

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: P860035

Luminaire Tested: **SPHB-24SE-W-L740-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: P860035
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-L740-CD
Description: 24000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens
and, 4000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

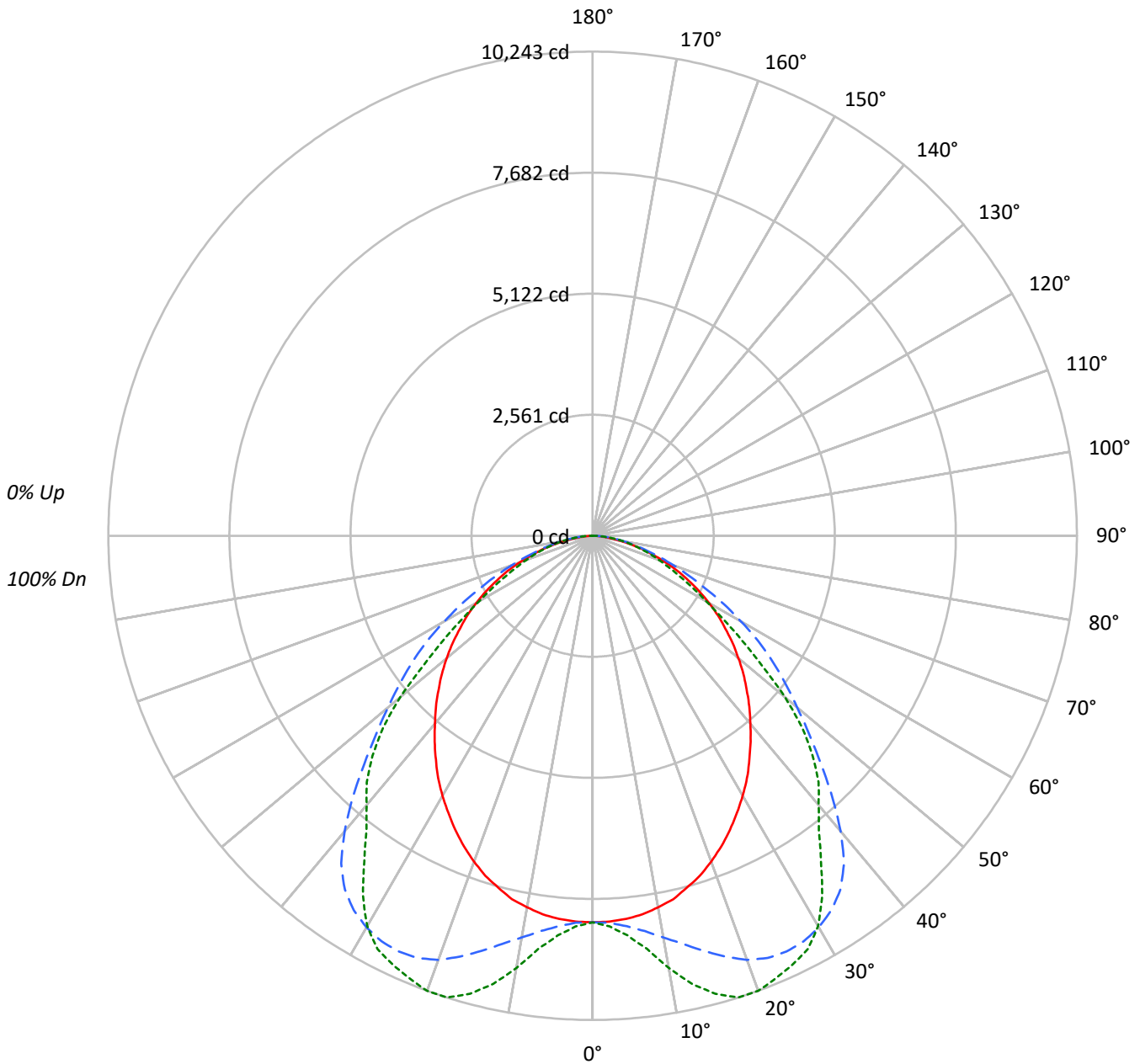
Lumens per Lamp: N/A
Luminaire Lumens: 25728.0 lumens
Efficiency: N/A
Efficacy: 162.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 1.38' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P860035

