

FCC RF Test Report

APPLICANT : Acer Incorporated
EQUIPMENT : Dual band WiFi LGA Module
BRAND NAME : Acer
MODEL NAME : T77H389
FCC ID : HLZ-T77H389
STANDARD : FCC Part 15 Subpart C §15.247
CLASSIFICATION : (DTS) Digital Transmission System

The product was received on Jul. 10, 2012 and completely tested on Sep. 11, 2012. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures 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:



Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

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

SPORTON INTERNATIONAL INC.

TEL : 886-3-327-3456

FAX : 886-3-328-4978

FCC ID : HLZ-T77H389

Page Number : 1 of 177

Report Issued Date : Sep. 26, 2012

Report Version : Rev. 02



TABLE OF CONTENTS

REVISION HISTORY	3
SUMMARY OF TEST RESULT	4
1 GENERAL DESCRIPTION	5
1.1 Applicant	5
1.2 Manufacturer	5
1.3 Feature of Equipment Under Test	6
1.4 Testing Site	7
1.5 Applied Standards	7
1.6 Ancillary Equipment List	7
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	8
2.1 Carrier Frequency Channel	8
2.2 Pre-Scanned RF Power	9
2.3 Test Mode	11
2.4 Connection Diagram of Test System	13
2.5 RF Utility	13
3 TEST RESULT	14
3.1 6dB and 99% Bandwidth Measurement	14
3.2 Output Power Measurement	35
3.3 Power Spectral Density Measurement	40
3.4 Conducted Band Edges and Spurious Emission Measurement	51
3.5 Radiated Band Edges and Spurious Emission Measurement	72
3.6 AC Conducted Emission Measurement	171
3.7 Antenna Requirements	175
4 LIST OF MEASURING EQUIPMENT	176
5 UNCERTAINTY OF EVALUATION	177
APPENDIX A. PHOTOGRAPHS OF EUT	
APPENDIX B. SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FR271030C	Rev. 01	Initial issue of report	Sep. 18, 2012
FR271030C	Rev. 02	Update report for adding Loop Antenna in the list of measuring equipment	Sep. 26, 2012

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.247(a)(2)	A8.2(a)	6dB Bandwidth	$\geq 0.5\text{MHz}$	Pass	-
3.1	-	Gen 4.6.1	99% Bandwidth	-	Pass	-
3.2	15.247(b)	A8.4	Power Output Measurement	$\leq 30\text{dBm}$	Pass	-
3.3	15.247(e)	A8.2(b)	Power Spectral Density	$\leq 8\text{dBm/3kHz}$	Pass	-
3.4	15.247(d)	A8.5	Conducted Band Edges	$\leq 20\text{dBc}$	Pass	-
			Conducted Spurious Emission		Pass	-
3.5	15.247(d)	A8.5	Radiated Band Edges	15.209(a) & 15.247(d)	Pass	-
			Radiated Spurious Emission		Pass	Under limit 0.11 dB at 2483.940 MHz
3.6	15.207	Gen 7.2.4	AC Conducted Emission	15.207(a)	Pass	Under limit 18.40 dB at 2.574 MHz
3.7	15.203 & 15.247(b)	A8.4	Antenna Requirement	N/A	Pass	-

1 General Description

1.1 Applicant

Acer Incorporated

8F., No. 88, Sec. 1, Xintai 5th Rd., New Taipei City 22181, Taiwan, R.O.C.

1.2 Manufacturer

1. AMBIT MICROSYSTEMS (SHANGHAI) LTD.

No. 1925, Nanle Road, Songjiang Export Process Zone, Shanghai, China

2. Hon Fu Jin Precision Industry (Shenzhen) Co., Ltd.

Communication Network Solution Business Group; No. 2, 2nd Donghuan Road, 10th Yousong Industrial District, Longhua Town, Baoan District, Shenzhen, Guangdong 518109 China

3. Hong Fu Jin Precision Electrons (YanTai) Co., Ltd.

CNSBG-CPE1; A11 Building, Export Processing Zone, Economic & Technologic, Development Area, YanTai, Shandong, 264006, China

4. Hong Fu Jin Precision Electronics (Chongqing) Co.,Ltd.

Building D02, No. 1, East Zone 1st Road , Shapingba District, Chongqing, 401332, China

