

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: P#

Luminaire Tested: **HBLED-LD5-30SE-W-CL-UNV-L850-ED3-U**

Issue Date: 3/3/2020

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: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23762)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-30SE-W-CL-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

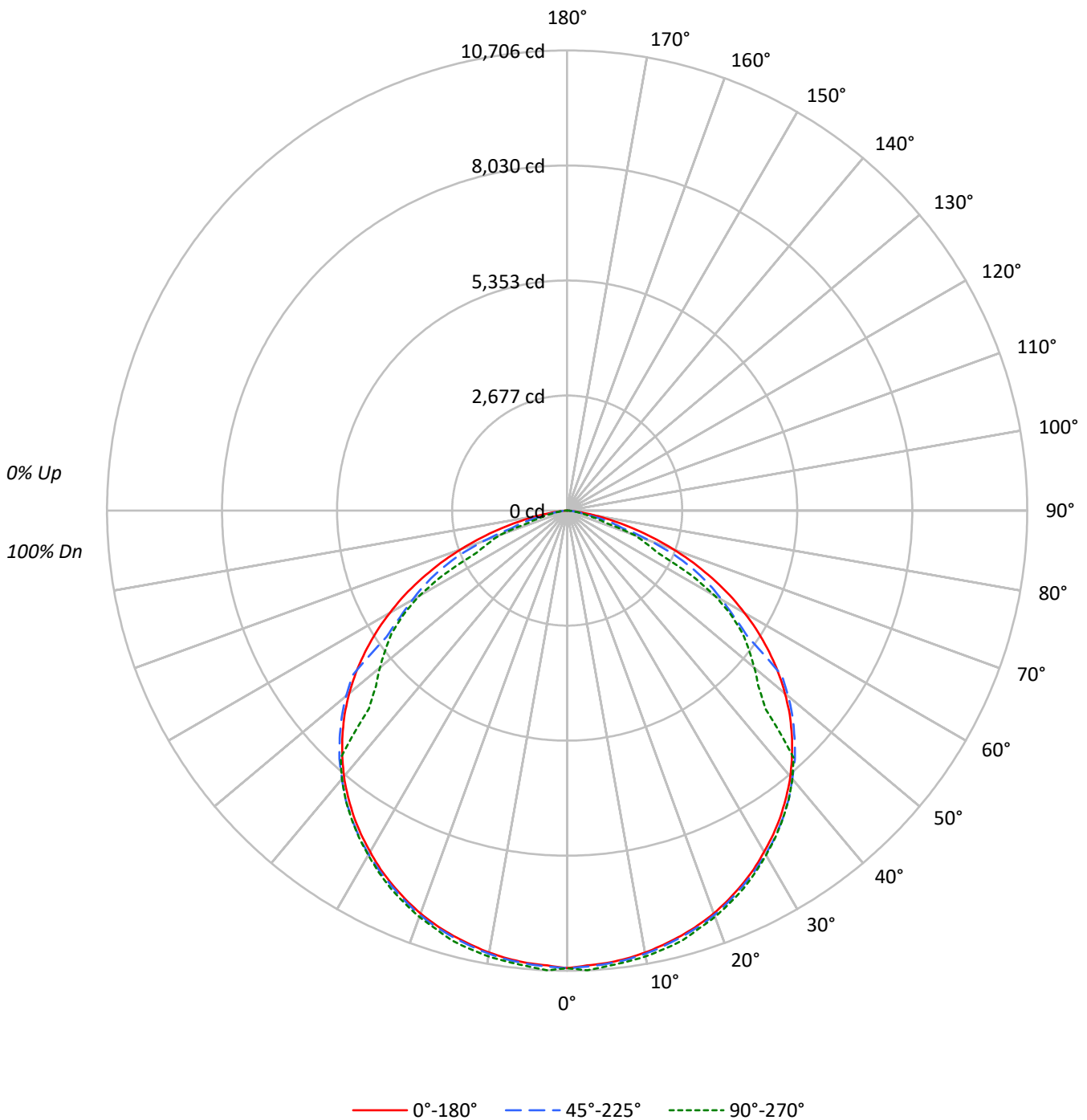
Lumens per Lamp: N/A  
Luminaire Lumens: 28774.0 lumens  
Efficiency: N/A  
Efficacy: 149.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 193  
Input Voltage (V): NR  
Input Current (Ain): 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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-30SE-W-CL-UNV-L850-ED3-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-30SE-W-CL-UNV-L850-ED3-U

