

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: P860256

Luminaire Tested: **SPHB-60SE-W-L935-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: P860256  
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-L935-CD  
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 3500K 90CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

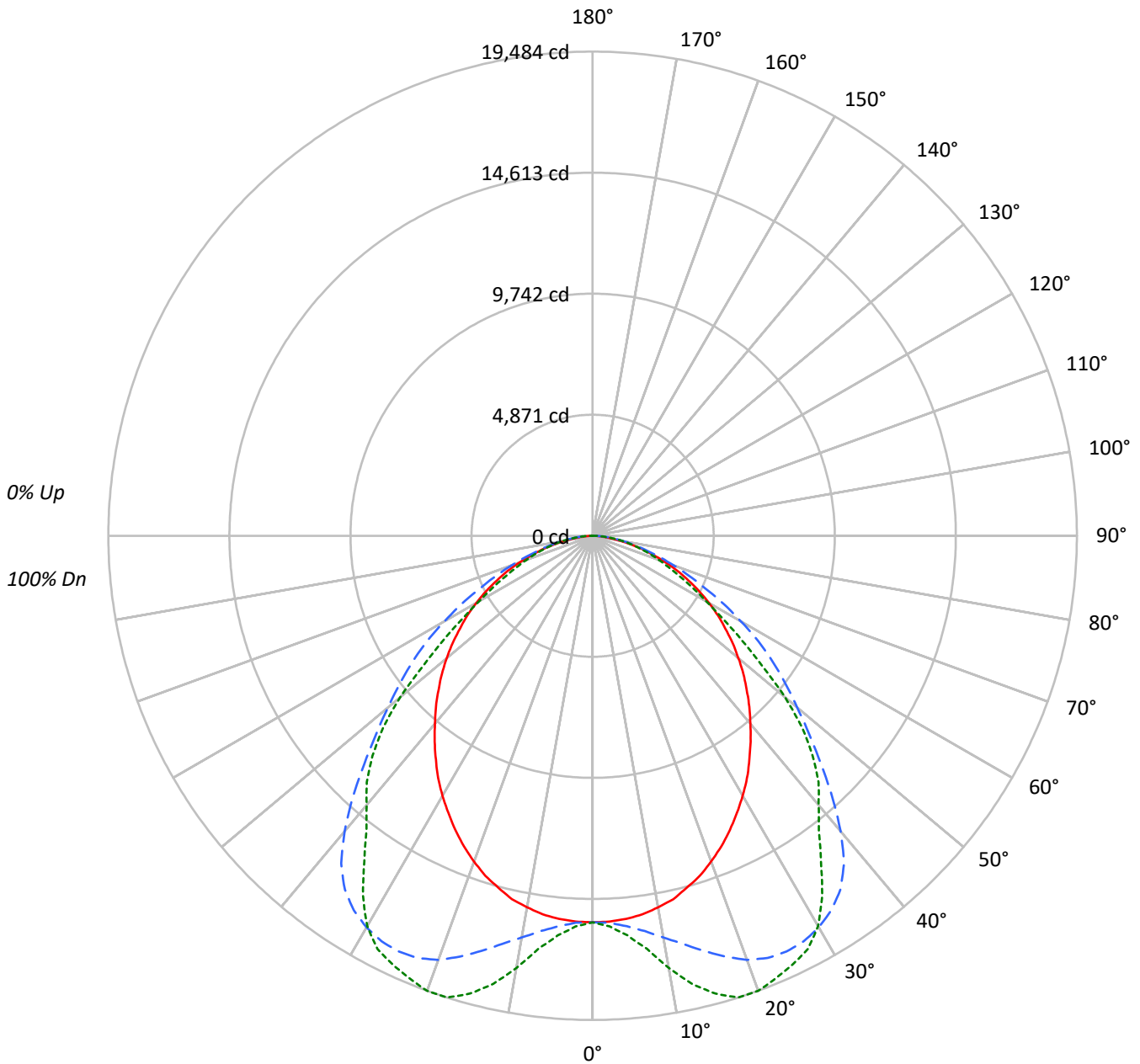
Lumens per Lamp: N/A  
Luminaire Lumens: 48939.0 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 376  
Input Voltage (V): NR  
Input Current (Ain): 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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CATALOG NUMBER: SPHB-60SE-W-L935-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			100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72			72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62			62
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53			53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46			46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40			40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36			36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32			32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29			29
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26			26

