



Partial FCC RF Test Report

APPLICANT : Getac Technology Corporation
EQUIPMENT : Notebook PC
BRAND NAME : Getac
MODEL NAME : E100
FCC ID : QYLEA01
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : Digital Transmission System (DTS)

This is a partial report which is only valid combined with the Integrated WLAN Module (Brand name: Intel / Model name: 622ANHMW, FCC ID: PD9622ANH) Report.

The product was received on May 03, 2010 and completely tested on May 30, 2010. 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 the 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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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR050315-01B	Rev. 01	Initial issue of report	Jun. 15, 2010



SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(d)	A8.5	Frequency Band Edges	$\leq 20\text{dBc}$	Pass	-
3.2	15.207	Gen 7.2.2	AC Conducted Emission	15.207(a)	Pass	Under limit 15.8 dB at 13.502 MHz
3.3	15.247(d)	A8.5	Transmitter Radiated Emission	15.209(a) & 15.247(d)	Pass	Under limit 4.65 dB at 5725.00 MHz
3.4	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-



1 General Description

1.1 Applicant

Getac Technology Corporation

5F., Building A, No. 209, Sec.1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.

1.2 Manufacturer

GeTAC Technology (Kunshan) Co., LTD.

No. 269, 2nd Road, Export Processing Zone, Changjiang South Road, Kunshan, Jiangsu, P.R.C.



1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Notebook PC
Brand Name	Getac
Model Name	E100
FCC ID	QYLEA01
Tx/Rx Frequency Range	802.11b/g/n : 2400 MHz ~ 2483.5 MHz 802.11a/n : 5725 MHz ~ 5850 MHz
Channel Spacing	802.11b/g : 5 MHz 802.11a : 20 MHz
Maximum Output Power to Antenna	<2400 MHz ~ 2483.5 MHz> 802.11b : 16.64 dBm (46.13 mW) 802.11g : 16.61 dBm (45.81 mW) 802.11n (BW 20MHz) : 16.62 dBm (45.92 mW) 802.11n (BW 40MHz) : 16.51 dBm (44.77 mW) <5725 MHz ~ 5850 MHz> 802.11a : 16.82 dBm (48.08 mW) 802.11n (BW 20MHz) : 16.80 dBm (47.86 mW) 802.11n (BW 40MHz) : 16.77 dBm (47.53 mW)
Antenna Type	802.11b/g/n : PIFA Antenna with gain 0.35 dBi 802.11a/n : PIFA Antenna with gain 3.17 dBi
Type of Modulation	802.11b : DSSS (BPSK / QPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)
EUT Stage	Identical Prototype

Remark:

1. For other wireless features of this EUT, test report will be issued separately.
2. This test report recorded only product characteristics and test results of Digital Transmission System (DTS).
3. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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	03CH07HY	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 KDB Publication No. 558074 (Measurement Guidelines of DTS)
- ♦ 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

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	T&E	GS-50	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
4.	Notebook	DELL	Vostro 1510	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Bluetooth Earphone	Nokia	BH-102	PYAHS-107W	N/A	N/A
6.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A
7.	Modem	ACEEX	DM1414	IFAXDM1414	Shielded, 1.15 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 power output in the following table:

Channel	Frequency	802.11b RF Power (dBm)	
		Data Rate: 1Mbps	
		Chain A	Chain B
CH 01	2412 MHz	16.44	16.64
CH 06	2437 MHz	16.35	16.56
CH 11	2462 MHz	16.11	16.04

Channel	Frequency	802.11g RF Power (dBm)	
		Data Rate: 6Mbps	
		Chain A	Chain B
CH 01	2412 MHz	16.58	16.56
CH 06	2437 MHz	16.47	16.61
CH 11	2462 MHz	16.08	16.21

Channel	Frequency	802.11n (BW 20MHz) RF Power (dBm)		
		Data Rate: HT0		Data Rate: HT8
		SISO		2Tx
		Chain A	Chain B	Chain A+B
CH 01	2412 MHz	16.46	16.43	16.30
CH 06	2437 MHz	16.38	16.62	16.26
CH 11	2462 MHz	16.15	16.14	16.41

Channel	Frequency	802.11n (BW 40MHz) RF Power (dBm)		
		Data Rate: HT0		Data Rate: HT8
		SISO		2Tx
		Chain A	Chain B	Chain A+B
CH 03	2422 MHz	16.46	16.20	16.42
CH 06	2437 MHz	16.20	16.12	16.40
CH 09	2452 MHz	16.22	15.90	16.51



Channel	Frequency	802.11a RF Power (dBm)	
		Data Rate: 6Mbps	
		Chain A	Chain B
CH149	5745 MHz	16.60	16.61
CH157	5785 MHz	16.80	16.82
CH165	5825 MHz	16.36	16.70

Channel	Frequency	802.11n (BW 20MHz) RF Power (dBm)		
		Data Rate: HT0		Data Rate: HT8
		SISO		2Tx
		Chain A	Chain B	Chain A+B
CH149	5745 MHz	16.45	16.40	16.80
CH157	5785 MHz	16.32	16.63	16.71
CH165	5825 MHz	16.49	16.54	16.60

Channel	Frequency	802.11n (BW 40MHz) RF Power (dBm)		
		Data Rate: HT0		Data Rate: HT8
		SISO		2Tx
		Chain A	Chain B	Chain A+B
CH 151	5755 MHz	16.58	16.77	16.46
CH 159	5795 MHz	16.33	16.74	16.75

Remark:

1. The EUT is programmed to transmit signals continuously for all testing.
2. SISO stands for single input and single output. It means that only one chain transmits signals at a time.
3. 2Tx is one type of MIMO, which means that two chains transmit signals at the same time.



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: conducted emission (150 kHz to 30 MHz), radiated emission (30 MHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

Pre-scanned tests, X, Y, Z in three orthogonal panels, were conducted to determine the final configuration from all possible combinations, tablet modes.

The following table is showing the total pre-scanned test modes, and the worst modes are recorded in this report only.

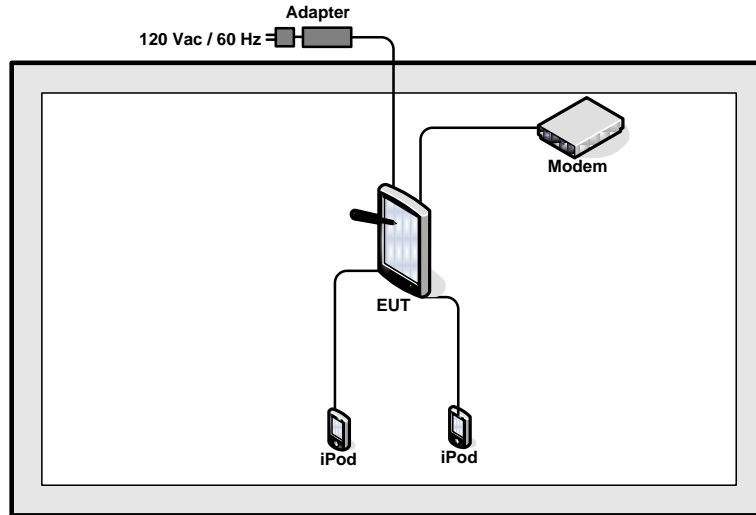
Test Cases	
Test Item	802.11b (Modulation : DSSS)
	802.11g/n (Modulation : OFDM)
	802.11a/n (Modulation : OFDM)
Radiated TCs	Mode 1: 802.11b_CH01_2412 MHz
	Mode 2: 802.11b_CH06_2437 MHz
	Mode 3: 802.11b_CH11_2462 MHz
	Mode 4: 802.11g_CH01_2412 MHz
	Mode 5: 802.11g_CH06_2437 MHz
	Mode 6: 802.11g_CH11_2462 MHz
	Mode 7: 802.11n_CH01_2412 MHz (BW 20M)
	Mode 8: 802.11n_CH06_2437 MHz (BW 20M)
	Mode 9: 802.11n_CH11_2462 MHz (BW 20M)
	Mode 10: 802.11n_CH03_2422 MHz (BW 40M)
	Mode 11: 802.11n_CH06_2437 MHz (BW 40M)
	Mode 12: 802.11n_CH09_2452 MHz (BW 40M)
	Mode 13: 802.11a_CH149_5745 MHz
	Mode 14: 802.11a_CH157_5785 MHz
	Mode 15: 802.11a_CH165_5825 MHz
	Mode 16: 802.11n_CH149_5745 MHz (BW 20M)
	Mode 17: 802.11n_CH157_5785 MHz (BW 20M)
	Mode 18: 802.11n_CH165_5825 MHz (BW 20M)
	Mode 19: 802.11n_CH151_5755 MHz (BW 40M)
	Mode 20: 802.11n_CH159_5795 MHz (BW 40M)



