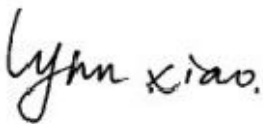

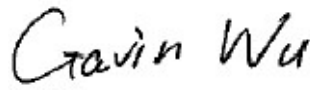




TEST REPORT

Report No.:	EM201300810-5	Application No.:	ZJ00034131
Client:	Harman International Industries, Incorporated		
Address:	8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES		
Sample Description:	USB POWERED WIRELESS CHARGER		
Model:	JBL AUTHENTICS QI		
Adding Model:	/		
Test Specification:	FCC Part 1 §1.1310		
Test Date:	2013-09-20 to 2013-10-25		
Issue Date:	2013-10-25		
Test Result:	<i>Pass.</i>		
Prepared By:	Reviewed By:	Approved By:	
Lynn Xiao / Test Engineer	Jane Cao / Test Engineer	Gavin Wu / Manager	
			
Date:2013-10-25	Date:2013-10-25	Date:2013-10-25	
Other Aspects:			
<i>None</i>			
Abbreviations: <i>ok / P = passed; fail / F = failed; n.a. / N = not applicable</i>			
The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.			

DIRECTIONS OF TEST

1. This station carries out test task according to the national regulation of verifications which can be traced to National Primary Standards and BIPM.
2. The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test result without the written permission of the test laboratory.
3. If there is any objection concerning the test, the client should inform the laboratory within 15 days from the date of receiving the test report.

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1. TEST RESULT SUMMARY

FCC PART 1.1310&KDB 680106 D01			
Standard	Item	Limit / Severity	Result
FCC PART 1.1310&KDB 680106 D01	RF exposure compliance	1.1310	PASS

2. GENERAL DESCRIPTION OF TUT

2.1 APPLICANT

Name: Harman International Industries, Incorporated
Address: 8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES

2.2 MANUFACTURER

Name: Harman International Industries, Incorporated
Address: 8500 Balboa Blvd, Northridge, CA 91329, UNITED STATES

2.3 BASIC DESCRIPTION OF EQUIPMENT UNDER TEST

Equipment: USB POWERED WIRELESS CHARGER
Model No.: JBL AUTHENTICS QI
Trade Name: JBL
Power supply: USB DC 5V
Mode: Wireless Charging
Wireless charging Operation frequency 106kHz
Sample submitting way: Provided by customer Sampling
Note: /

2.4 LOCAL SUPPORTIVE INSTRUMENTS

Name of Equipment	Manufacturer	Model	Serial Number
Wireless charge load	ConvenientPower	/	/
adapter	Harman	/	/

3. LABORATORY AND ACCREDITATIONS

3.1 LABORATORY

The tests and measurements refer to this report were performed by EMC Laboratory of Guangzhou GRG Metrology and Test Co., Ltd.

Add. : 163 Pingyun Rd, West of Huangpu Ave, Guangzhou, 510656, P. R. China

Telephone: +86-20-38699959, 38699960, 38699961

Fax : +86-20-38695185

3.2 ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC Listed Lab No. 688188
China	CNAS NO.L0446
China	DILAC No.DL175
Canada	Registration No.:8355A-1

3.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement		Frequency	Uncertainty
Radiated Emission	Horizontal	30MHz~1000MHz	4.2dB
	Vertical	30MHz~1000MHz	4.4dB
Conducted Emission		9kHz~30MHz	3.1 dB

