

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: P860081

Luminaire Tested: **SPHB-30SE-N-L750-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: P860081
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-L750-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Narrow Lens
and, 5000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

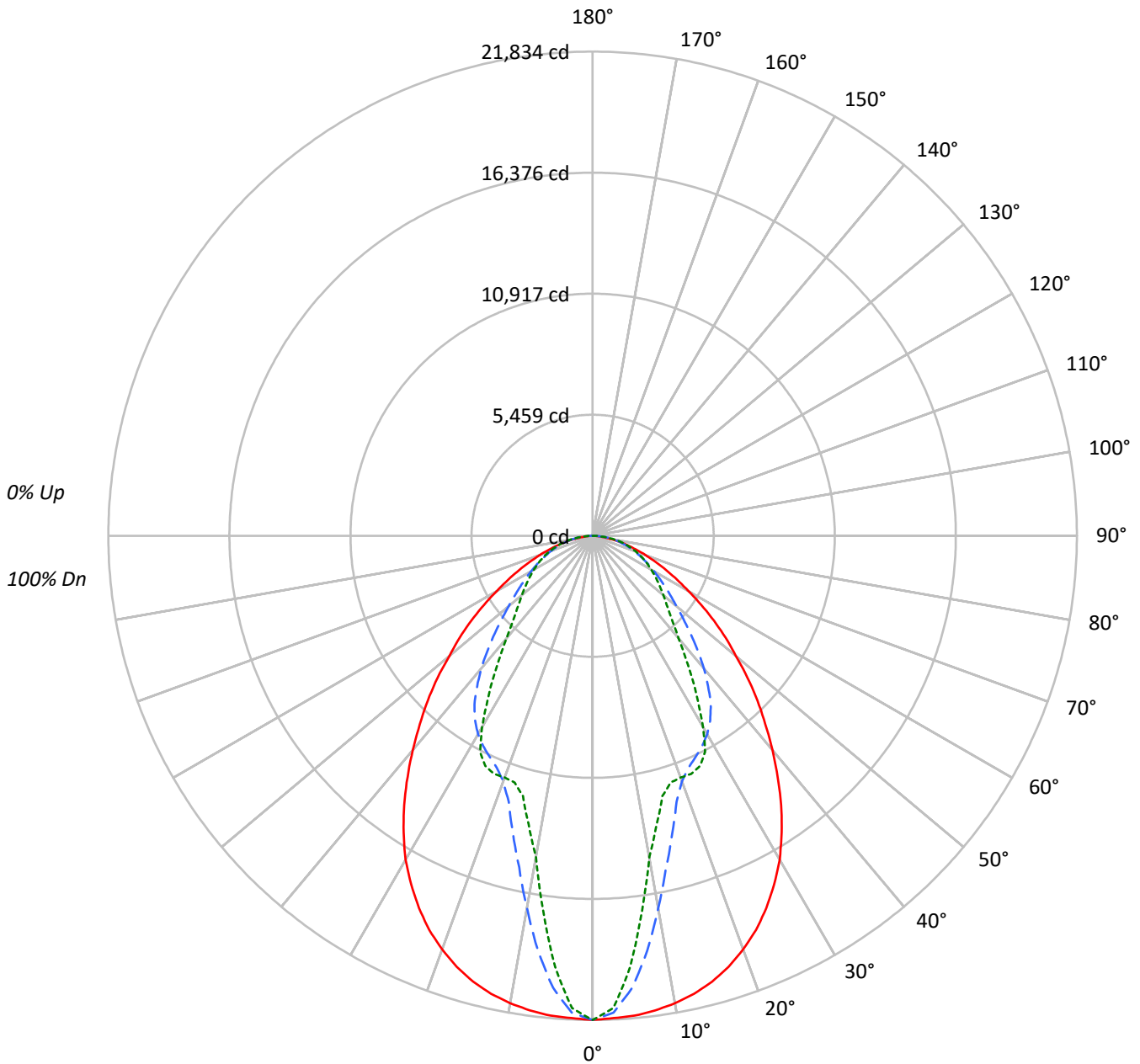
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31999.0 lumens
Efficiency: N/A
Efficacy: 164.1 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

