

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: P860055

Luminaire Tested: **SPHB-30HE-N-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: P860055  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2404-343-7)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/11/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SPHB-30HE-N-L835-CD  
Description: 30000 Lumen High Efficacy Select Pro High Bay with Narrow Lens and, 3500K 80CRI LEDs  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

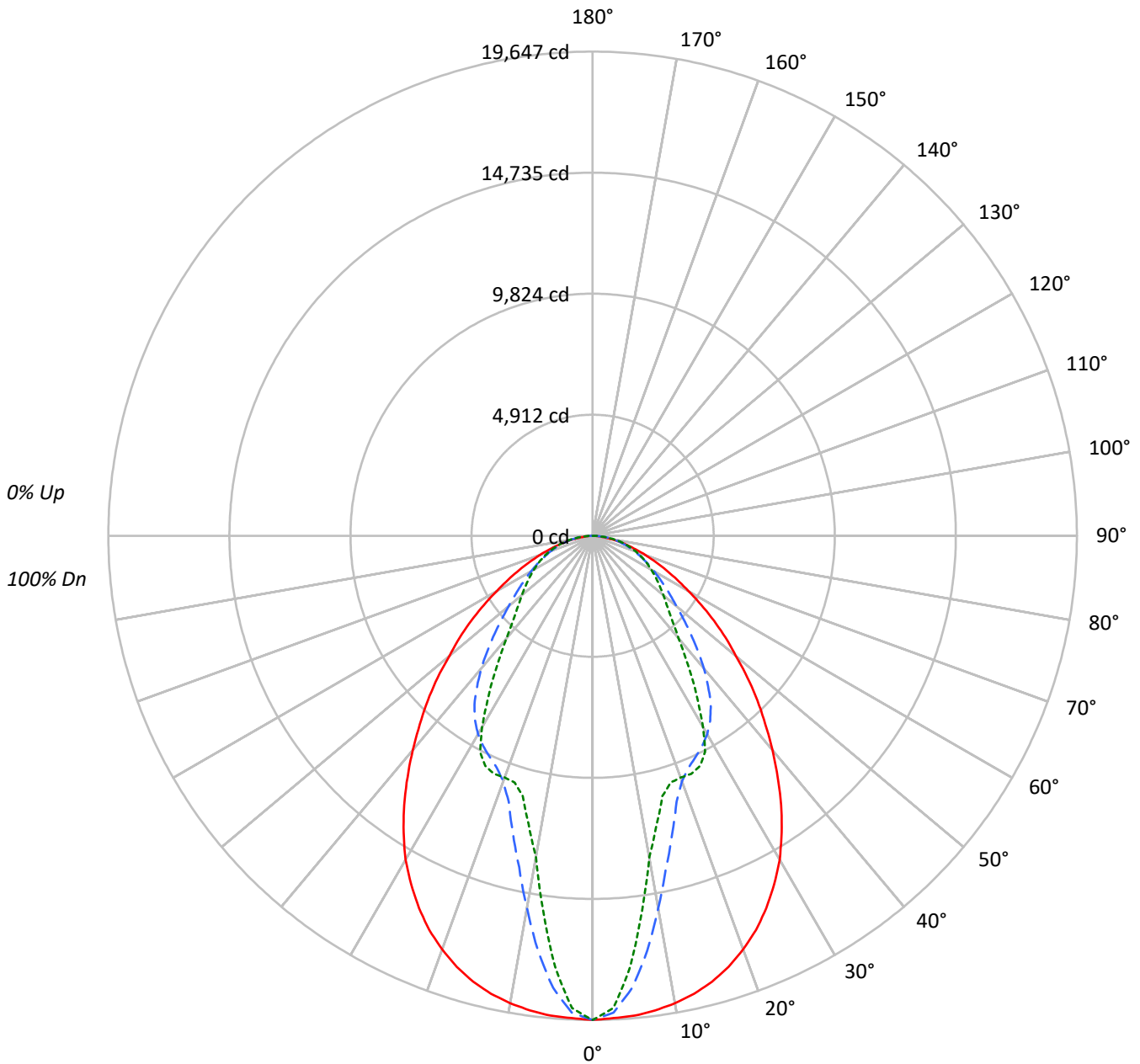
Lumens per Lamp: N/A  
Luminaire Lumens: 28794.0 lumens  
Efficiency: N/A  
Efficacy: 162.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.54 / 0.94  
Luminous Opening: Rectangular (W 1' x L: 2.04' x H: 0')  
CIE Type: Direct

