

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: P860143

Luminaire Tested: **SPHB-36SE-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: P860143  
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-36SE-W-L740-CD  
Description: 36000 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**

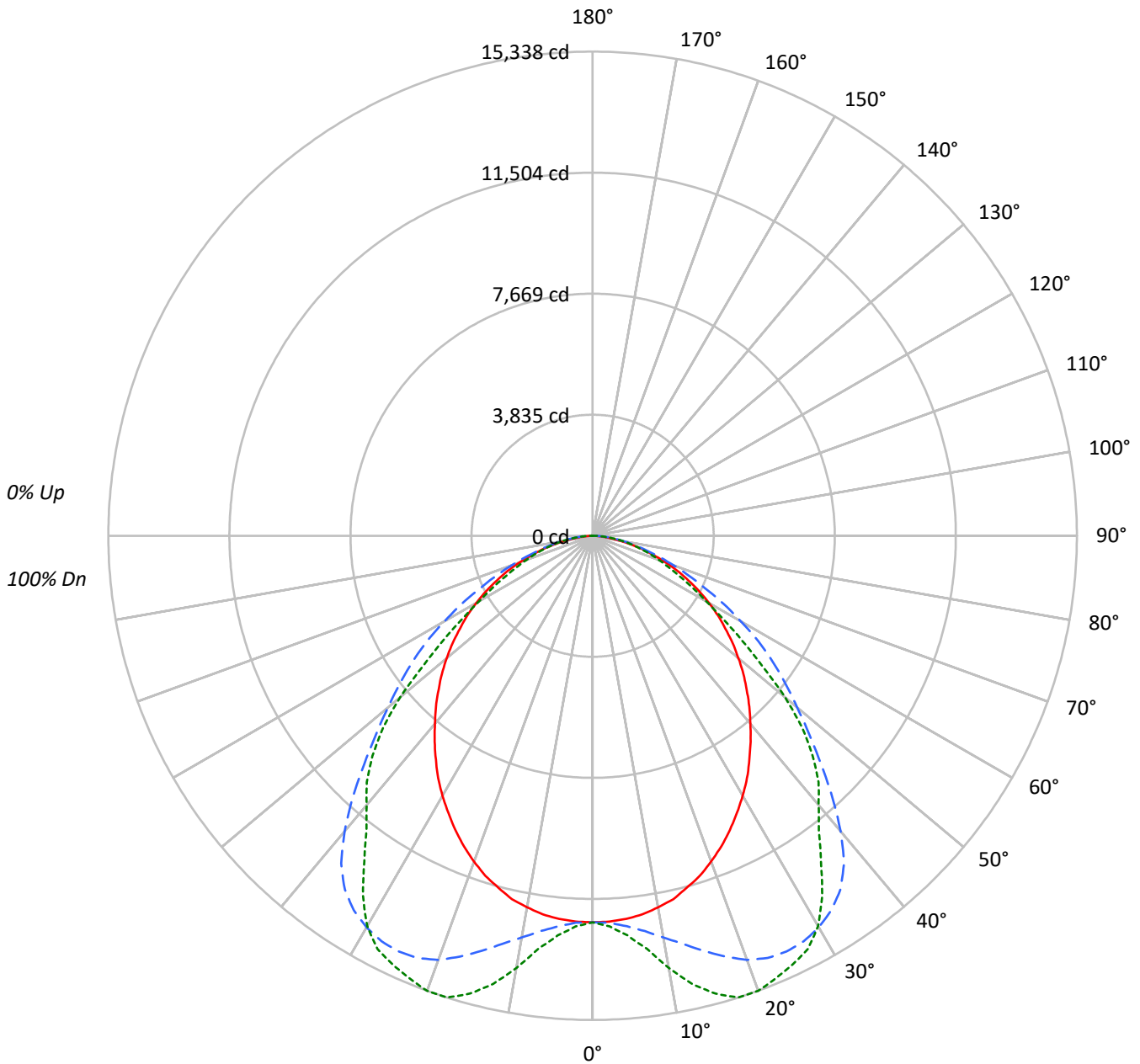
Lumens per Lamp: N/A  
Luminaire Lumens: 38525.0 lumens  
Efficiency: N/A  
Efficacy: 160.0 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

Input Watts (W): 240.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P860143

