TECHNICAL REPORT

Report No:	FCC 1606178-04
File reference No:	2016-07-15

Applicant:	Shenzhen Jingwah Information Technology Co., Ltd.
Product:	Tablet PC
Model No:	F102, ST1009, ST1009x, M10
Trademark:	Polaroid, Smartab
Test Standards:	FCC Part 15.247
Test result:	It is herewith confirmed and found to comply with the requirements set up by ANSI C63.10, FCC Part 15.247 for the evaluation of electromagnetic compatibility

Approved By

Jack Chung

Jack Chung

Manager

Dated: July 15, 2016

Results appearing herein relate only to the sample tested
The technical reports is issued errors and omissions exempt and is subject to withdrawal at

SHENZHEN TIMEWAY TESTING LABORATORIES

Room 512-519, 5/F., East Tower, Building 4, Anhua Industrial Zone, Futian District, Shenzhen, Guangdong, China
Tel (755) 83448688, Fax (755) 83442996, E-Mail:info@timeway-lab.com

Special Statement:

The testing quality ability of our laboratory meet with "Quality Law of People's Republic of China" Clause 19.

The testing quality system of our laboratory meet with ISO/IEC-17025 requirements, which is approved by CNAL. This approval result is accepted by MRA of APLAC.

Our test facility is recognized, certified, or accredited by the following organizations:

CNAL-LAB Code: L2292

The EMC Laboratory has been assessed and in compliance with CNAL/AC01:2002 accreditation criteria for testing Laboratories (identical to ISO/IEC 17025:2005 General Requirements) for the Competence of testing Laboratories.

FCC-Registration No.: 899988

The EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 899988.

IC- Registration No.: IC5205A-02

The EMC Laboratory has been registered and fully described in a report filed with the (IC) Industry Canada. The acceptance letter from the IC is maintained in our files. Registration IC No.: 5205A-02.

Test Report Conclusion

Content

1.0 General Details

1.1 Test Lab Details

Name : SHENZHEN TIMEWAY TESTING LABORATORIES.

Address: Room 512-519,5/F., East Tower,Building 4, Anhua Industrial Zone, Futian District,Shenzhen, Guangdong China

Telephone: (755) 83448688

Fax: (755) 83442996

Site on File with the Federal Communications Commission – United Sates

Registration Number: 899988

For 3m & 10 m OATS

Site Listed with Industry Canada of Ottawa, Canada

Registration Number: IC: 5205A-02

For 3m & 10 m OATS

1.2 Applicant Details

Applicant: Shenzhen Jingwah Information Technology Co., Ltd.

Address: 4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China

Telephone: --

Fax: --

1.3 Description of EUT

Product:	Tablet PC
Manufacturer:	Shenzhen Jingwah Information Technology Co., Ltd.
Address:	4F, Bldg 4, Jinghua Square, No.1 Huafa North Road, Futian District, Shenzhen, China
Brand Name:	Polaroid, Smartab
Additional Brand Name:	N/A
Model Number:	F102

Additional Model Number: ST1009, ST1009x, M10

Type of Modulation	GFSK (Bluetooth BLE)
Frequency range	2402-2480MHz
Frequency Selection	By software
Channel Number	40
Power Adapter	Model No.: TPA-97050150U01 Input: 100-240V, 50/60Hz, 0.3A; Output: 5.0V, 1.5A
Remark:	There are alternative manufacturers for TP, Camera and Panel. EUT are configured as following

Name	Manufacturer	Model
Configure a)		
TP	HOTATOUCH	F102 P+G
Camera	Shenzhen Best Camera Electronic Technique	F102 GC0310+GC2355
Panel	STARRY ELECTRONIC TECHNOLOGY	20811010280028
Configure b)		
TP	Shenzhen Leheng Electronic	F102 P+G
Camera	Shenzhen BOPENGFA ELEC&TECHNOLOGY	F102 GC0310+GC2355
Panel	Shenzhen K&D Technology	KD101N66-40NI-K2

Note: Configure a) and b) are tested and only worse case are recorded in the test report

1.4 Submitted Sample: 2 Samples

1.5 Test Duration
2016-06-23 to 2016-07-15

1.6 Test Uncertainty
Conducted Emissions Uncertainty =3.6dB
Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by Terry Tang

Print Name: Terry Tang

2.0 Test Equipment					
Instrument Type	Manufacturer	Model	Serial No.	Date of Cal.	Due Date
ESPI Test Receiver	R&S	ESPI 3	100379	2015-08-22	2016-08-21
TWO Line-V-NETW	R&S	EZH3-Z5	100294	2015-08-22	2016-08-21
TWO Line-V-NETW	R&S	EZH3-Z5	100253	2015-08-22	2016-08-21
Ultra Broadband ANT	R&S	HL562	100157	2015-08-23	2016-08-22
ESDV Test Receiver	R&S	ESDV	100008	2015-08-22	2016-08-21
Impuls-Begrenzer	R&S	ESH3-Z2	100281	2015-08-22	2016-08-21
System Controller	CT	SC100	-	--	--
Printer	EPSON	PHOTO EX3	CFNH234850	--	--
Computer	IBM	8434	1S8434KCE99BLXLO*	-	-
Loop Antenna	EMCO	6502	00042960	2015-08-23	2016-08-22
ESPI Test Receiver	R&S	ESI26	838786/013	2015-08-22	2016-08-21
3m OATS	--	--	N/A	2015-08-24	2016-08-23
Horn Antenna	R&S	BBHA 9170	BBHA9170265	2015-08-24	2016-08-23
Horn Antenna	R&S	BBHA 9120D	9120D-631	2015-08-24	2016-08-23
Power meter	Anritsu	ML2487A	6K00003613	2015-08-22	2016-08-21
Power sensor	Anritsu	MA2491A	32263	2015-08-22	2016-08-21
Bilog Antenna	Schwarebeck	VULB9163	9163/340	2015-08-23	2016-08-21
LISN	AFJ	LS16C	10010947251	2015-08-22	2016-08-21
LISN (Three Phase)	Schwarebeck	NSLK 8126	8126453	2015-08-23	2016-08-22
9*6*6 Anechoic	--	--	N/A	2015-08-24	2016-08-23
EMI Test Receiver	RS	ESCS30	100139	2015-08-22	2016-08-21
Pre-amplifier	EM	EM30265	2727A05017	2015-08-24	2016-08-23

2.1 Auxiliary Equipment

Name	Model No.	Rating	Manufacturer	FCC ID/DOC
Passive Earphone	--	--	--	--

3.0 Technical Details

3.1 Summary of test results

The EUT has been tested according to the following specifications:

Standard	Test Type	Result	Notes
FCC Part 15, Paragraph 15.107 & 15.207	Conducted Emission Test	PASS	Complies
FCC Part 15 Subpart C Paragraph 15.247(a)(2) Limit	Spectrum bandwidth of a Orthogonal Frequency Division Multiplex System Limit: 6dB bandwidth>500kHz	PASS	Complies
FCC Part 15, Paragraph 15.247(b)	Maximum peak output power Limit: max. 30dBm	PASS	Complies
FCC Part 15, Paragraph 15.109,15.205 & 15.209	Transmitter Radiated Emission Limit: Table 15.209	PASS	Complies
FCC Part 15, Paragraph 15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Complies
FCC Part 15, Paragraph 15.247(d)	Out of Band Emission and Restricted Band Radiation Limit: 20dB less than peak value of fundamental frequency Restricted band limit: Table 15.209	PASS	Complies

3.2 Test Standards

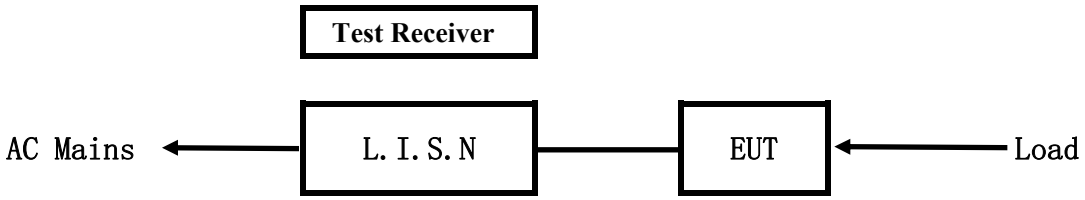
FCC Part 15 Subpart & Subpart C, Paragraph 15.247 and KDB558074 D01 DTS Meas Guidance v03r05

4.0 EUT Modification

No modification by SHENZHEN TIMEWAY TESTING LABORATORIES.

5.Power Line Conducted Emission Test

5.1 Schematics of the test



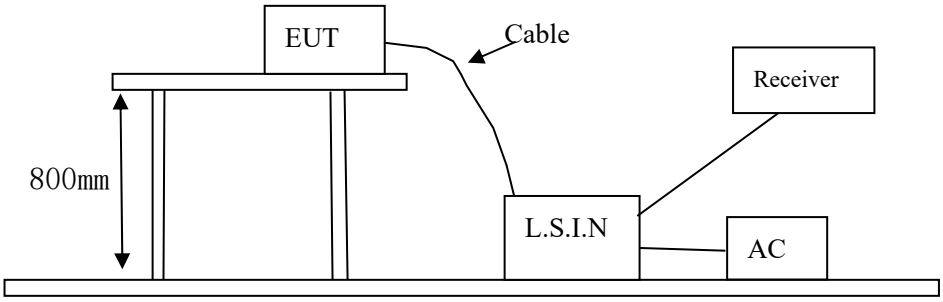
EUT: Equipment Under Test

5.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.10-2013.The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.10 –2013.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



5.3 Configuration of The EUT

The EUT was configured according to ANSI C63.10-2013. All interface ports were connected to the appropriate peripherals. All peripherals and cables are listed below.

A. EUT

Device	Manufacturer	Model	FCC ID
Tablet PC	Shenzhen Jingwah Information Technology Co., Ltd.	F102, ST1009, ST1009x, M10	FCC ID: RBD-F102

B. Internal Device

Device	Manufacturer	Model	Rating

C. Peripherals

Device	Manufacturer	Model	Rating
--	--	--	--

5.4 EUT Operating Condition

Operating condition is according to ANSI C63.10 -2013.

A Setup the EUT and simulators as shown on follow

B Enable AF signal and confirm EUT active to normal condition

5.5 Power line conducted Emission Limit according to Paragraph 15.207 and 15.107

Frequency (MHz)	Class A Limits (dB μ V)		Class B Limits (dB μ V)	
	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
0.15 ～ 0.50	79.0	66.0	66.0～56.0*	56.0～46.0*
0.50 ～ 5.00	73.0	60.0	56.0	46.0
5.00 ～ 30.00	73.0	60.0	60.0	50.0

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The tighter limit shall apply at the transition frequencies

5.6 Test Results

The frequency spectrum from 0.15MHz to 30MHz was investigated. All reading are quasi-peak values with a resolution bandwidth of 9kHz.

A: Conducted Emission on Live Terminal (150kHz to 30MHz)

EUT Operating Environment

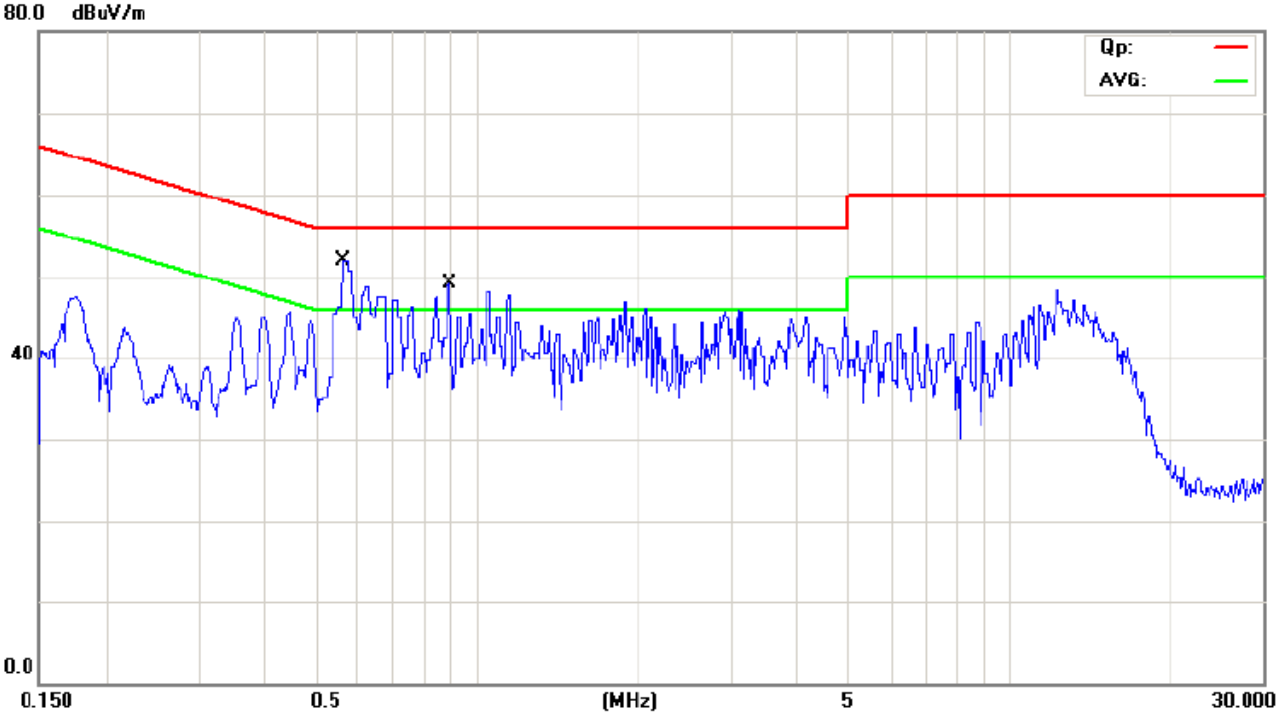
Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Charging and Keep Bluetooth Transmitting

Equipment Level: Class B

Results: PASS

Please refer to following diagram for individual



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.5658	32.20	11.44	43.64	56.00	-12.36	QP	
2		0.5658	11.20	11.44	22.64	46.00	-23.36	AVG	
3		0.8810	31.70	11.77	43.47	56.00	-12.53	QP	
4		0.8810	2.60	11.77	14.37	46.00	-31.63	AVG	

B: Conducted Emission on Neutral Terminal (150kHz to 30MHz)

EUT Operating Environment

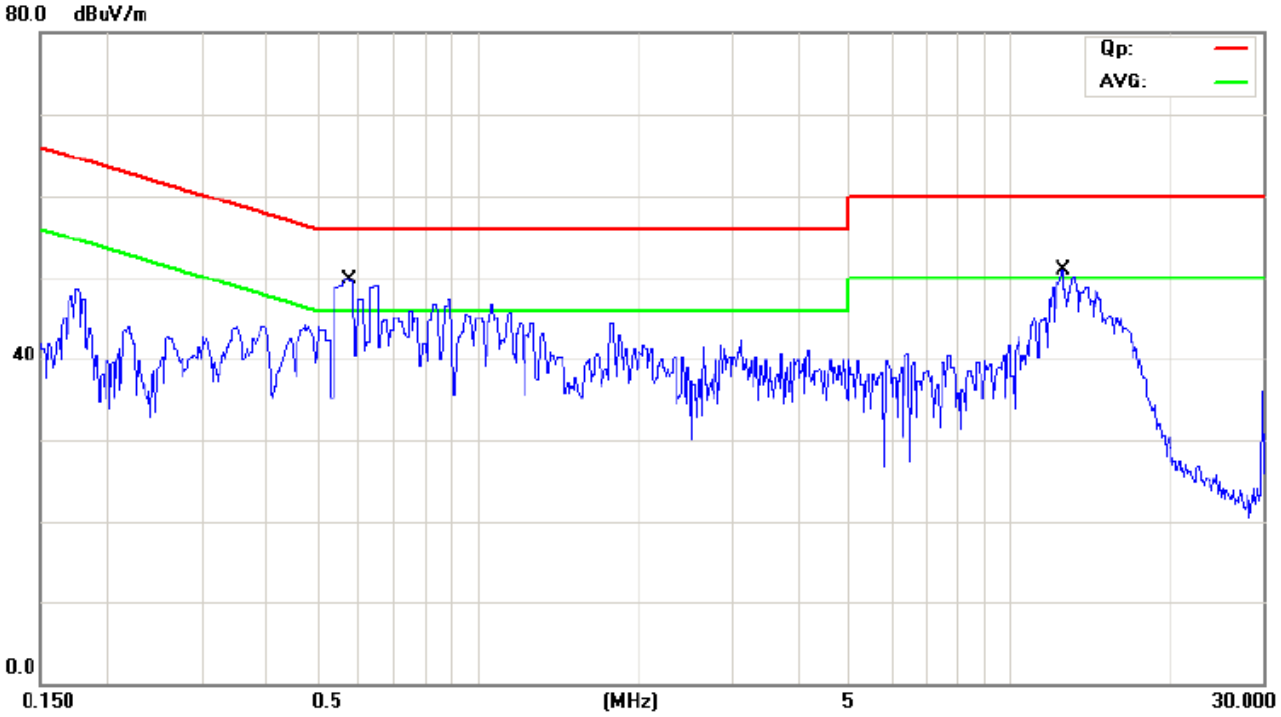
Temperature: 26℃ Humidity: 65%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Charging and Keep Bluetooth Transmitting

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.5682	36.20	11.44	47.64	56.00	-8.36	QP	
2		0.5682	16.70	11.44	28.14	46.00	-17.86	AVG	
3		12.5737	33.30	11.35	44.65	60.00	-15.35	QP	
4		12.5737	4.50	11.35	15.85	50.00	-34.15	AVG	

6 Radiated Emission Test

6.1 Test Method and test Procedure:

(1) The EUT was tested according to ANSI C63.10 –2013. The radiated test was performed at Timeway Laboratory. This site is on file with the FCC laboratory division, Registration No.899988

(2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.10-2013.

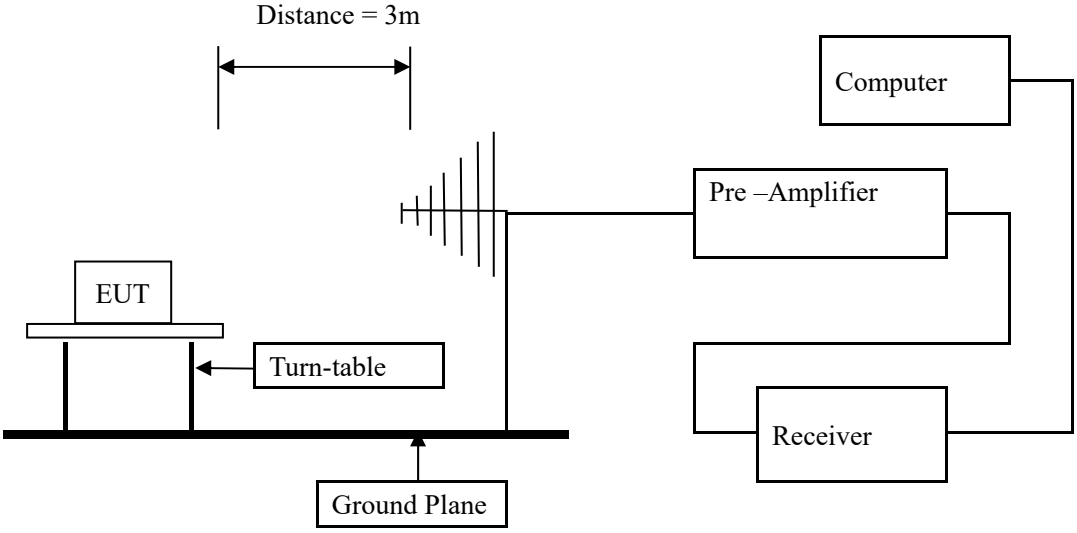
(3) The frequency spectrum from 30 MHz to 25 GHz was investigated. All readings from 30 MHz to 1 GHz are Quasi-peak values with a resolution bandwidth of 120 kHz. For measurement above 1GHz, peak values with RBW=1MHz VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector. Measurements were made at 3 meters.

(4) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.

(5) Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB of specification limit), and are distinguished with a "**QP**" in the data table.

(6) The antenna polarization : Vertical polarization and Horizontal polarization.

Block diagram of Test setup



6.2 Configuration of The EUT

Same as section 5.3 of this report

6.3 EUT Operating Condition

Same as section 5.4 of this report.