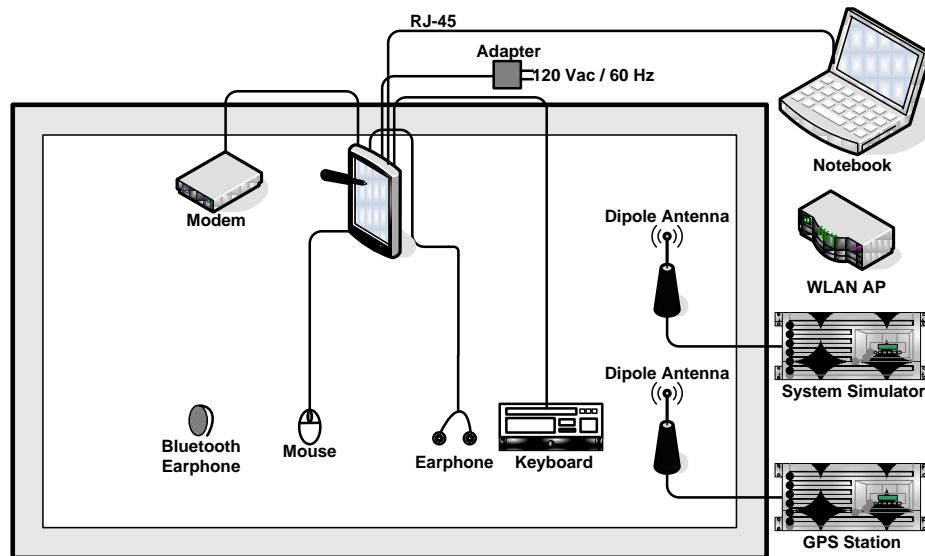
AC Conducted Emission	Mode 1 : GSM850 Idle + WLAN Link + Bluetooth Link + TC + Adapter
Remark: <ol style="list-style-type: none">1. TC stands for Test Configuration, and consists of modem, mouse, earphone, keyboard, RJ-45 and GPS Rx.2. Mode 4~6, 10~15, and 19~20 of radiated emission only verify bandedge.3. Only the radiated emission and conducted emission tests were performed in this report and the conducted test cases can be referred to the Bluetooth module (Brand name: Intel / Model name: 622ANHMW, FCC ID: PD9622ANH, AEGIS Report Number: INTEL-090601F) report.	

2.3 Connection Diagram of Test System

<WLAN Tx Mode>



<EUT with TC Mode>



2.4 RF Utility

The programmed RF utility "CRTU", is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testing. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.



3 Test Result

3.1 Band Edges Measurement

3.1.1 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. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB.

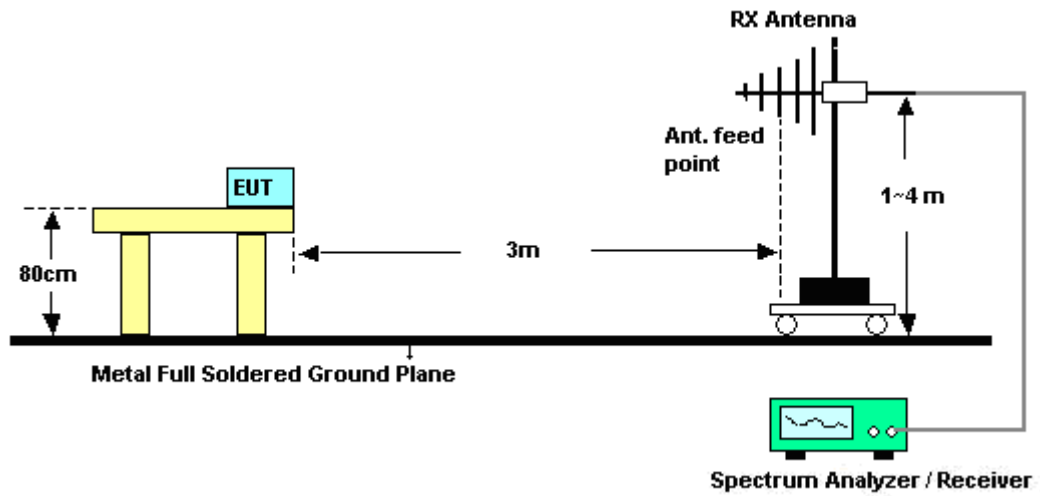
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows the guidelines in ANSI C63.4-2003 and FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. Conducted emission test: Set RBW = 100 kHz, Video bandwidth (VBW) > RBW. Band edge emissions must be at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz RBW. Note: If the output power of this device was measured by power meter, the attenuation under this paragraph shall be 30 dB instead of 20 dB.
3. Radiated emission test: Apply 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 as in FCC Section 15.35(b) and (c).

3.1.4 Test Setup





3.1.5 Test Result of Radiated Band Edges

Test Mode :	Mode 1	Temperature :	24~25°C
Test Band :	802.11b	Relative Humidity :	43~44%
Test Channel :	01	Test Engineer :	Kay Wu

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
2312.85	46.40	-27.60	74.00	42.99	32.00	5.53	34.12	169	325	Peak
2312.85	33.65	-20.35	54.00	30.24	32.00	5.53	34.12	169	325	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
2353.70	45.89	-28.11	74.00	42.46	32.08	5.49	34.14	200	340	Peak
2353.70	33.14	-20.86	54.00	29.71	32.08	5.49	34.14	200	340	Average

Test Mode :	Mode 3	Temperature :	24~25°C
Test Band :	802.11b	Relative Humidity :	43~44%
Test Channel :	11	Test Engineer :	Kay Wu

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
2484.42	45.65	-28.35	74.00	42.19	32.27	5.38	34.19	197	318	Peak
2484.42	33.14	-20.86	54.00	29.68	32.27	5.38	34.19	197	318	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
2494.49	44.56	-29.44	74.00	41.09	32.30	5.37	34.20	130	20	Peak
2494.49	32.46	-21.54	54.00	28.99	32.30	5.37	34.20	130	20	Average



Test Mode :	Mode 4	Temperature :	24~25°C
Test Band :	802.11g	Relative Humidity :	43~44%
Test Channel :	01	Test Engineer :	Kay Wu

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
2312.66	46.79	-27.21	74.00	43.38	32.00	5.53	34.12	140	320	Peak
2312.66	33.40	-20.60	54.00	29.99	32.00	5.53	34.12	140	320	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
2330.33	45.65	-28.35	74.00	42.25	32.02	5.51	34.13	200	340	Peak
2330.33	33.25	-20.75	54.00	29.85	32.02	5.51	34.13	200	340	Average

Test Mode :	Mode 6	Temperature :	24~25°C
Test Band :	802.11g	Relative Humidity :	43~44%
Test Channel :	11	Test Engineer :	Kay Wu

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
2492.21	45.64	-28.36	74.00	42.17	32.30	5.37	34.20	197	320	Peak
2492.21	32.85	-21.15	54.00	29.38	32.30	5.37	34.20	197	320	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
2487.46	44.82	-29.18	74.00	41.36	32.27	5.38	34.19	160	355	Peak
2487.46	32.65	-21.35	54.00	29.19	32.27	5.38	34.19	160	355	Average



Test Mode :	Mode 7	Temperature :	24~25°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	43~44%
Test Channel :	01	Test Engineer :	Kay Wu

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
2375.17	45.37	-28.63	74.00	41.94	32.11	5.47	34.15	124	235	Peak
2375.17	33.15	-20.85	54.00	29.72	32.11	5.47	34.15	124	235	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
2336.41	46.09	-27.91	74.00	42.67	32.05	5.50	34.13	100	133	Peak
2336.41	33.07	-20.93	54.00	29.65	32.05	5.50	34.13	100	133	Average

Test Mode :	Mode 9	Temperature :	24~25°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	43~44%
Test Channel :	11	Test Engineer :	Kay Wu

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
2492.21	44.80	-29.20	74.00	41.33	32.30	5.37	34.20	125	112	Peak
2492.21	32.63	-21.37	54.00	29.16	32.30	5.37	34.20	125	112	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
2489.17	44.81	-29.19	74.00	41.33	32.30	5.37	34.19	100	125	Peak
2489.17	32.46	-21.54	54.00	28.98	32.30	5.37	34.19	100	125	Average



Test Mode :	Mode 10	Temperature :	24~25°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	43~44%
Test Channel :	03	Test Engineer :	Kay Wu

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
2389.42	48.61	-25.39	74.00	45.17	32.13	5.46	34.15	125	233	Peak
2389.42	33.89	-20.11	54.00	30.45	32.13	5.46	34.15	125	233	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
2351.61	45.06	-28.94	74.00	41.63	32.08	5.49	34.14	128	120	Peak
2351.61	32.96	-21.04	54.00	29.53	32.08	5.49	34.14	128	120	Average

Test Mode :	Mode 12	Temperature :	24~25°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	43~44%
Test Channel :	09	Test Engineer :	Kay Wu

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
2483.66	48.17	-25.83	74.00	44.71	32.27	5.38	34.19	122	98	Peak
2483.66	33.56	-20.44	54.00	30.10	32.27	5.38	34.19	122	98	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
2497.53	44.95	-29.05	74.00	41.48	32.30	5.37	34.20	105	120	Peak
2497.53	32.57	-21.43	54.00	29.10	32.30	5.37	34.20	105	120	Average



Test Mode :	Mode 13	Temperature :	24~25°C
Test Band :	802.11a	Relative Humidity :	43~44%
Test Channel :	149	Test Engineer :	Kay Wu

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
5725.00	73.32	-4.87	78.19	64.40	35.01	8.40	34.49	154	217	Peak

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
5725.00	66.95	-7.49	74.44	58.03	35.01	8.40	34.49	200	349	Peak

Test Mode :	Mode 15	Temperature :	24~25°C
Test Band :	802.11a	Relative Humidity :	43~44%
Test Channel :	165	Test Engineer :	Kay Wu

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
5850.00	65.00	-13.98	78.98	55.93	35.18	8.43	34.54	157	162	Peak

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
5850.00	64.00	-12.11	76.11	54.93	35.18	8.43	34.54	155	351	Peak



Test Mode :	Mode 16	Temperature :	24~25°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	43~44%
Test Channel :	149	Test Engineer :	Kay Wu

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
5725.00	77.02	-10.18	87.20	68.10	35.01	8.40	34.49	100	330	Peak

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
5725.00	68.94	-13.45	82.39	60.02	35.01	8.40	34.49	184	66	Peak

Test Mode :	Mode 18	Temperature :	24~25°C
Test Band :	802.11n (BW 20MHz)	Relative Humidity :	43~44%
Test Channel :	165	Test Engineer :	Kay Wu

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
5850.00	69.48	-16.07	85.55	60.41	35.18	8.43	34.54	100	328	Peak

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
5850.00	64.88	-15.32	80.20	55.81	35.18	8.43	34.54	100	64	Peak



Test Mode :	Mode 19	Temperature :	24~25°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	43~44%
Test Channel :	151	Test Engineer :	Kay Wu

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
5725.00	79.96	-4.65	84.61	71.04	35.01	8.40	34.49	100	331	Peak

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
5725.00	72.46	-6.97	79.43	63.54	35.01	8.40	34.49	100	109	Peak

Test Mode :	Mode 20	Temperature :	24~25°C
Test Band :	802.11n (BW 40MHz)	Relative Humidity :	43~44%
Test Channel :	159	Test Engineer :	Kay Wu

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
5850.00	55.68	-27.18	82.86	46.61	35.18	8.43	34.54	100	329	Peak

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
5850.00	54.08	-25.74	79.82	45.01	35.18	8.43	34.54	153	330	Peak

3.2 AC Conducted Emission Measurement

3.2.1 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.