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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	100	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74	74	74	74
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64	64	64	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56	56	56	56
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50	50	50	50
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45	45	45	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40	40	40	40
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37	37	37	37
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34	34	34	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31	31	31	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	115203	115203	115203
5°	115069	108395	103265
10°	114676	91368	78766
15°	113722	75845	66376
20°	111431	66113	65159
25°	107850	63969	66686
30°	102751	62943	60688
35°	95404	59813	50289
40°	86875	53695	41526
45°	78420	46591	36455
50°	69205	40513	34137
55°	61410	36539	32859
60°	52628	33789	32189
65°	45553	31756	32027
70°	38983	30549	31988
75°	32722	29664	31703
80°	24968	28666	31048
85°	16346	25427	23913



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1861.5	5.8
10°-20°	4274.2	13.4
20°-30°	5776.4	18.1
30°-40°	6079.4	19.0
40°-50°	5158.6	16.1
50°-60°	3996.0	12.5
60°-70°	2783.1	8.7
70°-80°	1593.7	5.0
80°-90°	463.8	1.4
90°-100°	12.4	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°	11912.1	37.2
0°-40°	17991.5	56.2
0°-60°	27146.1	84.8
0°-90°	31986.6	100.0
90°-120°	12.4	0.0
90°-150°	12.4	0.0
90°-180°	12.0	0.0
0°-180°	31999.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	21834	21834	21834	21834	21834	
5°	21725	21327	20465	19680	19497	###
15°	20818	17670	13884	12498	12151	5858
25°	18525	13086	10988	11306	11454	8504
35°	14811	10064	9286	8387	7807	9233
45°	10509	7557	6244	5130	4885	8094
55°	6676	5090	3972	3610	3572	5968
65°	3649	2987	2544	2544	2565	3645
75°	1605	1427	1455	1547	1555	1712
85°	270	350	420	395	395	343
90°	2	32	62	78	82	15
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	21833.5	21833.5	21833.5	21833.5	21833.5
2.5°	21770.1	21698.5	21523.4	21410.1	21321.8
5°	21725.1	21326.8	20465.0	19680.0	19496.6
7.5°	21590.1	20715.0	18873.2	17421.4	17054.7
10°	21403.4	19836.6	17053.1	15234.6	14701.2
12.5°	21155.1	18898.2	15309.6	13596.1	13334.4
15°	20818.4	17669.8	13884.5	12497.7	12151.0
17.5°	20381.7	16399.7	12569.4	11767.6	11671.0
20°	19845.0	15234.6	11774.3	11501.0	11604.3
22.5°	19241.6	14102.8	11312.6	11427.6	11621.0
25°	18524.9	13086.1	10987.6	11305.9	11454.3
27.5°	17719.8	12167.7	10689.2	10980.9	10980.9
30°	16864.7	11402.6	10330.9	10304.2	9960.8
32.5°	15866.3	10752.6	9862.5	9334.1	8824.1
35°	14811.2	10064.2	9285.8	8387.4	7807.3
37.5°	13704.5	9424.1	8555.7	7370.6	6830.6
40°	12612.7	8792.4	7795.6	6457.2	6028.8
42.5°	11526.0	8149.0	7003.9	5717.1	5378.8
45°	10509.2	7557.3	6243.8	5130.4	4885.4
47.5°	9475.8	6928.9	5542.1	4658.7	4488.7
50°	8430.7	6292.2	4935.4	4283.7	4158.7
52.5°	7550.6	5698.8	4420.4	3928.7	3853.7
55°	6675.6	5090.4	3972.0	3610.3	3572.0
57.5°	5807.1	4523.7	3562.0	3318.6	3310.3
60°	4987.1	3993.7	3201.9	3068.6	3050.3
62.5°	4288.7	3467.0	2860.2	2796.9	2805.2
65°	3648.6	2986.9	2543.5	2543.5	2565.2
67.5°	3055.3	2545.2	2253.5	2291.9	2321.9
70°	2526.9	2145.2	1980.2	2046.8	2073.5
72.5°	2026.8	1773.5	1718.5	1791.8	1813.5
75°	1605.1	1426.8	1455.1	1546.8	1555.1
77.5°	1190.1	1123.4	1196.8	1296.8	1315.1
80°	821.7	828.4	943.4	1013.4	1021.8
82.5°	530.0	578.4	706.7	743.4	730.1
85°	270.0	350.0	420.0	395.0	395.0
87.5°	103.3	151.7	178.3	210.0	221.7
90°	1.7	31.7	61.7	78.3	81.7
92.5°	1.7	8.3	13.3	15.0	13.3
95°	1.7	5.0	10.0	10.0	8.3
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)