

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: P860087

Luminaire Tested: **SPHB-30SE-N-L950-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: P860087  
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-L950-CD  
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens  
and, 5000K 90CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

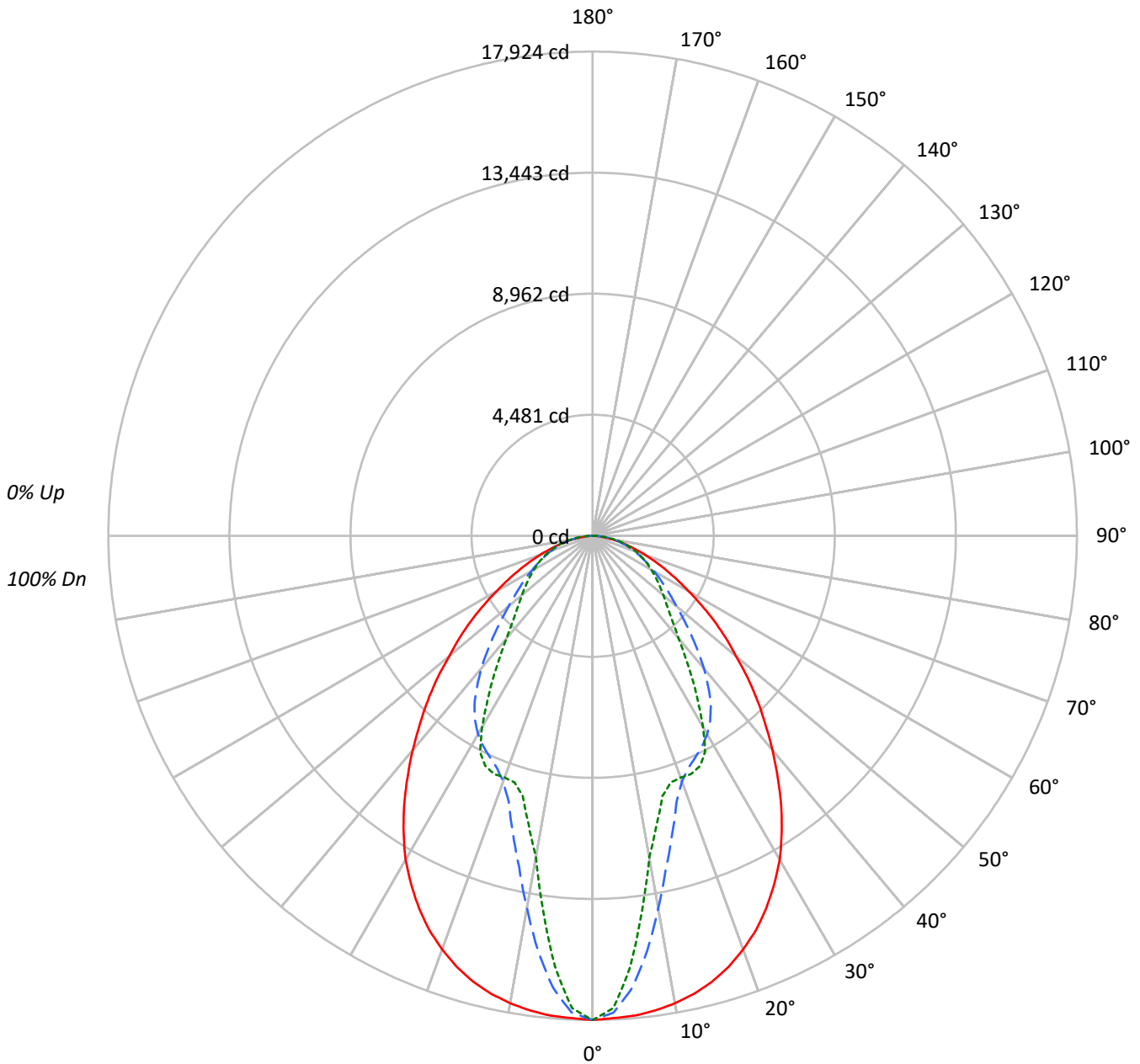
Lumens per Lamp: N/A  
Luminaire Lumens: 26270.0 lumens  
Efficiency: N/A  
Efficacy: 134.7 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

