

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: P860046

Luminaire Tested: **SPHB-30HE-M-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: P860046
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-L835-CD
Description: 30000 Lumen High Efficacy Select Pro High Bay with Medium Lens and, 3500K 80CRI LEDs
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

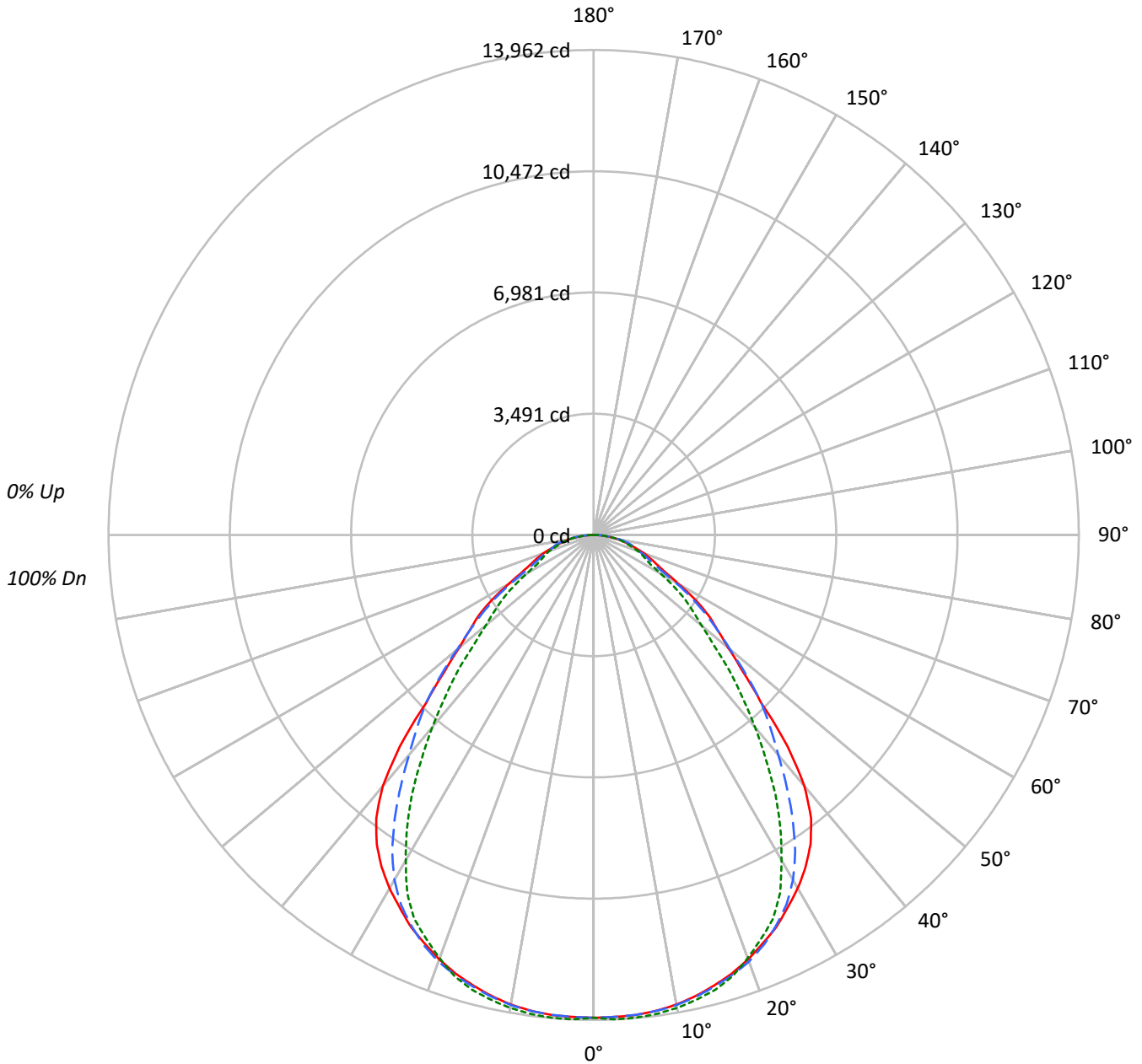
Lumens per Lamp: N/A
Luminaire Lumens: 28851.0 lumens
Efficiency: N/A
Efficacy: 162.4 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.16 / 1.22
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')
CIE Type: Direct