**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	100	100	100	100	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86	86	86	86	86	86	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73	73	73	73	73	73	73		
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62	62	62	62	62	62	62		
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53	53	53	53	53	53	53		
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46	46	46	46	46	46	46		
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40	40	40	40	40	40	40		
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36	36	36	36	36	36	36		
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32	32	32	32	32	32	32		
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29	29	29	29	29	29	29		
10	54	41	33	28	53	40	33	28	40	33	28	39	32	28	38	32	28	26	26	26	26	26	26	26		

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

	0°	45°	90°
0°	14321	14321	14321
5°	14268	14300	14370
10°	14267	14308	14391
15°	14266	14310	14425
20°	14284	14338	14405
25°	14268	14321	14408
30°	14241	14345	14378
35°	14234	14364	14375
40°	14190	14315	14315
45°	14068	14238	12406
50°	13851	14060	11903
55°	13458	12035	11692
60°	12826	11187	10682
65°	11862	10385	7398
70°	10329	8080	6592
75°	8159	5423	3544
80°	5252	2590	2209
85°	2161	1581	1740



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-30SE-W-CL-UNV-L850-ED3-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1009.6	3.5
10°-20°	2910.1	10.1
20°-30°	4461.6	15.5
30°-40°	5468.4	19.0
40°-50°	5621.9	19.5
50°-60°	4798.0	16.7
60°-70°	3172.1	11.0
70°-80°	1175.2	4.1
80°-90°	157.1	0.5
90°-100°	0.0	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°	8381.3	29.1
0°-40°	13849.6	48.1
0°-60°	24269.6	84.3
0°-90°	28774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	28774.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10643	10643	10643	10643	10643	
5°	10564	10638	10588	10629	10640	###
15°	10242	10304	10273	10350	10356	2893
25°	9610	9661	9647	9734	9705	4431
35°	8666	8725	8745	8799	8751	5420
45°	7393	7467	7483	7471	6520	5698
55°	5737	5842	5130	4982	4984	5119
65°	3726	3757	3262	2683	2324	3674
75°	1569	1375	1043	701	682	1684
85°	140	100	102	111	113	232
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-30SE-W-CL-UNV-L850-ED3-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10643.4	10643.4	10643.4	10643.4	10643.4
2.5°	10591.6	10657.6	10618.8	10668.0	10705.6
5°	10564.3	10638.2	10587.7	10629.1	10639.5
7.5°	10517.7	10586.4	10539.7	10594.1	10586.4
10°	10442.5	10504.7	10472.3	10529.4	10533.2
12.5°	10346.6	10408.8	10379.0	10449.0	10447.7
15°	10241.7	10303.9	10272.8	10350.5	10355.7
17.5°	10118.5	10175.6	10152.2	10223.5	10195.0
20°	9976.0	10025.2	10013.6	10081.0	10060.2
22.5°	9801.0	9851.6	9839.9	9917.7	9886.6
25°	9610.5	9661.1	9646.8	9733.7	9705.1
27.5°	9404.5	9452.4	9451.1	9532.8	9488.7
30°	9166.0	9229.5	9233.4	9306.0	9254.2
32.5°	8930.2	8989.8	9006.6	9059.8	9015.7
35°	8665.8	8725.4	8744.9	8799.3	8751.4
37.5°	8380.7	8431.3	8466.2	8506.4	8468.8
40°	8078.8	8124.1	8150.0	8199.3	8150.0
42.5°	7741.8	7806.6	7842.9	7877.9	7797.6
45°	7393.2	7467.1	7482.6	7471.0	6519.8
47.5°	7023.9	7104.2	7113.3	6203.6	6028.6
50°	6617.0	6718.1	6716.8	5733.2	5686.5
52.5°	6193.2	6290.4	6286.5	5365.1	5334.0
55°	5737.0	5842.0	5130.5	4981.5	4984.1
57.5°	5271.8	5347.0	4603.1	4609.6	4524.1
60°	4766.4	4837.7	4157.3	4117.1	3969.4
62.5°	4259.7	4289.5	3725.8	3530.1	3248.9
65°	3725.8	3756.9	3261.8	2682.6	2323.6
67.5°	3177.6	3208.7	2707.2	1995.7	1968.5
70°	2625.5	2371.5	2054.0	1662.7	1675.6
72.5°	2081.2	1822.1	1342.6	1288.1	930.5
75°	1569.4	1375.0	1043.2	701.1	681.7
77.5°	1092.5	947.3	558.5	478.2	447.1
80°	677.8	475.6	334.3	296.8	285.1
82.5°	343.4	273.4	181.4	181.4	181.4
85°	140.0	99.8	102.4	111.4	112.7
87.5°	29.8	40.2	49.2	50.5	49.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)