

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: P860047

Luminaire Tested: **SPHB-30HE-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: P860047
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-30HE-M-L840-CD
Description: 30000 Lumen High Efficacy Select Pro High Bay with Medium Lens and, 4000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

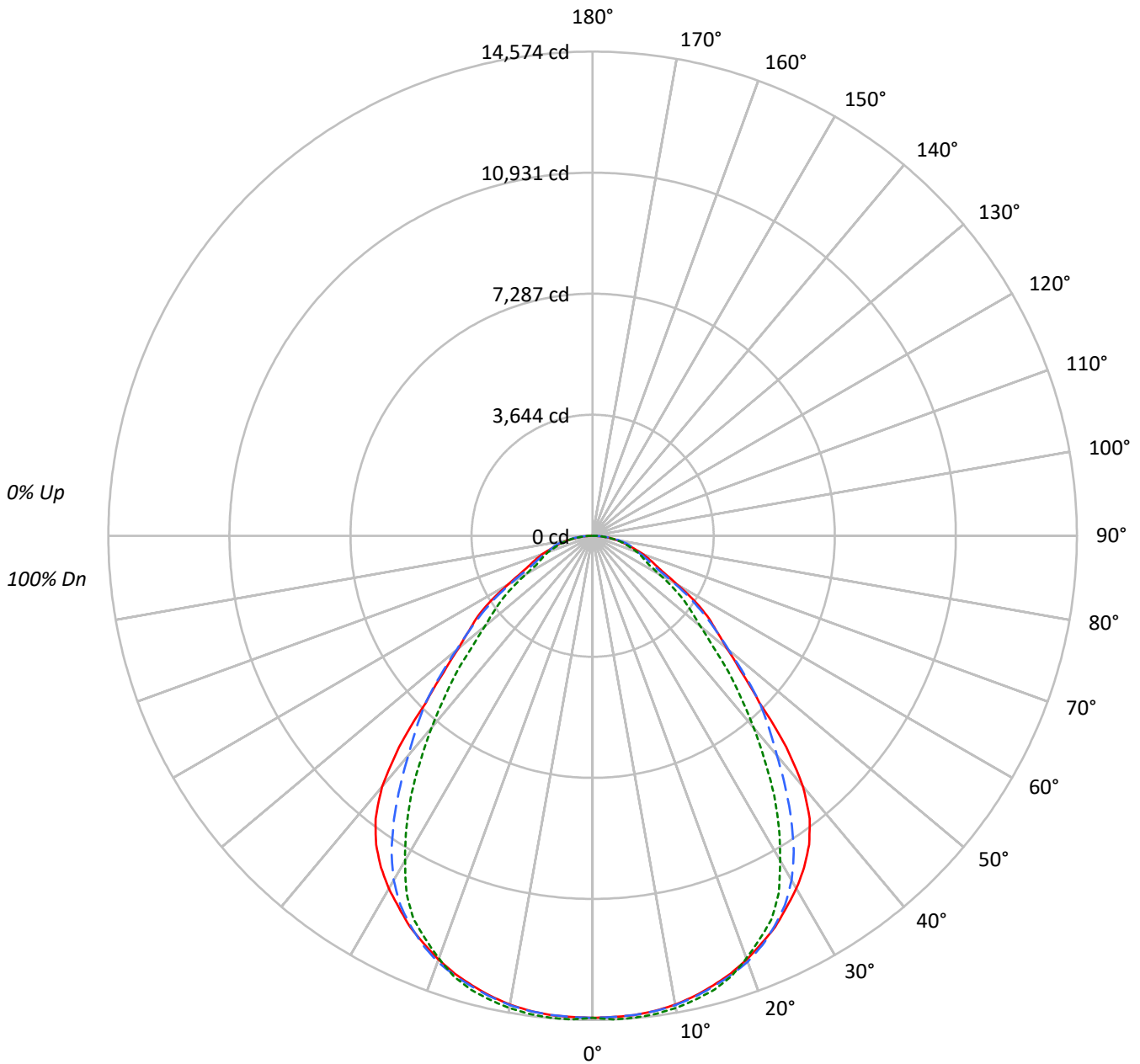
Lumens per Lamp: N/A
Luminaire Lumens: 30116.0 lumens
Efficiency: N/A
Efficacy: 169.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

