

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-LD5-18HE-N-CLWG-UNV-L835-ED2-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 (P33344)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-18HE-N-CLWG-UNV-L835-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
NARROW DISTRIBUTION WITH CLEAR LENS, WIREGUARD & DOORFRAME  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

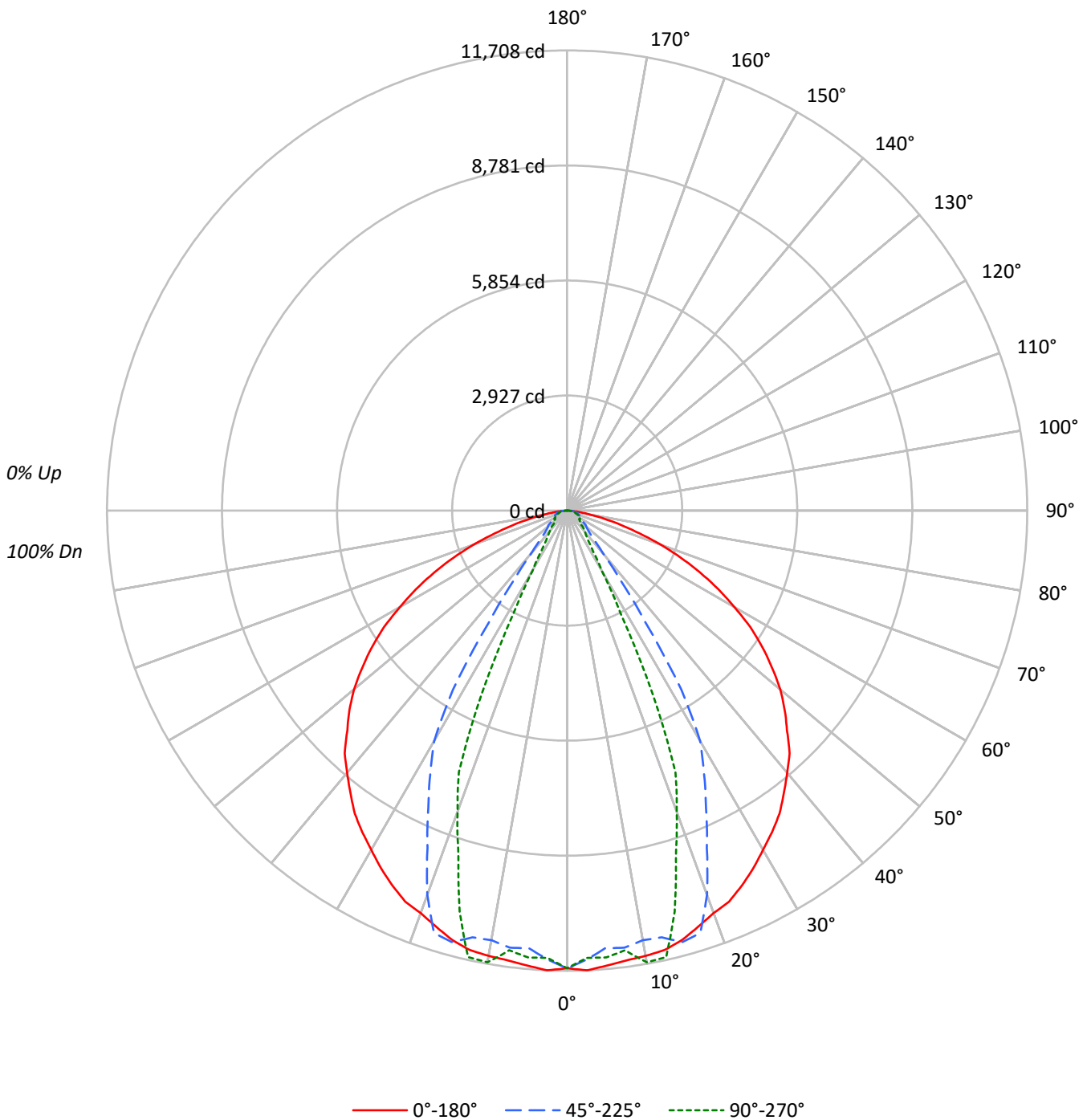
Lumens per Lamp: N/A  
Luminaire Lumens: 15654.0 lumens  
Efficiency: N/A  
Efficacy: 139.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 111.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	52	46	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38					38			

