

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-AI-UNV-L850-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 (P23765)  
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-AI-UNV-L850-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

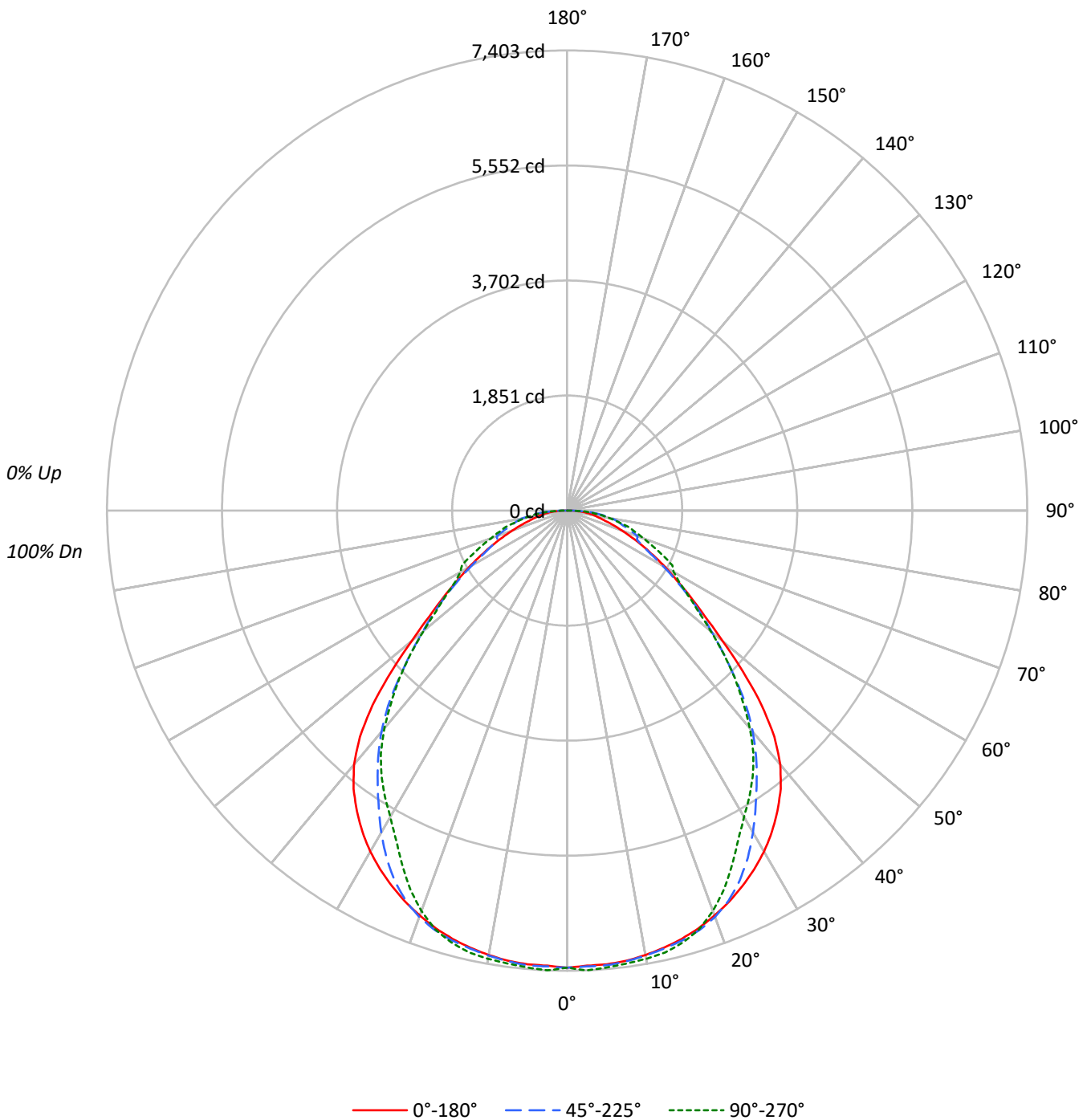
Lumens per Lamp: N/A  
Luminaire Lumens: 17022.0 lumens  
Efficiency: N/A  
Efficacy: 152.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

