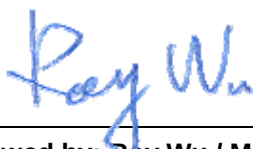


FCC Test Report

EQUIPMENT : Mobile Computer
BRAND NAME : Symbol
MODEL NAME : FR6874
FCC ID : H9PFR6874
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : Digital Spread Spectrum (DSS)
APPLICANT : Symbol Technologies, Inc., A Motorola Company
230 Victoria Street #12-06/10 Bugis Junction Office Tower
Singapore 188024

The product sample received on Oct. 31, 2008 and completely tested on Mar. 19, 2009. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Roy Wu / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(b)(1)	A8.4(2)	Number of Channels	$\geq 15\text{Chs}$	Pass	
3.2	15.247(a)(1)	A8.1(a)	20dB Bandwidth	NA	Pass	-
3.3	15.247(a)(1)	A8.1(b)	Channel Separation	$\geq 2/3$ of 20dB BW	Pass	-
3.4	15.247(a)(1)	A8.1(d)	Dwell Time of Each Channel	$\leq 0.4\text{sec}$ in 31.6sec period	Pass	-
3.5	15.247(a)(1)	A8.1(b)	Peak Output Power	$\leq 1\text{W}$	Pass	-
3.6	15.247(d)	A8.5	Frequency Band Edges	$\leq 20\text{dBc}$	Pass	-
3.7	15.207	Gen 7.2.2	AC Conducted Emission	15.207(a)	Pass	Under limit 15.0 dB at 0.702 MHz
3.8	15.247(d)	A8.5	Transmitter Radiated Emission	15.209(a) & 15.247(d)	Pass	Under limit 6.07 dB at 2483.50 MHz
3.9	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR8O3106B	Rev. 01	Initial issue of report	Apr. 17, 2009

1 General Description

1.1 Applicant

Symbol Technologies, Inc., A Motorola Company

230 Victoria Street #12-06/10 Bugis Junction Office Tower Singapore 188024

1.2 Manufacturer

Inventec Appliances Corp.

No. 37, Wugong 5th Road, Wugu Industrial Park, Taipei Country 248, Taiwan, R.O.C.

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Mobile Computer
Brand Name	Symbol
Model Name	FR6874
Tx/Rx Frequency Range	2400 MHz ~ 2483.5 MHz
Number of Channels	79
Carrier Frequency of Each Channel	2402+n*1 MHz; n=0~78
Channel Spacing	1 MHz
Maximum Output Power to Antenna	Bluetooth : 1.79 dBm (1Mbps) Bluetooth EDR : 1.13dBm (2Mbps) / 1.46dBm (3Mbps)
Antenna Type	Chip Antenna with gain -4 dBi
Antenna Connector Type	N/A
HW Version	DVT
SW Version	Modem: 0024-010709-M OS: EDA-DVT1-0.20.0039-011409-WWE-H
Type of Modulation	Bluetooth (1Mbps) : GFSK Bluetooth EDR (2Mbps) : $\pi/4$ -DQPSK Bluetooth EDR (3Mbps) : 8-DPSK
EUT Stage	Identical Prototype

List of Accessory:

Specification of Accessory		
Cradle	Brand Name	Symbol
	Model Name	CRD7X00-1
	Power Rating	12Vdc, 3.33A
Cradle Adapter	Brand Name	HIPRO
	Model Name	HP-O2040D43
	Power Rating	I/P: 100-240Vac, 50-60Hz, 1.5A; O/P: 12Vdc, 3.33A
	Power Cord Type	1.8 meter shielded cable with ferrite core
Product Charging Adapter	Brand Name	MOTOROLA
	Model Name	EADP-16BB A
	Power Rating	I/P: 100-240Vac, 50-60Hz, 0.4A; O/P: 5.4Vdc, 3A
	Power Cord Type	1.83 meter shielded cable with ferrite core
Product Charging Cable 1	Brand Name	MOTOROLA
	Model Name	25-102775-01R
	Power Rating	I/P: 5.4V, 3A
	Type	1.35 meter non-shielded cable with ferrite core
Product Charging Cable 2	Brand Name	MOTOROLA
	Model Name	25-118703-01R
	Power Rating	I/P: 5.4V, 3A
	Type	1.35 meter non-shielded cable with ferrite core
Battery 1	Brand Name	MOTOROLA
	Part Number	82-71364-04
	Power Rating	3.7Vdc, 1950mAh
	Type	Li-ion
Battery 2	Brand Name	MOTOROLA
	Part Number	82-71364-05
	Power Rating	3.7Vdc, 3600mAh
	Type	Li-ion
Earphone	Brand Name	Symbol
	Part Number	90-17C28-001R
	Signal Line Type	1.24 meter non-shielded cable without ferrite core
USB Cable	Brand Name	MOTOROLA
	Part Number	25-68596-01R
	Type	1.69 meter shielded cable without ferrite core

Remark:

1. Product Charging Cable 1 (P/N: 25-102775-01R) and Product Charging Cable 2 (P/N: 25-118703-01R) are exactly the same which was declared by the manufacturer, and only Product Charging Cable 1 (P/N: 25-102775-01R) was performed on all the tests.
2. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
3. For accessories equipped with this EUT, please refer to the appendix of the external photo.
4. This test report recorded only product characteristics and test results of Digital Spread Spectrum (DSS).

1.4 Testing Site

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C TEL: +886-3-3273456 / FAX: +886-3-3284978		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	CO05-HY	03CH07-HY	TW1022/4086B-1

1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- FCC Public Notice DA 00-705
- ANSI C63.4-2003
- IC RSS-210 Issue 7

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B (DoC), recorded in a separate test report.

1.6 Ancillary Equipment List

Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
System Simulator	R&S	CMU200	N/A	N/A	Unshielded, 1.8 m
WLAN AP	D-Link	DWL-7100AP	KA22003040018-1	N/A	Unshielded, 1.8 m
WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
BT Base Station	Anritsu	8852B	N/A	N/A	Unshielded, 1.8 m
GPS Station	SPIRENT	GSS4200	N/A	N/A	Unshielded, 1.8 m
Notebook	DELL	Vostro 1510	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
LCD Monitor	Lenovo	6135-AB1	FCC DoC	N/A	Unshielded, 1.8m
Bluetooth Earphone	Nokia	BH-100	PYA1YH	N/A	N/A
i-pod	Apple	A1199	FCC DoC	Shielded, 1.0 m	N/A

2 Test Configuration of Equipment Under Test

2.1 RF Power

Preliminary tests were performed in different data rate and recorded the RF output power in the following table:

RF Output Power				
Channel	Frequency	Data Rate / Modulation		
		GFSK	$\pi/4$ -DQPSK	8-DPSK
		1Mbps	2Mbps	3Mbps
Ch00	2402MHz	1.79 dBm	1.13 dBm	1.46 dBm
Ch39	2441MHz	1.56 dBm	0.69 dBm	1.01 dBm
Ch78	2480MHz	0.18 dBm	-0.85 dBm	-0.53 dBm

Remark: The EUT is programmed to transmit signal continuously for all testing.

2.2 Test Mode

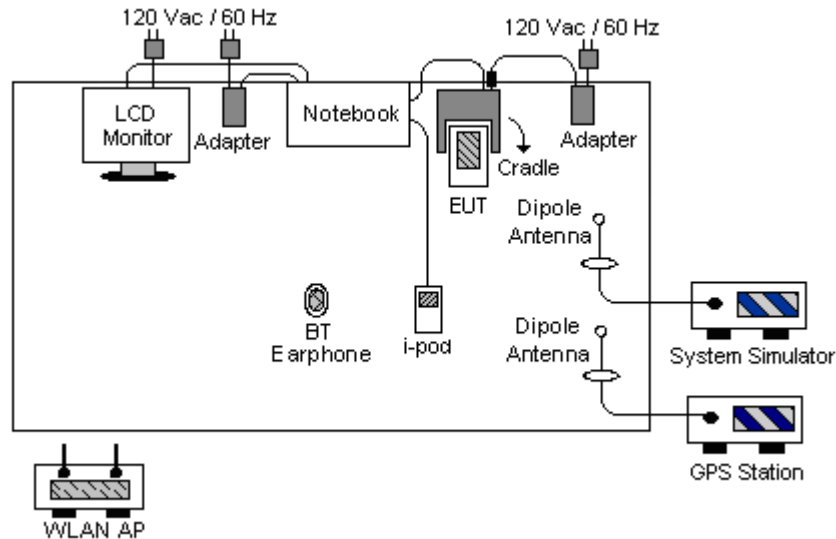
The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). Pre-scanned tests were conducted to determine the final configuration from all possible combinations. The following tables are showing the test modes as the worst cases and recorded in this report.

Test Cases			
Test Item	Modulation		
	Bluetooth 1Mbps GFSK	Bluetooth EDR 2Mbps $\pi/4$ -DQPSK	Bluetooth EDR 3Mbps 8-DPSK
Conducted TCs	■ Mode 1: CH00_2402 MHz ■ Mode 2: CH39_2441 MHz ■ Mode 3: CH78_2480 MHz	■ Mode 4: CH00_2402 MHz ■ Mode 5: CH39_2441 MHz ■ Mode 6: CH78_2480 MHz	■ Mode 7: CH00_2402 MHz ■ Mode 8: CH39_2441 MHz ■ Mode 9: CH78_2480 MHz
Radiated TCs	■ Mode 1: CH00_2402 MHz + Battery 1 ■ Mode 2: CH39_2441 MHz + Battery 1 ■ Mode 3: CH78_2480 MHz + Battery 1 ■ Mode 4: CH78_2480 MHz + Battery 2	N/A	N/A
AC Conducted Emission	■ Mode 1 : GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Cradle + Adapter + USB Cable + Battery 1 ■ Mode 2 : GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Earphone + USB Charging Cable with AC Power + Battery 1 ■ Mode 3 : GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Earphone + USB Charging Cable with AC Power + Battery 2		
Remark: The worst case of radiated emission was Bluetooth 1Mbps link mode; only the test data of this mode was reported.			

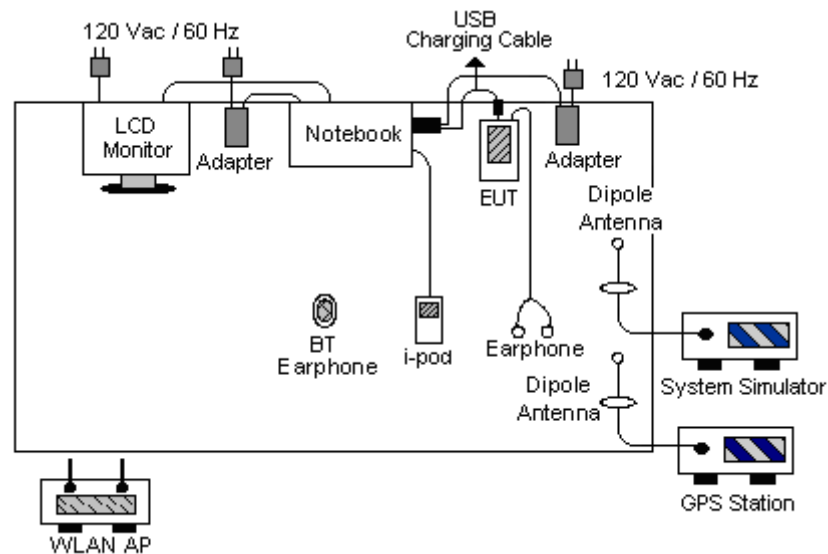
2.3 Connection Diagram of Test System

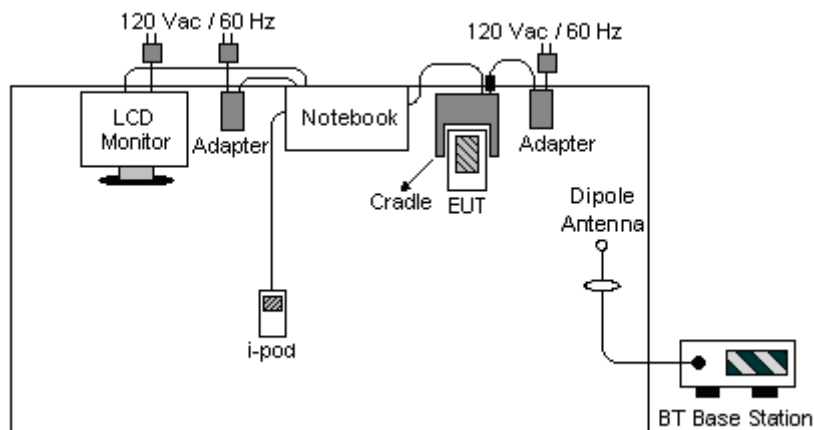
<Conducted Emission>

EUT with Cradle and Adapter Mode



EUT with USB Charging Cable with AC Power Mode



<Radiated Emission>


2.4 RF Utility

For Bluetooth function, the RF Utility, "BT Test ON" was installed in EUT which was programmed in order to make the EUT into the engineering modes to contact with BT base station for transmitting and receiving signals continuously.

3 Test Result

3.1 Number of Channel Measurement

3.1.1 Limits of Number of Hopping Frequency

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels.

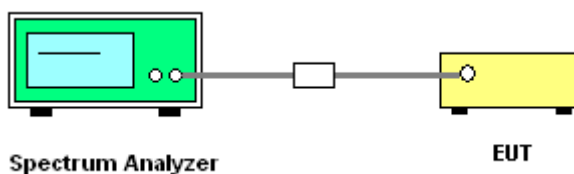
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedure

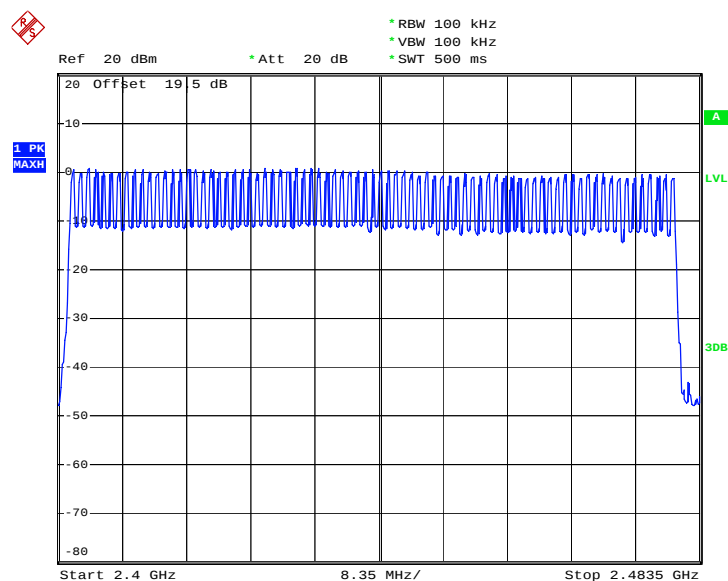
1. The testing follows FCC Public Notice DA 00-705 Measurement Guidelines.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. The modulation types of EUT are irrelevant to number of hopping channels deviation.
4. The EUT must have its hopping function enabled. Use the following spectrum analyzer settings:
Span = the frequency band of operation; $RBW \geq 1\%$ of the span; $VBW \geq RBW$; Sweep = auto;
Detector function = peak; Trace = max hold.
5. The number of hopping frequency used is defined as the device has the numbers of total channel.

3.1.4 Test Setup



3.1.5 Test Result of Number of Hopping Frequency

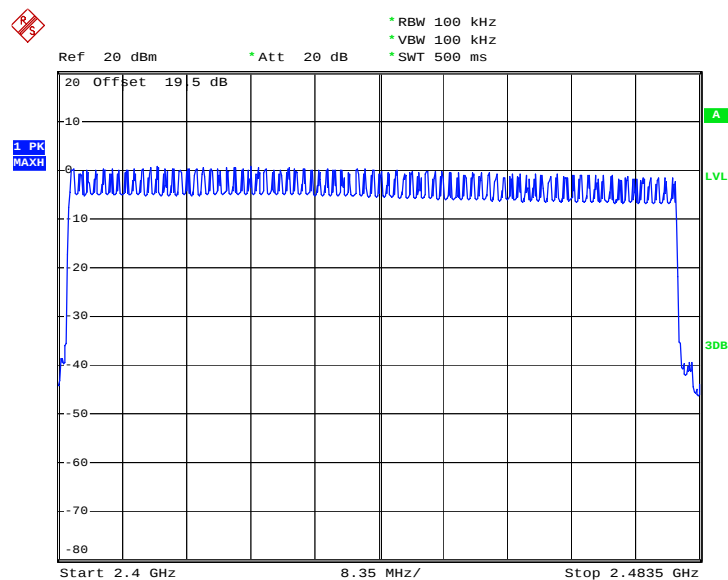
Test Mode :	Mode 1, 2, 3	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%
Number of Hopping Channels (Channel)		Limits (Channel)	Pass/Fail
79		> 15	Pass

Number of Hopping Channel Plot on Channel 00 - 78


Date: 18.FEB.2009 08:01:57



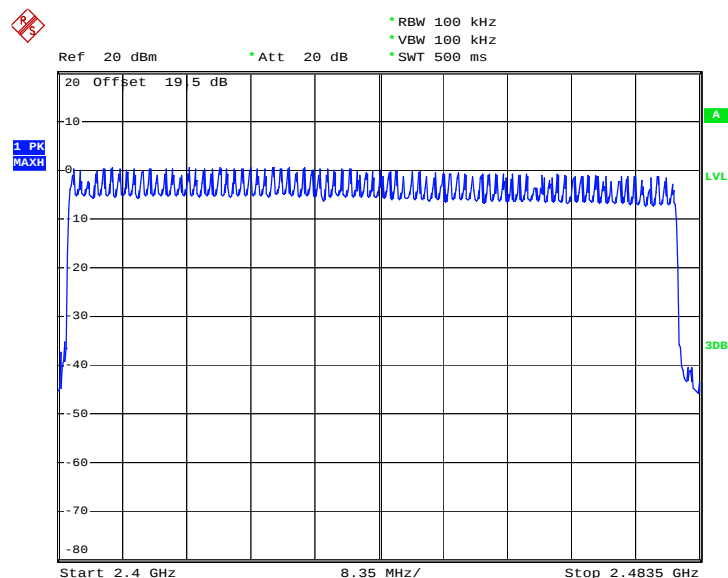
Test Mode :	Mode 4, 5, 6	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%
Number of Hopping Channels (Channel)		Limits (Channel)	Pass/Fail
79		> 15	Pass

Number of Hopping Channel Plot on Channel 00 - 78

Date: 18.FEB.2009 09:48:34



Test Mode :	Mode 7, 8, 9	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%
Number of Hopping Channels (Channel)		Limits (Channel)	Pass/Fail
79		> 15	Pass

Number of Hopping Channel Plot on Channel 00 - 78

Date: 18.FEB.2009 09:54:34

3.2 20dB Bandwidth Measurement

3.2.1 Limit of 20dB Bandwidth

N/A

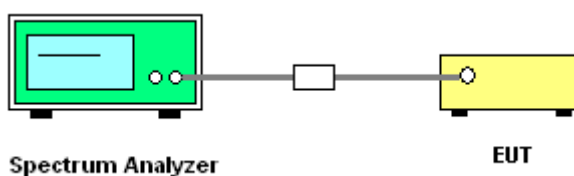
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The testing follows FCC Public Notice DA 00-705 Measurement Guidelines.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. The EUT should be transmitting at its maximum data rate as the worst cases.
4. Use the following spectrum analyzer settings:
Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel;
RBW $\geq$ 1% of the 20 dB bandwidth; VBW $\geq$ RBW; Sweep = auto; Detector function = peak;
Trace = max hold.
5. The marker-delta reading at this point is the 20 dB bandwidth of the emission.

