

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-CL-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 (P23762)
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-CL-UNV-L840-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

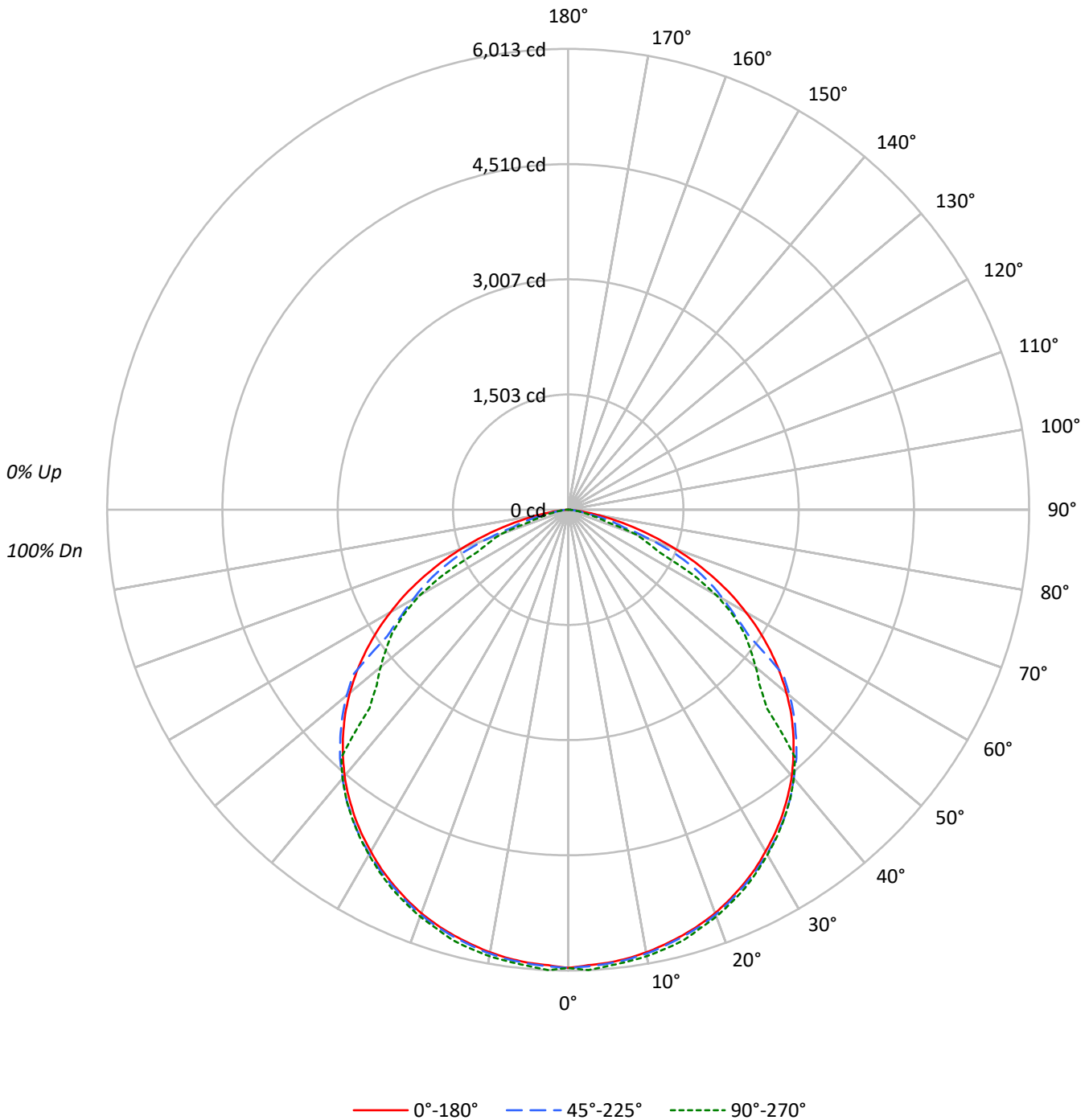
Lumens per Lamp: N/A
Luminaire Lumens: 16161.0 lumens
Efficiency: N/A
Efficacy: 132.7 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	84	73	64	58	82	71	64	57	69	62	57		67	61	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	54	49		58	53	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	38	51	43	38		49	43	38		48	42	38	36
8	62	48	40	34	60	48	40	34	46	39	34		45	39	34		44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	31		41	35	30	29
10	54	41	33	28	53	40	33	28	40	33	28		39	32	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8043	8043	8043
5°	8014	8032	8071
10°	8013	8036	8083
15°	8013	8037	8102
20°	8023	8053	8090
25°	8013	8044	8092
30°	7998	8057	8075
35°	7995	8067	8073
40°	7970	8040	8040
45°	7901	7997	6968
50°	7779	7897	6685
55°	7559	6760	6567
60°	7204	6283	5999
65°	6662	5833	4155
70°	5801	4539	3702
75°	4582	3046	1991
80°	2950	1455	1241
85°	1213	888	977



