

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: P859918

Luminaire Tested: **SPHB-15SE-N-L740-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: P859918
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-L740-CD
Description: 15000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 4000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

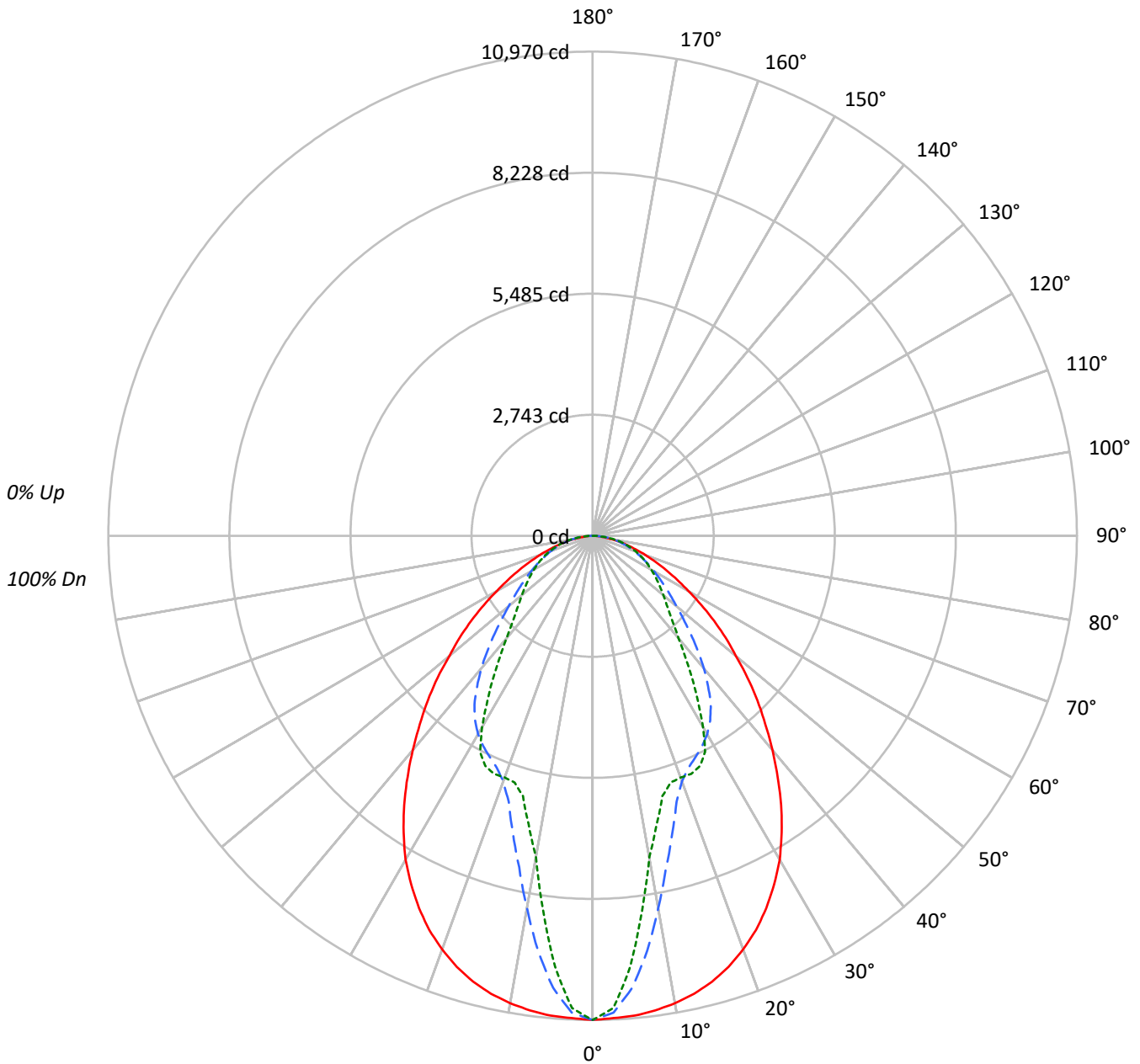
Lumens per Lamp: N/A
Luminaire Lumens: 16077.0 lumens
Efficiency: N/A
Efficacy: 167.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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°	85562	85562	85562
5°	85463	80506	76696
10°	85171	67859	58501
15°	84462	56331	49298
20°	82761	49103	48395
25°	80101	47510	49528
30°	76315	46748	45073
35°	70858	44424	37351
40°	64523	39880	30842
45°	58244	34604	27075
50°	51400	30090	25354
55°	45609	27138	24404
60°	39087	25096	23907
65°	33834	23585	23786
70°	28954	22689	23759
75°	24305	22033	23546
80°	18547	21291	23061
85°	12144	18883	17765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	935.3	5.8
10°-20°	2147.5	13.4
20°-30°	2902.2	18.1
30°-40°	3054.4	19.0
40°-50°	2591.8	16.1
50°-60°	2007.7	12.5
60°-70°	1398.3	8.7
70°-80°	800.7	5.0
80°-90°	233.0	1.4
90°-100°	6.2	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°	5984.9	37.2
0°-40°	9039.3	56.2
0°-60°	13638.8	84.8
0°-90°	16070.7	100.0
90°-120°	6.2	0.0
90°-150°	6.2	0.0
90°-180°	6.0	0.0
0°-180°	16077.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10970	10970	10970	10970	10970	
5°	10915	10715	10282	9888	9796	###
15°	10460	8878	6976	6279	6105	2943
25°	9307	6575	5520	5680	5755	4273
35°	7442	5056	4665	4214	3923	4639
45°	5280	3797	3137	2578	2454	4067
55°	3354	2558	1996	1814	1795	2999
65°	1833	1501	1278	1278	1289	1831
75°	806	717	731	777	781	860
