

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: P860255

Luminaire Tested: **SPHB-60SE-W-L850-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: P860255
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-L850-CD
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 5000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

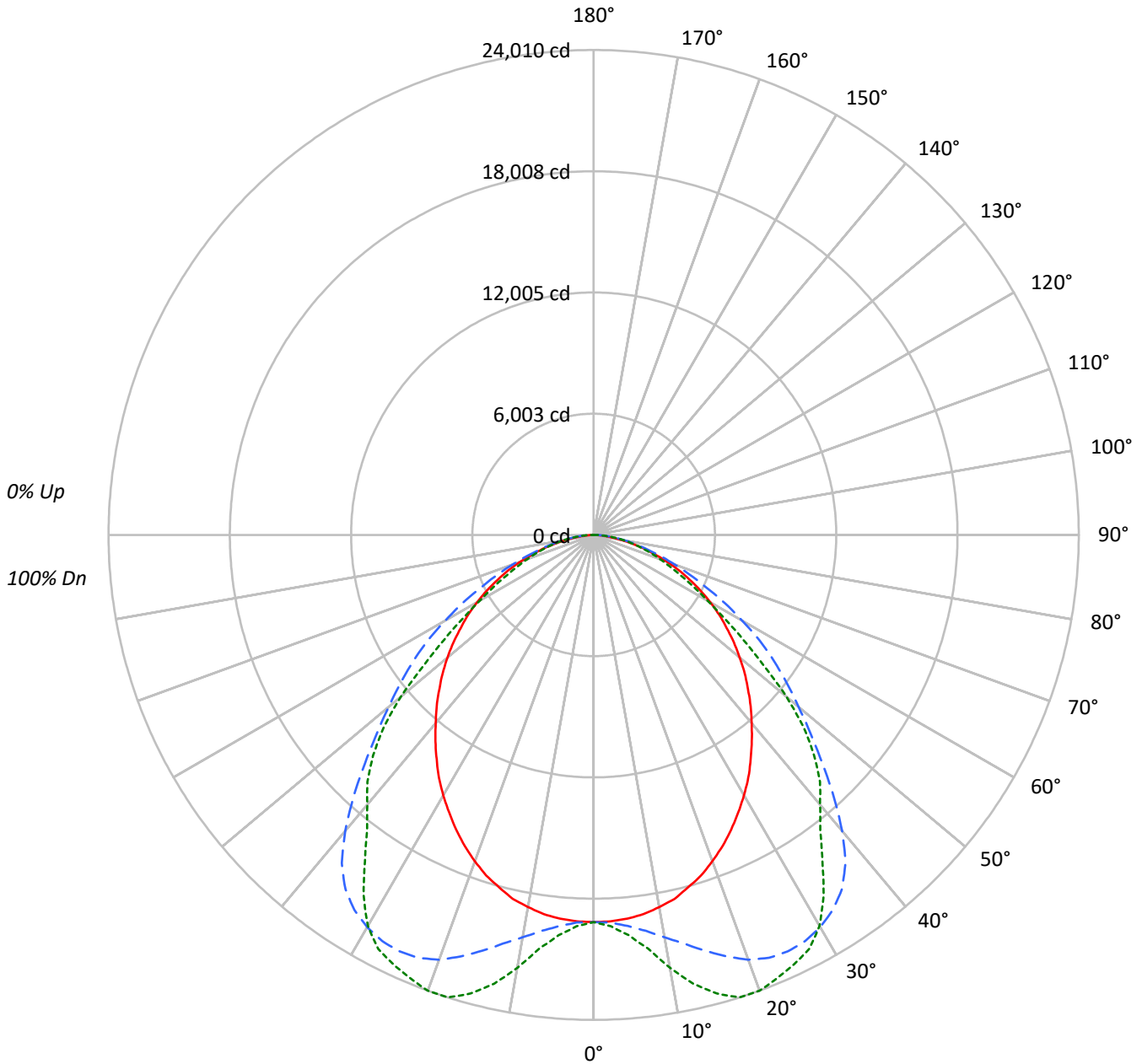
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60306.0 lumens
Efficiency: N/A
Efficacy: 160.4 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_{in}): 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: P860255
CATALOG NUMBER: SPHB-60SE-W-L850-CD

