

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: P860308

Luminaire Tested: **SPHB-9SE-W-L840-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: P860308
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-L840-CD
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 4000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

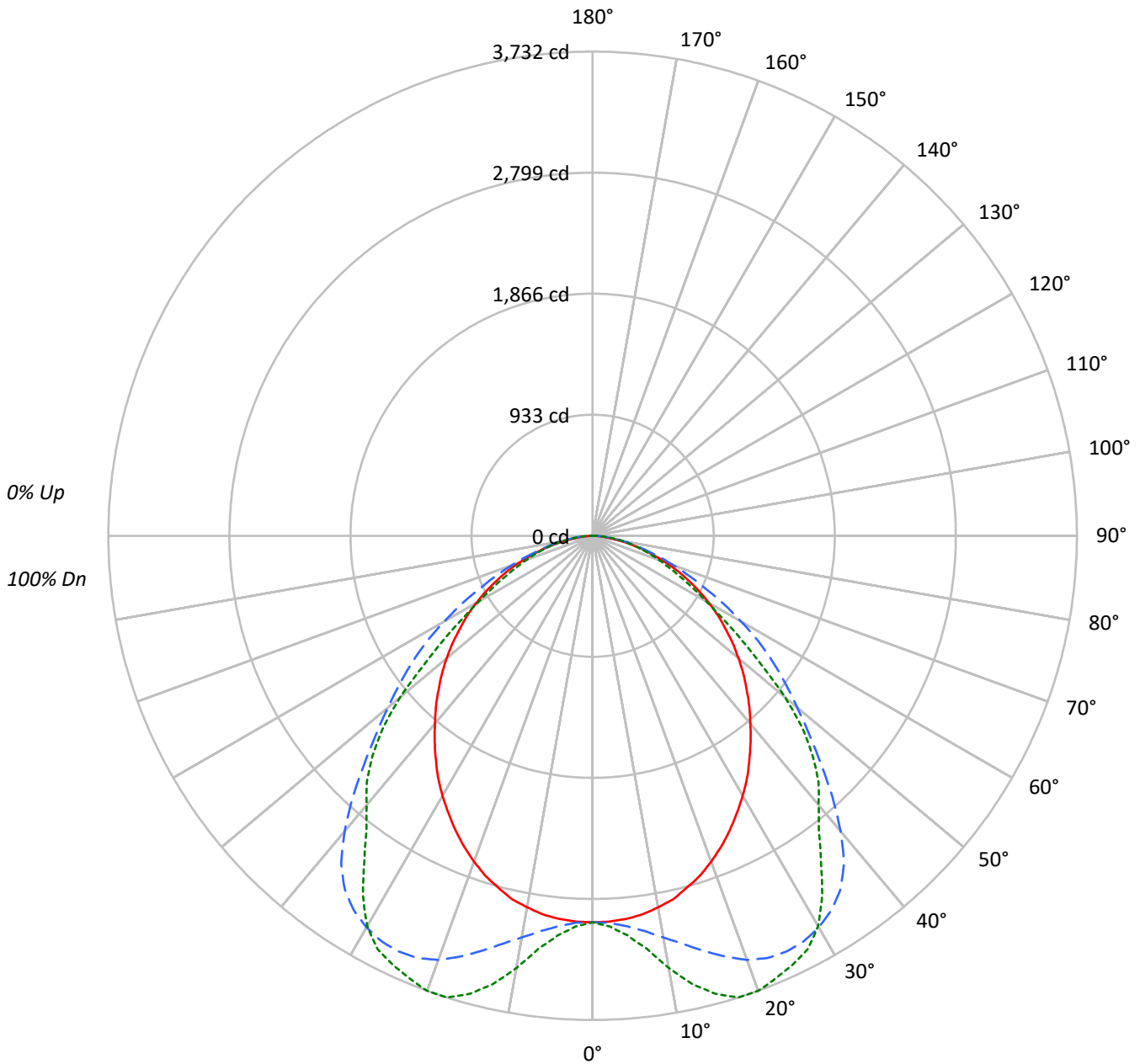
Lumens per Lamp: N/A
Luminaire Lumens: 9374.0 lumens
Efficiency: N/A
Efficacy: 171.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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°	23238	23238	23238
5°	23213	23650	24211
10°	23029	24899	26786
15°	22669	26753	29505
20°	22178	28880	30978
25°	21538	30438	31385
30°	20837	31390	31300
35°	20055	31705	29206
40°	19247	30273	27585
45°	18520	27441	26466
50°	17798	24951	23463
55°	16984	23054	19093
60°	16143	20553	15725
65°	15031	17661	13634
70°	13674	15079	12331
75°	11744	12654	11304
80°	9181	10852	10484
85°	6211	9209	8645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.5	3.1
10°-20°	927.5	9.9
20°-30°	1517.9	16.2
30°-40°	1851.7	19.8
40°-50°	1834.0	19.6
50°-60°	1466.6	15.6
60°-70°	914.9	9.8
70°-80°	448.2	4.8
80°-90°	117.6	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°	2737.9	29.2
0°-40°	4589.7	49.0
0°-60°	7890.2	84.2
0°-90°	9370.9	100.0
90°-120°	3.1	0.0
90°-150°	3.1	0.0
90°-180°	3.0	0.0
0°-180°	9374.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2979	2979	2979	2979	2979	
5°	2965	2978	3021	3073	3092	281
15°	2807	2971	3313	3577	3654	791
25°	2503	2926	3537	3639	3647	1152
35°	2106	2814	3330	3152	3067	1317
45°	1679	2608	2488	2404	2399	1297
55°	1249	2002	1695	1532	1404	1119
65°	814	1124	957	794	739	808
75°	390	477	420	384	375	414