3.2.4 Test Setup

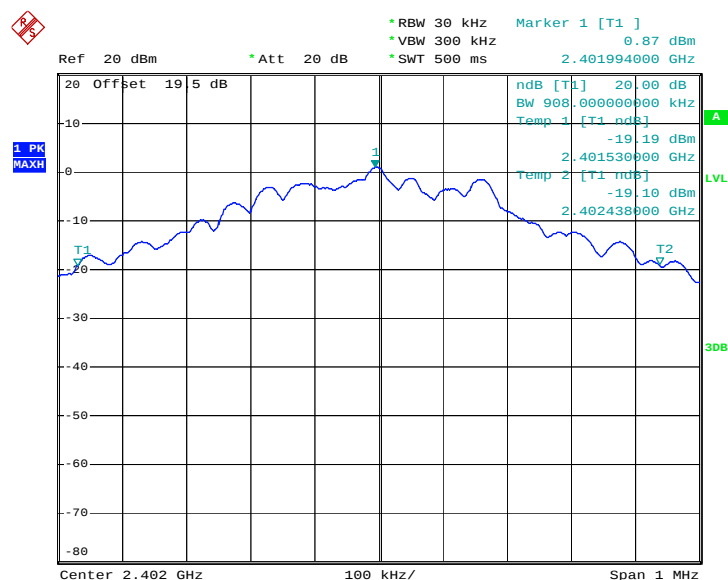


3.2.5 Test Result of 20dB Bandwidth

Test Mode :	Mode 1, 2, 3	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

Channel	Frequency (MHz)	20dB Bandwidth (MHz)
00	2402	0.908
39	2441	0.906
78	2480	0.908

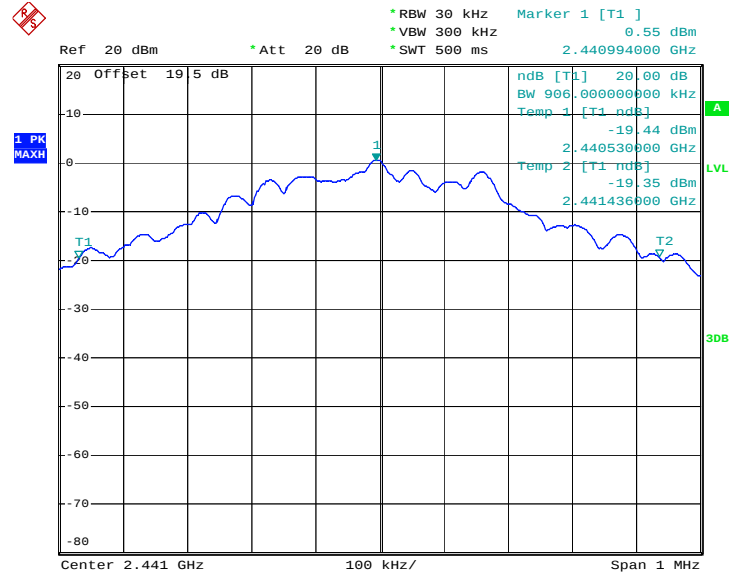
20 dB Bandwidth Plot on Channel 00



Date: 18.FEB.2009 09:20:54

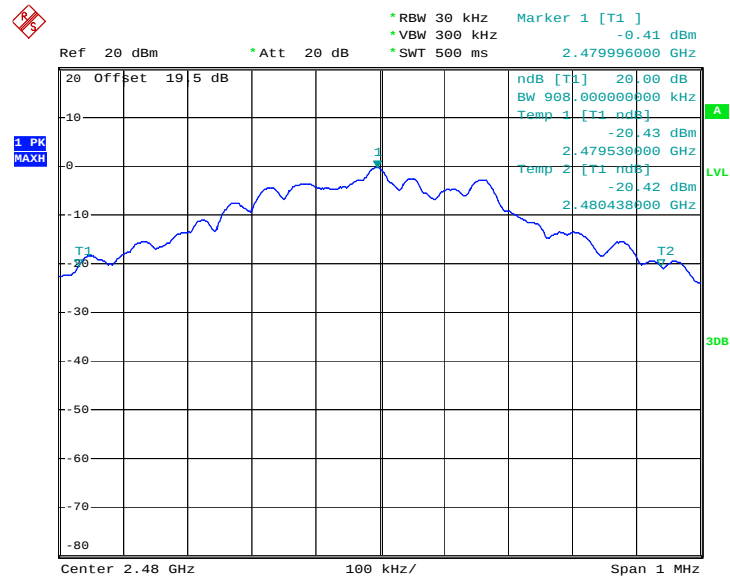


20 dB Bandwidth Plot on Channel 39



Date: 18.FEB.2009 09:21:08

20 dB Bandwidth Plot on Channel 78

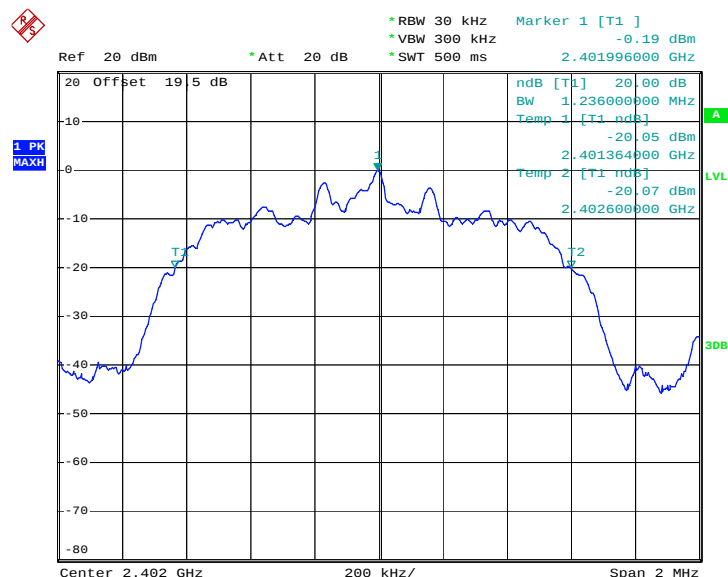


Date: 18.FEB.2009 09:59:03



Test Mode :	Mode 4, 5, 6	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

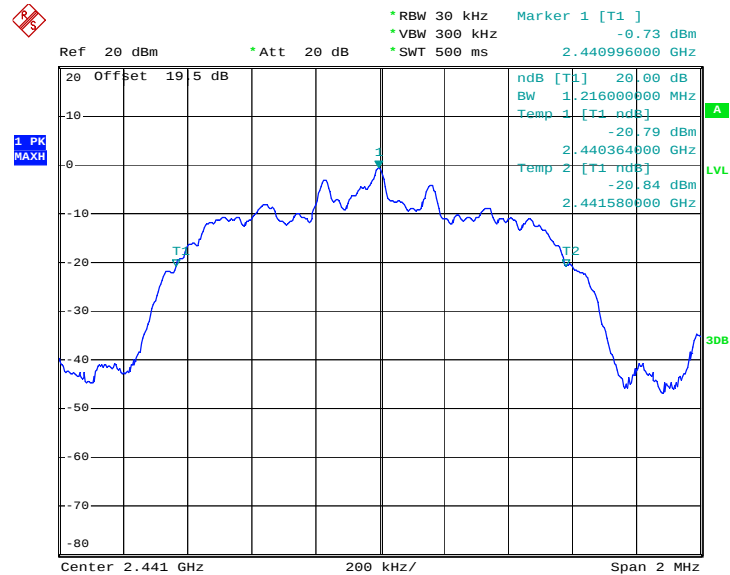
Channel	Frequency (MHz)	20dB Bandwidth (MHz)
00	2402	1.236
39	2441	1.216
78	2480	1.236

20 dB Bandwidth Plot on Channel 00

Date: 18.FEB.2009 09:22:06

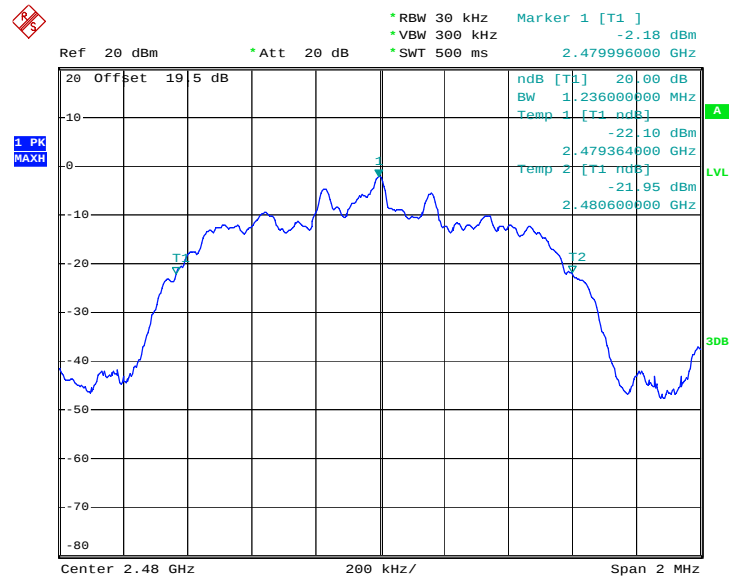


20 dB Bandwidth Plot on Channel 39



Date: 18.FEB.2009 09:22:25

20 dB Bandwidth Plot on Channel 78

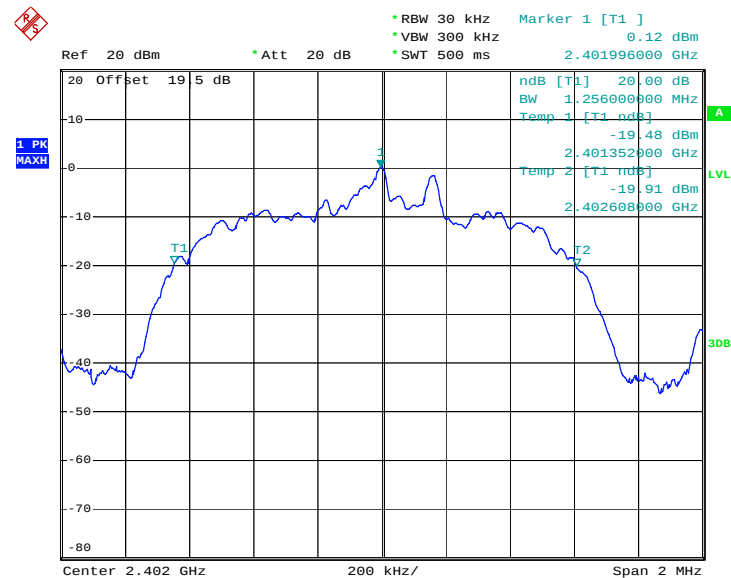


Date: 18.FEB.2009 09:22:42



Test Mode :	Mode 7, 8, 9	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

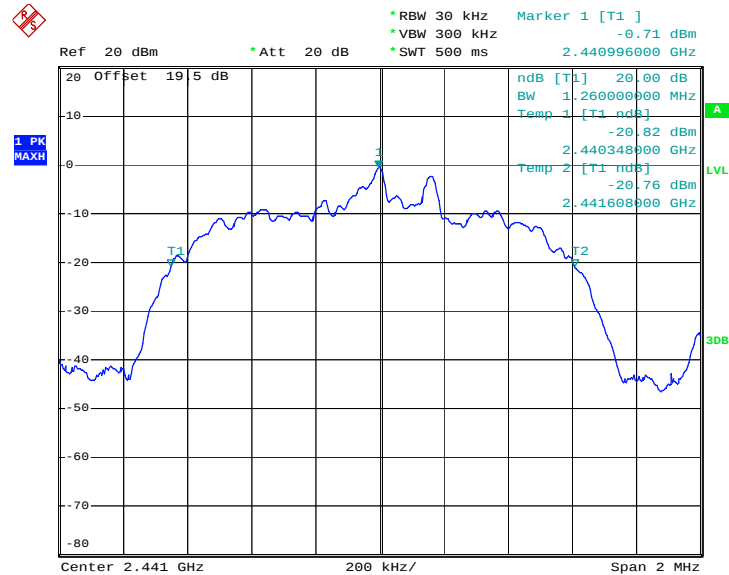
Channel	Frequency (MHz)	20dB Bandwidth (MHz)
00	2402	1.256
39	2441	1.260
78	2480	1.260

20 dB Bandwidth Plot on Channel 00

Date: 18.FEB.2009 09:23:04

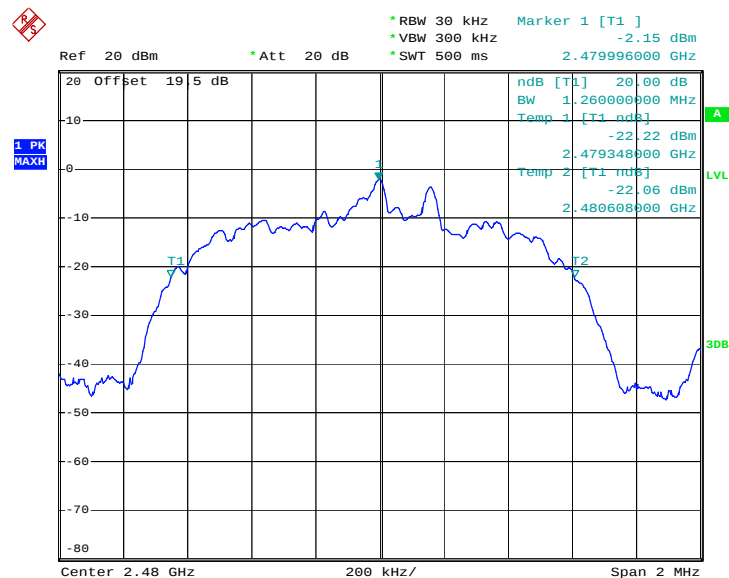


20 dB Bandwidth Plot on Channel 39



Date: 18.FEB.2009 09:23:26

20 dB Bandwidth Plot on Channel 78



Date: 18.FEB.2009 09:23:49

3.3 Hopping Channel Separation Measurement

3.3.1 Limit of Hopping Channel Separation

Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

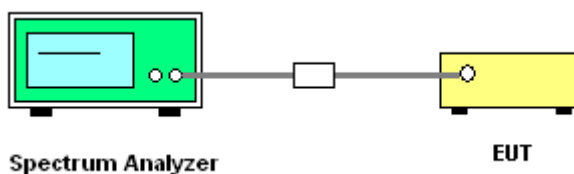
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

1. Please refer FCC Public Notice DA 00-705 Measurement Guidelines.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. The EUT should be transmitting at its maximum data rate as the worst cases.
4. Use the following spectrum analyzer settings:
Span = wide enough to capture the peaks of two adjacent channels; $RBW \geq 1\%$ of the span;
 $VBW \geq RBW$; Sweep = auto; Detector function = peak; Trace = max hold.
5. Use the marker-delta function to determine the separation between the peaks of the adjacent channels.

3.3.4 Test Setup

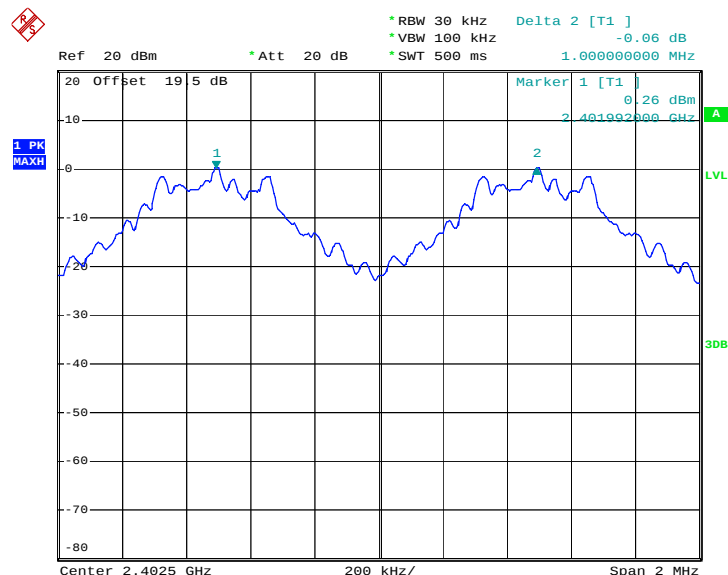


3.3.5 Test Result of Hopping Channel Separation

Test Mode :	Mode 1, 2, 3	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

Channel	Frequency (MHz)	Frequency Separation (MHz)	(2/3 of 20dB BW) Limits (MHz)	Pass/Fail
00	2402	1.000	0.605	Pass
39	2441	1.000	0.604	Pass
78	2480	1.004	0.605	Pass

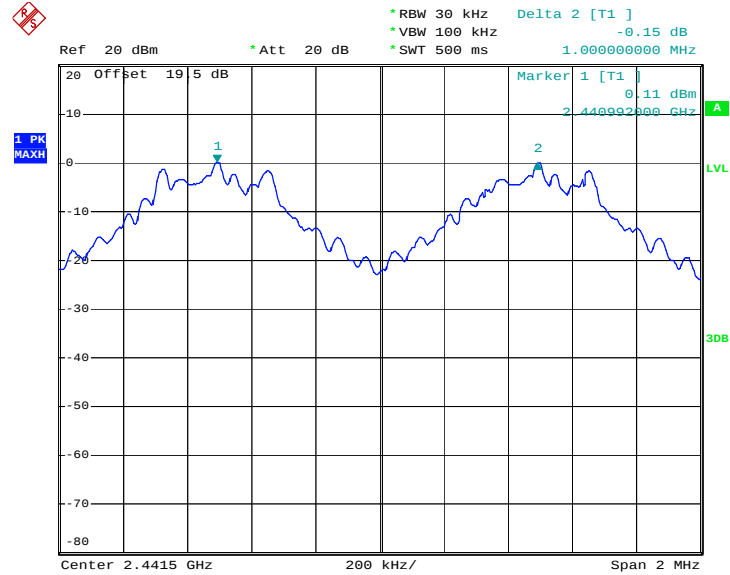
Channel Separation Plot on Channel 00 - 01



Date: 18.FEB.2009 07:53:39

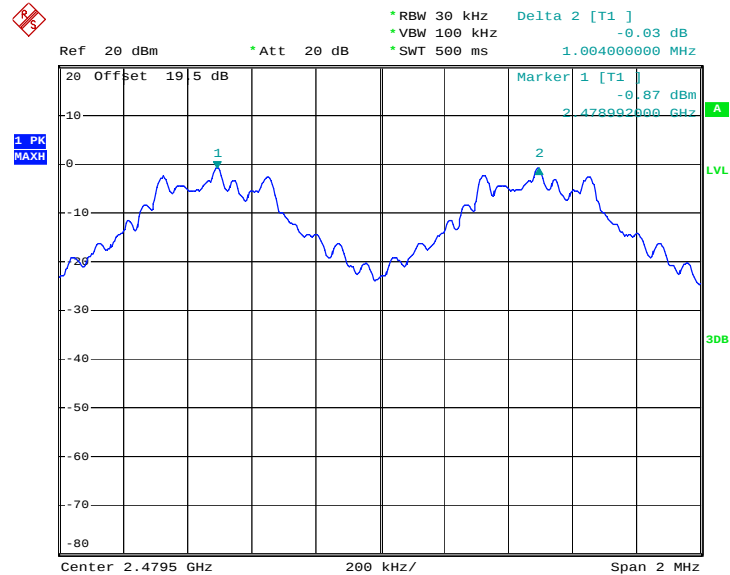


Channel Separation Plot on Channel 39 - 40



Date: 18.FEB.2009 07:55:13

Channel Separation Plot on Channel 77 - 78



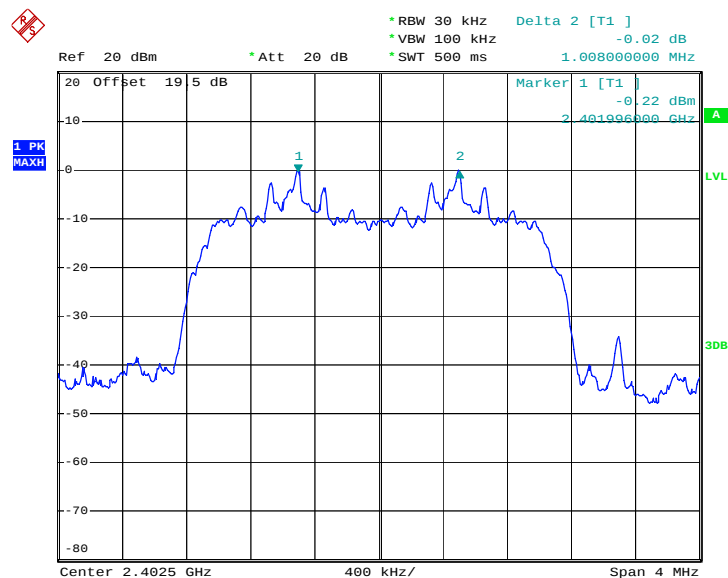
Date: 18.FEB.2009 07:56:18



Test Mode :	Mode 4, 5, 6	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

Channel	Frequency (MHz)	Frequency Separation (MHz)	(2/3 of 20dB BW) Limits (MHz)	Pass/Fail
00	2402	1.008	0.824	Pass
39	2441	1.000	0.811	Pass
78	2480	1.000	0.824	Pass

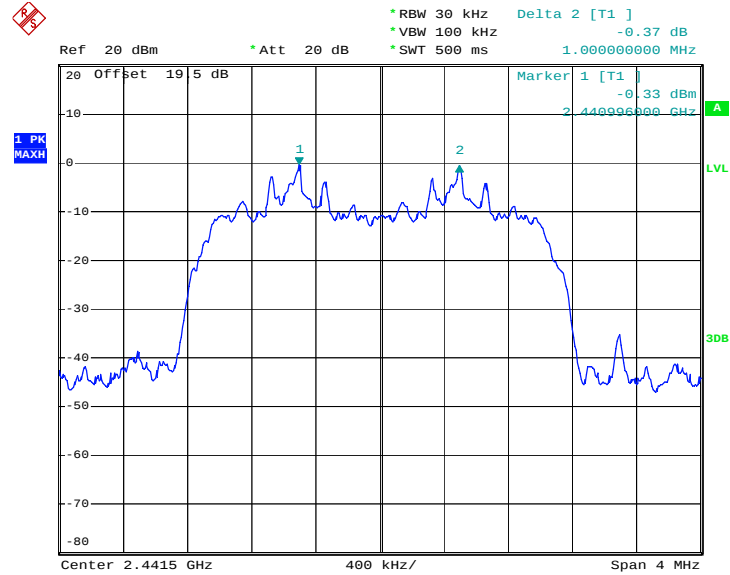
Channel Separation Plot on Channel 00 - 01



Date: 18.FEB.2009 09:31:36

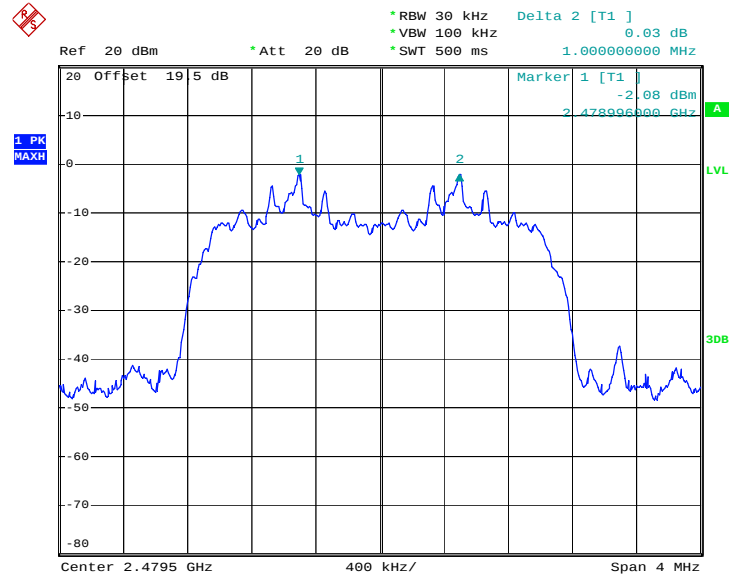


Channel Separation Plot on Channel 39 - 40



Date: 18.FEB.2009 09:32:12

Channel Separation Plot on Channel 77 - 78



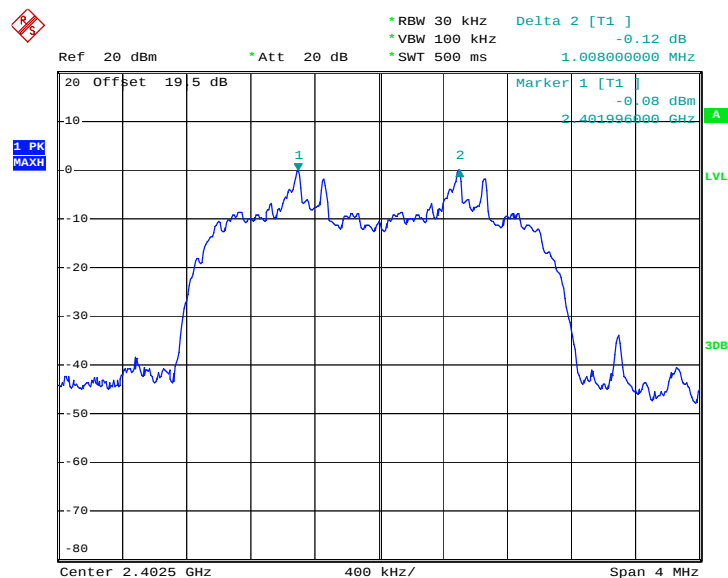
Date: 18.FEB.2009 09:32:45



Test Mode :	Mode 7, 8, 9	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

Channel	Frequency (MHz)	Frequency Separation (MHz)	(2/3 of 20dB BW) Limits (MHz)	Pass/Fail
00	2402	1.008	0.837	Pass
39	2441	1.000	0.840	Pass
78	2480	1.008	0.840	Pass

