Test Report

Product Name ： Car kit

Model No. ： JBH-19

FCC ID. ： UH6-JBH19

Applicant ： LITE-In Tech. Co., LTD

Address ： 4F., No.20, Lane 50, Sec. 3, Nangang Rd., Taipei 11510, Taiwan (R.O.C.)

Date of Receipt ： 2009/04/23

Issued Date ： 2009/05/11

Report No. ： 094405R-RFUSP43V01

Report Version ： V1.0

Test Report Certification

Issued Date : 2009/05/11
Report No. : 094405R-RFUSP43V01

QuieTek

Product Name	:	Car kit
Applicant	:	LITE-In Tech. Co., LTD
Address	:	4F., No.20, Lane 50, Sec. 3, Nangang Rd., Taipei 11510, Taiwan (R.O.C.)
Manufacturer	:	LITE-In Tech. Co., LTD
Model No.	:	JBH-19
FCC ID.	:	UH6-JBH19
Rated Voltage	:	DC12V~DC24V
EUT Voltage	:	DC12V~DC24V
Trade Name	:	LITE-In
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247:2008
Test Result	:	Complied

The test results relate only to the samples tested.

Documented By : Carol Tsai

(Carol Tsai / Engineering Adm. Specialist)

Tested By : Sheena Huang

(Sheena Huang / Engineer)

Approved By : Roy Wang

(Roy Wang / Manager)

TABLE OF CONTENTS

1. General Information

1.1. EUT Description

Product Name	Car kit
Trade Name	LITE-In
Model No.	JBH-19
Frequency Range	2402~2480MHz
Channel Number	79
Type of Modulation	FHSS
Channel Control	Auto
Antenna Type	Chip on PCB
Antenna Gain	3dBi

Component	
Remote Controller	1 Set
Audio Cable	Non-Shielded, 0.64m

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 00	2402 MHz	Channel 20	2422 MHz	Channel 40	2442 MHz	Channel 60	2462 MHz
Channel 01	2403 MHz	Channel 21	2423 MHz	Channel 41	2443 MHz	Channel 61	2463 MHz
Channel 02	2404 MHz	Channel 22	2424 MHz	Channel 42	2444 MHz	Channel 62	2464 MHz
Channel 03	2405 MHz	Channel 23	2425 MHz	Channel 43	2445 MHz	Channel 63	2465 MHz
Channel 04	2406 MHz	Channel 24	2426 MHz	Channel 44	2446 MHz	Channel 64	2466 MHz
Channel 05	2407 MHz	Channel 25	2427 MHz	Channel 45	2447 MHz	Channel 65	2467 MHz
Channel 06	2408 MHz	Channel 26	2428 MHz	Channel 46	2448 MHz	Channel 66	2468 MHz
Channel 07	2409 MHz	Channel 27	2429 MHz	Channel 47	2449 MHz	Channel 67	2469 MHz
Channel 08	2410 MHz	Channel 28	2430 MHz	Channel 48	2450 MHz	Channel 68	2470 MHz
Channel 09	2411 MHz	Channel 29	2431 MHz	Channel 49	2451 MHz	Channel 69	2471 MHz
Channel 10	2412 MHz	Channel 30	2432 MHz	Channel 50	2452 MHz	Channel 70	2472 MHz
Channel 11	2413 MHz	Channel 31	2433 MHz	Channel 51	2453 MHz	Channel 71	2473 MHz
Channel 12	2414 MHz	Channel 32	2434 MHz	Channel 52	2454 MHz	Channel 72	2474 MHz
Channel 13	2415 MHz	Channel 33	2435 MHz	Channel 53	2455 MHz	Channel 73	2475 MHz
Channel 14	2416 MHz	Channel 34	2436 MHz	Channel 54	2456 MHz	Channel 74	2476 MHz
Channel 15	2417 MHz	Channel 35	2437 MHz	Channel 55	2457 MHz	Channel 75	2477 MHz
Channel 16	2418 MHz	Channel 36	2438 MHz	Channel 56	2458 MHz	Channel 76	2478 MHz
Channel 17	2419 MHz	Channel 37	2439 MHz	Channel 57	2459 MHz	Channel 77	2479 MHz
Channel 18	2420 MHz	Channel 38	2440 MHz	Channel 58	2460 MHz	Channel 78	2480 MHz
Channel 19	2421 MHz	Channel 39	2441 MHz	Channel 59	2461 MHz		

The system receivers have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shift frequencies in synchronization with the transmitted signals Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. The transmitter is presented with a continuous data stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its 79 channels and over the minimum number of hopping channels (75 channels).
The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hop sets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

Note:

1. This device is a Car kit including a 2.4GHz receiving function, and transmitting function.
2. These test results 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 094405R-RFUSP37V02 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 transmitting operation, which was shown in this test report and defined as follows:

Pre-Test Mode	
EMI	Mode 1: Transmit
Final Test Mode	
EMI	Mode 1: Transmit

Emission	Mode 1
Conducted Emission	No
Peak Power Output	Yes
Radiated Emission	Yes
Band Edge	Yes
Channel of Number	Yes
Channel Separation	Yes
Occupied Bandwidth	Yes
Dwell Time	Yes

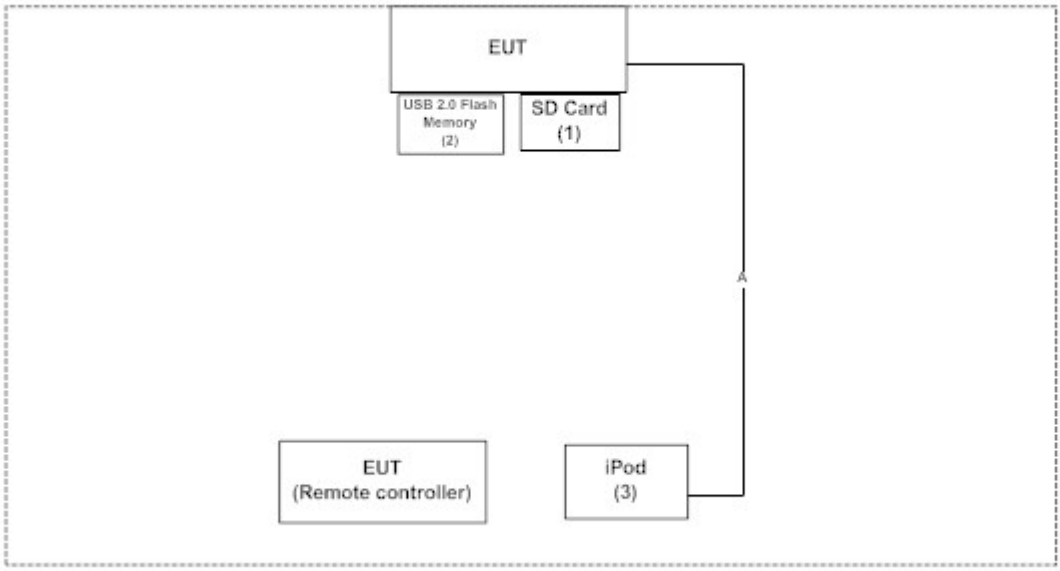
1.4. Tested System Details

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	SD Card	Transcend	TS512MSD80	160073-4664	DoC	--
2	USB 2.0 Flash Memory	TOSHIBA	74611927575N M8N	N/A	DoC	--
3	iPod	Apple	A1136	9C724G7MV9M	DoC	--

1.5. Configuration of tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	Audio Cable	Non-Shielded, 0.64m

1.6. EUT Exercise Software

1	Setup the EUT as shown in Section 1.5.
2	Turn on the power of all equipment.
3	The EUT will start transmitting RF signals.
4	Verify that the EUT works properly.

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 Peak Power Output (FHSS)	15 - 35	23
Humidity (%RH)		25 - 75	50
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	54
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Band Edge (FHSS)	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Channel Of Number (FHSS)	15 - 35	23
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Channel Separation (FHSS)	15 - 35	23
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth (FHSS)	15 - 35	24
Humidity (%RH)		25 - 75	48
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Dwell Time (FHSS)	15 - 35	23
Humidity (%RH)		25 - 75	50
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 TAF
Accreditation Number: 1313
Effective through: December 27, 2010

Accredited by NVLAP
NVLAP Lab Code: 200347-0
Effective through: September 30, 2009

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

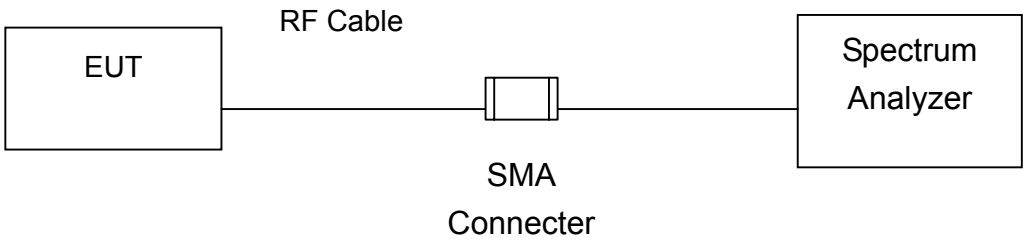
2.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R&S	FSP/ 100005	Oct., 2008
2	No.1 OATS			Sep., 2008

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

2.2. Test Setup



2.3. Test procedures

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

2.4. 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.

2.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2008

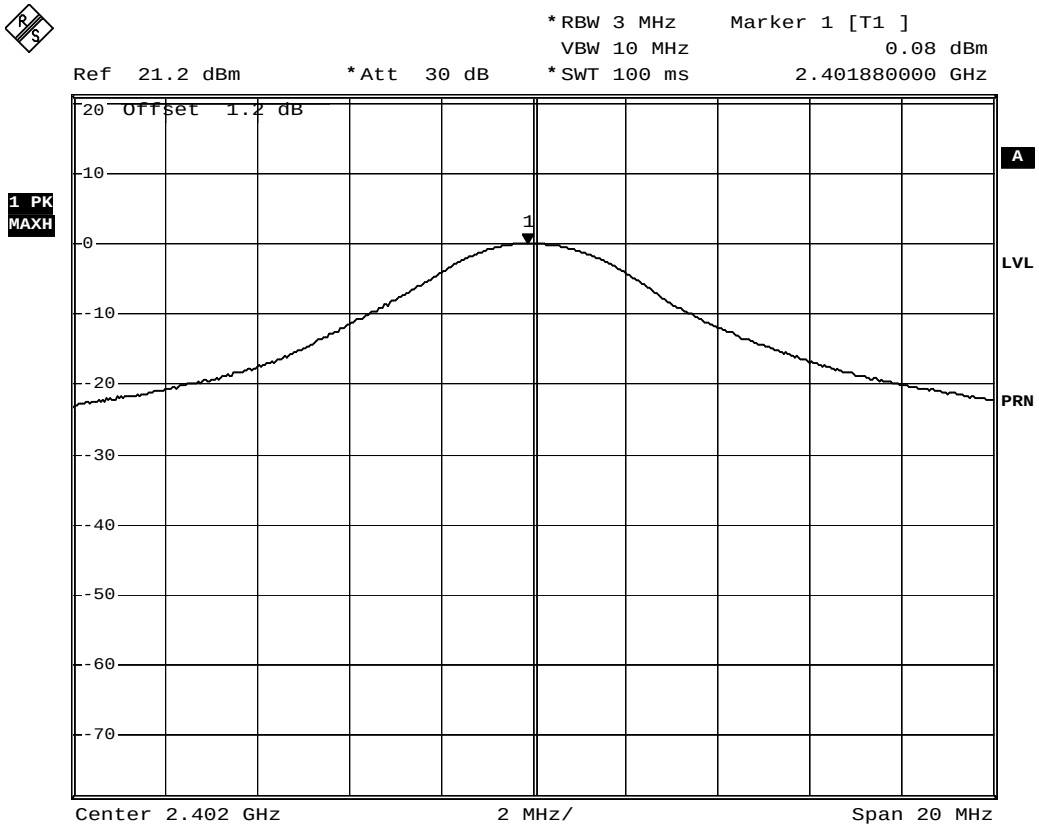
2.6. Test Result

Product	Car kit		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/06	Test Site	No.1 OATS

1M-GFSK Modulation, PRBS Packet Type

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
00	2402	0.08	1Watt= 30 dBm	Pass

Channel 00

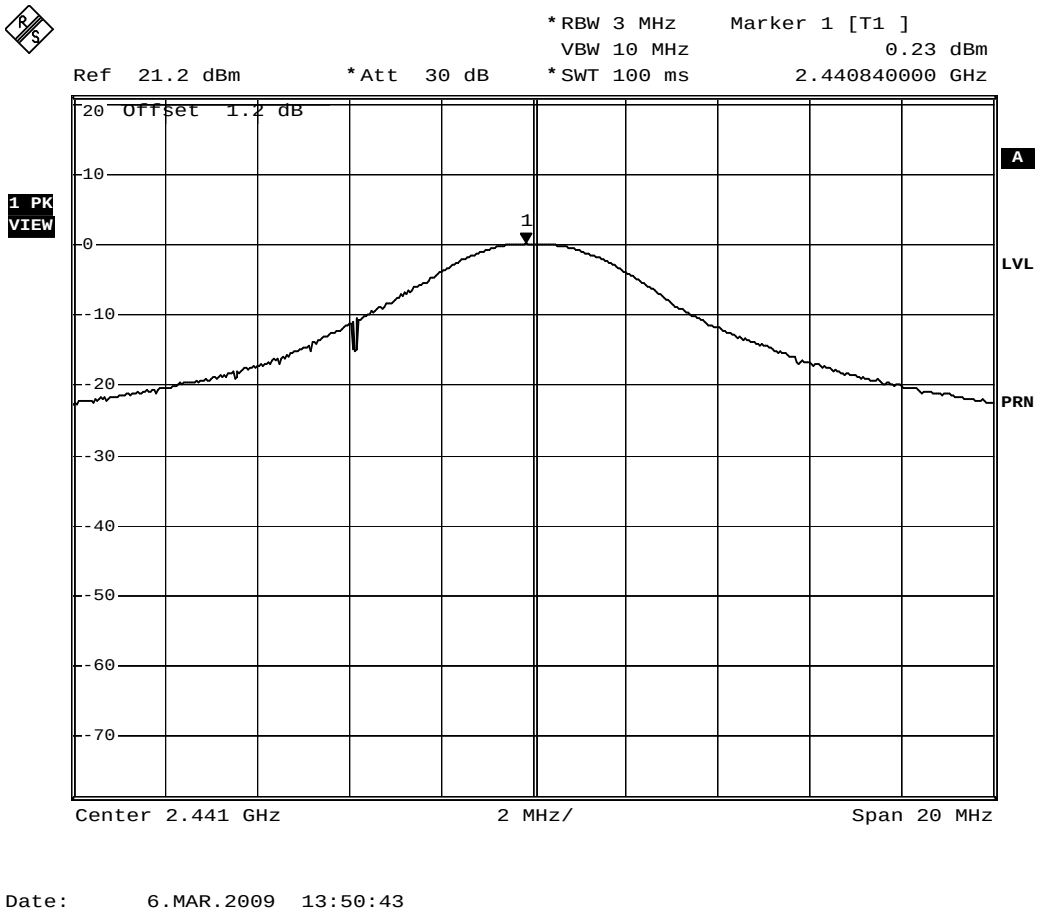


Product	Car kit		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/06	Test Site	No.1 OATS

1M-GFSK Modulation, PRBS Packet Type

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
39	2441	0.23	1Watt= 30 dBm	Pass

