

FCC 47 CFR PART 15 SUBPART C TEST REPORT

For

Applicant: Maxcable & Gennex Technology Limited

Shiao No.2 Industrial Zone, Dalang Street, Baoan District,

Address: Shenzhen City, China

Product Name: Accompanist

Model Name: Accompanist-3

Brand Name: Accompanist

FCC ID: ZUY-ACCOMPANIST3

Report No.: MOST110706F2

Date of Issue: August. 8, 2011

Issued by: Most Technology Service Co., Ltd.

No.5, 2nd Langshan Road, North District, Hi-tech Industrial Address:

Park, Nanshan, Shenzhen, Guangdong, China

Tel: 86-755-8617 0306

Fax: 86-755-8617 0310

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1. VERIFICATION OF CONFORMITY

Equipment Under Test: Accompanist

Brand Name: Accompanist

Model Number: Accompanist-3

FCC ID: ZUY-ACCOMPANIST3

Applicant: Maxcable & Gennex Technology Limited

Shiao No.2 Industrial Zone, Dalang Street, Baoan District, Shenzhen City,

China

Manufacturer: Maxcable & Gennex Technology Limited

Shiao No.2 Industrial Zone, Dalang Street, Baoan District, Shenzhen City,

China

Technical Standards: 47 CFR Part 15 Subpart C

File Number: MOST110706F2

Date of test: July. 20 - August. 8, 2011

Deviation: None

Condition of Test Sample: Normal

Test Result: PASS

The above equipment was tested by *Most Technology Service Co., Ltd.* for compliance with the requirements set forth in FCC rules and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

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

Tested by (+ signature):	Petter ping			
	Petter Ping/Test Engineer	August. 8, 2011		
Review by (+ signature):	Jar	-8		
	July Wen/Lab Manager	August. 8, 2011		
Approved by (+ signature):	Teo Yan	A		
	Terry Yang/Manager	August. 8, 2011		

2. GENERAL INFORMATION

2.1 Product Information

Description:	Accompanist
Brand Name:	Accompanist
Model Name:	Accompanist-3
Power Supply:	DC: 10~12.6V by Li-ion Battery; DC: 16V by AC Adapter(100V-240V 50/60Hz);
Frequency Range:	802.11b: 2412MHz - 2462MHz 802.11g: 2412MHz - 2462MHz
Number of Channels:	IEEE 802.11b/g mode: 11 Channels IEEE 802.11n Standard-20 MHz Channel mode: 11 Channels
Modulation Technique:	IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mpbs) IEEE 802.11g mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mpbs) IEEE 802.11n Standard-20 MHz Channel mode: OFDM(6.5, 13, 19.5, 26, 39, 52, 58.5, 65.0Mbps)
Antenna Type:	Internal
Antenna Gain:	2.0dBi
Temperature Range:	-20°C ~ +50°C

NOTE:

1. For a more detailed features description about the EUT, please refer to User's Manual.

2.2 Objective

The objective of the report is to perform tests according to 47 CFR Part 15 Subpart C for the EUT FCC ID Certification:

No.	Identity	Document Title
1	47 CFR Part 15(10-1-05 Edition)	Radio Frequency Devices

2.3 Test Standards and Results

Test items and the results are as bellow:

No.	Section	Description	Result	Date of Test
1	15.247(a)(2)	6dB Bandwidth	PASS	2011-08-06
2	15.247(b)(3)	Peak Output Power	PASS	2011-08-06
3	15.247(d)	conducted spurious emission	PASS	2011-08-06
4	15.247(d)	Band Edge	PASS	2011-08-06
5	15.247(e)	Power Spectral Density	PASS	2011-08-06
6	15.207	Conducted Emission	PASS	2011-07-21
7	15.247(d) 15.205 15.209	Radiated Emission	PASS	2011-07-19

Note: 1. The test result judgment is decided by the limit of measurement standard

2. The information of measurement uncertainty is available upon the customer's request.

2.4 Environmental Conditions

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35°C

- Humidity: 30-60 %

- Atmospheric pressure: 86-106 kPa

3. TEST FACILITY

3. 1 TEST FACILITY

Test Site: Most Technology Service Co., Ltd.

Location: No.5, Langshan 2nd Rd, North Hi-Tech Industrial park, Nanshan, Shenzhen,

Guangdong, China

Description: There is one 3m semi-anechoic an area test sites and two line conducted labs for final

test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009 and CISPR

16 requirements. The FCC Registration Number is 490827.

The CNAS Registration Number is CNAS L3573.

Site Filing: The site description is on file with the Federal Communications

Commission, 7435 Oakland Mills Road, Columbia, MD 21046.

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4:2009 and CISPR 16

requirements that meet industry regulatory agency and accreditation agency

requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted

Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of

measurement up to 1GHz.

3.2 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4:2009, Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4:2009.

3.3 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 0.110 10.495 0.505 2.1735 2.1905 4.125 - 4.128 4.17725 - 4.17775 4.20725 - 4.20775 6.215 - 6.218 6.26775 - 6.26825	16.42 - 16.423 16.69475 - 16.69525 16.80425 - 16.80475 25.5 - 25.67 37.5 - 38.25 73 - 74.6 74.8 - 75.2 108 - 121.94	399.9 - 410 608 - 614 960 - 1240 1300 - 1427 1435 - 1626.5 1645.5 - 1646.5 1660 - 1710	4.5 - 5.15 5.35 - 5.46 7.25 - 7.75 8.025 - 8.5 9.0 - 9.2 9.3 - 9.5 10.6 - 12.7 13.25 - 13.4
6.31175 - 6.31225 8.291 - 8.294 8.362 8.366 8.37625 - 8.38675 8.41425 - 8.41475 12.29 - 12.293 12.51975 - 12.52025 12.57675 - 12.57725 13.36 13.41	123 - 138 149.9 - 150.05 156.52475 - 156.52525 156.7 - 156.9 162.0125 - 167.17 167.72 - 173.2 240 - 285 322 - 335.4	2200 - 2300 2310 - 2390 2483.5 - 2500 2655 - 2900 3260 - 3267 3332 - 3339 3345.8 - 3358 3600 - 4400	14.47 - 14.5 15.35 - 16.2 17.7 - 21.4 22.01 - 23.12 23.6 - 24.0 31.2 - 31.8 36.43 - 36.5 (²)

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

⁽b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasipeak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

4. TEST EQUIPMENT LIST

Instrumentation: The following list contains equipment used at MOST for testing. The equipment conforms to the CISPR 16-1/ANSI C63.2 Specifications for Electromagnetic Interference and Field Strength Instrumentation

from 10 kHz to 1.0 GHz or above.

No.	Equipment	Manufacturer	Model No.	S/N	Calculator due date
1	Test Receiver	Rohde & Schwarz	ESCI	100492	2012/03/14
2	Spectrum Analyzer	Agilent	E7405A	US44210471	2012/03/14
3	L.I.S.N.	Rohde & Schwarz	ENV216	100093	2012/03/14
4	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2012/03/14
5	Terminator	Hubersuhner	50Ω	No.1	2012/03/14
6	RF Cable	SchwarzBeck	N/A	No.1	2012/03/14
7	Test Receiver	Rohde & Schwarz	ESPI	101202	2012/03/14
8	Bilog Antenna	Sunol	JB3	A121206	2012/03/14
9	Horn Antenna	TRC	N/A	N/A	2012/03/1
10	Cable	Resenberger	N/A	NO.1	2012/03/1
11	Cable	SchwarzBeck	N/A	NO.2	2012/03/1
12	Cable	SchwarzBeck	N/A	NO.3	2012/03/1
13	DC Power Filter	DuoJi	DL2×30B	N/A	2012/03/1
14	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	2012/03/1
15	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	2012/03/1
16	Test Receiver	Rohde & Schwarz	ESCI	100492	2012/03/1
17	Absorbing Clamp	Luthi	MDS21	3635	2012/03/1
18	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2012/03/1
19	AC Power Source	Kikusui	AC40MA	LM003232	2012/03/1
20	Test Analyzer	Kikusui	KHA1000	LM003720	2012/03/1
21	Line Impendence Network	Kikusui	LIN40MA- PCR-L	LM002352	2012/03/1
22	ESD Tester	Kikusui	KES4021	LM003537	2012/03/1
23	EMCPRO System	EM Test	UCS-500-M4	V0648102026	2012/03/1
24	Signal Generator	IFR	2032	203002/100	2012/03/1
25	Amplifier	A&R	150W1000	301584	2012/03/1
26	CDN	FCC	FCC-801-M2-25	47	2012/03/1
27	CDN	FCC	FCC-801-M3-25	107	2012/03/1
28	EM Injection Clamp	FCC	F-203I-23mm	403	2012/03/1
29	RF Cable	MIYAZAKI	N/A	No.1/No.2	2012/03/1
30	Universal Radio Communication Tester	ROHDE&SCHWARZ	CMU200	0304789	2012/03/1
31	Telecommunication Antenna	European Antennas	PSA 75301R/170	0304213	2012/03/1
			ļ	+	-1

NOTE: Equipments listed above have been calibrated and are in the period of validation.

