

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: P860079

Luminaire Tested: **SPHB-30SE-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: P860079  
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-30SE-N-L735-CD  
Description: 30000 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**

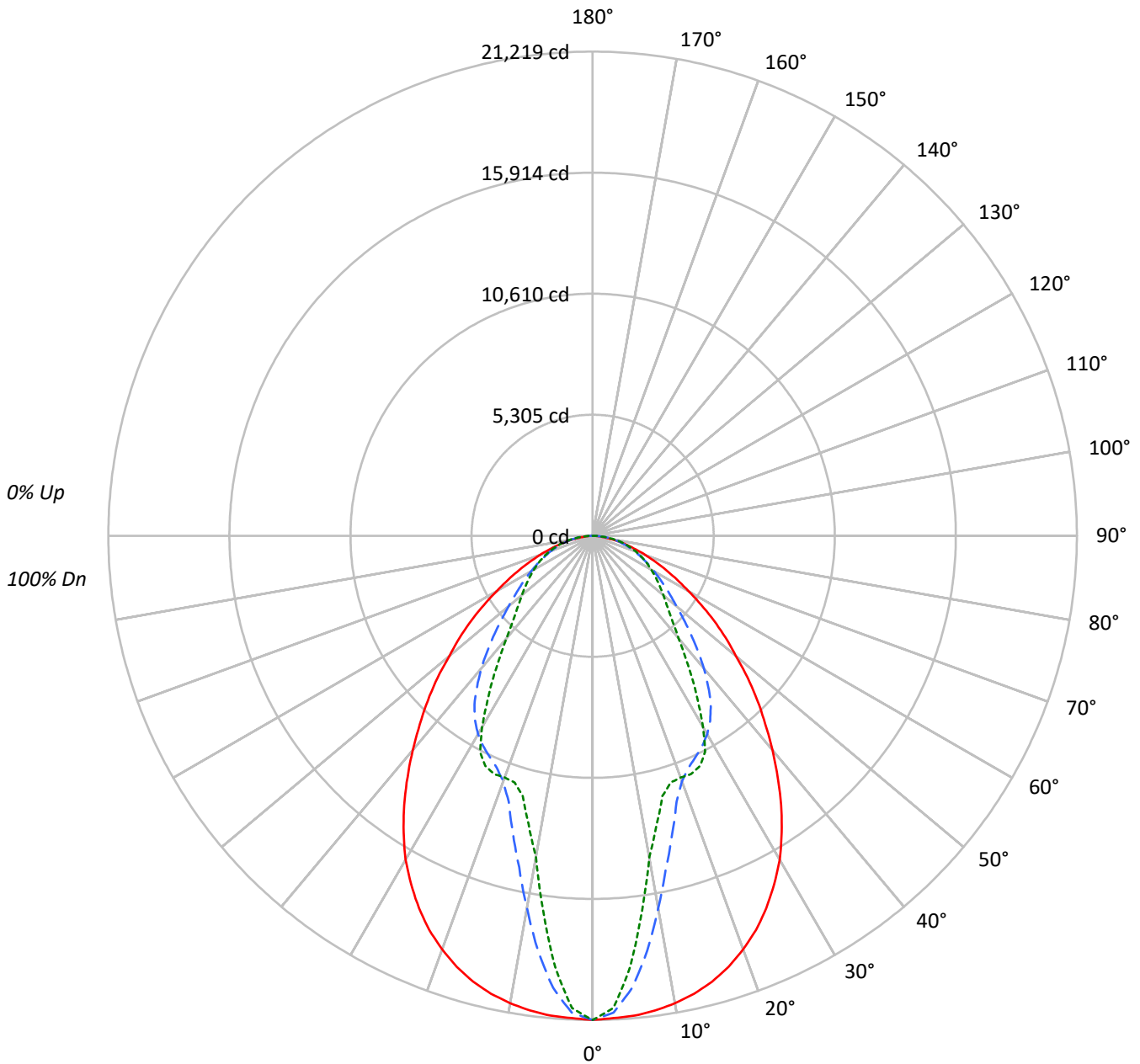
Lumens per Lamp: N/A  
Luminaire Lumens: 31099.0 lumens  
Efficiency: N/A  
Efficacy: 159.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

Input Watts (W): 195  
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: P860079

CATALOG NUMBER: SPHB-30SE-N-L735-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P860079