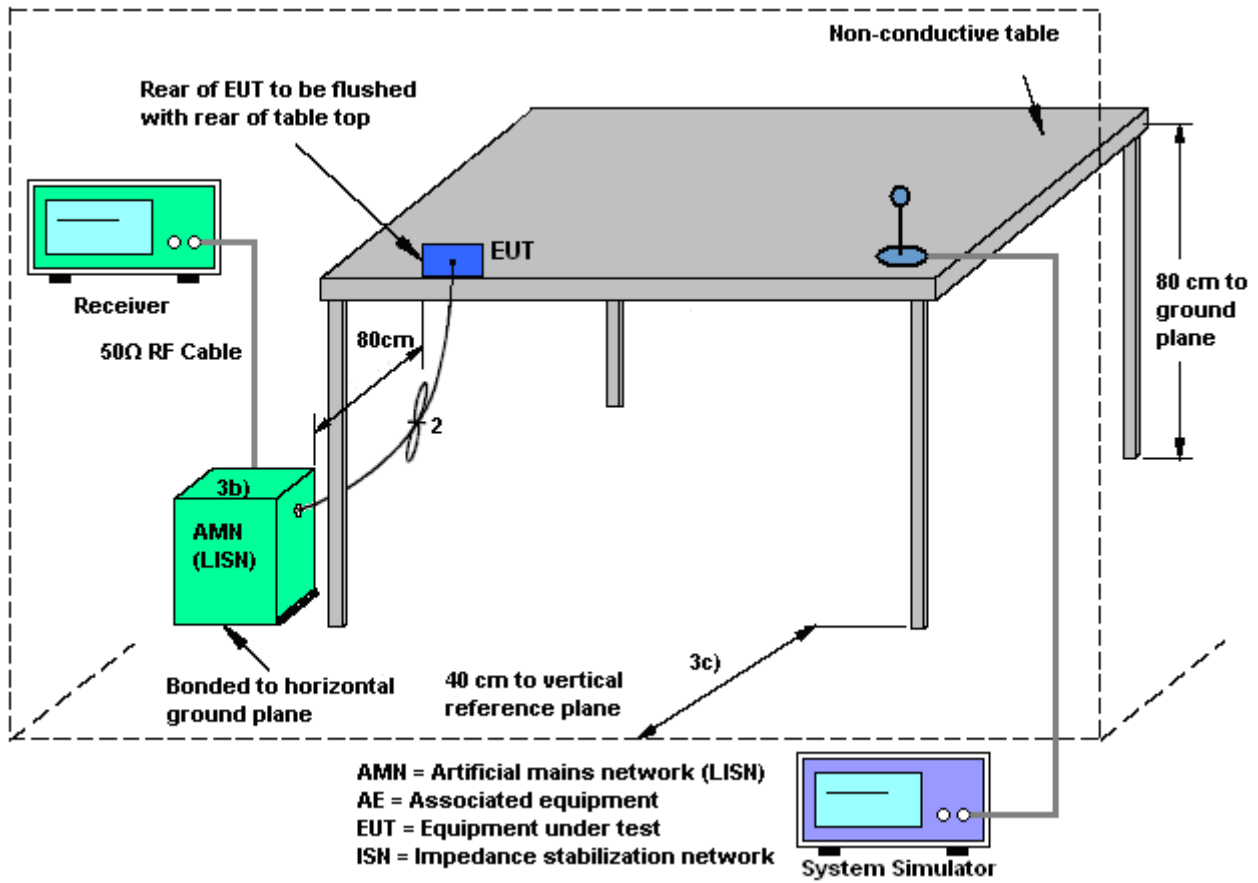
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

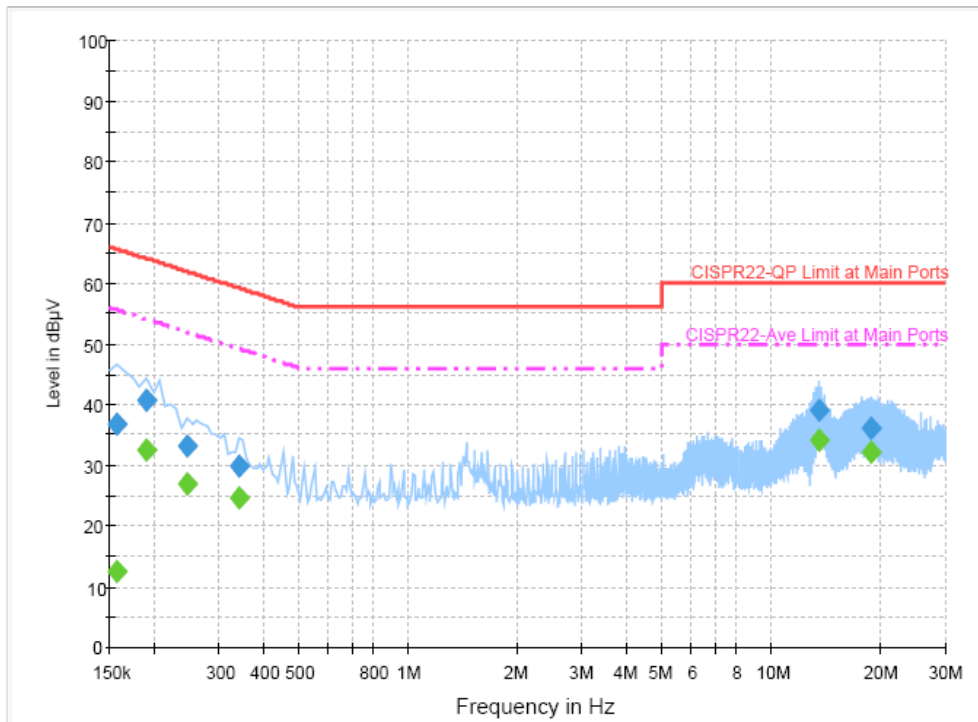
1. The testing follows the guidelines in ANSI C63.4-2003.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (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.

3.2.4 Test Setup



3.2.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	20~22°C
Test Engineer :	Novic Jiang	Relative Humidity :	40~42%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GSM850 Idle + WLAN Link + Bluetooth Link + TC + Adapter		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Final Result 1

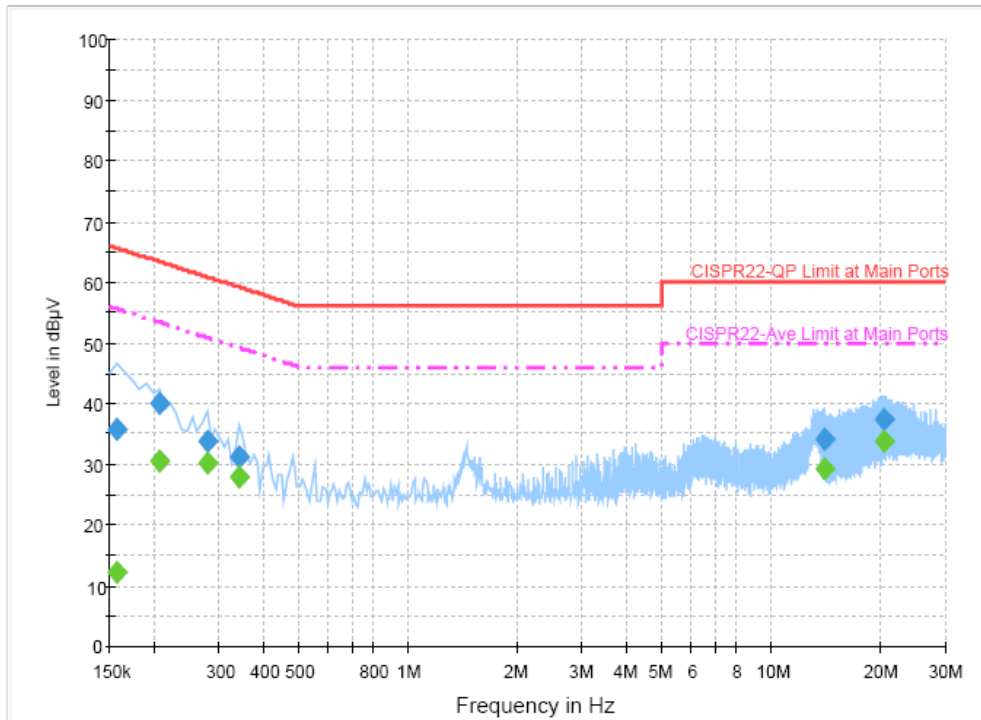
Frequency (MHz)	QuasiPeak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	36.7	Off	L1	19.5	28.9	65.6
0.190000	40.5	Off	L1	19.6	23.5	64.0
0.246000	33.2	Off	L1	19.5	28.7	61.9
0.342000	29.8	Off	L1	19.5	29.4	59.2
13.502000	39.0	Off	L1	19.6	21.0	60.0
18.670000	36.1	Off	L1	19.7	23.9	60.0

