



FCC Test Report

Report No.: AGC01705140402FE01

FCC ID : SOVAC79C0
PRODUCT DESIGNATION : 7.9 Inch Tablet
BRAND NAME : N/A
MODEL NAME : AC79C0
CLIENT : ARCHOS S.A.
DATE OF ISSUE : May 19, 2014
STANDARD(S) : FCC Part 15 Rules
REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	May 19, 2014	Valid	Original Report

TABLE OF CONTENTS

1. VERIFICATION OF CONFORMITY 4

2. SYSTEM DESCRIPTION 5

3. MEASUREMENT UNCERTAINTY..... 5

4. PRODUCT INFORMATION 6

5. SUPPORT EQUIPMENT..... 7

6. TEST FACILITY 8

7. FCCLINE CONDUCTED EMISSION TEST 9

 7.1. LIMITS OF LINE CONDUCTED EMISSION TEST 9

 7.2. BLOCK DIAGRAM OF TEST SETUP 9

 7.3. PROCEDURE OF LINE CONDUCTED EMISSION TEST 10

 7.4. TEST RESULT OF LINE CONDUCTED EMISSION TEST11

8. FCC RADIATED EMISSION TEST 13

 8.1. LIMITS OF RADIATED EMISSION TEST 13

 8.2. BLOCK DIAGRAM OF TEST SETUP 13

 8.3. PROCEDURE OF RADIATED EMISSION TEST 14

 8.4. TEST RESULT OF RADIATED EMISSION TEST 15

APPENDIX A: PHOTOGRAPHS OF TEST SETUP 19

APPENDIX B: PHOTOGRAPHS OF EUT 20

1. VERIFICATION OF CONFORMITY

Applicant	ARCHOS S.A.
Address	12 rue Ampère - 91430 Igny France
Manufacturer	Dongguan Yuanfeng Technology Co., Ltd
Address	No. 18, Industrial East Road, Songshan Lake Hi-Tech Industrial Development Zone, Dongguan, Guangdong, 523808, China
Product Designation	7.9 Inch Tablet
Brand Name	N/A
Test Model	AC79CO
Measurement Procedure	ANSI C63.4: 2003
Date of test	May 14, 2014 to May 16, 2014
Deviation	None
Condition of Test Sample	Normal
Report Template	AGCRT-US-IT/AC(2013-03-01)

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. for compliance with the requirements set forth in the FCC Rules and Regulations Part 15, the measurement procedure according to ANSI C63.4:2003. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Prepared By



Tom Huang

May 19, 2014

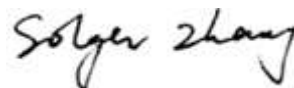
Checked By



Kidd Yang

May 19, 2014

Authorized By



Solger Zhang

May 19, 2014

2. SYSTEM DESCRIPTION

TEST MODE DESCRIPTION		
NO.	TEST MODE DESCRIPTION	WORST
1	USB Downloading	V
Note: 1. V means EMI worst mode 2. Only worst mode data recorded in the test report		

3. MEASUREMENT UNCERTAINTY

Conducted measurement: +/- 2.75dB

Radiated measurement: +/- 3.2dB

4. PRODUCT INFORMATION

Housing Type	Plastic
EUT Input Rating	DC 5V

I/O Port Information (☒Applicable ☐Not Applicable)

I/O Port of EUT			
I/O Port Type	Number	Cable Description	Tested With
TF port	1	--	1
USB port	1	0.5m	1
Earphone port	1	0.5m	1

Note:

1. All the above "--" means that EUT has no cable.

5. SUPPORT EQUIPMENT

Device Type	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
PC	DELL	INSPIRON	N5110	/	/

Note:

1 All the above equipment/cables were placed in worse case positions to maximize emission signals during emission test.

2 “/” means no any support device during testing.

6. TEST FACILITY

Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	2/F., Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2003.

TEST EQUIPMENT OF LINE CONDUCTED EMISSION TEST

Description	Manufacturer	Model	S/N	Cal. Date	Cal. Due
TEST RECEIVER	R&S	ESCI	100694	04/01/2014	03/30/2015
LISN	R&S	ESH3-Z5	8389791009	07/16/2013	07/15/2014

TEST EQUIPMENT OF RADIATED EMISSION

Description	Manufacturer	Model	S/N	Cal. Date	Cal. Due
SPECTRUM ANALYZER	AGILENT	E4440A	US41421290	07/16/2013	07/15/2014
ANTENNA	A.H.	SAS-521-4	128	06/07/2013	06/06/2014
HORN ANTENNA	EM	EM-AH-10180	N/A	04/19/2014	04/18/2015
AMPLIFIER	EM	EM30180	0607030	02/27/2014	02/26/2015
POSITIONING CONTROLLER	MF	MF-7802	MF780208147	--	--

Note: "--" means it's not applicable.

7. FCCLINE CONDUCTED EMISSION TEST

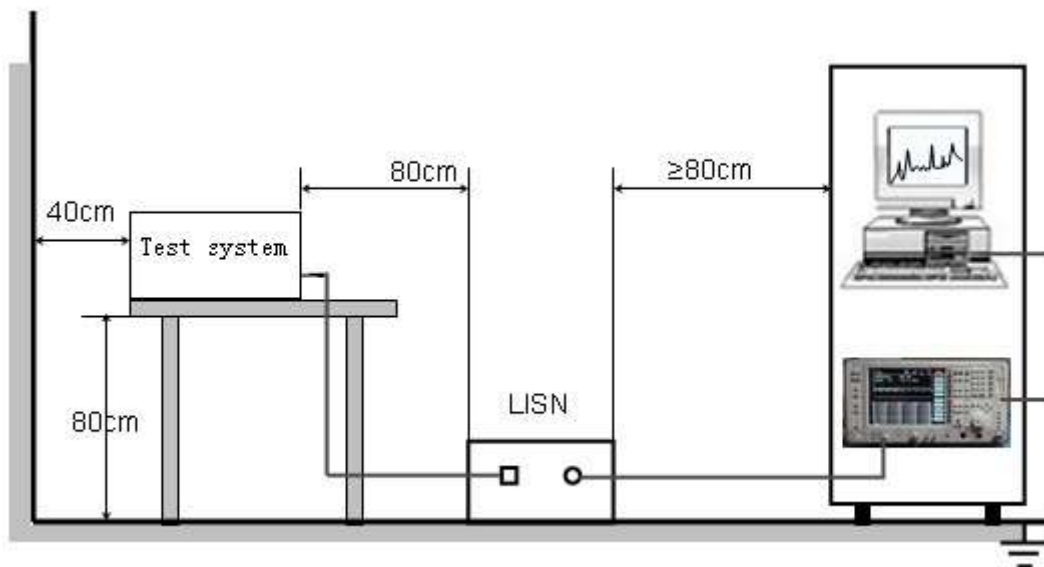
7.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz-500kHz	66-56	56-46
500kHz-5MHz	56	46
5MHz-30MHz	60	50

Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50MHz.

