



卓時檢測
TIMEWAY TESTING LABORATORY



ISO/IEC17025 Accredited Lab.

Report No: FCC 1010126-02

File reference No: 2010-10-29

Applicant: Zaidtek Electronic Technology (Xiamen) Co., Ltd.

Product: Receiver

Brand Name: N/A

Model No: HR004

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

Terry Tong

Manager

Dated: October 29,2010

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.

VCCI- Registration No.: R-3015 and C-3332

The EMC Laboratory has been registered and fully described in a report filed with the (VCCI) Voluntary Control Council for Interference. The acceptance letter from the VCCI is maintained in our files. Registration IC No.: R-3015 and C-3332



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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: Zaidtek Electronic Technology (Xiamen) Co., Ltd.
Address: No.285, Wengjiao Road, Haicang District, Xiamen, Fujian, China

Telephone: 0592-6881635
Fax: 0592-6881611

1.3 Description of EUT

Product: Receiver
Manufacturer: Zaidtek Electronic Technology (Xiamen) Co., Ltd.
Address: No.285, Wengjiao Road, Haicang District, Xiamen, Fujian, China

Brand Name: N/A
Model Number: HR004
Additional Model Number: --
Rating: Input: 5V Output: 2.4GHZ < 50 mA 0dBm

1.4 Submitted Sample: 1 Sample

1.5 Test Duration

2010-10-19 to 2010-10-29

1.6 Test Uncertainty

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

1.7 Test Engineer

The sample tested by

A handwritten signature in blue ink that reads 'Alan Geng'. The signature is written in a cursive, flowing style.

Print Name: Alan Geng



2.0 List of Measurement Equipment

2.1 Conducted Emission Test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESH3	860905/006	RS	2010.4.26	1Year
Spectrum Analyzer	ESA-L1500A	US37451154	HP	2010.4.26	1Year
PULSE LIMITER	ESH3-Z2	100281	RS	2010.4.26	1Year
LISN	ESH3-Z5	100294	RS	2010.4.26	1Year
LISN	ESH3-Z5	100253	RS	2010.4.26	1Year
LISN	LS16C	10010947251	AFJ	2010-5-14	1Year
LISN (Three Phase)	NSLK 8126	8126453	Schwarebeck	2010-5-14	1Year

2.2 Radiated electromagnetic disturbance test

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
EMI Test Receiver	ESVD	100008	RS	2010.4.26	1Year
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer	8595E	3441A00893	HP	2010.4.26	1Year
Amplifier	8447D	2727A05017	HP	2010.4.26	1Year
Bilog Antenna	VULB9163	9163/340	Schwarebeck	2010.4.26	1Year

2.3 Auxiliary Equipment

Name	Model No.	Serial No.	Manufacturer	Calibration Date	Calibration Cycle
Keyboard	--	--	DELL	Data cable of 1.5m length	FCC DOC
PC	R400	--	IBM	--	FCC DOC
Monitor	FP51G	ET47604175CLO	BENQ	Data cable of 1.5m length unshielded and 1.8m length AC Mains cable	FCC DOC

3.0 Technical Details

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- 3.1 Investigations Requested
Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

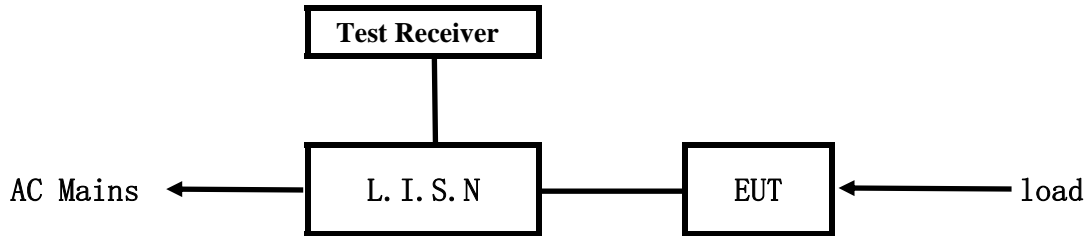
- 3.2 Test Standards
FCC Part 15 Subpart B: 2008

