TECHNICAL REPORT

卓時檢測 TIMEWAY TESTING LABORATORY

ISO/IEC17025 Accredited Lab.

Report No: FCC 0807194
File reference No: 2008-11-25

Applicant: WIN ACCORD LTD.

Product: Digital Photo Frame

Brand Name: N/A

Model No: SPX8E

Test Standards: FCC Part 15 Subpart B: 2006

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: Nov 25. 2008

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: WIN ACCORD LTD.
Address: 12F,NO.225,SEC 5,105 SONG SHAN DIST.,NAN JING EAST ROAD,TAIPEI,TAIWAN,R.O.C
Telephone: 02-2749 3837
Fax: 02-2749-3918

1.3 Description of EUT

Product: Digital Photo Frame
Manufacturer: WIN ACCORD LTD.
Address: Shatou Section. Zhen'an Road, Chang'an, Town, Dongguan City
Brand Name: N/A
Model Number: SPX8E
Additional Model Number: N/A
Remark: Just model names and appearance colour are different.
Rating: Input: DC 9V, Current 2A

1.4 Submitted Sample: 1 Sample

1.5 Test Duration: 2008-09-26 to 2008-11-25

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 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	2008.2.23	1Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
LISN	NTFM8132	8132137	SCHWARZBECK	2008.2.24	1Year
LISN	NTFM8134	8134109	SCHWARZBECK	2008.2.24	1Year
LISN	NTFM8136	8136102	SCHWARZBECK	2008.2.24	1Year

2.2 Radiated electromagnetic disturbance test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESCS30	830245/009	RS	2008.2.23	1Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer(with Tracking Generator)	MS2661C	MT72089	ANRITSU	2008.2.23	1Year
Amplifier	MH648A	M20494	ANRITSU	2008.2.24	1Year
Bilog Antenna	CBL6101C	2576	CHASE	2008.2.23	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	BOISB-027-00	CNFG029476	EPSON	Data cable of 2m length unshielded and 1.8m length AC Mains cable	DOC
Monitor	6331-4CN	23-DNWX3	IBM	Data cable of 1.5m length unshielded and 1.8m length AC Mains cable	FCC ID

PC	8434	--	IBM	1.8m length AC Mains cable	FCC DOC
Mouse	OM860XC	HM0509	BIGCOW	Data cable of 1.5m length	FCC DOC

3.0 Technical Details

3.1 Investigations Requested

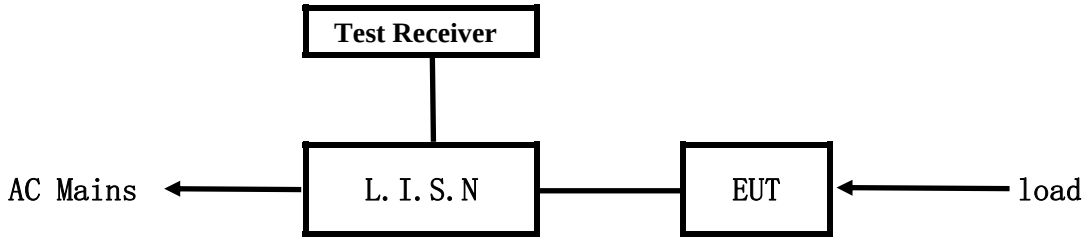
Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

3.2 Test Standards

FCC Part 15 Subpart B: 2006

4.0 Conducted Power line Test

4.1 Schematics of the test

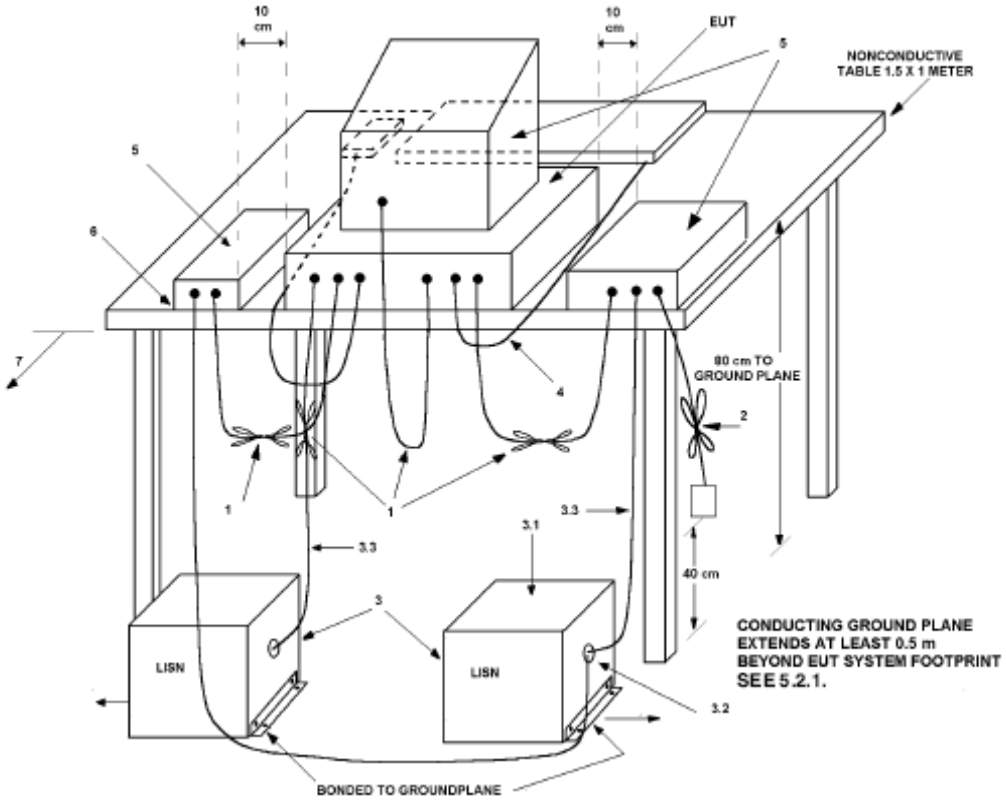


EUT: Equipment Under Test

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.

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.

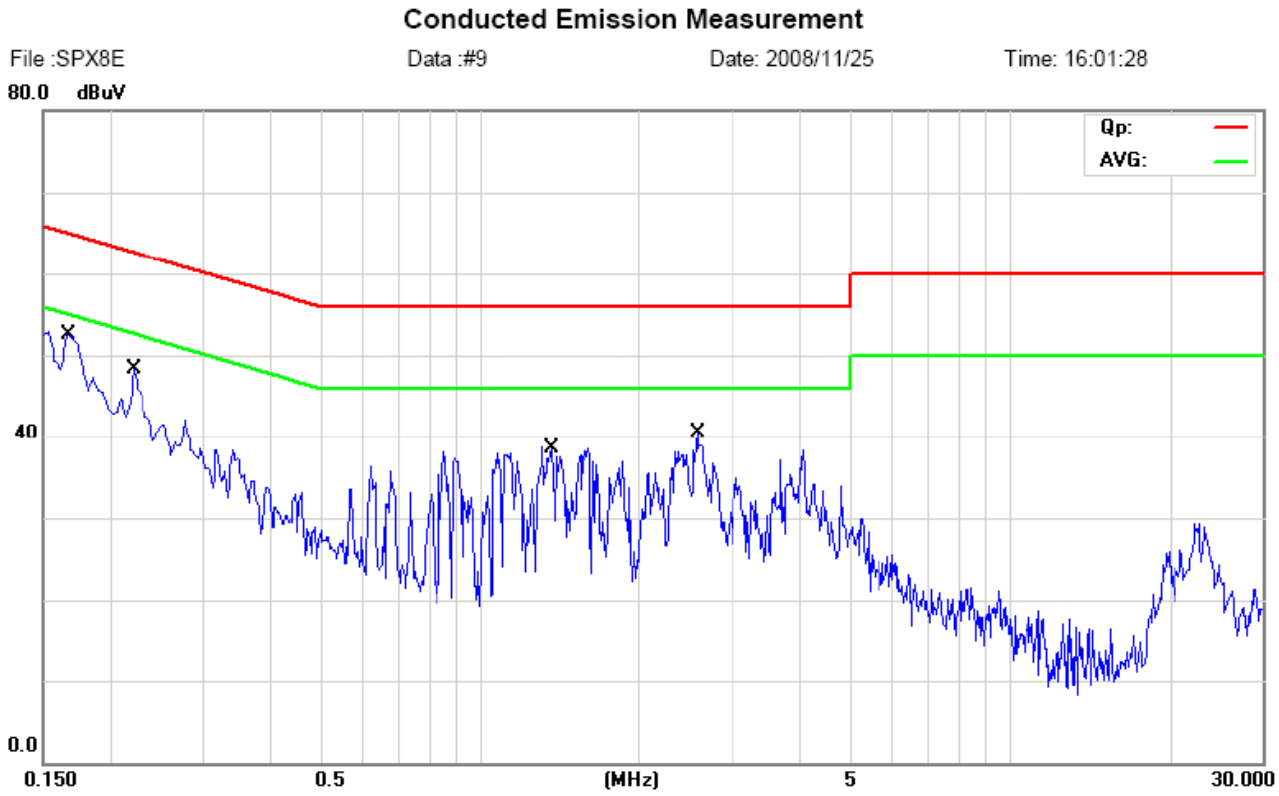
Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Playing SD Card

Working Voltage: 120V~ 60Hz

Results: **Pass**

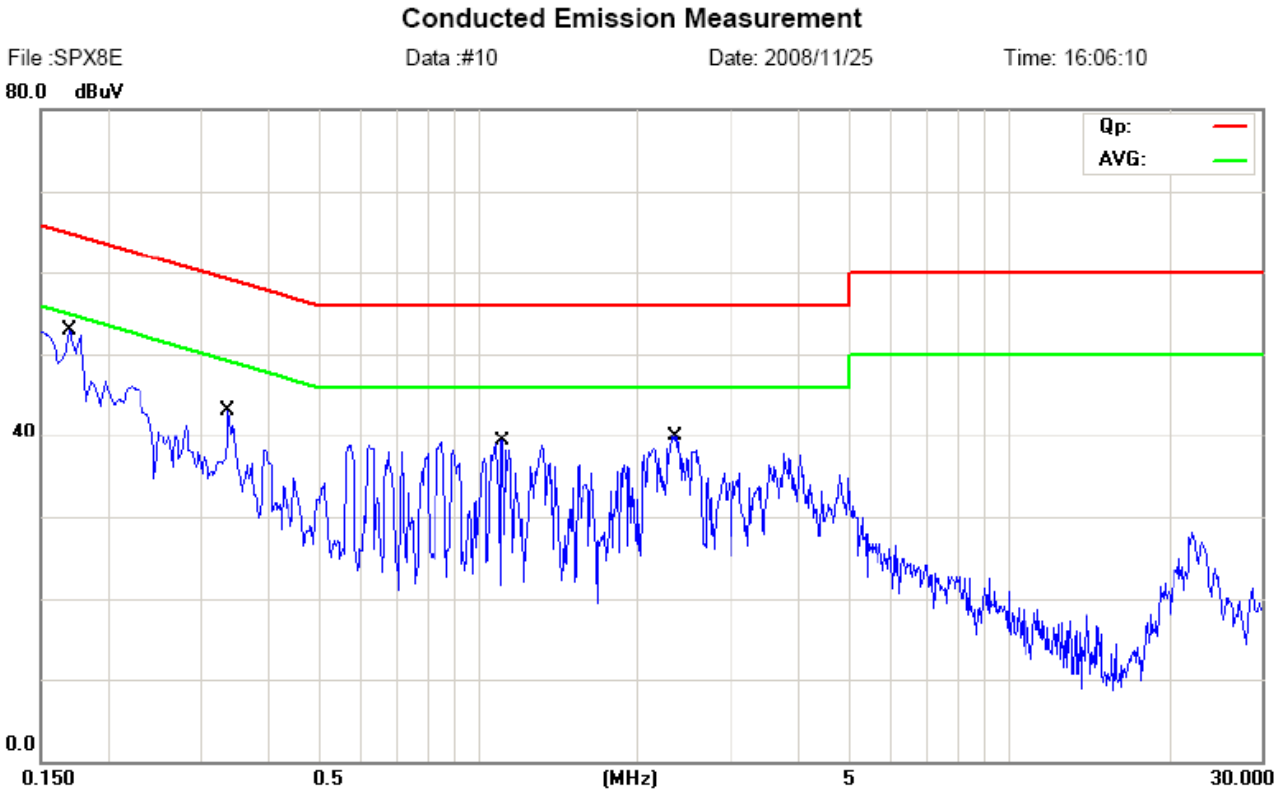
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1690	--	--	49.52	26.26	65.01	55.01
0.2225	--	--	43.38	21.68	62.73	52.73
2.5763	--	--	35.03	28.33	56.00	46.00
1.3621	--	--	34.14	26.44	56.00	46.00

