



Product Name : DIGITAL MEDIA FRAME

Model No. : DMF82XKU

FCC ID. : XHIDPF08UH

Applicant : LITE-ON IT Corp.

Address : No.8, Dusing Rd., Hsinchu Science Park,

Hsinchu, Taiwan, R.O.C.

Date of Receipt : 2009/06/10

Issued Date : 2009/06/22

Report No. : 096156R-RFUSP05V01

Report Version : V1.0

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 : 2009/06/22

: 096156R-RFUSP05V01 Report No.

		Quielek	
Product Name	:	DIGITAL MEDIA FRAME	
Applicant	:	LITE-ON IT Corp.	
Address	:	No.8, Dusing Rd., Hsinchu Science Park, Hsinchu, Taiwan,	
		R.O.C.	
Manufacturer	:	LITON OPTO Technology (Guangzhou) Co. Ltd.	
Address	:	No.8, Guang Bao Rd., Lite-On Scienece Park, Guangzhou,	
		Science Park, GuangZhou, P.R. China	
Model No.	:	DMF82XKU	
FCC ID.	:	XHIDPF08UH	
Rated Voltage	:	AC 120 V / 60 Hz	
EUT Voltage	:	AC 120 V / 60 Hz	
Trade Name	:	TOSHIBA	
Applicable Standard	:	FCC CFR Title 47 Part 15 Subpart C Section 15.247	
Test Result	:	Complied	
The test results relate only to the The test report shall not be reprodu		mples tested. ed except in full without the written approval of QuieTek Corporation.	
Documented By	:	Demi Chang	
		(Demi Chang / Engineering Adm. Specialist)	
Reviewed By	:	Halu Chung	
		(Halu Chung / Engineer)	
Approved By	:	Roy Wang	

(Roy Wang / Manager)



TABLE OF CONTENTS

Description		Page
1.	General Information	5
1.1.	EUT Description	5
1.2.	Operational Description	ϵ
1.3.	Test Mode	7
1.4.	Tested System Details	8
1.5.	Configuration of tested System	g
1.6.	EUT Exercise Software	g
1.7.	Test Facility	10
2.	Conducted Emission	11
2.1.	Test Equipment	11
2.2.	Test Setup	11
2.3.	Limits	12
2.4.	Test Procedure	12
2.5.	Uncertainty	12
2.6.	Test Result	13
2.7.	Test Photo	17
3.	Peak Power Output	18
3.1.	Test Equipment	18
3.2.	Test Setup	18
3.3.	Test procedures	18
3.4.	Limits	18
3.5.	Uncertainty	18
3.6.	Test Result	19
4.	Radiated Emission	27
4.1.	Test Equipment	27
4.2.	Test Setup	27
4.3.	Limits	28
4.4.	Test Procedure	28
4.5.	Test Specification	28
4.6.	Uncertainty	28
4.7.	Test Result	29
4.8.	Test Photo	
5.	RF antenna conducted test	49
5.1.	Test Equipment	49
5.2.	Test Setup	49
5.3.	Limits	50
5.4.	Test Procedure	50
5.5.	Test Specification	50
5.6.	Uncertainty	
5.7.	Test Result	
6.	Band Edge	
6.1.	Test Equipment	
6.2.	Test Setup	
6.3.	Limits	60

Report No: 096156R-RFUSP05V01



6.4.	Test Procedure	60
6.5.	Test Specification	60
6.6.	Uncertainty	60
6.7.	Test Result	61
7.	Occupied Bandwidth	77
7.1.	Test Equipment	77
7.2.	Test Setup	77
7.3.	Test Procedures	77
7.4.	Limits	77
7.5.	Uncertainty	77
7.6.	Test Result	78
8.	Power Density	84
8.1.	Test Equipment	84
8.2.	Test Setup	
8.3.	Limits	84
8.4.	Test Procedures	84
8.5.	Uncertainty	84
8.6.	Test Result	
Attachen	ment	91
	EUT Photograph	91



1. General Information

1.1. EUT Description

Product Name	DIGITAL MEDIA FRAME
Trade Name	TOSHIBA
Model No.	DMF82XKU
Frequency Range (IEEE 802.11b/g)	2412~2462MHz
Channel Number (IEEE 802.11b/g)	11
Type of Modulation (IEEE 802.11b)	DSSS
Type of Modulation (IEEE 802.11g)	OFDM
Data Speed (IEEE 802.11b)	1Mbps, 2Mbps, 5.5Mbps, 11Mbps
Data Speed (IEEE 802.11g)	6Mbps,9Mbps,12Mbps,18Mbps,24Mbps,36Mbps,48Mbps,54Mbps
Antenna	2.02dBi
Channel Control	Auto
Antenna Type	Connector (IPEX)

Component			
Digital Photo Frame TOSHIBA, SE-R0351			
Power Adapter	TOSHIBA, EADP-18 SB		
	I/P: 100-240V 0.4A, 50-60Hz		
	O/P: DC 12V 1.5A		
	Cable Out: Non-Shielded, 1.5m		

- 1. This device is a DIGITAL MEDIA FRAME, which including 2.4GHz b/g transmitting and receiving function.
- 2. These test results on a sample of the device are for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247.
- 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.
- This device is a composite device in accordance with Part 15 regulations. The receiving function receiving was tested and its test report number is 096156R-RFUSP01V02 under Declaration of Conformity.



1.2. Operational Description

The EUT is a DIGITAL MEDIA FRAME for 2.4GHz wireless signal. Operating Frequency Range is from 2412 MHz to 2462 MHz. The device adapts Digitally Modulation Spread Spectrum modulation. Operation in 2.4GHz Direst Sequence Spread Spectrum (DSSS) radio transmission for IEEE 802.11b and Orthogonal Frequency Division Multiplexing (OFDM) for IEEE 802.11g.

This device provided four kinds of transmitting speed 1 Mbps, 2 Mbps, 5.5 Mbps and 11Mbps for IEEE 802.11b and eight kinds of transmitting speed 6 Mbps, 9 Mbps, 12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps and 54Mbps for IEEE 802.11g. The device of RF carrier is DQPSK, DBPSK and CCK. The maximum wireless signal rate of 802.11b is 1 Mbps and 802.11g is 6 Mbps in the 2.4GHz frequency.



1.3. Test Mode

QuieTek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

Tx	Mode 1: Transmit	

Test Items	Mode1
Conducted Emission	Yes
Peak Power Output	Yes
Radiated Emission	Yes
RF antenna conducted test	Yes
Radiated Emission Band Edge	Yes
Occupied Bandwidth	Yes
Power Density	Yes



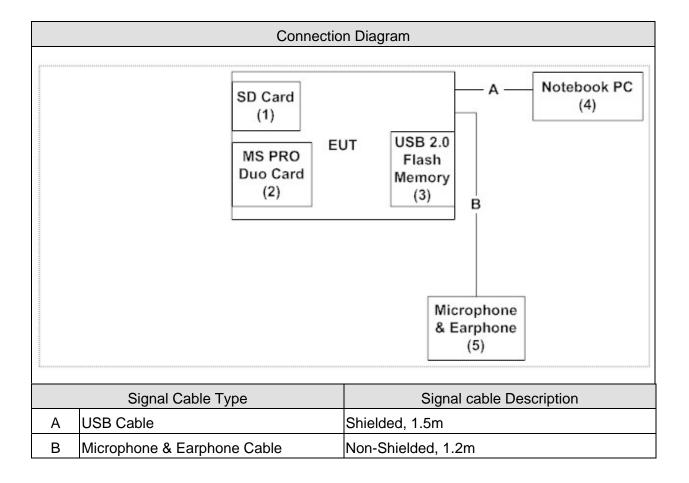
1.4. Tested System Details

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

Prod	uct	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	SD Card	Transcend	TS512MSD80	160073-4662	DoC	
2	MS PRO Duo	SanDisk	1GB	BB0717004214D	DoC	
	Card					
3	USB 2.0 Flash	TOSHIBA	Trans Memory II	N/A	DoC	
	Memory		1 GB			
4	Notebook PC	DELL	LATITUDE D400	GK43D1S	DoC	Non-shielded, 1.7m,
						a ferrite core bonded
5	Microphone &	токто	SX-MI	N/A	DoC	
	Earphone					



1.5. Configuration of tested System



1.6. EUT Exercise Software

1	Setup the EUT and simulators as shown on 1.5.
2	Turn on the power of all equipment.
3	Boot the Notebook PC from Hard Disk.
4	Data will communicate by connecting to USB port of Notebook PC.
5	The Notebook PC 's monitor will show the transmitting and receiving characteristics when the
	communication is success.
6	Repeat the above procedure (4) to (5).



1.7. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.207	15 - 35	20
Humidity (%RH)	Conducted Emission	25 - 75	50
Barometric pressure (mbar)	Conducted Limssion	860 - 1060	950-1000
Temperature (°C)	FCC DADT 45 C 45 247	15 - 35	23.5
Humidity (%RH)	FCC PART 15 C 15.247 Peak Power Output (DSSS)	25 - 75	53
Barometric pressure (mbar)	Feak Fower Output (DSSS)	860 - 1060	950-1000
Temperature (°C)	FCC DADT 45 C 45 247	15 - 35	25
Humidity (%RH)	FCC PART 15 C 15.247	25 - 75	65
Barometric pressure (mbar)	Radiated Emission (DSSS)	860 - 1060	950-1000
Temperature (°C)	FCC DADT 45 C 45 247	15 - 35	26
Humidity (%RH)	FCC PART 15 C 15.247	25 - 75	65
Barometric pressure (mbar)	Band Edge (DSSS)	860 - 1060	950-1000
Temperature (°C)	FCC DADT 45 C 45 247	15 - 35	26
Humidity (%RH)	FCC PART 15 C 15.247 Occupied Bandwidth (DSSS)	25 - 75	52.8
Barometric pressure (mbar)	Occupied Bandwidth (D333)	860 - 1060	950-1000
Temperature (°C)	TOO DADT 15 C 15 247	15 - 35	26
Humidity (%RH)	FCC PART 15 C 15.247	25 - 75	52.8
Barometric pressure (mbar)	Power Density (DSSS)	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. Conducted Emission

2.1. Test Equipment

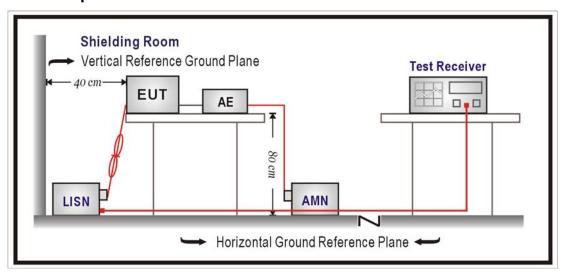
The following test equipments are used during the test:

Conducted Emission / SR2

Instrument	Manufacturer	Type No.	Serial No	Cal. Date
4-Wire ISN	R&S	ENY 41	837032/001	2009/04/15
Artificial Mains Network	R&S	ENV4200	848411/010	2009/03/13
Double 2-Wire ISN	R&S	ENY 22	835354/008	2009/04/15
LISN	R&S	ESH3-Z5	825562/002	2009/03/31
Pulse Limiter	R&S	ZSH3Z2	357.8810.54	2008/07/19
Test Receiver	R&S	ESCS 30	100122	2009/02/21

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2.2. Test Setup





2.3. 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.

