

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: P860226

Luminaire Tested: **SPHB-60HE-W-L835-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: P860226
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-60HE-W-L835-CD
Description: 60000 Lumen High Efficacy Select Pro High Bay with Wide Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

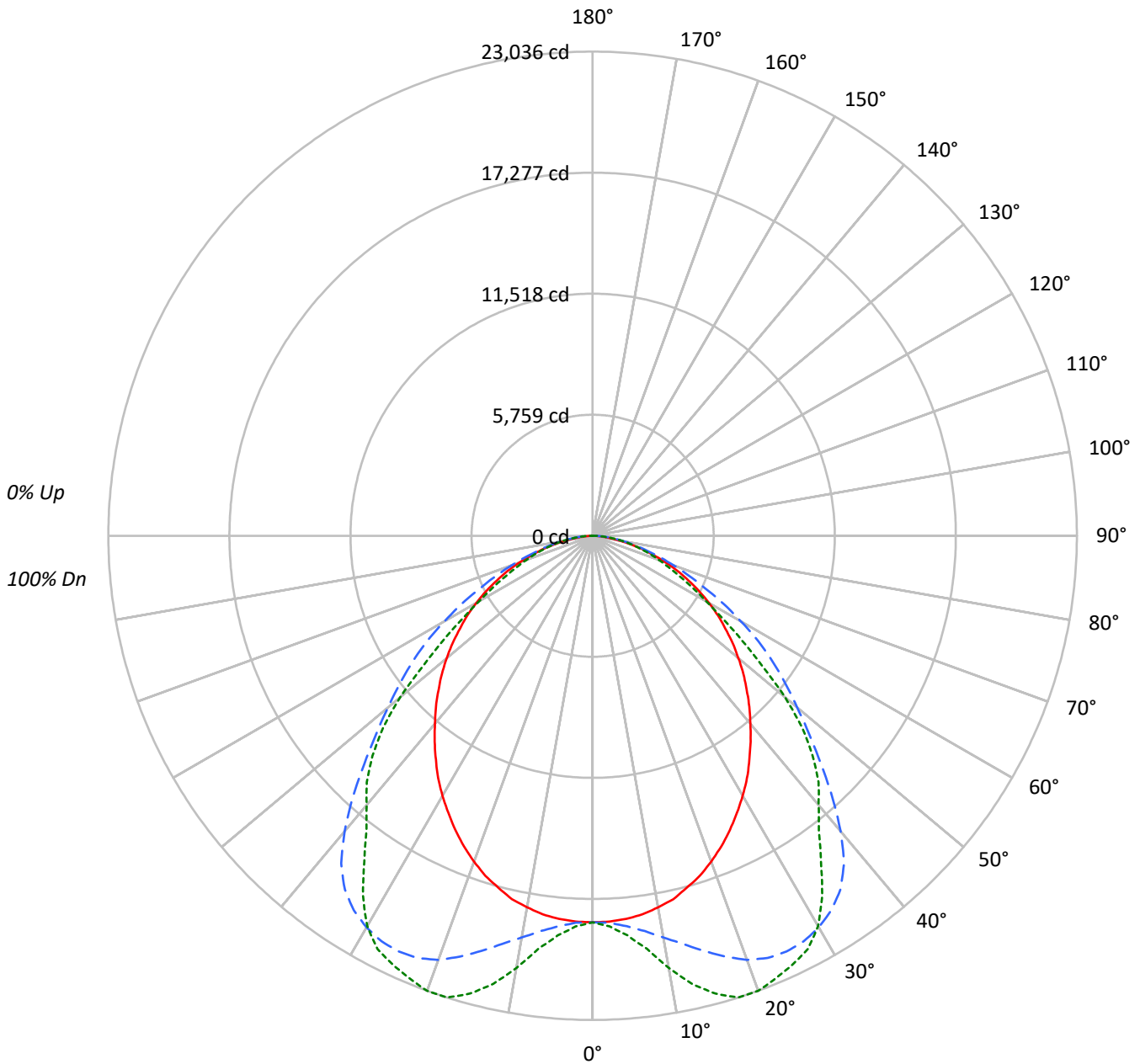
Lumens per Lamp: N/A
Luminaire Lumens: 57861.0 lumens
Efficiency: N/A
Efficacy: 159.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.5 / 1.51
Luminous Opening: Rectangular (W 1' x L: 3.38' x H: 0')
CIE Type: Direct

