

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: P860071

Luminaire Tested: **SPHB-30SE-M-L740-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: P860071
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-L740-CD
Description: 30000 Lumen Standard Efficacy Select Pro High Bay with Medium Lens
and, 4000K 70CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

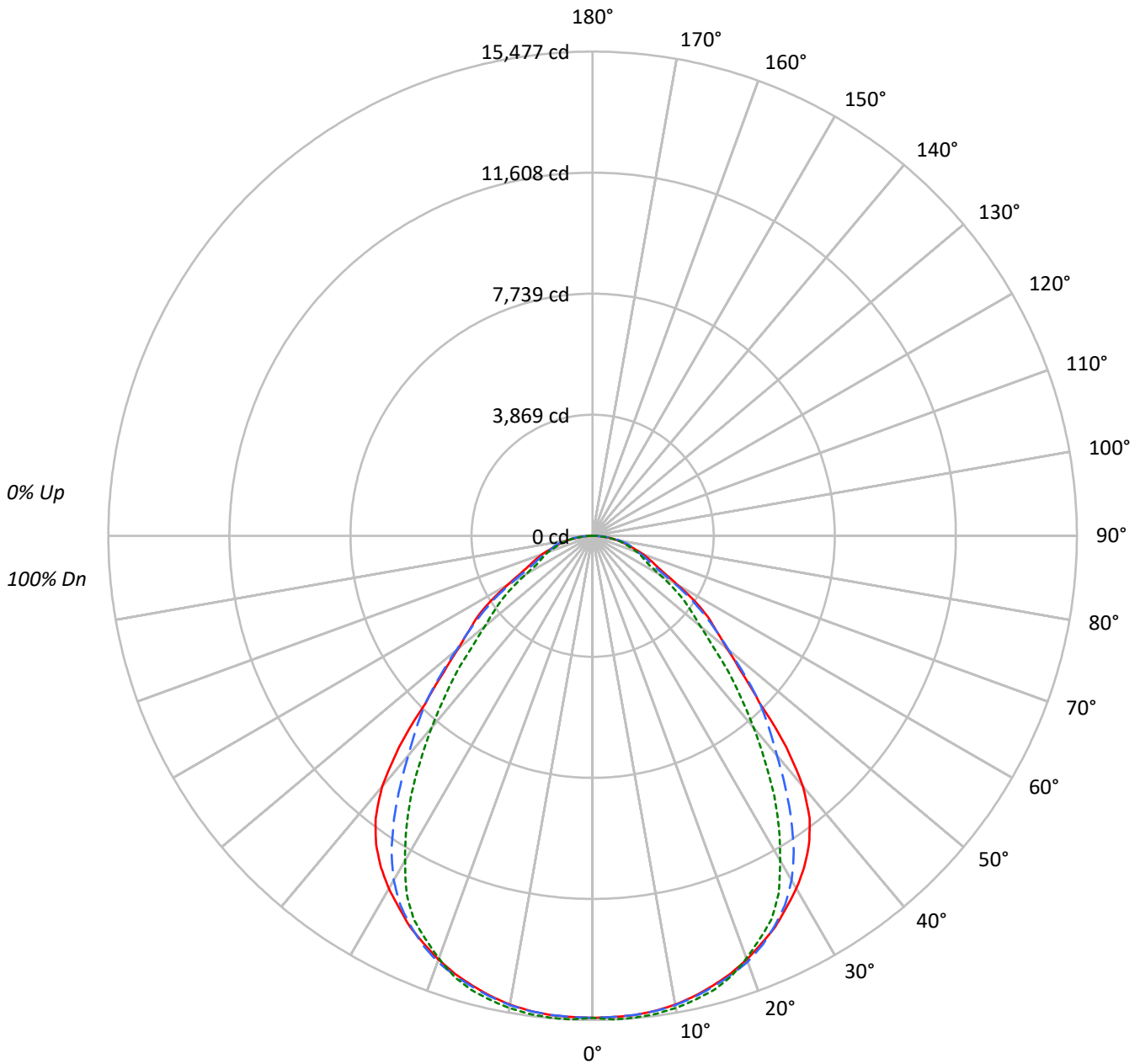
Lumens per Lamp: N/A
Luminaire Lumens: 31981.0 lumens
Efficiency: N/A
Efficacy: 164.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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°	81298	81298	81298
5°	81458	81437	81899
10°	81529	81616	82117
15°	81291	81502	82068
20°	80936	81347	80696
25°	80344	80120	78759
30°	79328	77458	73037
35°	77662	71261	65095
40°	72072	63072	55135
45°	56228	56380	45629
50°	45923	46574	36849
55°	41146	39594	32378
60°	32940	31182	25905
65°	27605	25270	22910
70°	26209	24077	23324
75°	23781	25561	22497
80°	23895	26120	23710
85°	20790	24361	19809



