FCC RF Test Report

APPLICANT	:	Motorola, Inc.
EQUIPMENT	:	Enterprise Smartphone
BRAND NAME	:	Motorola
MODEL NAME	:	ES405B
FCC ID	:	UZ7ES405B
STANDARD	:	FCC Part 15 Subpart E
CLASSIFICATION	:	Unlicensed National Information Infrastructure (UNII)

The product was received on Jan. 01, 2010 and completely tested on Feb. 02, 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 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

Testing Laboratory 1190

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
FR010103C	Rev. 01	Initial issue of report	Mar. 18, 2010

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.403(i)	A9.2	26dB & 99% Bandwidth	-	Pass	-
3.2	15.407(a)	A9.2	Maximum Conducted Output Power	≤ 17, 24, 30 dBm (depend on band)	Pass	-
3.3	15.407(a)	A9.2	Power Spectral Density	≤ 4, 11, 17 dBm (depend on band)	Pass	-
3.4	15.407(b)	A9.3	Frequency Band Edges	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	-
3.5	15.407(b)	A9.3	Spurious Emission	< 20 dBc	Pass	-
3.6	15.207	Gen 7.2.2	AC Conducted Emission	15.207(a)	Pass	Under limit 6.5 dB at 0.326 MHz
3.7	15.407(b)	A9.3	Transmitter Radiated Emission	≤ -17, -27 dBm (depend on band)&15.209(a)	Pass	Under limit 6.04 dB at 15900 MHz
3.8	15.407(b)	A9.3	Peak Excursion Ratio	≤ 13dB	Pass	-
3.9	15.407(c)	A9.5	Automatically Discontinue Transmission	Discontinue Transmission	Pass	-
3.10	15.407(g)	A9.5	Frequency Stability	Within Operation Band	Pass	-
3.11	15.203 & 15.407(a)	A9.2	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Motorola, Inc.
One Motorola Plaza, Holtsville, NY 11742-1300 USA

1.2 Manufacturer

Inventec Appliances Corp.
No. 37, Wugong 5th Road, Wugu industrial Park, Taipei County 248, Taiwan

1.3 Feature of Equipment Under Test

Product Feature & Specification	
Equipment	Enterprise Smartphone
Brand Name	Motorola
Model Name	ES405B
FCC ID	UZ7ES405B
Tx/Rx Frequency Range	5150 MHz ~ 5250 MHz 5250 MHz ~ 5350 MHz 5470 MHz ~ 5725 MHz
Maximum Output Power to Antenna	**<5150 MHz ~ 5250 MHz>** 802.11a : 15.29 dBm **<5250 MHz ~ 5350 MHz>** 802.11a : 15.11 dBm **<5470 MHz ~ 5725 MHz>** 802.11a : 14.69 dBm
Antenna Type	PIFA Antenna with gain 2.4 dBi
HW Version	EVT2
SW Version	BSP2410
Type of Modulation	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 Unlicensed National Information Infrastructure (UNII).
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 1st 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 E
- FCC Public Notice DA 02-2138, (Measurement Guidelines of UNII)
- ANSI C63.4-2003
- IC RSS-210 Issued 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	Agilent	8960	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.	LCD Monitor	Lenovo	6135-AB1	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
6.	Bluetooth Earphone	Nokia	BH-102	PYAHS-107W	N/A	N/A
7.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A

2 Test Configuration of Equipment Under Test

2.1 Carrier Frequency Channel

Channel Spacing 20MHz							
Channel	**Freq. (MHz)**	**Channel**	**Freq. (MHz)**	**Channel**	**Freq. (MHz)**	**Channel**	**Freq. (MHz)**
36	5180	**40**	5200	**44**	5220	**48**	5240
52	5260	**56**	5280	**60**	5300	**64**	5320
100	5500	**104**	5520	**108**	5540	**112**	5560
116	5580	**120**	5600	**124**	5620	**128**	5640
132	5660	**136**	5680	**140**	5700		

2.2 RF Power

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

Channel	**Frequency**	**5GHz 802.11a RF Power (dBm)**							
		At OFDM Data Rate							
		6 Mbps	**9 Mbps**	**12 Mbps**	**18 Mbps**	**24 Mbps**	**36 Mbps**	**48 Mbps**	**54 Mbps**
CH 36	5180 MHz	12.33	12.33	12.23	12.19	11.96	11.86	11.78	10.97
CH 44	5220 MHz	15.25	15.15	14.99	14.94	14.71	12.47	11.58	10.76
CH 48	5240 MHz	**15.29**	15.22	15.08	15.09	14.91	12.68	11.74	10.90
CH 52	5260 MHz	15.11	15.11	15.07	14.97	14.64	12.35	11.51	10.49
CH 60	5300 MHz	14.91	14.84	14.83	14.73	14.48	12.47	11.33	10.39
CH 64	5320 MHz	13.43	13.34	13.30	13.24	13.01	12.82	11.41	10.52
CH 100	5500 MHz	12.20	12.19	12.04	11.93	11.82	11.68	11.62	10.63
CH 120	5600 MHz	14.69	14.63	14.63	14.55	14.36	12.60	11.41	10.52
CH 140	5700 MHz	10.85	10.71	10.72	10.58	10.32	10.33	10.09	10.11

Remark:

1. The 802.11a data rate was set in 6Mbps on 5150MHz to 5350MHz and 5470 MHz to 5725 MHz due to the highest RF output power.
2. The EUT is programmed to transmit signal continuously for all testing.

2.3 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).

The following tables are showing the test modes as the worst cases and recorded in this report.

	Test Cases
Test Item	**802.11a (Modulation : OFDM)**
Conducted TCs	■ Mode 1: CH36_5180 MHz ■ Mode 2: CH44_5220 MHz ■ Mode 3: CH48_5240 MHz ■ Mode 4: CH52_5260 MHz ■ Mode 5: CH60_5300 MHz ■ Mode 6: CH64_5320 MHz ■ Mode 7: CH100_5500 MHz ■ Mode 8: CH120_5600 MHz ■ Mode 9: CH140_5700 MHz
Radiated TCs	■ Mode 1: CH36_5180 MHz + Battery <3080mAh> ■ Mode 2: CH44_5220 MHz + Battery <3080mAh> ■ Mode 3: CH48_5240 MHz + Battery <3080mAh> ■ Mode 4: CH52_5260 MHz + Battery <3080mAh> ■ Mode 5: CH60_5300 MHz + Battery <3080mAh> ■ Mode 6: CH64_5320 MHz + Battery <3080mAh> ■ Mode 7: CH100_5500 MHz + Battery <3080mAh> ■ Mode 8: CH120_5600 MHz + Battery <3080mAh> ■ Mode 9: CH140_5700 MHz + Battery <3080mAh> ■ Mode 10: CH60_5300 MHz + Battery <1540mAh> ■ Mode 11: CH120_5600 MHz + Battery <1540mAh>

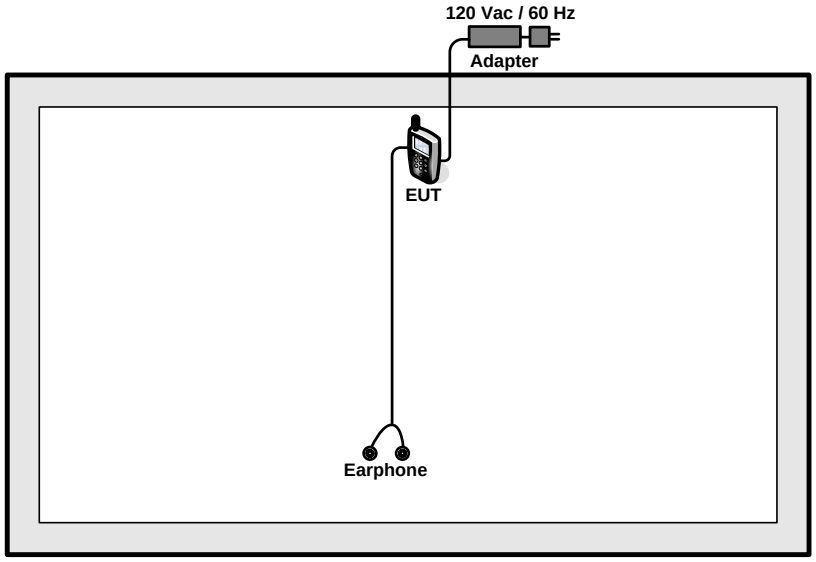
	Test Cases
AC Conducted Emission	Mode 1 : GSM 850 Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Charging from Adapter) + Battery <3080mAh> + Earphone + MP3 + Cradle Mode 2 : WCDMA Band V Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Link with Notebook) + Battery <3080mAh> + Earphone + Camera + Cradle Mode 3 : CDMA2000 BC0 Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Link with Notebook) + Battery <1540mAh> + Earphone + Camera + Cradle

Remark:

1. For radiated TCs test was performed together with USB Cable (Charging from Adapter) and Earphone.
2. "Bluetooth Link" stands for terminal linked to headset by Bluetooth function.
3. "WLAN Link" stands for terminal associated with AP at 5GHz band.
4. "GPS Rx" stands for receive signals from GPS station continuously.
5. "MP3" stands for playing MP3 file.
6. "Camera" stands for playing camera to capture picture.
7. "USB Link" stands for Activesync RNDIS file transfer.

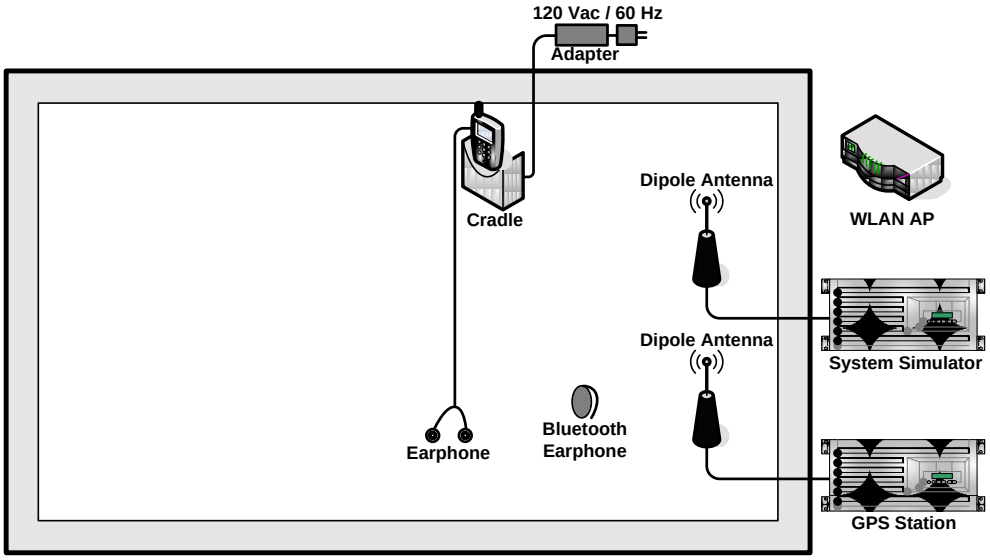
2.4 Connection Diagram of Test System

<Radiation Test>

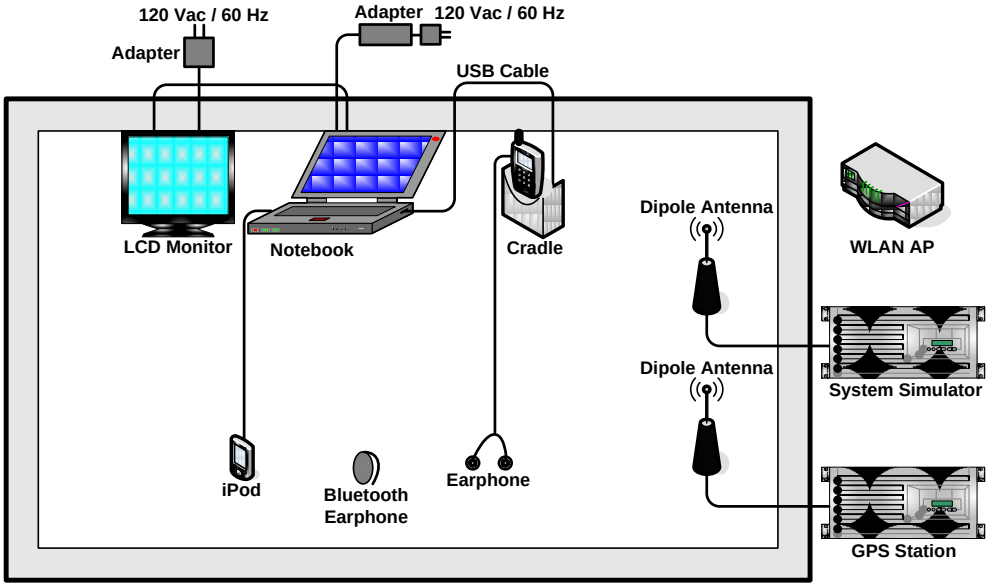


<Conduction Test>

EUT with Adapter Mode



EUT with USB Cable (Link with Notebook) Mode



2.5 RF Utility

The programmed RF Utility “Fcc Test 2009” 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 26dB & 99% Bandwidth Measurement

3.1.1 Limit of 26dB & 99% Bandwidth

There is no restriction limits for bandwidth. The maximum conducted output power can be limited by measured emission bandwidth (B). For the band 5.15~5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log B. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B. For the band 5.725-5.825 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 1 W (30dBm) or 17 dBm + 10log B.

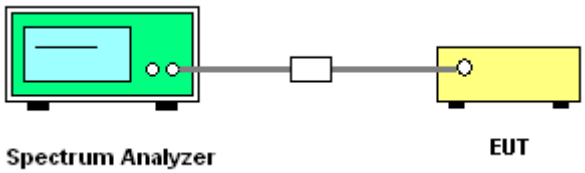
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows FCC Public Notice DA 02-2138 (Measurement Guidelines of UNII).
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
3. Read RBW and repeat measurement as needed until the RBW/BW ratio is approximately 1%.
4. Use a RBW = approximately 1% of the emission bandwidth; Set the VBW > RBW; Use a peak detector.
5. Measure the maximum width of the emission that is 26 dB relative to the peak of the emission and 99% occupied bandwidth.

3.1.4 Test Setup



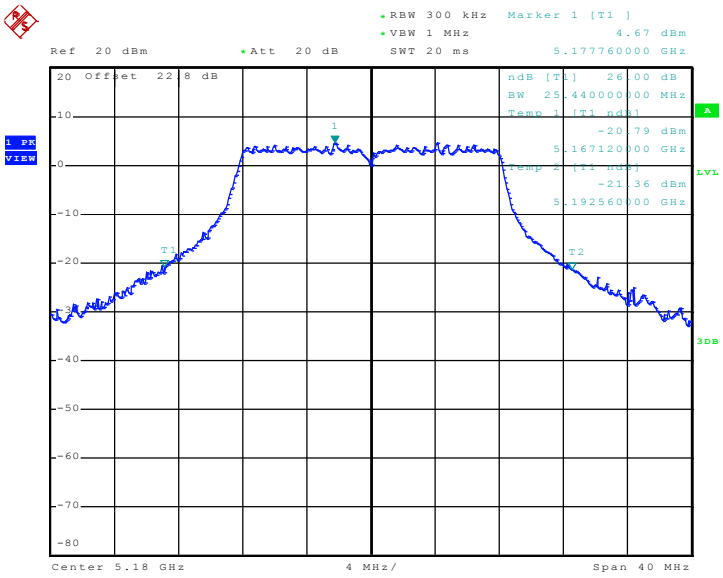
3.1.5 Test Result of 26dB & 99% Bandwidth Plots

Test Mode :	Mode 1~9	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Pass/Fail
36	5180	25.44	19.92	Pass
44	5220	27.04	21.20	Pass
48	5240	26.96	21.12	Pass
52	5260	26.96	20.88	Pass
60	5300	27.44	20.64	Pass
64	5320	26.16	20.08	Pass
100	5500	25.92	20.24	Pass
120	5600	33.92	23.44	Pass
140	5700	25.52	20.08	Pass

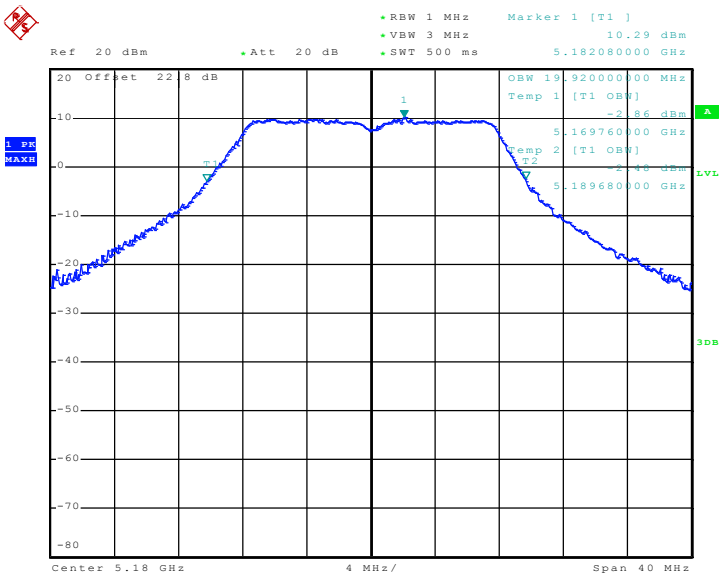
3.1.6 Test Result of 26dB & 99% Bandwidth Plots

Mode 1 : 26 dB Bandwidth Plot on 802.11a Channel 36



Date: 2.FEB.2010 09:31:27

Mode 1 : 99% Occupied Bandwidth Plot on 802.11a Channel 36



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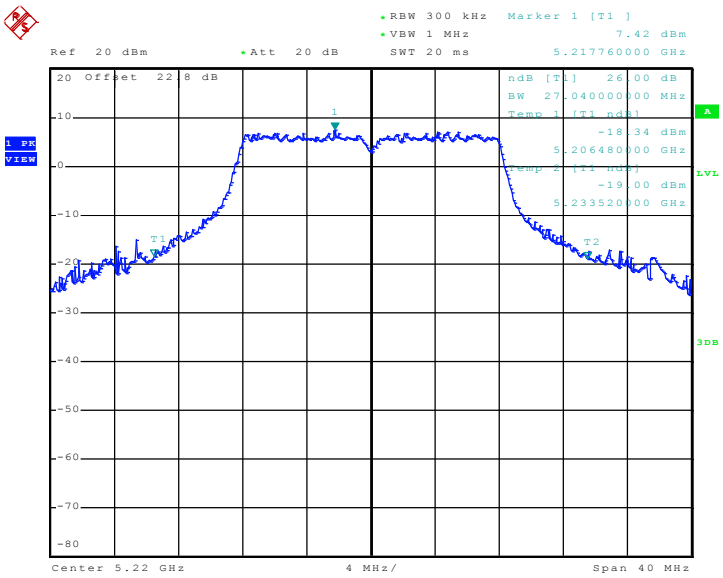
Mode 2 : 26 dB Bandwidth Plot on 802.11a Channel 44



