

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: P860133

Luminaire Tested: **SPHB-36SE-N-L735-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: P860133  
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-L735-CD  
Description: 36000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 3500K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

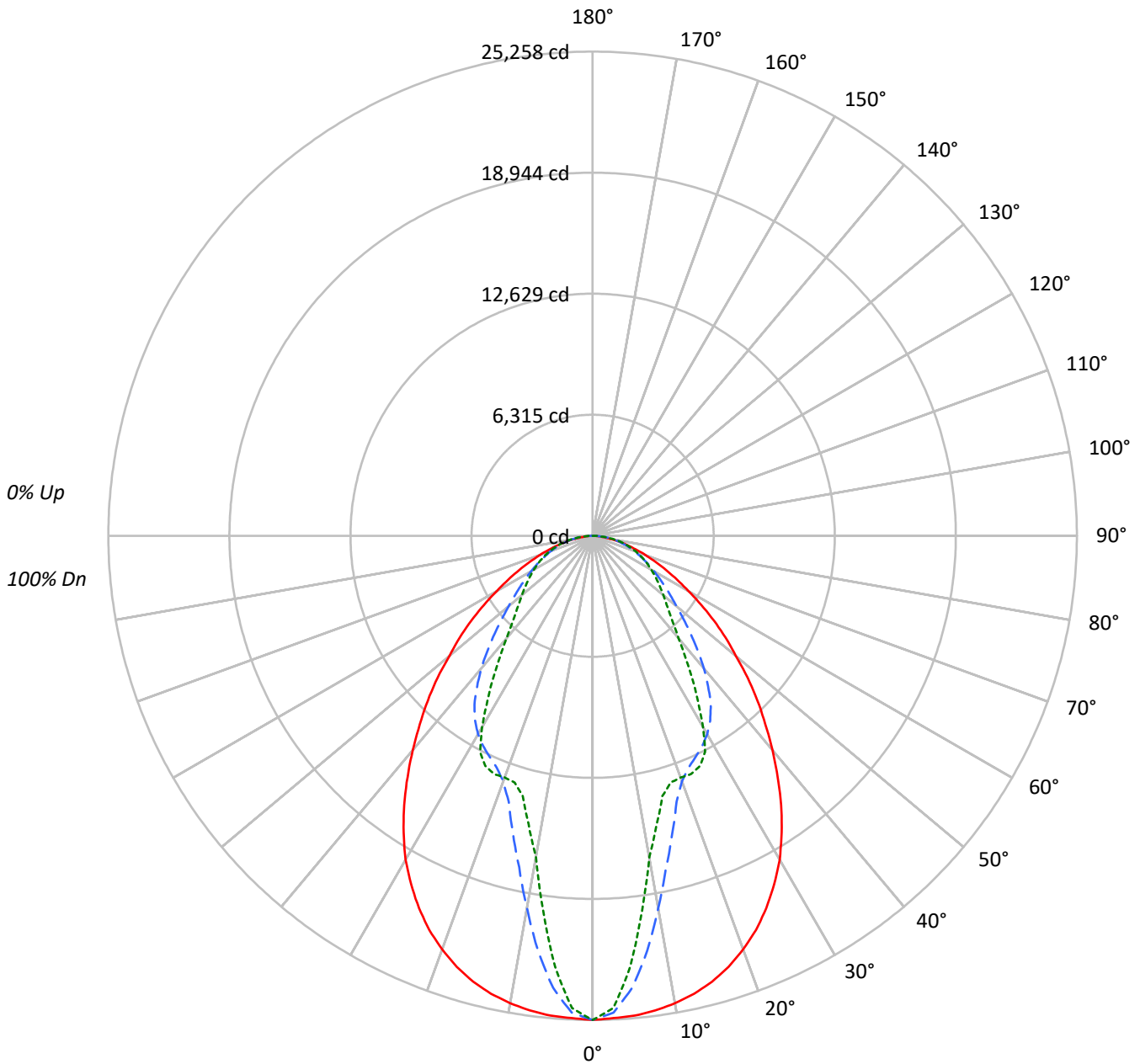
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37018.0 lumens  
Efficiency: N/A  
Efficacy: 153.7 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 (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									
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	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°	133272	133272	133272
5°	133117	125396	119462
10°	132662	105698	91121
15°	131559	87741	76787
20°	128908	76483	75379
25°	124766	74002	77145
30°	118868	72815	70207
35°	110368	69194	58177
40°	100501	62118	48039
45°	90720	53899	42173
50°	80059	46867	39492
55°	71042	42270	38013
60°	60883	39089	37238
65°	52698	36737	37051
70°	45097	35339	37005
75°	37856	34319	36675
80°	28885	33163	35916
85°	18913	29416	27667



