

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: P859933

Luminaire Tested: **SPHB-15SE-W-L940-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: P859933  
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-L940-CD  
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 4000K 90CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

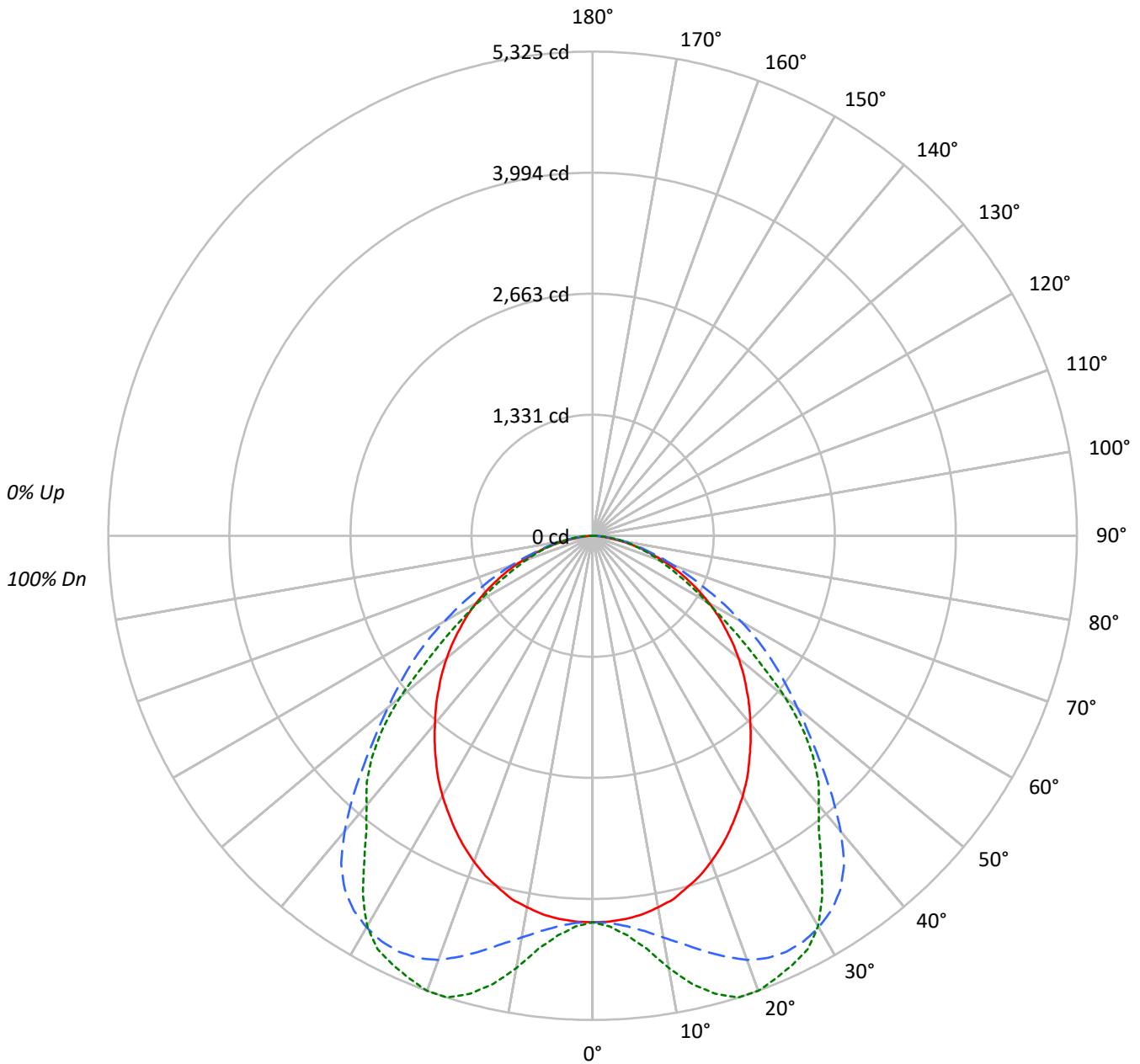
Lumens per Lamp: N/A  
Luminaire Lumens: 13376.0 lumens  
Efficiency: N/A  
Efficacy: 139.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')  
CIE Type: Direct