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	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	106	103	99	108	104	101	98	100	97	95	96	94	92	92	91	89	87					87			
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75					75			
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66					66			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58					58			
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51					51			
6	75	63	55	49	73	62	54	49	60	54	48	59	53	48	57	52	48	46					46			
7	70	58	50	44	68	57	49	44	55	49	44	54	48	43	53	47	43	41					41			
8	66	53	45	40	64	52	45	40	51	44	39	50	44	39	49	43	39	37					37			
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34					34			
10	58	45	38	33	57	45	38	33	44	37	33	43	37	33	42	37	33	31					31			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	73342	73342	73342
5°	73486	73466	73884
10°	73550	73628	74080
15°	73335	73526	74036
20°	73015	73385	72799
25°	72481	72278	71051
30°	71564	69877	65889
35°	70061	64286	58725
40°	65018	56899	49740
45°	50725	50862	41163
50°	41429	42016	33243
55°	37119	35719	29209
60°	29716	28130	23370
65°	24903	22797	20668
70°	23644	21722	21043
75°	21453	23059	20295
80°	21559	23564	21392
85°	18755	21976	17871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1321.6	4.6
10°-20°	3801.0	13.2
20°-30°	5674.3	19.7
30°-40°	6191.6	21.5
40°-50°	5065.0	17.6
50°-60°	3330.2	11.5
60°-70°	1910.6	6.6
70°-80°	1157.8	4.0
80°-90°	388.8	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°	10796.9	37.4
0°-40°	16988.5	58.9
0°-60°	25383.7	88.0
0°-90°	28840.9	100.0
90°-120°	10.1	0.0
90°-150°	10.1	0.0
90°-180°	10.0	0.0
0°-180°	28851.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13900	13900	13900	13900	13900	
5°	13874	13852	13870	13927	13949	###
15°	13425	13423	13460	13546	13553	3789
25°	12450	12479	12415	12265	12204	5727
35°	10877	10631	9980	9300	9117	6741
45°	6798	7306	6816	6017	5516	5396
55°	4035	3925	3883	3337	3175	3554
65°	1995	1965	1826	1776	1655	2039
75°	1052	1138	1131	1085	996	1139
85°	310	352	363	317	295	336
90°	2	26	51	60	64	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



TEST NUMBER: P860046

CATALOG NUMBER: SPHB-30HE-M-L835-CD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13899.9	13899.9	13899.9	13899.9	13899.9
2.5°	13890.7	13870.5	13888.9	13945.7	13962.2
5°	13874.2	13852.2	13870.5	13927.4	13949.4
7.5°	13817.4	13804.5	13822.9	13879.7	13907.2
10°	13727.5	13712.9	13742.2	13791.7	13826.5
12.5°	13593.7	13588.2	13615.7	13687.2	13701.9
15°	13425.0	13423.2	13459.9	13546.0	13553.4
17.5°	13234.4	13232.6	13278.4	13335.2	13315.1
20°	13003.4	13016.2	13069.4	13016.2	12964.9
22.5°	12726.6	12766.9	12779.7	12612.9	12587.2
25°	12449.7	12479.1	12414.9	12264.6	12204.1
27.5°	12092.3	12127.1	12007.9	11793.4	11621.1
30°	11745.8	11712.8	11468.9	11054.6	10814.5
32.5°	11348.0	11230.6	10792.5	10220.5	10002.3
35°	10876.8	10631.1	9980.3	9300.2	9116.9
37.5°	10281.0	9831.8	9120.5	8411.1	8134.2
40°	9439.5	8920.7	8260.7	7527.4	7221.3
42.5°	8260.7	8068.2	7521.9	6696.9	6332.1
45°	6797.8	7305.6	6816.1	6016.8	5516.3
47.5°	5818.8	6524.6	5936.1	5358.7	4669.3
50°	5047.0	5532.8	5118.5	4597.8	4049.7
52.5°	4489.7	4636.3	4469.5	3897.5	3585.9
55°	4035.0	3925.0	3882.9	3336.6	3175.2
57.5°	3470.4	3409.9	3301.7	2909.4	2696.7
60°	2815.9	2944.2	2665.6	2553.7	2214.6
62.5°	2313.6	2440.1	2141.3	2133.9	1851.6
65°	1994.6	1965.3	1825.9	1776.4	1655.4
67.5°	1765.4	1673.8	1626.1	1561.9	1519.8
70°	1532.6	1494.1	1408.0	1420.8	1364.0
72.5°	1277.8	1327.3	1241.1	1265.0	1162.3
75°	1052.3	1138.5	1131.1	1085.3	995.5
77.5°	867.1	958.8	975.3	933.1	859.8
80°	709.5	771.8	775.5	749.8	704.0
82.5°	520.6	557.3	584.8	540.8	511.5
85°	309.8	352.0	363.0	317.2	295.2
87.5°	100.8	141.2	157.7	163.2	165.0
90°	1.8	25.7	51.3	60.5	64.2
92.5°	1.8	7.3	11.0	16.5	18.3
95°	1.8	3.7	5.5	5.5	3.7
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)