

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-LD5-18SE-W-A-UNV-L840-ED1-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 (P23761)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-18SE-W-A-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

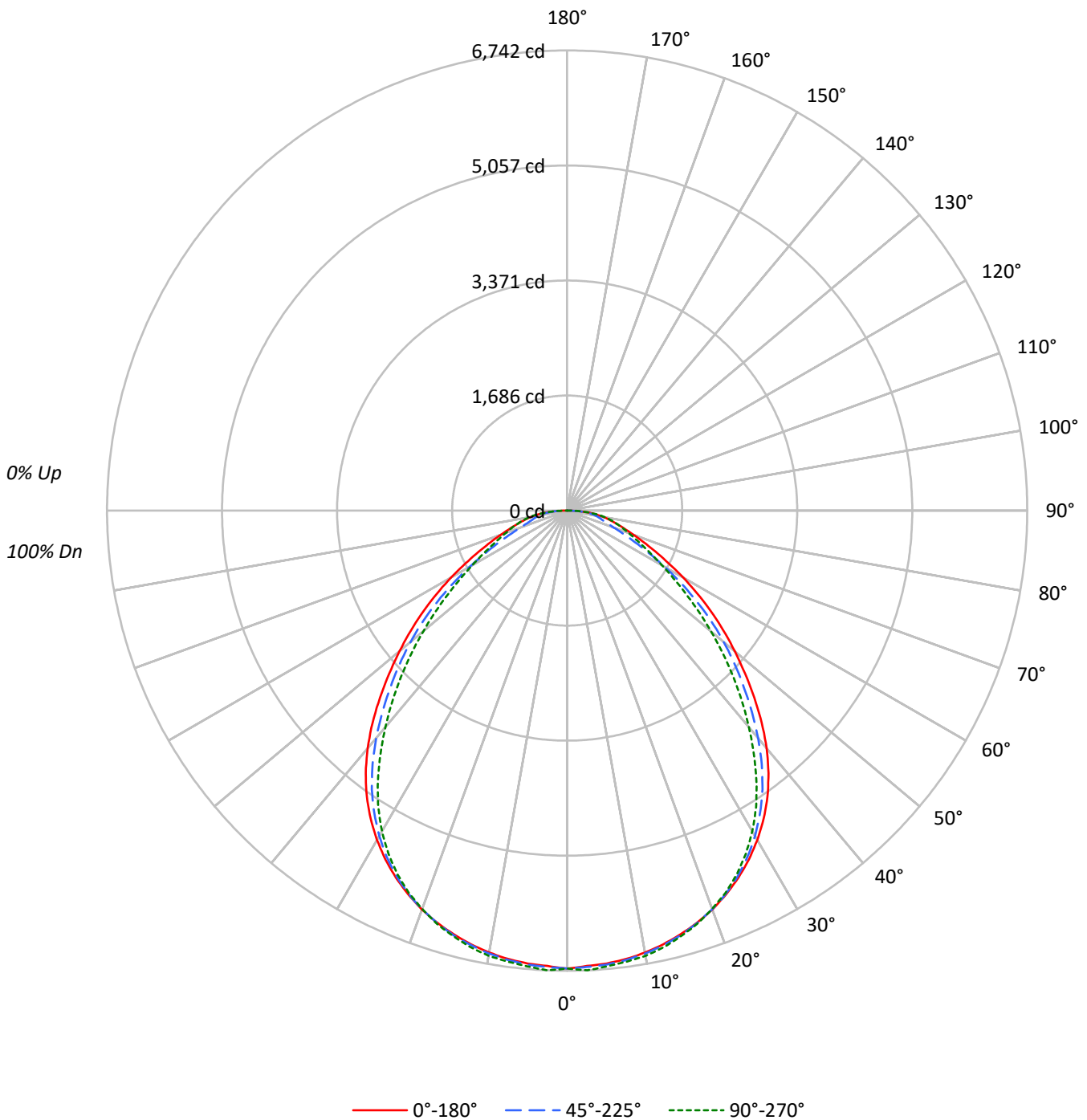
Lumens per Lamp: N/A  
Luminaire Lumens: 15413.0 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 121.76  
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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

