

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: P859862

Luminaire Tested: **SPHB-12SE-M-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: P859862
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-12SE-M-L950-CD
Description: 12000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 5000K 90CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

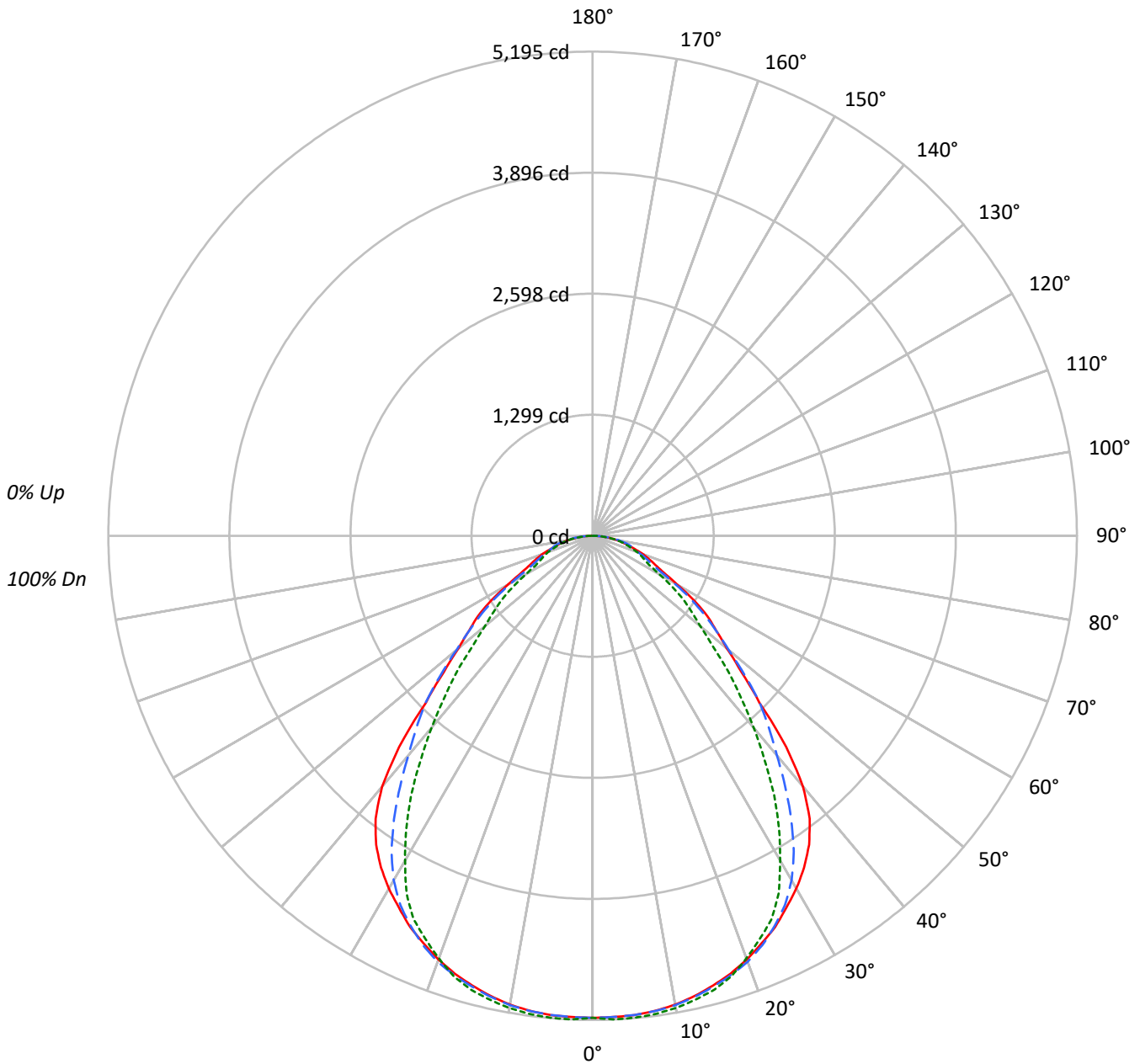
Lumens per Lamp: N/A
Luminaire Lumens: 10735.0 lumens
Efficiency: N/A
Efficacy: 140.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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					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								
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87								
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75								
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66								
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58								
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51								
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46								
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41								
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37								
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34								
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	40341	40341	40341
5°	40420	40409	40639
10°	40455	40499	40747
15°	40337	40442	40723
20°	40161	40365	40042
25°	39868	39756	39080
30°	39362	38435	36242
35°	38536	35360	32300
40°	35763	31297	27358
45°	27900	27976	22641
50°	22787	23110	18284
55°	20417	19648	16067
60°	16346	15472	12854
65°	13698	12539	11369
70°	13006	11948	11574
75°	11798	12685	11163
80°	11858	12959	11764
85°	10319	12091	9826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	491.8	4.6
10°-20°	1414.3	13.2
20°-30°	2111.3	19.7
30°-40°	2303.8	21.5
40°-50°	1884.6	17.6
50°-60°	1239.1	11.5
60°-70°	710.9	6.6
70°-80°	430.8	4.0
80°-90°	144.7	1.3
90°-100°	3.8	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°	4017.4	37.4
0°-40°	6321.1	58.9
0°-60°	9444.9	88.0