2.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs.)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

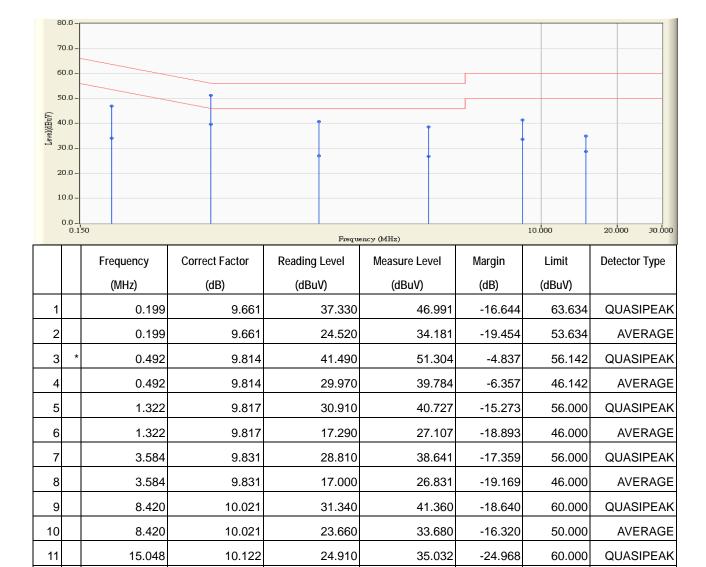
2.5. Uncertainty

The measurement uncertainty is defined as \pm 2.26 dB.



2.6. Test Result

Site : SR2	Time : 2009/06/17 - 15:52
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line1	Power : AC 120V / 60Hz`
EUT : DIGITAL MEDIA FRAME	Note : Mode 1: Transmit-B



Note:

12

1. All Reading Levels are Quasi-Peak and average value.

10.122

2. " * ", means this data is the worst emission level.

15.048

3. Measurement Level = Reading Level + Correct Factor.

18.530

28.652

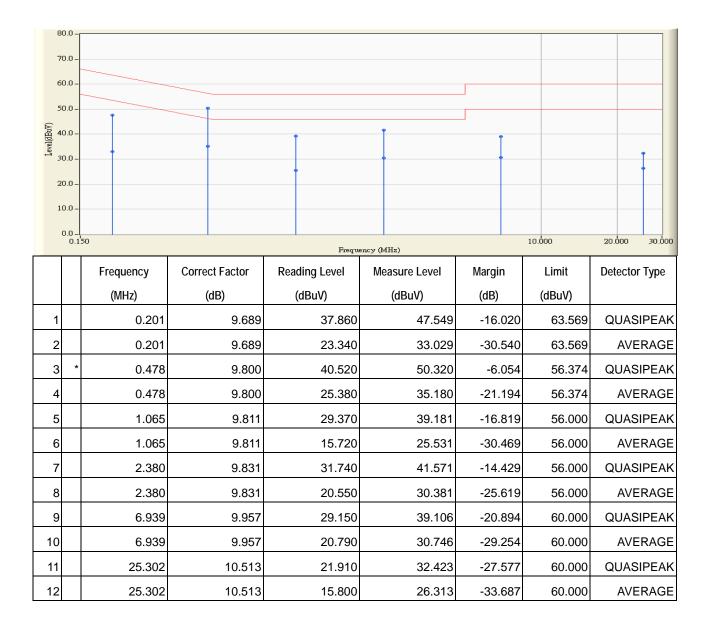
-21.348

50.000

AVERAGE



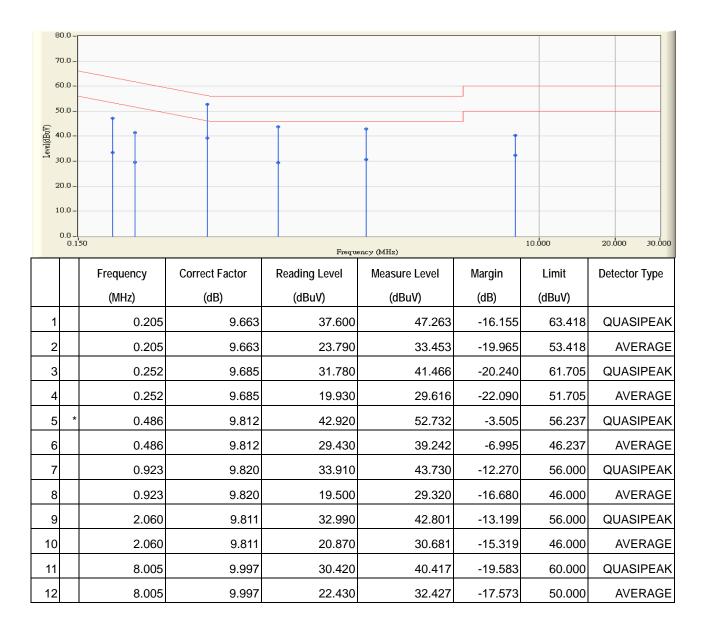
Site : SR2	Time : 2009/06/17 - 15:58
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line2	Power : AC 120V / 60Hz`
EUT : DIGITAL MEDIA FRAME	Note : Mode 1: Transmit-B



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



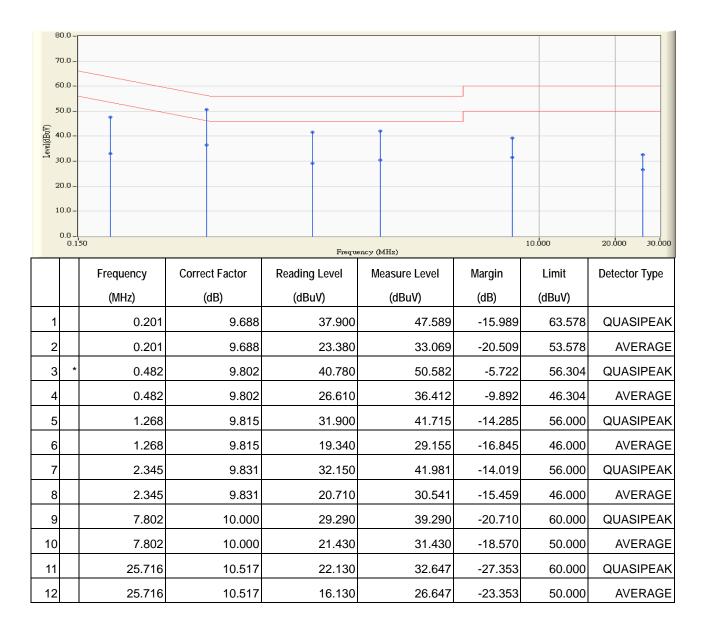
Site : SR2	Time : 2009/06/17 - 16:04
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line1	Power : AC 120V / 60Hz`
EUT : DIGITAL MEDIA FRAME	Note : Mode 1: Transmit-G



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



Site : SR2	Time : 2009/06/17 - 16:09
Limit : CISPR_B_00M_QP	Margin : 10
Probe : SR2-LISN(16A) - Line2	Power : AC 120V / 60Hz`
EUT : DIGITAL MEDIA FRAME	Note : Mode 1: Transmit-G



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



3. Peak Power Output

3.1. Test Equipment

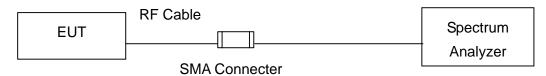
The following test equipments are used during the test:

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 are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup

IEEE 802.11 b / g MODE



3.3. Test procedures

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

3.4. Limits

The maximum peak power shall be less 1 Watt.

3.5. Uncertainty

The measurement uncertainty is defined as \pm 1.27 dB.



3.6. Test Result

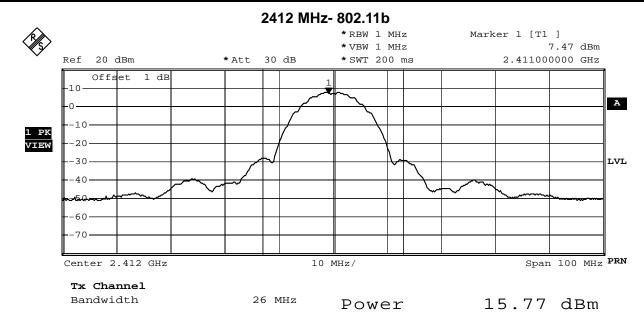
Product	DIGITAL MEDIA FRAME		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2009/06/16	Test Site	No.1 OATS

IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	15.77	1Watt= 30 dBm	Pass
6	2437	19.12	1Watt= 30 dBm	Pass
11	2462	21.36	1Watt= 30 dBm	Pass

Note: Measure Level =Reading value + cable loss

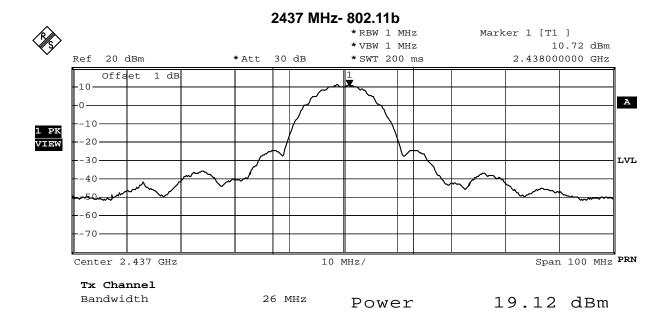
Page: 19 of 97





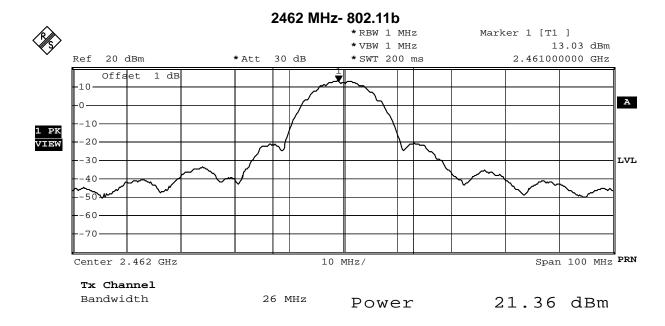
Date: 15.JUN.2009 15:06:24





Date: 17.JUN.2009 20:03:58





Date: 15.JUN.2009 15:20:58

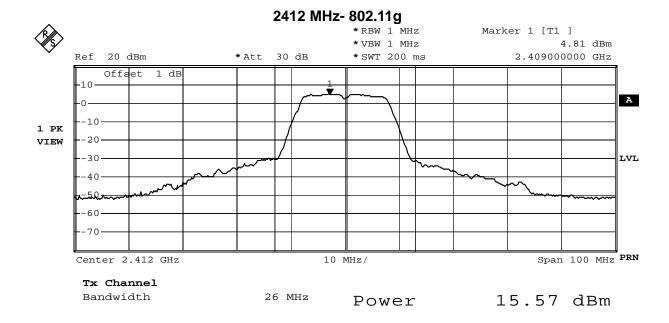


Product	DIGITAL MEDIA FRAME		
Test Item	Peak Power Output		
Test Mode	Transmit		
Date of Test	2009/06/16	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	15.57	1Watt= 30 dBm	Pass
6	2437	19.02	1Watt= 30 dBm	Pass
11	2462	15.70	1Watt= 30 dBm	Pass