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

	0°	45°	90°
0°	9028	9028	9028
5°	8996	9016	9053
10°	8983	9004	9049
15°	8953	8971	8992
20°	8906	8899	8893
25°	8809	8779	8730
30°	8657	8553	8428
35°	8406	8194	7942
40°	7988	7645	7278
45°	7379	6967	6545
50°	6708	6274	5758
55°	6031	5432	4977
60°	5278	4439	4319
65°	4551	3491	3898
70°	4057	2849	3757
75°	3886	2781	3926
80°	4203	3289	4374
85°	4719	3960	4766



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	635.9	4.1
10°-20°	1819.9	11.8
20°-30°	2722.4	17.7
30°-40°	3106.0	20.2
40°-50°	2827.3	18.3
50°-60°	2076.1	13.5
60°-70°	1225.8	8.0
70°-80°	702.5	4.6
80°-90°	297.0	1.9
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°	5178.2	33.6
0°-40°	8284.2	53.7
0°-60°	13187.6	85.6
0°-90°	15413.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15413.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6710	6710	6710	6710	6710	
5°	6660	6702	6676	6702	6703	633
15°	6427	6463	6440	6463	6455	1814
25°	5934	5955	5914	5911	5880	2731
35°	5118	5092	4989	4903	4835	3188
45°	3878	3855	3662	3497	3440	2989
55°	2571	2452	2316	2148	2122	2299
65°	1429	1248	1096	1173	1224	1438
75°	748	641	535	698	755	806
85°	306	282	256	303	309	320
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6709.5	6709.5	6709.5	6709.5	6709.5
2.5°	6678.5	6717.1	6692.9	6719.4	6742.1
5°	6660.4	6702.0	6675.5	6702.0	6702.7
7.5°	6627.1	6665.7	6639.9	6668.7	6665.7
10°	6574.8	6613.4	6590.0	6621.0	6623.3
12.5°	6508.3	6545.3	6521.1	6556.7	6550.6
15°	6427.3	6462.9	6440.2	6462.9	6455.3
17.5°	6332.0	6364.5	6335.0	6359.9	6347.1
20°	6220.0	6247.2	6215.4	6238.9	6210.9
22.5°	6086.0	6110.2	6076.9	6089.8	6061.1
25°	5933.9	5955.1	5913.5	5911.2	5880.2
27.5°	5764.4	5775.8	5722.8	5704.7	5669.1
30°	5572.2	5575.3	5504.9	5470.8	5424.7
32.5°	5356.6	5349.0	5259.0	5208.3	5151.5
35°	5117.5	5092.5	4988.8	4903.3	4835.2
37.5°	4847.3	4808.0	4683.9	4557.5	4492.4
40°	4547.7	4501.5	4352.5	4195.8	4143.6
42.5°	4221.6	4182.2	4006.7	3843.2	3791.8
45°	3878.0	3855.3	3661.6	3497.4	3439.9
47.5°	3534.5	3517.8	3328.7	3161.4	3091.8
50°	3204.6	3168.2	2997.2	2814.1	2750.6
52.5°	2884.5	2810.3	2659.8	2472.1	2425.2
55°	2571.2	2452.4	2315.5	2147.5	2121.7
57.5°	2261.0	2107.4	1974.2	1848.6	1847.8
60°	1961.3	1785.8	1649.6	1583.7	1604.9
62.5°	1680.6	1500.5	1353.0	1357.5	1396.1
65°	1429.4	1247.8	1096.4	1172.9	1224.3
67.5°	1213.7	1040.4	886.8	1029.1	1078.3
70°	1031.4	874.7	724.1	902.0	954.9
72.5°	877.8	746.1	610.6	796.0	849.8
75°	747.6	640.9	535.0	697.7	755.2
77.5°	641.7	547.1	479.7	603.8	663.6
80°	542.5	459.3	424.5	513.0	564.5
82.5°	429.8	372.3	351.9	416.9	443.4
85°	305.7	282.2	256.5	302.7	308.7
87.5°	168.0	174.0	143.8	174.0	174.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)