7.2. BLOCK DIAGRAM OF TEST SETUP



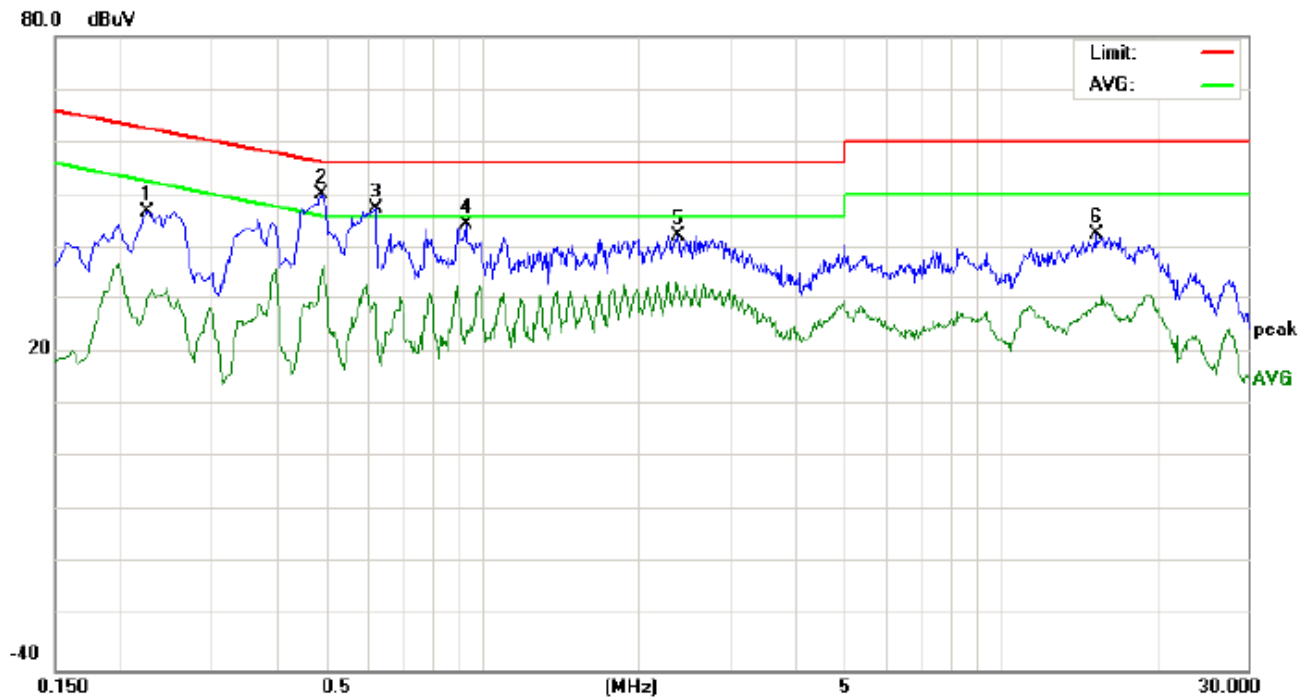
7.3. PROCEDURE OF LINE CONDUCTED EMISSION TEST

- (1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- (2) Support equipment, if needed, was placed as per ANSI C63.4.
- (3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- (4) The EUT received DC5V power from PC with receive 120V/60Hz power from a LISN.
- (5) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- (6) Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
- (7) During the above scans, the emissions were maximized by cable manipulation.
- (8) A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions.
- (9) Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

The test data of the worst case condition (mode 1) was reported on the Summary Data page.

7.4. TEST RESULT OF LINE CONDUCTED EMISSION TEST

LINE CONDUCTED EMISSION TEST-L



Site: Conduction

Phase: **L1**

Temperature: 26

Limit: FCC Class B Conduction(QP)

