

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: P860304

Luminaire Tested: **SPHB-9SE-W-L735-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: P860304
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-L735-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

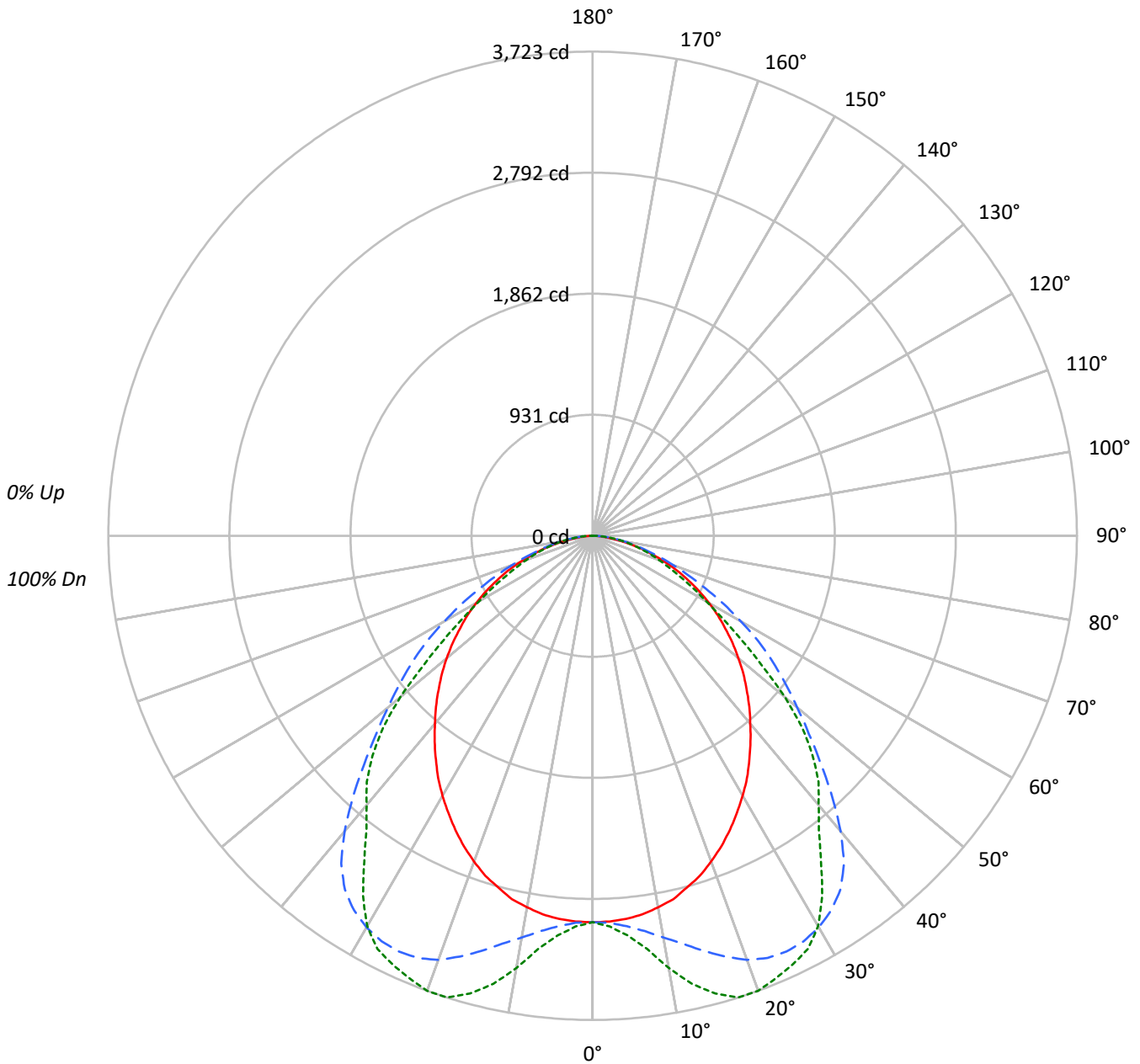
Lumens per Lamp: N/A
Luminaire Lumens: 9350.0 lumens
Efficiency: N/A
Efficacy: 170.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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°	23178	23178	23178
5°	23153	23590	24149
10°	22970	24835	26717
15°	22611	26684	29429
20°	22122	28806	30900
25°	21483	30360	31304
30°	20784	31310	31220
35°	20004	31624	29132
40°	19198	30196	27515
45°	18472	27371	26399
50°	17752	24888	23403
55°	16940	22994	19044
60°	16102	20500	15684
65°	14994	17615	13599
70°	13640	15040	12299
75°	11714	12621	11277
80°	9154	10825	10457
85°	6193	9191	8618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.8	3.1
10°-20°	925.1	9.9
20°-30°	1514.0	16.2
30°-40°	1847.0	19.8
40°-50°	1829.3	19.6
50°-60°	1462.8	15.6
60°-70°	912.6	9.8
70°-80°	447.1	4.8
80°-90°	117.3	1.3
90°-100°	3.1	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°	2730.9	29.2
0°-40°	4577.9	49.0
0°-60°	7870.0	84.2
0°-90°	9346.9	100.0
90°-120°	3.1	0.0
90°-150°	3.1	0.0
90°-180°	3.0	0.0
0°-180°	9350.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2972	2972	2972	2972	2972	
5°	2957	2970	3013	3065	3084	281
15°	2800	2963	3304	3567	3644	789
25°	2496	2919	3528	3630	3637	1149
35°	2101	2807	3321	3144	3059	1314
45°	1675	2602	2481	2398	2393	1293
55°	1246	1997	1691	1528	1400	1116
65°	812	1121	954	792	737	806