Input Watts (W): 363
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			100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85			85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72			72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62			62
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53			53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46			46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40			40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36			36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32			32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	29			29
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26			26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	58562	58562	58562
5°	58498	59602	61015
10°	58036	62748	67504
15°	57129	67420	74356
20°	55892	72781	78070
25°	54279	76707	79093
30°	52513	79107	78879
35°	50542	79902	73602
40°	48505	76294	69519
45°	46670	69156	66699
50°	44852	62881	59129
55°	42800	58098	48117
60°	40683	51796	39628
65°	37881	44507	34361
70°	34463	38000	31077
75°	29597	31890	28492
80°	23133	27355	26425
85°	15642	23213	21785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1805.5	3.1
10°-20°	5725.0	9.9
20°-30°	9369.3	16.2
30°-40°	11429.9	19.8
40°-50°	11320.1	19.6
50°-60°	9052.4	15.6
60°-70°	5647.2	9.8
70°-80°	2766.8	4.8
80°-90°	725.7	1.3
90°-100°	19.1	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°	16899.8	29.2
0°-40°	28329.7	49.0
0°-60°	48702.2	84.2
0°-90°	57841.9	100.0
90°-120°	19.1	0.0
90°-150°	19.1	0.0
90°-180°	19.0	0.0
0°-180°	57861.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18389	18389	18389	18389	18389	
5°	18299	18380	18645	18969	19086	###
15°	17328	18336	20449	22077	22553	4885
25°	15447	18062	21830	22463	22509	7108
35°	13001	17372	20553	19455	18932	8132
45°	10363	16099	15355	14840	14810	8004
55°	7709	12361	10464	9454	8666	6907
65°	5027	6935	5906	4898	4560	4985
75°	2405	2946	2592	2373	2316	2554
85°	428	608	635	603	596	530
90°	2	62	113	143	147	25
95°	2	9	9	7	5	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°	18389.1	18389.1	18389.1	18389.1	18389.1
2.5°	18370.7	18363.8	18430.5	18552.5	18607.8
5°	18299.3	18379.9	18644.6	18969.1	19086.5
7.5°	18170.4	18386.8	18971.4	19567.6	19820.8
10°	17947.1	18391.4	19404.2	20456.1	20875.0
12.5°	17717.0	18375.3	19885.3	21374.5	21832.6
15°	17328.0	18336.1	20449.2	22076.6	22553.0
17.5°	16966.6	18290.1	20992.4	22672.7	23034.1
20°	16492.4	18223.4	21475.8	22854.6	23036.4
22.5°	15995.2	18170.4	21742.8	22732.6	22787.8
25°	15447.4	18062.2	21830.3	22463.3	22509.3
27.5°	14862.7	17965.6	21747.4	22129.5	22168.6
30°	14280.4	17790.6	21512.6	21609.3	21450.5
32.5°	13670.4	17615.7	21132.8	20697.8	20327.2
35°	13000.6	17371.7	20552.8	19454.8	18932.3
37.5°	12340.0	17136.9	19648.2	18064.5	17670.9
40°	11667.8	16846.9	18352.3	16766.3	16722.6
42.5°	11032.5	16533.8	16886.0	15755.8	15903.1
45°	10362.7	16098.8	15355.3	14839.7	14809.8
47.5°	9727.4	15498.0	13962.7	13826.9	13520.8
50°	9053.0	14669.4	12692.1	12563.2	11934.8
52.5°	8392.4	13612.9	11557.3	11074.0	10157.8
55°	7708.7	12360.7	10464.0	9453.5	8666.3
57.5°	7073.4	10984.2	9352.2	8042.5	7335.8
60°	6387.5	9589.3	8132.3	6804.1	6221.8
62.5°	5715.4	8215.1	7027.4	5749.9	5363.2
65°	5027.1	6935.3	5906.4	4898.2	4559.9
67.5°	4368.8	5828.2	4937.4	4129.4	3903.9
70°	3701.3	4727.9	4081.1	3468.8	3337.6
72.5°	3013.1	3777.3	3300.8	2927.9	2828.9
75°	2405.4	2946.3	2591.8	2373.2	2315.6
77.5°	1790.8	2191.3	2025.6	1896.7	1880.6
80°	1261.4	1581.3	1491.6	1466.2	1440.9
82.5°	805.6	1033.5	1061.1	1045.0	1026.6
85°	428.1	607.7	635.3	603.1	596.2
87.5°	172.6	264.7	285.4	315.3	324.6
90°	2.3	62.1	112.8	142.7	147.3
92.5°	2.3	13.8	16.1	16.1	13.8
95°	2.3	9.2	9.2	6.9	4.6
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)