CATALOG NUMBER: SPHB-36SE-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°	64604	64604	64604
5°	64534	65751	67310
10°	64024	69222	74468
15°	63023	74376	82027
20°	61659	80290	86124
25°	59879	84621	87253
30°	57931	87269	87017
35°	55756	88146	81196
40°	53510	84165	76691
45°	51486	76291	73581
50°	49479	69369	65230
55°	47216	64092	53081
60°	44880	57140	43716
65°	41790	49099	37906
70°	38019	41920	34282
75°	32651	35181	31432
80°	25521	30176	29152
85°	17260	25609	24028



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1202.1	3.1
10°-20°	3811.8	9.9
20°-30°	6238.3	16.2
30°-40°	7610.2	19.8
40°-50°	7537.1	19.6
50°-60°	6027.2	15.6
60°-70°	3760.0	9.8
70°-80°	1842.2	4.8
80°-90°	483.2	1.3
90°-100°	12.7	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°	11252.2	29.2
0°-40°	18862.5	49.0
0°-60°	32426.9	84.2
0°-90°	38512.3	100.0
90°-120°	12.7	0.0
90°-150°	12.7	0.0
90°-180°	13.0	0.0
0°-180°	38525.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12244	12244	12244	12244	12244	
5°	12184	12238	12414	12630	12708	###
15°	11537	12209	13616	14699	15016	3252
25°	10285	12026	14535	14956	14987	4733
35°	8656	11566	13684	12953	12606	5414
45°	6900	10719	10224	9881	9861	5329
55°	5133	8230	6967	6294	5770	4599
65°	3347	4618	3933	3261	3036	3319
75°	1602	1962	1726	1580	1542	1700
85°	285	405	423	402	397	353
90°	2	41	75	95	98	16
95°	2	6	6	5	3	1
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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CATALOG NUMBER: SPHB-36SE-W-L740-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12243.8	12243.8	12243.8	12243.8	12243.8
2.5°	12231.6	12227.0	12271.4	12352.6	12389.4
5°	12184.0	12237.7	12413.9	12630.0	12708.2
7.5°	12098.2	12242.3	12631.6	13028.5	13197.1
10°	11949.6	12245.4	12919.7	13620.1	13899.0
12.5°	11796.3	12234.6	13240.0	14231.6	14536.6
15°	11537.3	12208.6	13615.5	14699.0	15016.3
17.5°	11296.7	12177.9	13977.2	15096.0	15336.6
20°	10981.0	12133.5	14299.0	15217.0	15338.1
22.5°	10649.9	12098.2	14476.8	15135.8	15172.6
25°	10285.2	12026.2	14535.0	14956.5	14987.1
27.5°	9895.9	11961.8	14479.9	14734.3	14760.3
30°	9508.2	11845.3	14323.5	14387.9	14282.2
32.5°	9102.0	11728.9	14070.7	13781.0	13534.3
35°	8656.0	11566.4	13684.4	12953.4	12605.5
37.5°	8216.2	11410.1	13082.1	12027.7	11765.7
40°	7768.7	11217.0	12219.3	11163.3	11134.2
42.5°	7345.7	11008.6	11243.0	10490.5	10588.6
45°	6899.7	10718.9	10223.9	9880.6	9860.7
47.5°	6476.7	10318.9	9296.7	9206.2	9002.4
50°	6027.7	9767.2	8450.7	8364.8	7946.5
52.5°	5587.8	9063.7	7695.1	7373.3	6763.3
55°	5132.6	8230.0	6967.1	6294.3	5770.2
57.5°	4709.6	7313.5	6226.9	5354.9	4884.3
60°	4252.9	6384.7	5414.6	4530.3	4142.6
62.5°	3805.4	5469.8	4679.0	3828.4	3570.9
65°	3347.2	4617.7	3932.6	3261.3	3036.1
67.5°	2908.8	3880.5	3287.4	2749.5	2599.3
70°	2464.4	3147.9	2717.3	2309.6	2222.2
72.5°	2006.2	2515.0	2197.7	1949.4	1883.5
75°	1601.6	1961.7	1725.7	1580.1	1541.8
77.5°	1192.4	1459.0	1348.7	1262.8	1252.1
80°	839.9	1052.9	993.1	976.3	959.4
82.5°	536.4	688.1	706.5	695.8	683.5
85°	285.1	404.6	423.0	401.5	396.9
87.5°	114.9	176.2	190.0	210.0	216.1
90°	1.5	41.4	75.1	95.0	98.1
92.5°	1.5	9.2	10.7	10.7	9.2
95°	1.5	6.1	6.1	4.6	3.1
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)