TECHNICAL REPORT

卓時檢測 TIMEWAY TESTING LABORATORY

ilac-MRA CNAS TESTING CNAS L2292

ISO/IEC17025 Accredited Lab.

Report No: FCC 0904080-02
File reference No: 2009-08-13

Applicant: SUNGALE ELECTRONICS (SHENZHEN) CO., LTD

Product: Digital photo frame

Model No: ID800WT

Trademark: N/A

Test Standards: FCC Part 15 Subpart B: 2008

Test result: It is herewith confirmed and found to comply with the requirements set up by ANSI C63.4&FCC Part 15 regulations for the evaluation of electromagnetic compatibility

Approved By

Jack Chung

Jack Chung

Manager

Dated: August 13,2009

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 TECHNOLOGY CONSULTING CO LTD

East 5/Block 4, Anhua Industrial Zone, No.8, Tairan Rd. Chegongmiao, FuTian District, Shenzhen, CHINA.

Tel (755) 83448688 Fax (755) 83442996

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 CNAS. This approval result is accepted by MRA of APLAC.

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

CNAS-LAB Code: L2292

The EMC Laboratory has been assessed and in compliance with CNAS-CL01 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-01

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-01.

Test Report Conclusion

Content

1.0 General Details

1.1 Test Lab Details

Name : SHENZHEN TIMEWAY TECHNOLOGY CONSULTING CO LTD

Address: East 5/Block 4, Anhua Industrial Zone, No.8,Tairan Rd. CheGongMiao, FuTian District, Shenzhen, CHINA.

Telephone: (755) 83448688

Fax: (755) 83442996

1.2 Applicant Details

Applicant: Dongguan Tangxia USmart Electronic Products Limited

Address: No.12,Lu Yi 2 Road, Tang Xia Town,Dongguan City,Guang Dong Prov.,China

Telephone: +86-769-87911890

Fax: +86-769-87915263

1.3 Description of EUT

Product: Digital photo frame

Manufacturer: SUNGALE ELECTRONICS (SHENZHEN) CO., LTD

Brand Name: N/A

Model Number: ID800WT

Additional Model Number: ID350IPR; ID700WTA; ID801WT; ID802WT, ID700WT

Rating: Input: DC 5V,2A

Power Supply: Model: FJ-SW1280G007 (Made by Switching) , Input: 100-240V~, 0.60A，50/60Hz; Output: DC5V, 2AMax

1.4 Submitted Sample: 1 Sample

1.5 Test Duration: 2009-04-13 to 2009-06-20

1.6 Test Uncertainty

Conducted Emissions Uncertainty =3.6dB

Radiated Emissions Uncertainty =4.7dB

1.7 Test Engineer

The sample tested by Terry Tong

Print Name: Terry Tong

2.0 List of Measurement Equipment

2.1 Conducted Emission Test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESCS30	830245/009	RS	2009.2.23	1Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
LISN	NTFM8132	8132137	SCHWARZBECK	2009.2.24	1Year
LISN	NTFM8134	8134109	SCHWARZBECK	2009.2.24	1Year
LISN	NTFM8136	8136102	SCHWARZBECK	2009.2.24	1Year

2.2 Radiated electromagnetic disturbance test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESCS30	830245/009	RS	2009.2.23	1Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer(with Tracking Generator)	MS2661C	MT72089	ANRITSU	2009.2.23	1Year
Amplifier	MH648A	M20494	ANRITSU	2009.2.24	1Year
Bilog Antenna	CBL6101C	2576	CHASE	2009.2.23	1Year

2.3 Auxiliary Equipment

Name	Model No.	Serial No.	Manufacturer	Cable	FCC ID/DOC
Keyboard	KB-0225	1211815	IBM	Data cable of 2m length unshielded	FCC DOC
Printer	LaserJet 1015	CNFG029476	HP	Data cable of 2m length unshielded and 1.8m length AC Mains cable	DOC
Printer	LaserJet 1022	CNBG591GM7	HP	Data cable of 2m length unshielded and 1.8m length AC Mains cable	DOC
Monitor	FP51G	ET47604175CLO	BENQ	Data cable of	FCC DOC

				1.5m length unshielded and 1.8m length AC Mains cable	
Monitor	6331-4CN	23-DNWX3	IBM	Data cable of 1.5m length unshielded and 1.8m length AC Mains cable	FCC DOC
Notebook	Vostro 1310	--	DELL	--	FCC DOC
Earphone	HS555DS	--	SUTAIN	1.5m length unshielded cable	--

3.0 Technical Details

3.1 Investigations Requested

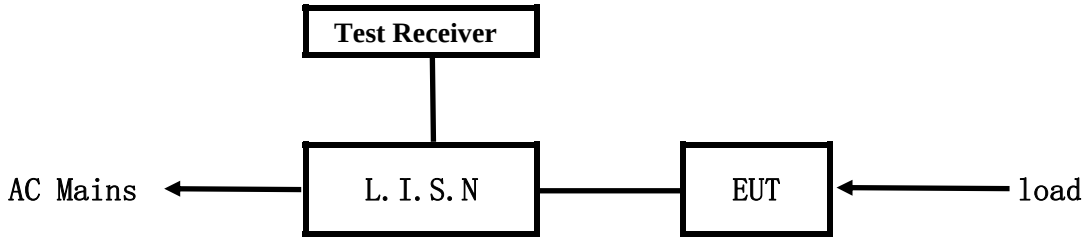
Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

3.2 Test Standards

FCC Part 15 Subpart B: 2008

4.0 Conducted Power line Test

4.1 Schematics of the test



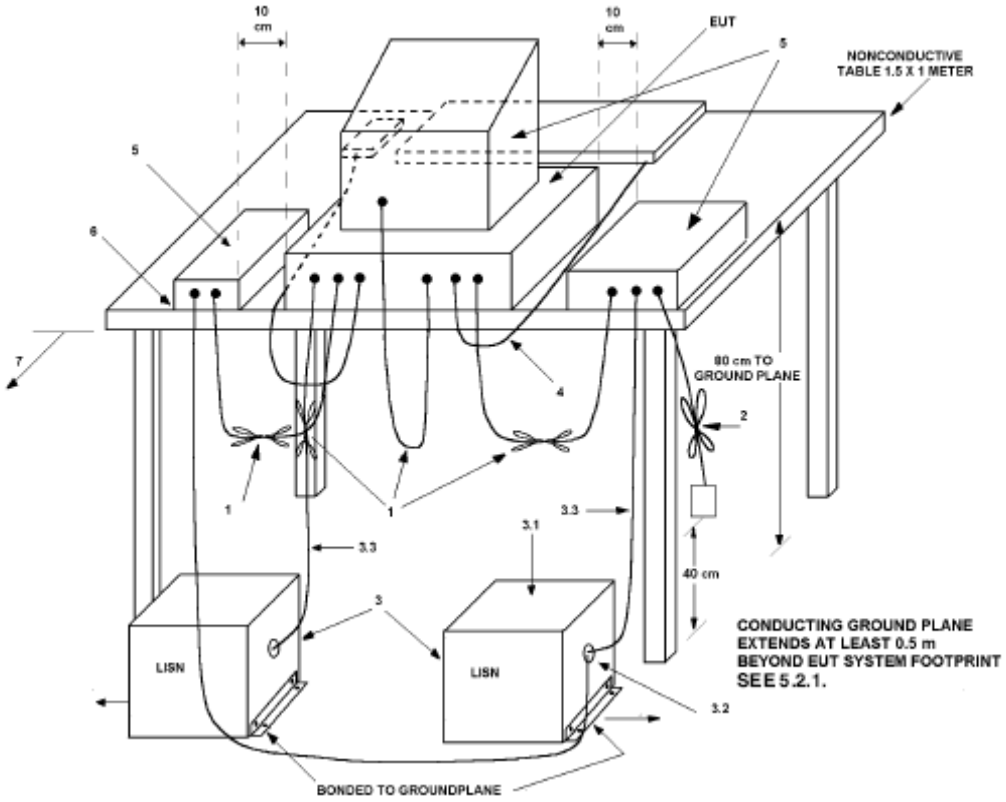
EUT: Equipment Under Test

4.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2003.The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2003.Cables and peripherals were moved to find the maximum emission levels for each frequency.