5. 47 CFR Part 15 C 15.247 Requirements

5.1 6dB Bandwidth

5.1.1 Definition

Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz.

5.1.2 Test Description

The EUT is powered by the Battery, is coupled to the Spectrum Analyzer (SA) through the Attenuator/DC Block. The path loss as the factor is calibrated to correct the reading. During the measurement, the EUT is activated and is set to operate at maximum power. The RF load attached to the EUT antenna terminal is 500hm.

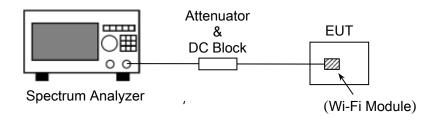


Figure 1: RF Test Setup

5.1.3 Test Result

The lowest, middle and highest channels are selected to perform testing to record the 6 dB bandwidth of the Module.

802.11b Test Mode

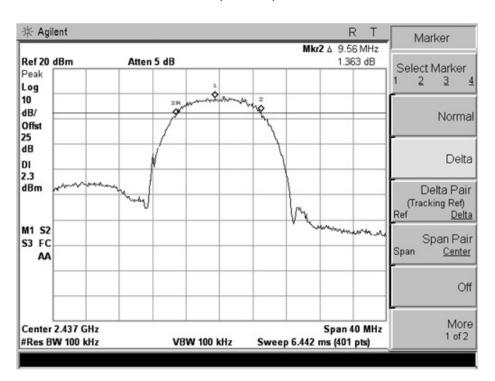
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limits (kHz)	Result
1	2412	9.71	≥500	PASS
7	2437	9.56	≥500	PASS
11	2462	9.83	≥500	PASS

#Res BW 100 kHz

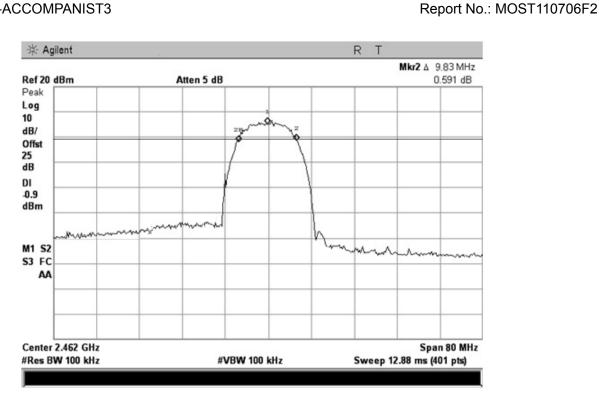
(CH Low)

Sweep 6.442 ms (401 pts)

VBW 100 kHz



(CH Mid)



(CH High)

802.11g Test Mode

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limits (kHz)	Result
1	2412	15.84	≥500	PASS
7	2437	16.19	≥500	PASS
11	2462	16.37	≥500	PASS

本 Agilent

Ref 25 dBm

Peak Log 10 dB/ Offst 25 dB DI 0.5 dBm

M1 S2 S3 FC AA

Center 2.412 GHz

#Res BW 100 kHz

Span 50 MHz

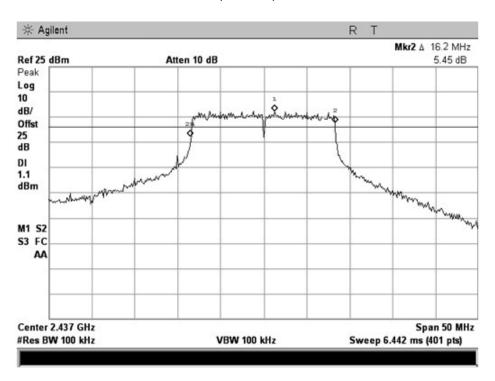
Sweep 6.442 ms (401 pts)

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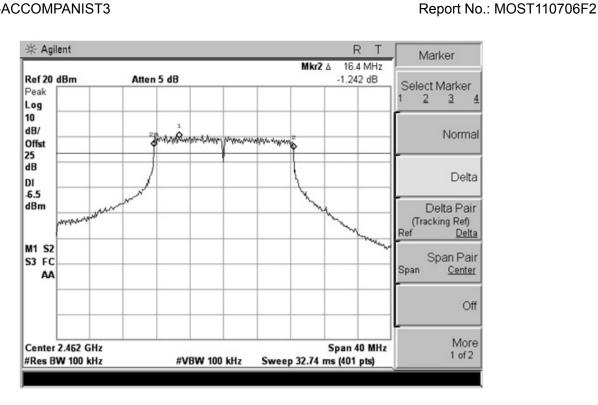
(CH Low)

VBW 100 kHz

Atten 10 dB



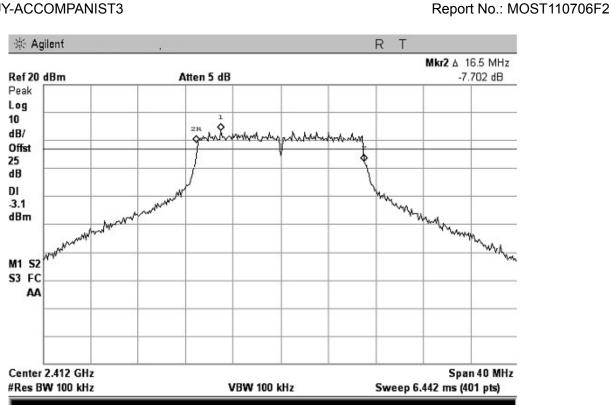
(CH Mid)



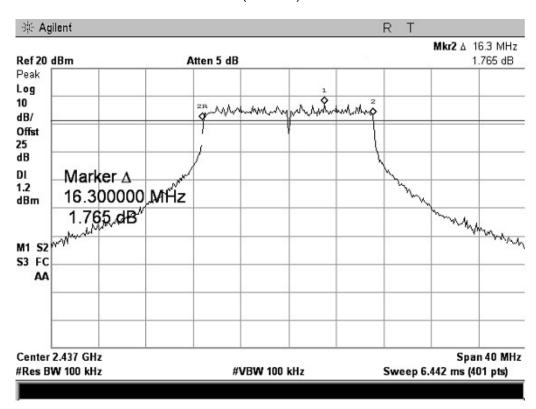
(CH High)

802.11n-20MHz Test Mode

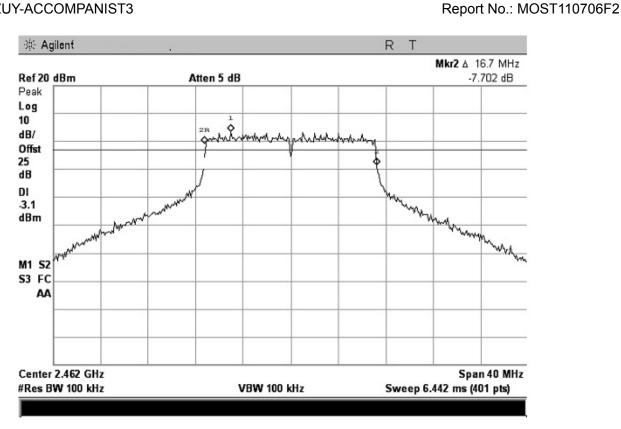
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Limits (kHz)	Result
1	2412	16.51	≥500	PASS
7	2437	16.34	≥500	PASS
11	2462	16.68	≥500	PASS



(CH Low)



(CH Mid)



(CH High)

5.2 Peak Output Power

5.2.1 Definition

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power.

5.2.2 Test Description

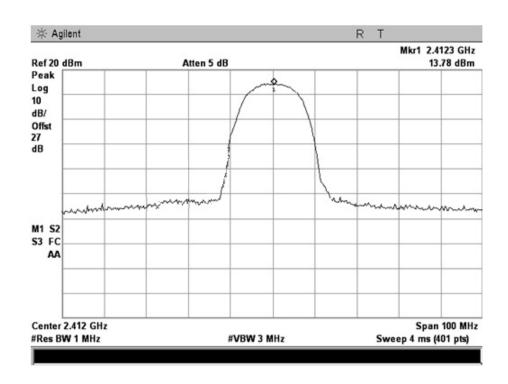
See section 5.1.2 of this report.