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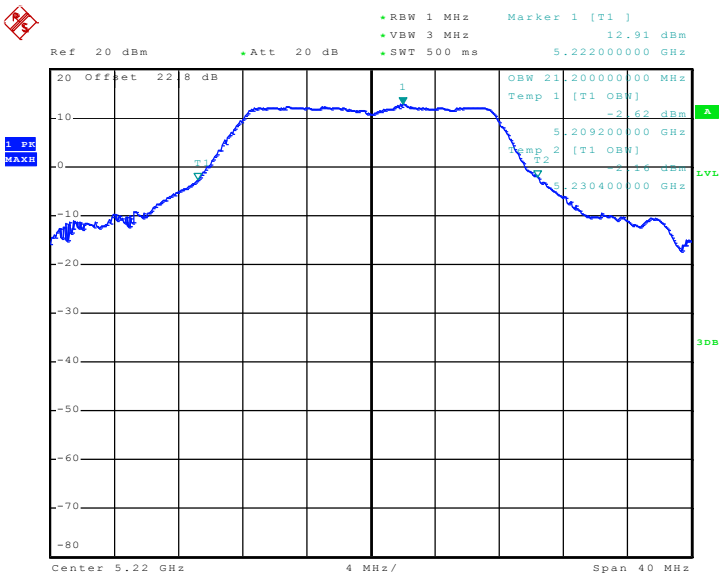
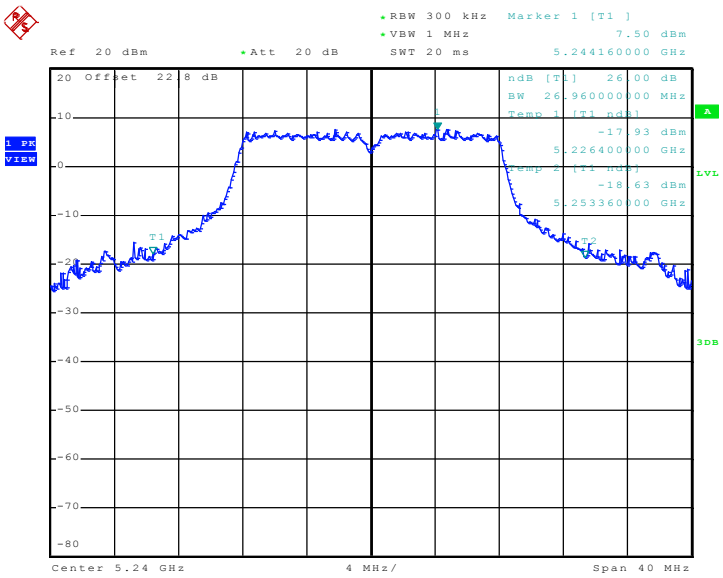
Mode 2 : 99% Occupied Bandwidth Plot on 802.11a Channel 44

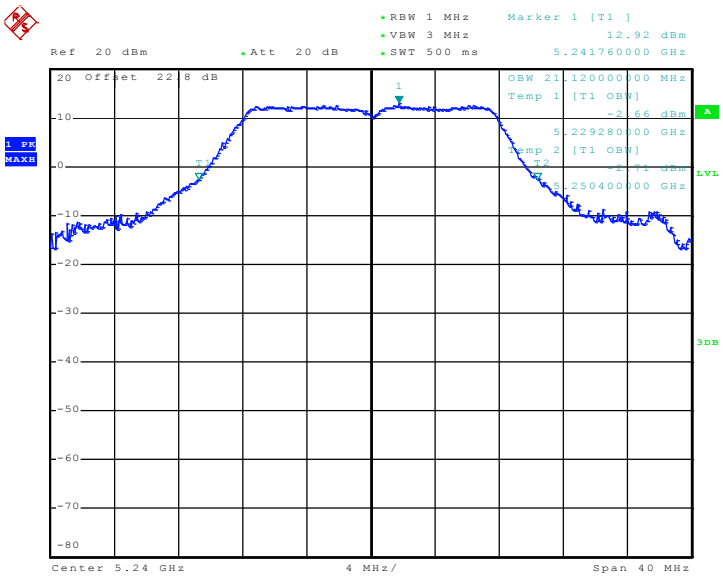


Date: 21.JAN.2010 17:41:52

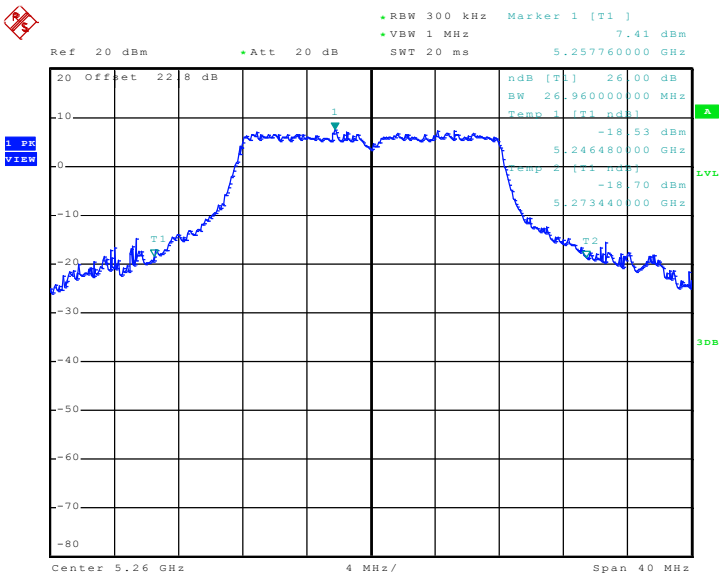
Mode 3 : 26 dB Bandwidth Plot on 802.11a Channel 48



Mode 3 : 99% Occupied Bandwidth Plot on 802.11a Channel 48



Mode 4 : 26 dB Bandwidth Plot on 802.11a Channel 52



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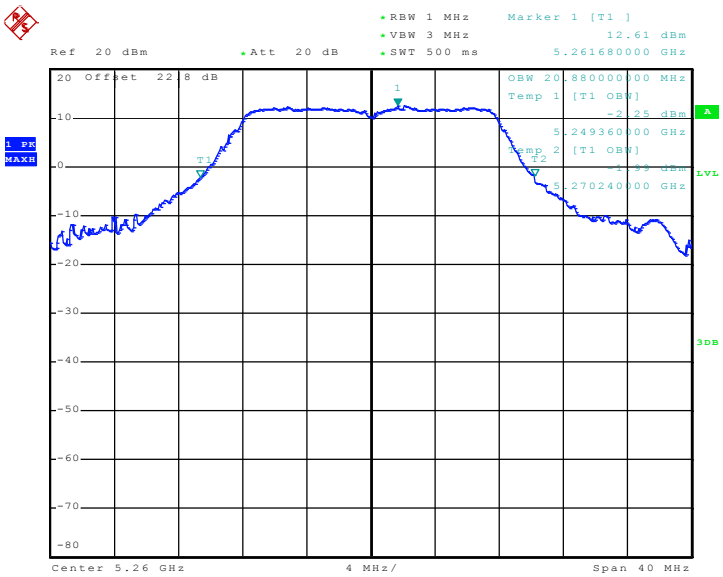
Mode 4 : 99% Occupied Bandwidth Plot on 802.11a Channel 52



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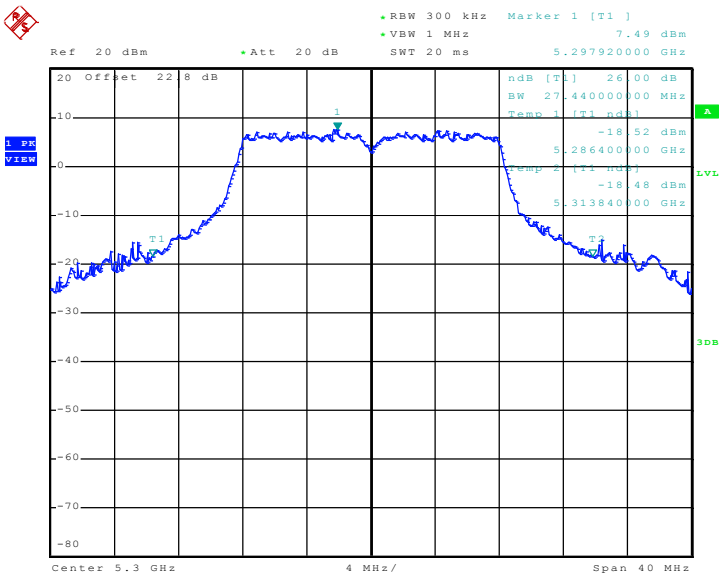
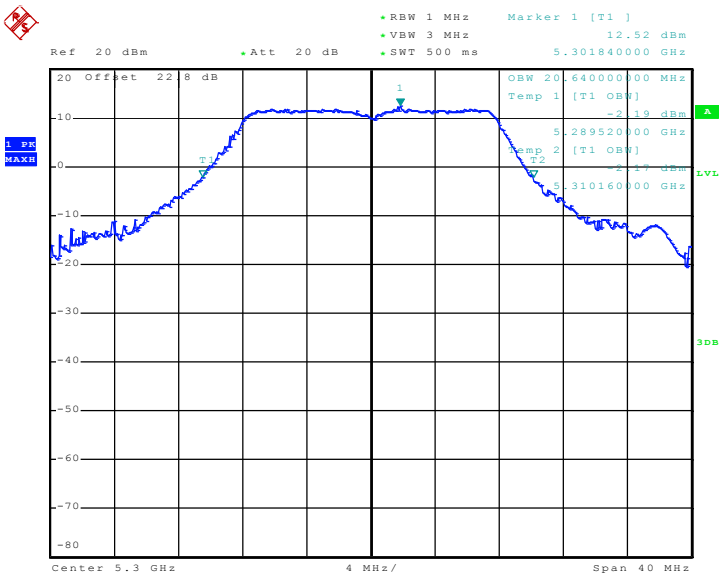
Mode 5 : 26 dB Bandwidth Plot on 802.11a Channel 60



Date: 2.FEB.2010 09:29:11

Mode 5 : 99% Occupied Bandwidth Plot on 802.11a Channel 60



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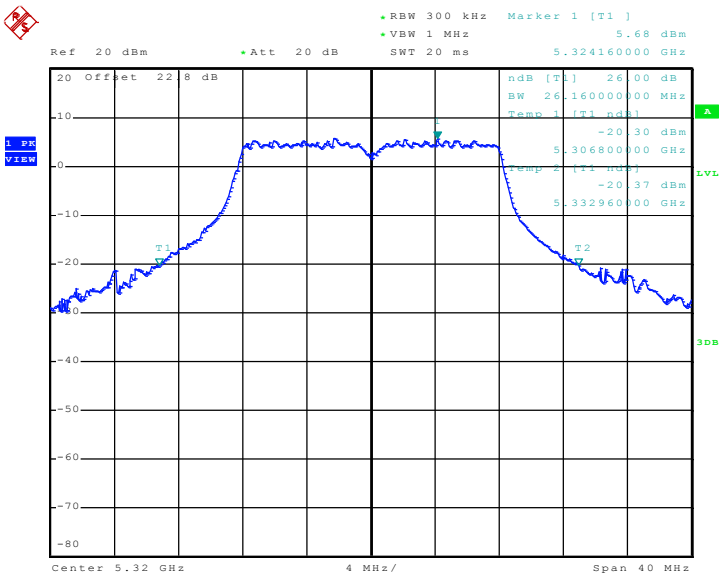
Mode 6 : 26 dB Bandwidth Plot on 802.11a Channel 64



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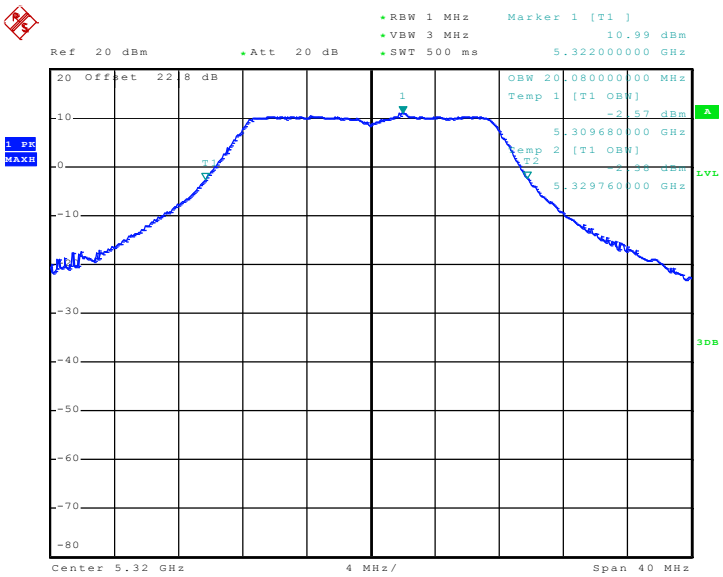
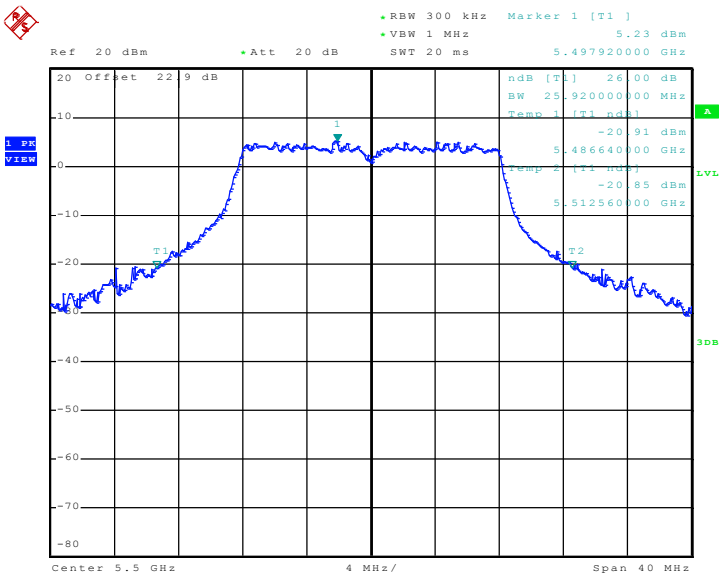
Mode 6 : 99% Occupied Bandwidth Plot on 802.11a Channel 64

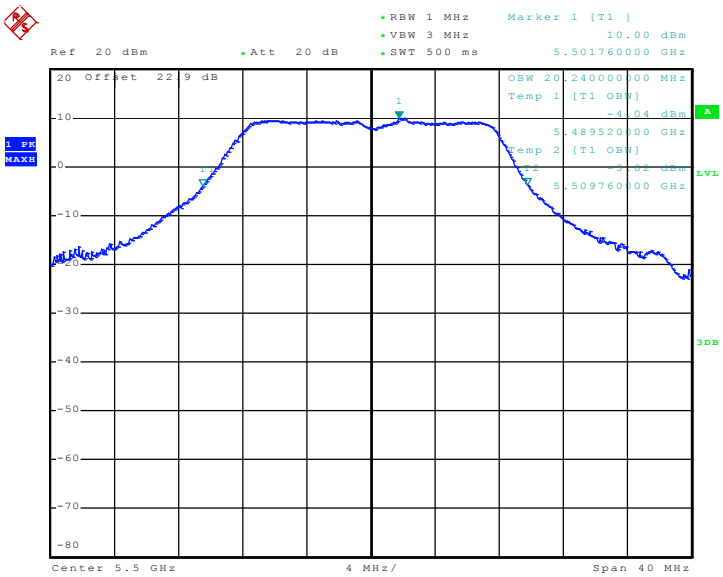


Date: 21.JAN.2010 17:47:56

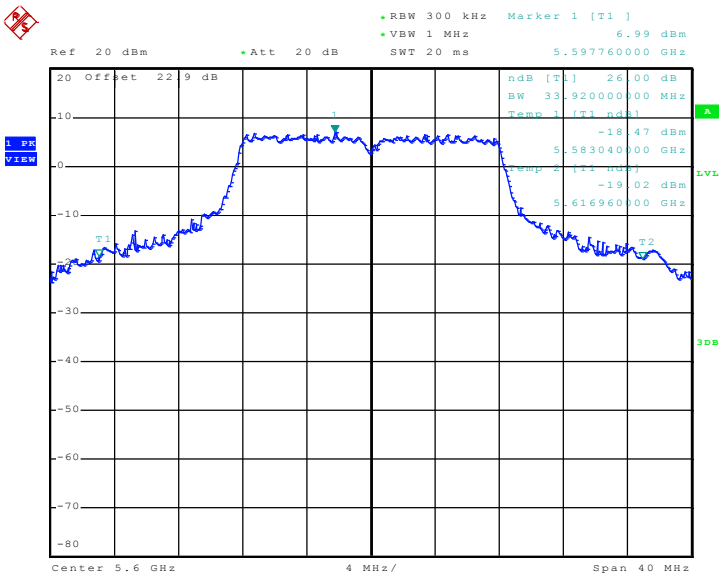
Mode 7 : 26 dB Bandwidth Plot on 802.11a Channel 100



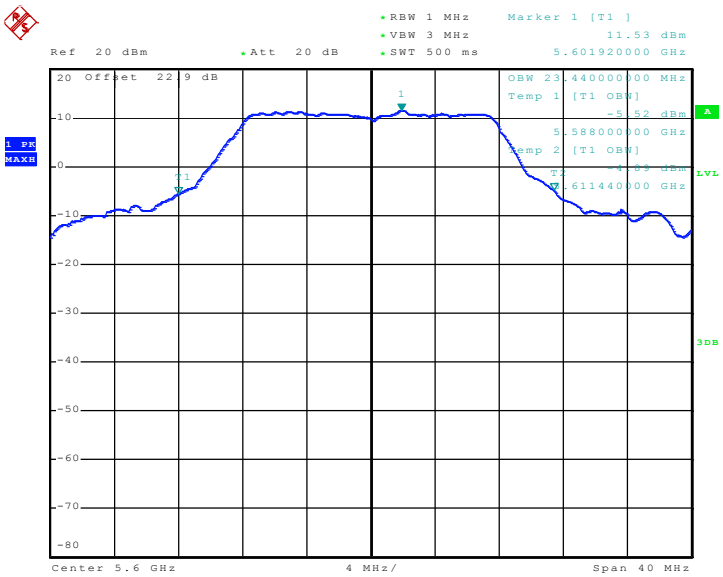
Mode 7 : 99% Occupied Bandwidth Plot on 802.11a Channel 100



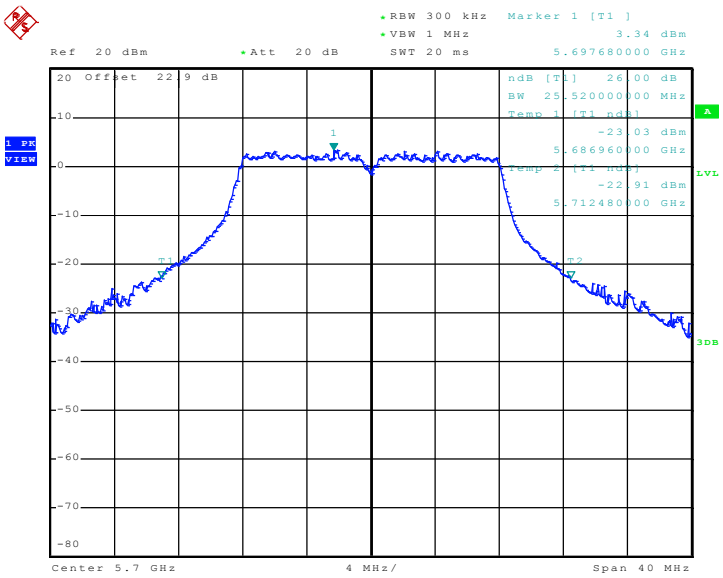
Mode 8 : 26 dB Bandwidth Plot on 802.11a Channel 120



Mode 8 : 99% Occupied Bandwidth Plot on 802.11a Channel 120



Mode 9 : 26 dB Bandwidth Plot on 802.11a Channel 140



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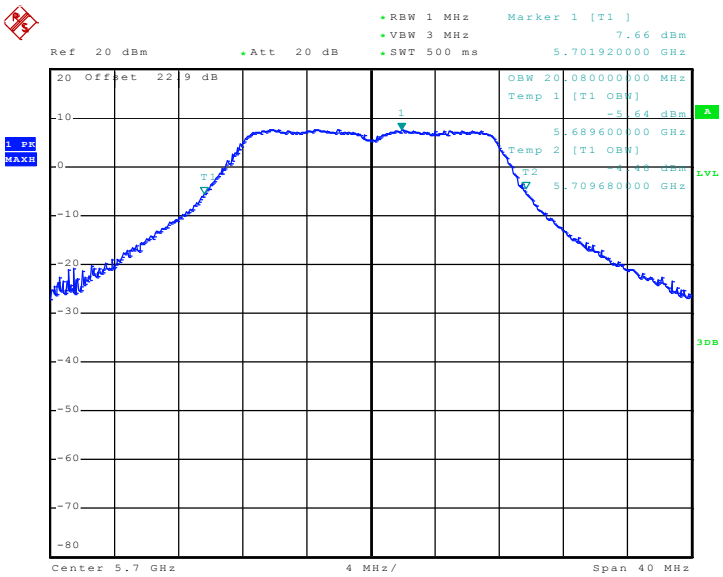
Mode 9 : 99% Occupied Bandwidth Plot on 802.11a Channel 140



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3.2 Maximum Conducted Output Power Measurement

3.2.1 Limit of Maximum Conducted Output Power

For the band 5.15~5.25 GHz, the maximum conducted output power shall not exceed the lesser of 50 mW (17dBm) or 4 dBm + 10log B, where B is the 26 dB emissions bandwidth in MHz. If transmitting antenna directional gain is greater than 6 dBi, the peak output power and power density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed the lesser of 250 mW (24dBm) or 11 dBm + 10log B. If transmitting antenna directional gain is greater than 6 dBi, the peak output power and power density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

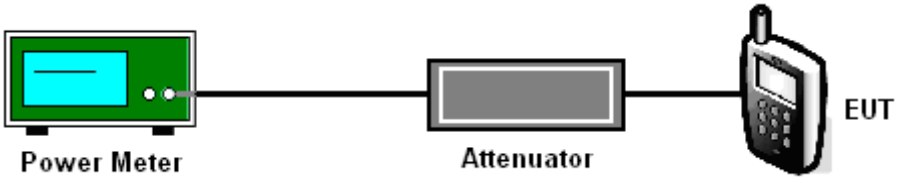
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The testing follows FCC Public Notice DA 02-2138 (Measurement Guidelines of UNII).
2. The RF output of EUT was connected to the power meter by a low loss cable.
3. Measure the power and record it.

