



Test Report

Product Name : Wireless digital child tracker
Model No. : TTD-80T
FCC ID. : O6LTTD-80T

Applicant : TRANWO TECHNOLOGY CORP

Address : 6F., No.49, Guangming 6th Rd., JubeiCity, Hsinchu, Taiwan,
R.O.C.

Date of Receipt : 2006/11/16

Issued Date : 2006/12/01

Report No. : 06BH063-RFUSP05V01

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : 2006/12/01

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Product Name : Wireless digital child tracker

Applicant : TRANWO TECHNOLOGY CORP

Address : 6F., No.49, Guangming 6th Rd., JubeiCity, Hsinchu, Taiwan,
R.O.C.

Manufacturer : TRANWO TECHNOLOGY CORP

Model No. : TTD-80T

FCC ID. : O6LTTD-80T

Rated Voltage : AC 120 V / 60 Hz

EUT Voltage : DC 3.6V

Trade Name : TRANWO

Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.247: 2005

Test Result : Complied

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By : Carol Tsai
(Carol Tsai)

Reviewed By : Sheena Huang
(Sheena Huang)

Approved By : Roy Wang
(Roy Wang)

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1. General Information

1.1. EUT Description

Product Name	Wireless digital child tracker
Trade Name	TRANWO
Model No.	TTD-80T
Frequency Range	2480MHz
Channel Number	1
Antenna Gain	0 dBi
Channel Control	Auto
Antenna Type	Soldered on PCB

Component	
LITHIUM ION Battery	LIR2450, 3.6V
Charger Base	TRANWO, TTD-80T Charger
Power Adapter	DVE, DVR-0620-3508 I/P: 120VAC, 60Hz, 60mA O/P: 6V DC, 200mA Cable Out: Non-Shielded, 1.76m

Working Frequency of Each Channel	
Channel	Frequency
001	2480MHz

Note:

1. This device is a Wireless digital child tracker included a 2.4GHz receiving function, and 2.4GHz transmitting function.
2. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regards to the frequency band operation; the lowest 、 middle and highest frequency of channel were selected to perform the test, and then shown on this report.
4. This device is a composite device in accordance with Part 15 regulations. The function receiving was measured and made a test report that the report number is 06BH063-RFUSP01V02 under Declaration of Conformity.

1.3. Test Mode

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

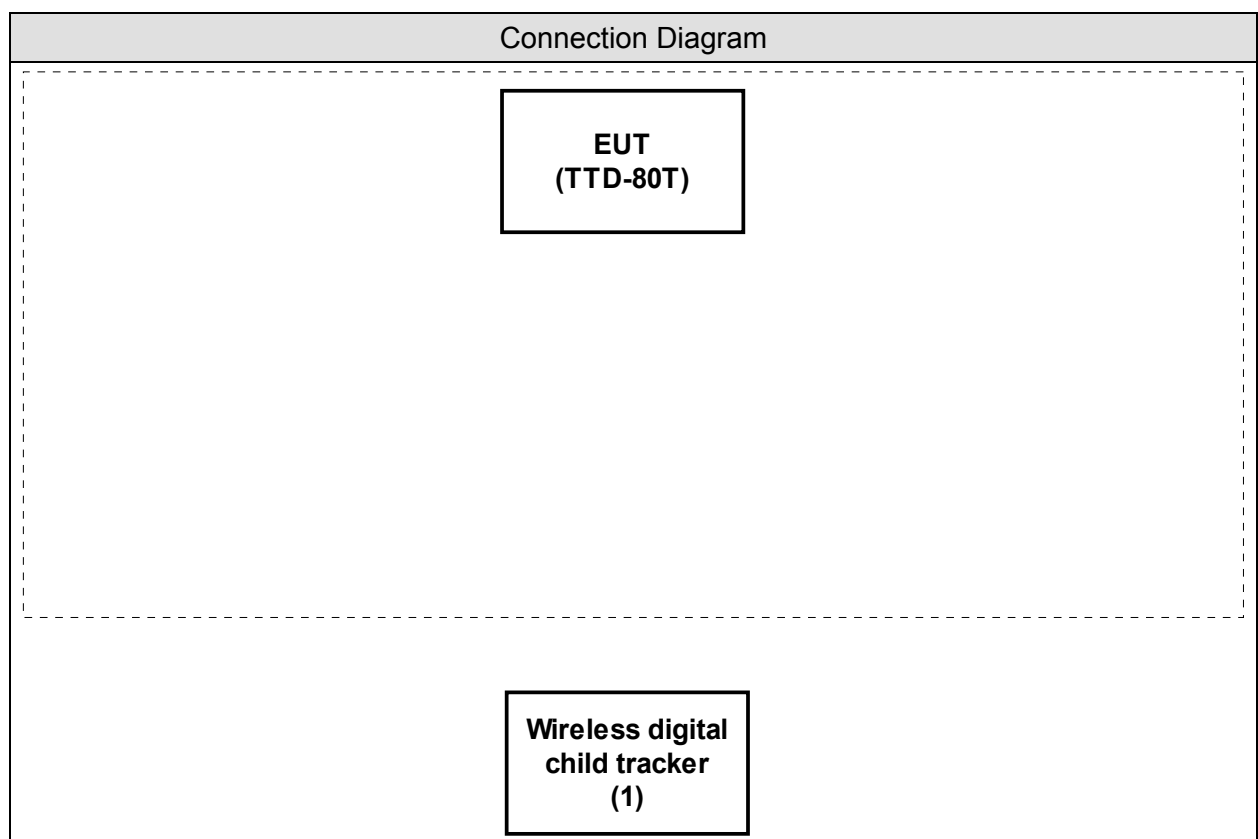
Pre-Test Mode	
EMI	Mode 1: Transmit (TTD-80T)
Final Test Mode	
EMI	Mode 1: Transmit (TTD-80T)

1.4. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1 Wireless digital child tracker	TRANWO	TTD-80R	N/A	DoC	--

1.5. Configuration of tested System



1.6. EUT Exercise Software

1	Setup the EUT and display as shown on 1.4.
2	Turn on the power of all equipment.
3	The EUT(Tx) will start to operate.
4	The EUT(Tx) will transmit the video signal to EUT(Rx).
5	Monitor will display “video figure” on monitor in the same time.

