

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: P859911

Luminaire Tested: **SPHB-15SE-M-L835-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: P859911
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-L835-CD
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

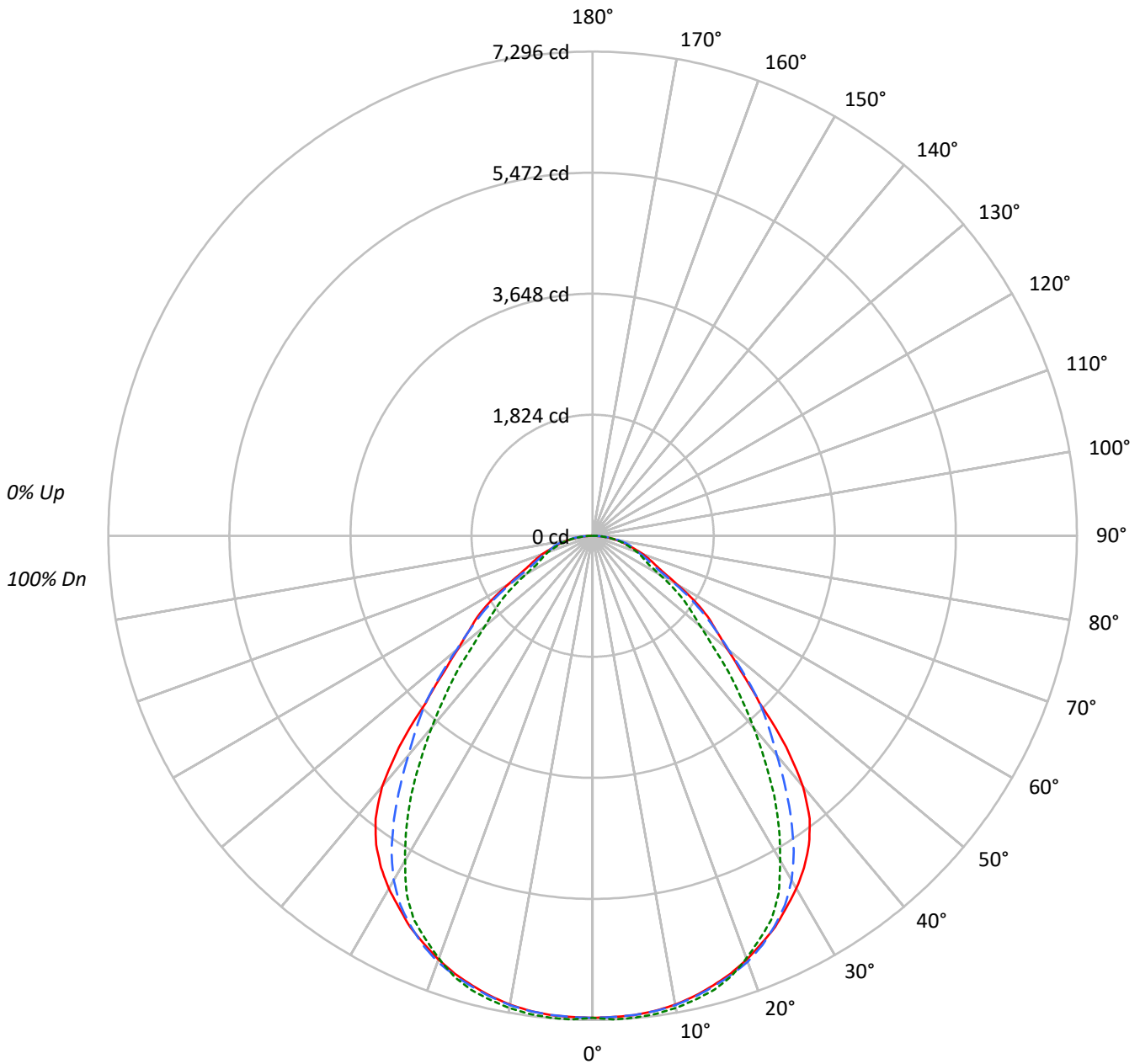
Lumens per Lamp: N/A
Luminaire Lumens: 15076.0 lumens
Efficiency: N/A
Efficacy: 157.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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

