

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-CLI-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 (P23766)  
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-CLI-UNV-L850-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

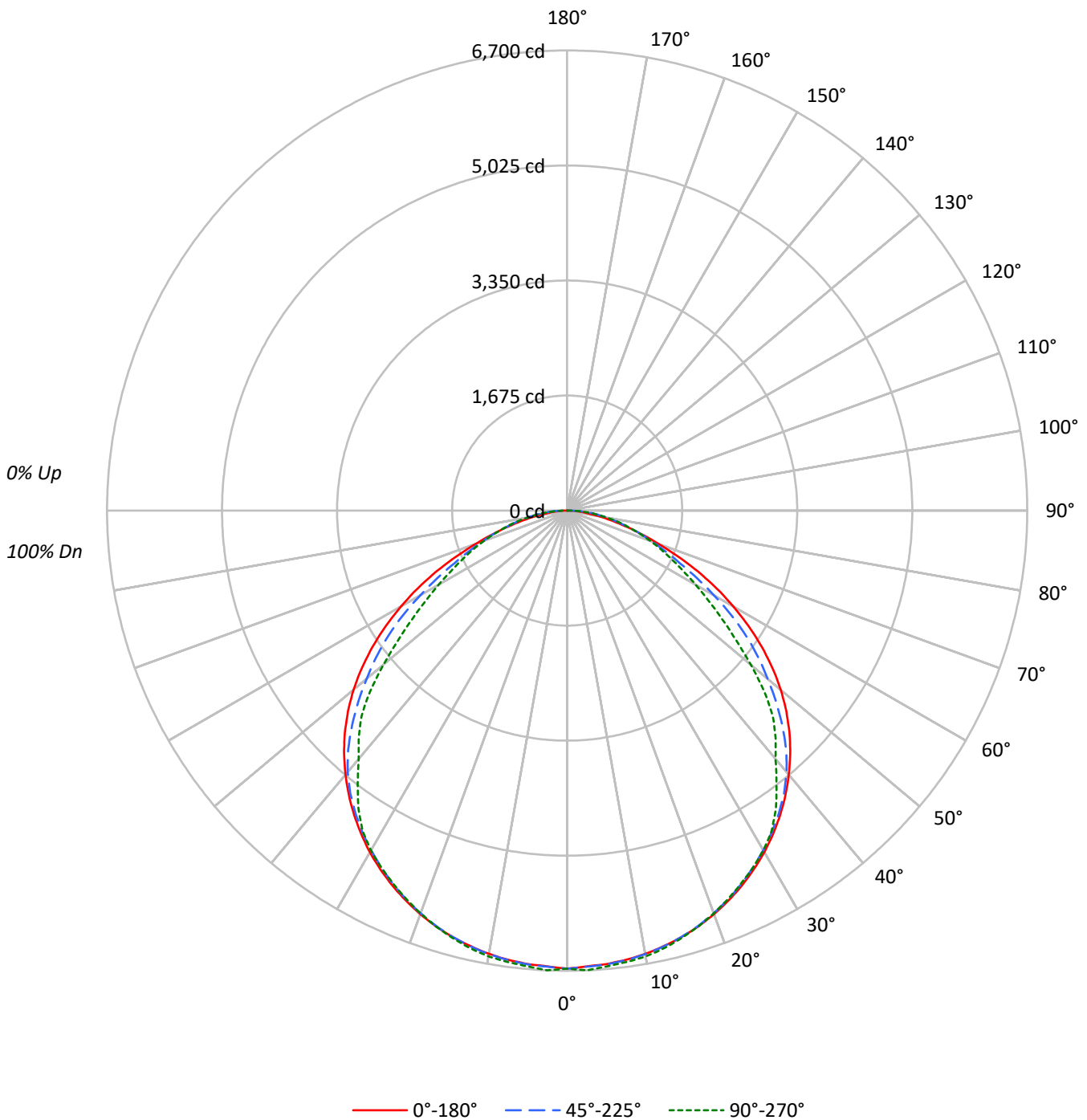
Lumens per Lamp: N/A  
Luminaire Lumens: 17919.0 lumens  
Efficiency: N/A  
Efficacy: 160.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71					71			
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61					61			
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52					52			
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40					40			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35					35			
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31					31			
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	35	30	28					28			
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26					26			

