EMC TEST REPORT

Report No.: 17070660-FCC-E

Supersede Report No.:N/A

Applicant	AOC
Product Name	Tablet PC
Model No.	A726
Serial No.	N/A
Test Standard	FCC Part 15 Subpart B Class B:2016, ANSI C63.4: 2014
Test Date	August 01 to 09, 2017
Issue Date	August 10, 2017
Test Result	☑ Pass ☐ Fail
Equipment complied with the specification	☑
Equipment did not comply with the specification	☐

Evans He	David Huang	
Test Engineer	Checked By	

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Test result presented in this test report is applicable to the tested sample only

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park

South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108

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Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.

In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

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CONTENTS

1. Report Revision History

Report No.	Report Version	Description	Issue Date
17070660-FCC-E	NONE	Original	August 10, 2017

2. Customer information

Applicant Name	AOC
Applicant Add	14F-5, NO.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan
Manufacturer	China Great Wall Computer Shenzhen Co., Ltd.
Manufacturer Add	No.Great wall Computer Industrial Park,Bao Shi East Road,Bao' an Bistrict,Shenzhen,P.R.China

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES
Lab Address	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
FCC Test Site No.	718246
IC Test Site No.	4842E-1
Test Software of Radiated Emission	Radiated Emission Program-To Shenzhen v2.0
Test Software of Conducted Emission	EZ-EMC(ver.Icp-03A1)

4. Equipment under Test (EUT) Information

Description of EUT:	Tablet PC
Main Model:	A726
Serial Model:	N/A
Antenna Gain:	Bluetooth/WIFI: 2dBi
Antenna Type:	PIFA antenna
Input Power:	Adapter: Model: SC/5WM500100-US Input: AC 100-240V~50/60Hz;0.4A Output: DC 5.0V,1000mA Battery: Spec: 3.7V,2500mAh(9.25Wh)
Equipment Category：	JBC
Type of Modulation:	802.11b/g/n: DSSS, OFDM Bluetooth: GFSK, π /4DQPSK, 8DPSK
RF Operating Frequency (ies):	WIFI: 802.11b/g/n(20M): 2412-2462 MHz WIFI: 802.11n（40M）：2422-2452 MHz Bluetooth: 2402-2480 MHz
Number of Channels:	WIFI :802.11b/g/n(20M): 11CH WIFI :802.11n(40M): 7CH Bluetooth: 79CH
Port:	Earphone Port, USB Port，SD Card Port
Trade Name：	AOC
FCC ID:	2AEB5-A726
Date EUT received:	July 31, 2017

Test Date(s): August 01 to 09, 2017

Note: The difference between the old case 16071173 and new case 17070660: The only difference is updated the LCD, the other construction is the same.

So, we have retested the Radiated Emissions data in this report.

5. Test Summary

The product was tested in accordance with the following specifications.

All testing has been performed according to below product classification:

FCC Rules	Description of Test	Result
§15.107; ANSI C63.4: 2014	AC Power Line Conducted Emissions	Compliance
§15.109; ANSI C63.4: 2014	Radiated Emissions	Compliance

Measurement Uncertainty

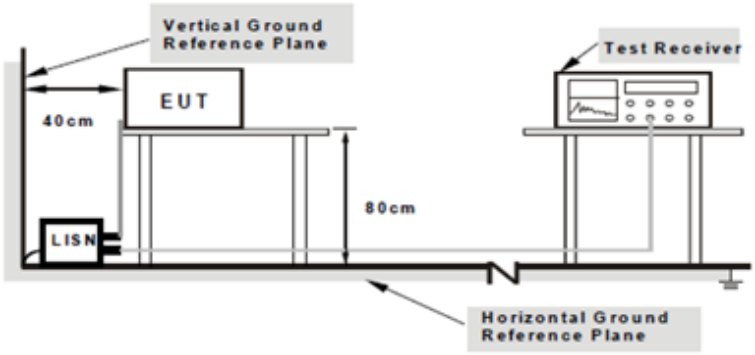
Parameter	Uncertainty
Radiated Emission(30MHz~1GHz)	±5.12dB
Radiated Emission(1GHz~6GHz)	±5.34dB

6. Measurements, Examination And Derived Results

6.1 AC Power Line Conducted Emissions

Temperature	25℃
Relative Humidity	50%
Atmospheric Pressure	1008mbar
Test date :	August 08, 2017
Tested By :	Evans He

Requirement(s):

<table>
<tr><th>Spec</th><th>Item</th><th>Requirement</th><th>Applicable</th></tr>
<tr><td>47CFR§15.107</td><td>a)</td><td>For Low-power radio-frequency devices that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 [mu] H/50 ohms line impedance stabilization network (LISN). The lower limit applies at the boundary between the frequencies ranges.
<table>
<tr><th rowspan="2">Frequency ranges (MHz)</th><th colspan="2">Limit (dBμV)</th></tr>
<tr><th>QP</th><th>Average</th></tr>
<tr><td>0.15 ~ 0.5</td><td>66 – 56</td><td>56 – 46</td></tr>
<tr><td>0.5 ~ 5</td><td>56</td><td>46</td></tr>
<tr><td>5 ~ 30</td><td>60</td><td>50</td></tr>
</table></td><td>☑</td></tr>
<tr><td>Test Setup</td><td colspan="3"> 

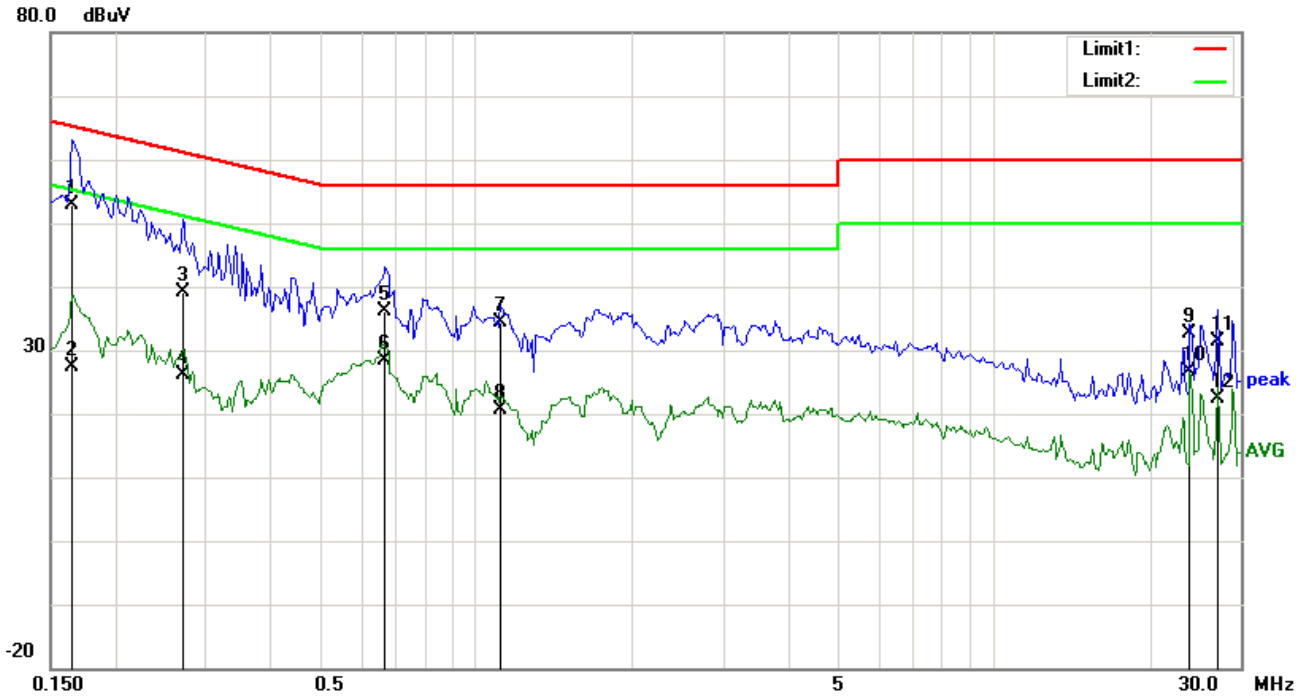
Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80cm from EUT and at least 80cm from other units and other metal planes support units.</td></tr>
<tr><td>Procedure</td><td colspan="3">1. The EUT and supporting equipment were set up in accordance with the requirements of the standard on top of a 1.5m x 1m x 0.8m high, non-metallic table.
2. The power supply for the EUT was fed through a 50Ω /50mH EUT LISN, connected to filtered mains.</td></tr>
</table>

	3. The RF OUT of the EUT LISN was connected to the EMI test receiver via a low-loss coaxial cable. 4. All other supporting equipment were powered separately from another main supply. 5. The EUT was switched on and allowed to warm up to its normal operating condition. 6. A scan was made on the NEUTRAL line (for AC mains) or Earth line (for DC power) over the required frequency range using an EMI test receiver. 7. High peaks, relative to the limit line, The EMI test receiver was then tuned to the selected frequencies and the necessary measurements made with a receiver bandwidth setting of 10 kHz. 8. Step 7 was then repeated for the LIVE line (for AC mains) or DC line (for DC power).
Remark	
Result	☑ Pass ☐ Fail

