

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: P859917

Luminaire Tested: **SPHB-15SE-N-L735-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: P859917
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-L735-CD
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

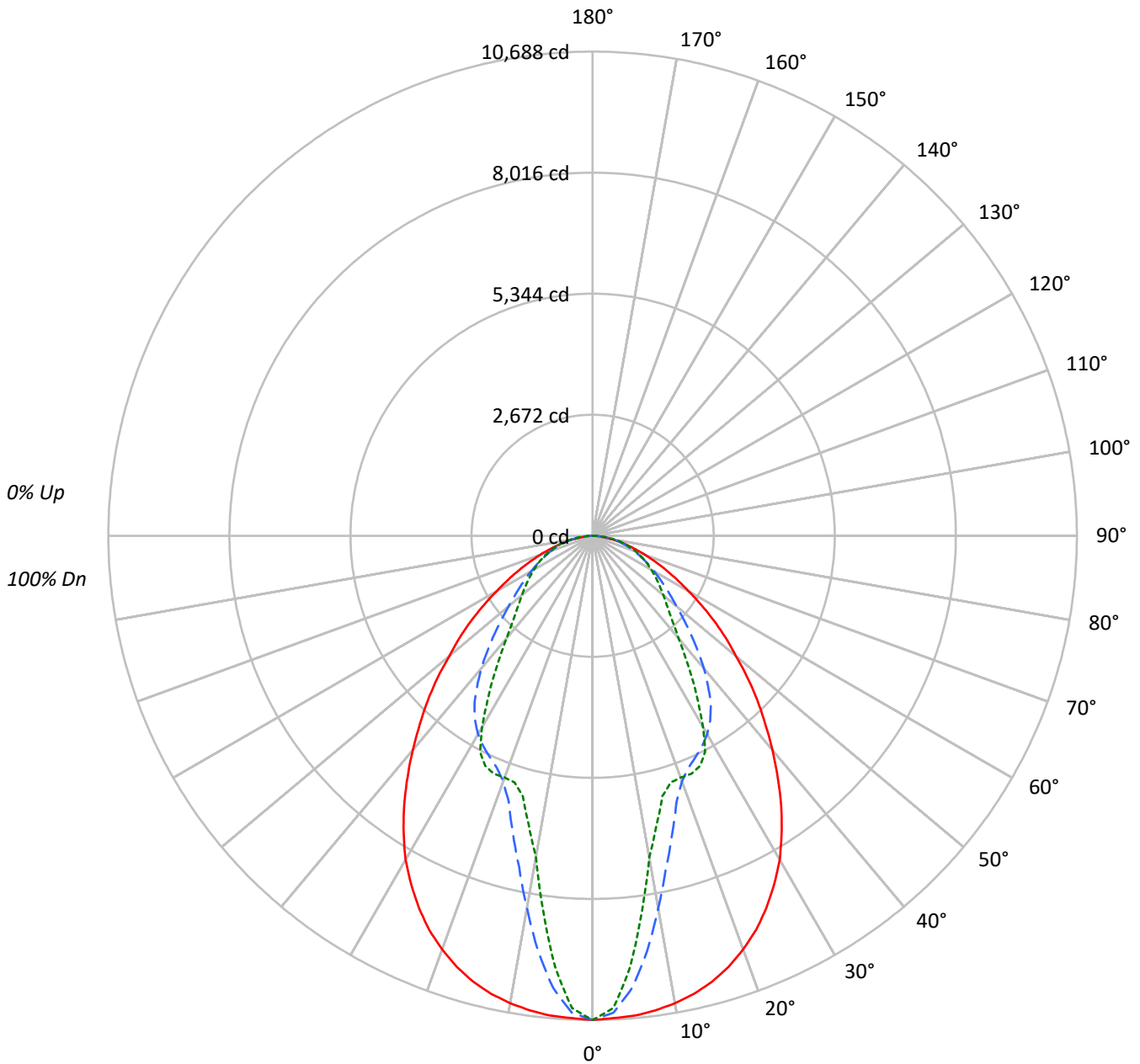
Lumens per Lamp: N/A
Luminaire Lumens: 15664.0 lumens
Efficiency: N/A
Efficacy: 163.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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°	83364	83364	83364
5°	83268	78437	74726
10°	82983	66116	56998
15°	82292	54884	48031
20°	80635	47842	47151
25°	78043	46290	48255
30°	74354	45547	43916
35°	69037	43282	36391
40°	62865	38856	30049
45°	56747	33716	26380
50°	50079	29317	24702
55°	44438	26441	23777
60°	38084	24451	23292
65°	32965	22980	23175
70°	28208	22105	23148
75°	23678	21466	22943
80°	18071	20743	22468
85°	11831	18400	17308