1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.247 Band Edge (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	57
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Channel Of Number (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	57
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Channel Separation (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	57
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Dwell Time (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	57
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	57
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Peak Power Output (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	57
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	57
Barometric pressure (mbar)		860 - 1060	950-1000

Site Description:

January 24, 2005 File on
Federal Communications Commission
Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 365520



Accredited by CNLA
Accreditation Number: 1313
Effective through: September 27, 2007



1313
ILAC MRA

Accredited by NVLAP
NVLAP Lab Code: 200347-0
Effective through: September 30, 2007



Site Name: Quietek Corporation

Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,
Chiung-Lin, Hsin-Chu County,
Taiwan, R.O.C.
TEL : 886-3-592-8858 / FAX : 886-3-592-8859
E-Mail : service@quietek.com

2. Peak Power Output

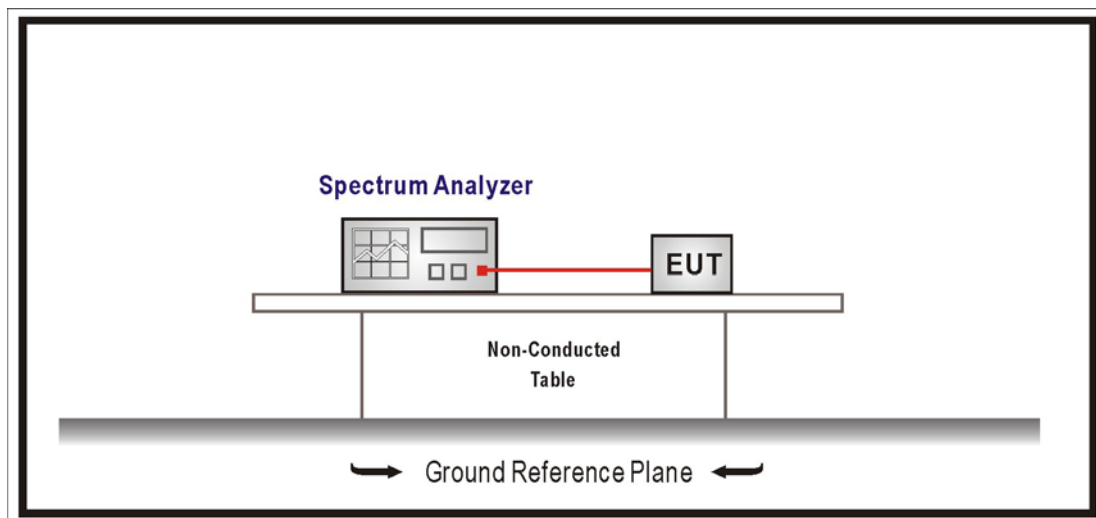
2.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2006
2	No.1 OATS			Sep., 2006

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: 1 Watt for systems employing at least 50 hopping channels; and, 0.25 Watts for systems employing less than 50 hopping channels.

For frequency hopping systems in the 2400-2483.5 MHz band employing at least 75 hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1Watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 Watt.

2.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2005

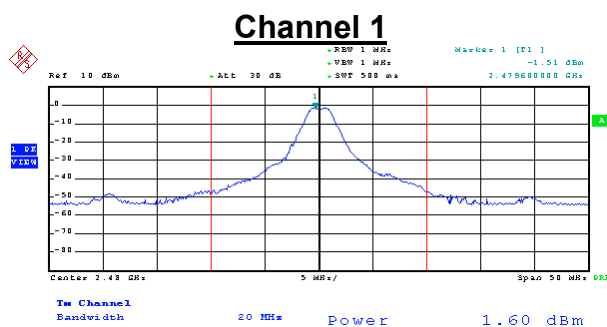
2.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB.

2.6. Test Result

Product	Wireless digital child tracker		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	2006/11/22	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2480	1.6	1Watt = 30 dBm	Pass



Date: 20.NOV.2006 17:52:22

3. Conducted Emission

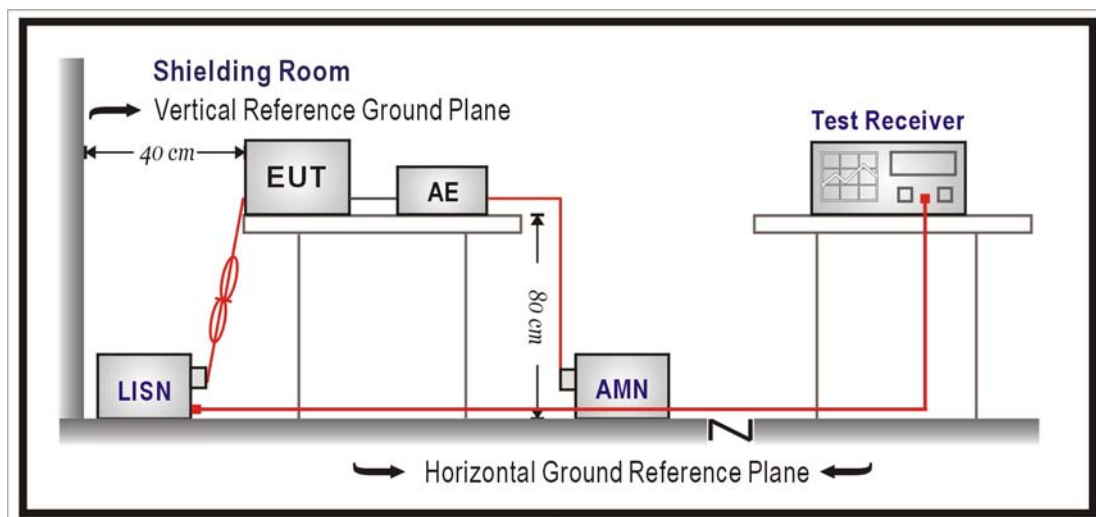
3.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30/825442/018	Sep., 2006	
2	Artificial Mains Network	R & S	ENV4200/848411/10	Feb., 2006	Peripherals
3	LISN	R & S	ESH3-Z5/825562/002	Feb., 2006	EUT
4	Pulse Limiter	R & S	ESH3-Z2/357.8810.52	Feb., 2006	
5	No.2 Shielded Room			N/A	

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

3.2. Test Setup



3.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 Limits (dBUV)		
Frequency MHz	QP	AV
0.15 - 0.50	66-56	56-46
0.50-5.0	56	46
5.0 - 30	60	50

Remarks : In the above table, the tighter limit applies at the band edges.

3.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.) Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement. Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2005

3.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

3.7. Test Result

Product	Wireless digital child tracker		
Test Item	Conducted Emission		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	--	Test Site	No.1 Shielded Room

Owing to the DC operation of EUT, this test item is not performed.