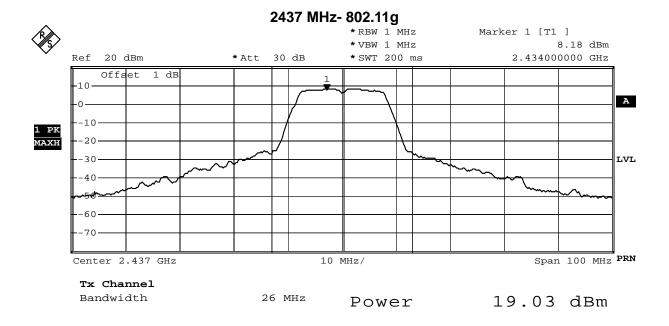
Note: Measure Level =Reading value + cable loss





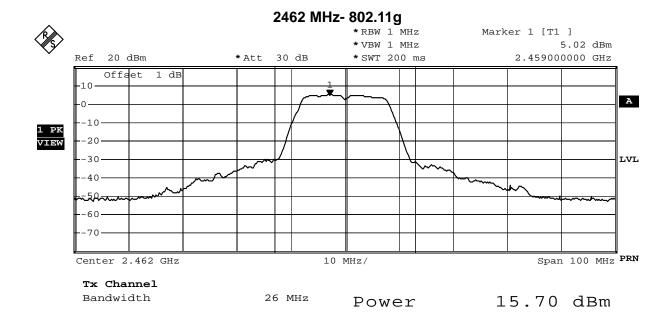
Date: 15.JUN.2009 15:54:38





Date: 17.JUN.2009 20:00:27





Date: 15.JUN.2009 17:05:10



4. Radiated Emission

4.1. Test Equipment

The following test equipments are used during the test:

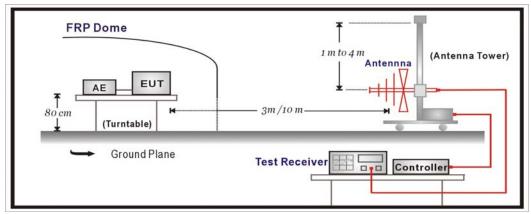
Item		Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	X	Test Receiver	R&S	ESCS 30 / 836858/023	Apr., 2009
2	X	Spectrum Analyzer	R&S	FSP40 / 100005	Aug., 2008
3	Χ	Pre-Amplifier	HP	8449B / 3008A01123	Nov., 2008
4	Χ	Bilog Antenna	Schaffner	CBL6112B / 2708	Sep., 2008
5	Χ	Spectrum Analyzer	Advantest	R3162 / 121200166	Feb., 2009
6	Χ	Pre-Amplifier	QuieTek	AP-025C / 002	N/A
7	Х	Horn Antenna	Electro Metrics	EM-6961 / 103325	Mar., 2009
8	No.2 OATS			Sep., 2008	

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

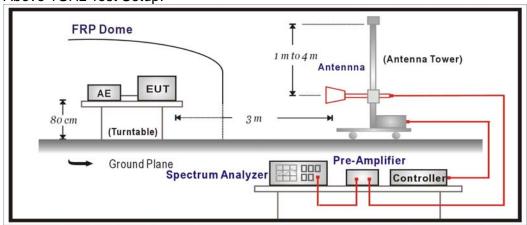
2. Last Cal showing "N/A" means it is used to Pre-test, not for final test.

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: E field strength $(dBuV/m) = 20 \log E$ field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 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.

4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2008

4.6. Uncertainty

The measurement uncertainty 30MHz~1GHz as ±3.19dB

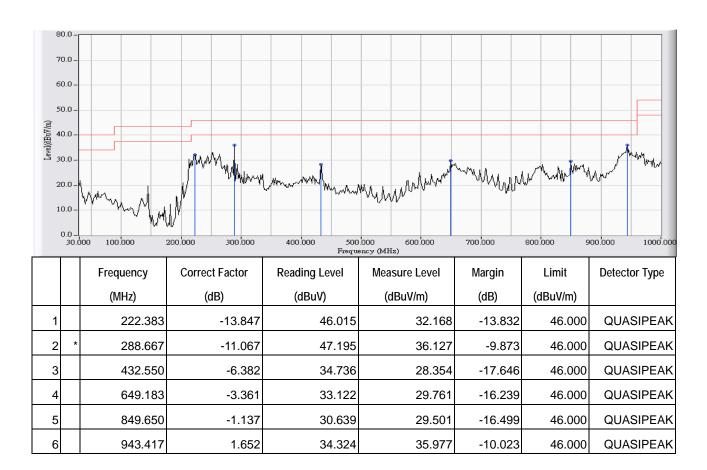
 $1GHz\sim26.5Ghz$ as $\pm3.9dB$



4.7. Test Result

30MHz-1GHz Spurious

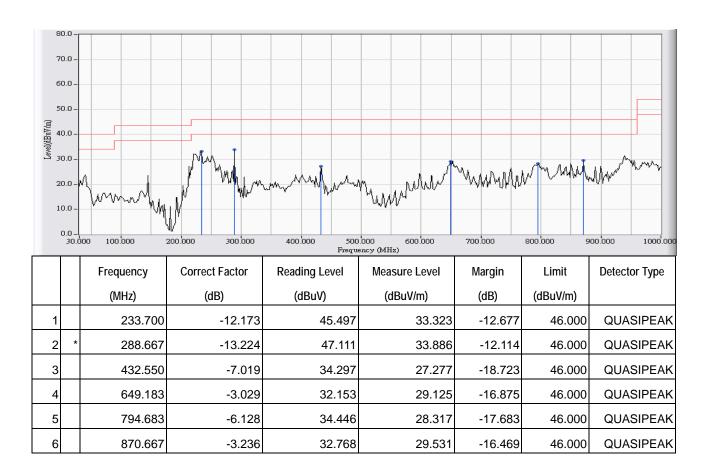
Site : Site 2	Time : 2009/06/17 - 09:59
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2009) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B



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



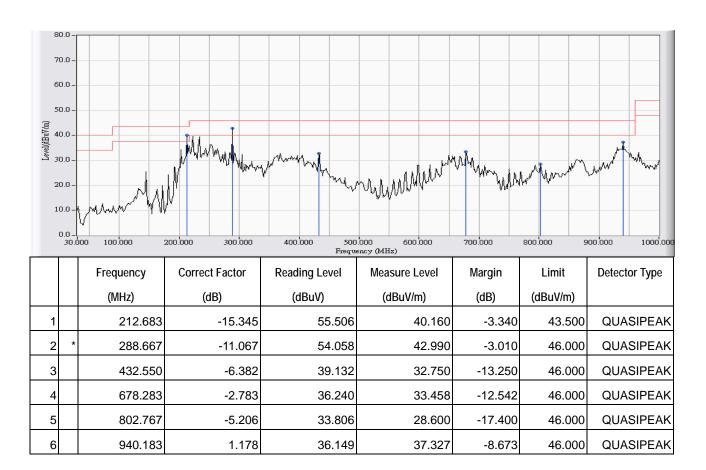
Site : Site 2	Time : 2009/06/17 - 10:02
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2009) - VERTICAL	Power : AC 120V / 60Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B



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



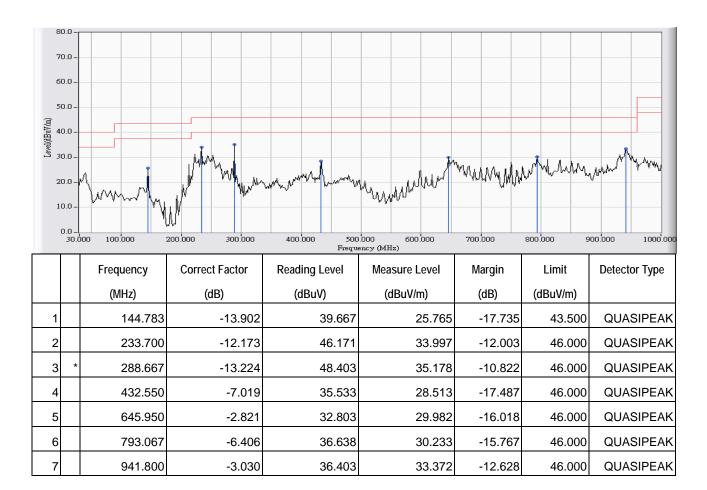
Site : Site 2	Time : 2009/06/17 - 10:11
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2009) - HORIZONTAL	Power : AC 120V / 60Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G



- 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 2	Time : 2009/06/17 - 10:14
Limit : FCC_CLASS_B_03M_QP	Margin : 6
Probe : Site 2_FCC_30-1G(2009) - VERTICAL	Power : AC 120V / 60Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G

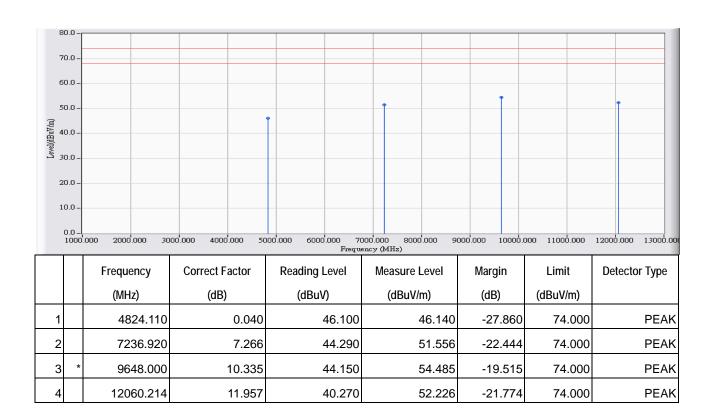


- 1. All Reading Levels are Quasi-Peak value.
- 2. " * ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



Harmonic & Spurious:

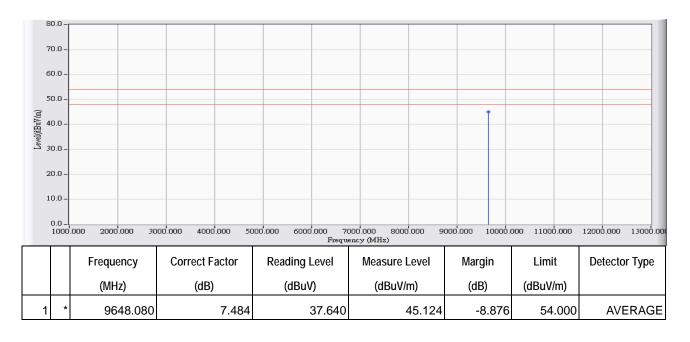
Site : Site 2	Time : 2009/06/01 - 14:09
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-CH_2412MHz-B(1M), Txpower : 19



- 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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



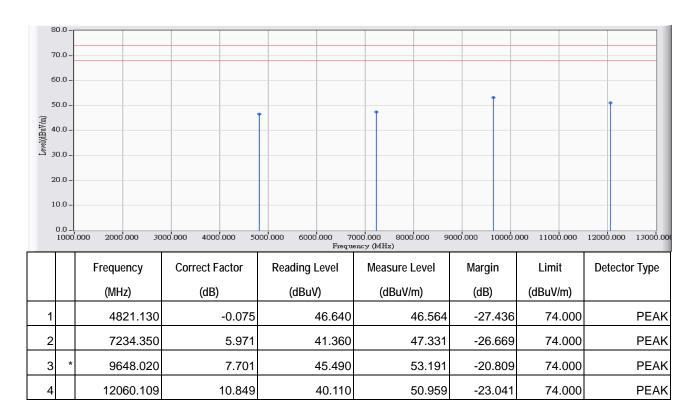
Site : Site 2	Time : 2009/06/01 - 14:47
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-CH1_2412MHz-B(1M), Txpower : 19



- 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.