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

EUT set Condition: Playing SD Card
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
0.1685	48.72	33.32	--	--	65.03	55.03
0.3370	38.70	21.50	--	--	59.28	49.28
1.1071	32.54	22.84	--	--	56.00	46.00
2.3518	34.74	27.74	--	--	56.00	56.00

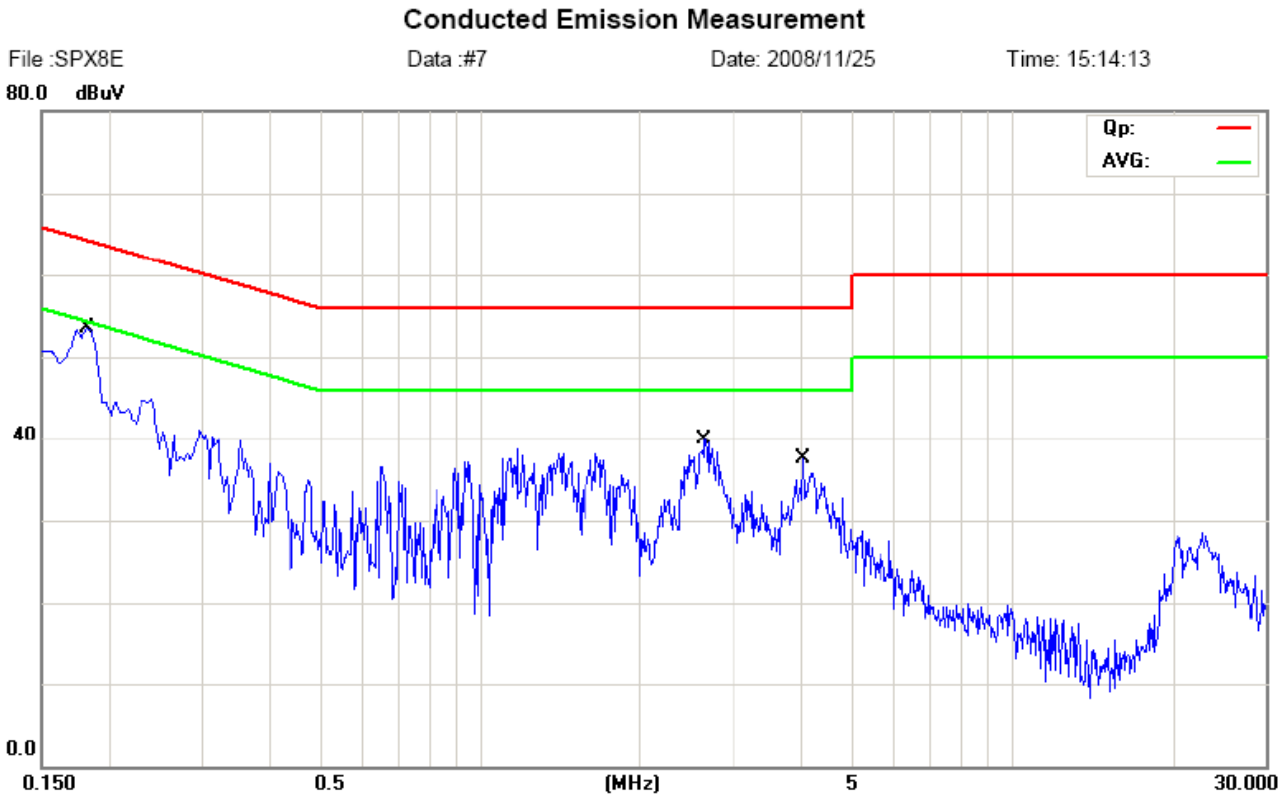
Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Playing USB

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
0.1812	--	--	49.53	22.43	64.43	54.43
2.6574	--	--	33.06	25.56	56.00	46.00
4.0590	--	--	32.72	28.72	56.00	46.00

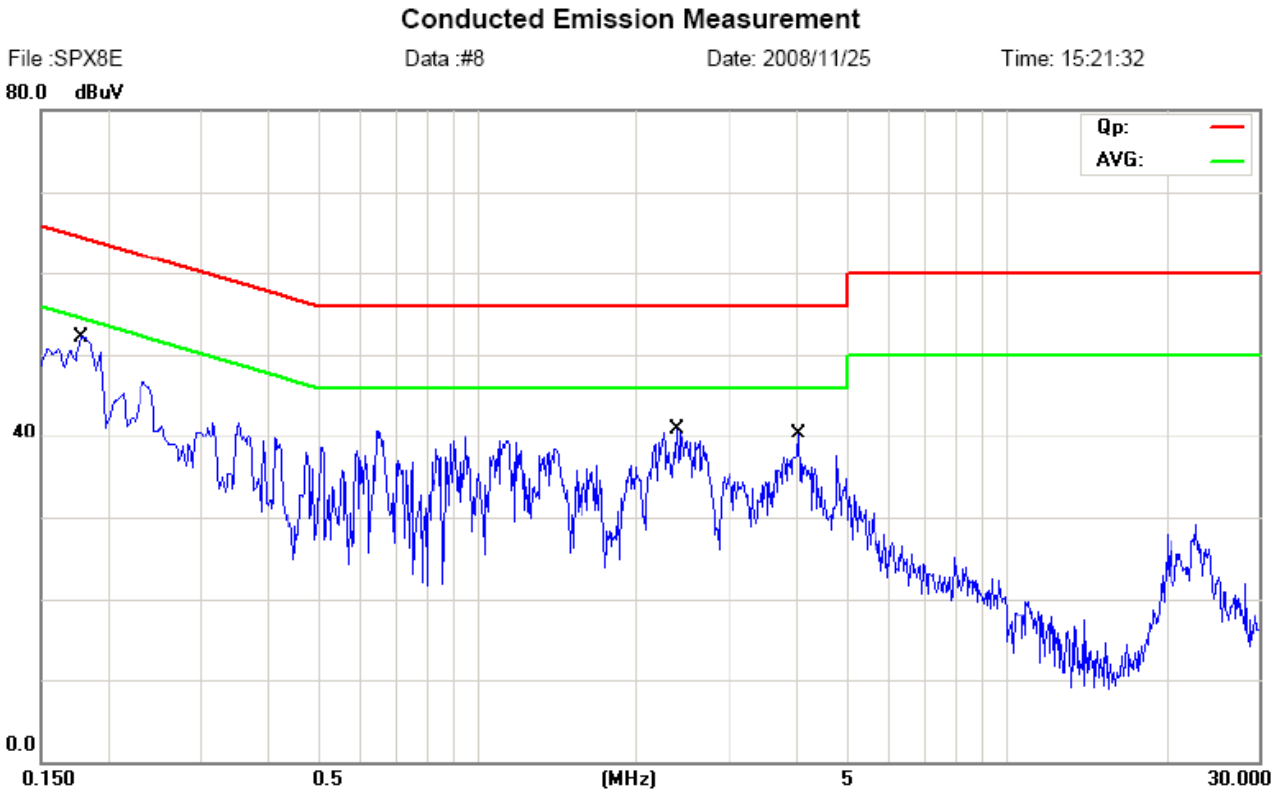
Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Playing USB

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
0.1801	48.53	32.83	--	--	64.48	54.48
2.3880	33.86	27.86	--	--	56.00	46.00
4.0461	35.12	31.42	--	--	56.00	46.00

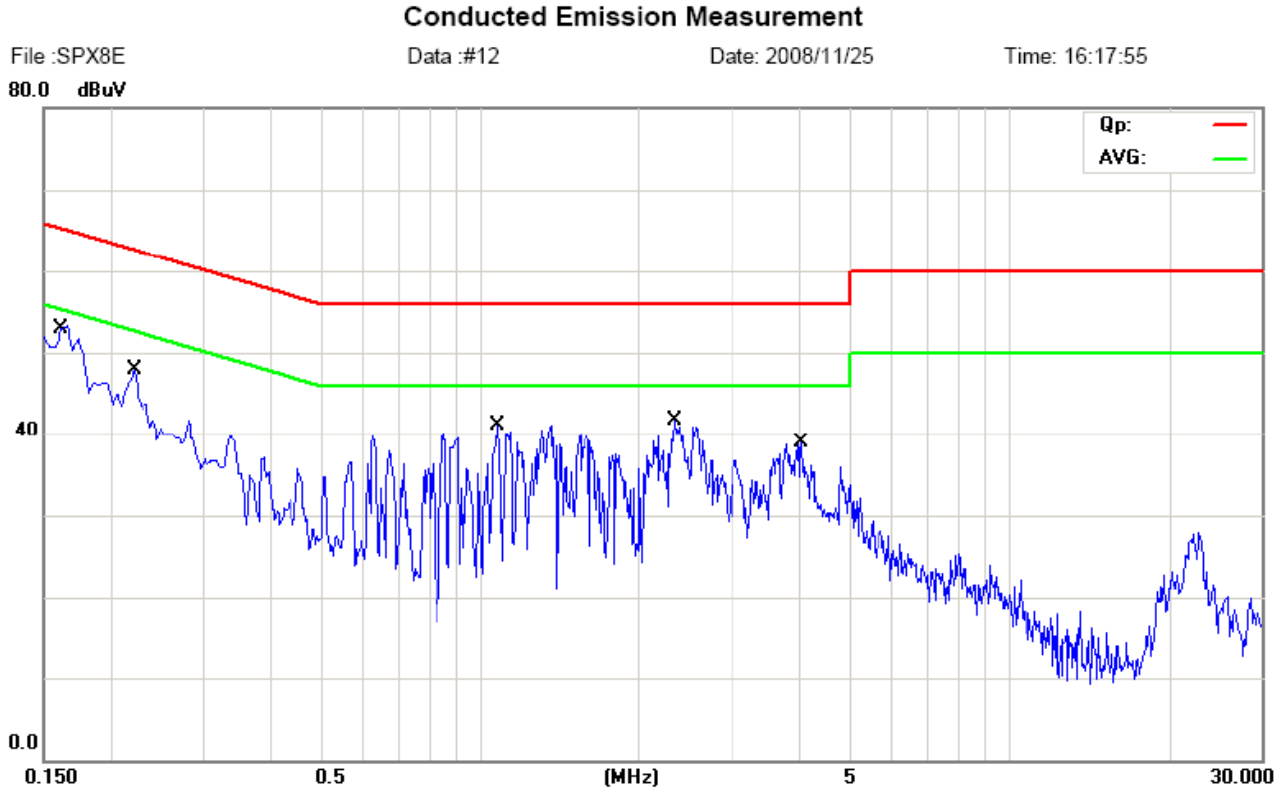
Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Read CF Card