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1465.0	4.6
10°-20°	4213.4	13.2
20°-30°	6289.9	19.7
30°-40°	6863.3	21.5
40°-50°	5614.5	17.6
50°-60°	3691.5	11.5
60°-70°	2117.9	6.6
70°-80°	1283.4	4.0
80°-90°	431.0	1.3
90°-100°	11.2	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°	11968.2	37.4
0°-40°	18831.5	58.9
0°-60°	28137.5	88.0
0°-90°	31969.8	100.0
90°-120°	11.2	0.0
90°-150°	11.2	0.0
90°-180°	11.0	0.0
0°-180°	31981.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15408	15408	15408	15408	15408	
5°	15379	15355	15375	15438	15463	###
15°	14882	14880	14920	15016	15024	4200
25°	13800	13833	13762	13595	13528	6349
35°	12057	11784	11063	10309	10106	7473
45°	7535	8098	7556	6670	6115	5981
55°	4473	4351	4304	3698	3520	3939
65°	2211	2178	2024	1969	1835	2260
75°	1166	1262	1254	1203	1104	1262
85°	343	390	402	352	327	372
90°	2	28	57	67	71	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°	15407.8	15407.8	15407.8	15407.8	15407.8
2.5°	15397.7	15375.3	15395.6	15458.6	15476.9
5°	15379.4	15355.0	15375.3	15438.3	15462.7
7.5°	15316.4	15302.2	15322.5	15385.5	15416.0
10°	15216.8	15200.6	15233.1	15287.9	15326.6
12.5°	15068.5	15062.4	15092.9	15172.1	15188.4
15°	14881.5	14879.5	14920.1	15015.6	15023.8
17.5°	14670.2	14668.1	14718.9	14781.9	14759.6
20°	14414.1	14428.3	14487.3	14428.3	14371.4
22.5°	14107.3	14152.0	14166.2	13981.3	13952.8
25°	13800.4	13832.9	13761.8	13595.2	13528.1
27.5°	13404.1	13442.7	13310.7	13072.9	12881.9
30°	13020.1	12983.5	12713.2	12253.9	11987.7
32.5°	12579.1	12449.0	11963.3	11329.3	11087.5
35°	12056.8	11784.5	11063.1	10309.1	10105.9
37.5°	11396.4	10898.5	10110.0	9323.6	9016.7
40°	10463.6	9888.5	9156.9	8344.1	8004.7
42.5°	9156.9	8943.5	8338.0	7423.5	7019.1
45°	7535.3	8098.2	7555.6	6669.6	6114.8
47.5°	6450.1	7232.5	6580.1	5940.0	5175.9
50°	5594.5	6133.1	5673.8	5096.7	4489.0
52.5°	4976.8	5139.3	4954.4	4320.4	3974.9
55°	4472.8	4350.9	4304.1	3698.5	3519.7
57.5°	3846.9	3779.8	3659.9	3225.0	2989.3
60°	3121.4	3263.6	2954.8	2830.8	2454.8
62.5°	2564.6	2704.8	2373.6	2365.4	2052.5
65°	2211.0	2178.5	2024.0	1969.2	1835.0
67.5°	1957.0	1855.4	1802.5	1731.4	1684.7
70°	1698.9	1656.2	1560.7	1574.9	1511.9
72.5°	1416.4	1471.3	1375.8	1402.2	1288.4
75°	1166.5	1262.0	1253.8	1203.0	1103.5
77.5°	961.2	1062.8	1081.1	1034.4	953.1
80°	786.4	855.5	859.6	831.2	780.3
82.5°	577.1	617.8	648.3	599.5	567.0
85°	343.4	390.2	402.4	351.6	327.2
87.5°	111.8	156.5	174.8	180.9	182.9
90°	2.0	28.5	56.9	67.1	71.1
92.5°	2.0	8.1	12.2	18.3	20.3
95°	2.0	4.1	6.1	6.1	4.1
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)