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

	0°	45°	90°
0°	49532	49532	49532
5°	49478	50412	51606
10°	49087	53072	57095
15°	48320	57024	62890
20°	47274	61558	66032
25°	45909	64879	66897
30°	44415	66909	66716
35°	42748	67582	62253
40°	41026	64530	58799
45°	39474	58492	56414
50°	37935	53185	50012
55°	36201	49139	40697
60°	34410	43809	33517
65°	32040	37645	29062
70°	29149	32140	26285
75°	25033	26974	24099
80°	19566	23137	22350
85°	13231	19632	18423



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1527.1	3.1
10°-20°	4842.2	9.9
20°-30°	7924.6	16.2
30°-40°	9667.4	19.8
40°-50°	9574.6	19.6
50°-60°	7656.5	15.6
60°-70°	4776.4	9.8
70°-80°	2340.2	4.8
80°-90°	613.8	1.3
90°-100°	16.2	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°	14293.9	29.2
0°-40°	23961.4	49.0
0°-60°	41192.4	84.2
0°-90°	48922.8	100.0
90°-120°	16.2	0.0
90°-150°	16.2	0.0
90°-180°	16.0	0.0
0°-180°	48939.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15554	15554	15554	15554	15554	
5°	15478	15546	15770	16044	16143	###
15°	14656	15509	17296	18672	19075	4132
25°	13065	15277	18464	19000	19038	6012
35°	10996	14693	17384	16455	16013	6878
45°	8765	13616	12988	12552	12526	6770
55°	6520	10455	8850	7996	7330	5842
65°	4252	5866	4996	4143	3857	4216
75°	2034	2492	2192	2007	1959	2160
85°	362	514	537	510	504	449
90°	2	53	95	121	125	21
95°	2	8	8	6	4	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



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CATALOG NUMBER: SPHB-60SE-W-L935-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15553.5	15553.5	15553.5	15553.5	15553.5
2.5°	15538.0	15532.1	15588.6	15691.8	15738.5
5°	15477.6	15545.8	15769.6	16044.2	16143.4
7.5°	15368.6	15551.6	16046.1	16550.3	16764.5
10°	15179.7	15555.5	16412.1	17301.8	17656.2
12.5°	14985.1	15541.9	16819.0	18078.6	18466.1
15°	14656.0	15508.8	17296.0	18672.4	19075.4
17.5°	14350.4	15469.8	17755.5	19176.7	19482.3
20°	13949.3	15413.4	18164.3	19330.5	19484.3
22.5°	13528.8	15368.6	18390.1	19227.3	19274.0
25°	13065.4	15277.1	18464.1	18999.5	19038.4
27.5°	12570.9	15195.3	18394.0	18717.2	18750.3
30°	12078.4	15047.4	18195.4	18277.2	18142.9
32.5°	11562.5	14899.4	17874.2	17506.3	17192.8
35°	10995.9	14693.0	17383.6	16454.9	16013.0
37.5°	10437.2	14494.4	16618.5	15279.0	14946.1
40°	9868.7	14249.1	15522.4	14181.0	14144.0
42.5°	9331.3	13984.4	14282.2	13326.3	13450.9
45°	8764.8	13616.4	12987.6	12551.5	12526.2
47.5°	8227.5	13108.3	11809.7	11694.8	11435.9
50°	7657.0	12407.4	10735.0	10626.0	10094.5
52.5°	7098.3	11513.8	9775.2	9366.4	8591.5
55°	6520.1	10454.7	8850.5	7995.8	7330.0
57.5°	5982.7	9290.5	7910.1	6802.4	6204.7
60°	5402.6	8110.7	6878.3	5754.9	5262.4
62.5°	4834.1	6948.4	5943.8	4863.3	4536.2
65°	4252.0	5865.9	4995.7	4142.9	3856.7
67.5°	3695.2	4929.5	4176.0	3492.7	3301.9
70°	3130.6	3998.9	3451.8	2933.9	2823.0
72.5°	2548.5	3194.8	2791.8	2476.4	2392.7
75°	2034.5	2492.0	2192.2	2007.2	1958.6
77.5°	1514.7	1853.4	1713.2	1604.2	1590.6
80°	1066.9	1337.5	1261.6	1240.2	1218.7
82.5°	681.4	874.1	897.5	883.9	868.3
85°	362.1	514.0	537.3	510.1	504.2
87.5°	146.0	223.9	241.4	266.7	274.5
90°	1.9	52.6	95.4	120.7	124.6
92.5°	1.9	11.7	13.6	13.6	11.7
95°	1.9	7.8	7.8	5.8	3.9
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)