

RF - TEST REPORT

Report Number : **64.790.11.01344.01- FCC** Date of Issue: 2011-06-22

Model : My7

Product Type : Vibrating Exercise Plate

FCC ID : ZN4MY7

Applicant : Power Plate International Ltd

Address : First Floor, 13 George Street London, W1U 3QJ, UK

Manufacturer : Shunde Yip Shing Garbo Clock Co. Ltd.

License Holder : Power Plate International Ltd

Address : First Floor, 13 George Street London, W1U 3QJ, UK

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including
Appendices

: 77

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1. DETAILS ABOUT THE TEST LABORATORY

Details about the Test Laboratory

Company name: Neutron Engineering Inc.
No.3.JinShaGang 1st Road,
ShiXia, DaLang Town,
DongGuan, China

Telephone: 86 769 83183000
Fax: 86 769 83196000

January 24, 2005 File on
Federal Communications Commission
Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046

Registration
Number: 319330

2. DESCRIPTION OF THE EQUIPMENT UNDER TEST

Test Standards	
FCC Part 15 Subpart C	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

Equipment	Vibrating Exercise Plate	
Brand Name	Power Plate	
Model Name.	My7	
OEM Brand/Model Name	N/A	
Model Difference	N/A	
Product Description	The EUT is vibrating exercise plate equipment with WIFI function.	
	Product Type	Vibrating Exercise Plate
	Operation Frequency:	2400~2483.5 MHz
	modulation Type:	802.11b: DSSS(CCK/QPSK/BPSK) 802.11g: OFDM(BPSK/QPSK/16QAM/64QAM)
	Date rate:	802.11b :1M/2M/5.5M/11M bps 802.11g :6M/9M/12M/18M/24M/36M/48M /54M bps
	Number Of Channel	11CH .Please see note 2.
	Antenna Designation:	ceramic multilayer antenna
	Antenna Gain(Peak)	4 dBi max.
	Output Power:	14.73dBm(conducted)
	More details of EUT technical specification. Please refer to the User's Manual.	
Channel List	Please refer to the Note 2.	
Power Source	100~240Vac	
Power Rating	160~185VA	
Connecting I/O Port(s)	Please refer to the User's Manual	
Products Covered	N/A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.



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2.

Frequency Band	Channel No.	Frequency
2400~2483.5MHz	1	2412 MHz
	2	2417 MHz
	3	2422 MHz
	4	2427 MHz
	5	2432 MHz
	6	2437MHz
	7	2442 MHz
	8	2447 MHz
	9	2452 MHz
	10	2457 MHz
	11	2462 MHz

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	SMD Antenna	N/A	4

3. SUMMARY OF TEST RESULTS

Technical Requirements				
Transmitter mode				
Test Items		Test Result		
		Pass	Fail	N/A
15.247(b)(4) Antenna Requirement		☒	☐	☐
15.207 Conducted Emission AC Power Port		☒	☐	☐
15.247 (a)(2) 6dB Bandwidth		☒	☐	☐
15.247(b)(3) Maximum Peak Output Power		☒	☐	☐
15.247(e) Peak Power Spectral Density		☒	☐	☐
15.209 & 15.247(d) Conducted Spurious Emission (30MHz to 25GHz)		☒	☐	☐
15.247 (d) & 15.205 Band Edges Measurement		☒	☐	☐
15.209 & 15.247(d) Radiated Spurious Emission (30MHz to 25GHz)		☒	☐	☐



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4. GENERAL REMARKS

This submittal(s) (test report) is intended for

FCC ID: ZN4MY7

filing to comply with

- Section 15.205, 15.207, 15.209, 15.247 of the FCC Part 15, Subpart C Rules. Tests have been carried out in accordance with FCC rules Part 15 Subpart C, ANSI C63.4 (2009), Public Notice DA 00-705 and DTS procedures KDB 558074.

SUMMARY:

All tests according to the regulations cited on page 5 were

☒ - Performed

☐ - Not Performed

The Equipment Under Test

☒ - **Fulfills** the general approval requirements.

