

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: P860243

Luminaire Tested: **SPHB-60SE-N-L750-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: P860243
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-60SE-N-L750-CD
Description: 60000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 5000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

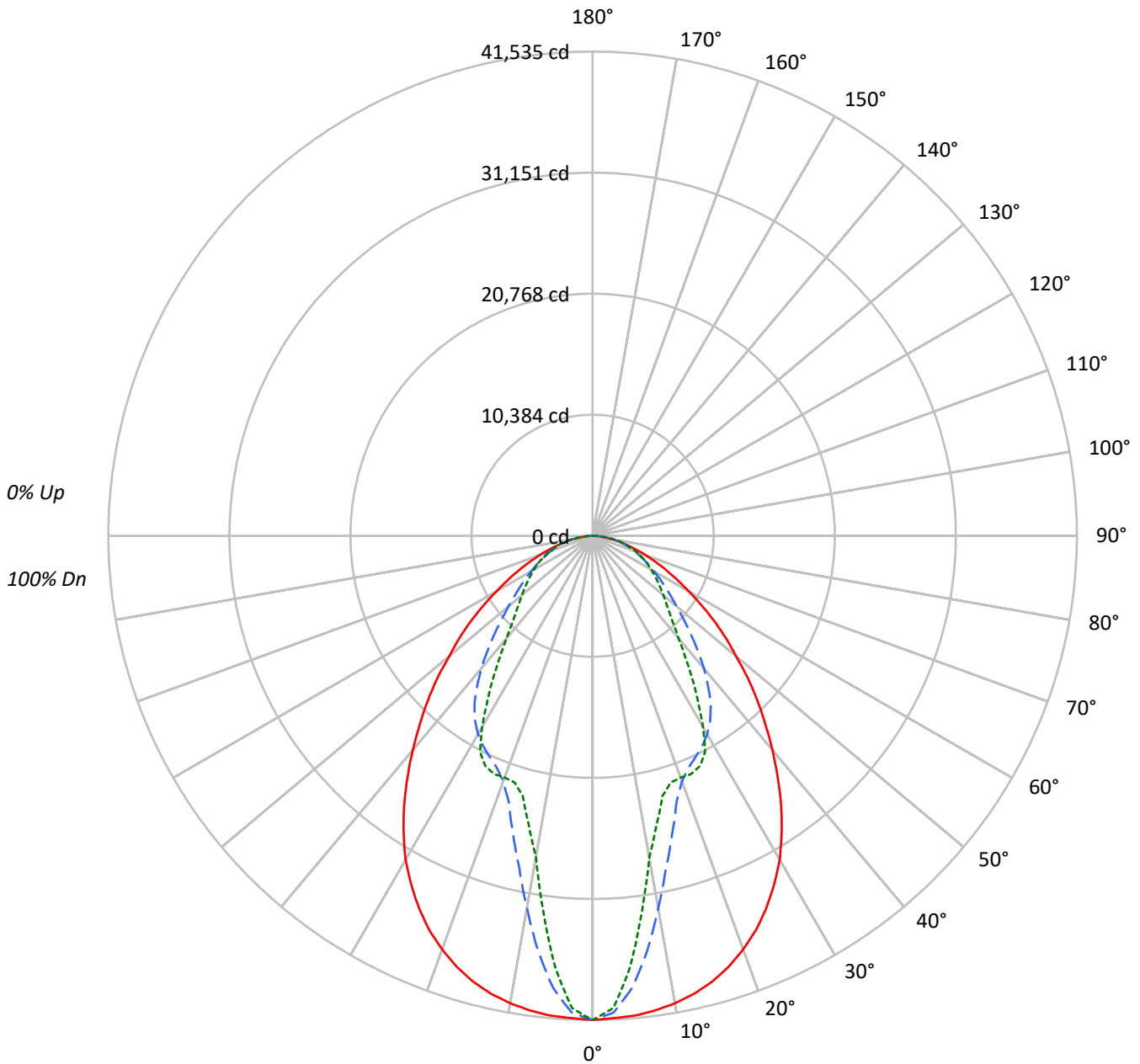
Lumens per Lamp: N/A
Luminaire Lumens: 60873.0 lumens
Efficiency: N/A
Efficacy: 161.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')
CIE Type: Direct