Test Data ☑ Yes ☐ N/A

Test Plot ☑ Yes (See below) ☐ N/A

Test Mode :	Charging +MP4 Mode

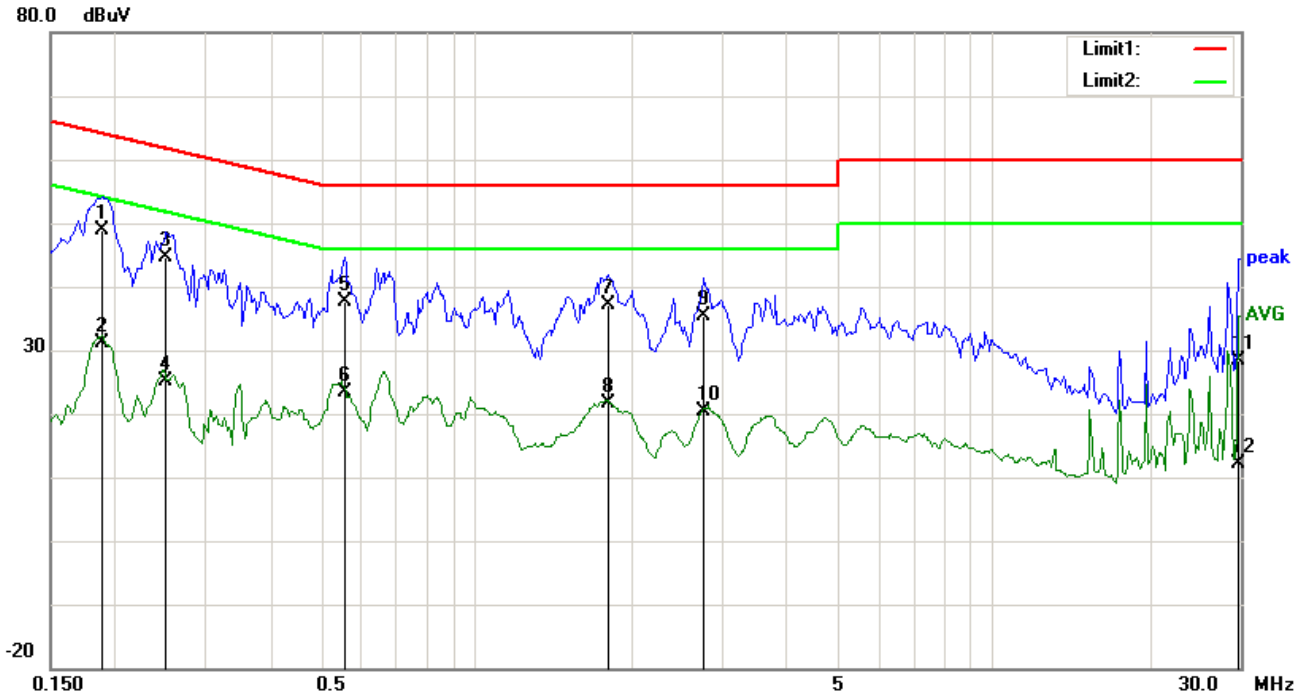


Test Data

Phase Line Plot at 120Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB}	(dBuV)	(dBuV)	(dB)
1	L1	0.1656	42.76	QP	10.03	52.79	65.18	-12.39
2	L1	0.1656	17.46	AVG	10.03	27.49	55.18	-27.69
3	L1	0.2709	29.09	QP	10.03	39.12	61.09	-21.97
4	L1	0.2709	16.11	AVG	10.03	26.14	51.09	-24.95
5	L1	0.6648	26.00	QP	10.03	36.03	56.00	-19.97
6	L1	0.6648	18.44	AVG	10.03	28.47	46.00	-17.53
7	L1	1.1133	24.28	QP	10.03	34.31	56.00	-21.69
8	L1	1.1133	10.71	AVG	10.03	20.74	46.00	-25.26
9	L1	24.0015	22.32	QP	10.38	32.70	60.00	-27.30
10	L1	24.0015	16.29	AVG	10.38	26.67	50.00	-23.33
11	L1	27.1098	21.01	QP	10.44	31.45	60.00	-28.55
12	L1	27.1098	12.06	AVG	10.44	22.50	50.00	-27.50

Test Mode :	Charging +MP4 Mode

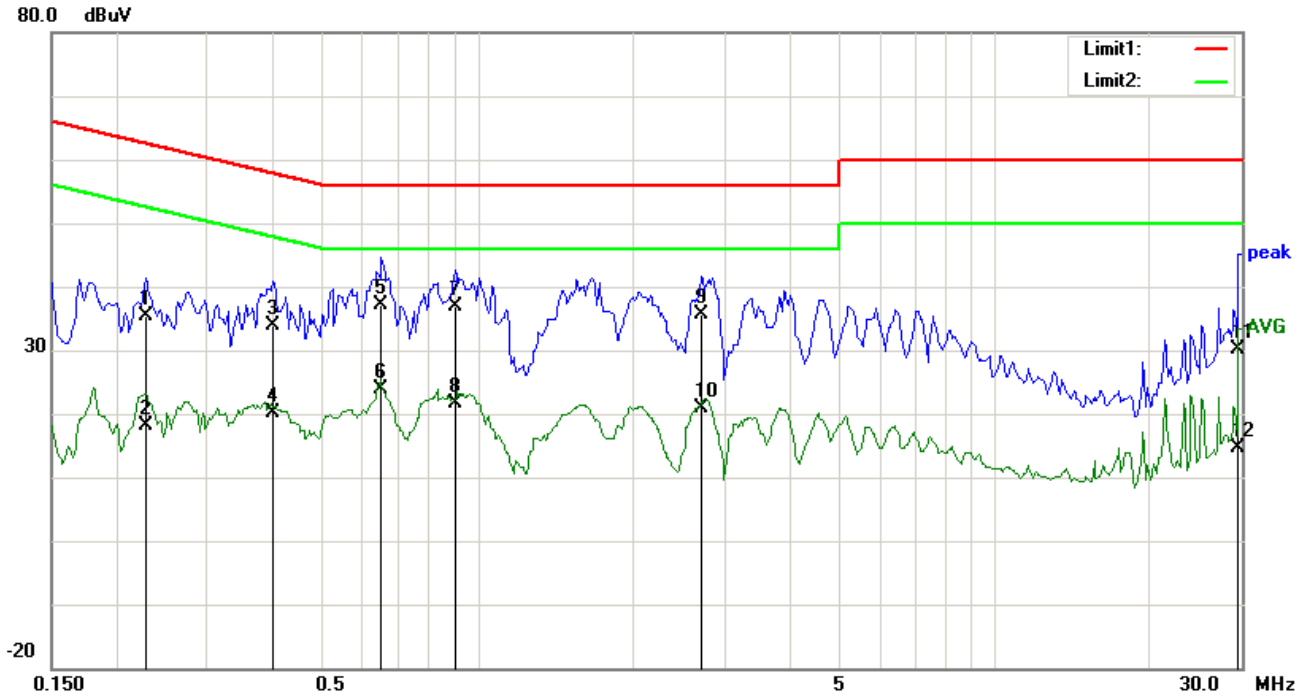


Test Data

Phase Neutral Plot at 120Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB}	(dBuV)	(dBuV)	(dB)
1	N	0.1890	38.80	QP	10.02	48.82	64.08	-15.26
2	N	0.1890	21.14	AVG	10.02	31.16	54.08	-22.92
3	N	0.2514	34.59	QP	10.02	44.61	61.71	-17.10
4	N	0.2514	15.10	AVG	10.02	25.12	51.71	-26.59
5	N	0.5556	27.49	QP	10.02	37.51	56.00	-18.49
6	N	0.5556	13.29	AVG	10.02	23.31	46.00	-22.69
7	N	1.7919	27.07	QP	10.04	37.11	56.00	-18.89
8	N	1.7919	11.50	AVG	10.04	21.54	46.00	-24.46
9	N	2.7474	25.27	QP	10.05	35.32	56.00	-20.68
10	N	2.7474	10.42	AVG	10.05	20.47	46.00	-25.53
11	N	29.6838	17.99	QP	10.41	28.40	60.00	-31.60
12	N	29.6838	1.63	AVG	10.41	12.04	50.00	-37.96