Channel 39

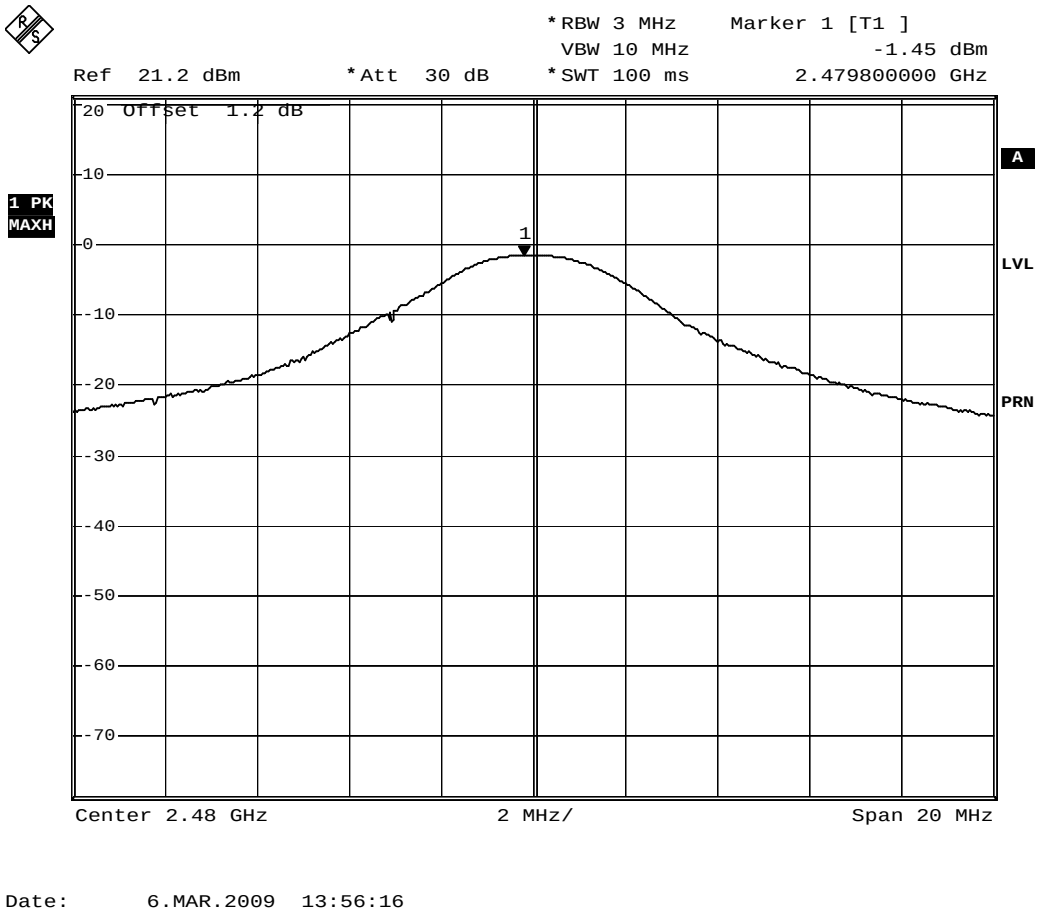


Product	Car kit		
Test Item	Peak Power Output		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/06	Test Site	No.1 OATS

1M-GFSK Modulation, PRBS Packet Type

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
78	2480	-1.45	1Watt= 30 dBm	Pass

Channel 78



3. Radiated Emission

3.1. Test Equipment

The following test equipment are used during the test:

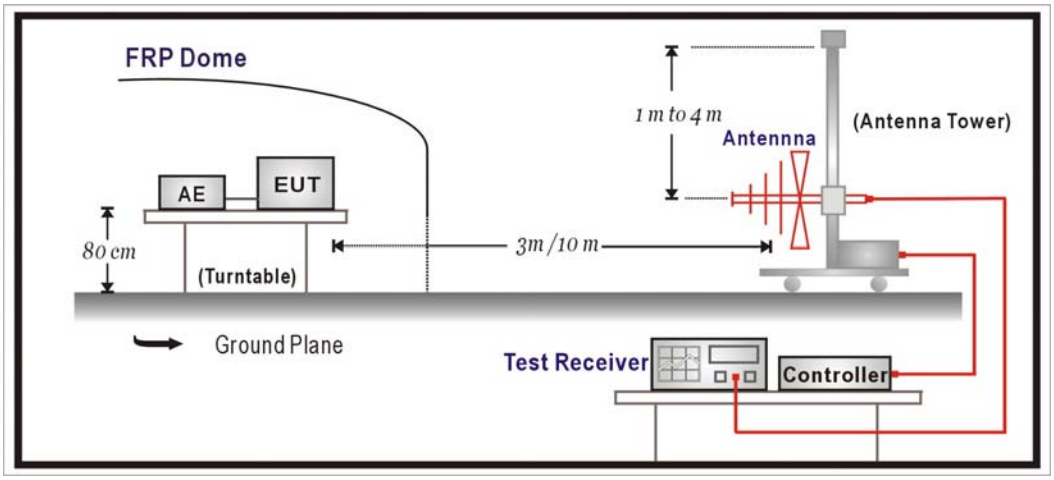
Radiated Emission / Site1

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
Bilog Antenna	Schaffner Chase	CBL6112B	2895	2008/09/03
Horn Antenna	Electro Metrics	EM-6961	103325	2009/03/15
Pre-Amplifier	HP	8449B	3008A01123	2008/11/15
Pre-Amplifier	Quietek	AP-025C	N/A	N/A
Spectrum Analyzer	R & S	FSP40	100005	2008/08/25
Spectrum Analyzer	Advantest	R3162	120300649	2008/11/24
Test Receiver	R & S	ESCS 30	825442/017	2009/02/13

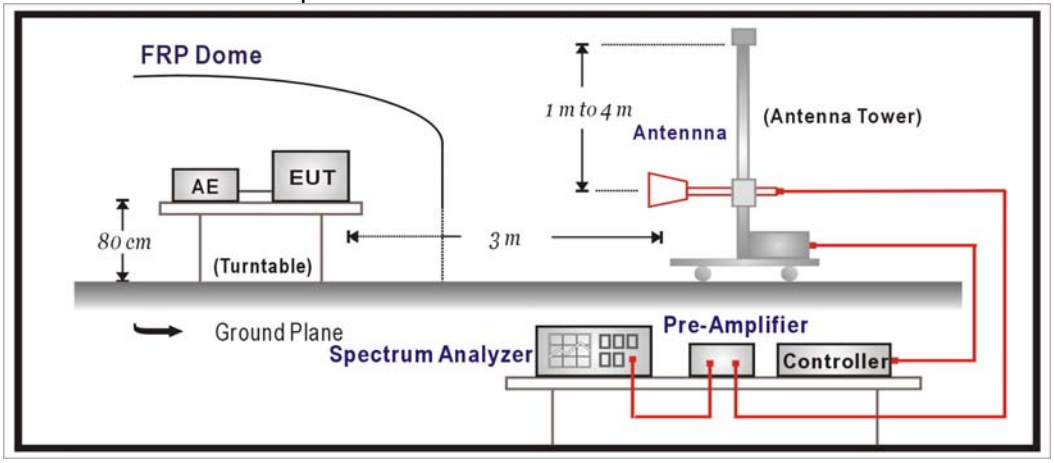
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.
2. “N/A” Ca1.Date is used to Pre-test, not final test.

3.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



3.3. 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.

3.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

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.

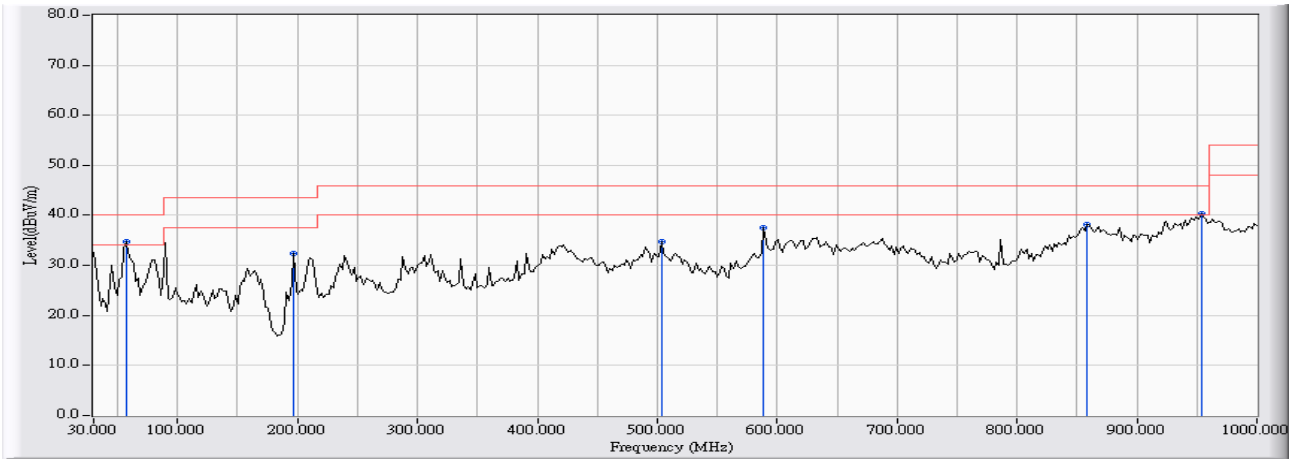
3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2008

3.6. Test Result

30MHz-1GHz Spurious

Site : Site 1	**Time : 2009/05/07 - 09:48**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : FCC_30-1G(2008-9) - HORIZONTAL	**Power : DC12V~DC24V**
EUT : Car kit	**Note : TX**

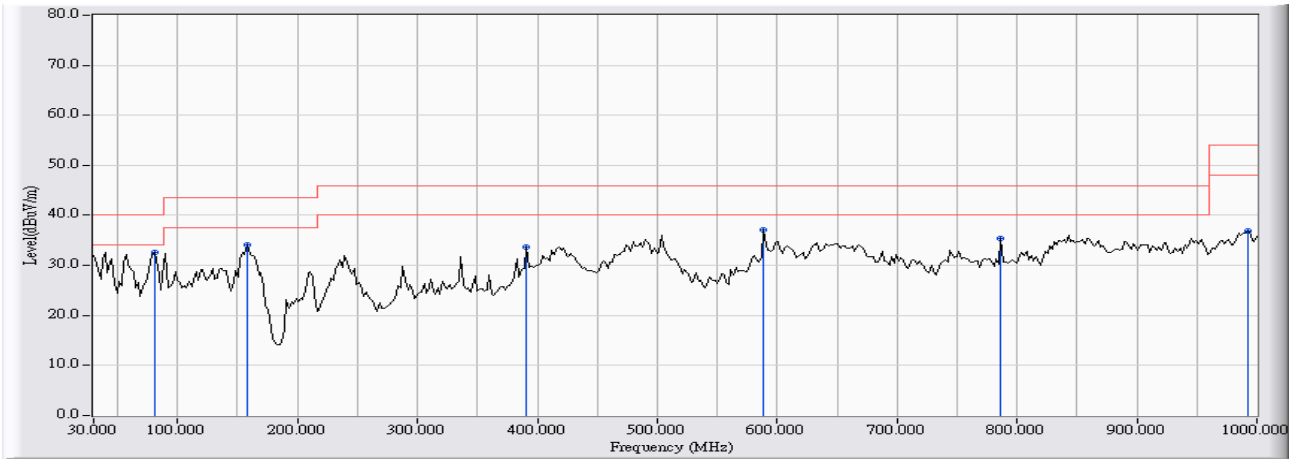


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	57.160	9.201	25.475	34.676	-5.324	40.000	QUASIPEAK
2		196.840	2.984	29.406	32.390	-11.110	43.500	QUASIPEAK
3		503.360	15.740	19.103	34.843	-11.157	46.000	QUASIPEAK
4		588.720	18.546	19.089	37.635	-8.365	46.000	QUASIPEAK
5		858.380	22.664	15.558	38.222	-7.778	46.000	QUASIPEAK
6		953.440	24.505	15.824	40.329	-5.671	46.000	QUASIPEAK

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 : 2009/05/07 - 09:49**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : FCC_30-1G(2008-9) - VERTICAL	**Power : DC12V~DC24V**
EUT : Car kit	**Note : TX**



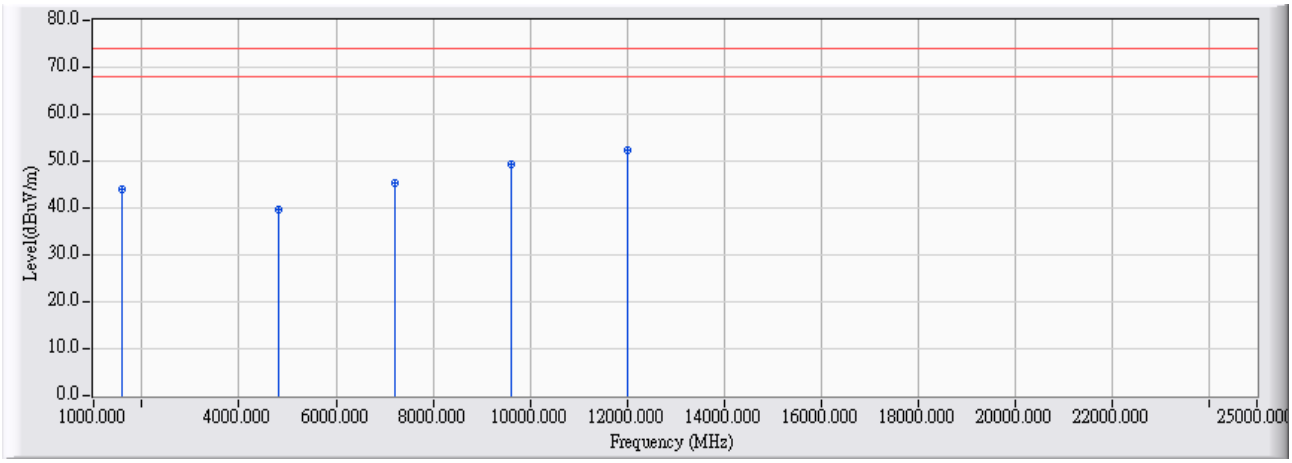
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	80.440	8.566	24.000	32.566	-7.434	40.000	QUASIPEAK
2		158.040	6.628	27.578	34.206	-9.294	43.500	QUASIPEAK
3		390.840	15.001	18.730	33.731	-12.269	46.000	QUASIPEAK
4		588.720	17.941	19.089	37.030	-8.970	46.000	QUASIPEAK
5		786.600	15.768	19.717	35.484	-10.516	46.000	QUASIPEAK
6		992.240	21.723	15.229	36.952	-17.048	54.000	QUASIPEAK

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

Harmonic & Spurious:

Site : Site 1	**Time : 2009/05/04 - 15:40**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - HORIZONTAL	**Power : DC12V~DC24V**
EUT : Cat Kit	**Note : TX-2402MHz**

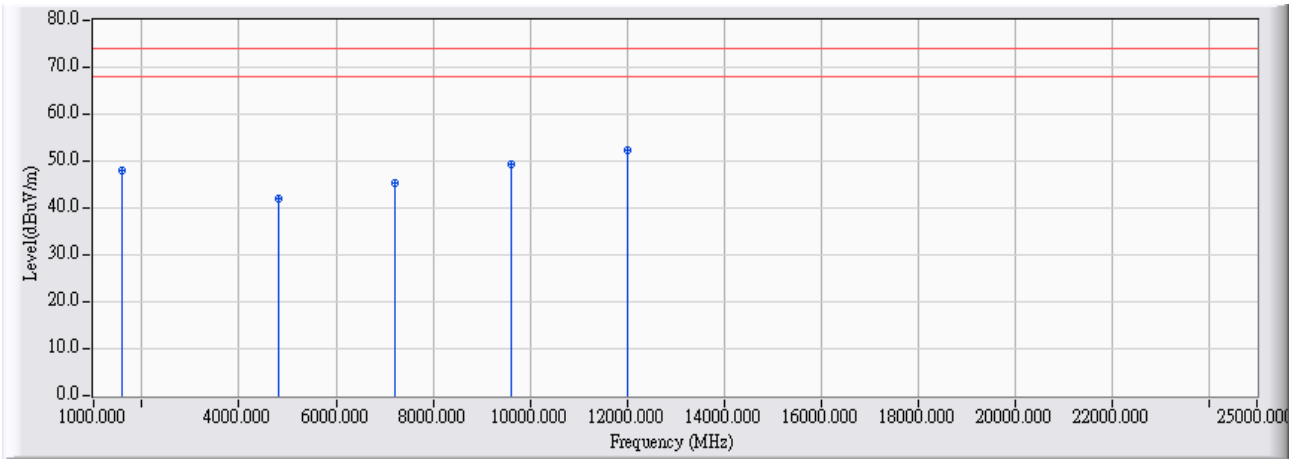


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1600.000	-9.907	53.760	43.853	-30.147	74.000	54.00	PEAK
2		4804.040	0.343	39.460	39.803	-34.197	74.000	54.00	PEAK
3		7205.920	6.745	38.670	45.415	-28.585	74.000	54.00	PEAK
4		9608.160	10.653	38.520	49.173	-24.827	74.000	54.00	PEAK
5	*	12010.200	15.804	36.570	52.374	-21.626	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	**Time : 2009/05/04 - 15:46**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - VERTICAL	**Power : DC12V~DC24V**
EUT : Cat Kit	**Note : TX-2402MHz**

