

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-AWG-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 (P23764)  
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-AWG-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

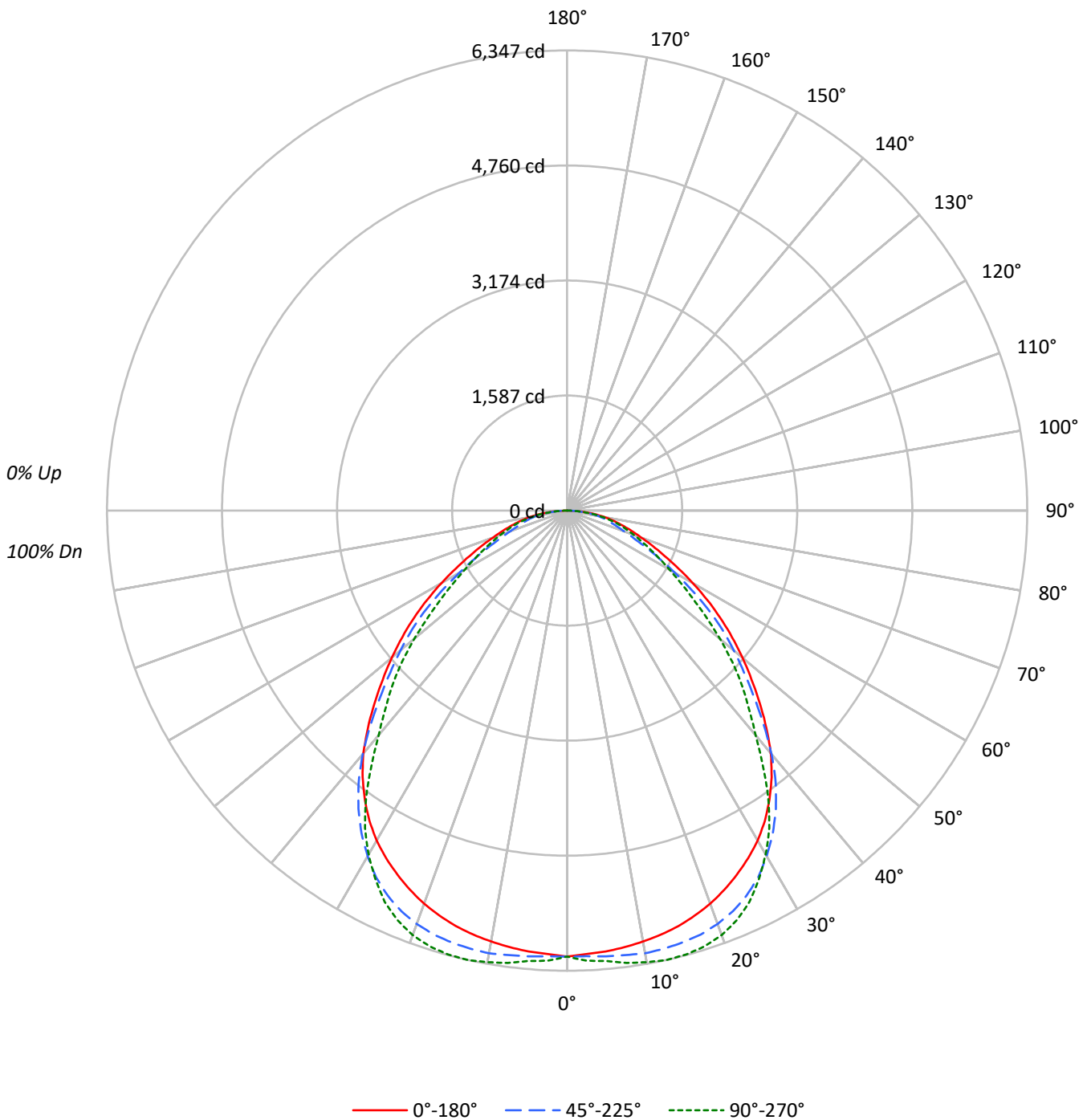
Lumens per Lamp: N/A  
Luminaire Lumens: 15249.0 lumens  
Efficiency: N/A  
Efficacy: 125.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63					63			
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	54	49	44	42					42			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38					38			
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31					31			
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28					28			