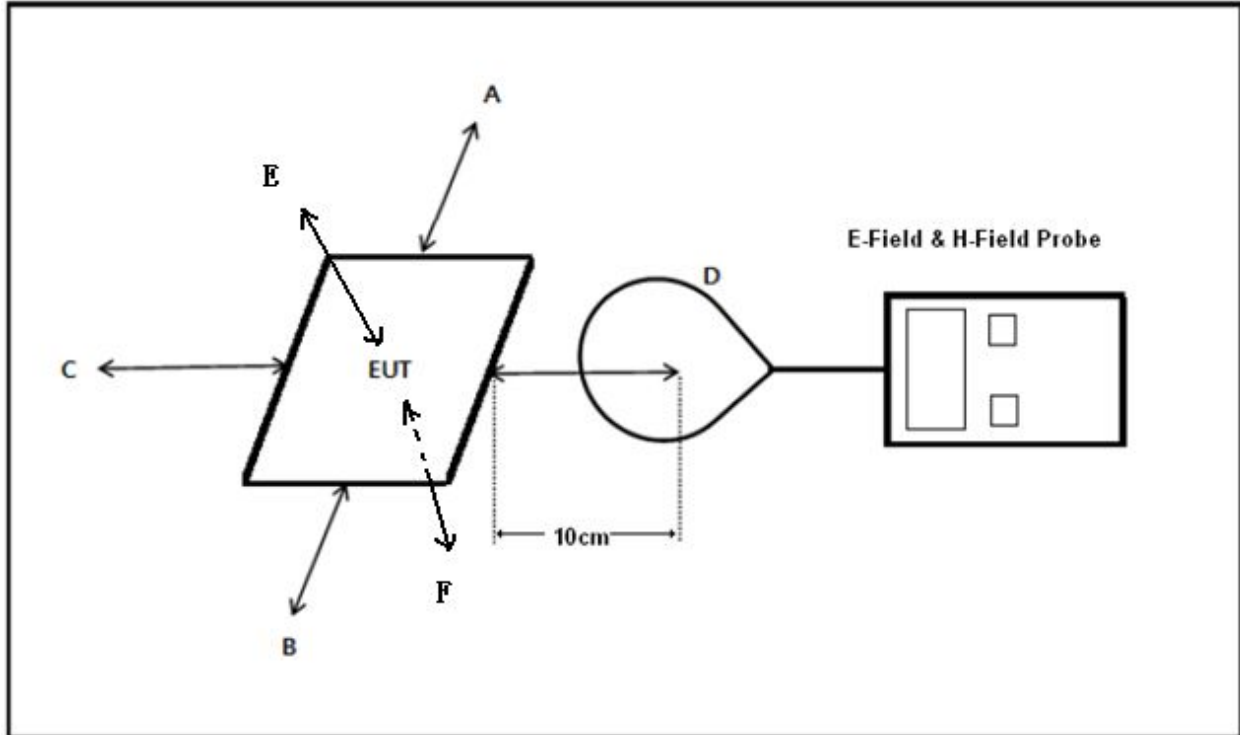
This uncertainty represents an expanded uncertainty factor of $k=2$.

3.4 LIST OF USED TEST EQUIPMENT AT GRGT

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Broadband Field Meter	Narda	NBM-550	E-0082	2014-01-09
Exposure Level Tester	Narda	ELT-400	M-0084/M-0096	2014-05-06

4. RF EXPOSURE EVALUATION

4.1 Test Setup



Note:

- The RF exposure test is performed in the shield room.
- The test distance is between the edge of the charger and the geometric centre of probe.

4.2 Environmental Evaluation and Exposure Limit

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in §1.1307(b).

Table 1 Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

RF exposure compliance will need to be determined with respect to 1.1307 (c) and (d) of the FCC rules. The emissions should be within the limits at 300 kHz in Table 1 of 1.1310 (use the 300 kHz limits for 150 kHz: 614 V/m, 1.63 A/m).

4.3 Test Result

Test Mode: Normal Operation (Transmit with Charging Mode in max charging current)

4.3.1 Electric Field Strength at 10 cm from the edges surrounding the EUT

Test position	Side position	Probe Measure result (V/m)	Limits (V/m)
A	Right side	1.44	614.00
B	Left side	1.13	614.00
C	Found side	1.52	614.00
D	Back side	1.20	614.00
E	Top	3.28	614.00
F	Bottom	4.91	614.00
Total		13.48	614

