

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: P859920

Luminaire Tested: **SPHB-15SE-N-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: P859920
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-L835-CD
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

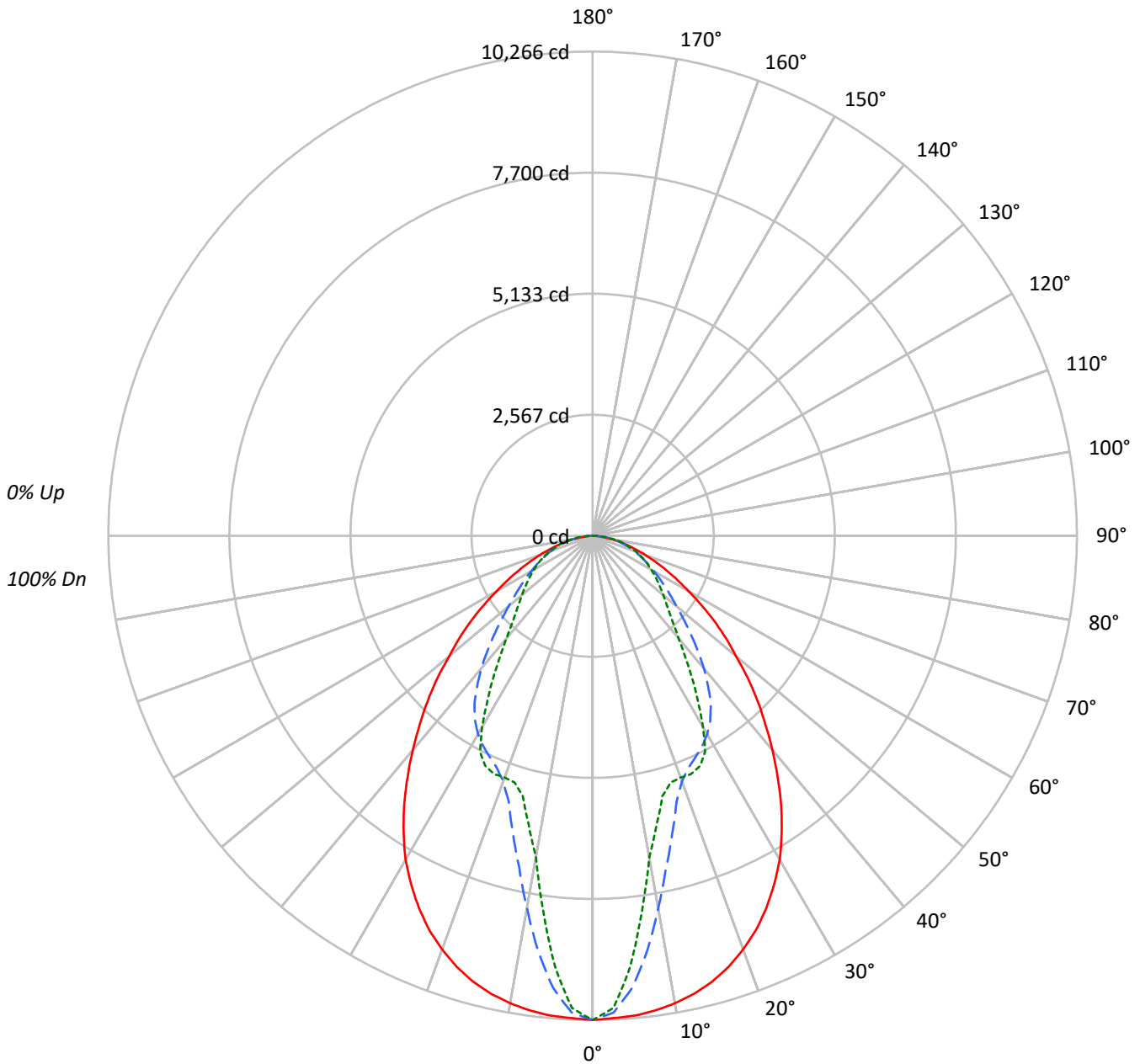
Lumens per Lamp: N/A
Luminaire Lumens: 15046.0 lumens
Efficiency: N/A
Efficacy: 156.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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°	80075	80075	80075
5°	79982	75343	71778
10°	79709	63508	54749
15°	79046	52718	46136
20°	77454	45954	45291
25°	74964	44463	46352
30°	71420	43750	42183
35°	66314	41575	34955
40°	60385	37322	28864
45°	54507	32385	25339
50°	48103	28159	23728
55°	42685	25397	22839
60°	36580	23487	22373
65°	31664	22074	22262
70°	27095	21234	22235
75°	22744	20619	22036
80°	17356	19926	21579
85°	11366	17675	16619