Test Mode :	Charging +MP4 Mode

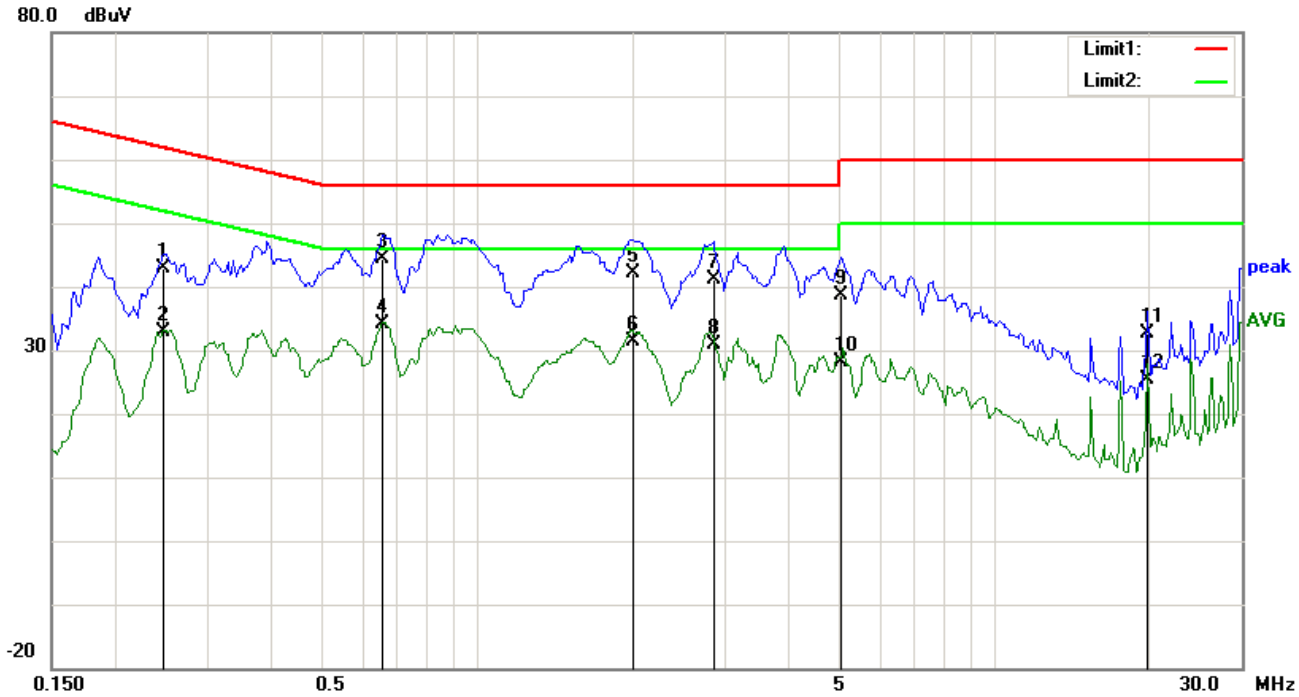


Test Data

Phase Line Plot at 240Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB}	(dBuV)	(dBuV)	(dB)
1	L1	0.2280	25.41	QP	10.02	35.43	62.52	-27.09
2	L1	0.2280	8.05	AVG	10.02	18.07	52.52	-34.45
3	L1	0.4035	23.78	QP	10.02	33.80	57.78	-23.98
4	L1	0.4035	10.22	AVG	10.02	20.24	47.78	-27.54
5	L1	0.6531	27.11	QP	10.02	37.13	56.00	-18.87
6	L1	0.6531	13.98	AVG	10.02	24.00	46.00	-22.00
7	L1	0.9066	26.83	QP	10.03	36.86	56.00	-19.14
8	L1	0.9066	11.59	AVG	10.03	21.62	46.00	-24.38
9	L1	2.7201	25.46	QP	10.05	35.51	56.00	-20.49
10	L1	2.7201	10.77	AVG	10.05	20.82	46.00	-25.18
11	L1	29.5269	19.65	QP	10.41	30.06	60.00	-29.94
12	L1	29.5269	4.13	AVG	10.41	14.54	50.00	-35.46

Test Mode :	Charging +MP4 Mode



Test Data

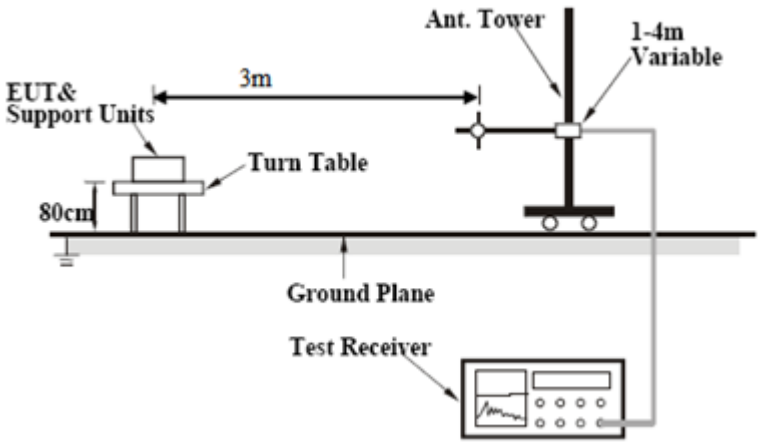
Phase Neutral Plot at 240Vac, 60Hz

No.	P/L	Frequency	Reading	Detector	Corrected	Result	Limit	Margin
		(MHz)	(dBuV)		(dB}	(dBuV)	(dBuV)	(dB)
1	N	0.2475	32.82	QP	10.02	42.84	61.84	-19.00
2	N	0.2475	22.87	AVG	10.02	32.89	51.84	-18.95
3	N	0.6570	34.34	QP	10.02	44.36	56.00	-11.64
4	N	0.6570	23.99	AVG	10.02	34.01	46.00	-11.99
5	N	2.0025	32.10	QP	10.04	42.14	56.00	-13.86
6	N	2.0025	21.40	AVG	10.04	31.44	46.00	-14.56
7	N	2.8605	31.12	QP	10.05	41.17	56.00	-14.83
8	N	2.8605	20.74	AVG	10.05	30.79	46.00	-15.21
9	N	5.0358	28.49	QP	10.07	38.56	60.00	-21.44
10	N	5.0358	18.01	AVG	10.07	28.08	50.00	-21.92
11	N	19.7076	22.32	QP	10.26	32.58	60.00	-27.42
12	N	19.7076	15.13	AVG	10.26	25.39	50.00	-24.61

6.2 Radiated Emissions

Temperature	25℃
Relative Humidity	50%
Atmospheric Pressure	1008mbar
Test date :	August 08, 2017
Tested By :	Evans He

Requirement(s):

<table>
<tr><th>Spec</th><th>Item</th><th>Requirement</th><th>Applicable</th></tr>
<tr><td>47CFR§15.109(d)</td><td>a)</td><td>Except higher limit as specified elsewhere in other section, the emissions from the low-power radio-frequency devices shall not exceed the field strength levels specified in the following table and the level of any unwanted emissions shall not exceed the level of the fundamental emission. The tighter limit applies at the band edges
<table>
<tr><th>Frequency range (MHz)</th><th>Field Strength (μV/m)</th></tr>
<tr><td>30 – 88</td><td>100</td></tr>
<tr><td>88 – 216</td><td>150</td></tr>
<tr><td>216 960</td><td>200</td></tr>
<tr><td>Above 960</td><td>500</td></tr>
</table></td><td>☑</td></tr>
<tr><td>Test Setup</td><td colspan="3"> 
</td></tr>
<tr><td>Procedure</td><td colspan="3">1. The EUT was switched on and allowed to warm up to its normal operating condition.
2. The test was carried out at the selected frequency points obtained from the EUT characterization. Maximization of the emissions, was carried out by rotating the EUT, changing the antenna polarization, and adjusting the antenna height in the following manner:
a. Vertical or horizontal polarization (whichever gave the higher emission level</td></tr>
</table>

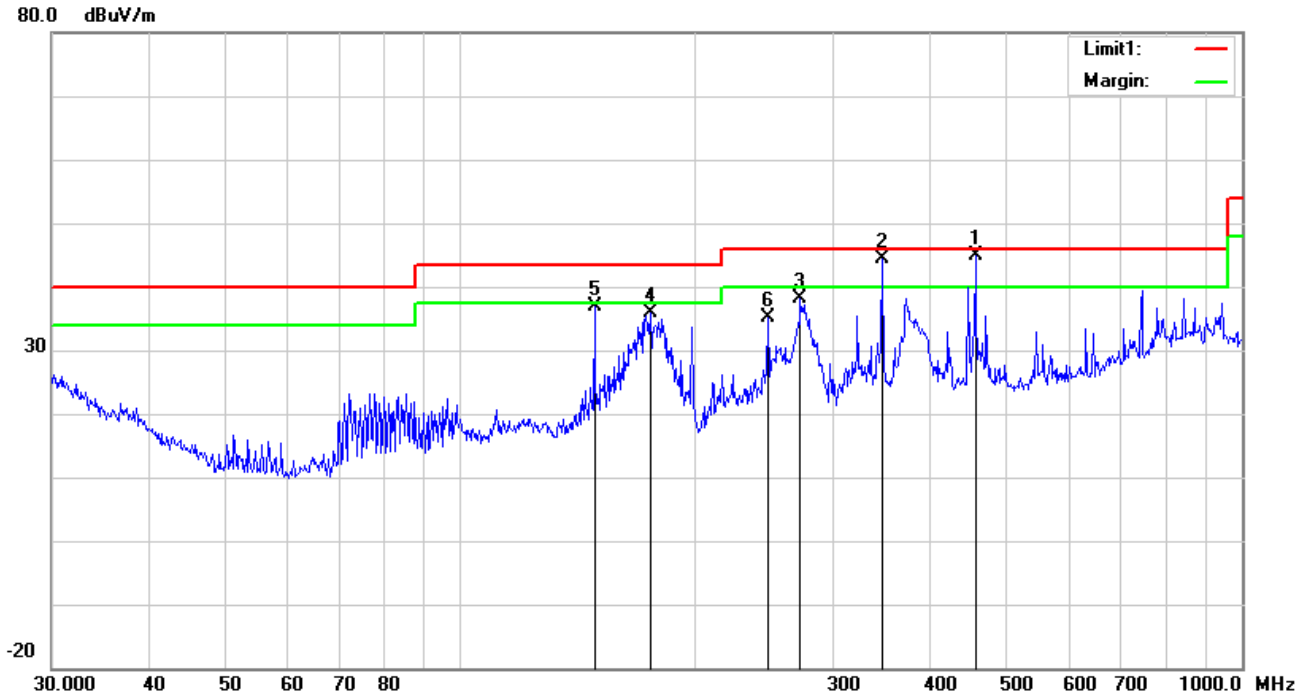
	over a full rotation of the EUT) was chosen. b. The EUT was then rotated to the direction that gave the maximum emission. c. Finally, the antenna height was adjusted to the height that gave the maximum emission. 3. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasiy Peak detection at frequency below 1GHz. 4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz with Peak detection for Peak measurement at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth with Peak detection for Average Measurement as below at frequency above 1GHz. ■ 1 kHz (Duty cycle < 98%) □ 10 Hz (Duty cycle > 98%) 5. Steps 2 and 3 were repeated for the next frequency point, until all selected frequency points were measured.
Remark	
Result	☑ Pass ☐ Fail