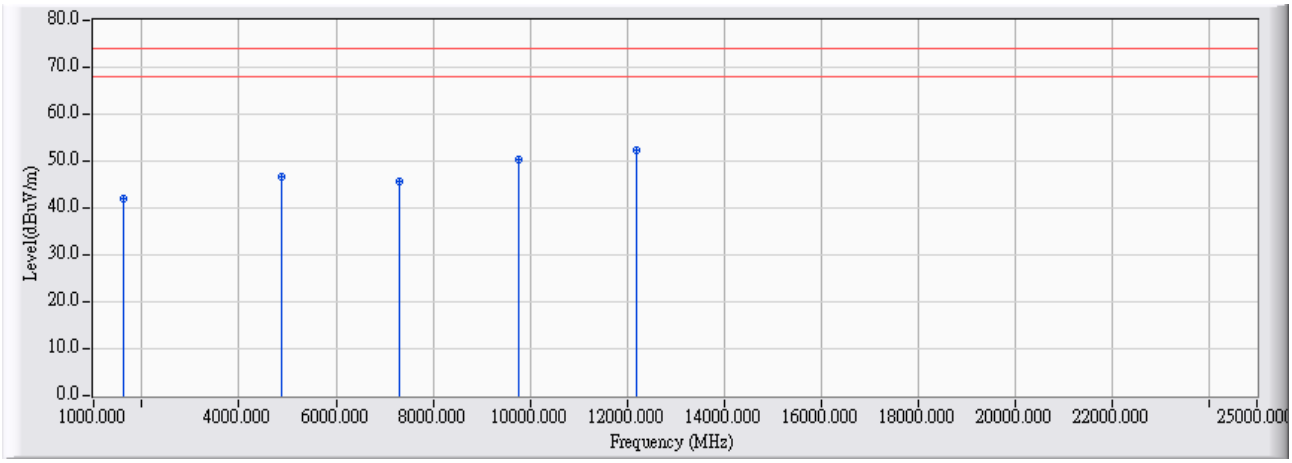


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1600.000	-7.351	55.400	48.049	-25.951	74.000	54.00	PEAK
2		4804.040	2.532	39.440	41.972	-32.028	74.000	54.00	PEAK
3		7205.920	6.400	39.060	45.460	-28.540	74.000	54.00	PEAK
4		9608.160	10.717	38.590	49.306	-24.694	74.000	54.00	PEAK
5	*	12010.210	14.434	37.870	52.304	-21.696	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	**Time : 2009/05/04 - 15:54**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - HORIZONTAL	**Power : DC12V~DC24V**
EUT : Cat Kit	**Note : TX-2441MHz**

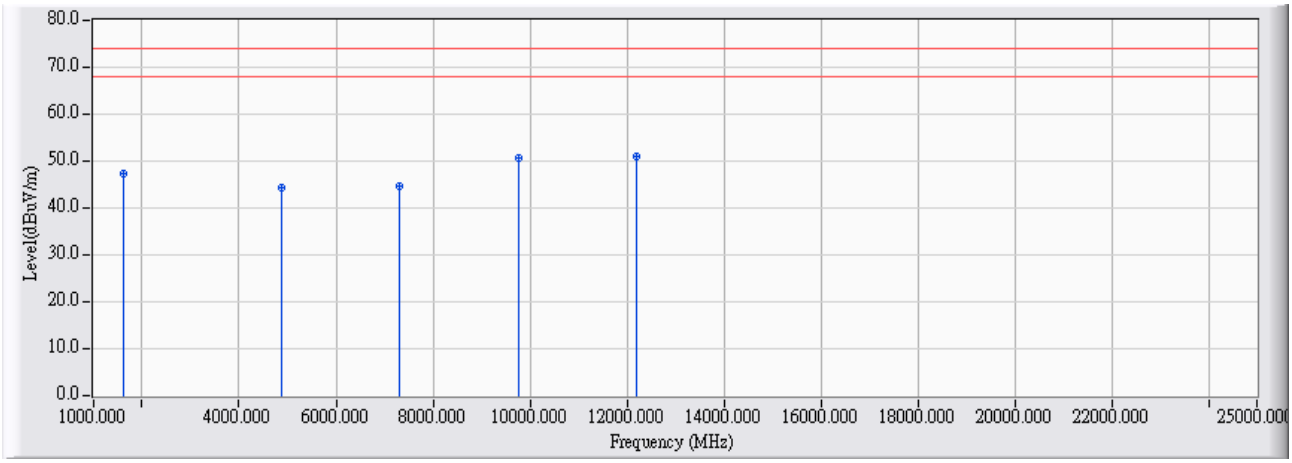


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1627.960	-9.755	51.710	41.955	-32.045	74.000	54.00	PEAK
2		4882.000	0.553	46.130	46.683	-27.317	74.000	54.00	PEAK
3		7322.920	7.282	38.250	45.532	-28.468	74.000	54.00	PEAK
4		9763.920	11.281	39.190	50.471	-23.529	74.000	54.00	PEAK
5	*	12205.080	15.042	37.240	52.283	-21.717	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	**Time : 2009/05/04 - 16:02**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - VERTICAL	**Power : DC12V~DC24V**
EUT : Cat Kit	**Note : TX-2441MHz**

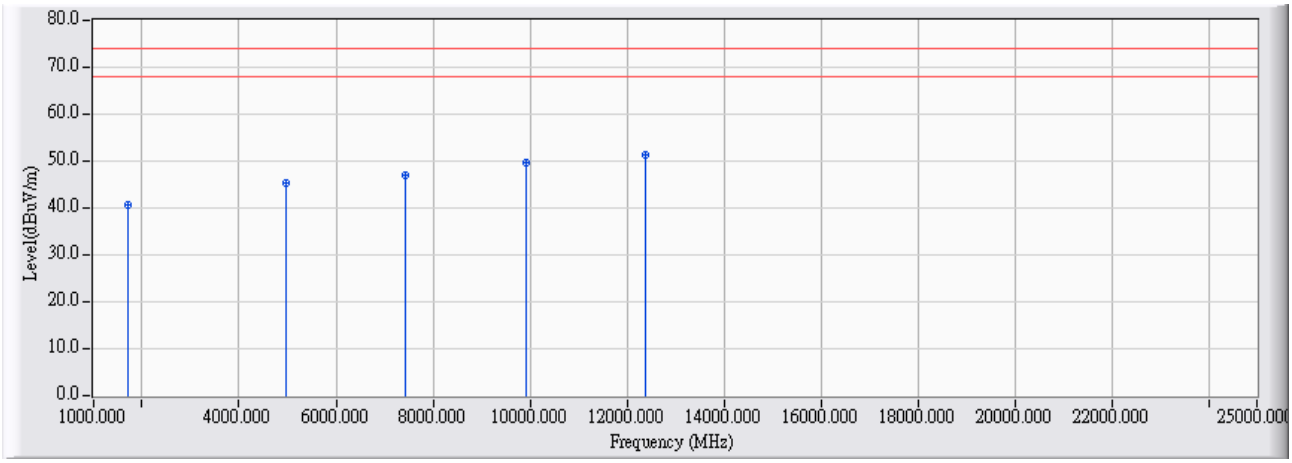


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1627.960	-7.405	54.700	47.295	-26.705	74.000	54.00	PEAK
2		4882.000	2.581	41.910	44.491	-29.509	74.000	54.00	PEAK
3		7322.920	6.627	37.910	44.537	-29.463	74.000	54.00	PEAK
4		9763.920	11.497	39.030	50.527	-23.473	74.000	54.00	PEAK
5	*	12205.080	14.085	36.990	51.076	-22.924	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	**Time : 2009/05/04 - 16:10**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - HORIZONTAL	**Power : DC12V~DC24V**
EUT : Cat Kit	**Note : TX-2480MHz**

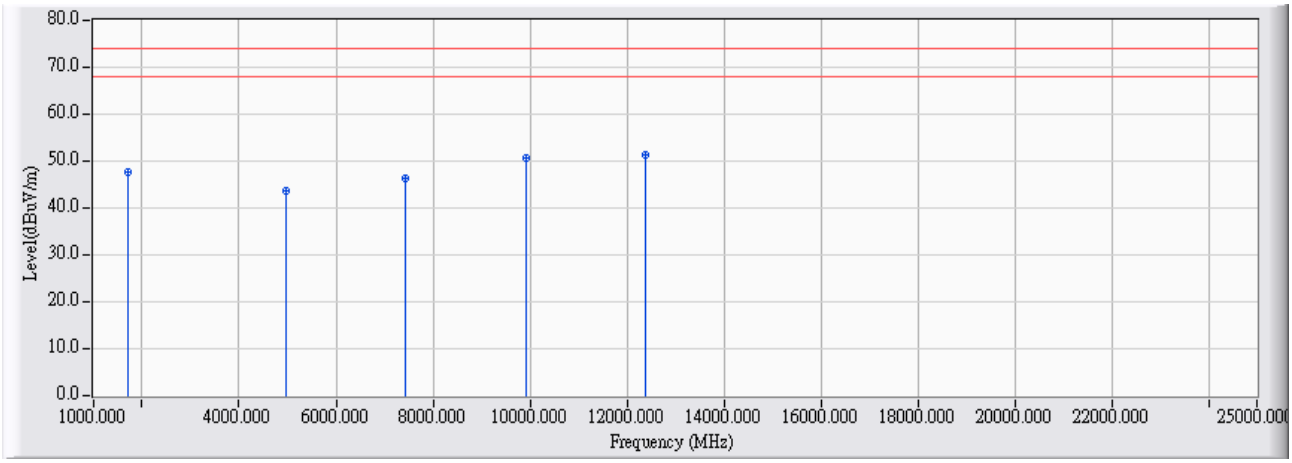


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1722.500	-9.230	49.790	40.560	-33.440	74.000	54.00	PEAK
2		4960.000	0.772	44.410	45.182	-28.818	74.000	54.00	PEAK
3		7440.000	7.829	39.160	46.989	-27.011	74.000	54.00	PEAK
4		9920.000	11.908	37.900	49.808	-24.192	74.000	54.00	PEAK
5	*	12399.900	14.272	36.900	51.171	-22.829	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : Site 1	**Time : 2009/05/04 - 16:18**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - VERTICAL	**Power : DC12V~DC24V**
EUT : Cat Kit	**Note : TX-2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Detector Type
1		1722.500	-7.585	55.340	47.755	-26.245	74.000	54.00	PEAK
2		4960.250	2.630	40.980	43.609	-30.391	74.000	54.00	PEAK
3		7440.000	6.864	39.520	46.385	-27.615	74.000	54.00	PEAK
4		9920.000	12.278	38.280	50.558	-23.442	74.000	54.00	PEAK
5	*	12399.900	13.725	37.630	51.355	-22.645	74.000	54.00	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

4. RF antenna conducted test

4.1. Test Equipment

The following test equipments are used during the test:

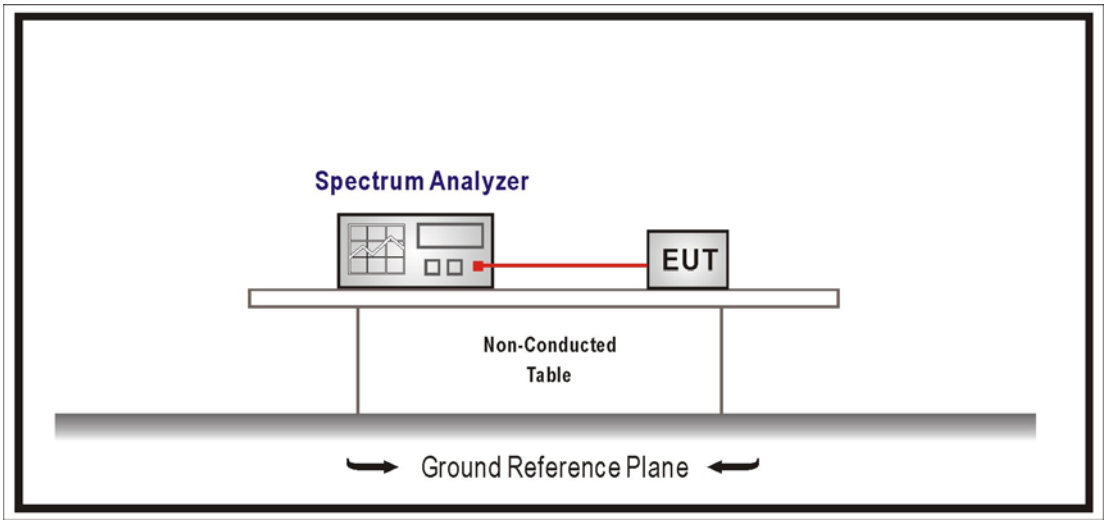
RF Conducted Measurement:				
Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Jan., 2009
2	No.1 OATS			Sep., 2008

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

RF Conducted Measurement:



4.3. 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 an RF conducted or 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)).

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Set RBW = 100 kHz, Set VBW> RBW, scan up through 10th harmonic.