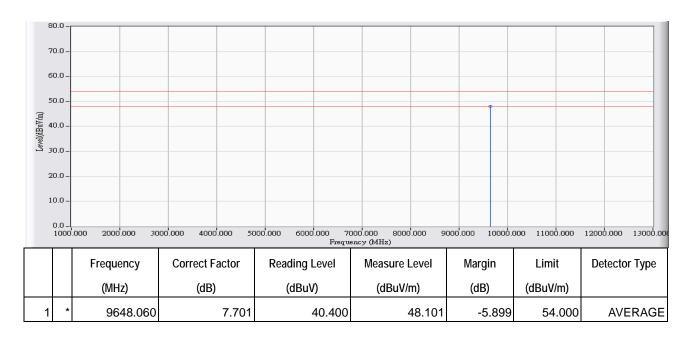
Site : Site 2	Time : 2009/06/01 - 14:38
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note: TX-CH1_2412MHz-B(1M), Txpower: 19



- 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.



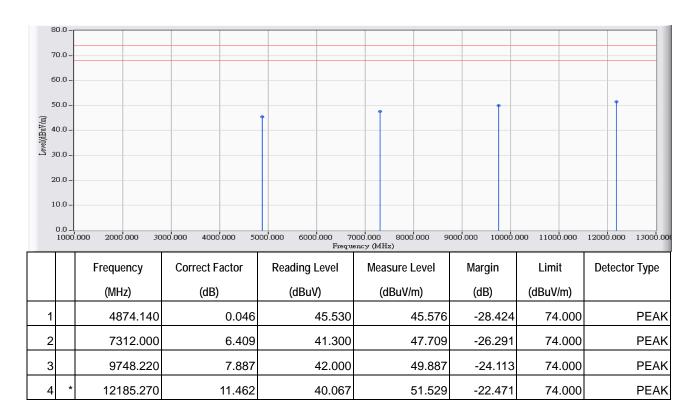
Site : Site 2	Time : 2009/06/01 - 14:39
Limit : FCC_SpartC_15.247_H_03M_AV	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-CH1_2412MHz-B(1M), Txpower : 19



- 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.



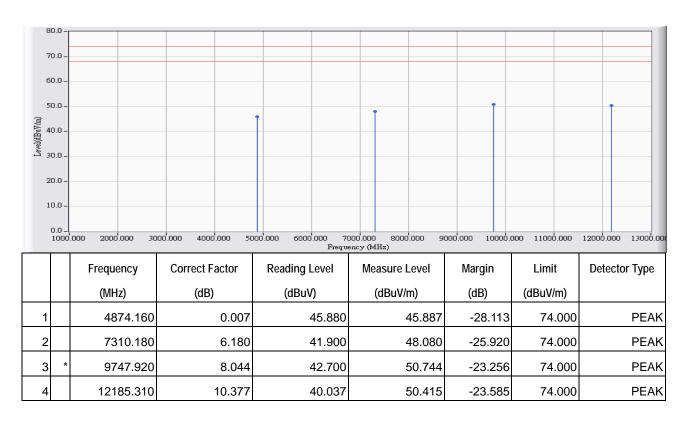
Site : Site 2	Time : 2009/06/01 - 15:00
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note: TX-CH6_2437MHz-B(1M), Txpower: 19



- 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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



Site : Site 2	Time : 2009/06/01 - 15:03	
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6	
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V/60Hz	
EUT : DIGITAL MEDIA FRAME	Note : TX-CH6_2437MHz-B(1M), Txpower : 19	



- 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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



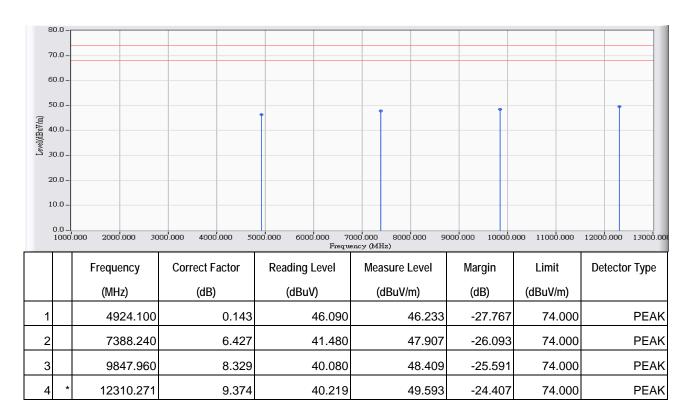
Site : Site 2	Time : 2009/06/01 - 15:31
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note: TX-CH11_2462MHz-B(1M), Txpower: 19



- 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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



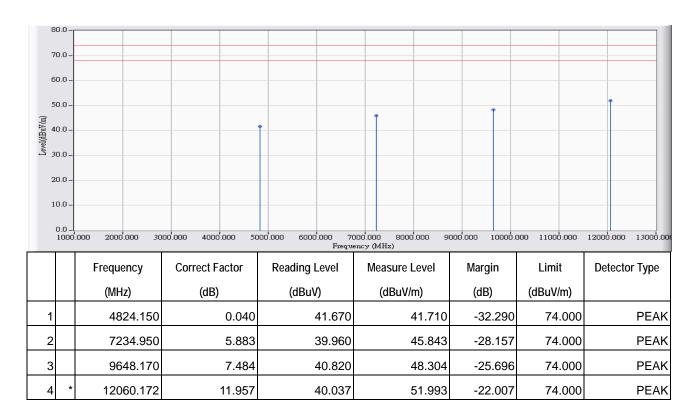
Site : Site 2	Time : 2009/06/01 - 15:39	
Limit : FCC_SpartC_15.247_H_03M_PK	Margin: 6	
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V/60Hz	
EUT : DIGITAL MEDIA FRAME	Note : TX-CH11_2462MHz-B(1M), Txpower : 19	



- 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.



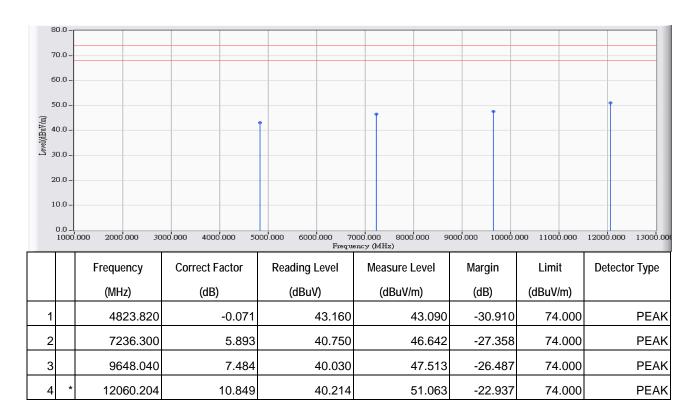
Site : Site 2	Time : 2009/06/01 - 15:51	
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6	
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V/60Hz	
EUT : DIGITAL MEDIA FRAME	Note: TX-CH1_2412MHz-G(6M), Txpower: 13	



- 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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



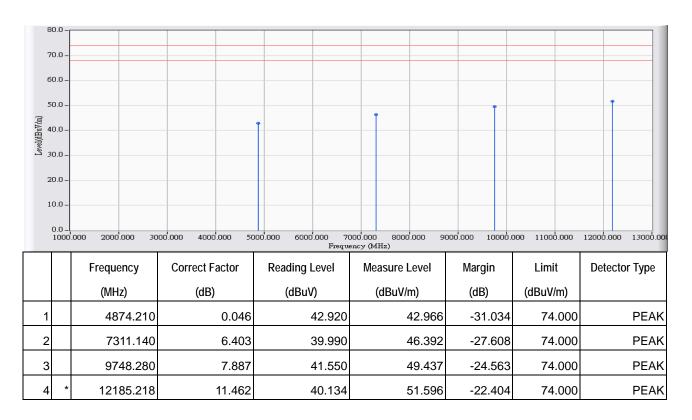
Site : Site 2	Time : 2009/06/01 - 15:53	
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6	
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V/60Hz	
EUT : DIGITAL MEDIA FRAME	Note : TX-CH1_2412MHz-G(6M), Txpower : 13	



- 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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



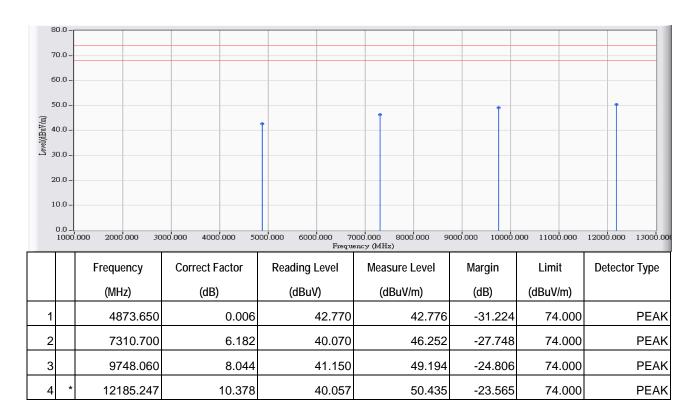
Site : Site 2	Time : 2009/06/01 - 16:11	
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6	
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V/60Hz	
EUT : DIGITAL MEDIA FRAME	Note: TX-CH6_2437MHz-G(6M), Txpower: 13	



- 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.



