

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: P859925

Luminaire Tested: **SPHB-15SE-N-L950-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: P859925
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-L950-CD
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

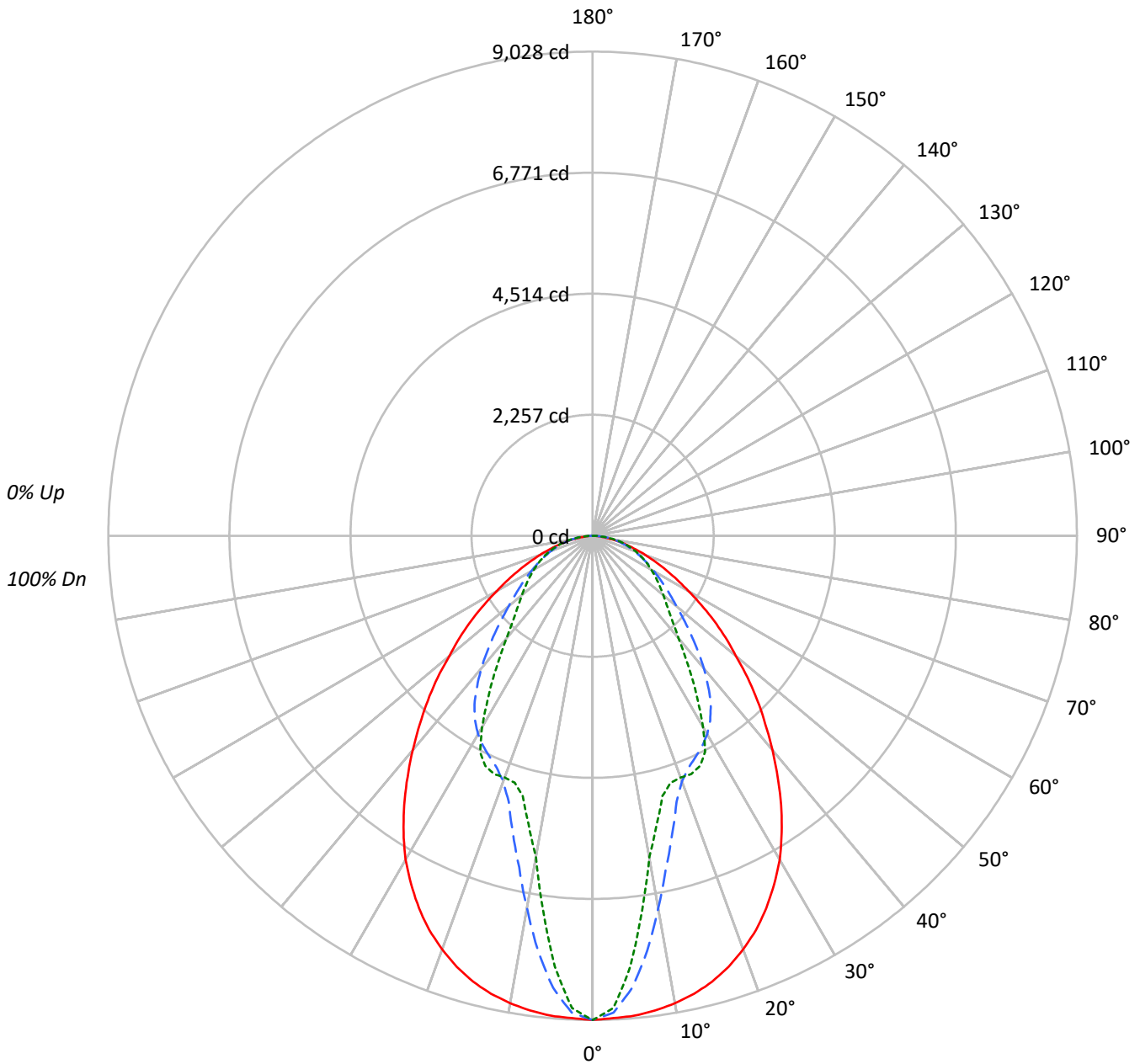
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13232.0 lumens
Efficiency: N/A
Efficacy: 138.0 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_{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°	70421	70421	70421
5°	70339	66260	63124
10°	70099	55851	48148
15°	69516	46362	40574
20°	68116	40414	39830
25°	65927	39103	40764
30°	62810	38475	37097
35°	58318	36562	30741
40°	53105	32823	25384
45°	47936	28480	22284
50°	42303	24765	20868
55°	37538	22336	20087
60°	32170	20654	19676
65°	27847	19412	19577
70°	23829	18673	19553
75°	20002	18133	19381
80°	15263	17523	18978
85°	9997	15545	14623



