

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: P859986

Luminaire Tested: **SPHB-18SE-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: P859986
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-18SE-W-L935-CD
Description: 18000 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

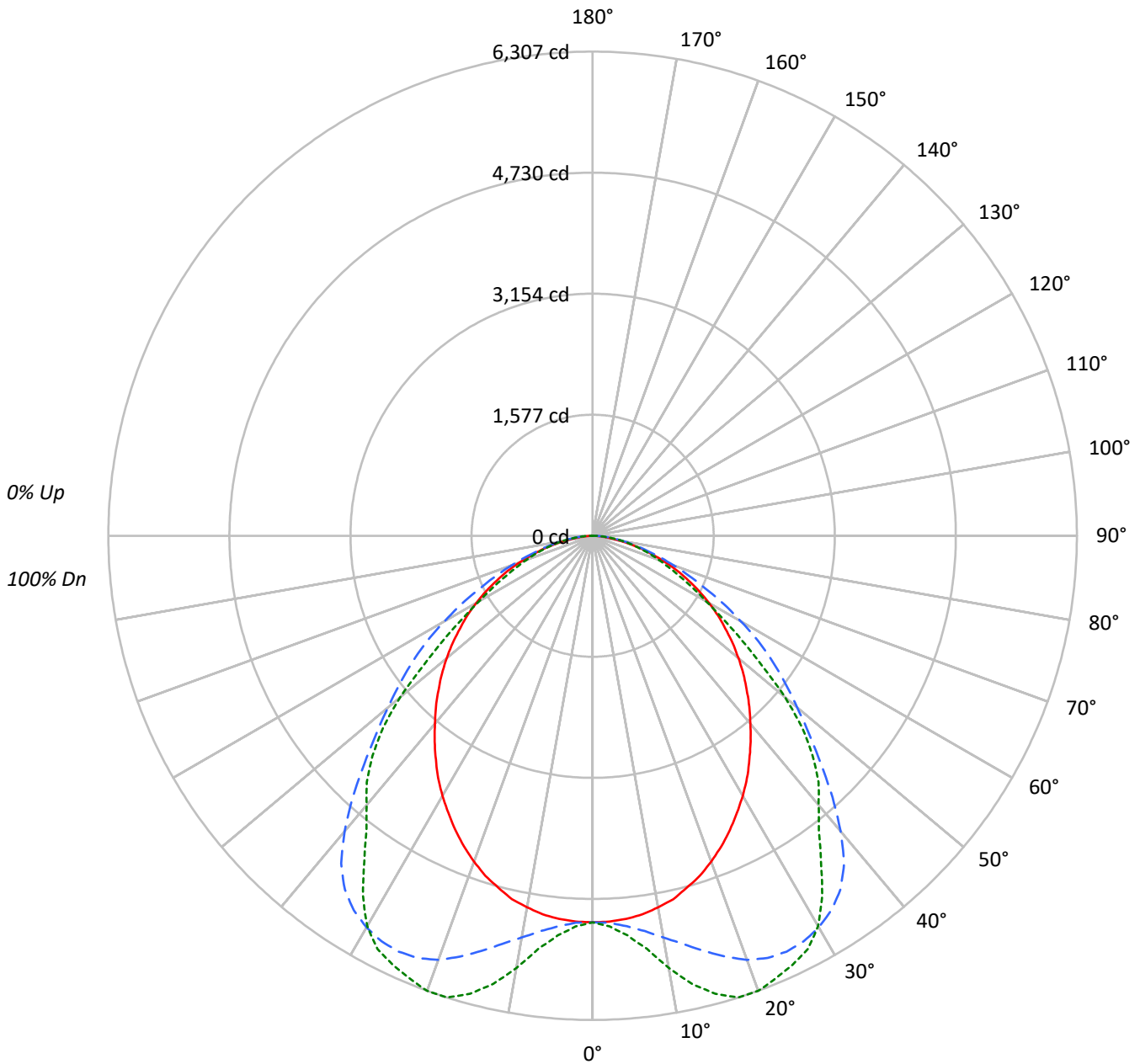
Lumens per Lamp: N/A
Luminaire Lumens: 15842.0 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 117.4
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: P859986