4. Radiated Emission

4.1. Test Equipment

The following test equipment are used during the test:

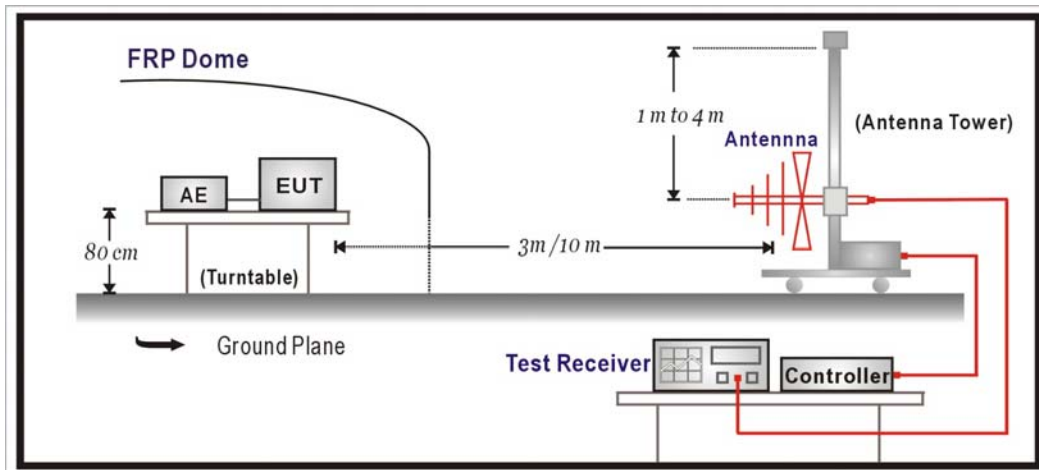
Radiated Emission / Site1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2455	2006/09/03
Horn Antenna	Schwarzbeck	BBHA 9120D	BBHA9120D312	2006/07/29
Pre-Amplifier	HP	8449B	3008A01123	2006/02/15
Pre-Amplifier	HP	8447D	2944A09276	N/A
Spectrum Analyzer	R & S	FSP40	100005	2006/08/25
Spectrum Analyzer	Advantest	R3261C	81720266	2006/01/19
Test Receiver	R & S	ESCS 30	825442/017	2006/02/17

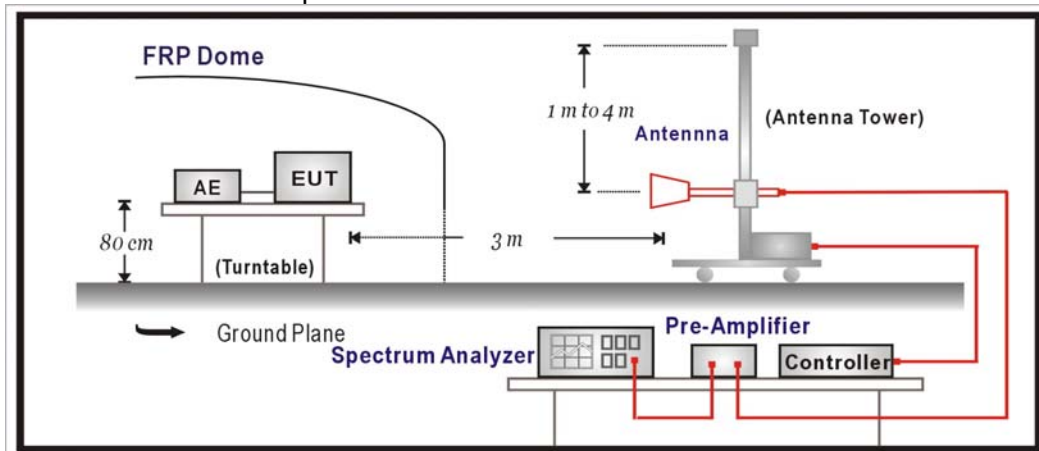
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.
2. Mark "X" test instruments are used to measure the final test results.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m	dBuV/m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2005

4.6. Uncertainty

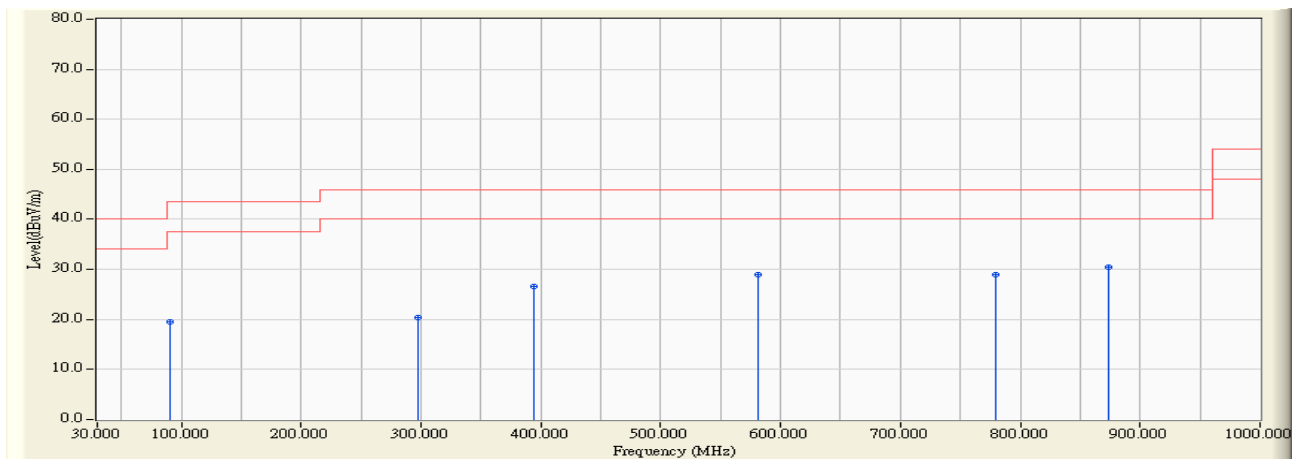
The measurement uncertainty

30MHz~1GHz as $\pm 3.19\text{dB}$

1GHz~26.5Ghz as $\pm 3.9\text{dB}$

4.7. Test Result

Site : Site 1	Time : 2006/11/23 - 14:52
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Wireless digital child tracker	Probe : FCC_RF_30-1G(200605) - HORIZONTAL
Power : DC 3.6V	Note : Mode 1: Transmit (TTD-80T)