5. Foxconn CMMSG Industrial Electronics Ltd.

N800, Marginal Rodovia dos Bandeirantes avenue, Engordadouro district, Jundiai City, Sao Paulo, Brazil, ZIP Code: 13213-008

6. Fenix Industrial Electronics Ltd.

N236, Jose de Palma Renno street, Centro district, Santa Rita do Sapucaí City , Minas Gerais, Brazil , ZIP Code: 37540-000

7. Foxconn MOEBG Industria De Eletronicos Ltda.

No. 1580a Acai Street, Industrial district, Manaus Amazonas, Brazil, ZIP Code: 69075-020

8. Nanning Fu Tai Hong Precision Electronic Co., Ltd.

HWV Product Division No. 13, Road, Keyuan East; High Technical Industrial, Development Zone, Nanning, Guangxi, 530007, China

9. Nanning Fu Tai Hong Precision Electronics Co., Ltd.

The Forth Building, China-ASEAN Advanced Business Part Phase Three, No. 18, Zongbu Road, High Technical Industrial Development Zone, Nanning, Guangxi, 530007, China

10. Nanning Fu Gui Precision Electronics Co., Ltd.

China-ASEAN Advanced Business Park Phase Three, No. 18, Zongbu Road, High Technical Industrial Development Zone, Nanning , Guangxi , 530007, China

11. FUNING Precision Component (Bac Ninh) Co., Ltd.

Que Vo industrial park, Van Duong commune, Bac Ninh city, BacNinh province, Vietnam

12. Fuhong Precision Component (Bac Giang) Limited

Dinh Tram Industrial Park, Viet Yen District Bac Giang Province 236100, Vietnam

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Dual band WiFi LGA Module
Brand Name	Acer
Model Name	T77H389
FCC ID	HLZ-T77H389
EUT supports Radios application	WLAN 11abgn / Bluetooth
HW Version	035
SW Version	045
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Product Specification subjective to this standard	
Tx/Rx Channel Frequency Range	802.11b/g/n : 2412 MHz ~ 2462 MHz 802.11a/n: 5745~5825MHz.
Maximum Output Power to Antenna	<2412 MHz ~ 2462 MHz> 802.11b : 19.90 dBm (0.0977 W) 802.11g : 22.44 dBm (0.1754 W) 802.11n HT20 : 22.33 dBm (0.1710 W) <5745 MHz ~ 5825 MHz> 802.11a : 22.89 dBm (0.1945 W) 802.11n HT20 : 22.45 dBm (0.1758 W)
99% Occupied Bandwidth	<2412 MHz ~ 2462 MHz> 802.11b : 12.65MHz 802.11g : 17.15MHz 802.11n HT20 : 18.05MHz <5745 MHz ~ 5825 MHz> 802.11a : 17.30MHz 802.11n HT20 : 18.10MHz
Antenna Type	<Antenna 1> 802.11b/g/n : PIFA Antenna type with gain -0.15 dBi 802.11a/n : PIFA Antenna type with gain 0.04 dBi <Antenna 2> 802.11b/g/n : Chip Antenna type with gain 2.50 dBi 802.11a/n : Chip Antenna type with gain 2.48 dBi
Type of Modulation	802.11b : DSSS (BPSK / QPSK / CCK) 802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)

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.
	TH02-HY	CO05-HY	03CH05-HY	722060/4086B-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 D01 DTS Meas. Guidance v01
- ♦ FCC TCB Workshop 2012, April
- ♦ ANSI C63.4-2003 and ANSI C63.10-2009
- ♦ IC RSS-210 Issue 8
- ♦ IC RSS-Gen Issue 3

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, recorded in a separate test report.

1.6 Ancillary Equipment List

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
2.	Notebook	DELL	E6500	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
3.	LCD Monitor	Lenovo	6135-AB1	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
4.	iPod	Apple	A1285	FCC DoC	Shielded, 1.0 m	N/A

2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals 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) and radiated emission (9 KHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.

