

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: P860036

Luminaire Tested: **SPHB-24SE-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: P860036
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-24SE-W-L750-CD
Description: 24000 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

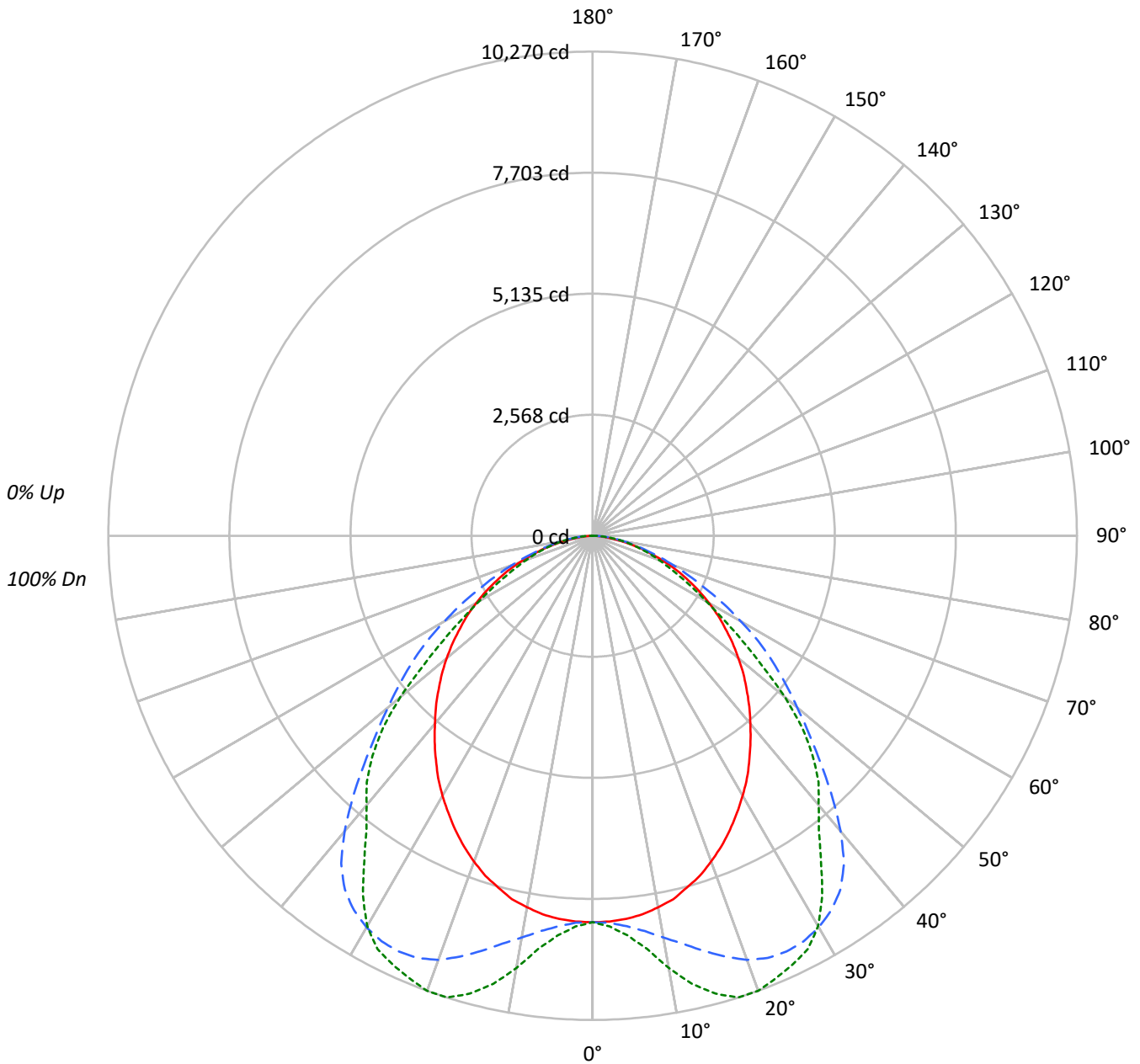
Lumens per Lamp: N/A
Luminaire Lumens: 25794.0 lumens
Efficiency: N/A
Efficacy: 162.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