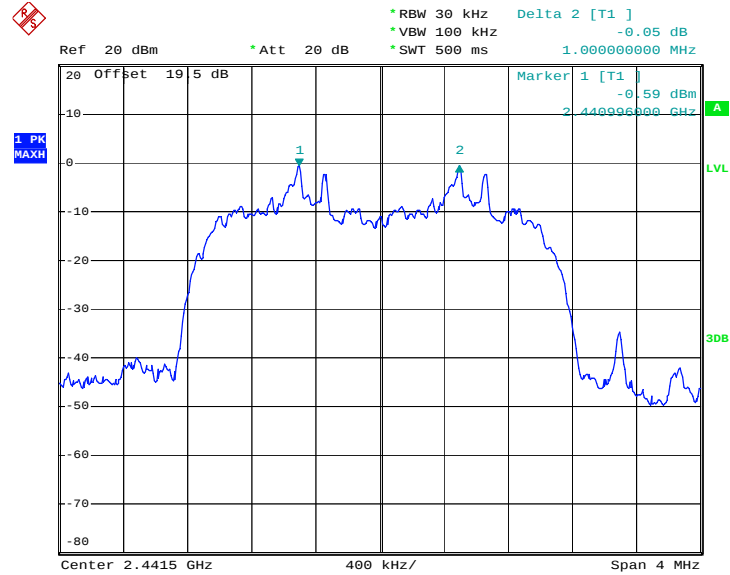
Channel Separation Plot on Channel 00 - 01



Date: 18.FEB.2009 09:34:06

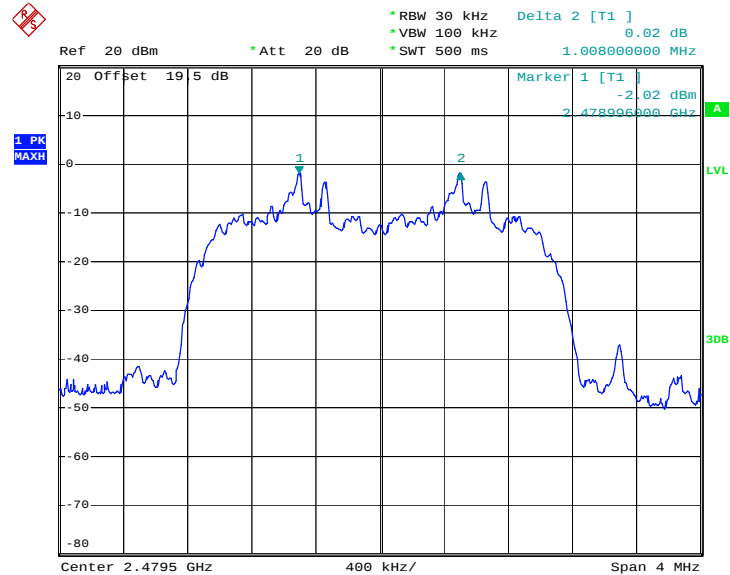


Channel Separation Plot on Channel 39 - 40



Date: 18.FEB.2009 09:33:48

Channel Separation Plot on Channel 77 - 78



Date: 18.FEB.2009 09:33:30

3.4 Dwell Time Measurement

3.4.1 Limit of Dwell Time

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.

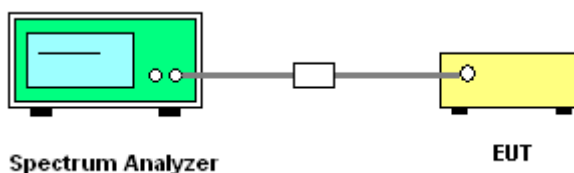
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The testing follows FCC Public Notice DA 00-705 Measurement Guidelines.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. The EUT should be transmitting at its maximum data rate as the worst cases.
4. The EUT must have its hopping function enabled. Use the following spectrum analyzer settings:
Span = zero span, centered on a hopping channel; RBW = 1 MHz; VBW $\geq$ RBW; Sweep = as necessary to capture the entire dwell time per hopping channel; Detector function = peak; Trace = max hold.
5. Use the marker-delta function to calculate the dwell time.

3.4.4 Test Setup



3.4.5 Test Result of Dwell Time

Test Mode :	Mode 2	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

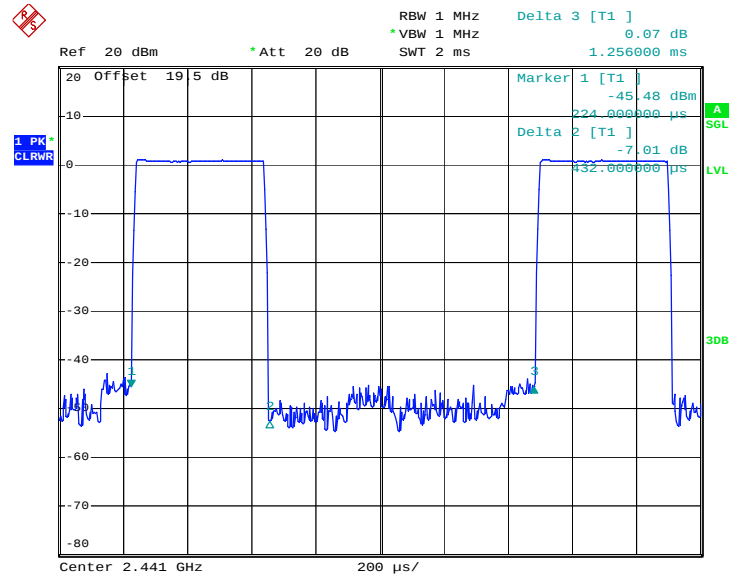
Package Mode	Average Hopping Channel	Package Transfer Time (usec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
DH1	8.40	432.00	0.11	0.4	Pass
DH3	4.90	1702.00	0.26	0.4	Pass
DH5	3.30	3020.00	0.31	0.4	Pass

Remark:

- 1.Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
- 2.79 channels come from the Hopping Channel number.
- 3.Average Hopping Channel = hops/sweep time
- 4.t: Package Transfer Time(us)

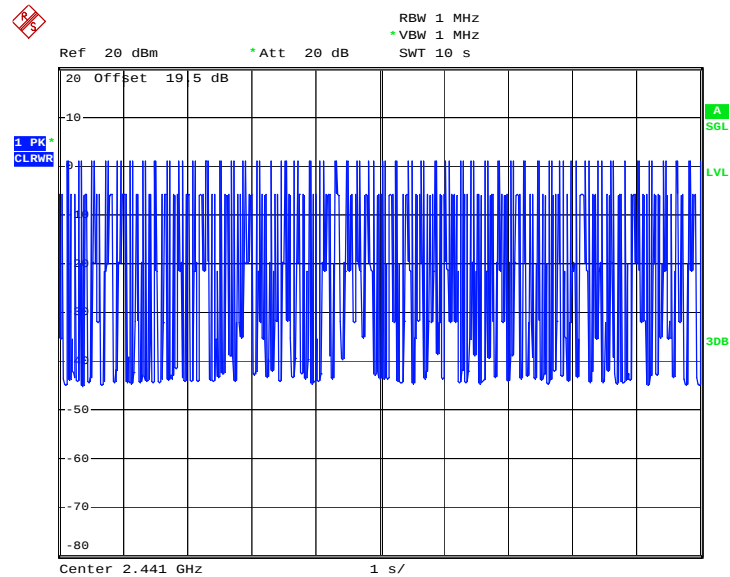


DH1 Dwell Time (One Pulse) Plot on Channel 39_1Mbps



Date: 16.FEB.2009 08:17:30

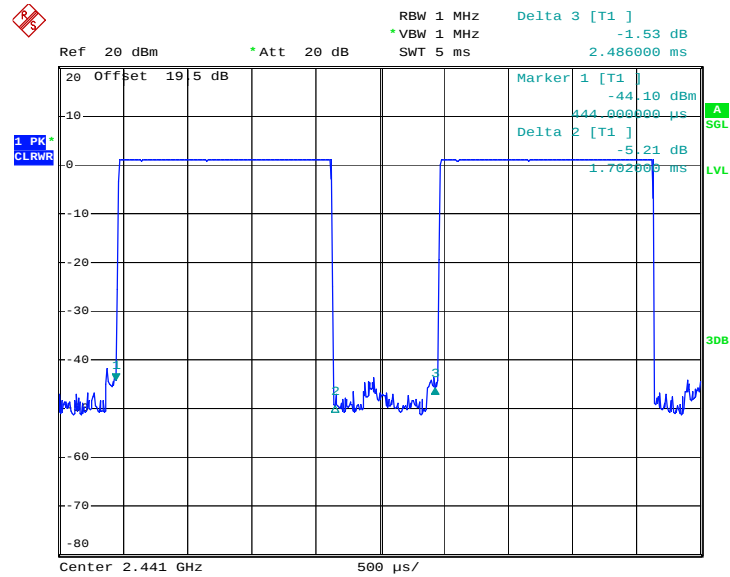
DH1 Dwell Time (Count Pulses) Plot on Channel 39_1Mbps



Date: 18.FEB.2009 07:43:44

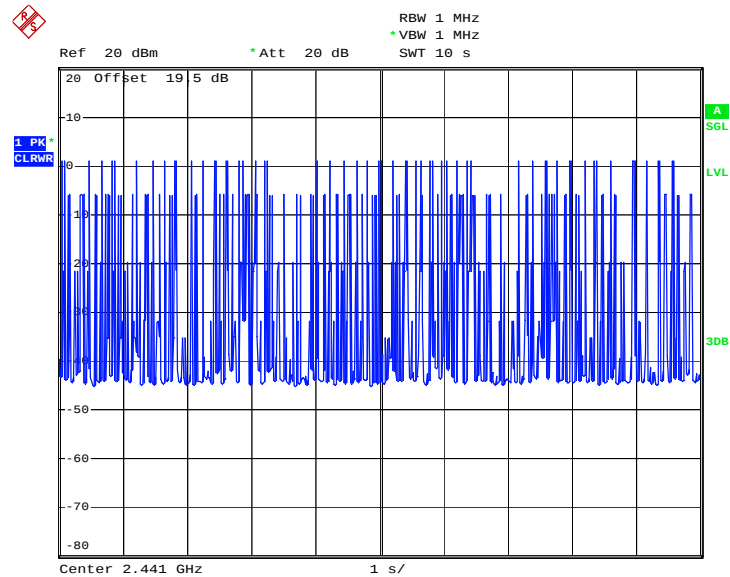


DH3 Dwell Time (One Pulse) Plot on Channel 39_1Mbps



Date: 16.FEB.2009 08:18:01

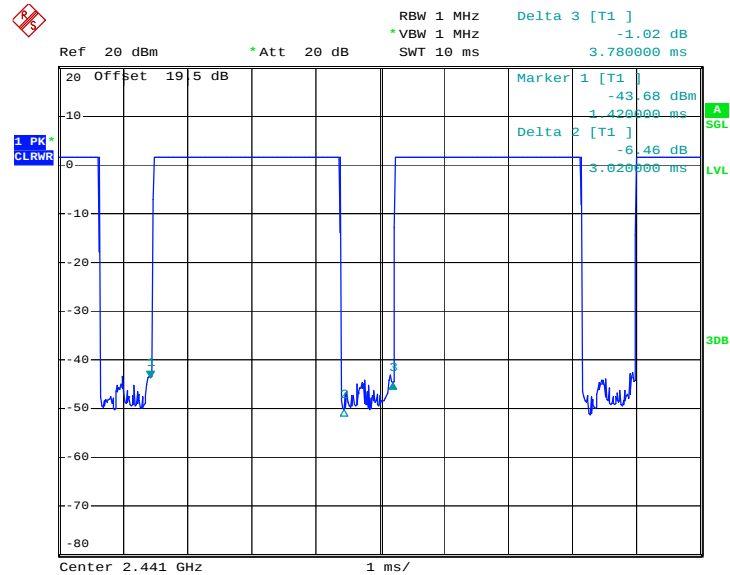
DH3 Dwell Time (Count Pulses) Plot on Channel 39_1Mbps



Date: 18.FEB.2009 07:44:05

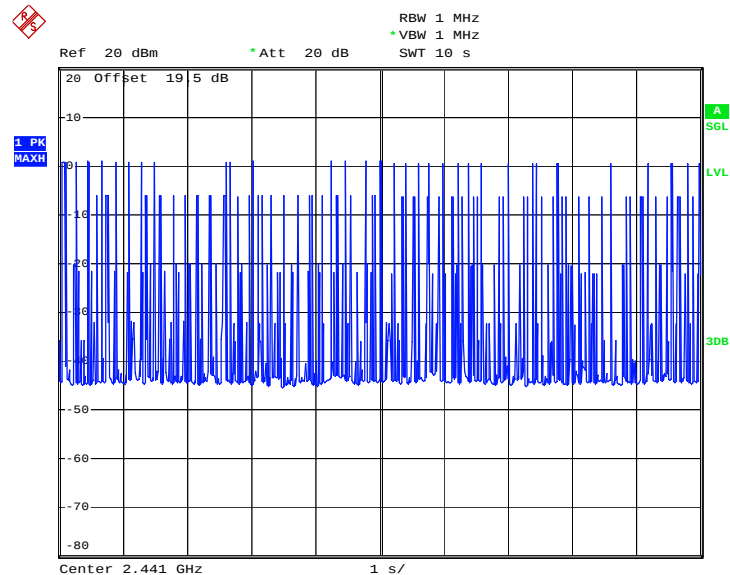


DH5 Dwell Time (One Pulse) Plot on Channel 39_1Mbps



Date: 18.FEB.2009 09:57:27

DH5 Dwell Time (Count Pulses) Plot on Channel 39_1Mbps



Date: 18.FEB.2009 08:07:01

Test Mode :	Mode 5	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

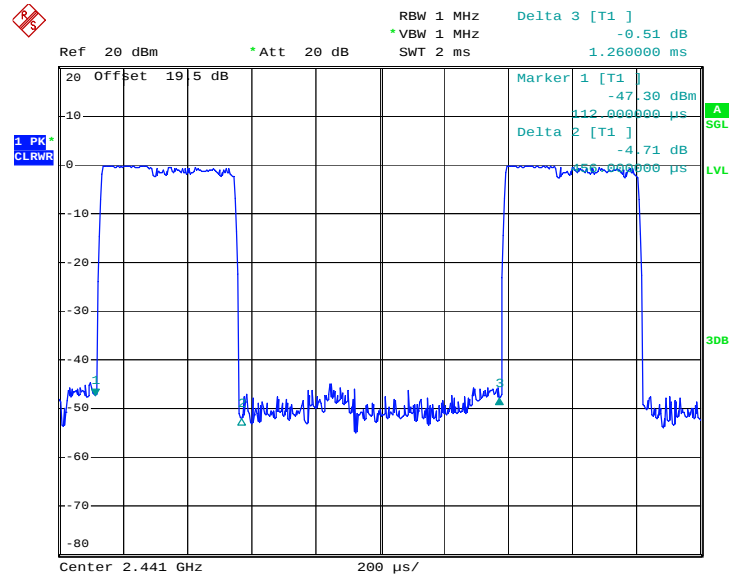
Package Mode	Average Hopping Channel	Package Transfer Time (usec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
DH1	8.20	456.00	0.12	0.4	Pass
DH3	5.10	1756.00	0.28	0.4	Pass
DH5	3.40	2996.00	0.32	0.4	Pass

Remark:

1. Dwell Time = 79(channels) x 0.4(s) x average hopping channel x package transfer time
2. 79 channels come from the Hopping Channel number.
3. Average Hopping Channel = hops/sweep time
4. t: Package Transfer Time(us)

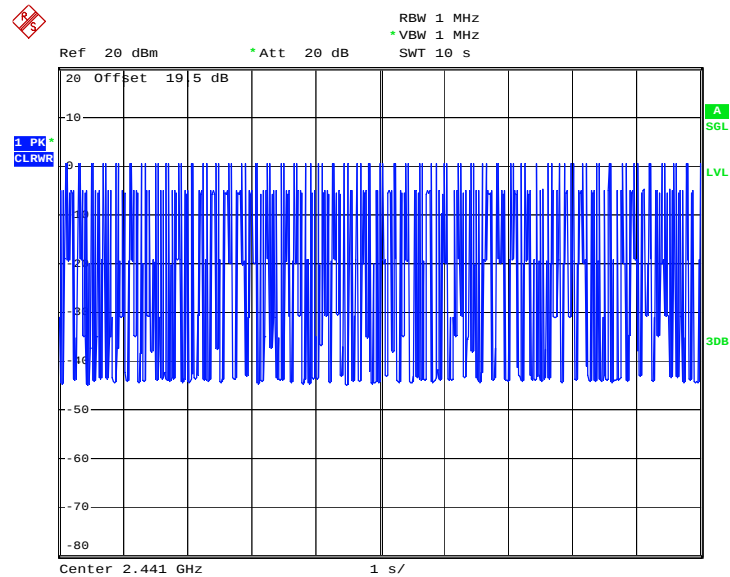


DH1 Dwell Time (One Pulse) Plot on Channel 39_2Mbps



Date: 16.FEB.2009 08:19:02

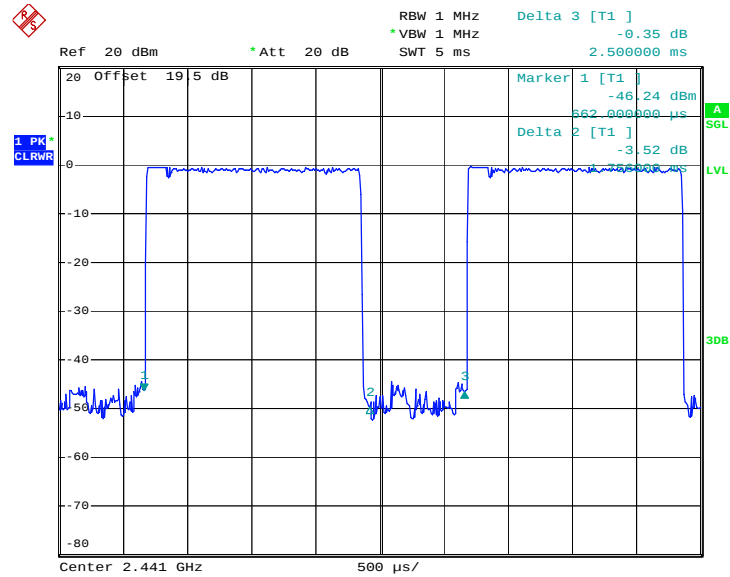
DH1 Dwell Time (Count Pulses) Plot on Channel 39_2Mbps



Date: 18.FEB.2009 09:35:49

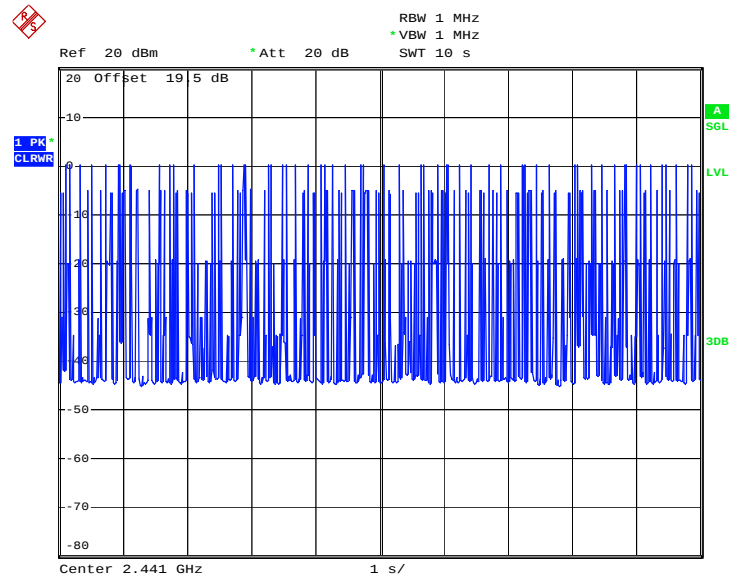


DH3 Dwell Time (One Pulse) Plot on Channel 39_2Mbps



Date: 16.FEB.2009 08:19:34

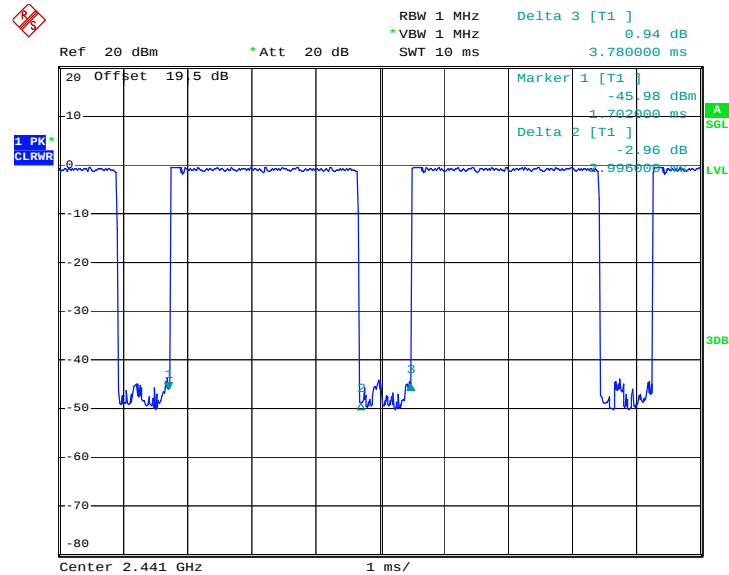
DH3 Dwell Time (Count Pulses) Plot on Channel 39_2Mbps