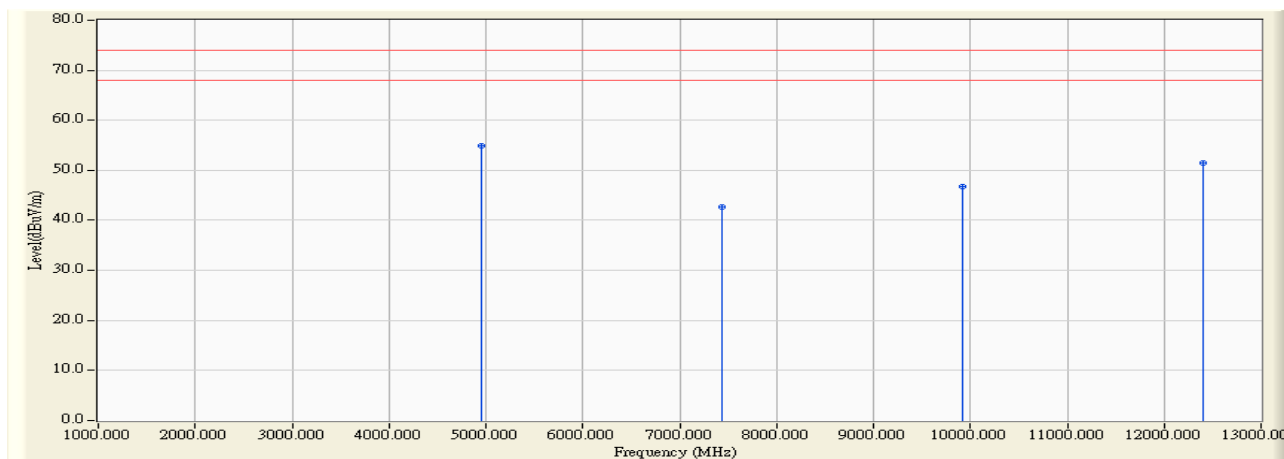


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	90.971	-9.292	28.801	19.509	-23.991	43.500	PEAK	0.000	0.000
2	297.443	-3.927	24.400	20.473	-25.527	46.000	PEAK	0.000	0.000
3	394.443	0.807	25.800	26.607	-19.393	46.000	PEAK	0.000	0.000
4	581.514	5.050	23.800	28.850	-17.150	46.000	PEAK	0.000	0.000
5	779.671	4.019	25.001	29.019	-16.981	46.000	PEAK	0.000	0.000
6	* 873.900	5.710	24.800	30.510	-15.490	46.000	PEAK	0.000	0.000

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : Site 1	Time : 2006/11/21 - 16:42
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : Wireless digital child tracker	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : DC 3.6V	Note : Mode 1: Transmit (TTD-80T)

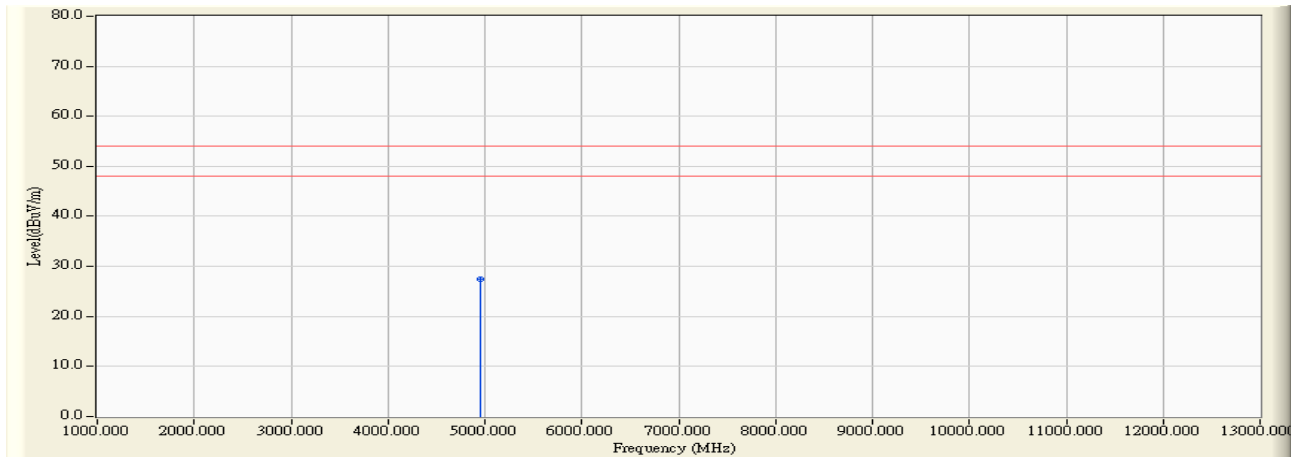


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	4959.270	4.400	50.590	54.990	-19.010	74.000	PEAK	0.000	0.000
2		7440.170	9.017	33.620	42.637	-31.363	74.000	PEAK	0.000	0.000
3		9920.030	14.540	32.140	46.680	-27.320	74.000	PEAK	0.000	0.000
4		12400.030	20.665	30.890	51.555	-22.445	74.000	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2006/11/21 - 16:43
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
EUT : Wireless digital child tracker	Probe : FCC_RF_1G-18G(2005-3) - HORIZONTAL
Power : DC 3.6V	Note : Mode 1: Transmit (TTD-80T)

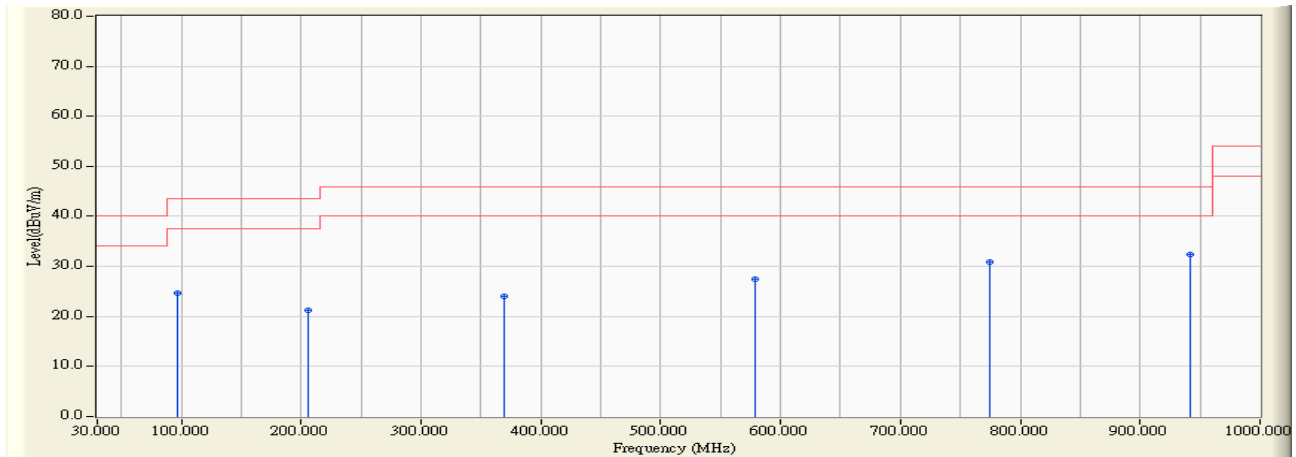


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	4955.260	4.400	23.100	27.500	-26.500	54.000	AVERAGE	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Site : Site 1	Time : 2006/11/23 - 14:54
Limit : FCC_CLASS_B_03M_QP	Margin : 6
EUT : Wireless digital child tracker	Probe : FCC_RF_30-1G(200605) - VERTICAL
Power : DC 3.6V	Note : Mode 1: Transmit (TTD-80T)

