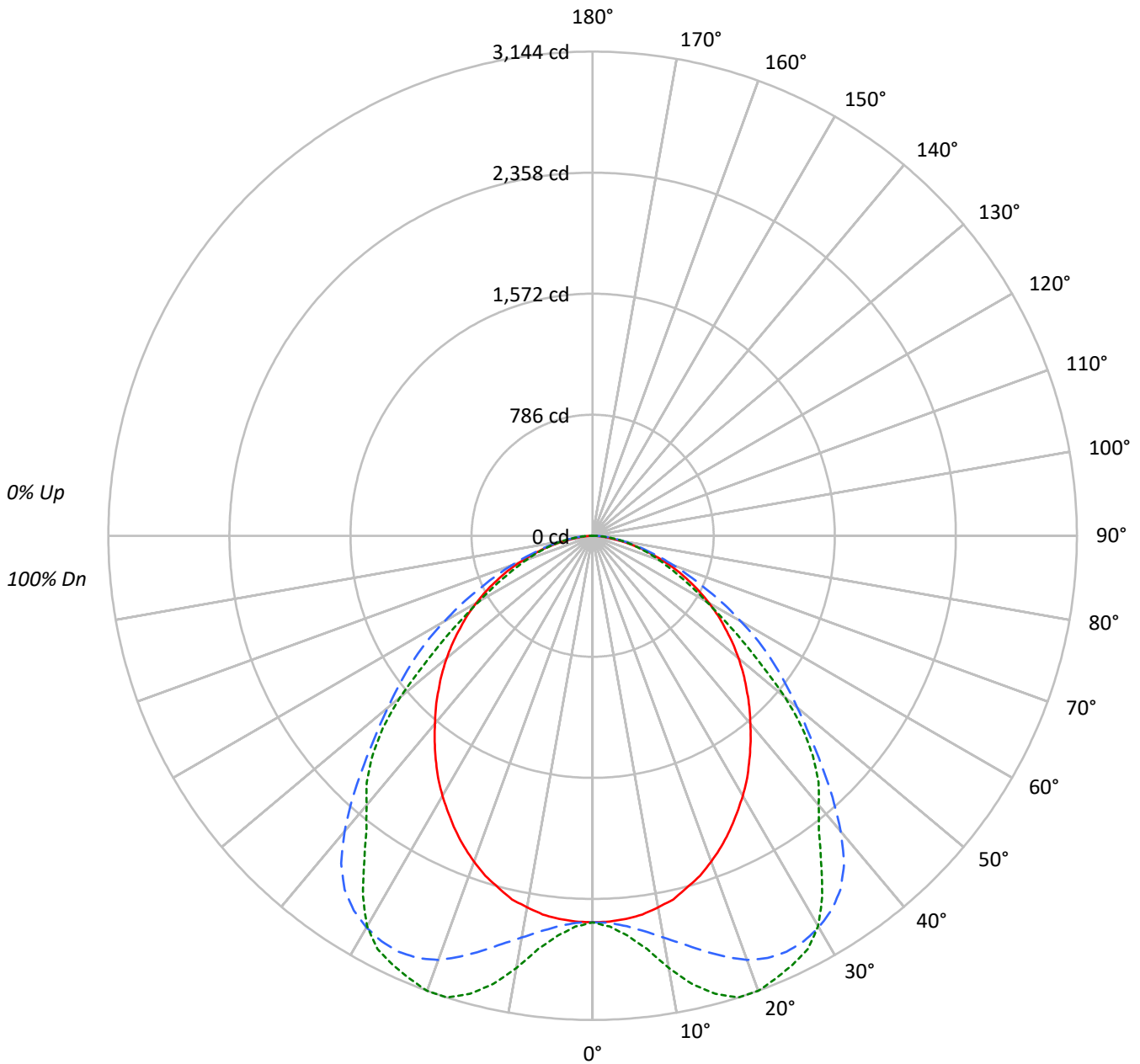
Lumens per Lamp: N/A
Luminaire Lumens: 7898.0 lumens
Efficiency: N/A
Efficacy: 144.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 54.8
Input Voltage (V): NR
Input Current (A_{in}): 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°	19579	19579	19579
5°	19557	19927	20399
10°	19403	20978	22568
15°	19100	22540	24859
20°	18686	24332	26101
25°	18147	25645	26443
30°	17557	26448	26371
35°	16898	26713	24608
40°	16217	25507	23242
45°	15603	23121	22299
50°	14995	21023	19768
55°	14309	19423	16086
60°	13602	17317	13249
65°	12665	14879	11487
70°	11521	12705	10390
75°	9894	10662	9526
80°	7735	9145	8835
85°	5226	7759	7285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.4	3.1
10°-20°	781.5	9.9
20°-30°	1278.9	16.2
30°-40°	1560.2	19.8
40°-50°	1545.2	19.6
50°-60°	1235.6	15.6
60°-70°	770.8	9.8
70°-80°	377.7	4.8
80°-90°	99.0	1.3
90°-100°	2.6	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°	2306.8	29.2
0°-40°	3867.0	49.0
0°-60°	6647.8	84.2
0°-90°	7895.4	100.0
90°-120°	2.6	0.0
90°-150°	2.6	0.0
90°-180°	3.0	0.0
0°-180°	7898.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2510	2510	2510	2510	2510	
5°	2498	2509	2545	2589	2605	237
15°	2365	2503	2791	3013	3078	667
25°	2109	2466	2980	3066	3072	970
35°	1775	2371	2805	2656	2584	1110
45°	1414	2198	2096	2026	2022	1093
55°	1052	1687	1428	1290	1183	943
65°	686	947	806	669	622	680
75°	328	402	354	324	316	349
85°	58	83	87	82	81	72
90°	0	8	15	20	20	3
95°	0	1	1	1	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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CATALOG NUMBER: SPHB-9SE-W-L950-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2510.1	2510.1	2510.1	2510.1	2510.1
