

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-CL-UNV-L735-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 (P23768)  
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-CL-UNV-L735-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

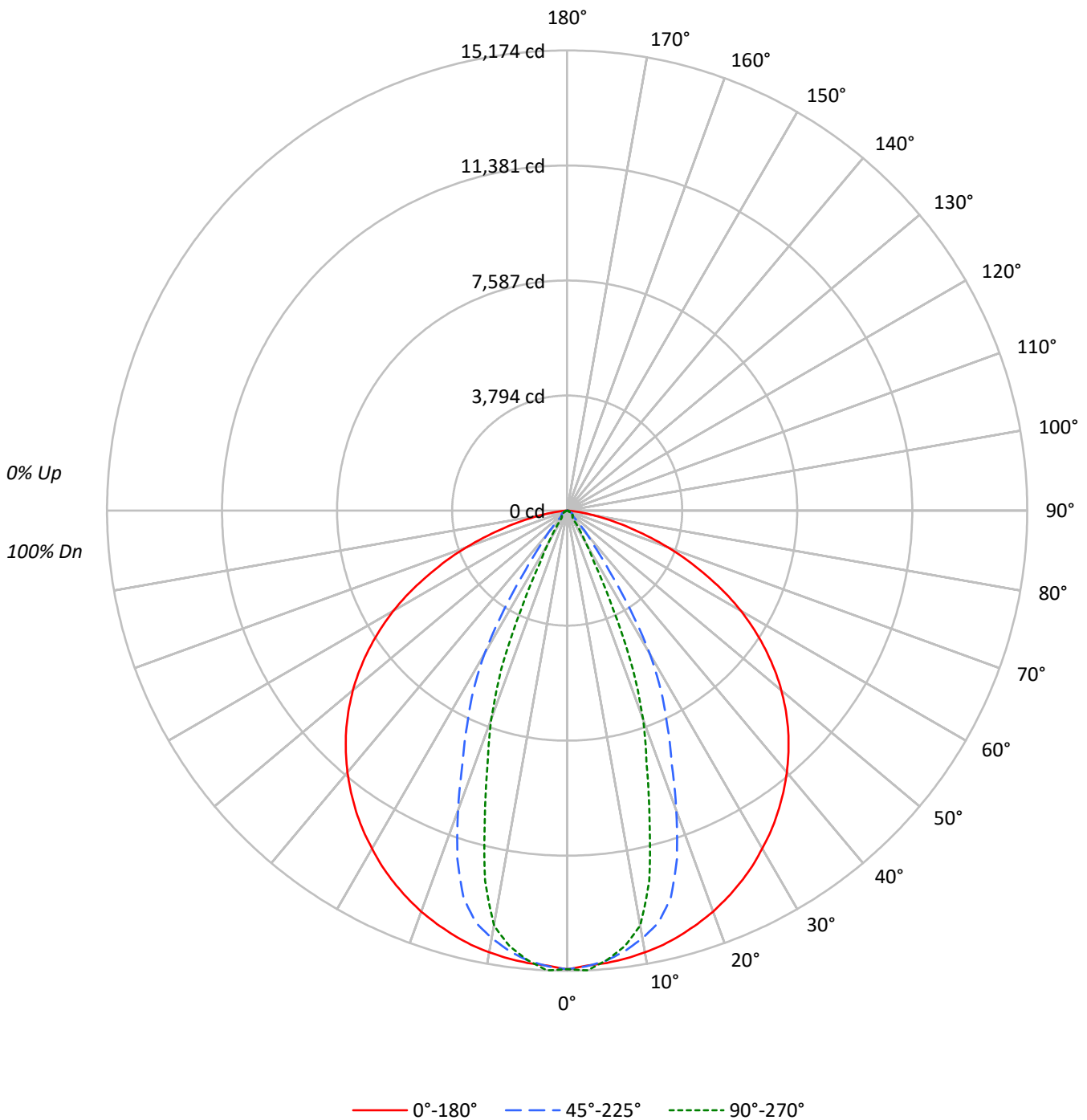
Lumens per Lamp: N/A  
Luminaire Lumens: 16175.0 lumens  
Efficiency: N/A  
Efficacy: 132.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92					90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83					81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75					73				
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68					66				
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62					60				
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57					55				
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53					51				
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49					47				
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46					44				
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43					41				

