

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-L835-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-L835-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

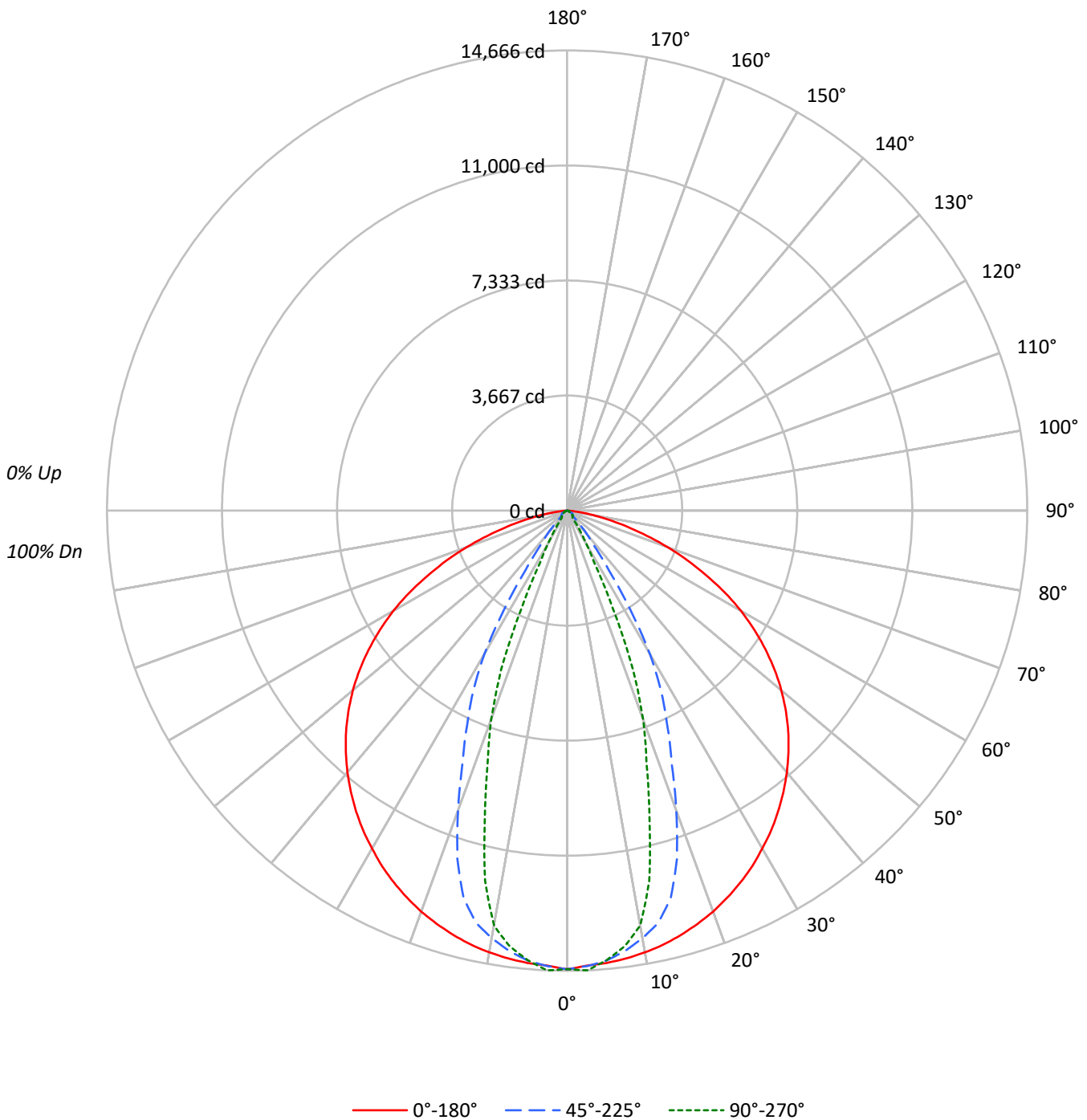
Lumens per Lamp: N/A  
Luminaire Lumens: 15633.0 lumens  
Efficiency: N/A  
Efficacy: 128.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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°	19667	19667	19667
5°	19547	19444	19430
10°	19533	18907	18349
15°	19511	17779	14109
20°	19473	14550	10120
25°	19412	11210	5143
30°	19320	8181	1871
35°	19251	3757	651
40°	19133	1705	449
45°	18962	636	456
50°	18660	462	479
55°	18108	486	365
60°	17208	519	322
65°	15605	395	262
70°	13380	286	241
75°	10227	253	229
80°	6399	238	249
85°	2021	278	335