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
0.1596	--	--	45.71	36.71	65.48	55.48
0.2217	--	--	41.78	24.48	62.75	52.75
1.0790			37.23	32.37	56.00	46.00
2.3335			35.23	32.93	56.00	46.00
3.9964	--	--	30.70	14.80	56.00	46.00

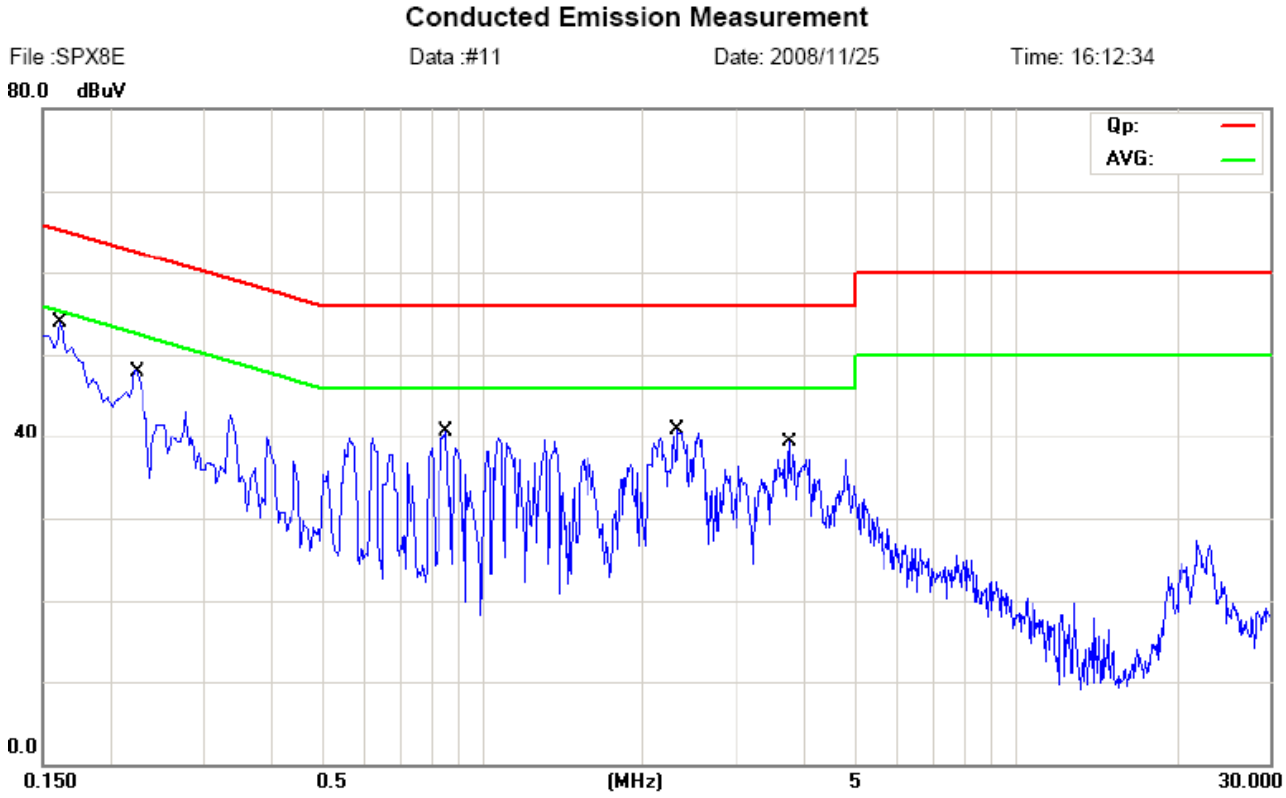
Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Read CF Card

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
0.1614	45.61	35.01	--	--	65.39	55.39
0.2260	44.08	35.28	--	--	62.60	52.60
0.8520	36.54	23.84	--	--	56.00	46.00
2.3327	35.93	32.73	--	--	56.00	46.00
3.7630	32.41	25.61	--	--	56.00	46.00

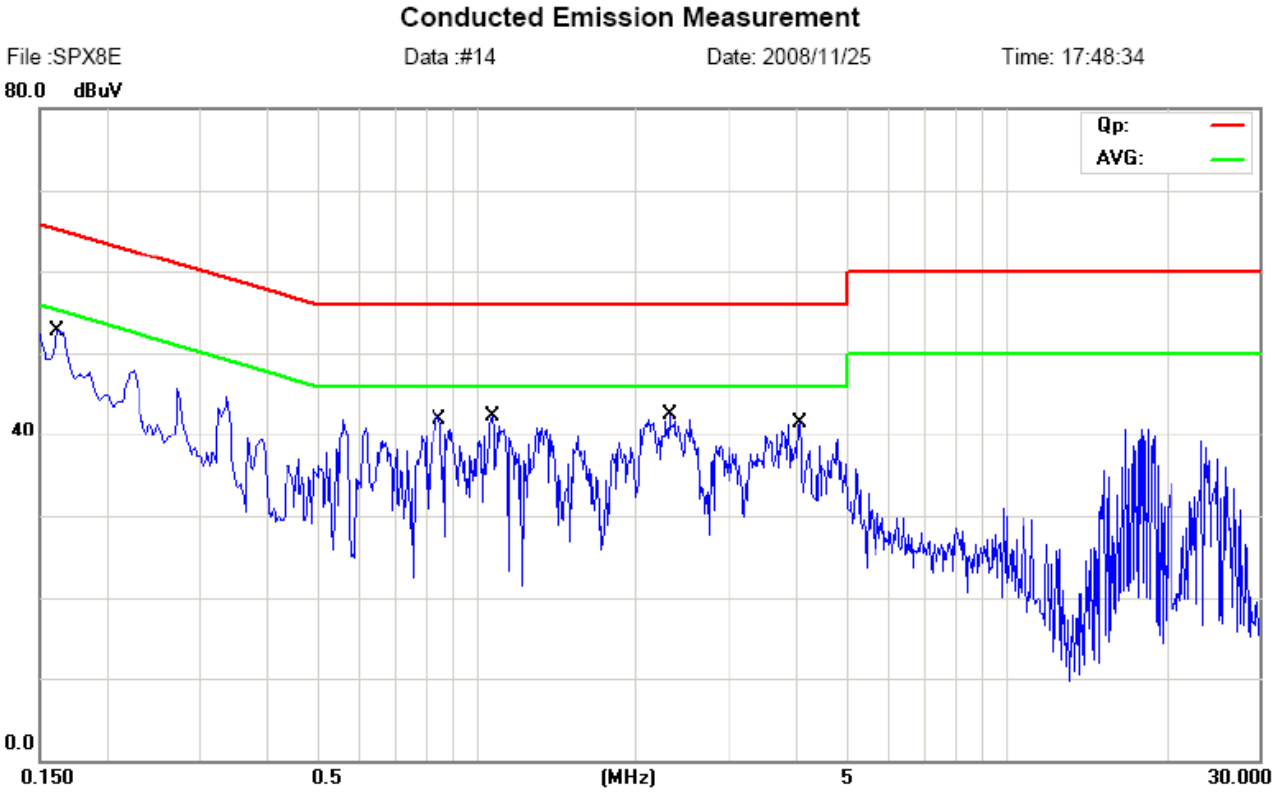
Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Connected to PC

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
0.1620	--	--	46.51	39.01	65.36	55.36
0.8540	--	--	38.05	35.95	56.00	46.00
1.0694			36.83	23.03	56.00	46.00
2.3171			38.73	30.13	56.00	46.00
4.0620	--	--	40.12	27.82	56.00	46.00

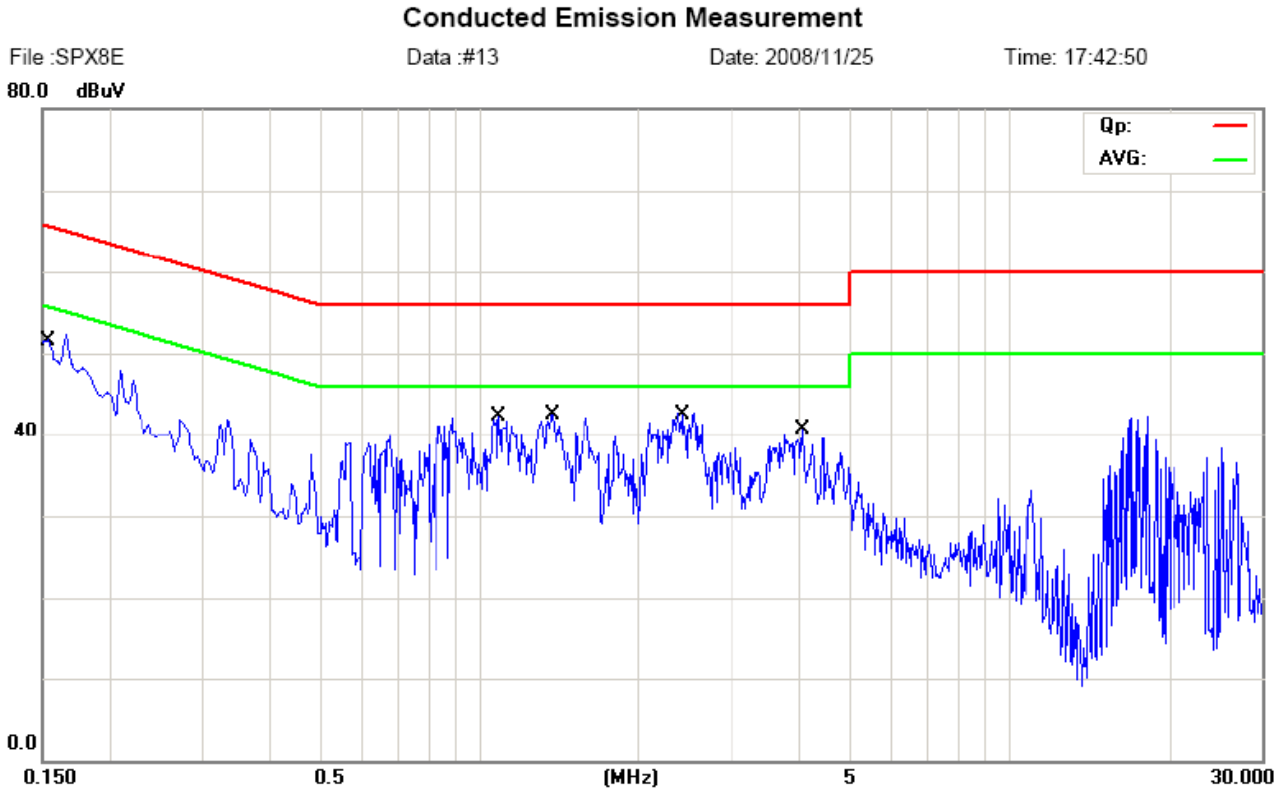
Conducted Emission on Live Terminal of the power line (150kHz to 30MHz)