4.5. Test Specification

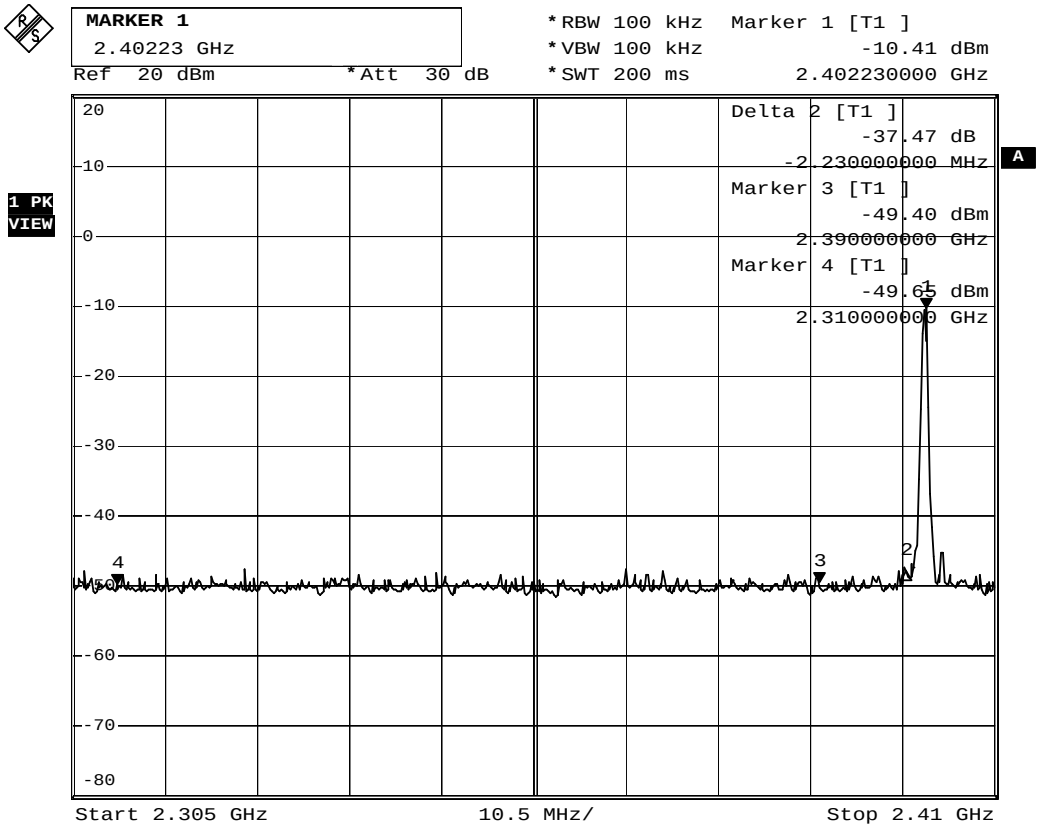
According to FCC Part 15 Subpart C Paragraph 15.247: 2008

4.6. Test Result

Product	Car kit		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/05	Test Site	No.1 OATS

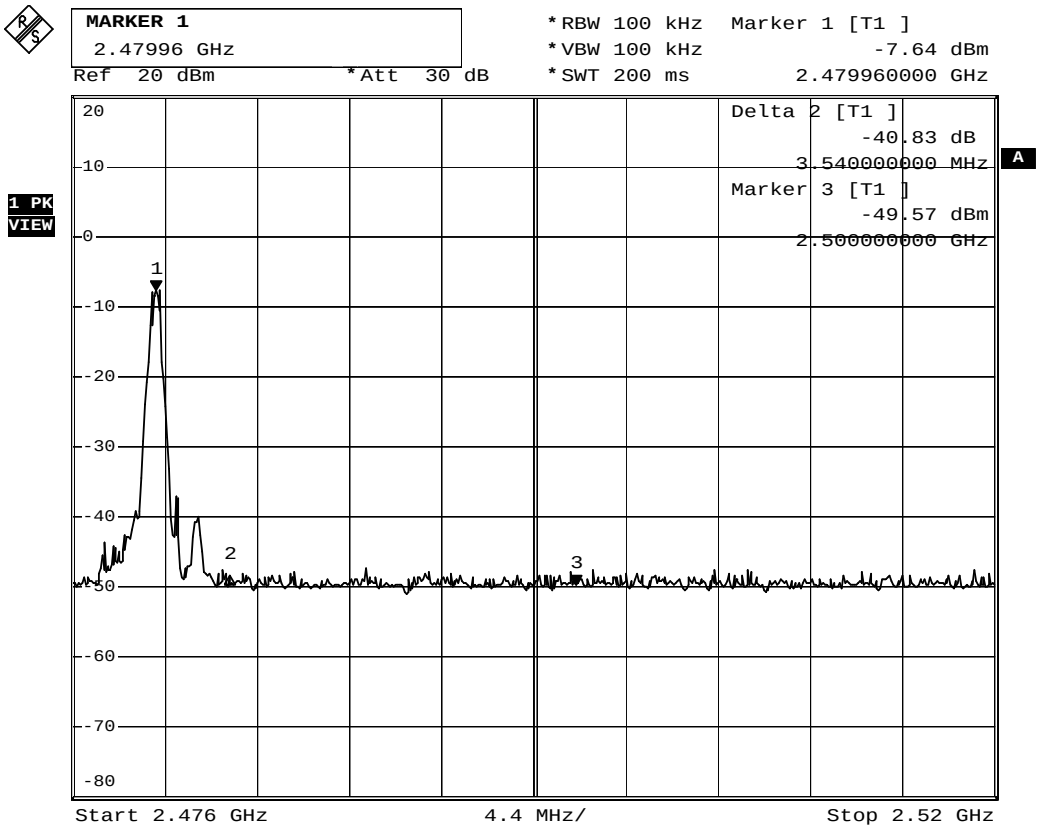
Channel No.	Frequency (MHz)	Measurement Level (dB)	Required Limit (dBc)	Result
00	2402	37.47	≧20	Pass
78	2480	40.33	≧20	Pass

Channel 00



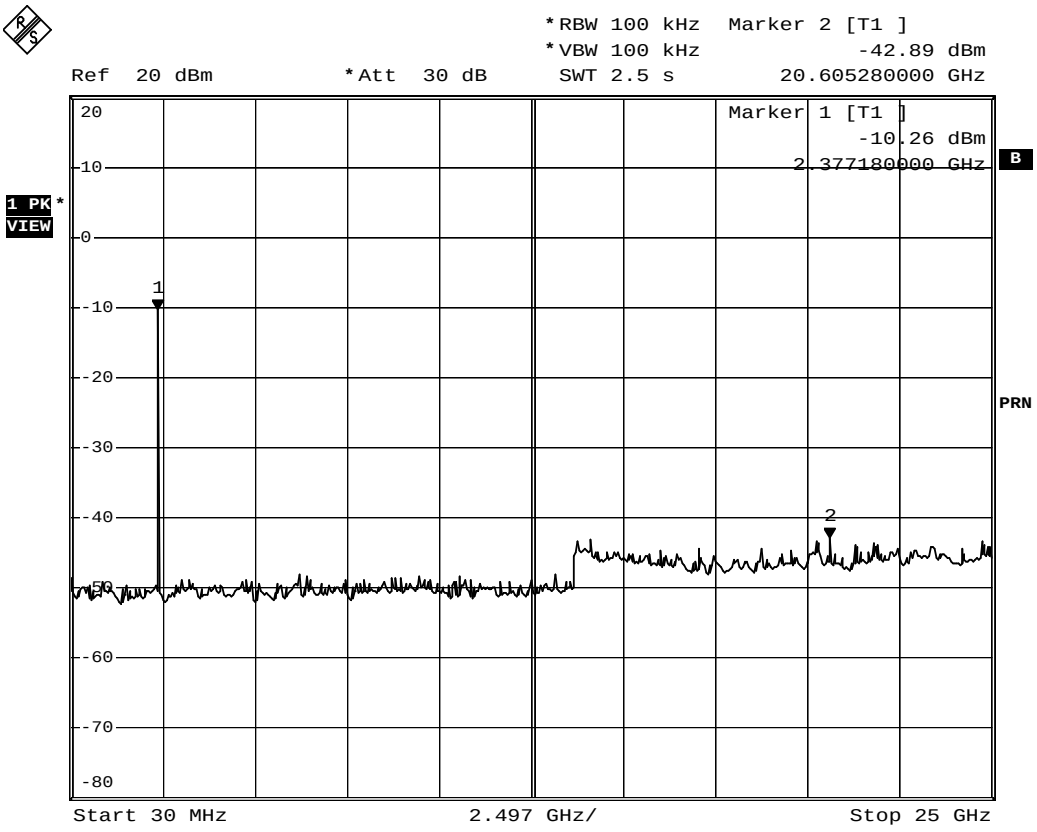
Date: 5.MAY.2009 17:29:44

Channel 78



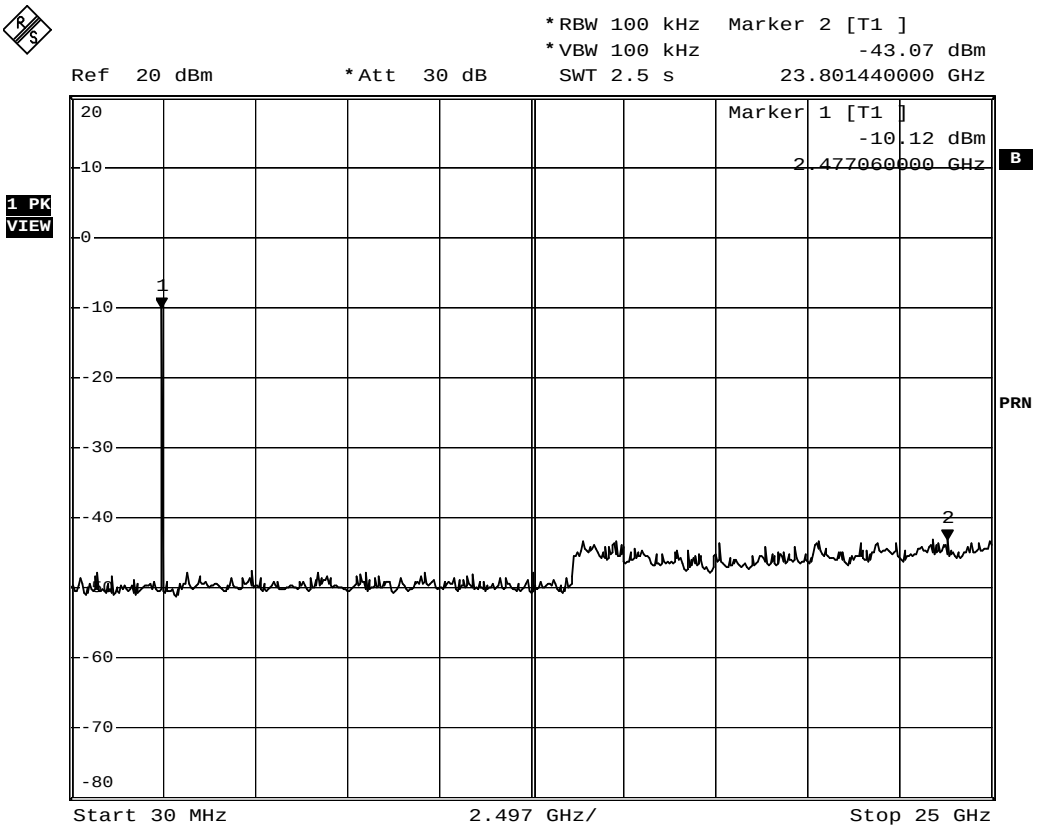
Date: 5.MAY.2009 17:31:43

Channel 00 (30MHz-25GHz)



Date: 5.MAY.2009 21:28:06

Channel 78 (30MHz~25GHz)



Date: 5.MAY.2009 21:29:33

5. Band Edge

5.1. Test Equipment

The following test equipments are used during the test:

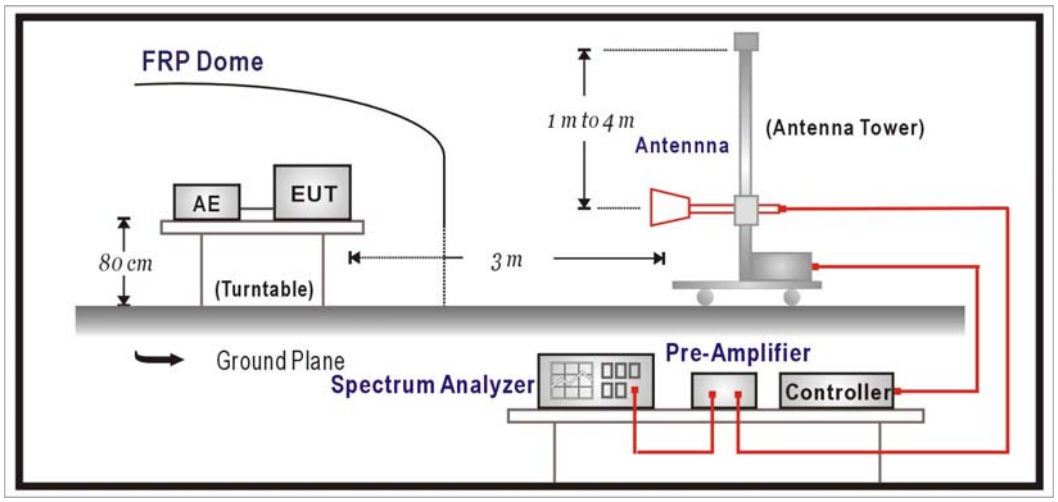
RF Radiated Measurement:					
Item	Equipment		Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Spectrum Analyzer	R & S	FSP40 / 100005	Aug., 2008
2	X	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2009
3		Loop Antenna	R & S	HFH2-Z2 / 833799/004	Sep., 2008
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061	Sep., 2008
5		Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2008
6	X	Horn Antenna	Schwarzbeck	BBHA 9120D / BBHA9120D312	Sep., 2008
7	No.1 OATS				Sep., 2008

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 Radiated Measurement:



5.3. 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.

5.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

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.

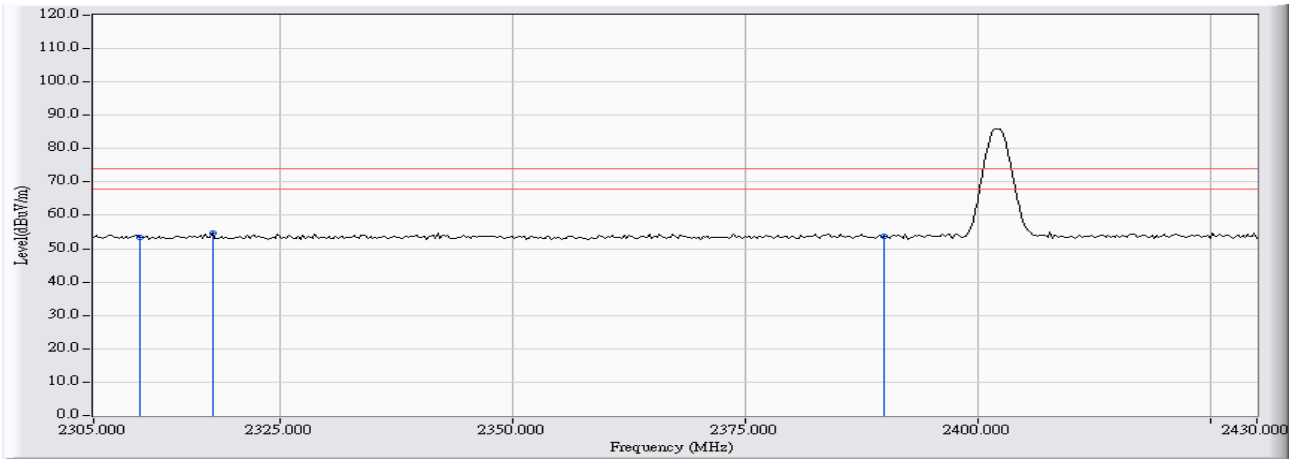
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:2003 on radiated measurement.

