

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: P859910

Luminaire Tested: **SPHB-15SE-M-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: P859910  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-15SE-M-L750-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens and, 5000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

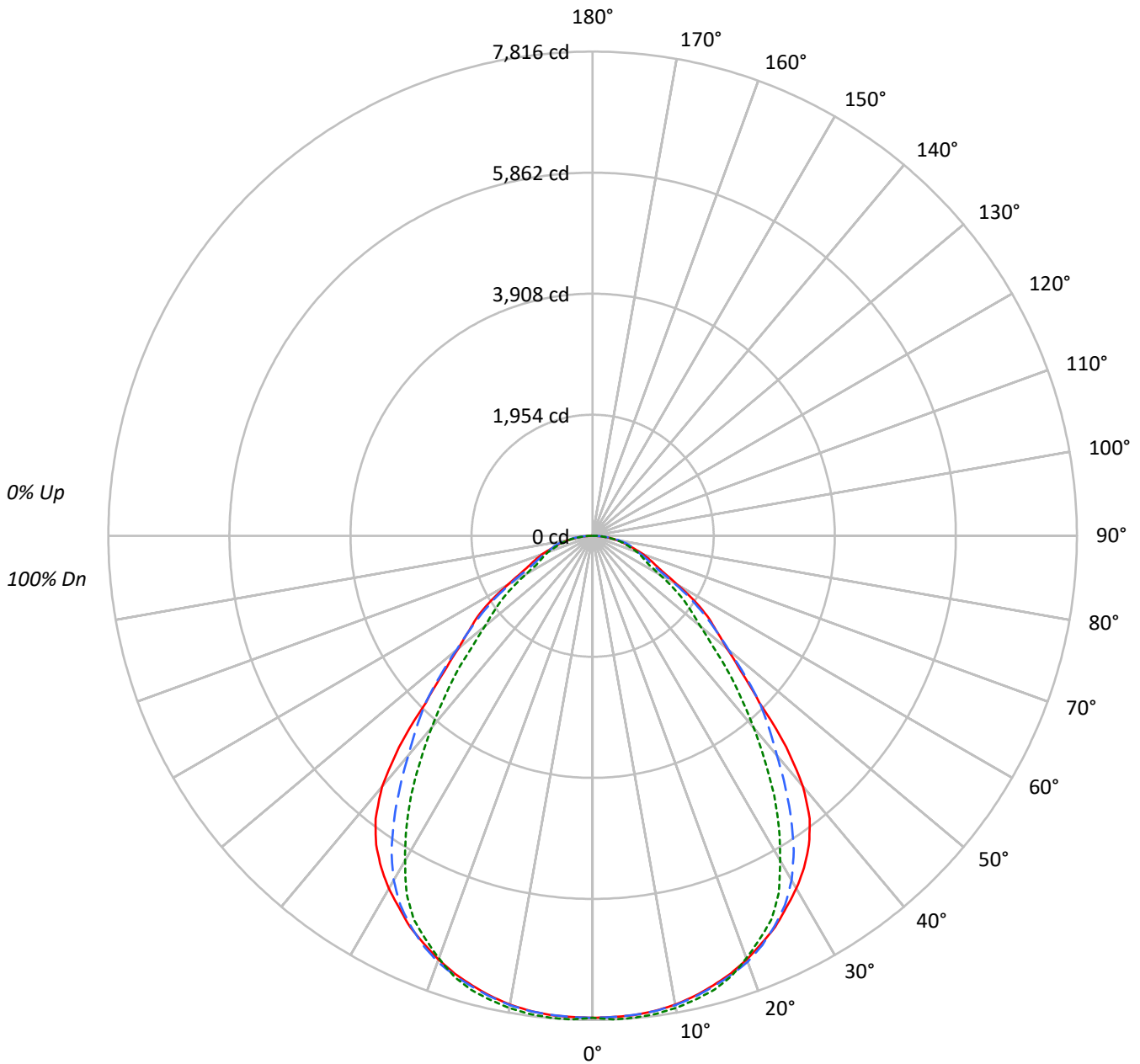
Lumens per Lamp: N/A  
Luminaire Lumens: 16150.0 lumens  
Efficiency: N/A  
Efficacy: 168.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

Input Watts (W): 95.9  
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					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	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	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46					46			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41					41			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31					31			