EUT set Condition: Connected to PC

Working Voltage: 120V~ 60Hz

Results: **Pass**

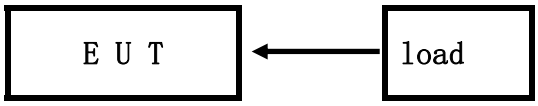
Please refer to following diagram for individual



Frequency (MHz)	Reading(dB μ V)				Limit (dB μ V)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1518	45.70	37.80	--	--	65.90	55.90
1.0775	37.83	29.03	--	--	56.00	46.00
1.3614	37.54	27.14	--	--	56.00	46.00
2.4120	34.66	28.76	--	--	56.00	46.00
4.0786	37.13	33.73	--	--	56.00	46.00

5.0 Radiated Disturbance Test

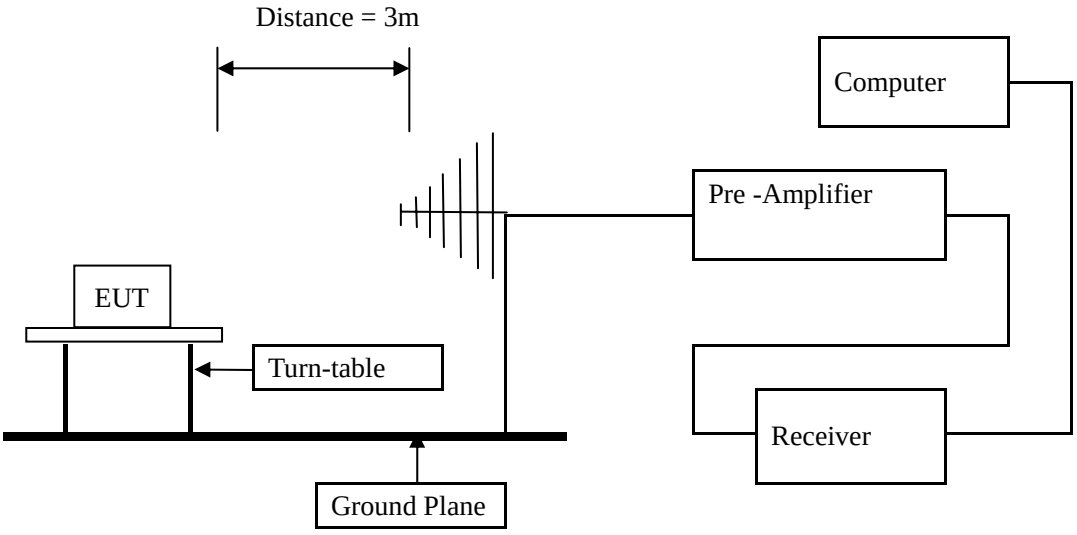
5.1 Schematics of the test

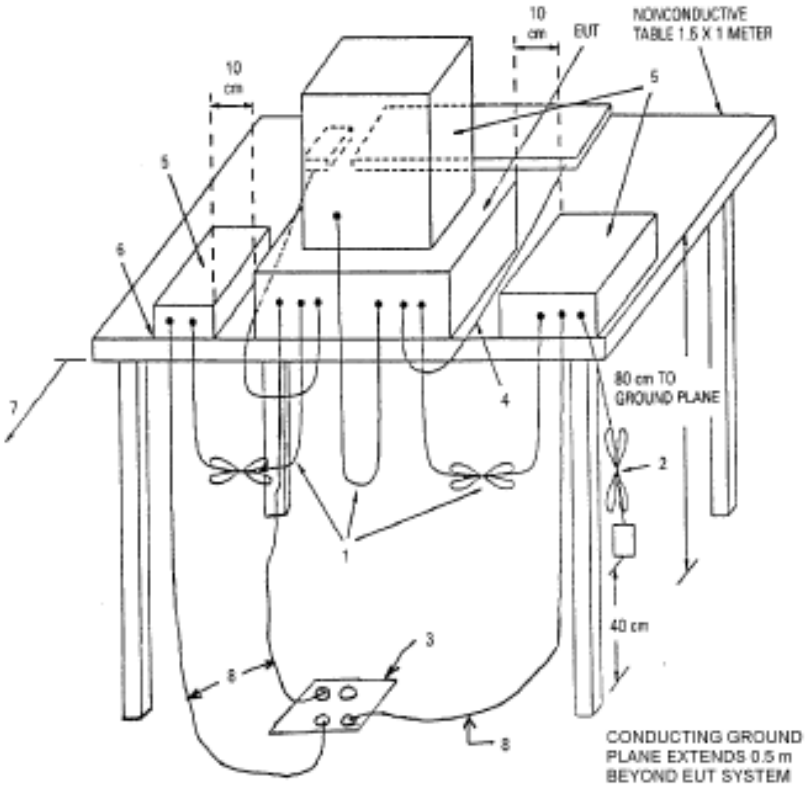


5.2 Test Method and test Procedure:

The EUT was tested according to ANSI C63.4 –2003, The frequency spectrum from 30MHz to 1GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak 0values with a resolution bandwidth of 120KHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.

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 1GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120KHz. All readings are above 1GHz, peak values with a resolution bandwidth of 1MHz. Measurements were made at 3 meters.

A: Radiated Disturbance In Horizontal (30MHz----1000MHz)

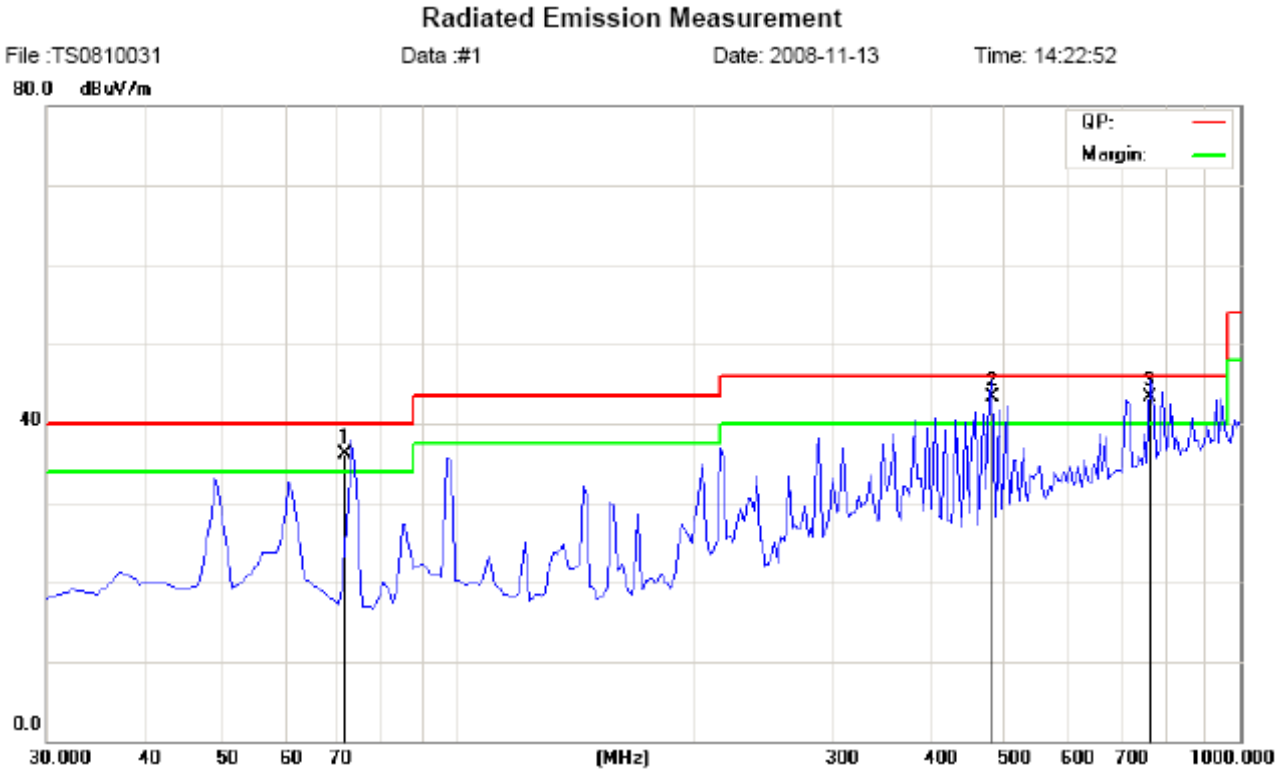
EUT set Condition: Connected to PC

Level: **Class B**

Results: **PASS**

Please refer to following diagram for individual

Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
72.032	36.03	H	40.00
480.095	43.40	H	46.00
768.143	43.37	H	46.00

B: Radiated Disturbance In Vertical (30MHz----1000MHz)