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2008

5.6. Test Result

Site : Site 1	**Time : 2009/05/04 - 17:54**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - HORIZONTAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2402MHz**

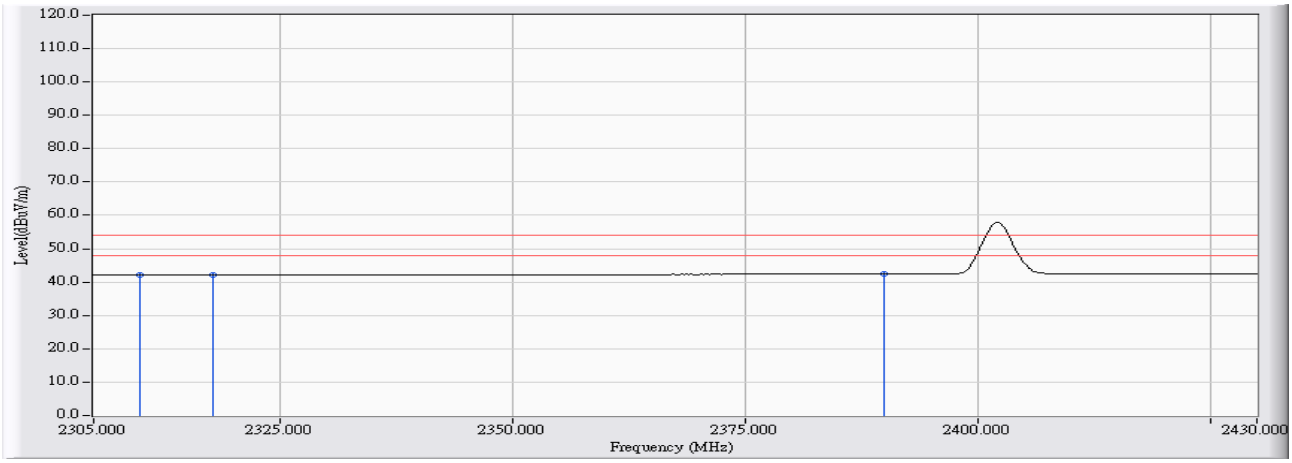


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.658	24.774	53.431	-20.569	74.000	PEAK
2	*	2317.750	28.695	26.057	54.752	-19.248	74.000	PEAK
3		2390.000	29.036	24.846	53.882	-20.118	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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 : 2009/05/04 - 17:56**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - HORIZONTAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2402MHz**

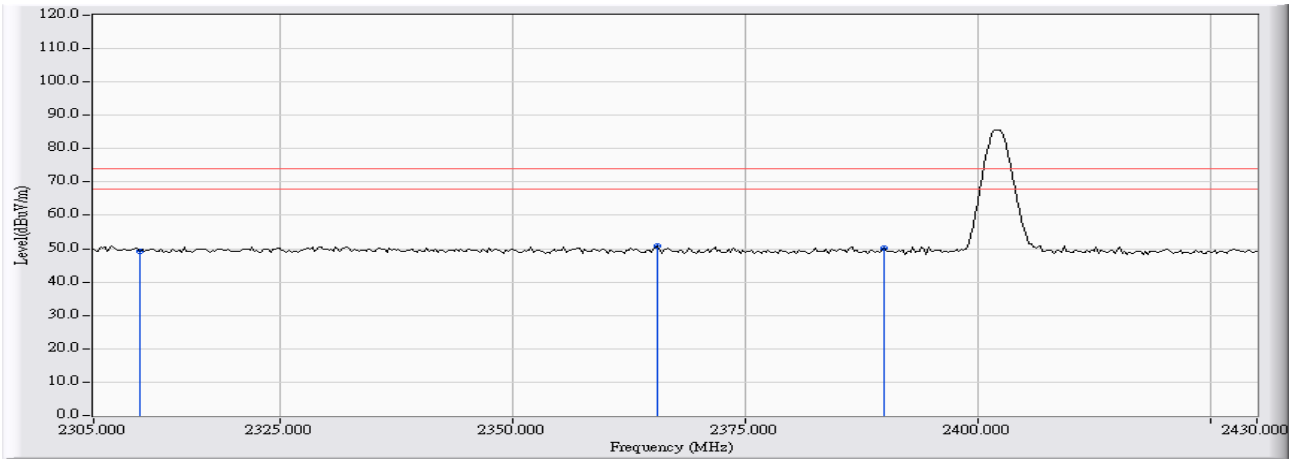


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.658	13.520	42.177	-11.823	54.000	AVERAGE
2	*	2317.750	28.695	13.453	42.148	-11.852	54.000	AVERAGE
3		2390.000	29.036	13.408	42.444	-11.556	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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 : 2009/05/04 - 18:02**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - VERTICAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2402MHz**

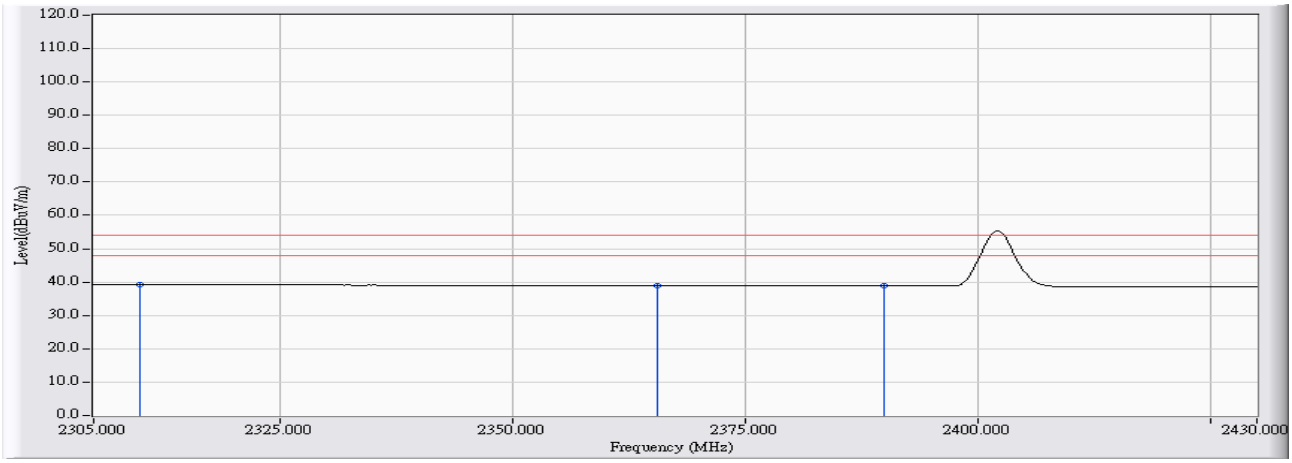


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	25.738	23.521	49.258	-24.742	74.000	PEAK
2	*	2365.500	25.549	25.138	50.687	-23.313	74.000	PEAK
3		2390.000	25.470	24.721	50.191	-23.809	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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 : 2009/05/04 - 18:03**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - VERTICAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2402MHz**

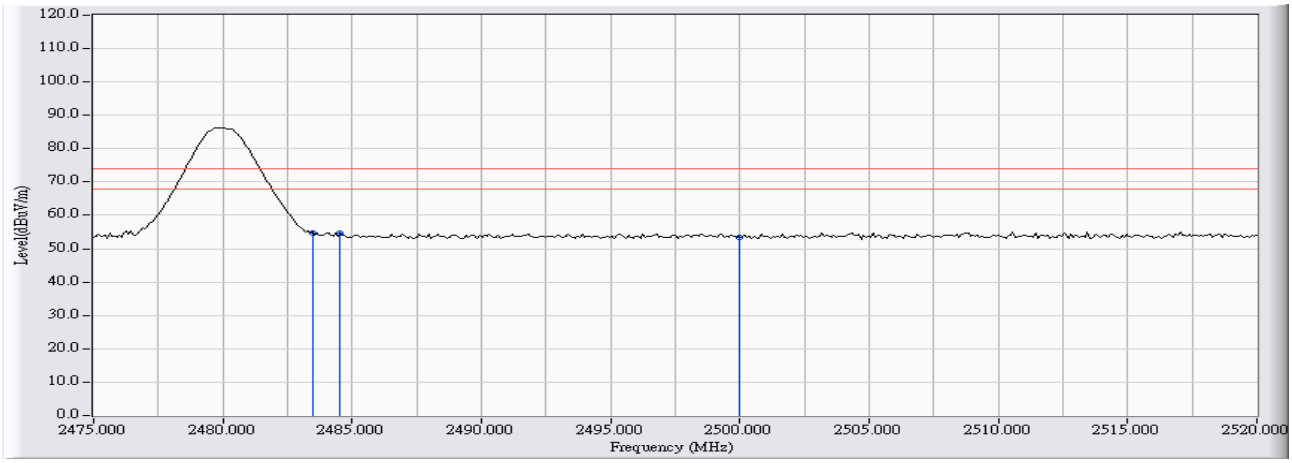


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	25.738	13.493	39.230	-14.770	54.000	AVERAGE
2	*	2365.500	25.549	13.363	38.912	-15.088	54.000	AVERAGE
3		2390.000	25.470	13.414	38.884	-15.116	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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 : 2009/05/04 - 18:11**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - HORIZONTAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2480MHz**

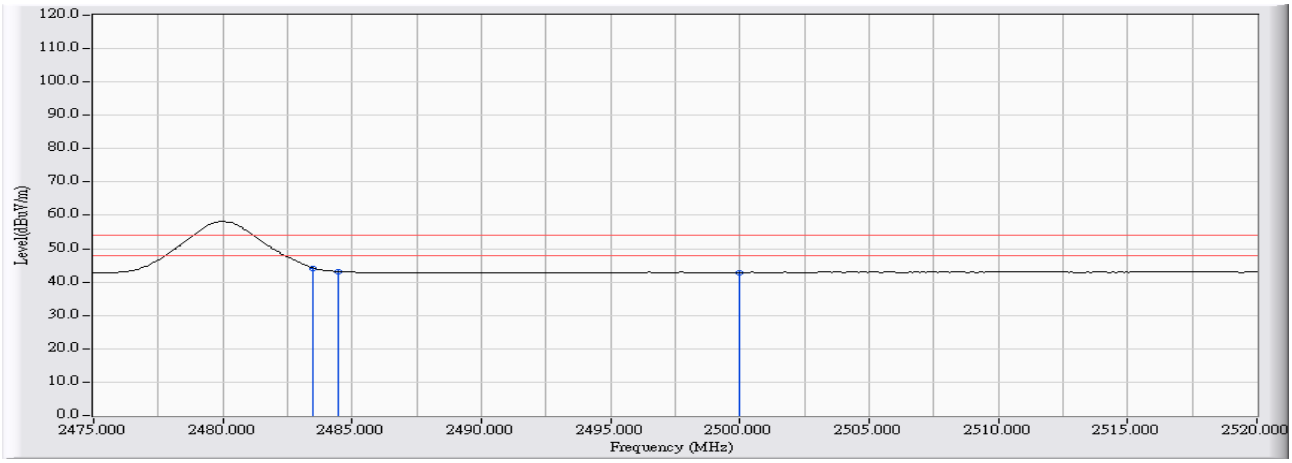


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2483.500	29.480	25.252	54.732	-19.268	74.000	PEAK
2	*	2484.540	29.485	25.272	54.757	-19.243	74.000	PEAK
3		2500.000	29.557	23.935	53.493	-20.507	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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 : 2009/05/04 - 18:13**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - HORIZONTAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2480MHz**

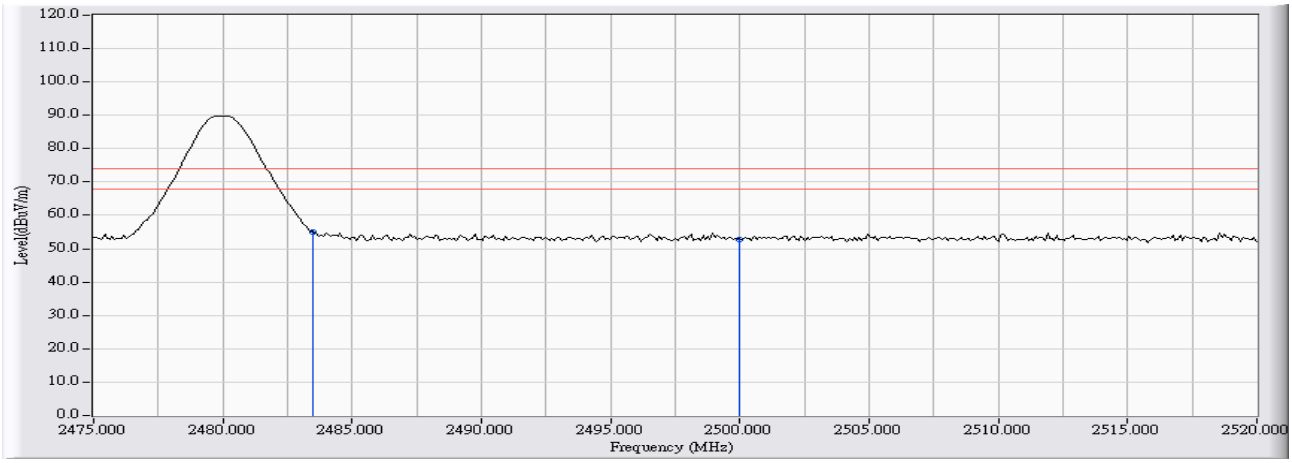


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	29.480	14.687	44.167	-9.833	54.000	AVERAGE
2		2484.450	29.484	13.638	43.123	-10.877	54.000	AVERAGE
3		2500.000	29.557	13.372	42.930	-11.070	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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 : 2009/05/04 - 18:19**
Limit : FCC_SpartC_15.209_03M_PK	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - VERTICAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2480MHz**

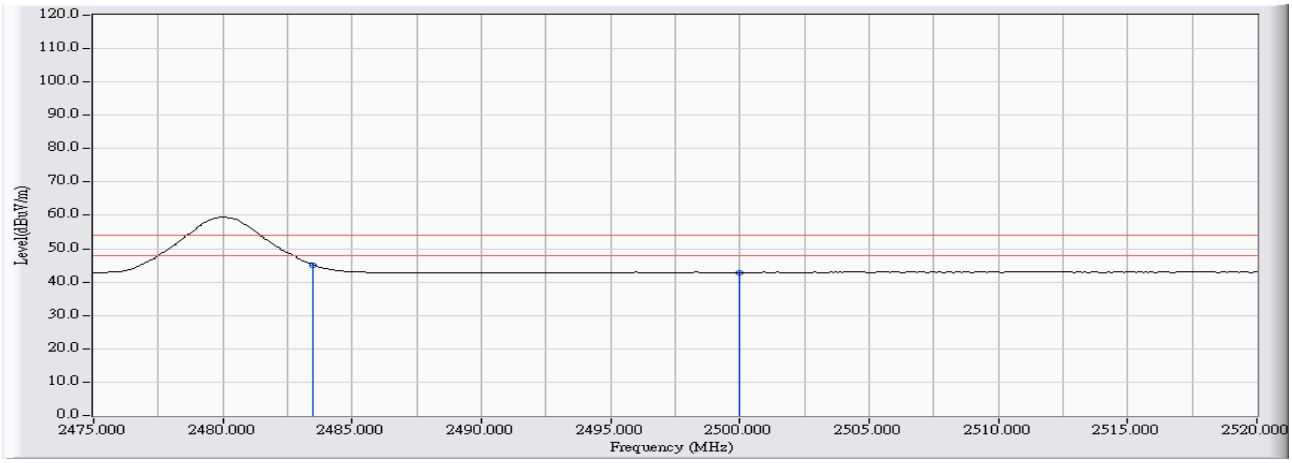


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	29.480	25.658	55.138	-18.862	74.000	PEAK
2		2500.000	29.557	23.315	52.873	-21.127	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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 : 2009/05/04 - 18:20**
Limit : FCC_SpartC_15.209_03M_AV	**Margin : 6**
Probe : FCC_1-18G(2009-0115) - VERTICAL	**Power : DC 12V~DC 24V**
EUT : Car kit	**Note : TX-2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	2483.500	29.480	15.646	45.126	-8.874	54.000	AVERAGE
2		2500.000	29.557	13.378	42.936	-11.064	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. 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. Number of hopping frequency

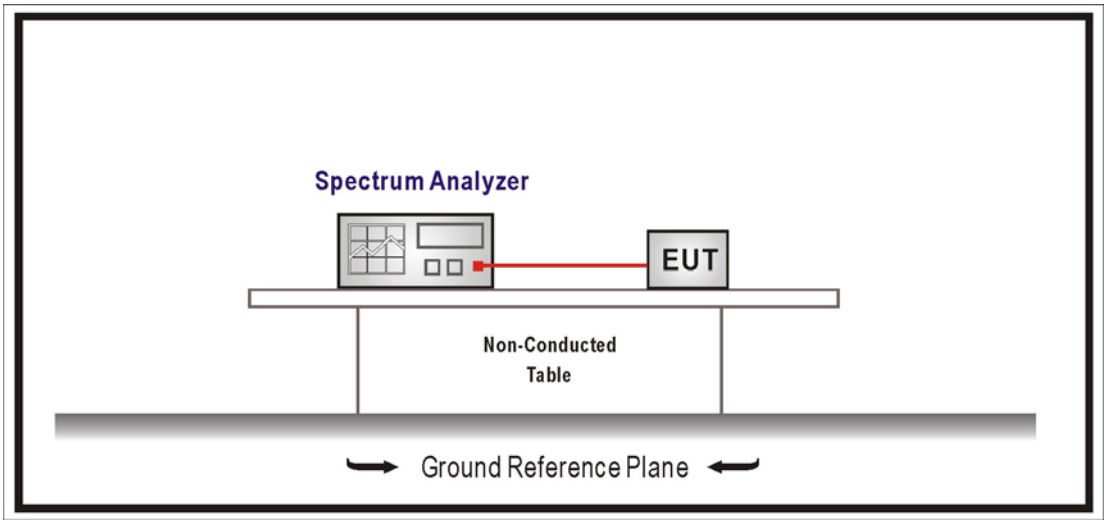
6.1. Test Equipment

The following test equipments are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	R & S	FSP / 100561	Jan., 2009
2	No.1 OATS			Sep., 2008

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 2400-2483.5 MHz bands, which use fewer than 75 hopping frequencies, may employ intelligent hopping techniques to avoid interference to other transmissions. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 non-overlapping channels are used.