Date: 18.FEB.2009 09:36:08

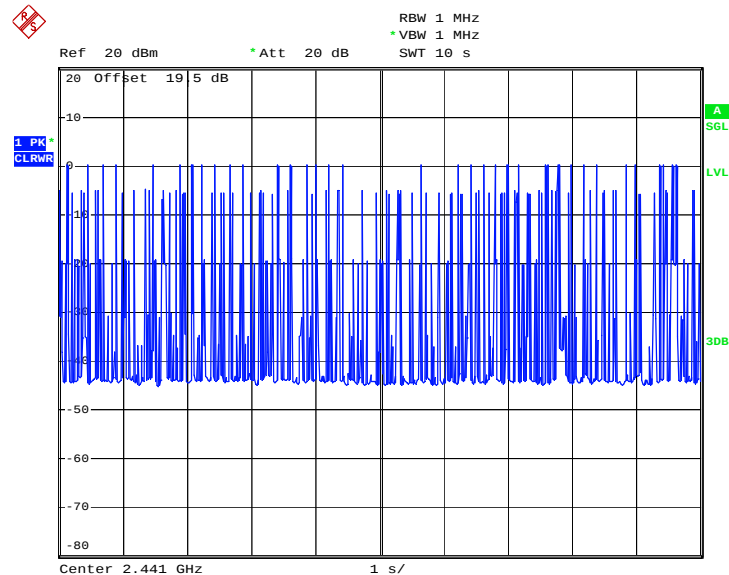


DH5 Dwell Time (One Pulse) Plot on Channel 39_2Mbps



Date: 16.FEB.2009 08:20:05

DH5 Dwell Time (Count Pulses) Plot on Channel 39_2Mbps



Date: 18.FEB.2009 09:36:32

Test Mode :	Mode 8	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

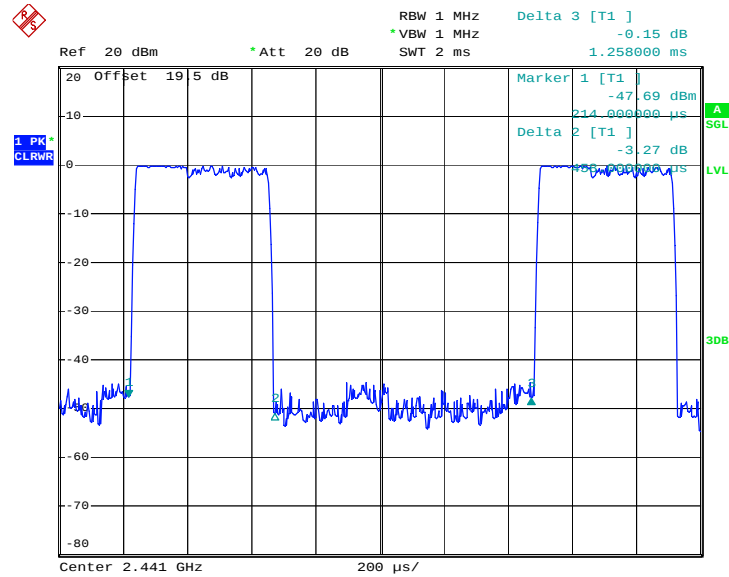
Package Mode	Average Hopping Channel	Package Transfer Time (usec)	Dwell Time (sec)	Limits (sec)	Pass/Fail
DH1	7.80	458.00	0.11	0.4	Pass
DH3	4.60	1720.00	0.25	0.4	Pass
DH5	3.10	3020.00	0.30	0.4	Pass

Remark:

- 1.Dwell Time=79(channels) x 0.4(s) x average hopping channel x package transfer time
- 2.79 channels come from the Hopping Channel number.
- 3.Average Hopping Channel = hops/sweep time
- 4.t: Package Transfer Time(us)

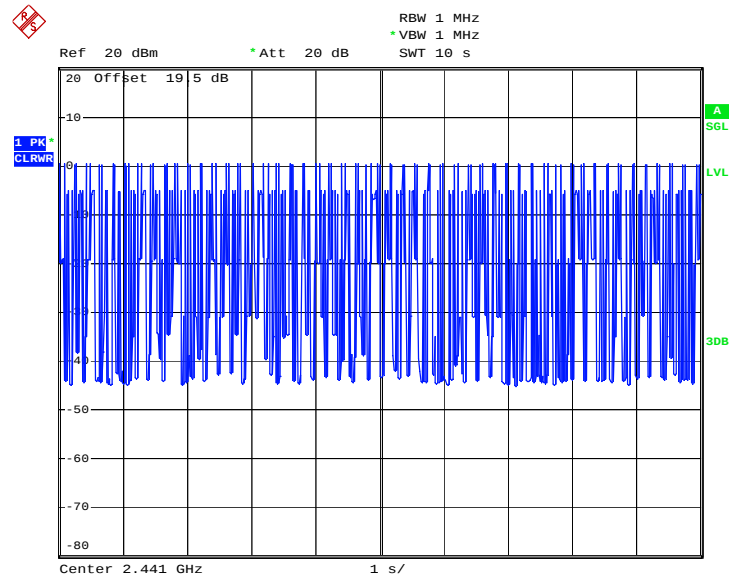


DH1 Dwell Time (One Pulse) Plot on Channel 39_3Mbps

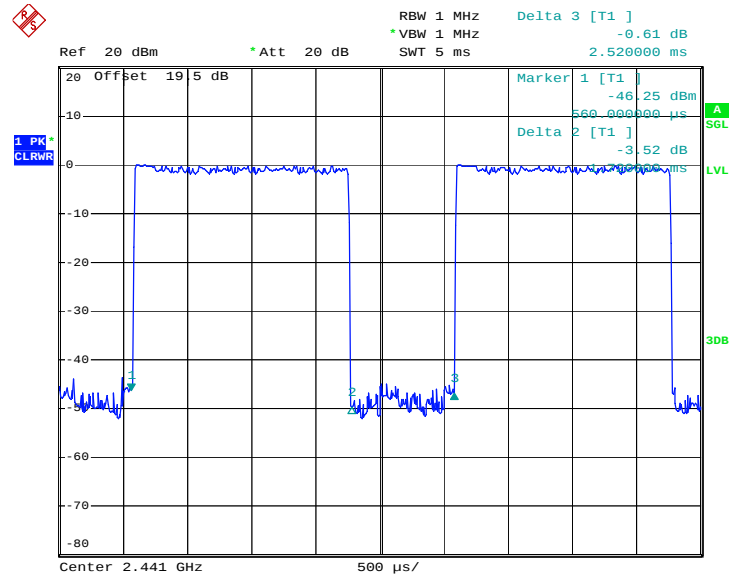


Date: 16.FEB.2009 08:21:45

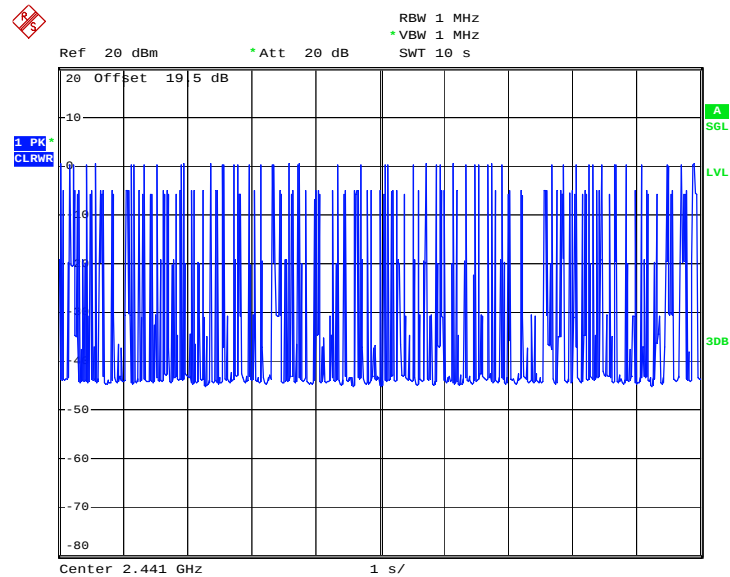
DH1 Dwell Time (Count Pulses) Plot on Channel 39_3Mbps



Date: 18.FEB.2009 09:37:00

DH3 Dwell Time (One Pulse) Plot on Channel 39_3Mbps


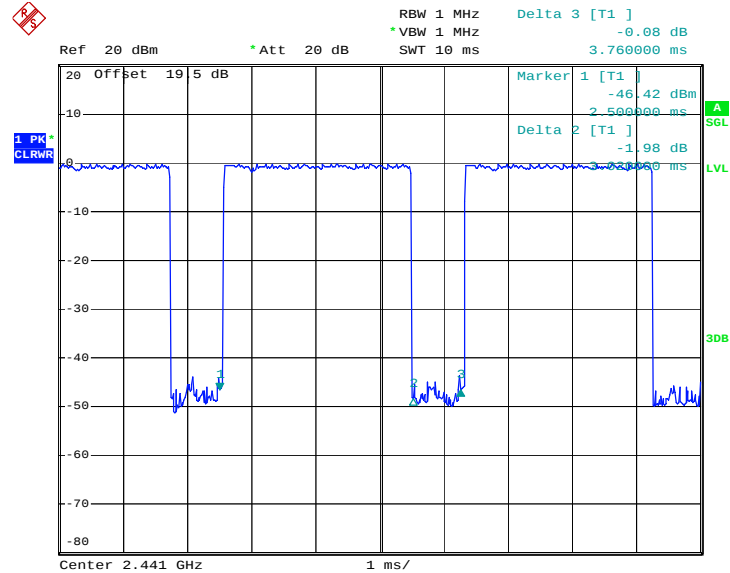
Date: 16.FEB.2009 08:22:23

DH3 Dwell Time (Count Pulses) Plot on Channel 39_3Mbps


Date: 18.FEB.2009 09:37:21

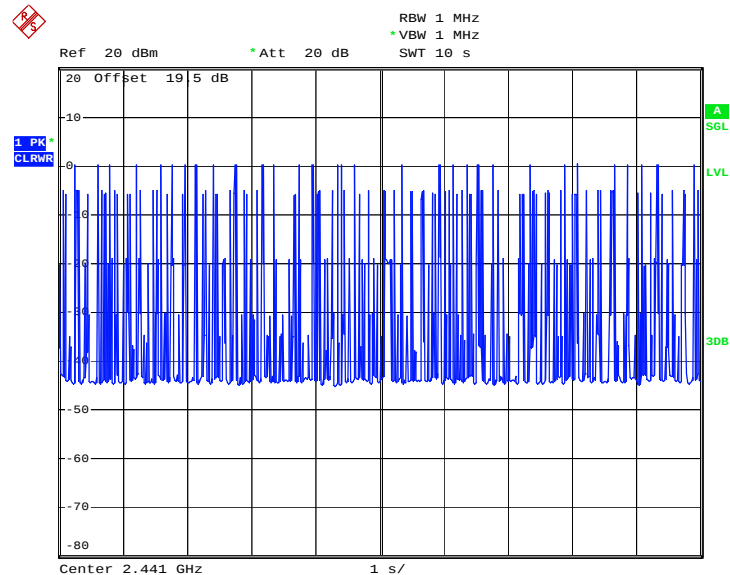


DH5 Dwell Time (One Pulse) Plot on Channel 39_3Mbps



Date: 16.FEB.2009 08:24:28

DH5 Dwell Time (Count Pulses) Plot on Channel 39_3Mbps



Date: 18.FEB.2009 09:37:39

3.5 Peak Output Power Measurement

3.5.1 Limit of Peak Output Power

Frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels: 1W (30 dBm).

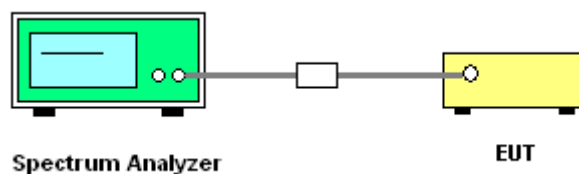
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

1. The testing follows FCC Public Notice DA 00-705 Measurement Guidelines.
2. The RF output of EUT was connected to the peak power meter by a low loss cable.

3.5.4 Test Setup



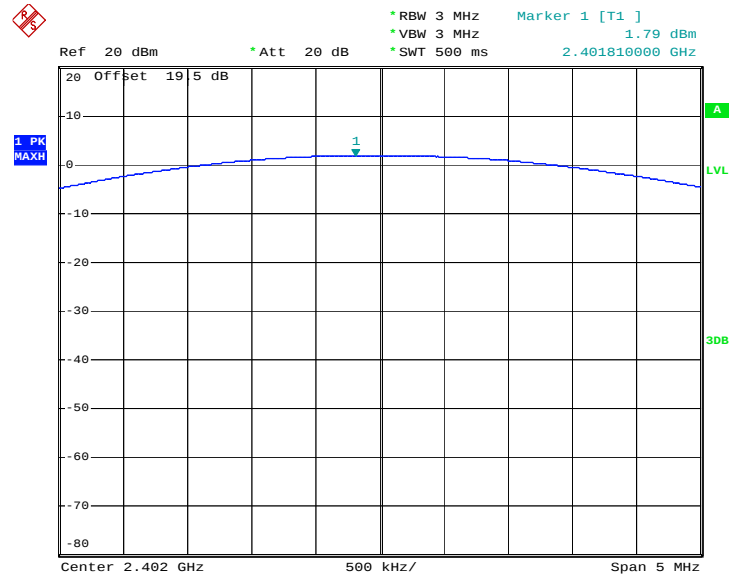
3.5.5 Test Result of Peak Output Power

Test Mode :	Mode 1, 2, 3	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

Channel	Frequency (MHz)	RF Power (dBm)		
		GFSK	Max. Limits (dBm)	Pass/Fail
		1 Mbps		
00	2402	1.79	30	Pass
39	2441	1.56	30	Pass
78	2480	0.18	30	Pass

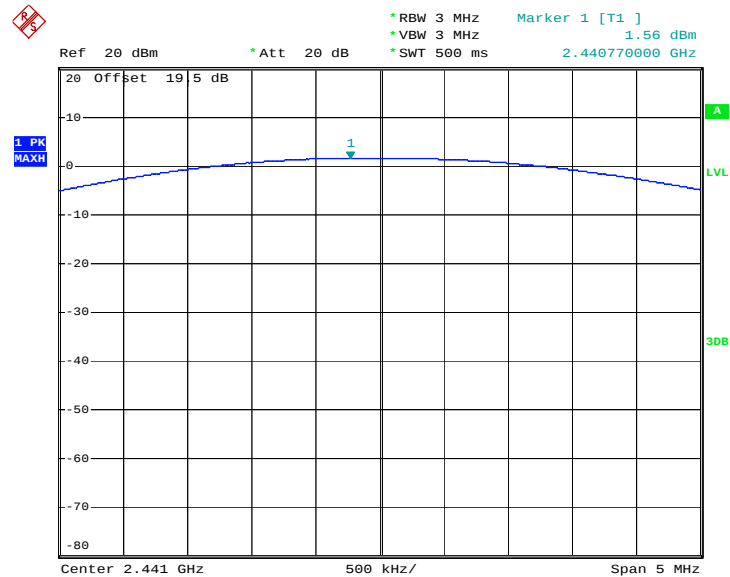


Peak Output Power Plot on Channel 00



Date: 18.FEB.2009 08:54:32

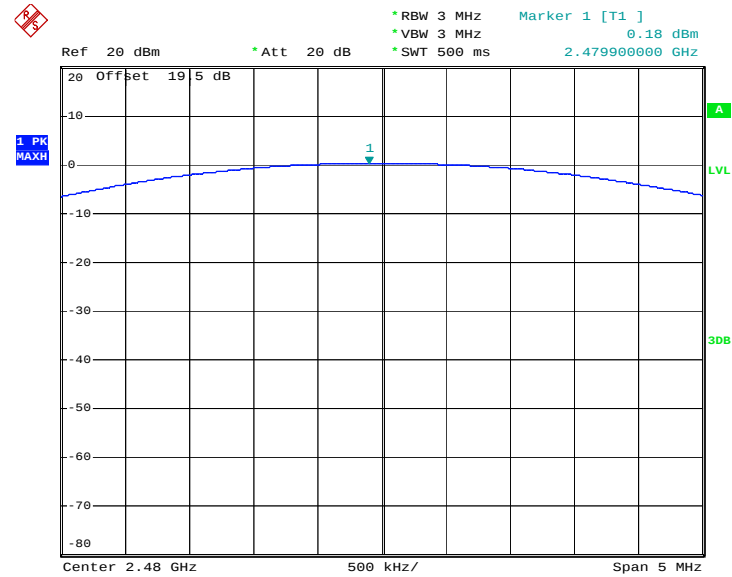
Peak Output Power Plot on Channel 39



Date: 18.FEB.2009 08:57:28



Peak Output Power Plot on Channel 78

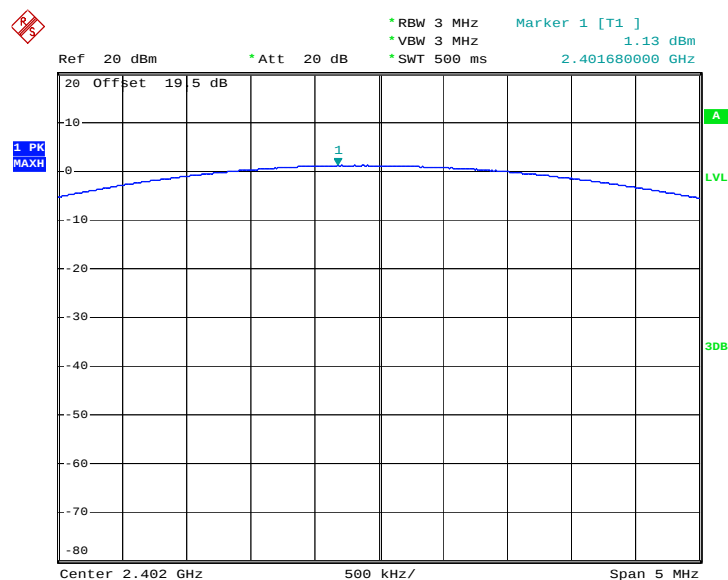


Date: 18.FEB.2009 08:59:11



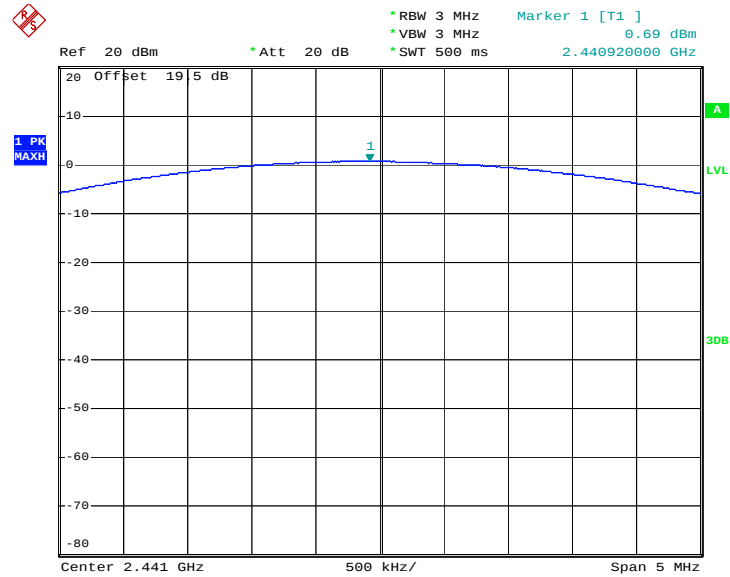
Test Mode :	Mode 4, 5, 6	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

Channel	Frequency (MHz)	RF Power (dBm)		
		$\pi/4$ -DQPSK	Max. Limits (dBm)	Pass/Fail
		2 Mbps		
00	2402	1.13	30	Pass
39	2441	0.69	30	Pass
78	2480	-0.85	30	Pass

Peak Output Power Plot on Channel 00

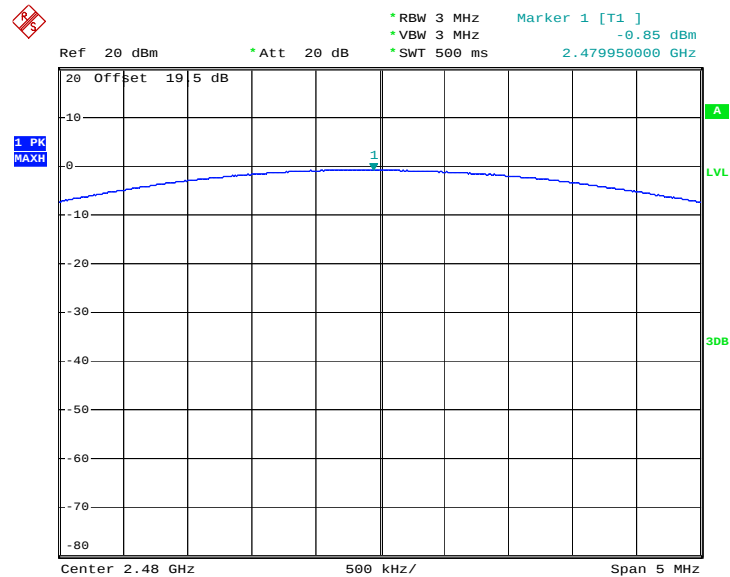
Date: 18.FEB.2009 08:54:57

Peak Output Power Plot on Channel 39



Date: 18.FEB.2009 08:58:02

Peak Output Power Plot on Channel 78

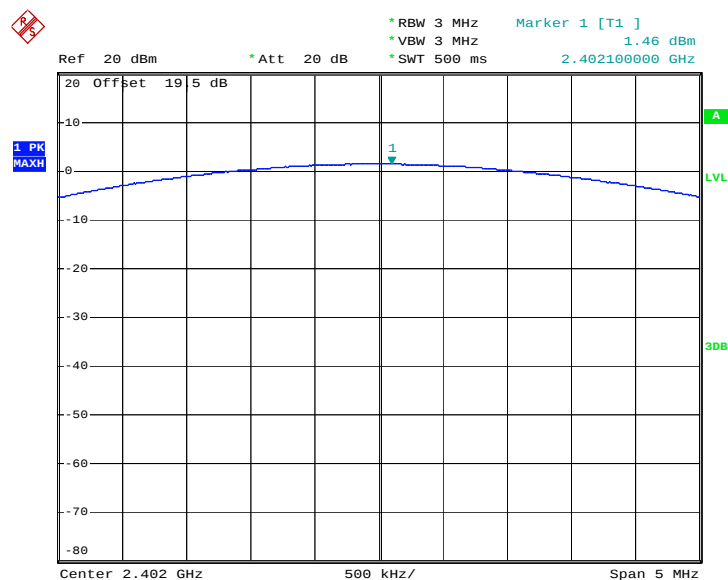


Date: 18.FEB.2009 08:59:29



Test Mode :	Mode 7, 8, 9	Temperature :	23~24
Test Engineer :	Ken Hsu	Relative Humidity :	44~45%