☐ - **Does not** fulfill the general approval requirements.

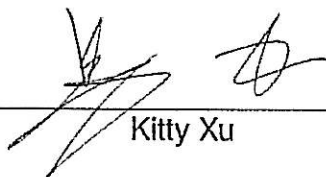
Testing Start Date: 2011-05-25

Testing End Date: 2011-05-31

- JIANGSU TÜV PRODUCT SERVICE LTD. GUANGZHOU BRANCH-

Reviewed by:

Prepared by:


Kitty Xu


Cella Xiang

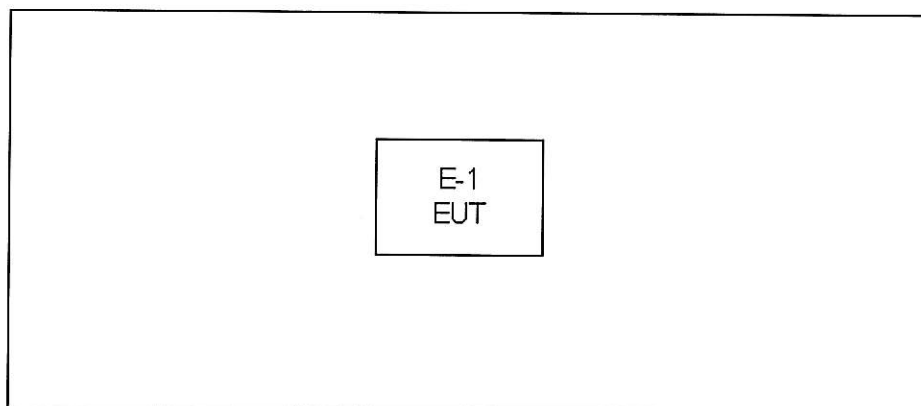
5. DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	Transmitting in 802.11b/g mode at 2412MHz with different data rate.
Mode 2	Transmitting in 802.11b/g mode at 2437MHz with different data rate.
Mode 3	Transmitting in 802.11b/g mode at 2462MHz with different data rate.

Final Test Mode	Description
Mode 1	Transmitting in 802.11b mode at 2412MHz with data rate is 1Mbps.
Mode 2	Transmitting in 802.11g mode at 2412MHz with data rate is 6Mbps.
Mode 3	Transmitting in 802.11b mode at 2437MHz with data rate is 1Mbps.
Mode 4	Transmitting in 802.11g mode at 2437MHz with data rate is 6Mbps.
Mode 5	Transmitting in 802.11b mode at 2462MHz with data rate is 1Mbps.
Mode 6	Transmitting in 802.11g mode at 2462MHz with data rate is 6Mbps.

5.1 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



5.2 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note

Item	Shielded Type	Ferrite Core	Length	Note

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in m in 「Length」 column.

