

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: P860088

Luminaire Tested: **SPHB-30SE-W-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: P860088  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-30SE-W-L735-CD  
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Wide Lens  
and, 3500K 70CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

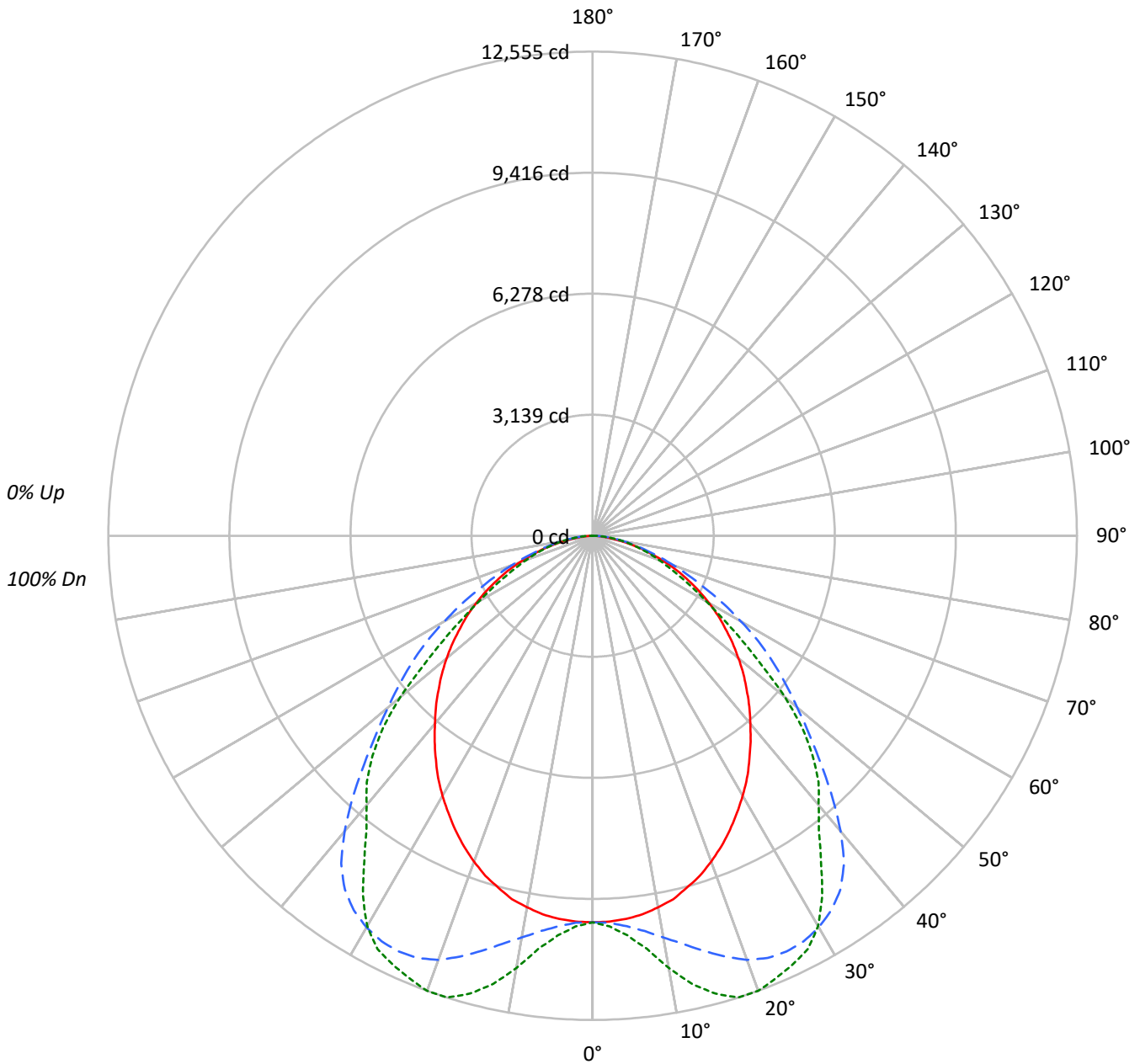
Lumens per Lamp: N/A  
Luminaire Lumens: 31535.0 lumens  
Efficiency: N/A  
Efficacy: 161.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

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

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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			100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72			72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62			62
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53			53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46			46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40			40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36			36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32			32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29			29
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26			26

