

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: P859908

Luminaire Tested: **SPHB-15SE-M-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: P859908
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-15SE-M-L735-CD
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

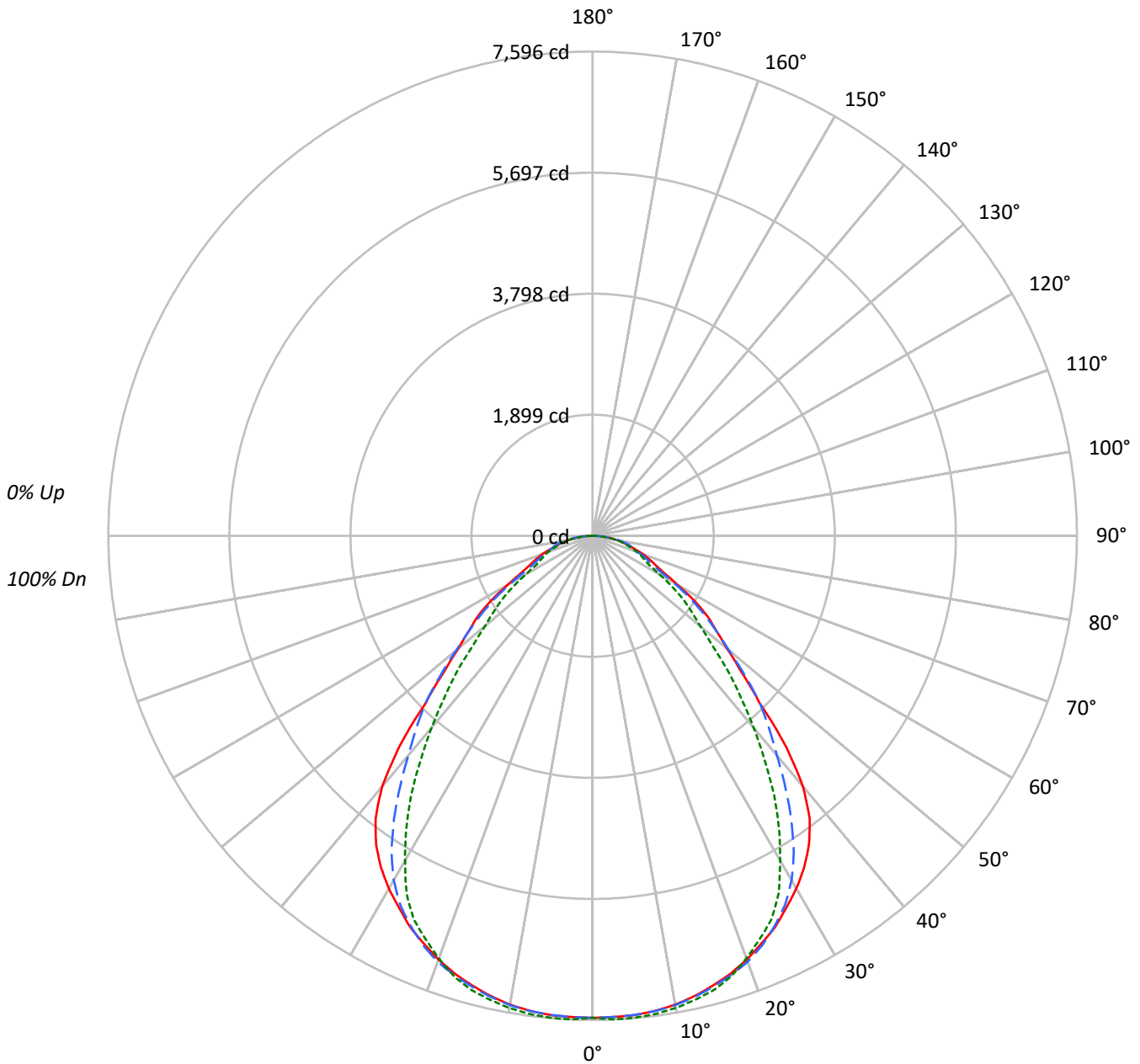
Lumens per Lamp: N/A
Luminaire Lumens: 15696.0 lumens
Efficiency: N/A
Efficacy: 163.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P859908