4.0 Conducted Power line Test

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4.1 Schematics of the test



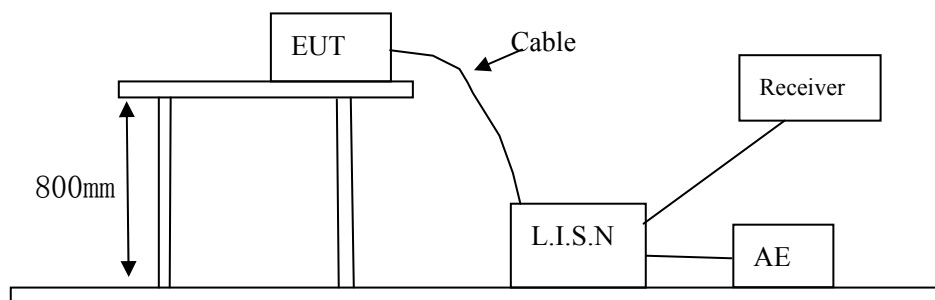
EUT: Equipment Under Test

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.

Test Voltage: 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:
- *decreasing linearly with logarithm of frequency.
 - 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 (150kHz to 30MHz)

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EUT Operating Environment

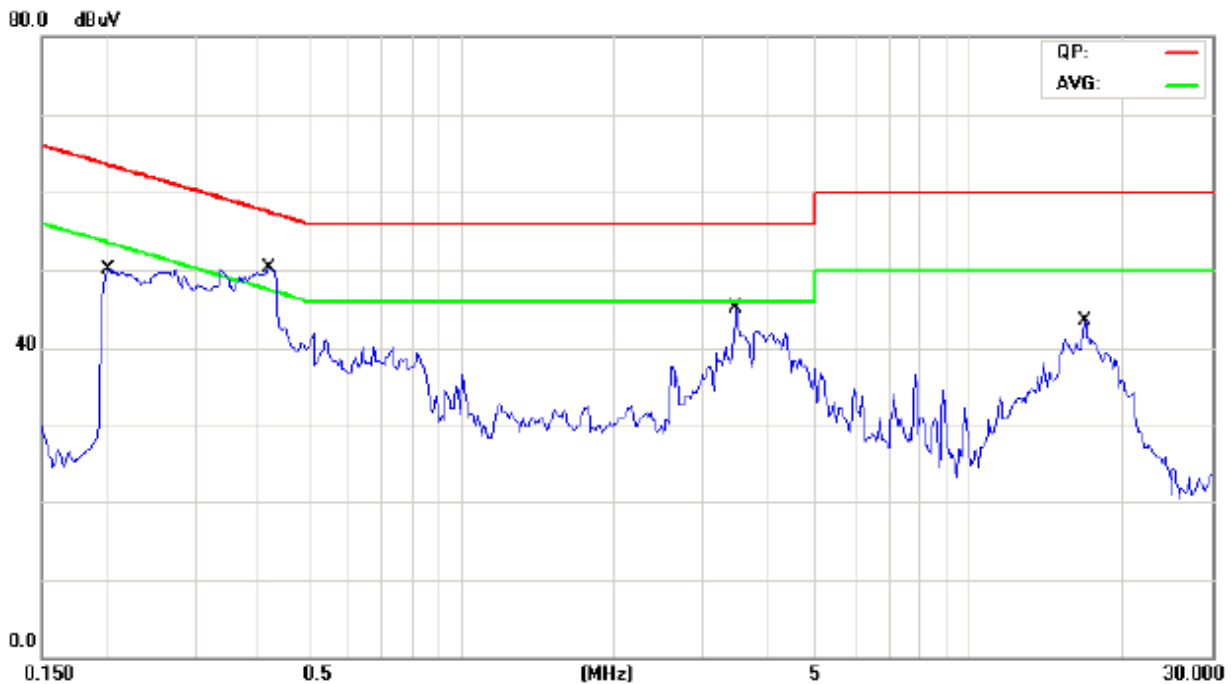
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Normal Work

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBµV)		Limit(dBµV)	
		Quasi-peak	Average	Quasi-peak	Average
0.419	Live	47.06	33.53	57.46	47.46
3.476	Live	43.78	33.15	56.00	46.00
16.875	Live	36.58	30.57	60.00	50.00
0.204	Live	47.36	30.73	63.41	53.41