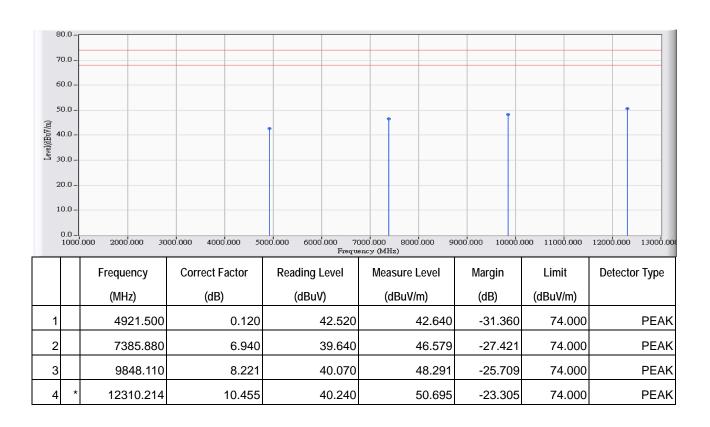
Site : Site 2	Time : 2009/06/01 - 16:19	
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6	
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V/60Hz	
EUT : DIGITAL MEDIA FRAME	Note: TX-CH6_2437MHz-G(6M), Txpower: 13	



- 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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



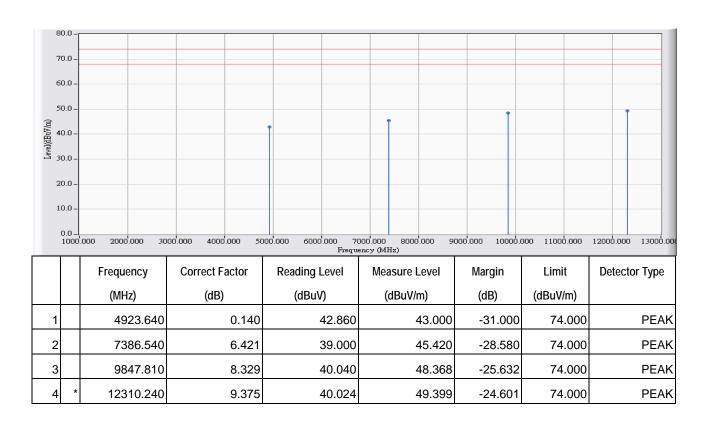
Site : Site 2	Time : 2009/06/01 - 16:30
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - HORIZONTAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note: TX-CH11_2462MHz-G(6M), Txpower: 13



- 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.



Site : Site 2	Time : 2009/06/01 - 16:36
Limit : FCC_SpartC_15.247_H_03M_PK	Margin : 6
Probe : Site 2_FCC_1-18G(2009-01) - VERTICAL	Power : AC 120V/60Hz
EUT : DIGITAL MEDIA FRAME	Note: TX-CH11_2462MHz-G(6M), Txpower: 13



- 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.



5. RF antenna conducted test

5.1. Test Equipment

The following test equipments are used during the test:

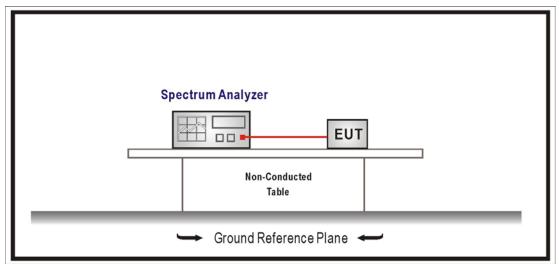
RF C	onducted Measurement:			
Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Spectrum Analyzer	Jan., 2009		
2	No.1 OATS			Sep., 2008

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. Test instruments are marked with "X" are used to measure the final test results.

5.2. Test Setup

RF Antenna Conducted 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 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)).

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

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

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2008

5.6. Uncertainty

The measurement uncertainty

Conducted is defined as ± 1.27dB

Radiated is defined as ± 3.9dB

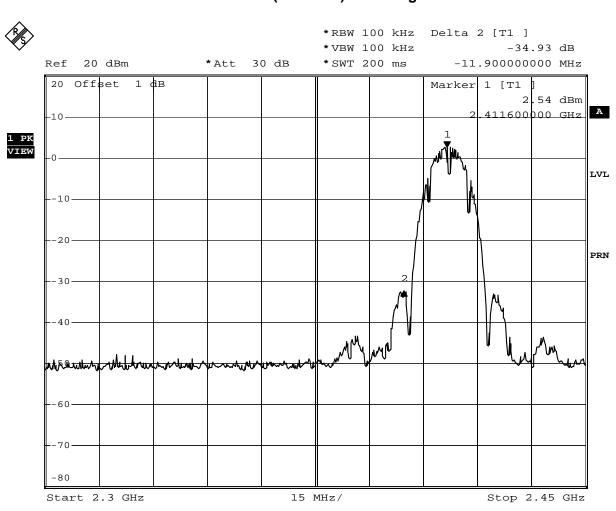


5.7. Test Result

Product	DIGITAL MEDIA FRAME		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2009/06/16	Test Site	No.1 OATS

IEEE 802.11b, Antenna Gain: 2.02dBi, Duty Cycle: 1				
Channel No	Frequency	Measure Level	Limit	Decult
Channel No.	(MHz)	(dBc)	(dBc)	Result
1	2412	34.93	≧30	Pass
11	2462	48.27	≧30	Pass

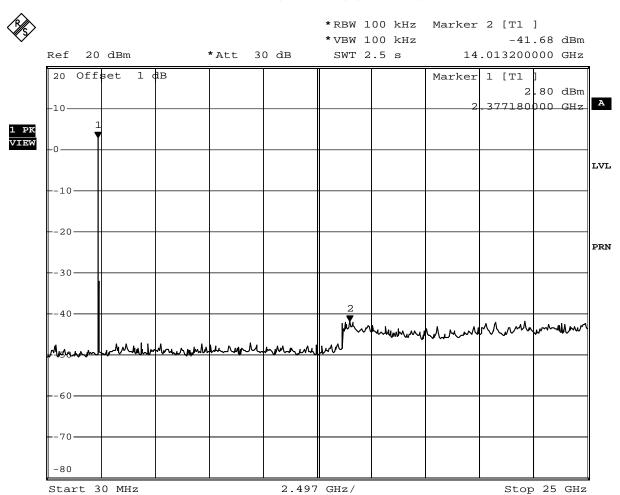
Channel 01 (2412MHz) -Bandedge



Date: 15.JUN.2009 14:30:44



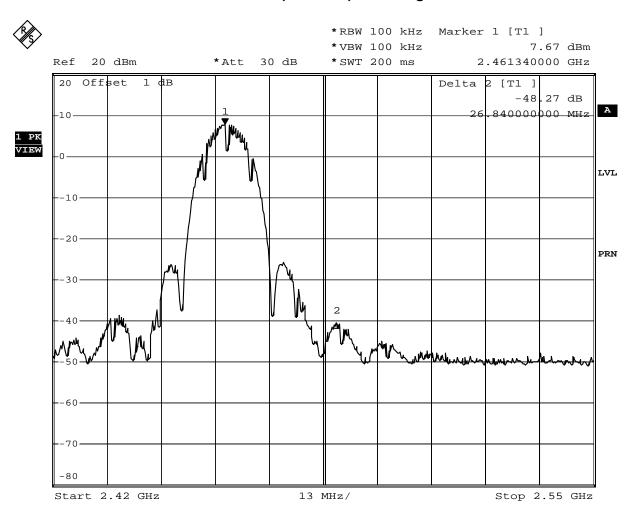
Channel 01 (2412MHz)-(30M-25G)



Date: 15.JUN.2009 14:27:30



Channel 11 (2462MHz) -Bandedge

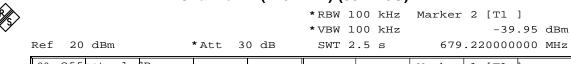


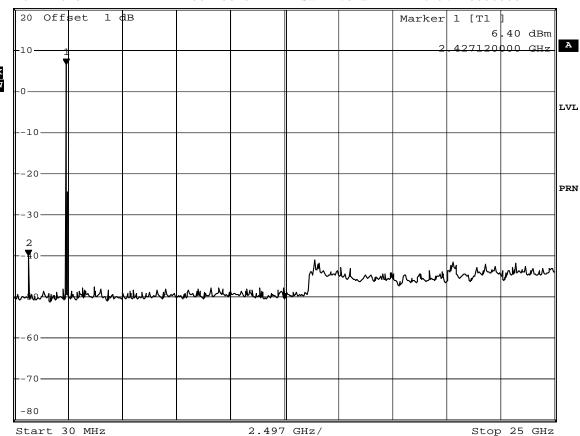
Date: 15.JUN.2009 15:23:16

-39.95 dBm



Channel 11 (2462MHz)-(30M-25G)





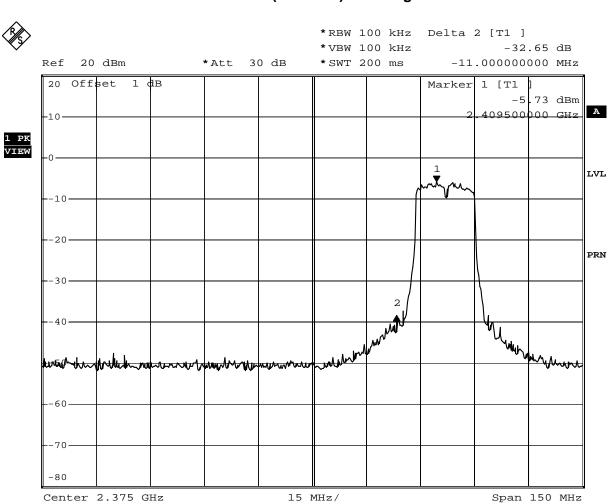
Date: 15.JUN.2009 15:24:25



Product	DIGITAL MEDIA FRAME		
Test Item	RF antenna conducted test		
Test Mode	Transmit		
Date of Test	2006/06/16	Test Site	No.1 OATS

IEEE 802.11g, Antenna Gain: 2.02dBi, Duty Cycle: 1				
Chanal Na	Frequency	Measure Level	Limit	Desult
Channel No.	(MHz)	(dBc)	(dBc)	Result
1	2412	32.65	≧30	Pass
11	2462	44.27	≧30	Pass

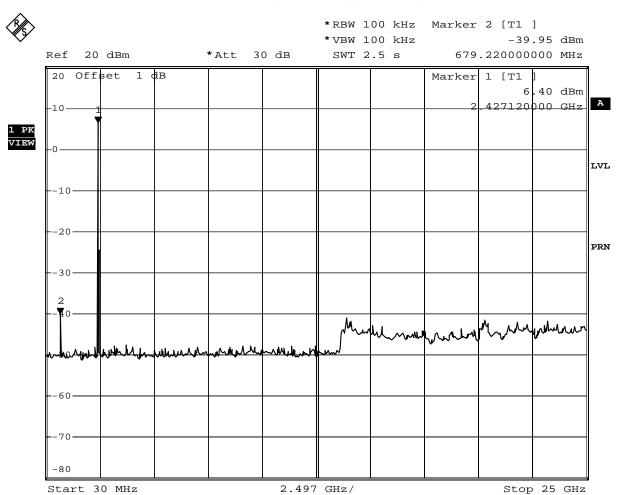
Channel 01 (2412MHz)-Bandedge



Date: 15.JUN.2009 15:56:27



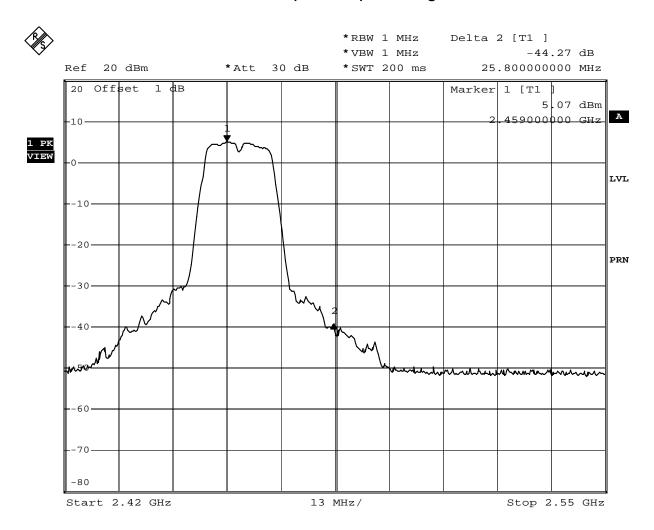
Channel 01 (2412MHz)-(30M-25G)



