

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: P860305

Luminaire Tested: **SPHB-9SE-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: P860305
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-L740-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 4000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

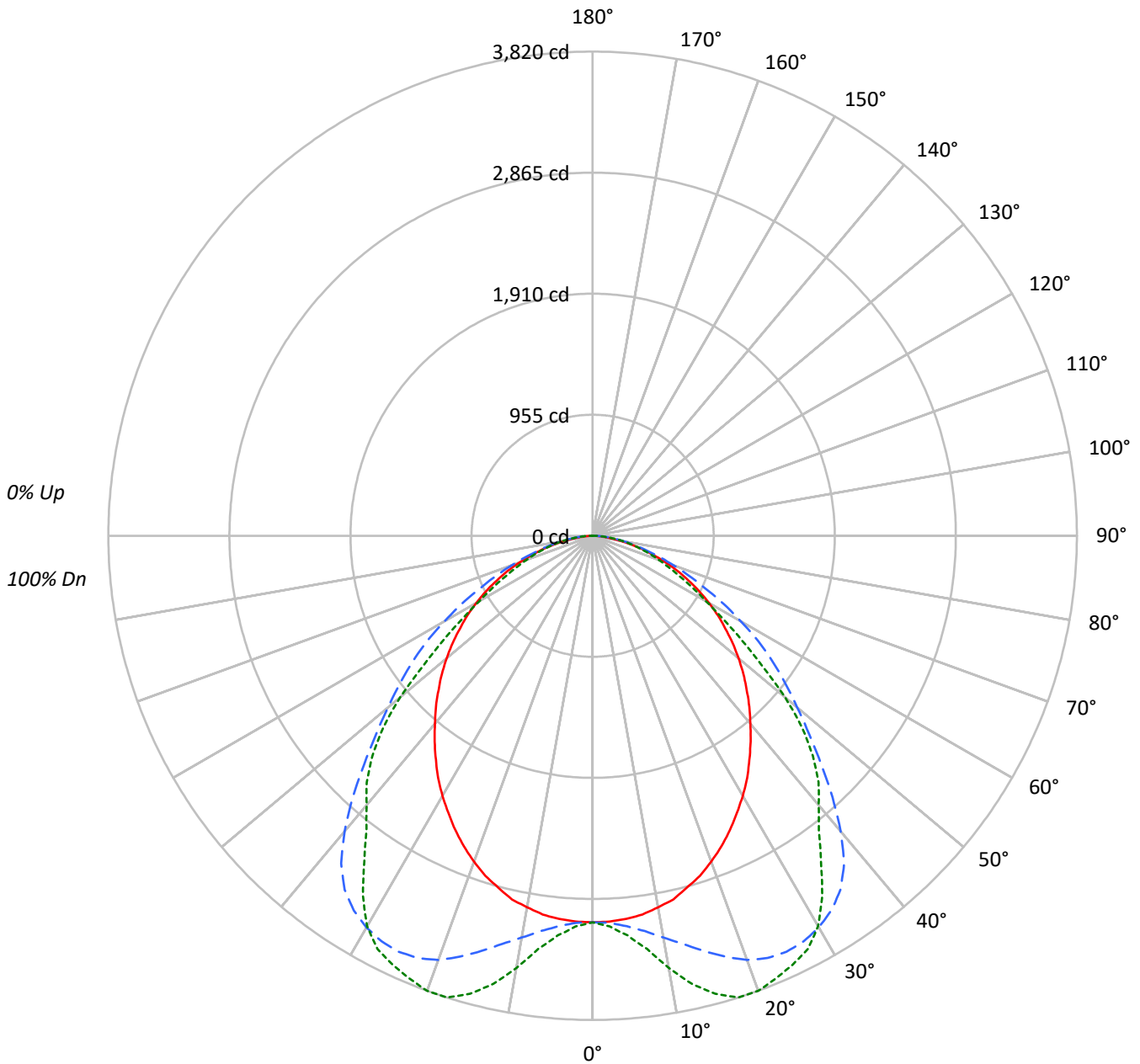
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9596.0 lumens
Efficiency: N/A
Efficacy: 175.1 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°	23788	23788	23788
5°	23762	24210	24784
10°	23575	25488	27420
15°	23206	27386	30203
20°	22704	29564	31712
25°	22048	31159	32128
30°	21330	32134	32041
35°	20530	32457	29897
40°	19703	30990	28239
45°	18957	28091	27093
50°	18219	25542	24018
55°	17386	23599	19546
60°	16525	21040	16098
65°	15387	18080	13957
70°	13998	15435	12623
75°	12022	12953	11572
80°	9397	11113	10735
85°	6354	9433	8851