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

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EUT Operating Environment

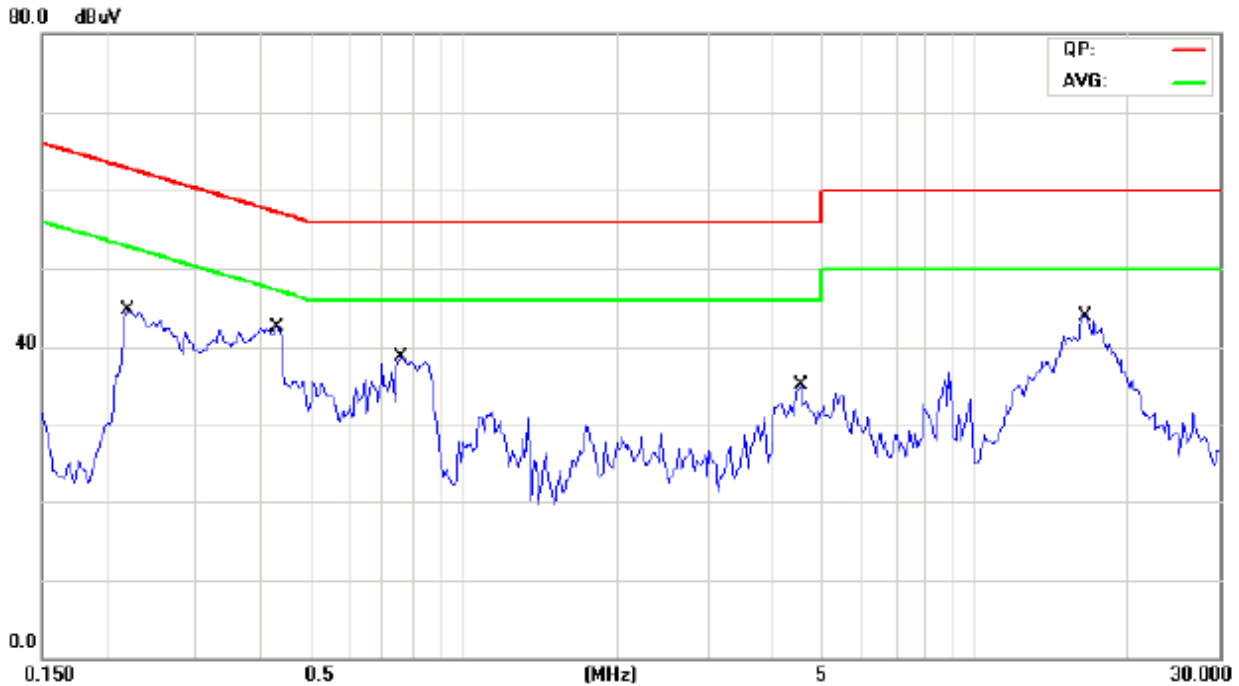
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Normal Work

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Line	Reading(dBµV)		Limit(dBµV)	
		Quasi-peak	Average	Quasi-peak	Average
0.220	Neutral	42.61	26.01	62.80	52.80
0.755	Neutral	31.05	15.25	56.00	46.00
0.435	Neutral	40.62	25.84	57.15	47.15
4.550	Neutral	29.97	21.70	56.00	46.00
16.433	Neutral	37.72	31.05	60.00	50.00