Date: 15.JUN.2009 15:24:25



Channel 11 (2462MHz) -Bandedge



Date: 15.JUN.2009 17:08:06

Stop 25 GHz



-40-

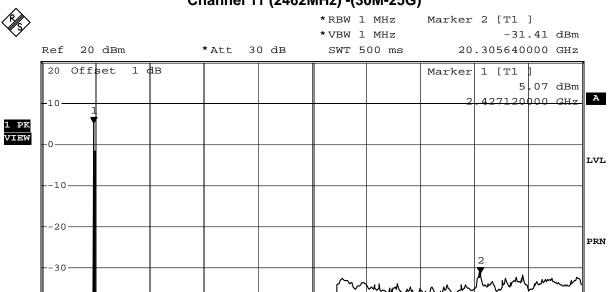
-60-

-70-

-80

Start 30 MHz

Channel 11 (2462MHz) -(30M-25G)



2.497 GHz/

Date: 15.JUN.2009 17:11:26



6. Band Edge

6.1. Test Equipment

The following test equipments are used during the test:

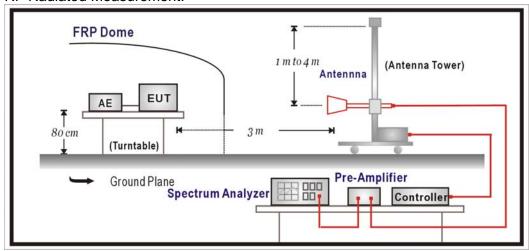
RF R	RF Radiated Measurement:				
Item		Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
1	Х	Spectrum Analyzer	R&S	FSP40 / 100005	Aug., 2008
2	Х	Pre-Amplifier	HP	8449B / 3008A01123	Feb., 2009
3		Loop Antenna	R&S	HFH2-Z2 / 833799/004	Sep., 2008
4		BiconiLog Antenna	Schwarzbeck	VULB 9166 / 1061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

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

2. Test instruments are marked with "X" are used to measure the final test results.

6.2. Test Setup

RF Radiated Measurement:





6.3. 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.

6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 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.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.207: 2008

6.6. Uncertainty

The measurement uncertainty

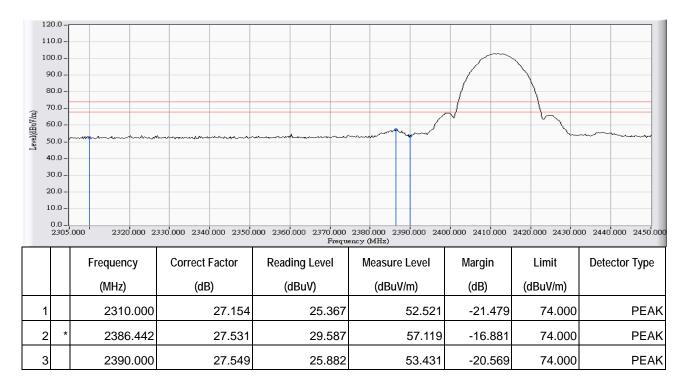
+ 3.9 dB above 1GHz



6.7. Test Result

Radiated is defined as

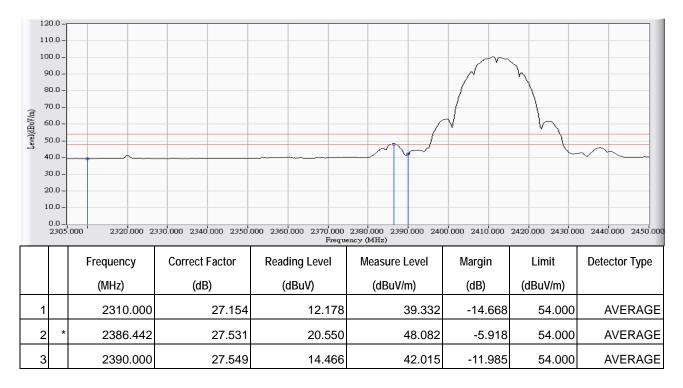
Site : SITE1	Time : 2009/06/17 - 11:30
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH1



- 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.



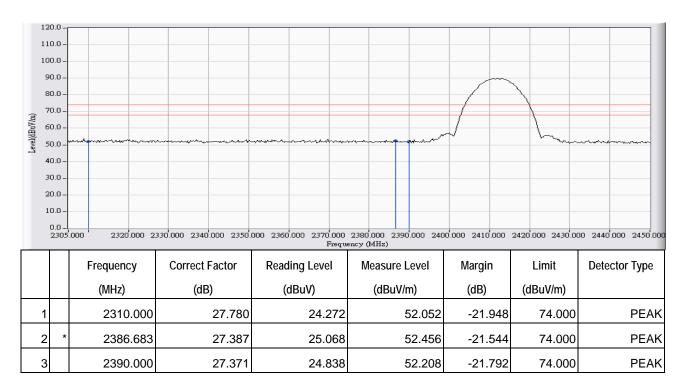
Site : SITE1	Time : 2009/06/17 - 11:30
Limit : FCC_15.209(961011)_03M_AV	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH1



- 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.



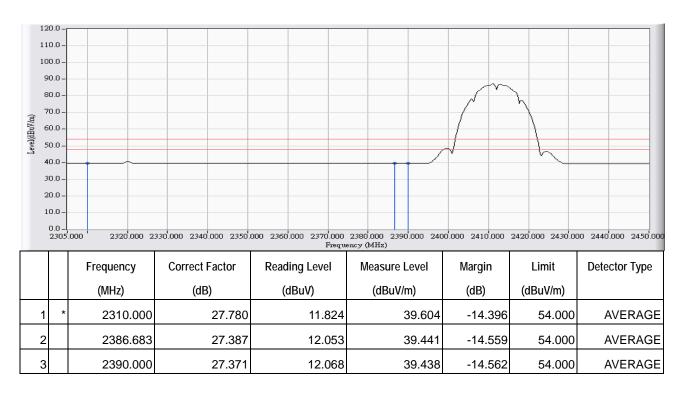
Site : SITE1	Time : 2009/06/17 - 13:21
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH1



- 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.



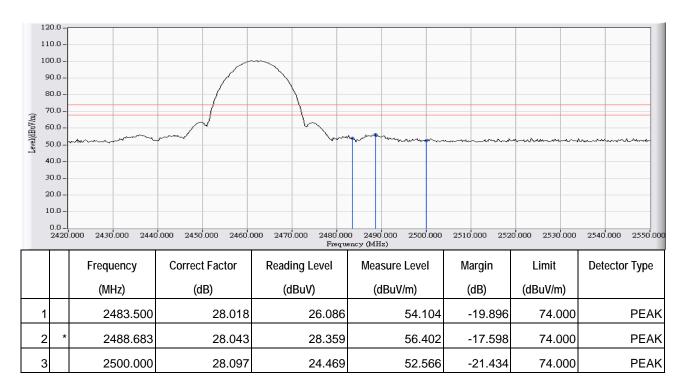
Site : SITE1	Time : 2009/06/17 - 13:21
Limit : FCC_15.209(961011)_03M_AV	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH1



- 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.



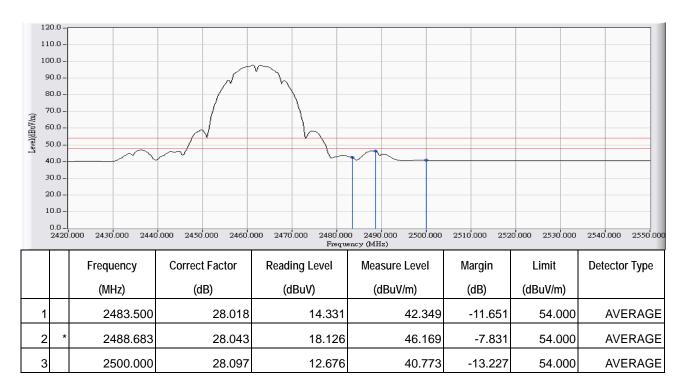
Site : SITE1	Time : 2009/06/17 - 13:56
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH11



- 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.



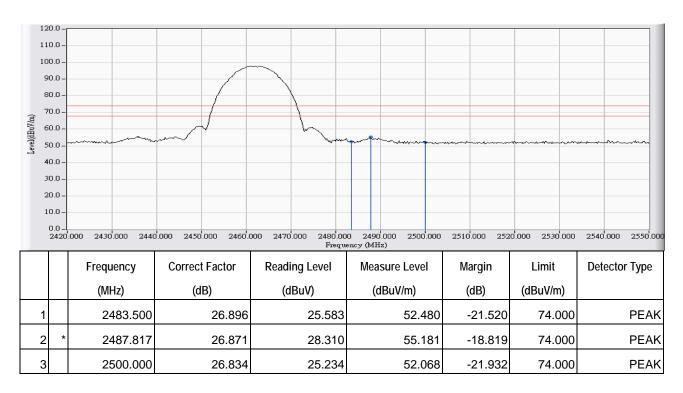
Site : SITE1	Time : 2009/06/17 - 13:57
Limit : FCC_15.209(961011)_03M_AV	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH11



- 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.



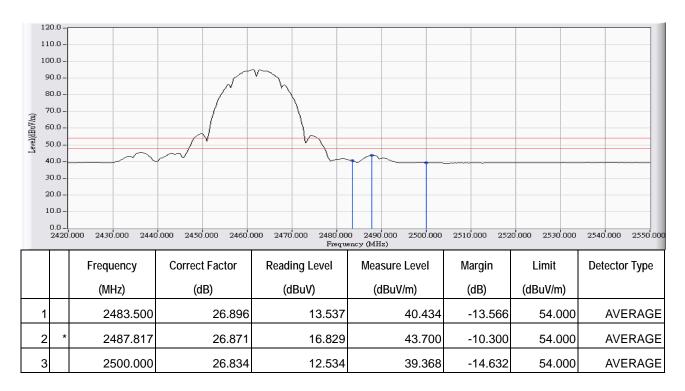
Site : SITE1	Time : 2009/06/17 - 13:33
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe : SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH11



- 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.



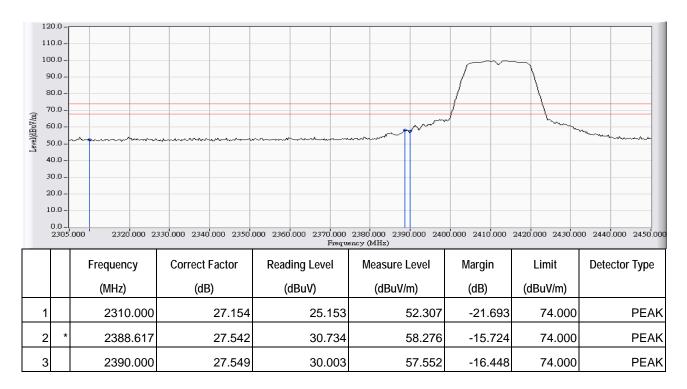
Site : SITE1	Time : 2009/06/17 - 13:34
Limit : FCC_15.209(961011)_03M_AV	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-B-CH11



- 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.