Actual Working Voltage and Frequency: 120V~, 60Hz

Block diagram of Test setup



4.3 Power line conducted Emission Limit

Frequency(MHz)	Class A Limits dB(μV)		Class B Limits dB(μV)	
	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
0.15 ～ 0.50	79.00	66.00	66.00～56.00*	56.00～46.00*
0.50 ～ 5.00	73.00	60.00	56.00	46.00
5.00 ～ 30.00	73.00	60.00	60.00	50.00

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

2. The tighter limit shall apply at the transition frequencies

4.4 Test Results

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

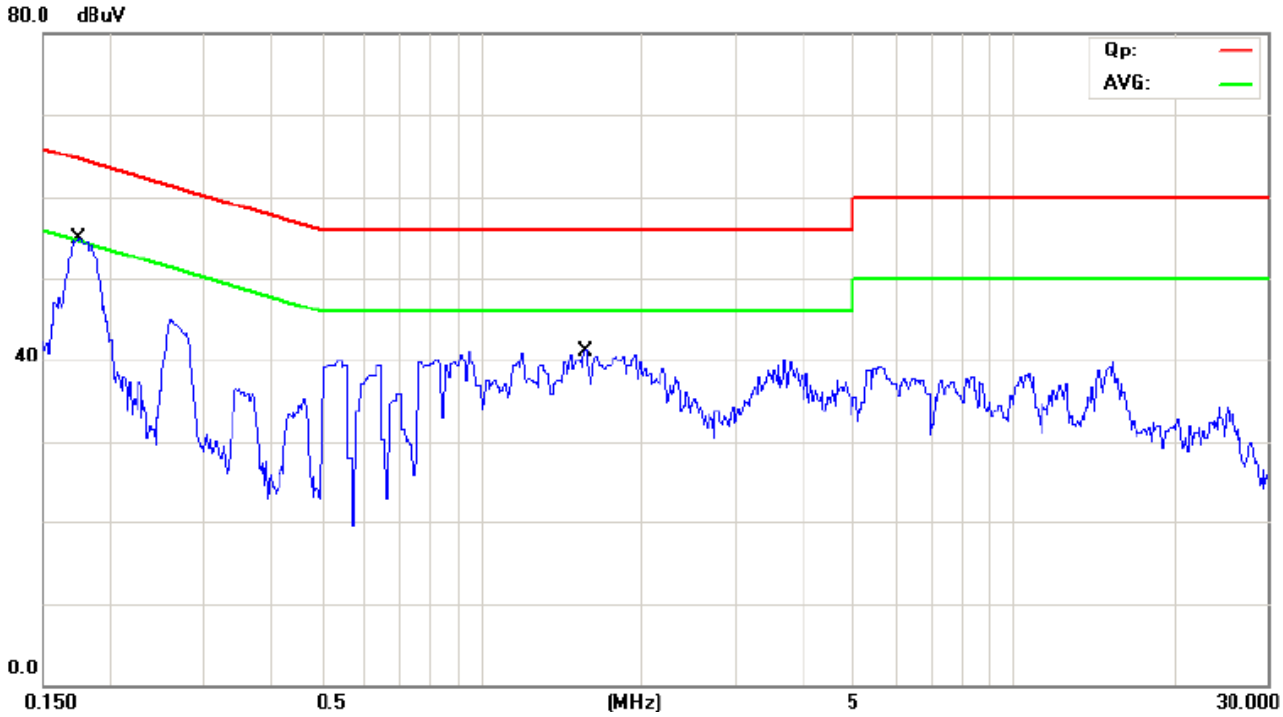
A Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Memory

Adaptor used for test Model: FJ-SW1280G007

Results: **Pass**

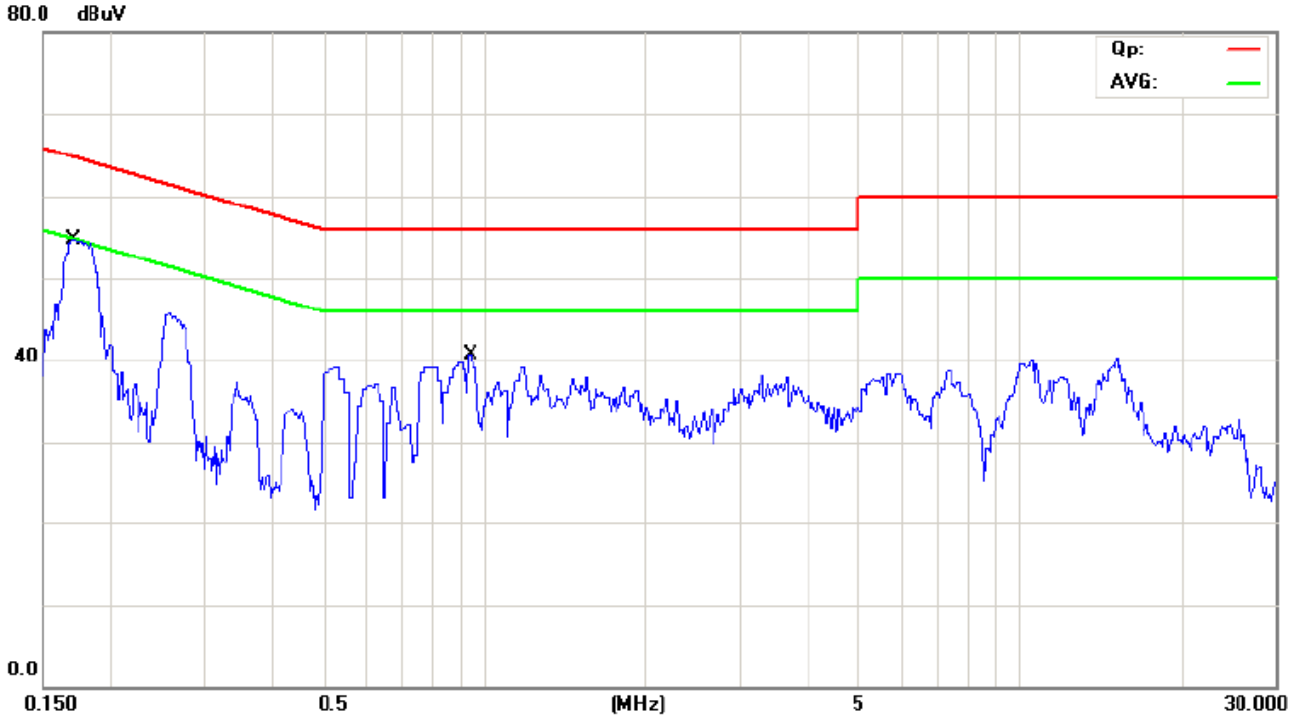
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1727	53.72	31.42	--	--	64.83	54.83
1.5654	39.33	22.33	--	--	56.00	46.00

B **Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)**

EUT set Condition: Memory
Adaptor used for test Model: FJ-SW1280G007
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1707	--	--	53.32	38.42	64.93	54.93
0.9383	--	--	39.33	18.23	56.00	46.00

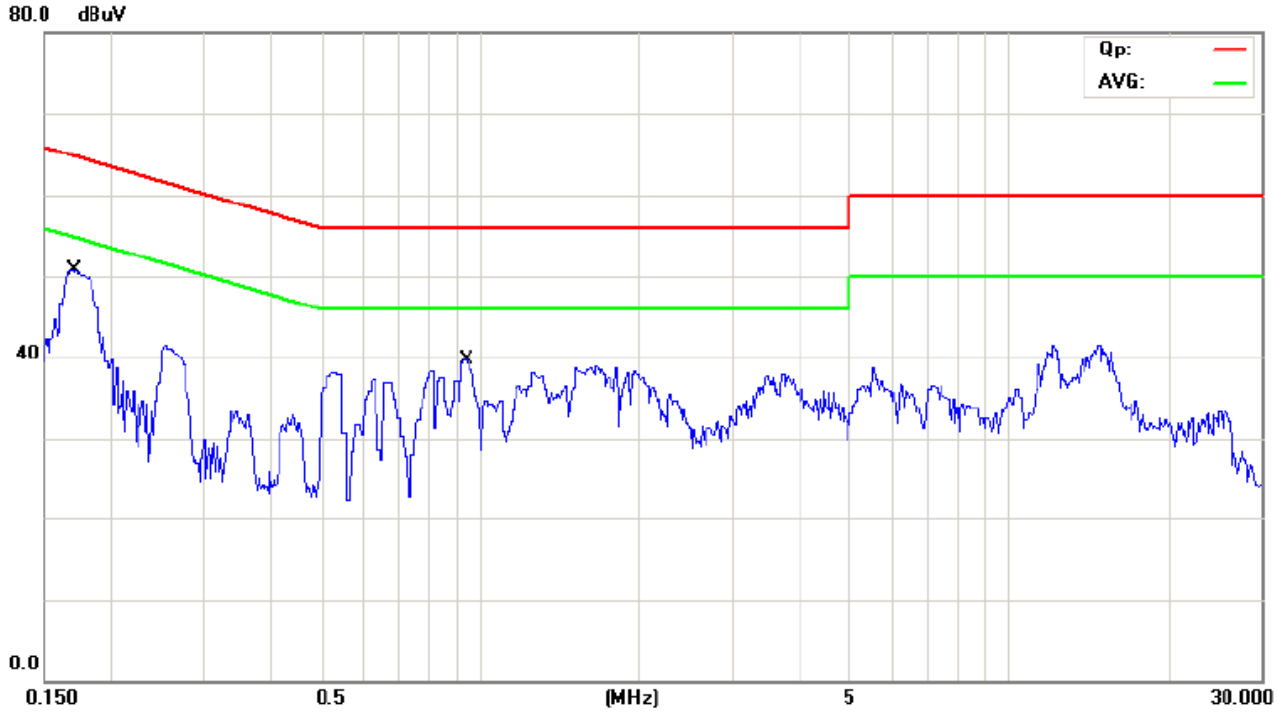
C Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

