

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: P860253

Luminaire Tested: **SPHB-60SE-W-L835-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: P860253  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-60SE-W-L835-CD  
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens  
and, 3500K 80CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

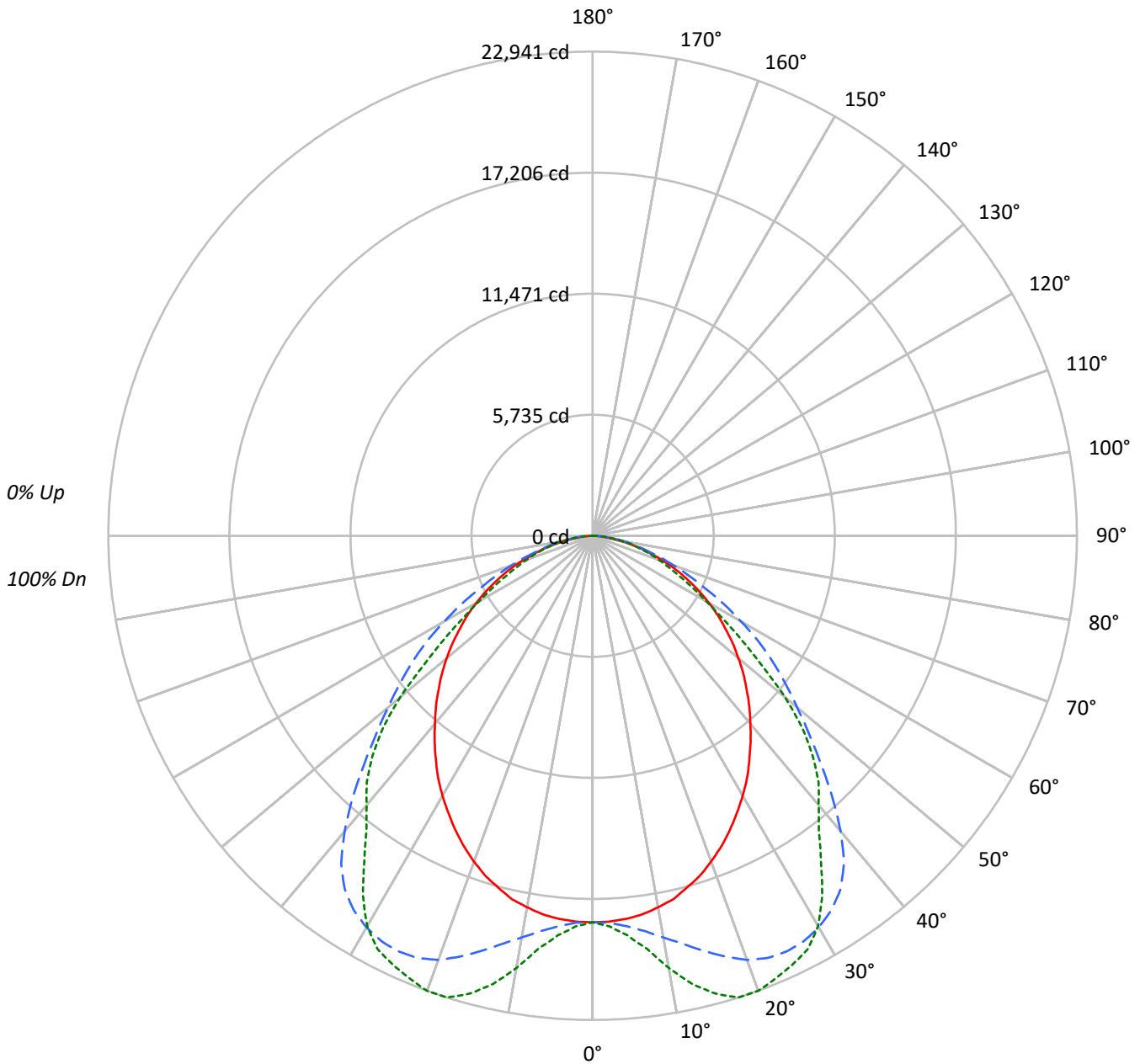
Lumens per Lamp: N/A  
Luminaire Lumens: 57622.0 lumens  
Efficiency: N/A  
Efficacy: 153.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')  
CIE Type: Direct

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

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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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85																			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72																			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62																			
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53																			
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46																			
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40																			
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36																			
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																			
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29																			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26																			

