

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-N-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 (P23767)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-18SE-N-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

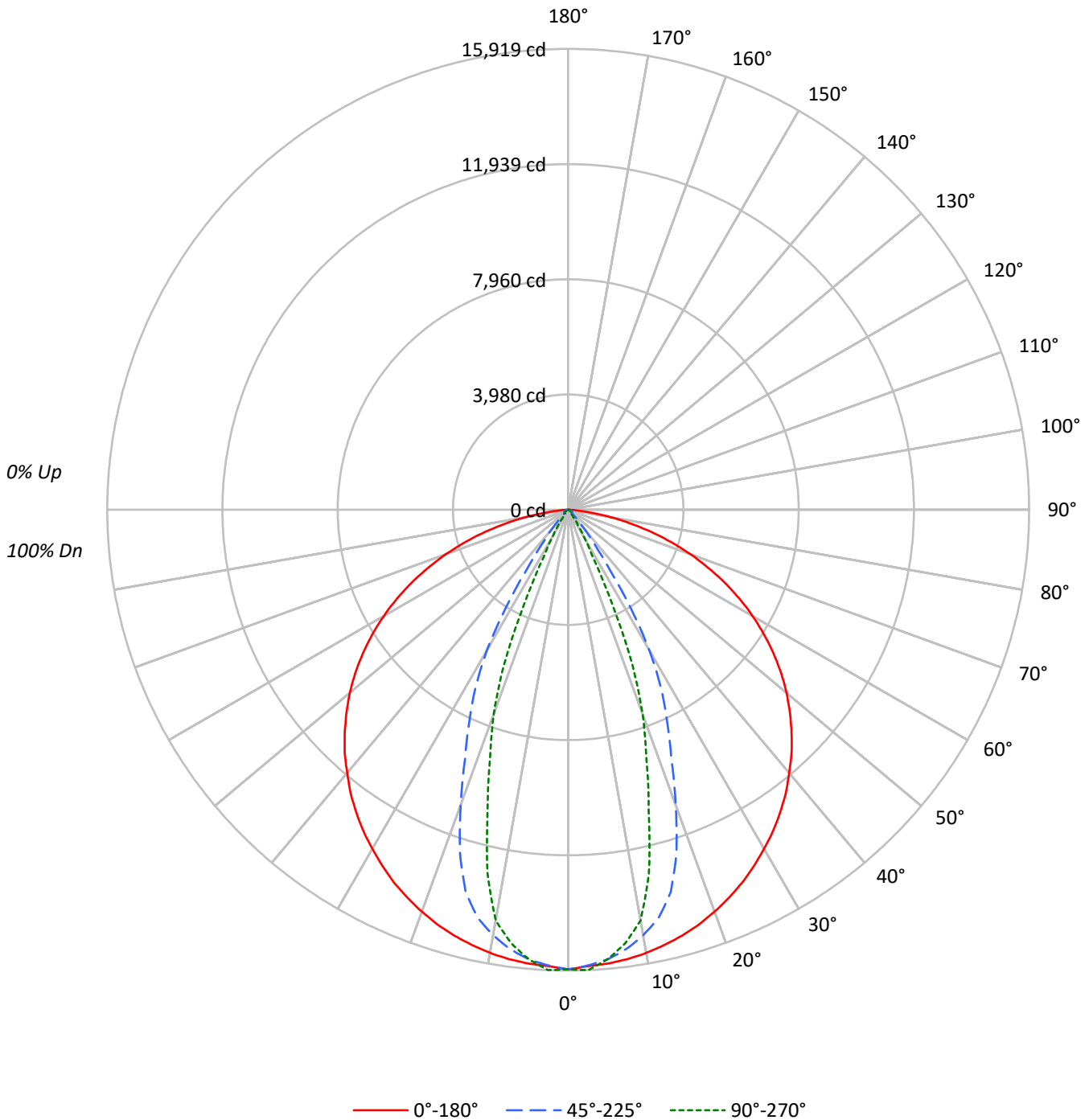
Lumens per Lamp: N/A  
Luminaire Lumens: 16879.0 lumens  
Efficiency: N/A  
Efficacy: 138.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