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

	0°	45°	90°
0°	8277	8277	8277
5°	8245	8337	8421
10°	8247	8471	8641
15°	8263	8588	8830
20°	8261	8686	8920
25°	8225	8698	8839
30°	8164	8553	8508
35°	7991	8244	7943
40°	7679	7701	7101
45°	7147	6943	6492
50°	6606	6278	5753
55°	6047	5564	4964
60°	5392	4618	4384
65°	4729	3800	4028
70°	4270	3273	3835
75°	4081	3209	3825
80°	4114	3397	3732
85°	3645	3112	3257



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	590.9	3.9
10°-20°	1741.4	11.4
20°-30°	2671.0	17.5
30°-40°	3072.0	20.1
40°-50°	2801.9	18.4
50°-60°	2100.0	13.8
60°-70°	1291.8	8.5
70°-80°	740.3	4.9
80°-90°	239.7	1.6
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°	5003.3	32.8
0°-40°	8075.3	53.0
0°-60°	12977.3	85.1
0°-90°	15249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15249.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6151	6151	6151	6151	6151	
5°	6104	6166	6172	6224	6235	581
15°	5932	6064	6165	6297	6339	1674
25°	5540	5700	5859	5949	5954	2553
35°	4865	4960	5019	4936	4836	3034
45°	3756	3838	3649	3460	3412	2899
55°	2578	2482	2372	2162	2116	2303
65°	1486	1329	1194	1231	1265	1494
75°	785	704	617	707	736	840
85°	236	223	202	212	211	263
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6151.3	6151.3	6151.3	6151.3	6151.3
2.5°	6122.3	6166.2	6152.1	6188.2	6214.9
5°	6104.3	6166.2	6172.5	6223.5	6235.2
7.5°	6073.7	6154.5	6182.7	6272.9	6293.3
10°	6036.0	6133.3	6199.9	6297.2	6324.7
12.5°	5990.5	6103.5	6188.2	6308.2	6347.4
15°	5931.7	6063.5	6165.4	6297.2	6338.8
17.5°	5857.2	6010.1	6129.4	6258.8	6301.9
20°	5769.4	5930.9	6066.6	6199.2	6229.8
22.5°	5663.5	5825.8	5980.3	6099.6	6116.0
25°	5540.3	5699.6	5858.8	5949.0	5953.7
27.5°	5406.2	5554.5	5703.5	5752.1	5730.9
30°	5254.9	5387.4	5505.1	5515.2	5476.0
32.5°	5075.3	5194.5	5278.4	5256.4	5190.5
35°	4865.1	4960.0	5018.8	4936.4	4836.0
37.5°	4634.5	4705.8	4725.5	4546.6	4432.1
40°	4371.7	4432.9	4384.3	4135.7	4043.1
42.5°	4069.0	4139.6	4014.9	3769.4	3712.9
45°	3756.0	3837.6	3648.6	3460.4	3411.7
47.5°	3449.4	3523.9	3309.8	3158.4	3086.2
50°	3156.1	3188.2	2999.2	2828.2	2748.2
52.5°	2867.4	2835.3	2701.2	2488.6	2418.0
55°	2578.0	2482.3	2371.7	2162.3	2116.1
57.5°	2287.8	2154.5	2033.7	1872.9	1854.9
60°	2003.9	1840.0	1716.1	1620.4	1629.0
62.5°	1733.3	1566.3	1433.7	1403.1	1436.1
65°	1485.5	1328.6	1193.7	1230.6	1265.1
67.5°	1279.2	1128.6	991.4	1085.5	1112.9
70°	1085.5	963.9	832.1	953.7	974.9
72.5°	931.0	827.4	712.9	831.4	849.4
75°	785.1	703.5	617.2	706.7	735.7
77.5°	658.0	590.6	531.8	584.3	615.7
80°	531.0	473.7	438.4	462.0	481.6
82.5°	389.0	352.2	326.3	336.5	339.6
85°	236.1	222.7	201.6	212.5	211.0
87.5°	77.6	88.6	93.3	83.9	79.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)