Test Data ☑ Yes ☐ N/A

Test Plot ☑ Yes (See below) ☐ N/A

Test Mode :	Charging +MP4 Mode

Below 1GHz

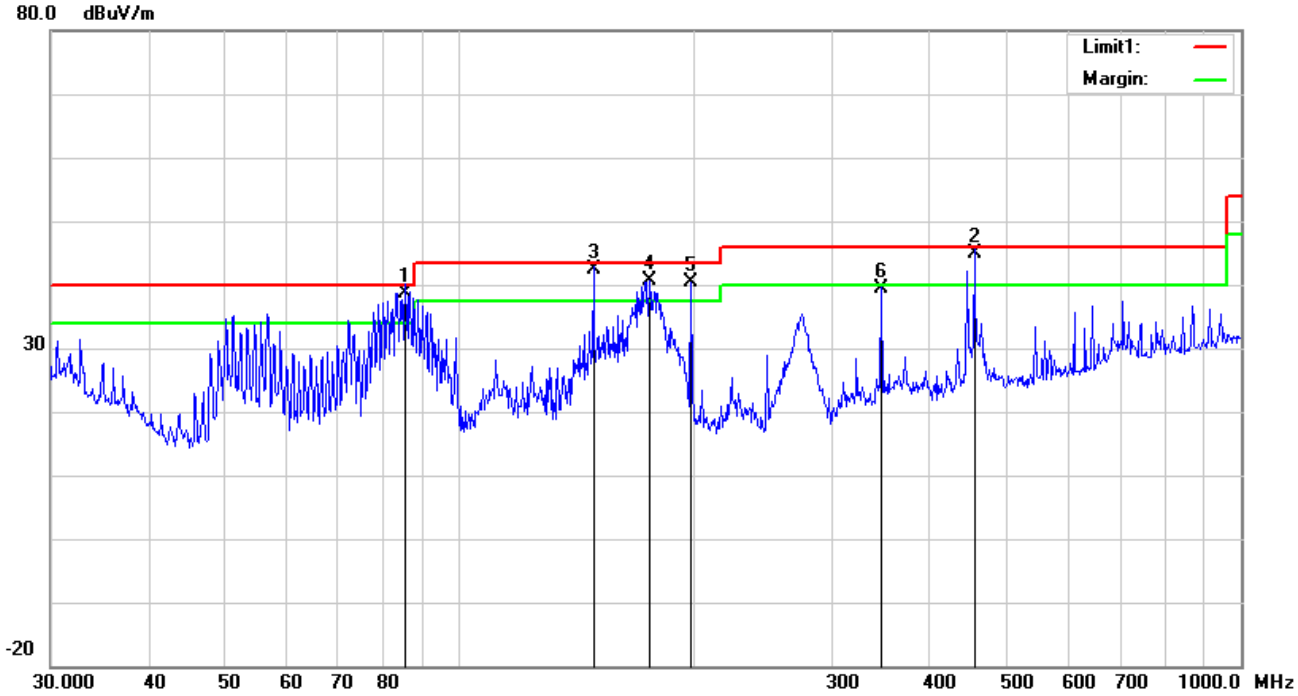


Test Data

Horizontal Polarity Plot @3m

No.	P/L	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	H	455.9058	47.84	QP	16.82	21.90	2.16	44.92	46.00	-1.08	100	335
2	H	346.8092	49.86	QP	14.58	22.16	2.02	44.30	46.00	-1.70	100	193
3	H	272.2776	46.26	peak	12.38	22.29	1.74	38.09	46.00	-7.91	100	242
4	H	175.0368	45.41	peak	11.40	22.25	1.36	35.92	43.50	-7.58	100	319
5	H	148.4410	45.23	peak	12.60	22.35	1.33	36.81	43.50	-6.69	100	338
6	H	247.6819	44.32	peak	11.43	22.29	1.69	35.15	46.00	-10.85	100	160

Below 1GHz



Test Data

Vertical Polarity Plot @3m

No.	P/L	Frequency	Reading	Detector	Ant_F	PA_G	Cab_L	Result	Limit	Margin	Height	Degree
		(MHz)	(dBuV/m)		(dB/m)	(dB)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	( )
1	V	85.2981	52.10	QP	7.81	22.37	1.06	38.60	40.00	-1.40	100	253
2	V	455.9058	47.92	QP	16.82	21.90	2.16	45.00	46.00	-1.00	100	49
3	V	148.4410	50.82	QP	12.60	22.35	1.33	42.40	43.50	-1.10	200	338
4	V	175.0368	50.09	peak	11.40	22.25	1.36	40.60	43.50	-2.90	100	35
5	V	197.8928	49.23	peak	11.98	22.37	1.54	40.38	43.50	-3.12	100	95
6	V	346.8092	45.06	peak	14.58	22.16	2.02	39.50	46.00	-6.50	200	12

Above 1GHz

Frequency (MHz)	Read_level (dBμV/m)	Azimuth	Height (cm)	Polarity (H/V)	Factors (dB)	Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector (PK/AV)
1267.9	64.79	135	100	V	-19.56	45.23	74	-28.77	PK
1643.2	61.82	117	100	V	-17.51	44.31	74	-29.69	PK
2038.4	58.59	246	100	V	-14.9	43.69	74	-30.31	PK
1452.7	69.42	59	100	H	-18.95	50.47	74	-23.53	PK
1833.2	63.7	108	100	H	-16.39	47.31	74	-26.69	PK
2561.5	59.98	239	100	H	-13.46	46.52	74	-27.48	PK

*Note1: The highest frequency of the EUT is 2480 MHz, so the testing has been conformed to 5*2480MHz=12,400MHz.*

Note2: The frequency that above 3GHz is mainly from the environment noise.

Note3: The AV measurement performed, more than 20dB below limit so AV test data was not presented.

Annex A. TEST INSTRUMENT

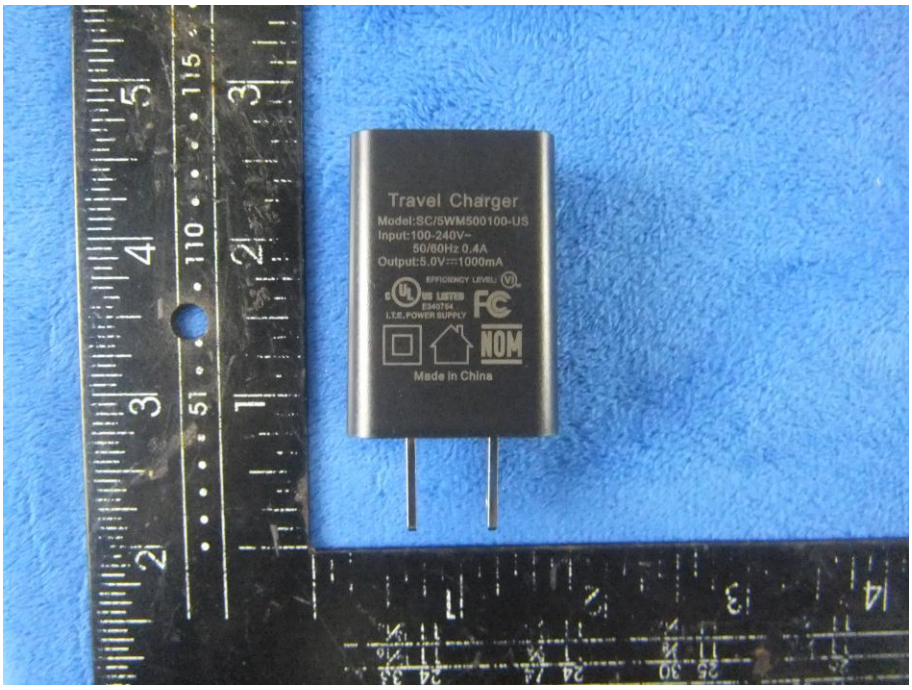
Instrument	Model	Serial #	Cal Date	Cal Due	In use
Radiated Emissions					
EMI test receiver	ESL6	100262	09/16/2016	09/15/2017	☑
OPT 010 AMPLIFIER (0.1-1300MHz)	8447E	2727A02430	08/31/2016	08/30/2017	☑
Microwave Preamplifier (1 ~ 26.5GHz)	8449B	3008A02402	03/23/2017	03/22/2018	☑
Bilog Antenna (30MHz~6GHz)	JB6	A110712	09/20/2016	09/19/2017	☑
Double Ridge Horn Antenna	AH-118	71259	09/23/2016	09/22/2017	☑