Power: AC 120V/60Hz

Humidity: 60 %

EUT: 7.9 Inch Tablet

M/N: AC79CO

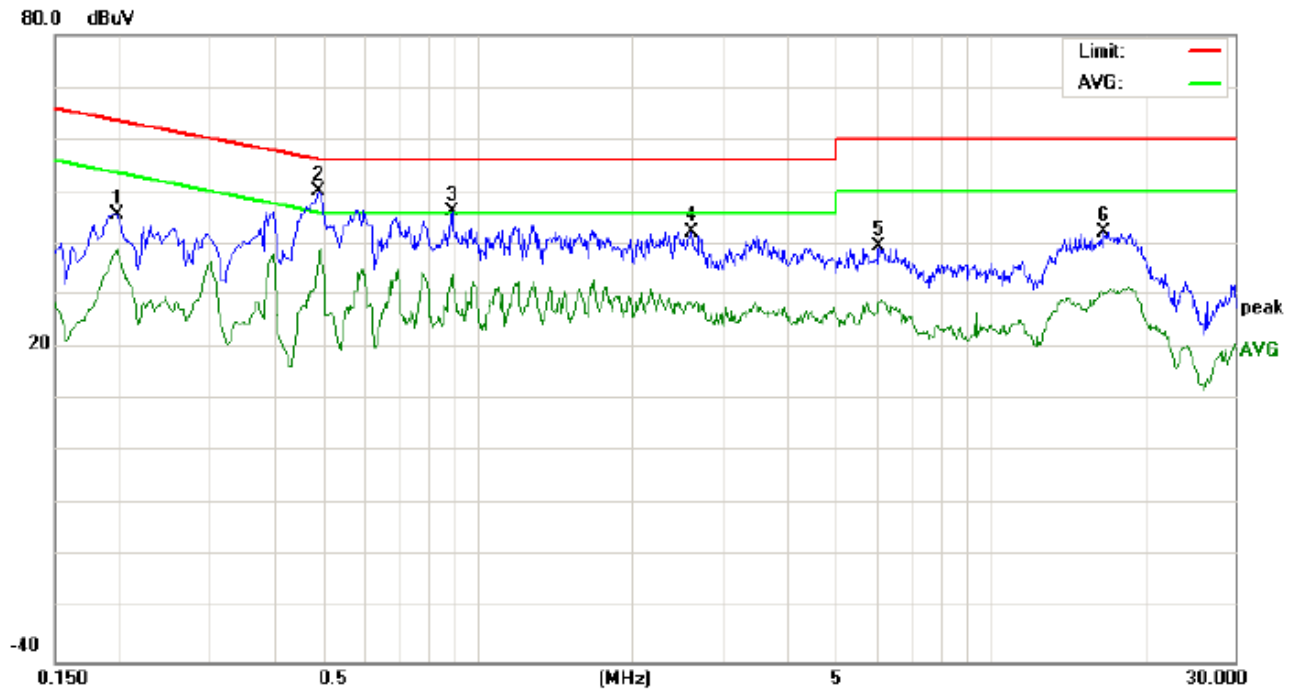
Mode: USB Downloading

Note:

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.2260	36.64		19.57	10.24	46.88		29.81	62.59	52.59	-15.71	-22.78	P	
2	0.4900	39.85		25.27	10.39	50.24		35.66	56.17	46.17	-5.93	-10.51	P	
3	0.6220	37.02		18.89	10.32	47.34		29.21	56.00	46.00	-8.66	-16.79	P	
4	0.9300	33.93		13.64	10.40	44.33		24.04	56.00	46.00	-11.67	-21.96	P	
5	2.3860	32.03		22.25	10.38	42.41		32.63	56.00	46.00	-13.59	-13.37	P	
6	15.3220	32.49		19.43	10.12	42.61		29.55	60.00	50.00	-17.39	-20.45	P	

RESULT: PASS

LINE CONDUCTED EMISSION TEST-N



Site: Conduction

Phase: **N**

Temperature: 26

Limit: FCC Class B Conduction(QP)

Power: AC 120V/60Hz

Humidity: 60 %

EUT: 7.9 Inch Tablet

M/N: AC79CO

Mode: USB Downloading

Note:

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1980	35.50		28.72	10.21	45.71		38.93	63.69	53.69	-17.98	-14.76	P	
2	0.4900	39.86		27.81	10.39	50.25		38.20	56.17	46.17	-5.92	-7.97	P	
3	0.8900	35.75		23.69	10.40	46.15		34.09	56.00	46.00	-9.85	-11.91	P	
4	2.6099	31.96		18.17	10.46	42.42		28.63	56.00	46.00	-13.58	-17.37	P	
5	6.0739	29.32		18.55	10.28	39.60		28.83	60.00	50.00	-20.40	-21.17	P	
6	16.7260	32.20		20.10	10.12	42.32		30.22	60.00	50.00	-17.68	-19.78	P	

RESULT: PASS

8. FCC RADIATED EMISSION TEST

8.1. LIMITS OF RADIATED EMISSION TEST

Limits for radiated disturbance 30M to1 GHz at a measurement distance of 3 m

Frequency range (MHz)	Quasi peak limits(dBuV/m), for Class B ITE, at 3m measurement distance
30 - 230	40
230 - 1000	47

Limits for radiated disturbance above 1 GHz at a measurement distance of 3 m

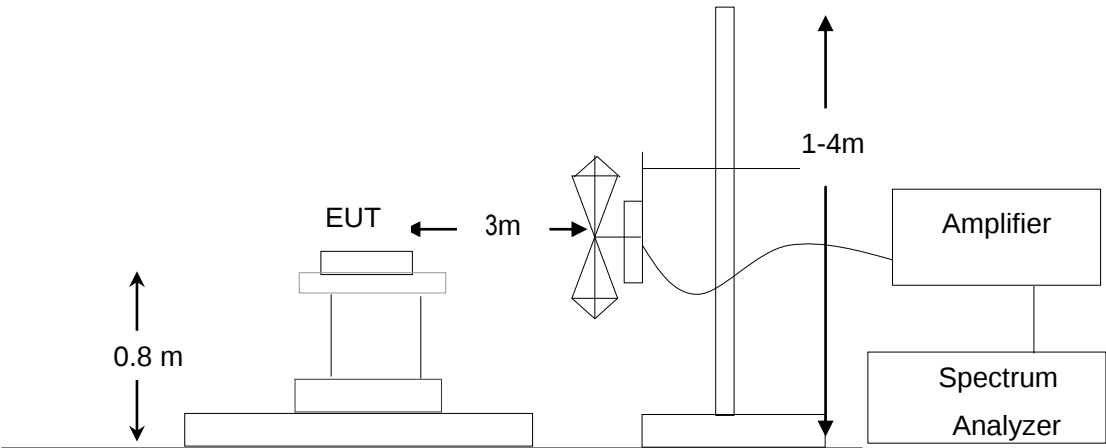
Frequency range (MHz)	Limits (dBuV/m), Class B ITE	
	Peak	Average
1000-3000MHz	70	50
3000-6000MHz	74	54

Notes:

- 1. The lower limit shall apply at the transition frequency.
- 2. Additional provisions may be required for cases where interference occurs.