5.0 Radiated Disturbance Test

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5.1 Schematics of the test

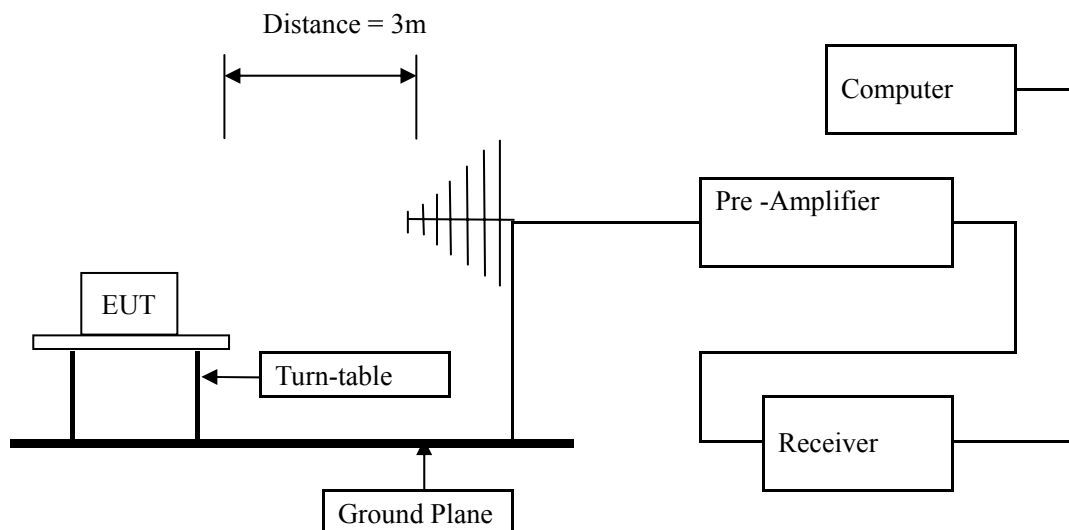


5.2 Test Method and test Procedure:

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.

Test Voltage: 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 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 (30MHz----1000MHz)

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EUT Operating Environment

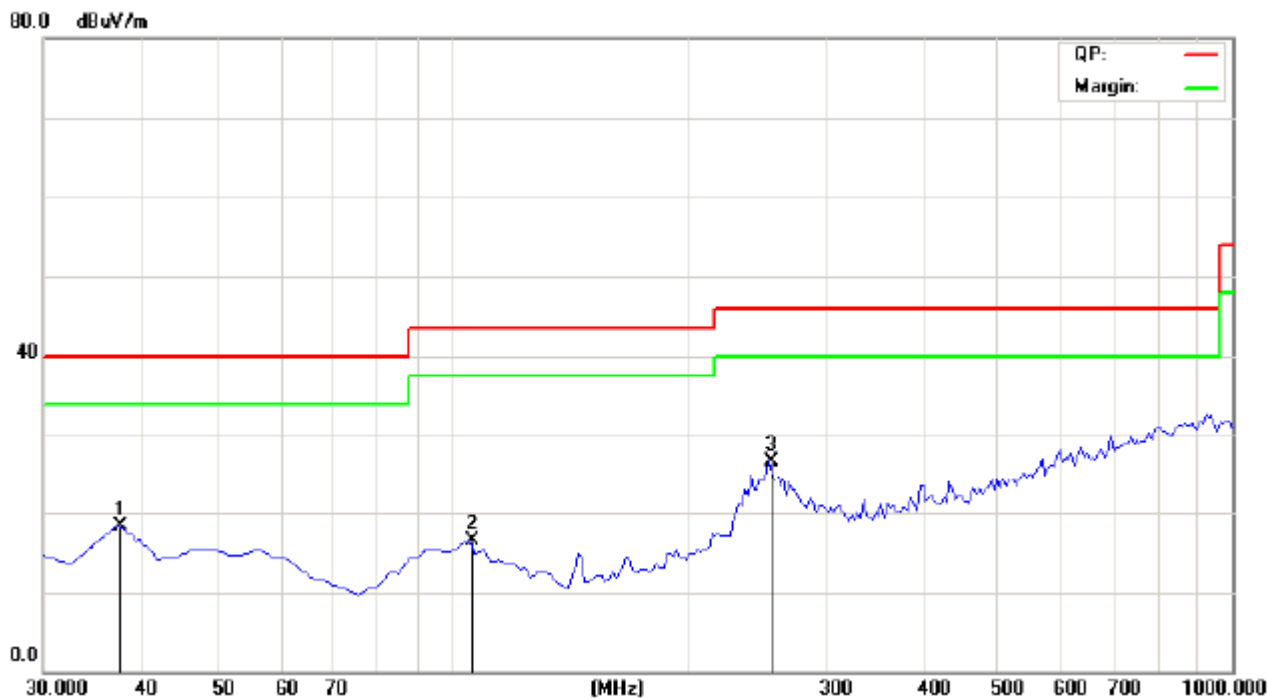
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Normal Work

