

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: P860074

Luminaire Tested: **SPHB-30SE-M-L840-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: P860074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-30SE-M-L840-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 4000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

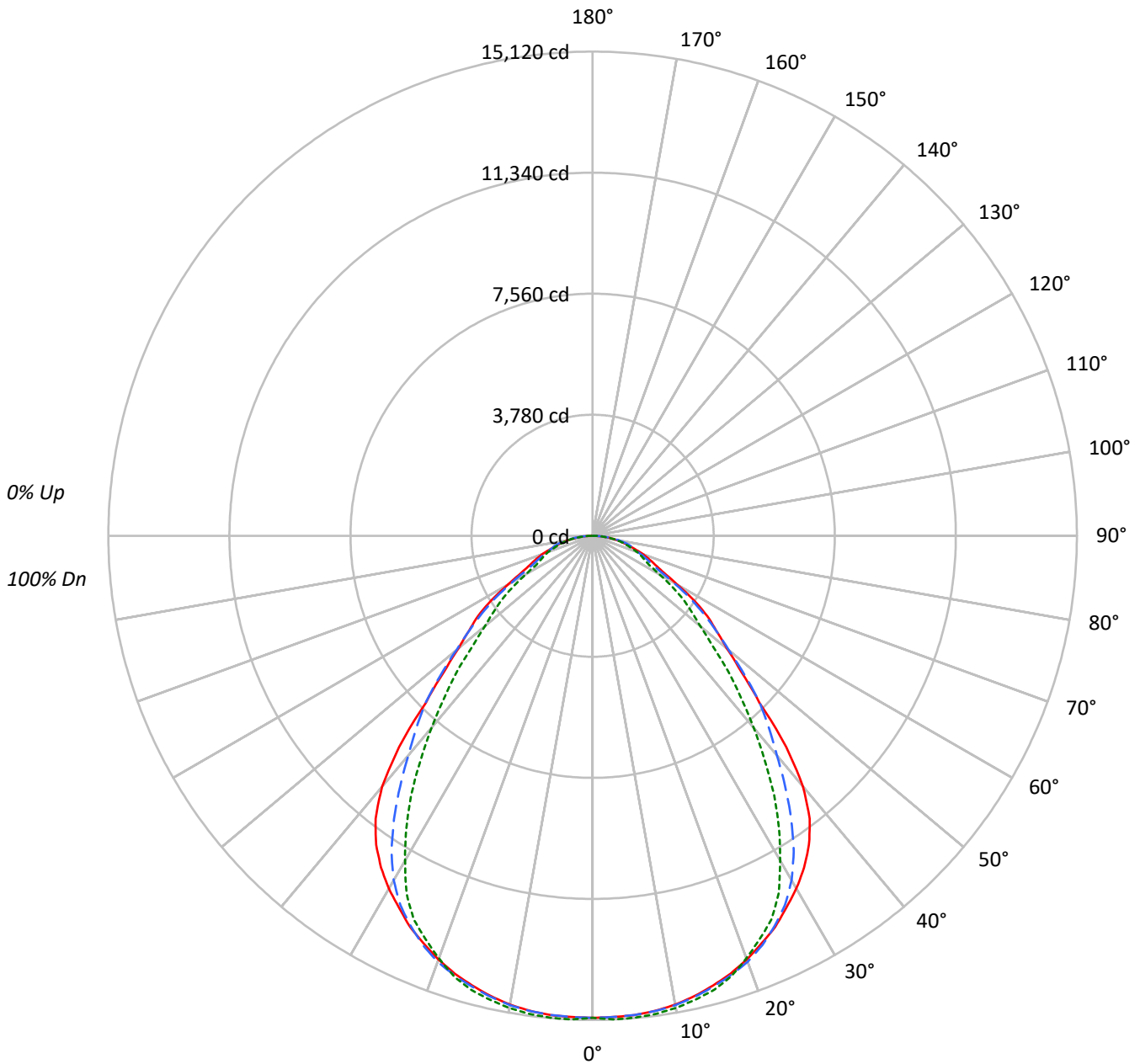
Lumens per Lamp: N/A
Luminaire Lumens: 31243.0 lumens
Efficiency: N/A
Efficacy: 160.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 195
Input Voltage (V): NR
Input Current (A_{in}): 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	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87																			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75																			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66																			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58																			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51																			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46																			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41																			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37																			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34																			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	79422	79422	79422
5°	79579	79557	80010
10°	79648	79733	80222
15°	79415	79621	80175
20°	79068	79470	78834
25°	78490	78271	76942
30°	77497	75670	71352
35°	75870	69617	63593
40°	70409	61616	53863
45°	54931	55078	44576
50°	44864	45500	35999
55°	40197	38681	31631
60°	32180	30462	25308
65°	26968	24687	22382
70°	25605	23522	22786
75°	23230	24971	21977
80°	23345	25518	23163
85°	20311	23798	19349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1431.2	4.6
10°-20°	4116.1	13.2
20°-30°	6144.7	19.7
30°-40°	6704.9	21.5
40°-50°	5484.9	17.6
50°-60°	3606.3	11.5
60°-70°	2069.0	6.6
70°-80°	1253.8	4.0
80°-90°	421.0	1.3
90°-100°	11.0	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°	11692.0	37.4
0°-40°	18397.0	58.9
0°-60°	27488.2	88.0
0°-90°	31232.1	100.0
90°-120°	11.0	0.0
90°-150°	11.0	0.0