8.2. BLOCK DIAGRAM OF TEST SETUP

System Diagram of Connections between EUT and Simulators



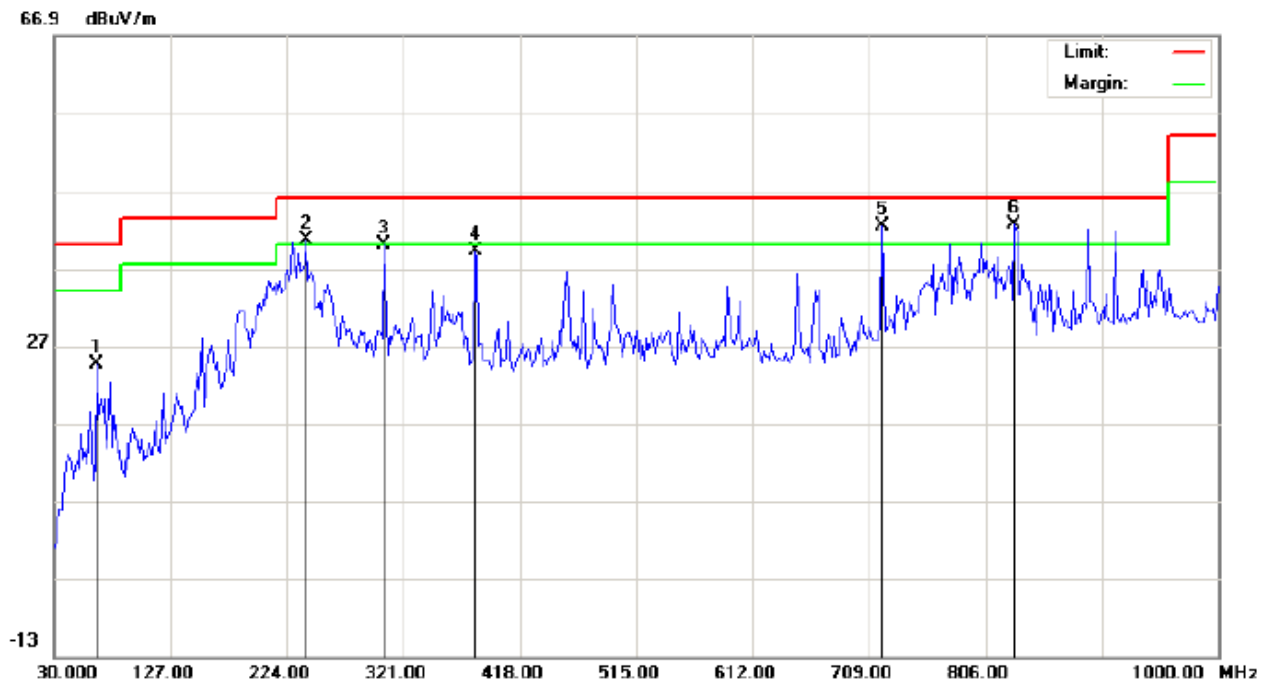
8.3. PROCEDURE OF RADIATED EMISSION TEST

- (1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden turntable with a height of 0.8 meters is used which is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
- (2) Support equipment, if needed, was placed as per ANSI C63.4.
- (3) All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- (4) The EUT received DC 5V power from PC with receive 120V/60Hz power from socket under the turntable through a LISN.
- (5) The antenna was placed at 3 meter away from the EUT as stated in FCC Part 15. The antenna connected to the Analyzer via a cable and at times a pre-amplifier would be used.
- (6) The Analyzer / Receiver quickly scanned from 30MHz to 1000MHz. The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level.
- (7) The test mode(s) were scanned during the test:
- (8) Recorded at least the six highest emissions. Emission frequency, amplitude, antenna position, polarization and turntable position were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit and Q.P./Peak reading is presented.

The test data of the worst case condition (mode 1) was reported on the Summary Data page.

8.4. TEST RESULT OF RADIATED EMISSION TEST

RADIATED EMISSION BELOW 1GHZ- HORIZONTAL



Site: site #1

Polarization: *Horizontal*

Temperature: 26

Limit: FCC Class B 3M Radiation

Power: AC 120V/60Hz

Humidity: 60 %

EUT: 7.9 Inch Tablet

Distance:

M/N: AC79CO

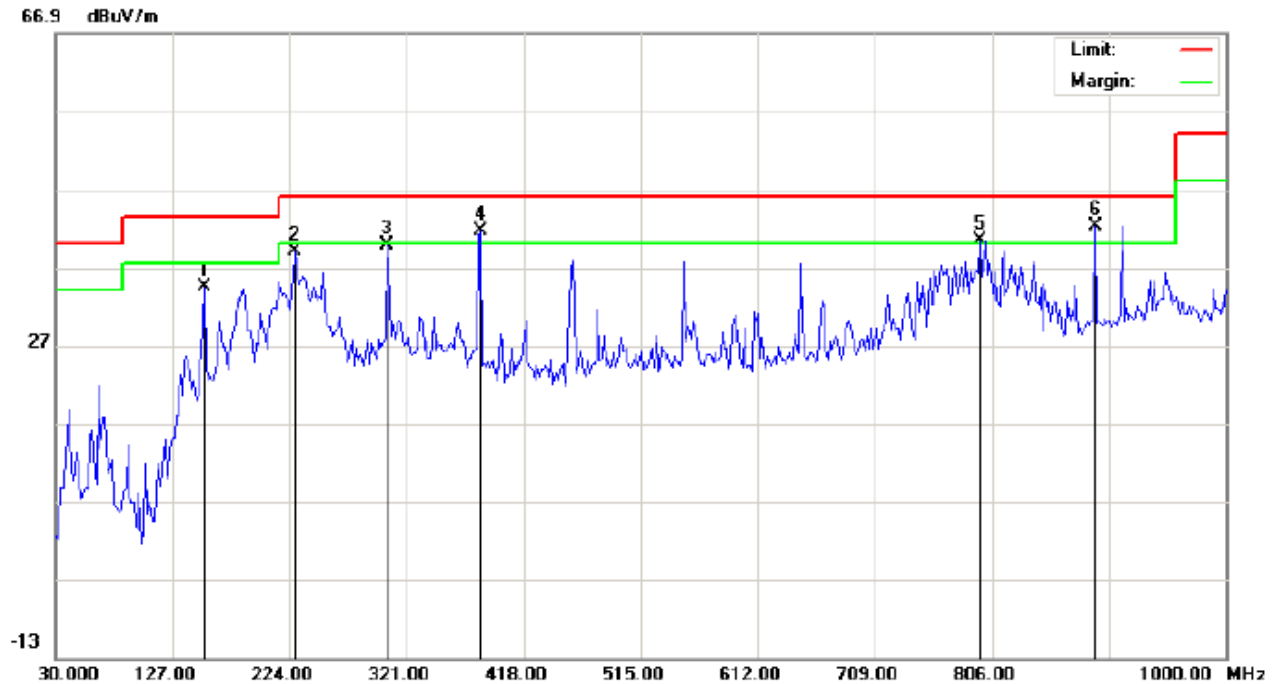
Mode: USB Downloading

Note:

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		65.5667	13.86	10.65	24.51	40.00	-15.49	peak			
2	!	240.1667	27.04	13.53	40.57	46.00	-5.43	peak			
3	!	304.8333	24.33	15.73	40.06	46.00	-5.94	peak			
4		380.8167	20.20	18.94	39.14	46.00	-6.86	peak			
5	!	720.3167	16.63	25.77	42.40	46.00	-3.60	peak			
6	*	830.2500	15.32	27.31	42.63	46.00	-3.37	peak			

RESULT: PASS

RADIATED EMISSION BELOW 1GHZ- VERTICAL



Site: site #1

Limit: FCC Class B 3M Radiation

EUT: 7.9 Inch Tablet

M/N: AC79CO

Mode: USB Downloading

Note:

Polarization: **Vertical**

Power: AC 120V/60Hz

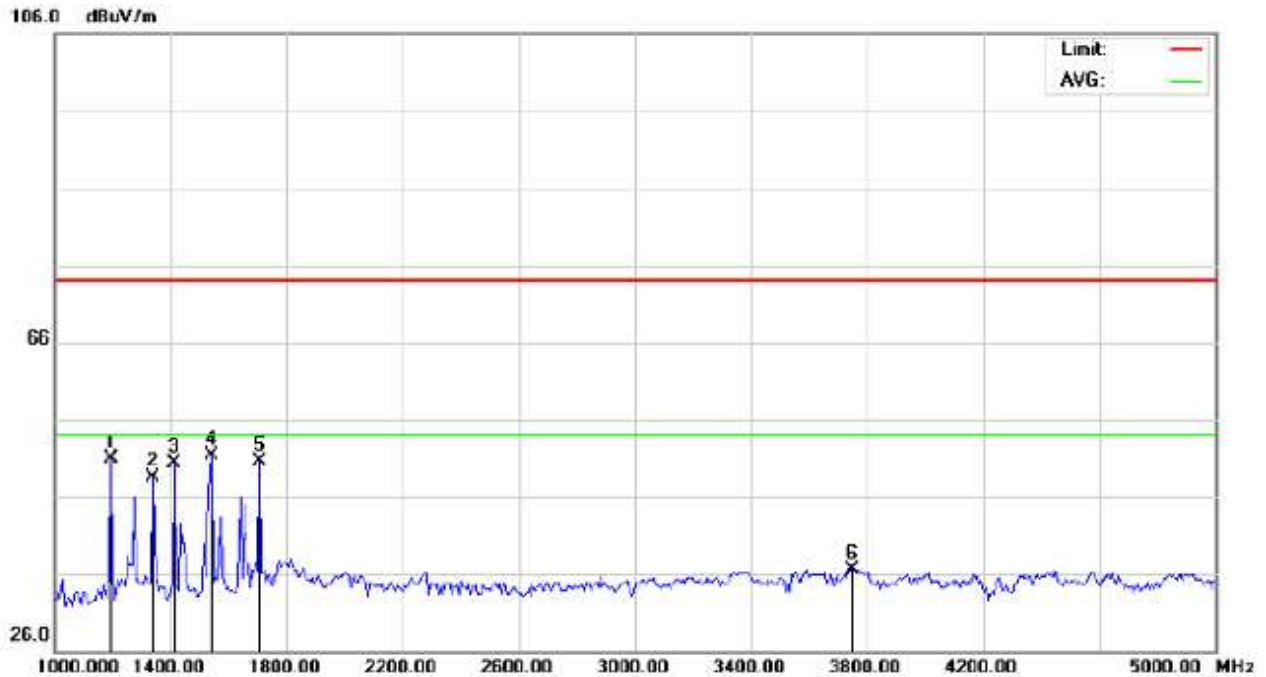
Distance:

Temperature: 26

Humidity: 60 %

No.	Mk	Freq.	Reading	Factor	Measurement	Limit	Over	Detector	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		cm	degree	
1		152.8667	19.08	15.28	34.36	43.50	-9.14	peak			
2		228.8500	27.27	11.83	39.10	46.00	-6.90	peak			
3		304.8333	24.02	15.73	39.75	46.00	-6.25	peak			
4	!	382.4333	22.72	18.95	41.67	46.00	-4.33	peak			
5	!	796.3000	13.17	27.27	40.44	46.00	-5.56	peak			
6	*	891.6833	13.79	28.39	42.18	46.00	-3.82	peak			

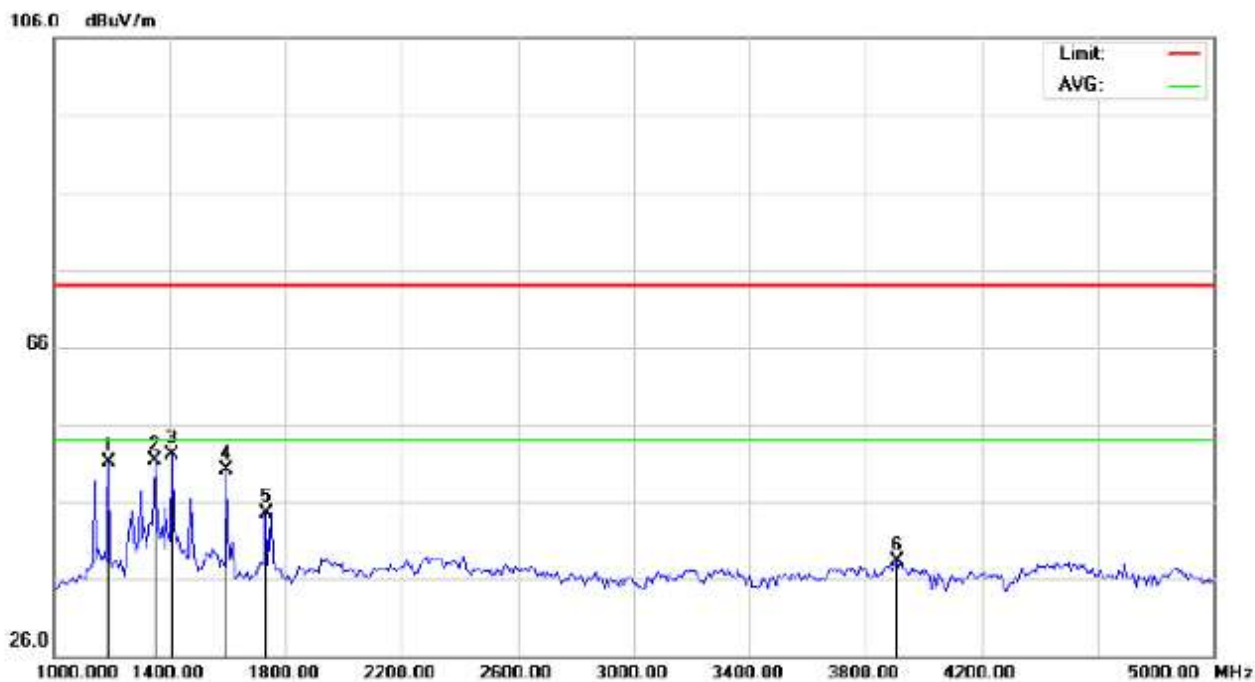
RADIATED EMISSION ABOVE 1GHZ – HORIZONTAL