Input Watts (W): 158.6
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°	63942	63942	63942
5°	63873	65078	66620
10°	63368	68512	73705
15°	62378	73613	81187
20°	61027	79468	85242
25°	59265	83755	86360
30°	57337	86375	86126
35°	55186	87243	80364
40°	52961	83303	75905
45°	50958	75509	72826
50°	48973	68658	64562
55°	46732	63436	52538
60°	44421	56554	43268
65°	41362	48595	37518
70°	37629	41490	33932
75°	32316	34820	31110
80°	25257	29866	28855
85°	17084	25345	23788



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	804.9	3.1
10°-20°	2552.2	9.9
20°-30°	4176.8	16.2
30°-40°	5095.4	19.8
40°-50°	5046.4	19.6
50°-60°	4035.5	15.6
60°-70°	2517.5	9.8
70°-80°	1233.4	4.8
80°-90°	323.5	1.3
90°-100°	8.5	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°	7533.8	29.2
0°-40°	12629.2	49.0
0°-60°	21711.1	84.2
0°-90°	25785.5	100.0
90°-120°	8.5	0.0
90°-150°	8.5	0.0
90°-180°	9.0	0.0
0°-180°	25794.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8198	8198	8198	8198	8198	
5°	8158	8194	8312	8456	8509	774
15°	7725	8174	9116	9842	10054	2178
25°	6886	8052	9732	10014	10034	3169
35°	5796	7744	9162	8673	8440	3625
45°	4620	7177	6845	6615	6602	3568
55°	3436	5510	4665	4214	3863	3079
65°	2241	3092	2633	2184	2033	2222
75°	1072	1313	1155	1058	1032	1138
85°	191	271	283	269	266	236
90°	1	28	50	64	66	11
95°	1	4	4	3	2	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°	8197.7	8197.7	8197.7	8197.7	8197.7
2.5°	8189.5	8186.4	8216.2	8270.6	8295.2
5°	8157.7	8193.6	8311.6	8456.3	8508.6
7.5°	8100.2	8196.7	8457.3	8723.1	8836.0
10°	8000.7	8198.7	8650.2	9119.2	9305.9
12.5°	7898.1	8191.6	8864.7	9528.6	9732.8
15°	7724.7	8174.1	9116.1	9841.6	10054.0
17.5°	7563.6	8153.6	9358.3	10107.3	10268.4
20°	7352.2	8123.8	9573.8	10188.4	10269.5
22.5°	7130.5	8100.2	9692.8	10134.0	10158.6
25°	6886.3	8052.0	9731.8	10014.0	10034.5
27.5°	6625.7	8008.9	9694.8	9865.2	9882.6
30°	6366.1	7930.9	9590.2	9633.3	9562.5
32.5°	6094.2	7852.9	9420.9	9226.9	9061.7
35°	5795.6	7744.2	9162.3	8672.8	8439.9
37.5°	5501.1	7639.5	8759.0	8053.0	7877.6
40°	5201.4	7510.2	8181.3	7474.3	7454.8
42.5°	4918.2	7370.7	7527.7	7023.8	7089.5
45°	4619.6	7176.7	6845.3	6615.4	6602.1
47.5°	4336.4	6908.9	6224.5	6163.9	6027.5
50°	4035.8	6539.5	5658.1	5600.6	5320.5
52.5°	3741.3	6068.5	5152.2	4936.7	4528.3
55°	3436.5	5510.3	4664.8	4214.3	3863.4
57.5°	3153.3	4896.7	4169.1	3585.3	3270.3
60°	2847.5	4274.8	3625.3	3033.2	2773.6
62.5°	2547.9	3662.2	3132.8	2563.3	2390.9
65°	2241.1	3091.7	2633.0	2183.6	2032.8
67.5°	1947.6	2598.2	2201.0	1840.9	1740.3
70°	1650.0	2107.7	1819.3	1546.4	1487.9
72.5°	1343.2	1683.9	1471.5	1305.2	1261.1
75°	1072.3	1313.4	1155.4	1057.9	1032.3
77.5°	798.3	976.9	903.0	845.5	838.3
80°	562.3	704.9	664.9	653.6	642.4
82.5°	359.1	460.7	473.0	465.9	457.7
85°	190.9	270.9	283.2	268.8	265.8
87.5°	77.0	118.0	127.2	140.6	144.7
90°	1.0	27.7	50.3	63.6	65.7
92.5°	1.0	6.2	7.2	7.2	6.2
95°	1.0	4.1	4.1	3.1	2.1
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)