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

	0°	45°	90°
0°	60690	60690	60690
5°	60809	60792	61138
10°	60862	60927	61300
15°	60684	60842	61264
20°	60419	60726	60240
25°	59977	59809	58794
30°	59218	57822	54522
35°	57974	53196	48594
40°	53802	47083	41159
45°	41974	42088	34062
50°	34283	34768	27508
55°	30716	29557	24170
60°	24590	23277	19339
65°	20606	18864	17103
70°	19565	17973	17412
75°	17750	19083	16792
80°	17837	19499	17702
85°	15518	18185	14784



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	739.8	4.6
10°-20°	2127.7	13.2
20°-30°	3176.3	19.7
30°-40°	3465.9	21.5
40°-50°	2835.2	17.6
50°-60°	1864.2	11.5
60°-70°	1069.5	6.6
70°-80°	648.1	4.0
80°-90°	217.6	1.3
90°-100°	5.7	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°	6043.8	37.4
0°-40°	9509.7	58.9
0°-60°	14209.1	88.0
0°-90°	16144.3	100.0
90°-120°	5.7	0.0
90°-150°	5.7	0.0
90°-180°	6.0	0.0
0°-180°	16150.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7781	7781	7781	7781	7781	
5°	7766	7754	7764	7796	7808	739
15°	7515	7514	7534	7583	7587	2121
25°	6969	6985	6950	6865	6832	3206
35°	6088	5951	5587	5206	5103	3774
45°	3805	4090	3816	3368	3088	3020
55°	2259	2197	2174	1868	1777	1989
65°	1116	1100	1022	994	927	1141
75°	589	637	633	608	557	638
85°	173	197	203	178	165	188
90°	1	14	29	34	36	8
95°	1	2	3	3	2	0
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: P859910

CATALOG NUMBER: SPHB-15SE-M-L750-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7780.8	7780.8	7780.8	7780.8	7780.8
2.5°	7775.6	7764.3	7774.6	7806.4	7815.7
5°	7766.4	7754.1	7764.3	7796.2	7808.5
7.5°	7734.6	7727.4	7737.7	7769.5	7784.9
10°	7684.3	7676.1	7692.5	7720.2	7739.7
12.5°	7609.4	7606.3	7621.7	7661.7	7669.9
15°	7515.0	7513.9	7534.5	7582.7	7586.8
17.5°	7408.2	7407.2	7432.9	7464.7	7453.4
20°	7278.9	7286.1	7315.9	7286.1	7257.4
22.5°	7124.0	7146.6	7153.7	7060.4	7046.0
25°	6969.0	6985.4	6949.5	6865.4	6831.5
27.5°	6768.9	6788.4	6721.7	6601.6	6505.2
30°	6575.0	6556.5	6420.0	6188.1	6053.6
32.5°	6352.3	6286.6	6041.3	5721.2	5599.0
35°	6088.5	5951.0	5586.7	5206.0	5103.4
37.5°	5755.0	5503.6	5105.4	4708.3	4553.3
40°	5284.0	4993.6	4624.1	4213.6	4042.3
42.5°	4624.1	4516.4	4210.6	3748.8	3544.5
45°	3805.2	4089.5	3815.5	3368.0	3087.9
47.5°	3257.2	3652.3	3322.9	2999.6	2613.8
50°	2825.2	3097.1	2865.2	2573.7	2266.9
52.5°	2513.2	2595.3	2501.9	2181.7	2007.3
55°	2258.7	2197.1	2173.5	1867.7	1777.4
57.5°	1942.6	1908.8	1848.2	1628.6	1509.6
60°	1576.3	1648.1	1492.1	1429.5	1239.7
62.5°	1295.1	1365.9	1198.6	1194.5	1036.5
65°	1116.5	1100.1	1022.1	994.4	926.7
67.5°	988.2	936.9	910.3	874.3	850.7
70°	857.9	836.4	788.1	795.3	763.5
72.5°	715.3	743.0	694.7	708.1	650.6
75°	589.0	637.3	633.2	607.5	557.2
77.5°	485.4	536.7	545.9	522.3	481.3
80°	397.1	432.0	434.1	419.7	394.1
82.5°	291.4	312.0	327.4	302.7	286.3
85°	173.4	197.0	203.2	177.5	165.2
87.5°	56.4	79.0	88.3	91.3	92.4
90°	1.0	14.4	28.7	33.9	35.9
92.5°	1.0	4.1	6.2	9.2	10.3
95°	1.0	2.1	3.1	3.1	2.1
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)