2.1 Carrier Frequency Channel

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
2400-2483.5 MHz	1	2412	7	2442
	2	2417	8	2447
	3	2422	9	2452
	4	2427	10	2457
	5	2432	11	2462
	6	2437		

Frequency Band	Channel	Freq. (MHz)	Channel	Freq. (MHz)
5725-5850 MHz Band 4	149	5745	159	5795
	151	5755	161	5805
	157	5785	165	5825

2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and antenna configurations as following table and the highest power data rates were chosen for full test in the following tables. Final Output Power equals to Measured Output Power adds the duty factor.

2.4GHz 802.11b mode for Chain 0				
Data Rate (MHz)	1M bps	2M bps	5.5M bps	11M bps
Peak Power (dBm)	19.90	19.72	19.51	19.57

2.4GHz 802.11b mode for Chain 1				
Data Rate (MHz)	1M bps	2M bps	5.5M bps	11M bps
Peak Power (dBm)	19.89	19.42	19.32	19.51

2.4GHz 802.11g mode for Chain 0								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	22.44	22.39	22.38	22.33	22.37	22.31	22.34	22.32

2.4GHz 802.11g mode for Chain 1								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	22.36	22.30	22.20	22.01	22.00	21.98	21.94	22.00

2.4GHz 802.11n HT20 mode for Chain 0								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	22.33	21.92	22.00	21.96	21.94	21.90	21.88	21.95

2.4GHz 802.11n HT20 mode for Chain 1								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	21.93	21.87	21.56	21.50	21.44	21.46	21.39	21.37



5GHz 802.11a mode for Chain 0								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	22.89	22.75	22.71	22.65	22.73	22.64	22.70	22.67

5GHz 802.11a mode for Chain 1								
Data Rate (MHz)	6M bps	9M bps	12M bps	18M bps	24M bps	36M bps	48M bps	54M bps
Peak Power (dBm)	22.71	22.69	22.65	22.68	22.67	22.63	22.70	22.60

5GHz 802.11n HT20 mode for Chain 0								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	22.45	22.38	22.31	22.35	22.37	22.32	22.41	22.36

5GHz 802.11n HT20 mode for Chain 1								
Data Rate (MHz)	MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7
Peak Power (dBm)	22.42	22.31	22.30	22.34	22.37	22.30	22.36	22.31

2.3 Test Mode

Final results of test modes, data rates and test channels are shown as following table.

<2.4GHz>

Test Cases				
Conducted TCs	Test Items	Mode	Data Rate	Test Channel
	6dB and 99% BW Power Spectral Density	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT20	6.5 Mbps	1/6/11
	Output Power	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT20	6.5 Mbps	1/6/11
	Conducted Band Edge	802.11b	1 Mbps	1/11
		802.11g	6 Mbps	1/11
		802.11n HT20	6.5 Mbps	1/11
	Conducted Spurious Emission	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT20	6.5 Mbps	1/6/11
Radiated TCs	Radiated Band Edge	802.11b	1 Mbps	1/11
		802.11g	6 Mbps	1/11
		802.11n HT20	6.5 Mbps	1/11
	Radiated Spurious Emission	802.11b	1 Mbps	1/6/11
		802.11g	6 Mbps	1/6/11
		802.11n HT20	6.5 Mbps	1/6/11