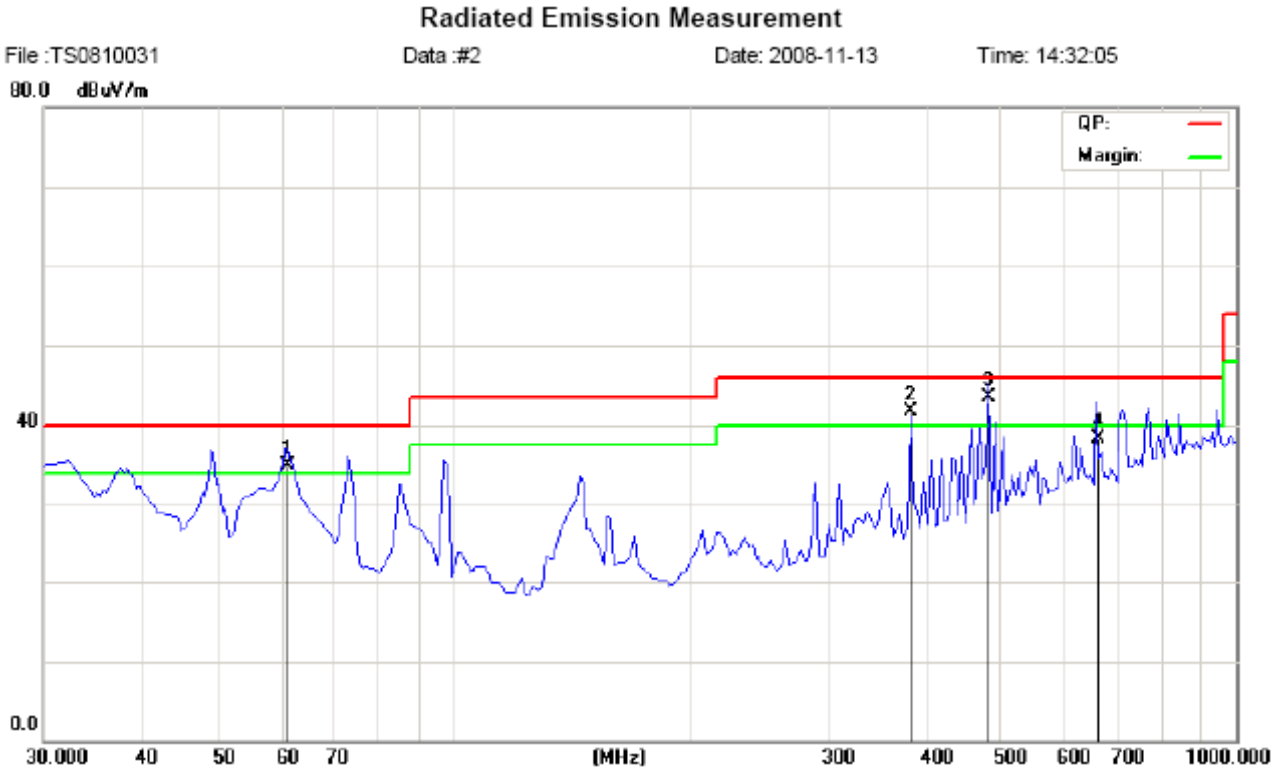
EUT set Condition: Connected to PC

Level: **Class B**

Results: **PASS**

Please refer to following diagram for individual

Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
61.040	34.89	V	40.00
384.086	41.79	V	46.00
480.081	43.46	V	46.00
665.469	38.28	V	46.00

C: Radiated Disturbance In Horizontal (30MHz----1000MHz)

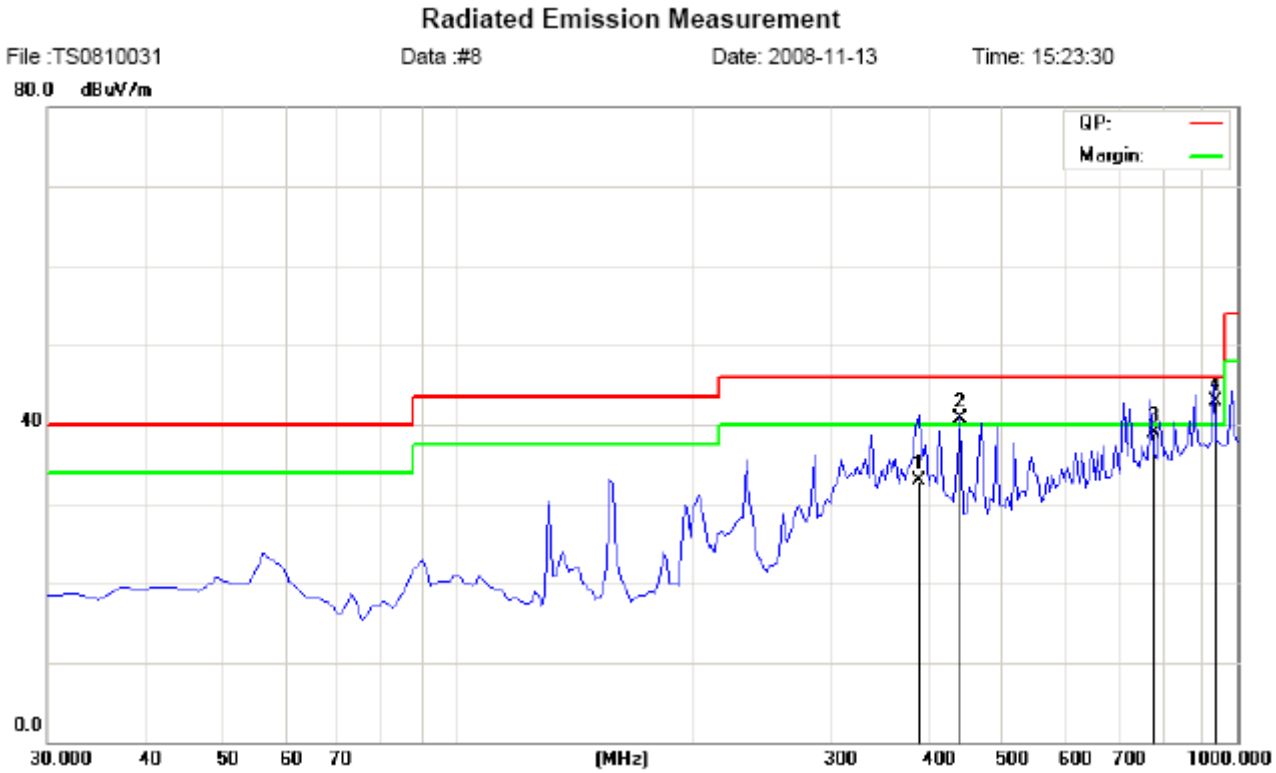
EUT set Condition: Reading SD Card

Level: **Class B**

Results: **PASS**

Please refer to following diagram for individual

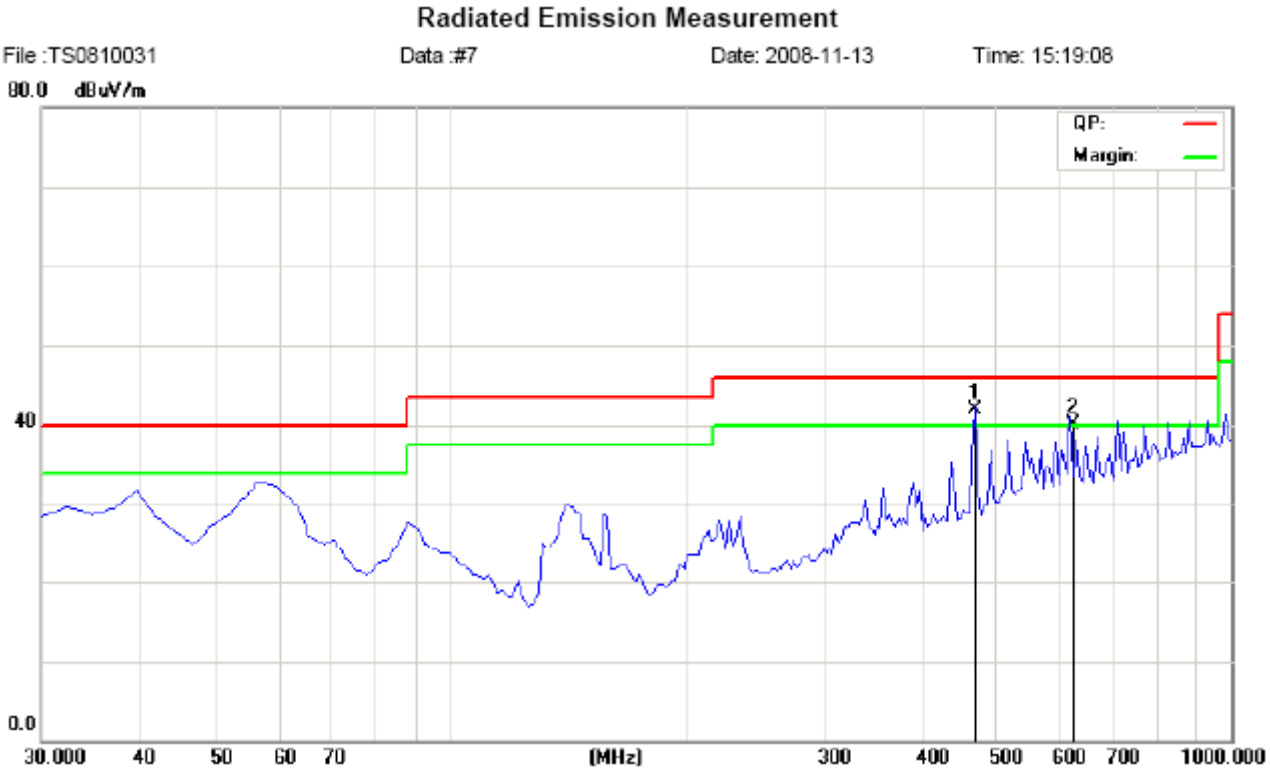
Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
389.018	32.81	H	46.00
441.994	40.66	H	46.00
780.006	38.95	H	46.00
938.012	42.82	H	46.00

D: Radiated Disturbance In Vertical (30MHz----1000MHz)

EUT set Condition: Reading SD Card
Level: **Class B**
Results: **PASS**
Please refer to following diagram for individual
Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
468.010	41.87	V	46.00
624.000	40.06	V	46.00

E: Radiated Disturbance In Horizontal (30MHz----1000MHz)