75°	389	476	419	384	374	413
85°	69	98	103	98	96	86
90°	0	10	18	23	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2971.6	2971.6	2971.6	2971.6	2971.6
2.5°	2968.6	2967.5	2978.3	2998.0	3006.9
5°	2957.1	2970.1	3012.9	3065.3	3084.3
7.5°	2936.2	2971.2	3065.7	3162.0	3202.9
10°	2900.2	2971.9	3135.6	3305.6	3373.3
12.5°	2863.0	2969.3	3213.3	3454.0	3528.0
15°	2800.1	2963.0	3304.5	3567.4	3644.4
17.5°	2741.7	2955.6	3392.3	3663.8	3722.2
20°	2665.1	2944.8	3470.4	3693.2	3722.6
22.5°	2584.7	2936.2	3513.5	3673.5	3682.4
25°	2496.2	2918.8	3527.6	3629.9	3637.4
27.5°	2401.7	2903.1	3514.3	3576.0	3582.3
30°	2307.6	2874.9	3476.3	3491.9	3466.3
32.5°	2209.1	2846.6	3414.9	3344.6	3284.8
35°	2100.8	2807.2	3321.2	3143.8	3059.4
37.5°	1994.1	2769.2	3175.0	2919.1	2855.5
40°	1885.5	2722.4	2965.6	2709.3	2702.3
42.5°	1782.8	2671.8	2728.7	2546.0	2569.9
45°	1674.6	2601.5	2481.3	2398.0	2393.2
47.5°	1571.9	2504.4	2256.3	2234.3	2184.9
50°	1462.9	2370.5	2051.0	2030.1	1928.6
52.5°	1356.2	2199.8	1867.6	1789.5	1641.4
55°	1245.7	1997.4	1690.9	1527.6	1400.4
57.5°	1143.0	1775.0	1511.3	1299.6	1185.4
60°	1032.2	1549.6	1314.1	1099.5	1005.4
62.5°	923.6	1327.5	1135.6	929.2	866.7
65°	812.4	1120.7	954.4	791.5	736.8
67.5°	706.0	941.8	797.8	667.3	630.8
70°	598.1	764.0	659.5	560.5	539.3
72.5°	486.9	610.4	533.4	473.1	457.1
75°	388.7	476.1	418.8	383.5	374.2
77.5°	289.4	354.1	327.3	306.5	303.9
80°	203.8	255.5	241.0	236.9	232.8
82.5°	130.2	167.0	171.5	168.9	165.9
85°	69.2	98.2	102.7	97.5	96.3
87.5°	27.9	42.8	46.1	51.0	52.4
90°	0.4	10.0	18.2	23.1	23.8
92.5°	0.4	2.2	2.6	2.6	2.2
95°	0.4	1.5	1.5	1.1	0.7
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)