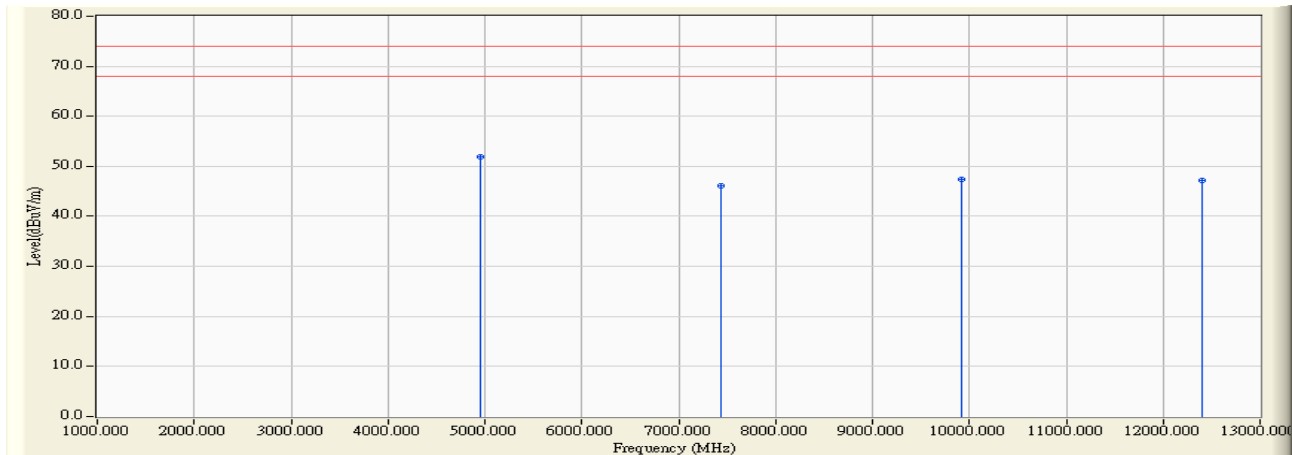


	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	96.514	-0.837	25.600	24.763	-18.737	43.500	PEAK	0.000	0.000
2	205.986	-3.860	25.000	21.140	-22.360	43.500	PEAK	0.000	0.000
3	369.500	-1.280	25.200	23.920	-22.080	46.000	PEAK	0.000	0.000
4	578.743	3.701	23.800	27.501	-18.499	46.000	PEAK	0.000	0.000
5	774.129	5.730	25.200	30.930	-15.070	46.000	PEAK	0.000	0.000
6	* 941.800	8.710	23.600	32.310	-13.690	46.000	PEAK	0.000	0.000

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : Site 1	Time : 2006/11/21 - 16:55
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
EUT : Wireless digital child tracker	Probe : FCC_RF_1G-18G(2005-3) - VERTICAL
Power : DC 3.6V	Note : Mode 1: Transmit (TTD-80T)



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type	Ant Pos (cm)	Table Pos (deg)
1	*	4959.220	2.917	48.880	51.797	-22.203	74.000	PEAK	0.000	0.000
2		7441.570	9.018	37.170	46.188	-27.812	74.000	PEAK	0.000	0.000
3		9920.010	15.340	32.090	47.430	-26.570	74.000	PEAK	0.000	0.000
4		12400.010	16.166	31.040	47.206	-26.794	74.000	PEAK	0.000	0.000

Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

5. Band Edge

5.1. Test Equipment

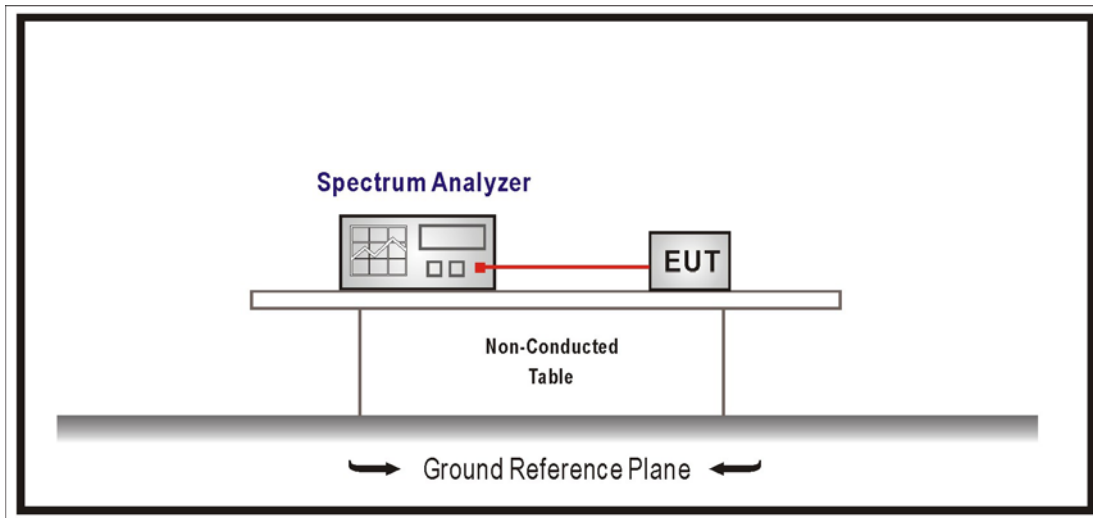
The following test equipment are used during the test:

RF Conducted Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer		R & S	FSP / 100561	Mar., 2006
2	No.1 OATS				Sep., 2006
RF Radiated Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2006
2	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2006
3		Loop Antenna	R & S	HFH2-Z2 / 833799/004	Sep., 2006
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061	Sep., 2006
5		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2006
6	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Sep., 2006
7	No.1 OATS				Sep., 2006

