

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: P859919

Luminaire Tested: **SPHB-15SE-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: P859919  
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-15SE-N-L750-CD  
Description: 15000 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**

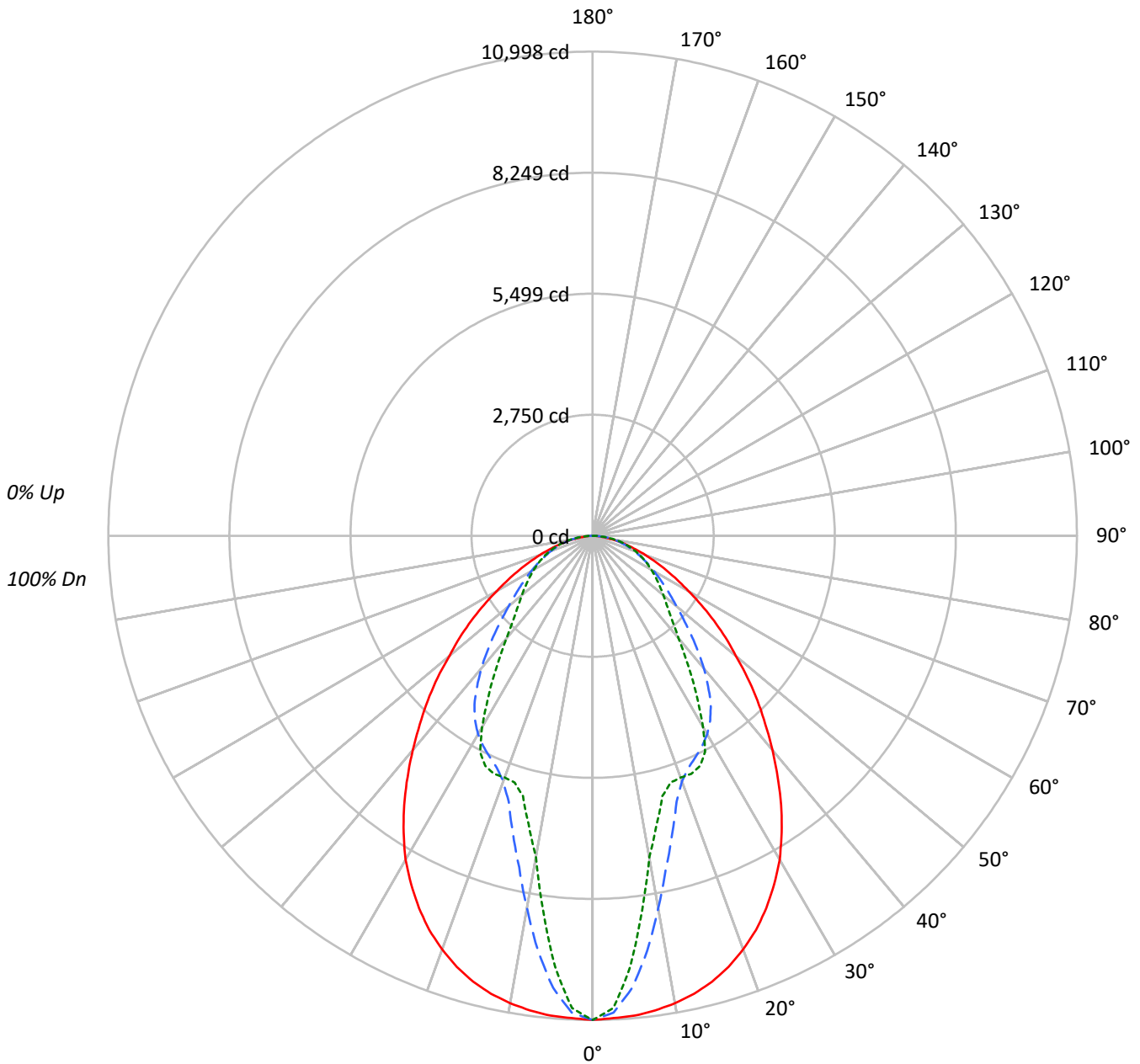
Lumens per Lamp: N/A  
Luminaire Lumens: 16118.0 lumens  
Efficiency: N/A  
Efficacy: 168.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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	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°	85781	85781	85781
5°	85681	80711	76892
10°	85388	68033	58650
15°	84678	56475	49424
20°	82972	49229	48517
25°	80305	47631	49655
30°	76509	46868	45189
35°	71039	44537	37446
40°	64688	39982	30920
45°	58391	34692	27145
50°	51531	30166	25418
55°	45726	27207	24467
60°	39187	25159	23968
65°	33919	23646	23847
70°	29027	22746	23818
75°	24365	22087	23606
80°	18592	21345	23119
85°	12171	18937	17809