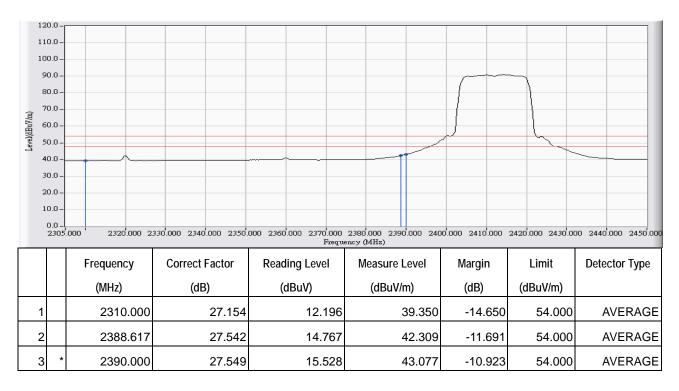
Site : SITE1	Time : 2009/06/17 - 12:00
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH1



- 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.



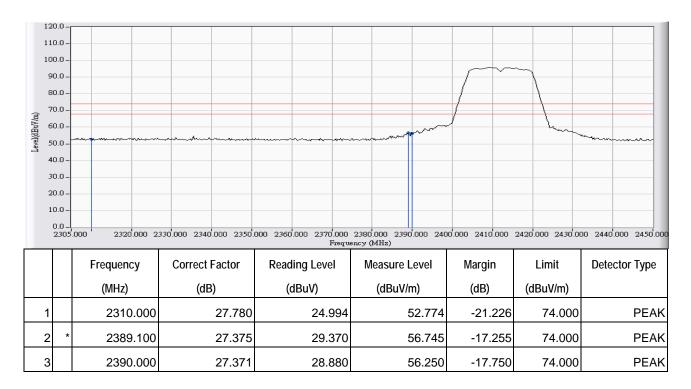
Site : SITE1	Time : 2009/06/17 - 12:00
Limit : FCC_15.209(961011)_03M_AV	Margin : 6
Probe : SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH1



- 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.



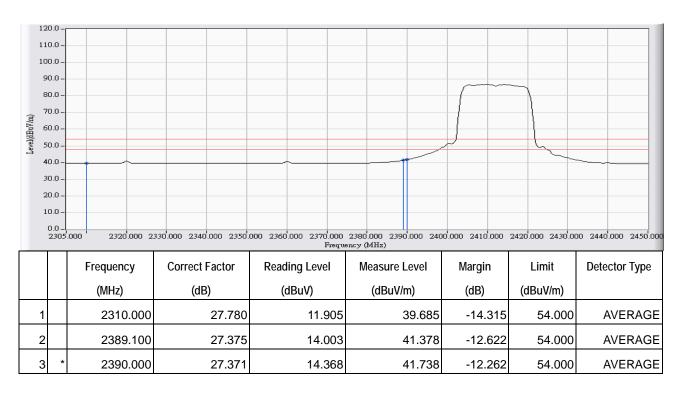
Site : SITE1	Time : 2009/06/17 - 13:14
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe : SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH1



- 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.



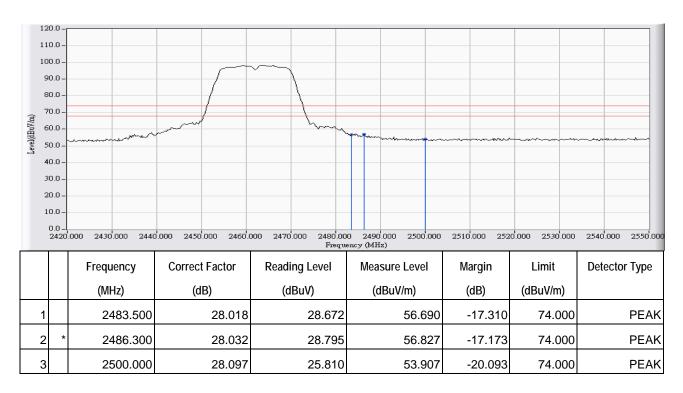
Site : SITE1	Time : 2009/06/17 - 13:14
Limit : FCC_15.209(961011)_03M_AV	Margin: 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH1



- 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.



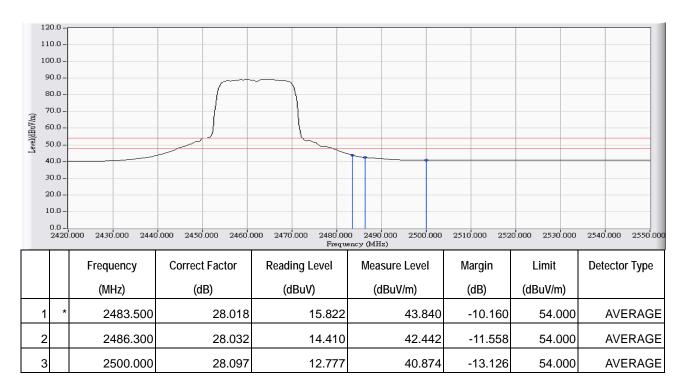
Site : SITE1	Time : 2009/06/17 - 13:50
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH11



- 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.



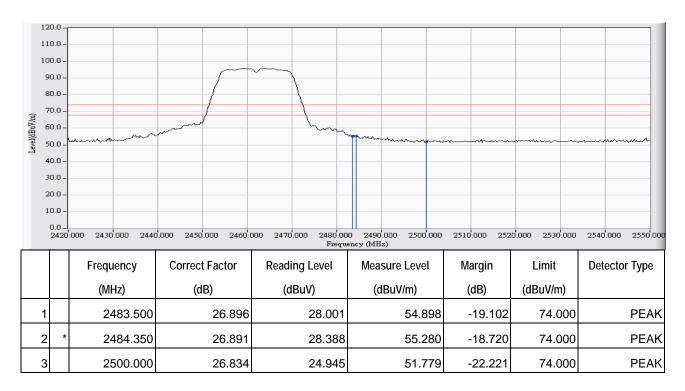
Site : SITE1	Time : 2009/06/17 - 13:51
Limit : FCC_15.209(961011)_03M_AV	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - HORIZONTAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH11



- 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.



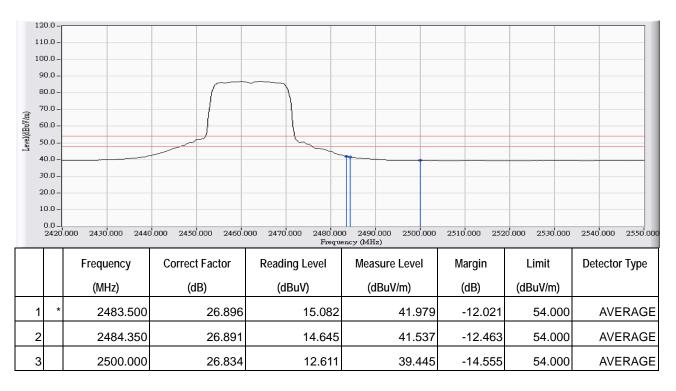
Site : SITE1	Time : 2009/06/17 - 13:41
Limit : FCC_15.209(961011)_03M_PK	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH11



- 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.



Site : SITE1	Time : 2009/06/17 - 13:42
Limit : FCC_15.209(961011)_03M_AV	Margin : 6
Probe: SITE1_FCC_EFS_1-18G(2009-06) - VERTICAL	Power : AC 120V / 50Hz
EUT : DIGITAL MEDIA FRAME	Note : TX-G-CH11



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.
- The average measurement was not performed when the peak measured data under the limit of average detection.



7. Occupied Bandwidth

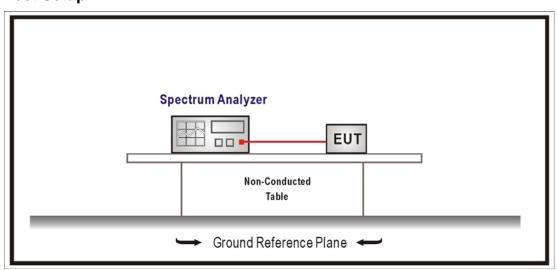
7.1. Test Equipment

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 are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



7.3. Test Procedures

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

7.4. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.5. Uncertainty

The measurement uncertainty is defined as ±150Hz



7.6. Test Result

Product	DIGITAL MEDIA FRAME		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2009/06/16	Test Site	No.1 OATS

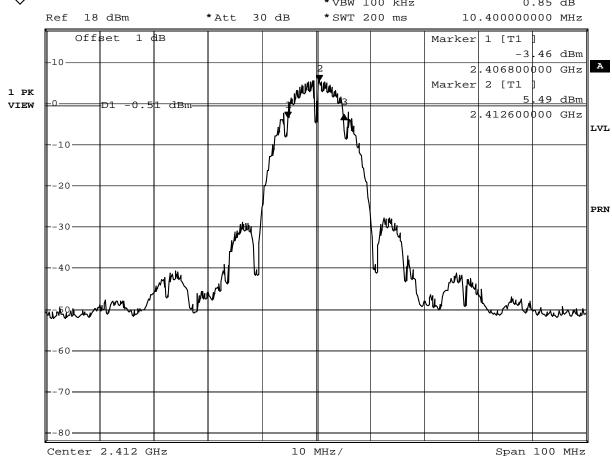
802.11 b				
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	10400	≥500	Pass
6	2437.00	10400	≧500	Pass
11	2462.00	10400	≥500	Pass

Channel 1



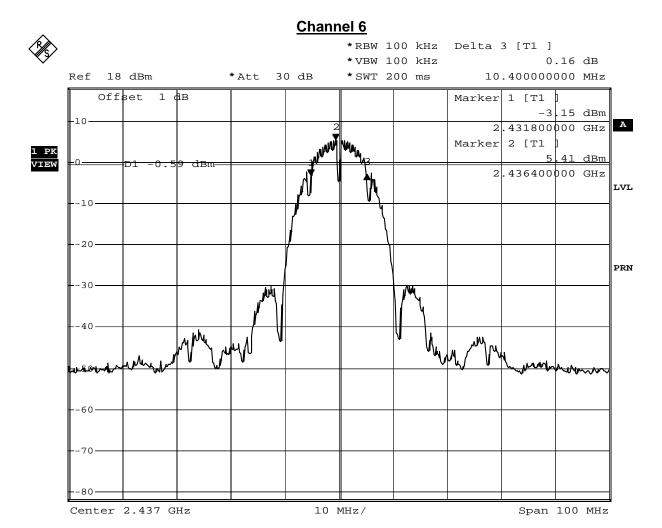
*RBW 100 kHz Delta 3 [T1]