3.2.4 Test Setup



3.2.5 Test Result of Maximum Conducted Output Power

Test Mode :	Mode 1~9	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Channel	Frequency (MHz)	Measured Power Output (dBm)	Max. Limits (dBm)	Pass/Fail
36	5180	12.33	17	Pass
44	5220	15.25	17	Pass
48	5240	15.29	17	Pass
52	5260	15.11	24	Pass
60	5300	14.91	24	Pass
64	5320	13.43	24	Pass
100	5500	12.20	24	Pass
120	5600	14.69	24	Pass
140	5700	10.85	24	Pass

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

For the band 5.15–5.25 GHz, the peak power spectral density shall not exceed 4 dBm in any 1MHz band. For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the peak power spectral density shall not exceed 11 dBm in any 1 1MHz band. If transmitting antenna directional gain is greater than 6 dBi, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

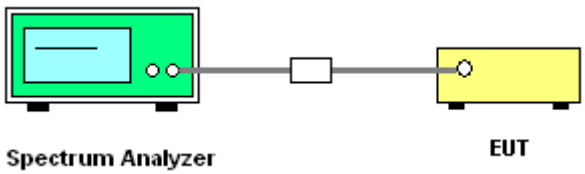
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

The transmitter output is connected to the spectrum analyzer. According to the method 3 of DA-02-2138, the resolution bandwidth is set to 1 MHz, video bandwidth is 3MHz, trace average 100 traces in power averaging mode, and sample detection is used, and the analyzer is set for video averaging.

3.3.4 Test Setup



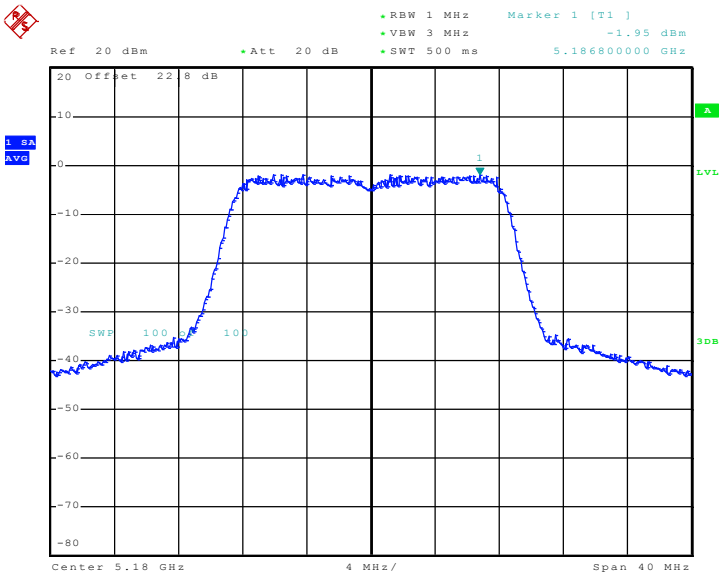
3.3.5 Test Result of Power Spectral Density

Test Mode :	Mode 1~9	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Channel	Frequency (MHz)	Measured PSD (dBm)	Max. Limits (dBm)	Pass/Fail
36	5180	-1.95	4	Pass
44	5220	2.22	4	Pass
48	5240	2.05	4	Pass
52	5260	1.41	11	Pass
60	5300	1.92	11	Pass
64	5320	-0.37	11	Pass
100	5500	-1.59	11	Pass
120	5600	0.51	11	Pass
140	5700	-3.23	11	Pass

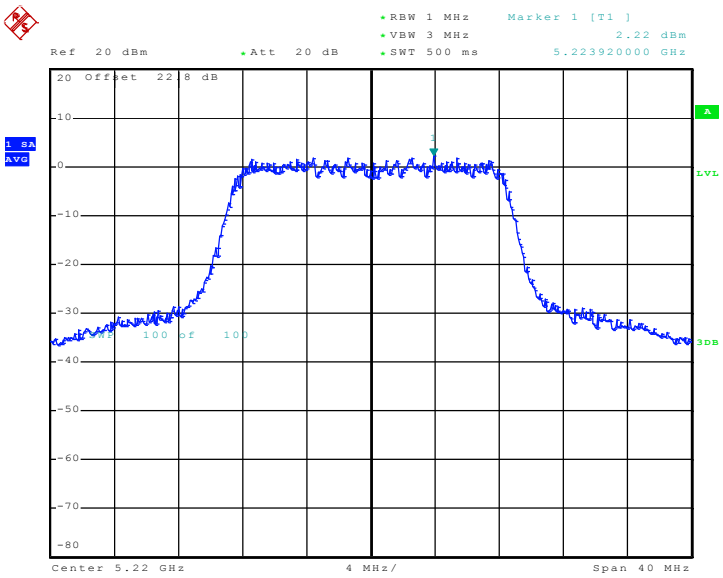
3.3.6 Test Result of Power Spectral Density Plots

Mode 1 : PSD Plot on 802.11a Channel 36



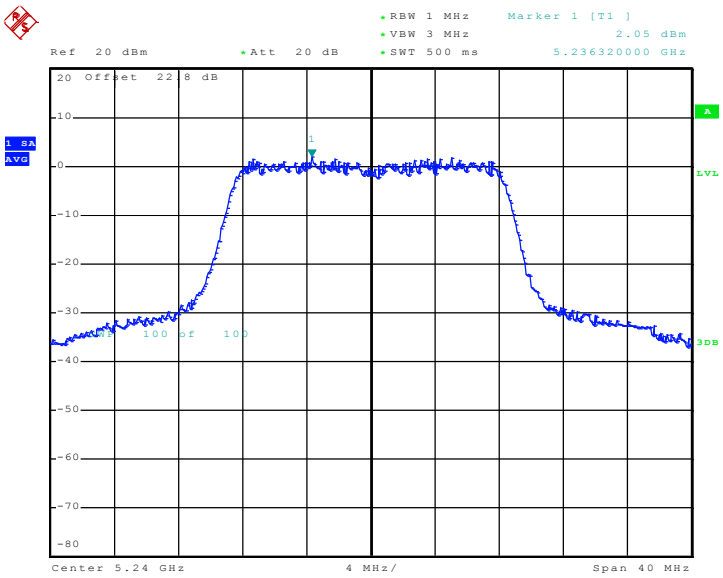
Date: 21.JAN.2010 17:13:56

Mode 2 : PSD Plot on 802.11a Channel 44



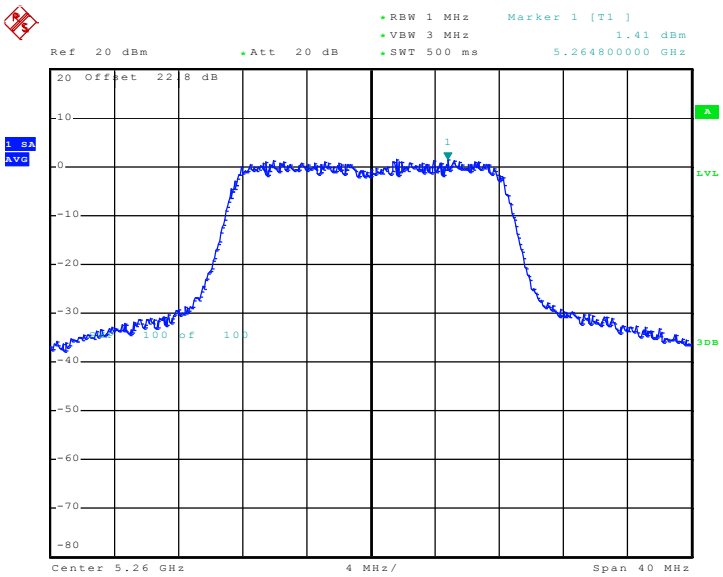
Date: 21.JAN.2010 17:15:40

Mode 3 : PSD Plot on 802.11a Channel 48



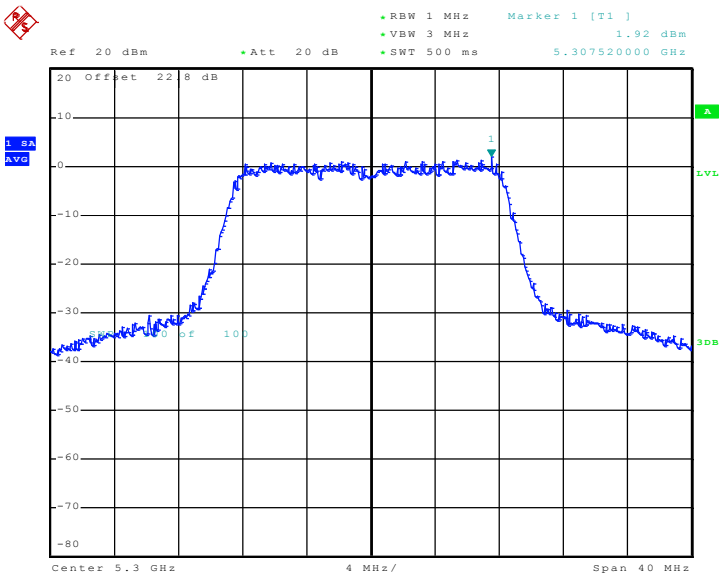
Date: 21.JAN.2010 17:20:31

Mode 4 : PSD Plot on 802.11a Channel 52



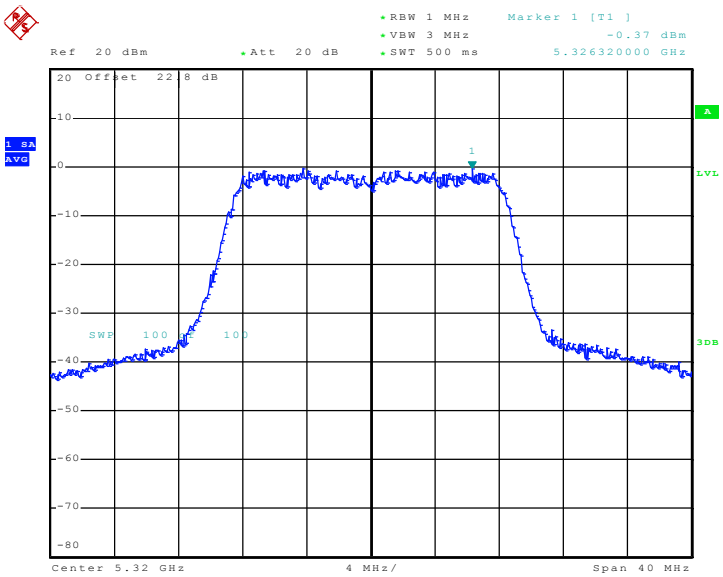
Date: 21.JAN.2010 17:22:28

Mode 5 : PSD Plot on 802.11a Channel 60



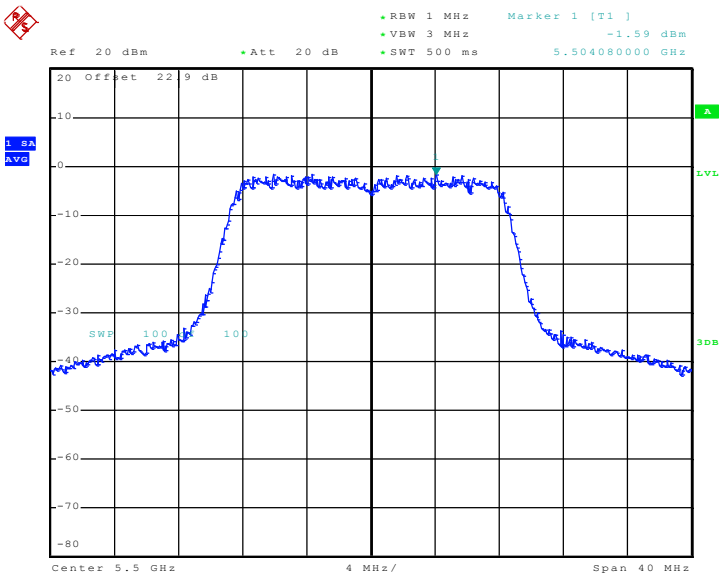
Date: 21.JAN.2010 17:24:10

Mode 6 : PSD Plot on 802.11a Channel 64



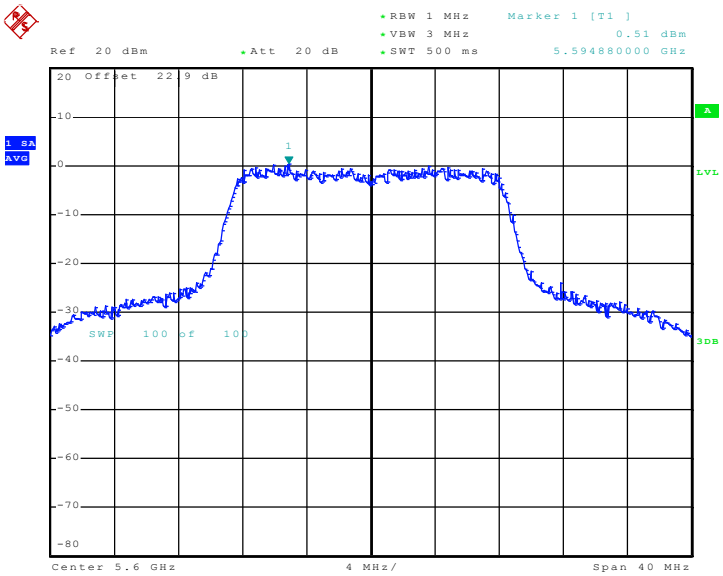
Date: 21.JAN.2010 17:25:49

Mode 7 : PSD Plot on 802.11a Channel 100



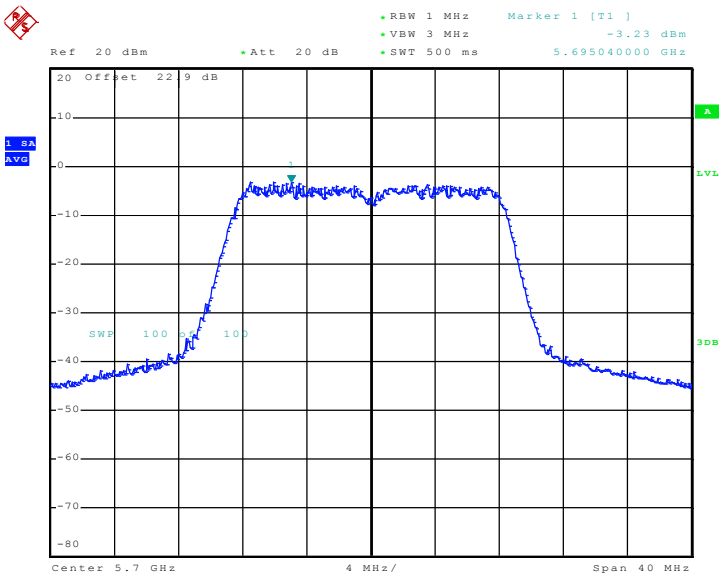
Date: 21.JAN.2010 17:28:42

Mode 8 : PSD Plot on 802.11a Channel 120



Date: 21.JAN.2010 17:30:23

Mode 9 : PSD Plot on 802.11a Channel 140



Date: 21.JAN.2010 17:32:13

3.4 Band Edges Measurement

3.4.1 Limit of Band Edges

(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. Devices operating in the 5.25–5.35 GHz band that generate emissions in the 5.15–5.25 GHz band must meet all applicable technical requirements for operation in the 5.15–5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of –27 dBm/MHz in the 5.15–5.25 GHz band. For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

(2) The provisions of Section 15.205 Restricted bands of operation of this part apply to intentional radiators operating under this section.

3.4.2 Measuring Instruments

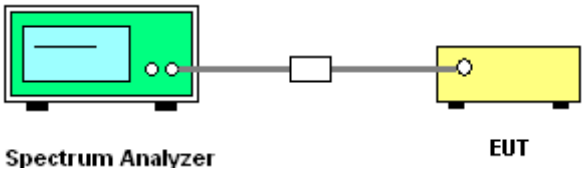
See list of measuring instruments of this test report.

3.4.3 Test Procedures

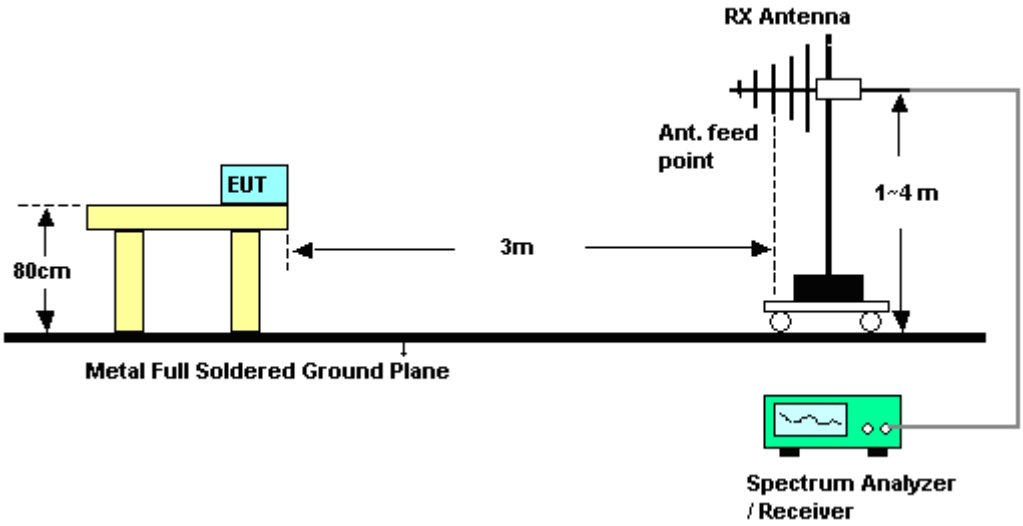
1. Set both RBW and VBW of spectrum analyzer to 1MHz with convenient frequency span including 1MHz bandwidth from band edge.
2. The band edges was measured and recorded.