5.2.3 Test Result

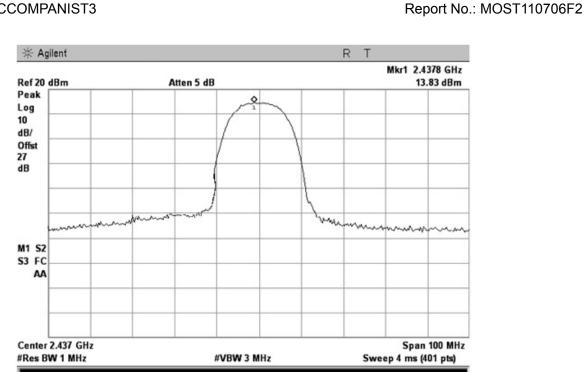
The EUT operates at maximum output power mode. The lowest, middle and highest channels are selected to perform testing to verify the conducted RF output peak power of the Module.

802.11b Test Mode

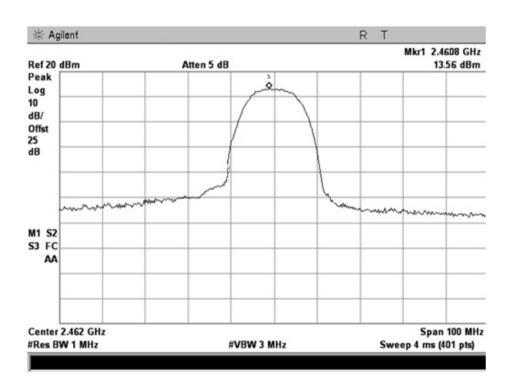
Channel	Eraguanay (MHz)	Measured Output Peak Power		Limit		Vandiat
Chamilei	Frequency (MHz)	dBm	W	dBm	W	Verdict
1	2412	13.78	0.024			PASS
7	2437	13.83	0.024	30	1	PASS
11	2462	13.56	0.023			PASS



(CH Low)



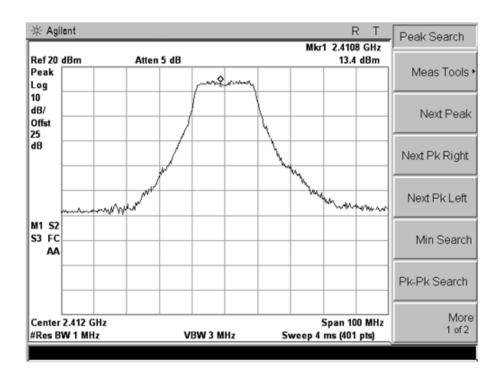
(CH Mid)



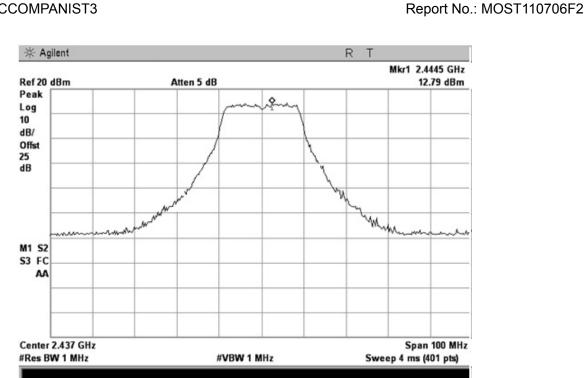
(CH High)

802.11g Test Mode

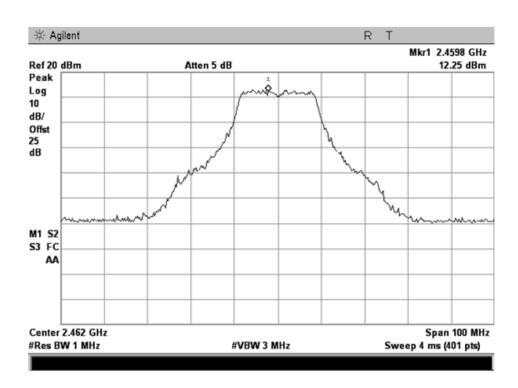
Channel	Engavon av (MHa)	Measured Output Peak Power		Limit		Verdict
Chamiei	Frequency (MHz)	dBm	W	dBm	W	verdict
1	2412	13.40	0.022			PASS
7	2437	12.79	0.019	30	1	PASS
11	2462	12.25	0.017			PASS



(CH Low)



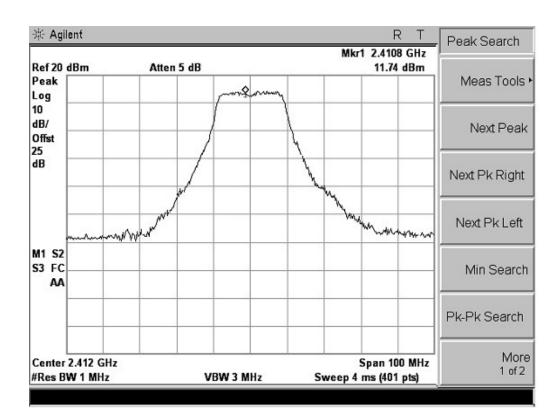
(CH Mid)



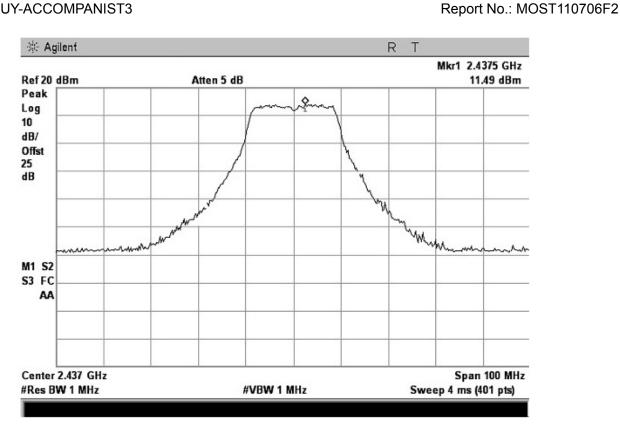
(CH High)

802.11n-20MHz Test Mode

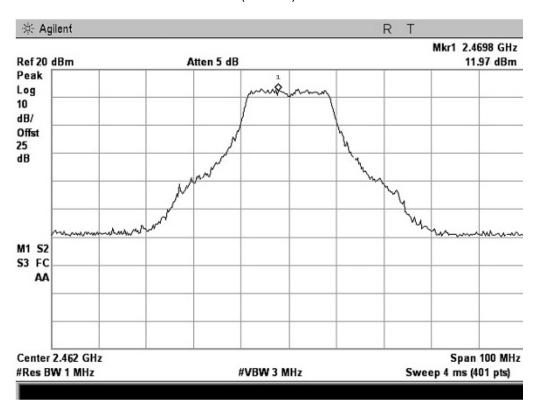
Channel	Eroguanay (MHz)	Measured Output Peak Power		Limit		Verdict
Chamilei	Frequency (MHz)	dBm	W	dBm	W	verdict
1	2412	11.74	0.015			PASS
7	2437	11.49	0.014	30	1	PASS
13	2472	11.97	0.016			PASS



(CH Low)



(CH Mid)



(CH High)

5.3 Conducted Spurious Emission

5.3.1 Definition

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

5.3.2 Test Description

See section 5.1.2 of this report.

5.3.3 Test Result

The measurement frequency range is from 30MHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions.

Channel	Frequency (MHz)	Fundamental Level (dBm)	Emission Level Limit (dBm)
802.11b Low	2412	13.78	-6.22
802.11b Mid	2437	13.83	-6.17
802.11b High	2462	13.56	-6.44
802.11g Low	2412	13.40	-6.60
802.11g Mid	2437	12.79	-7.21
802.11g High	2462	12.25	-7.75
802.11 n-20M Low	2412	11.74	-8.26
802.11 n-20M Mid	2437	11.49	-8.51
802.11 n-20M High	2462	11.97	-8.03

NO.	Frequency	Measurement Bandwidth	Emission Level	Limit	Margin		
	MHz	KHz	(dBm)	dBm	dB		
TX:802.11	TX:802.11 b Low Channel						
1	<1000	100	\	-6.22	>20		
2	4824	100	-36.26	-6.22	>20		
3	7236	100	\	-6.22	>20		
4	9648	100	\	-6.22	>20		
5	12060	100	\	-6.22	>20		
6	other	100	\	-6.22	>20		
TX: 802.11	b Middle Channel						
1	<1000	100	\	-6.17	>20		
2	4874	100	-37.82	-6.17	>20		
3	7311	100	\	-6.17	>20		
4	9748	100	\	-6.17	>20		
5	12185	100	\	-6.17	>20		
6	other	100	\	-6.17	>20		
TX: 802.11	b High Channel						
1	<1000	100	\	-6.44	>20		
2	4924	100	-35.92	-6.44	>20		
3	7386	100	\	-6.44	>20		
4	9848	100	\	-6.44	>20		
5	12310	100	\	-6.44	>20		
6	other	100	\	-6.44	>20		
Measurement uncertainty:±3.2dB							