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	769.7	5.8
10°-20°	1767.4	13.4
20°-30°	2388.6	18.1
30°-40°	2513.9	19.0
40°-50°	2133.1	16.1
50°-60°	1652.4	12.5
60°-70°	1150.8	8.7
70°-80°	659.0	5.0
80°-90°	191.8	1.4
90°-100°	5.1	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°	4925.8	37.2
0°-40°	7439.7	56.2
0°-60°	11225.3	84.8
0°-90°	13226.9	100.0
90°-120°	5.1	0.0
90°-150°	5.1	0.0
90°-180°	5.0	0.0
0°-180°	13232.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9028	9028	9028	9028	9028	
5°	8984	8819	8463	8138	8062	853
15°	8609	7307	5741	5168	5025	2422
25°	7660	5411	4544	4675	4736	3516
35°	6125	4162	3840	3468	3228	3818
45°	4346	3125	2582	2122	2020	3347
55°	2760	2105	1642	1493	1477	2468
65°	1509	1235	1052	1052	1061	1507
75°	664	590	602	640	643	708
85°	112	145	174	163	163	142
90°	1	13	26	32	34	6
95°	1	2	4	4	3	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9028.4	9028.4	9028.4	9028.4	9028.4
2.5°	9002.2	8972.6	8900.2	8853.4	8816.8
5°	8983.6	8818.9	8462.6	8137.9	8062.1
7.5°	8927.8	8565.9	7804.3	7204.0	7052.4
10°	8850.6	8202.7	7051.7	6299.7	6079.1
12.5°	8747.9	7814.7	6330.7	5622.2	5514.0
15°	8608.7	7306.7	5741.4	5168.0	5024.6
17.5°	8428.1	6781.5	5197.6	4866.1	4826.1
20°	8206.2	6299.7	4868.8	4755.8	4798.5
22.5°	7956.6	5831.7	4677.9	4725.5	4805.4
25°	7660.3	5411.3	4543.5	4675.1	4736.5
27.5°	7327.4	5031.5	4420.1	4540.7	4540.7
30°	6973.8	4715.1	4271.9	4260.9	4118.9
32.5°	6560.9	4446.3	4078.3	3859.8	3648.9
35°	6124.6	4161.7	3839.8	3468.3	3228.4
37.5°	5667.0	3897.0	3537.9	3047.8	2824.5
40°	5215.5	3635.8	3223.6	2670.1	2493.0
42.5°	4766.1	3369.7	2896.2	2364.1	2224.2
45°	4345.7	3125.0	2581.9	2121.5	2020.2
47.5°	3918.4	2865.2	2291.7	1926.4	1856.1
50°	3486.2	2601.9	2040.9	1771.4	1719.7
52.5°	3122.3	2356.5	1827.9	1624.6	1593.5
55°	2760.4	2105.0	1642.5	1492.9	1477.1
57.5°	2401.3	1870.6	1472.9	1372.3	1368.8
60°	2062.2	1651.4	1324.0	1268.9	1261.3
62.5°	1773.4	1433.6	1182.7	1156.6	1160.0
65°	1508.8	1235.1	1051.8	1051.8	1060.7
67.5°	1263.4	1052.5	931.9	947.7	960.1
70°	1044.9	887.1	818.8	846.4	857.4
72.5°	838.1	733.4	710.6	740.9	749.9
75°	663.7	590.0	601.7	639.6	643.1
77.5°	492.1	464.6	494.9	536.2	543.8
80°	339.8	342.6	390.1	419.1	422.5
82.5°	219.2	239.2	292.2	307.4	301.9
85°	111.7	144.7	173.7	163.4	163.4
87.5°	42.7	62.7	73.7	86.8	91.7
90°	0.7	13.1	25.5	32.4	33.8
92.5°	0.7	3.4	5.5	6.2	5.5
95°	0.7	2.1	4.1	4.1	3.4
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)