EUT set Condition: CF CARD

Adaptor used for test Model: FJ-SW1280G007

Results: **Pass**

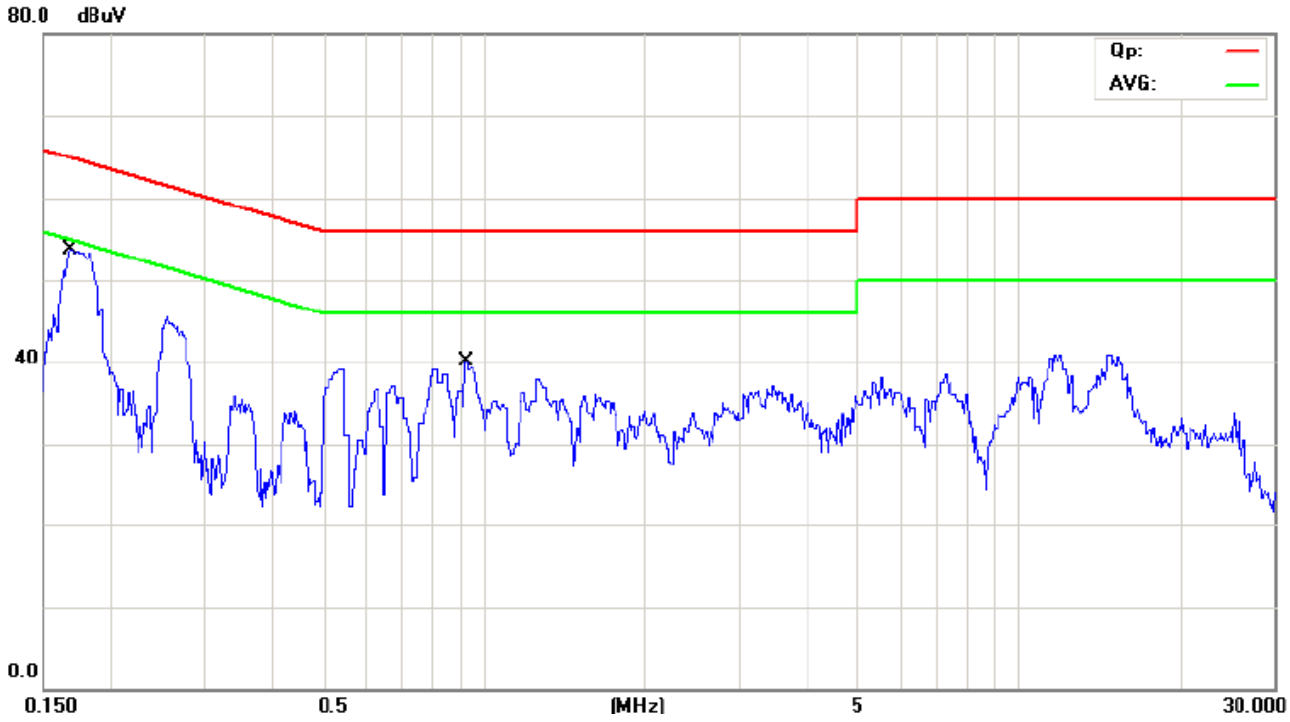
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1706	49.72	27.32	--	--	64.93	54.93
0.9314	37.23	17.33	--	--	56.00	46.00

D **Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)**

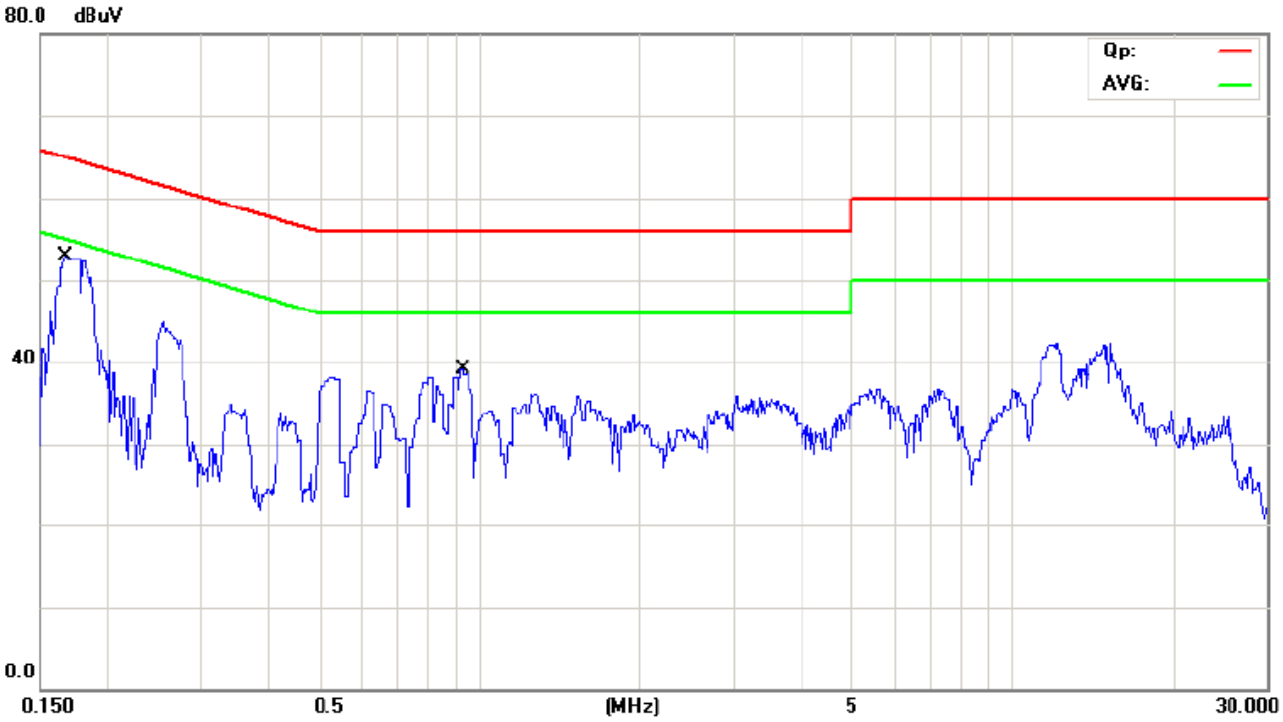
EUT set Condition: CF CARD
Adaptor used for test Model: FJ-SW1280G007
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1700	--	--	52.42	38.32	64.96	54.96
0.9330	--	--	35.83	21.23	56.00	46.00

Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

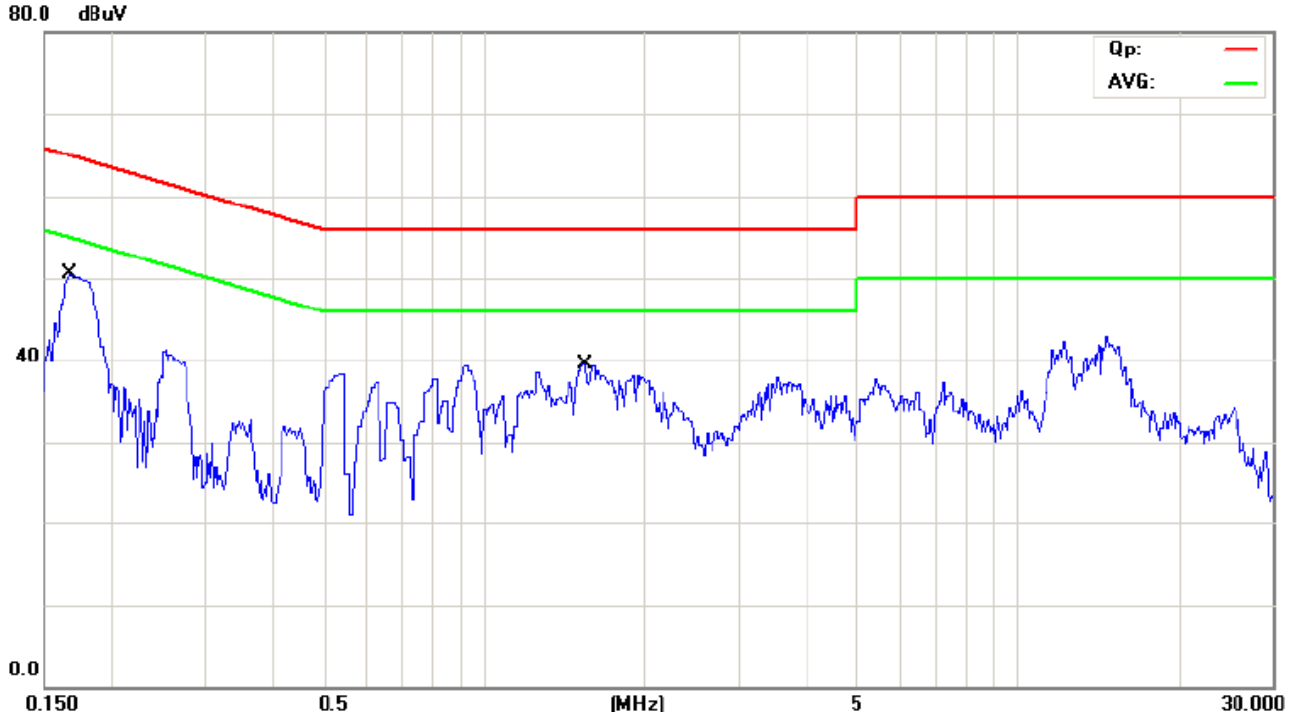
EUT set Condition: USB
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1682	--	--	51.72	38.32	65.05	55.05
0.9234	--	--	32.92	13.72	56.00	46.00

Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

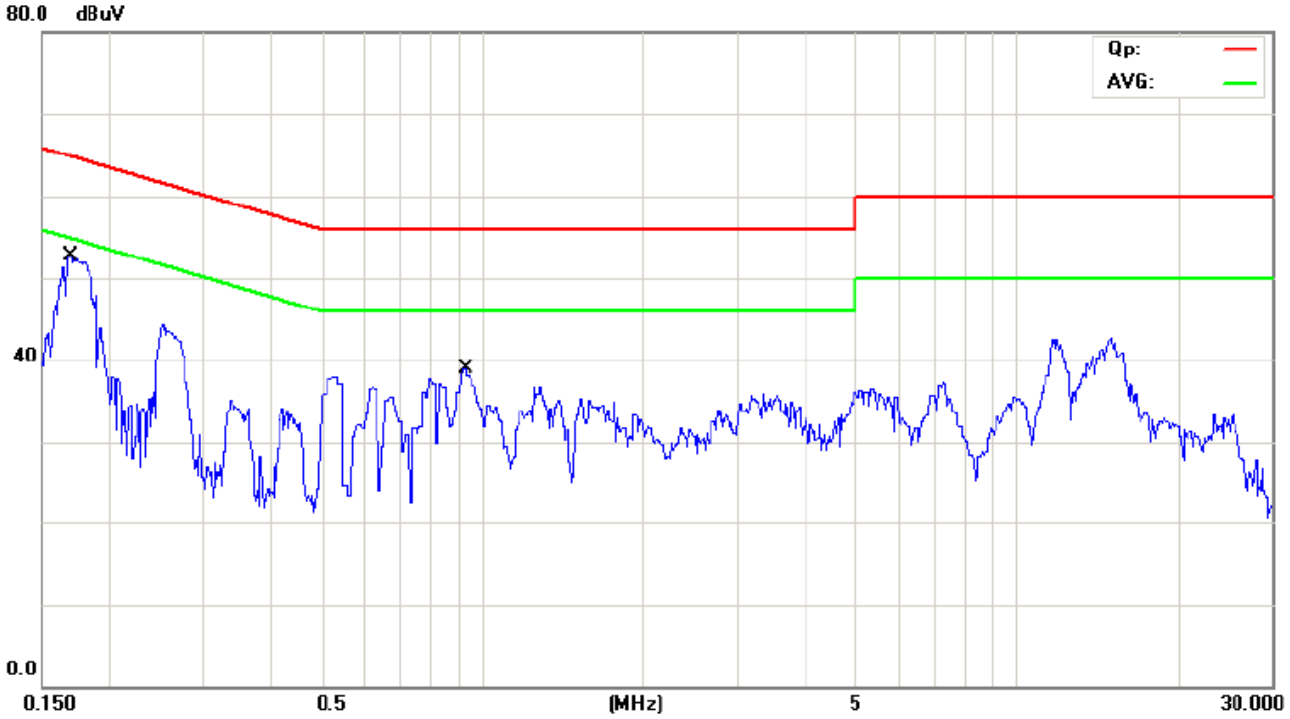
EUT set Condition: USB
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1692	49.52	26.52	--	--	65.00	55.00
1.5443	37.92	21.92	--	--	56.00	46.00

Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

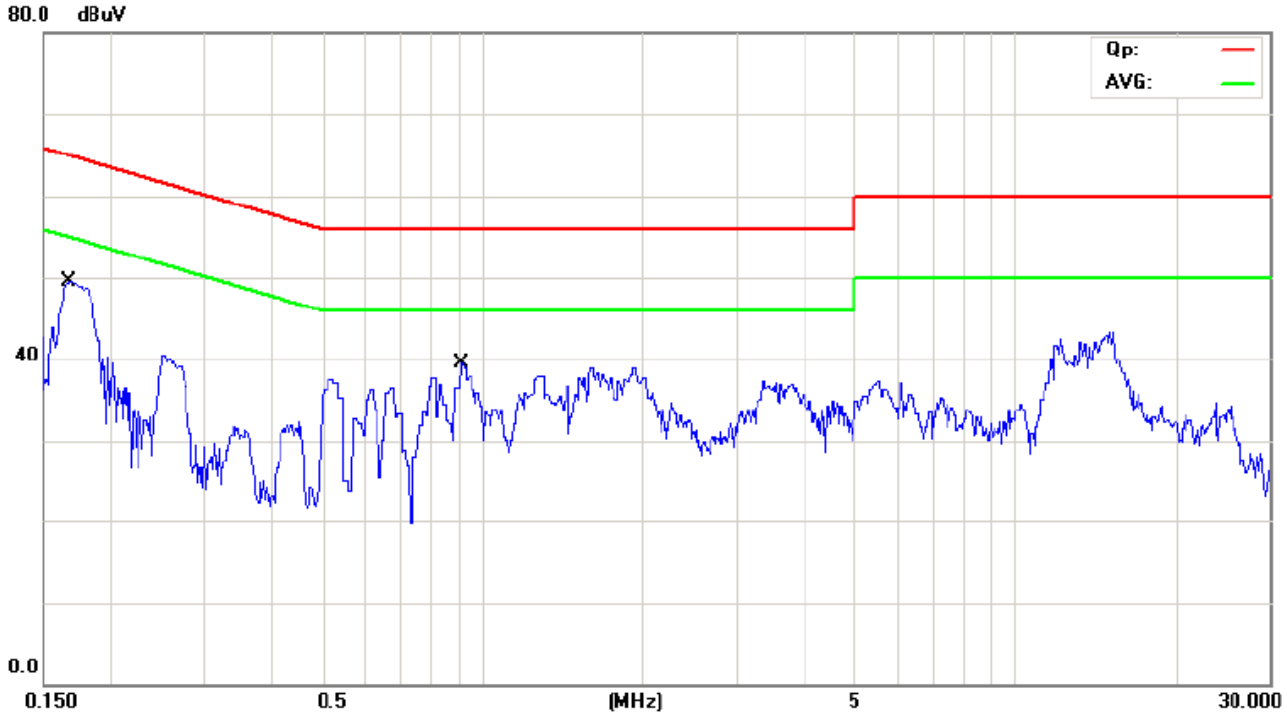
EUT set Condition: SD CARD
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1688	--	--	51.42	38.42	65.02	55.02
0.9256	--	--	36.62	16.72	56.00	46.00

Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

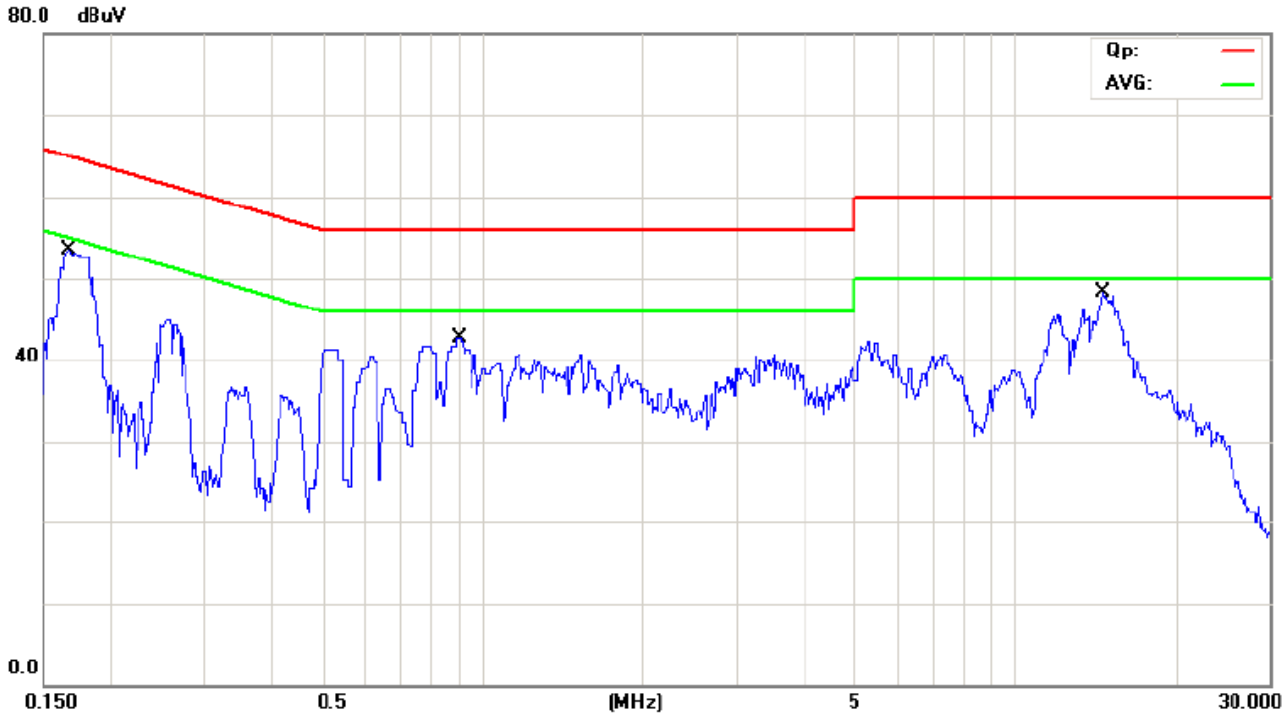
EUT set Condition: SD CARD
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1691	48.52	25.02	--	--	65.00	55.00
0.9231	37.22	13.52	--	--	56.00	46.00

Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

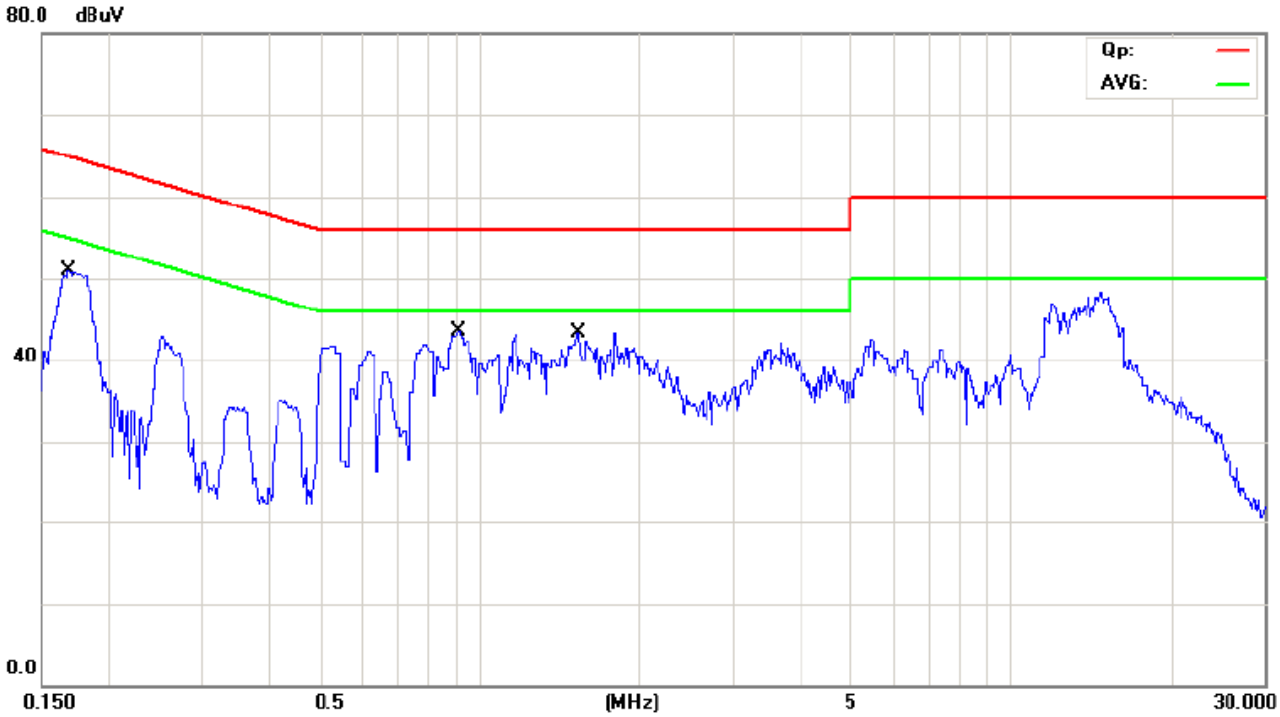
EUT set Condition: Connected to PC and Ping Wireless network
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1690	--	--	52.32	39.72	65.01	55.01
0.9020	--	--	41.70	16.10	56.00	46.00
14.7130	--	--	43.11	30.31	60.00	50.00

Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

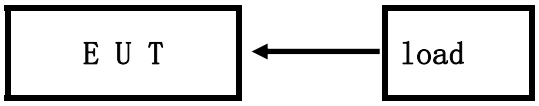
EUT set Condition: Connected to PC and Ping Wireless network
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: **Pass**
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1682	49.52	32.72	--	--	65.05	55.05
0.9035	42.20	16.40	--	--	56.00	46.00
1.5353	41.91	25.91	--	--	56.00	46.00

5.0 Radiated Disturbance Test

5.1 Schematics of the test

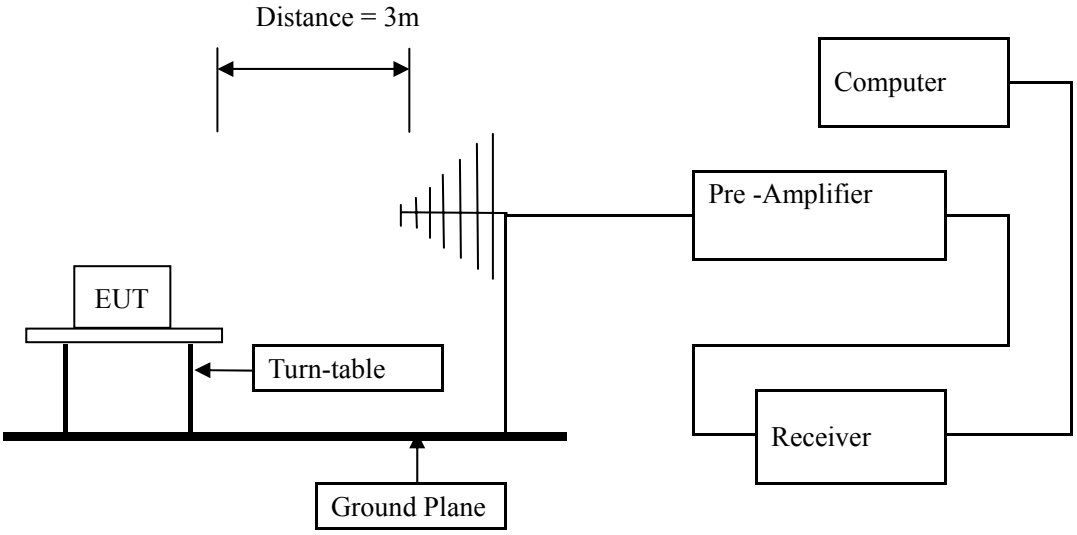


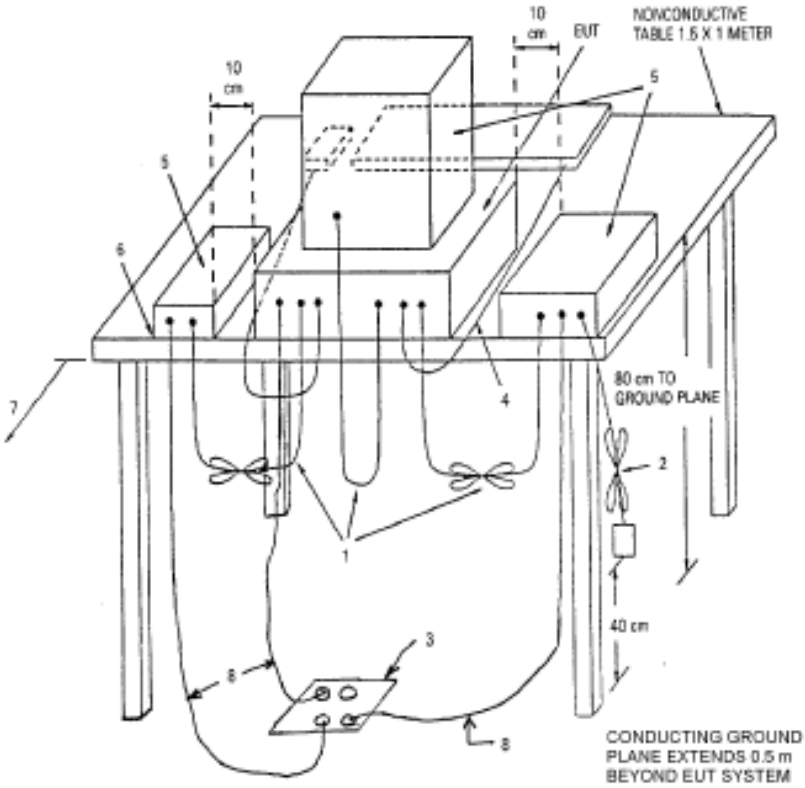
5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2003, The frequency spectrum from 30MHz to 5GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120kHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK

Actual Working Voltage and Frequency: 120V~, 60Hz

Block diagram of Test setup





5.3 Radiated Emission Limit

Frequency Range (MHz)	Distance (m)	Field strength (dB μ V/m)
30-88	3	40.00
88-216	3	43.50
216-960	3	46.00
Above 960	3	54.00

Note: The lower limit shall apply at the transition frequencies

5.4 Test result

The frequency spectrum from 30MHz to 5GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120KHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK. Measurements were made at 3 meters.

Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

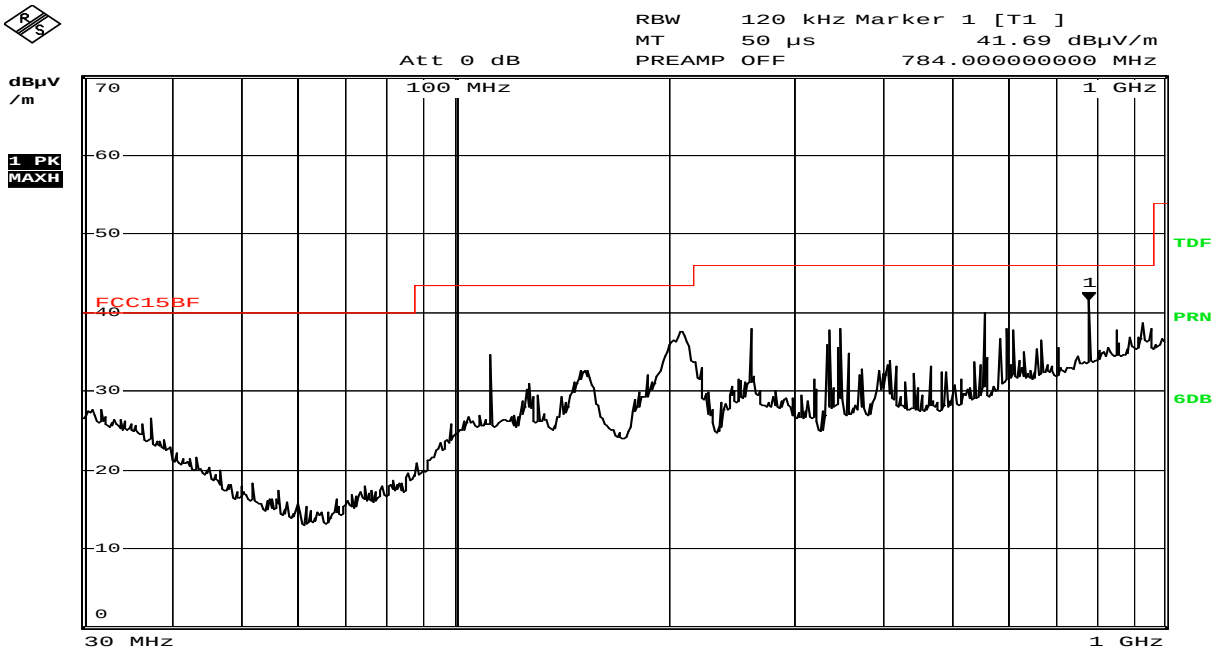
Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Memory
Adaptor used for test Model: FJ-SW1280G007
Results: **Pass**