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

	0°	45°	90°
0°	8974	8974	8974
5°	8950	8956	8996
10°	8955	8959	9006
15°	8956	8955	8976
20°	8954	8933	8935
25°	8940	8907	8896
30°	8925	8872	8877
35°	8884	8828	8703
40°	8820	8730	8290
45°	8708	8430	8061
50°	8499	7981	7300
55°	8112	7464	6455
60°	7528	6660	5822
65°	6691	5766	5353
70°	5553	5153	5046
75°	4491	4716	4774
80°	3567	4510	4492
85°	2794	4846	4622



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	632.5	3.5
10°-20°	1819.3	10.2
20°-30°	2774.2	15.5
30°-40°	3356.4	18.7
40°-50°	3399.7	19.0
50°-60°	2809.9	15.7
60°-70°	1855.9	10.4
70°-80°	967.7	5.4
80°-90°	303.4	1.7
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°	5226.0	29.2
0°-40°	8582.4	47.9
0°-60°	14792.0	82.5
0°-90°	17919.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17919.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6670	6670	6670	6670	6670	
5°	6626	6666	6631	6660	6661	630
15°	6429	6462	6429	6449	6444	1816
25°	6022	6046	5999	6015	5992	2777
35°	5408	5416	5375	5368	5299	3383
45°	4577	4565	4430	4292	4236	3524
55°	3458	3407	3182	2873	2752	3082
65°	2102	2041	1811	1693	1681	2076
75°	864	879	907	919	918	941
85°	181	233	314	312	299	220
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6669.6	6669.6	6669.6	6669.6	6669.6
2.5°	6641.5	6680.8	6647.9	6676.8	6700.0
5°	6626.3	6666.4	6631.1	6659.9	6660.7
7.5°	6596.7	6636.7	6600.7	6629.5	6628.7
10°	6554.3	6591.9	6557.5	6591.9	6591.9
12.5°	6496.6	6533.4	6499.8	6531.8	6527.0
15°	6429.4	6462.2	6428.6	6448.6	6443.8
17.5°	6350.1	6379.7	6342.1	6358.9	6349.3
20°	6253.2	6280.4	6238.8	6260.4	6240.4
22.5°	6144.3	6169.9	6127.5	6143.5	6121.1
25°	6021.8	6045.8	5999.4	6014.6	5992.2
27.5°	5889.7	5911.3	5859.3	5877.7	5860.1
30°	5744.8	5755.2	5710.4	5734.4	5713.6
32.5°	5583.0	5589.5	5550.2	5571.8	5536.6
35°	5408.5	5415.7	5374.9	5367.7	5298.8
37.5°	5221.9	5225.2	5186.7	5121.9	5008.2
40°	5021.8	5020.2	4970.5	4820.8	4719.9
42.5°	4808.0	4807.2	4719.9	4549.4	4491.7
45°	4576.6	4564.6	4430.1	4292.4	4236.3
47.5°	4328.4	4315.6	4127.4	4017.7	3890.4
50°	4060.2	4037.8	3812.8	3663.0	3487.7
52.5°	3771.1	3736.7	3507.7	3265.9	3100.2
55°	3458.1	3406.8	3181.8	2872.8	2751.9
57.5°	3132.2	3056.1	2837.6	2536.5	2438.0
60°	2797.5	2712.7	2474.9	2227.5	2163.4
62.5°	2453.2	2369.2	2126.6	1940.0	1904.8
65°	2101.7	2040.9	1811.1	1693.4	1681.4
67.5°	1741.4	1719.8	1544.5	1484.4	1479.6
70°	1411.6	1407.6	1309.9	1279.5	1282.7
72.5°	1128.1	1123.3	1108.9	1093.7	1094.5
75°	863.9	879.1	907.2	919.2	918.4
77.5°	644.5	675.8	735.0	759.0	755.0
80°	460.4	506.8	582.1	604.5	579.7
82.5°	306.7	355.5	444.4	447.6	427.6
85°	181.0	233.0	313.9	311.5	299.4
87.5°	89.7	140.1	188.2	180.1	172.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)