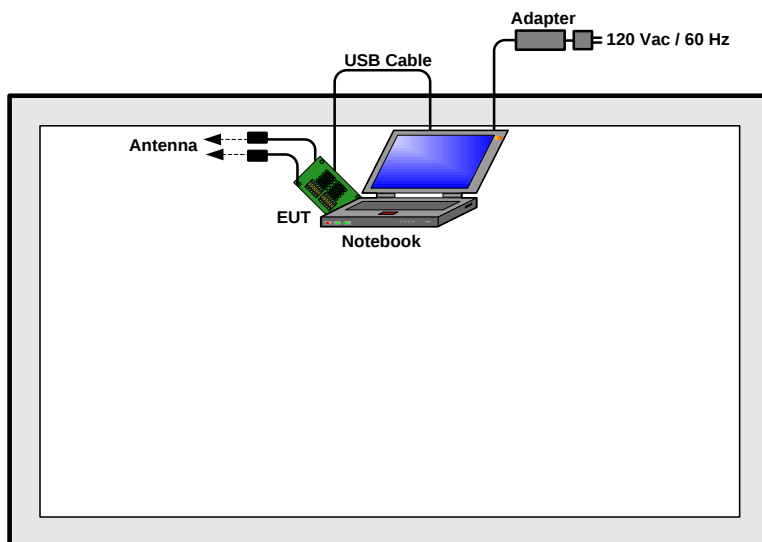
<5GHz>

Test Cases				
Conducted TCs	Test Items	Mode	Data Rate	Test Channel
	6dB and 99% BW Power Spectral Density	802.11a	6 Mbps	149/157/165
		802.11n HT20	6.5 Mbps	149/157/165
	Output Power	802.11a	6 Mbps	149/157/165
		802.11n HT20	6.5 Mbps	149/157/165
	Conducted Band Edge	802.11a	6 Mbps	149/165
		802.11n HT20	6.5 Mbps	149/165
	Conducted Spurious Emission	802.11a	6 Mbps	149/157/165
		802.11n HT20	6.5 Mbps	149/157/165
	Radiated TCs	Radiated Band Edge	802.11a	149/165
			802.11n HT20	149/165
		Radiated Spurious Emission	802.11a	149/157/165
			802.11n HT20	149/157/165

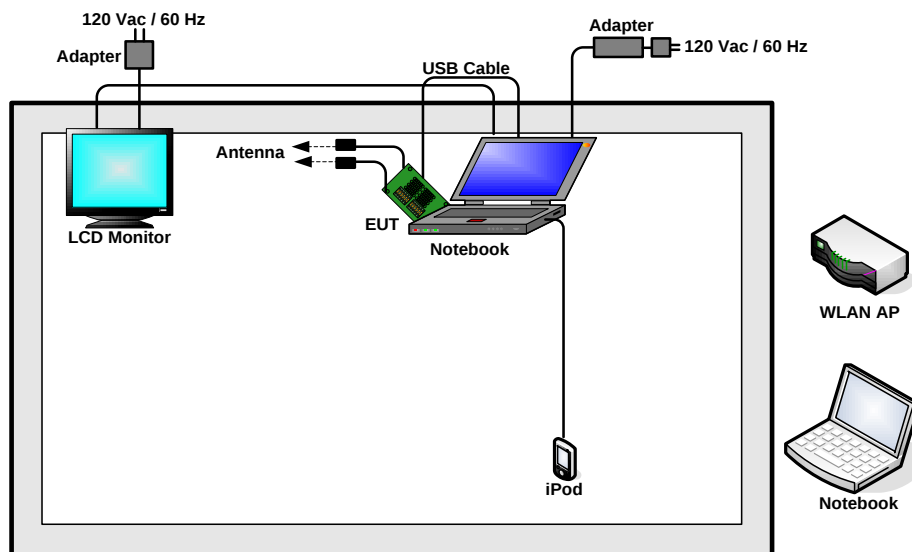
Test Cases	
AC Conducted Emission	Mode 1 : Bluetooth Link + WLAN (2.4G) Link
	Mode 2 : Bluetooth Link + WLAN (5G) Link
Remark: 1. The worst case of conducted emission is mode 1; only the test data of it was reported. 2. For conducted emission, all the tests were performance with Main Antenna: Chip Antenna and Aux. Antenna: PIFA Antenna	

2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



2.5 RF Utility

For WLAN function, programmed RF utility, "Command" installed in the notebook make the EUT provides functions like channel selection and power level for continuous transmitting and receiving signals.

3 Test Result

3.1 6dB and 99% Bandwidth Measurement

3.1.1 Limit of 6dB Bandwidth

The minimum 6 dB bandwidth shall be at least 500 KHz.

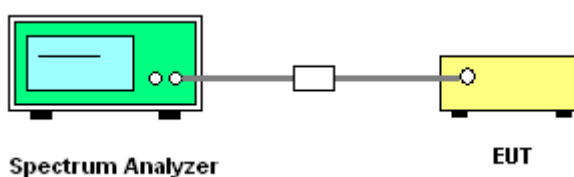
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance and TCB Workshop 2012, April.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 1-5% of the emission bandwidth (EBW). Set the Video bandwidth (VBW) $\geq 3 * RBW$. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 KHz.

