

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: P860250

Luminaire Tested: **SPHB-60SE-W-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: P860250
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-L735-CD
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

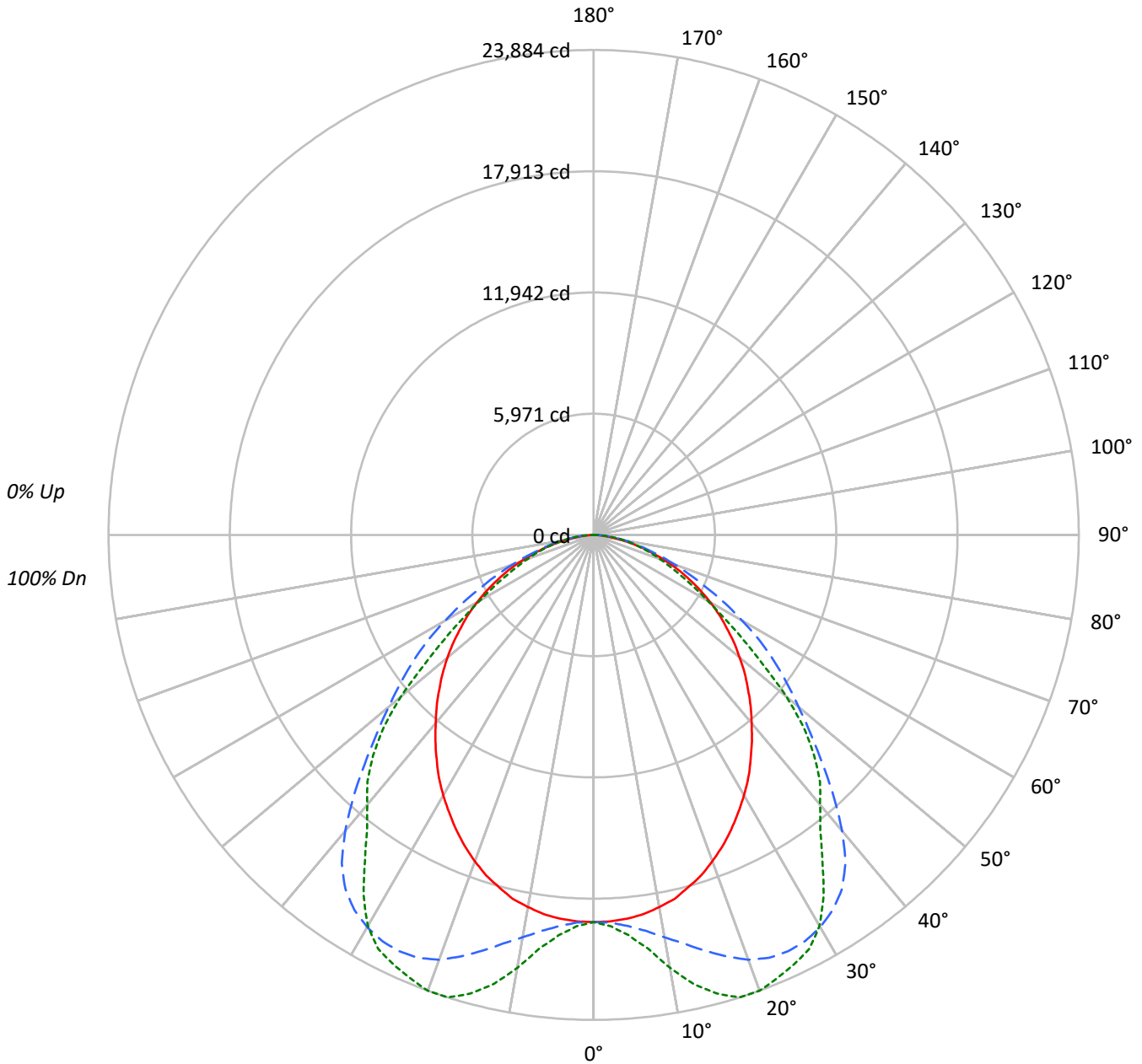
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59990.0 lumens
Efficiency: N/A
Efficacy: 159.5 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: P860250
CATALOG NUMBER: SPHB-60SE-W-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	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°	60716	60716	60716
5°	60651	61795	63260
10°	60171	65057	69988
15°	59231	69900	77092
20°	57949	75459	80943
25°	56276	79530	82003
30°	54445	82018	81781
35°	52401	82842	76311
40°	50290	79101	72077
45°	48388	71700	69153
50°	46502	65195	61305
55°	44375	60235	49887
60°	42180	53702	41086
65°	39275	46144	35624
70°	35731	39398	32220
75°	30686	33064	29540
80°	23984	28360	27397
85°	16220	24068	22585