3.4.4 Test Setup

<Conducted>



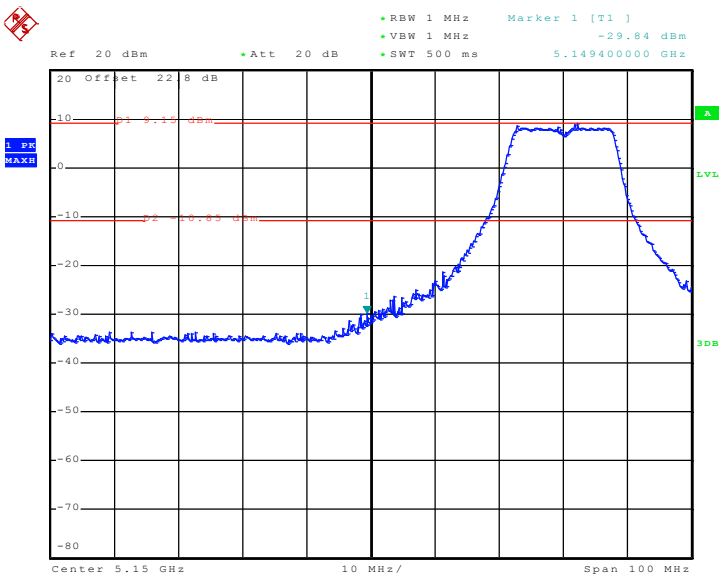
<Radiated>



3.4.5 Test Result of Conducted Band Edges

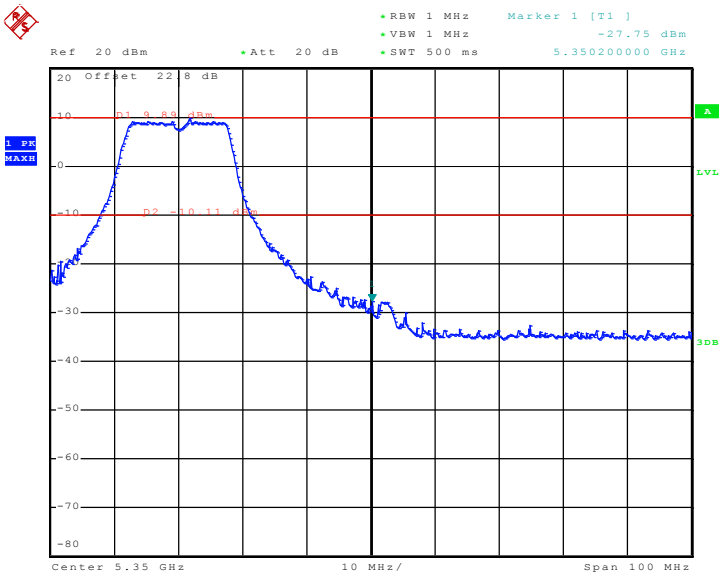
Test Mode :	Mode 1 and Mode 6	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Mode 1 : Low Band Edge Plot on Channel 36



Date: 21.JAN.2010 16:49:16

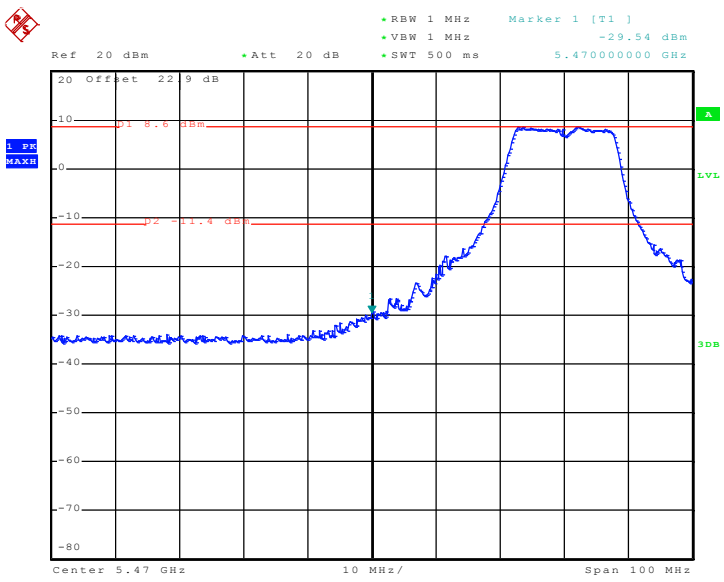
Mode 6 : High Band Edge Plot on Channel 64



Date: 21.JAN.2010 16:50:20

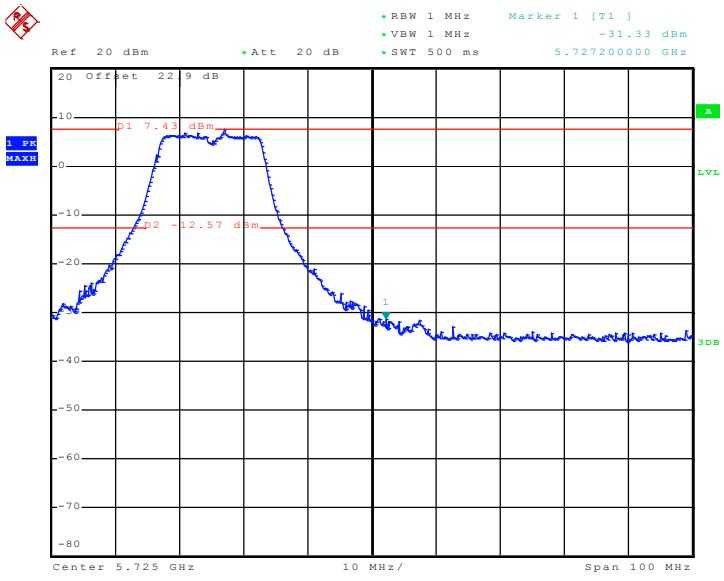
Test Mode :	Mode 7 and Mode 9	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Mode 7 : Low Band Edge Plot on Channel 100



Date: 21.JAN.2010 16:52:03

Mode 9 : High Band Edge Plot on Channel 140



Date: 21.JAN.2010 16:52:58

3.4.6 Test Result of Radiated Band Edges

Test Mode :	Mode 1	**Temperature :**	22~23°C℃
Test Band :	802.11a	**Relative Humidity :**	51~52%%
Test Channel :	36	**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
5150	55.65	-18.35	74	47.56	34.49	8.07	34.47	100	291	Peak
5150	42.35	-11.65	54	34.26	34.49	8.07	34.47	100	291	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
5150	55.53	-18.47	74	47.44	34.49	8.07	34.47	100	291	Peak
5150	41.17	-12.83	54	33.08	34.49	8.07	34.47	100	291	Average

Test Mode :	Mode 6	**Temperature :**	22~23°C℃
Test Band :	802.11a	**Relative Humidity :**	51~52%%
Test Channel :	64	**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
5350	51.26	-22.74	74	42.85	34.61	8.23	34.43	102	359	Peak
5350	39.46	-14.54	54	31.05	34.61	8.23	34.43	102	359	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
5350	50.24	-23.76	74	41.83	34.61	8.23	34.43	100	303	Peak
5350	38.93	-15.07	54	30.52	34.61	8.23	34.43	100	303	Average

Test Mode :	Mode 7	Temperature :	22~23°C℃
Test Band :	802.11a	Relative Humidity :	51~52%%
Test Channel :	100	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
5470	52.49	-15.81	68.3	43.9	34.68	8.32	34.41	101	313	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
5470	51.70	-16.6	68.3	43.11	34.68	8.32	34.41	116	359	Peak

Test Mode :	Mode 9	Temperature :	22~23°C℃
Test Band :	802.11a	Relative Humidity :	51~52%%
Test Channel :	140	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	51.10	-17.2	68.3	42.18	35.01	8.4	34.49	100	311	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	49.64	-18.66	68.3	40.72	35.01	8.4	34.49	100	17	Peak

3.5 Spurious Emission

3.5.1 Limit of Spurious Emission Measurement

All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band.

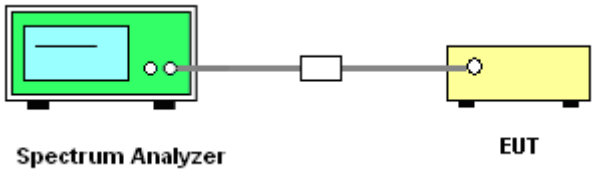
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedure

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set RBW = 100 kHz, Video bandwidth (VBW) > RBW, scan up through 10th harmonic. All harmonics/spurs must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

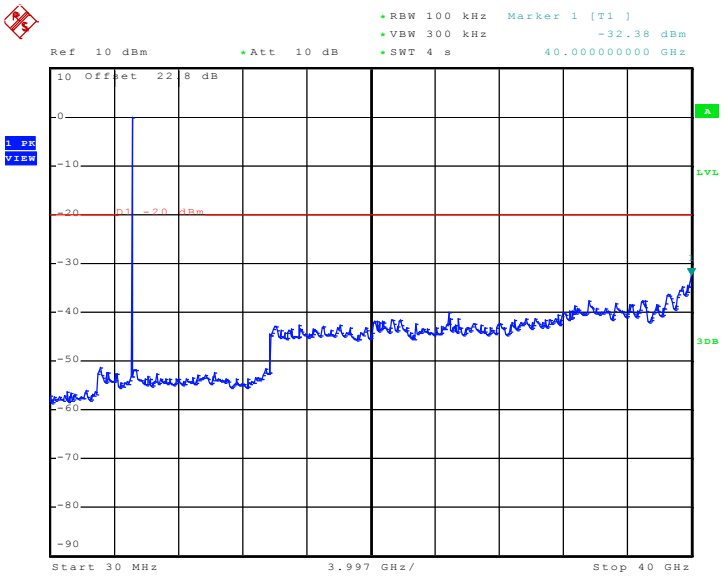
3.5.4 Test Setup



3.5.5 Test Result

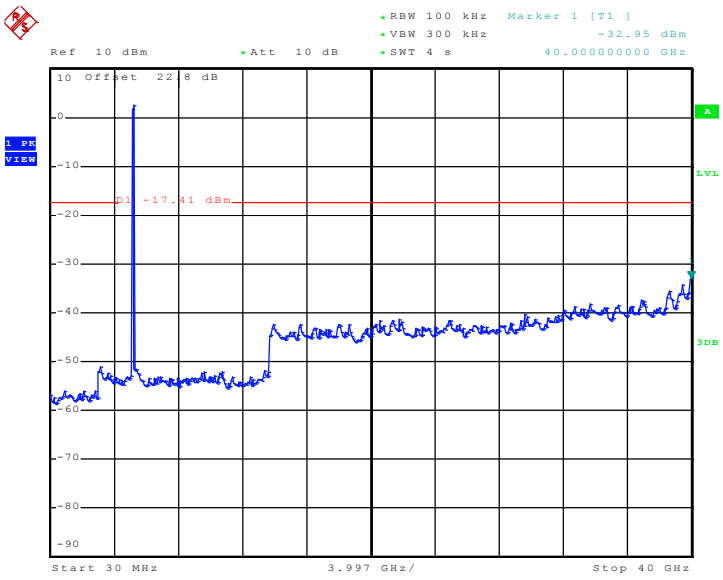
Test Mode :	Mode 1~9	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Mode 1 : Spurious Emission Plot on channel 36 between 30 MHz~40 GHz



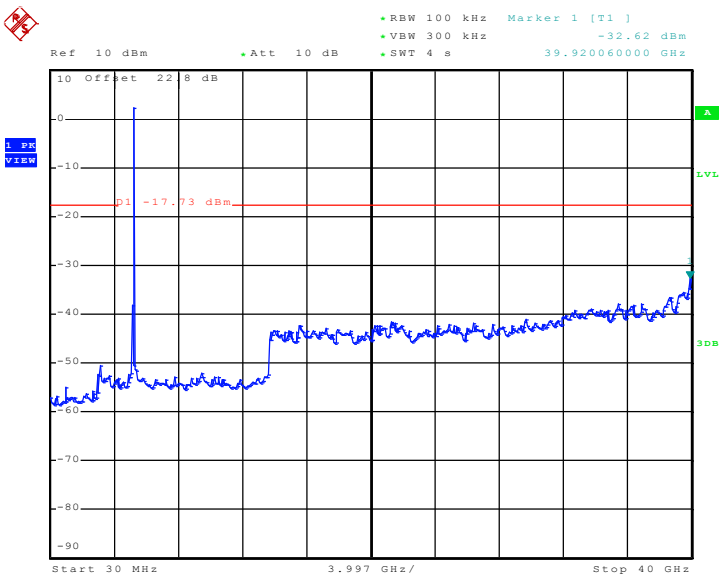
Date: 21.JAN.2010 18:37:55

Mode 2 : Spurious Emission Plot on channel 44 between 30 MHz~40 GHz



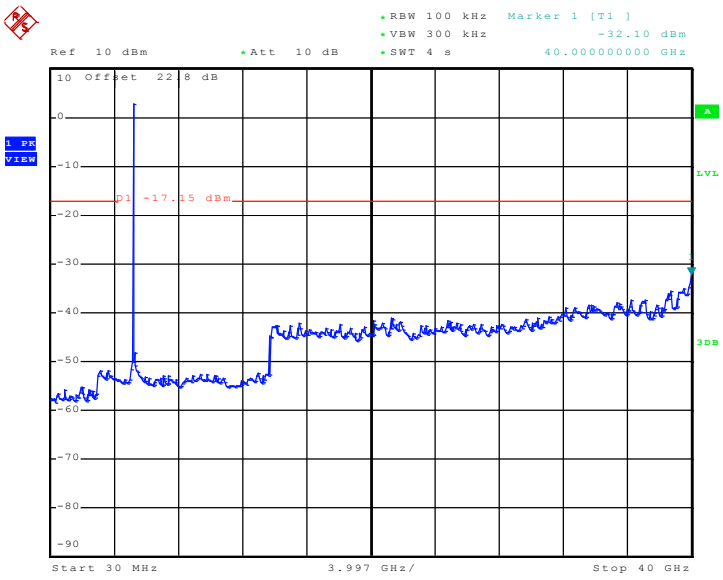
Date: 21.JAN.2010 18:49:26

Mode 3 : Spurious Emission Plot on channel 48 between 30 MHz~40 GHz



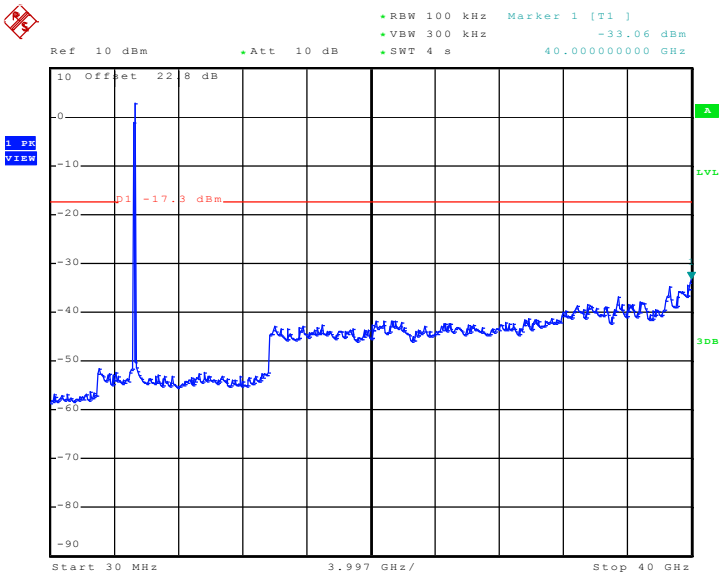
Date: 21.JAN.2010 18:50:39

Mode 4 : Spurious Emission Plot on channel 52
between 30 MHz~40 GHz



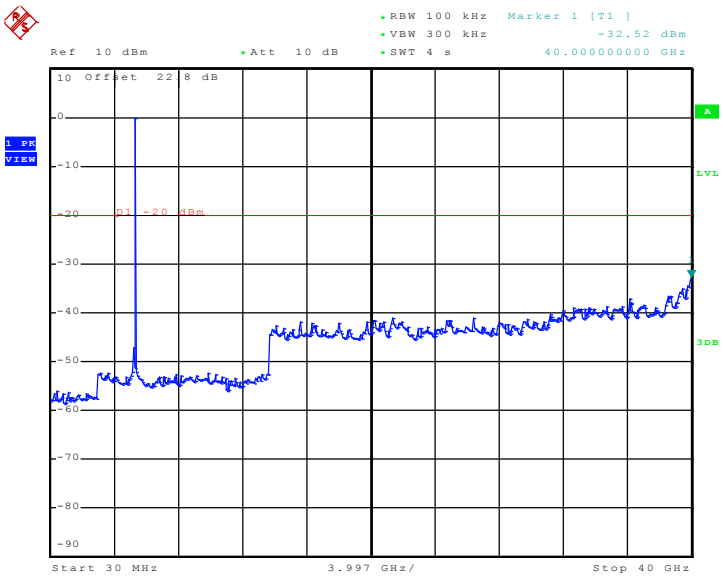
Date: 21.JAN.2010 18:33:01

Mode 5 : Spurious Emission Plot on channel 60
between 30 MHz~40 GHz



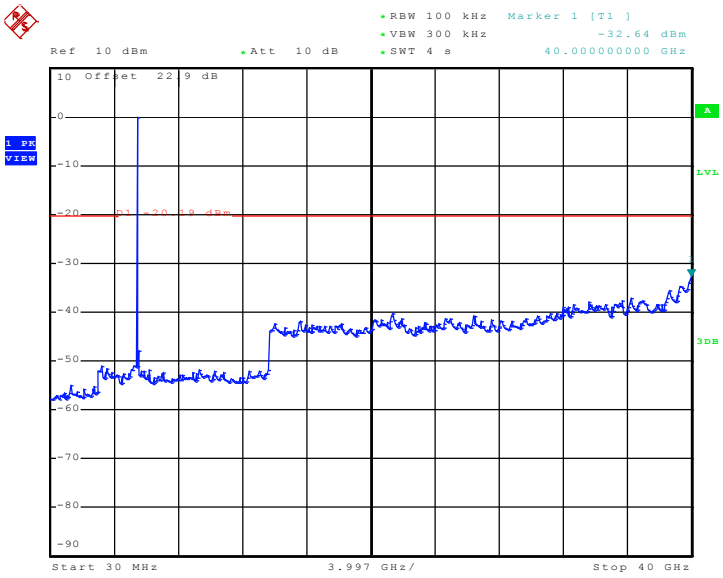
Date: 21.JAN.2010 18:34:00

Mode 6 : Spurious Emission Plot on channel 64 between 30 MHz~40 GHz



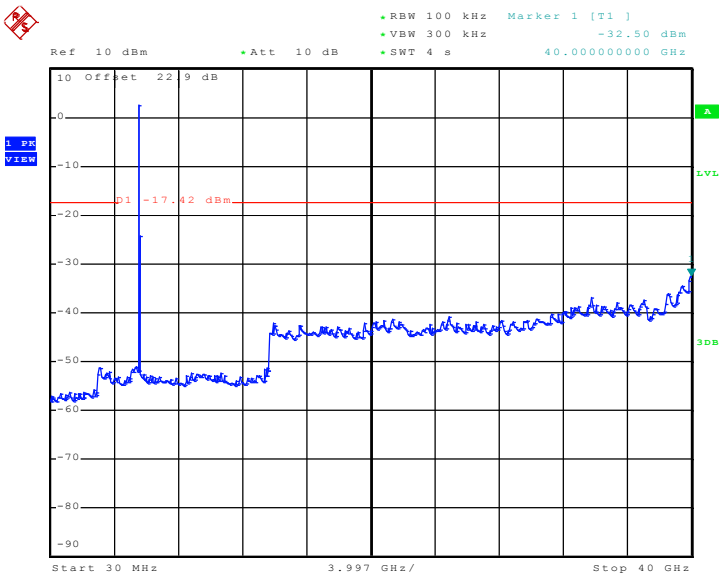
Date: 21.JAN.2010 18:36:06

Mode 7 : Spurious Emission Plot on channel 100 between 30 MHz~40 GHz



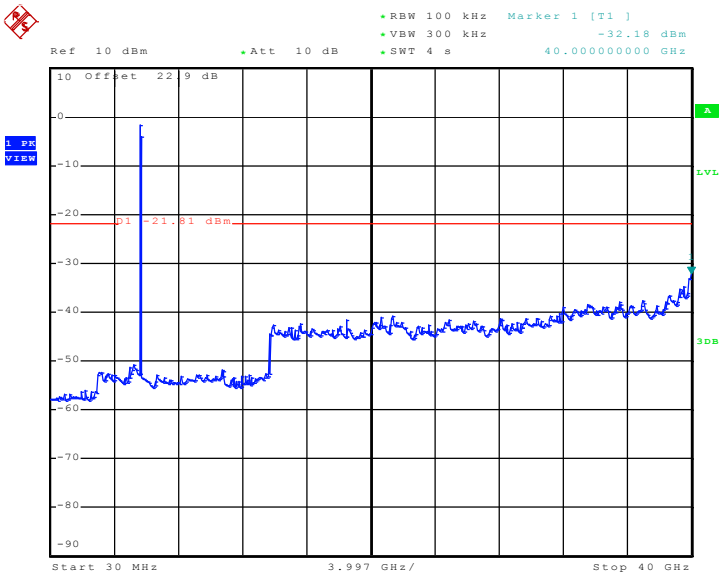
Date: 21.JAN.2010 18:43:39

Mode 8 : Spurious Emission Plot on channel 120 between 30 MHz~40 GHz



Date: 21.JAN.2010 18:45:05

Mode 9 : Spurious Emission Plot on channel 140 between 30 MHz~40 GHz



Date: 21.JAN.2010 18:46:11

3.6 AC Conducted Emission Measurement

3.6.1 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.