3.1.4 Test Setup



3.1.5 Test Result of 6dB Bandwidth

Test Mode :	802.11b	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11b 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
01	2412	7.64	0.5	Pass
06	2437	7.16	0.5	Pass
11	2462	7.16	0.5	Pass

Test Mode :	802.11g	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11g 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
01	2412	15.84	0.5	Pass
06	2437	15.72	0.5	Pass
11	2462	15.72	0.5	Pass

Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	2.4GHz 802.11n HT20 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
01	2412	17.28	0.5	Pass
06	2437	17.26	0.5	Pass
11	2462	17.26	0.5	Pass

Test Mode :	802.11a	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11a 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
149	5745	16.20	0.5	Pass
157	5785	16.20	0.5	Pass
165	5825	16.20	0.5	Pass



Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	5GHz 802.11n HT20 6dB Bandwidth (MHz)	6dB Bandwidth Min. Limit (MHz)	Pass/Fail
149	5745	17.36	0.5	Pass
157	5785	17.40	0.5	Pass
165	5825	17.44	0.5	Pass

3.1.6 Test Result of 99% Occupied Bandwidth

Test Mode :	802.11b	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11b 99% Occupied Bandwidth (MHz)	Pass/Fail
01	2412	12.25	Pass
06	2437	12.35	Pass
11	2462	12.65	Pass

Test Mode :	802.11g	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11g 99% Occupied Bandwidth (MHz)	Pass/Fail
01	2412	17.15	Pass
06	2437	17.10	Pass
11	2462	17.10	Pass

Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	2.4GHz 802.11n HT20 99% Occupied Bandwidth (MHz)	Pass/Fail
01	2412	18.05	Pass
06	2437	18.05	Pass
11	2462	18.05	Pass



Test Mode :	802.11a	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

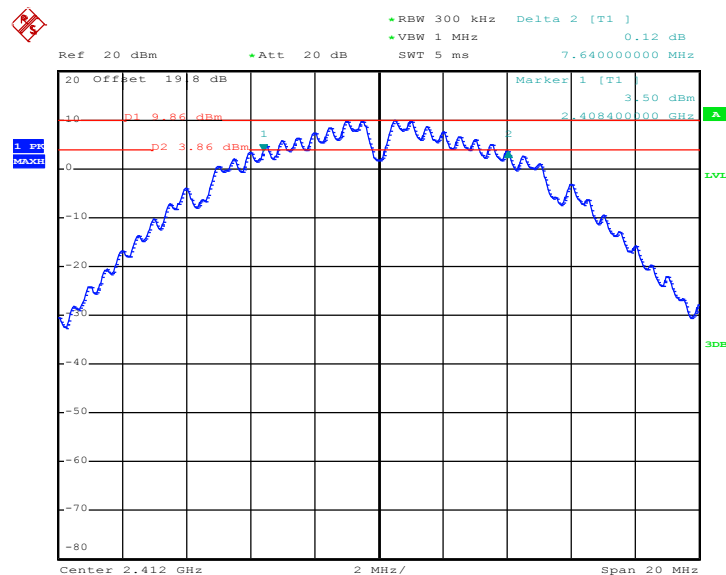
Channel	Frequency (MHz)	802.11a 99% Occupied Bandwidth (MHz)	Pass/Fail
149	5745	17.25	Pass
157	5785	17.20	Pass
165	5825	17.30	Pass

Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	5GHz 802.11n HT20 99% Occupied Bandwidth (MHz)	Pass/Fail
149	5745	18.10	Pass
157	5785	18.10	Pass
165	5825	18.10	Pass