6. TEST RESULTS

6.1 ANTENNA REQUIREMENT

6.1.1 STANDARD REQUIREMENTS

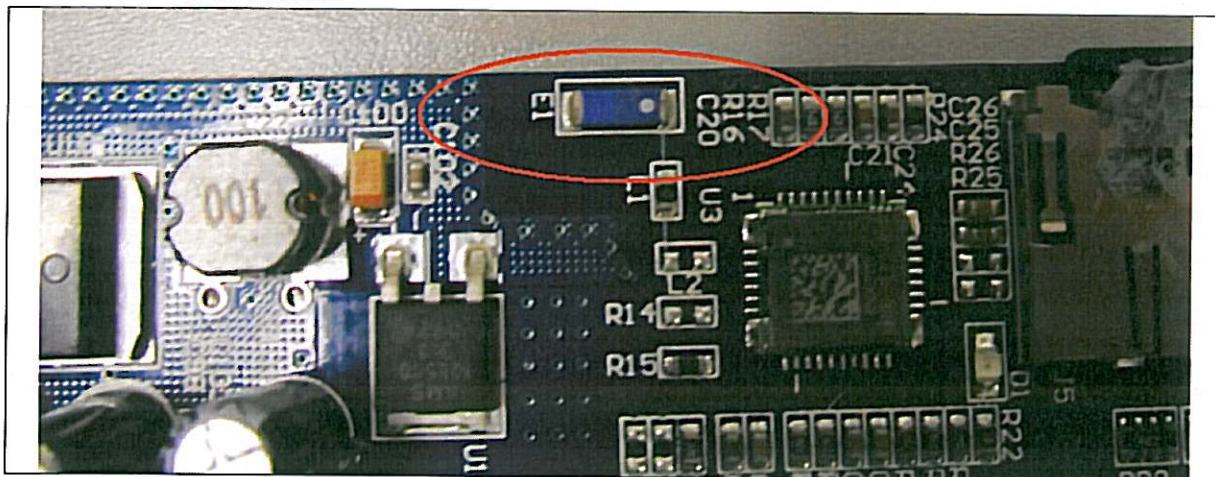
15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

6.1.2 EUT ANTENNA

The max antenna gain of ceramic multilayer antenna for EUT is 4dBi.

6.1.3 ANTENNA PHOTO



6.1.4 RESULT

Complies.

6.2 CONDUCTED EMISSION MEASUREMENT

6.2.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (d uV)		Class B (dBuV)		Standard
	Quasi-peak	average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

6.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	ESCI	Rohde & Schwarz	EMI Test Receiver	TÜV SÜD	2011-11-21
2	ENV216	Rohde & Schwarz	AMN	TÜV SÜD	2011-11-21
3	RSU-M314-N	Compliance Direction Systems Inc.	RF Switch Box	TÜV SÜD	2011-11-21

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

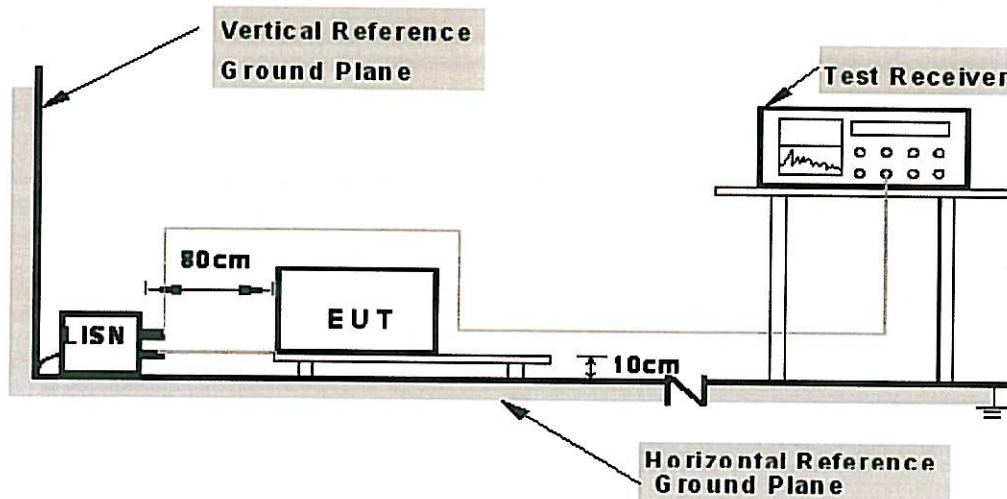
6.2.3 TEST PROCEDURE

- The EUT was placed 0.1 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

6.2.4 DEVIATION FROM TEST STANDARD

No deviation

6.2.5 TEST SETUP PHOTO



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

6.2.6 EUT OPERATING CONDITIONS

Test EUT with WIFI function on.

