

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: P860288

Luminaire Tested: **SPHB-9SE-M-L750-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: P860288  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-9SE-M-L750-CD  
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens  
and, 5000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

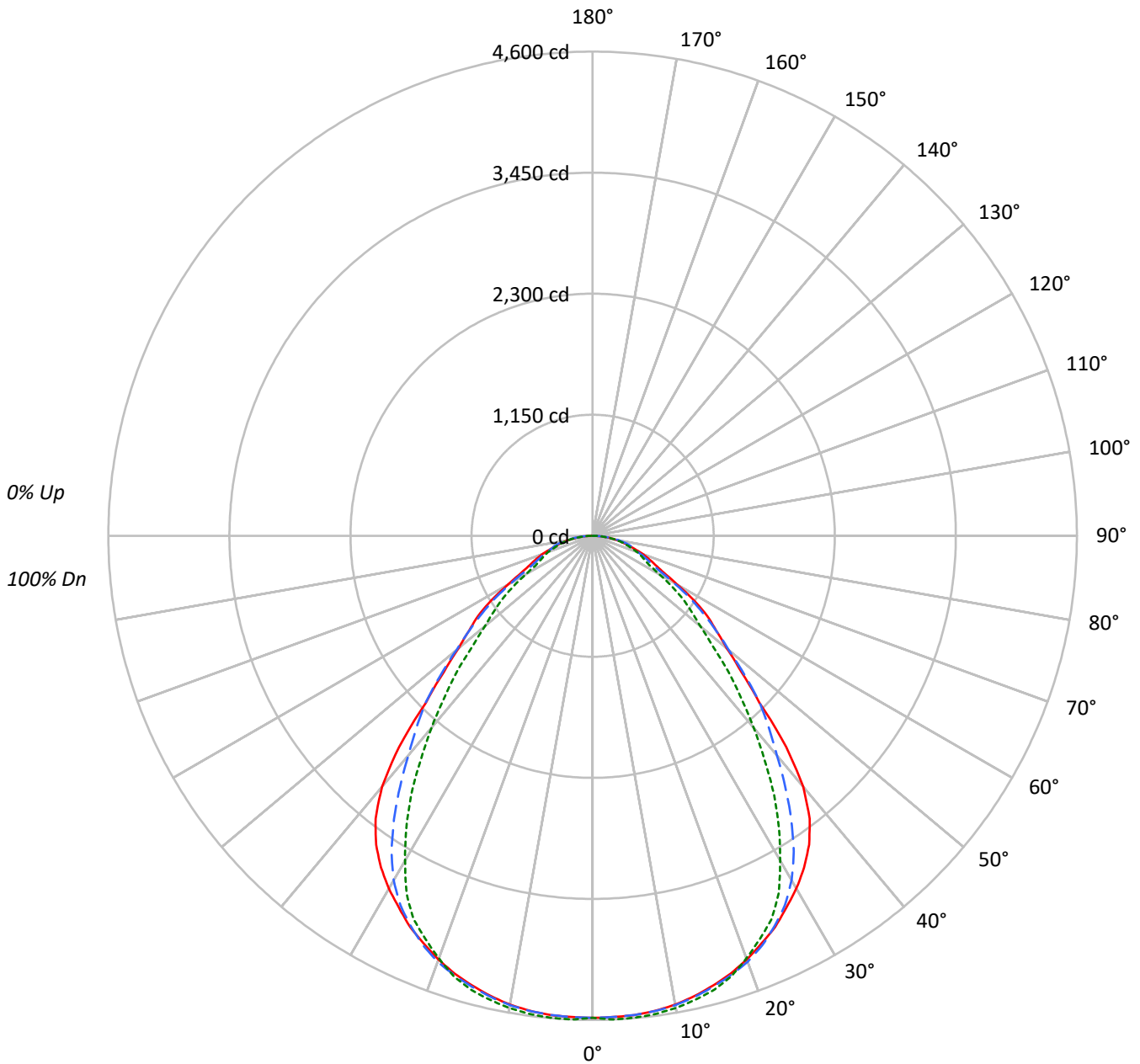
Lumens per Lamp: N/A  
Luminaire Lumens: 9506.0 lumens  
Efficiency: N/A  
Efficacy: 173.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46					46			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41					41			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31					31			