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	937.6	5.8
10°-20°	2152.9	13.4
20°-30°	2909.6	18.1
30°-40°	3062.2	19.0
40°-50°	2598.4	16.1
50°-60°	2012.8	12.5
60°-70°	1401.8	8.7
70°-80°	802.7	5.0
80°-90°	233.6	1.4
90°-100°	6.2	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°	6000.2	37.2
0°-40°	9062.4	56.2
0°-60°	13673.6	84.8
0°-90°	16111.8	100.0
90°-120°	6.2	0.0
90°-150°	6.2	0.0
90°-180°	6.0	0.0
0°-180°	16118.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10998	10998	10998	10998	10998	
5°	10943	10742	10308	9913	9820	###
15°	10486	8900	6994	6295	6120	2951
25°	9331	6592	5534	5695	5770	4283
35°	7460	5069	4677	4225	3933	4650
45°	5294	3807	3145	2584	2461	4077
55°	3362	2564	2001	1818	1799	3006
65°	1838	1504	1281	1281	1292	1836
75°	808	719	733	779	783	862
85°	136	176	212	199	199	173
90°	1	16	31	40	41	7
95°	1	2	5	5	4	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-N-L750-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10997.6	10997.6	10997.6	10997.6	10997.6
2.5°	10965.7	10929.6	10841.4	10784.3	10739.8
5°	10943.0	10742.4	10308.3	9912.9	9820.5
7.5°	10875.0	10434.2	9506.5	8775.2	8590.5
10°	10781.0	9991.8	8589.7	7673.7	7405.0
12.5°	10655.9	9519.1	7711.5	6848.4	6716.6
15°	10486.3	8900.3	6993.7	6295.1	6120.5
17.5°	10266.3	8260.6	6331.2	5927.4	5878.7
20°	9996.0	7673.7	5930.8	5793.1	5845.1
22.5°	9692.1	7103.6	5698.2	5756.1	5853.5
25°	9331.0	6591.5	5534.5	5694.8	5769.6
27.5°	8925.5	6128.9	5384.2	5531.1	5531.1
30°	8494.8	5743.5	5203.7	5190.3	5017.3
32.5°	7991.9	5416.1	4967.8	4701.6	4444.7
35°	7460.5	5069.4	4677.3	4224.7	3932.6
37.5°	6903.0	4747.0	4309.5	3712.6	3440.6
40°	6353.1	4428.8	3926.7	3252.5	3036.7
42.5°	5805.7	4104.7	3527.9	2879.7	2709.3
45°	5293.5	3806.6	3145.0	2584.2	2460.8
47.5°	4773.0	3490.1	2791.6	2346.6	2261.0
50°	4246.6	3169.4	2486.0	2157.7	2094.7
52.5°	3803.3	2870.5	2226.6	1978.9	1941.1
55°	3362.5	2564.1	2000.7	1818.5	1799.2
57.5°	2925.1	2278.6	1794.2	1671.6	1667.4
60°	2512.0	2011.6	1612.8	1545.7	1536.4
62.5°	2160.2	1746.3	1440.7	1408.8	1413.0
65°	1837.8	1504.5	1281.2	1281.2	1292.1
67.5°	1538.9	1282.0	1135.1	1154.4	1169.5
70°	1272.8	1080.5	997.4	1031.0	1044.4
72.5°	1020.9	893.3	865.6	902.5	913.5
75°	808.5	718.7	732.9	779.1	783.3
77.5°	599.5	565.9	602.8	653.2	662.4
80°	413.9	417.3	475.2	510.5	514.7
82.5°	267.0	291.3	356.0	374.5	367.7
85°	136.0	176.3	211.6	199.0	199.0
87.5°	52.1	76.4	89.8	105.8	111.7
90°	0.8	16.0	31.1	39.5	41.1
92.5°	0.8	4.2	6.7	7.6	6.7
95°	0.8	2.5	5.0	5.0	4.2
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)