

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: P859928

Luminaire Tested: **SPHB-15SE-W-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: P859928  
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-15SE-W-L750-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens  
and, 5000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

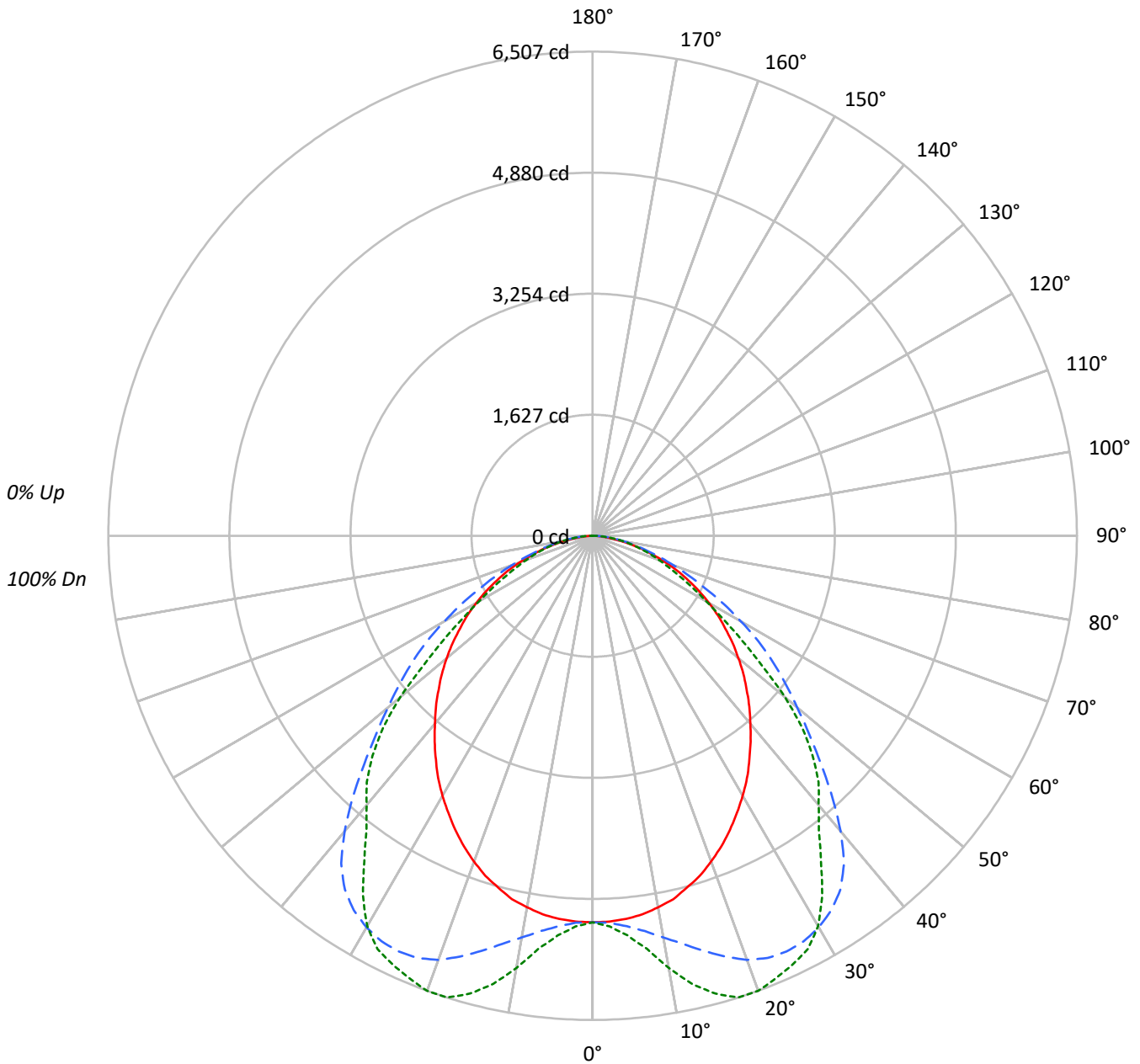
Lumens per Lamp: N/A  
Luminaire Lumens: 16344.0 lumens  
Efficiency: N/A  
Efficacy: 170.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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									
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	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°	40516	40516	40516
5°	40472	41235	42213
10°	40152	43412	46703
15°	39524	46644	51443
20°	38669	50353	54012
25°	37553	53070	54720
30°	36331	54730	54572
35°	34968	55280	50922
40°	33558	52784	48096
45°	32289	47845	46145
50°	31030	43504	40908
55°	29611	40195	33290
60°	28147	35834	27417
65°	26208	30792	23772
70°	23843	26290	21501
75°	20475	22063	19712
80°	16004	18924	18282
85°	10820	16064	15071