90°-180°	11.0	0.0
0°-180°	31243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15052	15052	15052	15052	15052	
5°	15024	15001	15020	15082	15106	###
15°	14538	14536	14576	14669	14677	4104
25°	13482	13514	13444	13281	13216	6202
35°	11779	11513	10808	10071	9873	7300
45°	7361	7911	7381	6516	5974	5843
55°	4370	4250	4205	3613	3438	3848
65°	2160	2128	1977	1924	1793	2208
75°	1140	1233	1225	1175	1078	1233
85°	336	381	393	344	320	364
90°	2	28	56	66	70	16
95°	2	4	6	6	4	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°	15052.3	15052.3	15052.3	15052.3	15052.3
2.5°	15042.4	15020.5	15040.4	15101.9	15119.8
5°	15024.5	15000.7	15020.5	15082.1	15105.9
7.5°	14962.9	14949.1	14968.9	15030.4	15060.2
10°	14865.7	14849.8	14881.6	14935.2	14972.9
12.5°	14720.7	14714.8	14744.6	14822.0	14837.9
15°	14538.1	14536.1	14575.8	14669.1	14677.1
17.5°	14331.6	14329.6	14379.3	14440.8	14419.0
20°	14081.5	14095.4	14153.0	14095.4	14039.8
22.5°	13781.7	13825.4	13839.3	13658.6	13630.8
25°	13481.9	13513.7	13444.2	13281.4	13215.9
27.5°	13094.8	13132.5	13003.5	12771.2	12584.6
30°	12719.6	12683.9	12419.8	11971.2	11711.1
32.5°	12288.8	12161.7	11687.3	11067.9	10831.6
35°	11778.6	11512.6	10807.8	10071.3	9872.7
37.5°	11133.4	10647.0	9876.7	9108.4	8808.6
40°	10222.1	9660.3	8945.6	8151.5	7820.0
42.5°	8945.6	8737.2	8145.5	7252.2	6857.1
45°	7361.4	7911.3	7381.2	6515.6	5973.7
47.5°	6301.2	7065.6	6428.3	5802.9	5056.5
50°	5465.4	5991.5	5542.9	4979.0	4385.5
52.5°	4861.9	5020.7	4840.1	4220.7	3883.2
55°	4369.6	4250.5	4204.8	3613.2	3438.5
57.5°	3758.1	3692.6	3575.5	3150.6	2920.3
60°	3049.4	3188.3	2886.6	2765.5	2398.2
62.5°	2505.4	2642.4	2318.8	2310.8	2005.1
65°	2160.0	2128.2	1977.3	1923.7	1792.7
67.5°	1911.8	1812.5	1760.9	1691.4	1645.8
70°	1659.7	1618.0	1524.7	1538.6	1477.0
72.5°	1383.7	1437.3	1344.0	1369.8	1258.7
75°	1139.5	1232.9	1224.9	1175.3	1078.0
77.5°	939.0	1038.3	1056.2	1010.5	931.1
80°	768.3	835.8	839.8	812.0	762.3
82.5°	563.8	603.5	633.3	585.7	553.9
85°	335.5	381.2	393.1	343.5	319.6
87.5°	109.2	152.9	170.7	176.7	178.7
90°	2.0	27.8	55.6	65.5	69.5
92.5°	2.0	7.9	11.9	17.9	19.9
95°	2.0	4.0	6.0	6.0	4.0
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)