Input Watts (W): 177.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86			
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74			
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64			
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56			
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50			
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45			
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40			
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37			
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34			
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	103664	103664	103664
5°	103544	97538	92922
10°	103190	82216	70878
15°	102331	68248	59728
20°	100270	59492	58632
25°	97047	57562	60006
30°	92460	56638	54610
35°	85848	53822	45252
40°	78173	48317	37367
45°	70565	41925	32804
50°	62273	36456	30718
55°	55259	32880	29568
60°	47357	30405	28964
65°	40991	28576	28819
70°	35078	27488	28784
75°	29446	26694	28529
80°	22467	25794	27937
85°	14711	22884	21522



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1675.0	5.8
10°-20°	3846.1	13.4
20°-30°	5197.9	18.1
30°-40°	5470.5	19.0
40°-50°	4641.9	16.1
50°-60°	3595.8	12.5
60°-70°	2504.4	8.7
70°-80°	1434.0	5.0
80°-90°	417.3	1.4
90°-100°	11.1	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°	10719.0	37.2
0°-40°	16189.5	56.2
0°-60°	24427.1	84.8
0°-90°	28782.9	100.0
90°-120°	11.1	0.0
90°-150°	11.1	0.0
90°-180°	11.0	0.0
0°-180°	28794.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	19647	19647	19647	19647	19647	
5°	19549	19191	18415	17709	17544	###
15°	18733	15900	12494	11246	10934	5271
25°	16669	11775	9887	10174	10307	7652
35°	13328	9056	8356	7547	7025	8308
45°	9457	6800	5618	4617	4396	7283
55°	6007	4581	3574	3249	3214	5371
65°	3283	2688	2289	2289	2308	3280
75°	1444	1284	1309	1392	1399	1540
85°	243	315	378	356	356	309
90°	2	28	56	70	74	13
95°	2	4	9	9	8	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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CATALOG NUMBER: SPHB-30HE-N-L835-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	19646.6	19646.6	19646.6	19646.6	19646.6
2.5°	19589.6	19525.2	19367.7	19265.7	19186.2
5°	19549.2	19190.7	18415.3	17708.8	17543.8
7.5°	19427.7	18640.2	16982.9	15676.5	15346.6
10°	19259.7	17849.8	15345.1	13708.7	13228.8
12.5°	19036.2	17005.4	13776.2	12234.3	11998.9
15°	18733.2	15900.0	12493.8	11245.9	10934.0
17.5°	18340.3	14757.1	11310.4	10589.0	10502.0
20°	17857.3	13708.7	10595.0	10349.0	10442.0
22.5°	17314.4	12690.3	10179.5	10283.0	10457.0
25°	16669.4	11775.4	9887.1	10173.5	10307.0
27.5°	15945.0	10949.0	9618.6	9881.1	9881.1
30°	15175.6	10260.5	9296.1	9272.1	8963.2
32.5°	14277.2	9675.6	8874.7	8399.2	7940.2
35°	13327.7	9056.1	8355.7	7547.3	7025.3
37.5°	12331.8	8480.2	7698.8	6632.4	6146.4
40°	11349.4	7911.8	7014.8	5810.5	5425.0
42.5°	10371.5	7332.8	6302.4	5144.5	4840.0
45°	9456.6	6800.4	5618.5	4616.6	4396.1
47.5°	8526.7	6234.9	4987.0	4192.1	4039.1
50°	7586.3	5662.0	4441.1	3854.6	3742.1
52.5°	6794.4	5128.0	3977.6	3535.2	3467.7
55°	6006.9	4580.6	3574.2	3248.7	3214.2
57.5°	5225.5	4070.6	3205.2	2986.2	2978.7
60°	4487.6	3593.7	2881.2	2761.2	2744.7
62.5°	3859.1	3119.7	2573.8	2516.8	2524.3
65°	3283.2	2687.7	2288.8	2288.8	2308.3
67.5°	2749.2	2290.3	2027.8	2062.3	2089.3
70°	2273.8	1930.3	1781.8	1841.8	1865.8
72.5°	1823.8	1595.8	1546.4	1612.3	1631.8
75°	1444.4	1283.9	1309.4	1391.9	1399.4
77.5°	1070.9	1010.9	1076.9	1166.9	1183.4
80°	739.4	745.4	848.9	911.9	919.4
82.5°	477.0	520.5	635.9	668.9	656.9
85°	243.0	315.0	378.0	355.5	355.5
87.5°	93.0	136.5	160.5	189.0	199.5
90°	1.5	28.5	55.5	70.5	73.5
92.5°	1.5	7.5	12.0	13.5	12.0
95°	1.5	4.5	9.0	9.0	7.5
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)