

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: P859878

Luminaire Tested: **SPHB-12SE-W-L935-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: P859878
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-L935-CD
Description: 12000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 3500K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

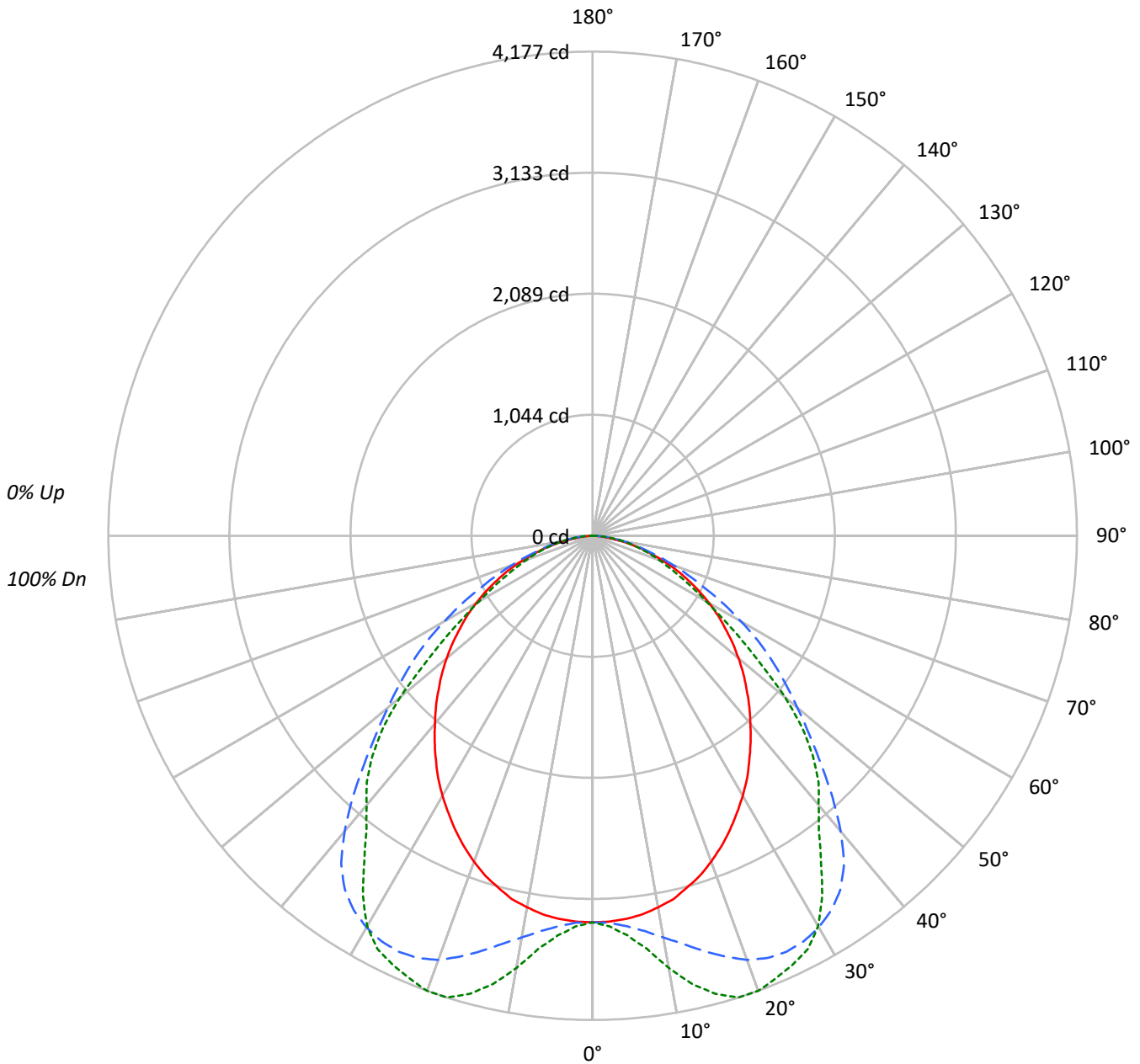
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10492.0 lumens
Efficiency: N/A
Efficacy: 137.5 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