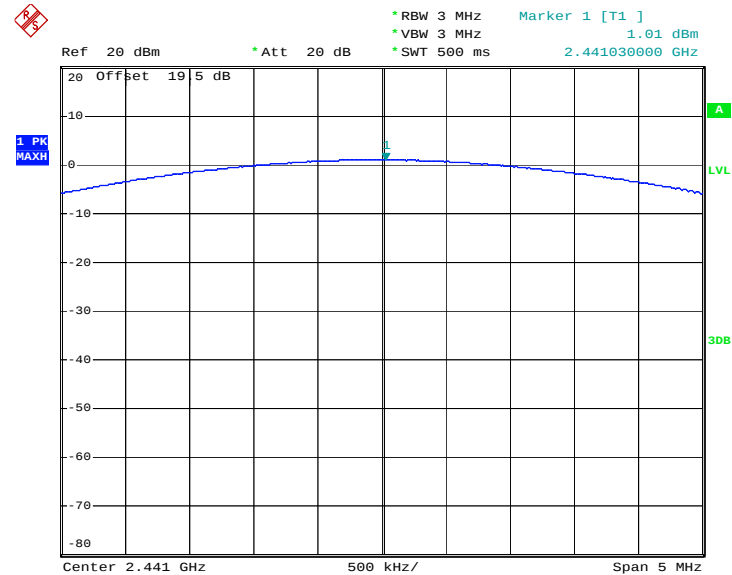
Channel	Frequency (MHz)	RF Power (dBm)		
		8-DPSK	Max. Limits (dBm)	Pass/Fail
		3 Mbps		
00	2402	1.46	30	Pass
39	2441	1.01	30	Pass
78	2480	-0.53	30	Pass

Peak Output Power Plot on Channel 00

Date : 18.FEB.2009 08:56:35

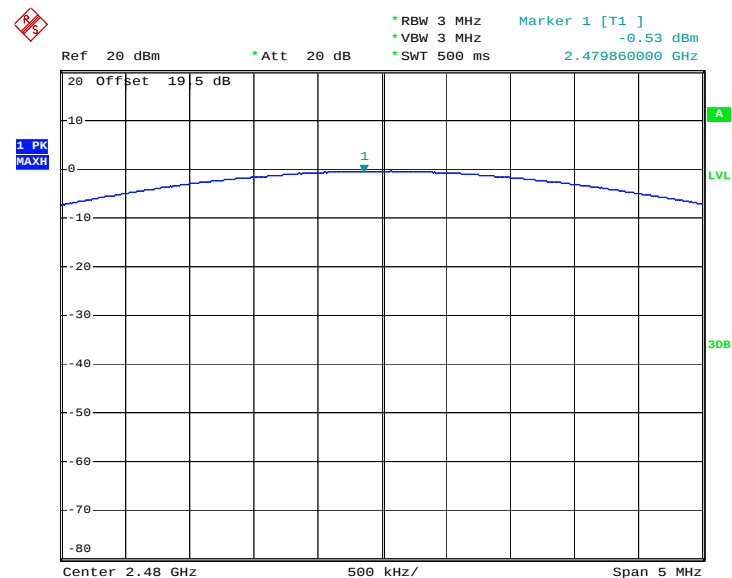


Peak Output Power Plot on Channel 39



Date: 18.FEB.2009 08:58:22

Peak Output Power Plot on Channel 78



Date: 18.FEB.2009 09:00:13

3.6 Band Edges Measurement

3.6.1 Limit of Band Edges

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. In addition, radiated emissions which fall in the restricted bands must also comply with the radiated emission limits.

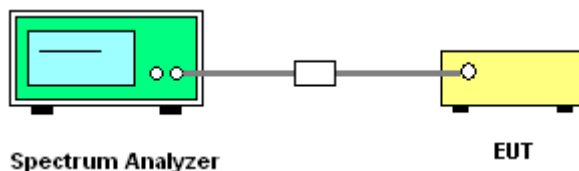
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

1. The testing follows the guidelines in ANSI C63.4-2003 and FCC Public Notice DA 00-705 Measurement Guidelines.
2. RF antenna conducted test: Set RBW = 100 kHz, Video bandwidth (VBW) > RBW, scan up through 10th harmonic. Band edge emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW. Note: If the device complies with the use of power option 2 the attenuation under this paragraph shall be 30 dB instead of 20 dB.
3. Radiated emission test: Applies to band edge emissions that fall in the restricted bands listed in FCC Section 15.205. The maximum permitted average field strength is listed in FCC Section 15.209. A pre-amp is necessary for this measurement. For measurements above 1 GHz, set RBW = 1MHz, VBW = 10 Hz, Sweep: Auto. If the emission is pulsed, modify the unit for continuous operation; use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation. See FCC Section 15.35(b) and (c).

3.6.4 Test Setup



3.6.5 Test Result of Radiated Band Edges

Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	CH00_2402 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2316.65	44.33	-29.67	74.00	42.13	32.34	5.53	35.67	100	54	Peak
2316.65	30.84	-23.16	54.00	28.64	32.34	5.53	35.67	100	54	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2358.26	45.08	-28.92	74.00	42.96	32.30	5.49	35.67	127	54	Peak
2358.26	31.29	-22.71	54.00	29.17	32.30	5.49	35.67	127	54	Average

Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen		

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	58.49	-15.51	74.00	56.50	32.30	5.38	35.70	100	0	Peak
2483.50	47.86	-6.14	54.00	45.87	32.30	5.38	35.70	100	0	Average

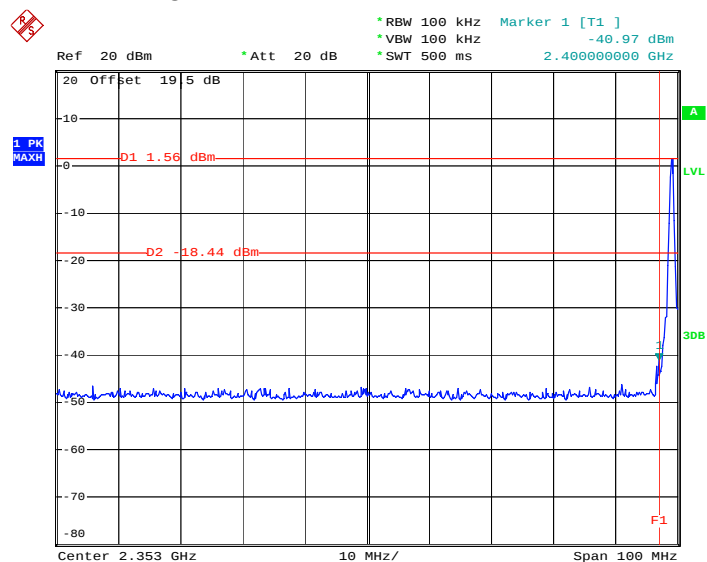
ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBuV/m)	Over Limit (dB)	Limit Line (dBuV/m)	Read Level (dBuV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.50	54.45	-19.55	74.00	52.46	32.30	5.38	35.70	100	55	Peak
2483.50	44.71	-9.29	54.00	42.72	32.30	5.38	35.70	100	55	Average



3.6.6 Test Result of Conducted Band Edges

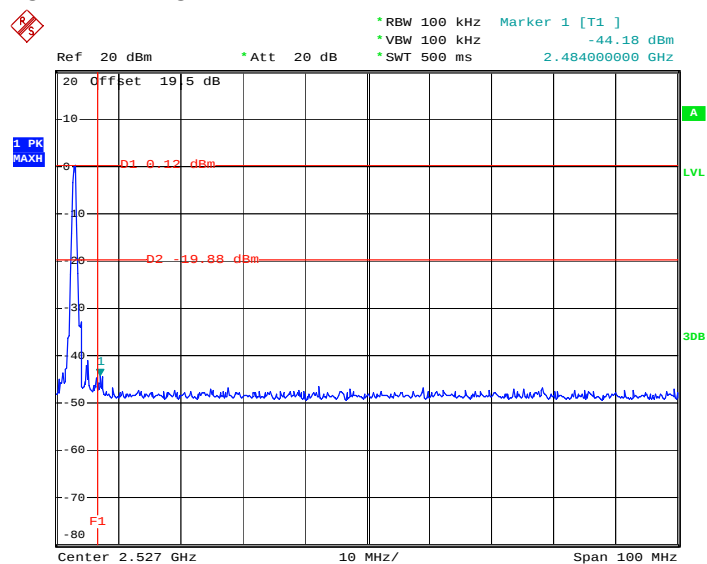
Test Mode :	Mode 1, 3	Temperature :	23~24
Test Channel :	00, 78	Relative Humidity :	44~45%
Test Engineer :	Ken Hsu		

Low Band Edge Plot on Channel 00



Date: 18.FEB.2009 09:24:46

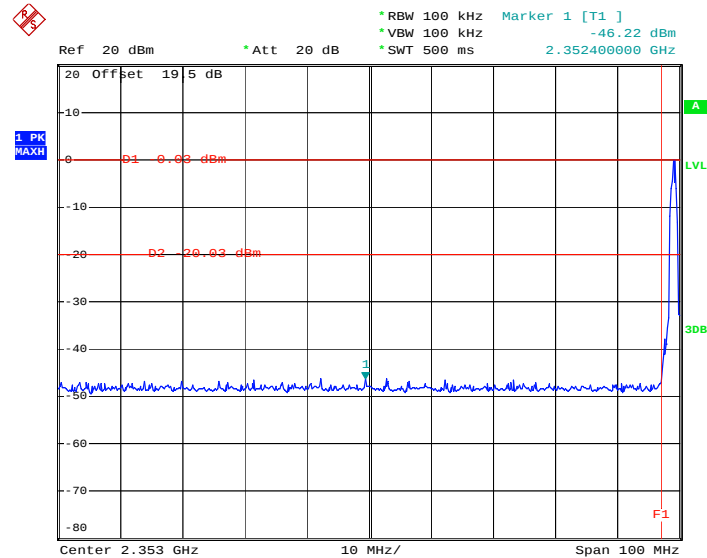
High Band Edge Plot on Channel 78



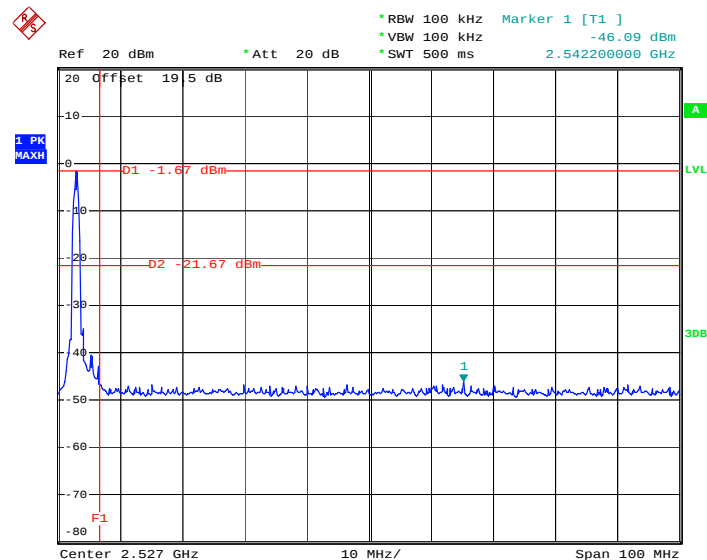
Date: 18.FEB.2009 09:30:18



Test Mode :	Mode 4, 6	Temperature :	23~24
Test Channel :	00, 78	Relative Humidity :	44~45%
Test Engineer :	Ken Hsu		

Low Band Edge Plot on Channel 00

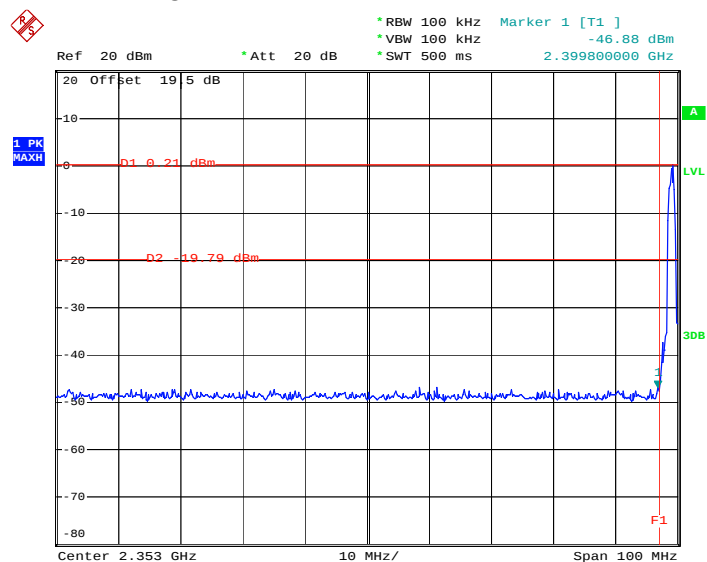
Date: 18.FEB.2009 09:25:59

High Band Edge Plot on Channel 78

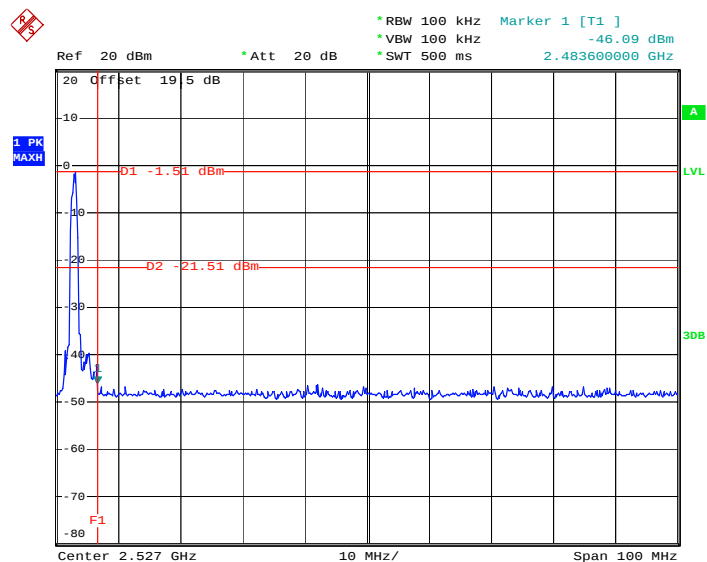
Date: 18.FEB.2009 09:29:17



Test Mode :	Mode 7, 9	Temperature :	23~24
Test Channel :	00, 78	Relative Humidity :	44~45%
Test Engineer :	Ken Hsu		

Low Band Edge Plot on Channel 00

Date: 18.FEB.2009 09:26:56

High Band Edge Plot on Channel 78

Date: 18.FEB.2009 09:28:09

3.7 AC Conducted Emission Measurement

3.7.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

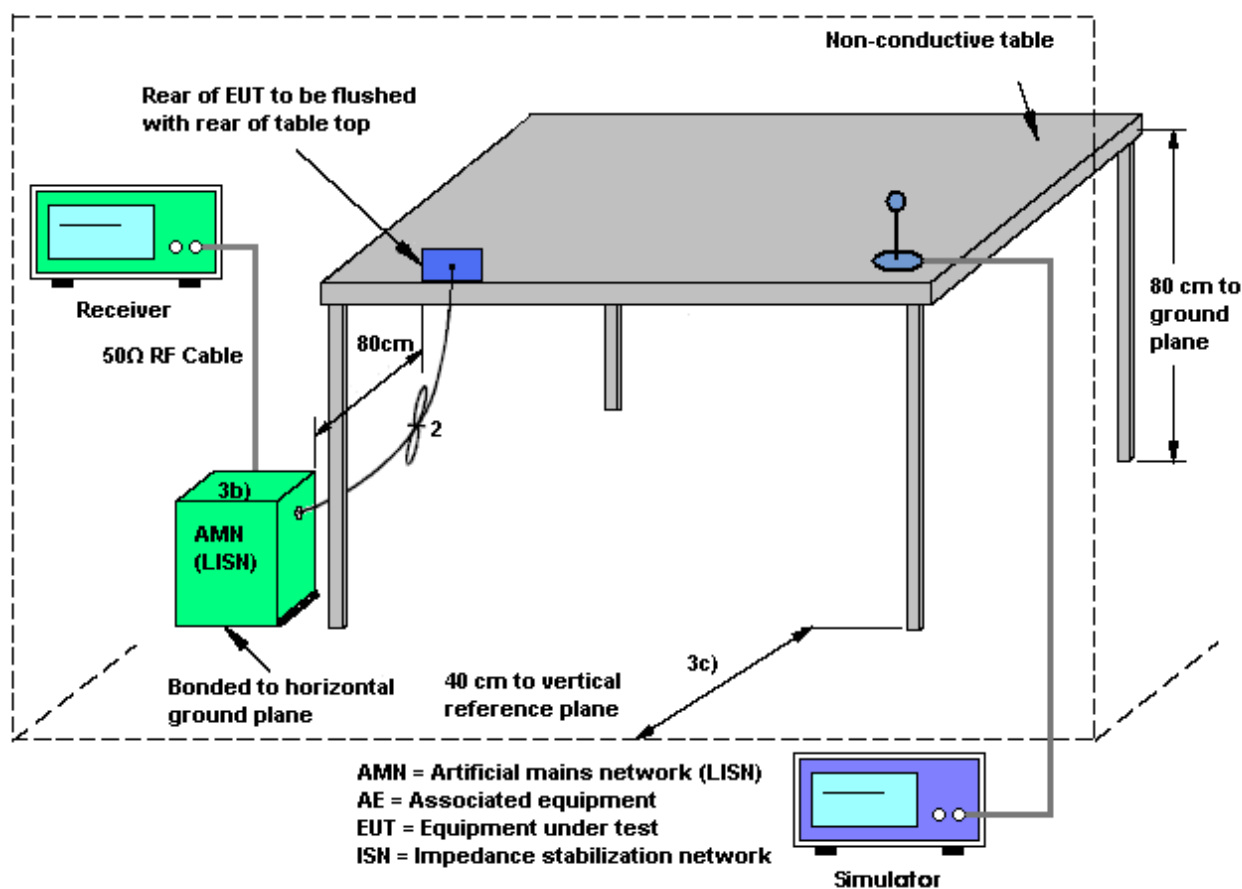
3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

3.7.3 Test Procedures

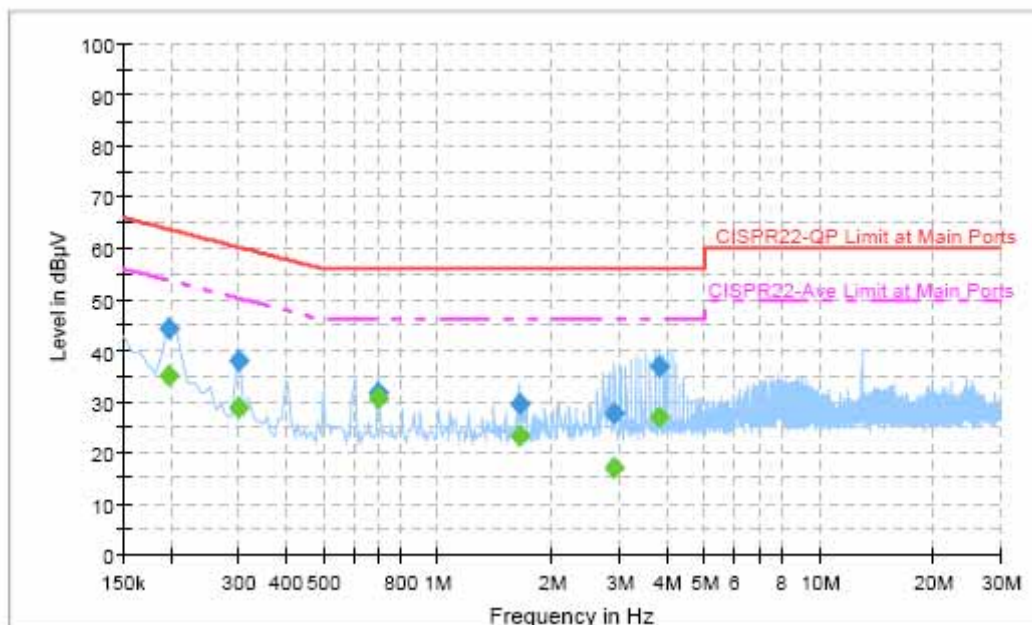
1. Please follow the guidelines in ANSI C63.4-2003.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 kHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

3.7.4 Test Setup



3.7.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	23~24
Test Engineer :	Cona Huang	Relative Humidity :	44~45%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Cradle + Adapter + USB Cable + Battery 1		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