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	911.2	5.8
10°-20°	2092.3	13.4
20°-30°	2827.6	18.1
30°-40°	2975.9	19.0
40°-50°	2525.2	16.1
50°-60°	1956.1	12.5
60°-70°	1362.4	8.7
70°-80°	780.1	5.0
80°-90°	227.0	1.4
90°-100°	6.1	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°	5831.2	37.2
0°-40°	8807.1	56.2
0°-60°	13288.4	84.8
0°-90°	15657.9	100.0
90°-120°	6.1	0.0
90°-150°	6.1	0.0
90°-180°	6.0	0.0
0°-180°	15664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10688	10688	10688	10688	10688	
5°	10635	10440	10018	9634	9544	###
15°	10191	8650	6797	6118	5948	2868
25°	9068	6406	5379	5534	5607	4163
35°	7250	4927	4546	4106	3822	4519
45°	5144	3699	3056	2511	2392	3962
55°	3268	2492	1944	1767	1748	2922
65°	1786	1462	1245	1245	1256	1784
75°	786	698	712	757	761	838
85°	132	171	206	193	193	168
90°	1	16	30	38	40	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10687.8	10687.8	10687.8	10687.8	10687.8
2.5°	10656.8	10621.7	10536.1	10480.6	10437.3
5°	10634.8	10439.8	10017.9	9633.6	9543.9
7.5°	10568.7	10140.3	9238.7	8528.1	8348.6
10°	10477.3	9710.3	8347.7	7457.6	7196.5
12.5°	10355.7	9251.0	7494.3	6655.5	6527.4
15°	10190.9	8649.6	6796.7	6117.8	5948.1
17.5°	9977.1	8027.9	6152.9	5760.4	5713.1
20°	9714.4	7457.6	5763.7	5629.9	5680.5
22.5°	9419.1	6903.6	5537.7	5594.0	5688.6
25°	9068.2	6405.8	5378.6	5534.4	5607.0
27.5°	8674.1	5956.3	5232.5	5375.3	5375.3
30°	8255.5	5581.8	5057.1	5044.1	4876.0
32.5°	7766.8	5263.5	4827.8	4569.2	4319.5
35°	7250.3	4926.6	4545.5	4105.7	3821.8
37.5°	6708.5	4613.2	4188.1	3608.0	3343.7
40°	6174.1	4304.0	3816.1	3160.9	2951.2
42.5°	5642.1	3989.1	3428.5	2798.6	2633.0
45°	5144.4	3699.4	3056.5	2511.4	2391.5
47.5°	4638.5	3391.8	2713.0	2280.5	2197.3
50°	4127.0	3080.1	2416.0	2096.9	2035.7
52.5°	3696.1	2789.7	2163.8	1923.1	1886.4
55°	3267.8	2491.8	1944.4	1767.3	1748.5
57.5°	2842.7	2214.4	1743.6	1624.5	1620.4
60°	2441.3	1955.0	1567.4	1502.1	1493.1
62.5°	2099.4	1697.1	1400.1	1369.1	1373.2
65°	1786.1	1462.1	1245.1	1245.1	1255.7
67.5°	1495.6	1245.9	1103.1	1121.9	1136.6
70°	1236.9	1050.1	969.3	1002.0	1015.0
72.5°	992.2	868.1	841.2	877.1	887.7
75°	785.7	698.4	712.3	757.2	761.3
77.5°	582.6	549.9	585.8	634.8	643.8
80°	402.3	405.5	461.8	496.1	500.2
82.5°	259.5	283.1	346.0	363.9	357.4
85°	132.2	171.3	205.6	193.4	193.4
87.5°	50.6	74.2	87.3	102.8	108.5
90°	0.8	15.5	30.2	38.3	40.0
92.5°	0.8	4.1	6.5	7.3	6.5
95°	0.8	2.4	4.9	4.9	4.1
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)