2.5°	2507.6	2506.6	2515.8	2532.4	2540.0
5°	2497.8	2508.8	2545.0	2589.3	2605.3
7.5°	2480.3	2509.8	2589.6	2671.0	2705.5
10°	2449.8	2510.4	2648.7	2792.2	2849.4
12.5°	2418.4	2508.2	2714.3	2917.6	2980.1
15°	2365.3	2502.9	2791.3	3013.4	3078.5
17.5°	2315.9	2496.6	2865.5	3094.8	3144.1
20°	2251.2	2487.5	2931.4	3119.6	3144.5
22.5°	2183.3	2480.3	2967.9	3103.0	3110.5
25°	2108.6	2465.5	2979.8	3066.2	3072.5
27.5°	2028.8	2452.3	2968.5	3020.7	3026.0
30°	1949.3	2428.4	2936.5	2949.7	2928.0
32.5°	1866.0	2404.5	2884.6	2825.2	2774.7
35°	1774.6	2371.2	2805.4	2655.6	2584.3
37.5°	1684.4	2339.2	2682.0	2465.8	2412.1
40°	1592.7	2299.6	2505.1	2288.6	2282.6
42.5°	1505.9	2256.9	2304.9	2150.7	2170.8
45°	1414.5	2197.5	2096.0	2025.6	2021.5
47.5°	1327.8	2115.5	1905.9	1887.4	1845.6
50°	1235.7	2002.4	1732.5	1714.9	1629.1
52.5°	1145.6	1858.1	1577.6	1511.6	1386.5
55°	1052.2	1687.2	1428.3	1290.4	1182.9
57.5°	965.5	1499.3	1276.6	1097.8	1001.3
60°	871.9	1308.9	1110.1	928.8	849.3
62.5°	780.1	1121.4	959.2	784.9	732.1
65°	686.2	946.7	806.2	668.6	622.4
67.5°	596.3	795.5	673.9	563.7	532.9
70°	505.2	645.4	557.1	473.5	455.6
72.5°	411.3	515.6	450.6	399.7	386.1
75°	328.3	402.2	353.8	323.9	316.1
77.5°	244.4	299.1	276.5	258.9	256.7
80°	172.2	215.9	203.6	200.1	196.7
82.5°	110.0	141.1	144.8	142.6	140.1
85°	58.4	82.9	86.7	82.3	81.4
87.5°	23.6	36.1	39.0	43.0	44.3
90°	0.3	8.5	15.4	19.5	20.1
92.5°	0.3	1.9	2.2	2.2	1.9
95°	0.3	1.3	1.3	0.9	0.6
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)