Equipment Level: Class B

Results: Pass

Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
37.351	18.27	H	40.00
105.175	16.44	H	43.50
255.525	26.64	H	46.00

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

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EUT Operating Environment

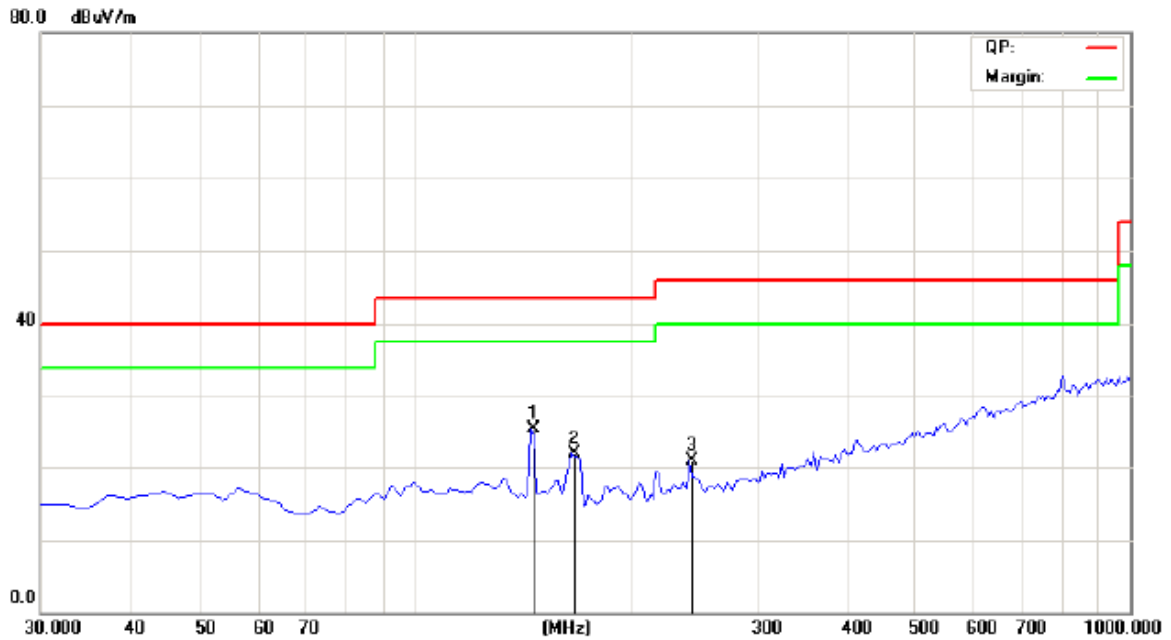
Temperature: 25°C Humidity: 75%RH Atmospheric Pressure: 101 KPa

EUT set Condition: Normal Work

Equipment Level: Class B

Results: Pass

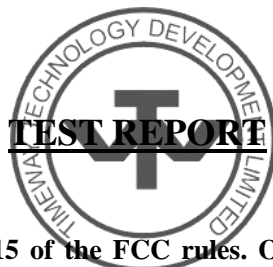
Please refer to following diagram for individual



Frequency (MHz)	Level@3m (dBµV/m)	Antenna Polarity	Limit@3m (dBµV/m)
146.400	25.58	V	43.50
165.800	21.95	V	43.50
243.400	20.98	V	46.00

6.0 FCC Label

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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: On the product body

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- 7.0 Photo of testing
- 7.1 Conducted test View--



