

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: P860135

Luminaire Tested: **SPHB-36SE-N-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: P860135  
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-L750-CD  
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 5000K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

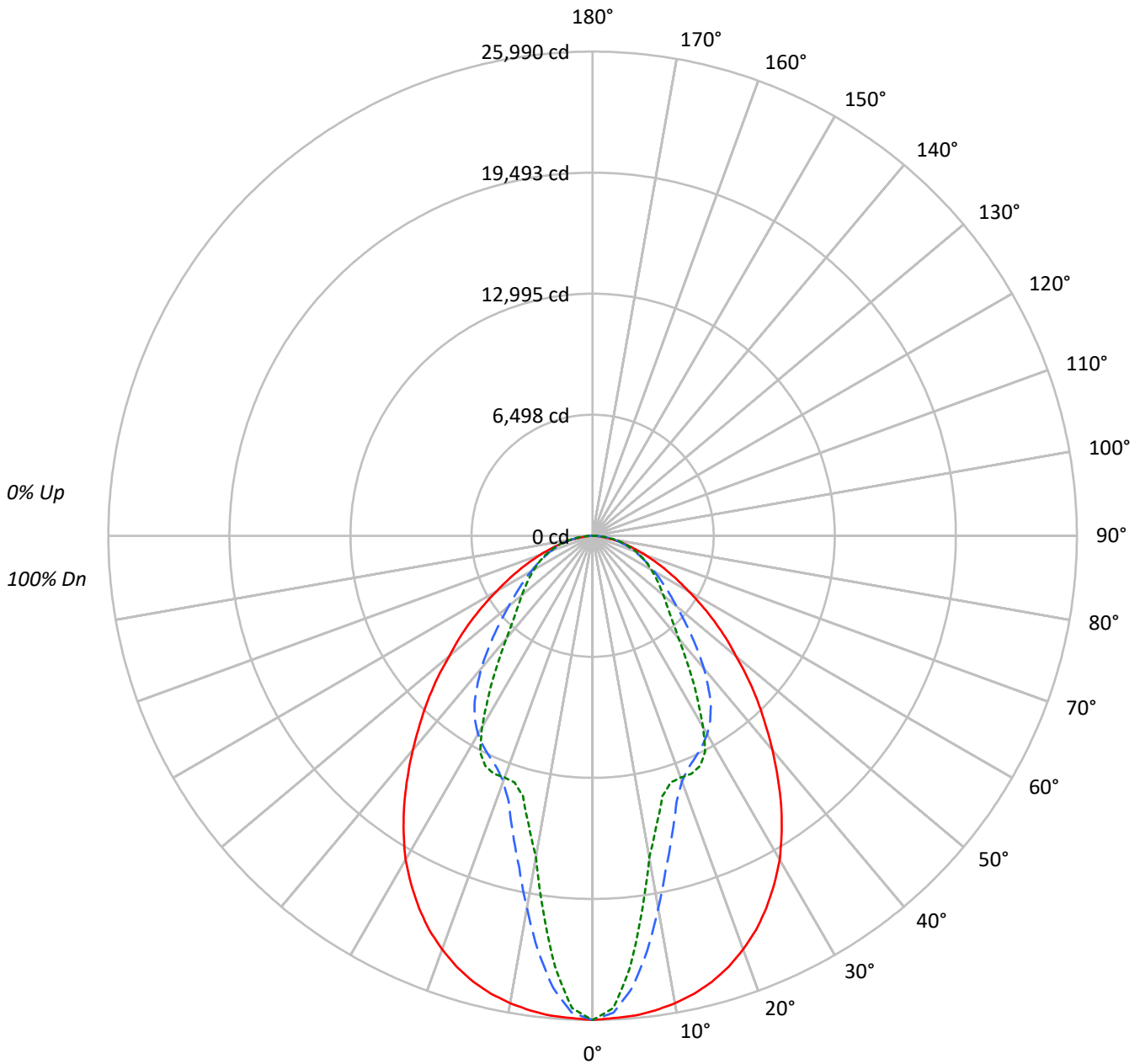
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 38090.0 lumens  
Efficiency: N/A  
Efficacy: 158.2 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°	137132	137132	137132
5°	136972	129027	122922
10°	136505	108759	93760
15°	135369	90282	79010
20°	132642	78698	77562
25°	128379	76145	79379
30°	122310	74924	72240
35°	113564	71198	59862
40°	103411	63916	49430
45°	93347	55461	43394
50°	82378	48225	40635
55°	73098	43495	39114
60°	62646	40221	38316
65°	54225	37801	38123
70°	46404	36364	38078
75°	38953	35312	37738
80°	29723	34123	36955
85°	19458	30270	28466