Final Result 2

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.158000	12.6	Off	L1	19.5	43.0	55.6
0.190000	32.3	Off	L1	19.6	21.7	54.0
0.246000	27.0	Off	L1	19.5	24.9	51.9
0.342000	24.7	Off	L1	19.5	24.5	49.2
13.502000	34.2	Off	L1	19.6	15.8	50.0
18.670000	32.2	Off	L1	19.7	17.8	50.0



Test Mode :	Mode 1	Temperature :	20~22°C
Test Engineer :	Novic Jiang	Relative Humidity :	40~42%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GSM850 Idle + WLAN Link + Bluetooth Link + TC + Adapter		
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	35.8	Off	N	19.5	29.8	65.6
0.206000	40.0	Off	N	19.5	23.4	63.4
0.278000	33.6	Off	N	19.5	27.3	60.9
0.342000	31.3	Off	N	19.4	27.9	59.2
13.918000	34.2	Off	N	19.7	25.8	60.0
20.262000	37.5	Off	N	19.8	22.5	60.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	12.2	Off	N	19.5	43.4	55.6
0.206000	30.6	Off	N	19.5	22.8	53.4
0.278000	30.2	Off	N	19.5	20.7	50.9
0.342000	27.8	Off	N	19.4	21.4	49.2
13.918000	29.2	Off	N	19.7	20.8	50.0
20.262000	33.8	Off	N	19.8	16.2	50.0

3.3 Radiated Emission Measurement

3.3.1 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. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. 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

3.3.2 Measuring Instruments

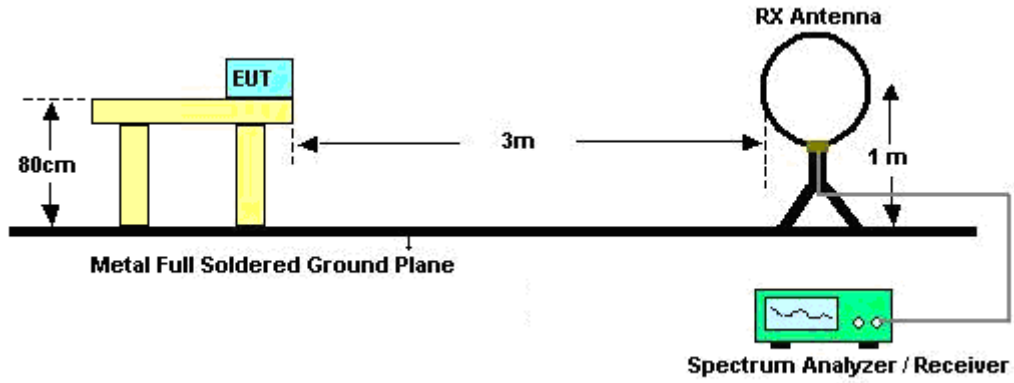
See list of measuring instruments of this test report.

3.3.3 Test Procedures

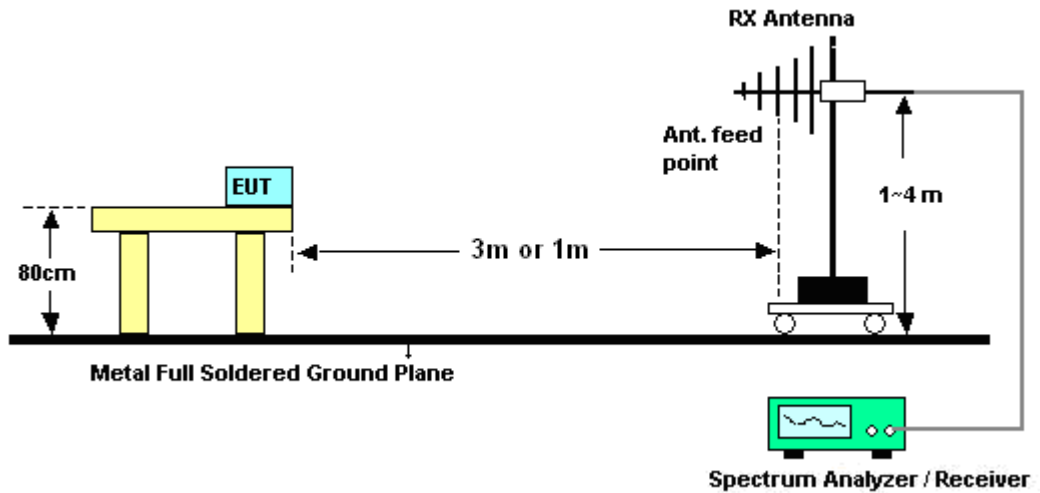
1. The testing follows the guidelines in FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. Use the following spectrum analyzer settings:
 - (1) Span = wide enough to fully capture the emission being measured; RBW = 1 MHz for $f \geq 1$ GHz, 100 kHz for $f < 1$ GHz; VBW \geq RBW; Sweep = auto; Detector function = peak; Trace = max hold.
 - (2) Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1m.
 Distance extrapolation factor = $20 \log(\text{specific distance [3m]} / \text{test distance [1m]})$ (dB)
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.

3.3.4 Test Setup

For radiated emissions below 30MHz



For radiated emissions above 30MHz





3.3.5 Test Results of Radiated Emissions (9kHz ~ 30MHz)

Test Engineer :	Kay Wu	Temperature :	24~25°C	
		Relative Humidity :	43~44%	
Frequency (MHz)	Level (dBuV)	Over Limit (dB)	Limit Line (dBuV)	Remark
-	-	-	-	See Note

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log(\text{specific distance} / \text{test distance})$ (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.



3.3.6 Test Result of Radiated Emission (30MHz ~ 10th Harmonic)

Test Mode :	Mode 1	Temperature :	24~25°C
Test Channel :	01	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
38.91	33.50	-6.50	40.00	49.80	14.59	0.61	31.50	100	222	Peak
54.30	27.03	-12.97	40.00	50.70	7.16	0.72	31.55	-	-	Peak
161.22	32.65	-10.85	43.50	52.64	10.31	1.22	31.52	-	-	Peak
365.80	36.13	-9.87	46.00	50.11	15.21	2.07	31.26	-	-	Peak
478.50	25.83	-20.17	46.00	36.80	17.72	2.37	31.06	-	-	Peak
719.30	27.07	-18.93	46.00	33.74	21.11	2.99	30.77	-	-	Peak
2312.85	33.65	-20.35	54.00	30.24	32.00	5.53	34.12	169	325	Average
2312.85	46.40	-27.60	74.00	42.99	32.00	5.53	34.12	169	325	Peak
2412.00	96.74	-	-	93.30	32.16	5.44	34.16	169	325	Average
2412.00	100.16	-	-	96.72	32.16	5.44	34.16	169	325	Peak
2500.00	43.92	-30.08	74.00	40.45	32.30	5.37	34.20	169	325	Peak
2500.00	32.61	-21.39	54.00	29.14	32.30	5.37	34.20	169	325	Average
8241.00	54.31	-19.69	74.00	43.41	36.00	10.00	35.10	100	196	Peak
8241.00	40.56	-13.44	54.00	29.66	36.00	10.00	35.10	100	196	Average



Test Mode :	Mode 1	Temperature :	24~25°C
Test Channel :	01	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
84.54	31.21	-8.79	40.00	53.76	8.09	0.90	31.54	100	119	Peak
124.50	27.11	-16.39	43.50	45.66	11.89	1.12	31.56	-	-	Peak
171.21	26.73	-16.77	43.50	47.49	9.53	1.23	31.52	-	-	Peak
366.50	33.93	-12.07	46.00	47.88	15.24	2.07	31.26	-	-	Peak
433.70	23.42	-22.58	46.00	35.48	16.81	2.26	31.13	-	-	Peak
864.20	27.90	-18.10	46.00	32.49	22.84	3.29	30.72	-	-	Peak
2353.70	33.14	-20.86	54.00	29.71	32.08	5.49	34.14	200	340	Average
2353.70	45.89	-28.11	74.00	42.46	32.08	5.49	34.14	200	340	Peak
2412.00	88.79	-	-	85.35	32.16	5.44	34.16	200	340	Average
2412.00	92.68	-	-	89.24	32.16	5.44	34.16	200	340	Peak
2492.00	43.91	-30.09	74.00	40.44	32.30	5.37	34.20	200	340	Peak
2492.00	32.61	-21.39	54.00	29.14	32.30	5.37	34.20	200	340	Average
8361.00	54.83	-19.17	74.00	43.84	36.00	10.09	35.10	100	217	Peak
8361.00	40.85	-13.15	54.00	29.86	36.00	10.09	35.10	100	217	Average



