

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: P859865

Luminaire Tested: **SPHB-12SE-N-L750-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: P859865
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-12SE-N-L750-CD
Description: 12000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 5000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

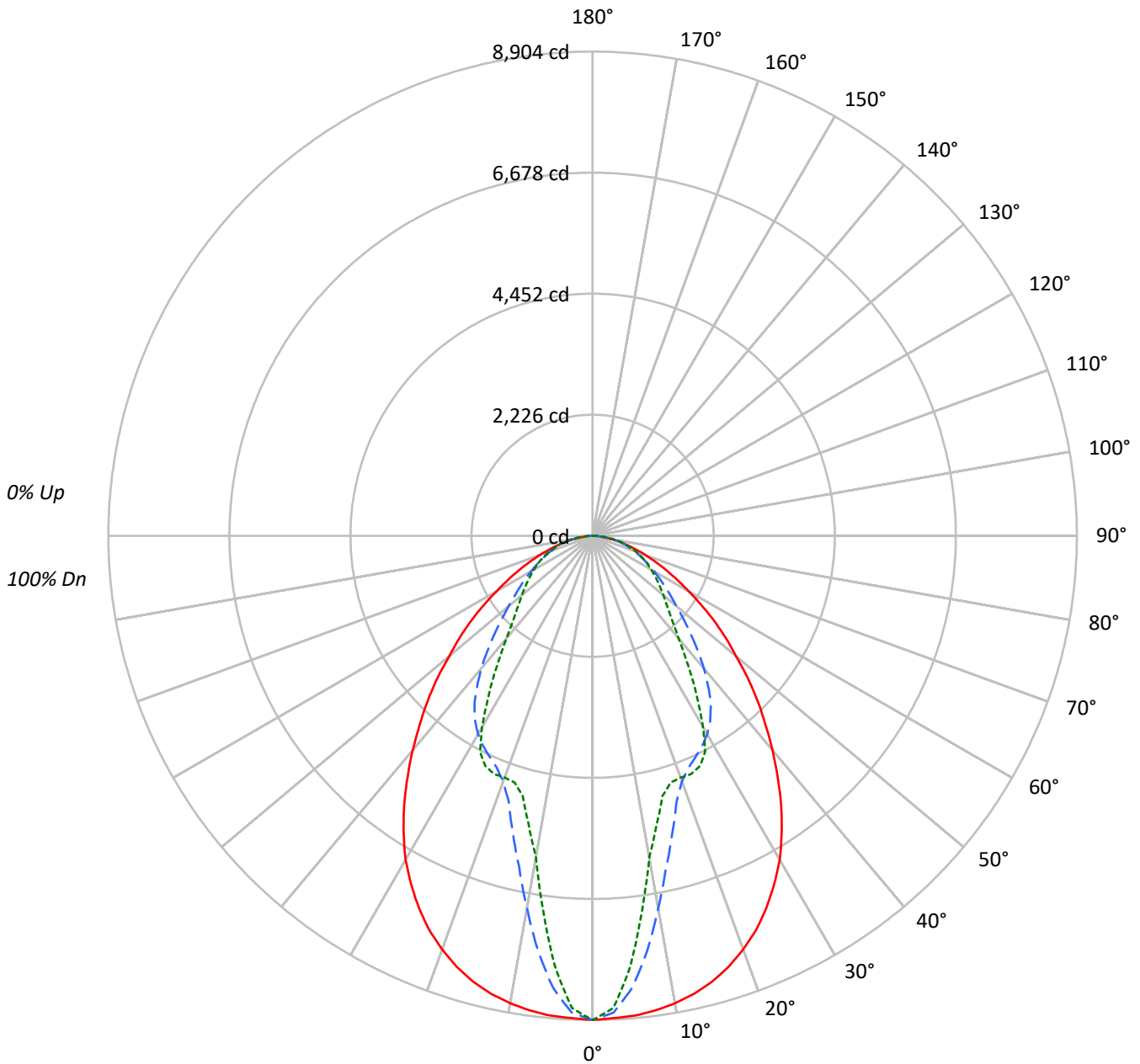
Lumens per Lamp: N/A
Luminaire Lumens: 13050.0 lumens
Efficiency: N/A
Efficacy: 171.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86								
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74								
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64								
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56								
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50								
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45								
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40								
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37								
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34								
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	69452	69452	69452
5°	69372	65349	62256
10°	69135	55083	47486
15°	68560	45724	40016
20°	67179	39858	39282
25°	65020	38565	40203
30°	61946	37947	36587
35°	57516	36060	30318
40°	52375	32372	25035
45°	47277	28089	21978
50°	41722	24424	20580
55°	37023	22029	19809
60°	31729	20370	19406
65°	27463	19145	19309
70°	23501	18418	19284
75°	19727	17883	19113
80°	15052	17280	18717
85°	9853	15330	14418