Site: site #1 Polarization: **Horizontal** Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %
EUT: 7.9 Inch Tablet Distance:
M/N: AC79CO
Mode: USB Downloading
Note:

No.	Freq.	Reading	Factor	Measurement(PK)	Measurement(AV)	Limit(PK)	Limit(AV)	Over(PK)	Over(AV)
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB
1	1193.333	66.46	-15.51	50.95	39.75	74	54	-23.05	-14.25
2	1340.000	64.05	-15.45	48.60	37.34	74	54	-25.40	-16.66
3	1413.333	65.71	-15.42	50.29	39.07	74	54	-23.71	-14.93
4	1540.000	66.30	-14.96	51.34	40.11	74	54	-22.66	-13.89
5	1706.667	63.75	-13.21	50.54	40.32	74	54	-23.46	-13.68
6	3746.667	42.94	-6.37	36.57	25.34	74	54	-37.43	-28.66

RADIATED EMISSION ABOVE 1GHZ – VERTICAL



Site: site #1 Polarization: **Vertical** Temperature: 26
Limit: FCC Class B 3M Radiation above 1GHZ(PK) Power: Humidity: 60 %
EUT: 7.9 Inch Tablet Distance:
M/N: AC79CO
Mode: USB Downloading
Note:

No.	Freq.	Reading	Factor	Measurement(PK)	Measurement(AV)	Limit(PK)	Limit(AV)	Over(PK)	Over(AV)
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dBuV/m	dBuV/m	dB	dB
1	1186.667	66.67	-15.51	51.16	39.88	74	54	-22.84	-14.12
2	1346.667	66.76	-15.44	51.32	40.12	74	54	-22.68	-13.88
3	1406.667	67.57	-15.42	52.15	40.84	74	54	-21.85	-13.16
4	1593.333	64.45	-14.40	50.05	38.82	74	54	-23.95	-15.18
5	1733.333	57.41	-12.93	44.48	33.27	74	54	-29.52	-20.73
6	3906.667	43.74	-5.38	38.36	27.13	74	54	-35.64	-26.87

RESULT: PASS

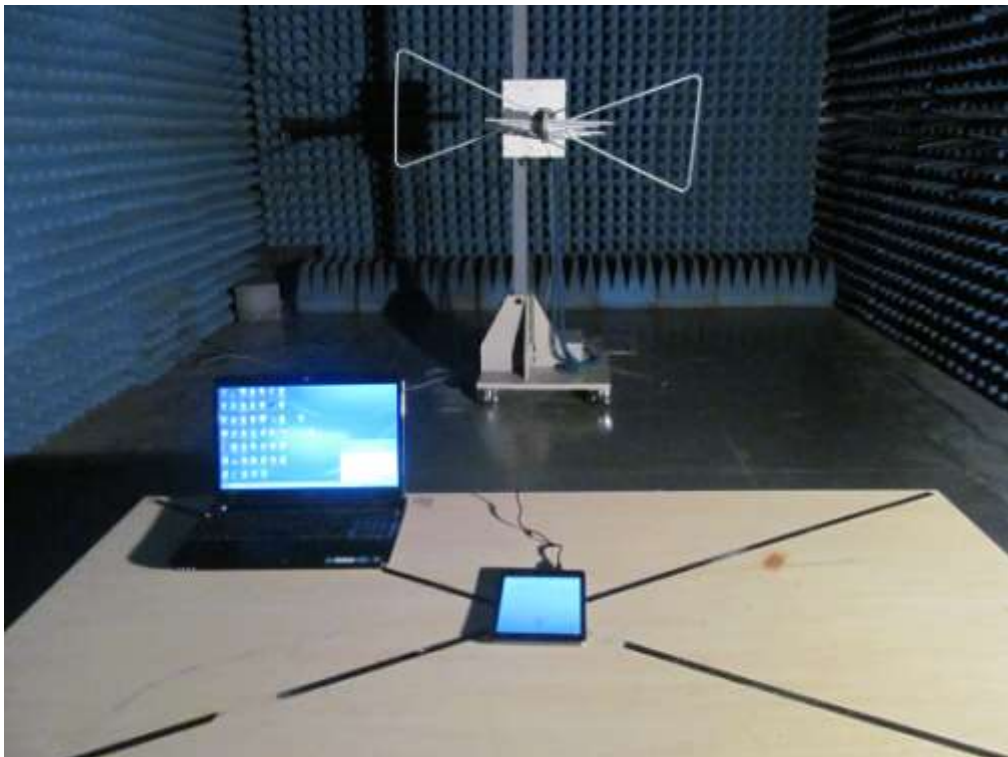
Note: Measurement = Reading + Factor, Over = Measurement – Limit.