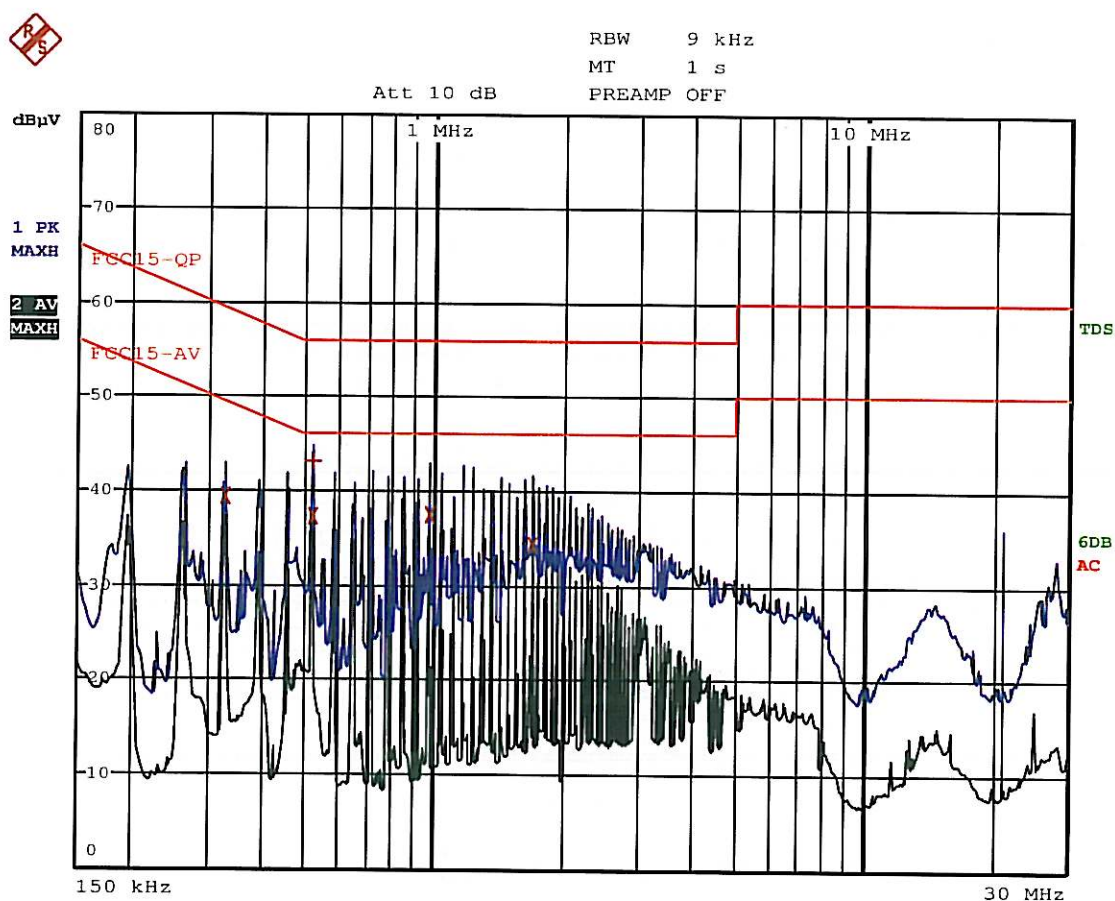


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6.2.7 TEST RESULTS

Model Name. :	My7	Conducted Line/Port:	L
Temperature:	24.9 °C	Relative Humidity:	48%
Pressure:	1003mBar	Test voltage:	120Vac
Test Mode :	Test EUT with WIFI function on.		

Test data:



