

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: P860296

Luminaire Tested: **SPHB-9SE-N-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: P860296  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-9SE-N-L740-CD  
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 4000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

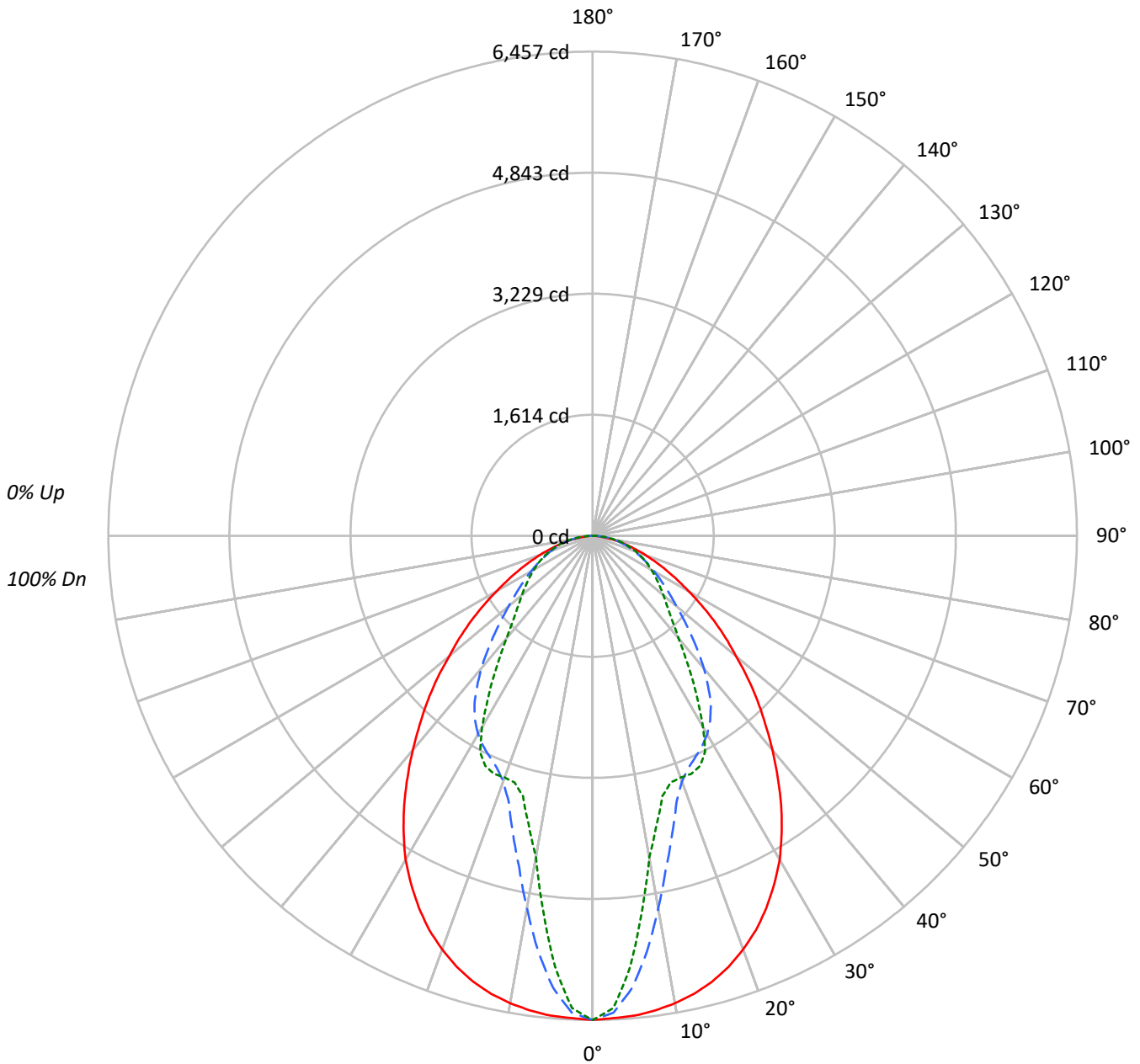
Lumens per Lamp: N/A  
Luminaire Lumens: 9463.0 lumens  
Efficiency: N/A  
Efficacy: 172.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 54.8  
Input Voltage (V): NR  
Input Current (A<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	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86								
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74								
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64								
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56								
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50								
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45								
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40								
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37								
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34								
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	50363	50363	50363
5°	50304	47386	45144
10°	50132	39943	34434
15°	49715	33156	29017
20°	48713	28902	28485
25°	47148	27964	29153
30°	44919	27516	26531
35°	41707	26148	21984
40°	37978	23474	18154
45°	34283	20368	15937
50°	30254	17710	14923
55°	26845	15973	14364
60°	23007	14772	14071
65°	19914	13883	14001
70°	17043	13355	13984
75°	14306	12968	13860
80°	10915	12532	13574
85°	7151	11115	10453



