

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: P860134

Luminaire Tested: **SPHB-36SE-N-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: P860134  
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-36SE-N-L740-CD  
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 4000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

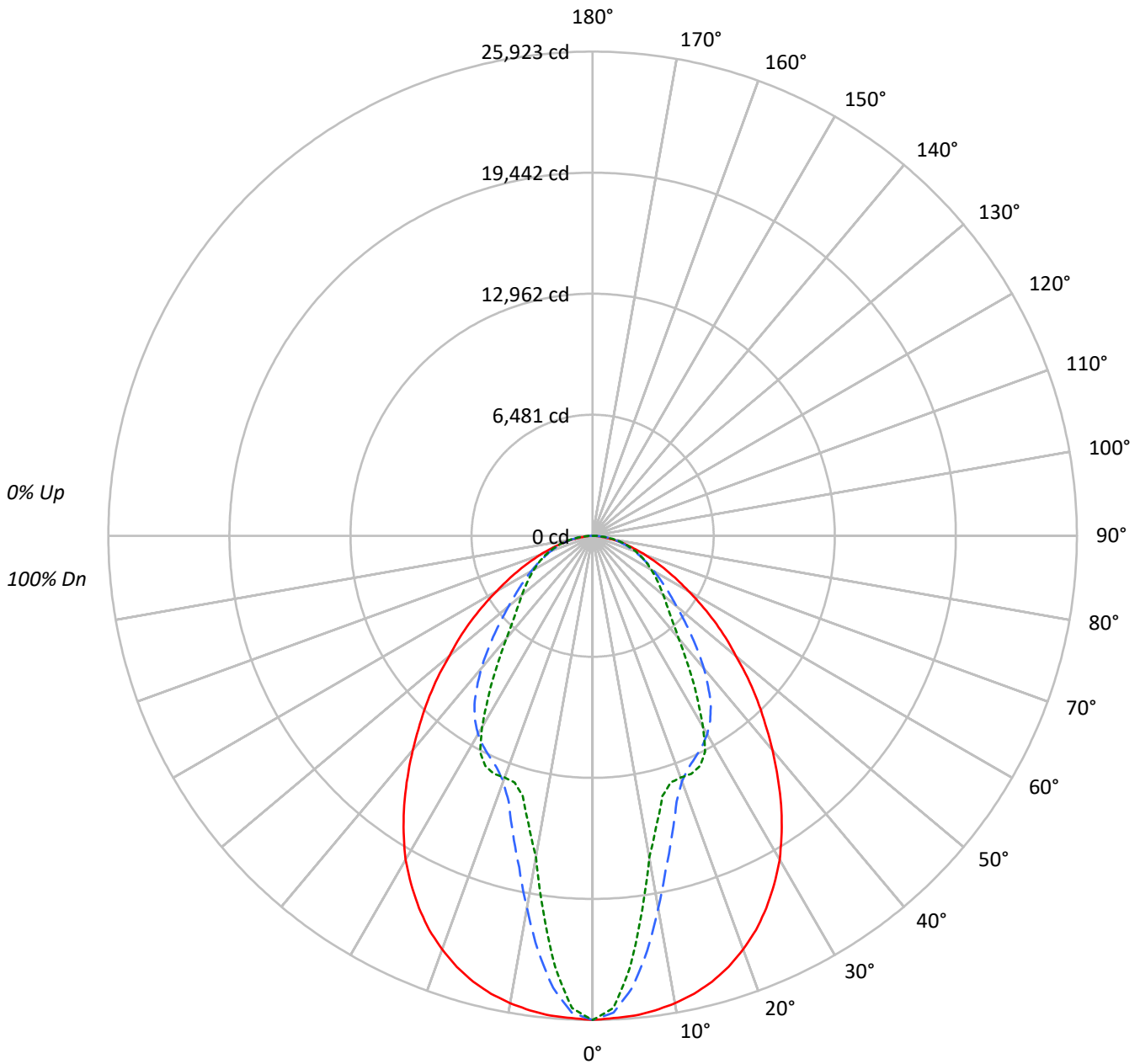
Lumens per Lamp: N/A  
Luminaire Lumens: 37992.0 lumens  
Efficiency: N/A  
Efficacy: 157.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