0°-90°	10731.3	100.0
90°-120°	3.8	0.0
90°-150°	3.8	0.0
90°-180°	4.0	0.0
0°-180°	10735.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5172	5172	5172	5172	5172	
5°	5162	5154	5161	5182	5190	491
15°	4995	4995	5008	5040	5043	1410
25°	4632	4643	4619	4564	4541	2131
35°	4047	3956	3714	3460	3392	2508
45°	2529	2718	2536	2239	2052	2008
55°	1501	1460	1445	1242	1182	1322
65°	742	731	679	661	616	759
75°	392	424	421	404	370	424
85°	115	131	135	118	110	125
90°	1	10	19	22	24	5
95°	1	1	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5171.9	5171.9	5171.9	5171.9	5171.9
2.5°	5168.5	5161.0	5167.8	5189.0	5195.1
5°	5162.4	5154.2	5161.0	5182.2	5190.3
7.5°	5141.2	5136.4	5143.3	5164.4	5174.6
10°	5107.8	5102.3	5113.3	5131.7	5144.6
12.5°	5058.0	5056.0	5066.2	5092.8	5098.2
15°	4995.2	4994.6	5008.2	5040.3	5043.0
17.5°	4924.3	4923.6	4940.7	4961.8	4954.3
20°	4838.4	4843.1	4862.9	4843.1	4824.0
22.5°	4735.4	4750.4	4755.1	4693.1	4683.5
25°	4632.4	4643.3	4619.4	4563.5	4540.9
27.5°	4499.3	4512.3	4468.0	4388.2	4324.0
30°	4370.4	4358.1	4267.4	4113.3	4023.9
32.5°	4222.4	4178.7	4015.7	3802.9	3721.7
35°	4047.1	3955.7	3713.5	3460.5	3392.2
37.5°	3825.4	3658.3	3393.6	3129.6	3026.6
40°	3512.3	3319.3	3073.7	2800.8	2686.9
42.5°	3073.7	3002.1	2798.8	2491.8	2356.1
45°	2529.3	2718.3	2536.2	2238.8	2052.5
47.5°	2165.1	2427.7	2208.7	1993.9	1737.4
50°	1877.9	2058.7	1904.5	1710.8	1506.8
52.5°	1670.5	1725.1	1663.0	1450.2	1334.2
55°	1501.4	1460.4	1444.8	1241.5	1181.5
57.5°	1291.3	1268.8	1228.5	1082.5	1003.4
60°	1047.8	1095.5	991.8	950.2	824.0
62.5°	860.8	907.9	796.7	794.0	689.0
65°	742.2	731.2	679.4	661.0	616.0
67.5°	656.9	622.8	605.1	581.2	565.5
70°	570.3	555.9	523.9	528.7	507.5
72.5°	475.4	493.9	461.8	470.7	432.5
75°	391.5	423.6	420.9	403.8	370.4
77.5°	322.6	356.8	362.9	347.2	319.9
80°	264.0	287.2	288.5	279.0	261.9
82.5°	193.7	207.4	217.6	201.2	190.3
85°	115.3	131.0	135.1	118.0	109.8
87.5°	37.5	52.5	58.7	60.7	61.4
90°	0.7	9.5	19.1	22.5	23.9
92.5°	0.7	2.7	4.1	6.1	6.8
95°	0.7	1.4	2.0	2.0	1.4
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)