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1360.9	8.7
10°-20°	3428.1	21.9
20°-30°	3733.4	23.9
30°-40°	2792.8	17.9
40°-50°	2008.1	12.8
50°-60°	1233.3	7.9
60°-70°	709.6	4.5
70°-80°	316.7	2.0
80°-90°	50.2	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°	8522.3	54.5
0°-40°	11315.1	72.4
0°-60°	14556.4	93.1
0°-90°	15633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15633.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14617	14617	14617	14617	14617	
5°	14472	14540	14397	14410	14386	###
15°	14007	13738	12764	10962	10129	3954
25°	13076	12138	7551	4845	3464	6027
35°	11720	8406	2287	672	396	7331
45°	9966	4723	334	248	239	7677
55°	7719	981	207	200	156	6882
65°	4902	108	124	103	82	4852
75°	1967	65	49	50	44	2135
85°	131	13	18	23	22	261
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14617.3	14617.3	14617.3	14617.3	14617.3
2.5°	14515.5	14610.5	14530.5	14602.3	14665.9
5°	14472.2	14540.2	14396.6	14410.1	14386.1
7.5°	14397.4	14413.8	14154.3	14054.0	14005.4
10°	14297.1	14253.0	13838.6	13600.0	13430.2
12.5°	14170.7	14024.9	13445.9	12593.9	12086.1
15°	14006.9	13738.4	12763.7	10961.8	10128.6
17.5°	13811.7	13439.2	11634.3	9136.0	8414.9
20°	13600.0	13108.6	10161.5	7767.9	7067.8
22.5°	13350.2	12686.0	8708.9	6460.4	5499.2
25°	13075.7	12137.7	7551.0	4844.7	3464.0
27.5°	12779.5	11414.4	6479.1	2971.0	1873.0
30°	12435.4	10534.0	5265.9	1667.3	1204.3
32.5°	12099.5	9507.7	3761.7	1110.8	769.7
35°	11720.3	8405.9	2287.4	672.4	396.4
37.5°	11318.6	7404.4	1431.7	365.8	273.8
40°	10893.0	6454.4	970.9	259.6	255.8
42.5°	10438.2	5595.0	608.1	246.8	255.1
45°	9965.5	4722.8	334.4	247.6	239.4
47.5°	9452.4	3775.9	233.4	234.1	233.4
50°	8914.6	2708.5	220.7	231.1	228.9
52.5°	8334.9	1681.5	221.4	225.9	202.7
55°	7719.3	981.4	207.2	200.5	155.6
57.5°	7072.3	611.9	202.7	165.3	139.9
60°	6394.6	323.1	193.0	148.9	119.7
62.5°	5672.8	159.3	154.8	127.2	98.0
65°	4901.6	107.7	124.2	103.2	82.3
67.5°	4156.6	97.2	93.5	84.5	71.8
70°	3401.1	89.0	72.6	74.1	61.3
72.5°	2659.9	80.8	58.3	63.6	51.6
75°	1967.2	65.1	48.6	50.1	44.1
77.5°	1368.8	50.9	38.1	42.6	41.1
80°	825.8	32.2	30.7	35.2	32.2
82.5°	400.2	20.9	23.9	27.7	25.4
85°	130.9	12.7	18.0	23.2	21.7
87.5°	16.5	7.5	15.0	20.2	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)