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°	33158	33158	33158
5°	33122	33748	34547
10°	32860	35529	38222
15°	32347	38173	42101
20°	31647	41210	44204
25°	30733	43432	44784
30°	29733	44792	44662
35°	28617	45242	41675
40°	27464	43199	39362
45°	26425	39157	37765
50°	25395	35604	33479
55°	24234	32895	27244
60°	23035	29328	22437
65°	21448	25200	19455
70°	19512	21515	17597
75°	16759	18058	16132
80°	13098	15488	14962
85°	8860	13147	12332



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	417.4	3.1
10°-20°	1323.5	9.9
20°-30°	2166.0	16.2
30°-40°	2642.3	19.8
40°-50°	2616.9	19.6
50°-60°	2092.7	15.6
60°-70°	1305.5	9.8
70°-80°	639.6	4.8
80°-90°	167.8	1.3
90°-100°	4.4	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°	3906.8	29.2
0°-40°	6549.1	49.0
0°-60°	11258.7	84.2
0°-90°	13371.6	100.0
90°-120°	4.4	0.0
90°-150°	4.4	0.0
90°-180°	4.0	0.0
0°-180°	13376.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4251	4251	4251	4251	4251	
5°	4230	4249	4310	4385	4412	401
15°	4006	4239	4727	5104	5214	1129
25°	3571	4176	5047	5193	5204	1643
35°	3005	4016	4751	4498	4377	1880
45°	2396	3722	3550	3431	3424	1850
55°	1782	2858	2419	2185	2003	1597
65°	1162	1603	1365	1132	1054	1152
75°	556	681	599	549	535	590
85°	99	140	147	139	138	123
90°	0	14	26	33	34	6
95°	0	2	2	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-L940-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4251.1	4251.1	4251.1	4251.1	4251.1
2.5°	4246.8	4245.2	4260.7	4288.9	4301.6
5°	4230.3	4249.0	4310.2	4385.2	4412.3
7.5°	4200.5	4250.6	4385.7	4523.5	4582.1
10°	4148.9	4251.6	4485.8	4728.9	4825.8
12.5°	4095.7	4247.9	4597.0	4941.2	5047.1
15°	4005.8	4238.9	4727.3	5103.5	5213.7
17.5°	3922.2	4228.2	4852.9	5241.4	5324.9
20°	3812.6	4212.8	4964.7	5283.4	5325.4
22.5°	3697.7	4200.5	5026.4	5255.2	5268.0
25°	3571.0	4175.5	5046.6	5192.9	5203.6
27.5°	3435.9	4153.2	5027.5	5115.8	5124.8
30°	3301.3	4112.7	4973.2	4995.5	4958.8
32.5°	3160.2	4072.3	4885.4	4784.8	4699.1
35°	3005.4	4015.9	4751.3	4497.5	4376.7
37.5°	2852.7	3961.6	4542.2	4176.1	4085.1
40°	2697.3	3894.6	4242.6	3875.9	3865.8
42.5°	2550.4	3822.2	3903.6	3642.3	3676.4
45°	2395.6	3721.6	3549.8	3430.6	3423.6
47.5°	2248.7	3582.8	3227.8	3196.4	3125.7
50°	2092.8	3391.2	2934.1	2904.3	2759.0
52.5°	1940.1	3146.9	2671.8	2560.0	2348.2
55°	1782.1	2857.5	2419.0	2185.4	2003.4
57.5°	1635.2	2539.3	2162.0	1859.2	1695.9
60°	1476.6	2216.8	1880.0	1572.9	1438.3
62.5°	1321.2	1899.1	1624.6	1329.2	1239.8
65°	1162.1	1603.3	1365.4	1132.3	1054.1
67.5°	1010.0	1347.3	1141.4	954.6	902.5
70°	855.6	1093.0	943.4	801.9	771.6
72.5°	696.5	873.2	763.1	676.9	654.0
75°	556.1	681.1	599.2	548.6	535.3
77.5°	414.0	506.6	468.3	438.5	434.7
80°	291.6	365.6	344.8	339.0	333.1
82.5°	186.2	238.9	245.3	241.6	237.3
85°	99.0	140.5	146.9	139.4	137.8
87.5°	39.9	61.2	66.0	72.9	75.0
90°	0.5	14.4	26.1	33.0	34.1
92.5°	0.5	3.2	3.7	3.7	3.2
95°	0.5	2.1	2.1	1.6	1.1
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)