

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: P859874

Luminaire Tested: **SPHB-12SE-W-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: P859874
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-12SE-W-L750-CD
Description: 12000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 5000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

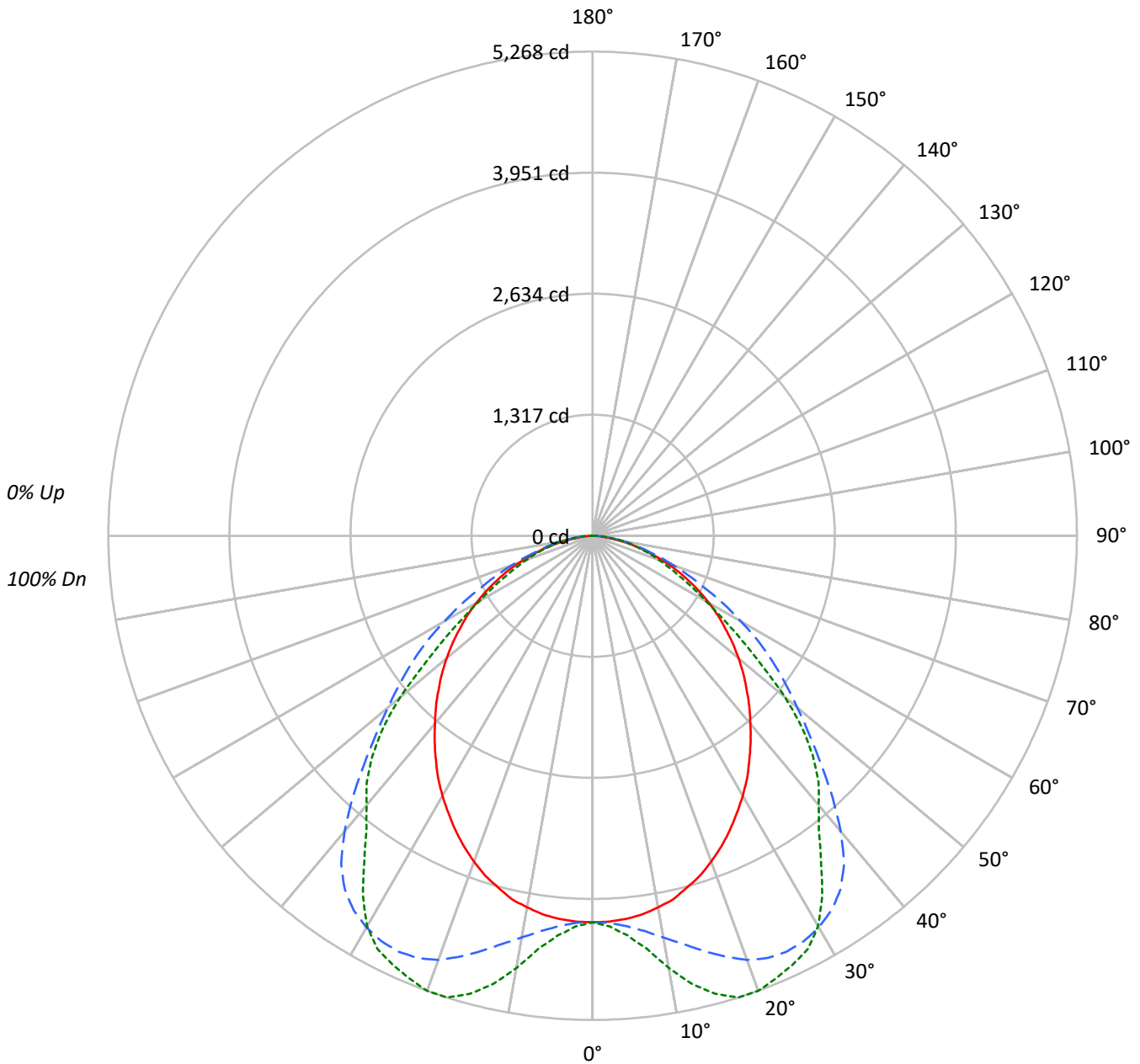
Lumens per Lamp: N/A
Luminaire Lumens: 13233.0 lumens
Efficiency: N/A
Efficacy: 173.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	32803	32803	32803
5°	32768	33387	34178
10°	32510	35149	37813
15°	32002	37766	41651
20°	31309	40769	43731
25°	30405	42969	44305
30°	29416	44312	44185
35°	28312	44758	41229
40°	27171	42736	38941
45°	26143	38738	37361
50°	25123	35223	33121
55°	23975	32543	26953
60°	22788	29014	22197
65°	21219	24931	19248
70°	19305	21287	17407
75°	16578	17865	15960
80°	12959	15322	14800
85°	8761	13004	12198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	412.9	3.1
10°-20°	1309.3	9.9
20°-30°	2142.8	16.2
30°-40°	2614.1	19.8
40°-50°	2588.9	19.6
50°-60°	2070.3	15.6
60°-70°	1291.5	9.8
70°-80°	632.8	4.8
80°-90°	166.0	1.3
90°-100°	4.4	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°	3865.0	29.2
0°-40°	6479.1	49.0
0°-60°	11138.3	84.2
0°-90°	13228.6	100.0
90°-120°	4.4	0.0
90°-150°	4.4	0.0
90°-180°	4.0	0.0
0°-180°	13233.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4206	4206	4206	4206	4206	
5°	4185	4204	4264	4338	4365	397
15°	3963	4194	4677	5049	5158	1117
25°	3533	4131	4993	5137	5148	1626
35°	2973	3973	4700	4449	4330	1860
45°	2370	3682	3512	3394	3387	1831
55°	1763	2827	2393	2162	1982	1580
65°	1150	1586	1351	1120	1043	1140
75°	550	674	593	543	530	584