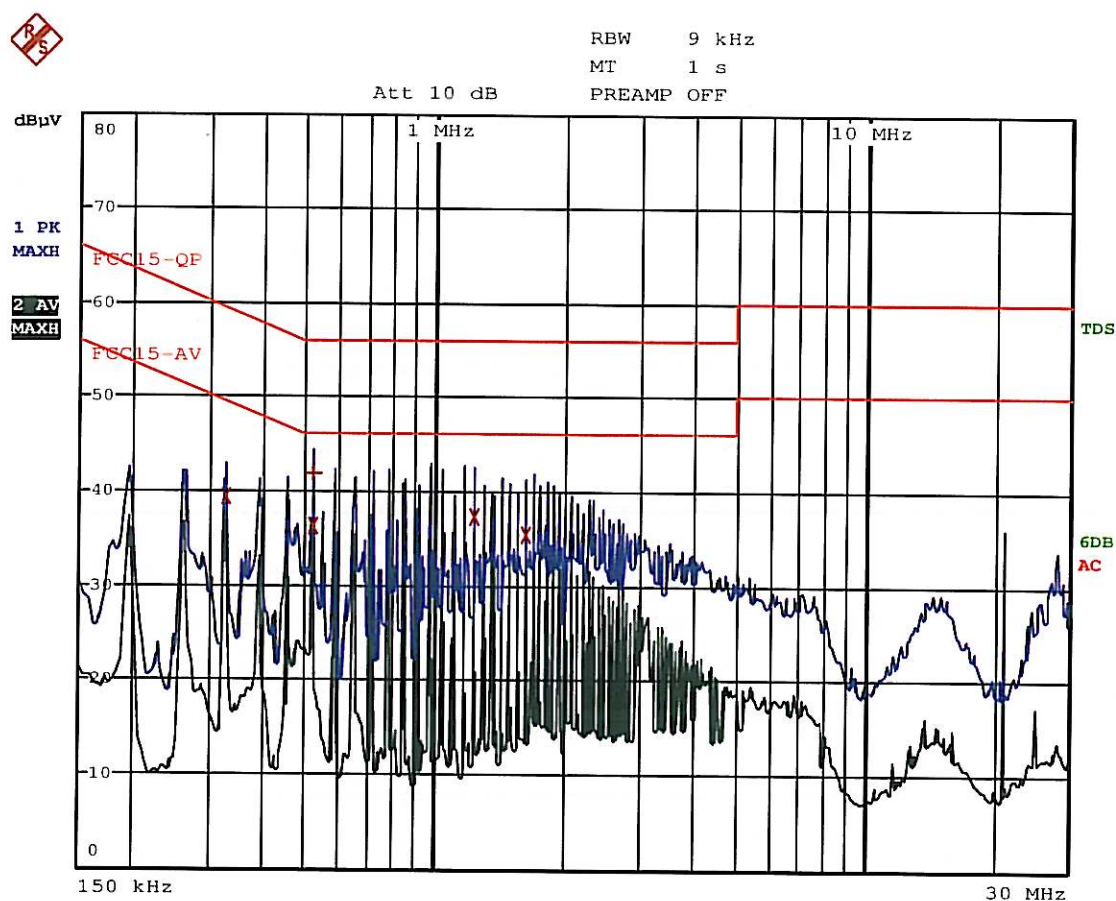
TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
2 Average	326 kHz	39.29	-10.26
1 Quasi Peak	518 kHz	43.06	-12.93
2 Average	518 kHz	37.33	-8.66
2 Average	974 kHz	37.48	-8.51
2 Average	1.69 MHz	34.40	-11.60



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Model Name. :	My7	Conducted Line/Port:	N
Temperature:	24.9 °C	Relative Humidity:	48%
Pressure:	1003mBar	Test voltage:	120Vac
Test Mode :	Test EUT with WIFI function on.		

Test data:



TRACE	FREQUENCY	LEVEL dBμV	DELTA LIMIT dB
2 Average	326 kHz	39.31	-10.23
1 Quasi Peak	522 kHz	41.81	-14.18
2 Average	522 kHz	36.15	-9.84
2 Average	1.234 MHz	37.34	-8.65
2 Average	1.622 MHz	35.43	-10.56

6.3 RADIATED EMISSION MEASUREMENT

6.3.1 Radiated Emission Limits (FCC 15.209)

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
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

Harmonic emissions limits comply with below 54 dBuV/m at 3m. Other emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or comply with the radiated emissions limits specified in section 15.209(a) limit in the table below has to be followed.

Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (FCC 15.209)

FREQUENCY (MHz)	(dBuV/m) (at 3m)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

6.3.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Jun .04.2012
2	Amplifier	HP	8447D	2944A09673	May.26.2012
3	Test Receiver	R&S	ESCI	100382	May.26.2012
4	Test Cable	N/A	C-01_CB03	N/A	Jul.06.2011
5	Controller	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	May.26.2012
7	Amplifier	Agilent	8449B	3008A02274	May.26.2012
8	Spectrum	Agilent	E4408B	US39240143	Nov.26.2011
9	Test Cable	HUBER+SUHNER	C-45	N/A	May.04.2012

Remark: " N/A" denotes No Model Name. / Serial No. and No Calibration specified.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1GHz
Stop Frequency	10th carrier harmonic
RBW / VBW (emission in restricted band)	1 MHz / 1 MHz for Peak, 1MHz/10Hz for average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP



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6.3.3 TEST PROCEDURE

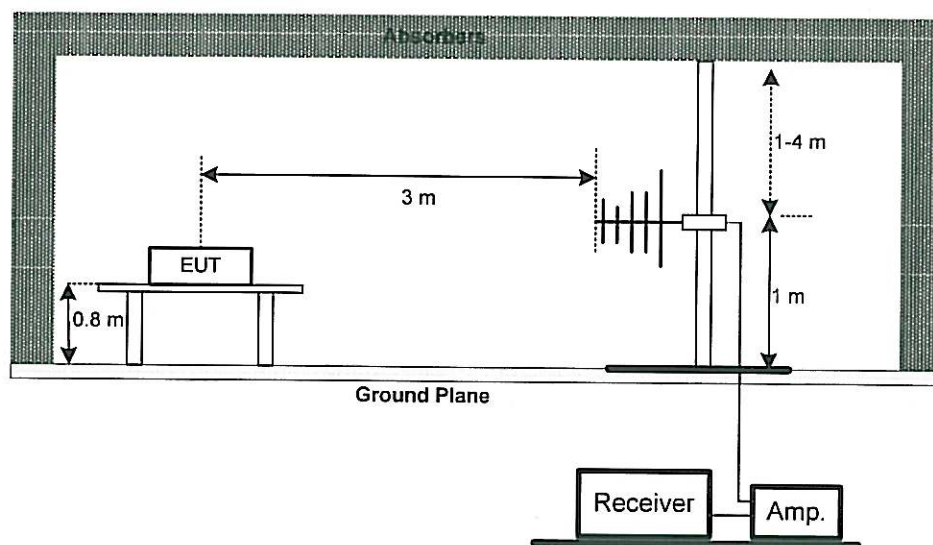
- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item – EUT Test Photos.