6.4 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

Frequencies in restricted band are complied to limit on Paragraph 15.209 and 15.109 and RSS-210

Frequency Range (MHz)	Distance (m)	Field strength (dB μ V/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note: 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the higher limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument antenna and the EUT

4. This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.

Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

Radiated Emission In Horizontal/ In Vertical (30MHz----1000MHz)

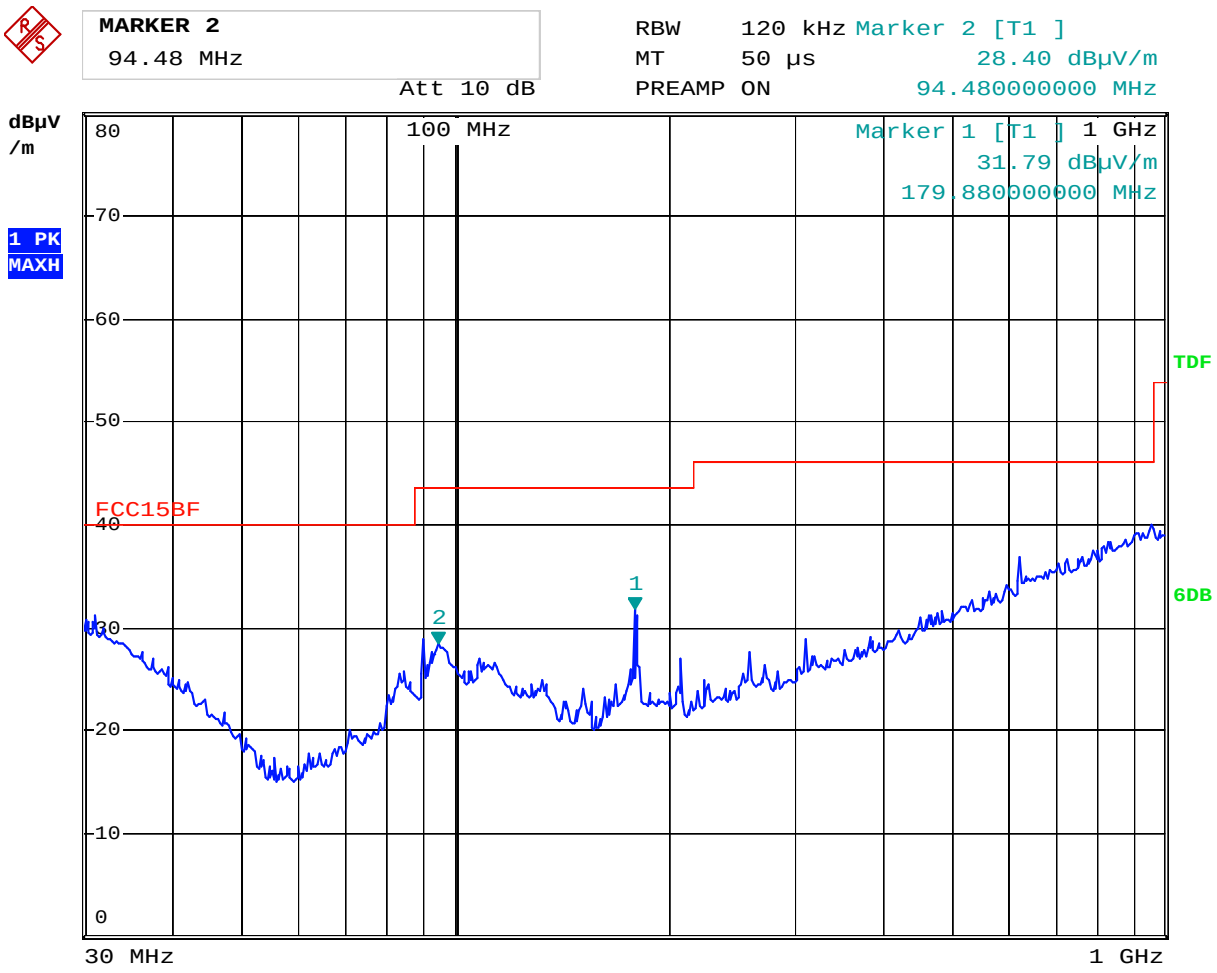
EUT set Condition: **Charging and Keep Bluetooth Transmitting**

Results: **Pass**

Frequency (MHz)	Reading (dB μ V)	Antenna Factor (dB/m)	Cable Loss (dB)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
94.480	17.62	8.71	2.07	28.40	H	43.50
179.880	21.03	8.13	2.63	31.79	H	43.50
34.600	14.10	16.93	1.50	32.53	V	40.00
179.00	18.52	8.26	2.53	29.31	V	43.50
91.440	16.12	8.59	2.14	26.85	V	43.50

Test Figure:

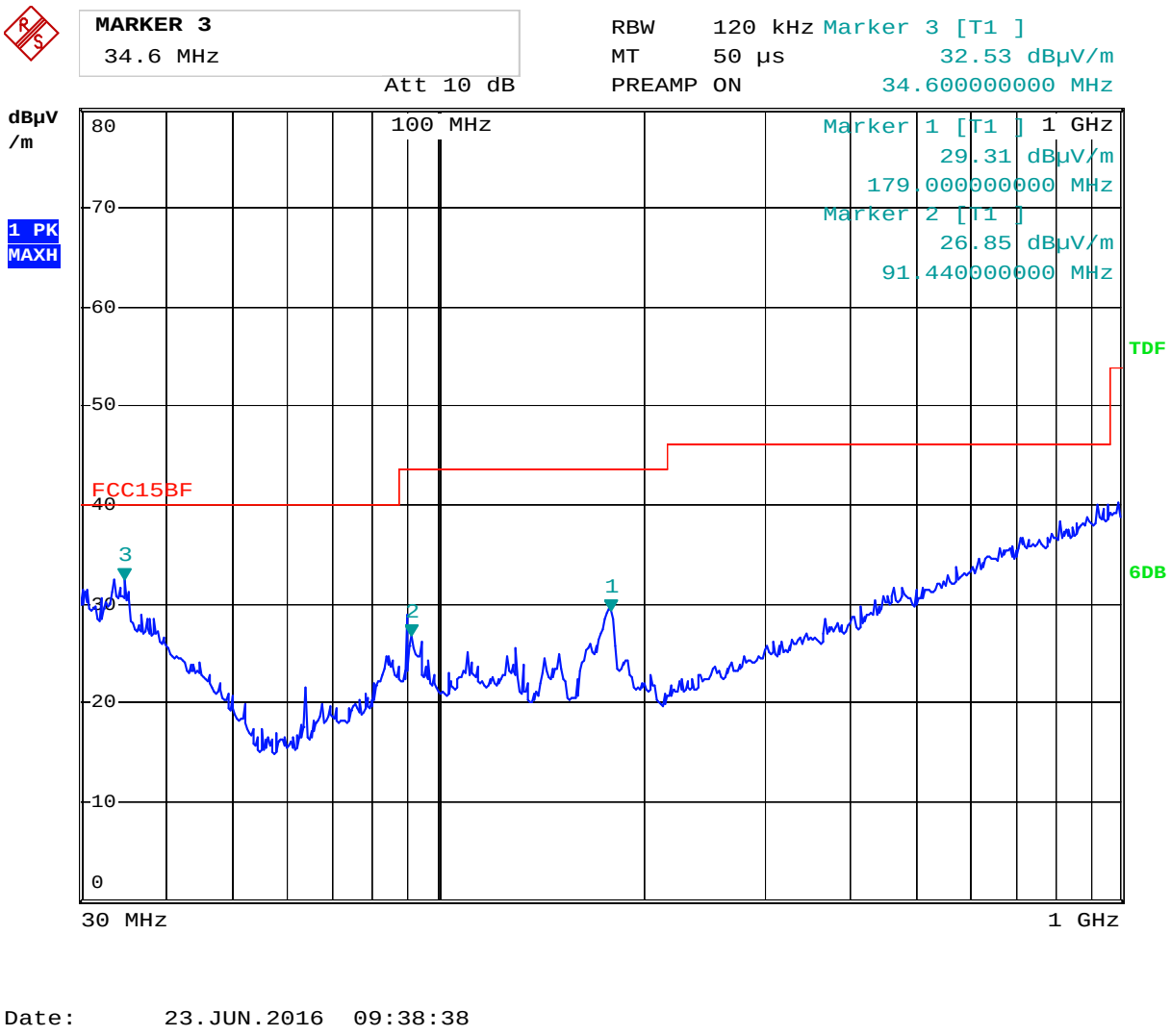
H



Date: 23.JUN.2016 09:34:36

Test Figure:

V



Operation Mode: Transmitting under Low Channel (2402MHz)

Frequency (MHz)	Reading (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pre-amp (dB)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
4804	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
7206	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
9608	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
12010	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
14412	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
16814	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
19216	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
21618	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
24020	--	---	--	--	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp , Margin = Level - Limit

2. Remark “---” means that the emissions level is too low to be measured

Operation Mode: Transmitting under Middle Channel (2440MHz)

Frequency (MHz)	Reading (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pre-amp (dB)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
4880	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
7320	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
9760	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
12200	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
14640	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
17080	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
19520	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
21960	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
24400	--	---	--	--	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp , Margin = Level - Limit

2. Remark “---” means that the emissions level is too low to be measured

Operation Mode: Transmitting under High Channel (2480MHz)

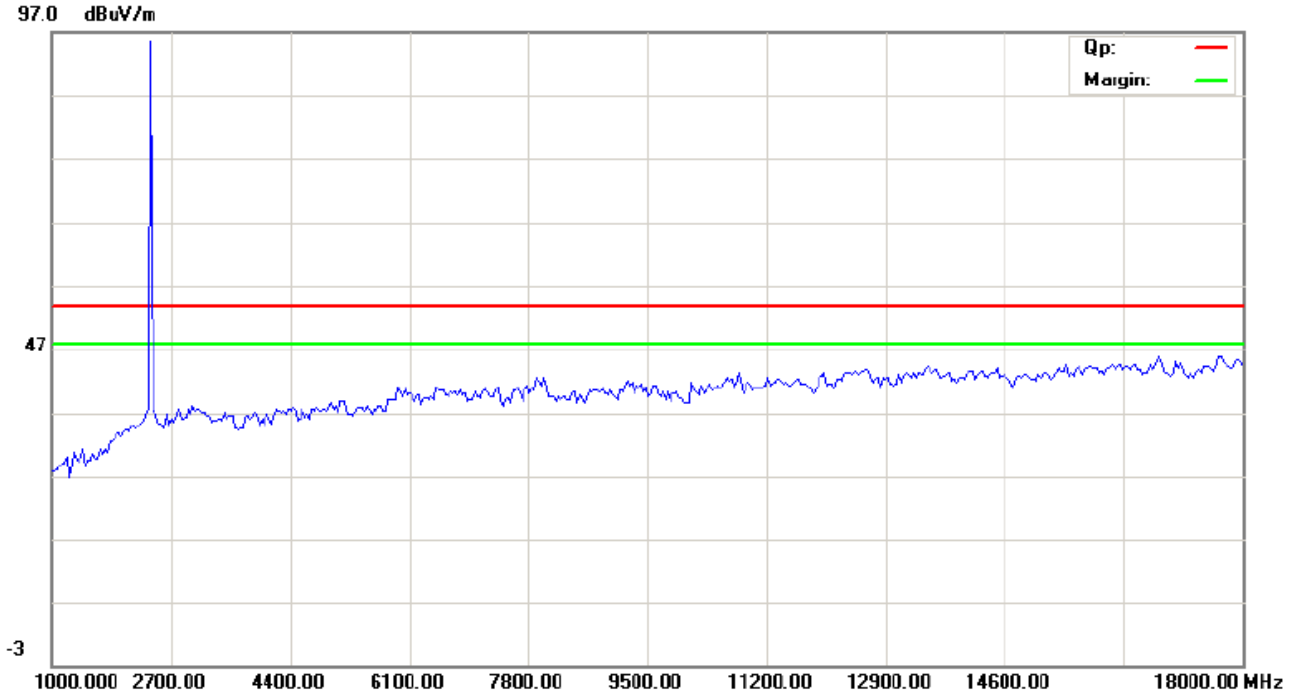
Frequency (MHz)	Reading (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pre-amp (dB)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
4960	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
7440	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
9920	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
12400	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
14880	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
17360	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
19840	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
22320	--	---	--	--	--	H/V	74(Peak)/ 54(AV)
24800	--	---	--	--	--	H/V	74(Peak)/ 54(AV)

Note: 1. Level = Reading + AF + Cable - Preamp , Margin = Level - Limit

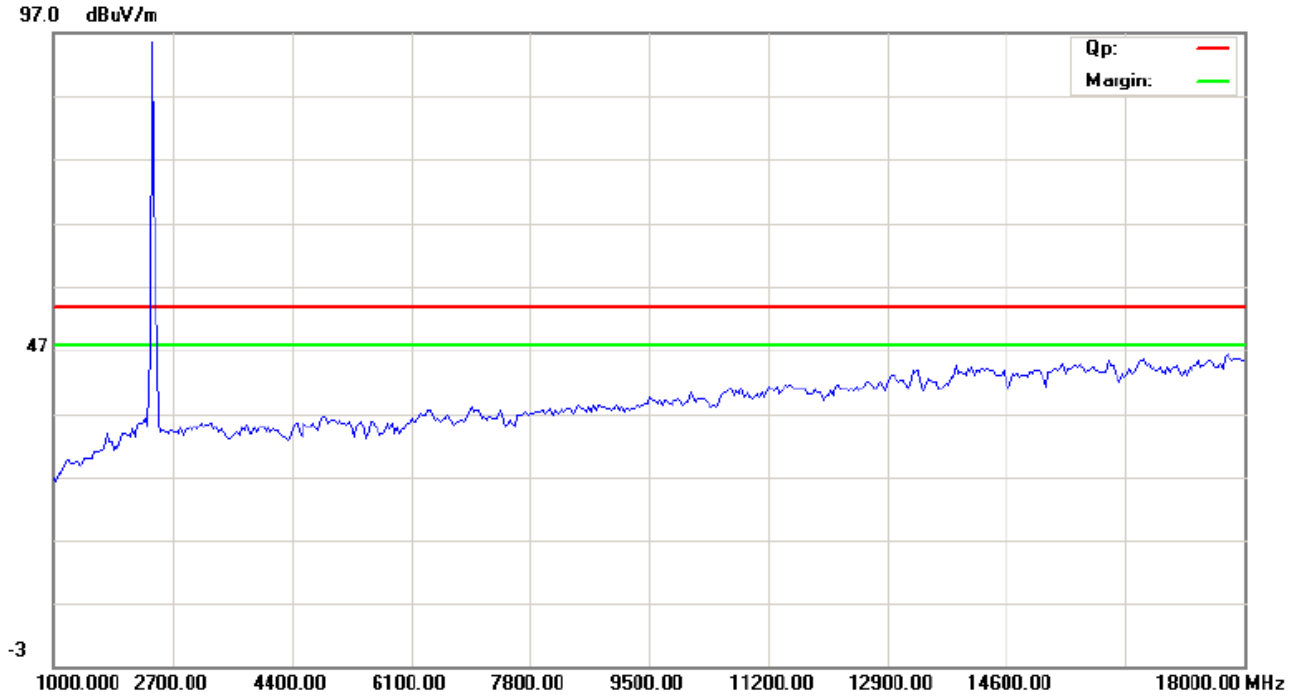
2. Remark “---” means that the emissions level is too low to be measured

Please refer to the following test plots for details:

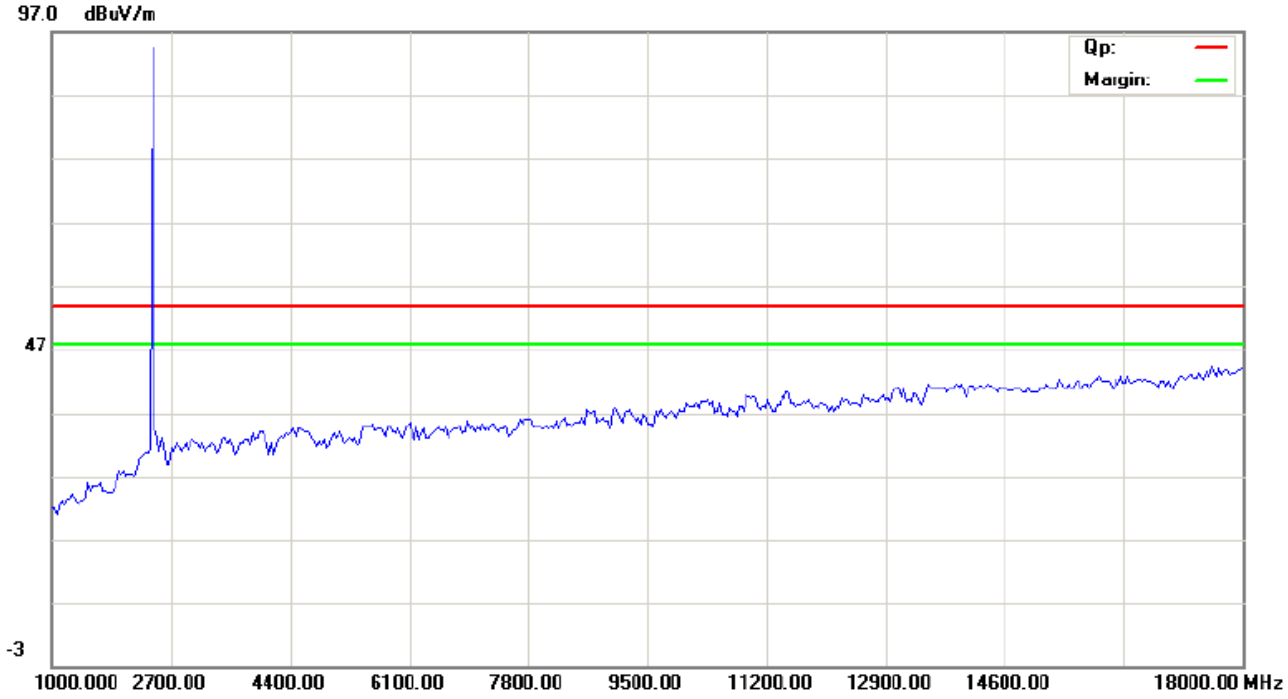
Low Channel: Horizontal



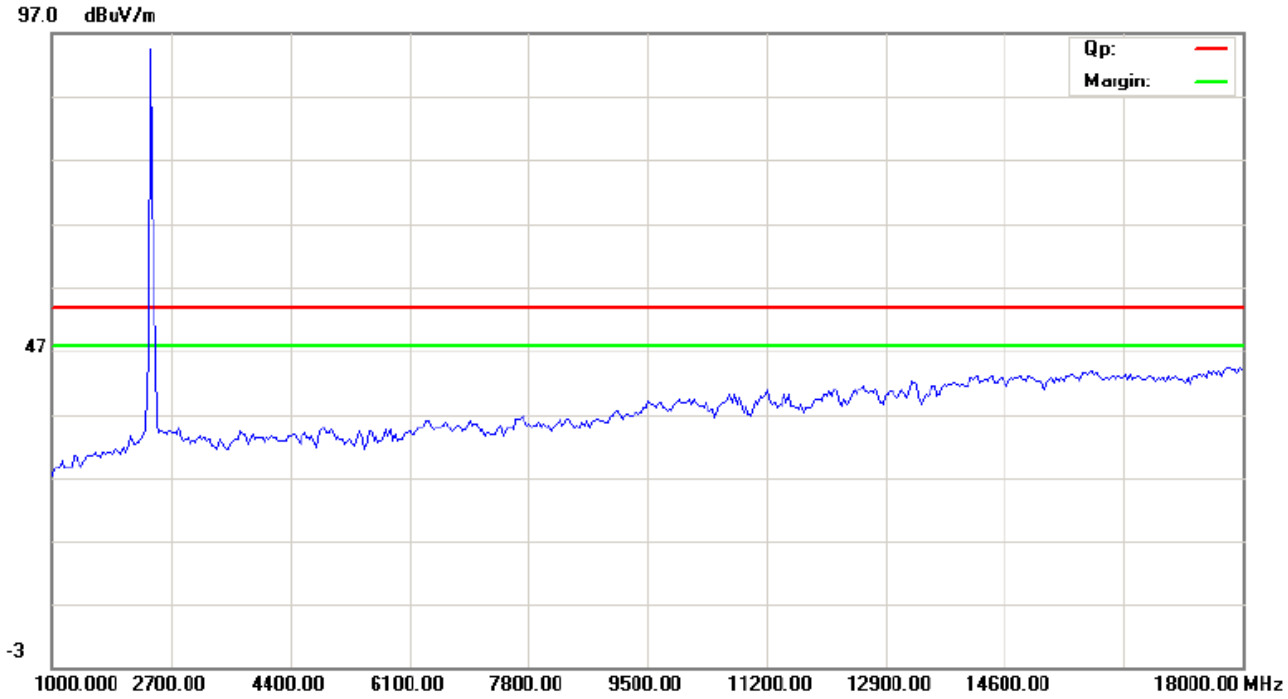
Low Channel : Vertical



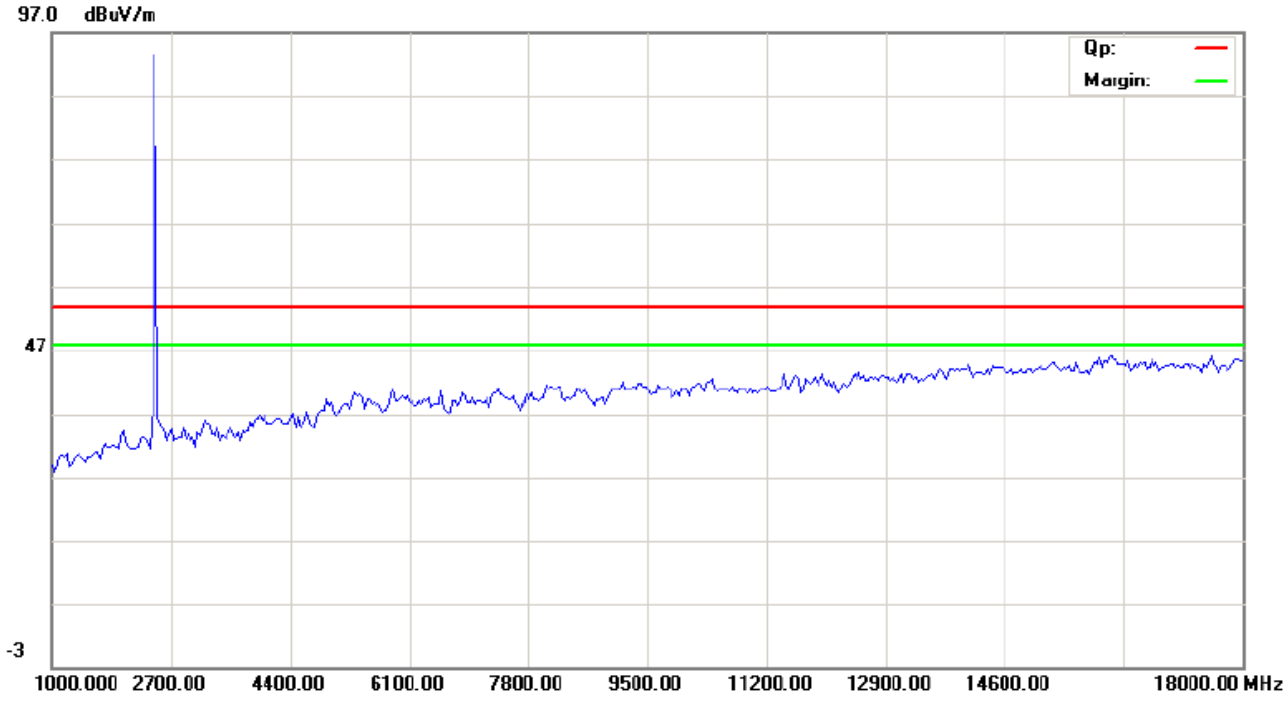
Middle Channel : Horizontal



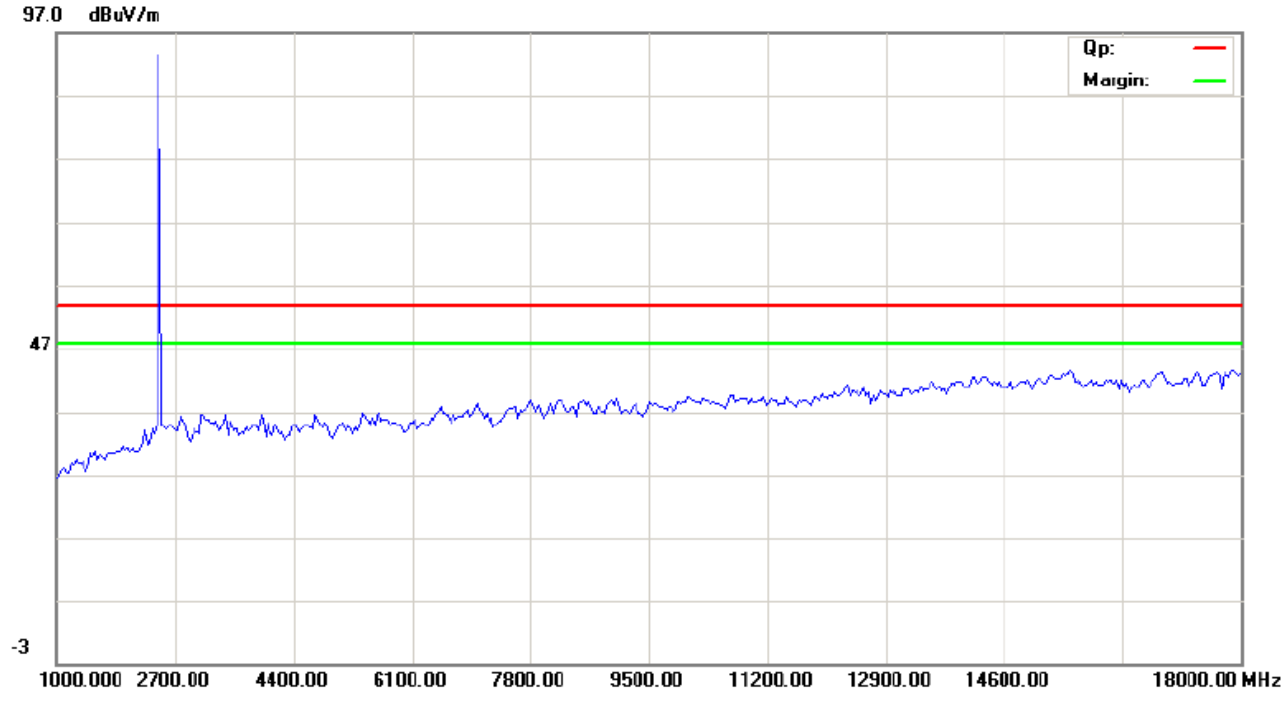
Middle Channel : Vertical



High Channel : Horizontal



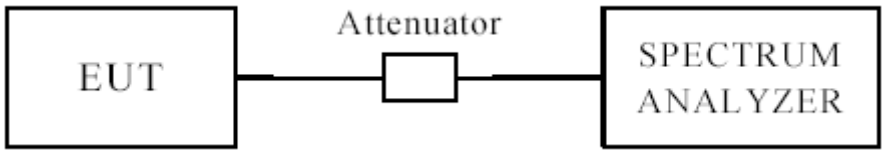
High Channel : Vertical



Note: for the radiated emissions above 18G, it is the floor noise.

7.0 6dB and 99% Bandwidth Measurement

7.1 Test Setup



7.2 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is >500 kHz

7.3 Test Procedure

1. Set resolution bandwidth (RBW) = 100 kHz
2. Set the video bandwidth (VBW) ≥ 3 x RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.4 Test Result

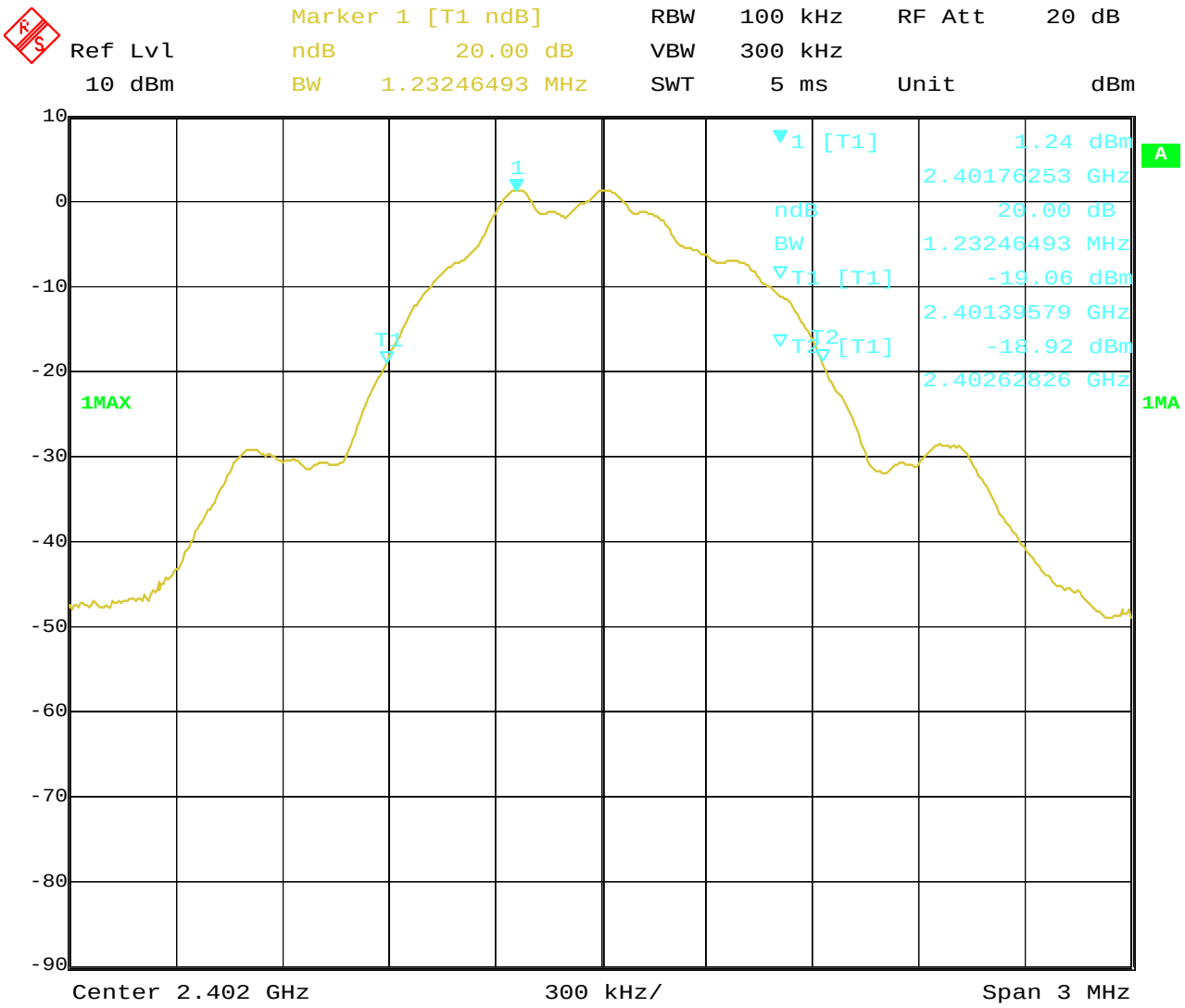
6dB BW

EUT	Tablet PC	Model	F102
Mode	Keep Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH

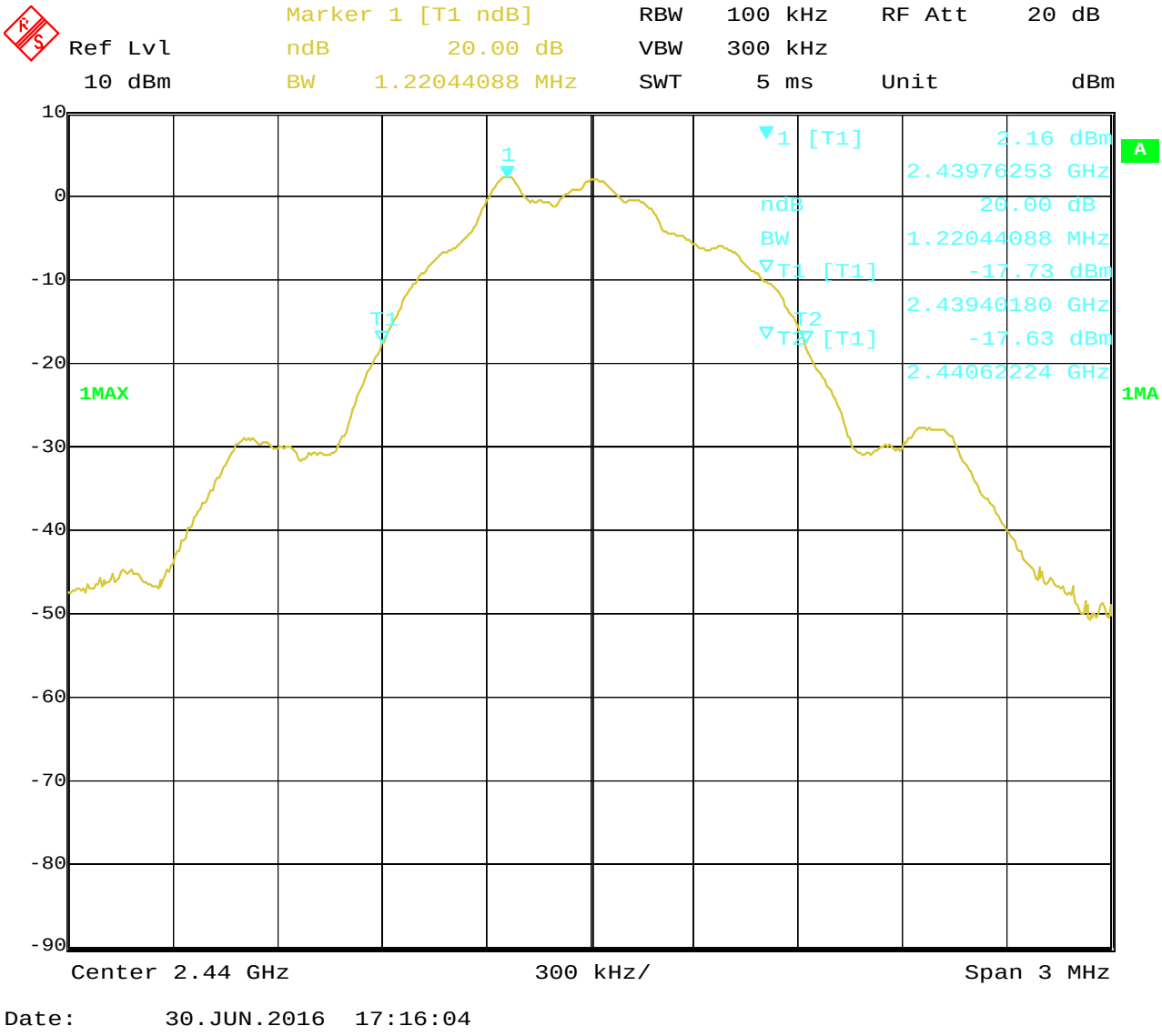
Channel	Channel Frequency (MHz)	6 dB Bandwidth (kHz)	Minimum Limit (kHz)	Pass/ Fail
Low	2402	1232	0.5	Pass
Middle	2440	1220	0.5	Pass
High	2480	1220	0.5	Pass

Test Figure:

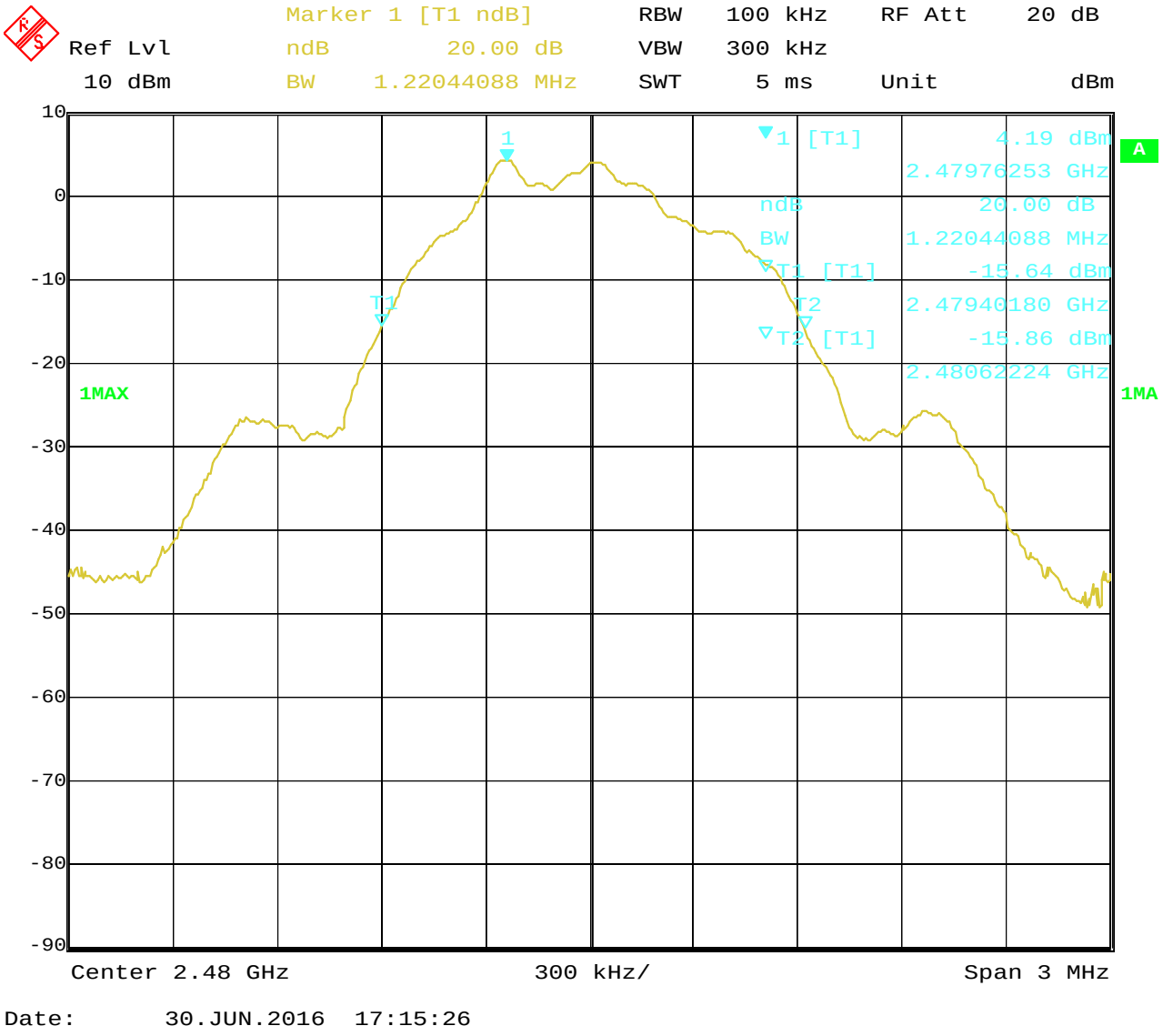
1. Condition: Low Channel



2. Condition: Middle Channel



3. High Channel



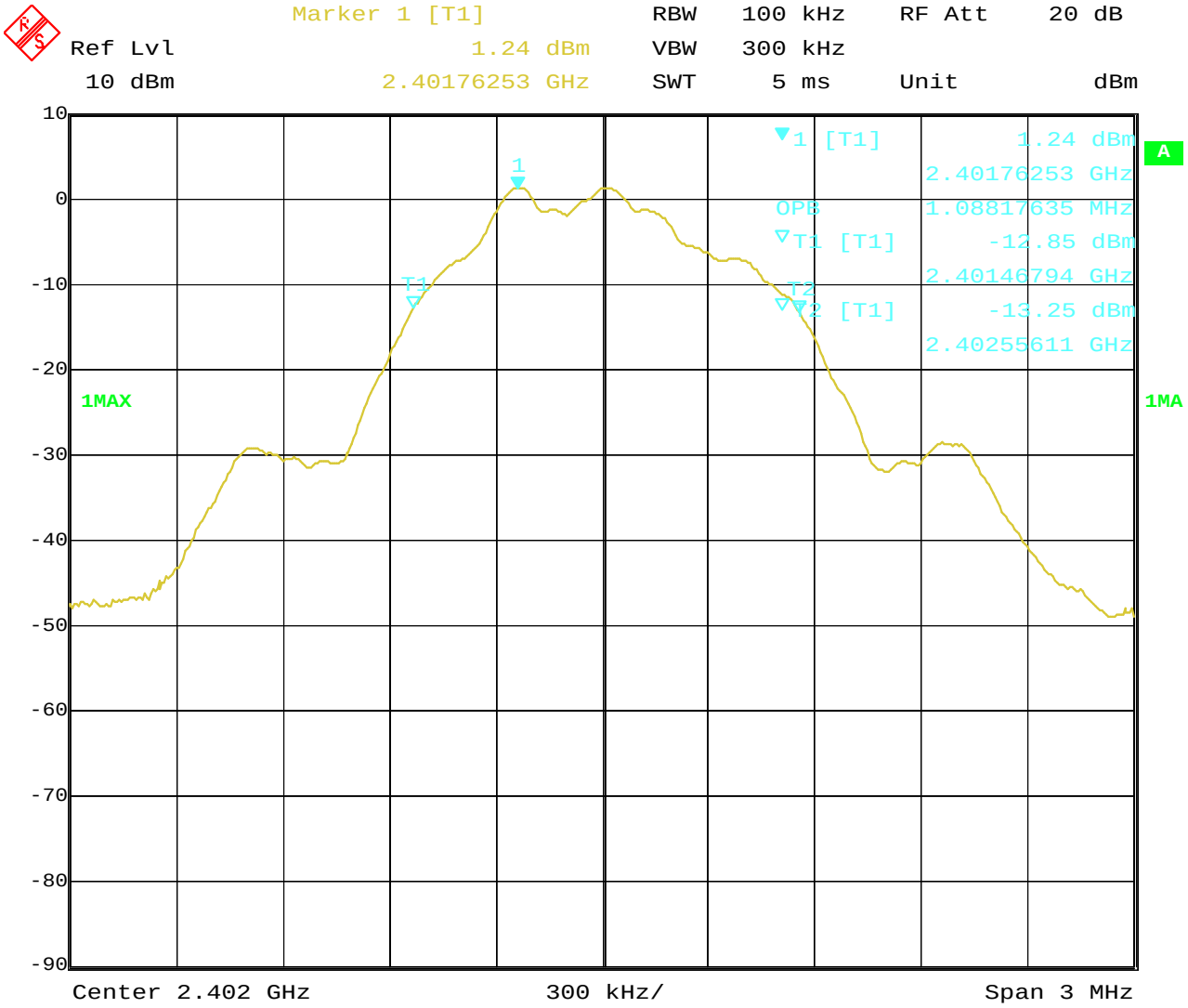
99% BW

EUT	Tablet PC	Model	F102
Mode	Keep Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH