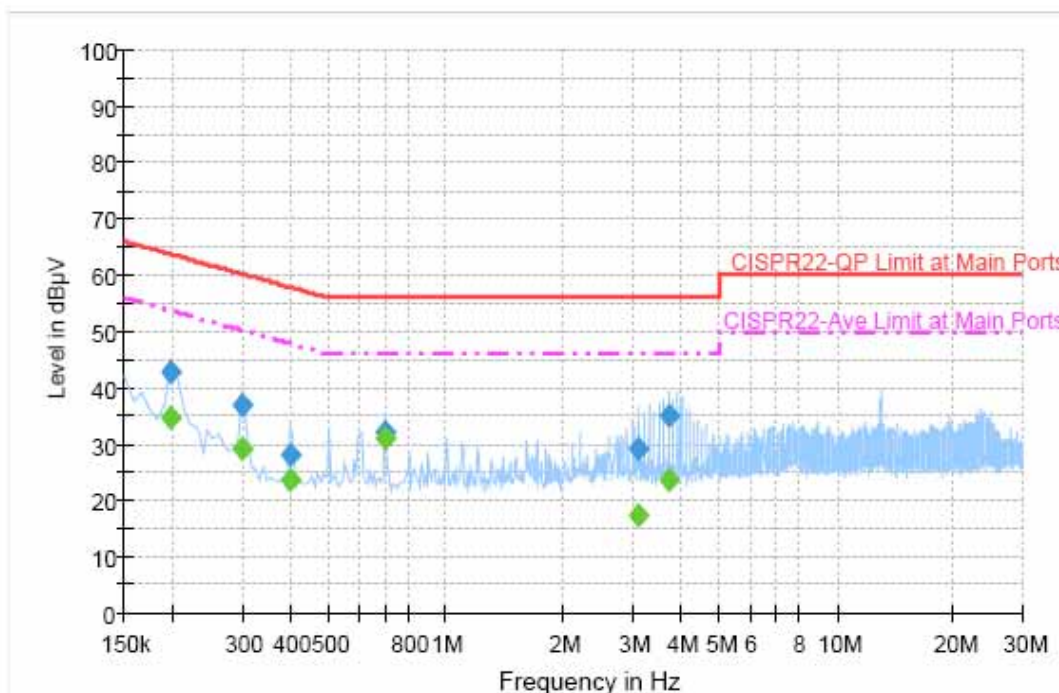
Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.198000	44.4	Off	L1	19.3	19.3	63.7
0.302000	37.8	Off	L1	19.3	22.4	60.2
0.702000	31.8	Off	L1	19.5	24.2	56.0
1.638000	29.5	Off	L1	19.4	26.5	56.0
2.918000	27.5	Off	L1	19.5	28.5	56.0
3.822000	36.9	Off	L1	19.5	19.1	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.198000	35.0	Off	L1	19.3	18.7	53.7
0.302000	28.7	Off	L1	19.3	21.5	50.2
0.702000	30.6	Off	L1	19.5	15.4	46.0
1.638000	23.3	Off	L1	19.4	22.7	46.0
2.918000	16.9	Off	L1	19.5	29.1	46.0
3.822000	26.9	Off	L1	19.5	19.1	46.0

Test Mode :	Mode 1	Temperature :	23~24
Test Engineer :	Cona Huang	Relative Humidity :	44~45%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Cradle + Adapter + USB Cable + Battery 1		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

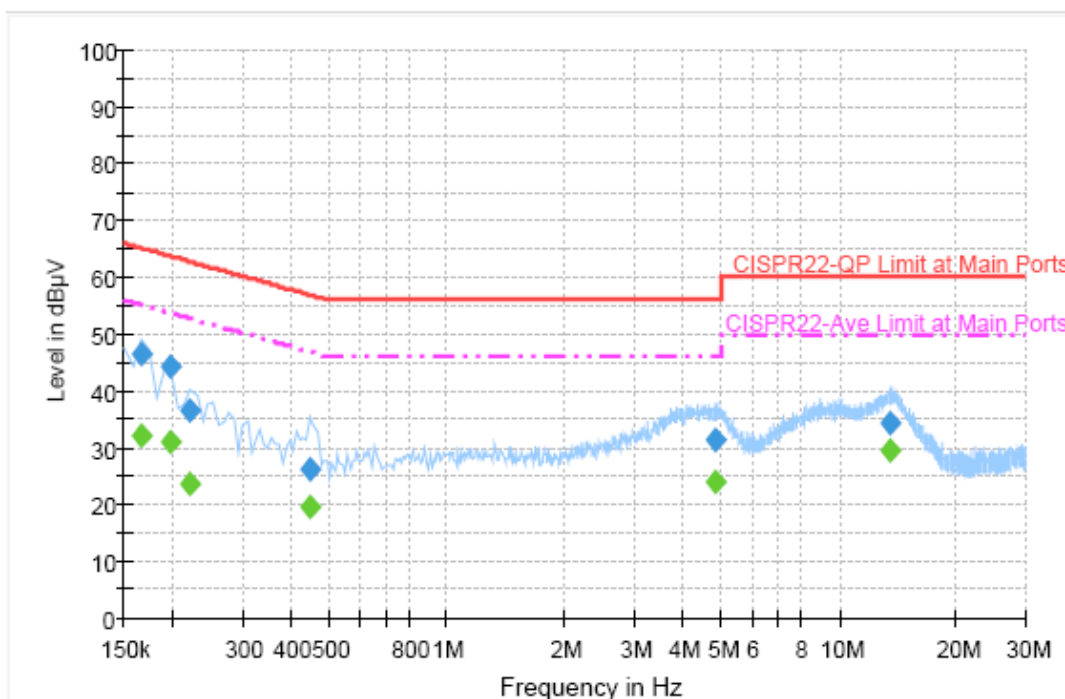

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.198000	43.0	Off	N	19.3	20.7	63.7
0.302000	37.0	Off	N	19.3	23.2	60.2
0.398000	28.1	Off	N	19.4	29.8	57.9
0.702000	32.3	Off	N	19.5	23.7	56.0
3.110000	29.2	Off	N	19.5	26.8	56.0
3.718000	35.1	Off	N	19.6	20.9	56.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.198000	34.9	Off	N	19.3	18.8	53.7
0.302000	29.2	Off	N	19.3	21.0	50.2
0.398000	23.5	Off	N	19.4	24.4	47.9
0.702000	31.0	Off	N	19.5	15.0	46.0
3.110000	17.2	Off	N	19.5	28.8	46.0
3.718000	23.5	Off	N	19.6	22.5	46.0

Test Mode :	Mode 2	Temperature :	23~24
Test Engineer :	Cona Huang	Relative Humidity :	44~45%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Earphone + USB Charging Cable with AC Power + Battery 1		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

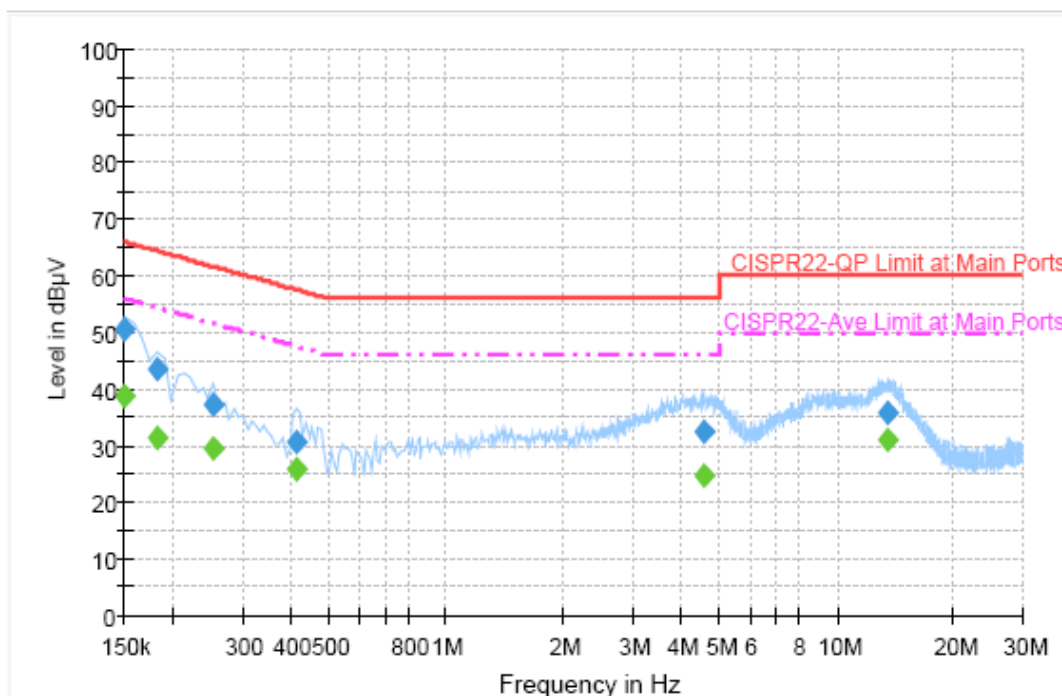

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.166000	46.6	Off	L1	19.3	18.6	65.2
0.198000	44.1	Off	L1	19.3	19.6	63.7
0.222000	36.4	Off	L1	19.3	26.3	62.7
0.446000	26.3	Off	L1	19.3	30.6	56.9
4.838000	31.3	Off	L1	19.5	24.7	56.0
13.438000	34.4	Off	L1	19.7	25.6	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.166000	32.2	Off	L1	19.3	23.0	55.2
0.198000	31.2	Off	L1	19.3	22.5	53.7
0.222000	23.7	Off	L1	19.3	29.0	52.7
0.446000	19.5	Off	L1	19.3	27.4	46.9
4.838000	24.1	Off	L1	19.5	21.9	46.0
13.438000	29.6	Off	L1	19.7	20.4	50.0

Test Mode :	Mode 2	Temperature :	23~24
Test Engineer :	Cona Huang	Relative Humidity :	44~45%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Earphone + USB Charging Cable with AC Power + Battery 1		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

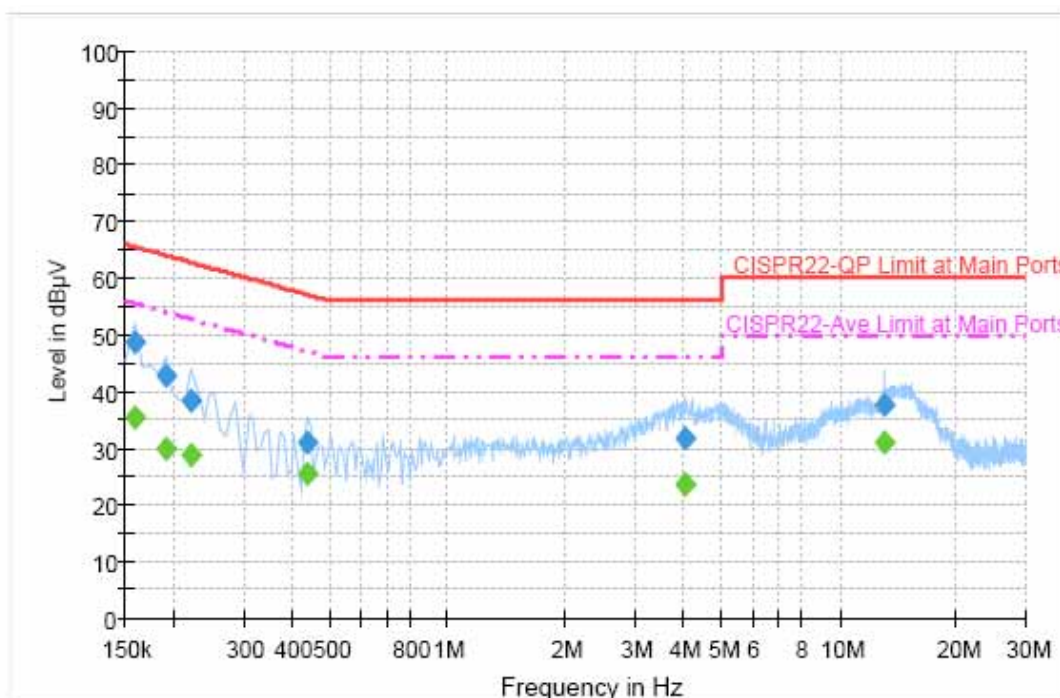

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	50.7	Off	N	19.4	15.3	66.0
0.182000	43.6	Off	N	19.4	20.8	64.4
0.254000	37.2	Off	N	19.4	24.4	61.6
0.414000	30.6	Off	N	19.4	27.0	57.6
4.574000	32.4	Off	N	19.6	23.6	56.0
13.454000	35.8	Off	N	19.8	24.2	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.150000	38.6	Off	N	19.4	17.4	56.0
0.182000	31.4	Off	N	19.4	23.0	54.4
0.254000	29.4	Off	N	19.4	22.2	51.6
0.414000	26.0	Off	N	19.4	21.6	47.6
4.574000	24.7	Off	N	19.6	21.3	46.0
13.454000	30.8	Off	N	19.8	19.2	50.0

Test Mode :	Mode 3	Temperature :	23~24
Test Engineer :	Cona Huang	Relative Humidity :	44~45%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Earphone + USB Charging Cable with AC Power + Battery 2		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		

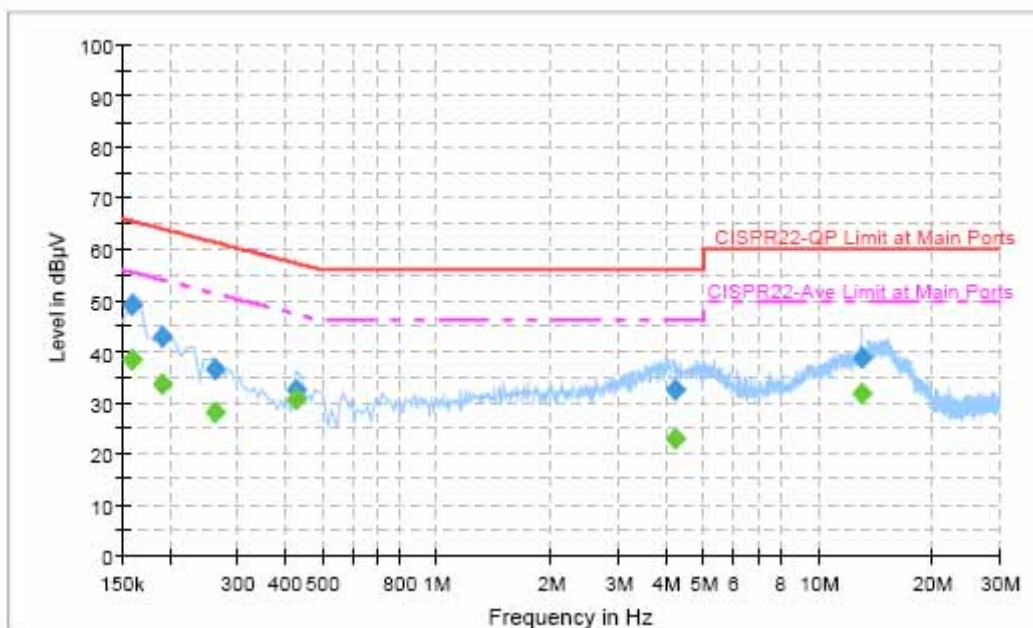

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	48.8	Off	L1	19.3	16.8	65.6
0.190000	42.7	Off	L1	19.4	21.3	64.0
0.222000	38.4	Off	L1	19.3	24.3	62.7
0.438000	31.1	Off	L1	19.4	26.0	57.1
4.038000	31.7	Off	L1	19.5	24.3	56.0
13.006000	37.5	Off	L1	19.7	22.5	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	35.5	Off	L1	19.3	20.1	55.6
0.190000	29.9	Off	L1	19.4	24.1	54.0
0.222000	28.9	Off	L1	19.3	23.8	52.7
0.438000	25.4	Off	L1	19.4	21.7	47.1
4.038000	23.8	Off	L1	19.5	22.2	46.0
13.006000	31.2	Off	L1	19.7	18.8	50.0

Test Mode :	Mode 3	Temperature :	23~24
Test Engineer :	Cona Huang	Relative Humidity :	44~45%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM 850 Idle + GPS Rx + BT Link + WLAN Link + Earphone + USB Charging Cable with AC Power + Battery 2		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		


Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	49.2	Off	N	19.4	16.4	65.6
0.190000	42.8	Off	N	19.4	21.2	64.0
0.262000	36.6	Off	N	19.4	24.8	61.4
0.430000	32.3	Off	N	19.4	25.0	57.3
4.222000	32.5	Off	N	19.5	23.5	56.0
13.006000	38.8	Off	N	19.7	21.2	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	38.5	Off	N	19.4	17.1	55.6
0.190000	33.5	Off	N	19.4	20.5	54.0
0.262000	28.2	Off	N	19.4	23.2	51.4
0.430000	30.5	Off	N	19.4	16.8	47.3
4.222000	22.9	Off	N	19.5	23.1	46.0
13.006000	31.7	Off	N	19.7	18.3	50.0

3.8 Radiated Emission Measurement

3.8.1 Limit of Radiated Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

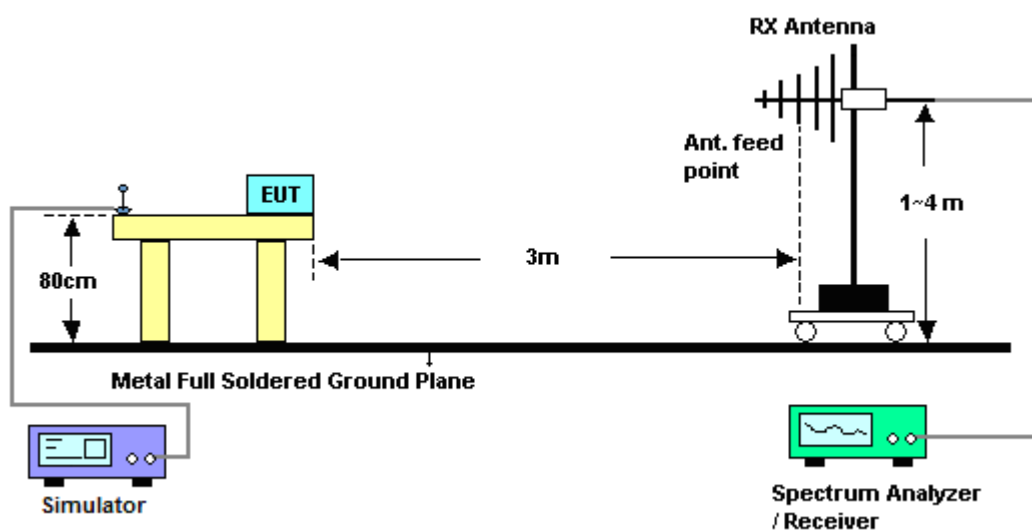
3.8.2 Measuring Instruments

See list of measuring instruments of this test report.

3.8.3 Test Procedures

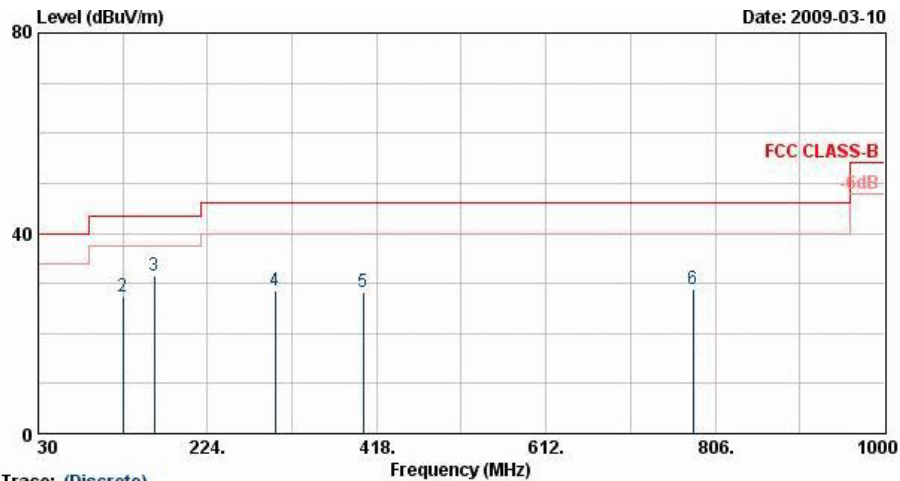
1. The testing follows the guidelines in FCC Public Notice DA 00-705 Measurement Guidelines.
2. Use the following spectrum analyzer settings:
Span = wide enough to fully capture the emission being measured; RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold.
3. Follow the guidelines in ANSI C63.4-2003 with respect to maximizing the emission by rotating the EUT, measuring the emission for three EUT orthogonal planes, and adjusting the measurement antenna height and polarization. A pre-amp and a high pass filter are used for this test in order to get the good signal level.