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
208.92	37.48	H	43.50
560.00	39.88	H	46.00
784.00	41.69	H	46.00
37.32	34.99	V	40.00
336.00	44.50	V	46.00
784.00	45.30	V	46.00

Test Figure:

Horizontal



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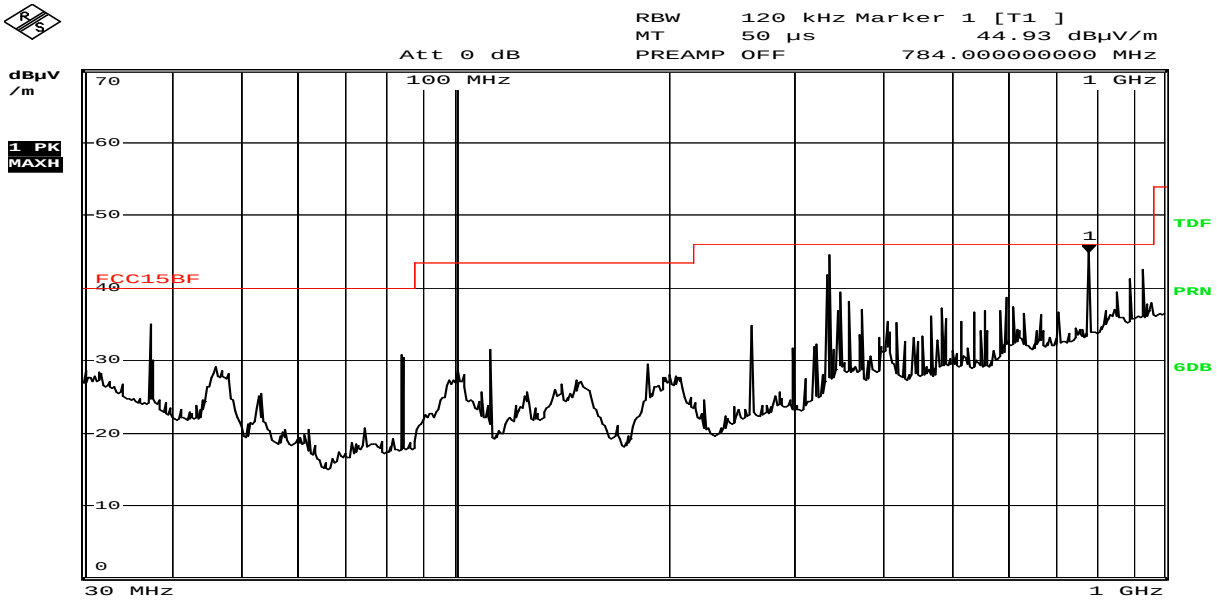
Date: 7.MAY.2009 18:35:31

Vertical



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Test result

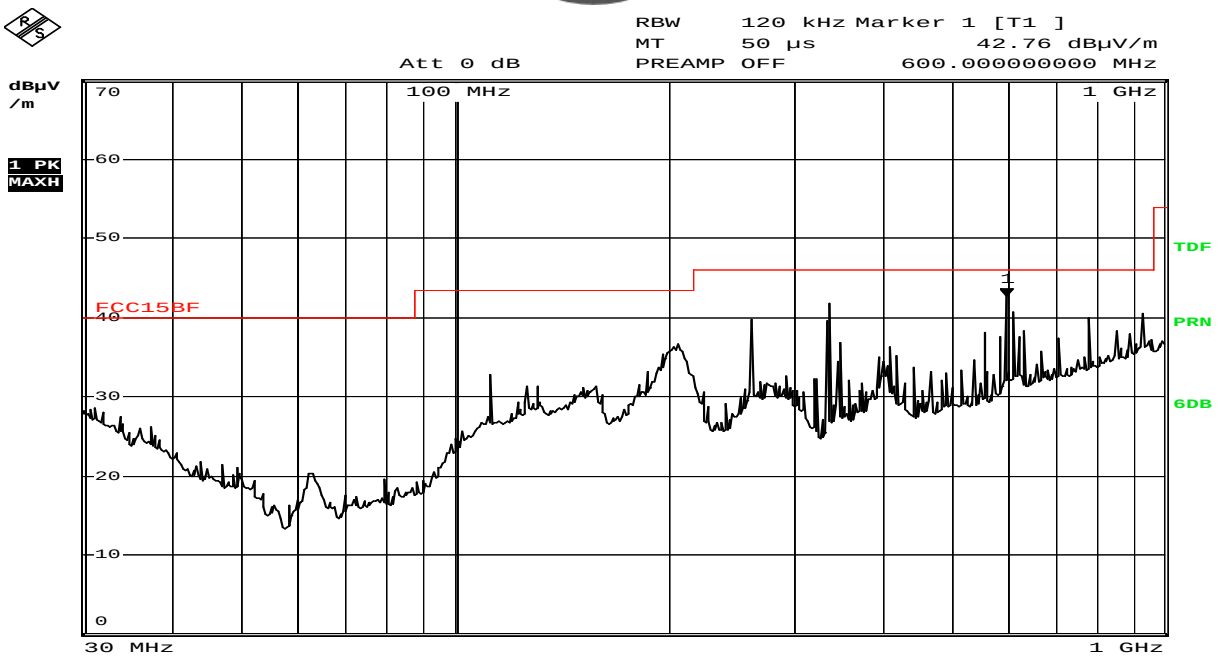
General Radiated Emission Data and Harmonics Radiated Emission Data

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

EUT set Condition: USB
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: PASS

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
206.12	36.57	H	43.50
260.32	39.69	H	46.00
336.00	41.84	H	46.00
600.00	42.76	H	46.00
261.32	37.45	V	46.00
336.00	45.32	V	46.00
784.50	43.38	V	46.00

Horizontal



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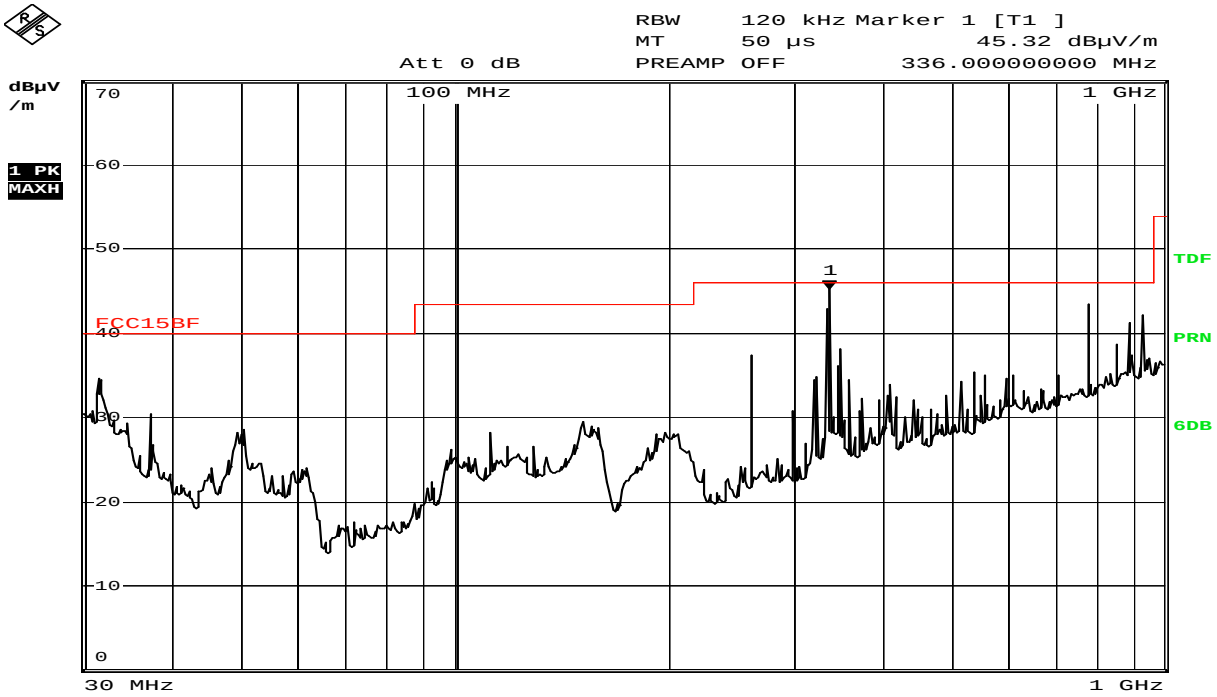
Vertical