Input Watts (W): 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									
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°	94577	94577	94577
5°	94467	88988	84777
10°	94145	75009	64665
15°	93361	62266	54492
20°	91481	54277	53493
25°	88541	52516	54746
30°	84355	51674	49823
35°	78323	49104	41286
40°	71321	44082	34091
45°	64380	38250	29928
50°	56815	33260	28025
55°	50415	29998	26976
60°	43206	27740	26425
65°	37398	26071	26292
70°	32004	25079	26262
75°	26865	24354	26028
80°	20498	23534	25488
85°	13422	20874	19633



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1528.2	5.8
10°-20°	3509.0	13.4
20°-30°	4742.2	18.1
30°-40°	4990.9	19.0
40°-50°	4235.0	16.1
50°-60°	3280.6	12.5
60°-70°	2284.8	8.7
70°-80°	1308.3	5.0
80°-90°	380.7	1.4
90°-100°	10.2	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°	9779.4	37.2
0°-40°	14770.3	56.2
0°-60°	22285.9	84.8
0°-90°	26259.8	100.0
90°-120°	10.2	0.0
90°-150°	10.2	0.0
90°-180°	10.0	0.0
0°-180°	26270.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	17924	17924	17924	17924	17924	
5°	17836	17508	16801	16156	16006	###
15°	17091	14506	11399	10260	9976	4809
25°	15208	10743	9020	9282	9404	6981
35°	12160	8262	7623	6886	6410	7580
45°	8628	6204	5126	4212	4011	6645
55°	5480	4179	3261	2964	2932	4900
65°	2995	2452	2088	2088	2106	2992
75°	1318	1171	1195	1270	1277	1405
85°	222	287	345	324	324	282
90°	1	26	51	64	67	12
95°	1	4	8	8	7	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: P860087

CATALOG NUMBER: SPHB-30SE-N-L950-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	17924.5	17924.5	17924.5	17924.5	17924.5
2.5°	17872.5	17813.6	17670.0	17576.9	17504.4
5°	17835.5	17508.5	16801.0	16156.5	16006.0
7.5°	17724.7	17006.3	15494.2	14302.4	14001.3
10°	17571.4	16285.2	13999.9	12507.0	12069.2
12.5°	17367.5	15514.7	12568.6	11161.9	10947.1
15°	17091.1	14506.2	11398.6	10260.2	9975.5
17.5°	16732.6	13463.5	10319.0	9660.8	9581.4
20°	16292.0	12507.0	9666.3	9441.9	9526.7
22.5°	15796.6	11577.9	9287.2	9381.6	9540.4
25°	15208.2	10743.2	9020.4	9281.8	9403.5
27.5°	14547.3	9989.2	8775.5	9014.9	9014.9
30°	13845.3	9361.1	8481.3	8459.4	8177.5
32.5°	13025.7	8827.5	8096.7	7663.0	7244.2
35°	12159.5	8262.3	7623.3	6885.7	6409.5
37.5°	11250.9	7736.8	7023.9	6051.0	5607.6
40°	10354.6	7218.2	6399.9	5301.1	4949.4
42.5°	9462.4	6690.0	5750.0	4693.6	4415.8
45°	8627.7	6204.3	5126.0	4211.9	4010.7
47.5°	7779.3	5688.4	4549.9	3824.6	3685.1
50°	6921.3	5165.7	4051.8	3516.7	3414.1
52.5°	6198.8	4678.5	3629.0	3225.3	3163.7
55°	5480.4	4179.0	3260.9	2963.9	2932.4
57.5°	4767.5	3713.8	2924.2	2724.5	2717.6
60°	4094.2	3278.7	2628.7	2519.2	2504.1
62.5°	3520.9	2846.2	2348.1	2296.2	2303.0
65°	2995.4	2452.1	2088.2	2088.2	2105.9
67.5°	2508.2	2089.5	1850.1	1881.5	1906.2
70°	2074.5	1761.1	1625.6	1680.4	1702.3
72.5°	1664.0	1456.0	1410.8	1471.0	1488.8
75°	1317.8	1171.3	1194.6	1269.9	1276.7
77.5°	977.0	922.3	982.5	1064.6	1079.7
80°	674.6	680.1	774.5	832.0	838.8
82.5°	435.1	474.8	580.2	610.3	599.4
85°	221.7	287.4	344.8	324.3	324.3
87.5°	84.8	124.5	146.4	172.4	182.0
90°	1.4	26.0	50.6	64.3	67.1
92.5°	1.4	6.8	10.9	12.3	10.9
95°	1.4	4.1	8.2	8.2	6.8
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



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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)