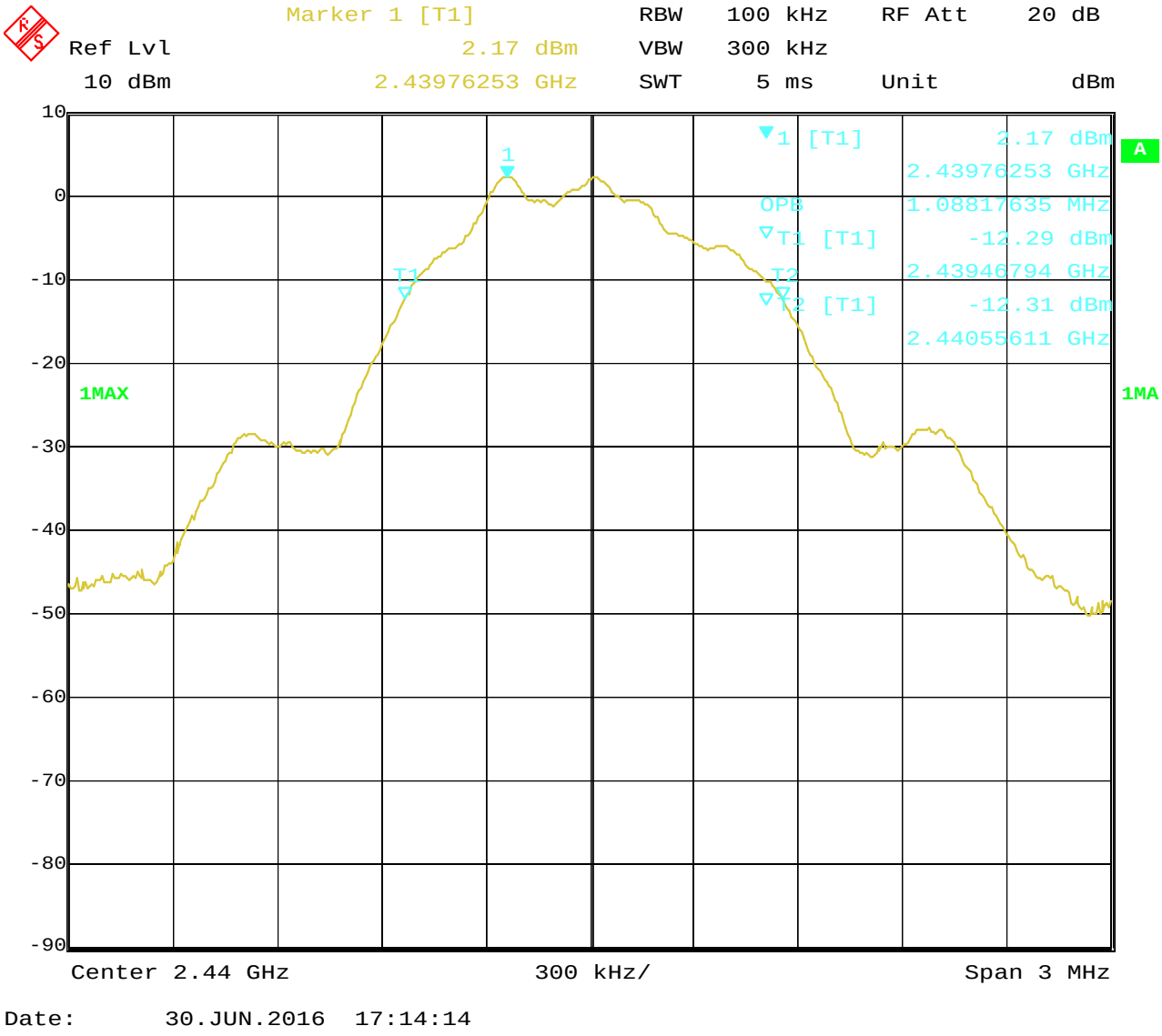
Channel	Channel Frequency (MHz)	99% Bandwidth (kHz)	Maximum Limit (kHz)	Pass/ Fail
Low	2402	1088	--	Pass
Middle	2440	1088	--	Pass
High	2480	1088	--	Pass

Test Figure:

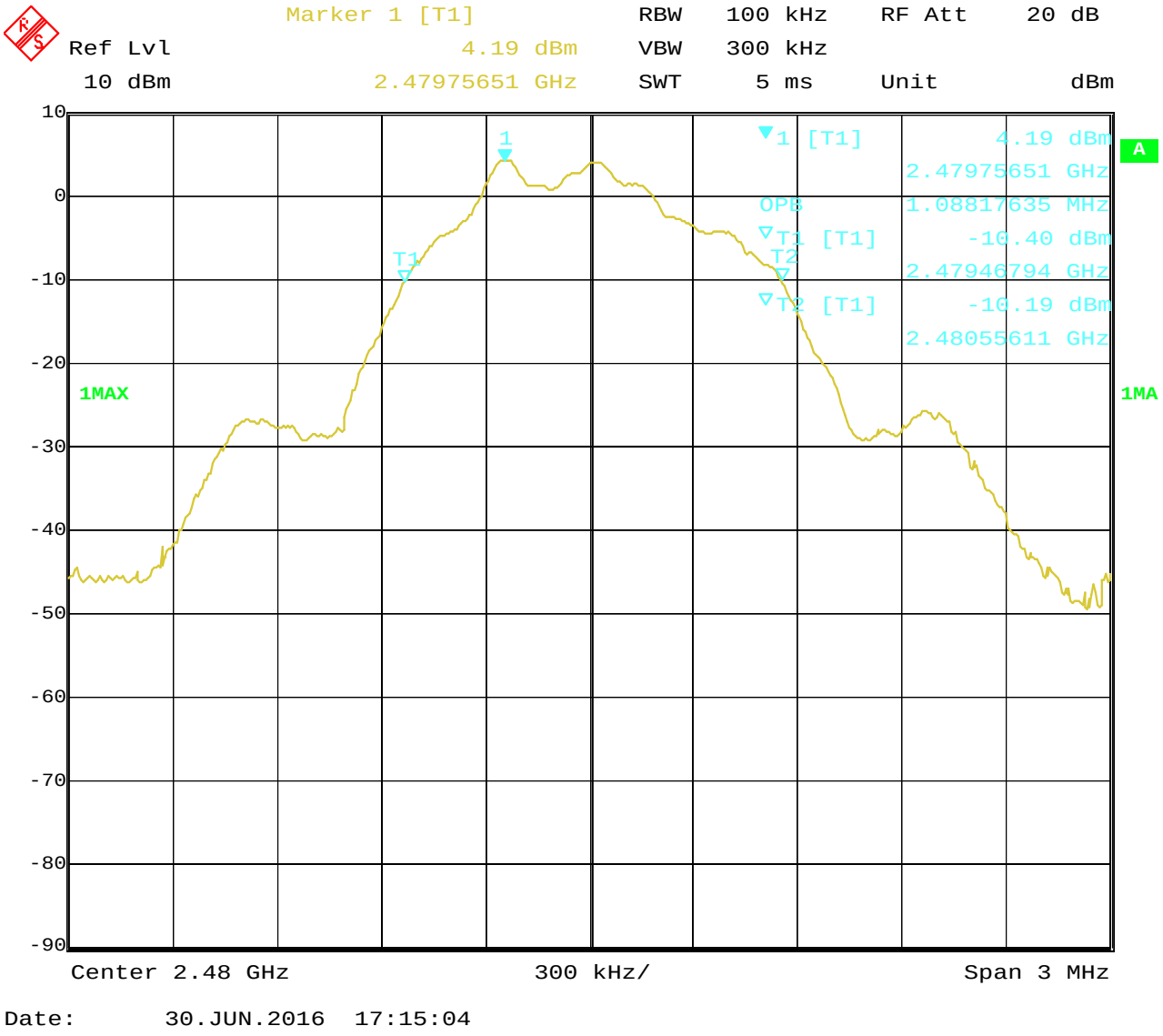
1. Condition: Low Channel



2. Condition: Middle Channel

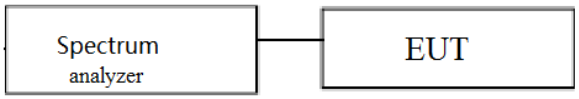


3. High Channel



8. Maximum Output Power

8.1 Test Setup



8.2 Limits of Maximum Output Power

The Maximum Output Power Measurement is 30dBm.

8.3 Test Procedure

1. Check the calibration of the measuring instrument (spectrum analyzer) using either an internal calibrator or a known signal from an external generator.
2. Set the spectrum analyzer as follows: Span =10MHz, centered on the test channel; RBW > the 20 dB bandwidth of the emission being measured; VBW = 10MHz, RBW=3MHz;
For AV power: Sweep = 60s; Detector function = RMS;
For PK power: Sweep = 5ms; Detector function = PK;
Trace = max hold
3. Measure the highest amplitude appearing on spectral display and record the level to calculate results.
4. Repeat above procedures until all frequencies measured were complete.

Note: the Peak and Average power were measured.

8.4Test Results

EUT	Tablet PC	Model	F102
Mode	Keep Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH

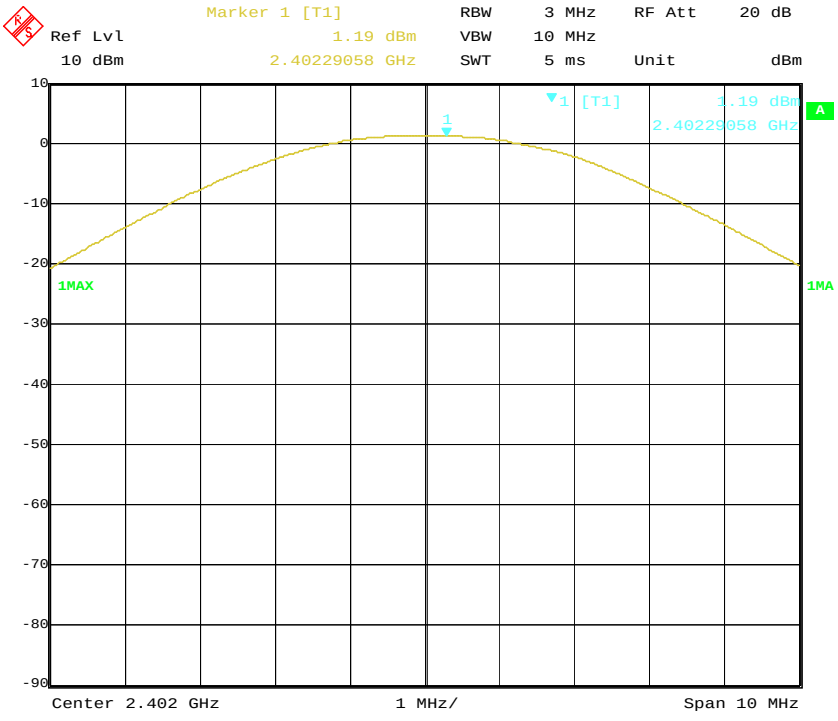
Channel	Channel Frequency (MHz)	Max. Power Output (dBm)		Peak Power Limit (dBm)	Pass/ Fail
		Peak	Average		
Low	2402	1.19	-7.40	30	Pass
Middle	2440	2.08	-6.50	30	Pass
High	2480	4.13	-4.40	30	Pass

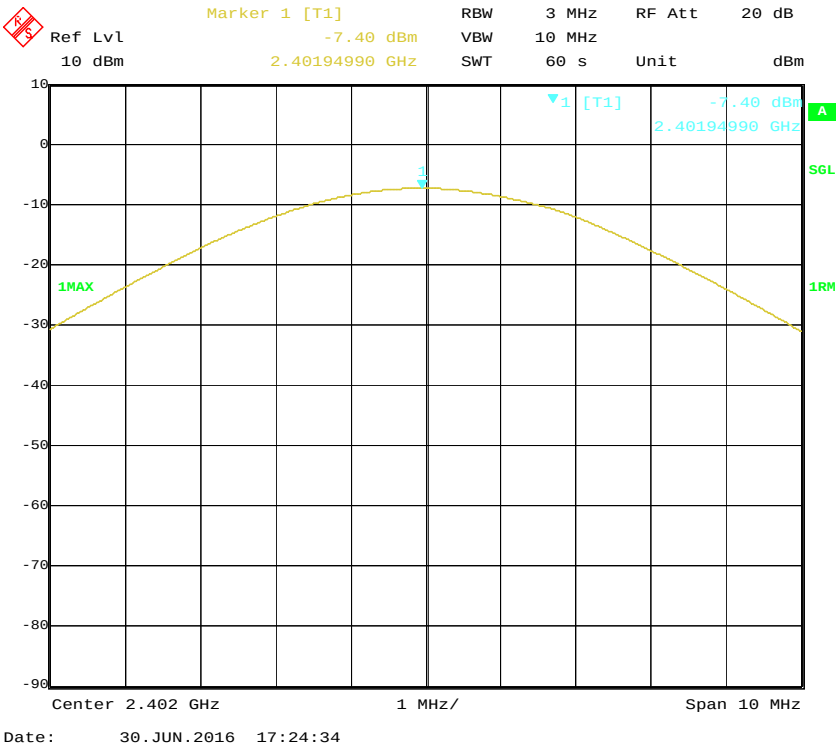
Note: 1. the result basic equation calculation as follow:

Max. Power Output = Power Reading + Cable loss + Attenuator

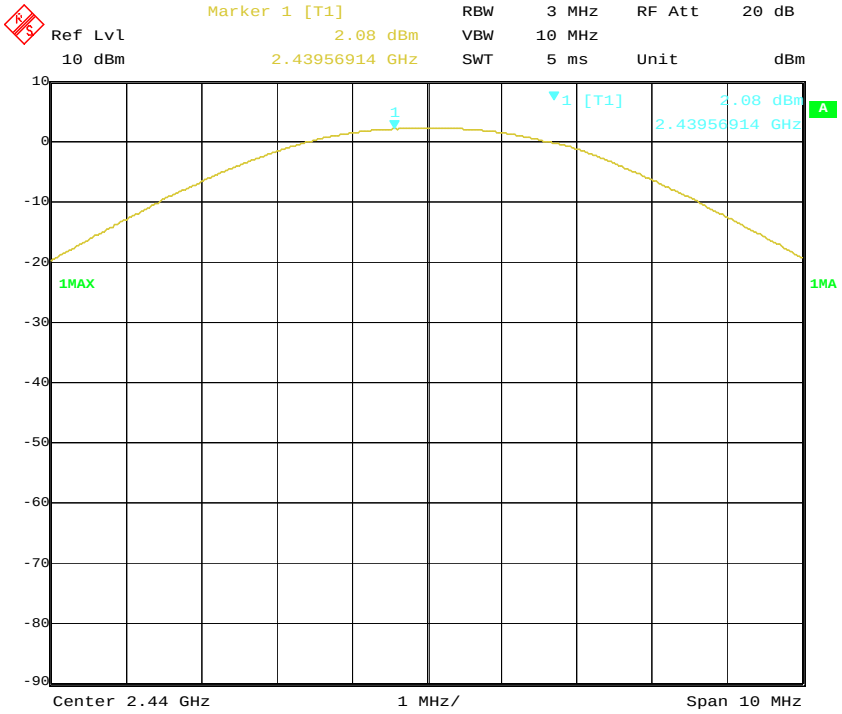
Test Plot:

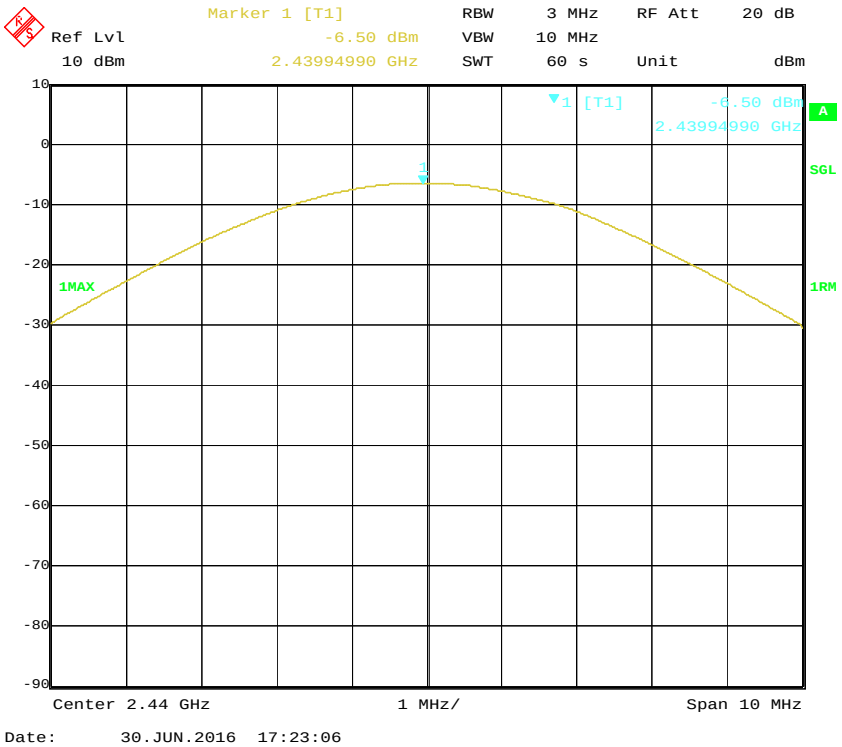
2402MHz



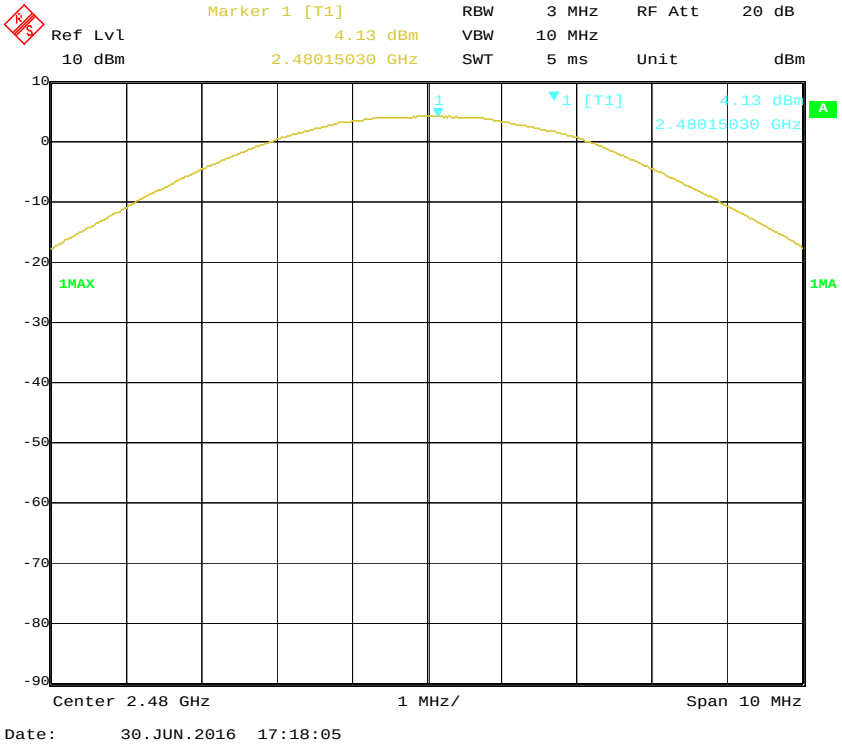


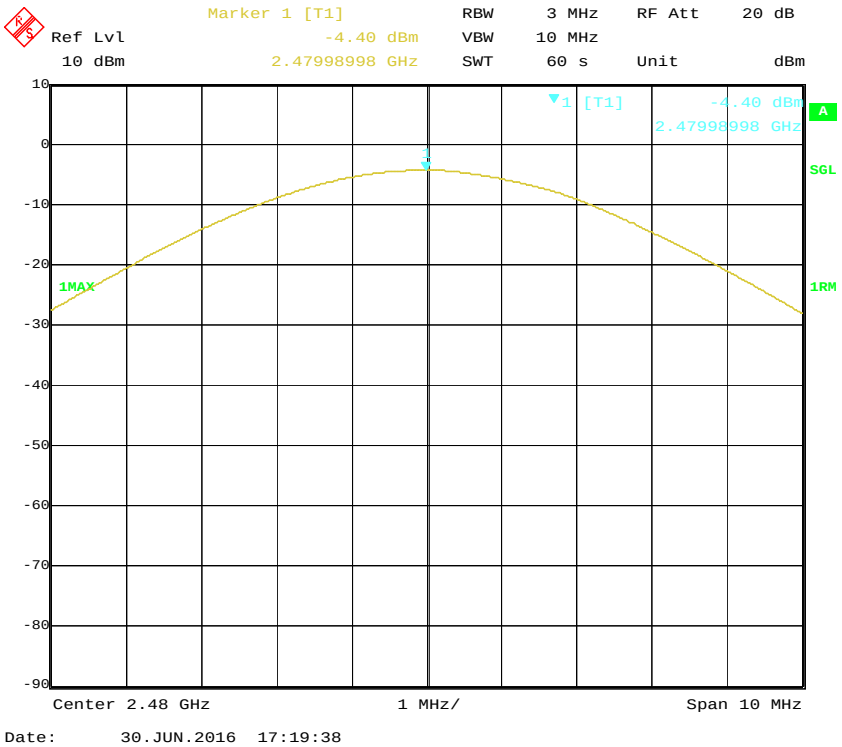
2440MHz





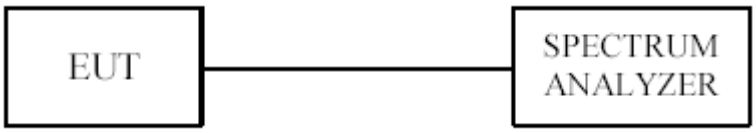
2480MHz





9. Power Spectral Density Measurement

9.1 Test Setup



9.2 Limits of Power Spectral Density Measurement

The Maximum Power Spectral Density Measurement is 8dBm.

9.3 Test Procedure

1. Use this procedure when the maximum peak conducted output power in the fundamental emission is used to demonstrate compliance.
2. Set the RBW = 10 kHz.
3. Set the VBW ≥ 30 kHz.
4. Set the span to 1.5 times the DTS channel bandwidth.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.
11. The resulting peak PSD level must be ≤ 8 dBm.