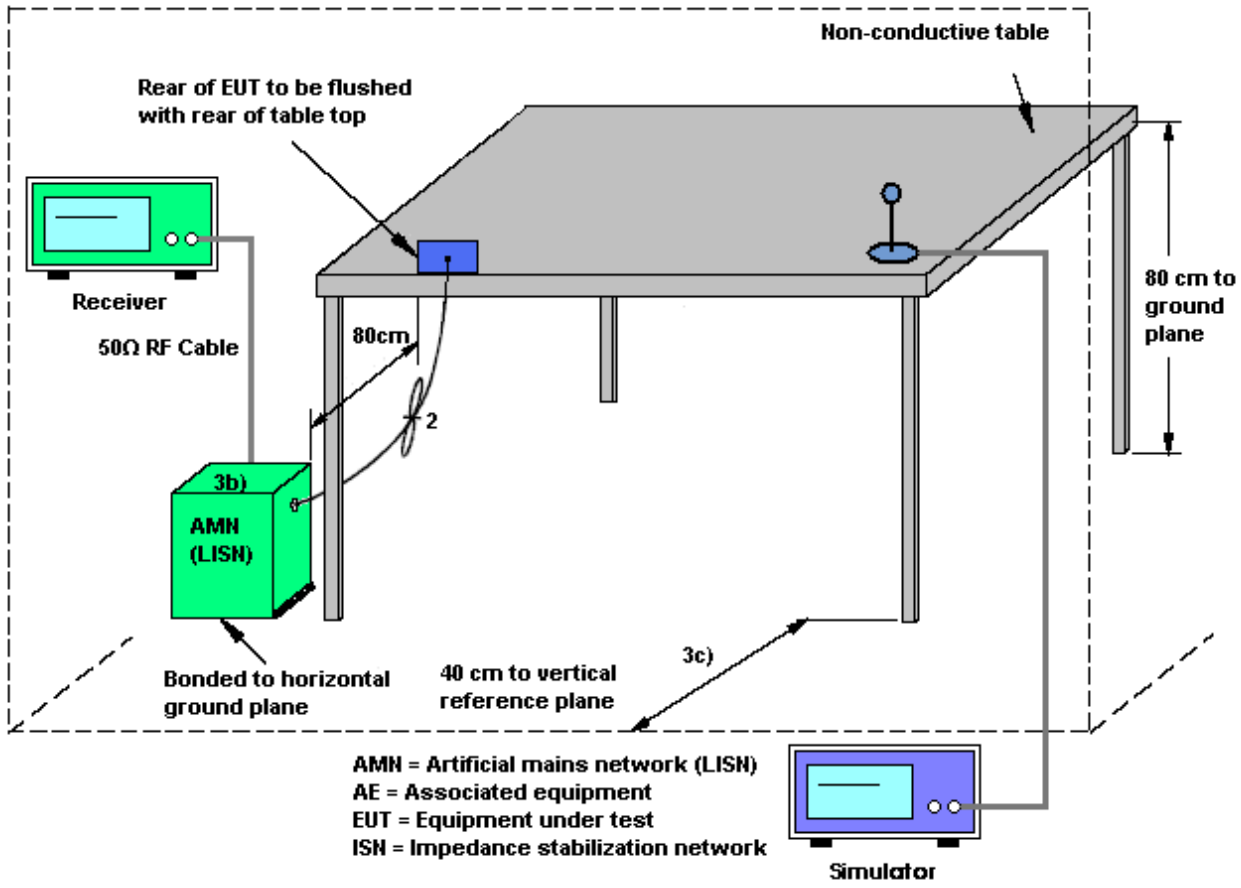
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

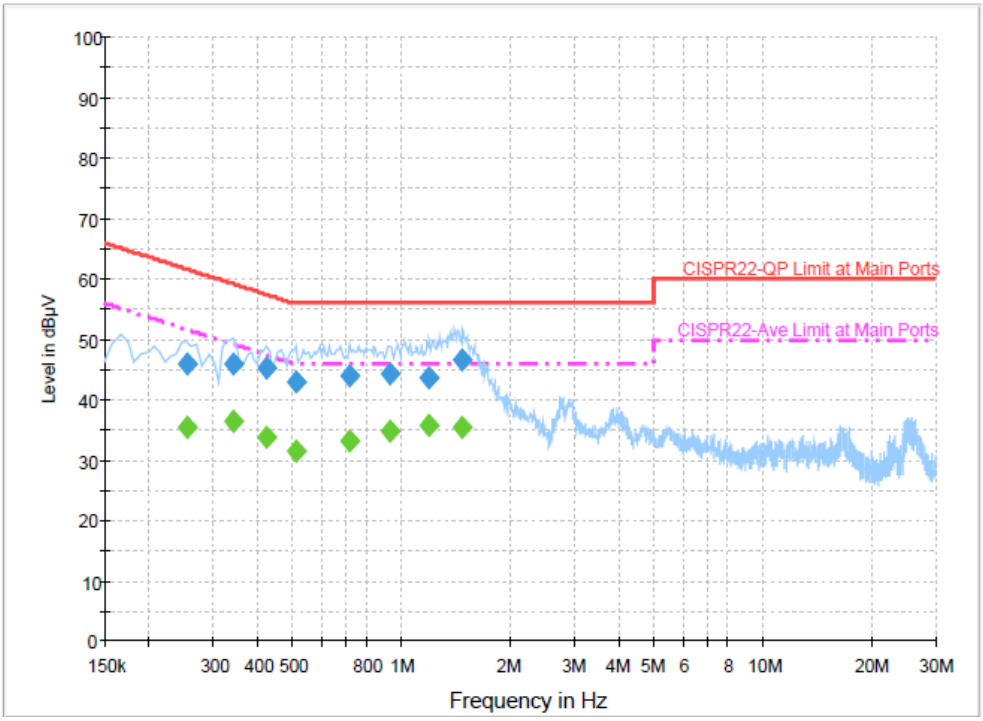
4. Please follow the guidelines in ANSI C63.4-2003.
5. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
6. Connect EUT to the power mains through a line impedance stabilization network (LISN).
7. All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

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	**Temperature :**	20~22℃
Test Engineer :	Hayden Wu	**Relative Humidity :**	45~48%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	GSM 850 Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Charging from Adapter) + Battery <3080mAh> + Earphone + MP3 + Cradle		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



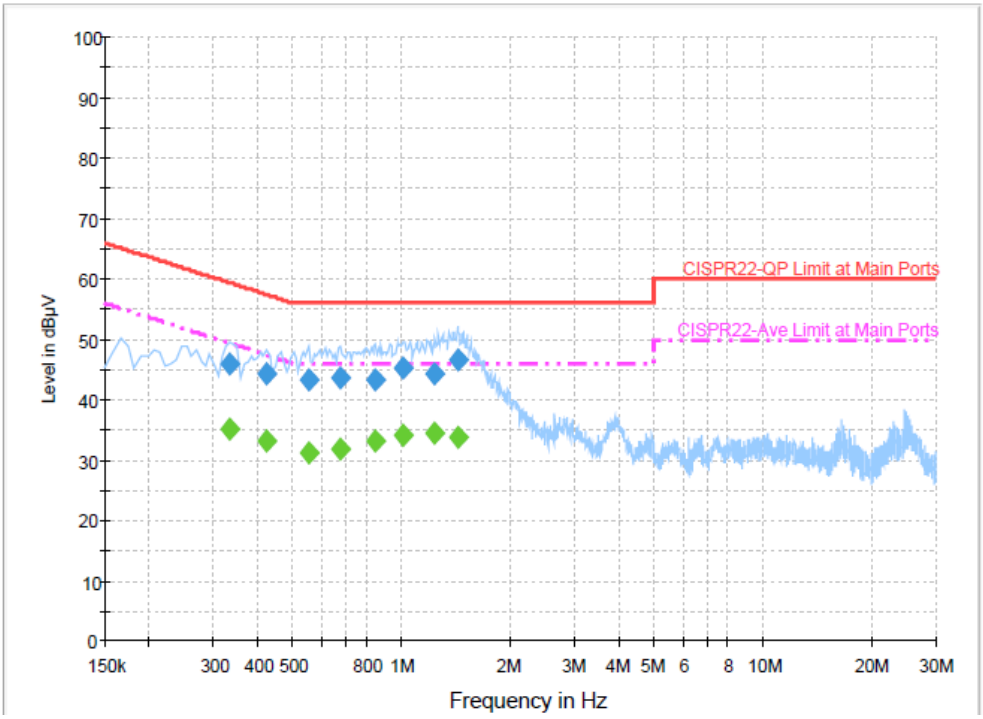
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.254000	45.9	Off	L1	19.4	15.7	61.6
0.342000	45.9	Off	L1	19.5	13.3	59.2
0.422000	45.1	Off	L1	19.4	12.3	57.4
0.510000	43.0	Off	L1	19.4	13.0	56.0
0.718000	44.1	Off	L1	19.5	11.9	56.0
0.926000	44.4	Off	L1	19.4	11.6	56.0
1.190000	43.8	Off	L1	19.5	12.2	56.0
1.470000	46.6	Off	L1	19.5	9.4	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.254000	35.5	Off	L1	19.4	16.1	51.6
0.342000	36.4	Off	L1	19.5	12.8	49.2
0.422000	33.7	Off	L1	19.4	13.8	47.4
0.510000	31.4	Off	L1	19.4	14.6	46.0
0.718000	33.0	Off	L1	19.5	13.0	46.0
0.926000	34.7	Off	L1	19.4	11.3	46.0
1.190000	35.6	Off	L1	19.5	10.4	46.0
1.470000	35.3	Off	L1	19.5	10.7	46.0

Test Mode :	Mode 1	**Temperature :**	20~22℃
Test Engineer :	Hayden Wu	**Relative Humidity :**	45~48%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	GSM 850 Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Charging from Adapter) + Battery <3080mAh> + Earphone + MP3 + Cradle		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



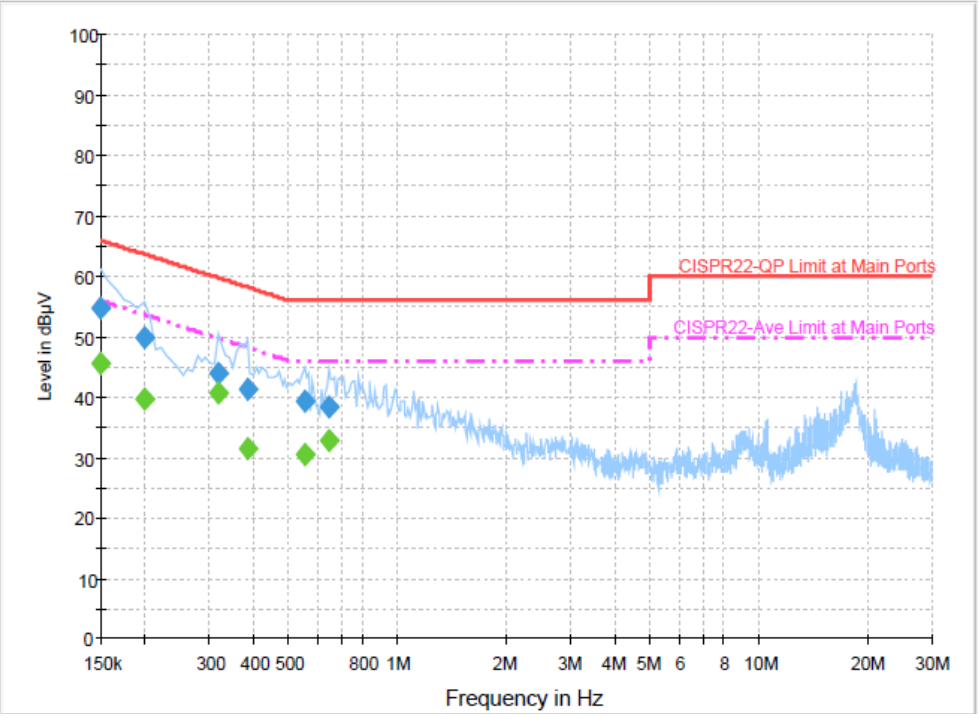
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.334000	45.8	Off	N	19.5	13.6	59.4
0.422000	44.4	Off	N	19.4	13.0	57.4
0.550000	43.3	Off	N	19.5	12.7	56.0
0.678000	43.6	Off	N	19.5	12.4	56.0
0.846000	43.3	Off	N	19.4	12.7	56.0
1.006000	45.2	Off	N	19.4	10.8	56.0
1.230000	44.4	Off	N	19.5	11.6	56.0
1.430000	46.6	Off	N	19.5	9.4	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.334000	35.0	Off	N	19.5	14.4	49.4
0.422000	33.1	Off	N	19.4	14.3	47.4
0.550000	31.3	Off	N	19.5	14.7	46.0
0.678000	31.8	Off	N	19.5	14.2	46.0
0.846000	33.2	Off	N	19.4	12.8	46.0
1.006000	34.2	Off	N	19.4	11.8	46.0
1.230000	34.5	Off	N	19.5	11.5	46.0
1.430000	33.9	Off	N	19.5	12.1	46.0

Test Mode :	Mode 2	**Temperature :**	20~22℃
Test Engineer :	Hayden Wu	**Relative Humidity :**	45~48%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Function Type :	WCDMA Band V Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Link with Notebook) + Battery <3080mAh> + Earphone + Camera + Cradle		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



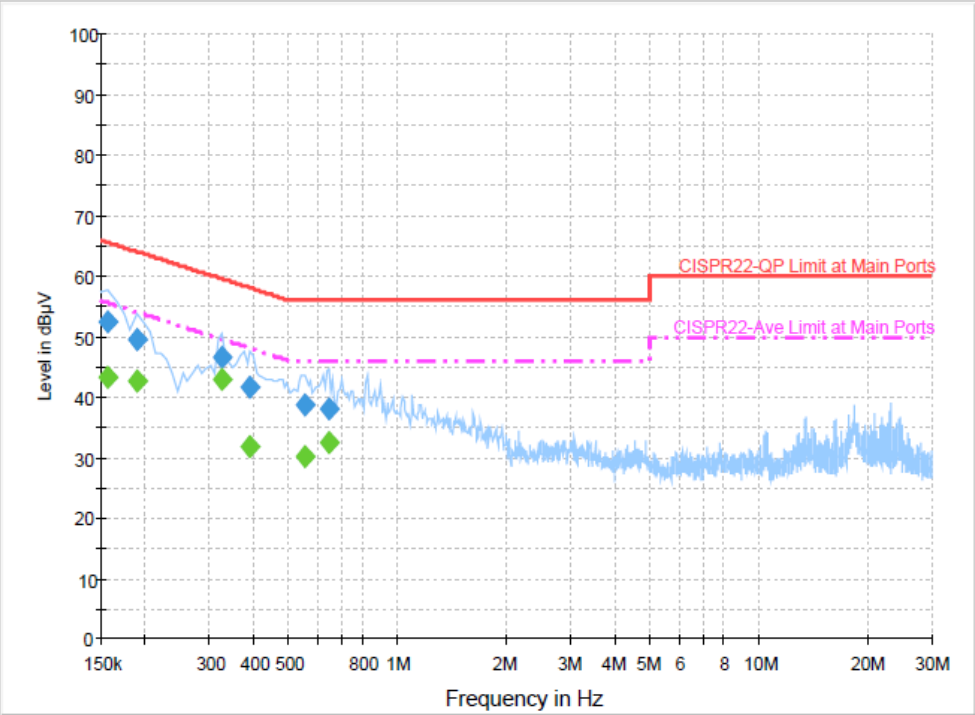
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	54.8	Off	L1	19.5	11.2	66.0
0.198000	50.0	Off	L1	19.6	13.7	63.7
0.318000	44.0	Off	L1	19.5	15.8	59.8
0.382000	41.2	Off	L1	19.5	17.0	58.2
0.550000	39.2	Off	L1	19.5	16.8	56.0
0.646000	38.3	Off	L1	19.5	17.7	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	45.7	Off	L1	19.5	10.3	56.0
0.198000	39.8	Off	L1	19.6	13.9	53.7
0.318000	40.7	Off	L1	19.5	9.1	49.8
0.382000	31.6	Off	L1	19.5	16.6	48.2
0.550000	30.4	Off	L1	19.5	15.6	46.0
0.646000	32.8	Off	L1	19.5	13.2	46.0

Test Mode :	Mode 2	**Temperature :**	20~22℃
Test Engineer :	Hayden Wu	**Relative Humidity :**	45~48%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	WCDMA Band V Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Link with Notebook) + Battery <3080mAh> + Earphone + Camera + Cradle		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



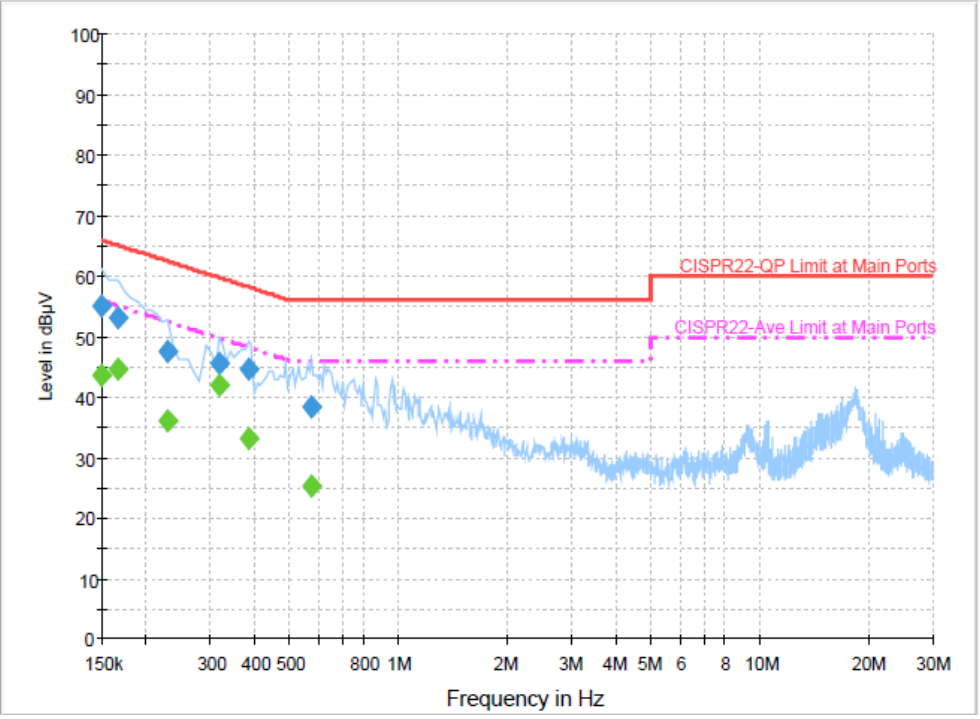
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	52.6	Off	N	19.5	13.0	65.6
0.190000	49.4	Off	N	19.5	15.4	64.0
0.326000	46.5	Off	N	19.5	13.1	59.6
0.390000	41.5	Off	N	19.4	16.6	58.1
0.550000	38.6	Off	N	19.5	17.4	56.0
0.646000	38.2	Off	N	19.5	17.8	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.158000	43.3	Off	N	19.5	12.3	55.6
0.190000	42.6	Off	N	19.5	11.4	54.0
0.326000	43.1	Off	N	19.5	6.5	49.6
0.390000	32.0	Off	N	19.4	16.1	48.1
0.550000	30.0	Off	N	19.5	16.0	46.0
0.646000	32.3	Off	N	19.5	13.7	46.0

Test Mode :	Mode 3	Temperature :	20~22℃
Test Engineer :	Hayden Wu	Relative Humidity :	45~48%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	CDMA2000 BC0 Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Link with Notebook) + Battery <1540mAh> + Earphone + Camera + Cradle		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