Test Mode :	Mode 2	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
167.97	32.05	-11.45	43.50	52.53	9.81	1.23	31.52	-	-	Peak
202.26	26.31	-17.19	43.50	47.61	8.85	1.33	31.48	-	-	Peak
299.46	28.46	-17.54	46.00	44.56	13.46	1.77	31.33	-	-	Peak
366.50	36.03	-9.97	46.00	49.98	15.24	2.07	31.26	100	145	Peak
478.50	24.92	-21.08	46.00	35.89	17.72	2.37	31.06	-	-	Peak
719.30	27.18	-18.82	46.00	33.85	21.11	2.99	30.77	-	-	Peak
2372.00	44.93	-29.07	74.00	41.50	32.11	5.47	34.15	164	313	Peak
2372.00	33.16	-20.84	54.00	29.73	32.11	5.47	34.15	164	313	Average
2437.00	100.75	-	-	97.29	32.22	5.41	34.17	164	313	Peak
2437.00	97.00	-	-	93.54	32.22	5.41	34.17	164	313	Average
2494.00	33.20	-20.80	54.00	29.73	32.30	5.37	34.20	164	313	Average
2494.00	44.82	-29.18	74.00	41.35	32.30	5.37	34.20	164	313	Peak
8382.00	54.36	-19.64	74.00	43.36	36.00	10.10	35.10	100	95	Peak
8382.00	40.99	-13.01	54.00	29.99	36.00	10.10	35.10	100	95	Average



Test Mode :	Mode 2	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
41.61	26.47	-13.53	40.00	44.55	12.80	0.63	31.51	-	-	Peak
85.62	29.66	-10.34	40.00	52.06	8.23	0.91	31.54	100	211	Peak
175.53	25.89	-17.61	43.50	46.91	9.27	1.24	31.53	-	-	Peak
365.80	33.01	-12.99	46.00	46.99	15.21	2.07	31.26	-	-	Peak
430.90	24.04	-21.96	46.00	36.17	16.75	2.25	31.13	-	-	Peak
900.60	27.15	-18.85	46.00	31.32	23.19	3.34	30.70	-	-	Peak
2316.00	44.31	-29.69	74.00	40.91	32.00	5.53	34.13	143	318	Peak
2316.00	33.02	-20.98	54.00	29.62	32.00	5.53	34.13	143	318	Average
2437.00	92.85	-	-	89.39	32.22	5.41	34.17	143	318	Peak
2437.00	88.97	-	-	85.51	32.22	5.41	34.17	143	318	Average
2500.00	32.48	-21.52	54.00	29.01	32.30	5.37	34.20	143	318	Average
2500.00	43.98	-30.02	74.00	40.51	32.30	5.37	34.20	143	318	Peak
8358.00	54.88	-19.12	74.00	43.89	36.00	10.09	35.10	100	96	Peak
8358.00	40.88	-13.12	54.00	29.89	36.00	10.09	35.10	100	96	Average



Test Mode :	Mode 3	Temperature :	24~25°C
Test Channel :	11	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
165.81	28.86	-14.64	43.50	49.19	9.96	1.23	31.52	-	-	Peak
175.53	30.44	-13.06	43.50	51.46	9.27	1.24	31.53	-	-	Peak
299.73	28.52	-17.48	46.00	44.62	13.46	1.77	31.33	-	-	Peak
365.80	36.32	-9.68	46.00	50.30	15.21	2.07	31.26	100	211	Peak
433.70	25.42	-20.58	46.00	37.48	16.81	2.26	31.13	-	-	Peak
719.30	27.45	-18.55	46.00	34.12	21.11	2.99	30.77	-	-	Peak
2356.00	44.32	-29.68	74.00	40.89	32.08	5.49	34.14	197	318	Peak
2356.00	33.06	-20.94	54.00	29.63	32.08	5.49	34.14	197	318	Average
2462.00	98.73	-	-	95.27	32.24	5.40	34.18	197	318	Peak
2462.00	94.82	-	-	91.36	32.24	5.40	34.18	197	318	Average
2484.42	33.14	-20.86	54.00	29.68	32.27	5.38	34.19	197	318	Average
2484.42	45.65	-28.35	74.00	42.19	32.27	5.38	34.19	197	318	Peak
8298.00	54.88	-19.12	74.00	43.94	36.00	10.04	35.10	100	91	Peak
8298.00	40.83	-13.17	54.00	29.89	36.00	10.04	35.10	100	91	Average



Test Mode :	Mode 3	Temperature :	24~25°C
Test Channel :	11	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
94.53	25.12	-18.38	43.50	46.06	9.61	0.98	31.53	-	-	Peak
174.18	32.06	-11.44	43.50	53.02	9.32	1.24	31.52	100	102	Peak
299.73	24.99	-21.01	46.00	41.09	13.46	1.77	31.33	-	-	Peak
366.50	29.06	-16.94	46.00	43.01	15.24	2.07	31.26	-	-	Peak
430.90	22.88	-23.12	46.00	35.01	16.75	2.25	31.13	-	-	Peak
719.30	25.20	-20.80	46.00	31.87	21.11	2.99	30.77	-	-	Peak
2316.00	44.69	-29.31	74.00	41.29	32.00	5.53	34.13	130	20	Peak
2316.00	32.98	-21.02	54.00	29.58	32.00	5.53	34.13	130	20	Average
2462.00	90.86	-	-	87.40	32.24	5.40	34.18	130	20	Peak
2462.00	87.22	-	-	83.76	32.24	5.40	34.18	130	20	Average
2494.49	32.46	-21.54	54.00	28.99	32.30	5.37	34.20	130	20	Average
2494.49	44.56	-29.44	74.00	41.09	32.30	5.37	34.20	130	20	Peak
8337.00	54.94	-19.06	74.00	43.97	36.00	10.07	35.10	100	91	Peak
8337.00	40.86	-13.14	54.00	29.89	36.00	10.07	35.10	100	91	Average



Test Mode :	Mode 4	Temperature :	24~25°C
Test Channel :	01	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
2312.66	46.79	-27.21	74.00	43.38	32.00	5.53	34.12	140	320	Peak
2312.66	33.40	-20.60	54.00	29.99	32.00	5.53	34.12	140	320	Average
2412.00	95.82	-	-	92.38	32.16	5.44	34.16	140	320	Peak
2412.00	86.10	-	-	82.66	32.16	5.44	34.16	140	320	Average
2500.00	32.73	-21.27	54.00	29.26	32.30	5.37	34.20	140	320	Average
2500.00	45.17	-28.83	74.00	41.70	32.30	5.37	34.20	140	320	Peak



Test Mode :	Mode 4	Temperature :	24~25°C
Test Channel :	01	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
2330.33	45.65	-28.35	74.00	42.25	32.02	5.51	34.13	200	340	Peak
2330.33	33.25	-20.75	54.00	29.85	32.02	5.51	34.13	200	340	Average
2412.00	88.79	-	-	85.35	32.16	5.44	34.16	200	340	Peak
2412.00	79.18	-	-	75.74	32.16	5.44	34.16	200	340	Average
2484.00	32.79	-21.21	54.00	29.33	32.27	5.38	34.19	200	340	Average
2484.00	44.08	-29.92	74.00	40.62	32.27	5.38	34.19	200	340	Peak



Test Mode :	Mode 5	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
2340.00	44.97	-29.03	74.00	41.56	32.05	5.50	34.14	164	312	Peak
2340.00	33.33	-20.67	54.00	29.92	32.05	5.50	34.14	164	312	Average
2437.00	97.38	-	-	93.92	32.22	5.41	34.17	164	312	Peak
2437.00	87.68	-	-	84.22	32.22	5.41	34.17	164	312	Average
2492.00	32.88	-21.12	54.00	29.41	32.30	5.37	34.20	164	312	Average
2492.00	44.07	-29.93	74.00	40.60	32.30	5.37	34.20	164	312	Peak



Test Mode :	Mode 5	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
2334.00	45.48	-28.52	74.00	42.08	32.02	5.51	34.13	196	360	Peak
2334.00	33.26	-20.74	54.00	29.86	32.02	5.51	34.13	196	360	Average
2437.00	89.78	-	-	86.33	32.19	5.43	34.17	196	360	Peak
2437.00	80.12	-	-	76.66	32.22	5.41	34.17	196	360	Average
2486.00	32.68	-21.32	54.00	29.22	32.27	5.38	34.19	196	360	Average
2486.00	43.86	-30.14	74.00	40.40	32.27	5.38	34.19	196	360	Peak



Test Mode :	Mode 6	Temperature :	24~25°C
Test Channel :	11	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
2340.00	44.58	-29.42	74.00	41.17	32.05	5.50	34.14	197	320	Peak
2340.00	33.22	-20.78	54.00	29.81	32.05	5.50	34.14	197	320	Average
2462.00	95.26	-	-	91.80	32.24	5.40	34.18	197	320	Peak
2462.00	85.40	-	-	81.94	32.24	5.40	34.18	197	320	Average
2492.21	32.85	-21.15	54.00	29.38	32.30	5.37	34.20	197	320	Average
2492.21	45.64	-28.36	74.00	42.17	32.30	5.37	34.20	197	320	Peak



Test Mode :	Mode 6	Temperature :	24~25°C
Test Channel :	11	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
2358.00	45.22	-28.78	74.00	41.79	32.08	5.49	34.14	160	355	Peak
2358.00	33.23	-20.77	54.00	29.80	32.08	5.49	34.14	160	355	Average
2462.00	89.21	-	-	85.75	32.24	5.40	34.18	160	355	Peak
2462.00	79.53	-	-	76.07	32.24	5.40	34.18	160	355	Average
2487.46	32.65	-21.35	54.00	29.19	32.27	5.38	34.19	160	355	Average
2487.46	44.82	-29.18	74.00	41.36	32.27	5.38	34.19	160	355	Peak