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.4	3.1
10°-20°	949.5	9.9
20°-30°	1553.9	16.2
30°-40°	1895.6	19.8
40°-50°	1877.4	19.6
50°-60°	1501.3	15.6
60°-70°	936.6	9.8
70°-80°	458.9	4.8
80°-90°	120.4	1.3
90°-100°	3.2	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°	2802.8	29.2
0°-40°	4698.4	49.0
0°-60°	8077.0	84.2
0°-90°	9592.8	100.0
90°-120°	3.2	0.0
90°-150°	3.2	0.0
90°-180°	3.0	0.0
0°-180°	9596.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3050	3050	3050	3050	3050	
5°	3035	3048	3092	3146	3165	288
15°	2874	3041	3391	3661	3740	810
25°	2562	2996	3620	3725	3733	1179
35°	2156	2881	3409	3226	3140	1349
45°	1719	2670	2547	2461	2456	1327
55°	1278	2050	1735	1568	1437	1145
65°	834	1150	980	812	756	827
75°	399	489	430	394	384	423
85°	71	101	105	100	99	88
90°	0	10	19	24	24	4
95°	0	2	2	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-L740-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3049.8	3049.8	3049.8	3049.8	3049.8
2.5°	3046.7	3045.6	3056.6	3076.9	3086.0
5°	3034.9	3048.2	3092.1	3146.0	3165.4
7.5°	3013.5	3049.4	3146.3	3245.2	3287.2
10°	2976.5	3050.1	3218.1	3392.6	3462.0
12.5°	2938.3	3047.5	3297.9	3544.9	3620.8
15°	2873.8	3041.0	3391.4	3661.3	3740.3
17.5°	2813.8	3033.3	3481.5	3760.2	3820.1
20°	2735.2	3022.3	3561.7	3790.3	3820.5
22.5°	2652.7	3013.5	3606.0	3770.1	3779.3
25°	2561.9	2995.5	3620.5	3725.4	3733.1
27.5°	2464.9	2979.5	3606.7	3670.1	3676.6
30°	2368.3	2950.5	3567.8	3583.8	3557.5
32.5°	2267.2	2921.5	3504.8	3432.6	3371.2
35°	2156.1	2881.0	3408.6	3226.5	3139.8
37.5°	2046.5	2842.1	3258.6	2995.9	2930.6
40°	1935.1	2794.0	3043.6	2780.6	2773.4
42.5°	1829.7	2742.1	2800.5	2613.0	2637.5
45°	1718.6	2669.9	2546.6	2461.1	2456.1
47.5°	1613.2	2570.3	2315.7	2293.1	2242.4
50°	1501.4	2432.9	2104.9	2083.6	1979.3
52.5°	1391.8	2257.6	1916.7	1836.6	1684.6
55°	1278.5	2050.0	1735.4	1567.8	1437.3
57.5°	1173.1	1821.7	1551.0	1333.8	1216.6
60°	1059.3	1590.3	1348.7	1128.4	1031.9
62.5°	947.9	1362.4	1165.5	953.6	889.5
65°	833.7	1150.2	979.6	812.4	756.2
67.5°	724.5	966.6	818.8	684.8	647.4
70°	613.8	784.1	676.8	575.3	553.5
72.5°	499.7	626.4	547.4	485.6	469.2
75°	398.9	488.6	429.8	393.6	384.0
77.5°	297.0	363.4	335.9	314.6	311.9
80°	209.2	262.3	247.4	243.2	239.0
82.5°	133.6	171.4	176.0	173.3	170.3
85°	71.0	100.8	105.4	100.0	98.9
87.5°	28.6	43.9	47.3	52.3	53.8
90°	0.4	10.3	18.7	23.7	24.4
92.5°	0.4	2.3	2.7	2.7	2.3
95°	0.4	1.5	1.5	1.1	0.8
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)