

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-LD5-12SE-N-CLWG-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 (P33344)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12SE-N-CLWG-UNV-L835-ED1-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**

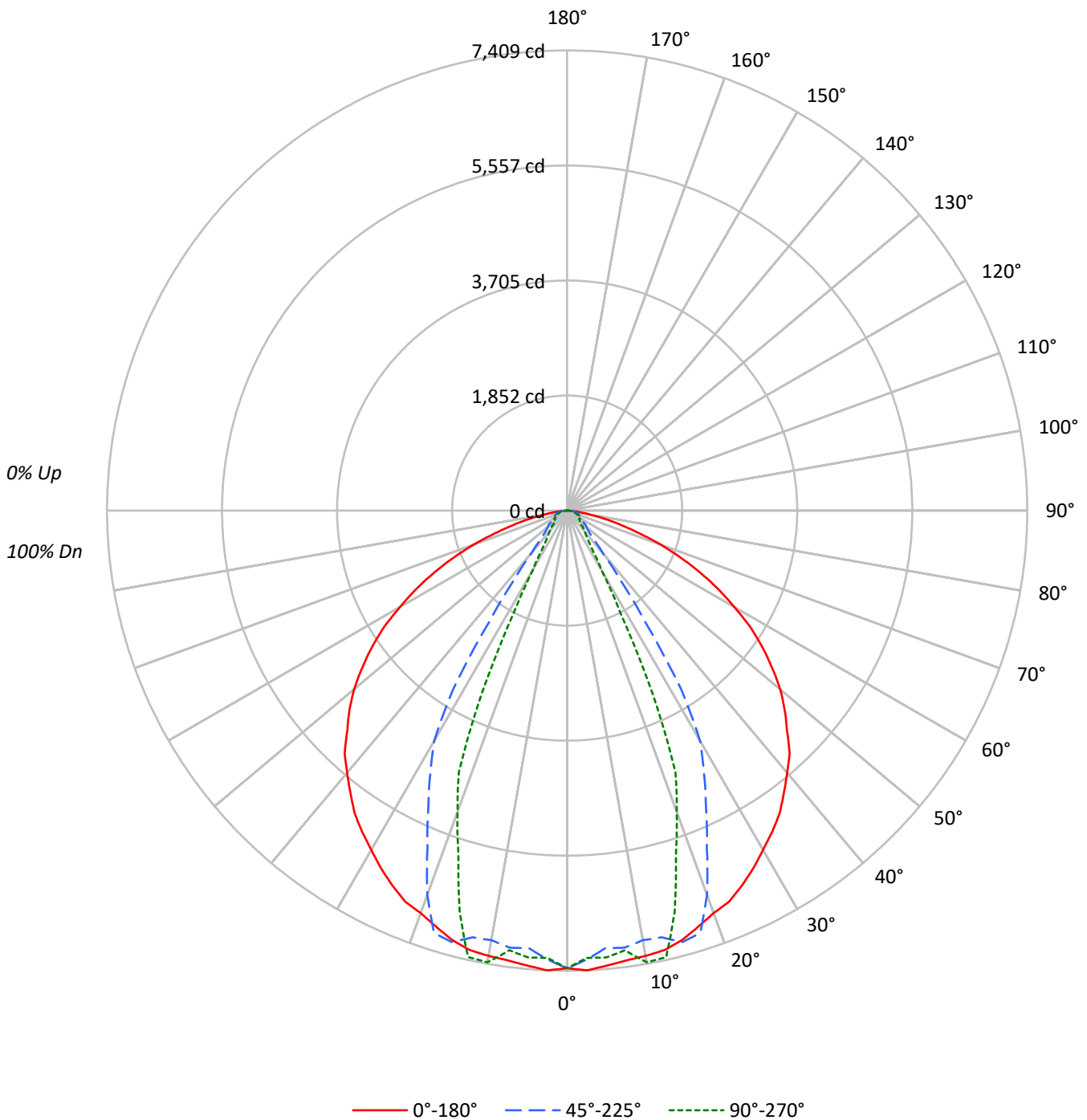
Lumens per Lamp: N/A  
Luminaire Lumens: 9906.0 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 76.6  
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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-12SE-N-CLWG-UNV-L835-ED1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-12SE-N-CLWG-UNV-L835-ED1-U

