

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: P859872

Luminaire Tested: **SPHB-12SE-W-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: P859872
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-12SE-W-L735-CD
Description: 12000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 3500K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

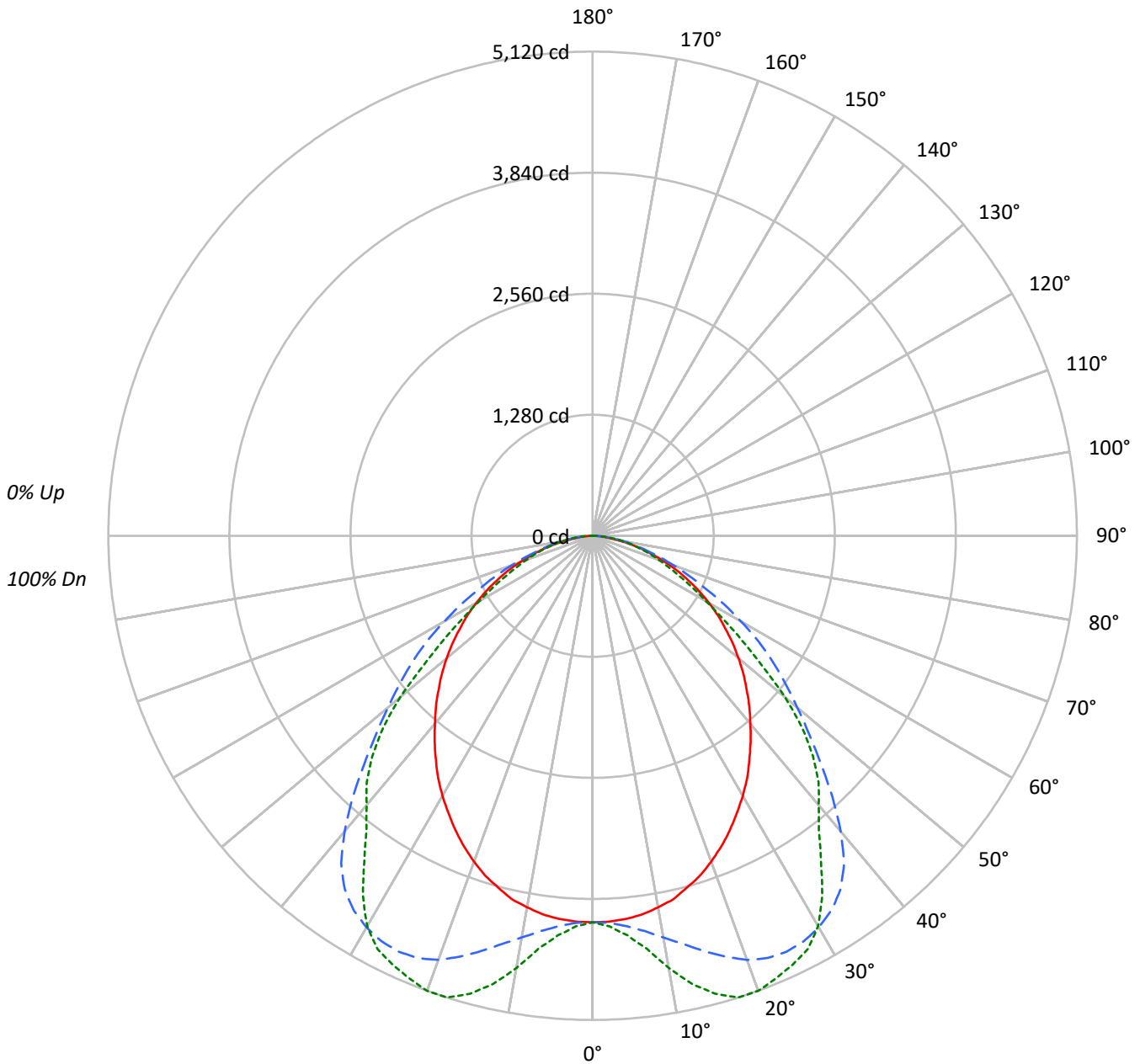
Lumens per Lamp: N/A
Luminaire Lumens: 12861.0 lumens
Efficiency: N/A
Efficacy: 168.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 76.3
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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85																			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72																			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62																			
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53																			
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46																			
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40																			
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36																			
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																			
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29																			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31881	31881	31881
5°	31847	32448	33217
10°	31596	34160	36750
15°	31102	36704	40480
20°	30428	39623	42502
25°	29551	41760	43059
30°	28589	43067	42943
35°	27516	43500	40070
40°	26407	41535	37847
45°	25408	37649	36311
50°	24417	34233	32191
55°	23302	31629	26195
60°	22149	28198	21573
65°	20623	24229	18705
70°	18762	20687	16919
75°	16114	17362	15511
80°	12595	14890	14387
85°	8520	12637	11858



