

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: P860136

Luminaire Tested: **SPHB-36SE-N-L835-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: P860136  
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-L835-CD  
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 3500K 80CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

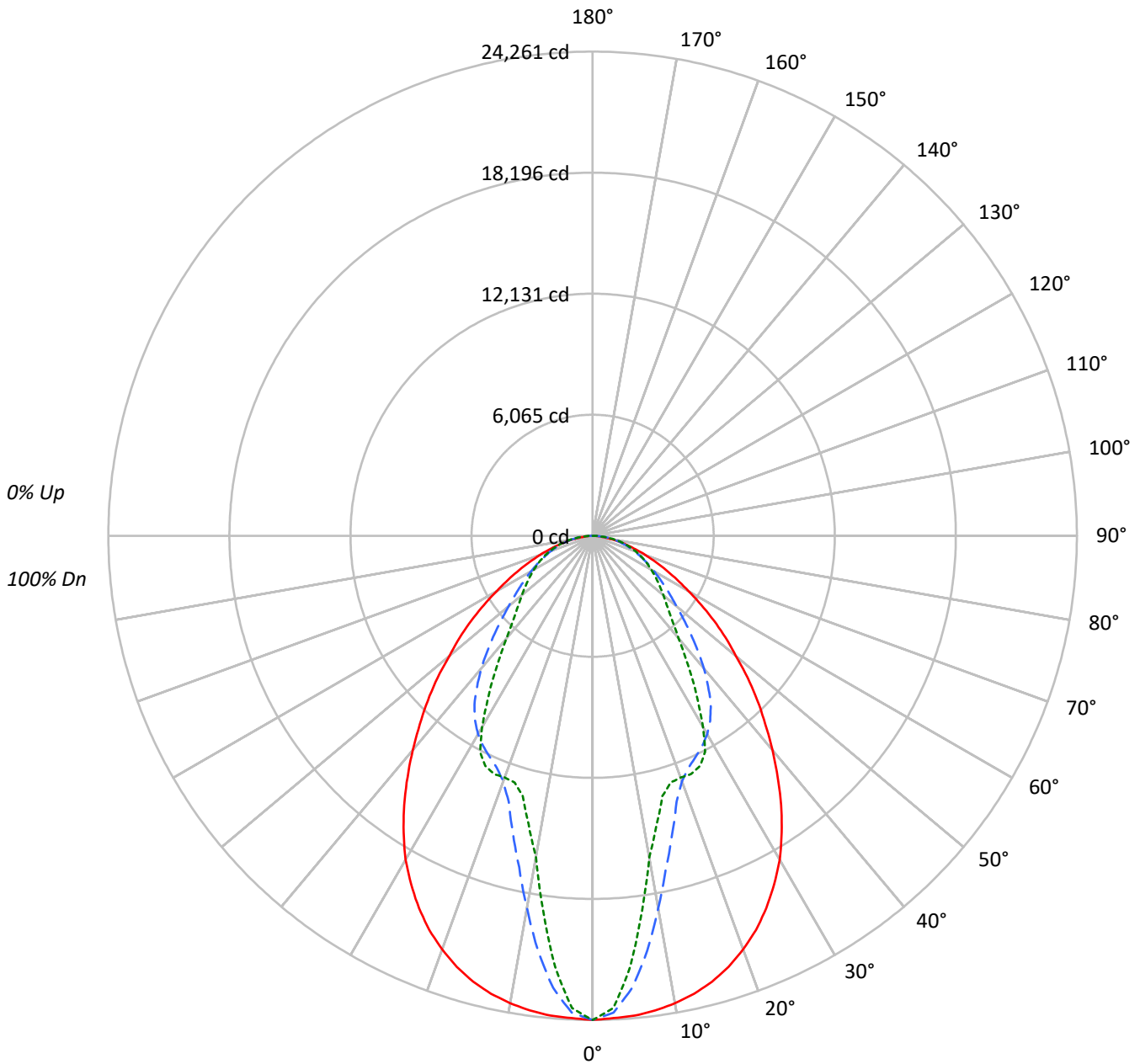
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35557.0 lumens  
Efficiency: N/A  
Efficacy: 147.7 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 (Ain): 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: P860136

CATALOG NUMBER: SPHB-36SE-N-L835-CD

### 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			100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86			86
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74			74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64			64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56			56
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			50
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45			45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40			40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37			37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34			34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31			31

