

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-WG-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 (P33336)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-18SE-W-WG-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

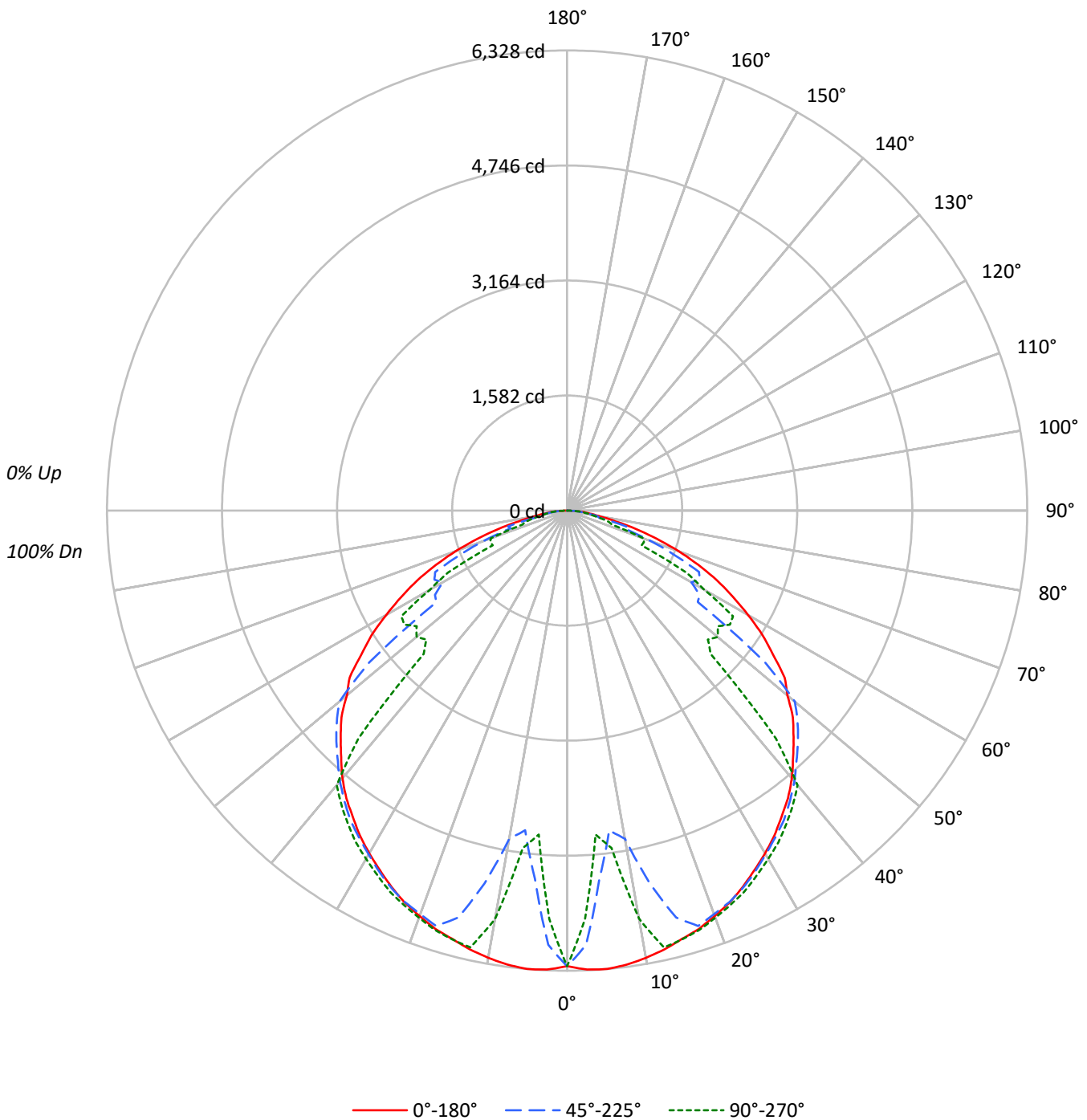
Lumens per Lamp: N/A  
Luminaire Lumens: 16599.0 lumens  
Efficiency: N/A  
Efficacy: 136.3 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	8430	8430	8430
5°	8547	6867	6039
10°	8533	6262	7789
15°	8495	8071	8502
20°	8495	8456	8531
25°	8480	8499	8577
30°	8455	8483	8593
35°	8442	8535	8635
40°	8443	8535	8657
45°	8377	8541	5308
50°	8282	8558	5657
55°	8107	5146	6411
60°	7734	5304	5871
65°	7246	6369	3592
70°	6399	4825	4403
75°	5098	4386	3054
80°	3512	3170	2624
85°	3365	2925	2776