Annex B. EUT And Test Setup Photographs

Annex B.ii. Photograph: EUT External Photo

Whole Package View

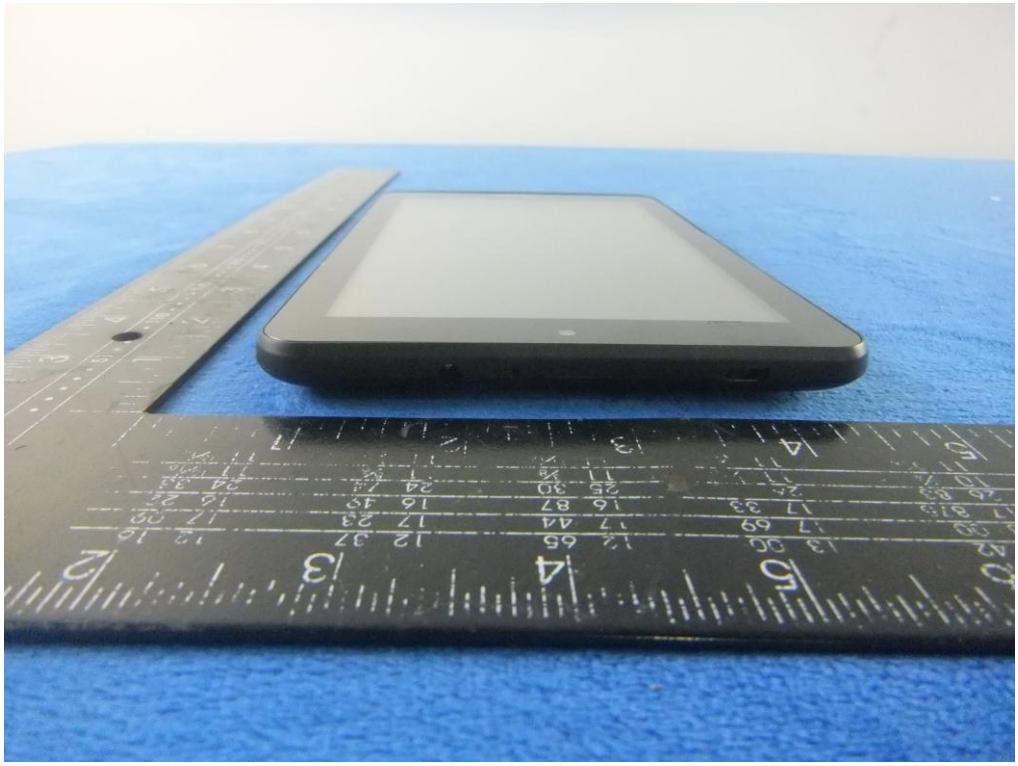
Adapter - Front View



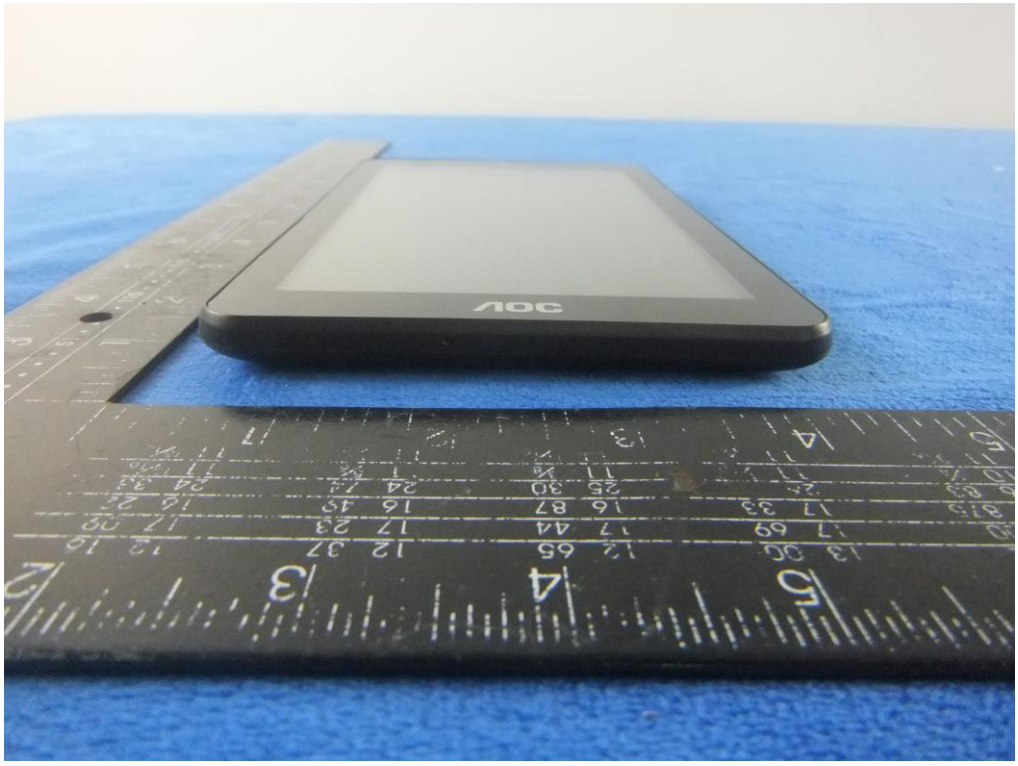
EUT - Front View

EUT - Rear View

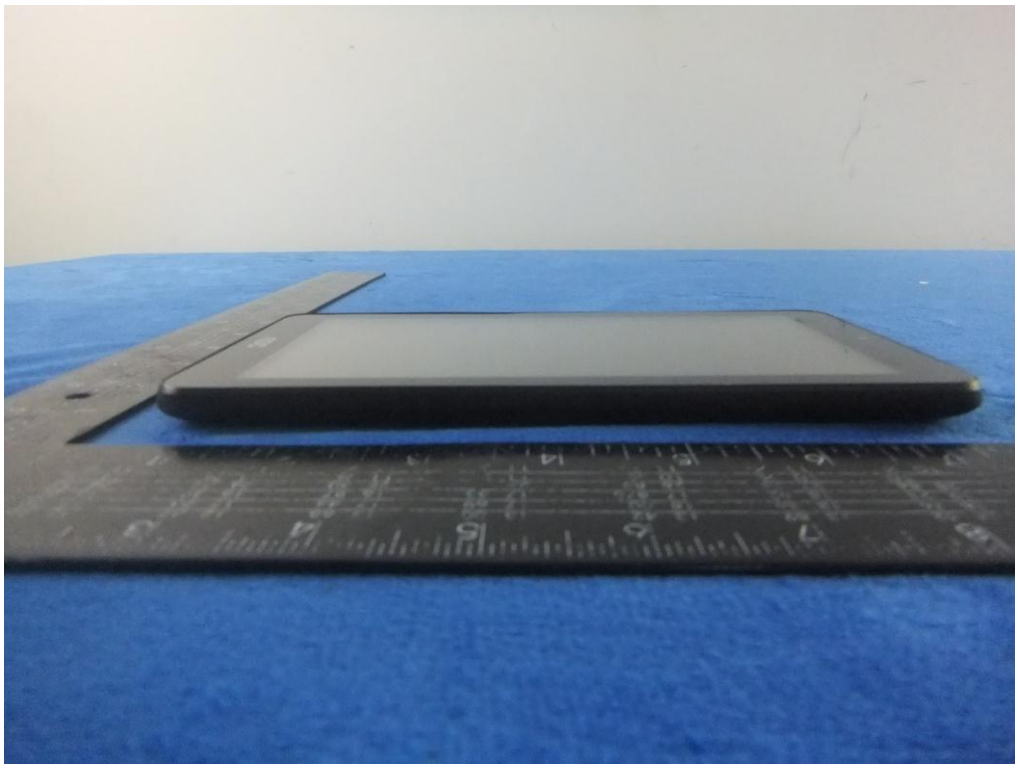
EUT - Top View



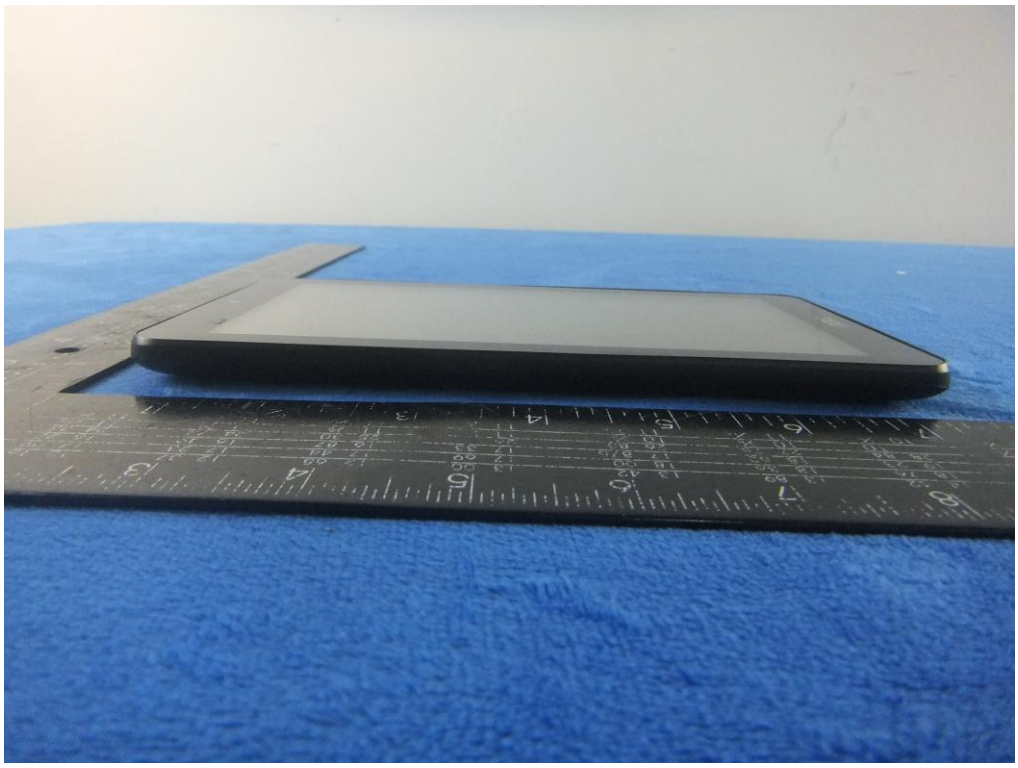