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.3	3.1
10°-20°	1272.5	9.9
20°-30°	2082.6	16.2
30°-40°	2540.6	19.8
40°-50°	2516.2	19.6
50°-60°	2012.1	15.6
60°-70°	1255.2	9.8
70°-80°	615.0	4.8
80°-90°	161.3	1.3
90°-100°	4.2	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°	3756.4	29.2
0°-40°	6297.0	49.0
0°-60°	10825.2	84.2
0°-90°	12856.8	100.0
90°-120°	4.2	0.0
90°-150°	4.2	0.0
90°-180°	4.0	0.0
0°-180°	12861.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4087	4087	4087	4087	4087	
5°	4068	4085	4144	4216	4242	386
15°	3852	4076	4545	4907	5013	1086
25°	3434	4015	4852	4993	5003	1580
35°	2890	3861	4568	4324	4208	1808
45°	2303	3578	3413	3298	3292	1779
55°	1714	2748	2326	2101	1926	1535
65°	1117	1542	1313	1089	1014	1108
75°	535	655	576	528	515	568
85°	95	135	141	134	132	118
90°	0	14	25	32	33	5
95°	0	2	2	2	1	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-12SE-W-L735-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4087.4	4087.4	4087.4	4087.4	4087.4
2.5°	4083.3	4081.8	4096.6	4123.7	4136.0
5°	4067.5	4085.4	4144.2	4216.3	4242.4
7.5°	4038.8	4086.9	4216.9	4349.4	4405.7
10°	3989.2	4087.9	4313.0	4546.9	4640.0
12.5°	3938.0	4084.3	4420.0	4751.0	4852.8
15°	3851.6	4075.7	4545.3	4907.0	5013.0
17.5°	3771.2	4065.4	4666.1	5039.6	5119.9
20°	3665.8	4050.6	4773.5	5080.0	5120.4
22.5°	3555.3	4038.8	4832.9	5052.9	5065.1
25°	3433.6	4014.8	4852.3	4993.0	5003.2
27.5°	3303.6	3993.3	4833.9	4918.8	4927.5
30°	3174.2	3954.4	4781.7	4803.2	4767.9
32.5°	3038.6	3915.5	4697.3	4600.6	4518.2
35°	2889.7	3861.3	4568.4	4324.3	4208.2
37.5°	2742.9	3809.1	4367.3	4015.3	3927.8
40°	2593.5	3744.6	4079.2	3726.7	3717.0
42.5°	2452.2	3675.0	3753.3	3502.1	3534.9
45°	2303.4	3578.3	3413.1	3298.5	3291.8
47.5°	2162.2	3444.8	3103.6	3073.4	3005.3
50°	2012.2	3260.6	2821.1	2792.5	2652.8
52.5°	1865.4	3025.8	2568.9	2461.5	2257.8
55°	1713.5	2747.5	2325.9	2101.3	1926.3
57.5°	1572.2	2441.5	2078.8	1787.6	1630.6
60°	1419.8	2131.5	1807.6	1512.4	1382.9
62.5°	1270.4	1826.0	1562.0	1278.1	1192.1
65°	1117.4	1541.5	1312.8	1088.8	1013.5
67.5°	971.1	1295.4	1097.4	917.9	867.7
70°	822.7	1050.9	907.1	771.0	741.9
72.5°	669.7	839.6	733.7	650.8	628.8
75°	534.7	654.9	576.1	527.5	514.7
77.5°	398.0	487.1	450.2	421.6	418.0
80°	280.4	351.5	331.5	325.9	320.3
82.5°	179.1	229.7	235.9	232.3	228.2
85°	95.2	135.1	141.2	134.0	132.5
87.5°	38.4	58.8	63.4	70.1	72.1
90°	0.5	13.8	25.1	31.7	32.7
92.5°	0.5	3.1	3.6	3.6	3.1
95°	0.5	2.0	2.0	1.5	1.0
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



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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)