

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: P859988

Luminaire Tested: **SPHB-18SE-W-L950-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: P859988
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-L950-CD
Description: 18000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

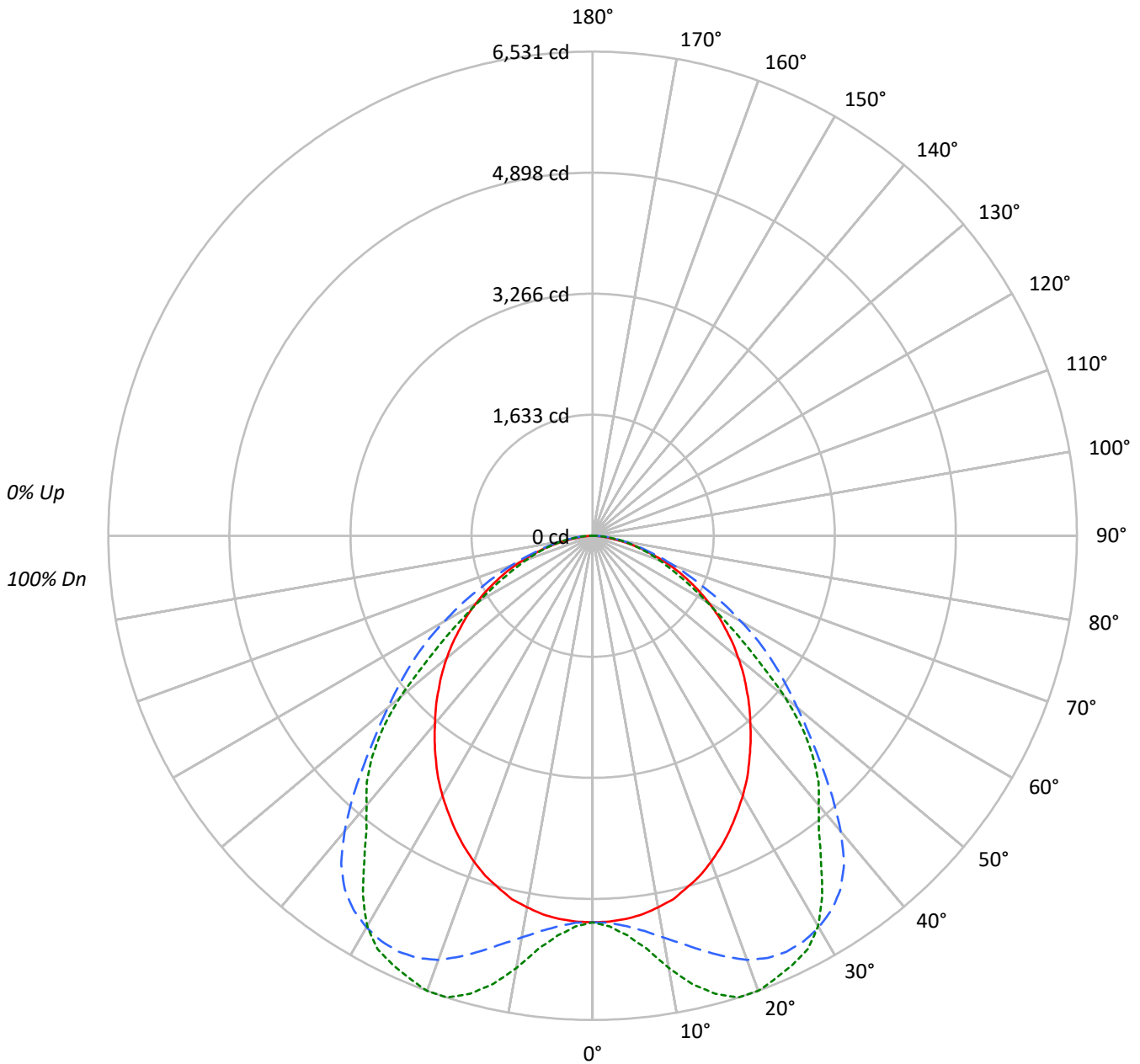
Lumens per Lamp: N/A
Luminaire Lumens: 16405.0 lumens
Efficiency: N/A
Efficacy: 139.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				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			100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72			72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62			62
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53			53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46			46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40			40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36			36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32			32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29			29
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26			26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40667	40667	40667
5°	40623	41390	42371
10°	40302	43574	46877
15°	39672	46818	51635
20°	38813	50541	54214
25°	37693	53268	54924
30°	36466	54935	54775
35°	35098	55486	51112
40°	33683	52981	48276
45°	32410	48024	46317
50°	31146	43666	41061
55°	29721	40345	33414
60°	28251	35969	27518
65°	26306	30907	23860
70°	23932	26388	21581
75°	20553	22144	19785
80°	16063	18996	18349
85°	10865	16118	15125