85°	136	176	211	198	198	172
90°	1	16	31	39	41	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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CATALOG NUMBER: SPHB-15SE-N-L740-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10969.6	10969.6	10969.6	10969.6	10969.6
2.5°	10937.8	10901.8	10813.9	10756.9	10712.5
5°	10915.2	10715.0	10282.1	9887.6	9795.5
7.5°	10847.3	10407.7	9482.3	8752.9	8568.7
10°	10753.6	9966.4	8567.8	7654.2	7386.2
12.5°	10628.8	9494.9	7691.9	6831.0	6699.5
15°	10459.6	8877.7	6975.9	6279.1	6104.9
17.5°	10240.2	8239.6	6315.1	5912.3	5863.7
20°	9970.6	7654.2	5915.7	5778.3	5830.3
22.5°	9667.4	7085.6	5683.7	5741.5	5838.6
25°	9307.3	6574.7	5520.4	5680.3	5754.9
27.5°	8902.8	6113.3	5370.5	5517.0	5517.0
30°	8473.2	5728.9	5190.4	5177.0	5004.5
32.5°	7971.6	5402.3	4955.1	4689.7	4433.4
35°	7441.5	5056.5	4665.4	4214.0	3922.6
37.5°	6885.4	4734.9	4298.6	3703.2	3431.8
40°	6336.9	4417.5	3916.7	3244.2	3029.0
42.5°	5790.9	4094.2	3518.9	2872.4	2702.4
45°	5280.1	3796.9	3137.0	2577.6	2454.5
47.5°	4760.8	3481.2	2784.5	2340.6	2255.2
50°	4235.8	3161.3	2479.7	2152.2	2089.4
52.5°	3793.6	2863.2	2220.9	1973.8	1936.2
55°	3353.9	2557.5	1995.6	1813.9	1794.6
57.5°	2917.6	2272.8	1789.6	1667.3	1663.2
60°	2505.6	2006.5	1608.7	1541.7	1532.5
62.5°	2154.7	1741.9	1437.0	1405.2	1409.4
65°	1833.2	1500.7	1277.9	1277.9	1288.8
67.5°	1535.0	1278.8	1132.2	1151.5	1166.6
70°	1269.6	1077.8	994.9	1028.4	1041.8
72.5°	1018.3	891.0	863.4	900.2	911.1
75°	806.5	716.8	731.1	777.1	781.3
77.5°	597.9	564.4	601.3	651.5	660.7
80°	412.9	416.2	474.0	509.2	513.4
82.5°	266.3	290.6	355.1	373.5	366.8
85°	135.7	175.9	211.0	198.5	198.5
87.5°	51.9	76.2	89.6	105.5	111.4
90°	0.8	15.9	31.0	39.4	41.0
92.5°	0.8	4.2	6.7	7.5	6.7
95°	0.8	2.5	5.0	5.0	4.2
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)