**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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	111	108	104	101	109	105	103	100	101	99	97		98	96	94		94	92	91	89
2	104	97	92	88	101	96	91	87	92	88	85		89	86	83		86	84	81	79
3	97	89	82	77	95	87	81	76	84	79	75		82	77	74		79	76	73	71
4	90	81	74	68	88	80	73	68	77	72	67		75	70	66		73	69	65	64
5	85	74	67	62	83	73	66	61	71	65	61		69	64	60		68	63	59	58
6	79	68	61	56	78	68	61	56	66	60	55		64	59	55		63	58	54	53
7	75	63	56	51	73	63	56	51	61	55	50		60	54	50		59	54	50	48
8	70	59	52	47	69	58	51	47	57	51	46		56	50	46		55	50	46	44
9	66	55	48	43	65	54	48	43	53	47	43		52	47	43		52	46	43	41
10	63	52	45	40	62	51	45	40	50	44	40		49	44	40		48	43	40	38

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

	0°	45°	90°
0°	9914	9914	9914
5°	9931	9552	9754
10°	9945	9598	10091
15°	9967	10019	9312
20°	9873	9424	7391
25°	9887	7856	4828
30°	9798	6655	1734
35°	9788	3605	976
40°	9677	1572	764
45°	9528	971	599
50°	9379	846	566
55°	9011	734	553
60°	8360	657	595
65°	7514	743	650
70°	6302	799	670
75°	4711	911	725
80°	2959	1058	828
85°	1970	1326	1212



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-12SE-N-CLWG-UNV-L835-ED1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	683.0	6.9
10°-20°	1928.5	19.5
20°-30°	2361.6	23.8
30°-40°	1854.5	18.7
40°-50°	1375.2	13.9
50°-60°	837.2	8.5
60°-70°	501.5	5.1
70°-80°	275.1	2.8
80°-90°	89.2	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°	4973.1	50.2
0°-40°	6827.6	68.9
0°-60°	9040.1	91.3
0°-90°	9906.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9906.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7369	7369	7369	7369	7369	
5°	7353	7153	7073	7151	7222	699
15°	7156	6959	7193	6902	6685	2015
25°	6660	6681	5292	4151	3252	3066
35°	5959	5421	2195	734	594	3718
45°	5007	3595	510	387	315	3872
55°	3841	991	313	265	236	3418
65°	2360	292	233	220	204	2332
75°	906	184	175	152	140	981
85°	128	100	86	79	78	156
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-12SE-N-CLWG-UNV-L835-ED1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7368.6	7368.6	7368.6	7368.6	7368.6
2.5°	7408.8	7309.0	7232.5	7189.8	7207.2
5°	7352.7	7152.6	7072.6	7150.6	7221.6
7.5°	7304.0	7006.6	7096.9	7103.9	7141.1
10°	7279.2	6992.7	7025.4	7179.9	7386.0
12.5°	7246.4	7024.9	7036.4	7246.9	7363.1
15°	7155.5	6959.4	7192.8	6902.3	6685.3
17.5°	7022.9	6806.4	7127.2	6114.7	5819.7
20°	6895.3	6640.1	6581.5	5446.7	5162.2
22.5°	6812.9	6614.7	5879.3	4853.3	4559.3
25°	6659.9	6680.8	5291.8	4150.6	3252.2
27.5°	6491.6	6525.3	4772.3	2768.1	1863.3
30°	6306.8	6345.6	4283.7	1635.8	1116.4
32.5°	6139.5	5921.0	3421.1	1020.5	776.2
35°	5959.2	5420.9	2195.0	734.5	593.9
37.5°	5732.3	4895.5	1389.5	581.0	498.6
40°	5509.8	4423.7	894.9	496.1	435.0
42.5°	5301.7	4034.9	651.0	433.5	392.8
45°	5007.2	3595.4	510.5	386.9	314.8
47.5°	4752.5	3079.9	446.4	327.3	271.6
50°	4480.8	2354.9	404.2	291.0	270.2
52.5°	4158.5	1540.5	373.4	278.6	252.3
55°	3841.2	990.7	312.9	264.7	235.9
57.5°	3498.6	628.2	276.1	256.7	246.3
60°	3106.7	423.6	244.3	243.3	221.0
62.5°	2744.2	348.1	235.9	233.4	209.1
65°	2360.3	292.0	233.4	219.5	204.1
67.5°	1977.0	250.3	211.1	200.6	187.2
70°	1602.0	228.9	203.1	198.6	170.3
72.5°	1216.7	188.7	180.3	168.3	141.5
75°	906.3	184.2	175.3	152.5	139.5
77.5°	613.3	169.8	159.4	136.6	126.1
80°	381.9	155.9	136.6	119.7	106.8
82.5°	226.9	130.1	112.2	98.8	90.4
85°	127.6	100.3	85.9	79.0	78.5
87.5°	27.3	36.3	28.8	27.3	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)