9.4Test Result

EUT	Tablet PC	Model	F102
Mode	Keep Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH

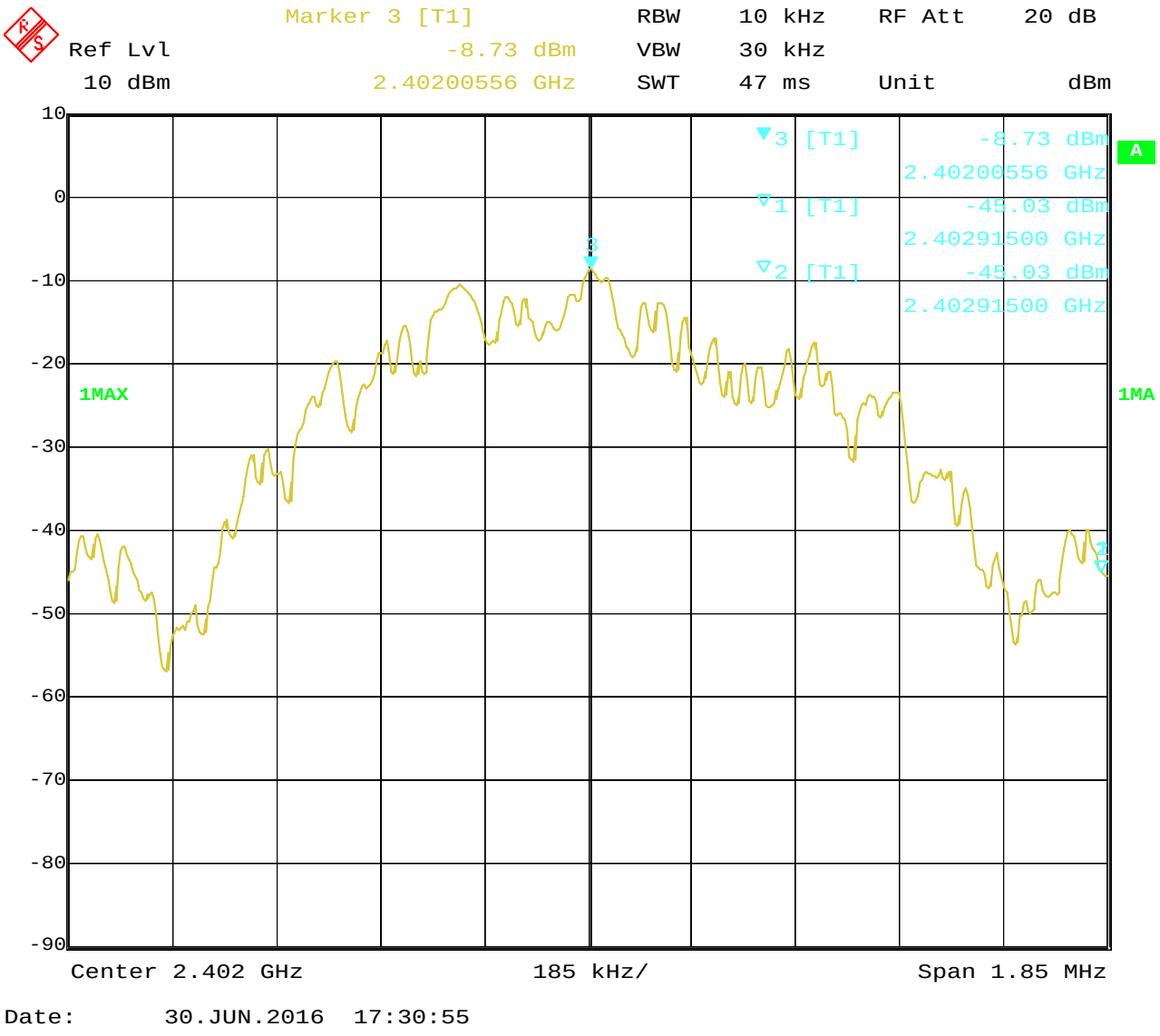
Channel	Peak Power Reading (dBm)	Cable Loss (dB)	Final Power Spectral Density (dBm)	Maximum Limit (dBm)	Pass/ Fail
Low	-8.73	0.2	-8.53	8	Pass
Middle	-8.10	0.2	-7.90	8	Pass
High	-6.40	0.2	-6.20	8	Pass

Note: The result basic equation calculation as follow:

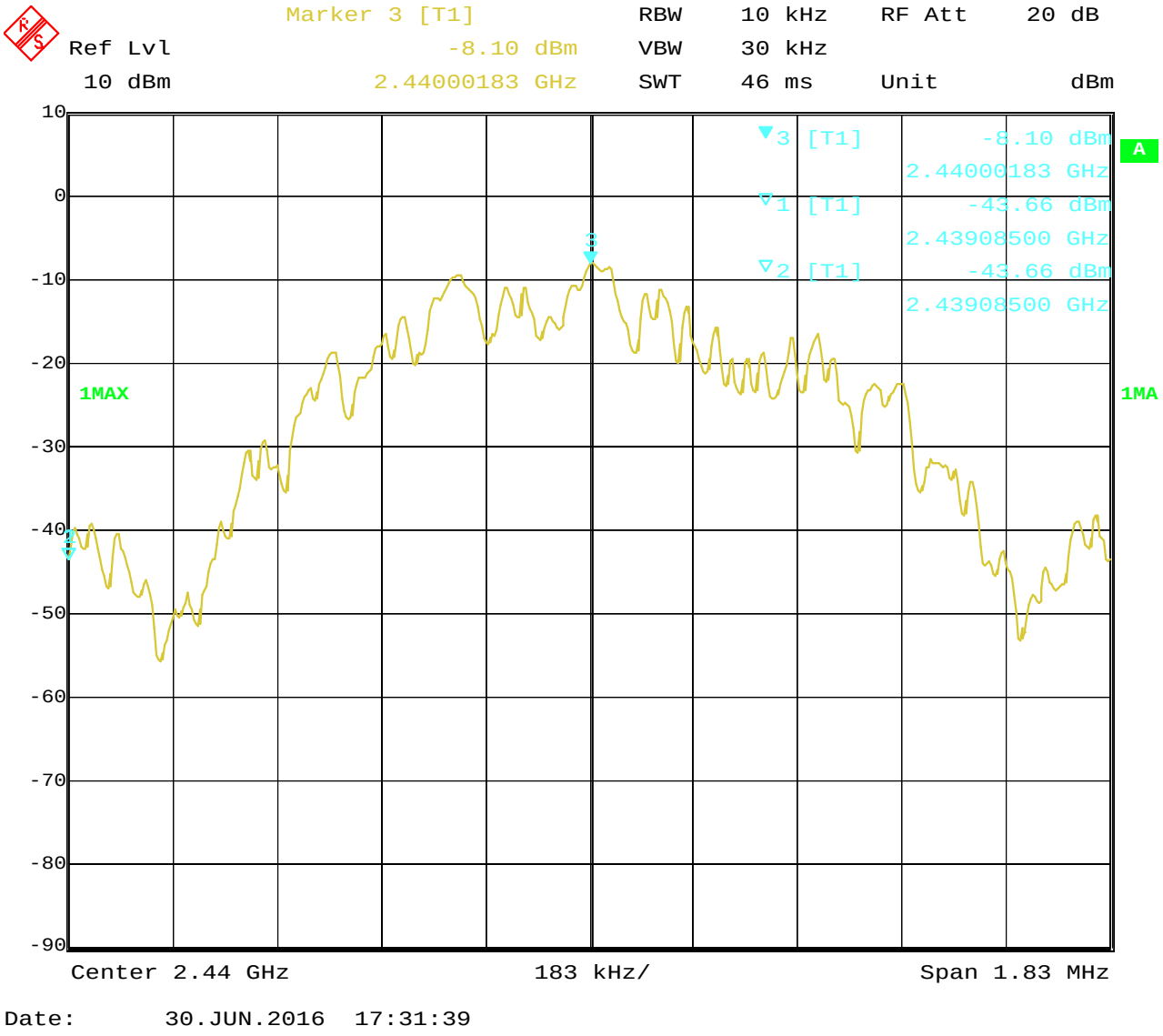
Peak Power Output = Peak Power Reading + Cable loss

Test Figure:

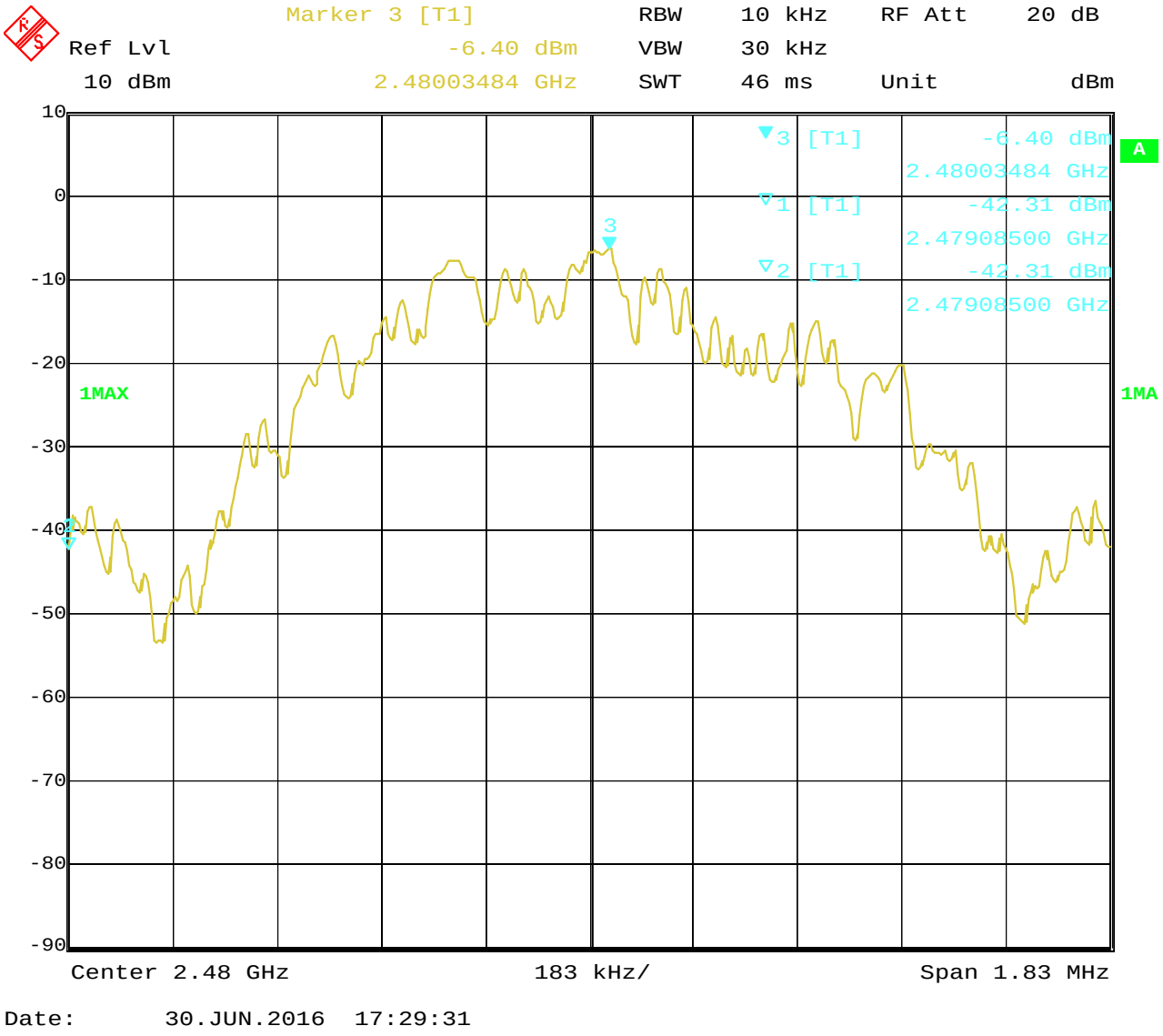
1. Condition: Low Channel



2. Condition: Middle Channel

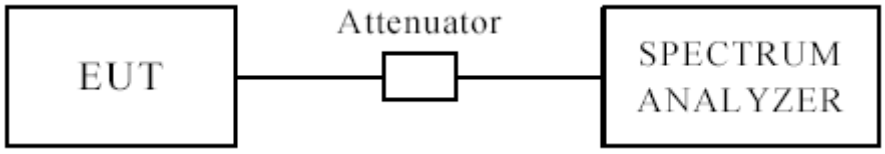


3. High Channel



10 Out of Band Measurement

10.1 Test Setup for band edge



The restricted band requirement based on radiated emission test; please see the clause 6 for the test setup

10.2 Limits of Out of Band Emissions Measurement

1. Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

10.3 Test Procedure

For signals in the restricted bands above and below the 2.4-2.483GHz allocated band a measurement was made of Radiated emission test. (Peak values with RBW=1MHz, VBW=3MHz and PK detector. AV value with RBW=1MHz, VBW=3MHz and RMS detector)

For bandage test, the spectrum set as follows: RBW=VBW=100 kHz. A conducted measurement used

10.4 Test Result

Please see next pages

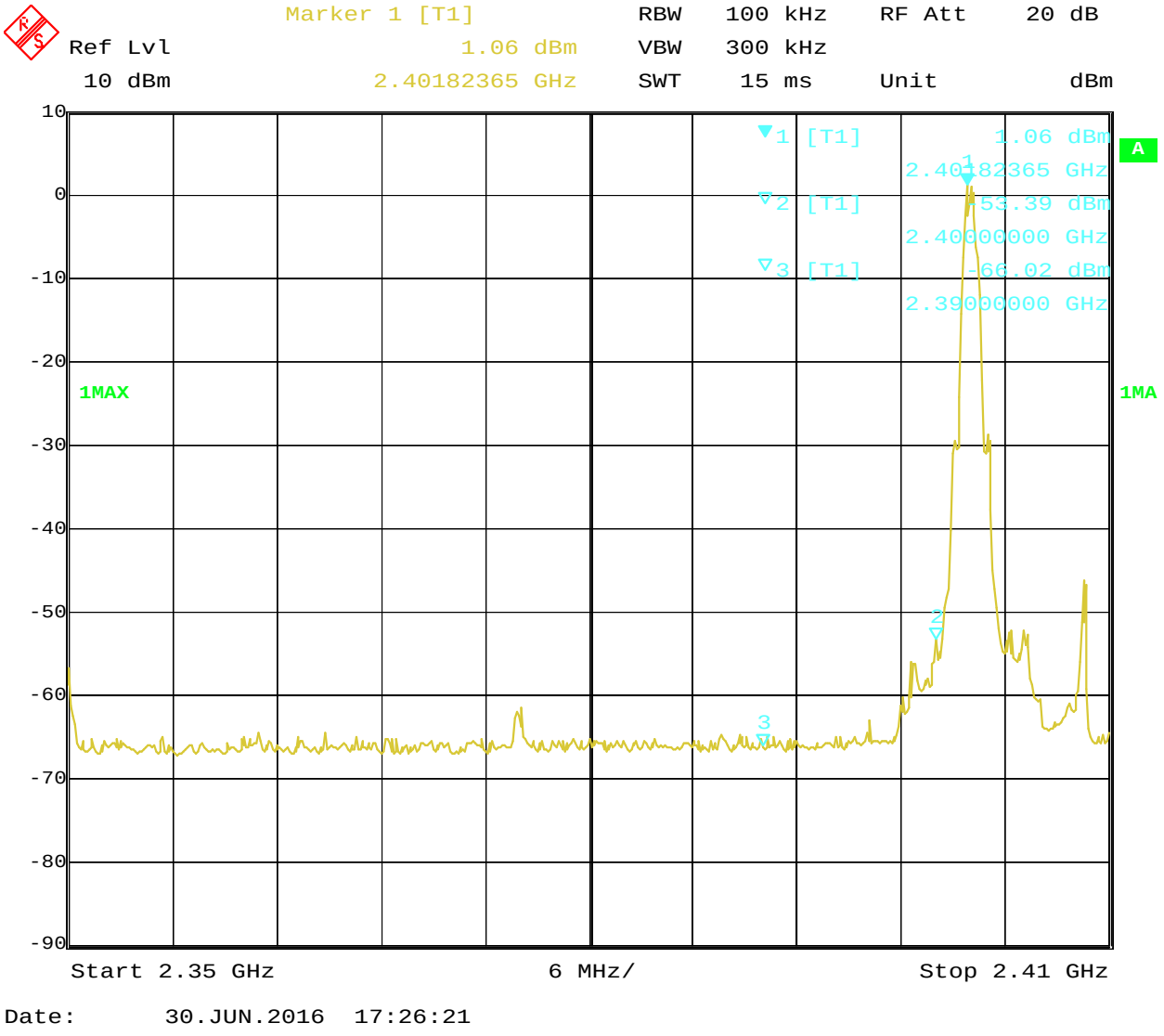
Note: 1. For band-edge measurement, the frequency from 30MHz-25GHz was tested. And It met the FCC rule.

2. This is a handhold device. The radiated emissions should be tested under 3-axes position (Lying, Side, and Stand), After pre-test. It was found that the worse radiated emission was get at the lying position.

10.4 Band-edge Measurement

EUT	Tablet PC	Model	F102
Mode	Keep Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

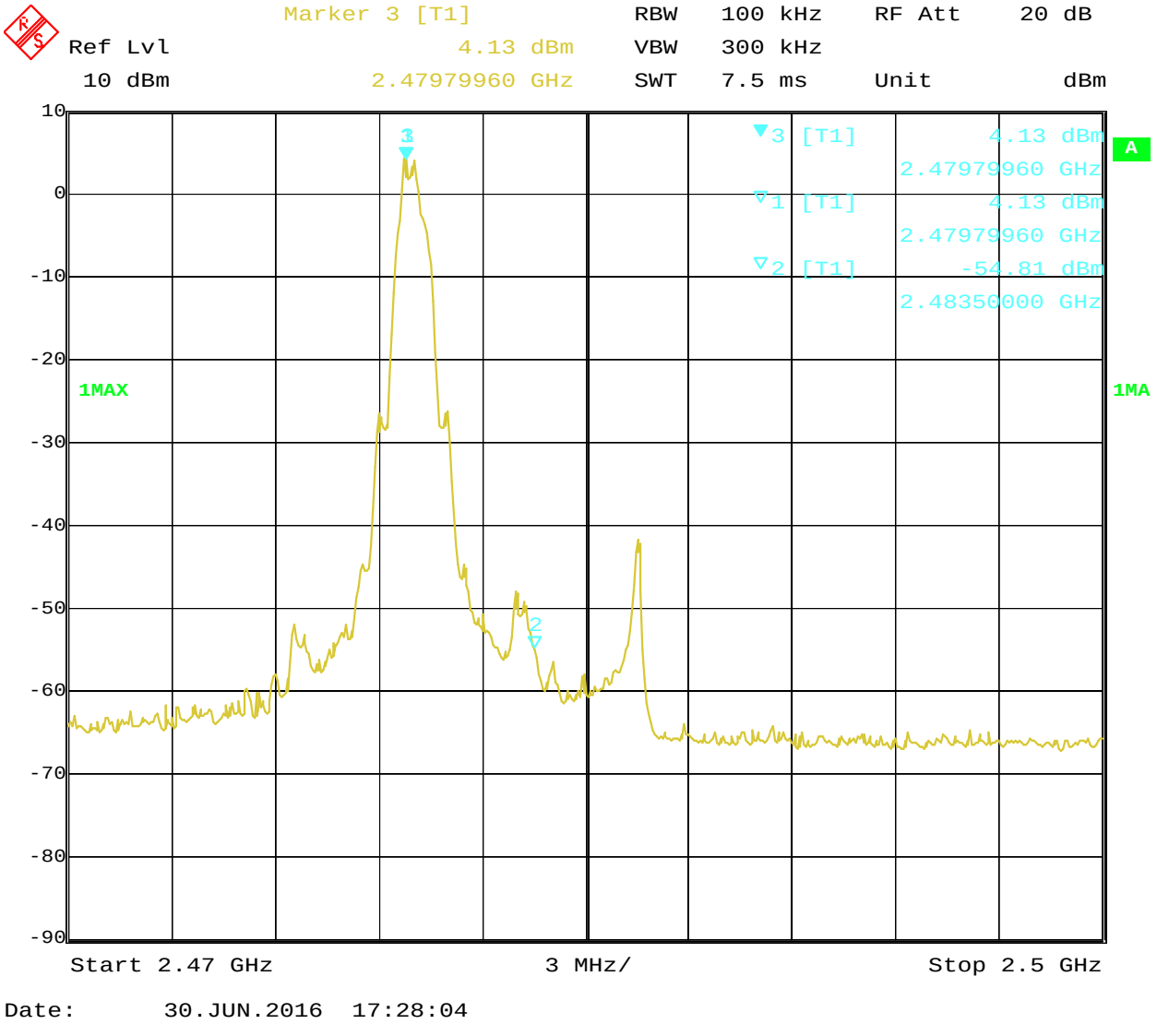
Test Figure:



10.4 Band-edge Measurement

EUT	Tablet PC	Model	F102
Mode	Keeping Transmitting	Input Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK

Test Figure:



10.4 Restricted band Measurement

Frequency (MHz)	Reading (dBμV)	Antenna Factor (dB/m)	Cable Loss (dB)	Pre-amp (dB)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)	Remark
2400	50.90	27.3	3.62	35.12	46.7	H	74	PK
2390	42.32	25.7	3.56	35.08	36.5	H	74	PK
2400	49.30	27.3	3.62	35.12	45.1	V	74	PK
2390	41.52	25.7	3.56	35.08	35.7	V	74	PK
2483.5	49.41	27.5	3.80	35.11	45.6	H	74	PK
2483.5	49.11	27.5	3.80	35.11	45.3	V	74	PK

11.0 Antenna Requirement

11.1 Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitter antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the mount in dB that the directional gain of the antenna exceeds 6 dBi.