- 7.2 Radiated emission test view--

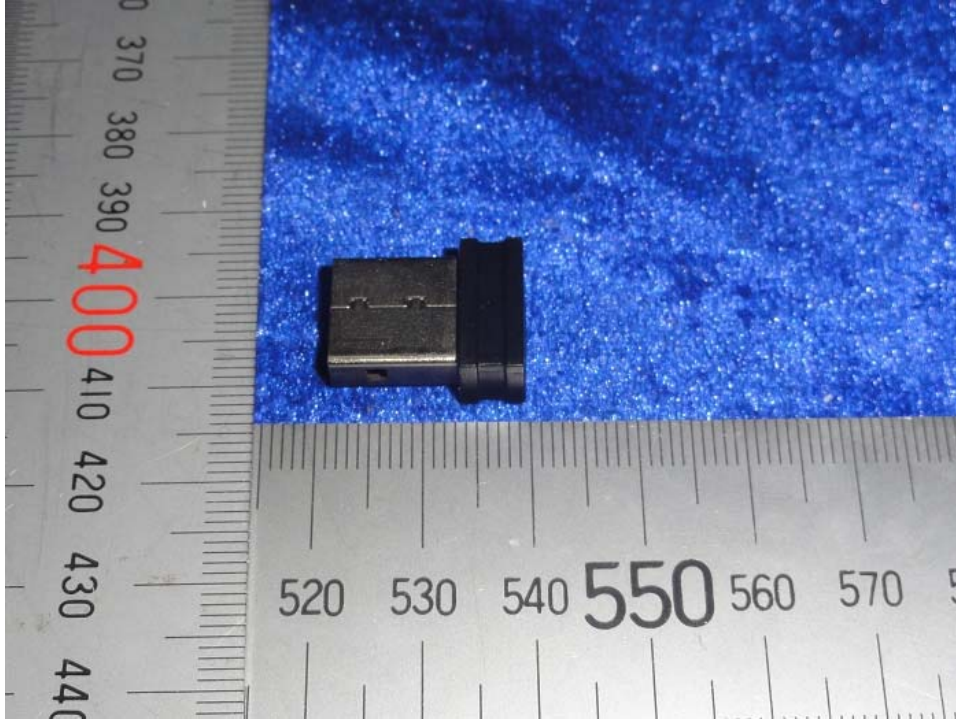


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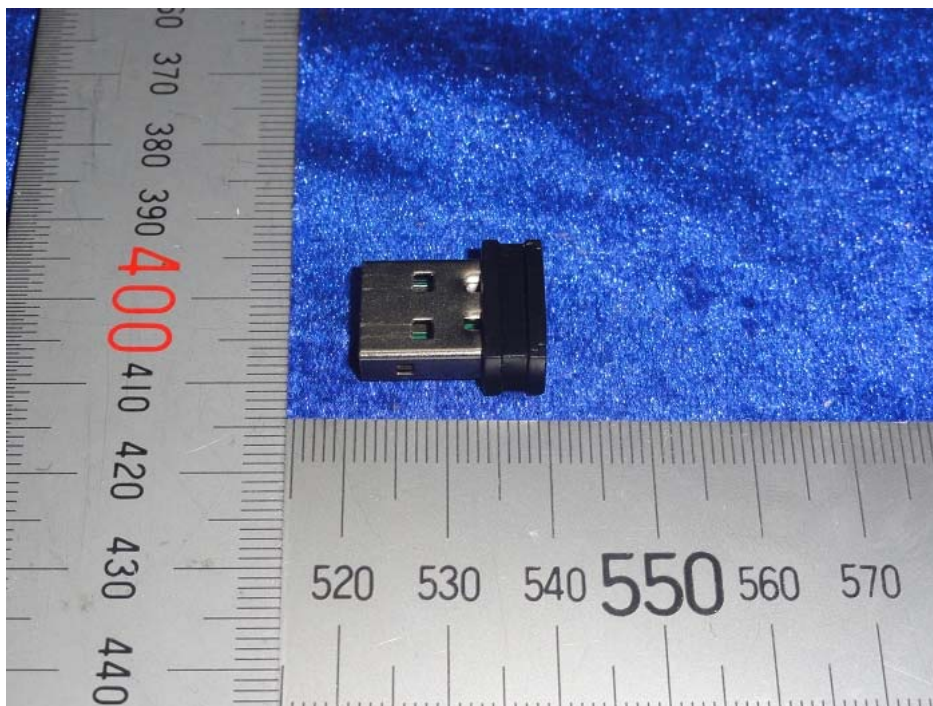