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	128012	128012	128012
5°	127864	120447	114748
10°	127427	101527	87525
15°	126367	84278	73756
20°	123821	73465	72404
25°	119842	71081	74100
30°	114177	69942	67436
35°	106012	66464	55881
40°	96534	59666	46143
45°	87139	51772	40508
50°	76900	45018	37933
55°	68238	40601	36512
60°	58480	37547	35768
65°	50618	35288	35588
70°	43317	33945	35546
75°	36361	32963	35228
80°	27745	31853	34500
85°	18162	28254	26577



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2068.5	5.8
10°-20°	4749.5	13.4
20°-30°	6418.7	18.1
30°-40°	6755.3	19.0
40°-50°	5732.1	16.1
50°-60°	4440.3	12.5
60°-70°	3092.6	8.7
70°-80°	1770.9	5.0
80°-90°	515.3	1.4
90°-100°	13.8	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°	13236.7	37.2
0°-40°	19992.0	56.2
0°-60°	30164.5	84.8
0°-90°	35543.2	100.0
90°-120°	13.8	0.0
90°-150°	13.8	0.0
90°-180°	14.0	0.0
0°-180°	35557.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	24261	24261	24261	24261	24261	
5°	24141	23698	22741	21868	21664	###
15°	23133	19634	15428	13887	13502	6509
25°	20585	14541	12209	12563	12728	9449
35°	16458	11183	10318	9320	8675	10259
45°	11678	8398	6938	5701	5429	8994
55°	7418	5656	4414	4012	3969	6632
65°	4054	3319	2826	2826	2850	4050
75°	1784	1585	1617	1719	1728	1902
85°	300	389	467	439	439	381
90°	2	35	68	87	91	17
95°	2	6	11	11	9	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: P860136

CATALOG NUMBER: SPHB-36SE-N-L835-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	24261.2	24261.2	24261.2	24261.2	24261.2
2.5°	24190.8	24111.1	23916.7	23790.7	23692.5
5°	24140.8	23698.1	22740.6	21868.2	21664.5
7.5°	23990.7	23018.4	20971.8	19358.5	18951.1
10°	23783.3	22042.3	18949.2	16928.5	16335.9
12.5°	23507.3	20999.5	17011.9	15107.9	14817.1
15°	23133.2	19634.5	15428.3	13887.3	13502.1
17.5°	22647.9	18223.2	13967.0	13076.1	12968.7
20°	22051.6	16928.5	13083.5	12779.8	12894.6
22.5°	21381.1	15670.9	12570.5	12698.3	12913.1
25°	20584.7	14541.1	12209.3	12563.1	12727.9
27.5°	19690.1	13520.6	11877.8	12201.9	12201.9
30°	18739.9	12670.5	11479.6	11449.9	11068.4
32.5°	17630.5	11948.1	10959.1	10372.0	9805.2
35°	16458.1	11183.2	10318.3	9320.0	8675.4
37.5°	15228.3	10472.0	9507.0	8190.2	7590.1
40°	14015.1	9770.0	8662.4	7175.2	6699.2
42.5°	12807.5	9055.1	7782.7	6352.8	5976.8
45°	11677.7	8397.6	6938.1	5700.9	5428.6
47.5°	10529.4	7699.3	6158.4	5176.7	4987.8
50°	9368.1	6991.8	5484.2	4760.0	4621.1
52.5°	8390.2	6332.5	4911.9	4365.5	4282.1
55°	7417.8	5656.4	4413.6	4011.7	3969.1
57.5°	6452.8	5026.7	3958.0	3687.6	3678.3
60°	5541.6	4437.7	3558.0	3409.8	3389.4
62.5°	4765.6	3852.4	3178.3	3107.9	3117.1
65°	4054.3	3319.0	2826.4	2826.4	2850.4
67.5°	3395.0	2828.2	2504.1	2546.7	2580.0
70°	2807.8	2383.7	2200.3	2274.4	2304.1
72.5°	2252.2	1970.7	1909.6	1991.0	2015.1
75°	1783.6	1585.4	1616.9	1718.8	1728.0
77.5°	1322.4	1248.3	1329.8	1441.0	1461.3
80°	913.1	920.5	1048.3	1126.1	1135.4
82.5°	589.0	642.7	785.3	826.1	811.2
85°	300.0	388.9	466.7	439.0	439.0
87.5°	114.8	168.5	198.2	233.4	246.3
90°	1.9	35.2	68.5	87.1	90.8
92.5°	1.9	9.3	14.8	16.7	14.8
95°	1.9	5.6	11.1	11.1	9.3
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: P860136

CATALOG NUMBER: SPHB-36SE-N-L835-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)