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP



FCC RADIATED EMISSION TEST SETUP



APPENDIX B: PHOTOGRAPHS OF EUT

TOTAL VIEW OF EUT



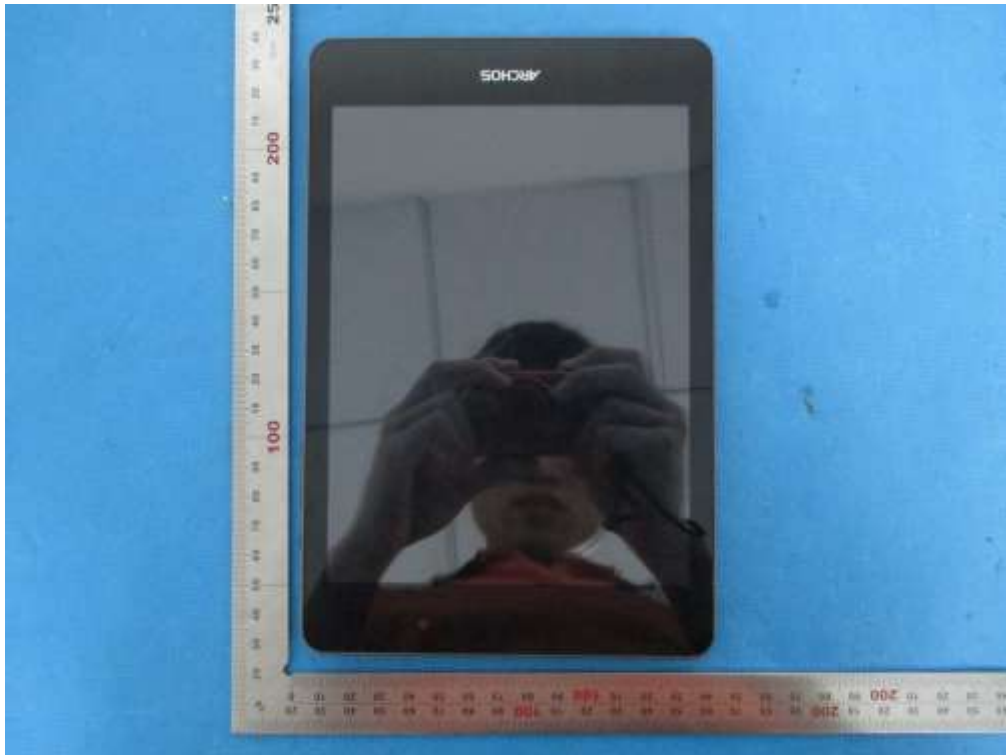
TOP VIEW OF EUT



BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



BACK VIEW OF EUT



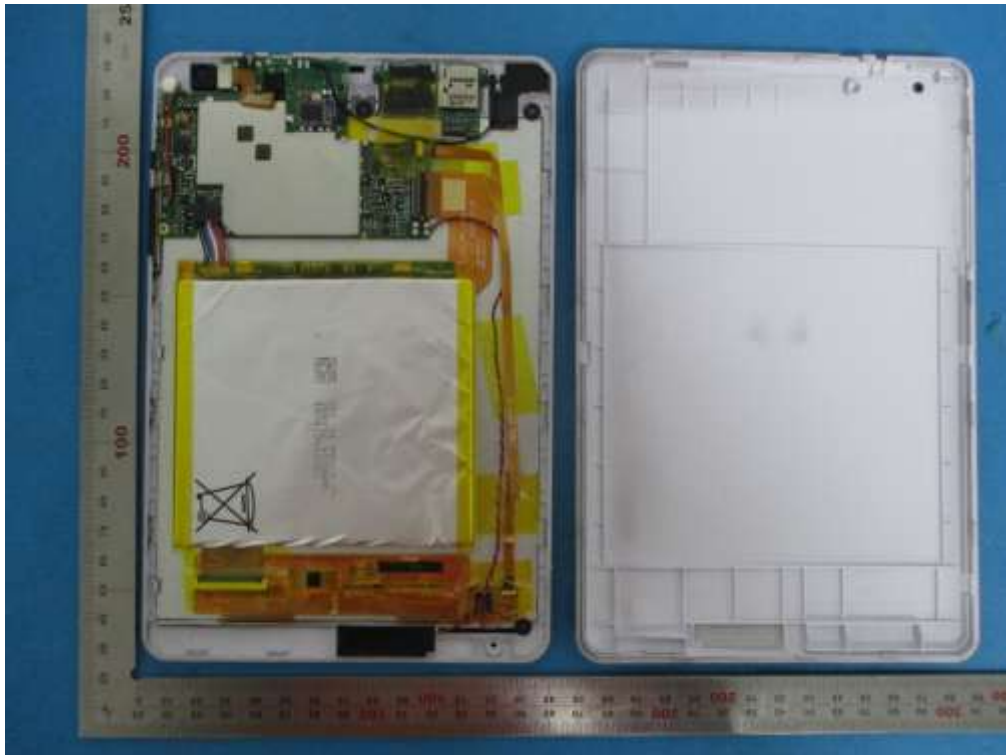