3.8.4 Test Setup



3.8.5 Test Result of Radiated Emission < 1GHz

Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	CH00_2402 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :			

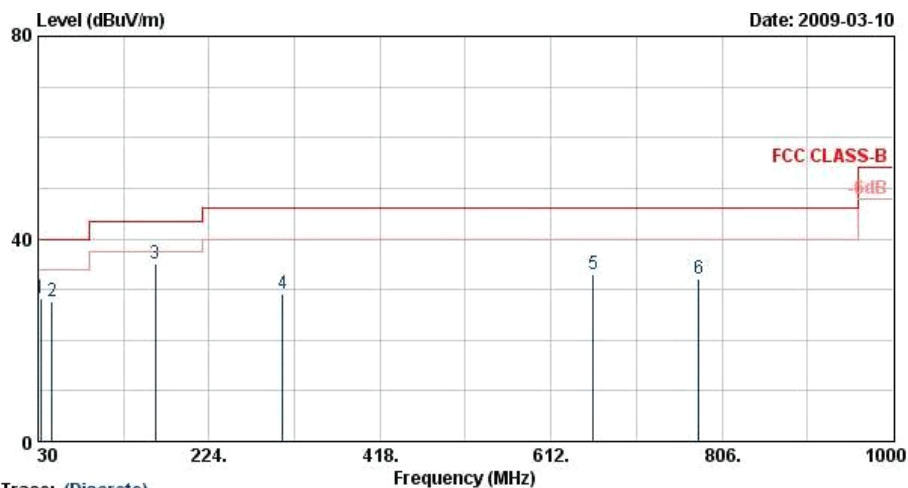


Site : 03CH07-HY
Condition : FCC CLASS-B 3m BILOG_0811118 HORIZONTAL
Project : FR 803106
Mode : Mode 1

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	30.00	23.90	-16.10	40.00	35.36	19.21	0.64	31.31	---	---	Peak
2	126.93	27.38	-16.12	43.50	45.06	12.33	1.36	31.37	---	---	Peak
3	163.38	31.64	-11.86	43.50	51.58	9.85	1.53	31.32	100	35	Peak
4	301.40	28.43	-17.57	46.00	44.58	13.11	2.14	31.41	---	---	Peak
5	402.20	28.11	-17.89	46.00	41.09	15.71	2.56	31.24	---	---	Peak
6	780.20	28.72	-17.28	46.00	35.77	19.92	3.79	30.76	---	---	Peak



Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	CH00_2402 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :			

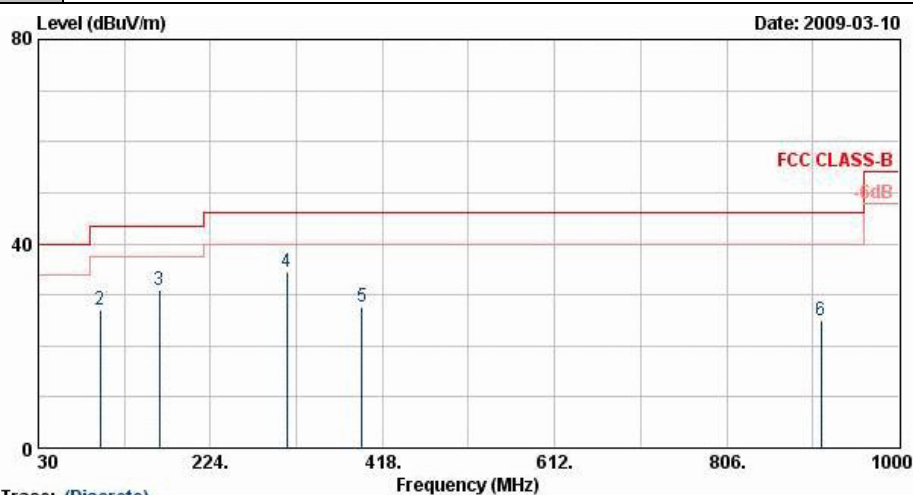


Site : 03CH07-HY
Condition : FCC CLASS-B 3m BILOG_081118 VERTICAL
Project : FR 803106
Mode : Mode 1

	Freq	Level	Over Limit	Limit Line	ReadAntenna Level Factor	Cable Loss	Preamp Factor	Ant Pos	Table Pos	Remark	
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	32.97	28.27	-11.73	40.00	41.71	17.12	0.66	31.23	---	---	Peak
2	45.93	27.73	-12.27	40.00	48.27	9.93	0.74	31.21	---	---	Peak
3	163.38	35.23	-8.27	43.50	55.17	9.85	1.53	31.32	100	99	Peak
4	307.70	29.21	-16.79	46.00	45.18	13.26	2.16	31.39	---	---	Peak
5	659.80	33.00	-13.00	46.00	41.47	18.99	3.44	30.90	---	---	Peak
6	779.50	32.08	-13.92	46.00	39.14	19.92	3.79	30.76	---	---	Peak



Test Mode :	Mode 2	Temperature :	23~25°C
Test Channel :	CH39_2441 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :			



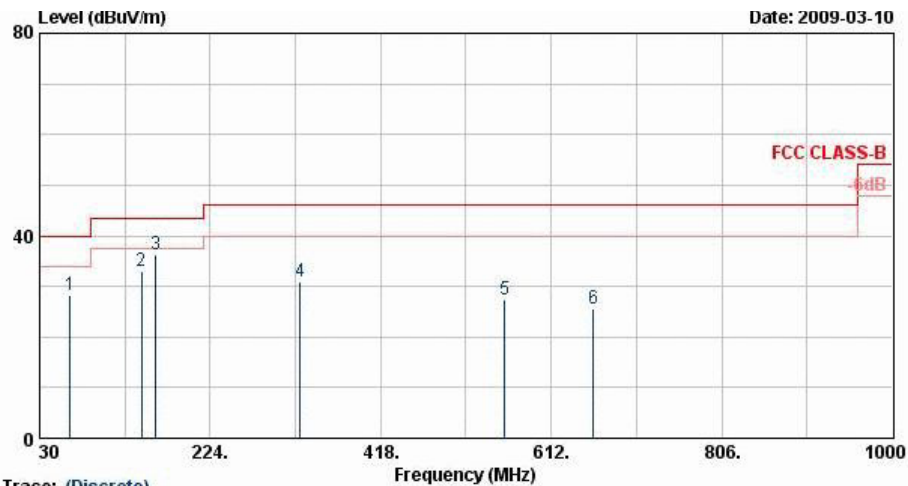
Trace: (Discrete)

Site : 03CH07-HY
Condition : FCC CLASS-B 3m BILOG_081118 HORIZONTAL
Project : FR8O3106
Mode : Mode 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB		cm	deg	
1	30.00	22.05	-17.95	40.00	33.51	19.21	0.64	31.31	---	Peak
2	99.66	27.03	-16.47	43.50	46.32	10.94	1.16	31.39	---	Peak
3	166.62	30.88	-12.62	43.50	50.94	9.72	1.54	31.32	---	Peak
4	309.80	34.51	-11.49	46.00	50.42	13.31	2.17	31.39	100	89 Peak
5	394.50	27.71	-18.29	46.00	40.90	15.53	2.53	31.25	---	Peak
6	912.50	24.88	-21.12	46.00	29.71	21.56	4.19	30.58	---	Peak



Test Mode :	Mode 2	Temperature :	23~25°C
Test Channel :	CH39_2441 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :			

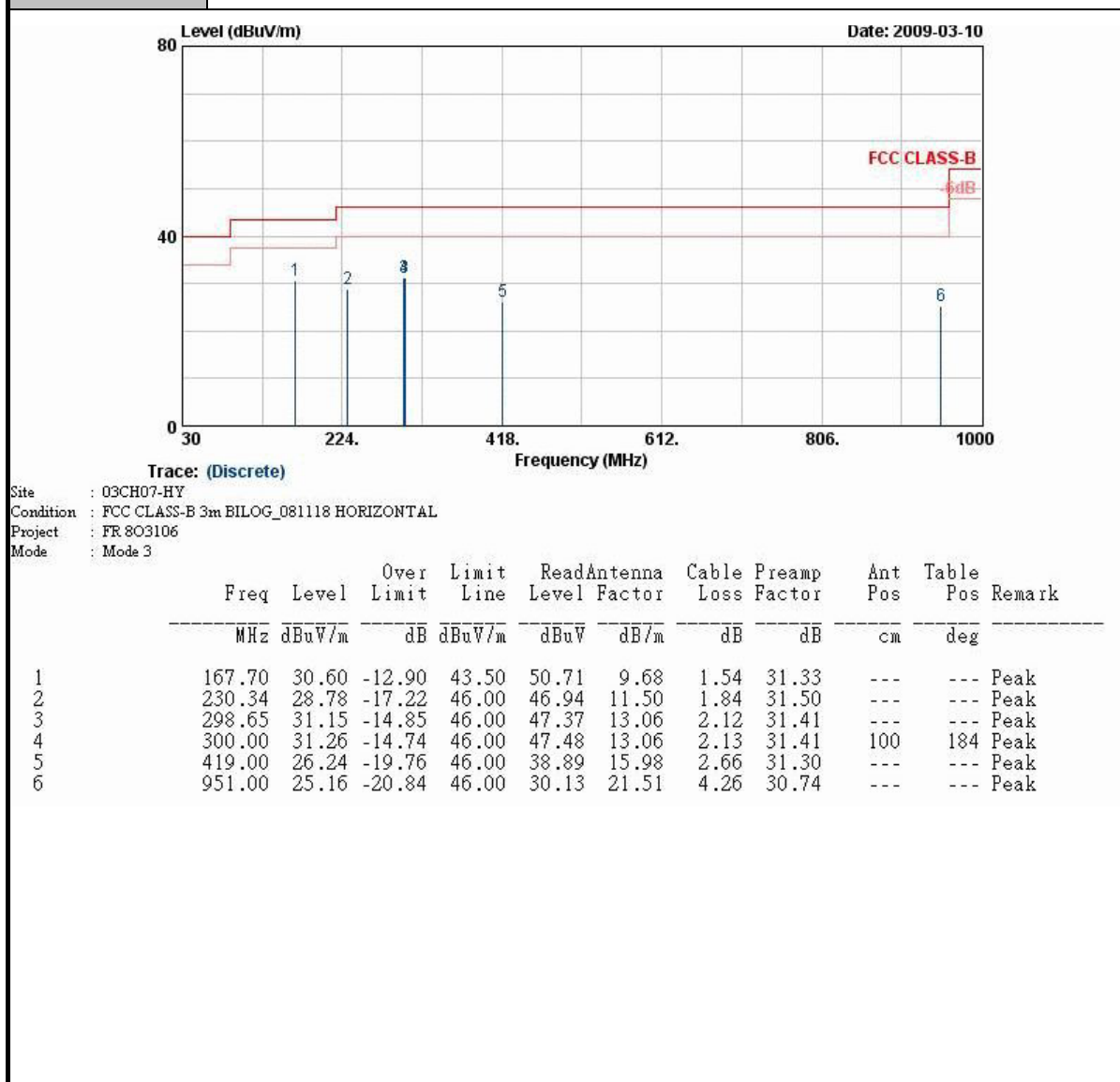


Site : 03CH07-HY
Condition : FCC CLASS-B 3m BILOG_081118 VERTICAL
Project : FR 8O3106
Mode : Mode 2

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	64.29	28.15	-11.85	40.00	52.33	6.28	0.93	31.39	---	--- Peak
2	146.10	33.14	-10.36	43.50	52.40	10.64	1.44	31.34	---	--- Peak
3	162.57	36.15	-7.35	43.50	56.04	9.90	1.52	31.32	100	75 Peak
4	326.60	30.92	-15.08	46.00	46.26	13.77	2.25	31.36	---	--- Peak
5	559.00	27.45	-18.55	46.00	37.19	18.17	3.12	31.02	---	--- Peak
6	659.80	25.71	-20.29	46.00	34.19	18.99	3.44	30.90	---	--- Peak

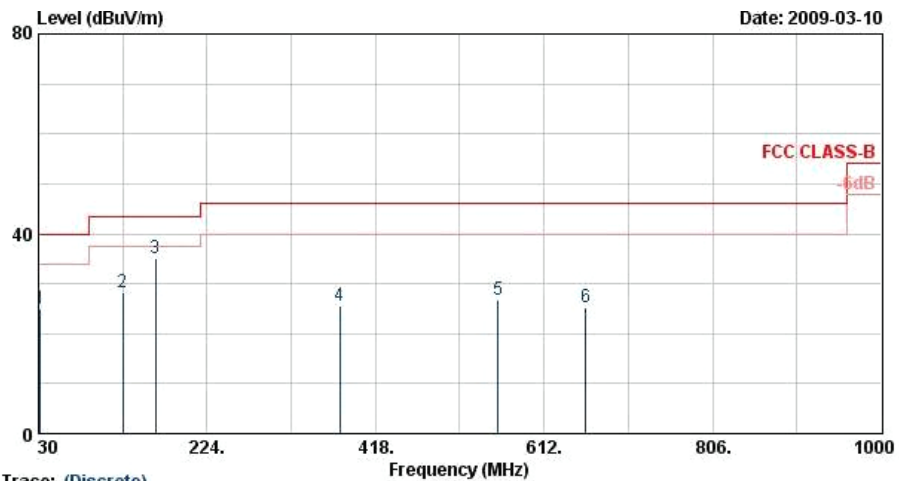


Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :			





Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :			

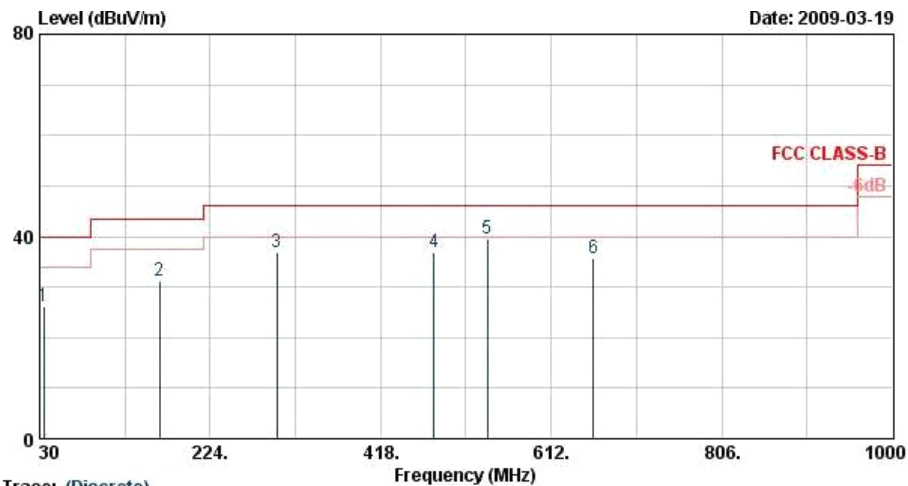


Site : 03CH07-HY
Condition : FCC CLASS-B 3m BILOG_081118 VERTICAL
Project : FR 803106
Mode : Mode 3

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	dB	dBuV/m	Level	Loss	Factor	Pos	Pos	Remark
					dBuV	dB/m	dB		deg	
1	31.89	25.01	-14.99	40.00	37.79	17.82	0.66	31.26	---	Peak
2	126.66	28.16	-15.34	43.50	45.85	12.33	1.36	31.37	---	Peak
3	164.73	35.21	-8.29	43.50	55.19	9.81	1.53	31.32	100	31 Peak
4	377.00	25.49	-20.51	46.00	39.25	15.08	2.48	31.32	---	Peak
5	559.00	26.85	-19.15	46.00	36.59	18.17	3.12	31.02	---	Peak
6	659.80	25.34	-20.66	46.00	33.82	18.99	3.44	30.90	---	Peak



Test Mode :	Mode 4	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :			



Site : 03CH07-HY
Condition : FCC CLASS-B 3m BILOG_081118 HORIZONTAL

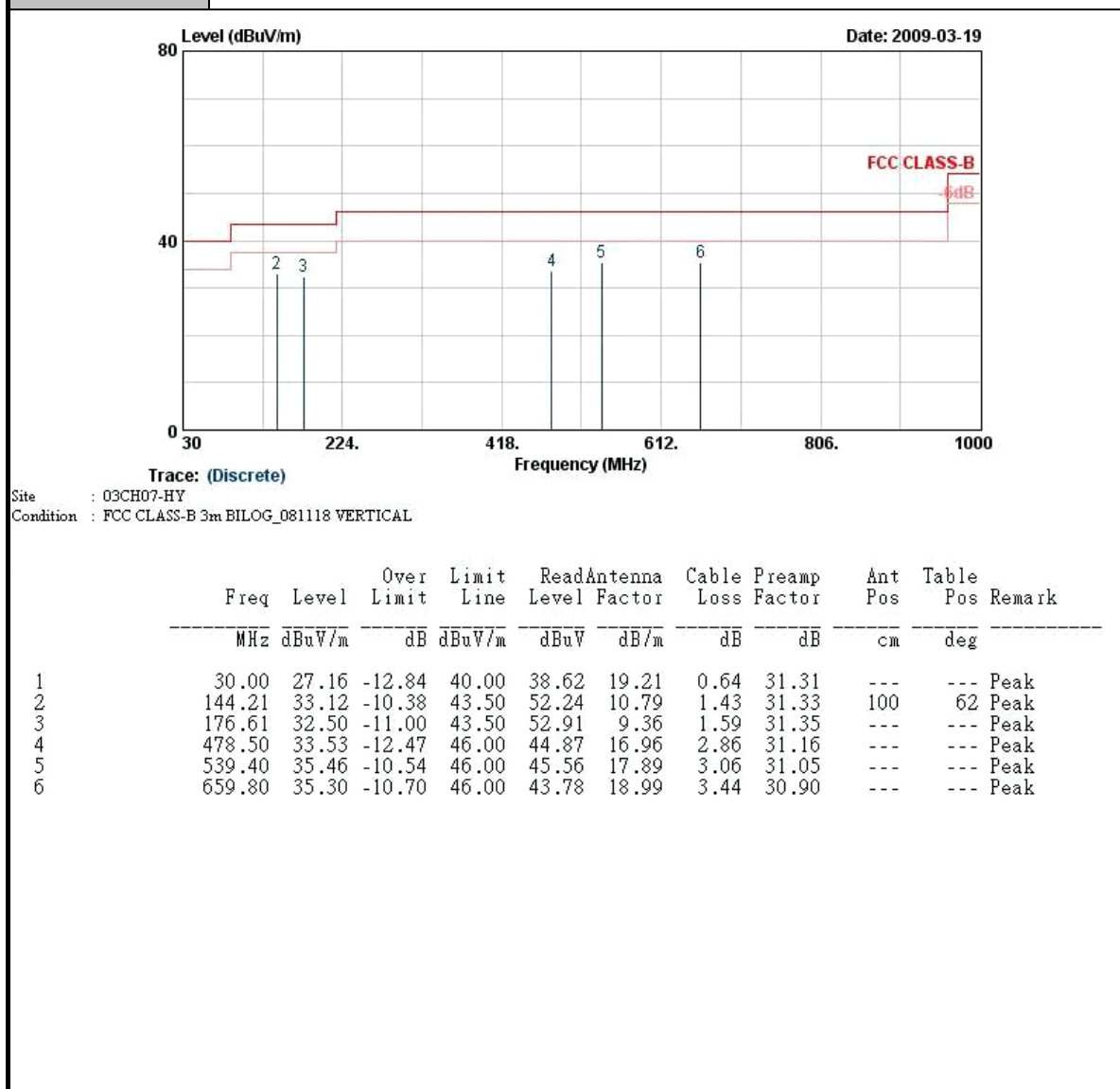
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	35.13	26.07	-13.93	40.00	40.84	15.73	0.68	31.18	---	---	Peak
2	166.62	31.08	-12.42	43.50	51.15	9.72	1.54	31.32	---	---	Peak
3	299.73	36.79	-9.21	46.00	53.01	13.06	2.13	31.41	---	---	Peak
4	478.50	37.01	-8.99	46.00	48.35	16.96	2.86	31.16	---	---	Peak
5	539.40	39.64	-6.36	46.00	49.74	17.89	3.06	31.05	100	81	Peak
6	659.80	35.72	-10.28	46.00	44.19	18.99	3.44	30.90	---	---	Peak



FCC Test Report

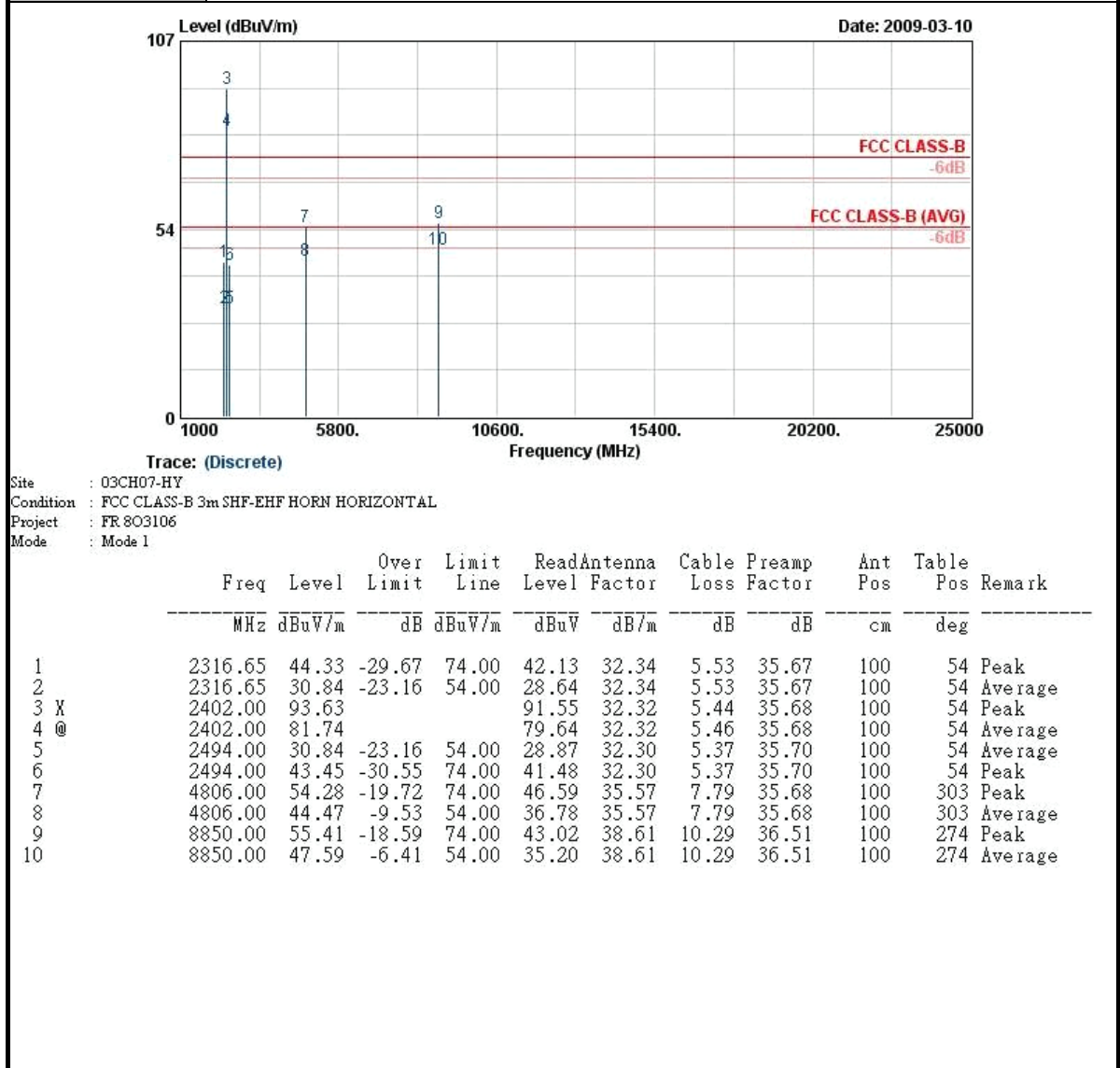
Report No. : FR8O3106B

Test Mode :	Mode 4	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :			