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

	0°	45°	90°
0°	9895	9895	9895
5°	9894	9916	9964
10°	9919	9931	10004
15°	9934	9971	10020
20°	9924	9961	9813
25°	9899	9751	9327
30°	9841	9291	8838
35°	9692	8732	8550
40°	9368	8165	8030
45°	8420	7291	7264
50°	6830	6350	6307
55°	5671	5565	5564
60°	4910	4767	5329
65°	4255	4229	5372
70°	3669	4744	5120
75°	3290	4862	5338
80°	3420	5724	5356
85°	3883	6595	6120



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	700.2	4.1
10°-20°	2022.2	11.9
20°-30°	3003.4	17.6
30°-40°	3409.7	20.0
40°-50°	3048.2	17.9
50°-60°	2107.5	12.4
60°-70°	1390.7	8.2
70°-80°	938.2	5.5
80°-90°	401.8	2.4
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°	5725.9	33.6
0°-40°	9135.6	53.7
0°-60°	14291.3	84.0
0°-90°	17022.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17022.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7354	7354	7354	7354	7354	
5°	7326	7371	7342	7372	7377	697
15°	7132	7166	7158	7198	7193	2013
25°	6668	6731	6568	6372	6282	3072
35°	5901	5777	5316	5239	5206	3680
45°	4425	4050	3832	3861	3817	3365
55°	2418	2207	2372	2339	2372	2196
65°	1337	1187	1328	1553	1687	1334
75°	633	796	935	999	1027	691
85°	252	350	427	430	396	262
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7354.0	7354.0	7354.0	7354.0	7354.0
2.5°	7329.0	7374.8	7340.7	7372.4	7403.2
5°	7325.7	7370.7	7341.5	7371.5	7377.3
7.5°	7304.9	7346.5	7312.4	7341.5	7348.2
10°	7259.9	7309.1	7269.1	7314.1	7322.4
12.5°	7201.6	7251.6	7216.6	7278.2	7281.6
15°	7131.7	7165.8	7158.3	7198.3	7193.3
17.5°	7043.4	7082.6	7076.7	7086.7	7063.4
20°	6931.0	6975.1	6956.8	6911.0	6853.5
22.5°	6810.2	6863.5	6791.1	6675.3	6594.6
25°	6667.8	6731.1	6567.9	6372.2	6282.3
27.5°	6510.5	6567.1	6295.6	6055.8	5962.5
30°	6333.9	6358.1	5980.0	5751.8	5688.5
32.5°	6129.9	6094.9	5642.7	5492.0	5455.4
35°	5900.9	5776.8	5316.3	5238.8	5205.5
37.5°	5642.7	5415.4	4994.0	4958.2	4923.2
40°	5333.8	4998.2	4648.4	4625.1	4571.8
42.5°	4934.9	4544.3	4264.5	4237.0	4189.6
45°	4425.2	4050.5	3831.5	3860.6	3817.3
47.5°	3839.0	3555.0	3415.9	3495.9	3415.9
50°	3262.7	3072.0	3033.7	3106.2	3012.9
52.5°	2790.6	2619.0	2698.1	2710.6	2654.8
55°	2417.5	2206.8	2372.5	2339.2	2371.7
57.5°	2092.7	1857.0	2061.1	2022.8	2134.3
60°	1824.6	1559.7	1771.3	1762.9	1980.3
62.5°	1561.4	1349.9	1519.8	1642.2	1909.5
65°	1336.6	1186.7	1328.2	1553.1	1687.2
67.5°	1120.9	1064.3	1215.0	1339.9	1486.5
70°	932.7	961.8	1205.8	1182.5	1301.6
72.5°	774.5	873.6	1064.3	1068.4	1152.5
75°	632.9	796.1	935.2	999.3	1026.8
77.5°	526.3	722.0	844.4	866.9	840.2
80°	441.4	636.2	738.7	728.7	691.2
82.5°	356.4	482.2	582.1	591.3	547.1
85°	251.5	349.8	427.2	429.7	396.4
87.5°	134.9	215.7	259.0	266.5	246.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)