CATALOG NUMBER: SPHB-15SE-M-L735-CD

Luminous Intensity Polar Plot





TEST NUMBER: P859908

CATALOG NUMBER: SPHB-15SE-M-L735-CD

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	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46								
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41								
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58983	58983	58983
5°	59100	59084	59420
10°	59151	59214	59577
15°	58978	59131	59542
20°	58720	59018	58547
25°	58291	58129	57141
30°	57553	56197	52990
35°	56345	51701	47228
40°	52289	45759	40001
45°	40794	40904	33104
50°	33319	33790	26735
55°	29852	28726	23491
60°	23899	22623	18795
65°	20027	18334	16622
70°	19015	17469	16922
75°	17253	18546	16322
80°	17338	18951	17204
85°	15089	17675	14373



TEST NUMBER: P859908

CATALOG NUMBER: SPHB-15SE-M-L735-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	719.0	4.6
10°-20°	2067.9	13.2
20°-30°	3087.0	19.7
30°-40°	3368.4	21.5
40°-50°	2755.5	17.6
50°-60°	1811.8	11.5
60°-70°	1039.5	6.6
70°-80°	629.9	4.0
80°-90°	211.5	1.3
90°-100°	5.5	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°	5873.9	37.4
0°-40°	9242.3	58.9
0°-60°	13809.7	88.0
0°-90°	15690.5	100.0
90°-120°	5.5	0.0
90°-150°	5.5	0.0
90°-180°	6.0	0.0
0°-180°	15696.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7562	7562	7562	7562	7562	
5°	7548	7536	7546	7577	7589	718
15°	7304	7303	7323	7370	7374	2062
25°	6773	6789	6754	6672	6640	3116
35°	5917	5784	5430	5060	4960	3667
45°	3698	3974	3708	3273	3001	2936
55°	2195	2135	2112	1815	1727	1933
65°	1085	1069	993	966	901	1109
75°	572	619	615	590	542	620
85°	169	192	198	172	161	183
90°	1	14	28	33	35	8
95°	1	2	3	3	2	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



TEST NUMBER: P859908

CATALOG NUMBER: SPHB-15SE-M-L735-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7562.0	7562.0	7562.0	7562.0	7562.0
2.5°	7557.0	7546.1	7556.1	7587.0	7595.9
5°	7548.1	7536.1	7546.1	7577.0	7589.0
7.5°	7517.2	7510.2	7520.1	7551.1	7566.0
10°	7468.3	7460.3	7476.3	7503.2	7522.1
12.5°	7395.5	7392.5	7407.4	7446.3	7454.3
15°	7303.7	7302.7	7322.7	7369.5	7373.5
17.5°	7200.0	7199.0	7223.9	7254.8	7243.9
20°	7074.3	7081.3	7110.2	7081.3	7053.4
22.5°	6923.7	6945.7	6952.6	6861.9	6847.9
25°	6773.1	6789.1	6754.2	6672.4	6639.5
27.5°	6578.6	6597.6	6532.8	6416.1	6322.3
30°	6390.1	6372.2	6239.5	6014.1	5883.5
32.5°	6173.7	6109.9	5871.5	5560.3	5441.6
35°	5917.4	5783.7	5429.7	5059.6	4959.9
37.5°	5593.2	5348.9	4961.9	4575.9	4425.3
40°	5135.4	4853.2	4494.1	4095.2	3928.6
42.5°	4494.1	4389.4	4092.2	3643.4	3444.9
45°	3698.2	3974.5	3708.2	3273.4	3001.1
47.5°	3165.6	3549.6	3229.5	2915.3	2540.3
50°	2745.8	3010.1	2784.6	2501.4	2203.2
52.5°	2442.6	2522.3	2431.6	2120.4	1950.8
55°	2195.2	2135.4	2112.4	1815.2	1727.4
57.5°	1888.0	1855.1	1796.3	1582.8	1467.1
60°	1532.0	1601.8	1450.2	1389.3	1204.8
62.5°	1258.7	1327.5	1164.9	1160.9	1007.3
65°	1085.1	1069.2	993.4	966.4	900.6
67.5°	960.5	910.6	884.7	849.8	826.8
70°	833.8	812.9	766.0	773.0	742.0
72.5°	695.2	722.1	675.2	688.2	632.3
75°	572.5	619.4	615.4	590.4	541.6
77.5°	471.8	521.6	530.6	507.7	467.8
80°	386.0	419.9	421.9	407.9	383.0
82.5°	283.3	303.2	318.2	294.2	278.3
85°	168.6	191.5	197.5	172.5	160.6
87.5°	54.9	76.8	85.8	88.8	89.8
90°	1.0	14.0	27.9	32.9	34.9
92.5°	1.0	4.0	6.0	9.0	10.0
95°	1.0	2.0	3.0	3.0	2.0
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



TEST NUMBER: P859908

CATALOG NUMBER: SPHB-15SE-M-L735-CD

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)