

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-LD5-30HE-W-FLI-UNV-L840-ED2-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 (P26703)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-30HE-W-FLI-UNV-L840-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

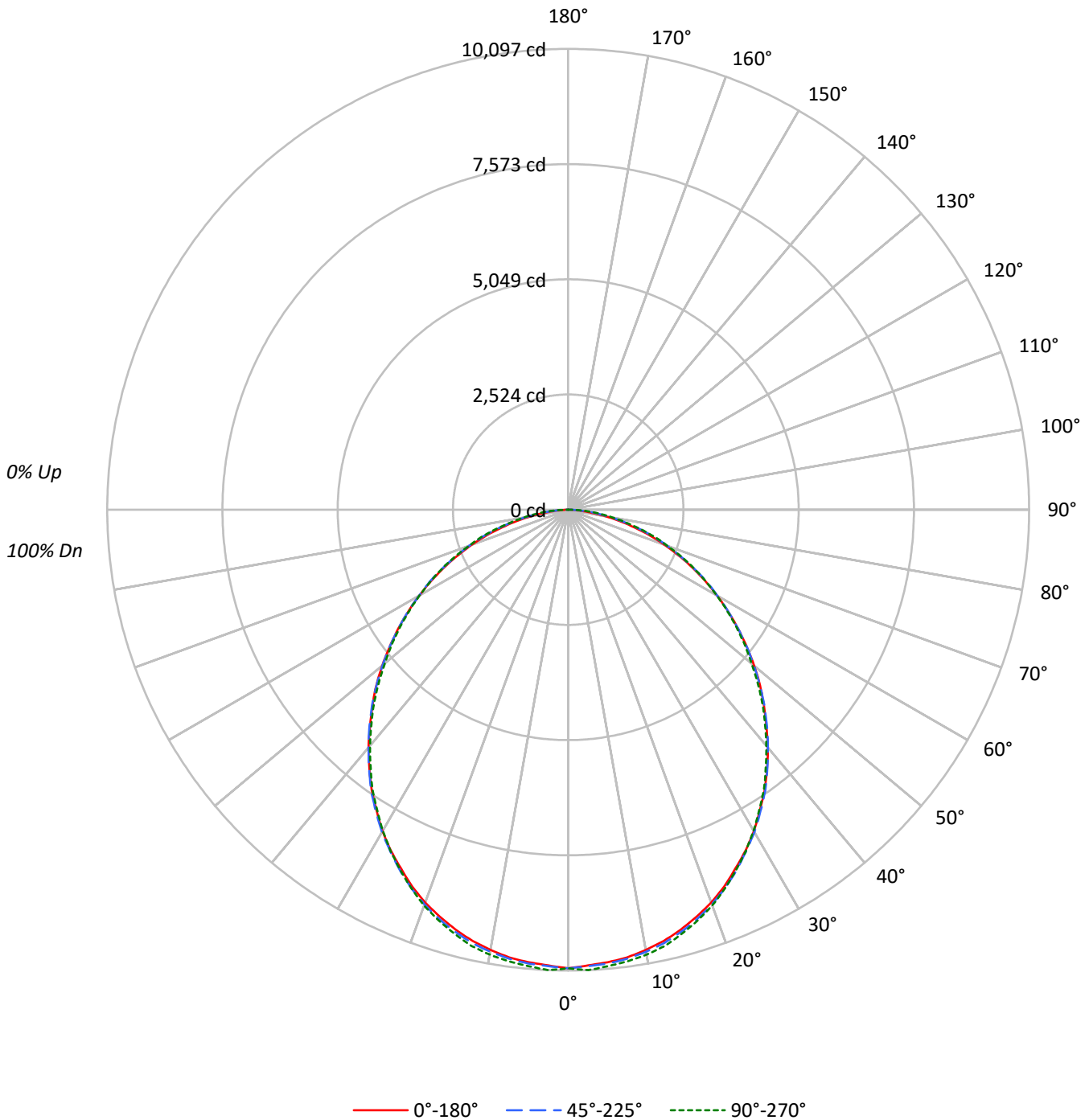
Lumens per Lamp: N/A  
Luminaire Lumens: 26248.0 lumens  
Efficiency: N/A  
Efficacy: 145.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 180  
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



