

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: P860286

Luminaire Tested: **SPHB-9SE-M-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: P860286  
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-L735-CD  
Description: 9000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens  
and, 3500K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

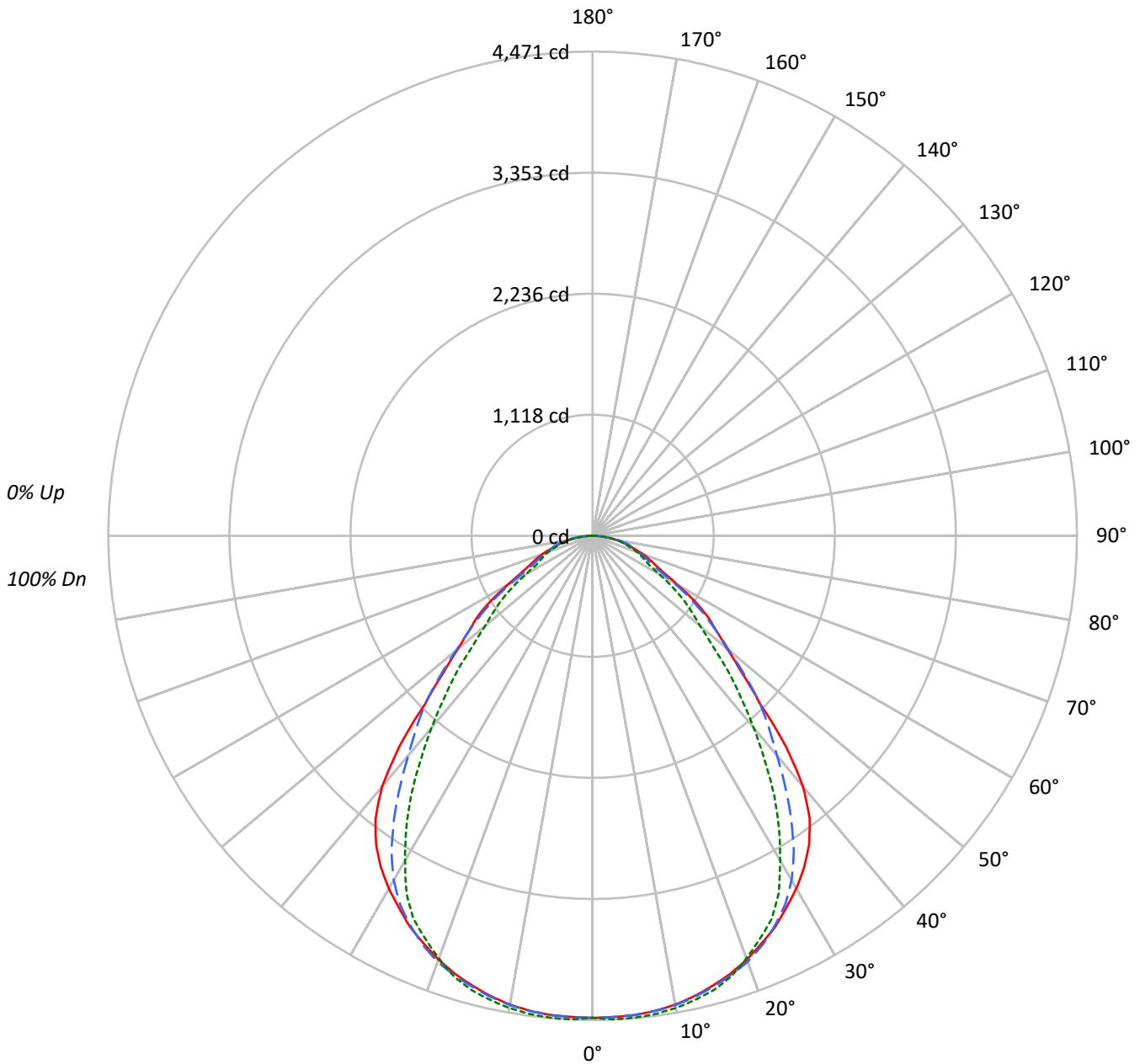
Lumens per Lamp: N/A  
Luminaire Lumens: 9239.0 lumens  
Efficiency: N/A  
Efficacy: 168.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P860286

CATALOG NUMBER: SPHB-9SE-M-L735-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P860286