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2153.5	5.8
10°-20°	4944.6	13.4
20°-30°	6682.4	18.1
30°-40°	7032.9	19.0
40°-50°	5967.7	16.1
50°-60°	4622.8	12.5
60°-70°	3219.6	8.7
70°-80°	1843.6	5.0
80°-90°	536.5	1.4
90°-100°	14.3	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°	13780.5	37.2
0°-40°	20813.4	56.2
0°-60°	31403.9	84.8
0°-90°	37003.7	100.0
90°-120°	14.3	0.0
90°-150°	14.3	0.0
90°-180°	14.0	0.0
0°-180°	37018.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	25258	25258	25258	25258	25258	
5°	25133	24672	23675	22767	22555	###
15°	24084	20441	16062	14458	14057	6777
25°	21430	15139	12711	13079	13251	9838
35°	17134	11643	10742	9703	9032	10681
45°	12158	8743	7223	5935	5652	9364
55°	7723	5889	4595	4177	4132	6904
65°	4221	3455	2942	2942	2968	4216
75°	1857	1651	1683	1789	1799	1980
85°	312	405	486	457	457	397
90°	2	37	71	91	94	17
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: P860133

CATALOG NUMBER: SPHB-36SE-N-L735-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	25258.0	25258.0	25258.0	25258.0	25258.0
2.5°	25184.7	25101.8	24899.4	24768.2	24666.1
5°	25132.7	24671.8	23674.9	22766.7	22554.6
7.5°	24976.5	23964.2	21833.5	20154.0	19729.8
10°	24760.5	22948.0	19727.8	17624.1	17007.1
12.5°	24473.2	21862.4	17710.9	15728.7	15425.9
15°	24083.7	20441.3	16062.2	14457.9	14056.9
17.5°	23578.5	18972.0	14540.9	13613.4	13501.5
20°	22957.6	17624.1	13621.1	13304.9	13424.4
22.5°	22259.6	16314.8	13087.0	13220.0	13443.7
25°	21430.5	15138.6	12711.0	13079.3	13250.9
27.5°	20499.1	14076.2	12365.8	12703.2	12703.2
30°	19509.9	13191.1	11951.2	11920.4	11523.2
32.5°	18354.9	12439.1	11409.4	10798.1	10208.1
35°	17134.3	11642.7	10742.2	9702.9	9031.9
37.5°	15854.0	10902.3	9897.7	8526.7	7901.9
40°	14591.0	10171.5	9018.4	7470.0	6974.4
42.5°	13333.8	9427.2	8102.5	6613.9	6222.4
45°	12157.6	8742.6	7223.2	5935.1	5651.7
47.5°	10962.0	8015.7	6411.4	5389.4	5192.8
50°	9753.0	7279.1	5709.5	4955.6	4811.0
52.5°	8734.9	6592.7	5113.7	4544.9	4458.1
55°	7722.6	5888.8	4595.0	4176.6	4132.2
57.5°	6718.0	5233.2	4120.6	3839.1	3829.5
60°	5769.3	4620.1	3704.1	3549.9	3528.7
62.5°	4961.4	4010.7	3308.9	3235.6	3245.2
65°	4220.9	3455.4	2942.5	2942.5	2967.6
67.5°	3534.5	2944.4	2607.0	2651.3	2686.0
70°	2923.2	2481.6	2290.7	2367.9	2398.7
72.5°	2344.7	2051.6	1988.0	2072.9	2097.9
75°	1856.9	1650.6	1683.4	1789.4	1799.0
77.5°	1376.8	1299.6	1384.5	1500.2	1521.4
80°	950.6	958.3	1091.4	1172.4	1182.0
82.5°	613.2	669.1	817.6	860.0	844.6
85°	312.4	404.9	485.9	457.0	457.0
87.5°	119.6	175.5	206.3	243.0	256.5
90°	1.9	36.6	71.3	90.6	94.5
92.5°	1.9	9.6	15.4	17.4	15.4
95°	1.9	5.8	11.6	11.6	9.6
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)