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	759.2	5.8
10°-20°	1743.1	13.4
20°-30°	2355.8	18.1
30°-40°	2479.3	19.0
40°-50°	2103.8	16.1
50°-60°	1629.7	12.5
60°-70°	1135.0	8.7
70°-80°	649.9	5.0
80°-90°	189.1	1.4
90°-100°	5.0	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°	4858.1	37.2
0°-40°	7337.4	56.2
0°-60°	11070.9	84.8
0°-90°	13045.0	100.0
90°-120°	5.0	0.0
90°-150°	5.0	0.0
90°-180°	5.0	0.0
0°-180°	13050.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8904	8904	8904	8904	8904	
5°	8860	8698	8346	8026	7951	841
15°	8490	7206	5662	5097	4956	2389
25°	7555	5337	4481	4611	4671	3468
35°	6040	4104	3787	3421	3184	3765
45°	4286	3082	2546	2092	1992	3301
55°	2722	2076	1620	1472	1457	2434
65°	1488	1218	1037	1037	1046	1486
75°	655	582	593	631	634	698
85°	110	143	171	161	161	140
90°	1	13	25	32	33	6
95°	1	2	4	4	3	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: P859865

CATALOG NUMBER: SPHB-12SE-N-L750-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8904.2	8904.2	8904.2	8904.2	8904.2
2.5°	8878.4	8849.2	8777.8	8731.6	8695.6
5°	8860.1	8697.6	8346.2	8026.0	7951.2
7.5°	8805.0	8448.1	7697.0	7104.9	6955.4
10°	8728.9	8089.9	6954.7	6213.1	5995.5
12.5°	8627.6	7707.2	6243.6	5544.8	5438.1
15°	8490.3	7206.2	5662.4	5096.9	4955.5
17.5°	8312.2	6688.2	5126.1	4799.1	4759.7
20°	8093.3	6213.1	4801.9	4690.4	4732.5
22.5°	7847.2	5751.5	4613.6	4660.5	4739.3
25°	7554.9	5336.8	4481.0	4610.8	4671.3
27.5°	7226.6	4962.3	4359.3	4478.3	4478.3
30°	6877.9	4650.3	4213.2	4202.3	4062.3
32.5°	6470.7	4385.2	4022.2	3806.7	3598.7
35°	6040.4	4104.4	3787.0	3420.6	3184.0
37.5°	5589.0	3843.4	3489.2	3005.9	2785.7
40°	5143.8	3585.8	3179.3	2633.4	2458.7
42.5°	4700.6	3323.4	2856.4	2331.6	2193.6
45°	4285.9	3082.1	2546.4	2092.3	1992.4
47.5°	3864.5	2825.8	2260.2	1899.9	1830.6
50°	3438.3	2566.1	2012.8	1747.0	1696.0
52.5°	3079.3	2324.1	1802.7	1602.2	1571.6
55°	2722.5	2076.0	1619.9	1472.4	1456.7
57.5°	2368.3	1844.9	1452.7	1353.4	1350.0
60°	2033.9	1628.7	1305.8	1251.4	1244.0
62.5°	1749.0	1413.9	1166.5	1140.6	1144.0
65°	1488.0	1218.1	1037.3	1037.3	1046.2
67.5°	1246.0	1038.0	919.0	934.7	946.9
70°	1030.5	874.9	807.6	834.8	845.6
72.5°	826.6	723.3	700.8	730.7	739.6
75°	654.6	581.9	593.4	630.8	634.2
77.5°	485.4	458.2	488.1	528.9	536.3
80°	335.1	337.8	384.7	413.3	416.7
82.5°	216.2	235.9	288.2	303.2	297.7
85°	110.1	142.8	171.3	161.1	161.1
87.5°	42.1	61.9	72.7	85.7	90.4
90°	0.7	12.9	25.2	31.9	33.3
92.5°	0.7	3.4	5.4	6.1	5.4
95°	0.7	2.0	4.1	4.1	3.4
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)