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	550.5	5.8
10°-20°	1264.0	13.4
20°-30°	1708.2	18.1
30°-40°	1797.8	19.0
40°-50°	1525.5	16.1
50°-60°	1181.7	12.5
60°-70°	823.0	8.7
70°-80°	471.3	5.0
80°-90°	137.1	1.4
90°-100°	3.7	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°	3522.7	37.2
0°-40°	5320.6	56.2
0°-60°	8027.9	84.8
0°-90°	9459.3	100.0
90°-120°	3.7	0.0
90°-150°	3.7	0.0
90°-180°	4.0	0.0
0°-180°	9463.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6457	6457	6457	6457	6457	
5°	6425	6307	6052	5820	5766	610
15°	6157	5226	4106	3696	3593	1732
25°	5478	3870	3249	3344	3387	2515
35°	4380	2976	2746	2480	2309	2730
45°	3108	2235	1846	1517	1445	2394
55°	1974	1505	1175	1068	1056	1765
65°	1079	883	752	752	759	1078
75°	475	422	430	457	460	506
85°	80	104	124	117	117	101
90°	0	9	18	23	24	4
95°	0	2	3	3	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-9SE-N-L740-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6456.8	6456.8	6456.8	6456.8	6456.8
2.5°	6438.0	6416.8	6365.1	6331.6	6305.4
5°	6424.7	6306.9	6052.1	5819.9	5765.7
7.5°	6384.8	6126.0	5581.3	5152.0	5043.6
10°	6329.6	5866.2	5043.1	4505.3	4347.6
12.5°	6256.1	5588.7	4527.5	4020.8	3943.4
15°	6156.6	5225.5	4106.0	3695.9	3593.4
17.5°	6027.4	4849.8	3717.1	3480.0	3451.4
20°	5868.7	4505.3	3482.0	3401.2	3431.7
22.5°	5690.3	4170.6	3345.5	3379.5	3436.6
25°	5478.3	3869.9	3249.3	3343.5	3387.4
27.5°	5240.2	3598.3	3161.1	3247.4	3247.4
30°	4987.4	3372.1	3055.1	3047.2	2945.7
32.5°	4692.1	3179.8	2916.6	2760.4	2609.5
35°	4380.1	2976.3	2746.1	2480.4	2308.8
37.5°	4052.8	2787.0	2530.2	2179.7	2020.0
40°	3729.9	2600.2	2305.4	1909.6	1782.9
42.5°	3408.5	2409.9	2071.3	1690.7	1590.7
45°	3107.9	2234.9	1846.5	1517.2	1444.8
47.5°	2802.3	2049.1	1639.0	1377.7	1327.4
50°	2493.2	1860.8	1459.5	1266.8	1229.8
52.5°	2232.9	1685.3	1307.2	1161.8	1139.6
55°	1974.1	1505.4	1174.6	1067.7	1056.3
57.5°	1717.3	1337.8	1053.4	981.4	978.9
60°	1474.8	1181.0	946.9	907.5	902.0
62.5°	1268.3	1025.3	845.9	827.1	829.6
65°	1079.0	883.3	752.2	752.2	758.6
67.5°	903.5	752.7	666.4	677.8	686.6
70°	747.3	634.4	585.6	605.3	613.2
72.5°	599.4	524.5	508.2	529.9	536.3
75°	474.7	421.9	430.3	457.4	459.9
77.5°	351.9	332.2	353.9	383.5	388.9
80°	243.0	245.0	279.0	299.7	302.2
82.5°	156.7	171.0	209.0	219.8	215.9
85°	79.9	103.5	124.2	116.8	116.8
87.5°	30.6	44.9	52.7	62.1	65.6
90°	0.5	9.4	18.2	23.2	24.2
92.5°	0.5	2.5	3.9	4.4	3.9
95°	0.5	1.5	3.0	3.0	2.5
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)