

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-LD5-18HE-W-AWG-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 (P23764)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-18HE-W-AWG-UNV-L840-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

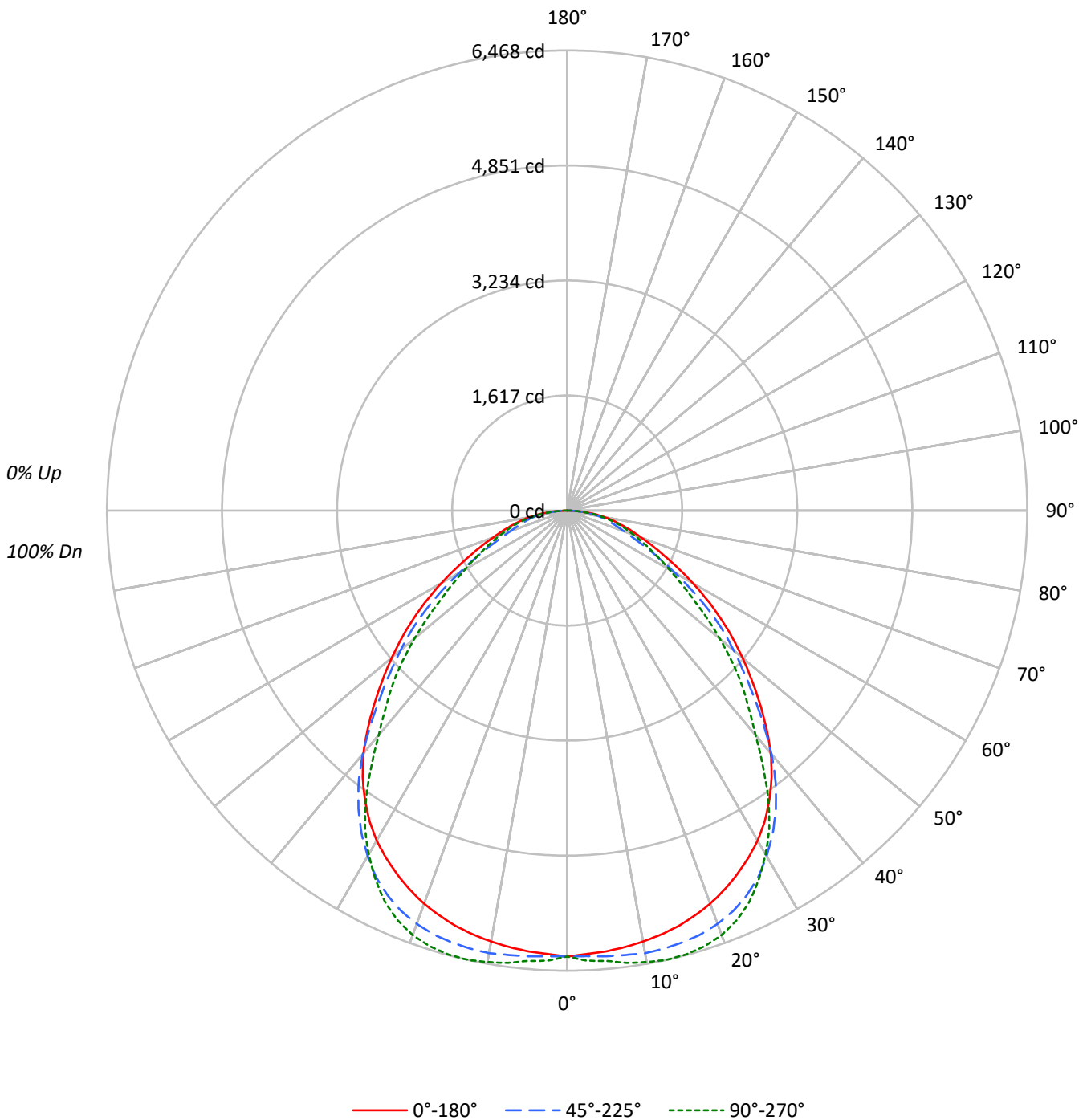
Lumens per Lamp: N/A  
Luminaire Lumens: 15538.0 lumens  
Efficiency: N/A  
Efficacy: 138.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 111.9  
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	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	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63					63			
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	54	49	44	42					42			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38					38			
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31					31			
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28					28			