85°	69	98	103	98	97	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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CATALOG NUMBER: SPHB-9SE-W-L840-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2979.2	2979.2	2979.2	2979.2	2979.2
2.5°	2976.2	2975.1	2985.9	3005.7	3014.6
5°	2964.7	2977.7	3020.6	3073.2	3092.2
7.5°	2943.8	2978.8	3073.5	3170.1	3211.1
10°	2907.6	2979.6	3143.7	3314.1	3381.9
12.5°	2870.3	2977.0	3221.6	3462.9	3537.1
15°	2807.3	2970.6	3313.0	3576.6	3653.8
17.5°	2748.7	2963.2	3401.0	3673.2	3731.7
20°	2671.9	2952.3	3479.3	3702.6	3732.1
22.5°	2591.4	2943.8	3522.5	3682.9	3691.8
25°	2502.6	2926.2	3536.7	3639.3	3646.7
27.5°	2407.9	2910.6	3523.3	3585.2	3591.5
30°	2313.5	2882.2	3485.2	3500.9	3475.2
32.5°	2214.7	2853.9	3423.7	3353.2	3293.2
35°	2106.2	2814.4	3329.7	3151.9	3067.2
37.5°	1999.2	2776.3	3183.2	2926.6	2862.8
40°	1890.3	2729.3	2973.2	2716.3	2709.2
42.5°	1787.4	2678.6	2735.7	2552.6	2576.5
45°	1678.9	2608.1	2487.7	2404.2	2399.3
47.5°	1575.9	2510.8	2262.1	2240.1	2190.5
50°	1466.7	2376.6	2056.2	2035.4	1933.6
52.5°	1359.6	2205.4	1872.4	1794.1	1645.7
55°	1248.9	2002.5	1695.3	1531.6	1404.0
57.5°	1146.0	1779.5	1515.1	1303.0	1188.5
60°	1034.8	1553.6	1317.5	1102.3	1008.0
62.5°	925.9	1330.9	1138.5	931.5	868.9
65°	814.4	1123.6	956.9	793.6	738.7
67.5°	707.8	944.2	799.9	669.0	632.5
70°	599.6	766.0	661.2	562.0	540.7
72.5°	488.1	611.9	534.8	474.3	458.3
75°	389.7	477.3	419.9	384.5	375.1
77.5°	290.1	355.0	328.2	307.3	304.7
80°	204.4	256.2	241.6	237.5	233.4
82.5°	130.5	167.4	171.9	169.3	166.3
85°	69.4	98.4	102.9	97.7	96.6
87.5°	28.0	42.9	46.2	51.1	52.6
90°	0.4	10.1	18.3	23.1	23.9
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)