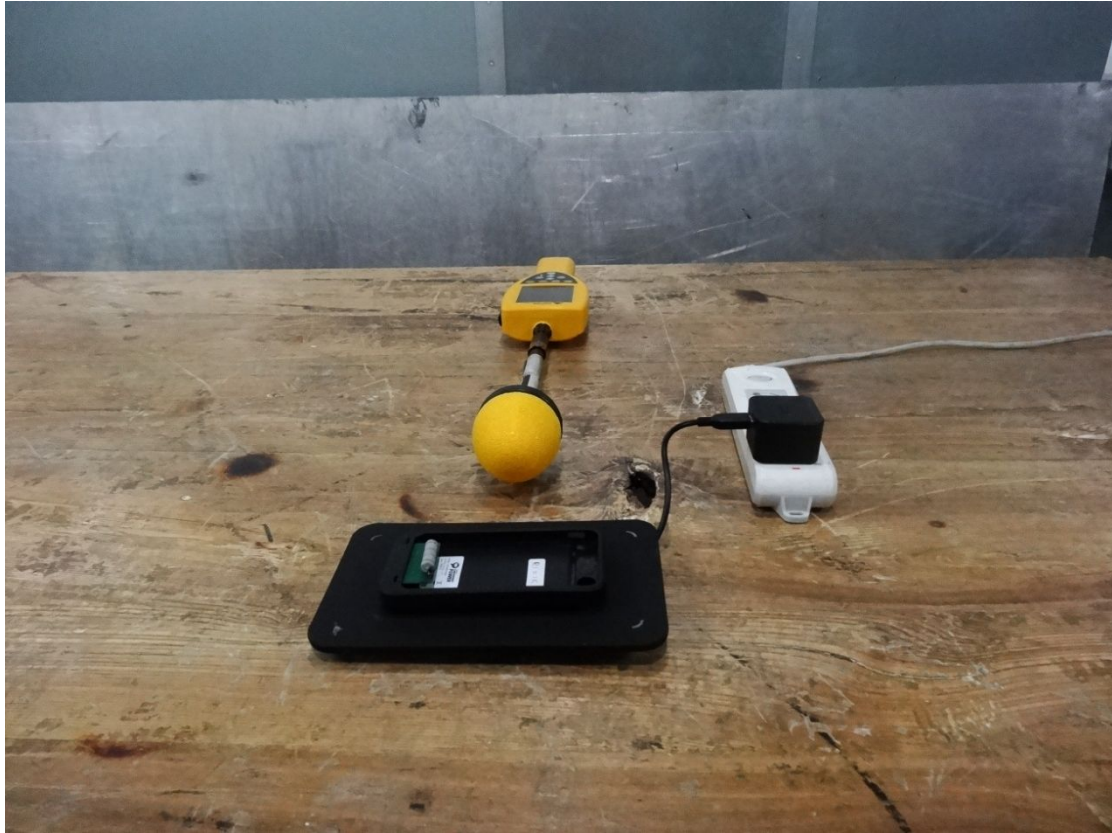
4.3.2 Magnetic-Field Strength at 10 cm from the edges surrounding the EUT

Test position	Side position	Probe Measure result (A/m)	Limits (A/m)
A	Right side	0.0039	1.63
B	Left side	0.0021	1.63
C	Found side	0.0043	1.63
D	Back side	0.0028	1.63
E	Top	0.0092	1.63
F	Bottom	0.0141	1.63
Total		0.0364	1.63

The Electric Field Strength and Magnetic-Field Strength is less than 30% of limit.

APPENDIX A: PHOTOGRAPH OF THE TEST ARRANGEMENT

Test position A :