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	875.3	5.8
10°-20°	2009.7	13.4
20°-30°	2716.1	18.1
30°-40°	2858.5	19.0
40°-50°	2425.6	16.1
50°-60°	1878.9	12.5
60°-70°	1308.6	8.7
70°-80°	749.3	5.0
80°-90°	218.1	1.4
90°-100°	5.8	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°	5601.1	37.2
0°-40°	8459.6	56.2
0°-60°	12764.1	84.8
0°-90°	15040.2	100.0
90°-120°	5.8	0.0
90°-150°	5.8	0.0
90°-180°	6.0	0.0
0°-180°	15046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10266	10266	10266	10266	10266	
5°	10215	10028	9623	9254	9167	970
15°	9789	8308	6528	5876	5713	2754
25°	8710	6153	5166	5316	5386	3999
35°	6964	4732	4366	3944	3671	4341
45°	4941	3554	2936	2412	2297	3806
55°	3139	2394	1868	1698	1680	2806
65°	1716	1404	1196	1196	1206	1714
75°	755	671	684	727	731	805
85°	127	165	198	186	186	161
90°	1	15	29	37	38	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°	10266.1	10266.1	10266.1	10266.1	10266.1
2.5°	10236.4	10202.7	10120.4	10067.1	10025.5
5°	10215.2	10027.9	9622.7	9253.6	9167.3
7.5°	10151.7	9740.3	8874.2	8191.6	8019.2
10°	10063.9	9327.2	8018.4	7163.3	6912.5
12.5°	9947.2	8886.0	7198.6	6392.9	6269.9
15°	9788.9	8308.4	6528.5	5876.4	5713.4
17.5°	9583.5	7711.2	5910.1	5533.2	5487.7
20°	9331.2	7163.3	5536.3	5407.8	5456.4
22.5°	9047.4	6631.2	5319.2	5373.3	5464.2
25°	8710.4	6153.1	5166.4	5316.1	5385.8
27.5°	8331.9	5721.3	5026.1	5163.2	5163.2
30°	7929.8	5361.5	4857.6	4845.1	4683.6
32.5°	7460.4	5055.9	4637.4	4388.9	4149.1
35°	6964.3	4732.2	4366.2	3943.8	3671.0
37.5°	6443.9	4431.2	4022.9	3465.7	3211.7
40°	5930.5	4134.2	3665.5	3036.2	2834.8
42.5°	5419.5	3831.7	3293.3	2688.2	2529.1
45°	4941.4	3553.5	2935.9	2412.3	2297.1
47.5°	4455.5	3258.0	2605.9	2190.5	2110.6
50°	3964.1	2958.6	2320.6	2014.2	1955.4
52.5°	3550.3	2679.6	2078.5	1847.3	1812.0
55°	3138.9	2393.5	1867.6	1697.6	1679.5
57.5°	2730.5	2127.1	1674.8	1560.4	1556.5
60°	2344.9	1877.8	1505.6	1442.9	1434.2
62.5°	2016.6	1630.2	1344.9	1315.1	1319.0
65°	1715.6	1404.5	1196.0	1196.0	1206.2
67.5°	1436.6	1196.8	1059.6	1077.6	1091.7
70°	1188.1	1008.7	931.1	962.4	975.0
72.5°	953.0	833.9	808.0	842.5	852.7
75°	754.7	670.9	684.2	727.3	731.2
77.5°	559.6	528.2	562.7	609.7	618.4
80°	386.4	389.5	443.6	476.5	480.4
82.5°	249.2	272.0	332.3	349.5	343.3
85°	127.0	164.6	197.5	185.7	185.7
87.5°	48.6	71.3	83.9	98.8	104.2
90°	0.8	14.9	29.0	36.8	38.4
92.5°	0.8	3.9	6.3	7.1	6.3
95°	0.8	2.4	4.7	4.7	3.9
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)