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

	0°	45°	90°
0°	15667	15667	15667
5°	15693	15095	15413
10°	15716	15168	15946
15°	15751	15833	14716
20°	15602	14892	11680
25°	15624	12415	7630
30°	15484	10517	2741
35°	15468	5697	1542
40°	15293	2484	1207
45°	15056	1535	947
50°	14822	1337	894
55°	14239	1160	875
60°	13211	1039	940
65°	11875	1174	1027
70°	9959	1263	1059
75°	7445	1440	1146
80°	4676	1672	1307
85°	3114	2096	1914



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1079.3	6.9
10°-20°	3047.6	19.5
20°-30°	3731.9	23.8
30°-40°	2930.6	18.7
40°-50°	2173.3	13.9
50°-60°	1323.0	8.5
60°-70°	792.5	5.1
70°-80°	434.8	2.8
80°-90°	141.0	0.9
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°	7858.7	50.2
0°-40°	10789.4	68.9
0°-60°	14285.6	91.3
0°-90°	15654.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15654.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11644	11644	11644	11644	11644	
5°	11619	11303	11176	11300	11412	###
15°	11308	10998	11366	10907	10564	3184
25°	10524	10557	8362	6559	5139	4845
35°	9417	8566	3469	1161	939	5876
45°	7913	5682	807	611	498	6119
55°	6070	1566	494	418	373	5402
65°	3730	461	369	347	322	3685
75°	1432	291	277	241	220	1551
85°	202	158	136	125	124	246
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11644.2	11644.2	11644.2	11644.2	11644.2
2.5°	11707.8	11550.1	11429.2	11361.7	11389.2
5°	11619.1	11302.9	11176.5	11299.7	11411.9
7.5°	11542.2	11072.1	11215.0	11226.0	11284.8
10°	11503.0	11050.2	11102.0	11346.0	11671.7
12.5°	11451.2	11101.2	11119.2	11452.0	11635.6
15°	11307.6	10997.6	11366.4	10907.3	10564.4
17.5°	11098.0	10755.9	11262.8	9662.7	9196.6
20°	10896.4	10493.0	10400.4	8607.2	8157.6
22.5°	10766.1	10453.0	9290.7	7669.4	7204.9
25°	10524.4	10557.3	8362.4	6559.0	5139.4
27.5°	10258.3	10311.7	7541.5	4374.2	2944.4
30°	9966.4	10027.6	6769.3	2585.0	1764.1
32.5°	9702.0	9356.7	5406.2	1612.7	1226.6
35°	9417.1	8566.4	3468.6	1160.7	938.6
37.5°	9058.5	7736.1	2195.8	918.2	787.9
40°	8706.9	6990.6	1414.1	784.0	687.4
42.5°	8378.1	6376.2	1028.8	685.1	620.7
45°	7912.7	5681.6	806.7	611.3	497.5
47.5°	7510.1	4867.1	705.5	517.2	429.3
50°	7080.9	3721.3	638.8	459.9	426.9
52.5°	6571.6	2434.3	590.1	440.2	398.7
55°	6070.1	1565.6	494.4	418.3	372.8
57.5°	5528.6	992.7	436.3	405.7	389.2
60°	4909.4	669.4	386.1	384.5	349.2
62.5°	4336.6	550.1	372.8	368.8	330.4
65°	3730.0	461.4	368.8	346.9	322.5
67.5°	3124.1	395.5	333.5	317.0	295.9
70°	2531.6	361.8	321.0	313.9	269.2
72.5°	1922.7	298.2	284.9	266.0	223.7
75°	1432.2	291.1	277.0	240.9	220.5
77.5°	969.2	268.4	251.9	215.8	199.3
80°	603.5	246.4	215.8	189.1	168.7
82.5°	358.6	205.6	177.4	156.2	142.8
85°	201.7	158.5	135.8	124.8	124.0
87.5°	43.2	57.3	45.5	43.2	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)