

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: P860232

Luminaire Tested: **SPHB-60SE-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: P860232  
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-60SE-M-L735-CD  
Description: 60000 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**

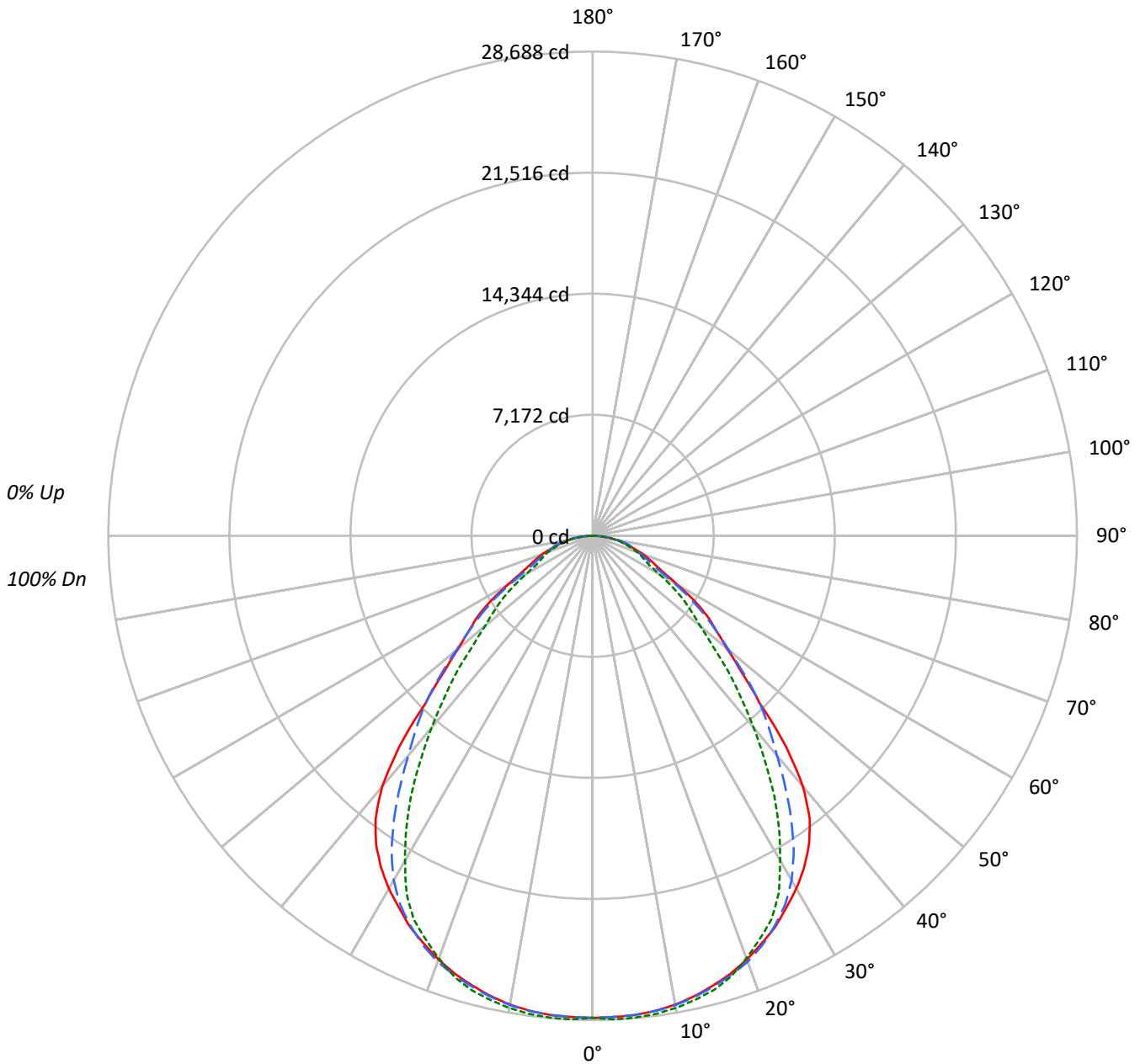
Lumens per Lamp: N/A  
Luminaire Lumens: 59279.0 lumens  
Efficiency: N/A  
Efficacy: 157.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 376  
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: P860232