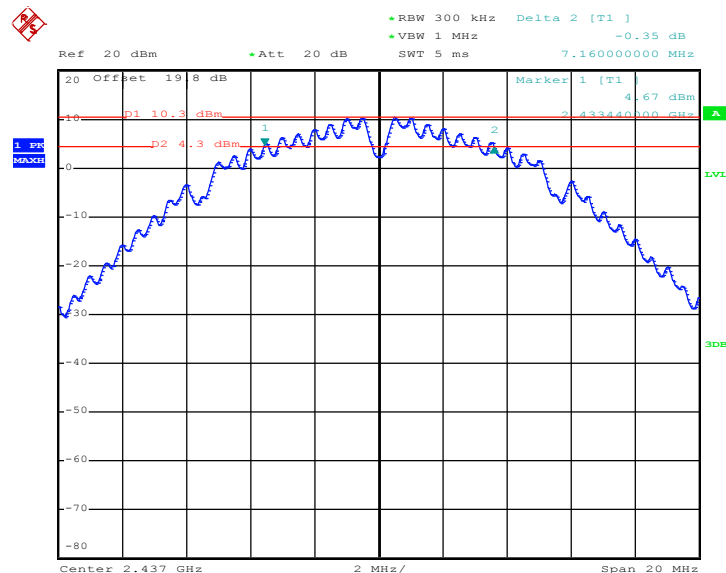
3.1.7 Test Result of 6dB Bandwidth Plots

6 dB Bandwidth Plot on 802.11b Channel 01

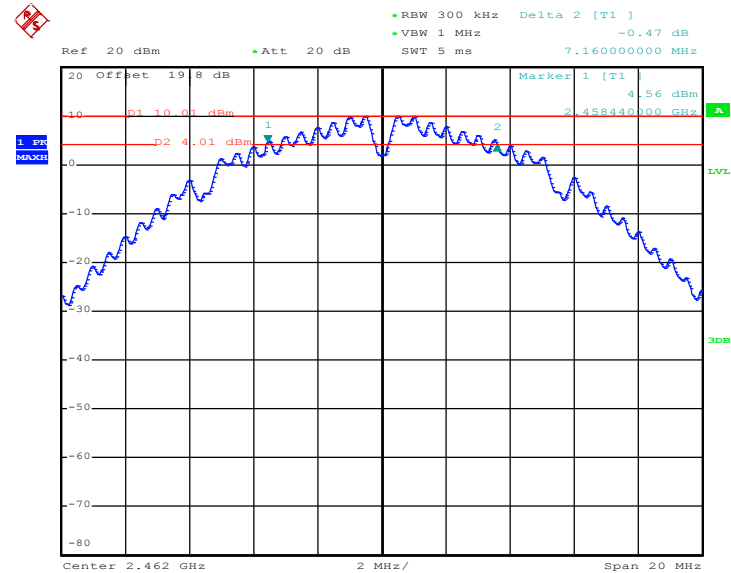


Date: 22.AUG.2012 22:45:33

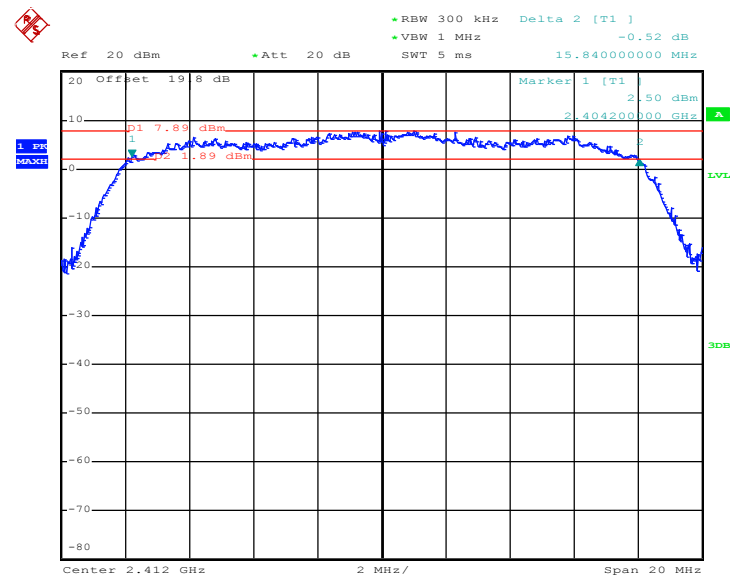
6 dB Bandwidth Plot on 802.11b Channel 06