For frequency hopping systems operating in the 5725-5850 MHz band shall use at least 75 hopping frequencies.

6.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Span = the frequency band of operation

RBW ≥ 1% of the span， VBW ≥ RBW

Sweep = auto, Detector function = peak, Trace = max hold

6.5. Test Specification

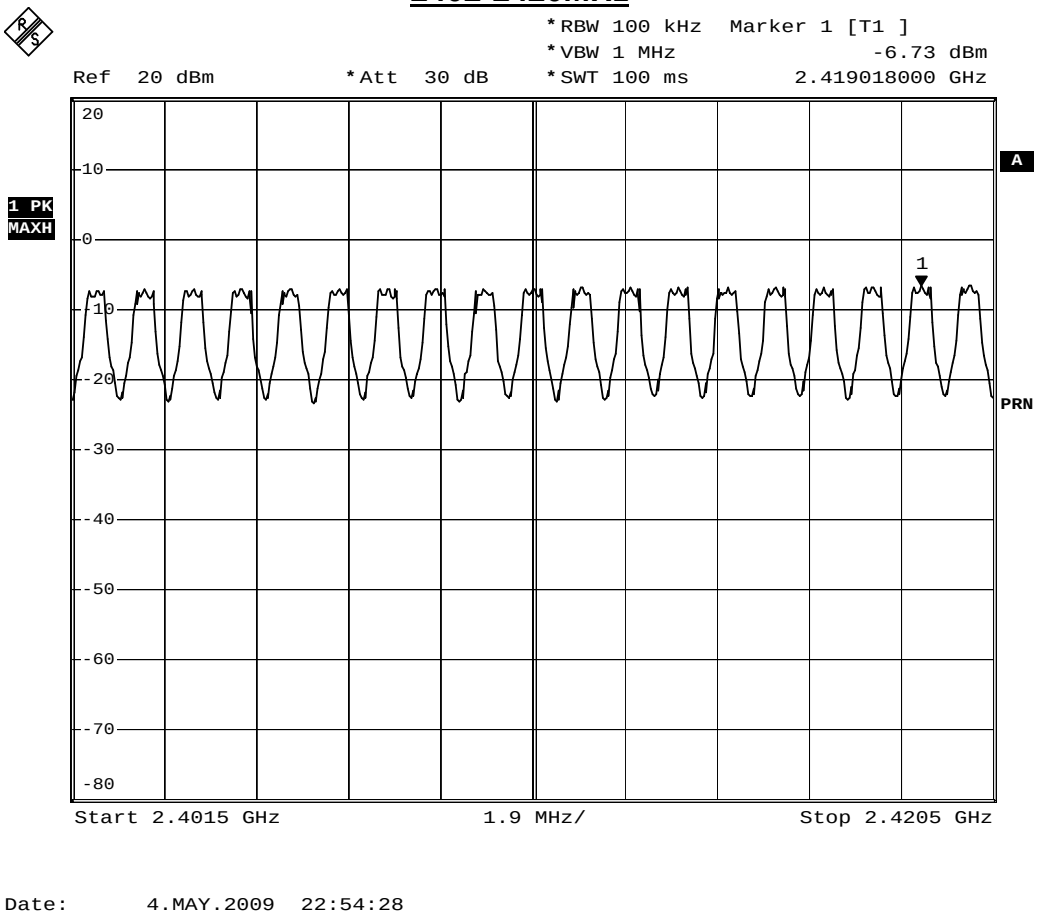
According to FCC Part 15 Subpart C Paragraph 15.247: 2008

6.6. Test Result

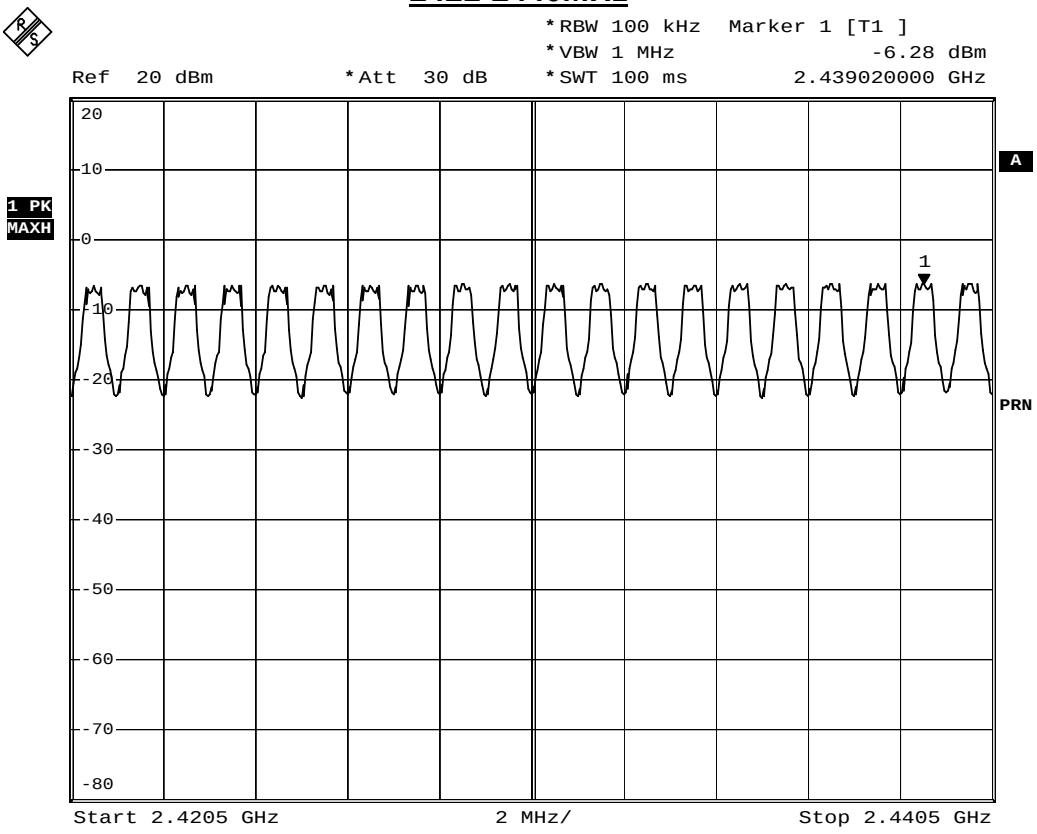
Product	Car kit		
Test Item	Number of hopping frequency		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/04	Test Site	No.1 OATS

Frequency Range (MHz)	Measure Level (Hopping Channel)	Limit (Hopping Channel)	Result
2402 ~ 2480	79	>75	Pass

2402-2420MHz

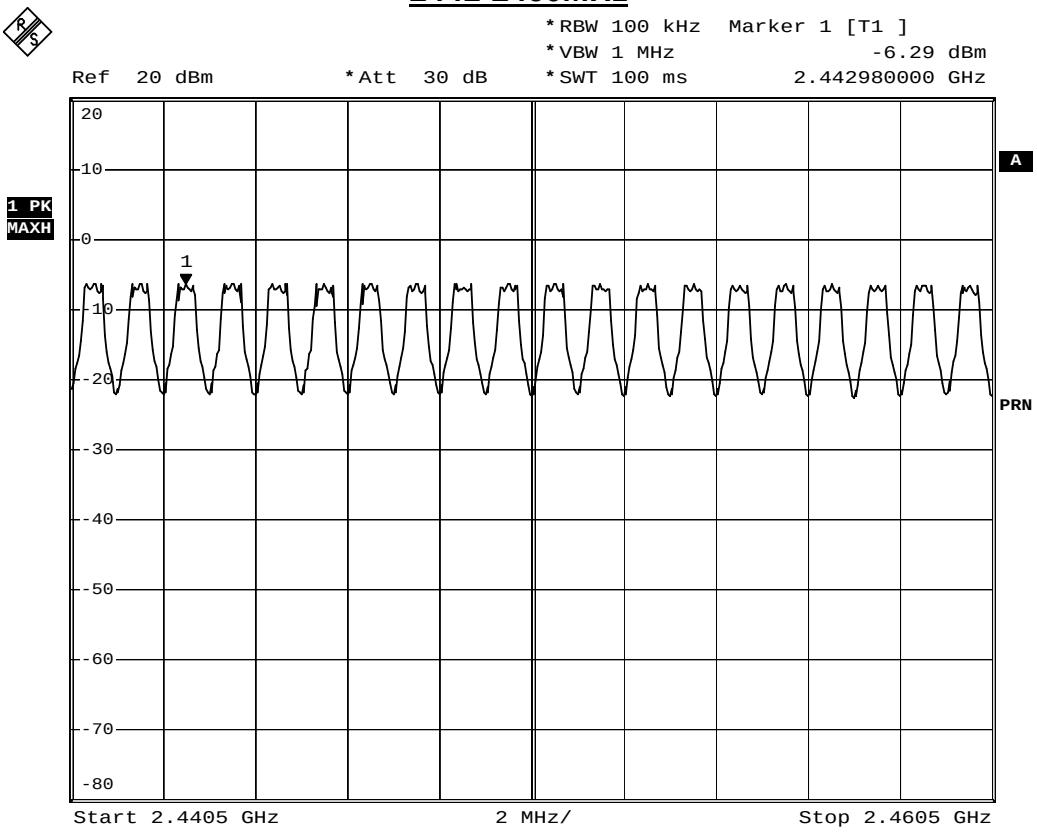


2421-2440MHz



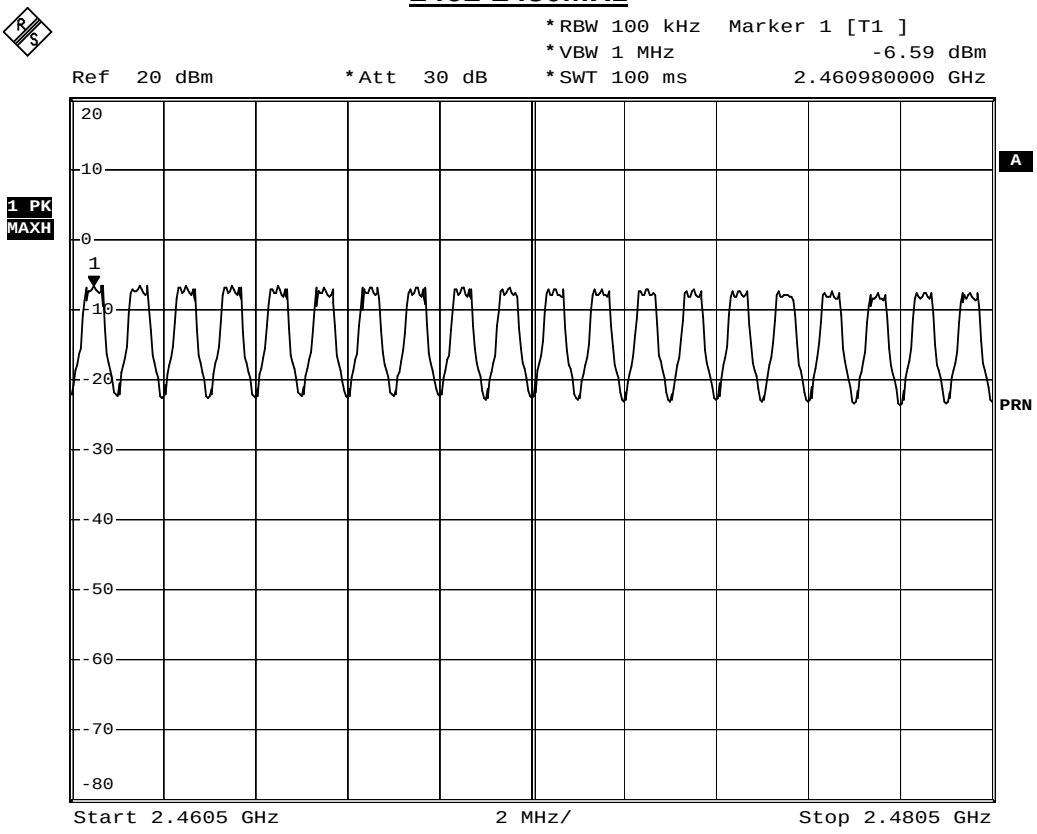
Date: 4.MAY.2009 22:58:24

2441-2460MHz



Date: 4.MAY.2009 23:01:58

2461-2480MHz



Date: 4.MAY.2009 23:05:24

7. Carrier Frequency Separation

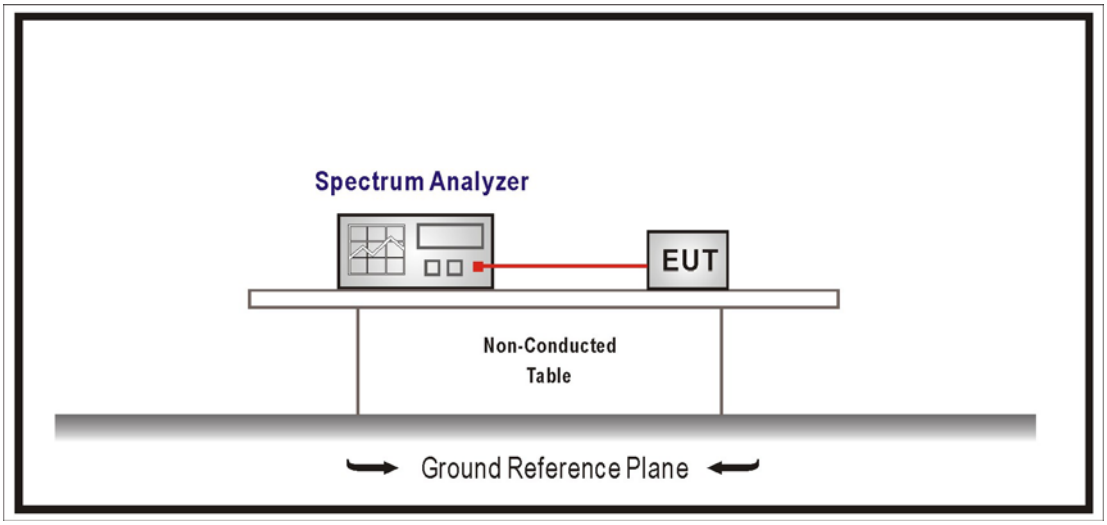
7.1. Test Equipment

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	Jan., 2009
2	No.1 OATS			Sep., 2008

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

7.2. Test Setup



7.3. Limits

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

7.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Span = wide enough to capture the peaks of two adjacent channels