85°	98	139	145	138	136	121
90°	0	14	26	33	34	6
95°	0	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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4205.6	4205.6	4205.6	4205.6	4205.6
2.5°	4201.4	4199.9	4215.1	4243.0	4255.7
5°	4185.1	4203.5	4264.1	4338.3	4365.2
7.5°	4155.6	4205.1	4338.8	4475.2	4533.1
10°	4104.6	4206.2	4437.8	4678.4	4774.2
12.5°	4051.9	4202.5	4547.8	4888.4	4993.2
15°	3963.0	4193.5	4676.8	5049.0	5158.0
17.5°	3880.3	4183.0	4801.0	5185.3	5268.0
20°	3771.9	4167.7	4911.6	5226.9	5268.5
22.5°	3658.2	4155.6	4972.7	5199.0	5211.7
25°	3532.9	4130.9	4992.7	5137.4	5148.0
27.5°	3399.2	4108.8	4973.7	5061.1	5070.0
30°	3266.0	4068.8	4920.0	4942.1	4905.8
32.5°	3126.5	4028.8	4833.1	4733.7	4648.9
35°	2973.3	3973.0	4700.5	4449.4	4329.9
37.5°	2822.2	3919.3	4493.6	4131.4	4041.4
40°	2668.5	3852.9	4197.2	3834.5	3824.5
42.5°	2523.2	3781.3	3861.9	3603.4	3637.1
45°	2370.0	3681.8	3511.8	3393.9	3387.0
47.5°	2224.7	3544.4	3193.3	3162.3	3092.2
50°	2070.4	3354.9	2902.7	2873.3	2729.5
52.5°	1919.4	3113.3	2643.2	2532.7	2323.1
55°	1763.0	2826.9	2393.1	2162.0	1982.0
57.5°	1617.7	2512.1	2138.9	1839.3	1677.7
60°	1460.8	2193.1	1859.9	1556.1	1422.9
62.5°	1307.1	1878.8	1607.2	1315.0	1226.6
65°	1149.7	1586.1	1350.8	1120.2	1042.9
67.5°	999.2	1332.9	1129.2	944.4	892.8
70°	846.5	1081.3	933.4	793.3	763.3
72.5°	689.1	863.9	754.9	669.6	647.0
75°	550.1	673.8	592.8	542.7	529.6
77.5°	409.6	501.2	463.3	433.8	430.1
80°	288.5	361.7	341.1	335.3	329.5
82.5°	184.3	236.4	242.7	239.0	234.8
85°	97.9	139.0	145.3	137.9	136.3
87.5°	39.5	60.5	65.3	72.1	74.2
90°	0.5	14.2	25.8	32.6	33.7
92.5°	0.5	3.2	3.7	3.7	3.2
95°	0.5	2.1	2.1	1.6	1.1
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)