

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: P860082

Luminaire Tested: **SPHB-30SE-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: P860082  
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-L835-CD  
Description: 30000 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**

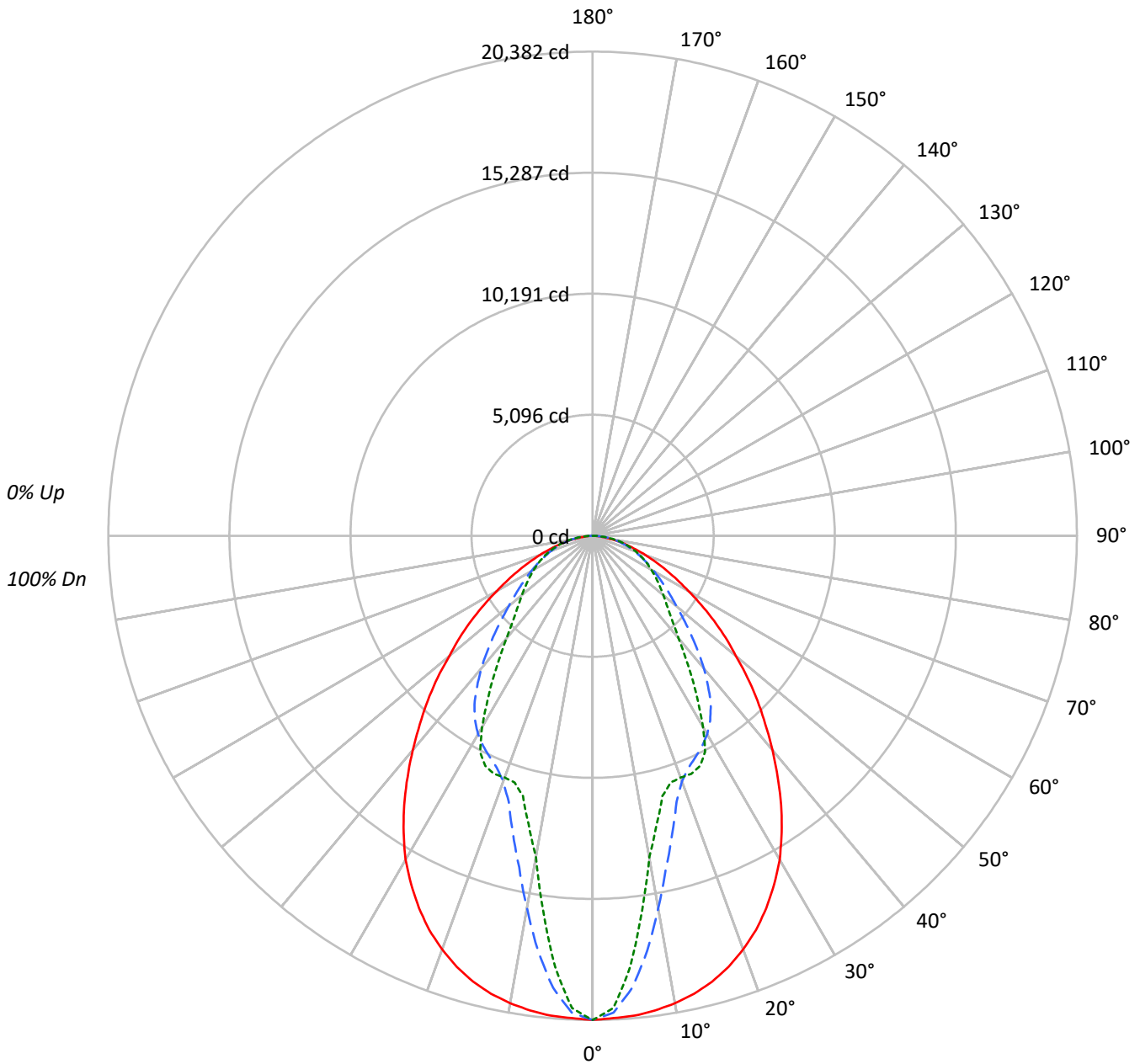
Lumens per Lamp: N/A  
Luminaire Lumens: 29871.0 lumens  
Efficiency: N/A  
Efficacy: 153.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

Input Watts (W): 195  
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: P860082