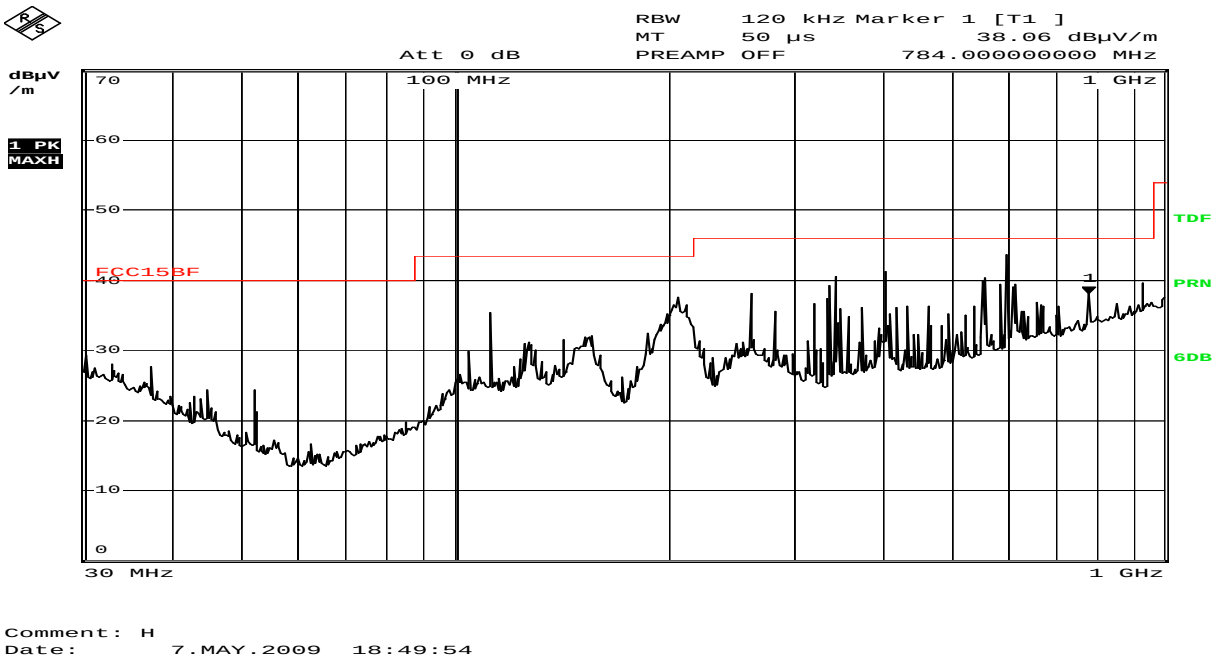
Comment: V
Date: 8.MAY.2009 20:41:21

EUT set Condition: SD CARD
Adaptor used for test Model: FJ-SW1280G007
Results: **Pass**

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
37.32	34.98	H	40.00
375.00	40.77	H	46.00
784.00	43.5	H	46.00
206.28	37.58	V	43.50
405.00	41.16	V	46.00
600.00	43.67	V	46.00

Test Figure:

Horizontal



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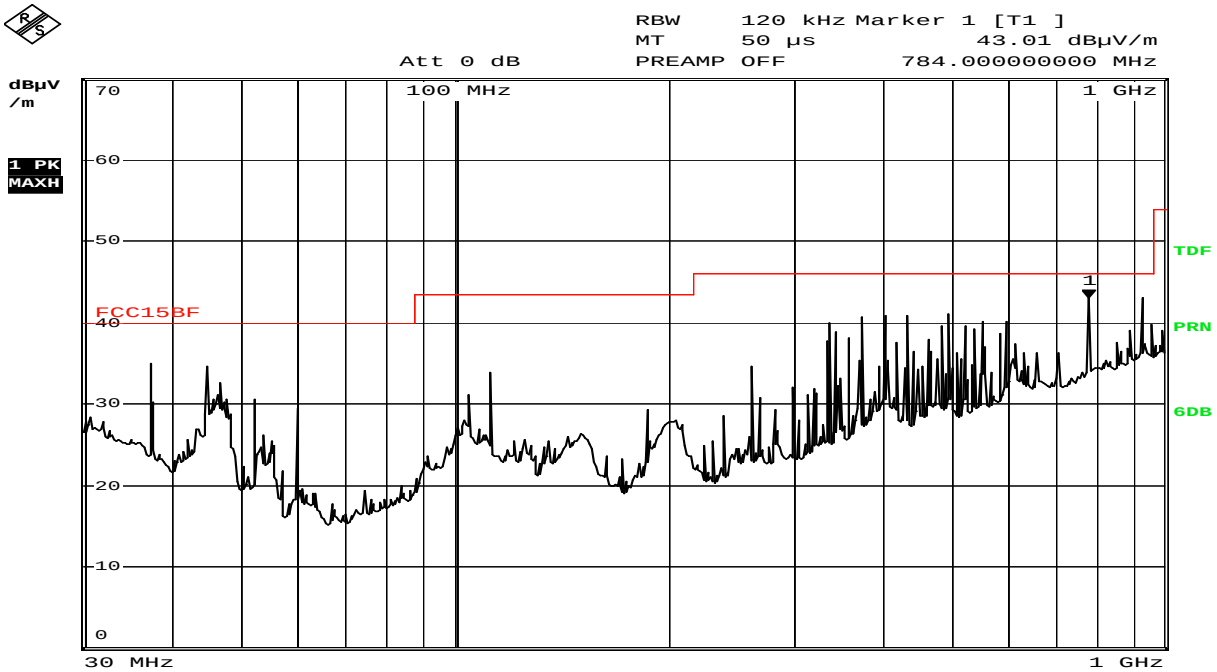
Vertical



Comment: V
Date: 7.MAY.2009 18:45:07

Note:. Emission level (dBµV/m) =Antenna Factor (dB/m) + Cable loss (dB) + Meter Reading (dBµV).

Test result

General Radiated Emission Data and Harmonics Radiated Emission Data

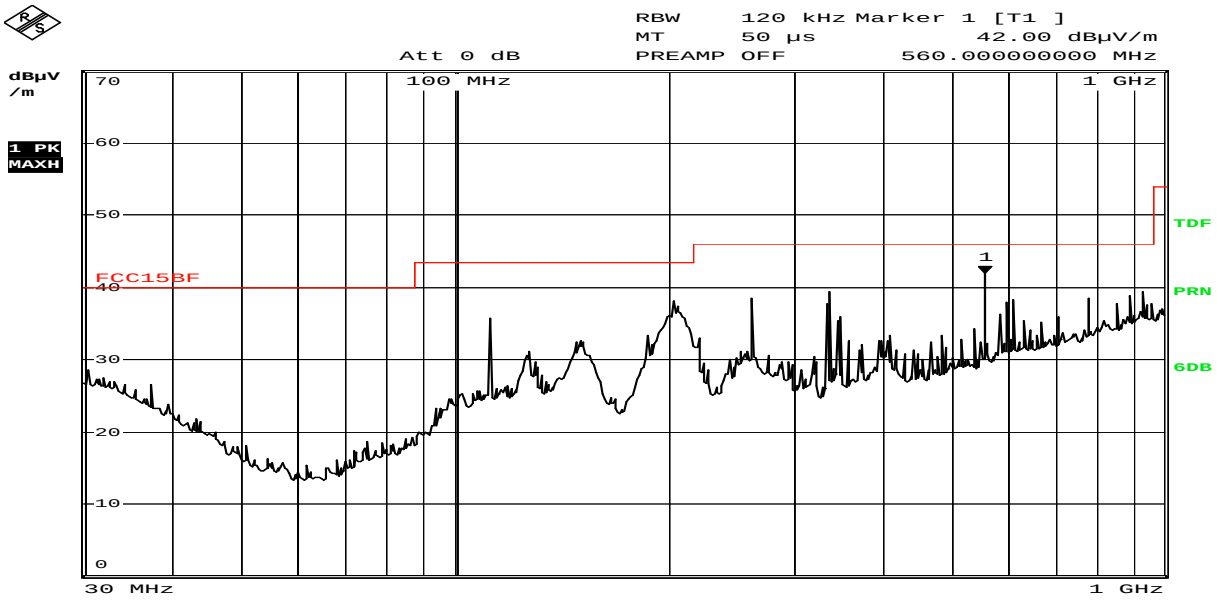
Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: CF CARD
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: PASS

Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
203.96	38.16	H	43.50
336.00	39.44	H	46.00
560.00	42.00	H	46.00
37.32	34.69	V	40.00
336.00	44.90	V	46.00
896.00	42.89	V	46.00

Test Figure:

Horizontal



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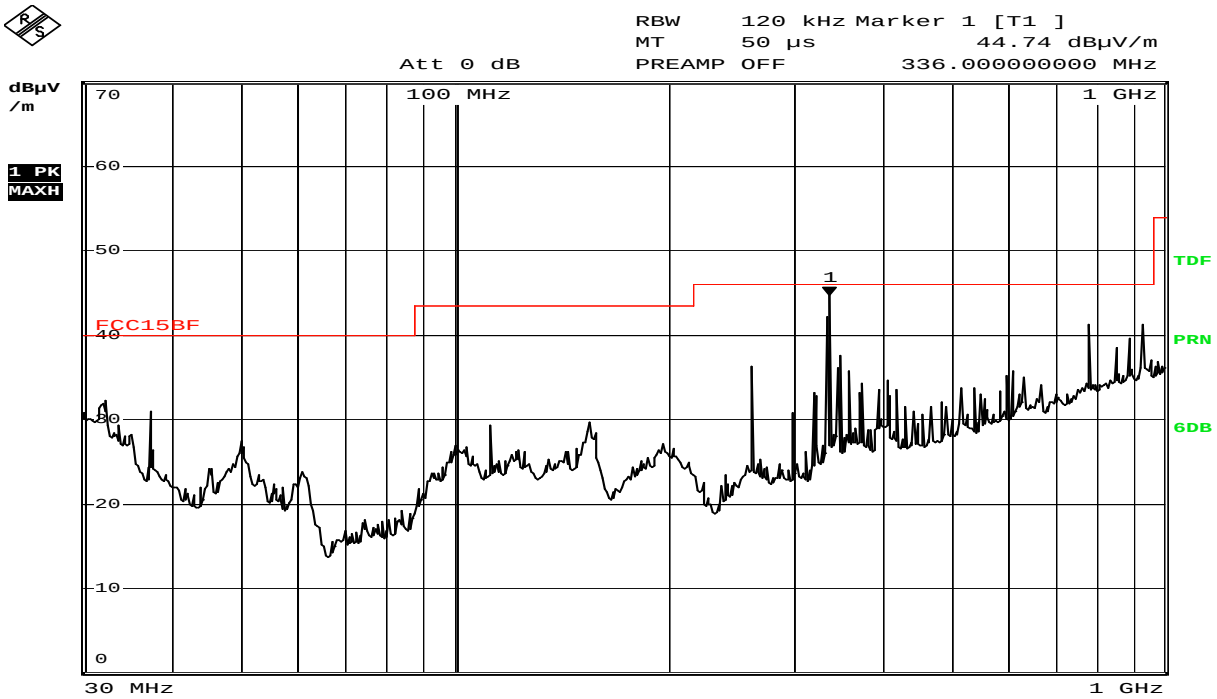
Date: 7.MAY.2009 18:53:34