EUT - Bottom View



EUT - Left View



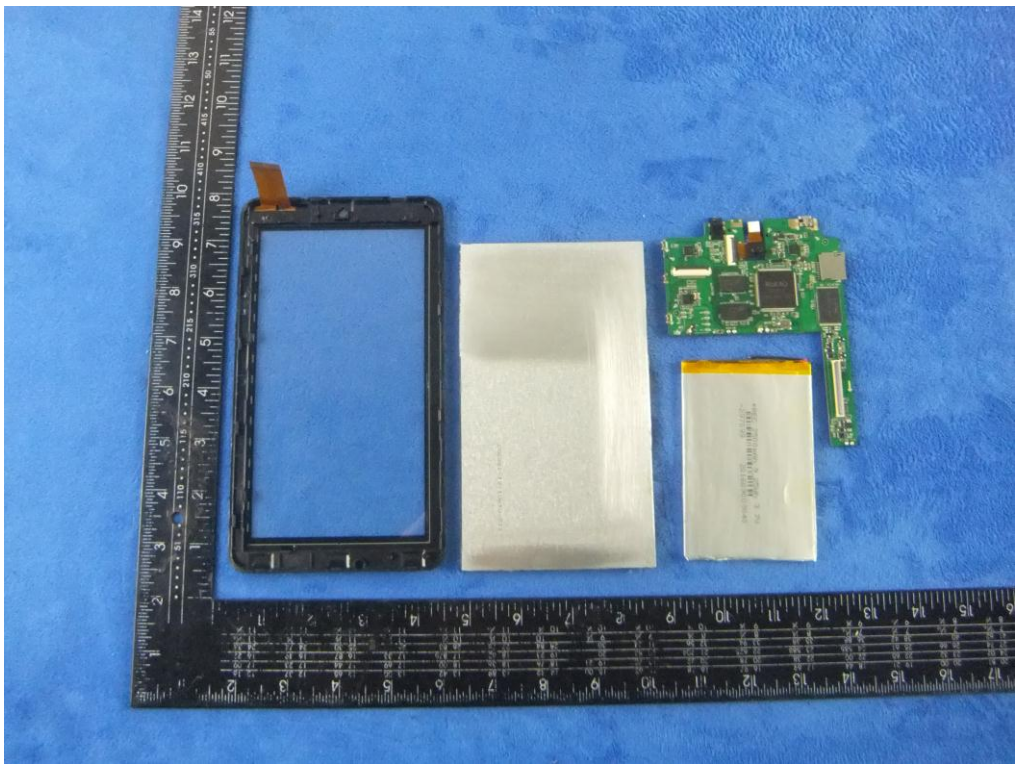
EUT - Right View



Annex B.ii. Photograph: EUT Internal Photo

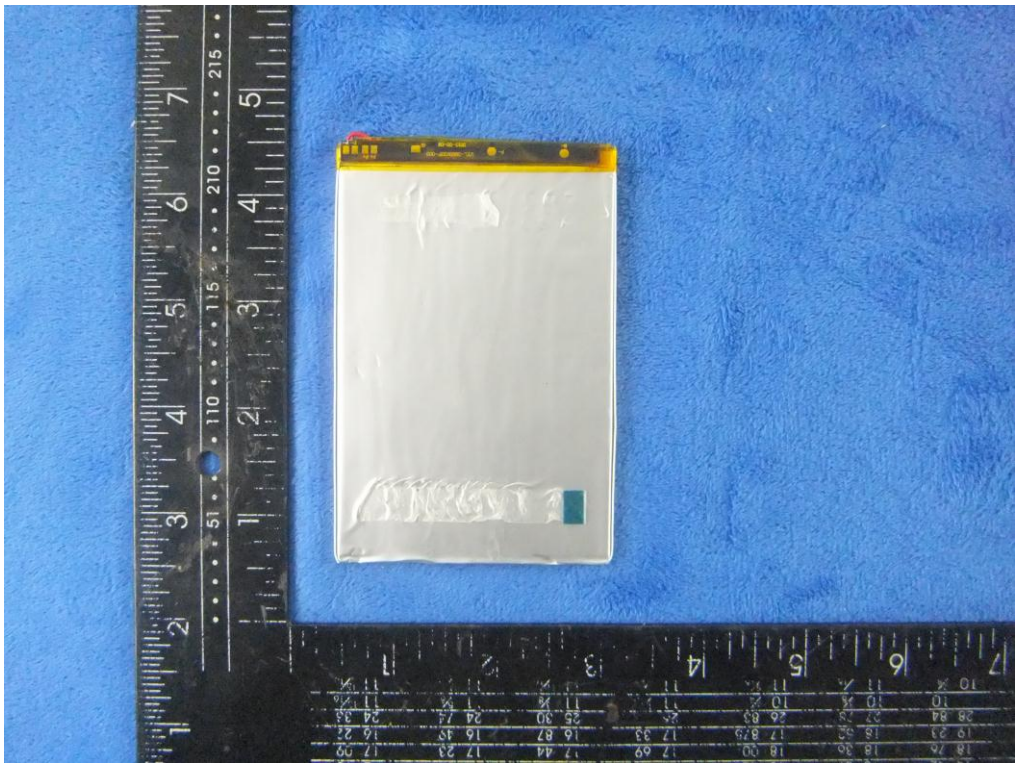
Cover Off - Top View 1

Cover Off - Top View 2

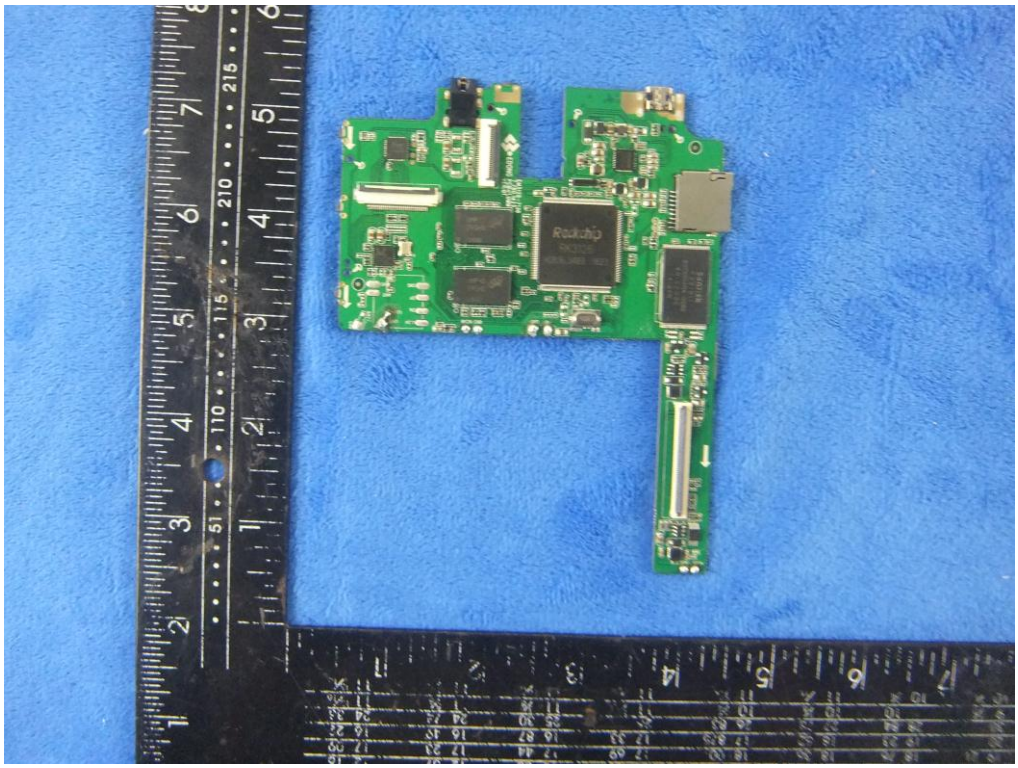


Battery - Front View

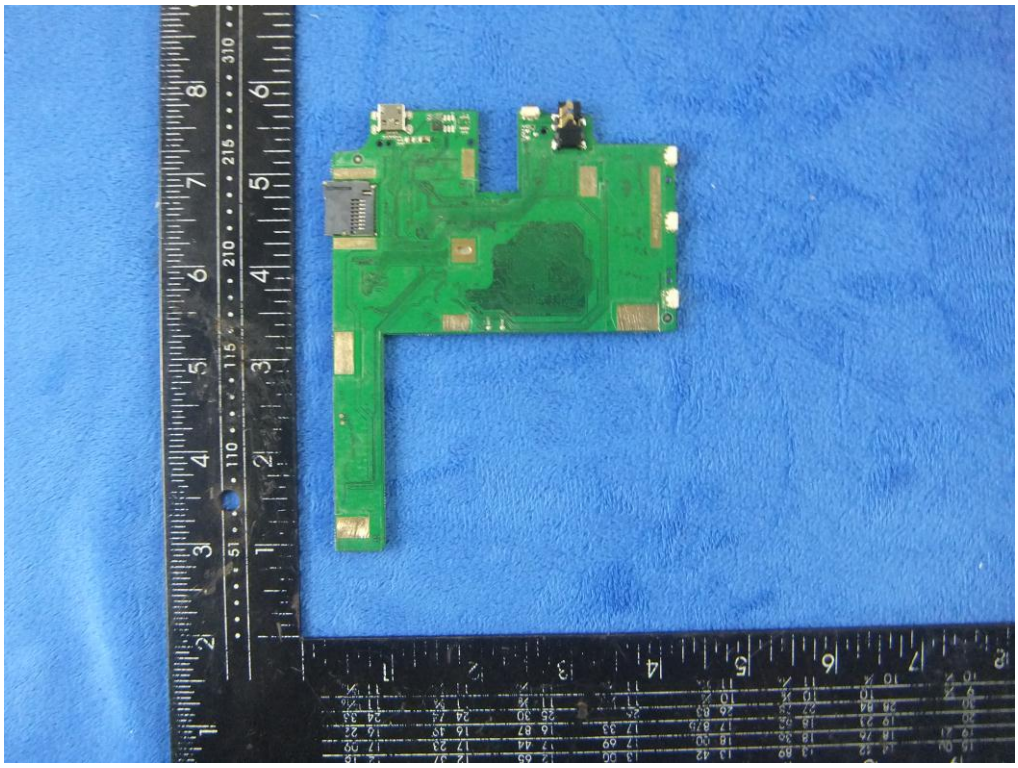