TEST NUMBER: P860250

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1871.9	3.1
10°-20°	5935.7	9.9
20°-30°	9714.1	16.2
30°-40°	11850.5	19.8
40°-50°	11736.6	19.6
50°-60°	9385.4	15.6
60°-70°	5855.0	9.8
70°-80°	2868.6	4.8
80°-90°	752.4	1.3
90°-100°	19.8	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°	17521.7	29.2
0°-40°	29372.1	49.0
0°-60°	50494.2	84.2
0°-90°	59970.2	100.0
90°-120°	19.8	0.0
90°-150°	19.8	0.0
90°-180°	20.0	0.0
0°-180°	59990.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19066	19066	19066	19066	19066	
5°	18973	19056	19331	19667	19789	###
15°	17966	19011	21202	22889	23383	5065
25°	16016	18727	22634	23290	23338	7370
35°	13479	18011	21309	20171	19629	8431
45°	10744	16691	15920	15386	15355	8298
55°	7992	12816	10849	9801	8985	7161
65°	5212	7190	6124	5078	4728	5168
75°	2494	3055	2687	2460	2401	2647
85°	444	630	659	625	618	550
90°	2	64	117	148	153	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: P860250

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19065.7	19065.7	19065.7	19065.7	19065.7
2.5°	19046.6	19039.5	19108.7	19235.2	19292.4
5°	18972.6	19056.2	19330.6	19667.1	19788.8
7.5°	18839.0	19063.3	19669.5	20287.6	20550.1
10°	18607.5	19068.1	20118.2	21208.8	21643.1
12.5°	18368.9	19051.4	20616.9	22161.0	22635.9
15°	17965.5	19010.8	21201.6	22888.9	23382.9
17.5°	17590.9	18963.1	21764.8	23507.0	23881.7
20°	17099.2	18893.9	22266.0	23695.5	23884.1
22.5°	16583.8	18839.0	22542.8	23569.0	23626.3
25°	16015.8	18726.8	22633.5	23289.8	23337.5
27.5°	15409.6	18626.6	22547.6	22943.8	22984.3
30°	14805.8	18445.2	22304.2	22404.4	22239.8
32.5°	14173.4	18263.9	21910.4	21459.4	21075.1
35°	13478.9	18010.9	21309.0	20170.7	19628.9
37.5°	12794.0	17767.5	20371.1	18729.2	18321.1
40°	12097.1	17466.8	19027.5	17383.2	17337.9
42.5°	11438.5	17142.2	17507.3	16335.6	16488.3
45°	10744.0	16691.2	15920.3	15385.7	15354.7
47.5°	10085.3	16068.3	14476.5	14335.7	14018.3
50°	9386.1	15209.1	13159.1	13025.5	12374.0
52.5°	8701.2	14113.7	11982.6	11481.4	10531.6
55°	7992.4	12815.5	10849.0	9801.3	8985.2
57.5°	7333.7	11388.4	9696.3	8338.4	7605.8
60°	6622.5	9942.1	8431.5	7054.5	6450.7
62.5°	5925.7	8517.4	7286.0	5961.5	5560.5
65°	5212.1	7190.5	6123.7	5078.5	4727.6
67.5°	4529.6	6042.6	5119.0	4281.4	4047.5
70°	3837.5	4901.9	4231.3	3596.4	3460.4
72.5°	3123.9	3916.2	3422.2	3035.6	2933.0
75°	2493.9	3054.7	2687.2	2460.5	2400.8
77.5°	1856.7	2271.9	2100.1	1966.5	1949.8
80°	1307.8	1639.5	1546.4	1520.2	1493.9
82.5°	835.3	1071.5	1100.2	1083.5	1064.4
85°	443.9	630.0	658.7	625.3	618.1
87.5°	179.0	274.4	295.9	326.9	336.5
90°	2.4	64.4	116.9	148.0	152.7
92.5°	2.4	14.3	16.7	16.7	14.3
95°	2.4	9.5	9.5	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: P860250

CATALOG NUMBER: SPHB-60SE-W-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)