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	567.1	3.5
10°-20°	1634.5	10.1
20°-30°	2505.9	15.5
30°-40°	3071.3	19.0
40°-50°	3157.5	19.5
50°-60°	2694.8	16.7
60°-70°	1781.6	11.0
70°-80°	660.1	4.1
80°-90°	88.3	0.5
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°	4707.4	29.1
0°-40°	7778.7	48.1
0°-60°	13631.1	84.3
0°-90°	16161.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16161.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5978	5978	5978	5978	5978	
5°	5934	5975	5947	5970	5976	564
15°	5752	5787	5770	5813	5816	1625
25°	5398	5426	5418	5467	5451	2489
35°	4867	4901	4912	4942	4915	3044
45°	4152	4194	4203	4196	3662	3200
55°	3222	3281	2882	2798	2799	2875
65°	2093	2110	1832	1507	1305	2063
75°	881	772	586	394	383	946
85°	79	56	58	63	63	130
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5977.9	5977.9	5977.9	5977.9	5977.9
2.5°	5948.8	5985.9	5964.1	5991.7	6012.8
5°	5933.5	5975.0	5946.6	5969.9	5975.7
7.5°	5907.3	5945.9	5919.7	5950.2	5945.9
10°	5865.1	5900.0	5881.8	5913.8	5916.0
12.5°	5811.2	5846.2	5829.4	5868.7	5868.0
15°	5752.3	5787.2	5769.7	5813.4	5816.3
17.5°	5683.1	5715.1	5702.0	5742.1	5726.1
20°	5603.0	5630.7	5624.2	5662.0	5650.4
22.5°	5504.8	5533.2	5526.6	5570.3	5552.8
25°	5397.8	5426.2	5418.2	5466.9	5450.9
27.5°	5282.1	5309.0	5308.3	5354.1	5329.4
30°	5148.1	5183.8	5186.0	5226.7	5197.6
32.5°	5015.7	5049.1	5058.6	5088.5	5063.7
35°	4867.2	4900.7	4911.6	4942.2	4915.2
37.5°	4707.1	4735.4	4755.1	4777.7	4756.5
40°	4537.5	4562.9	4577.5	4605.2	4577.5
42.5°	4348.2	4384.6	4405.0	4424.6	4379.5
45°	4152.4	4193.9	4202.6	4196.1	3661.9
47.5°	3945.0	3990.1	3995.2	3484.3	3386.0
50°	3716.4	3773.2	3772.5	3220.0	3193.8
52.5°	3478.4	3533.0	3530.8	3013.3	2995.9
55°	3222.2	3281.2	2881.6	2797.9	2799.3
57.5°	2960.9	3003.1	2585.3	2589.0	2541.0
60°	2677.1	2717.1	2335.0	2312.4	2229.4
62.5°	2392.5	2409.2	2092.6	1982.7	1824.7
65°	2092.6	2110.1	1832.0	1506.7	1305.0
67.5°	1784.7	1802.2	1520.5	1120.9	1105.6
70°	1474.6	1332.0	1153.7	933.8	941.1
72.5°	1168.9	1023.4	754.1	723.5	522.6
75°	881.4	772.3	585.9	393.8	382.9
77.5°	613.6	532.1	313.7	268.6	251.1
80°	380.7	267.1	187.8	166.7	160.1
82.5°	192.9	153.6	101.9	101.9	101.9
85°	78.6	56.0	57.5	62.6	63.3
87.5°	16.7	22.6	27.7	28.4	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)