Test Mode :	Mode 7	Temperature :	24~25°C
Test Channel :	01	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
52.14	33.48	-6.52	40.00	56.74	7.57	0.71	31.54	100	212	Peak
169.86	32.14	-11.36	43.50	52.76	9.67	1.23	31.52	-	-	Peak
299.46	29.81	-16.19	46.00	45.91	13.46	1.77	31.33	-	-	Peak
365.80	36.28	-9.72	46.00	50.26	15.21	2.07	31.26	-	-	Peak
528.20	25.30	-20.70	46.00	35.10	18.71	2.51	31.02	-	-	Peak
719.30	25.76	-20.24	46.00	32.43	21.11	2.99	30.77	-	-	Peak
2375.17	33.15	-20.85	54.00	29.72	32.11	5.47	34.15	124	235	Average
2375.17	45.37	-28.63	74.00	41.94	32.11	5.47	34.15	124	235	Peak
2412.00	94.58	-	-	91.14	32.16	5.44	34.16	124	235	Peak
2412.00	82.13	-	-	78.69	32.16	5.44	34.16	124	235	Average
2492.00	32.48	-21.52	54.00	29.01	32.30	5.37	34.20	124	235	Average
2492.00	43.81	-30.19	74.00	40.34	32.30	5.37	34.20	124	235	Peak
8442.00	55.19	-18.81	74.00	44.15	36.00	10.14	35.10	100	93	Peak
8442.00	41.00	-13.00	54.00	29.96	36.00	10.14	35.10	100	93	Average



Test Mode :	Mode 7	Temperature :	24~25°C
Test Channel :	01	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2412 MHz is Fundamental Signals which can be ignored.		

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
90.21	31.42	-12.08	43.50	53.12	8.88	0.94	31.52	-	-	Peak
177.42	32.52	-10.98	43.50	53.63	9.18	1.24	31.53	100	2	Peak
299.46	25.73	-20.27	46.00	41.83	13.46	1.77	31.33	-	-	Peak
315.40	26.96	-19.04	46.00	42.61	13.87	1.80	31.32	-	-	Peak
365.80	33.57	-12.43	46.00	47.55	15.21	2.07	31.26	-	-	Peak
719.30	25.16	-20.84	46.00	31.83	21.11	2.99	30.77	-	-	Peak
2336.41	33.07	-20.93	54.00	29.65	32.05	5.50	34.13	100	133	Average
2336.41	46.09	-27.91	74.00	42.67	32.05	5.50	34.13	100	133	Peak
2412.00	88.18	-	-	84.74	32.16	5.44	34.16	100	133	Peak
2412.00	76.89	-	-	73.45	32.16	5.44	34.16	100	133	Average
2494.00	32.48	-21.52	54.00	29.01	32.30	5.37	34.20	100	133	Average
2494.00	44.82	-29.18	74.00	41.35	32.30	5.37	34.20	100	133	Peak
8430.00	54.63	-19.37	74.00	43.60	36.00	10.13	35.10	100	91	Peak
8430.00	41.01	-12.99	54.00	29.98	36.00	10.13	35.10	100	91	Average



Test Mode :	Mode 8	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
38.37	23.18	-16.82	40.00	39.48	14.59	0.61	31.50	-	-	Peak
175.26	28.18	-15.32	43.50	49.20	9.27	1.24	31.53	-	-	Peak
299.46	25.81	-20.19	46.00	41.91	13.46	1.77	31.33	-	-	Peak
366.50	35.98	-10.02	46.00	49.93	15.24	2.07	31.26	100	102	Peak
478.50	25.01	-20.99	46.00	35.98	17.72	2.37	31.06	-	-	Peak
719.30	26.52	-19.48	46.00	33.19	21.11	2.99	30.77	-	-	Peak
2374.00	45.08	-28.92	74.00	41.65	32.11	5.47	34.15	122	231	Peak
2374.00	33.13	-20.87	54.00	29.70	32.11	5.47	34.15	122	231	Average
2437.00	94.88	-	-	91.43	32.22	5.41	34.18	122	231	Peak
2437.00	82.74	-	-	79.28	32.22	5.41	34.17	122	231	Average
2500.00	32.61	-21.39	54.00	29.14	32.30	5.37	34.20	122	231	Average
2500.00	44.16	-29.84	74.00	40.69	32.30	5.37	34.20	122	231	Peak
8322.00	54.95	-19.05	74.00	43.99	36.00	10.06	35.10	100	178	Peak
8322.00	41.52	-12.48	54.00	30.56	36.00	10.06	35.10	100	178	Average



Test Mode :	Mode 8	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
30.00	27.49	-12.51	40.00	38.91	19.51	0.53	31.46	-	-	Peak
95.34	26.17	-17.33	43.50	47.11	9.61	0.98	31.53	-	-	Peak
180.93	26.87	-16.63	43.50	48.12	9.03	1.25	31.53	-	-	Peak
366.50	33.93	-12.07	46.00	47.88	15.24	2.07	31.26	100	225	Peak
433.70	23.42	-22.58	46.00	35.48	16.81	2.26	31.13	-	-	Peak
864.20	27.90	-18.10	46.00	32.49	22.84	3.29	30.72	-	-	Peak
2340.00	44.45	-29.55	74.00	41.04	32.05	5.50	34.14	100	133	Peak
2340.00	33.05	-20.95	54.00	29.64	32.05	5.50	34.14	100	133	Average
2437.00	88.91	-	-	85.45	32.22	5.41	34.17	100	133	Peak
2437.00	77.22	-	-	73.76	32.22	5.41	34.17	100	133	Average
2500.00	32.46	-21.54	54.00	28.99	32.30	5.37	34.20	100	133	Average
2500.00	44.14	-29.86	74.00	40.67	32.30	5.37	34.20	100	133	Peak
8298.00	55.08	-18.92	74.00	44.14	36.00	10.04	35.10	100	284	Peak
8298.00	40.80	-13.20	54.00	29.86	36.00	10.04	35.10	100	284	Average



Test Mode :	Mode 9	Temperature :	24~25°C
Test Channel :	11	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
38.37	27.89	-12.11	40.00	44.19	14.59	0.61	31.50	-	-	Peak
161.22	30.02	-13.48	43.50	50.01	10.31	1.22	31.52	-	-	Peak
177.42	32.96	-10.54	43.50	54.07	9.18	1.24	31.53	100	215	Peak
318.90	32.57	-13.43	46.00	48.11	13.97	1.81	31.32	-	-	Peak
365.80	35.23	-10.77	46.00	49.21	15.21	2.07	31.26	-	-	Peak
915.30	26.31	-19.69	46.00	30.18	23.41	3.38	30.66	-	-	Peak
2348.00	44.25	-29.75	74.00	40.84	32.05	5.50	34.14	125	112	Peak
2348.00	33.13	-20.87	54.00	29.72	32.05	5.50	34.14	125	112	Average
2462.00	94.78	-	-	91.33	32.24	5.40	34.19	125	112	Peak
2462.00	82.69	-	-	79.23	32.24	5.40	34.18	125	112	Average
2492.21	32.63	-21.37	54.00	29.16	32.30	5.37	34.20	125	112	Average
2492.21	44.80	-29.20	74.00	41.33	32.30	5.37	34.20	125	112	Peak
8394.00	54.46	-19.54	74.00	43.45	36.00	10.11	35.10	100	68	Peak
8394.00	41.57	-12.43	54.00	30.56	36.00	10.11	35.10	100	68	Average



Test Mode :	Mode 9	Temperature :	24~25°C
Test Channel :	11	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2462 MHz is Fundamental Signals which can be ignored.		

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
34.05	32.98	-7.02	40.00	46.59	17.29	0.57	31.47	100	215	Peak
82.65	29.82	-10.18	40.00	52.63	7.83	0.89	31.53	-	-	Peak
177.69	27.09	-16.41	43.50	48.20	9.18	1.24	31.53	-	-	Peak
365.80	33.17	-12.83	46.00	47.15	15.21	2.07	31.26	-	-	Peak
433.70	23.80	-22.20	46.00	35.86	16.81	2.26	31.13	-	-	Peak
864.20	28.85	-17.15	46.00	33.44	22.84	3.29	30.72	-	-	Peak
2372.00	44.16	-29.84	74.00	40.73	32.11	5.47	34.15	100	125	Peak
2372.00	32.98	-21.02	54.00	29.55	32.11	5.47	34.15	100	125	Average
2462.00	89.11	-	-	85.65	32.24	5.40	34.18	100	125	Peak
2462.00	77.85	-	-	74.39	32.24	5.40	34.18	100	125	Average
2489.17	32.46	-21.54	54.00	28.98	32.30	5.37	34.19	100	125	Average
2489.17	44.81	-29.19	74.00	41.33	32.30	5.37	34.19	100	125	Peak
8409.00	54.81	-19.19	74.00	43.79	36.00	10.12	35.10	100	88	Peak
8409.00	41.90	-12.10	54.00	30.88	36.00	10.12	35.10	100	88	Average



Test Mode :	Mode 10	Temperature :	24~25°C
Test Channel :	03	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2422 MHz is Fundamental Signals which can be ignored.		

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
2389.42	48.61	-25.39	74.00	45.17	32.13	5.46	34.15	125	233	Peak
2389.42	33.89	-20.11	54.00	30.45	32.13	5.46	34.15	125	233	Average
2422.00	92.45	-	-	89.01	32.16	5.44	34.16	125	233	Peak
2422.00	79.20	-	-	75.75	32.19	5.43	34.17	125	233	Average
2500.00	32.49	-21.51	54.00	29.02	32.30	5.37	34.20	125	233	Average
2500.00	43.66	-30.34	74.00	40.19	32.30	5.37	34.20	125	233	Peak



Test Mode :	Mode 10	Temperature :	24~25°C
Test Channel :	03	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2422 MHz is Fundamental Signals which can be ignored.		