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

	0°	45°	90°
0°	58320	58320	58320
5°	58257	59356	60763
10°	57796	62488	67225
15°	56893	67141	74049
20°	55661	72480	77747
25°	54055	76391	78767
30°	52296	78781	78553
35°	50333	79572	73298
40°	48305	75979	69232
45°	46478	68870	66423
50°	44666	62621	58885
55°	42623	57858	47918
60°	40515	51582	39464
65°	37725	44323	34218
70°	34321	37842	30948
75°	29474	31759	28374
80°	23038	27241	26317
85°	15580	23118	21693



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1798.0	3.1
10°-20°	5701.4	9.9
20°-30°	9330.6	16.2
30°-40°	11382.7	19.8
40°-50°	11273.3	19.6
50°-60°	9015.0	15.6
60°-70°	5623.9	9.8
70°-80°	2755.4	4.8
80°-90°	722.7	1.3
90°-100°	19.0	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°	16830.0	29.2
0°-40°	28212.7	49.0
0°-60°	48501.0	84.2
0°-90°	57602.9	100.0
90°-120°	19.0	0.0
90°-150°	19.0	0.0
90°-180°	19.0	0.0
0°-180°	57622.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	18313	18313	18313	18313	18313	
5°	18224	18304	18568	18891	19008	###
15°	17256	18260	20365	21985	22460	4865
25°	15384	17988	21740	22370	22416	7079
35°	12947	17300	20468	19374	18854	8098
45°	10320	16032	15292	14778	14749	7971
55°	7677	12310	10421	9414	8630	6878
65°	5006	6907	5882	4878	4541	4964
75°	2395	2934	2581	2363	2306	2543
85°	426	605	633	601	594	528
90°	2	62	112	142	147	25
95°	2	9	9	7	5	1
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: P860253

CATALOG NUMBER: SPHB-60SE-W-L835-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	18313.1	18313.1	18313.1	18313.1	18313.1
2.5°	18294.8	18287.9	18354.4	18475.9	18530.9
5°	18223.7	18304.0	18567.6	18890.8	19007.7
7.5°	18095.4	18310.8	18893.1	19486.8	19738.9
10°	17873.0	18315.4	19324.0	20371.6	20788.8
12.5°	17643.8	18299.4	19803.1	21286.2	21742.4
15°	17256.4	18260.4	20364.7	21985.4	22459.9
17.5°	16896.5	18214.6	20905.7	22579.1	22939.0
20°	16424.3	18148.1	21387.1	22760.2	22941.3
22.5°	15929.1	18095.4	21653.0	22638.7	22693.7
25°	15383.6	17987.6	21740.1	22370.5	22416.3
27.5°	14801.3	17891.3	21657.6	22038.1	22077.1
30°	14221.4	17717.1	21423.8	21520.0	21361.9
32.5°	13613.9	17542.9	21045.5	20612.3	20243.2
35°	12946.9	17299.9	20467.9	19374.5	18854.1
37.5°	12289.0	17066.1	19567.0	17989.9	17597.9
40°	11619.6	16777.3	18276.5	16697.1	16653.5
42.5°	10987.0	16465.5	16816.3	15690.7	15837.5
45°	10319.9	16032.3	15291.9	14778.4	14748.6
47.5°	9687.2	15434.0	13905.1	13769.8	13464.9
50°	9015.6	14608.8	12639.7	12511.3	11885.5
52.5°	8357.7	13556.6	11509.6	11028.2	10115.9
55°	7676.9	12309.6	10420.8	9414.4	8630.5
57.5°	7044.2	10938.8	9313.6	8009.3	7305.5
60°	6361.1	9549.7	8098.7	6776.0	6196.1
62.5°	5691.8	8181.2	6998.4	5726.1	5341.0
65°	5006.4	6906.7	5882.0	4878.0	4541.0
67.5°	4350.8	5804.1	4917.0	4112.4	3887.7
70°	3686.0	4708.4	4064.2	3454.5	3323.8
72.5°	3000.6	3761.7	3287.1	2915.8	2817.2
75°	2395.4	2934.1	2581.1	2363.4	2306.0
77.5°	1783.4	2182.3	2017.2	1888.8	1872.8
80°	1256.2	1574.8	1485.4	1460.2	1435.0
82.5°	802.3	1029.2	1056.7	1040.7	1022.4
85°	426.4	605.2	632.7	600.6	593.7
87.5°	171.9	263.6	284.2	314.0	323.2
90°	2.3	61.9	112.3	142.1	146.7
92.5°	2.3	13.8	16.0	16.0	13.8
95°	2.3	9.2	9.2	6.9	4.6
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)