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2215.8	5.8
10°-20°	5087.8	13.4
20°-30°	6876.0	18.1
30°-40°	7236.6	19.0
40°-50°	6140.5	16.1
50°-60°	4756.7	12.5
60°-70°	3312.9	8.7
70°-80°	1897.0	5.0
80°-90°	552.0	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°	14179.6	37.2
0°-40°	21416.2	56.2
0°-60°	32313.3	84.8
0°-90°	38075.3	100.0
90°-120°	14.7	0.0
90°-150°	14.7	0.0
90°-180°	15.0	0.0
0°-180°	38090.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	25990	25990	25990	25990	25990	
5°	25860	25386	24360	23426	23208	###
15°	24781	21033	16527	14877	14464	6973
25°	22051	15577	13079	13458	13635	10123
35°	17630	11980	11053	9984	9293	10990
45°	12510	8996	7432	6107	5815	9635
55°	7946	6059	4728	4298	4252	7104
65°	4343	3556	3028	3028	3054	4338
75°	1911	1698	1732	1841	1851	2037
85°	321	417	500	470	470	409
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



TEST NUMBER: P860135

CATALOG NUMBER: SPHB-36SE-N-L750-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	25989.5	25989.5	25989.5	25989.5	25989.5
2.5°	25914.1	25828.8	25620.4	25485.5	25380.4
5°	25860.5	25386.3	24360.5	23426.0	23207.8
7.5°	25699.8	24658.1	22465.7	20737.6	20301.1
10°	25477.6	23612.5	20299.1	18134.5	17499.6
12.5°	25181.9	22495.5	18223.8	16184.1	15872.6
15°	24781.2	21033.2	16527.4	14876.6	14463.9
17.5°	24261.3	19521.4	14961.9	14007.6	13892.5
20°	23622.5	18134.5	14015.5	13690.2	13813.2
22.5°	22904.2	16787.3	13466.0	13602.9	13833.0
25°	22051.1	15577.0	13079.1	13458.0	13634.6
27.5°	21092.8	14483.8	12723.9	13071.1	13071.1
30°	20074.9	13573.1	12297.3	12265.6	11856.9
32.5°	18886.5	12799.3	11739.8	11110.8	10503.7
35°	17630.5	11979.9	11053.3	9983.9	9293.4
37.5°	16313.1	11218.0	10184.3	8773.6	8130.8
40°	15013.5	10466.0	9279.5	7686.3	7176.4
42.5°	13719.9	9700.2	8337.1	6805.4	6402.6
45°	12509.6	8995.8	7432.4	6107.0	5815.3
47.5°	11279.5	8247.8	6597.1	5545.5	5343.1
50°	10035.5	7489.9	5874.9	5099.1	4950.3
52.5°	8987.9	6783.6	5261.8	4676.5	4587.2
55°	7946.2	6059.4	4728.1	4297.5	4251.9
57.5°	6912.5	5384.8	4240.0	3950.3	3940.4
60°	5936.4	4753.9	3811.4	3652.7	3630.9
62.5°	5105.0	4126.9	3404.7	3329.3	3339.2
65°	4343.2	3555.5	3027.7	3027.7	3053.5
67.5°	3636.8	3029.7	2682.5	2728.1	2763.8
70°	3007.9	2553.5	2357.1	2436.5	2468.2
72.5°	2412.6	2111.1	2045.6	2132.9	2158.7
75°	1910.7	1698.4	1732.1	1841.2	1851.1
77.5°	1416.6	1337.3	1424.6	1543.6	1565.4
80°	978.2	986.1	1123.0	1206.3	1216.2
82.5°	630.9	688.5	841.2	884.9	869.0
85°	321.4	416.7	500.0	470.2	470.2
87.5°	123.0	180.6	212.3	250.0	263.9
90°	2.0	37.7	73.4	93.3	97.2
92.5°	2.0	9.9	15.9	17.9	15.9
95°	2.0	6.0	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)