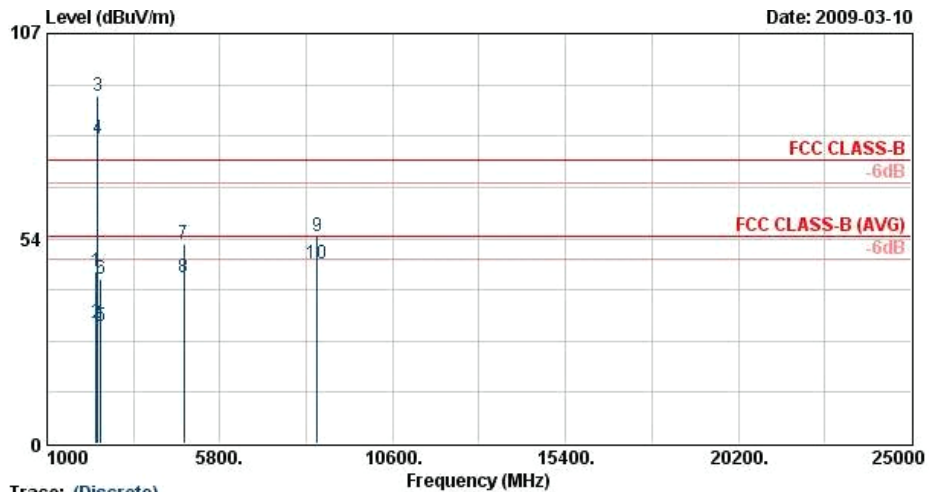
3.8.6 Test Result of Radiated Emission ≥ 1 GHz

Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	CH00_2402 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		





Test Mode :	Mode 1	Temperature :	23~25°C
Test Channel :	CH00_2402 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		

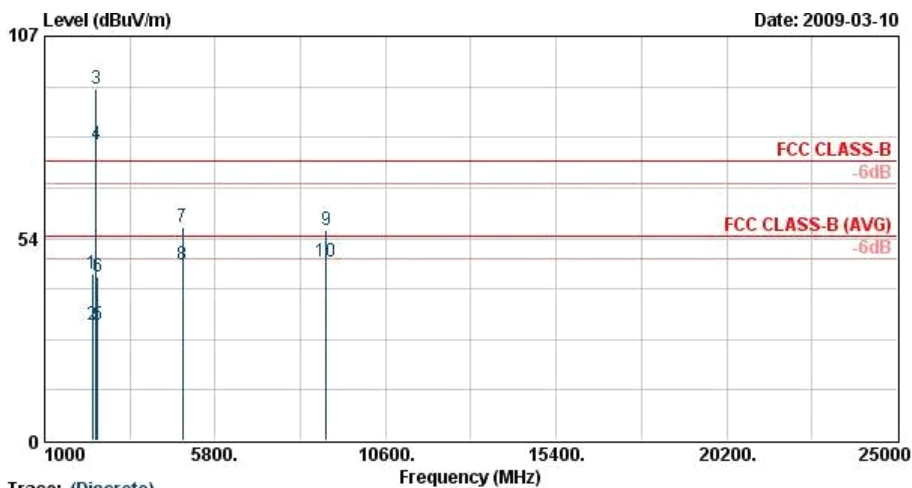


Site : 03CH07-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
Project : FR.8O3106
Mode : Mode 1

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2358.26	45.08	-28.92	74.00	42.96	32.30	5.49	35.67	127	54 Peak
2	2358.26	31.29	-22.71	54.00	29.17	32.30	5.49	35.67	127	54 Average
3 X	2402.00	90.67			88.61	32.30	5.44	35.68	127	54 Peak
4 @	2402.00	79.49			77.41	32.30	5.46	35.68	127	54 Average
5	2494.00	30.80	-23.20	54.00	28.83	32.30	5.37	35.70	127	54 Average
6	2494.00	42.79	-31.21	74.00	40.82	32.30	5.37	35.70	127	54 Peak
7	4806.00	52.12	-21.88	74.00	45.04	34.96	7.79	35.68	100	329 Peak
8	4806.00	43.23	-10.77	54.00	36.15	34.96	7.79	35.68	100	329 Average
9	8505.00	53.95	-20.05	74.00	42.77	37.30	10.18	36.30	100	11 Peak
10	8505.00	46.95	-7.05	54.00	35.77	37.30	10.18	36.30	100	11 Average



Test Mode :	Mode 2	Temperature :	23~25°C
Test Channel :	CH39_2441 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		



Site : 03CH07-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
Project : FR 803106
Mode : Mode 2

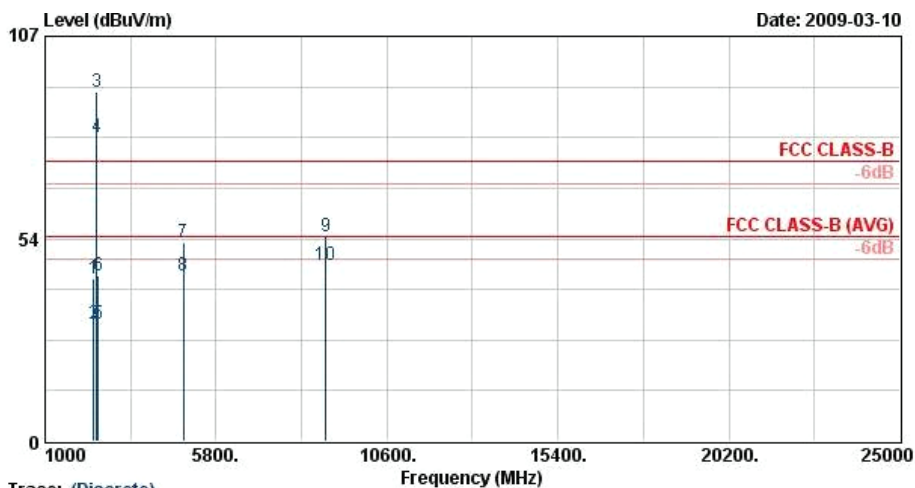
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	Remark
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2334.00	44.10	-29.90	74.00	41.92	32.33	5.51	35.67	101	49	Peak
2	2334.00	30.80	-23.20	54.00	28.62	32.33	5.51	35.67	101	49	Average
3 X	2441.00	92.89			90.85	32.31	5.41	35.69	101	49	Peak
4 X	2441.00	78.39			76.36	32.31	5.41	35.69	101	49	Average
5	2494.00	30.79	-23.21	54.00	28.82	32.30	5.37	35.70	101	49	Average
6	2494.00	43.38	-30.62	74.00	41.41	32.30	5.37	35.70	101	49	Peak
7	4881.00	56.53	-17.47	74.00	48.67	35.66	7.85	35.65	100	314	Peak
8	4881.00	46.49	-7.51	54.00	38.63	35.66	7.85	35.65	100	314	Average
9	8925.00	55.72	-18.28	74.00	43.31	38.65	10.31	36.56	100	7	Peak
10	8925.00	47.44	-6.56	54.00	35.03	38.65	10.31	36.56	100	7	Average



FCC Test Report

Report No. : FR8O3106B

Test Mode :	Mode 2	Temperature :	23~25°C
Test Channel :	CH39_2441 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		

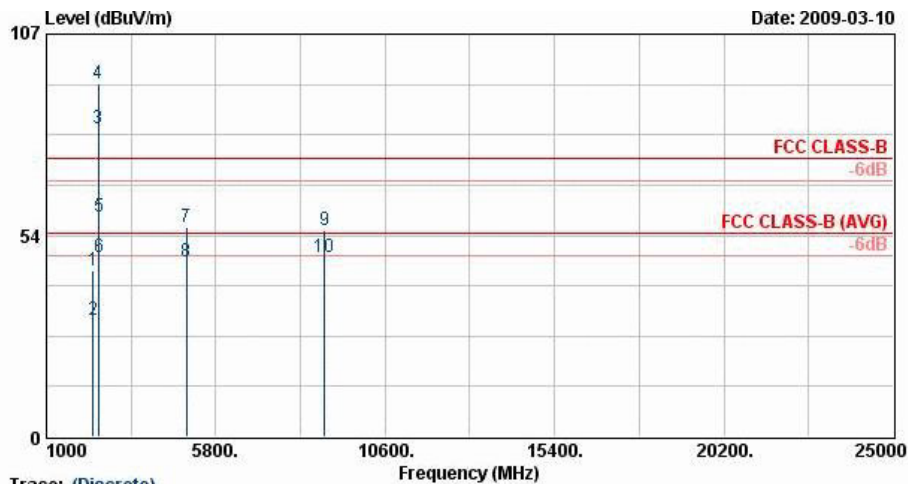


Site : 03CH07-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
Project : FR 8O3106
Mode : Mode 2

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2364.00	43.08	-30.92	74.00	40.97	32.30	5.49	35.67	100	54	Peak
2	2364.00	31.02	-22.98	54.00	28.90	32.30	5.49	35.67	100	54	Average
3 X	2441.00	92.44			90.41	32.30	5.41	35.69	100	54	Peak
4 @	2441.00	80.37			78.35	32.30	5.41	35.69	100	54	Average
5	2486.00	30.98	-23.02	54.00	28.99	32.30	5.38	35.70	100	54	Average
6	2486.00	43.60	-30.40	74.00	41.61	32.30	5.38	35.70	100	54	Peak
7	4881.00	52.66	-21.34	74.00	45.48	34.98	7.85	35.65	100	47	Peak
8	4881.00	43.75	-10.25	54.00	36.57	34.98	7.85	35.65	100	47	Average
9	8886.00	54.14	-19.86	74.00	42.83	37.53	10.30	36.53	100	101	Peak
10	8886.00	46.69	-7.31	54.00	35.38	37.53	10.30	36.53	100	101	Average



Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		



Site : 03CH07-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL
Project : FR 8O3106
Mode : Mode 3

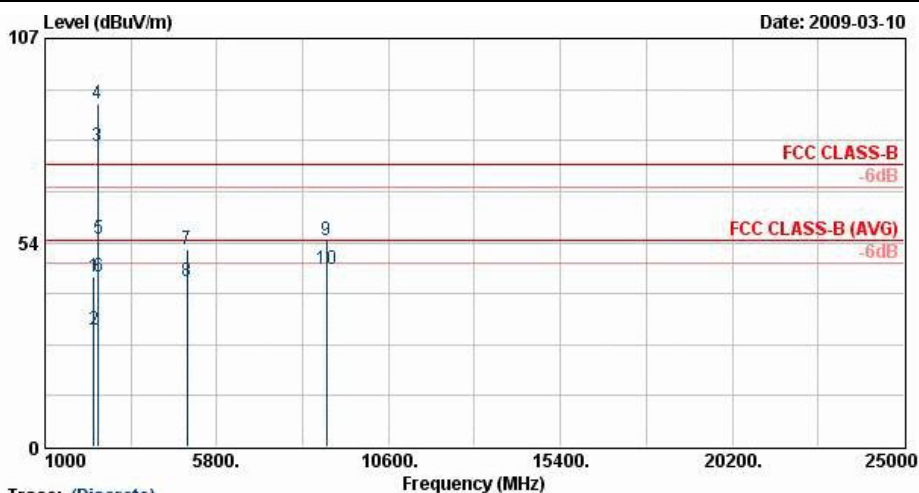
	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2332.00	44.01	-29.99	74.00	41.83	32.33	5.51	35.67	100	0	Peak
2	2332.00	30.97	-23.03	54.00	28.79	32.33	5.51	35.67	100	0	Average
3 @	2480.00	81.82			79.83	32.30	5.38	35.70	100	0	Average
4 X	2480.00	93.93			91.93	32.30	5.38	35.70	100	0	Peak
5	2483.50	58.49	-15.51	74.00	56.50	32.30	5.38	35.70	100	0	Peak
6	2483.50	47.86	-6.14	54.00	45.87	32.30	5.38	35.70	100	0	Average
7	4962.00	55.50	-18.50	74.00	47.44	35.76	7.92	35.62	100	292	Peak
8	4962.00	46.41	-7.59	54.00	38.35	35.76	7.92	35.62	100	292	Average
9	8874.00	54.81	-19.19	74.00	42.42	38.62	10.30	36.53	100	0	Peak
10	8874.00	47.63	-6.37	54.00	35.24	38.62	10.30	36.53	100	0	Average



FCC Test Report

Report No. : FR803106B

Test Mode :	Mode 3	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		



Trace: (Discrete)

Site : 03CH07-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN VERTICAL
Project : FR 803106
Mode : Mode 3

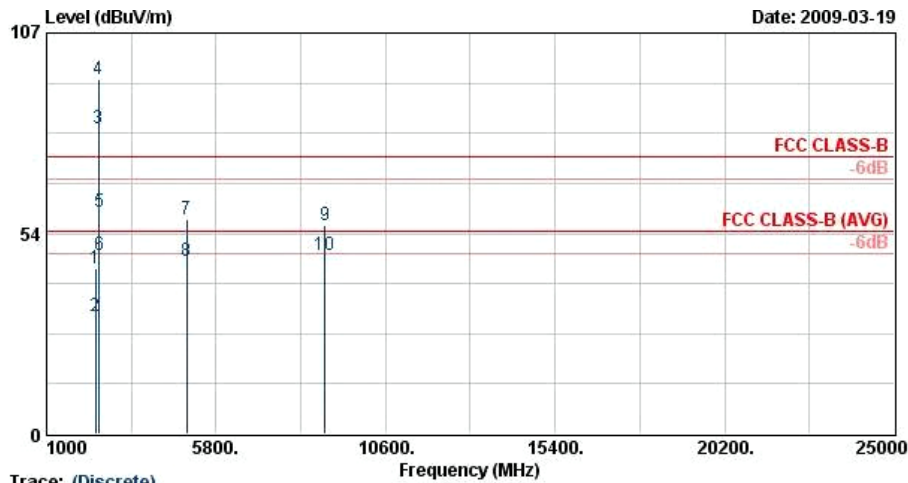
	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	2374.00	44.47	-29.53	74.00	42.37	32.30	5.47	35.68	100	55 Peak
2	2374.00	30.61	-23.39	54.00	28.51	32.30	5.47	35.68	100	55 Average
3 @	2480.00	78.82			76.83	32.30	5.38	35.70	100	55 Average
4 X	2480.00	89.88			87.89	32.30	5.38	35.70	100	55 Peak
5	2483.50	54.45	-19.55	74.00	52.46	32.30	5.38	35.70	100	55 Peak
6	2483.50	44.71	-9.29	54.00	42.72	32.30	5.38	35.70	100	55 Average
7	4962.00	51.81	-22.19	74.00	44.52	34.99	7.92	35.62	100	302 Peak
8	4962.00	43.40	-10.60	54.00	36.11	34.99	7.92	35.62	100	302 Average
9	8862.00	53.91	-20.09	74.00	42.61	37.51	10.29	36.51	100	146 Peak
10	8862.00	46.45	-7.55	54.00	35.16	37.51	10.29	36.51	100	146 Average



FCC Test Report

Report No. : FR8O3106B

Test Mode :	Mode 4	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Horizontal
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		

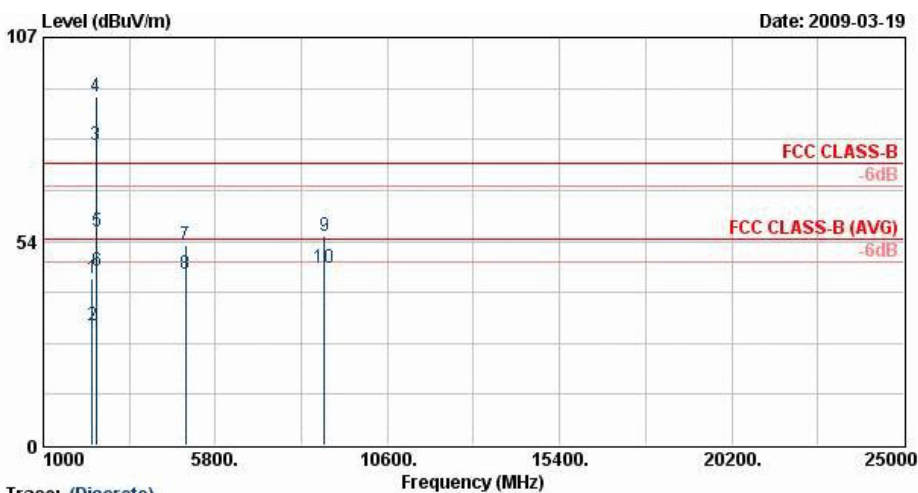


Site : 03CH07-HY
Condition : FCC CLASS-B 3m SHF-EHF HORN HORIZONTAL

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2380.00	43.96	-30.04	74.00	41.84	32.32	5.47	35.68	101	1	Peak
2	2380.00	31.23	-22.77	54.00	29.11	32.32	5.47	35.68	101	1	Average
3 @	2480.00	81.40			79.41	32.30	5.38	35.70	101	1	Average
4 X	2480.00	94.86			92.86	32.30	5.38	35.70	101	1	Peak
5	2483.50	59.43	-14.57	74.00	57.44	32.30	5.38	35.70	101	1	Peak
6	2483.50	47.93	-6.07	54.00	45.94	32.30	5.38	35.70	101	1	Average
7	4962.00	57.08	-16.92	74.00	49.02	35.76	7.92	35.62	100	292	Peak
8	4962.00	46.19	-7.81	54.00	38.13	35.76	7.92	35.62	100	292	Average
9	8874.00	55.72	-18.28	74.00	43.33	38.62	10.30	36.53	100	212	Peak
10	8874.00	47.72	-6.28	54.00	35.33	38.62	10.30	36.53	100	212	Average



Test Mode :	Mode 4	Temperature :	23~25°C
Test Channel :	CH78_2480 MHz	Relative Humidity :	41~43%
Test Engineer :	Elvis Chen	Polarization :	Vertical
Remark :	#3 and #4 are Fundamental Signals which can be ignored.		



	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	Ant	Table	
	MHz	dBuV/m	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Remark
			dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	2366.00	43.84	-30.16	74.00	41.72	32.30	5.49	35.68	102	63	Peak
2	2366.00	31.25	-22.75	54.00	29.14	32.30	5.49	35.68	102	63	Average
3 @	2480.00	78.93			76.94	32.30	5.38	35.70	102	63	Average
4 X	2480.00	91.39			89.40	32.30	5.38	35.70	102	63	Peak
5	2483.50	55.97	-18.03	74.00	53.98	32.30	5.38	35.70	102	63	Peak
6	2483.50	45.91	-8.09	54.00	43.92	32.30	5.38	35.70	102	63	Average
7	4962.00	52.49	-21.51	74.00	45.19	34.99	7.92	35.62	100	298	Peak
8	4962.00	45.12	-8.88	54.00	37.83	34.99	7.92	35.62	100	298	Average
9	8838.00	54.92	-19.08	74.00	43.63	37.50	10.29	36.50	100	91	Peak
10	8838.00	46.65	-7.35	54.00	35.36	37.50	10.29	36.50	100	91	Average

3.9 Antenna Requirements

3.9.1 Standard Applicable

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi.

The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

3.9.2 Antenna Connected Construction

The antennas type used in this product is Chip Antenna without connector and it is considered to meet antenna requirement.

3.9.3 Antenna Gain

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.

4 List of Measuring Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 26, 2008	Jun. 25, 2009	Conducted (TH02-HY)
Power Meter	Agilent	E4416A	GB41292344	N/A	Feb. 19, 2009	Feb. 18, 2010	Conducted (TH02-HY)
Power Sensor	Agilent	E9327A	US40441548	N/A	Feb. 19, 2009	Feb. 18, 2010	Conducted (TH02-HY)
System Simulator	R&S	CMU200	117591	N/A	Oct. 23, 2008	Oct. 22, 2009	Radiation (03CH07-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2726	30MHz~1GHz	Nov. 20, 2008	Nov. 19, 2009	Radiation (03CH07-HY)
Spectrum Analyzer	R&S	FSP	101067	9kHz~30GHz	Dec. 02, 2008	Dec. 01, 2009	Radiation (03CH07-HY)
BT Base Station	Anritsu	MT8852B	6K00005722	N/A	Oct. 23, 2007	Oct. 22, 2009	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15G - 40GHz	Oct. 16, 2008	Oct. 15, 2009	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	75962	1G~18GHz	Aug. 13, 2008	Aug. 12, 2009	Radiation (03CH07-HY)
Pre Amplifier	Agilent	8449B	3008A02362	1G~26.5GHz	Dec. 17, 2008	Dec. 16, 2009	Radiation (03CH07-HY)
Pre Amplifier	COM-POWER	PA-103A	161241	10~1000MHz. 32dB.GAIN	Mar. 27, 2009	Mar. 26, 2010	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	66584	1G~18GHz	Aug. 06, 2008	Aug. 05, 2009	Radiation (03CH07-HY)
EMI Receiver	R&S	ESCS 30	100356	9kHz~2.75GHz	Aug. 01, 2008	Jul. 31, 2009	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100081	9kHz~30MHz	Nov. 26, 2008	Nov. 25, 2009	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100080	9kHz~30MHz	Nov. 26, 2008	Nov. 25, 2009	Conduction (CO05-HY)
AC Power Source	APC	APC-1000W	N/A	N/A	N/A	N/A	Conduction (CO05-HY)

5 Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.10	Normal(k=2)	0.05
Cable loss	0.10	Normal(k=2)	0.05
AMN insertion loss	2.50	Rectangular	0.63
Receiver Spec	1.50	Rectangular	0.43
Site imperfection	1.39	Rectangular	0.80
Mismatch	+0.34/-0.35	U-shape	0.24
Combined standard uncertainty Uc(y)	1.13		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.26		

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of x_i		$u(x_i)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
Combined standard uncertainty Uc(y)	1.27		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	2.54		

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of x_i		$u(x_i)$	C_i	$C_i * u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20 \log(1 - \Gamma_1 * \Gamma_2)$	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty $U_c(y)$	2.36				
Measuring uncertainty for a level of confidence of 95% $U = 2U_c(y)$	4.72				

6 Certification of TAF Accreditation



Certificate No. : L1190-081212

財團法人全國認證基金會
Taiwan Accreditation Foundation

Certificate of Accreditation

This is to certify that

Sporton International Inc.
EMC & Wireless Communications Laboratory
No.52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien,
Taiwan, R.O.C.

is accredited in respect of laboratory

Accreditation Criteria	: ISO/IEC 17025:2005
Accreditation Number	: 1190
Originally Accredited	: December 15, 2003
Effective Period	: January 10, 2007 to January 09, 2010
Accredited Scope	: Testing Field, see described in the Appendix
Specific Accreditation Program	: Accreditation Program for Designated Testing Laboratory for Commodities Inspection Accreditation Program for Telecommunication Equipment Testing Laboratory Accreditation Program for BSMI Mutual Recognition Arrangement with Foreign Authorities



Jay-San Chen
President, Taiwan Accreditation Foundation
Date : December 12, 2008

P1, total 18 pages

The Appendix forms an integral part of this Certificate, which shall be invalid when use without the Appendix



Appendix A. Photographs of EUT

Please refer to Sporton report number EP8O3106 as below.