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
2351.61	32.96	-21.04	54.00	29.53	32.08	5.49	34.14	128	120	Average
2351.61	45.06	-28.94	74.00	41.63	32.08	5.49	34.14	128	120	Peak
2422.00	86.22	-	-	82.77	32.19	5.43	34.17	128	120	Peak
2422.00	74.28	-	-	70.83	32.19	5.43	34.17	128	120	Average
2494.00	32.30	-21.70	54.00	28.83	32.30	5.37	34.20	128	120	Average
2494.00	44.43	-29.57	74.00	40.96	32.30	5.37	34.20	128	120	Peak



Test Mode :	Mode 11	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
2334.00	44.71	-29.29	74.00	41.31	32.02	5.51	34.13	122	231	Peak
2334.00	33.00	-21.00	54.00	29.60	32.02	5.51	34.13	122	231	Average
2437.00	92.02	-	-	88.57	32.22	5.41	34.18	122	231	Peak
2437.00	79.08	-	-	75.62	32.22	5.41	34.17	122	231	Average
2494.00	32.44	-21.56	54.00	28.97	32.30	5.37	34.20	122	231	Average
2494.00	43.21	-30.79	74.00	39.74	32.30	5.37	34.20	122	231	Peak



Test Mode :	Mode 11	Temperature :	24~25°C
Test Channel :	06	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2437 MHz is Fundamental Signals which can be ignored.		

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
2324.00	44.70	-29.30	74.00	41.30	32.02	5.51	34.13	103	120	Peak
2324.00	32.92	-21.08	54.00	29.52	32.02	5.51	34.13	103	120	Average
2437.00	86.63	-	-	83.17	32.22	5.41	34.17	103	120	Peak
2437.00	74.77	-	-	71.31	32.22	5.41	34.17	103	120	Average
2494.00	32.33	-21.67	54.00	28.86	32.30	5.37	34.20	103	120	Average
2494.00	44.08	-29.92	74.00	40.61	32.30	5.37	34.20	103	120	Peak



Test Mode :	Mode 12	Temperature :	24~25°C
Test Channel :	09	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	2452 MHz is Fundamental Signals which can be ignored.		

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
2310.00	45.17	-28.83	74.00	41.76	32.00	5.53	34.12	122	98	Peak
2310.00	33.09	-20.91	54.00	29.68	32.00	5.53	34.12	122	98	Average
2452.00	91.08	-	-	87.63	32.22	5.41	34.18	122	98	Peak
2452.00	78.41	-	-	74.96	32.22	5.41	34.18	122	98	Average
2483.66	33.56	-20.44	54.00	30.10	32.27	5.38	34.19	122	98	Average
2483.66	48.17	-25.83	74.00	44.71	32.27	5.38	34.19	122	98	Peak



Test Mode :	Mode 12	Temperature :	24~25°C
Test Channel :	09	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	2452 MHz is Fundamental Signals which can be ignored.		

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
2334.00	44.64	-29.36	74.00	41.24	32.02	5.51	34.13	105	120	Peak
2334.00	32.92	-21.08	54.00	29.52	32.02	5.51	34.13	105	120	Average
2452.00	86.57	-	-	83.12	32.22	5.41	34.18	105	120	Peak
2452.00	74.79	-	-	71.34	32.22	5.41	34.18	105	120	Average
2497.53	32.57	-21.43	54.00	29.10	32.30	5.37	34.20	105	120	Average
2497.53	44.95	-29.05	74.00	41.48	32.30	5.37	34.20	105	120	Peak



Test Mode :	Mode 13	Temperature :	24~25°C
Test Channel :	149	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5745 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	73.32	-4.87	78.19	64.40	35.01	8.40	34.49	154	217	Peak
5745.00	88.34	-	-	79.39	35.04	8.41	34.50	154	217	Average
5745.00	98.19	-	-	89.24	35.04	8.41	34.50	154	217	Peak
5850.00	49.41	-28.78	78.19	40.34	35.18	8.43	34.54	154	217	Peak



Test Mode :	Mode 13	Temperature :	24~25°C
Test Channel :	149	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5745 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	66.95	-7.49	74.44	58.03	35.01	8.40	34.49	200	349	Peak
5745.00	84.69	-	-	75.74	35.04	8.41	34.50	200	349	Average
5745.00	94.44	-	-	85.49	35.04	8.41	34.50	200	349	Peak
5850.00	50.07	-24.37	74.44	41.00	35.18	8.43	34.54	200	349	Peak



Test Mode :	Mode 14	Temperature :	24~25°C
Test Channel :	157	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5785 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	50.37	-28.72	79.09	41.45	35.01	8.40	34.49	158	164	Peak
5785.00	89.33	-	-	80.34	35.09	8.42	34.52	158	164	Average
5785.00	99.09	-	-	90.08	35.11	8.42	34.52	158	164	Peak
5850.00	49.41	-29.68	79.09	40.34	35.18	8.43	34.54	158	164	Peak



Test Mode :	Mode 14	Temperature :	24~25°C
Test Channel :	157	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5785 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	49.11	-26.35	75.46	40.19	35.01	8.40	34.49	155	345	Peak
5785.00	85.30	-	-	76.31	35.09	8.42	34.52	155	345	Average
5785.00	95.46	-	-	86.45	35.11	8.42	34.52	155	345	Peak
5850.00	49.00	-26.46	75.46	39.93	35.18	8.43	34.54	155	345	Peak



Test Mode :	Mode 15	Temperature :	24~25°C
Test Channel :	165	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5825 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	49.42	-29.56	78.98	40.50	35.01	8.40	34.49	157	162	Peak
5825.00	89.10	-	-	80.04	35.16	8.43	34.53	157	162	Average
5825.00	98.98	-	-	89.92	35.16	8.43	34.53	157	162	Peak
5850.00	65.00	-13.98	78.98	55.93	35.18	8.43	34.54	157	162	Peak



Test Mode :	Mode 15	Temperature :	24~25°C
Test Channel :	165	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5825 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	49.16	-26.95	76.11	40.24	35.01	8.40	34.49	155	351	Peak
5825.00	86.52	-	-	77.46	35.16	8.43	34.53	155	351	Average
5825.00	96.11	-	-	87.05	35.16	8.43	34.53	155	351	Peak
5850.00	64.00	-12.11	76.11	54.93	35.18	8.43	34.54	155	351	Peak



Test Mode :	Mode 16	Temperature :	24~25°C
Test Channel :	149	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5745 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
39.18	25.25	-14.75	40.00	41.55	14.59	0.61	31.50	-	-	Peak
156.90	24.98	-18.52	43.50	44.66	10.63	1.22	31.53	-	-	Peak
168.78	29.36	-14.14	43.50	49.91	9.74	1.23	31.52	-	-	Peak
321.00	29.82	-16.18	46.00	45.30	14.03	1.81	31.32	-	-	Peak
366.50	35.73	-10.27	46.00	49.68	15.24	2.07	31.26	100	357	Peak
719.30	25.90	-20.10	46.00	32.57	21.11	2.99	30.77	-	-	Peak
5725.00	77.02	-10.18	87.20	68.10	35.01	8.40	34.49	100	330	Peak
5745.00	95.18	-	-	86.23	35.04	8.41	34.50	100	330	Average
5745.00	107.20	-	-	98.25	35.04	8.41	34.50	100	330	Peak
5850.00	49.03	-38.17	87.20	39.96	35.18	8.43	34.54	100	330	Peak
8374.00	55.72	-18.28	74.00	44.72	36.00	10.10	35.10	100	216	Peak
8374.00	40.66	-13.34	54.00	29.66	36.00	10.10	35.10	100	216	Average
11490.00	38.64	-35.36	74.00	71.29	-9.70	11.65	34.60	100	0	Peak
17235.00	39.51	-34.49	74.00	67.58	-8.65	14.83	34.25	100	0	Peak



Test Mode :	Mode 16	Temperature :	24~25°C
Test Channel :	149	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5745 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
81.30	32.10	-7.90	40.00	55.04	7.70	0.89	31.53	100	25	Peak
88.86	25.03	-18.47	43.50	46.87	8.75	0.93	31.52	-	-	Peak
172.02	27.61	-15.89	43.50	48.37	9.53	1.23	31.52	-	-	Peak
366.50	33.90	-12.10	46.00	47.85	15.24	2.07	31.26	-	-	Peak
430.90	23.64	-22.36	46.00	35.77	16.75	2.25	31.13	-	-	Peak
864.20	27.91	-18.09	46.00	32.50	22.84	3.29	30.72	-	-	Peak
5725.00	68.94	-13.45	82.39	60.02	35.01	8.40	34.49	184	66	Peak
5745.00	90.48	-	-	81.53	35.04	8.41	34.50	184	66	Average
5745.00	102.39	-	-	93.44	35.04	8.41	34.50	184	66	Peak
5850.00	49.05	-39.80	82.39	39.98	35.18	8.43	34.54	184	66	Peak
8436.00	54.87	-19.13	74.00	43.84	36.00	10.13	35.10	100	58	Peak
8436.00	40.91	-13.09	54.00	29.88	36.00	10.13	35.10	100	58	Average
11490.00	42.59	-31.41	74.00	75.24	-9.70	11.65	34.60	100	0	Peak