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

	0°	45°	90°
0°	20349	20349	20349
5°	20224	20119	20104
10°	20211	19562	18985
15°	20187	18396	14598
20°	20148	15054	10471
25°	20085	11599	5321
30°	19990	8465	1936
35°	19918	3887	674
40°	19796	1764	465
45°	19620	658	471
50°	19307	478	496
55°	18736	503	378
60°	17804	537	333
65°	16146	409	271
70°	13844	295	250
75°	10581	261	238
80°	6620	246	258
85°	2090	287	346



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1408.0	8.7
10°-20°	3547.0	21.9
20°-30°	3862.8	23.9
30°-40°	2889.6	17.9
40°-50°	2077.7	12.8
50°-60°	1276.0	7.9
60°-70°	734.2	4.5
70°-80°	327.7	2.0
80°-90°	52.0	0.3
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°	8817.8	54.5
0°-40°	11707.4	72.4
0°-60°	15061.1	93.1
0°-90°	16175.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16175.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15124	15124	15124	15124	15124	
5°	14974	15044	14896	14910	14885	###
15°	14492	14215	13206	11342	10480	4091
25°	13529	12558	7813	5013	3584	6236
35°	12127	8697	2367	696	410	7586
45°	10311	4887	346	256	248	7943
55°	7987	1015	214	207	161	7121
65°	5072	111	128	107	85	5020
75°	2035	67	50	52	46	2209
85°	135	13	19	24	22	270
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15124.1	15124.1	15124.1	15124.1	15124.1
2.5°	15018.8	15117.1	15034.3	15108.6	15174.4
5°	14973.9	15044.3	14895.7	14909.7	14884.9
7.5°	14896.5	14913.5	14645.0	14541.3	14491.0
10°	14792.8	14747.2	14318.4	14071.5	13895.8
12.5°	14662.0	14511.1	13912.1	13030.6	12505.1
15°	14492.5	14214.7	13206.3	11341.9	10479.7
17.5°	14290.5	13905.1	12037.6	9452.7	8706.7
20°	14071.5	13563.0	10513.8	8037.2	7312.8
22.5°	13813.0	13125.8	9010.8	6684.4	5689.9
25°	13529.0	12558.5	7812.8	5012.7	3584.0
27.5°	13222.5	11810.1	6703.7	3074.0	1937.9
30°	12866.5	10899.2	5448.4	1725.1	1246.0
32.5°	12519.0	9837.4	3892.1	1149.3	796.4
35°	12126.6	8697.4	2366.7	695.8	410.2
37.5°	11711.0	7661.1	1481.3	378.4	283.3
40°	11270.7	6678.2	1004.6	268.6	264.7
42.5°	10800.1	5789.0	629.2	255.4	263.9
45°	10311.0	4886.6	345.9	256.2	247.7
47.5°	9780.1	3906.8	241.5	242.2	241.5
50°	9223.6	2802.4	228.3	239.1	236.8
52.5°	8623.9	1739.8	229.1	233.7	209.7
55°	7986.9	1015.4	214.4	207.4	161.0
57.5°	7317.5	633.1	209.7	171.0	144.7
60°	6616.3	334.3	199.7	154.0	123.8
62.5°	5869.5	164.8	160.2	131.6	101.4
65°	5071.5	111.4	128.5	106.8	85.1
67.5°	4300.7	100.6	96.7	87.5	74.3
70°	3519.0	92.1	75.1	76.6	63.5
72.5°	2752.1	83.6	60.4	65.8	53.4
75°	2035.4	67.3	50.3	51.9	45.7
77.5°	1416.3	52.6	39.5	44.1	42.6
80°	854.4	33.3	31.7	36.4	33.3
82.5°	414.1	21.7	24.8	28.6	26.3
85°	135.4	13.2	18.6	24.0	22.4
87.5°	17.0	7.7	15.5	20.9	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)