LEFT VIEW OF EUT



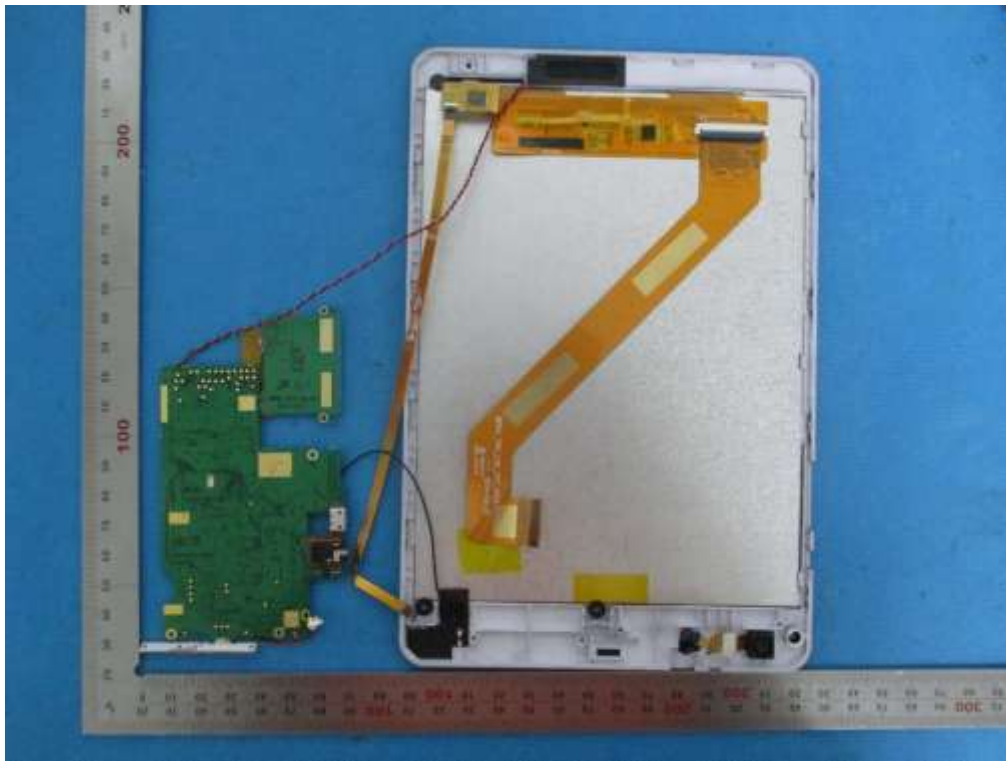
RIGHT VIEW OF EUT



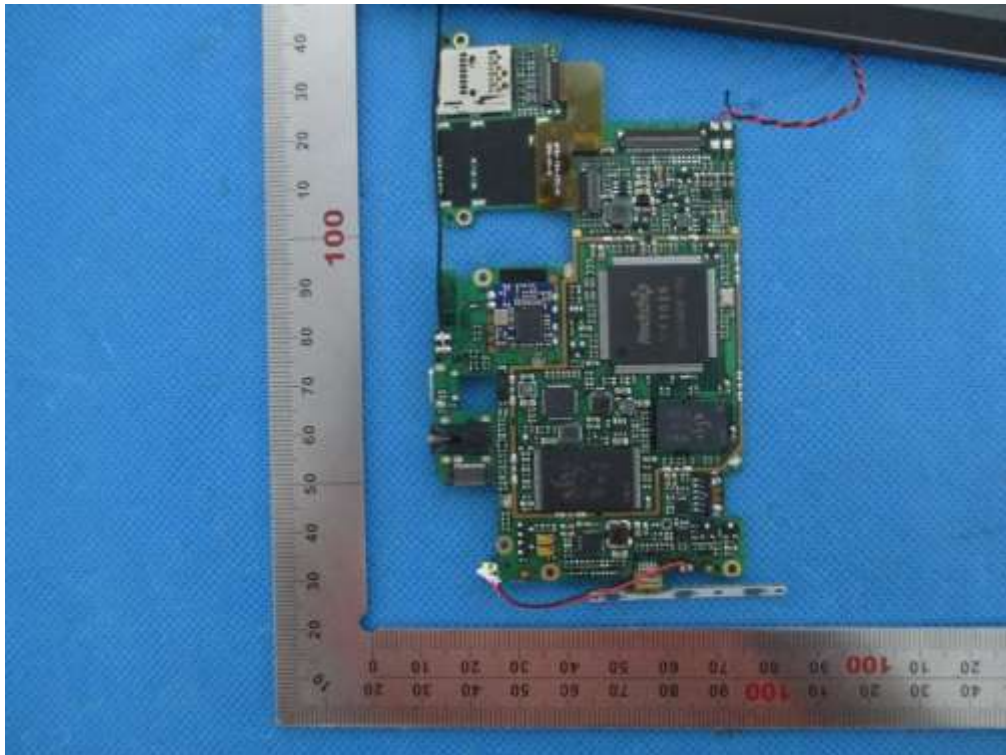
OPEN VIEW OF EUT-1



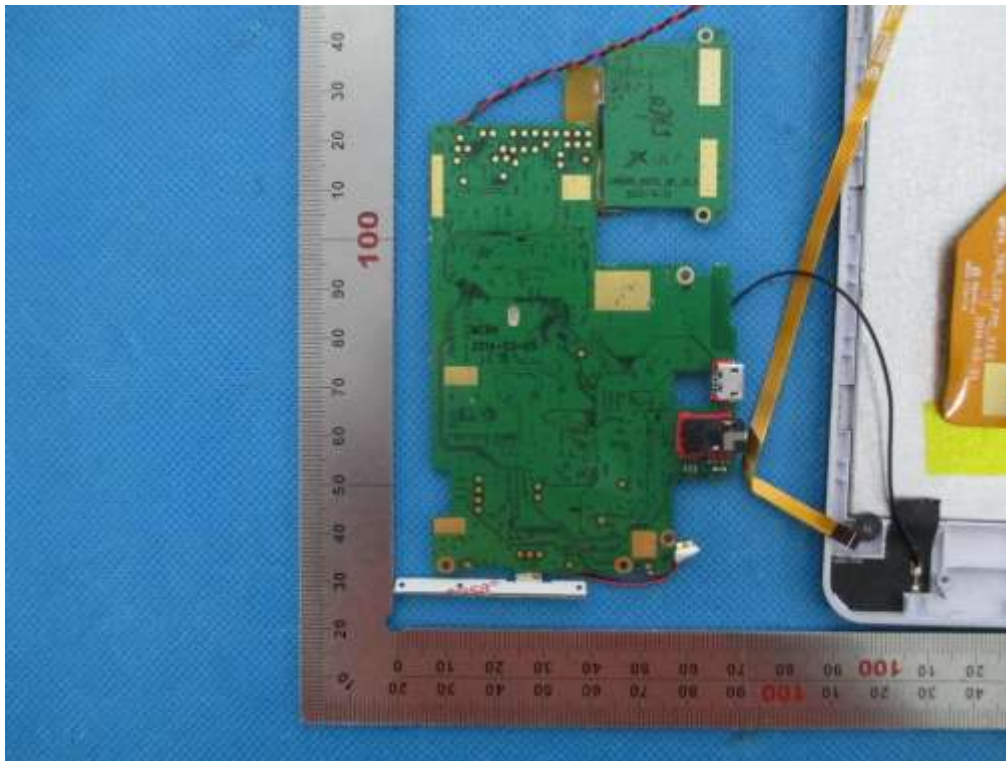
OPEN VIEW OF EUT-2



INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



----END OF REPORT----