Test Mode :	Mode 17	Temperature :	24~25°C
Test Channel :	157	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5785 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
31.62	22.29	-17.71	40.00	34.80	18.40	0.55	31.46	-	-	Peak
152.58	26.28	-17.22	43.50	45.58	11.04	1.21	31.55	-	-	Peak
157.98	25.84	-17.66	43.50	45.61	10.54	1.22	31.53	-	-	Peak
318.20	33.37	-12.63	46.00	48.93	13.95	1.81	31.32	-	-	Peak
366.50	34.38	-11.62	46.00	48.33	15.24	2.07	31.26	100	7	Peak
864.20	25.80	-20.20	46.00	30.39	22.84	3.29	30.72	-	-	Peak
5725.00	53.43	-32.24	85.67	44.51	35.01	8.40	34.49	100	329	Peak
5785.00	93.48	-	-	84.49	35.09	8.42	34.52	100	329	Average
5785.00	105.67	-	-	96.67	35.09	8.42	34.51	100	329	Peak
5850.00	48.90	-36.77	85.67	39.83	35.18	8.43	34.54	100	329	Peak
11570.00	41.06	-32.94	74.00	73.80	-9.80	11.69	34.63	100	0	Peak



Test Mode :	Mode 17	Temperature :	24~25°C
Test Channel :	157	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5785 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
70.77	25.46	-14.54	40.00	49.50	6.68	0.84	31.56	-	-	Peak
86.70	28.35	-11.65	40.00	50.61	8.36	0.92	31.54	100	9	Peak
89.13	29.77	-13.73	43.50	51.61	8.75	0.93	31.52	-	-	Peak
325.90	24.48	-21.52	46.00	39.81	14.15	1.83	31.31	-	-	Peak
365.80	30.89	-15.11	46.00	44.87	15.21	2.07	31.26	-	-	Peak
805.40	25.21	-20.79	46.00	30.47	22.27	3.15	30.68	-	-	Peak
5725.00	49.19	-32.48	81.67	40.27	35.01	8.40	34.49	100	110	Peak
5785.00	89.41	-	-	80.42	35.09	8.42	34.52	100	110	Average
5785.00	101.67	-	-	92.67	35.09	8.42	34.51	100	110	Peak
5850.00	49.77	-31.90	81.67	40.70	35.18	8.43	34.54	100	110	Peak
11570.00	41.15	-32.85	74.00	73.87	-9.78	11.68	34.62	100	0	Peak



Test Mode :	Mode 18	Temperature :	24~25°C
Test Channel :	165	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5825 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
30.00	27.46	-12.54	40.00	38.88	19.51	0.53	31.46	-	-	Peak
77.25	25.33	-14.67	40.00	48.69	7.30	0.87	31.53	-	-	Peak
176.61	32.04	-11.46	43.50	53.10	9.23	1.24	31.53	100	360	Peak
365.80	34.44	-11.56	46.00	48.42	15.21	2.07	31.26	-	-	Peak
433.70	23.91	-22.09	46.00	35.97	16.81	2.26	31.13	-	-	Peak
719.30	25.19	-20.81	46.00	31.86	21.11	2.99	30.77	-	-	Peak
5725.00	51.40	-34.50	85.55	42.48	35.01	8.40	34.49	100	328	Peak
5825.00	93.36	-	-	84.30	35.16	8.43	34.53	100	328	Average
5825.00	105.55	-	-	96.49	35.16	8.43	34.53	100	328	Peak
5850.00	69.48	-16.07	85.55	60.41	35.18	8.43	34.54	100	328	Peak
8414.00	54.41	-19.59	74.00	43.39	36.00	10.12	35.10	100	95	Peak
8414.00	40.71	-13.29	54.00	29.69	36.00	10.12	35.10	100	95	Average
11650.00	43.45	-30.55	74.00	76.28	-9.91	11.74	34.66	100	0	Peak



Test Mode :	Mode 18	Temperature :	24~25°C
Test Channel :	165	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5825 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
33.78	29.17	-10.83	40.00	42.78	17.29	0.57	31.47	100	12	Peak
89.13	32.07	-11.43	43.50	53.91	8.75	0.93	31.52	-	-	Peak
186.06	29.45	-14.05	43.50	50.73	8.97	1.27	31.52	-	-	Peak
365.80	31.59	-14.41	46.00	45.57	15.21	2.07	31.26	-	-	Peak
430.90	23.20	-22.80	46.00	35.33	16.75	2.25	31.13	-	-	Peak
864.20	26.50	-19.50	46.00	31.09	22.84	3.29	30.72	-	-	Peak
5725.00	49.11	-31.09	80.20	40.19	35.01	8.40	34.49	100	64	Peak
5825.00	88.62	-	-	79.56	35.16	8.43	34.53	100	64	Average
5825.00	100.20	-	-	91.14	35.16	8.43	34.53	100	64	Peak
5850.00	64.88	-15.32	80.20	55.81	35.18	8.43	34.54	100	64	Peak
8446.00	54.86	-19.14	74.00	43.82	36.00	10.14	35.10	100	99	Peak
8446.00	40.73	-13.27	54.00	29.69	36.00	10.14	35.10	100	99	Average
11650.00	44.42	-29.58	74.00	77.25	-9.91	11.74	34.66	100	0	Peak



Test Mode :	Mode 19	Temperature :	24~25°C
Test Channel :	151	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5755 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	79.96	-4.65	84.61	71.04	35.01	8.40	34.49	100	331	Peak
5755.00	92.46	-	-	83.49	35.06	8.41	34.50	100	331	Average
5755.00	104.61	-	-	95.66	35.04	8.41	34.50	100	331	Peak
5850.00	49.15	-35.46	84.61	40.08	35.18	8.43	34.54	100	331	Peak



Test Mode :	Mode 19	Temperature :	24~25°C
Test Channel :	151	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5755 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	72.46	-6.97	79.43	63.54	35.01	8.40	34.49	100	109	Peak
5755.00	87.23	-	-	78.26	35.06	8.41	34.50	100	109	Average
5755.00	99.43	-	-	90.48	35.04	8.41	34.50	100	109	Peak
5850.00	48.78	-30.65	79.43	39.71	35.18	8.43	34.54	100	109	Peak



Test Mode :	Mode 20	Temperature :	24~25°C
Test Channel :	159	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5795 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	59.33	-23.53	82.86	50.41	35.01	8.40	34.49	100	329	Peak
5795.00	90.97	-	-	81.96	35.11	8.42	34.52	100	329	Average
5795.00	102.86	-	-	93.85	35.11	8.42	34.52	100	329	Peak
5850.00	55.68	-27.18	82.86	46.61	35.18	8.43	34.54	100	329	Peak



Test Mode :	Mode 20	Temperature :	24~25°C
Test Channel :	159	Relative Humidity :	43~44%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5795 MHz is Fundamental Signals which can be ignored. 2. 5725 MHz and 5850 MHz are not within a restricted band.		

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
5725.00	55.38	-24.44	79.82	46.46	35.01	8.40	34.49	153	330	Peak
5795.00	87.69	-	-	78.68	35.11	8.42	34.52	153	330	Average
5795.00	99.82	-	-	90.79	35.13	8.42	34.52	153	330	Peak
5850.00	54.08	-25.74	79.82	45.01	35.18	8.43	34.54	153	330	Peak



3.4 Antenna Requirements

3.4.1 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. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. 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.

3.4.2 Antenna Connected Construction

The antennas type used in this product is PIFA Antenna and it is considered to meet antenna requirement.

3.4.3 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 Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
EMI Test Receive	R&S	ESCS 30	100356	9KHz – 2.75GHz	Aug. 05, 2009	Aug. 04, 2010	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100081	9kHz~30MHz	Nov. 30, 2009	Nov. 29, 2010	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100080	9kHz~30MHz	Nov. 23, 2009	Nov. 22, 2010	Conduction (CO05-HY)
AC Power Source	APC	APC-1000W	N/A	N/A	N/A	N/A	Conduction (CO05-HY)
System Simulator	R&S	CMU200	105934	N/A	Nov. 11, 2008	Nov. 10, 2010	Conduction (CO05-HY)
GPS Station	T&E	GS-50	N/A	N/A	N/A	N/A	Conduction (CO05-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2726	30MHz ~ 1GHz	Oct. 31, 2009	Oct. 30, 2010	Radiation (03CH07-HY)
Spectrum Analyzer	R&S	FSP	101067	9KHz ~ 30GHz	Dec. 04, 2009	Dec. 03, 2010	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Aug. 20, 2009	Aug. 19, 2010	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz- 40GHz	Oct. 14, 2009	Oct. 13, 2010	Radiation (03CH07-HY)
Pre Amplifier	Agilent	8449B	3008A02362	1GHz~ 26.5GHz	Dec.09,2009	Dec. 08, 2010	Radiation (03CH07-HY)
Pre Amplifier	COM-POWER	PA-103A	161241	10-1000MHz. 32dB.GAIN	Mar. 27, 2010	Mar. 26, 2011	Radiation (03CH07-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 Specification	1.50	Rectangular	0.43
Site Imperfection	1.39	Rectangular	0.80
Mismatch	+0.34 / -0.35	U-Shape	0.24
Combined Standard Uncertainty $U_c(y)$	1.13		
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	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-Shape	0.28
Combined Standard Uncertainty $U_c(y)$	1.27		
Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	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=2)	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 = $20\text{Log}(1-\Gamma_1*\Gamma_2)$	+0.34 / -0.35	U-Shape	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				



Appendix A. Photographs of EUT

Please refer to Sporton report number EP050315-01 as below.