CATALOG NUMBER: SPHB-60SE-M-L735-CD

### 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	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°	90950	90950	90950
5°	91129	91105	91623
10°	91208	91306	91866
15°	90942	91178	91812
20°	90545	91005	90277
25°	89883	89632	88110
30°	88745	86654	81709
35°	86882	79721	72824
40°	80629	70560	61681
45°	62903	63073	51046
50°	51376	52104	41224
55°	46031	44295	36222
60°	36850	34883	28981
65°	30882	28270	25631
70°	29321	26936	26094
75°	26603	28596	25166
80°	26733	29220	26526
85°	23261	27251	22157



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2715.5	4.6
10°-20°	7809.8	13.2
20°-30°	11658.7	19.7
30°-40°	12721.6	21.5
40°-50°	10406.9	17.6
50°-60°	6842.5	11.5
60°-70°	3925.7	6.6
70°-80°	2378.9	4.0
80°-90°	798.8	1.3
90°-100°	20.8	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°	22183.9	37.4
0°-40°	34905.5	58.9
0°-60°	52154.9	88.0
0°-90°	59258.2	100.0
90°-120°	20.8	0.0
90°-150°	20.8	0.0
90°-180°	21.0	0.0
0°-180°	59279.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	28560	28560	28560	28560	28560	
5°	28507	28462	28499	28616	28661	###
15°	27584	27580	27656	27832	27848	7786
25°	25580	25640	25508	25200	25075	11768
35°	22348	21843	20506	19109	18732	13851
45°	13967	15010	14005	12362	11334	11087
55°	8291	8065	7978	6856	6524	7302
65°	4098	4038	3752	3650	3401	4190
75°	2162	2339	2324	2230	2045	2340
85°	637	723	746	652	606	690
90°	4	53	106	124	132	30
95°	4	8	11	11	8	2
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: P860232

CATALOG NUMBER: SPHB-60SE-M-L735-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	28559.5	28559.5	28559.5	28559.5	28559.5
2.5°	28540.7	28499.2	28536.9	28653.7	28687.6
5°	28506.8	28461.6	28499.2	28616.0	28661.2
7.5°	28390.0	28363.6	28401.3	28518.1	28574.6
10°	28205.4	28175.3	28235.6	28337.3	28408.8
12.5°	27930.5	27919.2	27975.7	28122.6	28152.7
15°	27583.9	27580.1	27655.5	27832.5	27847.6
17.5°	27192.2	27188.4	27282.6	27399.3	27357.9
20°	26717.6	26743.9	26853.2	26743.9	26638.5
22.5°	26148.8	26231.6	26258.0	25915.2	25862.5
25°	25580.0	25640.3	25508.4	25199.6	25075.3
27.5°	24845.5	24917.1	24672.2	24231.5	23877.4
30°	24133.6	24065.8	23564.8	22713.5	22220.1
32.5°	23316.2	23075.1	22174.9	20999.6	20551.4
35°	22348.1	21843.4	20506.2	19108.7	18732.0
37.5°	21123.9	20201.1	18739.6	17281.8	16713.1
40°	19395.0	18329.0	16973.0	15466.3	14837.2
42.5°	16973.0	16577.5	15455.0	13759.9	13010.4
45°	13967.1	15010.5	14004.8	12362.5	11334.2
47.5°	11955.7	13405.9	12196.7	11010.2	9593.9
50°	10369.9	11368.1	10516.8	9447.0	8320.8
52.5°	9224.8	9526.1	9183.3	8008.1	7367.8
55°	8290.6	8064.6	7978.0	6855.5	6524.0
57.5°	7130.5	7006.2	6783.9	5977.8	5540.9
60°	5785.7	6049.4	5476.9	5247.1	4550.2
62.5°	4753.6	5013.5	4399.6	4384.5	3804.4
65°	4098.2	4038.0	3751.7	3650.0	3401.4
67.5°	3627.4	3439.0	3341.1	3209.3	3122.6
70°	3149.0	3069.9	2892.9	2919.2	2802.5
72.5°	2625.4	2727.1	2550.1	2599.1	2388.1
75°	2162.1	2339.2	2324.1	2229.9	2045.3
77.5°	1781.7	1970.0	2003.9	1917.3	1766.6
80°	1457.7	1585.8	1593.3	1540.6	1446.4
82.5°	1069.8	1145.1	1201.6	1111.2	1050.9
85°	636.6	723.2	745.8	651.6	606.4
87.5°	207.2	290.0	323.9	335.2	339.0
90°	3.8	52.7	105.5	124.3	131.8
92.5°	3.8	15.1	22.6	33.9	37.7
95°	3.8	7.5	11.3	11.3	7.5
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



TEST NUMBER: P860232

CATALOG NUMBER: SPHB-60SE-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)