

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: P860066

Luminaire Tested: **SPHB-30HE-W-L850-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: P860066
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/11/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SPHB-30HE-W-L850-CD
Description: 30000 Lumen High Efficacy Select Pro High Bay with Wide Lens and, 5000K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

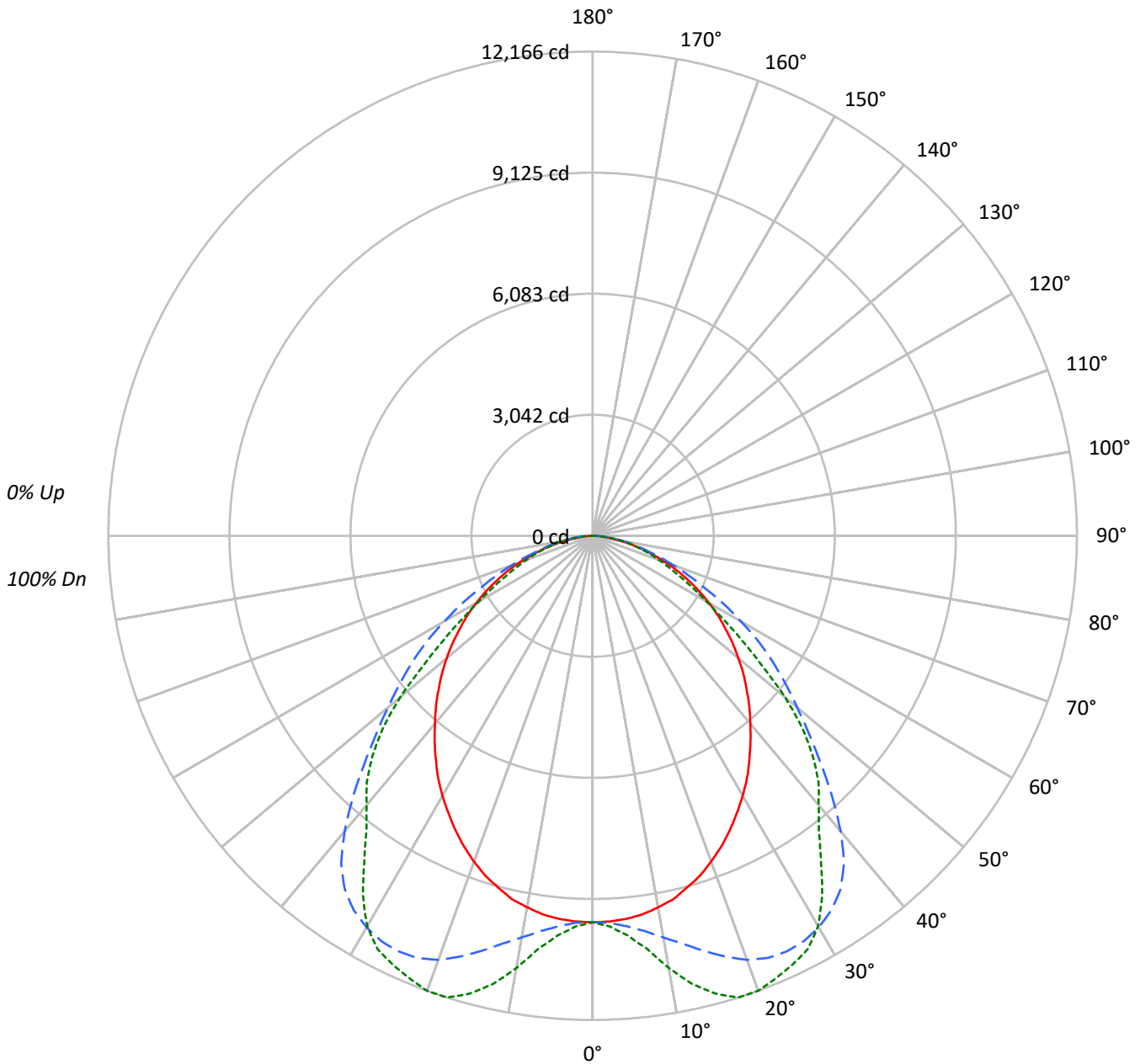
Lumens per Lamp: N/A
Luminaire Lumens: 30557.0 lumens
Efficiency: N/A
Efficacy: 172.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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									
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	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85																			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72																			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62																			
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53																			
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46																			
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40																			
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36																			
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32																			
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29																			
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	51242	51242	51242
5°	51187	52152	53389
10°	50782	54905	59066
15°	49988	58992	65062
20°	48906	63684	68312
25°	47494	67119	69207
30°	45949	69219	69019
35°	44224	69915	64403
40°	42442	66757	60830
45°	40837	60512	58362
50°	39246	55021	51738
55°	37451	50836	42103
60°	35598	45321	34675
65°	33147	38944	30065
70°	30156	33250	27192
75°	25897	27905	24931
80°	20243	23935	23124
85°	13688	20311	19058