TEST NUMBER: P859878
CATALOG NUMBER: SPHB-12SE-W-L935-CD

Luminous Intensity Polar Plot





TEST NUMBER: P859878

CATALOG NUMBER: SPHB-12SE-W-L935-CD

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°	26009	26009	26009
5°	25981	26471	27099
10°	25776	27868	29981
15°	25373	29943	33024
20°	24824	32324	34673
25°	24107	34068	35127
30°	23323	35134	35032
35°	22447	35487	32689
40°	21542	33884	30875
45°	20728	30714	29623
50°	19920	27928	26262
55°	19008	25802	21370
60°	18069	23004	17600
65°	16825	19767	15260
70°	15307	16876	13802
75°	13146	14164	12654
80°	10273	12150	11737
85°	6945	10310	9674



TEST NUMBER: P859878

CATALOG NUMBER: SPHB-12SE-W-L935-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.4	3.1
10°-20°	1038.1	9.9
20°-30°	1698.9	16.2
30°-40°	2072.6	19.8
40°-50°	2052.7	19.6
50°-60°	1641.5	15.6
60°-70°	1024.0	9.8
70°-80°	501.7	4.8
80°-90°	131.6	1.3
90°-100°	3.5	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°	3064.5	29.2
0°-40°	5137.1	49.0
0°-60°	8831.2	84.2
0°-90°	10488.5	100.0
90°-120°	3.5	0.0
90°-150°	3.5	0.0
90°-180°	3.0	0.0
0°-180°	10492.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3334	3334	3334	3334	3334	
5°	3318	3333	3381	3440	3461	315
15°	3142	3325	3708	4003	4090	886
25°	2801	3275	3958	4073	4082	1289
35°	2357	3150	3727	3528	3433	1475
45°	1879	2919	2784	2691	2686	1451
55°	1398	2241	1897	1714	1572	1252
65°	912	1258	1071	888	827	904
75°	436	534	470	430	420	463
85°	78	110	115	109	108	96
90°	0	11	20	26	27	4
95°	0	2	2	1	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



TEST NUMBER: P859878

CATALOG NUMBER: SPHB-12SE-W-L935-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3334.5	3334.5	3334.5	3334.5	3334.5
2.5°	3331.2	3329.9	3342.0	3364.1	3374.2
5°	3318.2	3332.8	3380.8	3439.7	3461.0
7.5°	3294.9	3334.1	3440.1	3548.2	3594.1
10°	3254.4	3334.9	3518.6	3709.3	3785.3
12.5°	3212.6	3332.0	3605.8	3875.9	3958.9
15°	3142.1	3324.9	3708.1	4003.2	4089.6
17.5°	3076.6	3316.6	3806.6	4111.3	4176.8
20°	2990.6	3304.5	3894.2	4144.2	4177.2
22.5°	2900.4	3294.9	3942.6	4122.1	4132.1
25°	2801.1	3275.2	3958.5	4073.3	4081.6
27.5°	2695.1	3257.7	3943.5	4012.8	4019.9
30°	2589.5	3226.0	3900.9	3918.4	3889.6
32.5°	2478.9	3194.3	3832.0	3753.2	3686.0
35°	2357.4	3150.0	3726.9	3527.8	3433.0
37.5°	2237.6	3107.5	3562.8	3275.7	3204.3
40°	2115.7	3054.9	3327.8	3040.3	3032.3
42.5°	2000.5	2998.1	3062.0	2857.0	2883.7
45°	1879.1	2919.2	2784.4	2690.9	2685.5
47.5°	1763.9	2810.3	2531.9	2507.3	2451.7
50°	1641.6	2660.0	2301.5	2278.1	2164.2
52.5°	1521.8	2468.4	2095.7	2008.1	1841.9
55°	1397.8	2241.4	1897.4	1714.2	1571.5
57.5°	1282.6	1991.8	1695.8	1458.4	1330.2
60°	1158.3	1738.8	1474.6	1233.8	1128.2
62.5°	1036.4	1489.7	1274.3	1042.6	972.5
65°	911.6	1257.6	1071.0	888.2	826.8
67.5°	792.2	1056.8	895.3	748.8	707.9
70°	671.2	857.3	740.0	629.0	605.2
72.5°	546.4	684.9	598.5	530.9	513.0
75°	436.2	534.3	470.0	430.3	419.9
77.5°	324.7	397.4	367.3	343.9	341.0
80°	228.7	286.7	270.5	265.9	261.3
82.5°	146.1	187.4	192.4	189.5	186.2
85°	77.6	110.2	115.2	109.4	108.1
87.5°	31.3	48.0	51.8	57.2	58.9
90°	0.4	11.3	20.5	25.9	26.7
92.5°	0.4	2.5	2.9	2.9	2.5
95°	0.4	1.7	1.7	1.3	0.8
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: P859878

CATALOG NUMBER: SPHB-12SE-W-L935-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)