CATALOG NUMBER: SPHB-18SE-W-L935-CD

Luminous Intensity Polar Plot





TEST NUMBER: P859986

CATALOG NUMBER: SPHB-18SE-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°	39271	39271	39271
5°	39229	39969	40917
10°	38919	42079	45268
15°	38311	45212	49863
20°	37481	48806	52353
25°	36399	51440	53040
30°	35215	53049	52896
35°	33893	53582	49358
40°	32528	51162	46619
45°	31297	46376	44728
50°	30078	42168	39652
55°	28702	38960	32267
60°	27283	34735	26574
65°	25403	29846	23043
70°	23111	25483	20840
75°	19848	21385	19107
80°	15515	18345	17720
85°	10489	15563	14605



TEST NUMBER: P859986

CATALOG NUMBER: SPHB-18SE-W-L935-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	494.3	3.1
10°-20°	1567.5	9.9
20°-30°	2565.3	16.2
30°-40°	3129.4	19.8
40°-50°	3099.4	19.6
50°-60°	2478.5	15.6
60°-70°	1546.2	9.8
70°-80°	757.5	4.8
80°-90°	198.7	1.3
90°-100°	5.2	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°	4627.1	29.2
0°-40°	7756.5	49.0
0°-60°	13334.4	84.2
0°-90°	15836.8	100.0
90°-120°	5.2	0.0
90°-150°	5.2	0.0
90°-180°	5.0	0.0
0°-180°	15842.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5035	5035	5035	5035	5035	
5°	5010	5032	5105	5194	5226	475
15°	4744	5020	5599	6044	6175	1337
25°	4229	4945	5977	6150	6163	1946
35°	3560	4756	5627	5327	5184	2227
45°	2837	4408	4204	4063	4055	2191
55°	2111	3384	2865	2588	2373	1891
65°	1376	1899	1617	1341	1248	1365
75°	659	807	710	650	634	699
85°	117	166	174	165	163	145
90°	1	17	31	39	40	7
95°	1	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



TEST NUMBER: P859986

CATALOG NUMBER: SPHB-18SE-W-L935-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5034.8	5034.8	5034.8	5034.8	5034.8
2.5°	5029.8	5027.9	5046.2	5079.6	5094.7
5°	5010.2	5032.3	5104.8	5193.6	5225.8
7.5°	4975.0	5034.2	5194.3	5357.5	5426.8
10°	4913.8	5035.5	5312.8	5600.8	5715.5
12.5°	4850.8	5031.0	5444.5	5852.2	5977.6
15°	4744.3	5020.3	5598.9	6044.4	6174.9
17.5°	4645.3	5007.7	5747.6	6207.7	6306.6
20°	4515.5	4989.4	5879.9	6257.4	6307.2
22.5°	4379.4	4975.0	5953.1	6224.0	6239.2
25°	4229.4	4945.3	5977.0	6150.3	6162.9
27.5°	4069.3	4918.9	5954.3	6058.9	6069.6
30°	3909.9	4871.0	5890.0	5916.5	5873.0
32.5°	3742.9	4823.1	5786.0	5666.9	5565.5
35°	3559.5	4756.3	5627.2	5326.6	5183.6
37.5°	3378.6	4692.0	5379.6	4946.0	4838.2
40°	3194.6	4612.6	5024.7	4590.5	4578.5
42.5°	3020.6	4526.9	4623.3	4313.9	4354.2
45°	2837.2	4407.8	4204.2	4063.0	4054.8
47.5°	2663.3	4243.3	3822.9	3785.7	3701.9
50°	2478.7	4016.4	3475.0	3439.7	3267.7
52.5°	2297.8	3727.1	3164.3	3032.0	2781.2
55°	2110.6	3384.3	2865.0	2588.3	2372.8
57.5°	1936.7	3007.4	2560.6	2202.0	2008.5
60°	1748.9	2625.5	2226.6	1862.9	1703.5
62.5°	1564.8	2249.3	1924.1	1574.3	1468.4
65°	1376.4	1898.9	1617.1	1341.1	1248.5
67.5°	1196.2	1595.7	1351.8	1130.6	1068.9
70°	1013.4	1294.5	1117.4	949.7	913.8
72.5°	825.0	1034.2	903.7	801.6	774.5
75°	658.6	806.7	709.6	649.8	634.0
77.5°	490.3	600.0	554.6	519.3	514.9
80°	345.4	433.0	408.4	401.4	394.5
82.5°	220.6	283.0	290.5	286.1	281.1
85°	117.2	166.4	173.9	165.1	163.2
87.5°	47.3	72.5	78.1	86.3	88.9
90°	0.6	17.0	30.9	39.1	40.3
92.5°	0.6	3.8	4.4	4.4	3.8
95°	0.6	2.5	2.5	1.9	1.3
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: P859986

CATALOG NUMBER: SPHB-18SE-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)