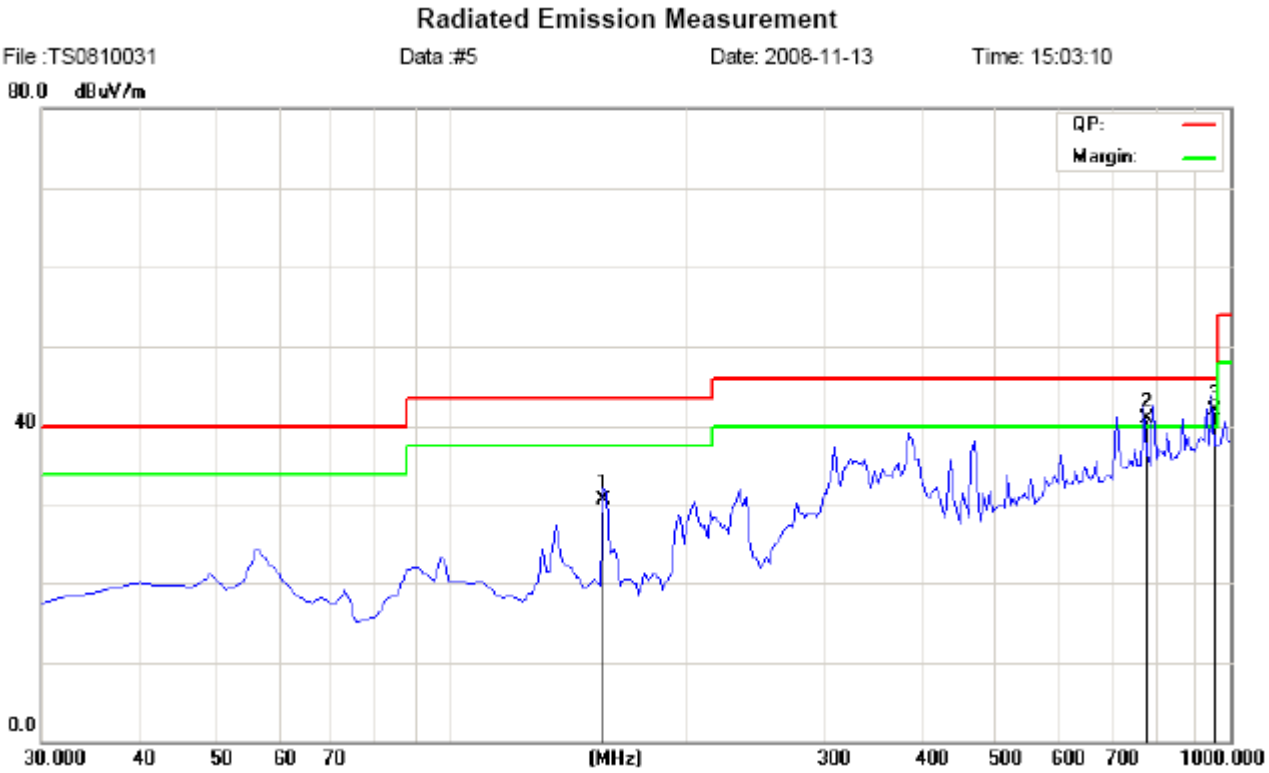
EUT set Condition: Reading USB

Level: **Class B**

Results: **PASS**

Please refer to following diagram for individual

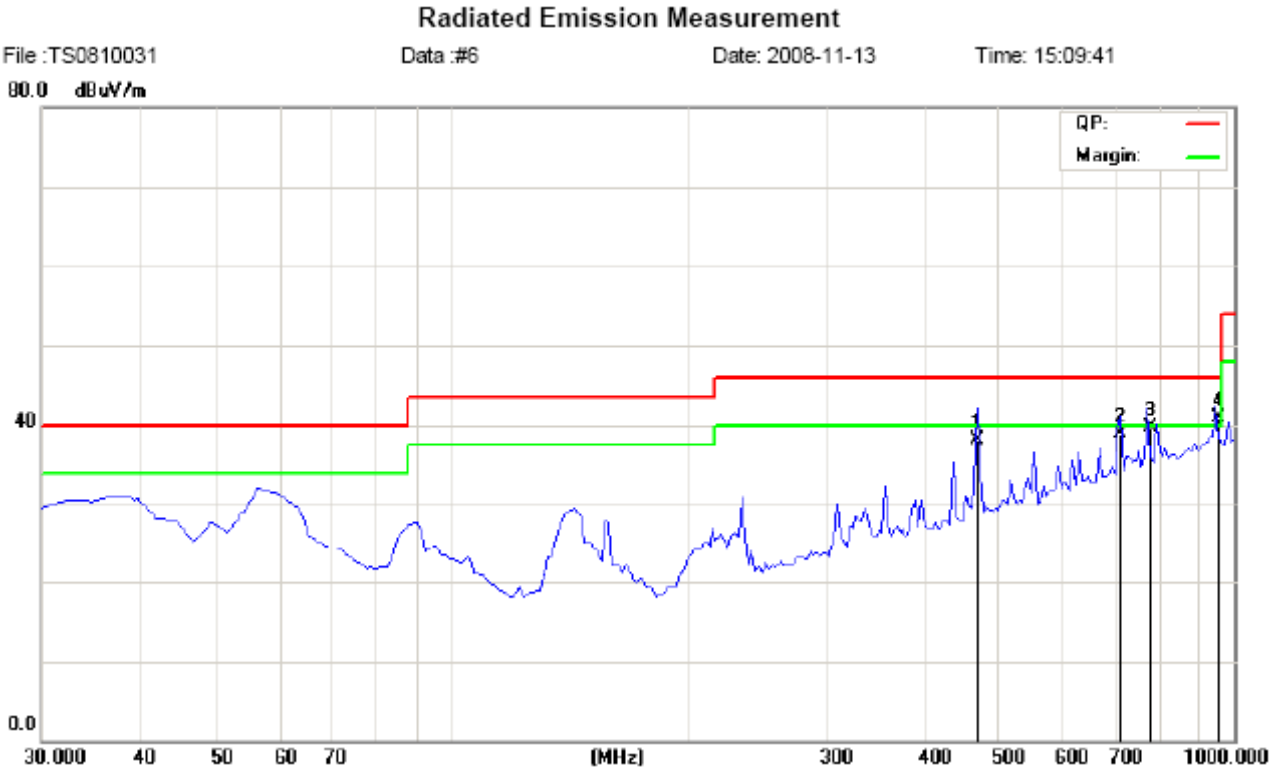
Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
155.985	30.73	H	43.50
779.995	40.94	H	46.00
952.954	41.99	H	46.00

F: Radiated Disturbance In Vertical (30MHz----1000MHz)

EUT set Condition: Reading USB
Level: **Class B**
Results: **PASS**
Please refer to following diagram for individual
Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
467.010	38.04	V	46.00
715.941	38.90	V	46.00
779.941	39.76	V	46.00
953.977	41.00	V	46.00

E: Radiated Disturbance In Horizontal (30MHz----1000MHz)

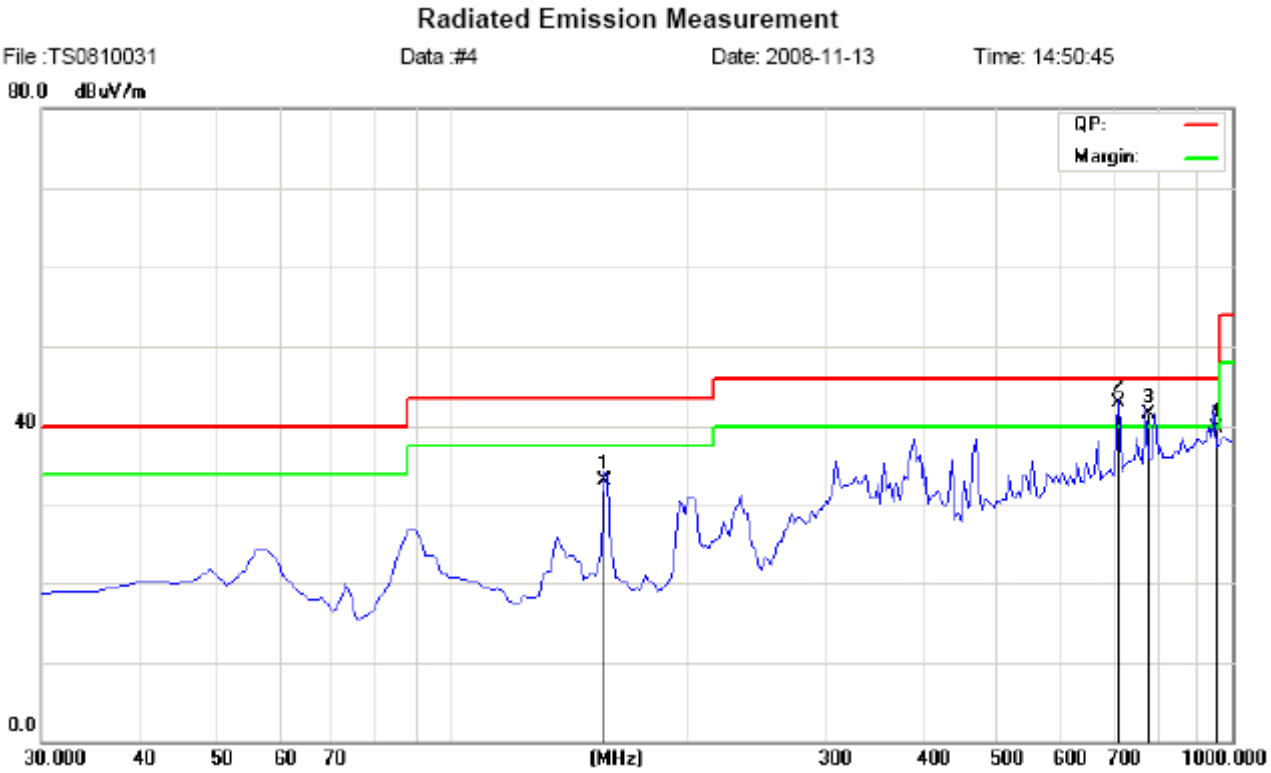
EUT set Condition: Reading CF Card

Level: **Class B**

Results: **PASS**

Please refer to following diagram for individual

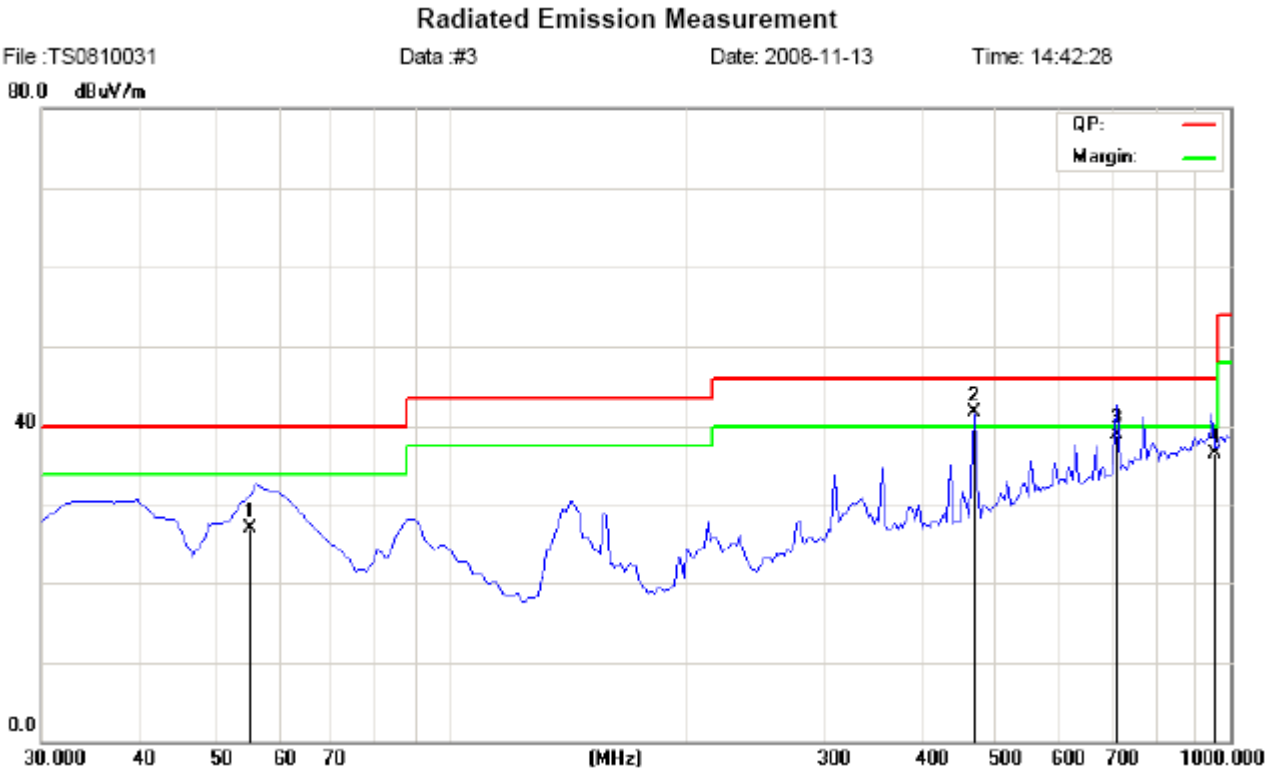
Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
156.006	33.06	H	43.50
715.501	42.99	H	46.00
780.016	41.47	H	46.00
984.947	39.66	H	46.00