CATALOG NUMBER: SPHB-24SE-W-L740-CD

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°	63778	63778	63778
5°	63709	64912	66450
10°	63205	68337	73517
15°	62218	73425	80979
20°	60871	79264	85024
25°	59114	83540	86139
30°	57190	86153	85905
35°	55044	87019	80159
40°	52826	83090	75711
45°	50828	75316	72640
50°	48846	68483	64396
55°	46613	63272	52403
60°	44307	56409	43157
65°	41255	48472	37422
70°	37533	41385	33846
75°	32234	34732	31029
80°	25195	29790	28779
85°	17040	25282	23725



TEST NUMBER: P860035

CATALOG NUMBER: SPHB-24SE-W-L740-CD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	802.8	3.1
10°-20°	2545.6	9.9
20°-30°	4166.1	16.2
30°-40°	5082.3	19.8
40°-50°	5033.5	19.6
50°-60°	4025.1	15.6
60°-70°	2511.0	9.8
70°-80°	1230.3	4.8
80°-90°	322.7	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°	7514.5	29.2
0°-40°	12596.9	49.0
0°-60°	21655.5	84.2
0°-90°	25719.5	100.0
90°-120°	8.5	0.0
90°-150°	8.5	0.0
90°-180°	8.0	0.0
0°-180°	25728.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8177	8177	8177	8177	8177	
5°	8137	8173	8290	8435	8487	772
15°	7705	8153	9093	9816	10028	2172
25°	6869	8031	9707	9988	10009	3161
35°	5781	7724	9139	8651	8418	3616
45°	4608	7158	6828	6598	6585	3559
55°	3428	5496	4653	4204	3854	3071
65°	2235	3084	2626	2178	2028	2216
75°	1070	1310	1152	1055	1030	1135
85°	190	270	282	268	265	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



TEST NUMBER: P860035

CATALOG NUMBER: SPHB-24SE-W-L740-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8176.7	8176.7	8176.7	8176.7	8176.7
2.5°	8168.6	8165.5	8195.2	8249.4	8274.0
5°	8136.8	8172.6	8290.4	8434.7	8486.9
7.5°	8079.5	8175.7	8435.7	8700.8	8813.4
10°	7980.2	8177.8	8628.1	9095.8	9282.1
12.5°	7877.9	8170.6	8842.0	9504.2	9707.9
15°	7704.9	8153.2	9092.8	9816.4	10028.3
17.5°	7544.2	8132.7	9334.3	10081.5	10242.2
20°	7333.4	8103.0	9549.3	10162.3	10243.2
22.5°	7112.3	8079.5	9668.0	10108.1	10132.7
25°	6868.7	8031.4	9706.9	9988.3	10008.8
27.5°	6608.7	7988.4	9670.0	9839.9	9857.3
30°	6349.8	7910.6	9565.6	9608.6	9538.0
32.5°	6078.6	7832.8	9396.8	9203.3	9038.5
35°	5780.7	7724.4	9138.8	8650.6	8418.3
37.5°	5487.0	7620.0	8736.6	8032.4	7857.4
40°	5188.1	7491.0	8160.4	7455.2	7435.7
42.5°	4905.6	7351.8	7508.4	7005.9	7071.4
45°	4607.8	7158.4	6827.8	6598.5	6585.2
47.5°	4325.3	6891.2	6208.6	6148.2	6012.0
50°	4025.4	6522.8	5643.6	5586.3	5306.8
52.5°	3731.7	6053.0	5139.0	4924.1	4516.7
55°	3427.7	5496.2	4652.8	4203.5	3853.5
57.5°	3145.2	4884.1	4158.5	3576.1	3261.9
60°	2840.2	4263.9	3616.0	3025.5	2766.5
62.5°	2541.4	3652.9	3124.7	2556.7	2384.8
65°	2235.3	3083.8	2626.3	2178.0	2027.6
67.5°	1942.6	2591.5	2195.4	1836.2	1735.9
70°	1645.8	2102.3	1814.7	1542.4	1484.1
72.5°	1339.8	1679.6	1467.7	1301.9	1257.9
75°	1069.6	1310.1	1152.5	1055.2	1029.6
77.5°	796.3	974.4	900.7	843.4	836.2
80°	560.9	703.1	663.2	652.0	640.7
82.5°	358.2	459.6	471.8	464.7	456.5
85°	190.4	270.2	282.5	268.2	265.1
87.5°	76.8	117.7	126.9	140.2	144.3
90°	1.0	27.6	50.2	63.5	65.5
92.5°	1.0	6.1	7.2	7.2	6.1
95°	1.0	4.1	4.1	3.1	2.0
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



TEST NUMBER: P860035

CATALOG NUMBER: SPHB-24SE-W-L740-CD

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)