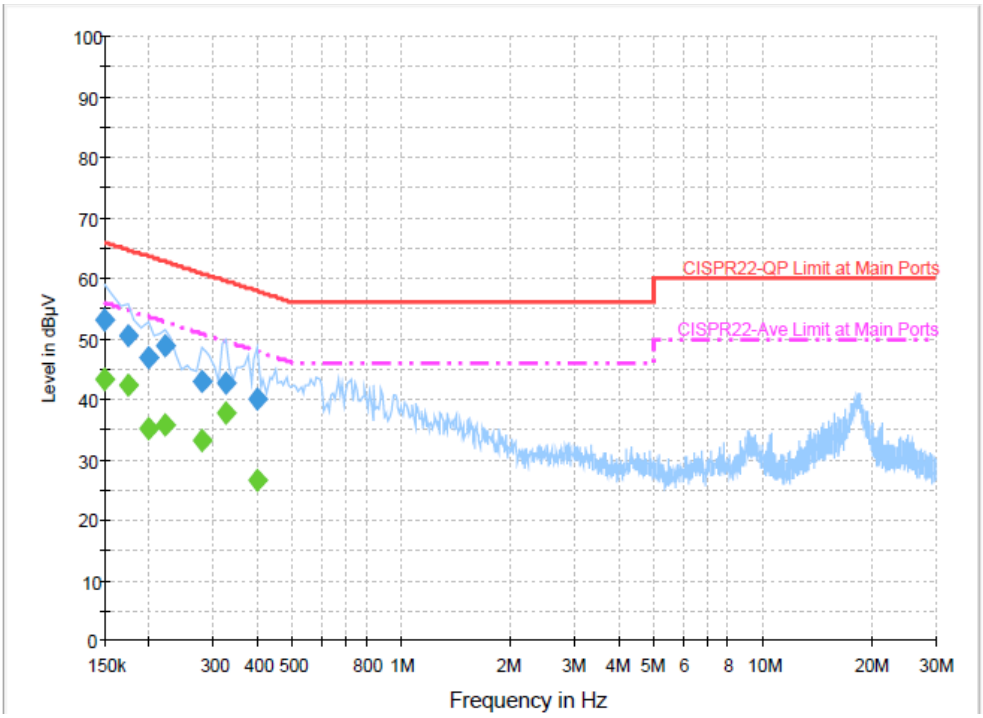
Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	55.0	Off	L1	19.5	11.0	66.0
0.166000	53.1	Off	L1	19.5	12.1	65.2
0.230000	47.4	Off	L1	19.5	15.0	62.4
0.318000	45.7	Off	L1	19.5	14.1	59.8
0.382000	44.7	Off	L1	19.5	13.5	58.2
0.574000	38.5	Off	L1	19.5	17.5	56.0

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	43.8	Off	L1	19.5	12.2	56.0
0.166000	44.5	Off	L1	19.5	10.7	55.2
0.230000	36.2	Off	L1	19.5	16.2	52.4
0.318000	41.9	Off	L1	19.5	7.9	49.8
0.382000	33.1	Off	L1	19.5	15.1	48.2
0.574000	25.4	Off	L1	19.5	20.6	46.0

Test Mode :	Mode 3	**Temperature :**	20~22℃
Test Engineer :	Hayden Wu	**Relative Humidity :**	45~48%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Function Type :	CDMA2000 BC0 Idle + WLAN Link (5G) + Bluetooth Link + GPS Rx + USB Cable (Link with Notebook) + Battery <1540mAh> + Earphone + Camera + Cradle		
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	53.1	Off	N	19.5	12.9	66.0
0.174000	50.4	Off	N	19.5	14.4	64.8
0.198000	47.0	Off	N	19.5	16.7	63.7
0.222000	48.7	Off	N	19.5	14.0	62.7
0.278000	43.0	Off	N	19.5	17.9	60.9
0.326000	42.5	Off	N	19.5	17.1	59.6
0.398000	40.0	Off	N	19.4	17.9	57.9

Final Result 2

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.150000	43.3	Off	N	19.5	12.7	56.0
0.174000	42.1	Off	N	19.5	12.7	54.8
0.198000	35.2	Off	N	19.5	18.5	53.7
0.222000	35.7	Off	N	19.5	17.0	52.7
0.278000	33.2	Off	N	19.5	17.9	50.9
0.326000	37.7	Off	N	19.5	11.9	49.6
0.398000	26.7	Off	N	19.4	21.2	47.9

3.7 Radiated Emission Measurement

3.7.1 Limit of Radiated Emission

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in § 15.209.

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

(1) For transmitters operating in the 5.15–5.25 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. (2) For transmitters operating in the 5.25–5.35 GHz band: all emissions outside of the 5.15–5.35 GHz band shall not exceed an EIRP of –27 dBm/MHz. Devices operating in the 5.25–5.35 GHz band that generate emissions in the 5.15–5.25 GHz band must meet all applicable technical requirements for operation in the 5.15–5.25 GHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of –27 dBm/MHz in the 5.15–5.25 GHz band. (3) For transmitters operating in the 5.47–5.725 GHz band: all emissions outside of the 5.47–5.725 GHz band shall not exceed an EIRP of -27 dBm/MHz.

(2) The provisions of Section 15.205 Restricted bands of operation of this part apply to intentional radiators operating under this section.

3.7.2 Measuring Instruments

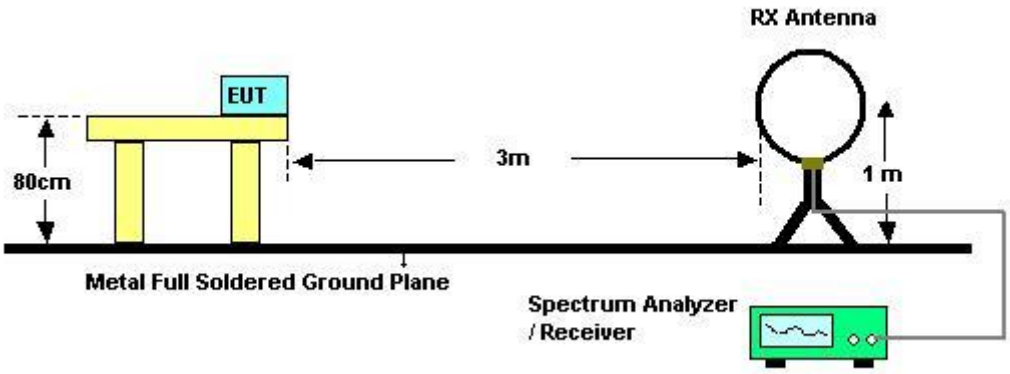
See list of measuring instruments of this test report.

3.7.3 Test Procedures

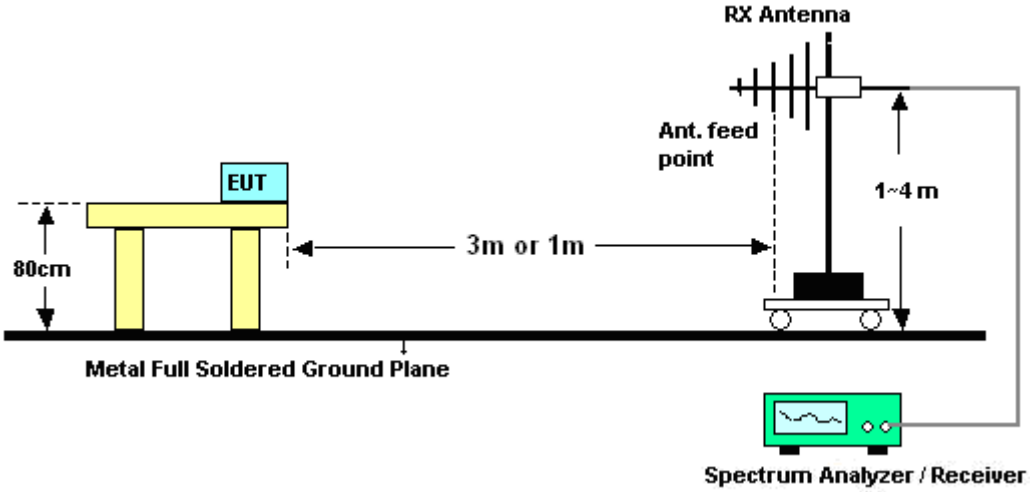
1. The testing follows the guidelines in FCC Public Notice DA 02-2138, (Measurement Guidelines of UNII)
2. The EUT was placed on a rotatable table top 0.8 meter above ground.
3. The EUT was set 3 meters from the interference receiving antenna which was mounted on the top of a variable height antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest radiation.
5. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
6. For each suspected emission, the EUT was arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
7. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function and specified bandwidth with Maximum Hold Mode.
8. For testing below 1GHz, If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.
9. For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in average mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

3.7.4 Test Setup

For radiated emissions below 30MHz



For radiated emissions above 30MHz



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

Temperature	22~23°C	Humidity	51~52%
Test Engineer	Kay Wu		

Freq. (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 (specific distance / test distance) (dB);

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

3.7.6 Test Result of Radiated Emission (30MHz ~ 25GHz)

Test Mode :	Mode 1	**Temperature :**	22~23°C
Test Channel :	36	**Relative Humidity :**	51~52%
Test Engineer :	Kay Wu	**Polarization :**	Horizontal
Remark :	1. 5180 MHz is Fundamental Signals which can be ignored. 2. 10360 MHz is 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	21.58	-18.42	40	33.13	19.51	0.64	31.7	-	-	Peak
70.77	16.82	-23.18	40	40.88	6.68	0.96	31.7	-	-	Peak
128.01	16.14	-27.36	43.5	34.66	11.79	1.36	31.67	-	-	Peak
542.9	29.71	-16.29	46	38.71	18.99	3.07	31.06	100	57	Peak
578.6	28.59	-17.41	46	36.76	19.67	3.18	31.02	-	-	Peak
926.5	26.59	-19.41	46	29.47	23.58	4.21	30.67	-	-	Peak
5150	42.35	-11.65	54	34.26	34.49	8.07	34.47	100	291	Average
5150	55.65	-18.35	74	47.56	34.49	8.07	34.47	100	291	Peak
5180	103.44	-	-	95.29	34.51	8.1	34.46	100	291	Peak
5180	92.4	-	-	84.25	34.51	8.1	34.46	100	291	Average
5350	32.95	-21.05	54	24.54	34.61	8.23	34.43	100	291	Average
5350	50.47	-23.53	74	42.06	34.61	8.23	34.43	100	291	Peak
8380	54.76	-19.24	74	43.76	36	10.1	35.1	121	11	Peak
8380	41.21	-12.79	54	30.21	36	10.1	35.1	121	11	Average
10360	40.46	-27.84	68.3	73.06	-8.72	11.07	34.95	100	0	Peak

Test Mode :	Mode 1	Temperature :	22~23°C
Test Channel :	36	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	5180 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	24.31	-15.69	40	35.86	19.51	0.64	31.7	-	-	Peak
70.77	23.44	-16.56	40	47.5	6.68	0.96	31.7	-	-	Peak
119.37	20.4	-23.1	43.5	38.67	12.14	1.27	31.68	-	-	Peak
542.9	30.57	-15.43	46	39.57	18.99	3.07	31.06	100	162	Peak
615	29.42	-16.58	46	36.93	20.18	3.3	30.99	-	-	Peak
898.5	26.12	-19.88	46	29.51	23.16	4.15	30.7	-	-	Peak
5150	55.53	-18.47	74	47.44	34.49	8.07	34.47	100	291	Peak
5150	41.17	-12.83	54	33.08	34.49	8.07	34.47	100	291	Average
5180	101.54	-	-	93.39	34.51	8.1	34.46	100	291	Peak
5180	92.4	-	-	84.25	34.51	8.1	34.46	100	291	Average
5350	38.53	-15.47	54	30.12	34.61	8.23	34.43	100	291	Average
5350	49.72	-24.28	74	41.31	34.61	8.23	34.43	100	291	Peak
8422	54.5	-19.5	74	43.47	36	10.13	35.1	132	88	Peak
8422	39.52	-14.48	54	28.49	36	10.13	35.1	132	88	Average

Test Mode :	Mode 2	Temperature :	22~23°C
Test Channel :	44	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5220 MHz is Fundamental Signals which can be ignored. 2. 10440 MHz is 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	22.76	-17.24	40	34.31	19.51	0.64	31.7	-	-	Peak
70.5	17.12	-22.88	40	41.18	6.68	0.96	31.7	-	-	Peak
157.98	19.25	-24.25	43.5	38.85	10.54	1.5	31.64	-	-	Peak
542.9	30.22	-15.78	46	39.22	18.99	3.07	31.06	100	133	Peak
578.6	28.91	-17.09	46	37.08	19.67	3.18	31.02	-	-	Peak
946.1	26.34	-19.66	46	28.87	23.87	4.25	30.65	-	-	Peak
5150	42.55	-11.45	54	34.46	34.49	8.07	34.47	115	337	Average
5150	54.92	-19.08	74	46.83	34.49	8.07	34.47	115	337	Peak
5220	107.32	-	-	99.12	34.53	8.12	34.45	115	337	Peak
5220	99.64	-	-	91.45	34.53	8.12	34.46	115	337	Average
5350	39.34	-14.66	54	30.93	34.61	8.23	34.43	115	337	Average
5350	52.01	-21.99	74	43.6	34.61	8.23	34.43	115	337	Peak
8254	53.84	-20.16	74	42.92	36	10.02	35.1	144	119	Peak
8254	39.91	-14.09	54	28.99	36	10.02	35.1	144	119	Average
10440	47.81	-20.49	68.3	80.21	-8.6	11.08	34.88	100	0	Peak
15660	51.4	-22.6	74	78.49	-6.28	14.25	35.06	100	4	Peak
15660	39.6	-14.4	54	66.69	-6.28	14.25	35.06	100	4	Average

Test Mode :	Mode 2	Temperature :	22~23°C
Test Channel :	44	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5220 MHz is Fundamental Signals which can be ignored. 2. 10440 MHz is 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	24.28	-15.72	40	35.83	19.51	0.64	31.7	-	-	Peak
70.77	23.31	-16.69	40	47.37	6.68	0.96	31.7	-	-	Peak
126.93	19.73	-23.77	43.5	38.24	11.8	1.36	31.67	-	-	Peak
542.9	30.68	-15.32	46	39.68	18.99	3.07	31.06	100	145	Peak
615	28.97	-17.03	46	36.48	20.18	3.3	30.99	-	-	Peak
848.1	26.33	-19.67	46	30.39	22.68	3.96	30.7	-	-	Peak
5150	40.49	-13.51	54	32.4	34.49	8.07	34.47	100	297	Average
5150	52.76	-21.24	74	44.67	34.49	8.07	34.47	100	297	Peak
5220	96.04	-	-	87.85	34.53	8.12	34.46	100	297	Average
5220	105.21	-	-	97.01	34.53	8.12	34.45	100	297	Peak
5350	51.61	-22.39	74	43.2	34.61	8.23	34.43	100	297	Peak
5350	39.55	-14.45	54	31.14	34.61	8.23	34.43	100	297	Average
8404	54.24	-19.76	74	43.22	36	10.12	35.1	100	255	Peak
8404	41.5	-12.5	54	30.48	36	10.12	35.1	100	255	Average
10440	43.18	-25.12	68.3	75.58	-8.6	11.08	34.88	100	0	Peak
15660	47.33	-26.67	74	74.36	-6.21	14.24	35.06	100	153	Peak
15660	36.21	-17.79	54	63.3	-6.28	14.25	35.06	100	153	Average

Test Mode :	Mode 3	Temperature :	22~23°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5240 MHz is Fundamental Signals which can be ignored. 2. 10480 MHz is 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	22.17	-17.83	40	33.72	19.51	0.64	31.7	-	-	Peak
94.53	17.94	-25.56	43.5	38.9	9.61	1.13	31.7	-	-	Peak
157.98	19.63	-23.87	43.5	39.23	10.54	1.5	31.64	-	-	Peak
542.9	29.18	-16.82	46	38.18	18.99	3.07	31.06	100	174	Peak
615	28.31	-17.69	46	35.82	20.18	3.3	30.99	-	-	Peak
931.4	26.8	-19.2	46	29.6	23.65	4.22	30.67	-	-	Peak
5150	39.61	-14.39	54	31.52	34.49	8.07	34.47	103	358	Average
5150	52.39	-21.61	74	44.3	34.49	8.07	34.47	103	358	Peak
5240	105.37	-	-	97.12	34.55	8.15	34.45	103	358	Peak
5240	97.12	-	-	88.89	34.54	8.14	34.45	103	358	Average
5350	40.61	-13.39	54	32.2	34.61	8.23	34.43	103	358	Average
5350	52.09	-21.91	74	43.68	34.61	8.23	34.43	103	358	Peak
8454	54.32	-19.68	74	43.28	36	10.14	35.1	100	100	Peak
8454	40.7	-13.3	54	29.66	36	10.14	35.1	100	100	Average
10480	46.47	-21.83	68.3	78.74	-8.53	11.09	34.83	100	0	Peak
15720	51.52	-22.48	74	78.36	-5.93	14.2	35.11	100	4	Peak
15720	39.84	-14.16	54	66.61	-5.86	14.2	35.11	100	4	Average

Test Mode :	Mode 3	Temperature :	22~23°C
Test Channel :	48	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5240 MHz is Fundamental Signals which can be ignored. 2. 10480 MHz is 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	24.34	-15.66	40	35.89	19.51	0.64	31.7	-	-	Peak
70.5	23.65	-16.35	40	47.71	6.68	0.96	31.7	-	-	Peak
118.02	20.75	-22.75	43.5	39.11	12.05	1.27	31.68	-	-	Peak
542.9	31.16	-14.84	46	40.16	18.99	3.07	31.06	100	37	Peak
615	29.49	-16.51	46	37	20.18	3.3	30.99	-	-	Peak
931.4	26.95	-19.05	46	29.75	23.65	4.22	30.67	-	-	Peak
5150	39.78	-14.22	54	31.69	34.49	8.07	34.47	100	303	Average
5150	52.24	-21.76	74	44.15	34.49	8.07	34.47	100	303	Peak
5240	106.01	-	-	97.76	34.55	8.15	34.45	100	303	Peak
5240	96.63	-	-	88.4	34.54	8.14	34.45	100	303	Average
5350	40.01	-13.99	54	31.6	34.61	8.23	34.43	100	303	Average
5350	51.58	-22.42	74	43.17	34.61	8.23	34.43	100	303	Peak
8372	54.21	-19.79	74	43.21	36	10.1	35.1	150	33	Peak
8372	41.21	-12.79	54	30.21	36	10.1	35.1	150	33	Average
10480	42.18	-26.12	68.3	74.45	-8.53	11.09	34.83	100	0	Peak
15720	47.17	-26.83	74	74.01	-5.93	14.2	35.11	100	35	Peak
15720	34.84	-19.16	54	61.61	-5.86	14.2	35.11	100	35	Average

Test Mode :	Mode 4	Temperature :	22~23°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5260 MHz is Fundamental Signals which can be ignored. 2. 10520 MHz is 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	21.71	-18.29	40	33.26	19.51	0.64	31.7	-	-	Peak
70.5	16.48	-23.52	40	40.54	6.68	0.96	31.7	-	-	Peak
157.98	19.71	-23.79	43.5	39.31	10.54	1.5	31.64	-	-	Peak
542.9	29.61	-16.39	46	38.61	18.99	3.07	31.06	100	27	Peak
615	27.61	-18.39	46	35.12	20.18	3.3	30.99	-	-	Peak
945.4	26.7	-19.3	46	29.23	23.87	4.25	30.65	-	-	Peak
5150	38.35	-15.65	54	30.26	34.49	8.07	34.47	100	358	Average
5150	50.35	-23.65	74	42.26	34.49	8.07	34.47	100	358	Peak
5260	105.71	-	-	97.44	34.56	8.16	34.45	100	358	Peak
5260	97.42	-	-	89.15	34.56	8.16	34.45	100	358	Average
5350	42.16	-11.84	54	33.75	34.61	8.23	34.43	100	358	Average
5350	53.04	-20.96	74	44.63	34.61	8.23	34.43	100	358	Peak
8300	54.97	-19.03	74	44.03	36	10.04	35.1	100	244	Peak
8300	40.39	-13.61	54	29.45	36	10.04	35.1	100	244	Average
10520	47.59	-20.71	68.3	79.76	-8.49	11.12	34.8	100	0	Peak
15780	50.65	-23.35	74	77.16	-5.51	14.16	35.16	100	324	Peak
15780	39.41	-14.59	54	65.88	-5.44	14.16	35.19	100	324	Average