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

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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°	136779	136779	136779
5°	136620	128696	122606
10°	136153	108479	93519
15°	135020	90050	78807
20°	132300	78496	77362
25°	128049	75949	79175
30°	121996	74731	72055
35°	113272	71015	59708
40°	103145	63752	49304
45°	93106	55317	43283
50°	82166	48100	40530
55°	72911	43382	39013
60°	62485	40118	38217
65°	54085	37704	38025
70°	46283	36269	37979
75°	38853	35220	37642
80°	29644	34035	36861
85°	19409	30191	28393



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2210.1	5.8
10°-20°	5074.7	13.4
20°-30°	6858.3	18.1
30°-40°	7218.0	19.0
40°-50°	6124.7	16.1
50°-60°	4744.4	12.5
60°-70°	3304.3	8.7
70°-80°	1892.1	5.0
80°-90°	550.6	1.4
90°-100°	14.7	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°	14143.1	37.2
0°-40°	21361.1	56.2
0°-60°	32230.2	84.8
0°-90°	37977.3	100.0
90°-120°	14.7	0.0
90°-150°	14.7	0.0
90°-180°	15.0	0.0
0°-180°	37992.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	25923	25923	25923	25923	25923	
5°	25794	25321	24298	23366	23148	###
15°	24717	20979	16485	14838	14427	6955
25°	21994	15537	13045	13423	13600	10097
35°	17585	11949	11025	9958	9270	10962
45°	12477	8973	7413	6091	5800	9610
55°	7926	6044	4716	4286	4241	7086
65°	4332	3546	3020	3020	3046	4327
75°	1906	1694	1728	1836	1846	2032
85°	321	416	499	469	469	407
90°	2	38	73	93	97	18
95°	2	6	12	12	10	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-N-L740-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	25922.6	25922.6	25922.6	25922.6	25922.6
2.5°	25847.4	25762.3	25554.5	25419.9	25315.1
5°	25794.0	25321.0	24297.9	23365.8	23148.1
7.5°	25633.7	24594.7	22407.9	20684.3	20248.9
10°	25412.0	23551.8	20246.9	18087.8	17454.6
12.5°	25117.2	22437.6	18176.9	16142.5	15831.8
15°	24717.4	20979.1	16484.9	14838.4	14426.7
17.5°	24198.9	19471.1	14923.5	13971.6	13856.8
20°	23561.7	18087.8	13979.5	13654.9	13777.6
22.5°	22845.3	16744.1	13431.3	13567.9	13797.4
25°	21994.3	15536.9	13045.4	13423.4	13599.5
27.5°	21038.5	14446.5	12691.2	13037.5	13037.5
30°	20023.3	13538.2	12265.7	12234.0	11826.4
32.5°	18837.9	12766.4	11709.6	11082.3	10476.7
35°	17585.2	11949.1	11024.9	9958.2	9269.5
37.5°	16271.1	11189.1	10158.1	8751.0	8109.8
40°	14974.9	10439.1	9255.7	7666.6	7158.0
42.5°	13684.6	9675.2	8315.7	6787.9	6386.2
45°	12477.4	8972.7	7413.2	6091.3	5800.4
47.5°	11250.5	8226.6	6580.1	5531.2	5329.4
50°	10009.7	7470.6	5859.7	5086.0	4937.5
52.5°	8964.8	6766.1	5248.2	4664.4	4575.4
55°	7925.8	6043.8	4715.9	4286.5	4240.9
57.5°	6894.8	5370.9	4229.1	3940.1	3930.2
60°	5921.1	4741.6	3801.6	3643.3	3621.5
62.5°	5091.9	4116.3	3395.9	3320.7	3330.6
65°	4332.0	3546.3	3019.9	3019.9	3045.6
67.5°	3627.5	3021.9	2675.6	2721.1	2756.7
70°	3000.1	2546.9	2351.0	2430.2	2461.8
72.5°	2406.4	2105.6	2040.3	2127.4	2153.1
75°	1905.8	1694.0	1727.6	1836.5	1846.4
77.5°	1413.0	1333.8	1420.9	1539.6	1561.4
80°	975.6	983.6	1120.1	1203.2	1213.1
82.5°	629.3	686.7	839.1	882.6	866.8
85°	320.6	415.6	498.7	469.0	469.0
87.5°	122.7	180.1	211.8	249.4	263.2
90°	2.0	37.6	73.2	93.0	97.0
92.5°	2.0	9.9	15.8	17.8	15.8
95°	2.0	5.9	11.9	11.9	9.9
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)