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

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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	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74																			
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64																			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56																			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50																			
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45																			
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40																			
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37																			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	132271	132271	132271
5°	132117	124454	118565
10°	131666	104904	90436
15°	130571	87082	76210
20°	127940	75909	74813
25°	123829	73446	76565
30°	117975	72268	69680
35°	109539	68674	57740
40°	99746	61651	47678
45°	90038	53494	41856
50°	79458	46515	39195
55°	70508	41953	37728
60°	60425	38796	36958
65°	52302	36461	36772
70°	44759	35074	36728
75°	37571	34060	36401
80°	28668	32914	35646
85°	18770	29195	27459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3541.2	5.8
10°-20°	8131.0	13.4
20°-30°	10988.7	18.1
30°-40°	11565.0	19.0
40°-50°	9813.3	16.1
50°-60°	7601.8	12.5
60°-70°	5294.4	8.7
70°-80°	3031.7	5.0
80°-90°	882.2	1.4
90°-100°	23.6	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°	22660.9	37.2
0°-40°	34225.9	56.2
0°-60°	51641.1	84.8
0°-90°	60849.4	100.0
90°-120°	23.6	0.0
90°-150°	23.6	0.0
90°-180°	24.0	0.0
0°-180°	60873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	41535	41535	41535	41535	41535	
5°	41329	40571	38931	37438	37089	###
15°	39604	33614	26413	23775	23115	11144
25°	35241	24894	20902	21508	21790	16177
35°	28176	19146	17665	15956	14852	17563
45°	19992	14376	11878	9760	9294	15398
55°	12699	9684	7556	6868	6795	11354
65°	6941	5682	4839	4839	4880	6933
75°	3054	2714	2768	2942	2958	3256
85°	514	666	799	752	752	653
90°	3	60	117	149	155	28
95°	3	10	19	19	16	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-N-L750-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	41534.7	41534.7	41534.7	41534.7	41534.7
2.5°	41414.2	41277.9	40944.9	40729.3	40561.3
5°	41328.6	40570.8	38931.4	37438.0	37089.2
7.5°	41071.8	39407.1	35903.3	33141.5	32443.9
10°	40716.6	37736.0	32440.8	28981.4	27966.7
12.5°	40244.2	35950.9	29124.1	25864.5	25366.6
15°	39603.7	33614.0	26413.0	23774.9	23115.3
17.5°	38772.9	31197.8	23911.2	22386.1	22202.2
20°	37751.9	28981.4	22398.7	21878.7	22075.3
22.5°	36604.1	26828.4	21520.4	21739.2	22107.0
25°	35240.6	24894.2	20902.1	21507.7	21789.9
27.5°	33709.1	23147.1	20334.5	20889.4	20889.4
30°	32082.5	21691.6	19652.8	19602.1	18948.9
32.5°	30183.1	20455.0	18761.8	17756.6	16786.4
35°	28176.0	19145.5	17664.7	15955.6	14852.2
37.5°	26070.6	17927.9	16275.9	14021.4	12994.1
40°	23993.7	16726.1	14830.0	12283.8	11468.9
42.5°	21926.3	15502.2	13323.8	10875.9	10232.3
45°	19992.1	14376.5	11877.9	9759.8	9293.7
47.5°	18026.2	13181.1	10543.0	8862.5	8539.0
50°	16038.1	11969.9	9388.8	8149.0	7911.2
52.5°	14363.9	10841.1	8409.0	7473.6	7331.0
55°	12699.2	9683.7	7556.1	6868.0	6795.1
57.5°	11047.2	8605.6	6776.1	6313.1	6297.3
60°	9487.1	7597.3	6091.2	5837.5	5802.6
62.5°	8158.5	6595.3	5441.1	5320.7	5336.5
65°	6940.9	5682.1	4838.7	4838.7	4879.9
67.5°	5812.1	4841.9	4287.0	4359.9	4417.0
70°	4807.0	4080.9	3766.9	3893.8	3944.5
72.5°	3855.7	3373.8	3269.1	3408.6	3449.9
75°	3053.5	2714.2	2768.1	2942.5	2958.4
77.5°	2264.0	2137.1	2276.7	2466.9	2501.8
80°	1563.2	1575.9	1794.7	1927.9	1943.7
82.5°	1008.3	1100.3	1344.4	1414.2	1388.8
85°	513.7	665.9	799.0	751.5	751.5
87.5°	196.6	288.5	339.3	399.5	421.7
90°	3.2	60.2	117.3	149.0	155.4
92.5°	3.2	15.9	25.4	28.5	25.4
95°	3.2	9.5	19.0	19.0	15.9
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)