

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: P859962

Luminaire Tested: **SPHB-18SE-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: P859962  
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-18SE-M-L735-CD  
Description: 18000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens  
and, 3500K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

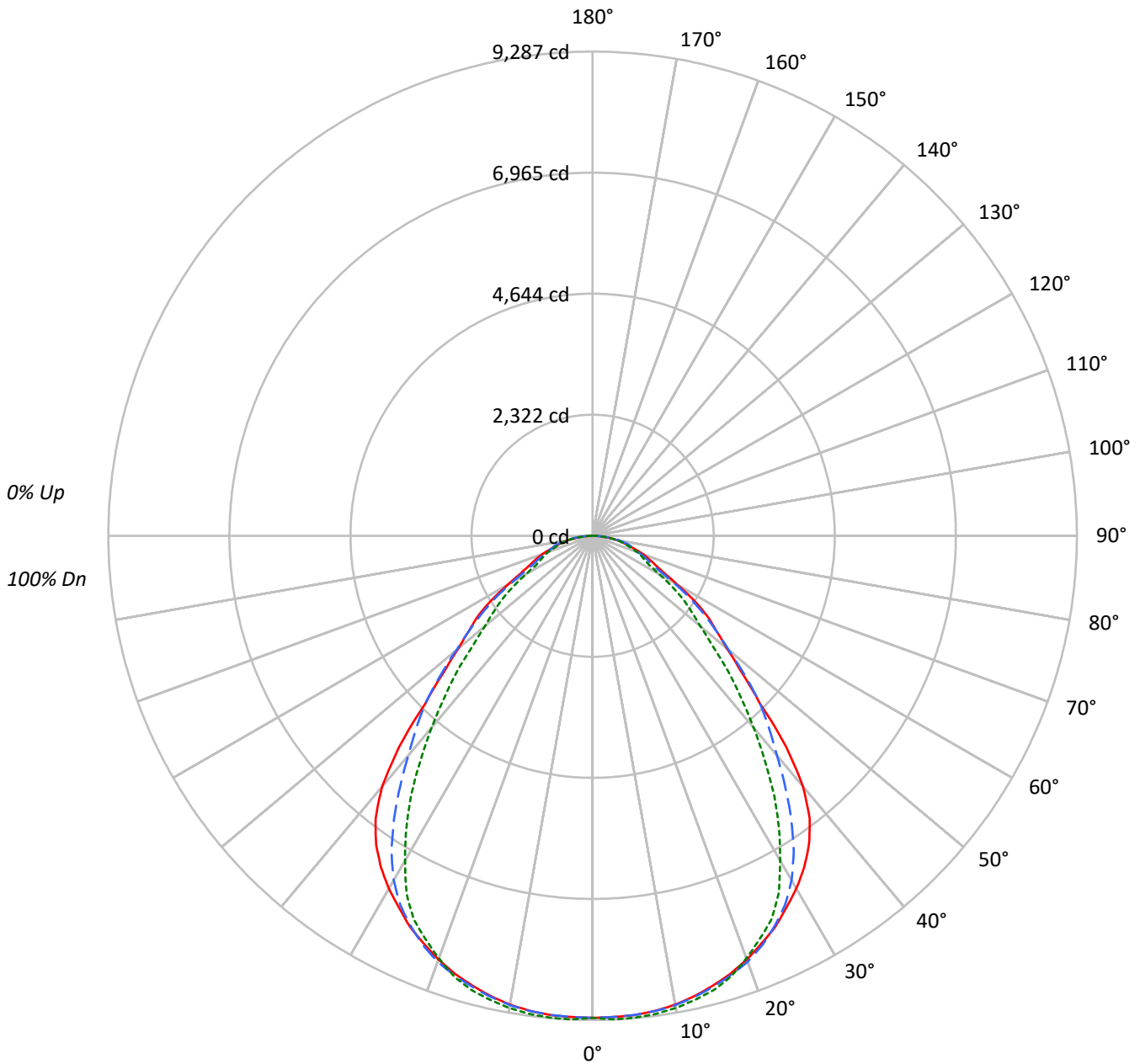
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19190.0 lumens  
Efficiency: N/A  
Efficacy: 163.5 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): 117.4  
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									
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	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°	72114	72114	72114
5°	72255	72236	72647
10°	72318	72395	72840
15°	72107	72294	72796
20°	71792	72156	71580
25°	71267	71068	69861
30°	70365	68707	64786
35°	68888	63210	57741
40°	63929	55946	48907
45°	49876	50010	40473
50°	40736	41312	32686
55°	36498	35122	28721
60°	29219	27659	22979
65°	24486	22415	20322
70°	23248	21357	20689
75°	21093	22675	19953
80°	21197	23169	21031
85°	18445	21604	17568



