

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: P860093

Luminaire Tested: **SPHB-30SE-W-L850-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: P860093
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-30SE-W-L850-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens and, 5000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

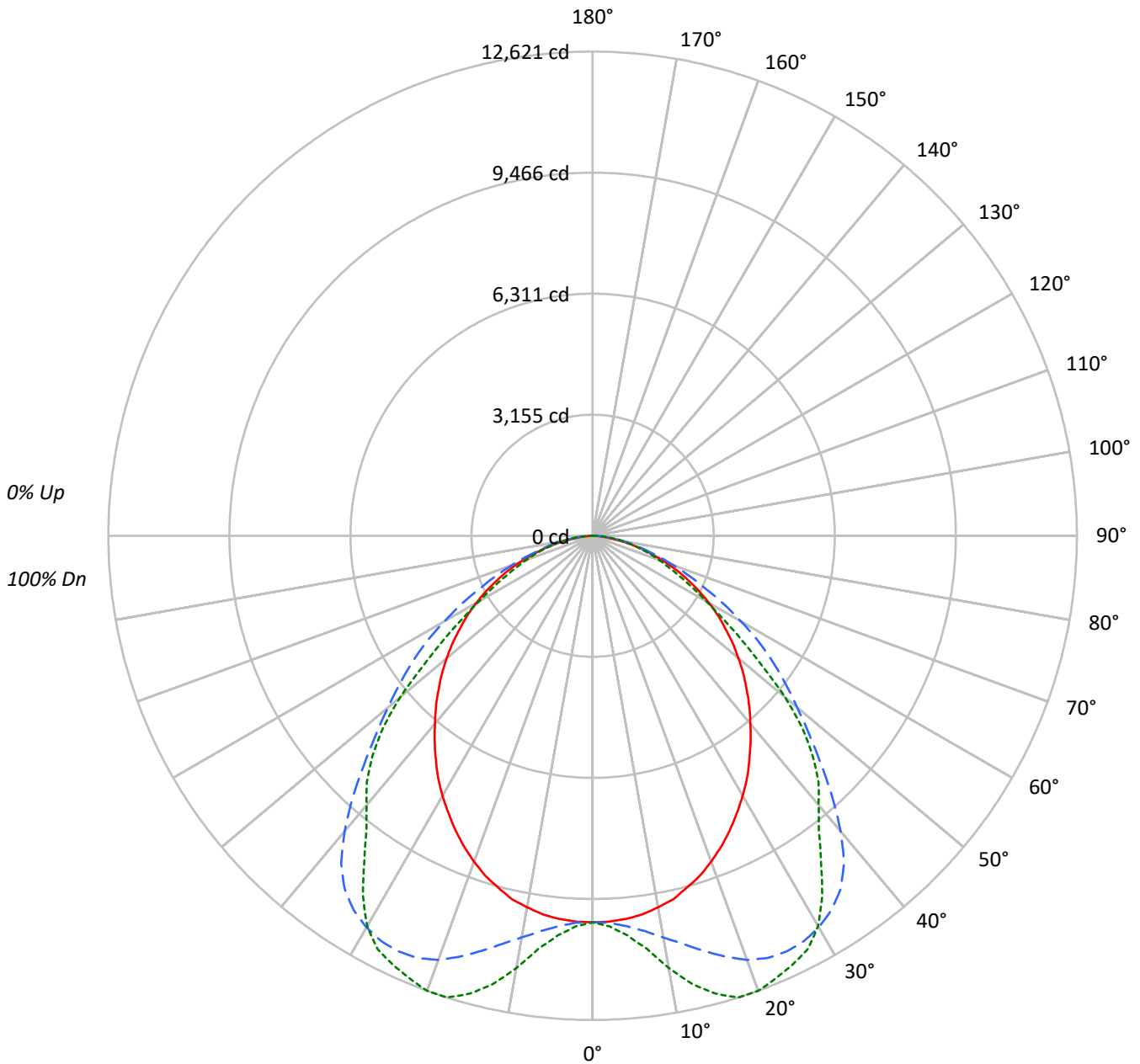
Lumens per Lamp: N/A
Luminaire Lumens: 31701.0 lumens
Efficiency: N/A
Efficacy: 162.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 195
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°	53161	53161	53161
5°	53103	54105	55387
10°	52683	56960	61278
15°	51860	61201	67498
20°	50737	66068	70869
25°	49272	69632	71798
30°	47669	71811	71603
35°	45880	72533	66814
40°	44032	69257	63107
45°	42365	62777	60547
50°	40715	57081	53676
55°	38853	52739	43679
60°	36931	47018	35973
65°	34388	40402	31192
70°	31285	34495	28210
75°	26867	28949	25864
80°	21000	24831	23990
85°	14203	21074	19772