11.2 Antenna Connected construction

Integral antenna used. The maximum Gain of the antennas is 2.0 dBi.

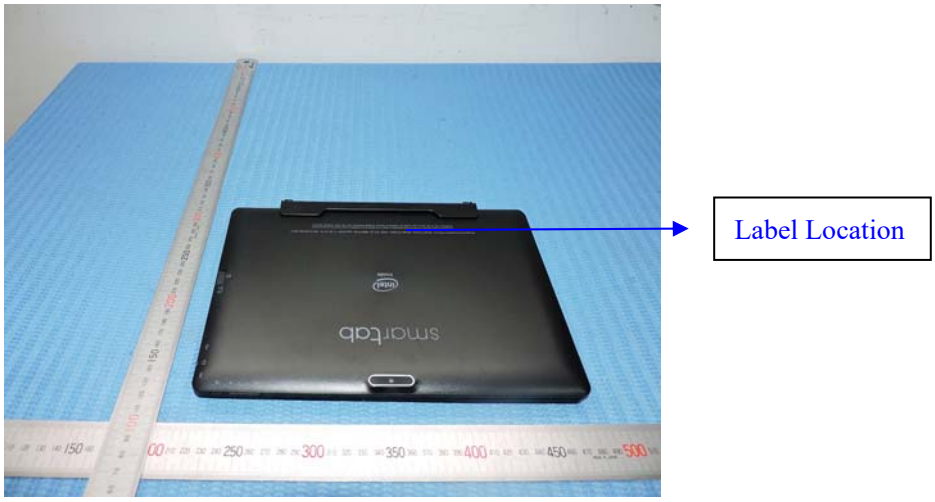
12.0 FCC ID Label

FCC ID: RBD-F102

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

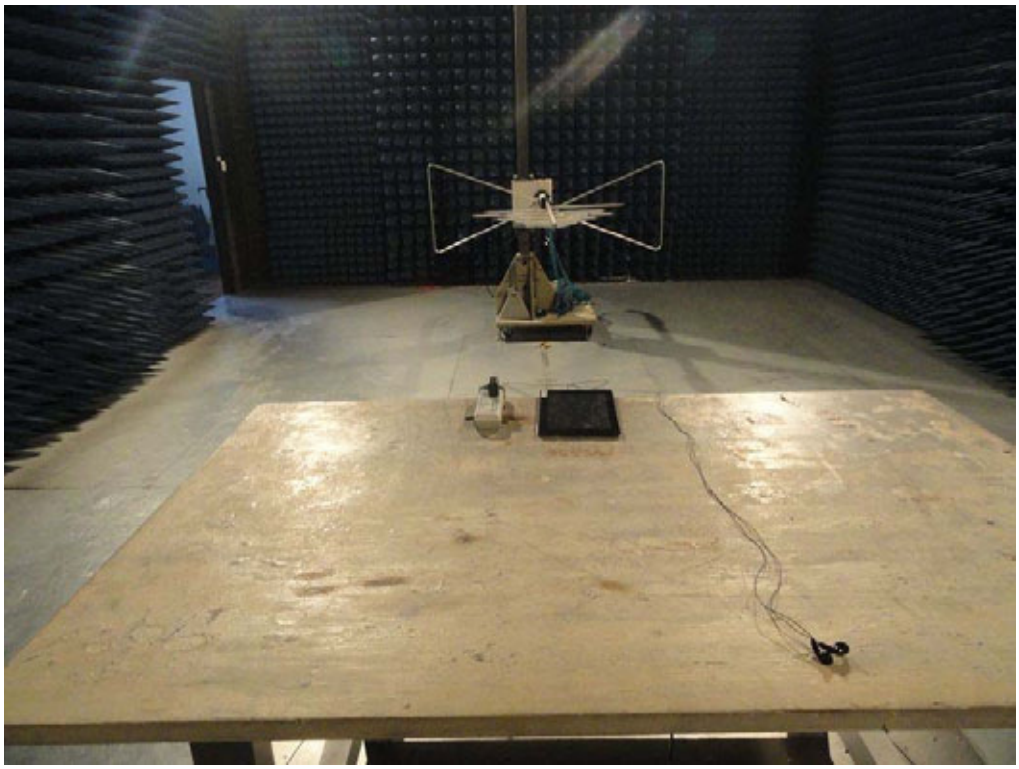
Mark Location:

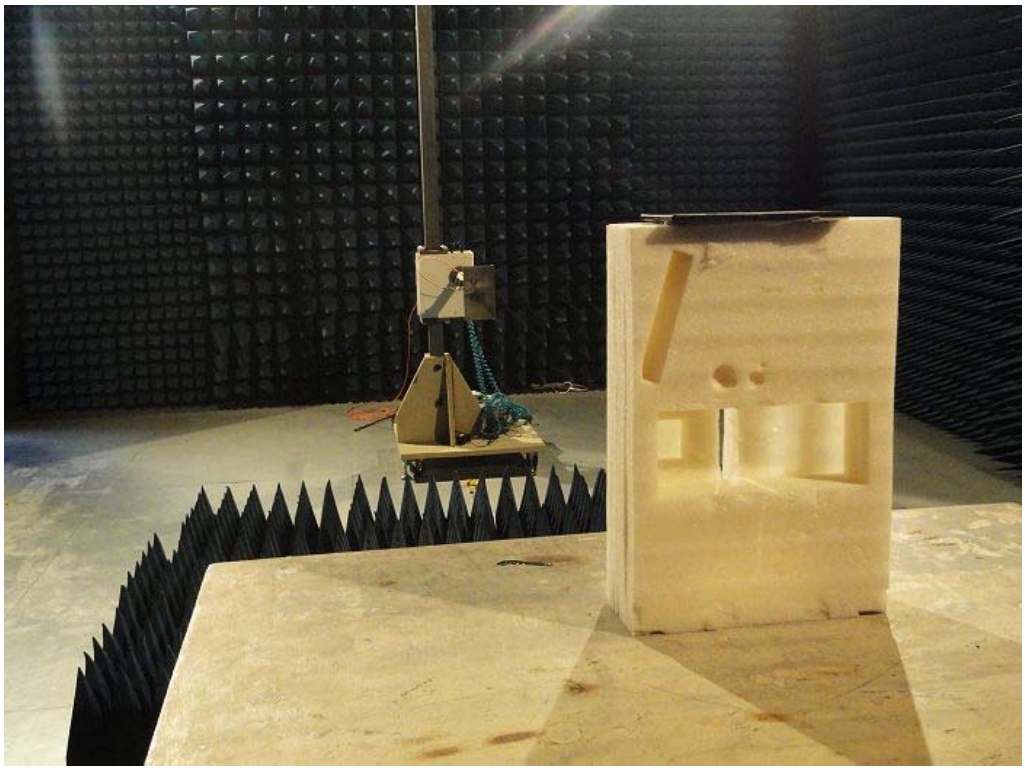


13.0 Photo of testing

Conducted Emission Test Setup:

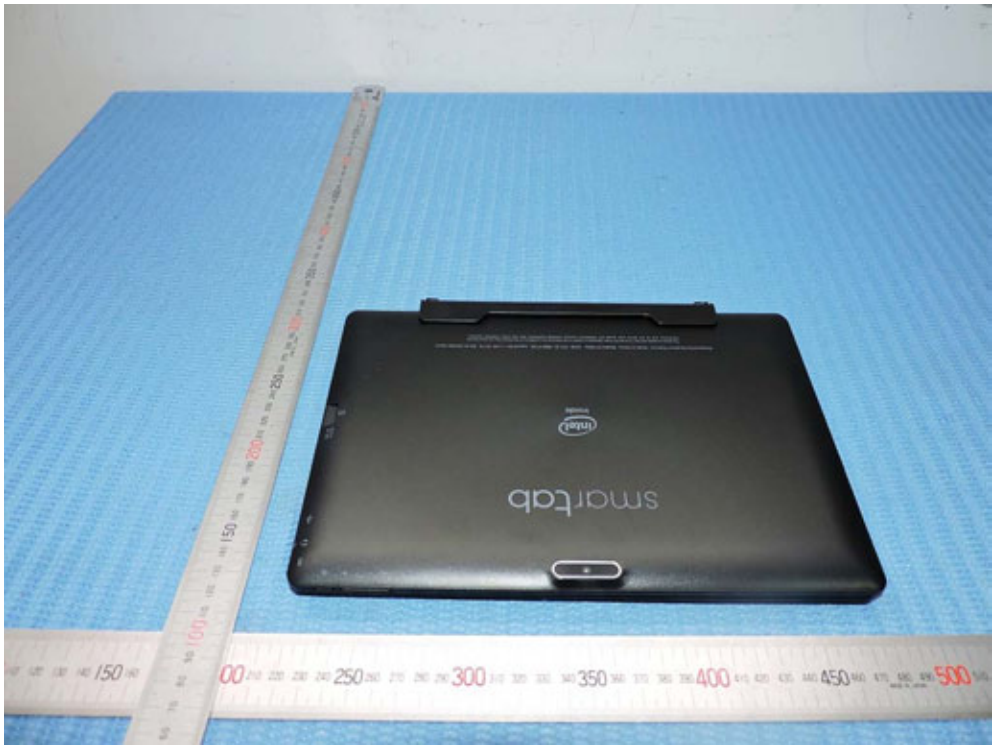
Radiated Emission Test Setup:





Photographs – EUT

Outside view



Outside view

Outside view

Outside view

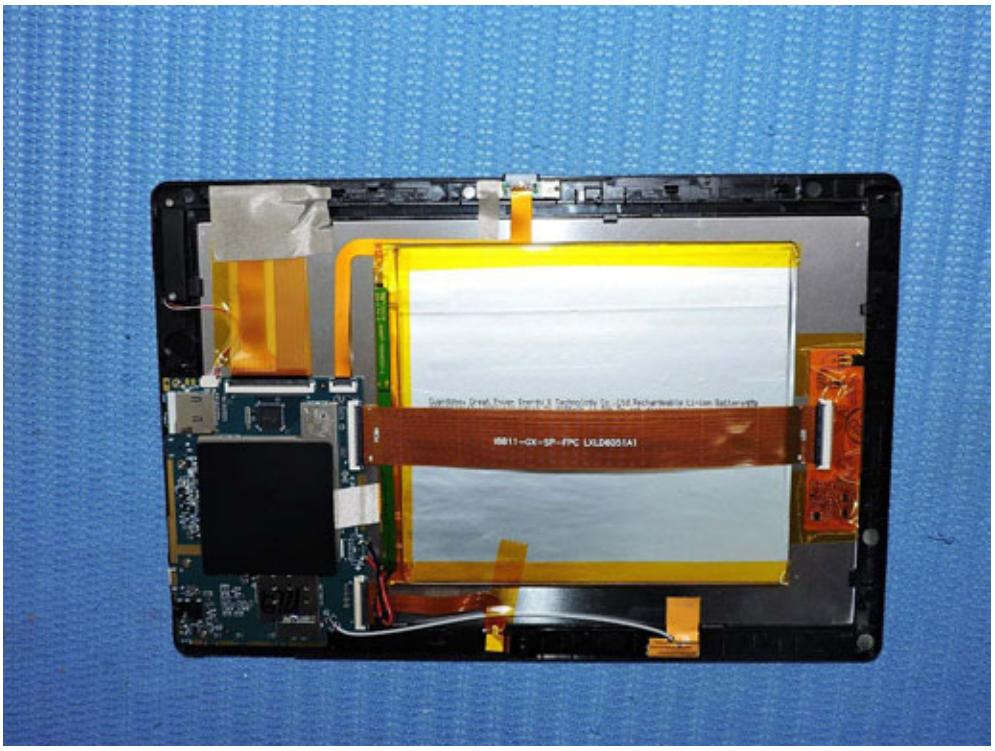
Outside view

Outside view

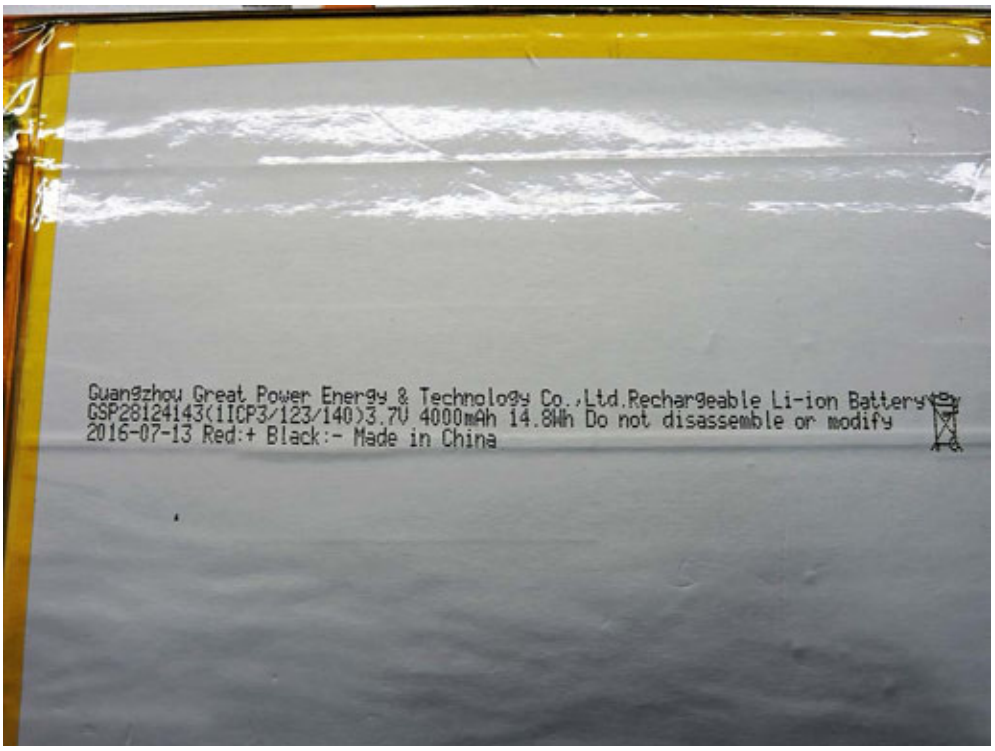
Outside view

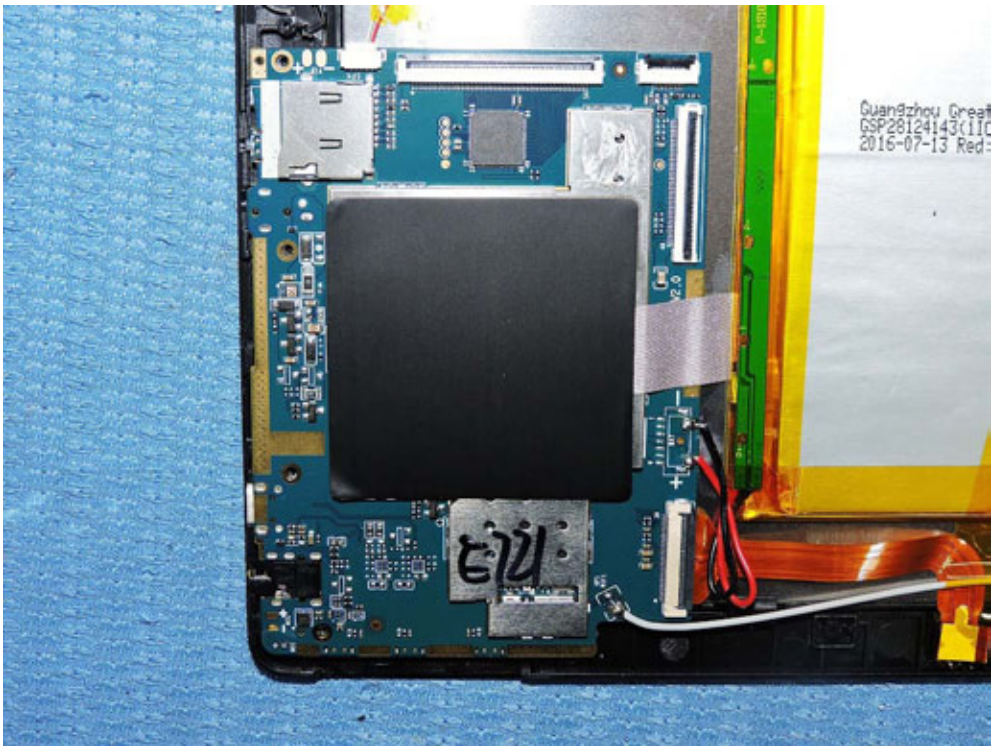
Outside view

Inside view

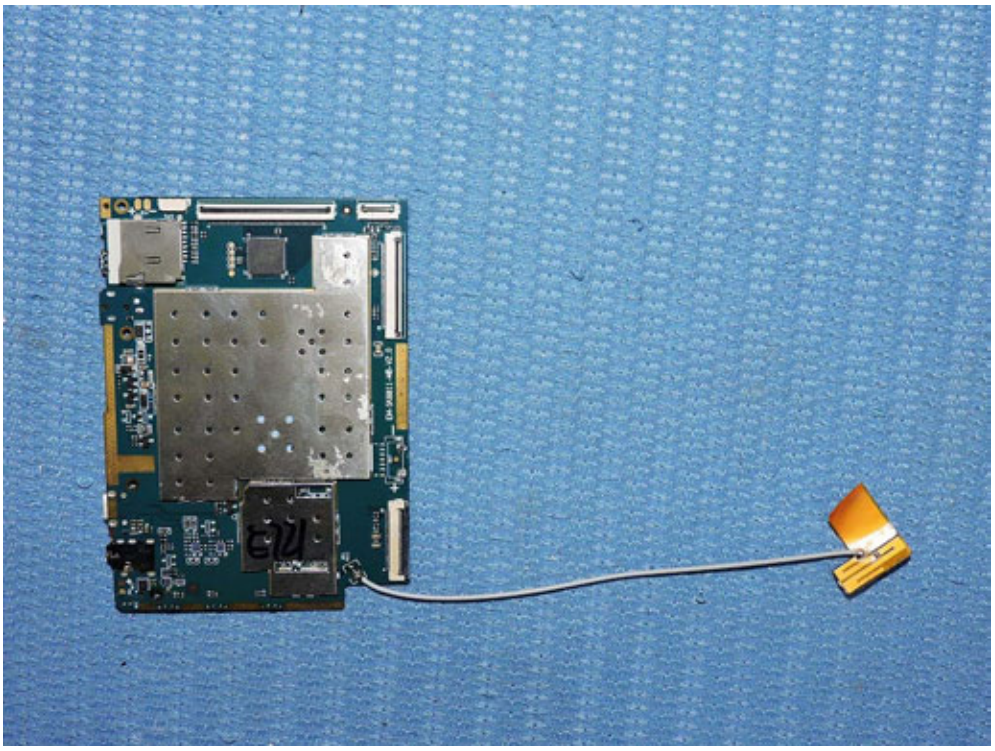


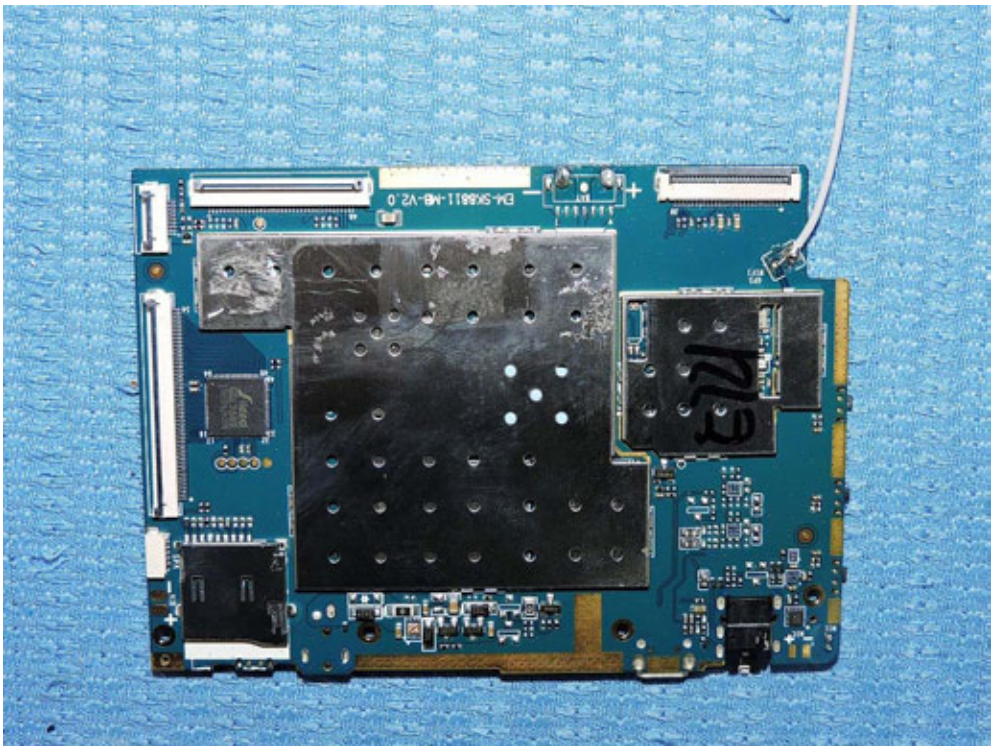
Inside view



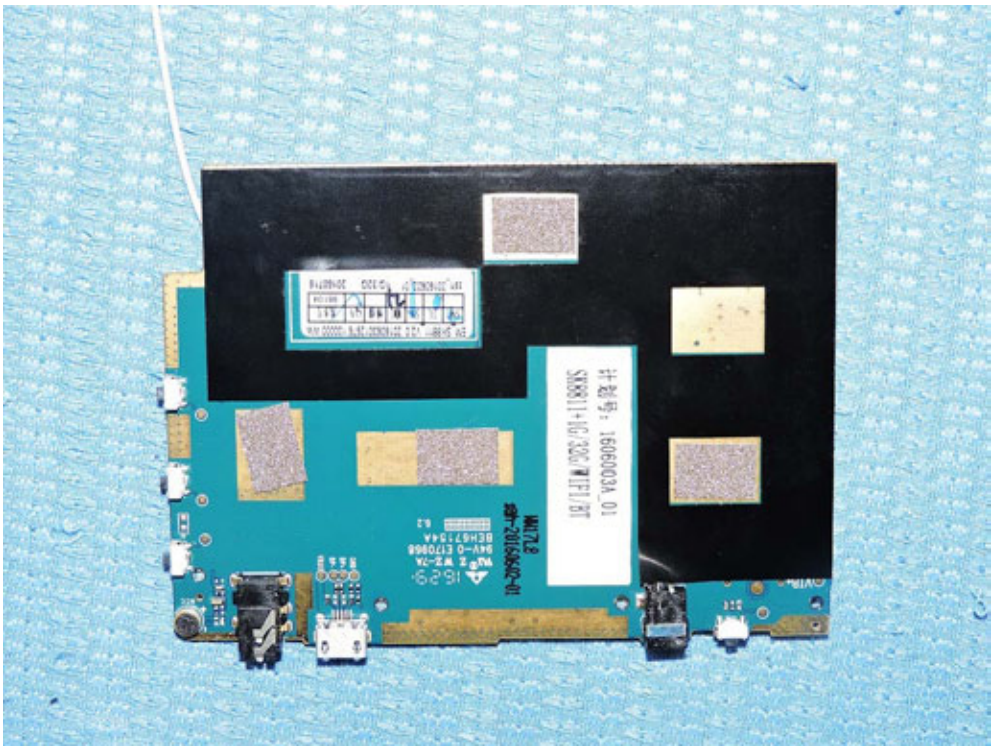


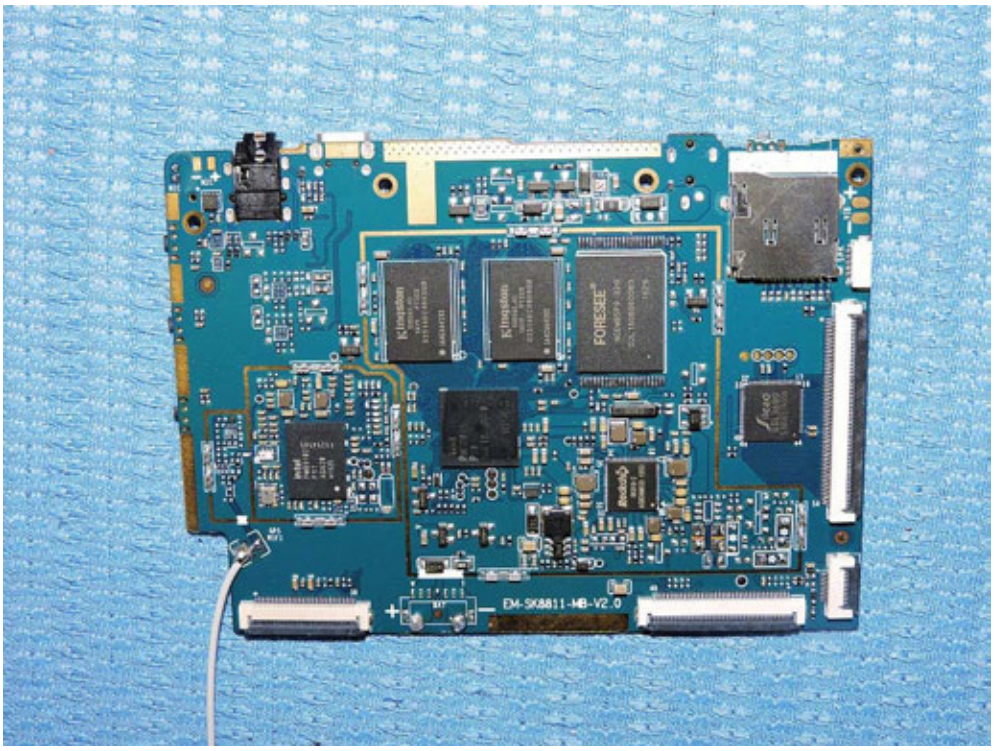
Inside view



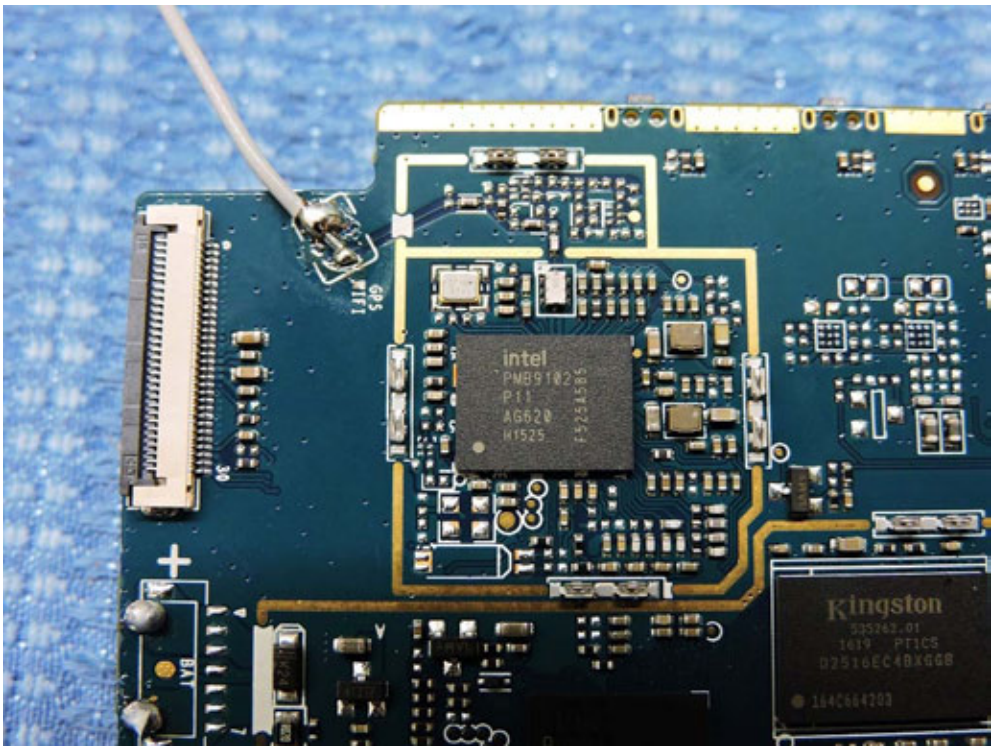


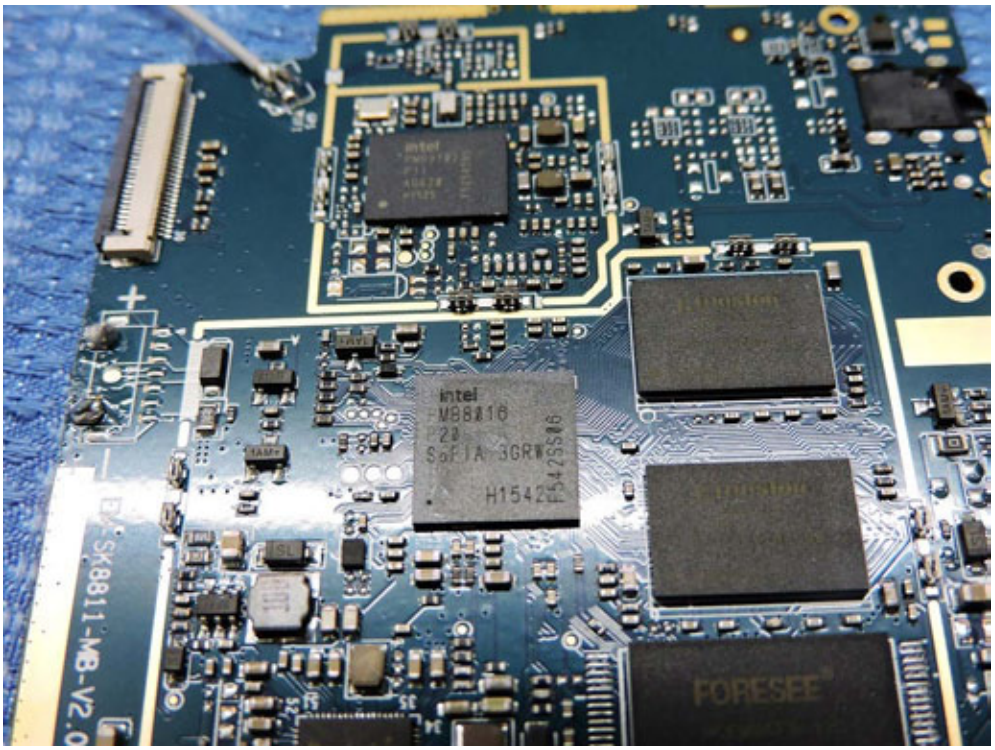
Inside view



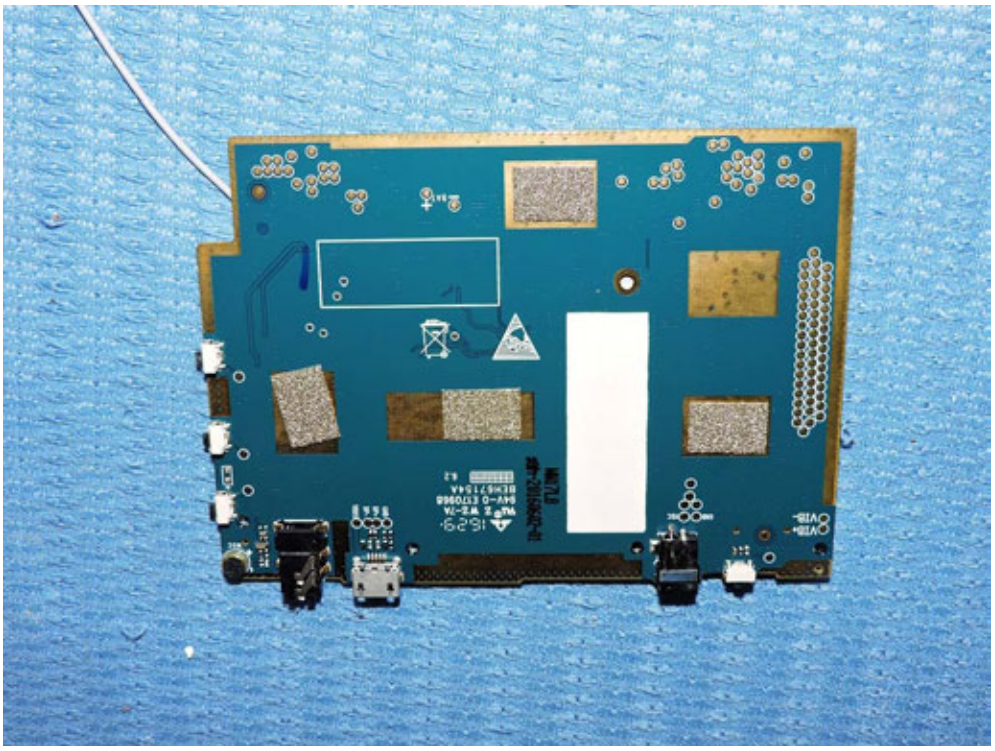


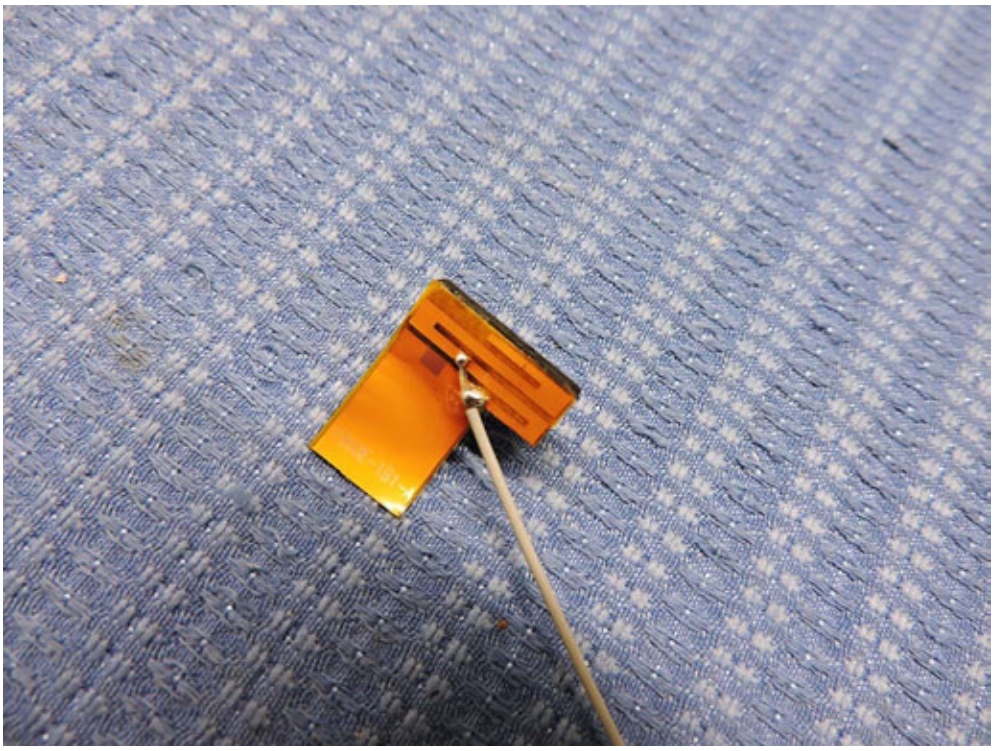
Inside view