*VBW 100 kHz 0.85 dB



Date: 17.JUN.2009 00:11:44





Date: 17.JUN.2009 00:16:55

Span 100 MHz

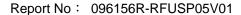


Channel 11 *RBW 100 kHz Delta 3 [T1] *VBW 100 kHz -0.06 dB *Att 30 dB *SWT 200 ms 10.400000000 MHz Ref 18 dBm Offset 1 dB Marker 1 [T1] -3.54 dBm 10-2.456800000 GHz A Marker 2 [T1 1 PK VIEW 2.461600000 GHz LVL -10--20 PRN -30--40-

10 MHz/

Date: 17.JUN.2009 00:21:26

Center 2.462 GHz





Product	DIGITAL MEDIA FRAME		
Test Item	Occupied Bandwidth		
Test Mode	Transmit		
Date of Test	2009/06/16	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
1	2412.00	16800	≧500	Pass
6	2437.00	16800	≧500	Pass
11	2462.00	16800	≧500	Pass

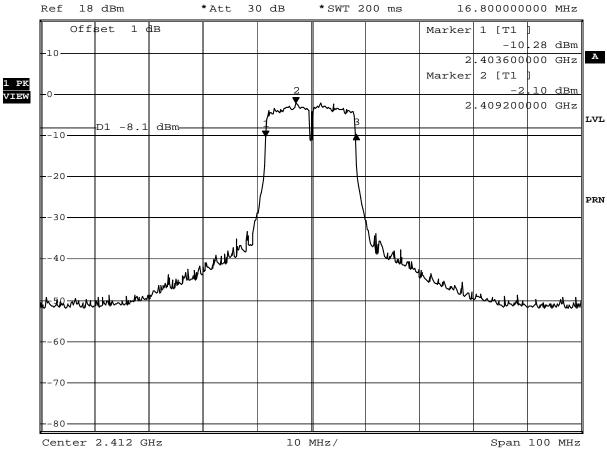
Channel 1



*RBW 100 kHz Delta 3 [T1]

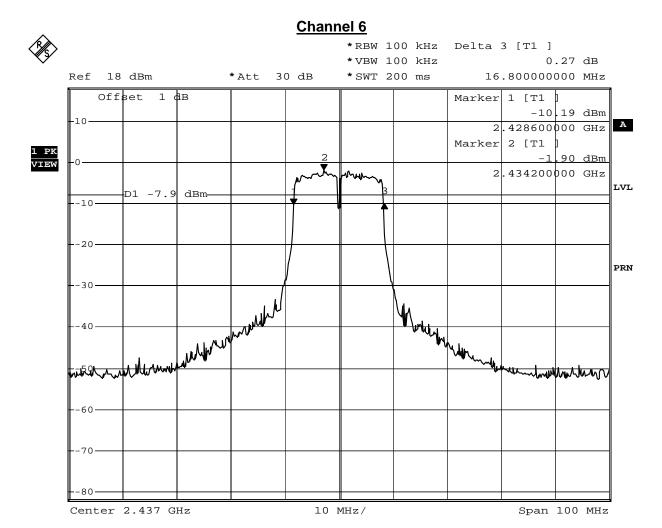
*VBW 100 kHz 0.50 dB

*SWT 200 ms 16.800000000 MH;



Date: 17.JUN.2009 00:13:42



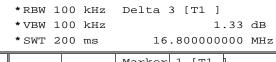


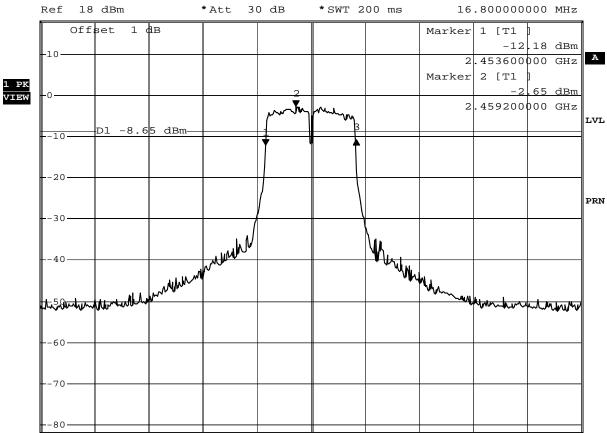
Date: 17.JUN.2009 00:18:33

Span 100 MHz



Channel 11





10 MHz/

Date: 17.JUN.2009 00:23:10

Center 2.462 GHz



8. Power Density

8.1. Test Equipment

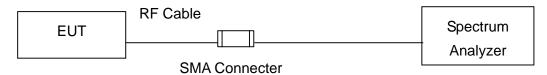
The following test equipment are used during the test:

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 are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup

IEEE 802.11 b / g MODE



8.3. 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.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4, 2003; tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 3 kHz, Set VBW≥ 9 kHz, Sweep time=Auto, Set detector=Peak detector

8.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB.



8.6. Test Result

Product	DIGITAL MEDIA FRAME		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2009/06/16	Test Site	No.1 OATS

IEEE 802.11b				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-16.98	≦8	Pass
6	2437	-14.07	≦8	Pass
11	2462	-11.66	≦8	Pass

Channel 1

*Att 30 dB



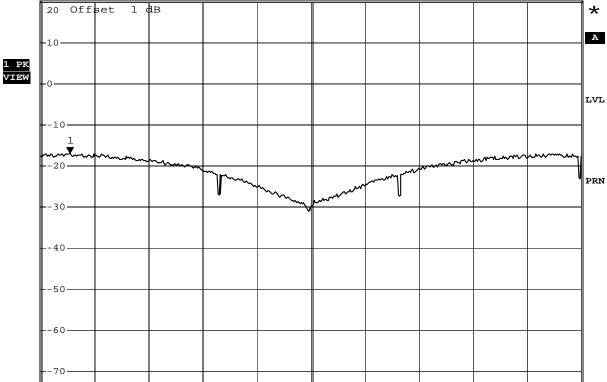
Ref 20 dBm

*RBW 3 kHz Marker 1 [T1]

*VBW 10 kHz -16.98 dBm

*SWT 500 s 2.411331000 GHz

Span 1.5 MHz



15.JUN.2009 14:47:53

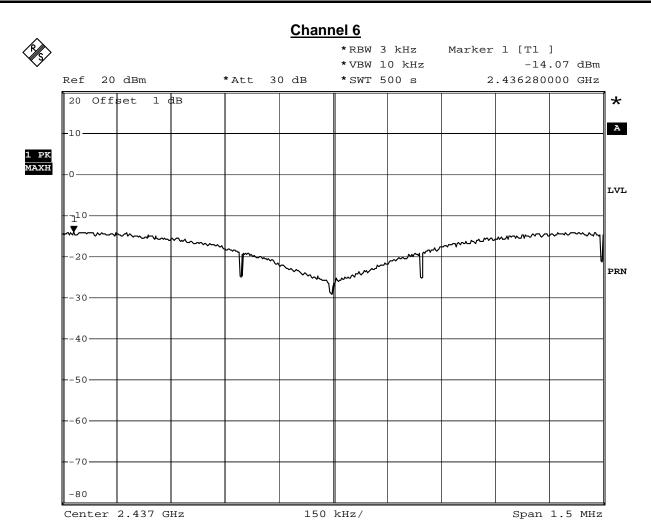
Center 2.412 GHz

-80

Date:

150 kHz/





Date: 17.JUN.2009 20:08:41

Span 1.5 MHz



Channel 11 *RBW 3 kHz Marker 1 [T1] *VBW 10 kHz -11.66 dBm Ref 20 dBm *Att 30 dB *SWT 500 s 2.461334000 GHz 20 Offset 1 dB A 10 1 PK VIEW LVL -10 1 -20-PRN -30--40--50--60-

150 kHz/

Date: 15.JUN.2009 15:43:33

Center 2.462 GHz

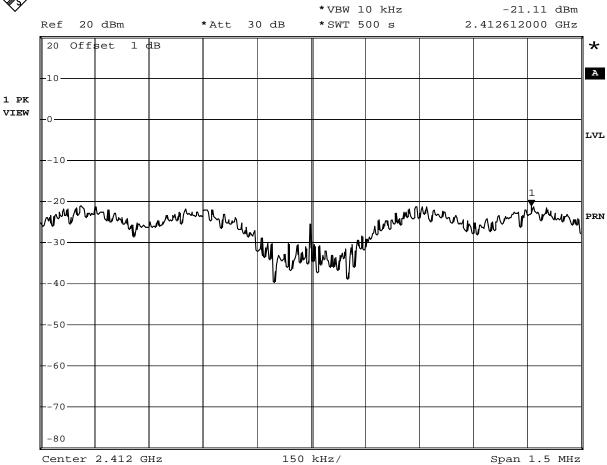


Product	DIGITAL MEDIA FRAME		
Test Item	Power Density		
Test Mode	Transmit		
Date of Test	2009/06/16	Test Site	No.1 OATS

IEEE 802.11g				
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
1	2412	-21.11	≦8	Pass
6	2437	-17.60	≦8	Pass
11	2462	-20.83	≦8	Pass

Channel 1

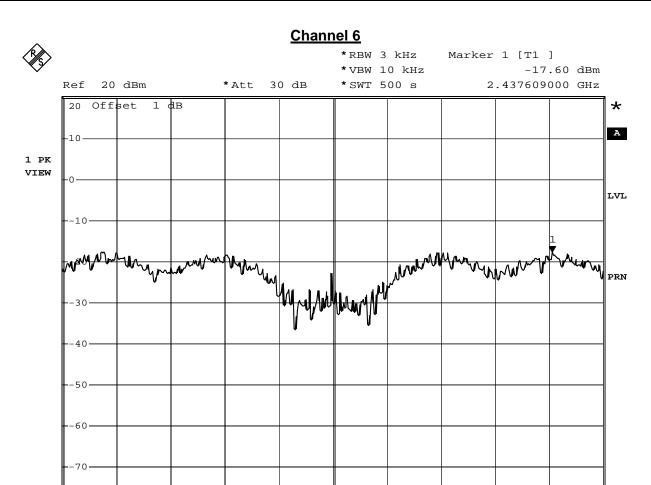
*RBW 3 kHz Marker 1 [T1]



Date: 15.JUN.2009 16:54:08

Span 1.5 MHz





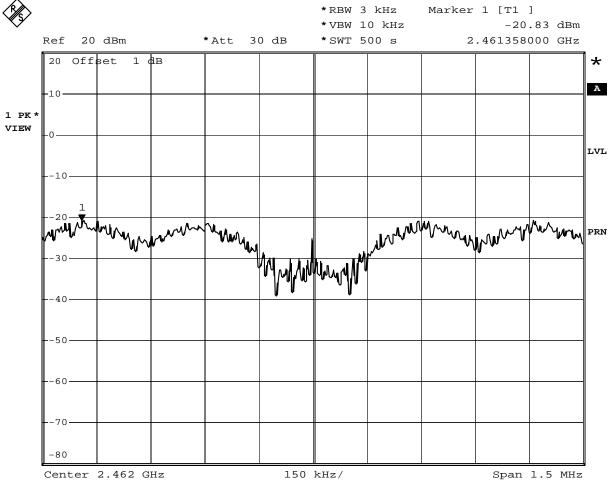
150 kHz/

Date: 17.JUN.2009 20:22:48

Center 2.437 GHz







Date: 15.JUN.2009 17:01:51