CATALOG NUMBER: SPHB-30SE-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°	107542	107542	107542
5°	107417	101186	96398
10°	107050	85291	73529
15°	106159	70801	61961
20°	104020	61717	60826
25°	100677	59715	62251
30°	95919	58757	56652
35°	89059	55835	46945
40°	81097	50125	38764
45°	73204	43493	34030
50°	64602	37819	31867
55°	57326	34109	30674
60°	49128	31542	30048
65°	42524	29645	29897
70°	36390	28517	29861
75°	30547	27693	29595
80°	23309	26761	28982
85°	15262	23738	22327



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1737.7	5.8
10°-20°	3990.0	13.4
20°-30°	5392.3	18.1
30°-40°	5675.1	19.0
40°-50°	4815.5	16.1
50°-60°	3730.3	12.5
60°-70°	2598.0	8.7
70°-80°	1487.7	5.0
80°-90°	432.9	1.4
90°-100°	11.6	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°	11120.0	37.2
0°-40°	16795.0	56.2
0°-60°	25340.8	84.8
0°-90°	29859.5	100.0
90°-120°	11.6	0.0
90°-150°	11.6	0.0
90°-180°	12.0	0.0
0°-180°	29871.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	20382	20382	20382	20382	20382	
5°	20280	19908	19104	18371	18200	###
15°	19434	16495	12961	11667	11343	5468
25°	17293	12216	10257	10554	10692	7938
35°	13826	9395	8668	7830	7288	8619
45°	9810	7055	5829	4789	4560	7556
55°	6232	4752	3708	3370	3334	5571
65°	3406	2788	2374	2374	2395	3402
75°	1498	1332	1358	1444	1452	1598
85°	252	327	392	369	369	320
90°	2	30	58	73	76	14
95°	2	5	9	9	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: P860082

CATALOG NUMBER: SPHB-30SE-N-L835-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	20381.5	20381.5	20381.5	20381.5	20381.5
2.5°	20322.4	20255.5	20092.1	19986.3	19903.8
5°	20280.4	19908.5	19104.1	18371.2	18200.0
7.5°	20154.3	19337.5	17618.1	16262.9	15920.6
10°	19980.1	18517.5	15919.0	14221.5	13723.6
12.5°	19748.2	17641.5	14291.5	12692.0	12447.7
15°	19433.9	16494.7	12961.1	11666.6	11342.9
17.5°	19026.3	15309.1	11733.5	10985.1	10894.8
20°	18525.2	14221.5	10991.3	10736.1	10832.6
22.5°	17962.0	13165.0	10560.3	10667.7	10848.1
25°	17292.9	12215.8	10256.9	10554.1	10692.5
27.5°	16541.4	11358.5	9978.4	10250.7	10250.7
30°	15743.2	10644.3	9643.8	9618.9	9298.4
32.5°	14811.2	10037.5	9206.6	8713.4	8237.2
35°	13826.2	9394.9	8668.2	7829.6	7288.1
37.5°	12793.1	8797.4	7986.7	6880.4	6376.3
40°	11773.9	8207.7	7277.2	6027.8	5627.9
42.5°	10759.5	7607.1	6538.1	5336.9	5021.1
45°	9810.3	7054.7	5828.6	4789.2	4560.5
47.5°	8845.6	6468.1	5173.6	4348.9	4190.2
50°	7870.0	5873.7	4607.2	3998.8	3882.1
52.5°	7048.5	5319.8	4126.4	3667.4	3597.4
55°	6231.6	4751.9	3707.8	3370.2	3334.4
57.5°	5421.0	4222.9	3325.1	3097.9	3090.1
60°	4655.4	3728.1	2989.0	2864.5	2847.4
62.5°	4003.5	3236.4	2670.0	2610.9	2618.7
65°	3406.0	2788.3	2374.4	2374.4	2394.6
67.5°	2852.1	2375.9	2103.7	2139.4	2167.5
70°	2358.8	2002.5	1848.5	1910.7	1935.6
72.5°	1892.0	1655.5	1604.2	1672.7	1692.9
75°	1498.4	1331.9	1358.4	1443.9	1451.7
77.5°	1111.0	1048.7	1117.2	1210.5	1227.7
80°	767.1	773.3	880.7	946.0	953.8
82.5°	494.8	539.9	659.7	694.0	681.5
85°	252.1	326.8	392.1	368.8	368.8
87.5°	96.5	141.6	166.5	196.1	206.9
90°	1.6	29.6	57.6	73.1	76.2
92.5°	1.6	7.8	12.4	14.0	12.4
95°	1.6	4.7	9.3	9.3	7.8
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: P860082

CATALOG NUMBER: SPHB-30SE-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)