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	13520	13520	13520
5°	13443	13481	13558
10°	13382	13436	13524
15°	13265	13337	13402
20°	13114	13177	13216
25°	12871	12945	12926
30°	12634	12668	12616
35°	12321	12353	12274
40°	11951	11951	11859
45°	11533	11565	11447
50°	11137	11118	10979
55°	10655	10656	10560
60°	10139	10151	10111
65°	9556	9651	9676
70°	8826	9067	9078
75°	7800	8305	8435
80°	6397	7273	7684
85°	4440	6106	6905



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	950.3	3.6
10°-20°	2703.5	10.3
20°-30°	4017.6	15.3
30°-40°	4697.6	17.9
40°-50°	4683.6	17.8
50°-60°	4063.7	15.5
60°-70°	3001.5	11.4
70°-80°	1680.5	6.4
80°-90°	448.4	1.7
90°-100°	1.3	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°	7671.4	29.2
0°-40°	12369.0	47.1
0°-60°	21116.3	80.4
0°-90°	26246.7	100.0
90°-120°	1.3	0.0
90°-150°	1.3	0.0
90°-180°	1.0	0.0
0°-180°	26248.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10048	10048	10048	10048	10048	
5°	9953	10016	9981	10026	10038	945
15°	9523	9589	9574	9620	9621	2686
25°	8670	8740	8719	8738	8706	3997
35°	7501	7567	7520	7519	7473	4686
45°	6061	6126	6078	6053	6016	4679
55°	4542	4573	4543	4535	4502	4062
65°	3001	3031	3032	3047	3039	2968
75°	1500	1545	1598	1609	1622	1598
85°	288	348	396	431	447	349
90°	0	6	8	17	16	12
95°	0	0	0	0	0	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



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10048.5	10048.5	10048.5	10048.5	10048.5
2.5°	9993.5	10052.9	10011.4	10051.0	10097.0
5°	9953.3	10015.9	9981.4	10025.5	10038.3
7.5°	9894.5	9955.2	9922.0	9966.0	9979.5
10°	9794.8	9860.6	9834.4	9884.2	9898.3
12.5°	9678.5	9740.5	9723.2	9781.4	9791.0
15°	9522.6	9589.0	9574.3	9620.3	9621.0
17.5°	9350.0	9412.7	9401.8	9437.6	9436.3
20°	9159.0	9226.1	9203.1	9242.0	9229.9
22.5°	8932.8	9004.3	8975.6	9008.2	8977.5
25°	8670.1	8739.8	8719.3	8738.5	8706.5
27.5°	8415.8	8479.7	8437.5	8460.5	8426.7
30°	8132.1	8186.4	8153.8	8161.5	8120.6
32.5°	7813.2	7877.7	7838.1	7836.9	7793.4
35°	7501.4	7567.2	7520.5	7519.3	7472.6
37.5°	7156.3	7217.6	7162.7	7165.9	7111.6
40°	6804.2	6857.2	6804.2	6801.7	6751.8
42.5°	6422.1	6492.4	6443.8	6449.6	6383.1
45°	6061.0	6125.6	6077.7	6052.7	6015.7
47.5°	5701.3	5729.4	5689.8	5683.4	5631.0
50°	5320.4	5341.5	5311.5	5303.8	5245.0
52.5°	4926.8	4963.2	4924.9	4914.6	4875.7
55°	4542.1	4573.4	4542.7	4535.1	4501.8
57.5°	4154.9	4195.8	4164.4	4156.8	4129.9
60°	3767.6	3779.8	3772.1	3783.6	3757.4
62.5°	3382.9	3411.1	3420.0	3416.8	3396.4
65°	3001.4	3030.8	3031.5	3046.8	3039.1
67.5°	2611.0	2649.3	2660.2	2676.2	2683.2
70°	2243.6	2273.0	2304.9	2314.5	2307.5
72.5°	1873.6	1920.9	1956.7	1965.0	1995.0
75°	1500.4	1545.1	1597.5	1609.0	1622.5
77.5°	1154.1	1213.5	1260.8	1276.1	1292.7
80°	825.6	891.4	938.7	959.8	991.7
82.5°	541.9	609.0	656.9	678.0	717.0
85°	287.6	347.6	395.5	430.7	447.3
87.5°	85.0	136.1	163.6	173.8	188.5
90°	0.0	6.4	7.7	17.3	16.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
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
107.5°	0.0	0.0	0.0	0.0	0.0
110°	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

(END OF REPORT)