F: Radiated Disturbance In Vertical (30MHz----1000MHz)

EUT set Condition: Reading CF Card
Level: **Class B**
Results: **PASS**
Please refer to following diagram for individual
Picture of the test



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
55.375	27.13	V	40.00
467.993	41.72	V	46.00
715.479	38.85	V	46.00
953.971	36.56	V	46.00

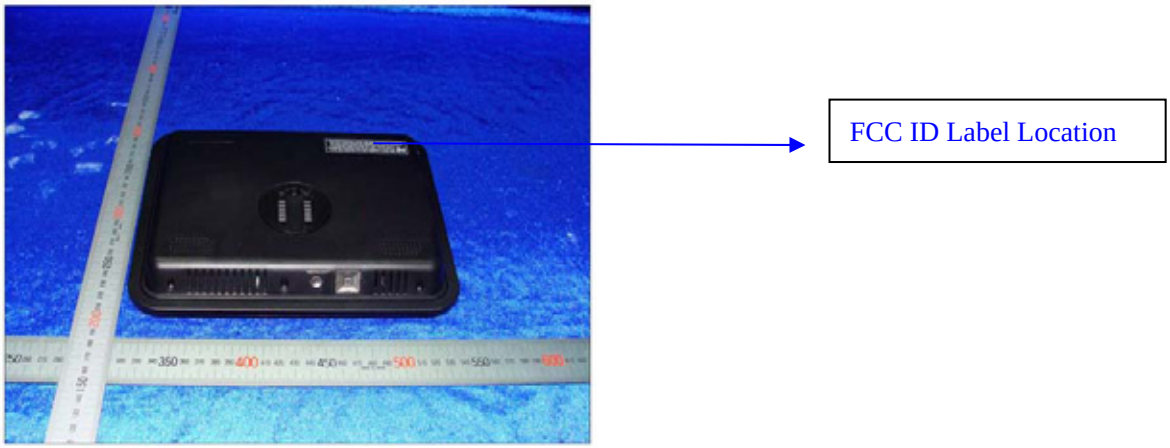
6.0 FCC ID Label

FCC ID: **V37-84INCHDPF**

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:



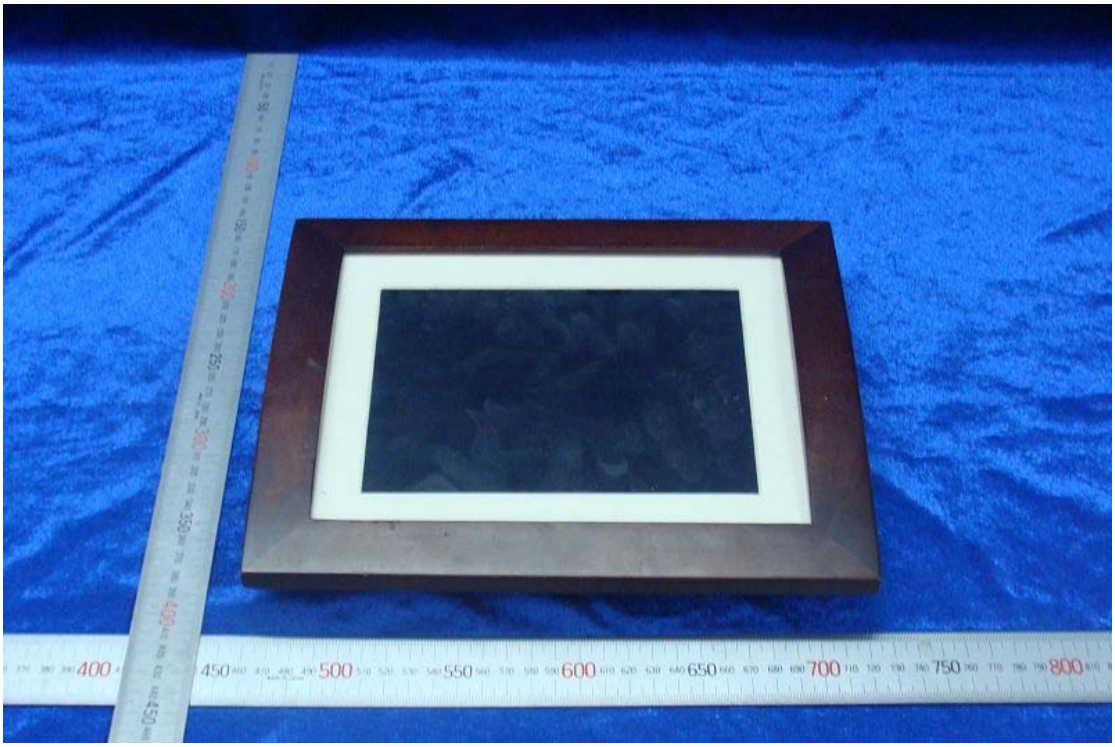
7.0 **Photo of testing**

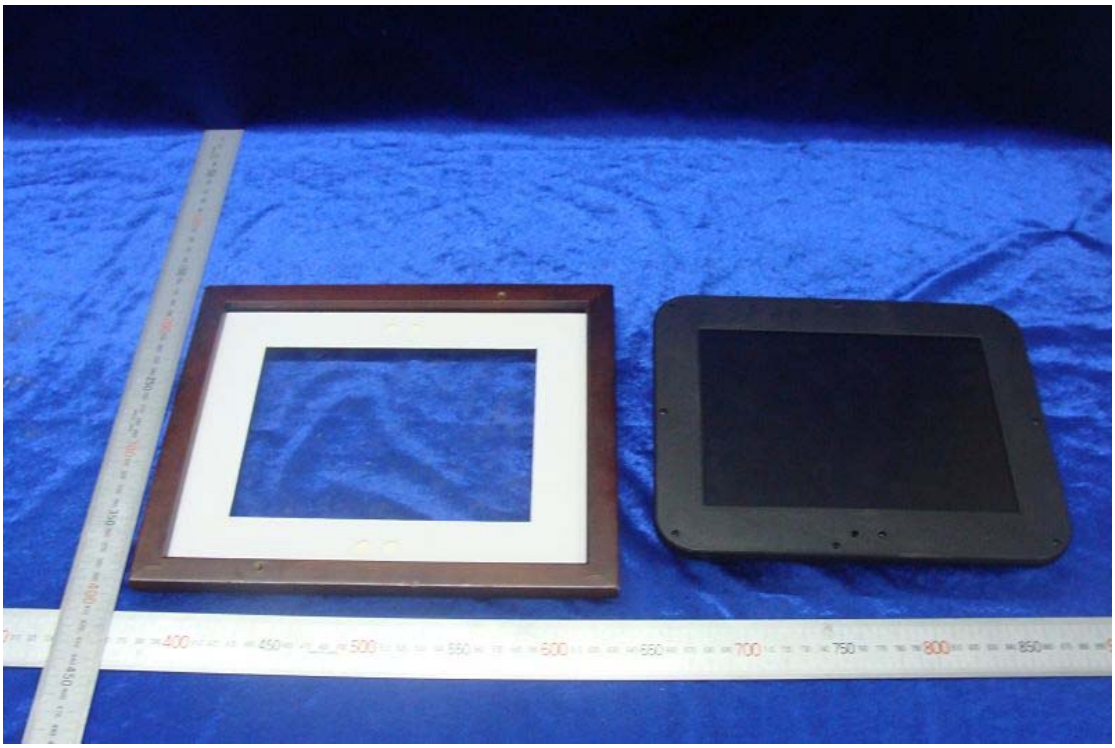
7.1 Conducted test View—

7.2 Radiated emission test view--

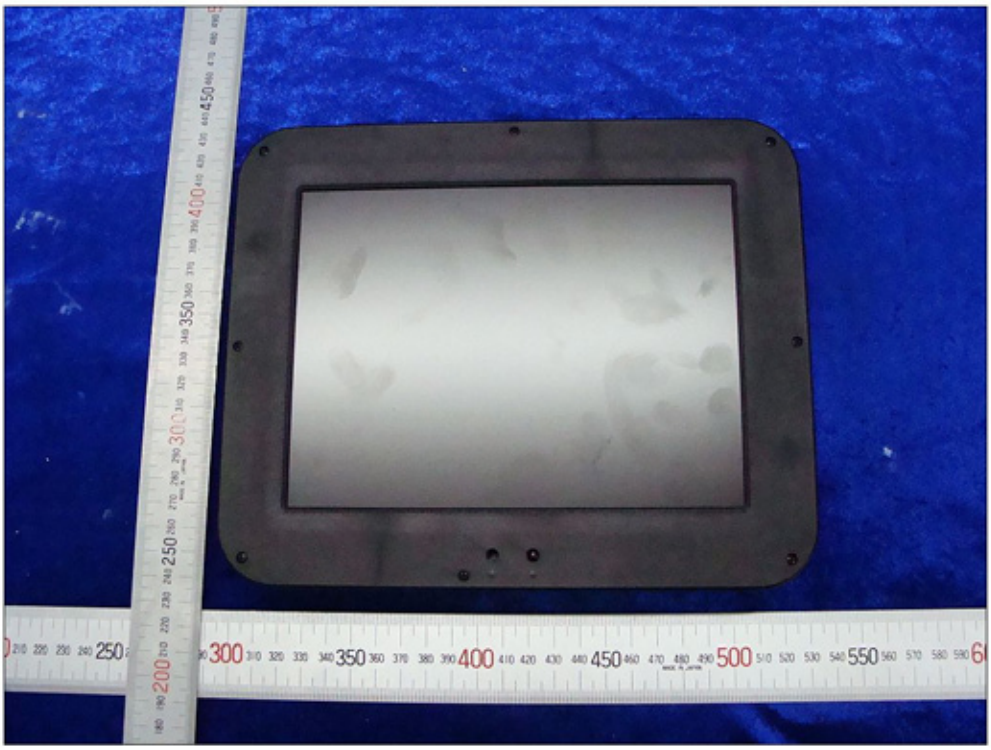
7.3 Photo for the EUT

Front View

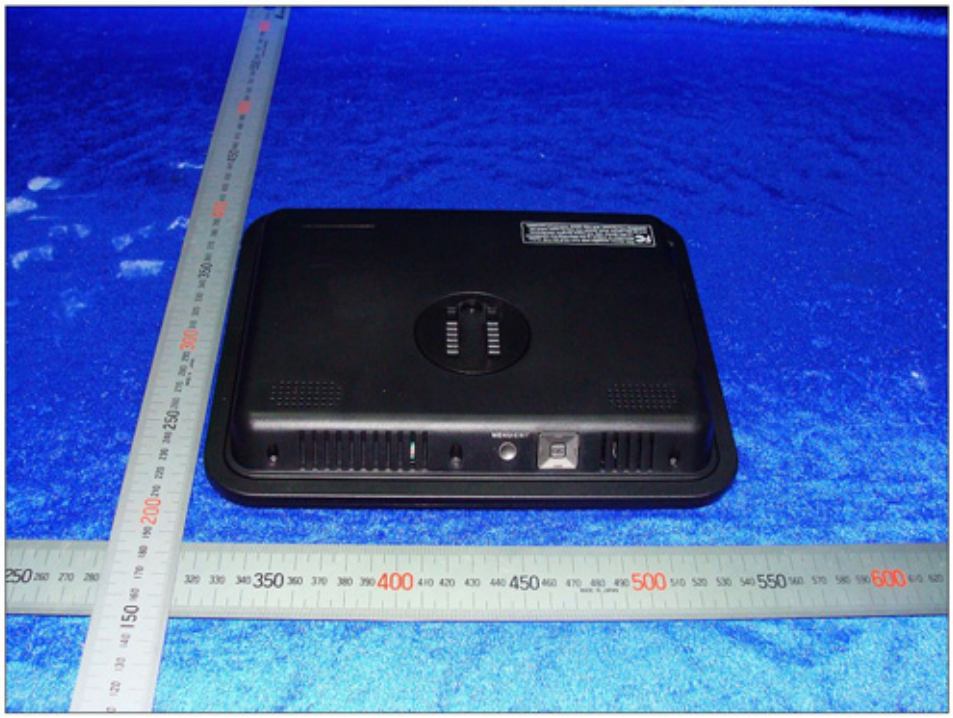


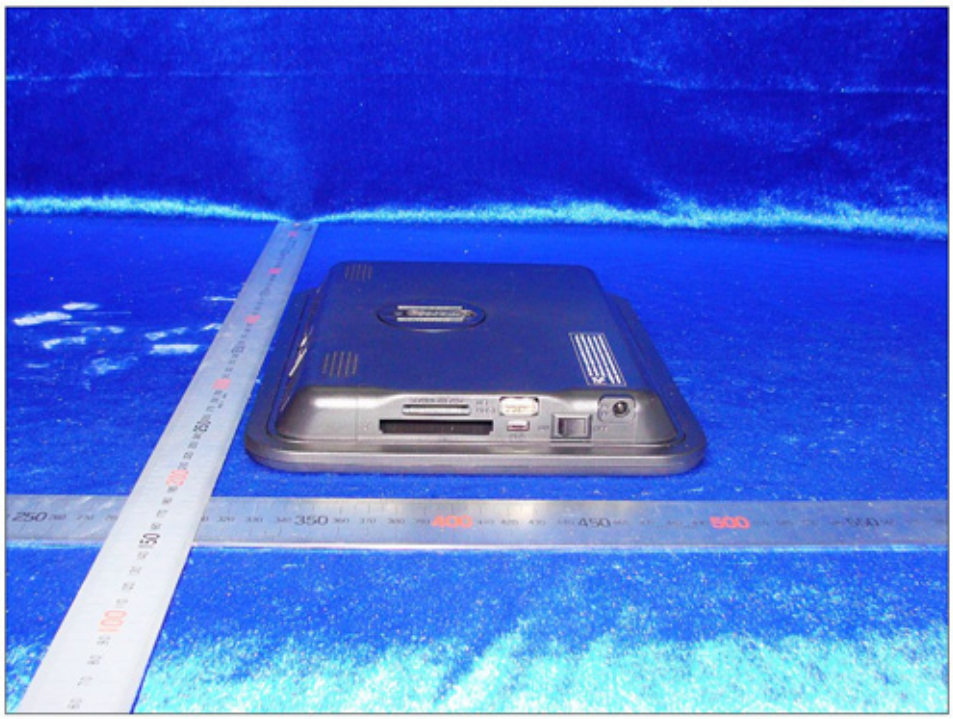


Back View



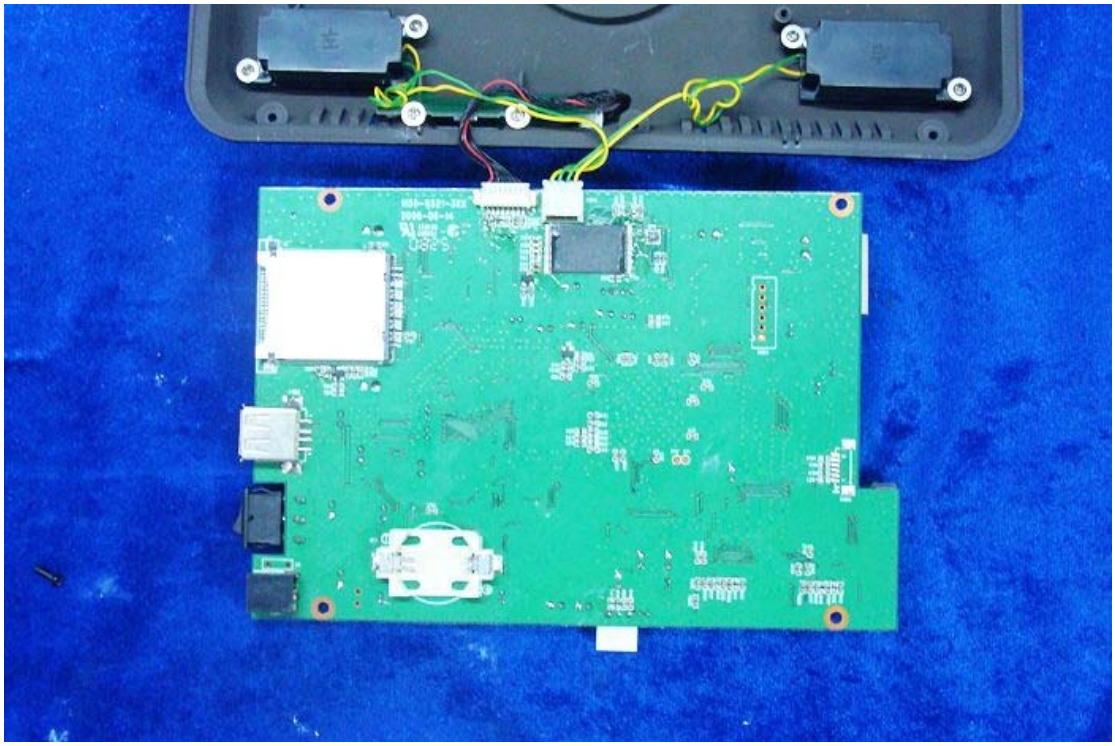
Side View



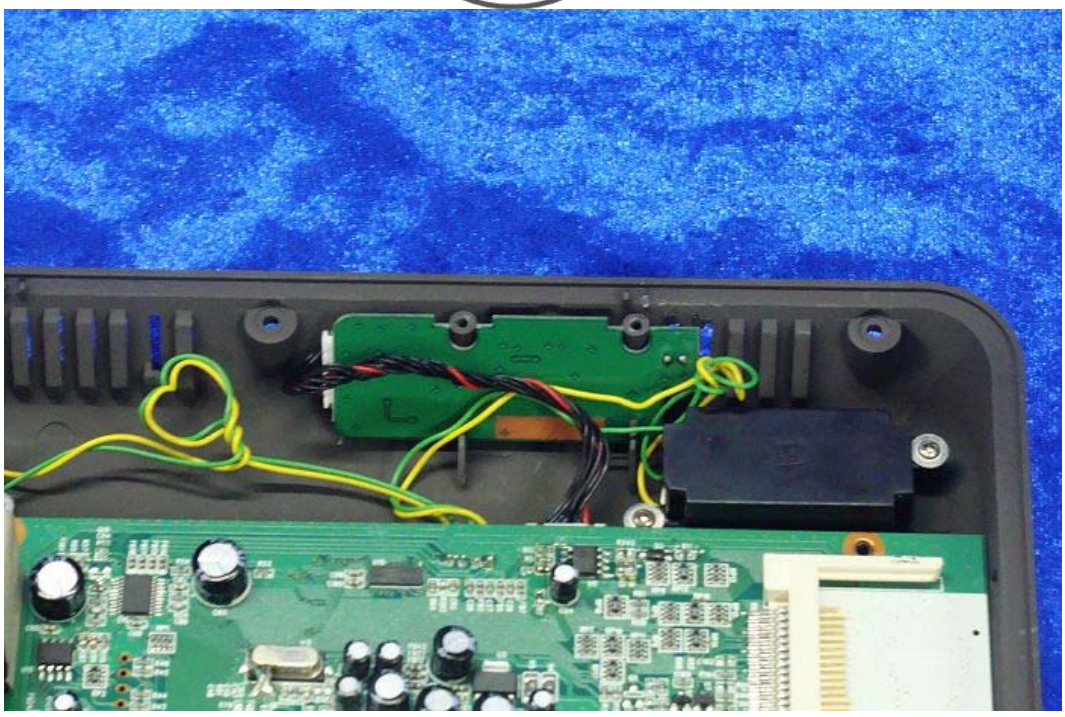


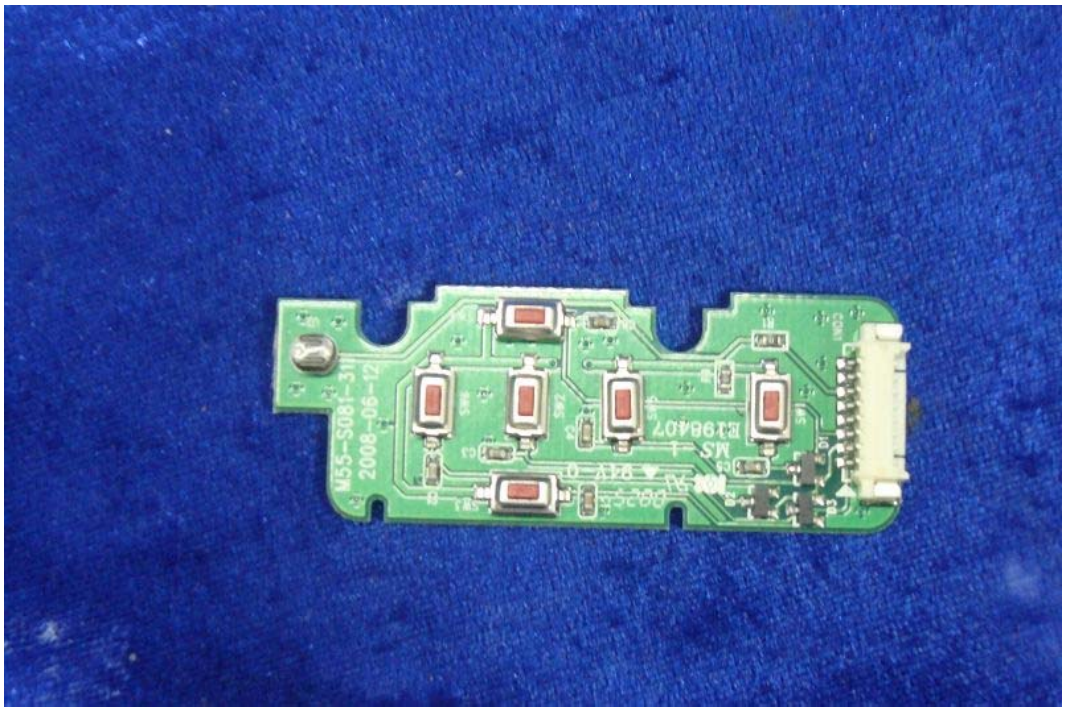
Inside View1

Inside View2



Inside View3





-End of the report-