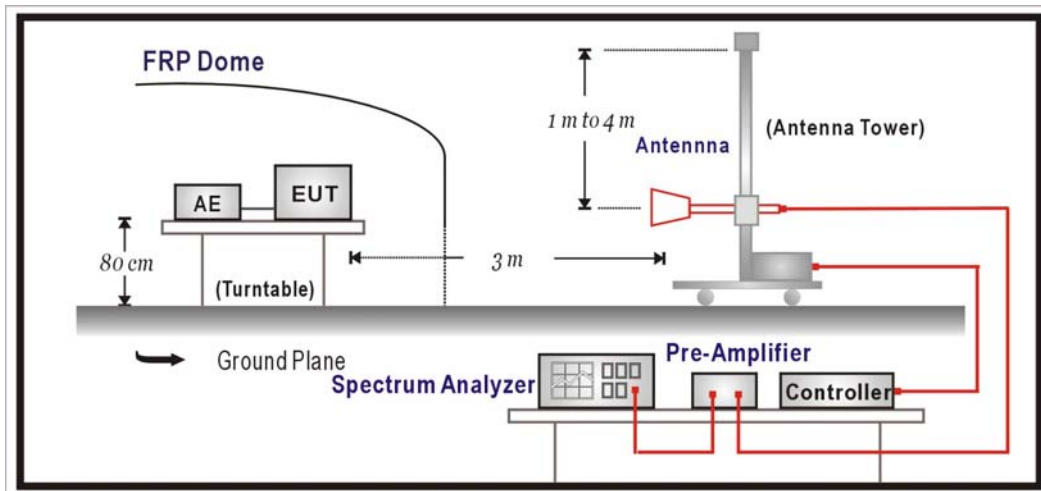
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.
2. Mark "X" test instruments are used to measure the final test results.

5.2. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2005

5.6. Uncertainty

The measurement uncertainty

Conducted is defined as $\pm 1.27\text{dB}$

Radiated is defined as $\pm 3.9\text{dB}$

5.7. Test Result

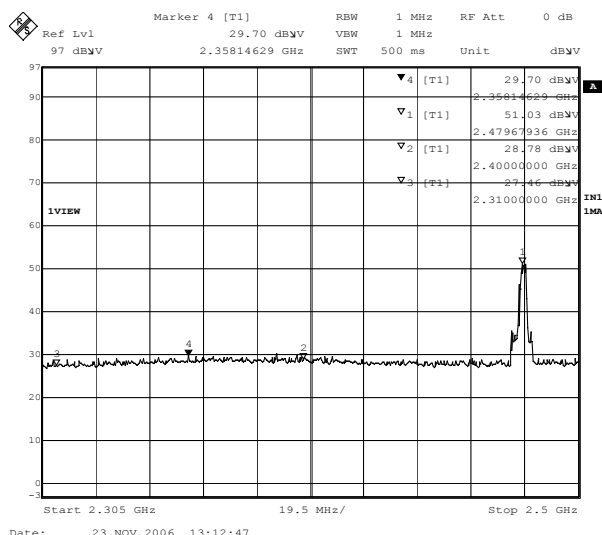
Product	Wireless digital child tracker		
Test Item	Band Edge		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	2006/11/23	Test Site	No.1 OATS

RF Radiated Measurement: (Peak Detector)

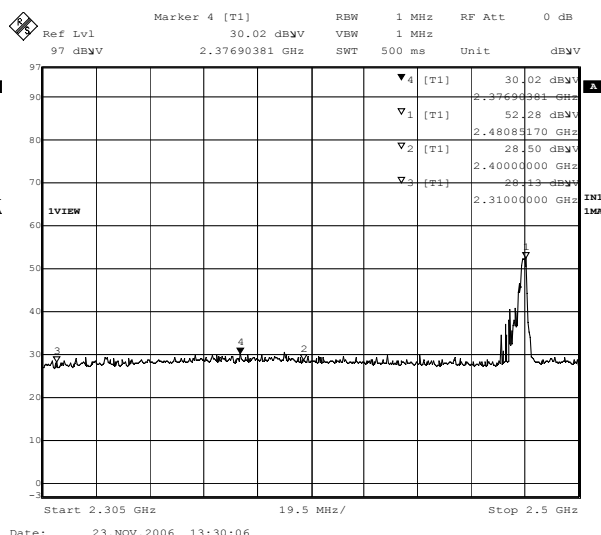
2310~2390MHz

Channel No.	Frequency (MHz)	Reading Level (dBuV)	Probe Factor (dB/m)	Cable Loss (dB)	PreAMP (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Result
1(Horizontal)	2358.140	29.700	24.375	4.488	0.00	58.562	74	Pass
1(Vertical)	2376.900	30.020	22.830	4.500	0.00	57.350	74	Pass

Horizontal



Vertical



Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

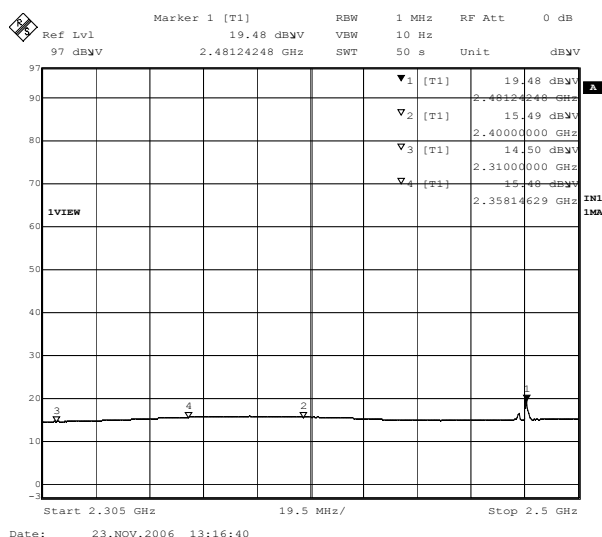
Product	Wireless digital child tracker		
Test Item	Band Edge		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	2006/11/23	Test Site	No.1 OATS

RF Radiated Measurement: (Average Detector)