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	501.0	3.0
10°-20°	1569.7	9.5
20°-30°	2582.4	15.6
30°-40°	3247.0	19.6
40°-50°	3184.5	19.2
50°-60°	2638.5	15.9
60°-70°	1861.0	11.2
70°-80°	811.9	4.9
80°-90°	202.9	1.2
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°	4653.1	28.0
0°-40°	7900.1	47.6
0°-60°	13723.2	82.7
0°-90°	16599.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16599.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6266	6266	6266	6266	6266	
5°	6328	5890	5084	4610	4471	601
15°	6098	4235	5794	6122	6104	1725
25°	5712	5226	5725	5763	5777	2633
35°	5140	5136	5196	5231	5257	3220
45°	4402	4416	4488	3975	2789	3398
55°	3456	3569	2194	2494	2733	3092
65°	2276	2410	2000	1539	1128	2238
75°	981	961	844	551	587	1052
85°	218	194	190	181	180	226
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6265.6	6265.6	6265.6	6265.6	6265.6
2.5°	6317.3	6186.2	5977.9	5715.7	5622.8
5°	6328.5	5890.2	5084.1	4609.8	4471.2
7.5°	6296.3	5353.1	4432.3	4531.9	4678.8
10°	6245.4	4881.1	4583.6	5392.8	5700.7
12.5°	6180.2	4461.5	5251.2	6091.8	6153.2
15°	6098.5	4235.2	5794.3	6122.5	6103.8
17.5°	6029.6	4367.9	5989.1	6061.1	6047.6
20°	5932.9	4632.3	5906.0	5963.7	5958.4
22.5°	5835.5	4945.5	5827.3	5868.5	5868.5
25°	5711.9	5226.4	5724.7	5762.9	5777.1
27.5°	5576.3	5388.3	5596.5	5628.0	5653.5
30°	5442.2	5411.5	5460.2	5500.6	5530.6
32.5°	5300.6	5288.6	5326.8	5369.5	5407.7
35°	5139.5	5136.5	5196.5	5230.9	5257.2
37.5°	4988.2	4977.7	5033.1	5081.1	5101.3
40°	4806.9	4806.9	4859.3	4908.0	4929.0
42.5°	4600.1	4629.3	4669.8	4720.0	4251.0
45°	4402.3	4415.8	4488.5	3975.3	2789.3
47.5°	4212.0	4229.2	4298.2	2555.5	2625.2
50°	3956.5	4034.5	4088.4	2548.0	2702.4
52.5°	3770.0	3803.7	3432.1	2522.6	2609.5
55°	3456.1	3569.2	2193.7	2494.1	2733.1
57.5°	3187.9	3270.3	2157.0	2555.5	2703.9
60°	2873.9	2999.8	1971.2	2465.6	2181.7
62.5°	2572.8	2692.6	2058.1	1940.4	1847.5
65°	2276.1	2410.2	2000.4	1538.9	1128.3
67.5°	1950.9	1825.8	1595.8	1084.1	1141.0
70°	1626.5	1275.1	1226.4	1212.2	1119.3
72.5°	1293.1	930.5	814.4	909.5	651.1
75°	980.7	961.2	843.6	551.4	587.4
77.5°	680.3	693.8	451.8	537.9	446.5
80°	453.3	392.6	409.1	343.1	338.6
82.5°	313.9	320.7	269.0	260.7	264.5
85°	218.0	194.0	189.5	181.3	179.8
87.5°	72.7	84.7	78.7	71.2	75.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)