Vertical



Comment: V
Date: 8.MAY.2009 20:51:51

Test result

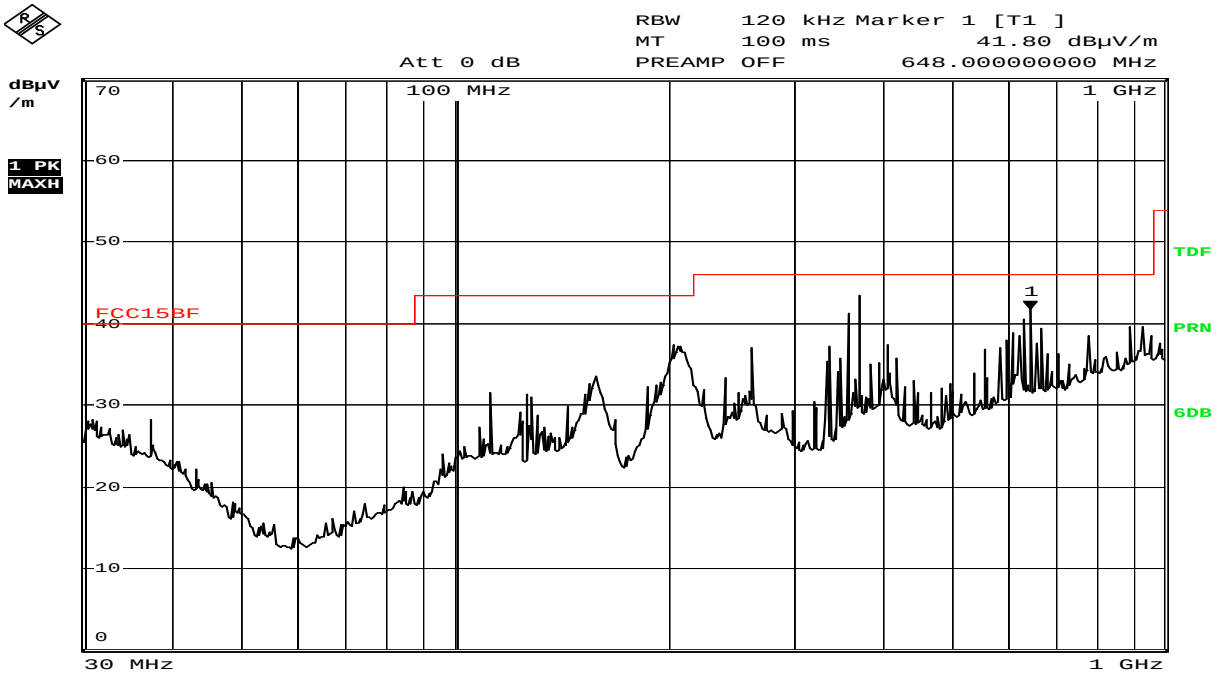
General Radiated Emission Data and Harmonics Radiated Emission Data

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

EUT set Condition: Connected to PC and Ping Wireless network
Adaptor used for test Model: FJ-SW1280G007
Working Voltage: 120V~ 60Hz
Results: PASS

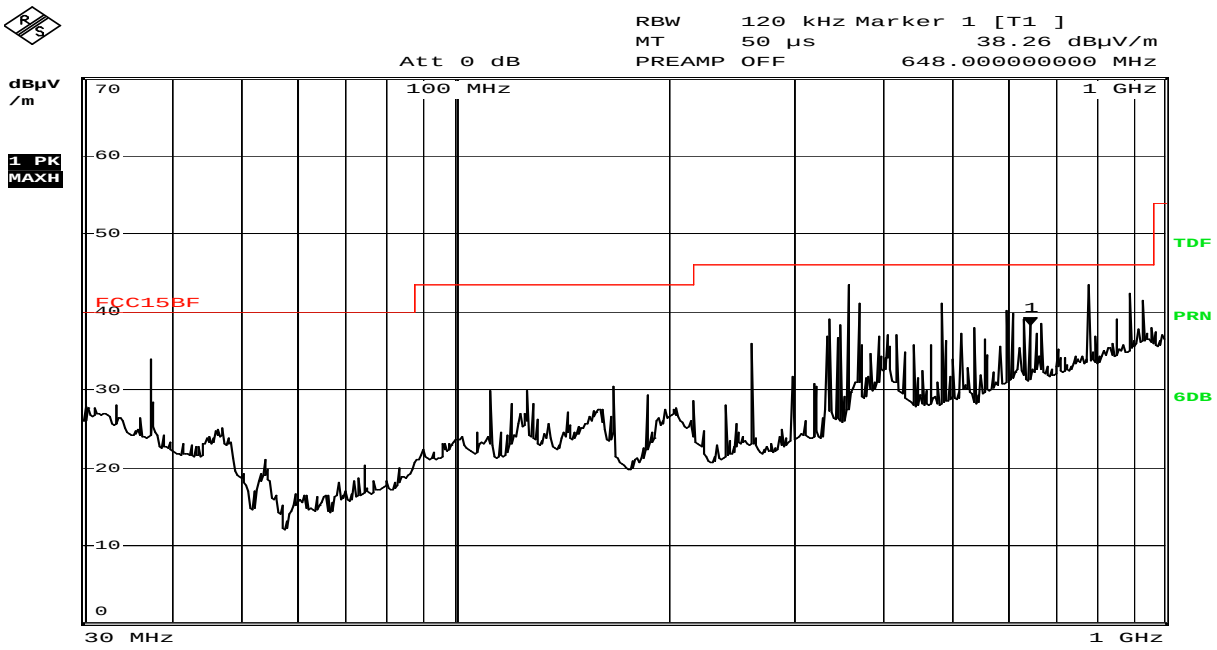
Frequency (MHz)	Level@3m (dB μ V/m)	Antenna Polarity	Limit@3m (dB μ V/m)
203.76	37.38	H	43.50
372.00	42.20	H	46.00
648.00	41.80	H	46.00
360.00	42.70	V	46.00
784.00	43.10	V	46.00

Horizontal



Comment: V
Date: 7.MAY.2009 19:19:53

Vertical



Comment: V
Date: 7.MAY.2009 19:21:41

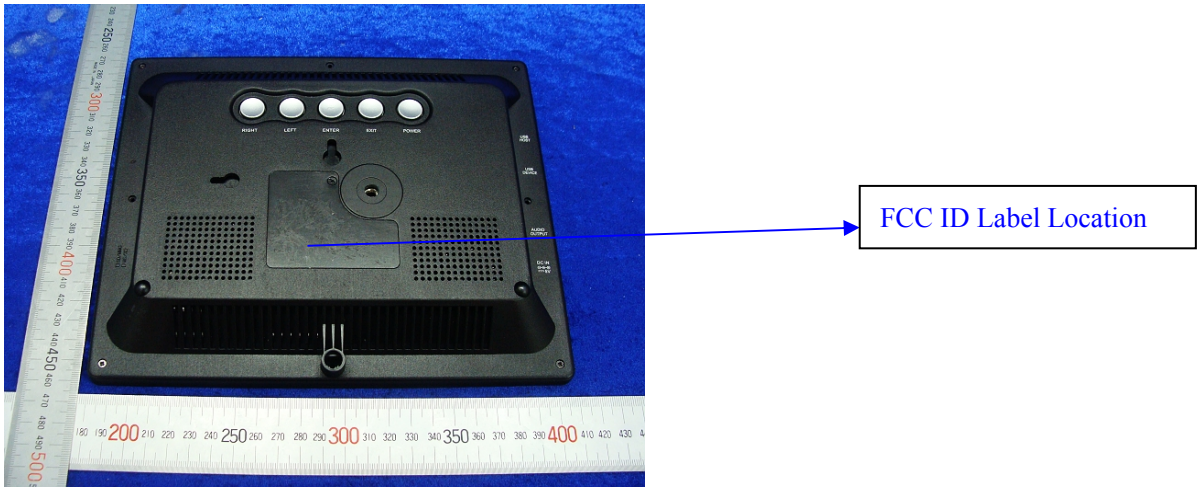
6.0 FCC ID Label

FCC ID: XBI DPFID83571215

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:



7.0 Photo of testing

7.1 Conducted test View--

7.2 Radiated emission test view--

-End of the report-