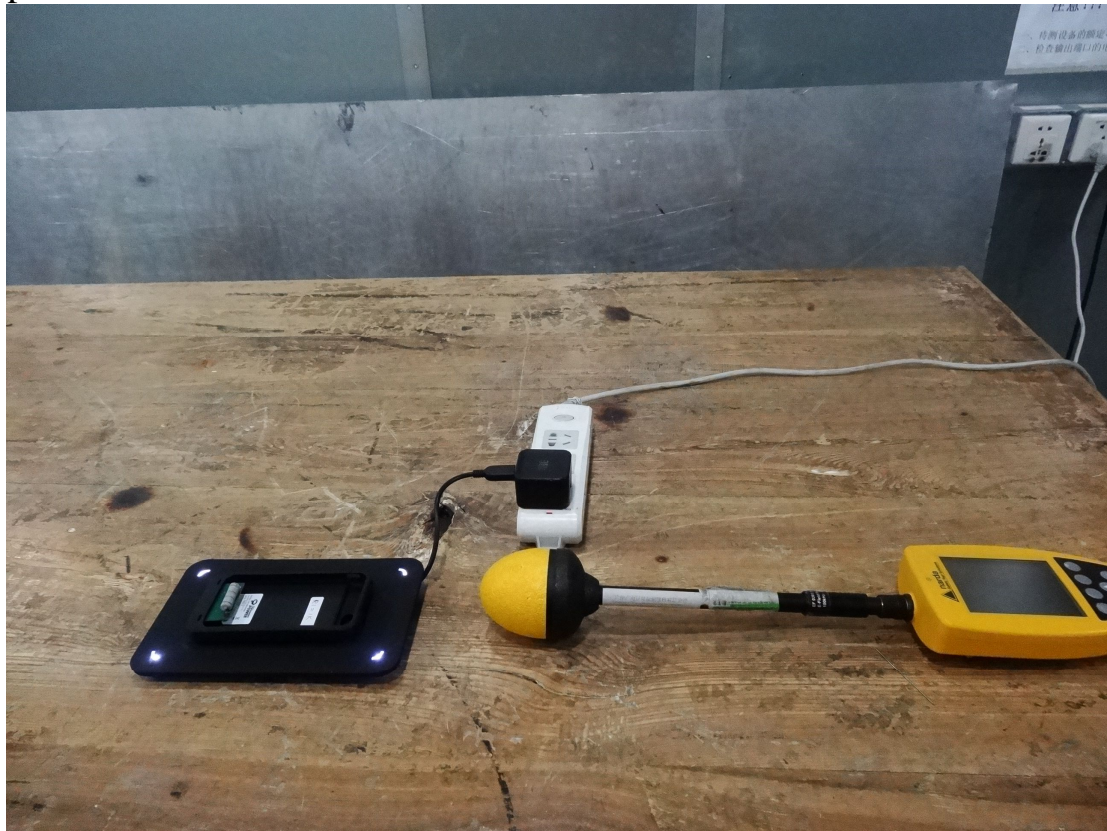
Test position B:



Test position C:



Test position D:



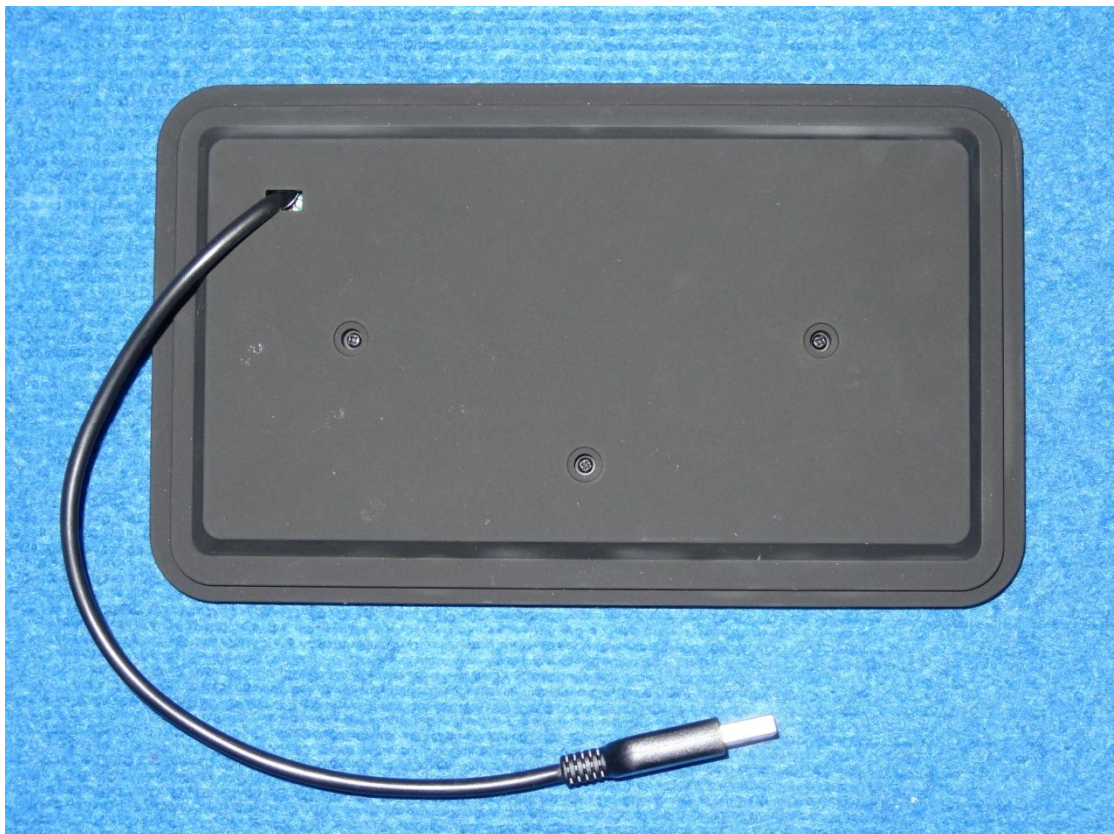
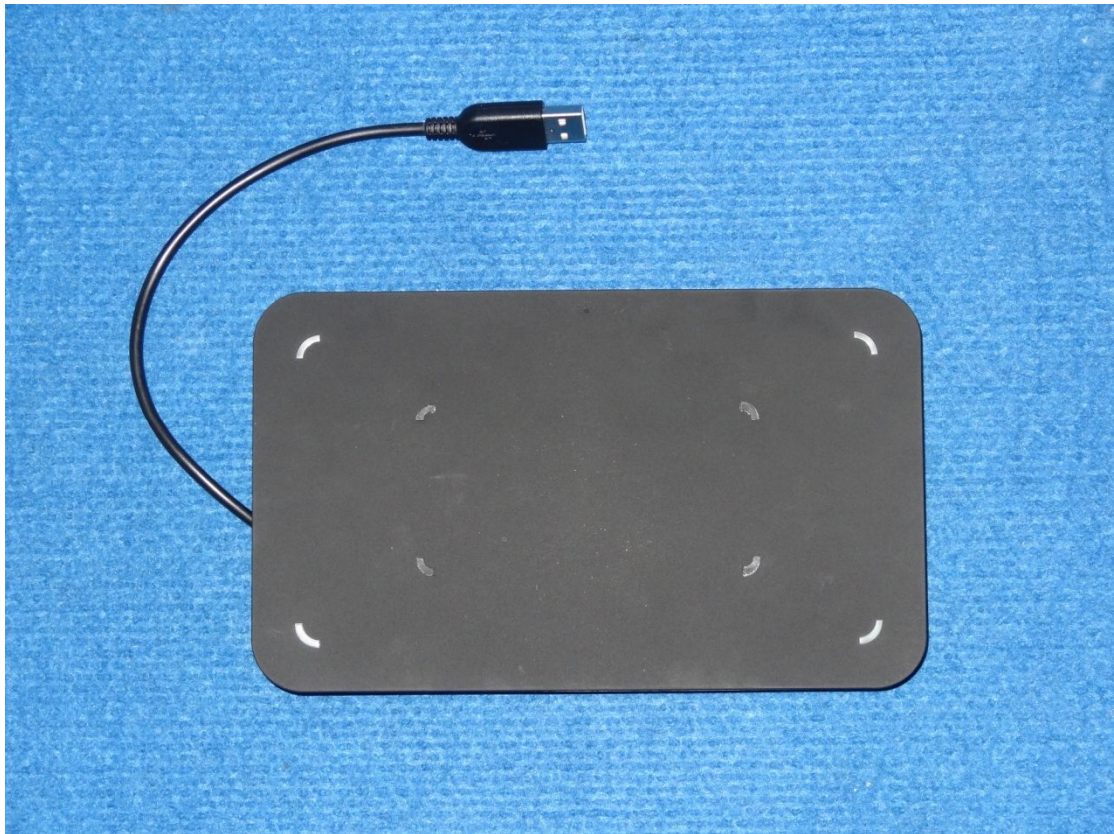
Test position E:



Test position F:

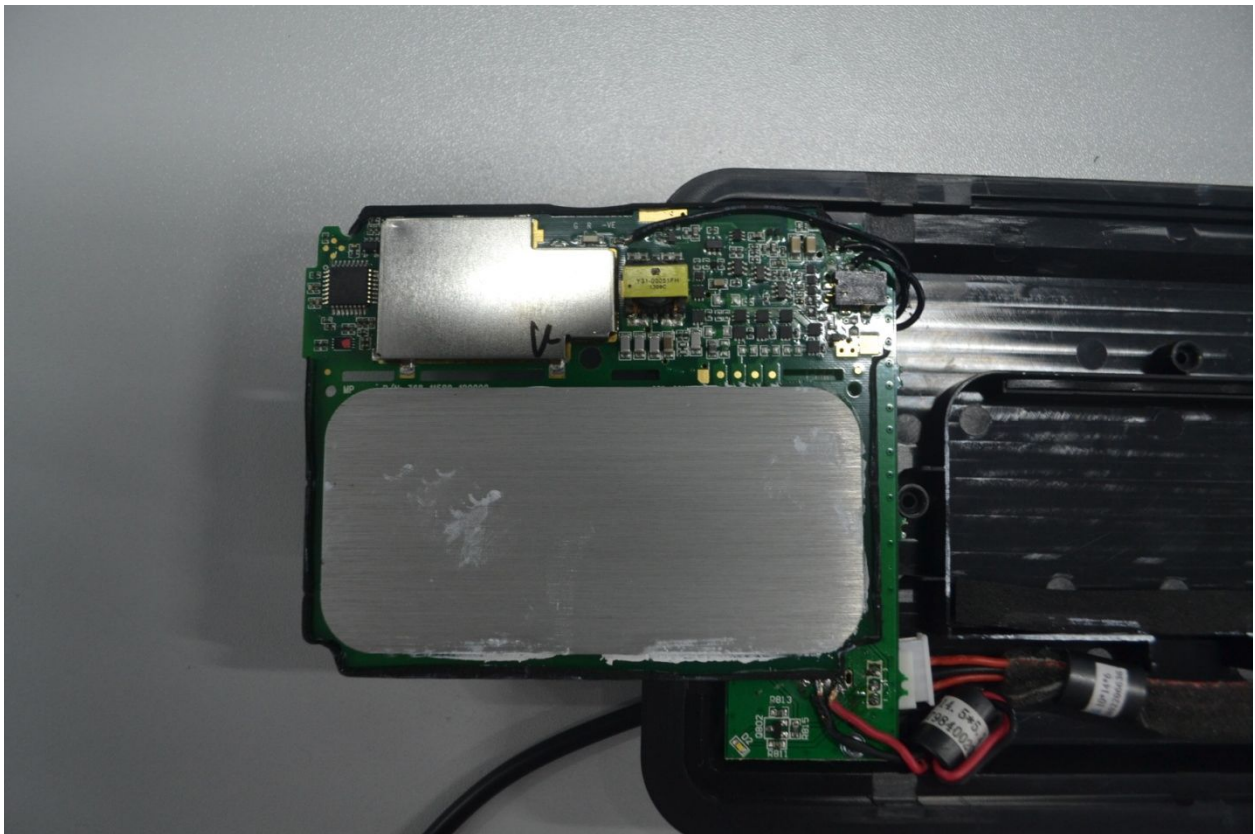


APPENDIX B: PHOTOGRAPH OF THE EUT









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