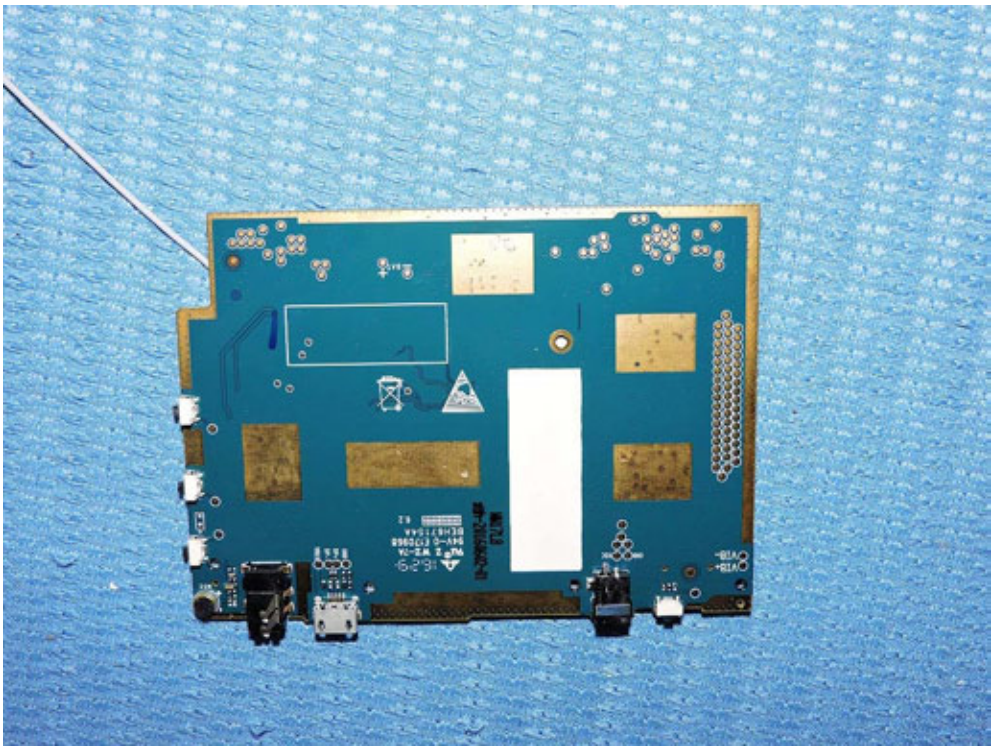


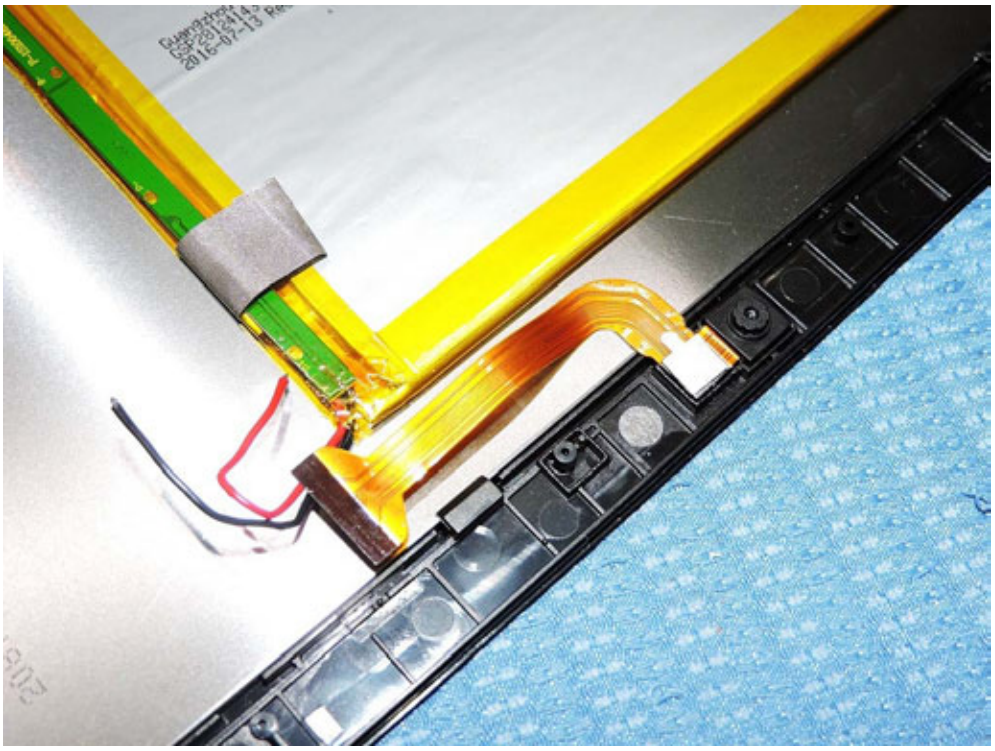
Inside view



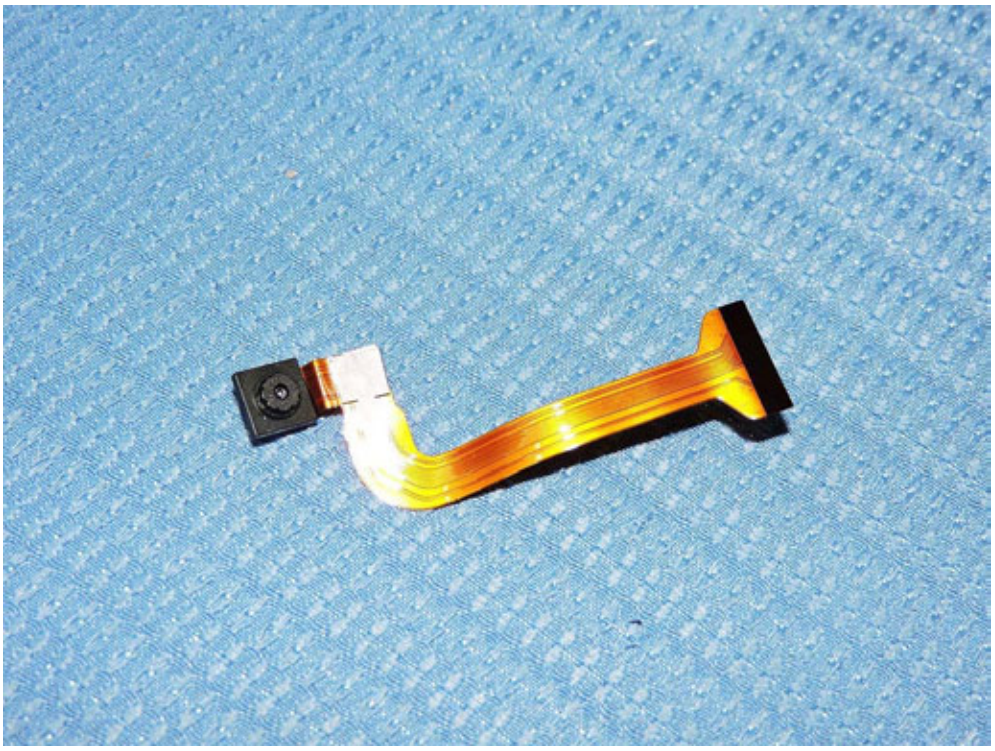


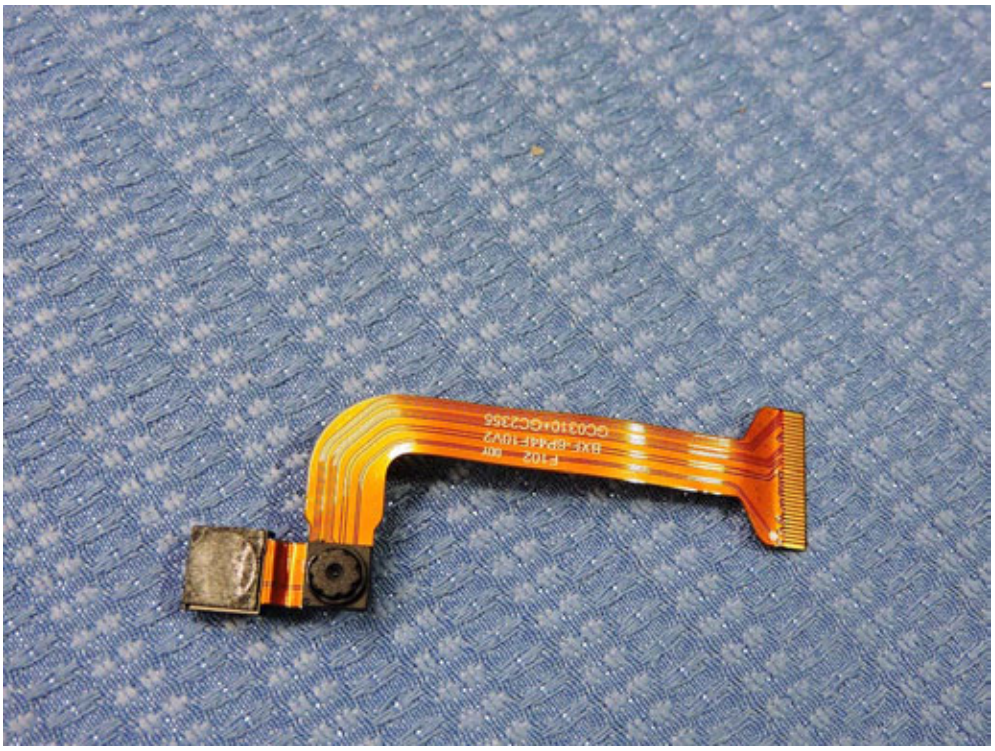
Inside view



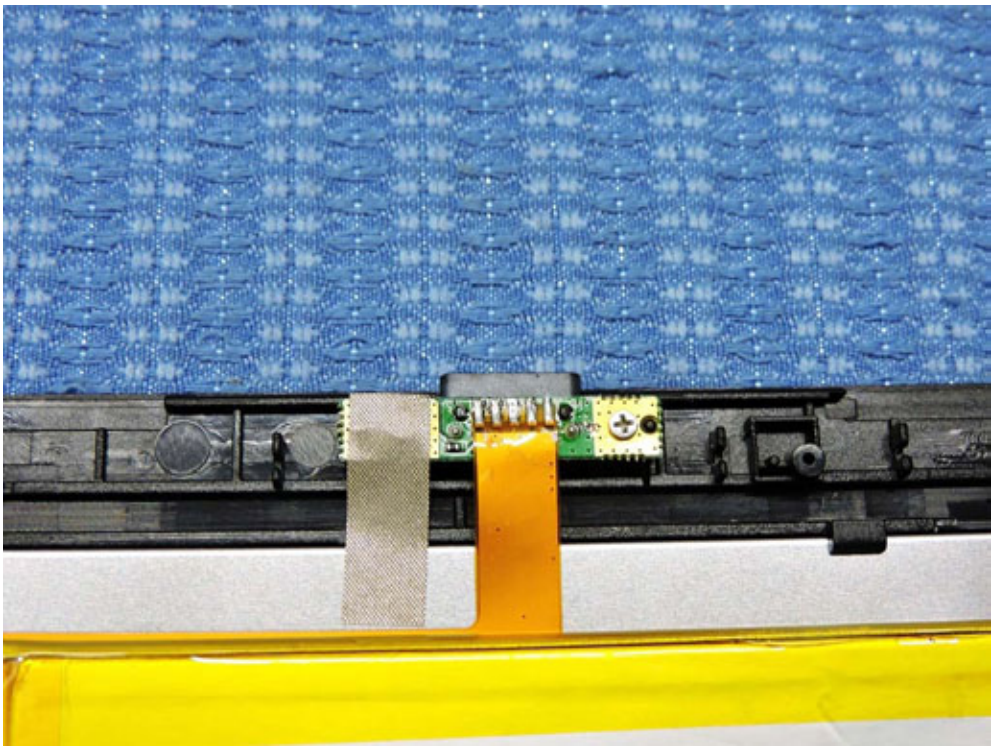


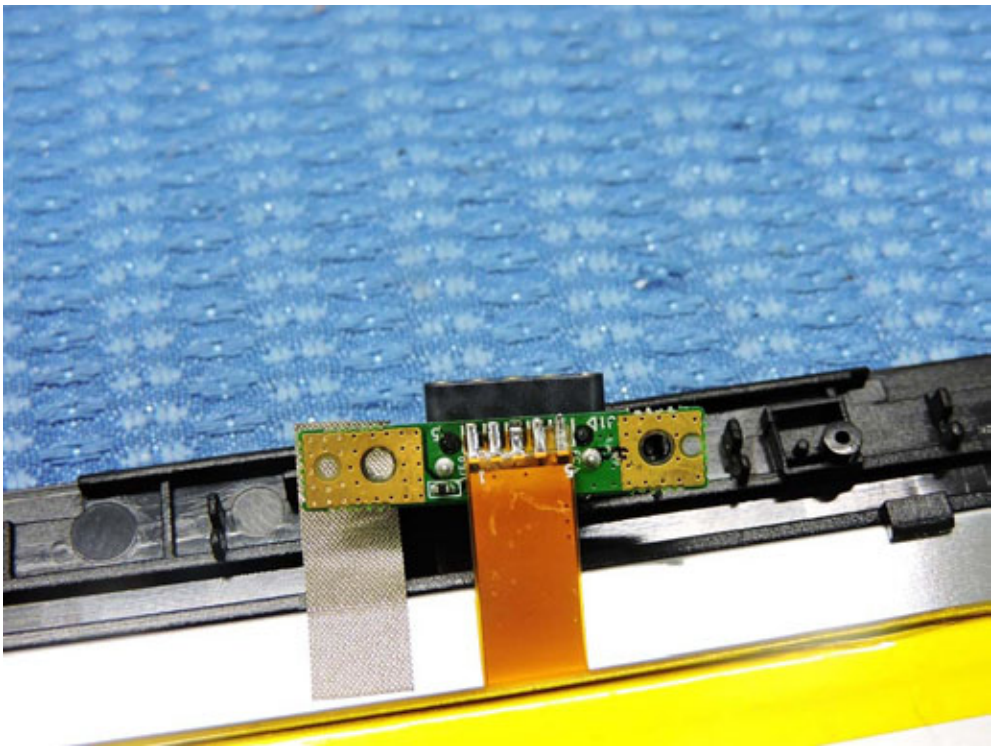
Inside view



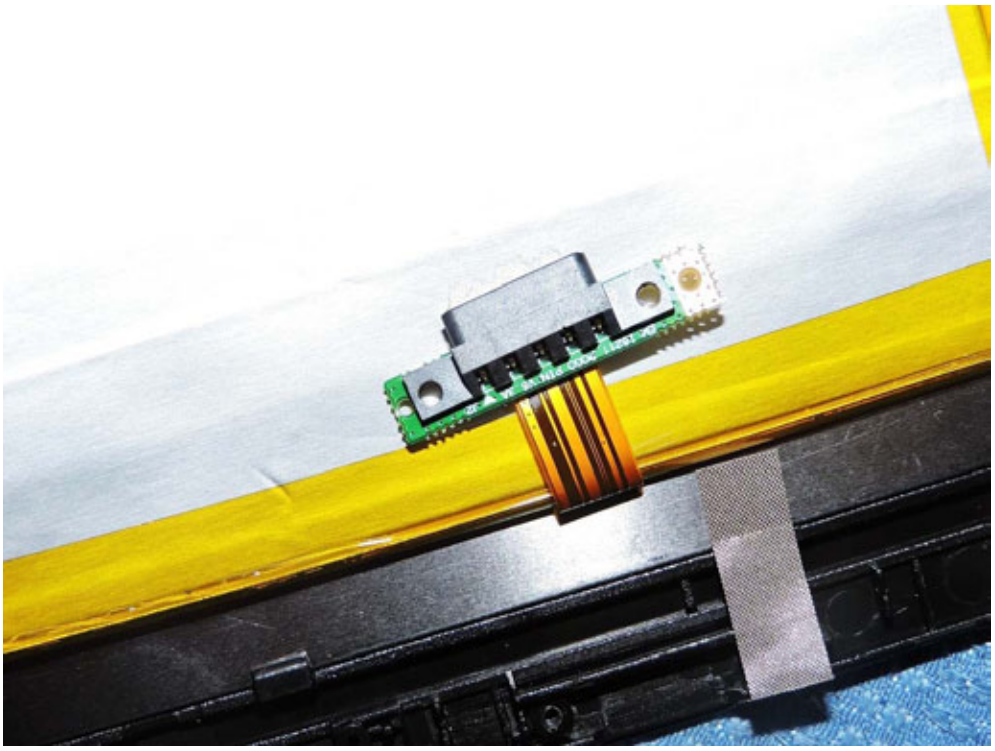


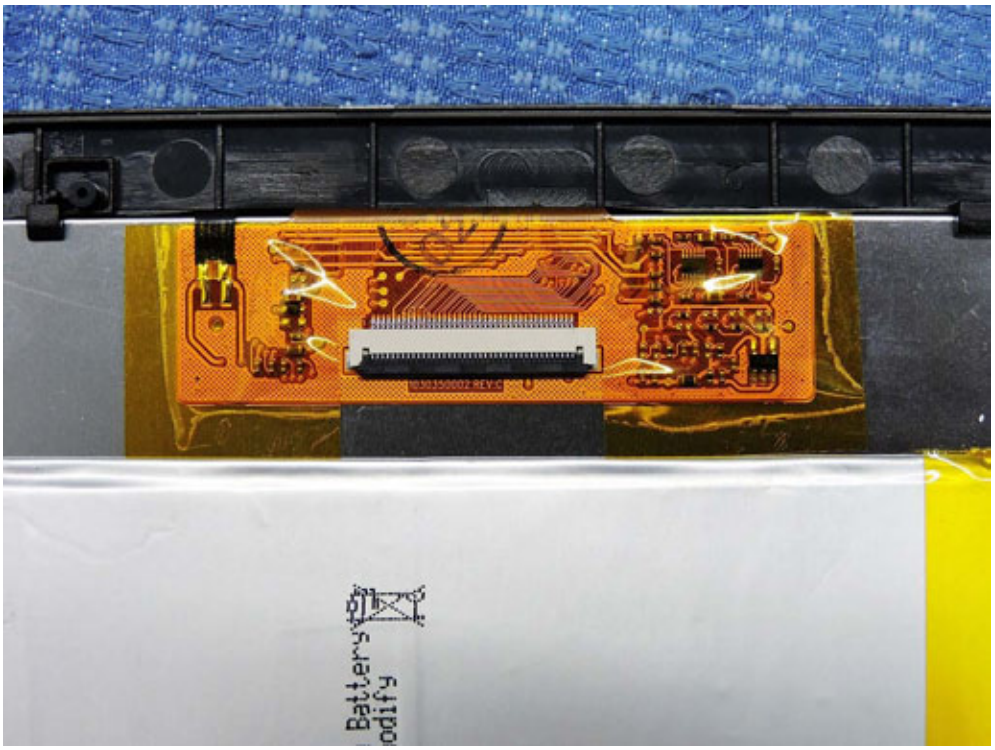
Inside view



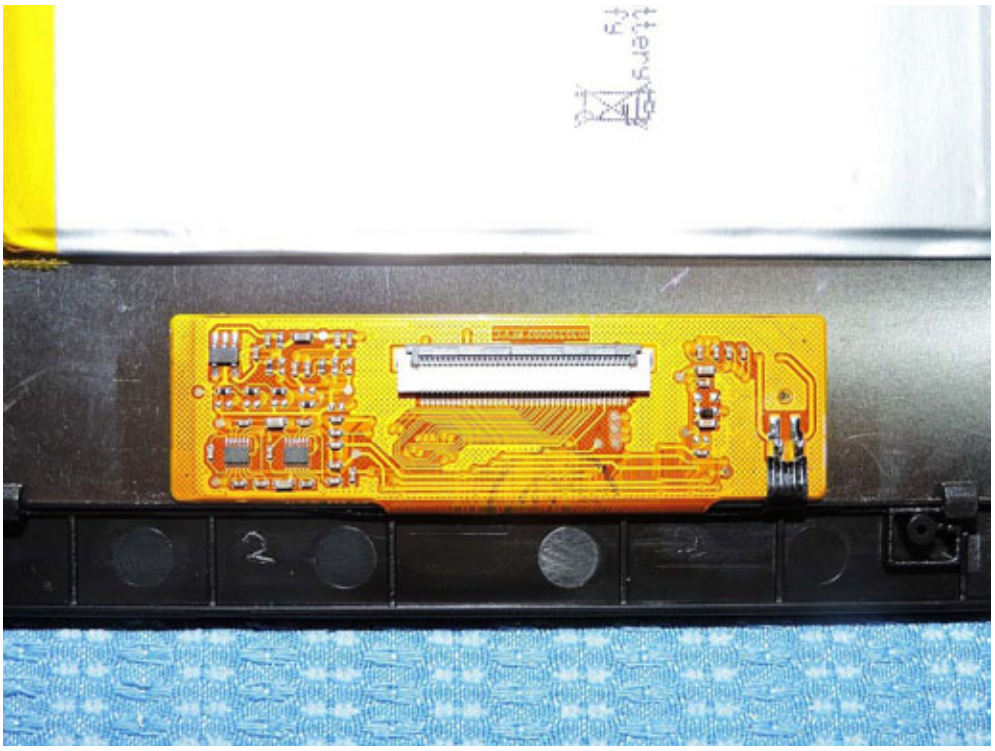


Inside view

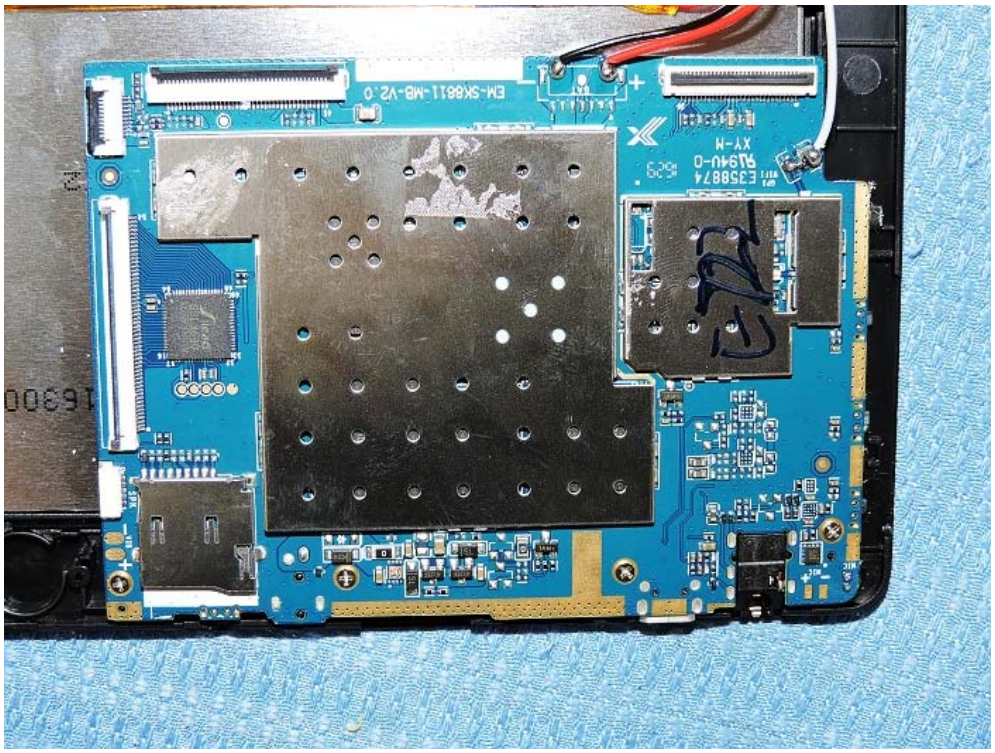




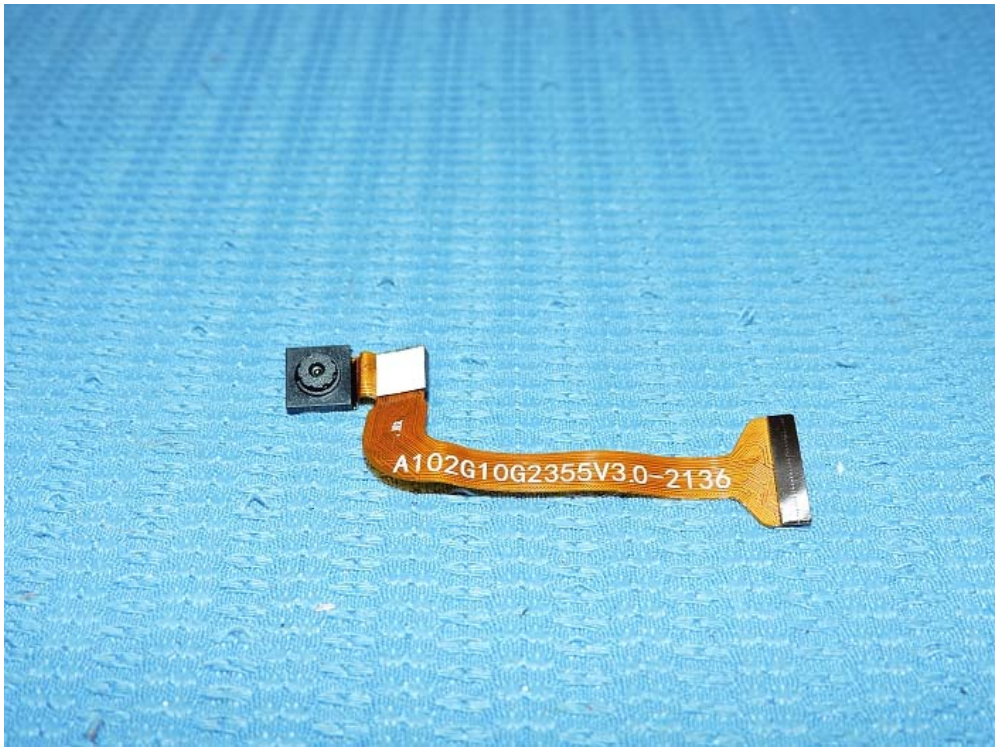
Inside view



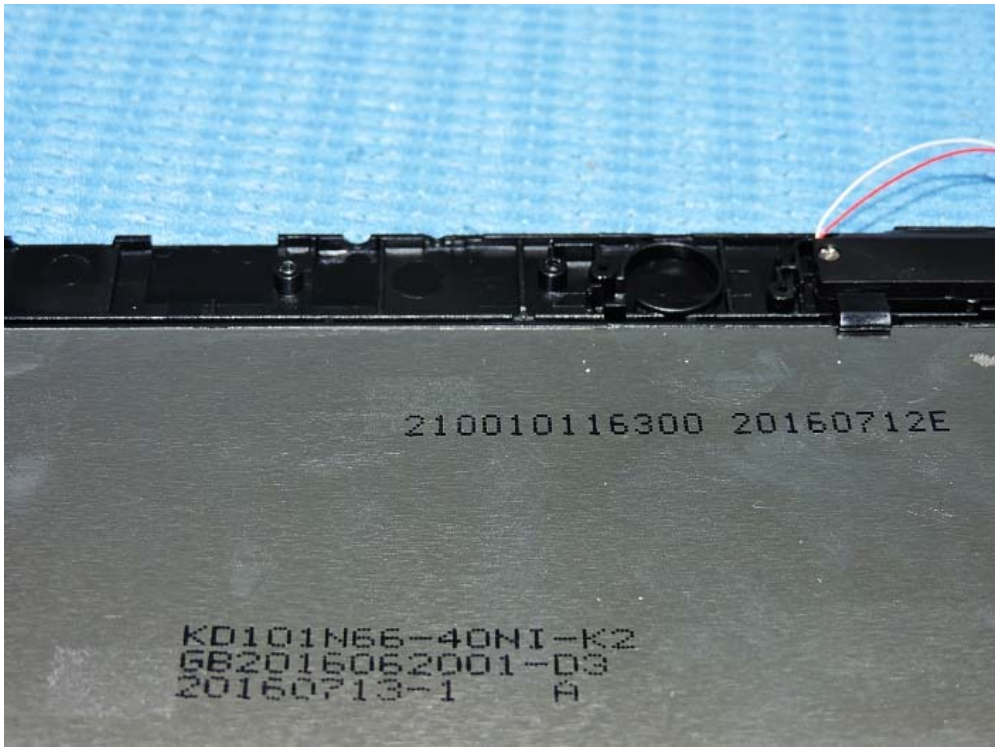
Inside view-Configure b)



Inside view-Configure b)



Inside view- Configure b)



End of the report