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

	0°	45°	90°
0°	8433	8433	8433
5°	8401	8495	8581
10°	8403	8631	8805
15°	8419	8751	8997
20°	8417	8851	9089
25°	8381	8863	9006
30°	8319	8715	8669
35°	8143	8400	8094
40°	7824	7847	7236
45°	7282	7074	6615
50°	6732	6397	5862
55°	6162	5669	5058
60°	5495	4705	4467
65°	4819	3872	4104
70°	4351	3336	3908
75°	4159	3269	3897
80°	4192	3461	3802
85°	3714	3171	3319



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	602.1	3.9
10°-20°	1774.4	11.4
20°-30°	2721.6	17.5
30°-40°	3130.3	20.1
40°-50°	2855.0	18.4
50°-60°	2139.8	13.8
60°-70°	1316.3	8.5
70°-80°	754.3	4.9
80°-90°	244.2	1.6
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°	5098.1	32.8
0°-40°	8228.3	53.0
0°-60°	13223.2	85.1
0°-90°	15538.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15538.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6268	6268	6268	6268	6268	
5°	6220	6283	6290	6341	6353	592
15°	6044	6178	6282	6416	6459	1706
25°	5645	5808	5970	6062	6066	2601
35°	4957	5054	5114	5030	4928	3092
45°	3827	3910	3718	3526	3476	2954
55°	2627	2529	2417	2203	2156	2347
65°	1514	1354	1216	1254	1289	1522
75°	800	717	629	720	750	855
85°	241	227	205	217	215	268
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6267.9	6267.9	6267.9	6267.9	6267.9
2.5°	6238.3	6283.1	6268.7	6305.5	6332.6
5°	6220.0	6283.1	6289.5	6341.4	6353.4
7.5°	6188.8	6271.1	6299.9	6391.8	6412.6
10°	6150.4	6249.5	6317.5	6416.5	6444.5
12.5°	6104.1	6219.2	6305.5	6427.7	6467.7
15°	6044.1	6178.4	6282.3	6416.5	6458.9
17.5°	5968.2	6124.1	6245.5	6377.4	6421.3
20°	5878.7	6043.3	6181.6	6316.7	6347.8
22.5°	5770.8	5936.2	6093.7	6215.2	6231.9
25°	5645.3	5807.6	5969.8	6061.7	6066.5
27.5°	5508.7	5659.7	5811.6	5861.1	5839.5
30°	5354.4	5489.5	5609.4	5619.8	5579.8
32.5°	5171.4	5292.9	5378.4	5356.0	5288.9
35°	4957.3	5054.0	5113.9	5030.0	4927.7
37.5°	4722.3	4795.0	4815.0	4632.8	4516.1
40°	4454.6	4516.9	4467.4	4214.0	4119.7
42.5°	4146.1	4218.0	4091.0	3840.8	3783.3
45°	3827.2	3910.3	3717.7	3525.9	3476.4
47.5°	3514.8	3590.7	3372.5	3218.3	3144.7
50°	3215.9	3248.6	3056.0	2881.8	2800.3
52.5°	2921.8	2889.0	2752.3	2535.8	2463.8
55°	2626.9	2529.4	2416.7	2203.3	2156.2
57.5°	2331.2	2195.3	2072.3	1908.4	1890.0
60°	2041.9	1874.9	1748.6	1651.1	1659.9
62.5°	1766.2	1595.9	1460.9	1429.7	1463.3
65°	1513.6	1353.8	1216.3	1253.9	1289.1
67.5°	1303.4	1150.0	1010.2	1106.1	1134.0
70°	1106.1	982.2	847.9	971.8	993.4
72.5°	948.6	843.1	726.4	847.1	865.5
75°	800.0	716.9	628.9	720.1	749.6
77.5°	670.5	601.8	541.8	595.4	627.3
80°	541.0	482.7	446.7	470.7	490.7
82.5°	396.4	358.8	332.5	342.8	346.0
85°	240.6	227.0	205.4	216.6	215.0
87.5°	79.1	90.3	95.1	85.5	80.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)