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	879.1	4.6
10°-20°	2528.2	13.2
20°-30°	3774.2	19.7
30°-40°	4118.3	21.5
40°-50°	3368.9	17.6
50°-60°	2215.1	11.5
60°-70°	1270.8	6.6
70°-80°	770.1	4.0
80°-90°	258.6	1.3
90°-100°	6.7	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°	7181.5	37.4
0°-40°	11299.7	58.9
0°-60°	16883.8	88.0
0°-90°	19183.3	100.0
90°-120°	6.7	0.0
90°-150°	6.7	0.0
90°-180°	7.0	0.0
0°-180°	19190.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9245	9245	9245	9245	9245	
5°	9228	9214	9226	9264	9278	878
15°	8930	8928	8953	9010	9015	2520
25°	8281	8300	8258	8158	8117	3810
35°	7235	7071	6638	6186	6064	4484
45°	4522	4859	4534	4002	3669	3589
55°	2684	2611	2583	2219	2112	2364
65°	1327	1307	1214	1182	1101	1356
75°	700	757	752	722	662	758
85°	206	234	241	211	196	223
90°	1	17	34	40	43	10
95°	1	2	4	4	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



TEST NUMBER: P859962

CATALOG NUMBER: SPHB-18SE-M-L735-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9245.4	9245.4	9245.4	9245.4	9245.4
2.5°	9239.3	9225.9	9238.1	9275.9	9286.8
5°	9228.3	9213.7	9225.9	9263.7	9278.3
7.5°	9190.5	9182.0	9194.2	9232.0	9250.3
10°	9130.8	9121.0	9140.5	9173.4	9196.6
12.5°	9041.7	9038.1	9056.4	9103.9	9113.7
15°	8929.6	8928.3	8952.7	9010.0	9014.9
17.5°	8802.7	8801.5	8832.0	8869.8	8856.4
20°	8649.1	8657.6	8693.0	8657.6	8623.5
22.5°	8465.0	8491.8	8500.3	8389.4	8372.3
25°	8280.8	8300.4	8257.7	8157.7	8117.4
27.5°	8043.1	8066.2	7987.0	7844.3	7729.7
30°	7812.6	7790.7	7628.5	7352.9	7193.2
32.5°	7548.0	7470.0	7178.5	6798.1	6653.0
35°	7234.6	7071.2	6638.3	6185.9	6064.0
37.5°	6838.3	6539.6	6066.4	5594.5	5410.4
40°	6278.6	5933.5	5494.5	5006.8	4803.2
42.5°	5494.5	5366.5	5003.1	4454.4	4211.8
45°	4521.5	4859.2	4533.7	4002.0	3669.1
47.5°	3870.3	4339.8	3948.4	3564.3	3105.8
50°	3357.0	3680.1	3404.5	3058.2	2693.6
52.5°	2986.3	3083.8	2972.9	2592.4	2385.1
55°	2683.9	2610.7	2582.7	2219.3	2112.0
57.5°	2308.3	2268.1	2196.1	1935.2	1793.7
60°	1873.0	1958.3	1773.0	1698.6	1473.0
62.5°	1538.9	1623.0	1424.2	1419.4	1231.6
65°	1326.7	1307.2	1214.5	1181.6	1101.1
67.5°	1174.3	1113.3	1081.6	1038.9	1010.9
70°	1019.4	993.8	936.5	945.0	907.2
72.5°	849.9	882.8	825.5	841.4	773.1
75°	699.9	757.2	752.4	721.9	662.1
77.5°	576.8	637.7	648.7	620.7	571.9
80°	471.9	513.4	515.8	498.7	468.2
82.5°	346.3	370.7	389.0	359.7	340.2
85°	206.1	234.1	241.4	211.0	196.3
87.5°	67.1	93.9	104.9	108.5	109.7
90°	1.2	17.1	34.1	40.2	42.7
92.5°	1.2	4.9	7.3	11.0	12.2
95°	1.2	2.4	3.7	3.7	2.4
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)