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

	0°	45°	90°
0°	35722	35722	35722
5°	35793	35783	35986
10°	35823	35862	36082
15°	35719	35811	36060
20°	35563	35744	35458
25°	35303	35204	34607
30°	34856	34035	32092
35°	34125	31312	28603
40°	31668	27714	24226
45°	24707	24773	20048
50°	20179	20465	16191
55°	18080	17398	14227
60°	14474	13701	11383
65°	12129	11103	10066
70°	11517	10579	10249
75°	10448	11232	9885
80°	10502	11477	10421
85°	9137	10704	8708



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	435.5	4.6
10°-20°	1252.4	13.2
20°-30°	1869.6	19.7
30°-40°	2040.0	21.5
40°-50°	1668.9	17.6
50°-60°	1097.3	11.5
60°-70°	629.5	6.6
70°-80°	381.5	4.0
80°-90°	128.1	1.3
90°-100°	3.3	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°	3557.4	37.4
0°-40°	5597.5	58.9
0°-60°	8363.6	88.0
0°-90°	9502.7	100.0
90°-120°	3.3	0.0
90°-150°	3.3	0.0
90°-180°	3.0	0.0
0°-180°	9506.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4580	4580	4580	4580	4580	
5°	4571	4564	4570	4589	4596	435
15°	4423	4423	4435	4463	4466	1249
25°	4102	4112	4090	4041	4021	1887
35°	3584	3503	3288	3064	3004	2221
45°	2240	2407	2246	1982	1818	1778
55°	1330	1293	1279	1099	1046	1171
65°	657	648	602	585	545	672
75°	347	375	373	358	328	375
85°	102	116	120	104	97	111
90°	1	8	17	20	21	5
95°	1	1	2	2	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°	4579.8	4579.8	4579.8	4579.8	4579.8
2.5°	4576.8	4570.1	4576.2	4594.9	4600.3
5°	4571.4	4564.1	4570.1	4588.9	4596.1
7.5°	4552.6	4548.4	4554.4	4573.2	4582.2
10°	4523.0	4518.2	4527.9	4544.2	4555.6
12.5°	4478.9	4477.1	4486.2	4509.7	4514.6
15°	4423.4	4422.8	4434.8	4463.2	4465.6
17.5°	4360.5	4359.9	4375.0	4393.8	4387.1
20°	4284.4	4288.7	4306.2	4288.7	4271.8
22.5°	4193.2	4206.5	4210.7	4155.8	4147.3
25°	4102.0	4111.7	4090.5	4041.0	4021.1
27.5°	3984.2	3995.7	3956.4	3885.8	3829.0
30°	3870.1	3859.2	3778.9	3642.3	3563.2
32.5°	3739.0	3700.3	3556.0	3367.5	3295.6
35°	3583.8	3502.8	3288.4	3064.3	3003.9
37.5°	3387.4	3239.5	3005.1	2771.3	2680.1
40°	3110.2	2939.2	2721.8	2480.2	2379.3
42.5°	2721.8	2658.4	2478.4	2206.5	2086.3
45°	2239.8	2407.1	2245.8	1982.5	1817.5
47.5°	1917.2	2149.8	1955.9	1765.6	1538.5
50°	1662.9	1823.0	1686.5	1514.9	1334.3
52.5°	1479.3	1527.6	1472.6	1284.2	1181.5
55°	1329.5	1293.2	1279.4	1099.3	1046.2
57.5°	1143.4	1123.5	1087.9	958.6	888.5
60°	927.8	970.1	878.3	841.4	729.7
62.5°	762.3	804.0	705.5	703.1	610.1
65°	657.2	647.5	601.6	585.3	545.4
67.5°	581.7	551.5	535.8	514.6	500.7
70°	505.0	492.3	463.9	468.1	449.4
72.5°	421.0	437.3	408.9	416.8	383.0
75°	346.7	375.1	372.7	357.6	328.0
77.5°	285.7	315.9	321.3	307.5	283.3
80°	233.8	254.3	255.5	247.1	232.0
82.5°	171.5	183.6	192.7	178.2	168.5
85°	102.1	116.0	119.6	104.5	97.3
87.5°	33.2	46.5	51.9	53.8	54.4
90°	0.6	8.5	16.9	19.9	21.1
92.5°	0.6	2.4	3.6	5.4	6.0
95°	0.6	1.2	1.8	1.8	1.2
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)