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	511.9	3.1
10°-20°	1623.2	9.9
20°-30°	2656.4	16.2
30°-40°	3240.7	19.8
40°-50°	3209.5	19.6
50°-60°	2566.6	15.6
60°-70°	1601.1	9.8
70°-80°	784.5	4.8
80°-90°	205.7	1.3
90°-100°	5.4	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°	4791.5	29.2
0°-40°	8032.2	49.0
0°-60°	13808.3	84.2
0°-90°	16399.6	100.0
90°-120°	5.4	0.0
90°-150°	5.4	0.0
90°-180°	5.0	0.0
0°-180°	16405.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5214	5214	5214	5214	5214	
5°	5188	5211	5286	5378	5412	492
15°	4913	5199	5798	6259	6394	1385
25°	4380	5121	6189	6369	6382	2015
35°	3686	4925	5827	5516	5368	2306
45°	2938	4564	4354	4207	4199	2269
55°	2186	3505	2967	2680	2457	1958
65°	1425	1966	1675	1389	1293	1413
75°	682	835	735	673	656	724
85°	121	172	180	171	169	150
90°	1	18	32	40	42	7
95°	1	3	3	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-18SE-W-L950-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5213.8	5213.8	5213.8	5213.8	5213.8
2.5°	5208.5	5206.6	5225.5	5260.1	5275.8
5°	5188.3	5211.1	5286.2	5378.2	5411.5
7.5°	5151.8	5213.1	5378.9	5547.9	5619.7
10°	5088.5	5214.4	5501.6	5799.8	5918.6
12.5°	5023.2	5209.8	5638.0	6060.2	6190.1
15°	4912.9	5198.7	5797.8	6259.2	6394.3
17.5°	4810.4	5185.7	5951.9	6428.3	6530.7
20°	4676.0	5166.8	6088.9	6479.8	6531.4
22.5°	4535.0	5151.8	6164.6	6445.2	6460.9
25°	4379.7	5121.1	6189.4	6368.9	6381.9
27.5°	4213.9	5093.7	6165.9	6274.3	6285.3
30°	4048.8	5044.1	6099.4	6126.8	6081.7
32.5°	3875.9	4994.5	5991.7	5868.3	5763.3
35°	3686.0	4925.3	5827.2	5515.9	5367.8
37.5°	3498.7	4858.7	5570.7	5121.7	5010.1
40°	3308.1	4776.5	5203.3	4753.7	4741.3
42.5°	3128.0	4687.7	4787.6	4467.2	4508.9
45°	2938.1	4564.4	4353.6	4207.4	4198.9
47.5°	2758.0	4394.1	3958.8	3920.3	3833.5
50°	2566.7	4159.1	3598.5	3562.0	3383.8
52.5°	2379.4	3859.6	3276.8	3139.7	2880.0
55°	2185.6	3504.6	2966.8	2680.3	2457.1
57.5°	2005.5	3114.3	2651.6	2280.2	2079.9
60°	1811.0	2718.8	2305.7	1929.1	1764.0
62.5°	1620.4	2329.2	1992.4	1630.2	1520.6
65°	1425.3	1966.3	1674.6	1388.8	1292.8
67.5°	1238.7	1652.4	1399.9	1170.8	1106.8
70°	1049.4	1340.5	1157.1	983.5	946.3
72.5°	854.3	1070.9	935.9	830.1	802.1
75°	682.0	835.3	734.8	672.8	656.5
77.5°	507.7	621.3	574.3	537.8	533.2
80°	357.6	448.3	422.9	415.7	408.5
82.5°	228.4	293.0	300.9	296.3	291.1
85°	121.4	172.3	180.1	171.0	169.0
87.5°	48.9	75.1	80.9	89.4	92.0
90°	0.7	17.6	32.0	40.5	41.8
92.5°	0.7	3.9	4.6	4.6	3.9
95°	0.7	2.6	2.6	2.0	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



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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)