Resolution Bandwidth (RBW) ≥ 1% of the span, VBW ≥ RBW

Sweep = auto, Detector function = peak, Trace = max hold

7.5. Test Specification

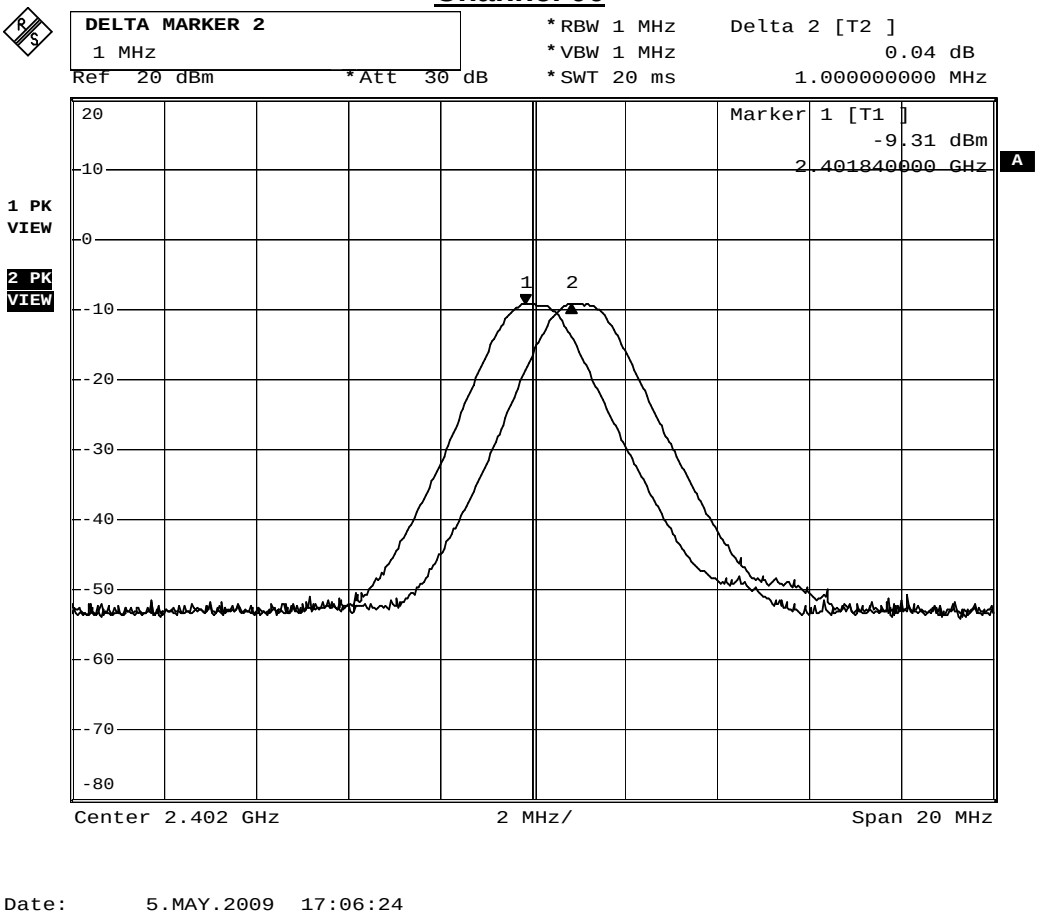
According to FCC Part 15 Subpart C Paragraph 15.247: 2008

7.6. Test Result

Product	Car kit		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/05	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
00	2402.00	1000	>740	Pass

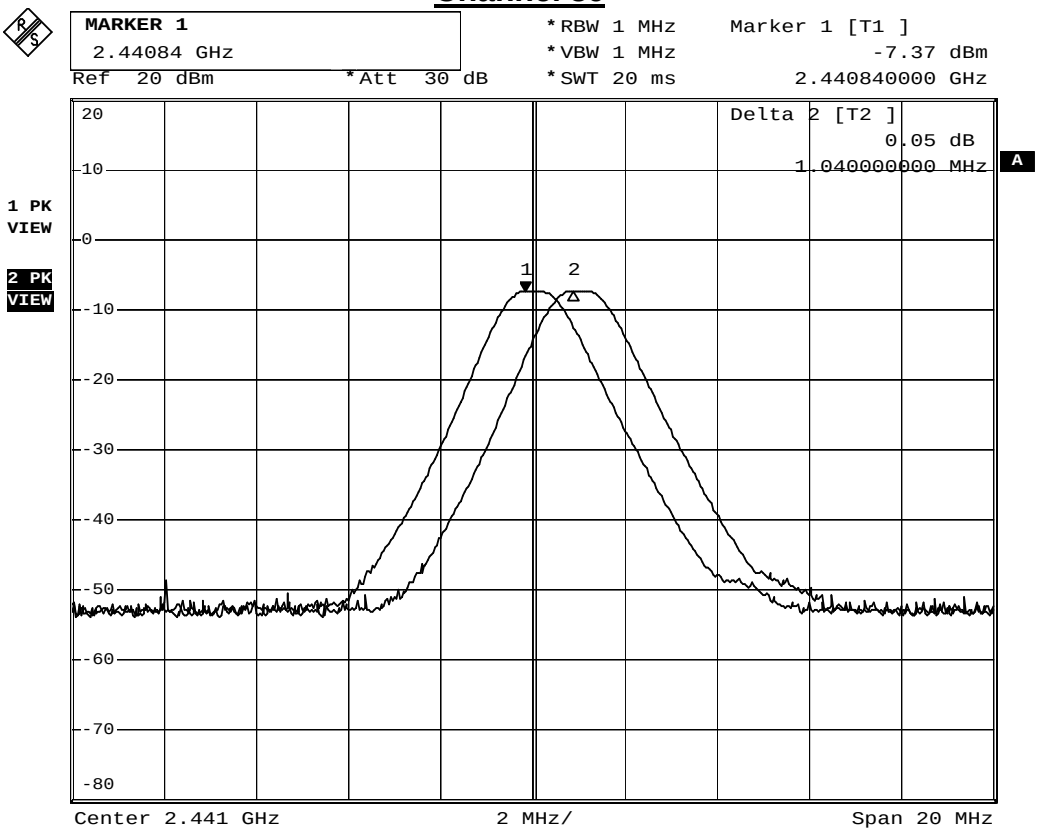
Channel 00



Product	Car kit		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/05	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
39	2441.00	1040	>753.3	Pass

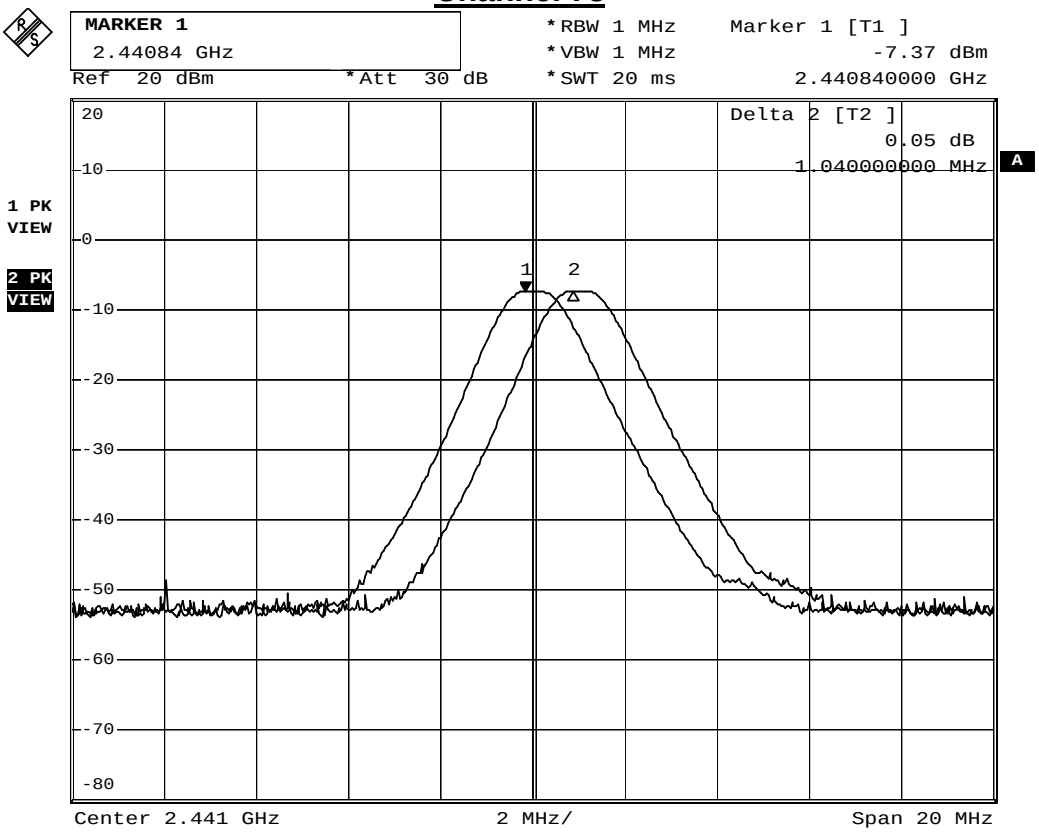
Channel 39



Product	Car kit		
Test Item	Carrier Frequency Separation		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/05	Test Site	No.1 OATS

Channel No.	Frequency (MHz)	Measure Level (kHz)	Limit (kHz)	Result
78	2480.00	1040	>740	Pass

Channel 78



Date: 5.MAY.2009 17:08:05

8. Occupied Bandwidth

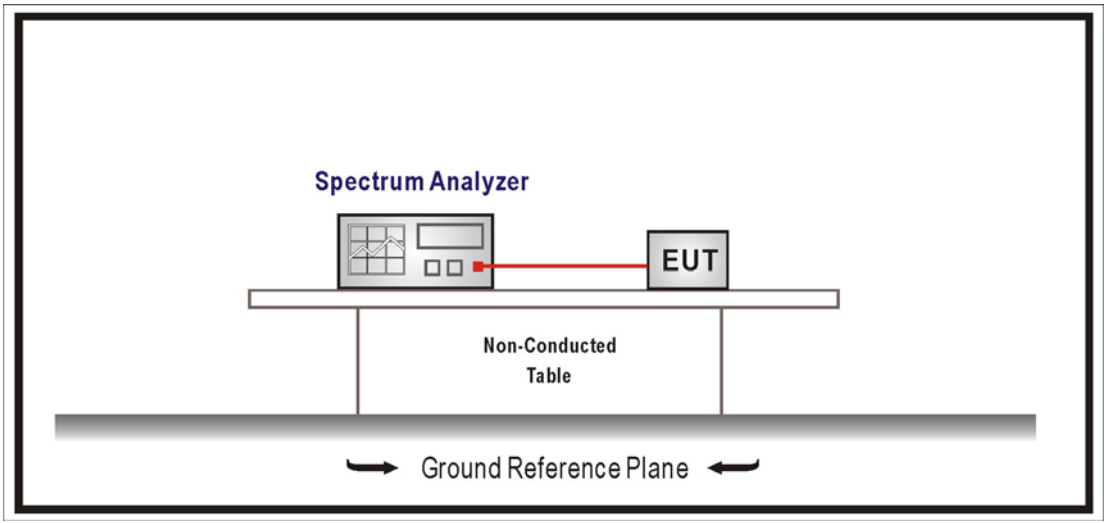
8.1. Test Equipment

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	Jan., 2009
2	No.1 OATS			Sep., 2008

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

8.2. Test Setup



8.3. 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.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Use the following spectrum analyzer settings:
Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel
RBW ≥ 1% of the 20 dB bandwidth, VBW ≥ RBW
Sweep = auto, Detector function = peak, Trace = max hold
The EUT should be transmitting at its maximum data rate.

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2008

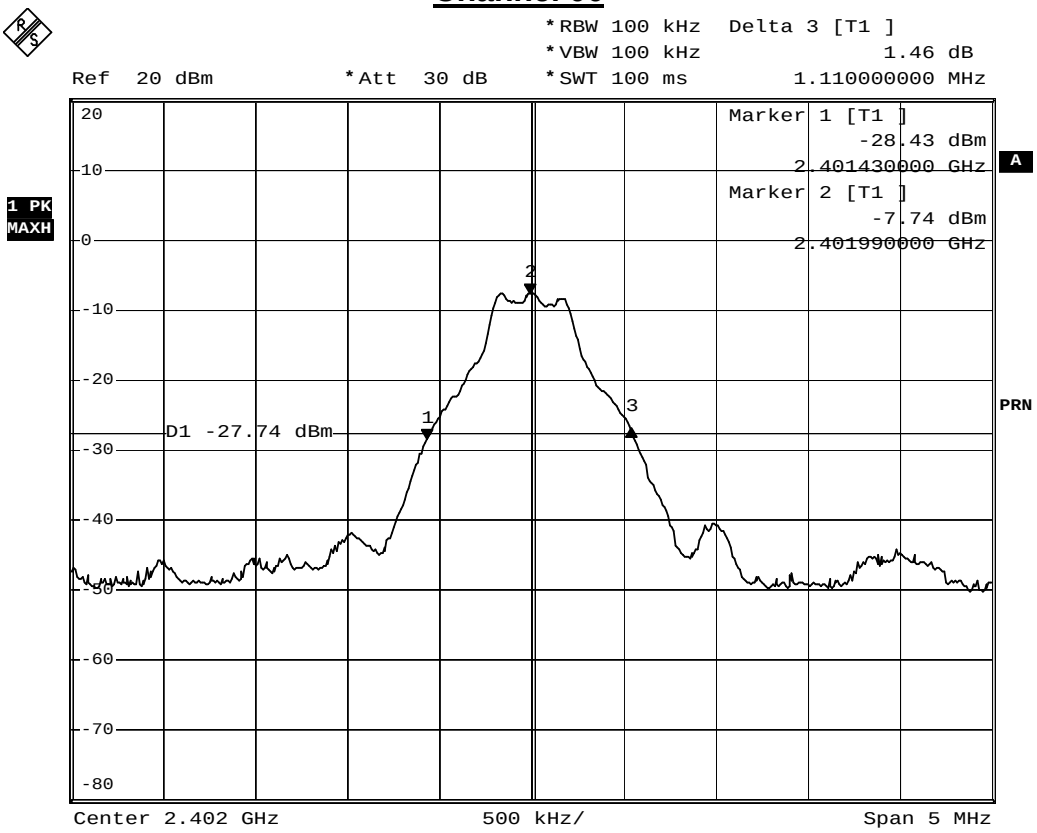
8.6. Test Result

Product	Car kit		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/04	Test Site	No.1 OATS

1M-GFSK Modulation, PRBS Packet Type

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
00	2402.00	1.11	--	Pass

Channel 00



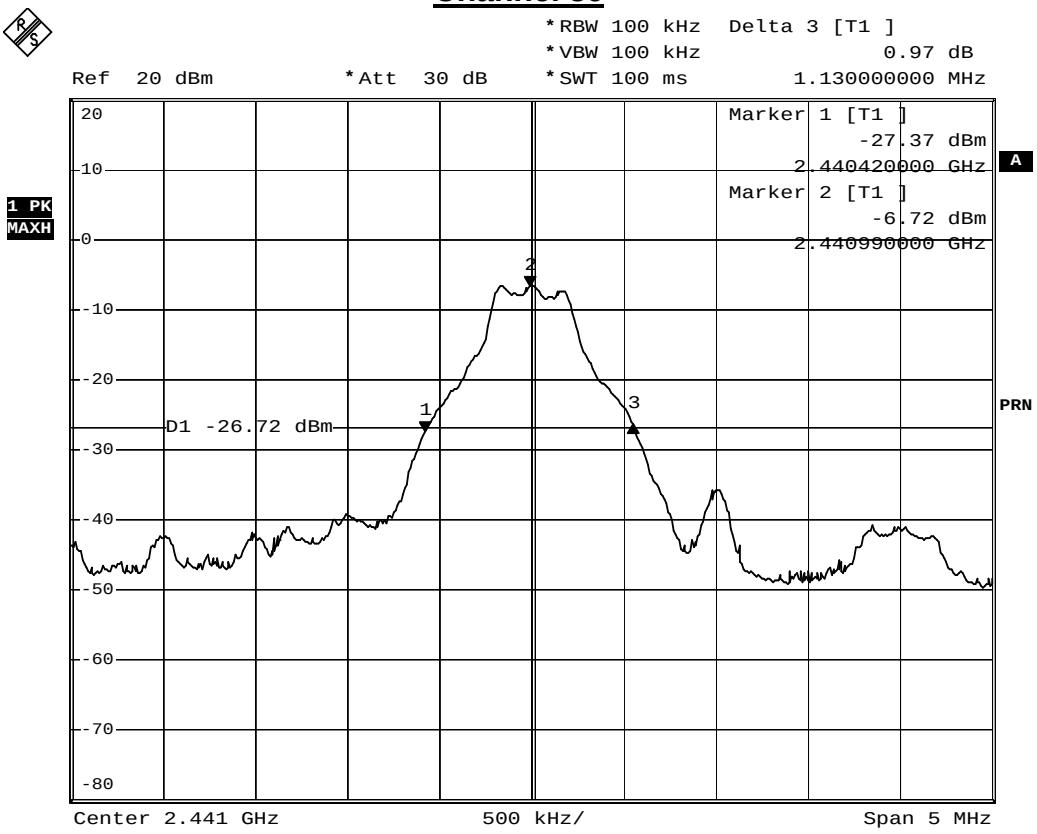
Date: 4.MAY.2009 22:29:38

Product	Car kit		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/04	Test Site	No.1 OATS