CATALOG NUMBER: SPHB-30SE-N-L735-CD

**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°	111963	111963	111963
5°	111833	105346	100361
10°	111450	88797	76551
15°	110523	73712	64508
20°	108297	64254	63326
25°	104816	62169	64810
30°	99862	61172	58982
35°	92720	58130	48875
40°	84432	52185	40358
45°	76214	45281	35430
50°	67259	39374	33177
55°	59682	35512	31935
60°	51148	32839	31284
65°	44272	30863	31127
70°	37886	29690	31089
75°	31803	28831	30812
80°	24266	27861	30173
85°	15886	24713	23241



TEST NUMBER: P860079

CATALOG NUMBER: SPHB-30SE-N-L735-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1809.1	5.8
10°-20°	4154.0	13.4
20°-30°	5613.9	18.1
30°-40°	5908.4	19.0
40°-50°	5013.5	16.1
50°-60°	3883.6	12.5
60°-70°	2704.8	8.7
70°-80°	1548.8	5.0
80°-90°	450.7	1.4
90°-100°	12.0	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°	11577.1	37.2
0°-40°	17485.5	56.2
0°-60°	26382.6	84.8
0°-90°	31086.9	100.0
90°-120°	12.0	0.0
90°-150°	12.0	0.0
90°-180°	12.0	0.0
0°-180°	31099.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	21219	21219	21219	21219	21219	
5°	21114	20727	19889	19126	18948	###
15°	20233	17173	13494	12146	11809	5693
25°	18004	12718	10678	10988	11132	8265
35°	14395	9781	9025	8152	7588	8973
45°	10214	7345	6068	4986	4748	7867
55°	6488	4947	3860	3509	3472	5800
65°	3546	2903	2472	2472	2493	3542
75°	1560	1387	1414	1503	1511	1663
85°	262	340	408	384	384	334
90°	2	31	60	76	79	14
95°	2	5	10	10	8	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: P860079

CATALOG NUMBER: SPHB-30SE-N-L735-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	21219.4	21219.4	21219.4	21219.4	21219.4
2.5°	21157.8	21088.2	20918.1	20807.9	20722.1
5°	21114.1	20726.9	19889.4	19126.4	18948.3
7.5°	20982.9	20132.4	18342.4	16931.4	16575.1
10°	20801.4	19278.7	16573.4	14806.1	14287.7
12.5°	20560.1	18366.7	14879.0	13213.7	12959.4
15°	20232.9	17172.8	13494.0	12146.2	11809.2
17.5°	19808.4	15938.4	12215.8	11436.7	11342.7
20°	19286.8	14806.1	11443.1	11177.5	11277.9
22.5°	18700.4	13706.2	10994.4	11106.2	11294.1
25°	18003.8	12718.0	10678.5	10987.9	11132.1
27.5°	17221.4	11825.4	10388.6	10672.1	10672.1
30°	16390.4	11081.9	10040.3	10014.4	9680.7
32.5°	15420.1	10450.1	9585.1	9071.6	8575.9
35°	14394.6	9781.1	9024.6	8151.5	7587.7
37.5°	13319.0	9159.1	8315.1	7163.3	6638.4
40°	12258.0	8545.1	7576.4	6275.6	5859.3
42.5°	11201.8	7919.8	6806.9	5556.3	5227.5
45°	10213.6	7344.7	6068.2	4986.1	4748.0
47.5°	9209.3	6734.0	5386.2	4527.7	4362.5
50°	8193.6	6115.2	4796.6	4163.2	4041.7
52.5°	7338.3	5538.5	4296.0	3818.2	3745.3
55°	6487.8	4947.2	3860.3	3508.8	3471.5
57.5°	5643.8	4396.5	3461.8	3225.3	3217.2
60°	4846.8	3881.3	3111.9	2982.3	2964.5
62.5°	4168.1	3369.4	2779.8	2718.2	2726.3
65°	3546.0	2902.9	2472.0	2472.0	2493.1
67.5°	2969.3	2473.6	2190.1	2227.4	2256.6
70°	2455.8	2084.8	1924.5	1989.3	2015.2
72.5°	1969.8	1723.6	1670.1	1741.4	1762.5
75°	1560.0	1386.7	1414.2	1503.3	1511.4
77.5°	1156.6	1091.8	1163.1	1260.3	1278.1
80°	798.6	805.1	916.9	984.9	993.0
82.5°	515.1	562.1	686.8	722.5	709.5
85°	262.4	340.2	408.2	383.9	383.9
87.5°	100.4	147.4	173.3	204.1	215.4
90°	1.6	30.8	59.9	76.1	79.4
92.5°	1.6	8.1	13.0	14.6	13.0
95°	1.6	4.9	9.7	9.7	8.1
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



TEST NUMBER: P860079

CATALOG NUMBER: SPHB-30SE-N-L735-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)