NO.	Frequency	Measurement Bandwidth	Emission Level (dBm)	Limit	Margin		
	MHz	KHz	dBm	dBm	dB		
TX:802.11	TX:802.11 g Low Channel						
1	<1000	100	\	-6.60	>20		
2	4824	100	-37.83	-6.60	>20		
3	7236	100	\	-6.60	>20		
4	9648	100	\	-6.60	>20		
5	12060	100	\	-6.60	>20		
6	other	100	\	-6.60	>20		
TX: 802.11	g Middle Channel						
1	<1000	100	\	-7.21	>20		
2	4874	100	-38.41	-7.21	>20		
3	7311	100	\	-7.21	>20		
4	9748	100	\	-7.21	>20		
5	12185	100	\	-7.21	>20		
6	other	100	\	-7.21	>20		
TX: 802.11	TX: 802.11 g High Channel						
1	<1000	100	\	-7.75	>20		
2	4924	100	-37.36	-7.75	>20		
3	7386	100	\	-7.75	>20		
4	9848	100	\	-7.75	>20		
5	12310	100	\	-7.75	>20		
6	other	100	\	-7.75	>20		
Measurement uncertainty:±3.2dB							

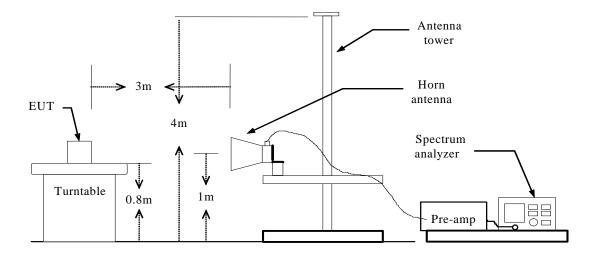
NO.	Frequency	Measurement Bandwidth	Emission Level (dBm)	Limit	Margin		
	MHz	KHz	dBm	dBm	dB		
TX:802.11	TX:802.11 n-20MHz Low Channel						
1	<1000	100	\	-8.26	>20		
2	4824	100	-38.34	-8.26	>20		
3	7236	100	\	-8.26	>20		
4	9648	100	\	-8.26	>20		
5	12060	100	\	-8.26	>20		
6	other	100	\	-8.26	>20		
TX: 802.11	n-20MHz Middle Ch	nannel		1			
1	<1000	100	\	-8.51	>20		
2	4874	100	-37.13	-8.51	>20		
3	7311	100	\	-8.51	>20		
4	9748	100	\	-8.51	>20		
5	12185	100	\	-8.51	>20		
6	other	100	\	-8.51	>20		
TX: 802.11	TX: 802.11 n-20MHz High Channel						
1	<1000	100	\	-8.03	>20		
2	4924	100	-37.62	-8.03	>20		
3	7386	100	\	-8.03	>20		
4	9848	100	\	-8.03	>20		
5	12310	100	\	-8.03	>20		
6	other	100	\	-8.03	>20		
Measurement uncertainty:±3.2dB							

5.4 Band Edge

5.4.1 Definition

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

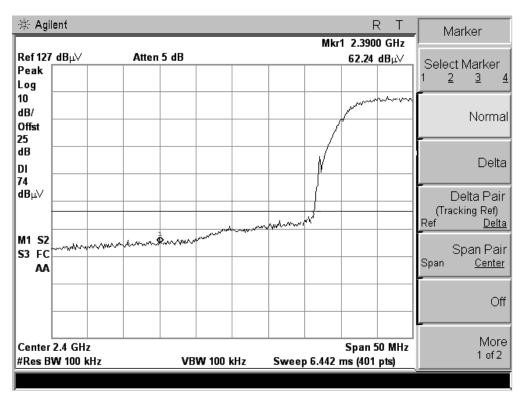
5.4.2 Test Description



5.4.3 Test Result

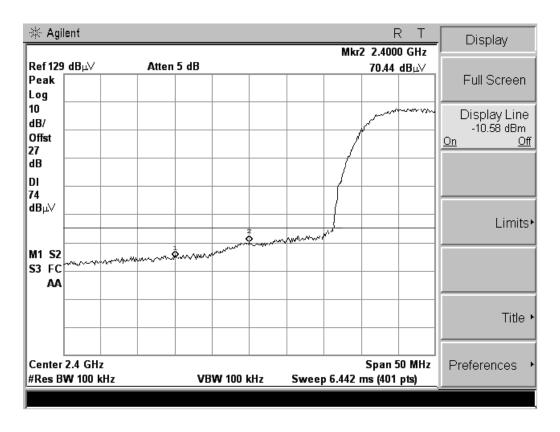
The EUT operates at continuous transmit test mode. The peak and average test data of the lowest and highest channels are tested to verify the band edge emissions.

802.11b Test Mode

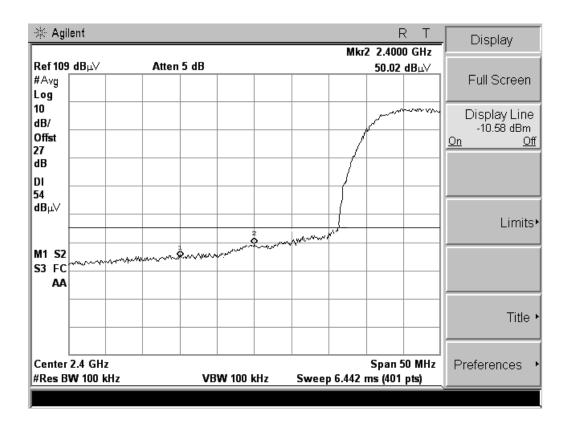


(CH Low, Horizontal, Peak)

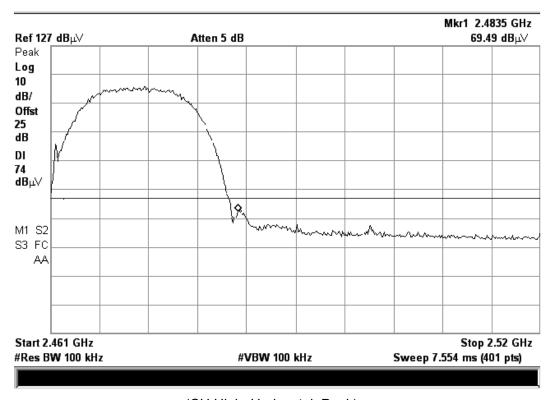
(CH Low, Horizontal, Average)



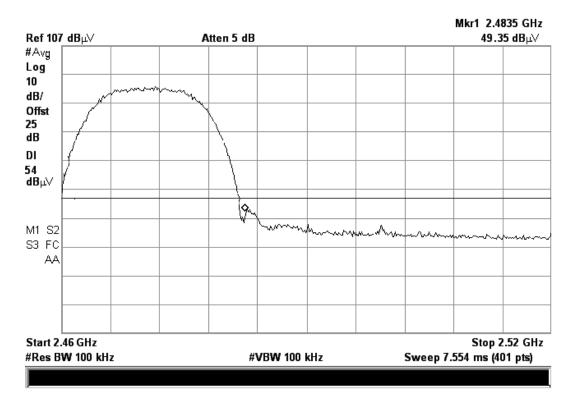
(CH Low, Vertical, Peak)



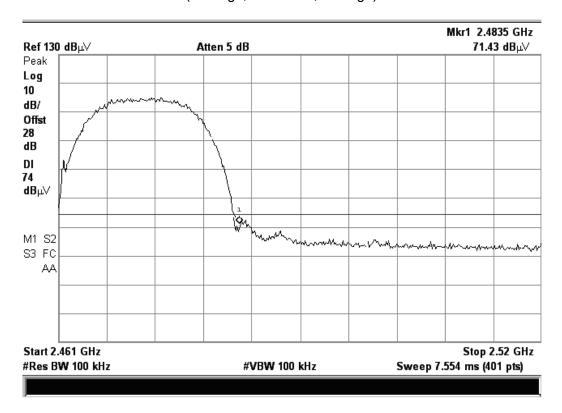
(CH Low, Vertical, Average)



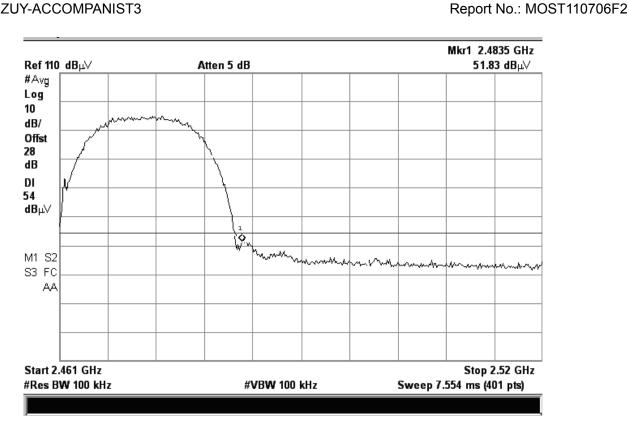
(CH High, Horizontal, Peak)