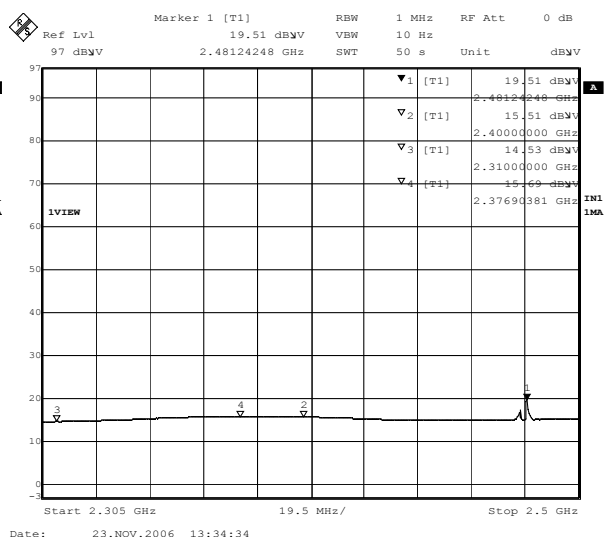
2310~2390MHz

Channel No.	Frequency (MHz)	Reading Level (dBuV)	Probe Factor (dB/m)	Cable Loss (dB)	PreAMP (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Result
1(Horizontal)	2358.140	15.480	24.375	4.488	0.00	44.342	54	Pass
1(Vertical)	2376.900	15.690	22.830	4.500	0.00	43.020	54	Pass

Horizontal



Vertical



Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

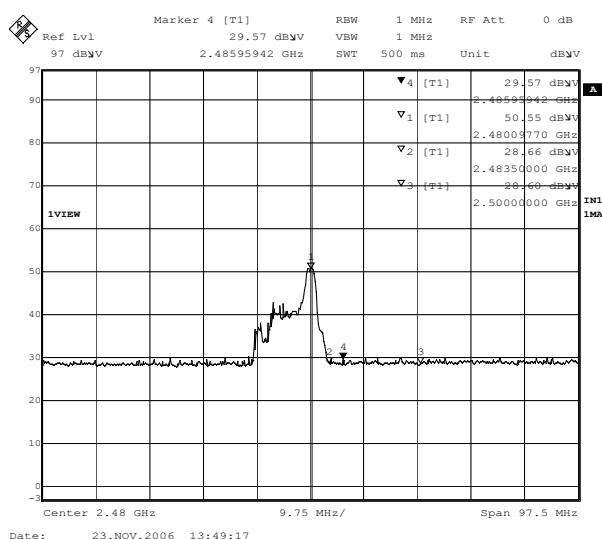
Product	Wireless digital child tracker		
Test Item	Band Edge		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	2006/11/23	Test Site	No.1 OATS

RF Radiated Measurement: (Peak Detector)

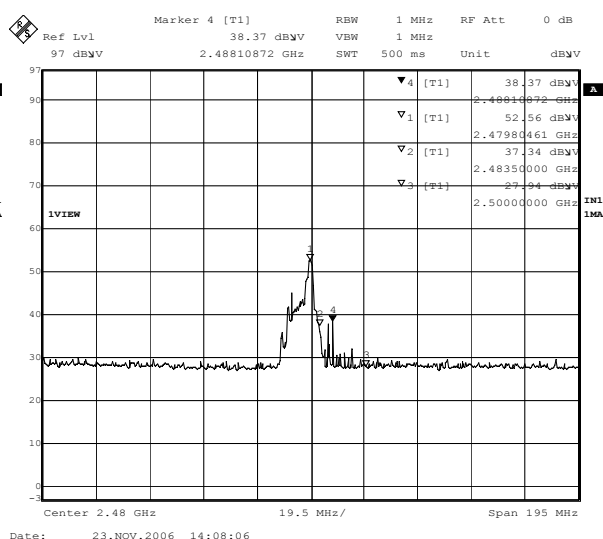
2483.5~2500MHz

Channel No.	Frequency (MHz)	Reading Level (dBuV)	Probe Factor (dB/m)	Cable Loss (dB)	PreAMP (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Result
1(Horizontal)	2488.100	38.370	24.731	4.575	0.00	67.677	74	Pass
1(Vertical)	2488.100	38.370	23.131	4.575	0.00	66.077	74	Pass

Horizontal



Vertical



Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

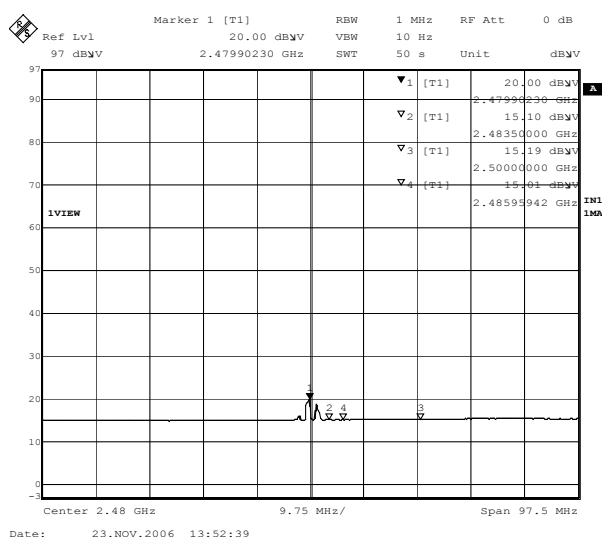
Product	Wireless digital child tracker		
Test Item	Band Edge		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	2006/11/23	Test Site	No.1 OATS

RF Radiated Measurement: (Average Detector)

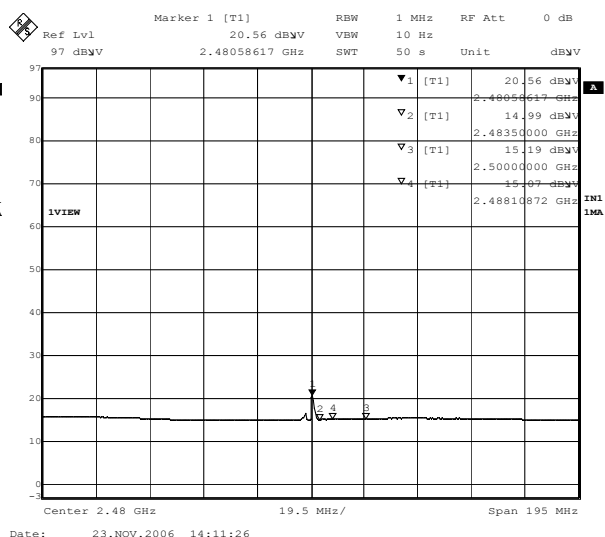
2483.5~2500MHz

Channel No.	Frequency (MHz)	Reading Level (dBuV)	Probe Factor (dB/m)	Cable Loss (dB)	PreAMP (dB)	Emission Level (dBuV/m)	Limit (dBuV/m)	Result
1(Horizontal)	2485.950	15.010	24.726	4.574	0.00	44.310	54	Pass
1(Vertical)	2488.100	15.070	23.131	4.575	0.00	42.777	54	Pass