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

	0°	45°	90°
0°	21367	21367	21367
5°	21253	21065	21056
10°	21240	20390	19675
15°	21210	19049	14973
20°	21160	15529	10778
25°	21106	12007	5309
30°	21013	8726	1722
35°	20963	3871	443
40°	20854	1572	299
45°	20760	441	318
50°	20598	313	353
55°	20302	372	151
60°	19801	415	91
65°	18986	265	108
70°	17639	235	134
75°	15430	177	185
80°	11537	217	263
85°	5715	279	350



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1473.7	8.7
10°-20°	3685.1	21.8
20°-30°	3991.5	23.6
30°-40°	2955.9	17.5
40°-50°	2129.0	12.6
50°-60°	1318.2	7.8
60°-70°	810.7	4.8
70°-80°	427.4	2.5
80°-90°	87.5	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°	9150.3	54.2
0°-40°	12106.2	71.7
0°-60°	15553.4	92.1
0°-90°	16879.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16879.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15880	15880	15880	15880	15880	
5°	15736	15794	15596	15608	15590	###
15°	15226	14873	13675	11630	10749	4298
25°	14217	13023	8088	5088	3576	6551
35°	12763	8998	2357	554	270	7985
45°	10910	5069	232	168	167	8414
55°	8655	1044	159	144	64	7726
65°	5964	110	83	53	34	5884
75°	2968	26	34	45	36	3135
85°	370	10	18	27	23	559
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15880.5	15880.5	15880.5	15880.5	15880.5
2.5°	15778.5	15879.0	15760.4	15848.8	15919.1
5°	15735.5	15793.7	15596.5	15607.8	15589.7
7.5°	15659.9	15646.3	15314.7	15169.6	15106.2
10°	15545.9	15456.0	14924.1	14621.2	14400.6
12.5°	15398.5	15197.6	14436.8	13473.6	12875.3
15°	15226.3	14872.7	13675.3	11629.6	10749.4
17.5°	15020.8	14519.9	12430.3	9746.9	8961.3
20°	14778.3	14126.4	10845.4	8292.7	7527.4
22.5°	14507.9	13647.4	9305.8	6892.1	5800.4
25°	14217.0	13022.6	8088.0	5088.0	3576.3
27.5°	13880.8	12219.6	6945.7	2996.9	1825.2
30°	13525.0	11252.6	5616.8	1612.2	1108.3
32.5°	13166.2	10156.4	3974.5	1007.0	628.5
35°	12762.7	8997.5	2357.0	554.5	269.7
37.5°	12342.0	7935.4	1393.1	252.3	173.0
40°	11872.8	6964.6	895.2	167.7	170.0
42.5°	11419.5	6059.5	503.9	165.4	168.5
45°	10910.4	5069.1	231.9	167.7	167.0
47.5°	10383.8	4042.5	150.3	169.2	169.2
50°	9840.6	2890.4	149.6	173.0	168.5
52.5°	9267.2	1803.3	155.6	172.2	138.2
55°	8654.6	1044.0	158.6	143.5	64.2
57.5°	8020.0	615.7	160.2	82.3	36.3
60°	7358.2	340.7	154.1	61.2	34.0
62.5°	6676.0	162.4	121.6	57.4	33.2
65°	5963.6	110.3	83.1	52.9	34.0
67.5°	5224.0	85.4	65.7	49.9	34.8
70°	4483.7	63.5	59.7	49.9	34.0
72.5°	3731.2	43.1	49.9	50.6	34.0
75°	2968.2	25.7	34.0	44.6	35.5
77.5°	2212.0	15.9	26.4	46.1	43.1
80°	1489.0	13.6	28.0	43.1	34.0
82.5°	874.1	12.1	27.2	33.2	27.2
85°	370.2	9.8	18.1	27.2	22.7
87.5°	69.5	8.3	14.4	21.9	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)