(CH High, Horizontal, Average)

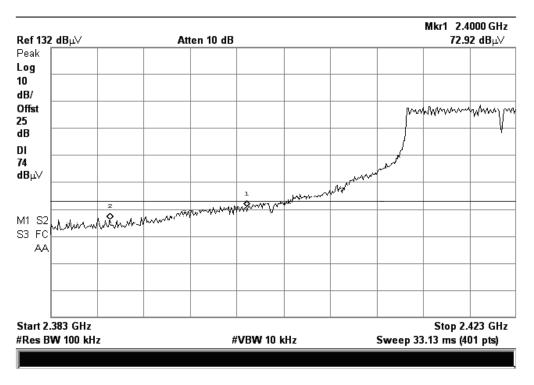


(CH High, Vertical, Peak)

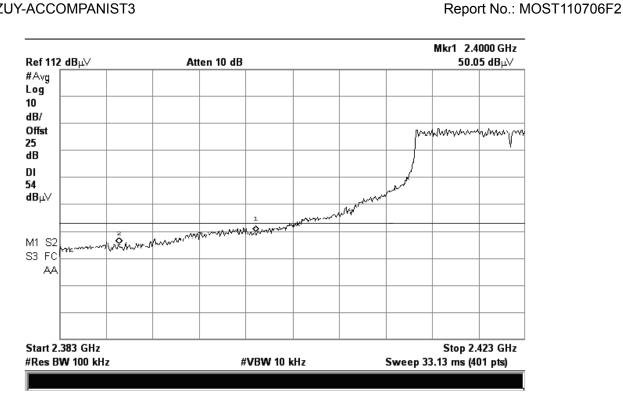


(CH High, Vertical, Average)

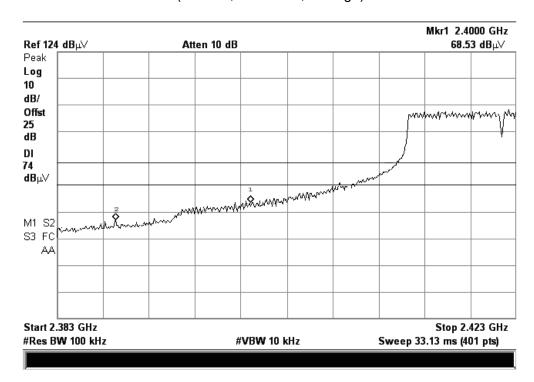
802.11g Test Mode



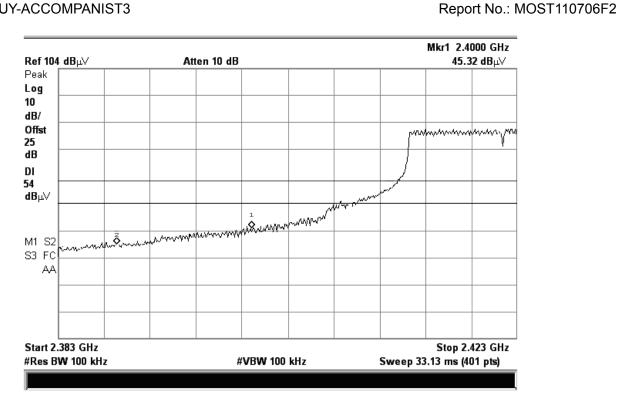
(CH Low, Horizontal, Peak)



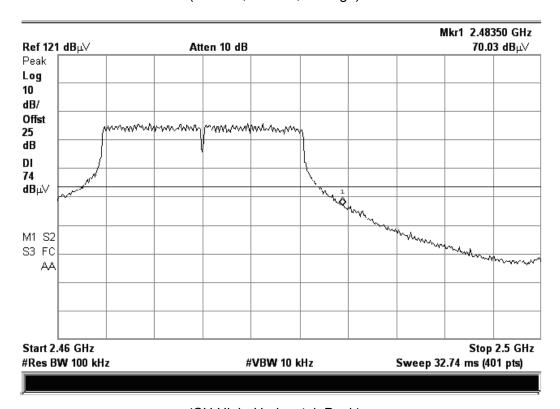
(CH Low, Horizontal, Average)



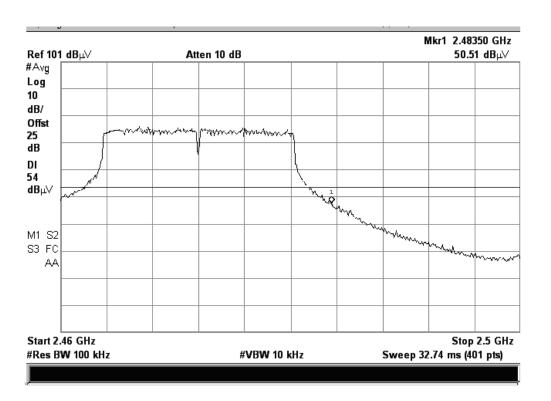
(CH Low, Vertical, Peak)



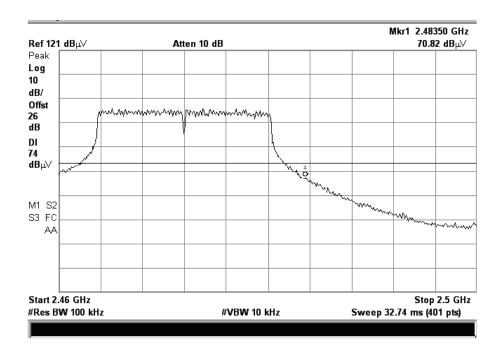
(CH Low, Vertical, Average)



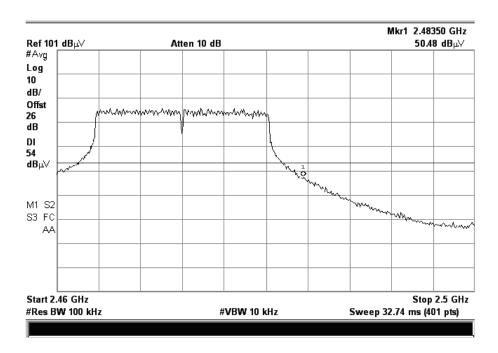
(CH High, Horizontal, Peak)



(CH High, Horizontal, Average)

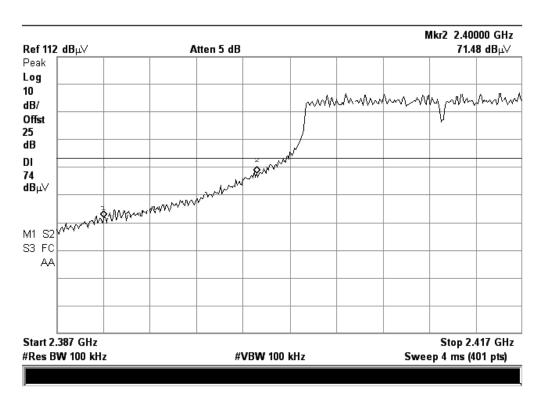


(CH High, Vertical, Peak)

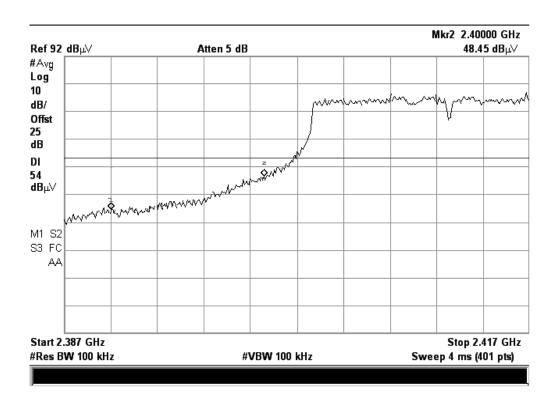


(CH High, Vertical, Average)

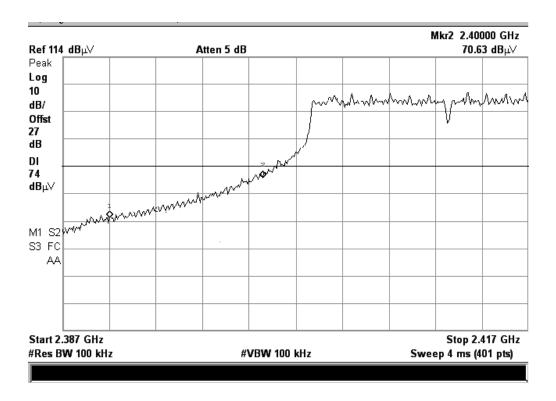
802.11n-20MHz Test Mode



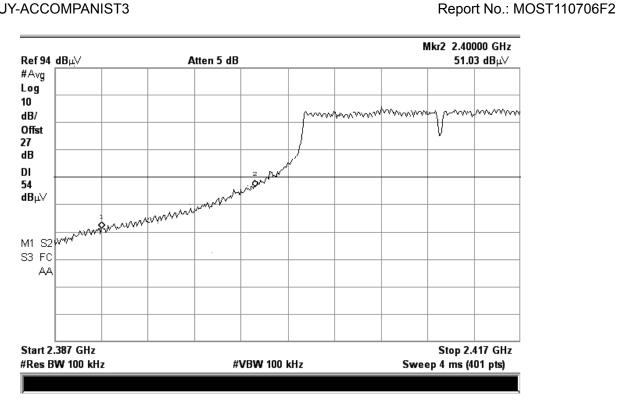
(CH Low, Horizontal, Peak)