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	989.2	3.1
10°-20°	3136.6	9.9
20°-30°	5133.3	16.2
30°-40°	6262.2	19.8
40°-50°	6202.1	19.6
50°-60°	4959.6	15.6
60°-70°	3094.0	9.8
70°-80°	1515.9	4.8
80°-90°	397.6	1.3
90°-100°	10.5	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°	9259.1	29.2
0°-40°	15521.3	49.0
0°-60°	26683.0	84.2
0°-90°	31690.5	100.0
90°-120°	10.5	0.0
90°-150°	10.5	0.0
90°-180°	10.0	0.0
0°-180°	31701.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10075	10075	10075	10075	10075	
5°	10026	10070	10215	10393	10457	951
15°	9494	10046	11204	12095	12356	2676
25°	8463	9896	11960	12307	12332	3895
35°	7123	9518	11260	10659	10373	4455
45°	5678	8820	8413	8130	8114	4385
55°	4224	6772	5733	5179	4748	3784
65°	2754	3800	3236	2684	2498	2731
75°	1318	1614	1420	1300	1269	1399
85°	235	333	348	330	327	291
90°	1	34	62	78	81	13
95°	1	5	5	4	2	1
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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10075.1	10075.1	10075.1	10075.1	10075.1
2.5°	10065.0	10061.2	10097.8	10164.6	10194.9
5°	10025.9	10070.0	10215.0	10392.9	10457.2
7.5°	9955.2	10073.8	10394.1	10720.7	10859.5
10°	9832.9	10076.3	10631.2	11207.5	11437.1
12.5°	9706.8	10067.5	10894.8	11710.7	11961.7
15°	9493.7	10046.0	11203.7	12095.4	12356.4
17.5°	9295.7	10020.8	11501.4	12422.0	12620.0
20°	9035.9	9984.3	11766.2	12521.6	12621.2
22.5°	8763.5	9955.2	11912.5	12454.8	12485.0
25°	8463.3	9896.0	11960.4	12307.2	12332.4
27.5°	8143.0	9843.0	11915.0	12124.4	12145.8
30°	7824.0	9747.2	11786.4	11839.4	11752.3
32.5°	7489.8	9651.3	11578.3	11339.9	11136.9
35°	7122.8	9517.6	11260.5	10658.9	10372.7
37.5°	6760.8	9389.0	10764.9	9897.2	9681.6
40°	6392.6	9230.1	10054.9	9186.0	9162.0
42.5°	6044.5	9058.6	9251.5	8632.3	8713.0
45°	5677.5	8820.2	8412.9	8130.4	8114.0
47.5°	5329.5	8491.1	7649.9	7575.5	7407.8
50°	4960.0	8037.1	6953.8	6883.2	6538.9
52.5°	4598.0	7458.2	6332.1	6067.2	5565.3
55°	4223.5	6772.2	5733.0	5179.4	4748.1
57.5°	3875.4	6018.0	5123.9	4406.3	4019.2
60°	3499.6	5253.8	4455.5	3727.9	3408.8
62.5°	3131.3	4500.9	3850.2	3150.3	2938.4
65°	2754.3	3799.7	3236.0	2683.7	2498.3
67.5°	2393.6	3193.1	2705.1	2262.4	2138.9
70°	2027.9	2590.3	2236.0	1900.5	1828.6
72.5°	1650.8	2069.5	1808.4	1604.1	1549.9
75°	1317.9	1614.2	1420.0	1300.2	1268.7
77.5°	981.1	1200.6	1109.8	1039.2	1030.3
80°	691.1	866.4	817.2	803.3	789.5
82.5°	441.4	566.2	581.4	572.5	562.5
85°	234.6	332.9	348.1	330.4	326.6
87.5°	94.6	145.0	156.4	172.8	177.8
90°	1.3	34.1	61.8	78.2	80.7
92.5°	1.3	7.6	8.8	8.8	7.6
95°	1.3	5.0	5.0	3.8	2.5
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)