Battery - Rear View



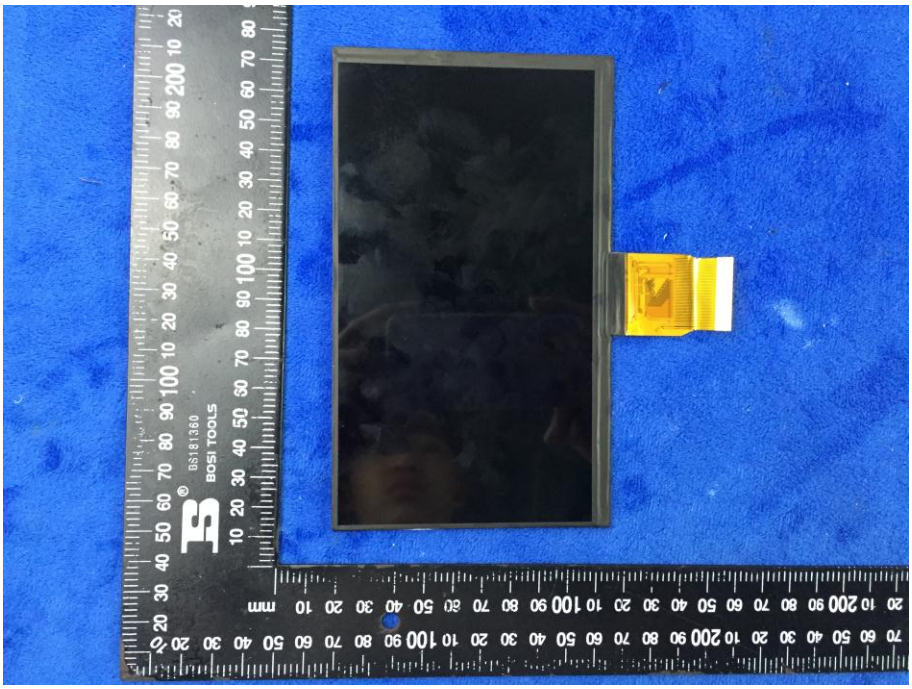
Mainboard - Front View



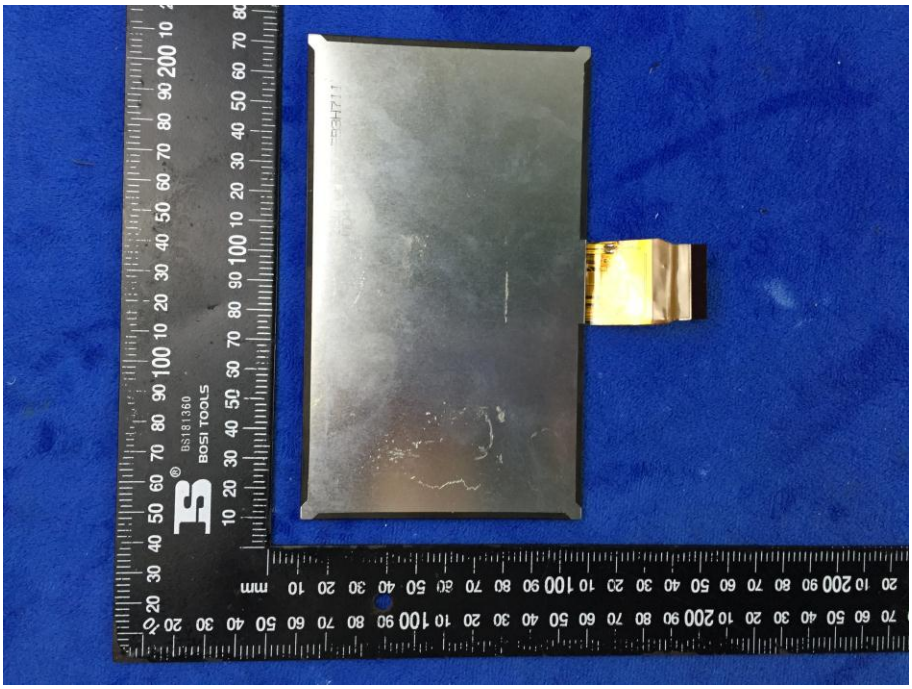
Mainboard - Rear View



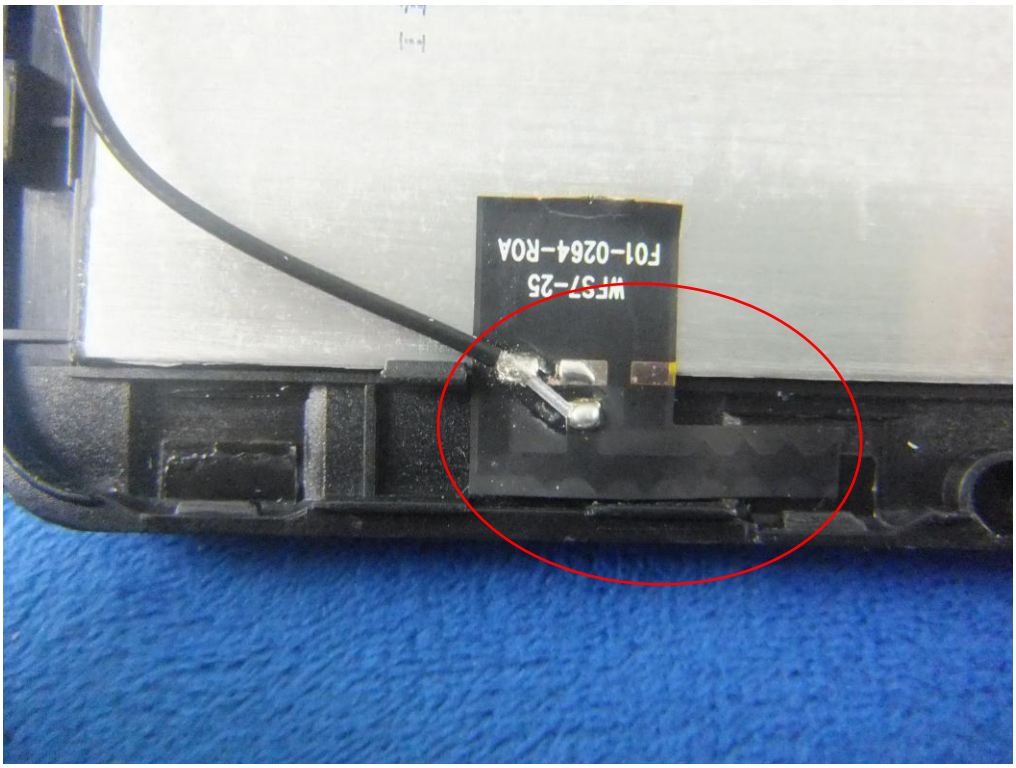
LCD – Front View



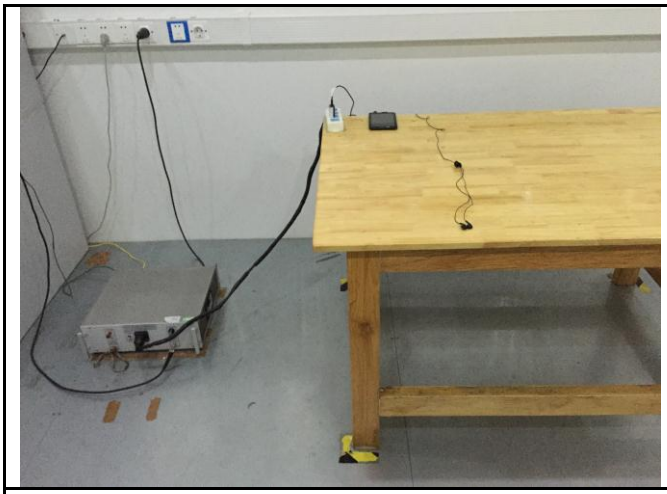
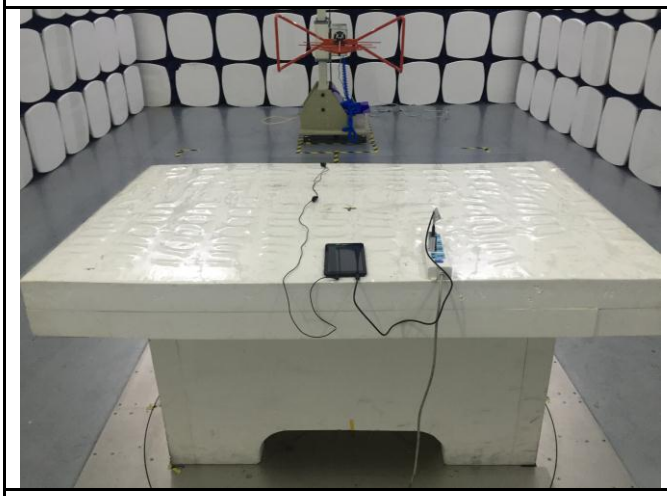
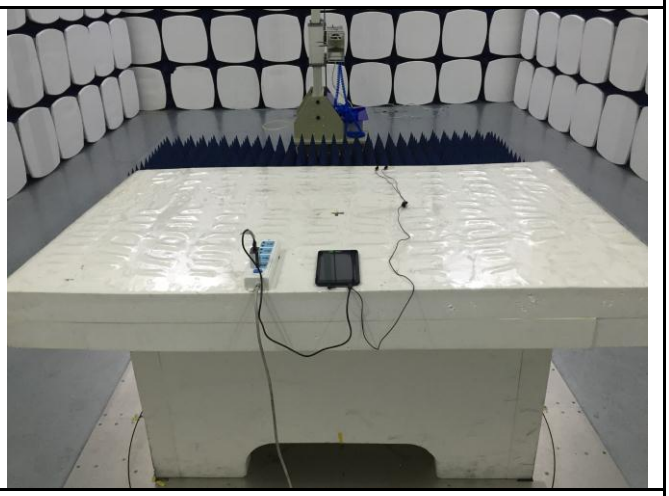
LCD – Rear View