Test Mode :	Mode 4	Temperature :	22~23°C
Test Channel :	52	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5260 MHz is Fundamental Signals which can be ignored. 2. 10520 MHz is 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	24.2	-15.8	40	35.75	19.51	0.64	31.7	-	-	Peak
70.5	23.05	-16.95	40	47.11	6.68	0.96	31.7	-	-	Peak
127.74	19.95	-23.55	43.5	38.47	11.79	1.36	31.67	-	-	Peak
542.9	31.03	-14.97	46	40.03	18.99	3.07	31.06	100	133	Peak
615	29.16	-16.84	46	36.67	20.18	3.3	30.99	-	-	Peak
937.7	27.2	-18.8	46	29.87	23.75	4.24	30.66	-	-	Peak
5150	39.93	-14.07	54	31.84	34.49	8.07	34.47	100	303	Average
5150	52.45	-21.55	74	44.36	34.49	8.07	34.47	100	303	Peak
5260	104.72	-	-	96.45	34.56	8.16	34.45	100	303	Peak
5260	96.5	-	-	88.23	34.56	8.16	34.45	100	303	Average
5350	40.62	-13.38	54	32.21	34.61	8.23	34.43	100	303	Average
5350	52.4	-21.6	74	43.99	34.61	8.23	34.43	100	303	Peak
8364	54.55	-19.45	74	43.56	36	10.09	35.1	100	76	Peak
8364	39.87	-14.13	54	28.88	36	10.09	35.1	100	76	Average
10520	42.62	-25.68	68.3	74.79	-8.49	11.12	34.8	100	0	Peak
15780	47.27	-26.73	74	73.78	-5.51	14.16	35.16	100	45	Peak
15780	34.98	-19.02	54	61.45	-5.44	14.16	35.19	100	45	Average

Test Mode :	Mode 5	Temperature :	22~23°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	5300 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	23.2	-16.8	40	34.75	19.51	0.64	31.7	-	-	Peak
70.77	16.93	-23.07	40	40.99	6.68	0.96	31.7	-	-	Peak
157.98	19.66	-23.84	43.5	39.26	10.54	1.5	31.64	-	-	Peak
542.9	29.35	-16.65	46	38.35	18.99	3.07	31.06	-	-	Peak
578.6	29.86	-16.14	46	38.03	19.67	3.18	31.02	100	114	Peak
914.6	27.38	-18.62	46	30.48	23.4	4.19	30.69	-	-	Peak
5150	38.78	-15.22	54	30.69	34.49	8.07	34.47	102	357	Average
5150	50	-24	74	41.91	34.49	8.07	34.47	102	357	Peak
5300	105.75	-	-	97.44	34.57	8.18	34.44	102	357	Peak
5300	96.62	-	-	88.29	34.58	8.19	34.44	102	357	Average
5350	41.7	-12.3	54	33.29	34.61	8.23	34.43	102	357	Average
5350	53.68	-20.32	74	45.27	34.61	8.23	34.43	102	357	Peak
8046	54.12	-19.88	74	43.36	36	9.86	35.1	120	75	Peak
8046	41.32	-12.68	54	30.56	36	9.86	35.1	120	75	Average
10600	45.88	-28.12	74	77.82	-8.46	11.28	34.76	100	210	Peak
10600	32.74	-21.26	54	64.69	-8.46	11.28	34.77	100	210	Average
15900	53.06	-20.94	74	78.85	-4.53	14.06	35.32	100	338	Peak
15900	39.87	-14.13	54	65.69	-4.6	14.07	35.29	100	338	Average

Test Mode :	Mode 5	Temperature :	22~23°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	5300 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	24.19	-15.81	40	35.74	19.51	0.64	31.7	-	-	Peak
70.77	23.06	-16.94	40	47.12	6.68	0.96	31.7	-	-	Peak
119.1	20.13	-23.37	43.5	38.4	12.14	1.27	31.68	-	-	Peak
542.9	30.59	-15.41	46	39.59	18.99	3.07	31.06	100	158	Peak
615	29.56	-16.44	46	37.07	20.18	3.3	30.99	-	-	Peak
903.4	27.97	-18.03	46	31.28	23.22	4.17	30.7	-	-	Peak
5150	39.16	-14.84	54	31.07	34.49	8.07	34.47	100	303	Average
5150	51.89	-22.11	74	43.8	34.49	8.07	34.47	100	303	Peak
5300	104.63	-	-	96.3	34.58	8.19	34.44	100	303	Peak
5300	96.2	-	-	87.87	34.58	8.19	34.44	100	303	Average
5350	40.43	-13.57	54	32.02	34.61	8.23	34.43	100	303	Average
5350	52.08	-21.92	74	43.67	34.61	8.23	34.43	100	303	Peak
8318	54.35	-19.65	74	43.4	36	10.05	35.1	100	90	Peak
8318	41.36	-12.64	54	30.41	36	10.05	35.1	100	90	Average
10600	42.58	-31.42	74	74.52	-8.46	11.28	34.76	100	224	Peak
10600	30.82	-23.18	54	62.77	-8.46	11.28	34.77	100	224	Average
15900	48.95	-25.05	74	74.84	-4.67	14.07	35.29	100	10	Peak
15900	38.5	-15.5	54	64.32	-4.6	14.07	35.29	100	10	Average

Test Mode :	Mode 6	Temperature :	22~23°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	5320 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	22.03	-17.97	40	33.58	19.51	0.64	31.7	-	-	Peak
71.58	17.31	-22.69	40	41.27	6.77	0.97	31.7	-	-	Peak
157.98	19.28	-24.22	43.5	38.88	10.54	1.5	31.64	-	-	Peak
508.6	26.41	-19.59	46	36.21	18.33	2.96	31.09	-	-	Peak
542.9	29.41	-16.59	46	38.41	18.99	3.07	31.06	100	177	Peak
615	27.01	-18.99	46	34.52	20.18	3.3	30.99	-	-	Peak
5150	38.04	-15.96	54	29.95	34.49	8.07	34.47	102	359	Average
5150	49.98	-24.02	74	41.89	34.49	8.07	34.47	102	359	Peak
5320	99.9	-	-	91.55	34.59	8.2	34.44	102	359	Peak
5320	90.76	-	-	82.41	34.59	8.2	34.44	102	359	Average
5350	39.46	-14.54	54	31.05	34.61	8.23	34.43	102	359	Average
5350	51.26	-22.74	74	42.85	34.61	8.23	34.43	102	359	Peak
8388	54.68	-19.32	74	43.67	36	10.11	35.1	100	31	Peak
8388	41.36	-12.64	54	30.35	36	10.11	35.1	100	31	Average
10640	38.39	-35.61	74	70.24	-8.44	11.34	34.75	100	78	Peak
10640	24.22	-29.78	54	56.07	-8.44	11.34	34.75	100	78	Average
15960	46.38	-27.62	74	71.91	-4.18	14.02	35.37	100	284	Peak
15960	33.59	-20.41	54	59.12	-4.18	14.02	35.37	100	284	Average

Test Mode :	Mode 6	Temperature :	22~23°C
Test Channel :	64	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	5320 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	23.74	-16.26	40	35.29	19.51	0.64	31.7	-	-	Peak
70.77	23.47	-16.53	40	47.53	6.68	0.96	31.7	-	-	Peak
118.29	20.07	-23.43	43.5	38.43	12.05	1.27	31.68	-	-	Peak
542.9	31.04	-14.96	46	40.04	18.99	3.07	31.06	100	195	Peak
615	29.5	-16.5	46	37.01	20.18	3.3	30.99	-	-	Peak
889.4	26.54	-19.46	46	30.04	23.08	4.12	30.7	-	-	Peak
5150	38.17	-15.83	54	30.08	34.49	8.07	34.47	100	303	Average
5150	49.65	-24.35	74	41.56	34.49	8.07	34.47	100	303	Peak
5320	98.18	-	-	89.83	34.59	8.2	34.44	100	303	Peak
5320	89.04	-	-	80.69	34.59	8.2	34.44	100	303	Average
5350	38.93	-15.07	54	30.52	34.61	8.23	34.43	100	303	Average
5350	50.24	-23.76	74	41.83	34.61	8.23	34.43	100	303	Peak
8348	54.55	-19.45	74	43.58	36	10.07	35.1	130	115	Peak
8348	41.97	-12.03	54	31	36	10.07	35.1	130	115	Average
15960	43.21	-30.79	74	68.74	-4.18	14.02	35.37	100	354	Peak
15960	32.42	-21.58	54	57.95	-4.18	14.02	35.37	100	354	Average

Test Mode :	Mode 7	Temperature :	22~23°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5500 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz, 5725 MHz and 16500 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	21.94	-18.06	40	33.49	19.51	0.64	31.7	-	-	Peak
70.5	16.36	-23.64	40	40.42	6.68	0.96	31.7	-	-	Peak
94.53	17.81	-25.69	43.5	38.77	9.61	1.13	31.7	-	-	Peak
542.9	29.64	-16.36	46	38.64	18.99	3.07	31.06	100	62	Peak
578.6	28.99	-17.01	46	37.16	19.67	3.18	31.02	-	-	Peak
934.9	27.12	-18.88	46	29.85	23.71	4.23	30.67	-	-	Peak
5470	52.49	-15.81	68.3	43.9	34.68	8.32	34.41	101	313	Peak
5500	92.87	-	-	84.22	34.7	8.35	34.4	101	313	Average
5500	102.03	-	-	93.39	34.7	8.35	34.41	101	313	Peak
5725	51.05	-17.25	68.3	42.13	35.01	8.4	34.49	101	313	Peak
8318	54.5	-19.5	74	43.55	36	10.05	35.1	122	241	Peak
8318	41.06	-12.94	54	30.11	36	10.05	35.1	122	241	Average
11000	44.68	-29.32	74	75.59	-8.3	11.99	34.6	100	154	Peak
11000	30.52	-23.48	54	61.43	-8.3	11.99	34.6	100	154	Average
16500	40.49	-27.81	68.3	71.78	-9.98	13.69	35	100	0	Peak

Test Mode :	Mode 7	Temperature :	22~23°C
Test Channel :	100	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5500 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz and 5725 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	24.31	-15.69	40	35.86	19.51	0.64	31.7	-	-	Peak
70.77	23.48	-16.52	40	47.54	6.68	0.96	31.7	-	-	Peak
118.29	20.01	-23.49	43.5	38.37	12.05	1.27	31.68	-	-	Peak
542.9	30.49	-15.51	46	39.49	18.99	3.07	31.06	100	155	Peak
615	28.87	-17.13	46	36.38	20.18	3.3	30.99	-	-	Peak
918.1	26.54	-19.46	46	29.56	23.46	4.2	30.68	-	-	Peak
5470	51.7	-16.6	68.3	43.11	34.68	8.32	34.41	116	359	Peak
5500	88.33	-	-	79.68	34.7	8.35	34.4	116	359	Average
5500	96.82	-	-	88.18	34.7	8.35	34.41	116	359	Peak
5725	50.13	-18.17	68.3	41.21	35.01	8.4	34.49	116	359	Peak
8286	54.68	-19.32	74	43.74	36	10.04	35.1	128	90	Peak
8286	39.59	-14.41	54	28.65	36	10.04	35.1	128	90	Average
11000	40.22	-33.78	74	71.13	-8.3	11.99	34.6	100	114	Peak
11000	29.74	-24.26	54	60.65	-8.3	11.99	34.6	100	114	Average

Test Mode :	Mode 8	Temperature :	22~23°C
Test Channel :	120	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5600 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz, 5725 MHz and 16800 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	22.27	-17.73	40	33.82	19.51	0.64	31.7	-	-	Peak
94.53	17.92	-25.58	43.5	38.88	9.61	1.13	31.7	-	-	Peak
157.98	19.98	-23.52	43.5	39.58	10.54	1.5	31.64	-	-	Peak
542.9	29.35	-16.65	46	38.35	18.99	3.07	31.06	100	132	Peak
578.6	28.41	-17.59	46	36.58	19.67	3.18	31.02	-	-	Peak
856.5	26.43	-19.57	46	30.38	22.76	3.99	30.7	-	-	Peak
5470	57.13	-11.17	68.3	48.54	34.68	8.32	34.41	100	311	Peak
5600	107.97	-	-	99.22	34.82	8.37	34.44	100	311	Peak
5600	98.53	-	-	89.76	34.84	8.37	34.44	100	311	Average
5725	51.1	-17.2	68.3	42.18	35.01	8.4	34.49	100	311	Peak
8430	54.74	-19.26	74	43.71	36	10.13	35.1	100	322	Peak
8430	40.59	-13.41	54	29.56	36	10.13	35.1	100	322	Average
11200	52.14	-21.86	74	84.59	-9.7	11.85	34.6	100	353	Peak
11200	39.46	-14.54	54	71.91	-9.7	11.85	34.6	100	353	Average
16800	52.94	-15.36	68.3	83.48	-10.1	14.15	34.59	100	0	Peak

Test Mode :	Mode 8	Temperature :	22~23°C
Test Channel :	120	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5600 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz, 5725 MHz and 16800 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	24.17	-15.83	40	35.72	19.51	0.64	31.7	-	-	Peak
70.5	23.4	-16.6	40	47.46	6.68	0.96	31.7	-	-	Peak
125.85	20.71	-22.79	43.5	39.23	11.8	1.35	31.67	-	-	Peak
542.9	31.22	-14.78	46	40.22	18.99	3.07	31.06	155	69	Peak
615	29.36	-16.64	46	36.87	20.18	3.3	30.99	-	-	Peak
900.6	26.84	-19.16	46	30.19	23.19	4.16	30.7	-	-	Peak
5470	50.54	-17.76	68.3	41.95	34.68	8.32	34.41	100	10	Peak
5600	95.65	-	-	86.88	34.84	8.37	34.44	100	10	Average
5600	104.93	-	-	96.18	34.82	8.37	34.44	100	10	Peak
5725	51.07	-17.23	68.3	42.15	35.01	8.4	34.49	100	10	Peak
8302	54.14	-19.86	74	43.19	36	10.05	35.1	133	285	Peak
8302	41.01	-12.99	54	30.06	36	10.05	35.1	133	285	Average
11200	45.42	-28.58	74	77.87	-9.7	11.85	34.6	100	360	Peak
11200	32.51	-21.49	54	64.96	-9.7	11.85	34.6	100	360	Average
16800	48.94	-19.36	68.3	79.48	-10.1	14.15	34.59	100	0	Peak

Test Mode :	Mode 9	Temperature :	22~23°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5700 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz, 5725 MHz and 17100 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	22.44	-17.56	40	33.99	19.51	0.64	31.7	-	-	Peak
44.58	21.89	-18.11	40	41.95	10.92	0.72	31.7	-	-	Peak
157.98	19.6	-23.9	43.5	39.2	10.54	1.5	31.64	-	-	Peak
542.9	29.47	-16.53	46	38.47	18.99	3.07	31.06	100	37	Peak
578.6	28.75	-17.25	46	36.92	19.67	3.18	31.02	-	-	Peak
937	26.98	-19.02	46	29.67	23.74	4.23	30.66	-	-	Peak
5470	49.68	-18.62	68.3	41.09	34.68	8.32	34.41	100	311	Peak
5700	90.17	-	-	81.28	34.97	8.4	34.48	100	311	Average
5700	99.43	-	-	90.54	34.97	8.4	34.48	100	311	Peak
5725	51.1	-17.2	68.3	42.18	35.01	8.4	34.49	100	311	Peak
8334	54.38	-19.62	74	43.42	36	10.06	35.1	105	66	Peak
8334	41.51	-12.49	54	30.55	36	10.06	35.1	105	66	Average
11400	38.85	-35.15	74	72.91	-11.17	11.71	34.6	100	56	Peak
11400	27.55	-26.45	54	61.54	-11.1	11.71	34.6	100	56	Average
17100	38.46	-29.84	68.3	68.62	-10.52	14.64	34.28	100	0	Peak

Test Mode :	Mode 9	Temperature :	22~23°C
Test Channel :	140	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5700 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz and 5725 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	24.56	-15.44	40	36.11	19.51	0.64	31.7	100	15	Peak
69.69	23.35	-16.65	40	47.5	6.59	0.96	31.7	-	-	Peak
119.37	20.46	-23.04	43.5	38.73	12.14	1.27	31.68	-	-	Peak
368.6	26.18	-19.82	46	39.72	15.29	2.43	31.26	-	-	Peak
542.9	27.66	-18.34	46	36.66	18.99	3.07	31.06	-	-	Peak
903.4	26.54	-19.46	46	29.85	23.22	4.17	30.7	-	-	Peak
5470	49.84	-18.46	68.3	41.25	34.68	8.32	34.41	100	17	Peak
5700	87.72	-	-	78.83	34.97	8.4	34.48	100	17	Average
5700	97.44	-	-	88.55	34.97	8.4	34.48	100	17	Peak
5725	49.64	-18.66	68.3	40.72	35.01	8.4	34.49	100	17	Peak
8238	54.04	-19.96	74	43.14	36	10	35.1	101	320	Peak
8238	40.34	-13.66	54	29.44	36	10	35.1	101	320	Average

Test Mode :	Mode 10	Temperature :	22~23°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	5300 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	22.31	-17.69	40	33.86	19.51	0.64	31.7	-	-	Peak
71.58	17.17	-22.83	40	41.13	6.77	0.97	31.7	-	-	Peak
157.98	19.94	-23.56	43.5	39.54	10.54	1.5	31.64	-	-	Peak
522.6	34.1	-11.9	46	43.57	18.6	3.01	31.08	100	122	Peak
542.9	29.26	-16.74	46	38.26	18.99	3.07	31.06	-	-	Peak
797.7	28.86	-17.14	46	33.55	22.18	3.84	30.71	-	-	Peak
5150	39.73	-14.27	54	31.64	34.49	8.07	34.47	102	351	Average
5150	52.32	-21.68	74	44.23	34.49	8.07	34.47	102	351	Peak
5300	108.65	-	-	100.34	34.57	8.18	34.44	102	351	Peak
5300	98.93	-	-	90.6	34.58	8.19	34.44	102	351	Average
5350	44.35	-9.65	54	35.94	34.61	8.23	34.43	102	351	Average
5350	56.44	-17.56	74	48.03	34.61	8.23	34.43	102	351	Peak
8302	54.46	-19.54	74	43.51	36	10.05	35.1	160	333	Peak
8302	40.39	-13.61	54	29.44	36	10.05	35.1	160	333	Average
10600	44.28	-29.72	74	76.22	-8.46	11.28	34.76	100	19	Peak
10600	35.17	-18.83	54	67.12	-8.46	11.28	34.77	100	19	Average
15900	58.17	-15.83	74	84.06	-4.67	14.07	35.29	100	353	Peak
15900	47.96	-6.04	54	73.78	-4.6	14.07	35.29	100	353	Average

Test Mode :	Mode 10	Temperature :	22~23°C
Test Channel :	60	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	5300 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	27.83	-12.17	40	50.4	8.09	1.04	31.7	100	137	Peak
126.93	20.61	-22.89	43.5	39.12	11.8	1.36	31.67	-	-	Peak
153.93	27.81	-15.69	43.5	47.1	10.87	1.49	31.65	-	-	Peak
542.9	30.43	-15.57	46	39.43	18.99	3.07	31.06	-	-	Peak
615	29.4	-16.6	46	36.91	20.18	3.3	30.99	-	-	Peak
856.5	26.77	-19.23	46	30.72	22.76	3.99	30.7	-	-	Peak
5150	38.86	-15.14	54	30.77	34.49	8.07	34.47	100	301	Average
5150	50.13	-23.87	74	42.04	34.49	8.07	34.47	100	301	Peak
5300	104.26	-	-	95.95	34.57	8.18	34.44	100	301	Peak
5300	95.63	-	-	87.3	34.58	8.19	34.44	100	301	Average
5350	44.35	-9.65	54	35.94	34.61	8.23	34.43	100	301	Average
5350	52.16	-21.84	74	43.75	34.61	8.23	34.43	100	301	Peak
8380	54.42	-19.58	74	43.42	36	10.1	35.1	145	55	Peak
8380	40.74	-13.26	54	29.74	36	10.1	35.1	145	55	Average
10600	39.82	-34.18	74	71.76	-8.46	11.28	34.76	100	59	Peak
10600	28.94	-25.06	54	60.89	-8.46	11.28	34.77	100	59	Average
15900	47.82	-26.18	74	73.71	-4.67	14.07	35.29	100	124	Peak
15900	39.11	-14.89	54	64.93	-4.6	14.07	35.29	100	124	Average