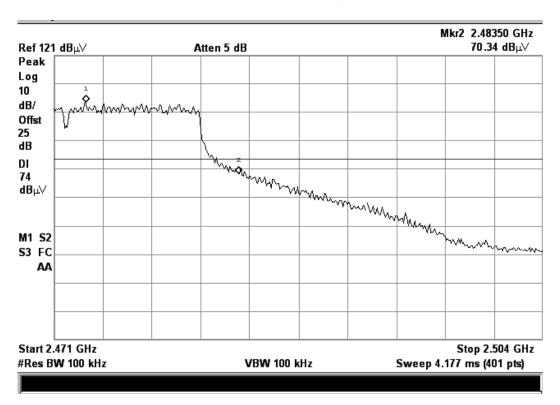
(CH Low, Horizontal, Average)



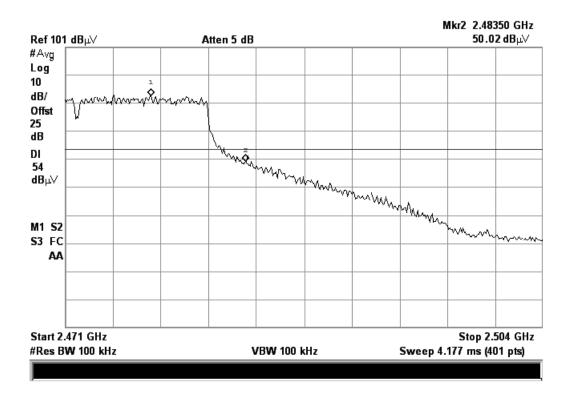
(CH Low, Vertical, Peak)



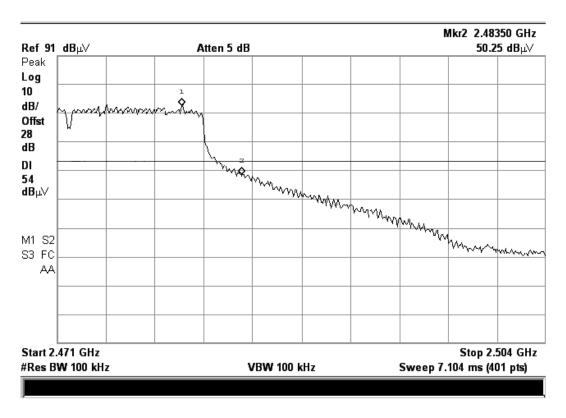
(CH Low, Vertical, Average)



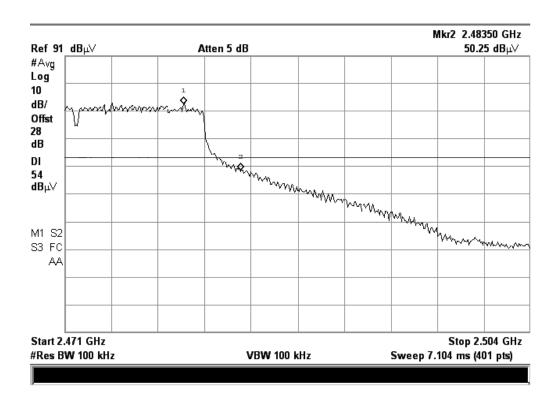
(CH High, Horizontal, Peak)



(CH High, Horizontal, Average)



(CH High, Vertical, Peak)



(CH High, Vertical, Average)

5.5 Power Spectral Density (PSD)

5.5.1 Definition

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

5.5.2 Test Description

See section 5.1.2 of this report.

5.5.3 Test Result

The lowest, middle and highest channels are tested to verify the power spectral density.

802.11b Test Mode

Channel	Frequency (MHz)	PSD (dBm)	Limits(dBm)	Result
1	2412	-14.35		PASS
6	2437	-15.27	≤8	PASS
11	2462	-14.39		PASS

802.11g Test Mode

Channel	Frequency (MHz)	PSD (dBm)	Limits(dBm)	Result
1	2412	-19.26		PASS
6	2437	-20.57	≤8	PASS
11	2462	-18.83		PASS

802.11n-20MHz Test Mode

Channel	Frequency (MHz)	PSD (dBm)	Limits(dBm)	Result
1	2412	-16.21		PASS
6	2437	-17.17	≤8	PASS
11	2462	-16.65		PASS

5.6 Conducted Emission

5.6.1 Definition

According to FCC section 15.207, for an intentional radiator 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 µH/50 ohms line impedance stabilization network (LISN).

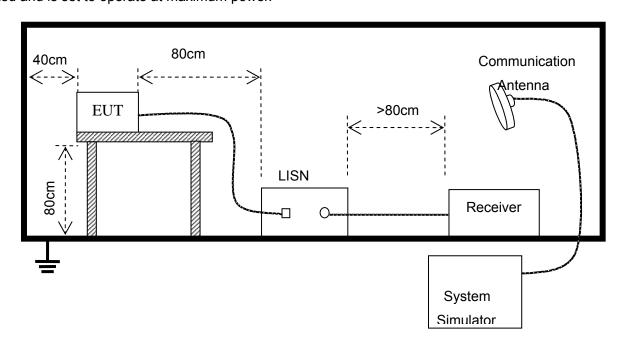
Fraguency	Maximum RF	Line Voltage
Frequency	Q.P.(dBuV)	Average(dBuV)
150kHz-500kHz	66-56	56-46
500kHz-5MHz	56	46
5MHz-30MHz	60	50

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 0.50 MHz

5.6.2 Test Description

The EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply. The path loss as the factor is calibrated to correct the reading. During the measurement, the EUT is activated and is set to operate at maximum power.



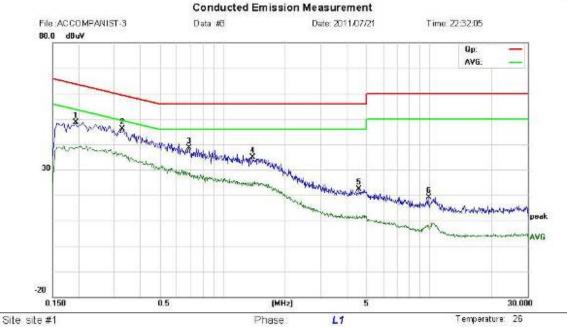
5.6.3 Test Result



Address:No 5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Humidity: 60 %

Tel: 0755-86170306 Fax: 0755-86170310



Power: AC 1209/60Hz

Limit: FCC Part15 B Class B QP

EUT: ACCOMPANIST M/N: ACCOMPANIST-3 Mode: FULL LOAD

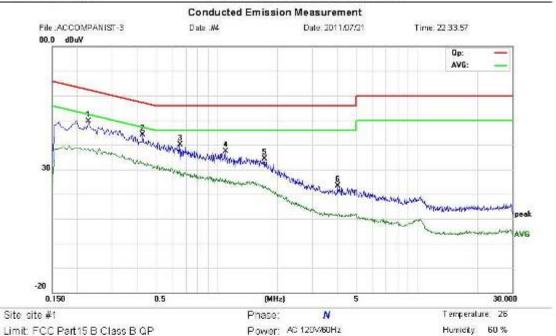
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBu∀	dBuV	dB	Detector	Comment
1		0.1940	36.93	11.64	48.57	63.86	-15.29	peak	
2	*	0.3260	34.89	11.16	46.05	59.55	-13.50	peak	
3		0.6860	28.57	10.00	38.57	56.00	-17.43	peak	
4		1.3820	25.35	9.62	34.97	56.00	-21.03	peak	
5		4.5500	10.75	11.55	22.30	56.00	-33.70	peak	
6		9.9020	9.99	9.06	19.05	60,00	-40.95	peak	

^{*:}Maximum data x:Over limit !:over margin



Address No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong China Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part 15 B Class B QP

EUT: ACCOMPANIST M/N: ACCOMPANIST-3 Mode: FULL LOAD

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		MHz	dBu∀	dB	dBuV	dBuV	ćΒ	Detector	Comment	
1	*	0.2260	37.73	11.83	49.56	62.60	-13.04	peak		
2		0.4260	33.58	10.49	44.07	57.33	-13.26	peak		
3		0.6540	30.03	10.00	40.03	56.00	-15.97	peak		
4		1.0940	27.36	9.91	37.27	56.00	-18.73	peak		
5		1,7100	24.97	9 28	34.26	58 00	-21.74	peak		
6		4.0220	12.38	11.02	23.38	58.00	-32.62	peak		