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	953.5	3.1
10°-20°	3023.4	9.9
20°-30°	4948.0	16.2
30°-40°	6036.2	19.8
40°-50°	5978.3	19.6
50°-60°	4780.6	15.6
60°-70°	2982.3	9.8
70°-80°	1461.2	4.8
80°-90°	383.2	1.3
90°-100°	10.1	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°	8925.0	29.2
0°-40°	14961.2	49.0
0°-60°	25720.1	84.2
0°-90°	30546.9	100.0
90°-120°	10.1	0.0
90°-150°	10.1	0.0
90°-180°	10.0	0.0
0°-180°	30557.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9712	9712	9712	9712	9712	
5°	9664	9707	9846	10018	10080	917
15°	9151	9684	10799	11659	11910	2580
25°	8158	9539	11529	11863	11887	3754
35°	6866	9174	10854	10274	9998	4295
45°	5473	8502	8109	7837	7821	4227
55°	4071	6528	5526	4992	4577	3647
65°	2655	3663	3119	2587	2408	2632
75°	1270	1556	1369	1253	1223	1349
85°	226	321	336	318	315	280
90°	1	33	60	75	78	13
95°	1	5	5	4	2	0
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°	9711.5	9711.5	9711.5	9711.5	9711.5
2.5°	9701.7	9698.1	9733.4	9797.8	9827.0
5°	9664.1	9706.6	9846.4	10017.8	10079.8
7.5°	9596.0	9710.3	10019.0	10333.9	10467.6
10°	9478.1	9712.7	10247.6	10803.1	11024.3
12.5°	9356.5	9704.2	10501.6	11288.1	11530.0
15°	9151.1	9683.5	10799.4	11658.9	11910.5
17.5°	8960.2	9659.2	11086.3	11973.7	12164.6
20°	8709.8	9623.9	11341.6	12069.7	12165.8
22.5°	8447.2	9596.0	11482.6	12005.3	12034.5
25°	8157.9	9538.9	11528.8	11863.1	11887.4
27.5°	7849.2	9487.8	11485.0	11686.8	11707.5
30°	7541.6	9395.4	11361.0	11412.1	11328.2
32.5°	7219.5	9303.0	11160.5	10930.7	10735.0
35°	6865.7	9174.2	10854.1	10274.3	9998.4
37.5°	6516.9	9050.2	10376.4	9540.1	9332.2
40°	6161.9	8897.0	9692.0	8854.5	8831.4
42.5°	5826.4	8731.7	8917.7	8320.8	8398.6
45°	5472.7	8501.9	8109.3	7837.0	7821.2
47.5°	5137.1	8184.7	7373.9	7302.1	7140.5
50°	4781.0	7747.1	6702.8	6634.8	6302.9
52.5°	4432.1	7189.1	6103.6	5848.3	5364.5
55°	4071.1	6527.8	5526.1	4992.5	4576.8
57.5°	3735.6	5800.9	4939.0	4247.3	3874.1
60°	3373.3	5064.2	4294.7	3593.3	3285.8
62.5°	3018.3	4338.5	3711.2	3036.6	2832.4
65°	2654.9	3662.6	3119.2	2586.8	2408.1
67.5°	2307.2	3077.9	2607.5	2180.8	2061.7
70°	1954.7	2496.9	2155.3	1831.9	1762.6
72.5°	1591.2	1994.8	1743.2	1546.2	1494.0
75°	1270.3	1556.0	1368.8	1253.3	1222.9
77.5°	945.7	1157.3	1069.7	1001.7	993.1
80°	666.2	835.1	787.7	774.3	761.0
82.5°	425.5	545.8	560.4	551.9	542.2
85°	226.1	320.9	335.5	318.5	314.8
87.5°	91.2	139.8	150.7	166.5	171.4
90°	1.2	32.8	59.6	75.4	77.8
92.5°	1.2	7.3	8.5	8.5	7.3
95°	1.2	4.9	4.9	3.6	2.4
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)