7.3 Photo for the EUT

Front View



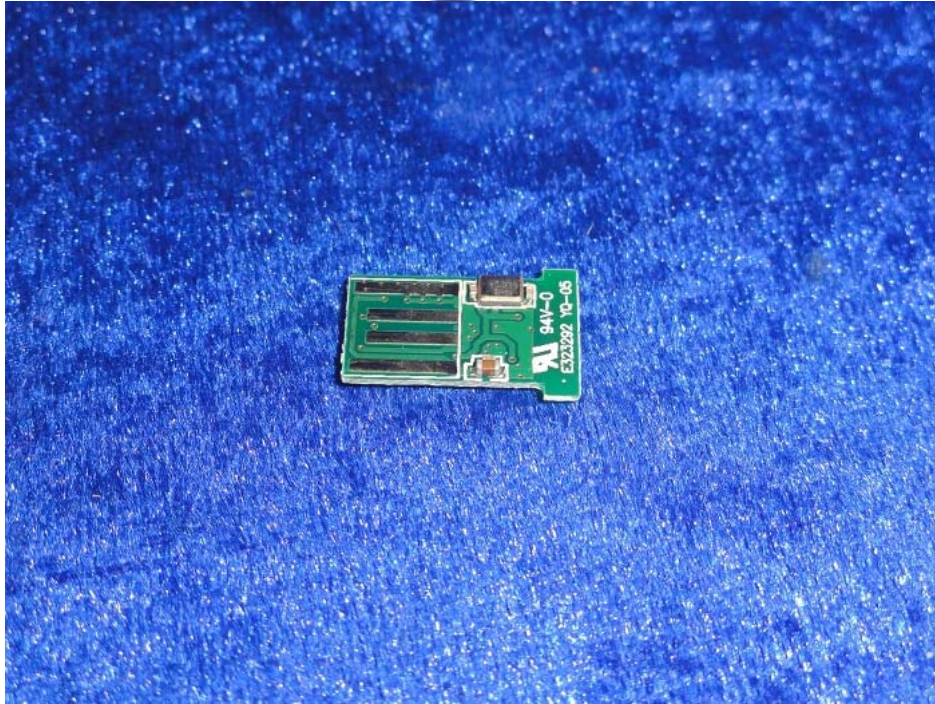
Back View



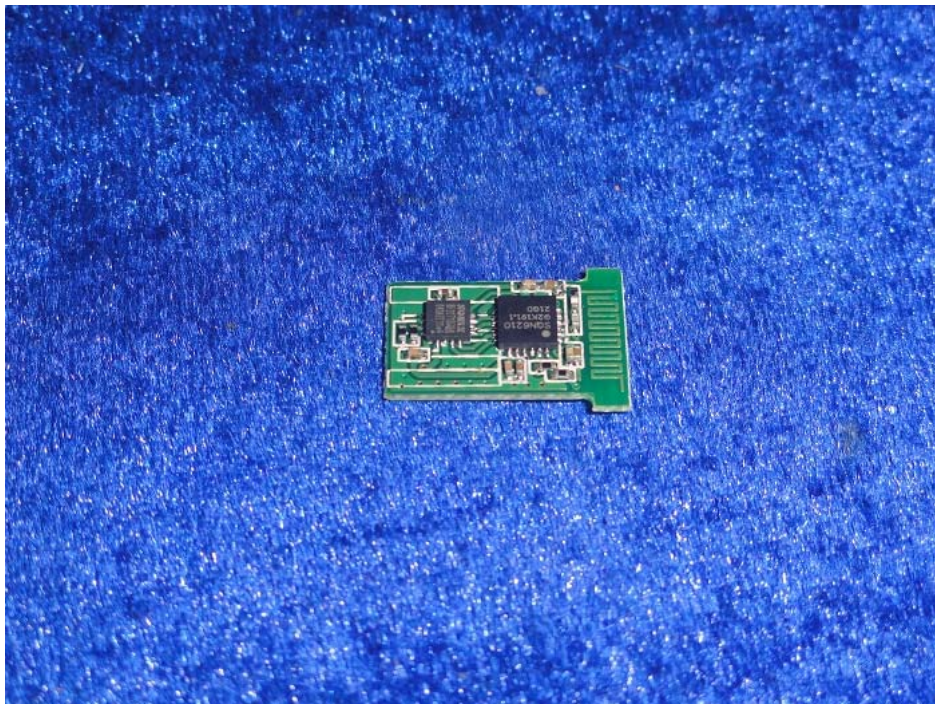
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Side View



Interior View



-End of the report-

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