BT/WIFI Antenna View



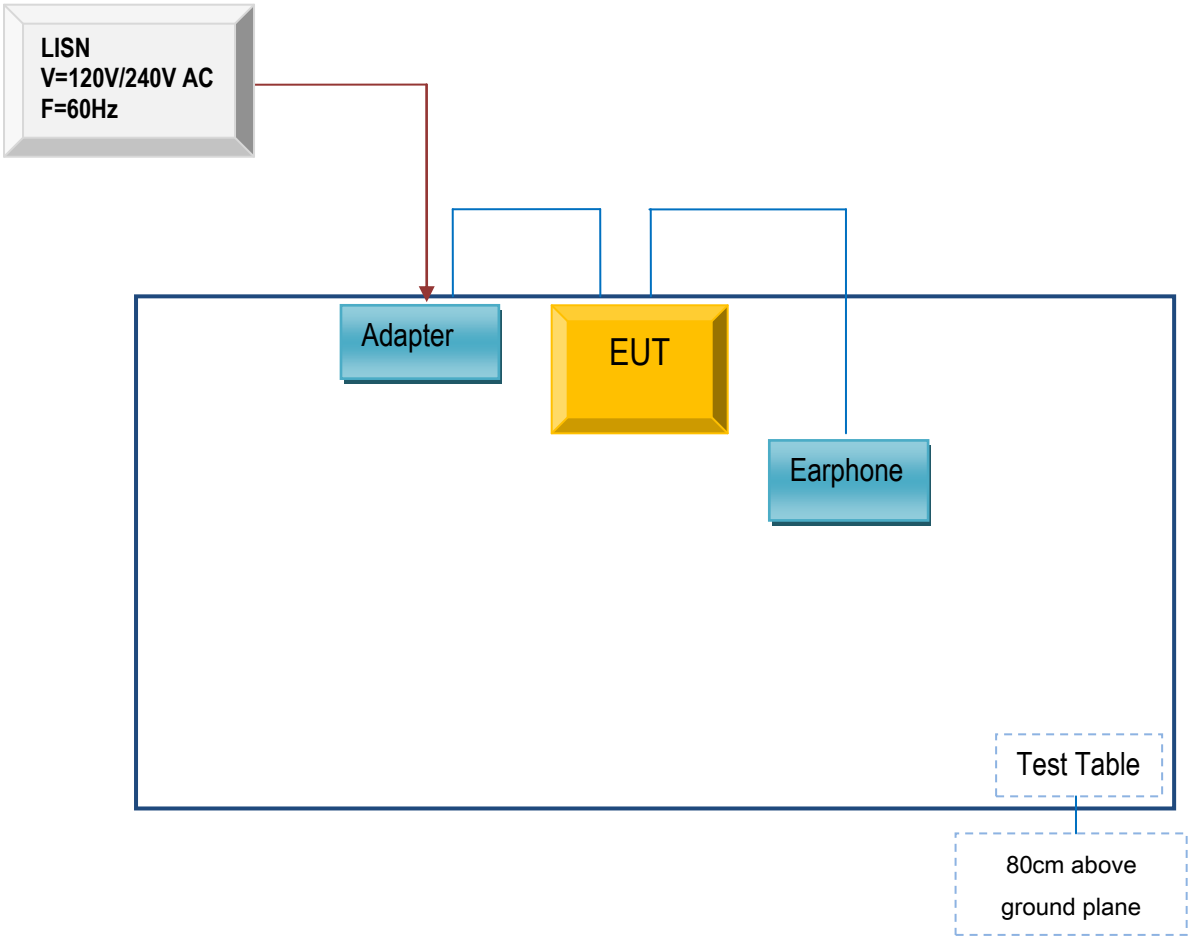
Annex B.iii. Photograph: Test Setup Photo

	
Conducted Emissions Test Setup – Front View	Conducted Emissions Test Setup – Side View
	
Radiated Emissions Test Setup Below 1GHz	Radiated Emissions Test Setup Above 1GHz

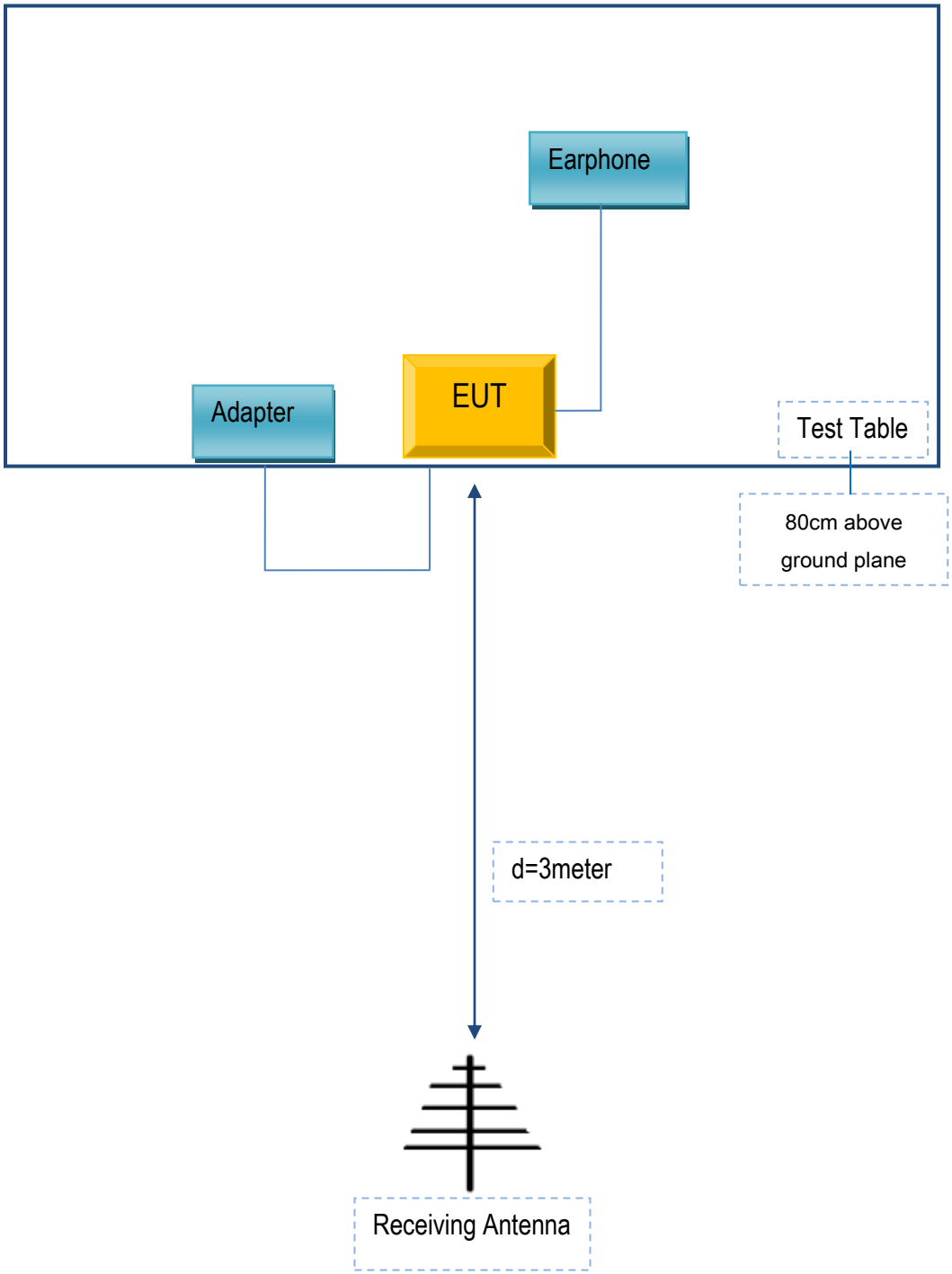
Annex C. TEST SETUP AND SUPPORTING EQUIPMENT

Annex C.ii. TEST SET UP BLOCK

Block Configuration Diagram for Conducted Emissions



Block Configuration Diagram for Radiated Emissions



Annex C. il. SUPPORTING EQUIPMENT DESCRIPTION

The following is a description of supporting equipment and details of cables used with the EUT.

Supporting Equipment:

Manufacturer	Equipment Description	Model	Serial No
BULL	Socket	GN-403	GN201203
AOC	Earphone	A726	N/A

Supporting Cable:

Cable type	Shield Type	Ferrite Core	Length	Serial No
Power Cable	Un-shielding	No	0.8m	GT211032

Annex D. User Manual / Block Diagram / Schematics / Partlist

Please see attachment

Annex E. DECLARATION OF SIMILARITY

Declaration Letter

(Original approval holder)

Company name	AOC
Address	14F-5, NO.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan

Declare that the following company:

(New approval holder)

Company name	AOC
Address	14F-5, NO.258, Liancheng Rd., Zhonghe Dist., New Taipei City, Taiwan

is here to declare that PCB ,Antenna and Appearance shape , accessories are the same . The only difference is listed as below

(Difference from original approval holder's)

	Model	**Difference**
Original	A726	
New	A726	New screen

and apply for own approval or certificate.

Attestation:

Date:	**Name:** (this must be a person)	**Function:**	**Signature:** (or official company stamp)
2017-8-11	李尚諭 SY.Lee	Design Manager	SY.Lee 8/31