Input Watts (W): 177.6
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					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								
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°	76557	76557	76557
5°	76708	76688	77124
10°	76774	76856	77328
15°	76551	76749	77282
20°	76216	76603	75991
25°	75659	75448	74166
30°	74701	72941	68778
35°	73133	67105	61300
40°	67869	59394	51920
45°	52949	53092	42968
50°	43246	43858	34700
55°	38747	37285	30490
60°	31019	29363	24395
65°	25995	23797	21574
70°	24681	22673	21965
75°	22393	24070	21184
80°	22504	24597	22327
85°	19579	22939	18652



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1379.6	4.6
10°-20°	3967.6	13.2
20°-30°	5923.0	19.7
30°-40°	6463.1	21.5
40°-50°	5287.1	17.6
50°-60°	3476.2	11.5
60°-70°	1994.4	6.6
70°-80°	1208.6	4.0
80°-90°	405.8	1.3
90°-100°	10.5	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°	11270.3	37.4
0°-40°	17733.3	58.9
0°-60°	26496.6	88.0
0°-90°	30105.4	100.0
90°-120°	10.5	0.0
90°-150°	10.5	0.0
90°-180°	11.0	0.0
0°-180°	30116.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14509	14509	14509	14509	14509	
5°	14482	14460	14479	14538	14561	###
15°	14014	14012	14050	14140	14148	3956
25°	12996	13026	12959	12802	12739	5979
35°	11354	11097	10418	9708	9517	7037
45°	7096	7626	7115	6281	5758	5632
55°	4212	4097	4053	3483	3314	3710
65°	2082	2051	1906	1854	1728	2128
75°	1098	1188	1181	1133	1039	1189
85°	323	367	379	331	308	351
90°	2	27	54	63	67	15
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°	14509.3	14509.3	14509.3	14509.3	14509.3
2.5°	14499.7	14478.7	14497.8	14557.2	14574.4
5°	14482.5	14459.6	14478.7	14538.0	14561.0
7.5°	14423.2	14409.8	14428.9	14488.3	14517.0
10°	14329.4	14314.1	14344.7	14396.4	14432.8
12.5°	14189.7	14184.0	14212.7	14287.3	14302.6
15°	14013.7	14011.8	14050.0	14140.0	14147.6
17.5°	13814.7	13812.7	13860.6	13919.9	13898.9
20°	13573.5	13586.9	13642.4	13586.9	13533.4
22.5°	13284.6	13326.7	13340.1	13165.9	13139.1
25°	12995.6	13026.2	12959.3	12802.3	12739.2
27.5°	12622.5	12658.8	12534.4	12310.5	12130.6
30°	12260.8	12226.3	11971.8	11539.3	11288.6
32.5°	11845.5	11723.0	11265.7	10668.6	10440.9
35°	11353.7	11097.3	10417.9	9708.0	9516.6
37.5°	10731.8	10262.9	9520.4	8779.8	8490.9
40°	9853.4	9311.8	8622.9	7857.5	7537.9
42.5°	8622.9	8422.0	7851.7	6990.6	6609.8
45°	7095.8	7625.9	7115.0	6280.6	5758.2
47.5°	6073.9	6810.7	6196.4	5593.6	4874.1
50°	5268.3	5775.4	5342.9	4799.4	4227.3
52.5°	4686.5	4839.6	4665.5	4068.4	3743.1
55°	4212.0	4097.1	4053.1	3482.8	3314.4
57.5°	3622.5	3559.4	3446.5	3037.0	2815.0
60°	2939.4	3073.3	2782.5	2665.7	2311.7
62.5°	2415.0	2547.1	2235.1	2227.5	1932.8
65°	2082.1	2051.4	1906.0	1854.3	1728.0
67.5°	1842.8	1747.2	1697.4	1630.4	1586.4
70°	1599.8	1559.6	1469.7	1483.1	1423.8
72.5°	1333.8	1385.5	1295.5	1320.4	1213.3
75°	1098.4	1188.4	1180.7	1132.9	1039.1
77.5°	905.2	1000.8	1018.1	974.0	897.5
80°	740.6	805.6	809.5	782.7	734.8
82.5°	543.5	581.8	610.5	564.5	533.9
85°	323.4	367.4	378.9	331.1	308.1
87.5°	105.3	147.4	164.6	170.3	172.2
90°	1.9	26.8	53.6	63.2	67.0
92.5°	1.9	7.7	11.5	17.2	19.1
95°	1.9	3.8	5.7	5.7	3.8
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)