6.3.4 DEVIATION FROM TEST STANDARD

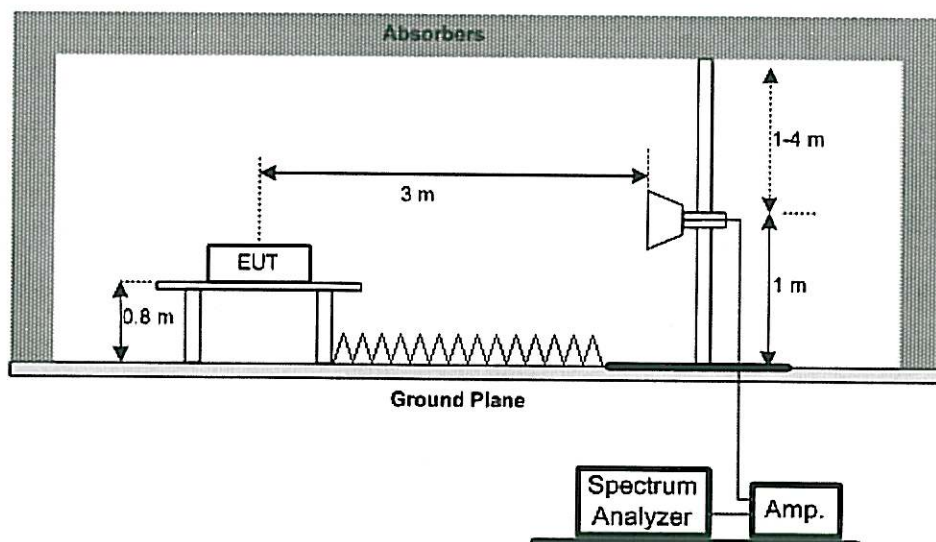
No deviation

6.3.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



6.3.6 EUT OPERATING CONDITIONS

The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

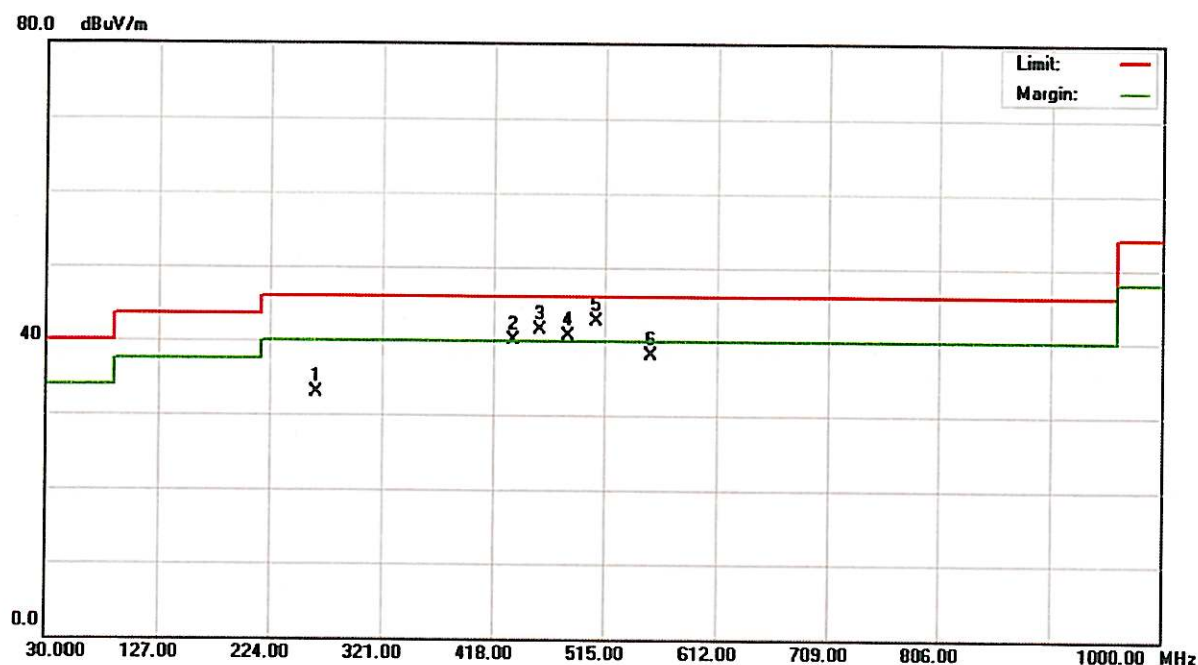


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6.3.7 TEST RESULTS

Below 1GHz:

Model:	My7	Result:	PASS
Temperature:	23°C	Relative Humidity:	51 %
Pressure:	1001 hPa	Test voltage:	120Vac
Test Mode :	Transmitting mode (802.11b/2412MHz)	Antenna polarity:	Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		265.2250	46.47	-13.55	32.92	46.00	-13.08	peak
2	!	434.9750	48.57	-8.39	40.18	46.00	-5.82	peak
3	!	459.2250	49.46	-7.97	41.49	46.00	-4.51	peak
4	!	483.4750	48.41	-7.61	40.80	46.00	-5.20	peak
5	*	507.7250	49.72	-7.07	42.65	46.00	-3.35	peak
6		556.2250	43.35	-5.34	38.01	46.00	-7.99	peak