Horizontal



Vertical



Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

6. Occupied Bandwidth

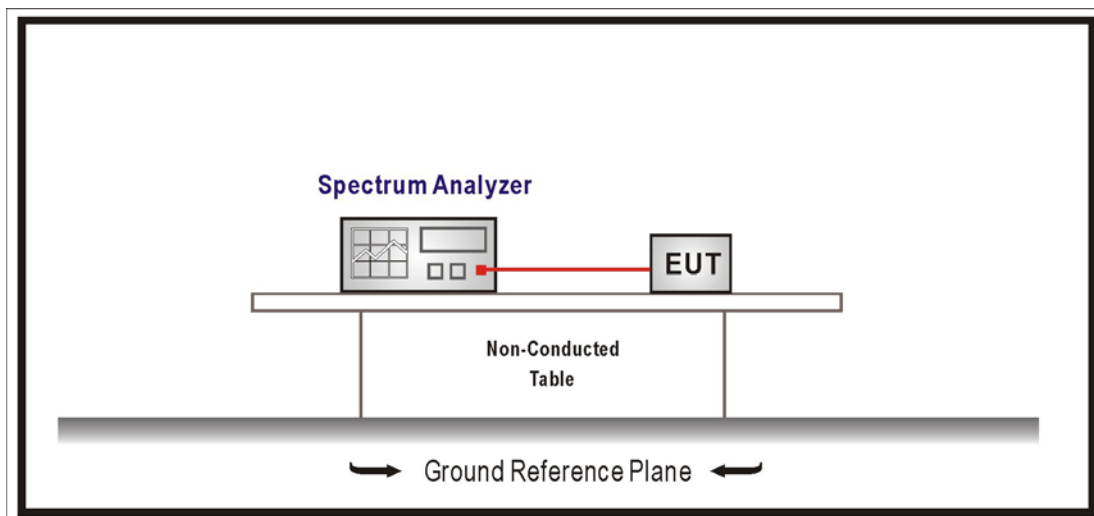
6.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2006
2	No.1 OATS			Sep., 2006

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup



6.3. Limits

For frequency hopping systems operating in the 902-928 MHz band: if the 20 dB bandwidth of the hopping channel is less than 250 kHz, the system shall use at least 50 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 20 second period; if the 20 dB bandwidth of the hopping channel is 250 kHz or greater, the system shall use at least 25 hopping frequencies and the average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 10 second period. The maximum allowed 20 dB bandwidth of the hopping channel is 500 kHz.

For frequency hopping systems operating in the 5725-5850 MHz bands. The maximum 20 dB bandwidth of the hopping channel is 1 MHz.

For frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

6.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2005

6.5. Uncertainty

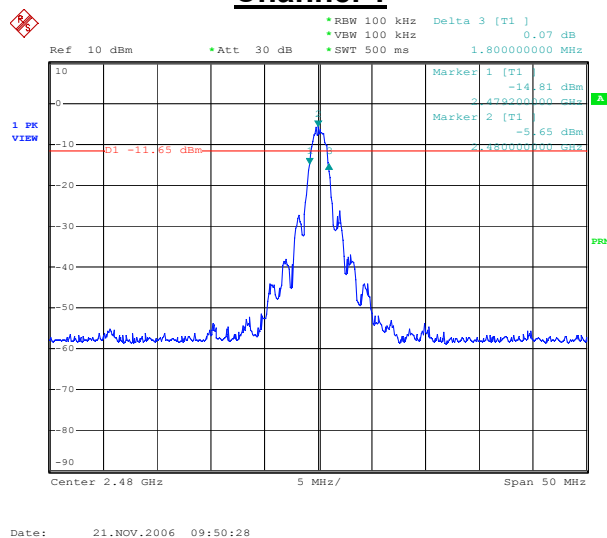
The measurement uncertainty is defined as $\pm 50\text{kHz}$

6.6. Test Result

Product	Wireless digital child tracker		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	2006/11/22	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (KHz)	Limit (MHz)	Result
1	2480.00	1800	> 500	Pass

Channel 1



7. Power Density

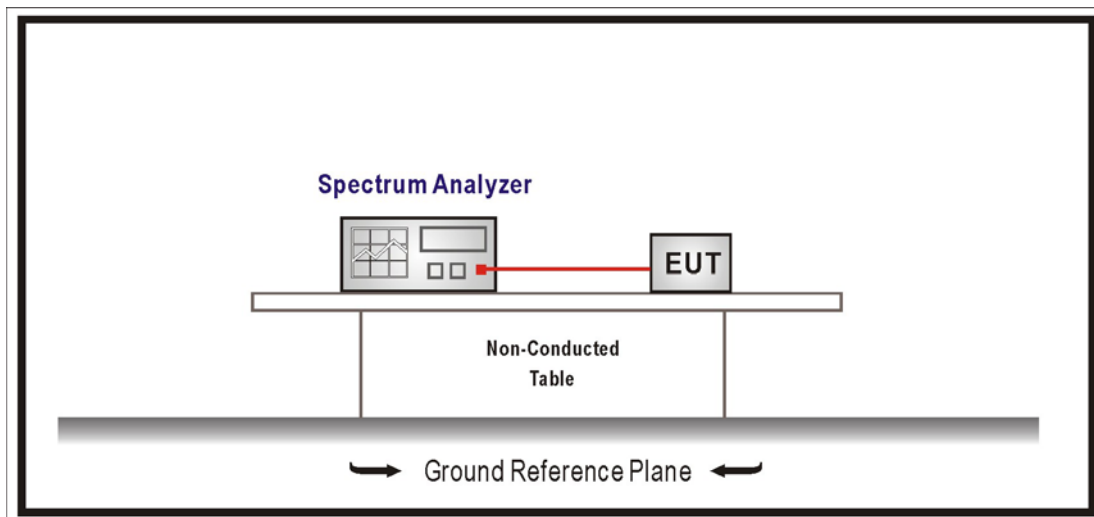
7.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Mar., 2006
2	No.1 OATS			Sep., 2006

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

7.4. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2005

7.5. Uncertainty

The measurement uncertainty is defined as $\pm 1.27\text{dB}$.

7.6. Test Result

Product	Wireless digital child tracker		
Test Item	Power Density		
Test Mode	Mode 1: Transmit (TTD-80T)		
Date of Test	2006/11/22	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2411.790	-16.09	< 8dBm	Pass