CATALOG NUMBER: SPHB-9SE-M-L735-CD

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

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

	0°	45°	90°
0°	34719	34719	34719
5°	34788	34778	34975
10°	34817	34855	35069
15°	34716	34806	35048
20°	34564	34739	34462
25°	34312	34215	33634
30°	33877	33079	31191
35°	33166	30432	27799
40°	30778	26935	23546
45°	24013	24077	19486
50°	19612	19890	15736
55°	17571	16909	13827
60°	14066	13316	11063
65°	11788	10791	9784
70°	11193	10283	9961
75°	10156	10915	9608
80°	10205	11153	10125
85°	8878	10399	8457



TEST NUMBER: P860286

CATALOG NUMBER: SPHB-9SE-M-L735-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	423.2	4.6
10°-20°	1217.2	13.2
20°-30°	1817.1	19.7
30°-40°	1982.7	21.5
40°-50°	1622.0	17.6
50°-60°	1066.4	11.5
60°-70°	611.8	6.6
70°-80°	370.8	4.0
80°-90°	124.5	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°	3457.5	37.4
0°-40°	5440.2	58.9
0°-60°	8128.7	88.0
0°-90°	9235.7	100.0
90°-120°	3.2	0.0
90°-150°	3.2	0.0
90°-180°	3.0	0.0
0°-180°	9239.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4451	4451	4451	4451	4451	
5°	4443	4436	4442	4460	4467	423
15°	4299	4298	4310	4338	4340	1213
25°	3987	3996	3976	3928	3908	1834
35°	3483	3404	3196	2978	2920	2159
45°	2177	2340	2183	1927	1766	1728
55°	1292	1257	1243	1068	1017	1138
65°	639	629	585	569	530	653
75°	337	365	362	348	319	365
85°	99	113	116	102	94	108
90°	1	8	16	19	20	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



TEST NUMBER: P860286

CATALOG NUMBER: SPHB-9SE-M-L735-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4451.2	4451.2	4451.2	4451.2	4451.2
2.5°	4448.2	4441.8	4447.7	4465.9	4471.1
5°	4443.0	4435.9	4441.8	4460.0	4467.0
7.5°	4424.8	4420.6	4426.5	4444.7	4453.5
10°	4396.0	4391.3	4400.7	4416.5	4427.7
12.5°	4353.1	4351.4	4360.2	4383.1	4387.8
15°	4299.1	4298.5	4310.3	4337.9	4340.2
17.5°	4238.1	4237.5	4252.2	4270.4	4263.9
20°	4164.1	4168.2	4185.2	4168.2	4151.8
22.5°	4075.4	4088.4	4092.5	4039.1	4030.8
25°	3986.8	3996.2	3975.6	3927.5	3908.1
27.5°	3872.3	3883.5	3845.3	3776.6	3721.4
30°	3761.4	3750.8	3672.7	3540.0	3463.1
32.5°	3634.0	3596.4	3456.1	3272.9	3203.1
35°	3483.1	3404.4	3196.0	2978.2	2919.5
37.5°	3292.3	3148.5	2920.7	2693.5	2604.8
40°	3022.8	2856.7	2645.3	2410.5	2312.5
42.5°	2645.3	2583.7	2408.8	2144.6	2027.7
45°	2176.9	2339.5	2182.7	1926.8	1766.5
47.5°	1863.4	2089.4	1900.9	1716.0	1495.3
50°	1616.2	1771.8	1639.1	1472.4	1296.8
52.5°	1437.7	1484.7	1431.3	1248.1	1148.3
55°	1292.1	1256.9	1243.4	1068.5	1016.8
57.5°	1111.3	1092.0	1057.3	931.7	863.6
60°	901.7	942.8	853.6	817.8	709.2
62.5°	740.9	781.4	685.7	683.4	592.9
65°	638.7	629.3	584.7	568.9	530.1
67.5°	565.3	536.0	520.7	500.2	486.7
70°	490.8	478.5	450.9	455.0	436.8
72.5°	409.2	425.0	397.4	405.1	372.2
75°	337.0	364.6	362.2	347.5	318.8
77.5°	277.7	307.0	312.3	298.8	275.3
80°	227.2	247.2	248.3	240.1	225.4
82.5°	166.7	178.5	187.3	173.2	163.8
85°	99.2	112.7	116.2	101.6	94.5
87.5°	32.3	45.2	50.5	52.2	52.8
90°	0.6	8.2	16.4	19.4	20.5
92.5°	0.6	2.3	3.5	5.3	5.9
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



TEST NUMBER: P860286

CATALOG NUMBER: SPHB-9SE-M-L735-CD

**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)