^{*:}Maximum data x:Over limit I:over margin

5.7 Radiated Emission

5.7.1 Definition

According to FCC section 15.247(d), radiated emission outside the frequency band attenuation below the general limits specified in § 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

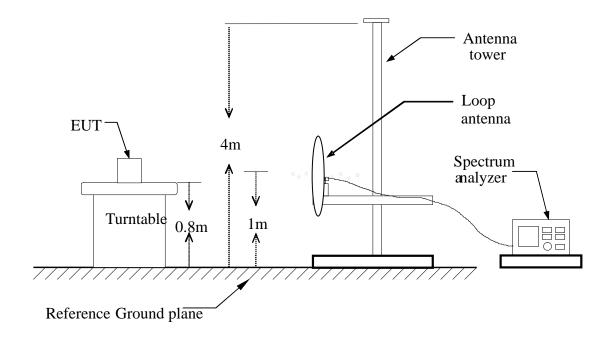
Frequency (MHz)	Field Strength (μV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 - 1.705	24000/F(kHz)	30
1.705 - 30.0	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

As shown in FCC section 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

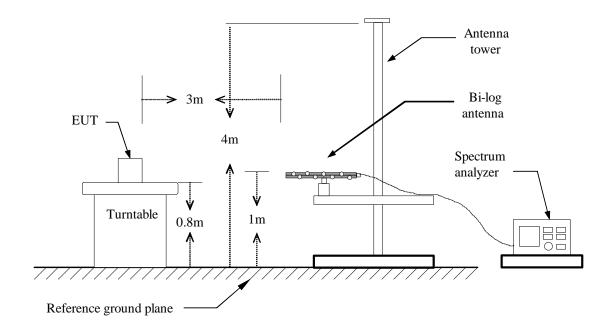
5.7.2 Test Description

A. Test Setup:

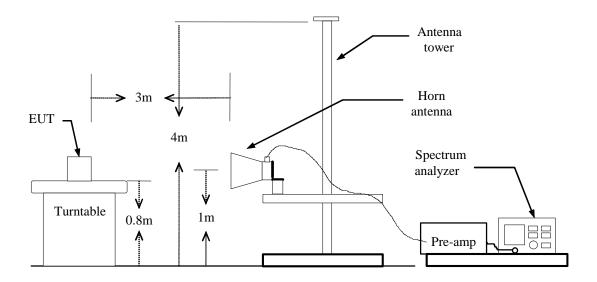
Below 30MHz:



Above 30MHz and blow 1GHz:



Above 1GHz:



B. Test procedures

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 3. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Set the spectrum analyzer in the following setting as:

Below 1GHz: RBW=100 kHz / VBW=300 kHz / Sweep=AUTO

Above 1GHz: (a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

7. Repeat above procedures until the measurements for all frequencies are complete.

5.7.3 Test Result

Below 30MHz:

Freq.	Ant. Pol	Peak	AV	Ant. / CL	Actu	al Fs	Peak	AV	AV
(MHz)	H/V	Reading	Reading	CF	ACIU	ai FS	Limit	Limit	Margin
		(dBuV)	(dBuV)	(dB)	Peak AV		(dBuV/m)	(dBuV/m)	(dB)
					(dBuV/m)	(dBuV/m)			
N/A	Н								PASS
N/A	V								PASS
							·		

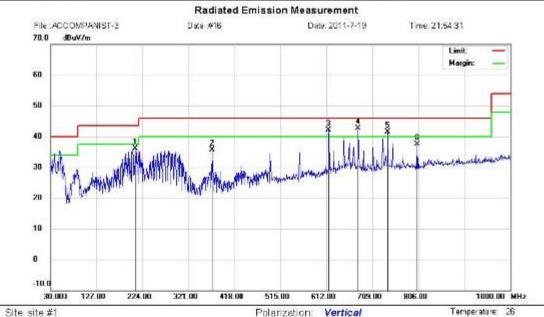
Note: No detected below 30MHz.

Above 30MHz and Below 1 GHz



Address No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guengdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



ore are #1

Limit FCC Part15 B 3M Radiation

EUT; ACCOMPANIST M/N: ACCOMPANIST-3

Mode: FULL LOAD

Note:

No.	Mk	c F	req.	Reading Level	Correct Factor	Measure- ment	Limit	Over		Antenna Height	Table Degree	
		I.	dHz	dBu∀	dB	dBuV/m	dBuV/m	dВ	Detector	cm	degree	Comment
1		209.4	499	20.17	16.03	36.20	43.50	-7.30	peak			
2		370.4	700	17.50	18.20	35.70	46.00	-10.30	peak			
3	1	816.8	3500	18.60	23:41	42.01	46.00	-3.99	QP			
4	•	678.9	299	18.29	24.51	42.80	46.00	-3.20	QP			
5	1	741.0	0099	15.88	25.56	41.44	46.00	-4.56	QP			
6		802.1	200	11.58	25.90	37.48	46.00	-8.52	peak			

Power AC 120M60Hz

Humidity:

Distance:

61 %

^{*:}Maximum data x:Over limit I:over margin



Address No.5 Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China Tel: 0755-86170306 Fax: 0755-86170310

Radiated Emission Measurement File: ACCOMPANIST-3 Date: 2011-7-19 Time: 21:55.46 dBuV/m Limit 60 50 40 30 20 10 ū 30.000 127.00 224.00 321.00 418.00 515.00 612.00 709.00 806.00 1000.00 MHz

Site site #1

Limit: FCC Part15 B 3M Radiation

EUT: ACCOMPANIST M/N: ACCOMPANIST-3 Mode: FULL LOAD

Note:

Power AC120V/60Hz

Polarization: Horizontal

Humidity: 51 %

Temperature, 26

Distance:

No.	M	k.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Оуег		Antenna Height	Table Degree	
			MHz	dBu∀	dΒ	dBuV/m	dBuV/m	dВ	Detector	om	degree	Comment
1	*	20	4.5999	23.31	17.17	40.48	43.50	-3.02	QP			
2	1	20	1.2300	23.13	19.41	42.54	46.00	-3.46	QP			
3	1	370	0.4700	24.00	18.20	42.20	46.00	-3.80	QP			
4		493	3.6600	16.49	21.55	38.04	46.00	-7.96	QP			
5	1	74	1.0099	16.39	25.56	41,95	46.00	-4,05	QP			
6	1	803	2.1200	14 26	25.90	40.16	46.00	-5.84	QP			

^{*:}Maximum data x:Over limit I:over margin

Above 1 GHz

Operation Mode:Operation ModeTest Date:2011-07-19Temperature:20°CTested by:Petter PingHumidity:70 % RHPolarity:Ver. / Hor.

Freq.	Ant. Pol	Peak	AV	Ant. / CL	A of u	al Fs	Peak	AV	AV
(MHz)	H/V	Reading	Reading	CF	ACIU	Idi FS	Limit	Limit	Margin
		(dBuV)	(dBuV)	(dB)	Peak AV		(dBuV/m)	(dBuV/m)	(dB)
					(dBuV/m)	(dBuV/m)			
5882.50	Н	53.59	29.77	17.76	71.35	47.53	74.00	54.00	-6.47
N/A	Н								
5882.50	V	51.72	25.27	17.76	69.48	43.03	74.00	54.00	-10.97
N/A	V								

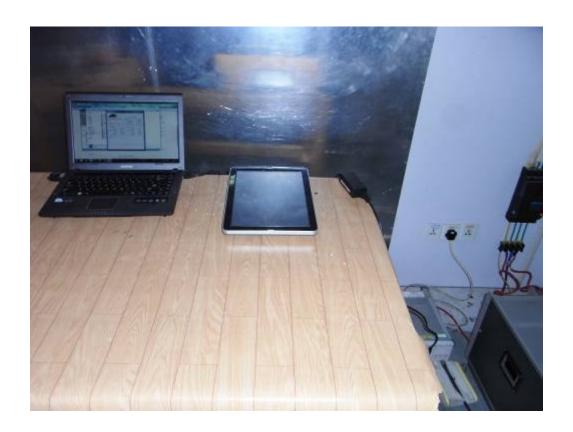
Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
- 3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
- 4. Data of measurement within this frequency range shown " --- " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with "N/A" remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 6. Margin (dB) = Remark result (dBuV/m) Average limit (dBuV/m).
- 7. No additional spurious emissions found between lowest internal generated and 30 MHz

APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

CE TEST SETUP





Report No.: MOST110706F2











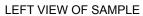
APPENDIX 2 PHOTOGRAPHS OF EUT

FRONT VIEW OF SAMPLE



BACK VIEW OF SAMPLE

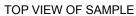






RIGHT VIEW OF SAMPLE







BOTTOM VIEW OF SAMPLE



PHOTO OF POWER SUPPLY



(MODEL NAME:FJ-SW1603000T)



(MODEL NAME:WT1602000)





PHOTO OF THE BATTERY

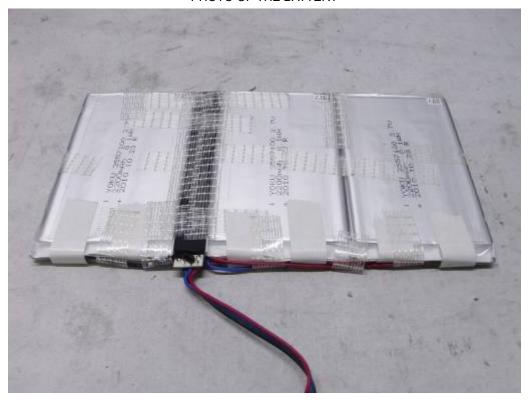


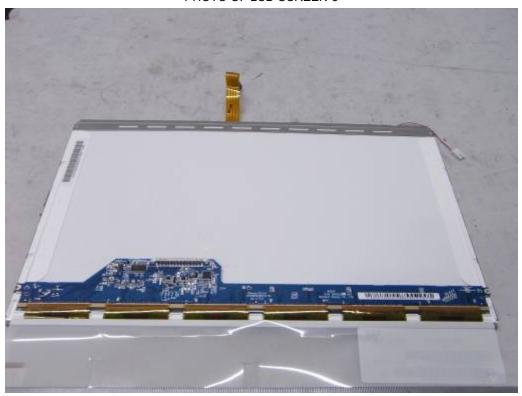




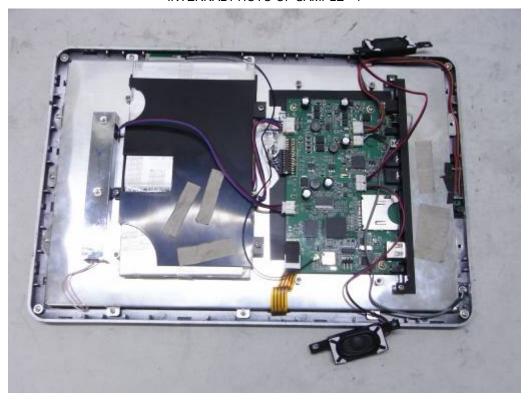
PHOTO OF LCD SCREEN-2







INTERNAL PHOTO OF SAMPLE - 1



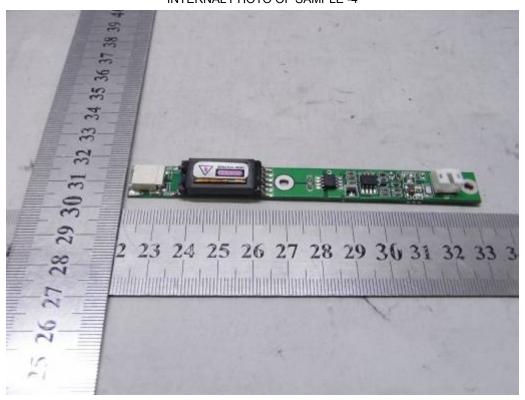
INTERNAL PHOTO OF SAMPLE -2



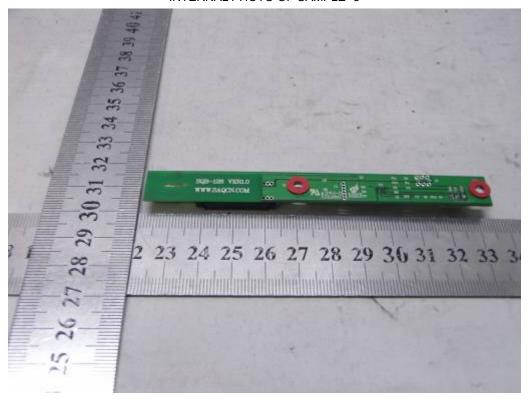
INTERNAL PHOTO OF SAMPLE -3



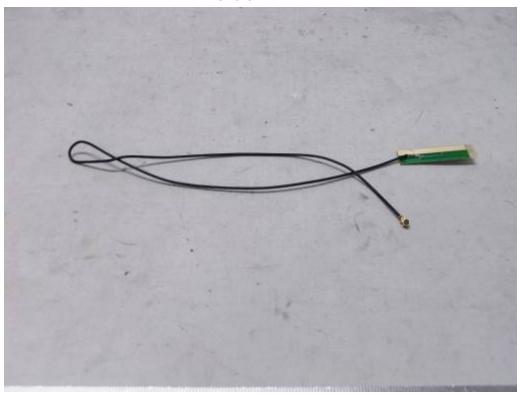
INTERNAL PHOTO OF SAMPLE -4



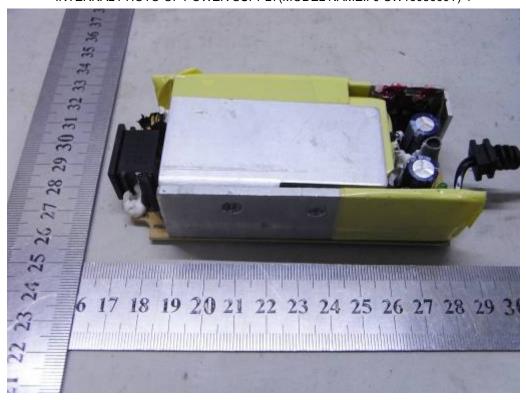
INTERNAL PHOTO OF SAMPLE -5



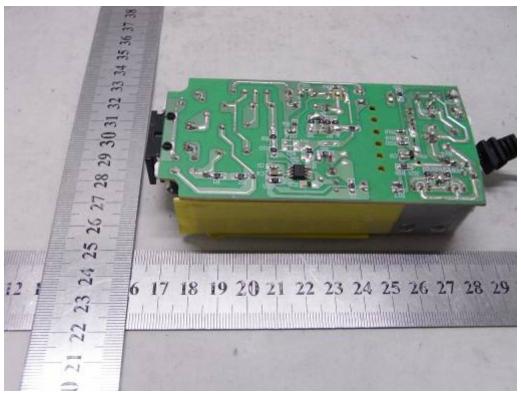




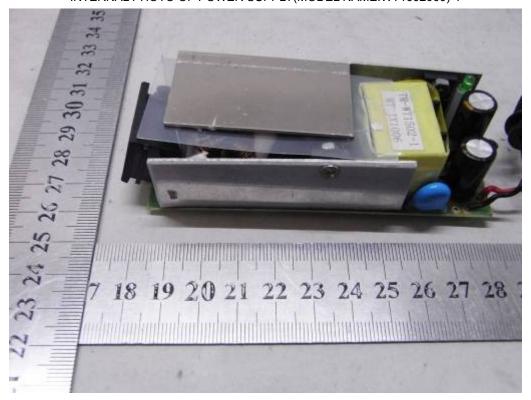
INTERNAL PHOTO OF POWER SUPPLY(MODEL NAME:FJ-SW1603000T)-1



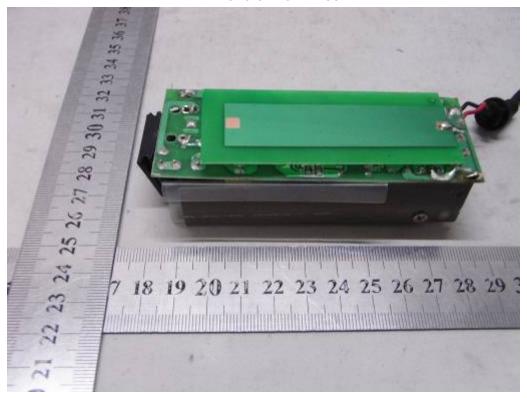




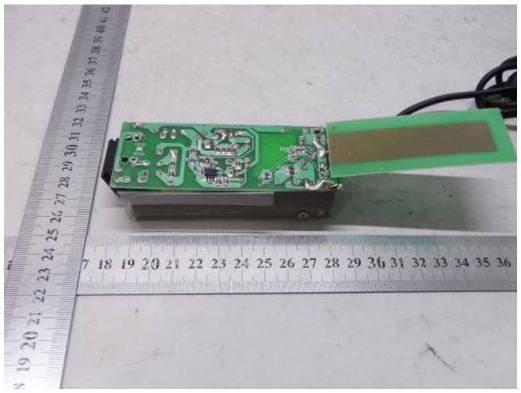
INTERNAL PHOTO OF POWER SUPPLY(MODEL NAME:WT1602000)-1







INTERNAL PHOTO OF POWER SUPPLY-3



-----END OF REPORT-----