Test Mode :	Mode 11	Temperature :	22~23°C
Test Channel :	120	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Horizontal
Remark :	1. 5600 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz, 5725 MHz and 16800 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	22.46	-17.54	40	34.01	19.51	0.64	31.7	-	-	Peak
70.5	20.14	-19.86	40	44.2	6.68	0.96	31.7	-	-	Peak
129.09	16.4	-27.1	43.5	34.93	11.78	1.36	31.67	-	-	Peak
542.9	29.92	-16.08	46	38.92	18.99	3.07	31.06	100	174	Peak
578.6	28.9	-17.1	46	37.07	19.67	3.18	31.02	-	-	Peak
925.8	27.09	-18.91	46	29.97	23.58	4.21	30.67	-	-	Peak
5470	54.44	-13.86	68.3	45.85	34.68	8.32	34.41	110	313	Peak
5600	99.02	-	-	90.25	34.84	8.37	34.44	110	313	Average
5600	106.58	-	-	97.83	34.82	8.37	34.44	110	313	Peak
5725	51.35	-16.95	68.3	42.43	35.01	8.4	34.49	110	313	Peak
8300	54.49	-19.51	74	43.55	36	10.04	35.1	100	358	Peak
8300	40.29	-13.71	54	29.35	36	10.04	35.1	100	358	Average
11200	49.08	-24.92	74	81.53	-9.7	11.85	34.6	100	4	Peak
11200	35.37	-18.63	54	67.82	-9.7	11.85	34.6	100	4	Average
16800	54.04	-14.26	68.3	84.58	-10.1	14.15	34.59	100	0	Peak

Test Mode :	Mode 11	Temperature :	22~23°C
Test Channel :	120	Relative Humidity :	51~52%
Test Engineer :	Kay Wu	Polarization :	Vertical
Remark :	1. 5600 MHz is Fundamental Signals which can be ignored. 2. 5470 MHz, 5725 MHz and 16800 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	24.5	-15.5	40	36.05	19.51	0.64	31.7	-	-	Peak
70.77	24.51	-15.49	40	48.57	6.68	0.96	31.7	-	-	Peak
121.26	20.22	-23.28	43.5	38.46	12.15	1.29	31.68	-	-	Peak
368.6	26.34	-19.66	46	39.88	15.29	2.43	31.26	-	-	Peak
542.9	30.68	-15.32	46	39.68	18.99	3.07	31.06	100	137	Peak
615	29.11	-16.89	46	36.62	20.18	3.3	30.99	-	-	Peak
5470	52.16	-16.14	68.3	43.57	34.68	8.32	34.41	100	251	Peak
5600	93.86	-	-	85.09	34.84	8.37	34.44	100	251	Average
5600	104.25	-	-	95.5	34.82	8.37	34.44	100	251	Peak
5725	51.44	-16.86	68.3	42.52	35.01	8.4	34.49	100	251	Peak
8260	54.7	-19.3	74	43.78	36	10.02	35.1	126	76	Peak
8260	41.47	-12.53	54	30.55	36	10.02	35.1	126	76	Average
11200	40.83	-33.17	74	73.28	-9.7	11.85	34.6	100	174	Peak
11200	27.49	-26.51	54	59.94	-9.7	11.85	34.6	100	174	Average
16800	50.78	-17.52	68.3	81.32	-10.1	14.15	34.59	100	0	Peak

3.8 Peak Excursion Ratio Measurement

3.8.1 Limit of Peak Excursion Ratio

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the maximum conducted output power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

3.8.2 Measuring Instruments

See list of measuring instruments of this test report.

3.8.3 Test Procedures

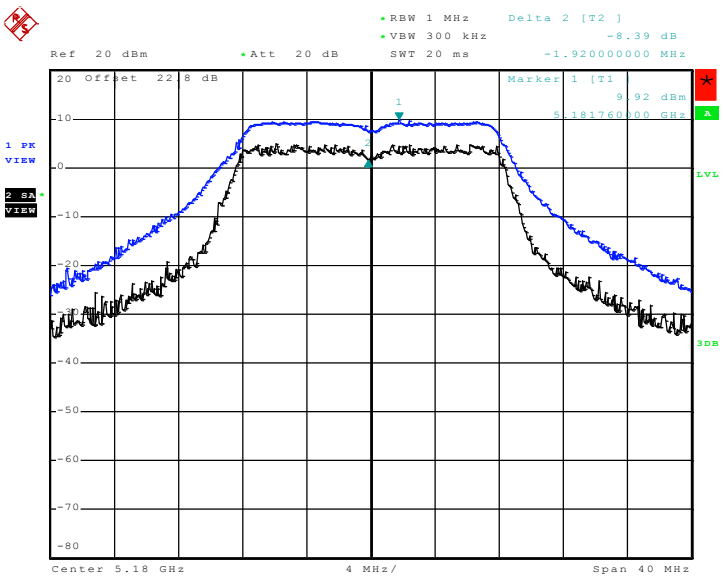
1. The transmitter output is connected to the spectrum analyzer.
2. The resolution bandwidth is set to and maintained at 1 MHz. The video bandwidth is set to 300 kHz.
3. Trace A is set peak detector and to Max Hold, then to View. Then the detector is readjusted to sample detector, max hold to run for 60 seconds, and the signal under this measurement condition is captured in Trace B in Accordance with the method 3 of DA-02-2138.
4. The difference between the traces is investigated. The marker is placed at the frequency, which shows the largest difference. The amplitude delta between the traces at this frequency is the peak excursion.

3.8.4 Test Setup

3.8.5 Test Result of Peak Excursion Ratio

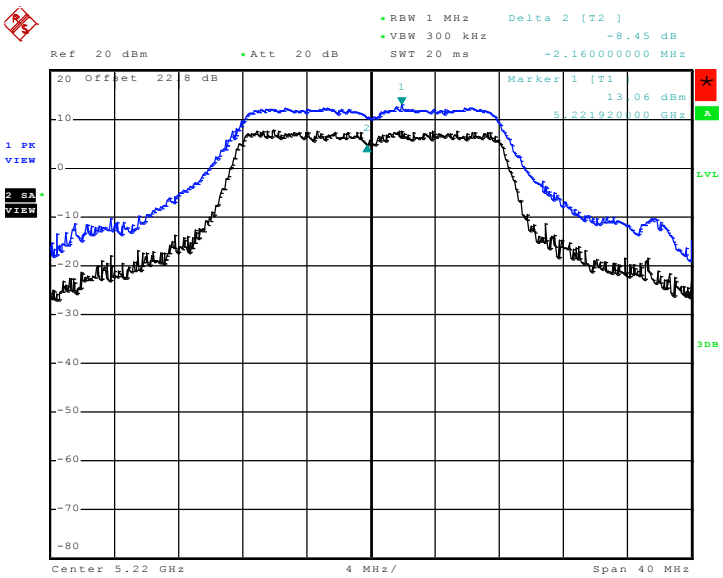
Test Mode :	Mode 1~9	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Mode 1 : Peak Excursion Ratio Plot on 802.11a Channel 36



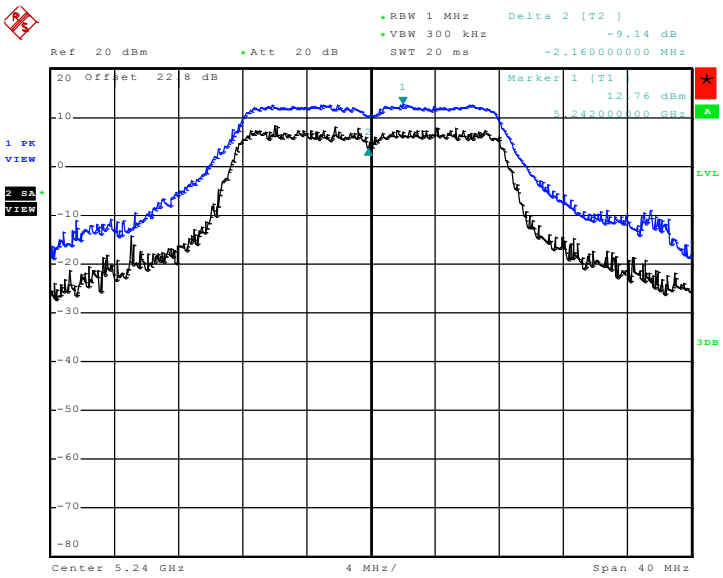
Date: 21.JAN.2010 17:01:08

Mode 2 : Peak Excursion Ratio Plot on 802.11a Channel 44



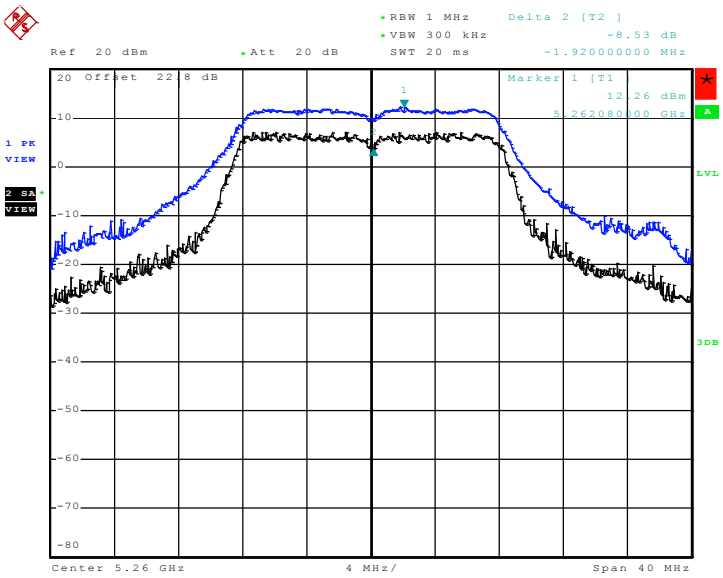
Date: 21.JAN.2010 17:02:41

Mode 3 : Peak Excursion Ratio Plot on 802.11a Channel 48



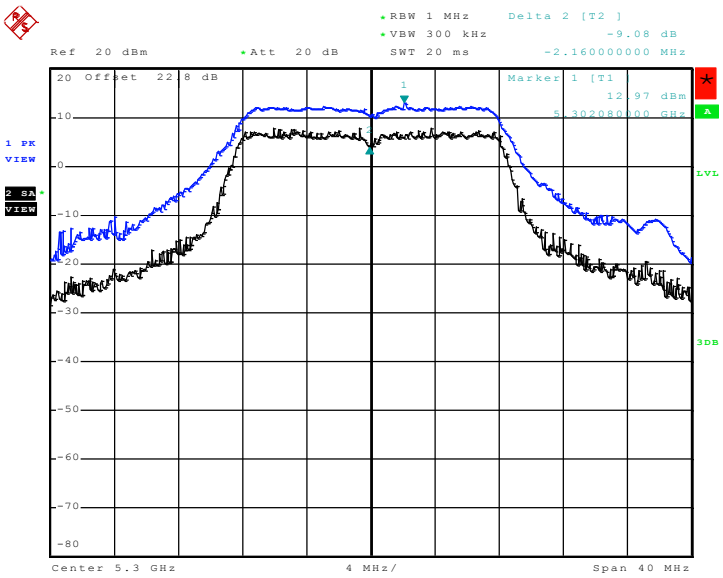
Date: 21.JAN.2010 17:04:08

Mode 4 : Peak Excursion Ratio Plot on 802.11a Channel 52



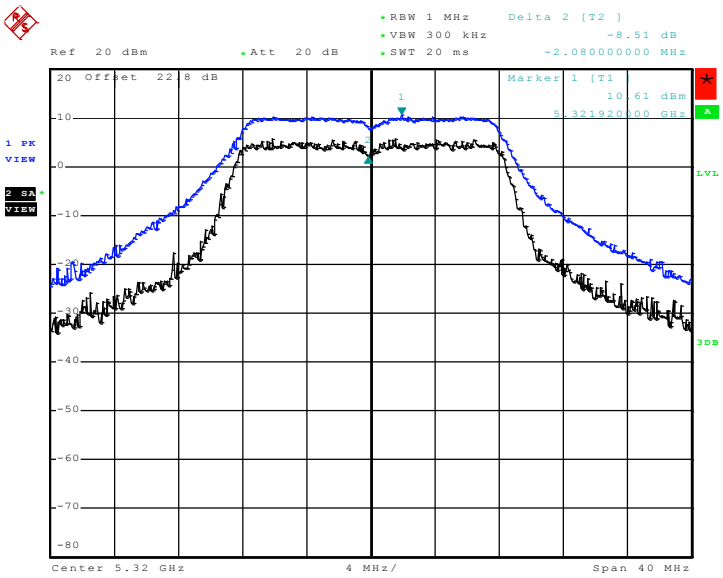
Date: 21.JAN.2010 17:05:28

Mode 5 : Peak Excursion Ratio Plot on 802.11a Channel 60



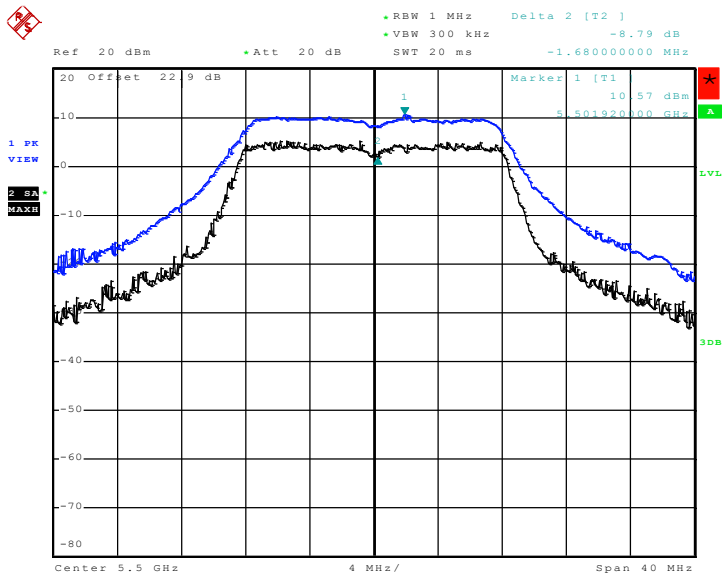
Date: 21.JAN.2010 17:07:07

Mode 6 : Peak Excursion Ratio Plot on 802.11a Channel 64



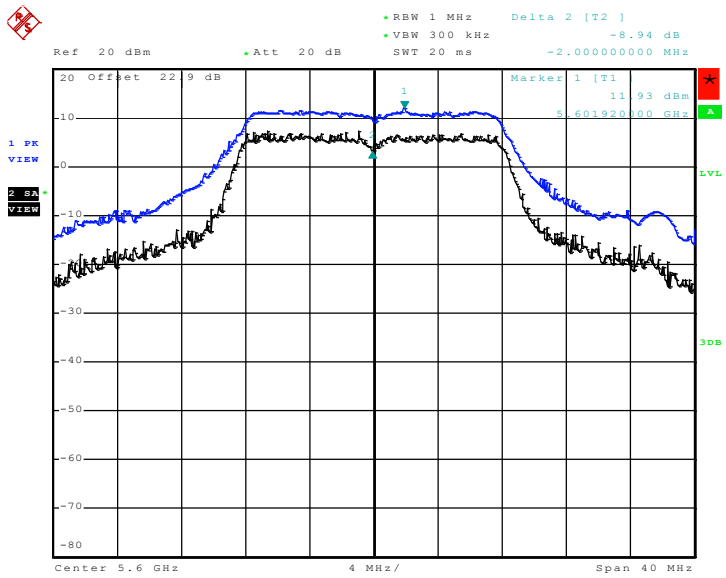
Date: 21.JAN.2010 17:09:44

Mode 7 : Peak Excursion Ratio Plot on 802.11a Channel 100



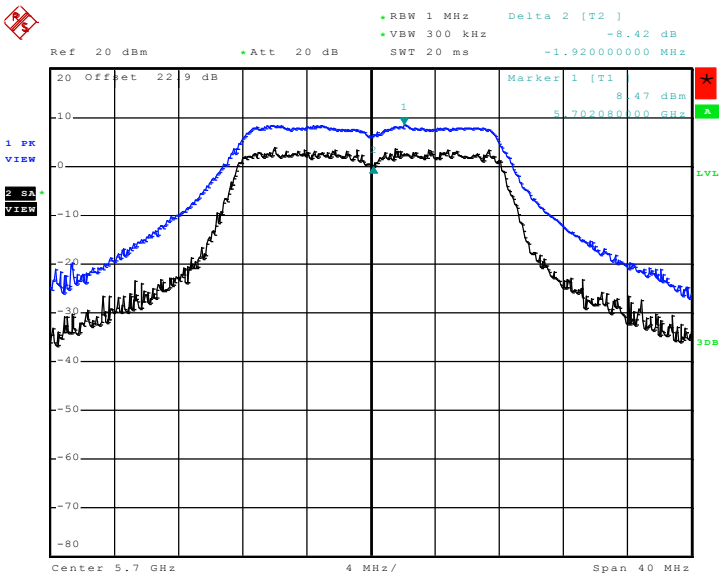
Date: 21.JAN.2010 16:56:17

Mode 8 : Peak Excursion Ratio Plot on 802.11a Channel 120



Date: 21.JAN.2010 16:57:41

Mode 9 : Peak Excursion Ratio Plot on 802.11a Channel 140



Date: 21.JAN.2010 16:59:14

3.9 Automatically Discontinue Transmission

3.9.1 Limit of Automatically Discontinue Transmission

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signaling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization to describe how this requirement is met.

3.9.2 Measuring Instruments

See list of measuring instruments of this test report.

3.9.3 Test Result of Automatically Discontinue Transmission

During no any information transmission, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling signal of ACK message transmitting from remote device and verify whether it shall resend or discontinue transmission.

3.10 Frequency Stability Measurement

3.10.1 Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

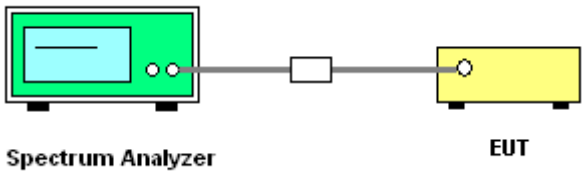
3.10.2 Measuring Instruments

See list of measuring instruments of this test report.

3.10.3 Test Procedures

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

3.10.4 Test Setup



3.10.5 Test Result of Frequency Stability

Test Mode :	Mode 1~9	Temperature :	22~25℃
Test Engineer :	Ken Hsu	Relative Humidity :	43~45%

Channel	Frequency (MHz)	Low Frequency (Fl)	High Frequency (Fh)	Frequency Stability (ppm)
36	5180	5171.68	5188.28	-3.86
44	5220	5211.68	5228.28	-3.83
48	5240	5231.68	5248.28	-3.82
52	5260	5251.68	5268.28	-3.80
60	5300	5291.68	5308.28	-3.77
64	5320	5311.68	5328.28	-3.76
100	5500	5491.68	5508.28	-3.64
120	5600	5591.68	5608.28	-3.57
140	5700	5691.68	5708.28	-3.51

3.11 Antenna Requirements

3.11.1 Standard Applicable

According to FCC 47 CFR Section 15.407(a)(1)(2) ,if transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.11.2 Antenna Connected Construction

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

3.11.3 Antenna Gain

The antenna gain 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. 23, 2009	Jun. 22, 2010	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	0932001	N/A	Sep. 17, 2009	Sep. 16, 2010	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	0846202	N/A	Sep. 10, 2009	Sep. 09, 2010	Conducted (TH02-HY)
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	Agilent	E5515C (8960)	MY48360820	N/A	Dec. 15 , 2008	Dec. 14 , 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.32 dB.GAIN	Mar. 27, 2009	Mar. 26, 2010	Radiation (03CH07-HY)
Loop Antenna	R&S	HFH2-Z2	860004/001	9 KHz~30 MHz	May 22, 2008	May 21, 2010	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 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-Shape	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=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 Γ1 = 0.197 Antenna VSWR Γ2 = 0.194 Uncertainty = 20Log(1-Γ1*Γ2)	+0.34 / -0.35	U-Shape	0.244	1	0.244
Combined Standard Uncertainty Uc(y)	**2.36**				
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.72**				

Appendix A. Photographs of EUT

Please refer to Sporton report number EP010103 as below.