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

	0°	45°	90°
0°	52882	52882	52882
5°	52825	53821	55097
10°	52407	56662	60957
15°	51588	60881	67144
20°	50472	65722	70498
25°	49015	69268	71422
30°	47419	71435	71228
35°	45640	72153	66464
40°	43801	68894	62776
45°	42144	62448	60230
50°	40502	56783	53394
55°	38649	52463	43450
60°	36738	46772	35784
65°	34208	40191	31028
70°	31121	34313	28062
75°	26727	28798	25728
80°	20890	24701	23862
85°	14124	20959	19670



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	984.0	3.1
10°-20°	3120.2	9.9
20°-30°	5106.4	16.2
30°-40°	6229.4	19.8
40°-50°	6169.6	19.6
50°-60°	4933.7	15.6
60°-70°	3077.8	9.8
70°-80°	1508.0	4.8
80°-90°	395.5	1.3
90°-100°	10.4	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°	9210.6	29.2
0°-40°	15440.1	49.0
0°-60°	26543.3	84.2
0°-90°	31524.6	100.0
90°-120°	10.4	0.0
90°-150°	10.4	0.0
90°-180°	10.0	0.0
0°-180°	31535.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10022	10022	10022	10022	10022	
5°	9973	10017	10162	10338	10402	946
15°	9444	9993	11145	12032	12292	2662
25°	8419	9844	11898	12243	12268	3874
35°	7086	9468	11202	10603	10318	4432
45°	5648	8774	8369	8088	8072	4362
55°	4201	6737	5703	5152	4723	3764
65°	2740	3780	3219	2670	2485	2717
75°	1311	1606	1413	1293	1262	1392
85°	233	331	346	329	325	289
90°	1	34	62	78	80	13
95°	1	5	5	4	2	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



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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10022.3	10022.3	10022.3	10022.3	10022.3
2.5°	10012.3	10008.5	10044.9	10111.4	10141.5
5°	9973.4	10017.3	10161.5	10338.4	10402.4
7.5°	9903.1	10021.0	10339.7	10664.6	10802.6
10°	9781.4	10023.5	10575.5	11148.8	11377.2
12.5°	9656.0	10014.8	10837.7	11649.4	11899.0
15°	9444.0	9993.4	11145.1	12032.0	12291.7
17.5°	9247.0	9968.3	11441.1	12356.9	12553.9
20°	8988.6	9932.0	11704.6	12456.0	12555.2
22.5°	8717.6	9903.1	11850.1	12389.6	12419.7
25°	8419.0	9844.2	11897.8	12242.8	12267.9
27.5°	8100.4	9791.5	11852.6	12060.9	12082.2
30°	7783.0	9696.1	11724.7	11777.4	11690.8
32.5°	7450.5	9600.8	11517.7	11280.6	11078.6
35°	7085.5	9467.8	11201.5	10603.1	10318.4
37.5°	6725.4	9339.8	10708.5	9845.4	9630.9
40°	6359.1	9181.8	10002.2	9137.9	9114.0
42.5°	6012.9	9011.2	9203.1	8587.1	8667.4
45°	5647.8	8774.1	8368.8	8087.8	8071.5
47.5°	5301.6	8446.6	7609.9	7535.9	7369.0
50°	4934.0	7995.0	6917.4	6847.1	6504.6
52.5°	4573.9	7419.2	6298.9	6035.5	5536.2
55°	4201.4	6736.7	5703.0	5152.3	4723.2
57.5°	3855.1	5986.5	5097.1	4383.3	3998.1
60°	3481.3	5226.3	4432.2	3708.3	3390.9
62.5°	3115.0	4477.4	3830.0	3133.8	2923.0
65°	2739.9	3779.8	3219.1	2669.6	2485.2
67.5°	2381.1	3176.4	2690.9	2250.6	2127.7
70°	2017.3	2576.8	2224.2	1890.5	1819.0
72.5°	1642.2	2058.7	1799.0	1595.7	1541.8
75°	1311.0	1605.8	1412.6	1293.4	1262.0
77.5°	976.0	1194.3	1104.0	1033.7	1024.9
80°	687.5	861.8	812.9	799.1	785.3
82.5°	439.1	563.3	578.3	569.5	559.5
85°	233.3	331.2	346.2	328.7	324.9
87.5°	94.1	144.3	155.6	171.9	176.9
90°	1.3	33.9	61.5	77.8	80.3
92.5°	1.3	7.5	8.8	8.8	7.5
95°	1.3	5.0	5.0	3.8	2.5
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)