1M-GFSK Modulation, PRBS Packet Type

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
39	2441.00	1.13	--	Pass

Channel 39



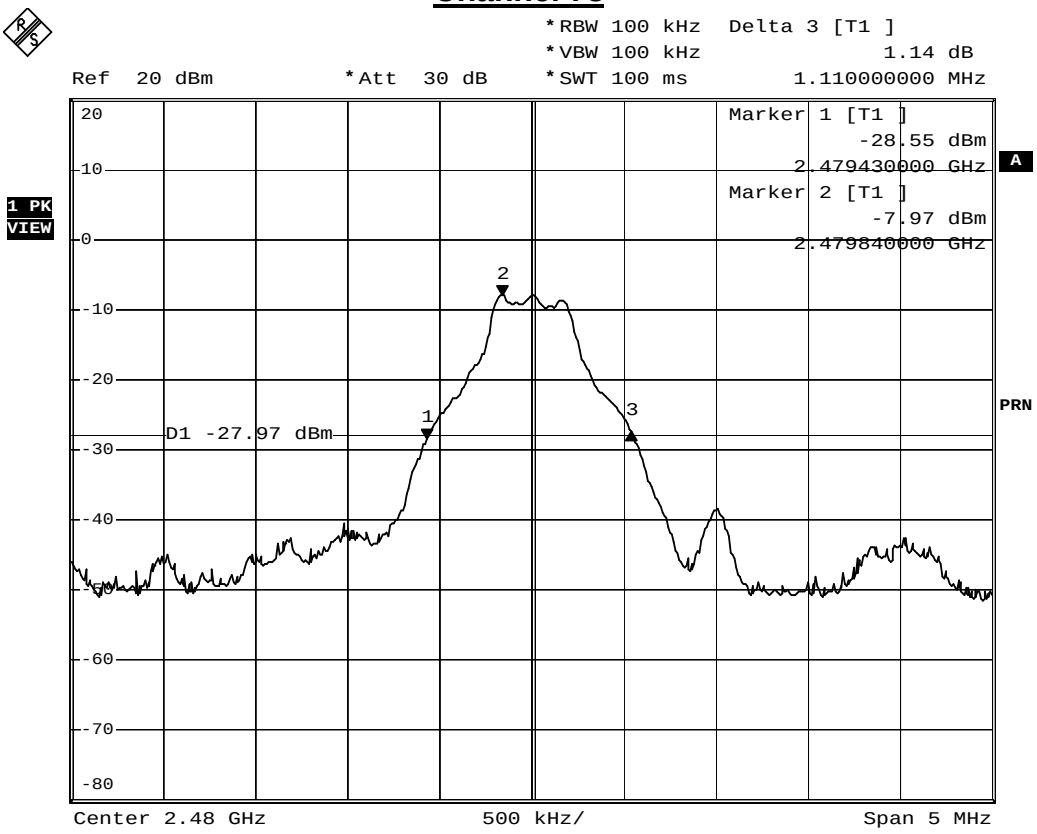
Date: 4.MAY.2009 22:28:11

Product	Car kit		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/04	Test Site	No.1 OATS

1M-GFSK Modulation, PRBS Packet Type

Channel No.	Frequency (MHz)	Measure Level (MHz)	Limit (MHz)	Result
78	2480.00	1.11	--	Pass

Channel 78



9. Dwell Time

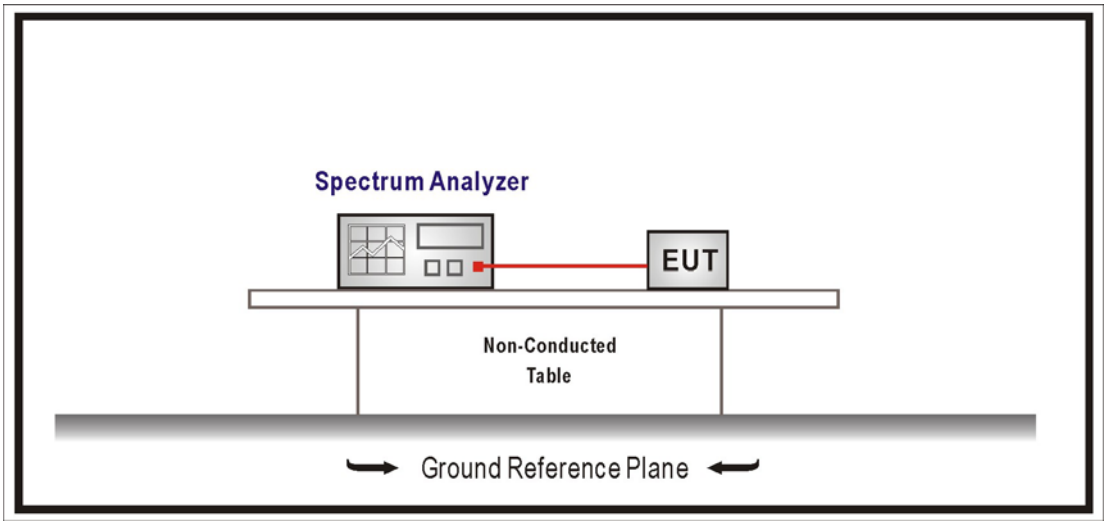
9.1. Test Equipment

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	Jan., 2009
2	No.1 OATS			Sep., 2008

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

9.2. Test Setup



9.3. 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.
For frequency hopping systems operating in the 2400-2483.5 MHz bands. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.
For frequency hopping systems operating in the 5725-5850 MHz bands. The average time of occupancy on any frequency shall not be greater than 0.4 seconds within a 30 second period.

9.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

Span = zero span, centered on a hopping channel
RBW = 1 MHz, VBW ≥ RBW
Sweep = as necessary to capture the entire dwell time per hopping channel
Detector function = peak, Trace = max hold

9.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2008

9.6. Test Result

Product	Car kit		
Test Item	Dwell Time		
Test Mode	Mode 1: Transmit		
Date of Test	2009/05/05	Test Site	No.1 OATS

Occupancy Time of Frequency Hopping System-DH 5

A) 2402MHz Test Time Period: 0.4*79=31.6sec，Hopping Times Within 1sec: 5/20msec=250 /sec

The Maximum Occupancy Time Within 31.6sec: 0.00316*(250/79)*31.6=0.316sec。

B) 2441MHz Test Time Period: 0.4*79=31.6sec，Hopping Times Within 1sec: 5/20msec=250 /sec

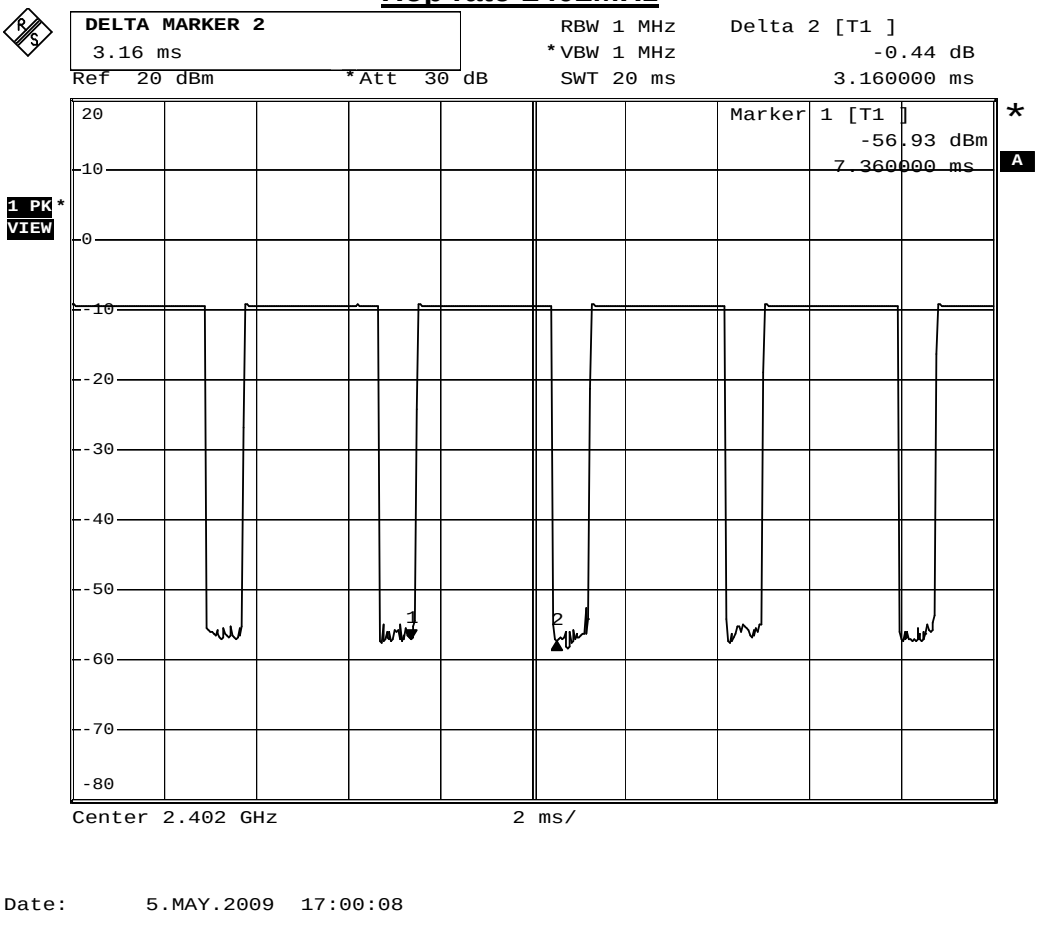
The Maximum Occupancy Time Within 31.6sec: 0.00316*(250/79)*31.6=0.316sec。

C) 2480MHz Test Time Period: 0.4*79=31.6sec，Hopping Times Within 1sec: 5/20msec=250 /sec

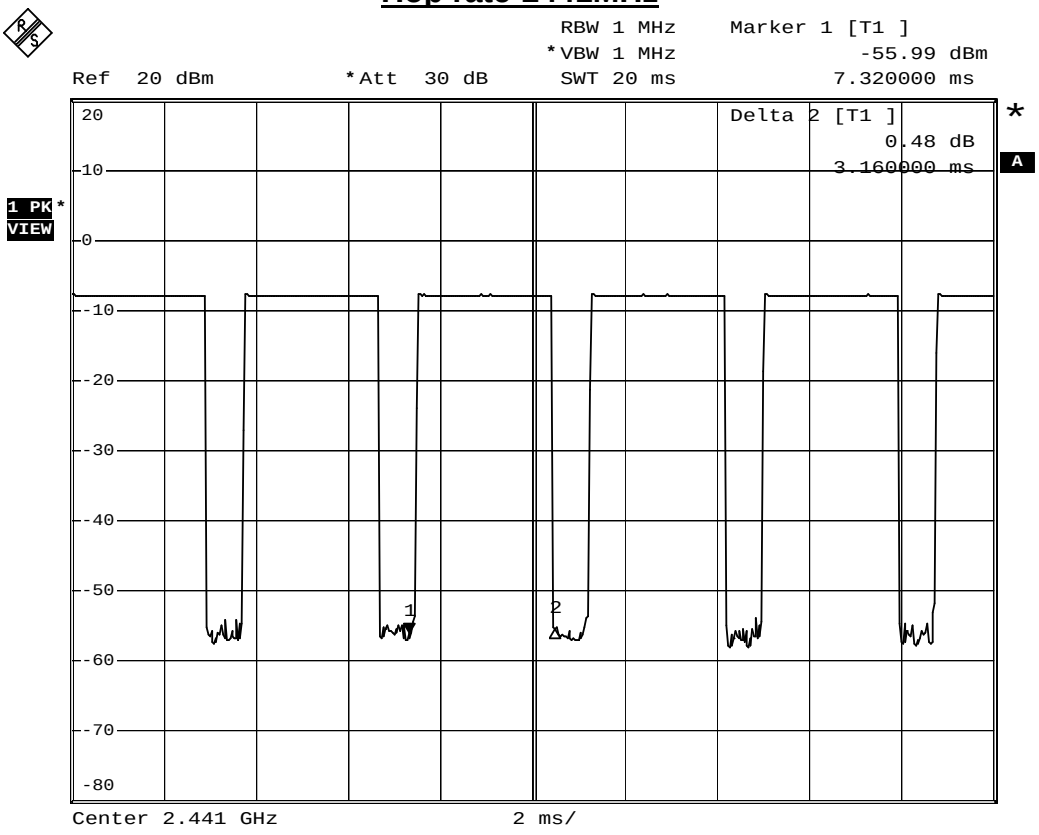
The Maximum Occupancy Time Within 31.6sec: 0.00316*(250/79)*31.6=0.316sec。

Test Result: The Average Occupancy Time of Each Highest，Middle and Lowest Channel Is Less Than 0.4sec，And Corresponds to The Standard。

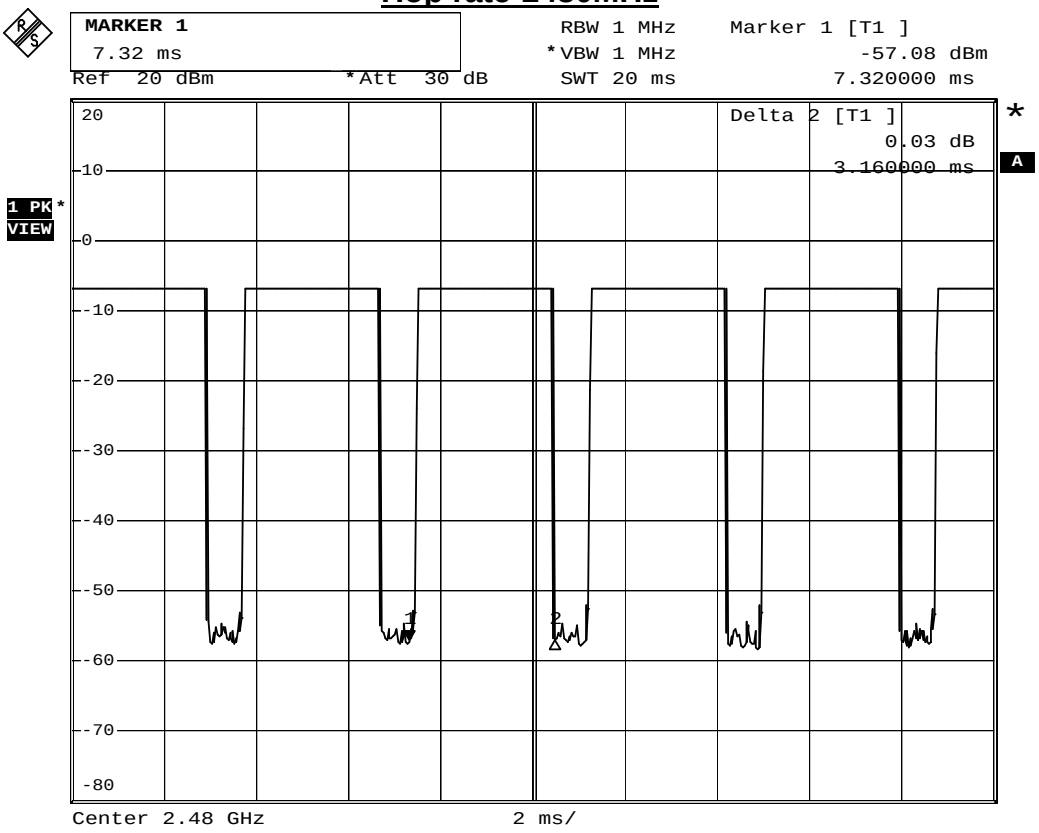
Hop rate-2402MHz



Hop rate-2441MHz



Hop rate-2480MHz



Note: Dwell time＝time slot length * hop rate / number of hopping channels * period