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	510.0	3.1
10°-20°	1617.1	9.9
20°-30°	2646.6	16.2
30°-40°	3228.6	19.8
40°-50°	3197.6	19.6
50°-60°	2557.0	15.6
60°-70°	1595.2	9.8
70°-80°	781.5	4.8
80°-90°	205.0	1.3
90°-100°	5.4	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°	4773.7	29.2
0°-40°	8002.3	49.0
0°-60°	13756.9	84.2
0°-90°	16338.6	100.0
90°-120°	5.4	0.0
90°-150°	5.4	0.0
90°-180°	5.0	0.0
0°-180°	16344.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5194	5194	5194	5194	5194	
5°	5169	5192	5266	5358	5391	490
15°	4895	5179	5776	6236	6371	1380
25°	4363	5102	6166	6345	6358	2008
35°	3672	4907	5806	5495	5348	2297
45°	2927	4547	4337	4192	4183	2261
55°	2178	3492	2956	2670	2448	1951
65°	1420	1959	1668	1384	1288	1408
75°	679	832	732	670	654	721
85°	121	172	180	170	168	150
90°	1	18	32	40	42	7
95°	1	3	3	2	1	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



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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5194.4	5194.4	5194.4	5194.4	5194.4
2.5°	5189.2	5187.2	5206.1	5240.5	5256.1
5°	5169.0	5191.8	5266.5	5358.2	5391.4
7.5°	5132.6	5193.7	5358.9	5527.3	5598.8
10°	5069.5	5195.0	5481.1	5778.2	5896.6
12.5°	5004.5	5190.5	5617.0	6037.7	6167.1
15°	4894.6	5179.4	5776.3	6236.0	6370.6
17.5°	4792.5	5166.4	5929.7	6404.4	6506.4
20°	4658.6	5147.6	6066.3	6455.7	6507.1
22.5°	4518.2	5132.6	6141.7	6421.3	6436.9
25°	4363.4	5102.0	6166.4	6345.2	6358.2
27.5°	4198.3	5074.7	6143.0	6250.9	6262.0
30°	4033.8	5025.3	6076.7	6104.0	6059.1
32.5°	3861.5	4975.9	5969.4	5846.5	5741.8
35°	3672.3	4907.0	5805.5	5495.4	5347.8
37.5°	3485.7	4840.7	5550.0	5102.7	4991.5
40°	3295.8	4758.7	5184.0	4736.0	4723.6
42.5°	3116.4	4670.3	4769.8	4450.5	4492.2
45°	2927.2	4547.4	4337.4	4191.8	4183.3
47.5°	2747.7	4377.7	3944.1	3905.7	3819.2
50°	2557.2	4143.7	3585.1	3548.7	3371.2
52.5°	2370.6	3845.2	3264.6	3128.1	2869.3
55°	2177.5	3491.5	2955.8	2670.3	2448.0
57.5°	1998.0	3102.7	2641.7	2271.8	2072.2
60°	1804.3	2708.7	2297.1	1922.0	1757.5
62.5°	1614.4	2320.5	1985.0	1624.2	1514.9
65°	1420.0	1959.0	1668.4	1383.6	1288.0
67.5°	1234.1	1646.3	1394.7	1166.4	1102.7
70°	1045.5	1335.5	1152.8	979.8	942.8
72.5°	851.1	1067.0	932.4	827.0	799.1
75°	679.4	832.2	732.1	670.3	654.1
77.5°	505.8	619.0	572.2	535.8	531.2
80°	356.3	446.7	421.3	414.2	407.0
82.5°	227.6	291.9	299.7	295.2	290.0
85°	120.9	171.7	179.5	170.3	168.4
87.5°	48.8	74.8	80.6	89.1	91.7
90°	0.7	17.6	31.9	40.3	41.6
92.5°	0.7	3.9	4.6	4.6	3.9
95°	0.7	2.6	2.6	2.0	1.3
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)