Luminous Intensity Polar Plot





TEST NUMBER: P860255

CATALOG NUMBER: SPHB-60SE-W-L850-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			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°	61036	61036	61036
5°	60970	62121	63593
10°	60488	65399	70356
15°	59543	70268	77498
20°	58254	75856	81369
25°	56573	79949	82436
30°	54731	82450	82212
35°	52677	83279	76713
40°	50555	79518	72456
45°	48643	72078	69517
50°	46747	65539	61628
55°	44609	60553	50150
60°	42402	53985	41302
65°	39482	46388	35813
70°	35920	39605	32390
75°	30847	33238	29696
80°	24111	28510	27542
85°	16304	24193	22705



TEST NUMBER: P860255

CATALOG NUMBER: SPHB-60SE-W-L850-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1881.8	3.1
10°-20°	5966.9	9.9
20°-30°	9765.2	16.2
30°-40°	11912.9	19.8
40°-50°	11798.5	19.6
50°-60°	9434.9	15.6
60°-70°	5885.8	9.8
70°-80°	2883.8	4.8
80°-90°	756.4	1.3
90°-100°	19.9	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°	17614.0	29.2
0°-40°	29526.8	49.0
0°-60°	50760.2	84.2
0°-90°	60286.1	100.0
90°-120°	19.9	0.0
90°-150°	19.9	0.0
90°-180°	20.0	0.0
0°-180°	60306.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19166	19166	19166	19166	19166	
5°	19073	19156	19432	19771	19893	###
15°	18060	19111	21313	23010	23506	5091
25°	16100	18826	22753	23412	23460	7409
35°	13550	18106	21421	20277	19732	8476
45°	10801	16779	16004	15467	15436	8342
55°	8034	12883	10906	9853	9032	7198
65°	5240	7228	6156	5105	4753	5195
75°	2507	3071	2701	2473	2414	2661
85°	446	633	662	629	621	553
90°	2	65	118	149	154	26
95°	2	10	10	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: P860255

CATALOG NUMBER: SPHB-60SE-W-L850-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19166.1	19166.1	19166.1	19166.1	19166.1
2.5°	19147.0	19139.8	19209.3	19336.5	19394.1
5°	19072.6	19156.5	19432.4	19770.7	19893.1
7.5°	18938.2	19163.7	19773.1	20394.5	20658.4
10°	18705.5	19168.5	20224.1	21320.5	21757.1
12.5°	18465.6	19151.8	20725.5	22277.7	22755.1
15°	18060.2	19111.0	21313.3	23009.5	23506.1
17.5°	17683.5	19063.0	21879.5	23630.8	24007.5
20°	17189.3	18993.4	22383.3	23820.3	24009.9
22.5°	16671.1	18938.2	22661.6	23693.2	23750.8
25°	16100.1	18825.5	22752.8	23412.5	23460.5
27.5°	15490.8	18724.7	22666.4	23064.6	23105.4
30°	14883.8	18542.4	22421.7	22522.4	22356.9
32.5°	14248.1	18360.1	22025.8	21572.4	21186.2
35°	13549.9	18105.8	21421.3	20276.9	19732.3
37.5°	12861.4	17861.1	20478.4	18827.9	18417.6
40°	12160.9	17558.8	19127.8	17474.8	17429.2
42.5°	11498.7	17232.5	17599.6	16421.6	16575.2
45°	10800.6	16779.1	16004.2	15466.8	15435.6
47.5°	10138.5	16152.9	14552.7	14411.2	14092.1
50°	9435.5	15289.3	13228.5	13094.1	12439.2
52.5°	8747.0	14188.1	12045.7	11541.9	10587.1
55°	8034.5	12883.0	10906.2	9853.0	9032.5
57.5°	7372.3	11448.3	9747.4	8382.3	7645.8
60°	6657.4	9994.5	8475.9	7091.6	6484.7
62.5°	5956.9	8562.3	7324.4	5992.9	5589.8
65°	5239.6	7228.4	6156.0	5105.2	4752.6
67.5°	4553.4	6074.4	5146.0	4303.9	4068.8
70°	3857.7	4927.7	4253.5	3615.4	3478.6
72.5°	3140.4	3936.9	3440.3	3051.6	2948.5
75°	2507.0	3070.8	2701.3	2473.4	2413.5
77.5°	1866.5	2283.9	2111.2	1976.8	1960.0
80°	1314.7	1648.2	1554.6	1528.2	1501.8
82.5°	839.7	1077.2	1106.0	1089.2	1070.0
85°	446.2	633.4	662.1	628.6	621.4
87.5°	179.9	275.9	297.5	328.7	338.3
90°	2.4	64.8	117.6	148.7	153.5
92.5°	2.4	14.4	16.8	16.8	14.4
95°	2.4	9.6	9.6	7.2	4.8
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: P860255

CATALOG NUMBER: SPHB-60SE-W-L850-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)