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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	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°	56653	56653	56653
5°	56765	56750	57072
10°	56814	56875	57224
15°	56648	56795	57190
20°	56401	56688	56234
25°	55989	55832	54884
30°	55280	53977	50897
35°	54119	49659	45363
40°	50224	43952	38421
45°	39184	39288	31796
50°	32002	32456	25679
55°	28673	27592	22563
60°	22954	21729	18052
65°	19237	17609	15965
70°	18265	16778	16253
75°	16572	17814	15677
80°	16651	18201	16525
85°	14489	16977	13800



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	690.6	4.6
10°-20°	1986.2	13.2
20°-30°	2965.1	19.7
30°-40°	3235.4	21.5
40°-50°	2646.7	17.6
50°-60°	1740.2	11.5
60°-70°	998.4	6.6
70°-80°	605.0	4.0
80°-90°	203.2	1.3
90°-100°	5.3	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°	5641.9	37.4
0°-40°	8877.3	58.9
0°-60°	13264.2	88.0
0°-90°	15070.7	100.0
90°-120°	5.3	0.0
90°-150°	5.3	0.0
90°-180°	5.0	0.0
0°-180°	15076.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7263	7263	7263	7263	7263	
5°	7250	7238	7248	7278	7289	690
15°	7015	7014	7033	7078	7082	1980
25°	6506	6521	6487	6409	6377	2993
35°	5684	5555	5215	4860	4764	3523
45°	3552	3818	3562	3144	2882	2820
55°	2108	2051	2029	1744	1659	1857
65°	1042	1027	954	928	865	1066
75°	550	595	591	567	520	595
85°	162	184	190	166	154	176
90°	1	13	27	32	34	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7263.3	7263.3	7263.3	7263.3	7263.3
2.5°	7258.5	7248.0	7257.6	7287.3	7295.9
5°	7249.9	7238.4	7248.0	7277.7	7289.2
7.5°	7220.2	7213.5	7223.1	7252.8	7267.2
10°	7173.3	7165.6	7180.9	7206.8	7225.0
12.5°	7103.4	7100.5	7114.8	7152.2	7159.9
15°	7015.2	7014.3	7033.4	7078.4	7082.3
17.5°	6915.6	6914.6	6938.6	6968.3	6957.7
20°	6794.9	6801.6	6829.4	6801.6	6774.8
22.5°	6650.2	6671.3	6678.0	6590.8	6577.4
25°	6505.6	6520.9	6487.4	6408.8	6377.2
27.5°	6318.8	6337.0	6274.7	6162.6	6072.6
30°	6137.7	6120.5	5993.1	5776.6	5651.1
32.5°	5929.8	5868.5	5639.6	5340.7	5226.7
35°	5683.6	5555.3	5215.2	4859.8	4764.0
37.5°	5372.3	5137.6	4765.9	4395.2	4250.5
40°	4932.6	4661.5	4316.6	3933.4	3773.4
42.5°	4316.6	4216.0	3930.6	3499.5	3308.8
45°	3552.2	3817.5	3561.7	3144.1	2882.5
47.5°	3040.6	3409.4	3101.9	2800.1	2440.0
50°	2637.3	2891.2	2674.7	2402.6	2116.2
52.5°	2346.1	2422.7	2335.5	2036.6	1873.8
55°	2108.5	2051.0	2029.0	1743.5	1659.2
57.5°	1813.4	1781.8	1725.3	1520.3	1409.2
60°	1471.4	1538.5	1392.9	1334.5	1157.2
62.5°	1209.0	1275.1	1118.9	1115.1	967.6
65°	1042.3	1026.9	954.1	928.3	865.0
67.5°	922.5	874.6	849.7	816.2	794.2
70°	800.9	780.7	735.7	742.4	712.7
72.5°	667.7	693.6	648.5	661.0	607.4
75°	549.9	594.9	591.1	567.1	520.2
77.5°	453.1	501.0	509.6	487.6	449.3
80°	370.7	403.3	405.2	391.8	367.9
82.5°	272.1	291.2	305.6	282.6	267.3
85°	161.9	183.9	189.7	165.7	154.2
87.5°	52.7	73.8	82.4	85.3	86.2
90°	1.0	13.4	26.8	31.6	33.5
92.5°	1.0	3.8	5.7	8.6	9.6
95°	1.0	1.9	2.9	2.9	1.9
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)