Date: 22.AUG.2012 23:28:54

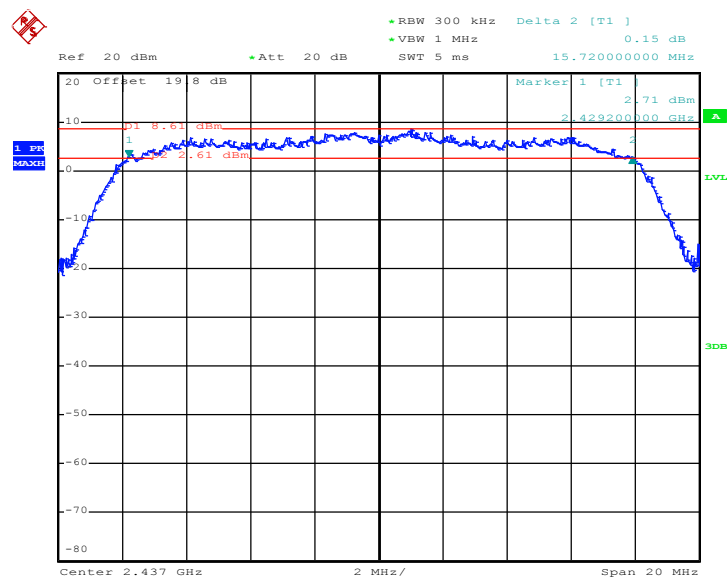
6 dB Bandwidth Plot on 802.11b Channel 11


Date: 22.AUG.2012 22:54:52

6 dB Bandwidth Plot on 802.11g Channel 01


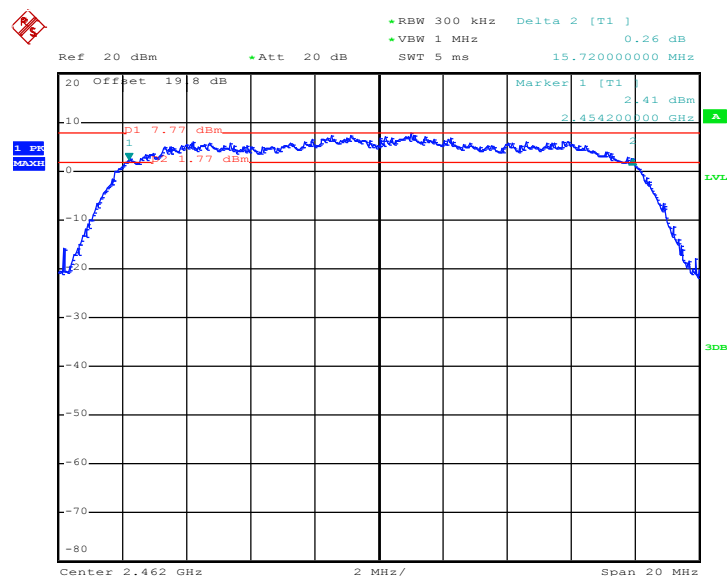
Date: 22.AUG.2012 23:07:37

6 dB Bandwidth Plot on 802.11g Channel 06

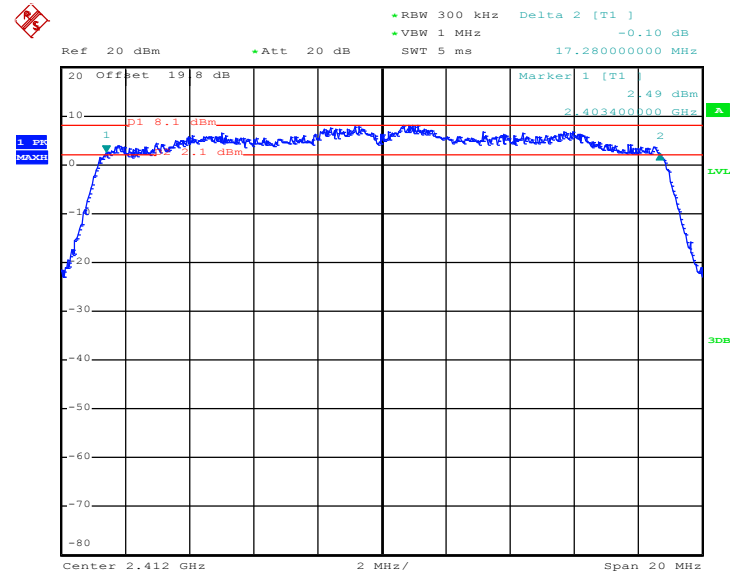


Date: 22.AUG.2012 23:03:30

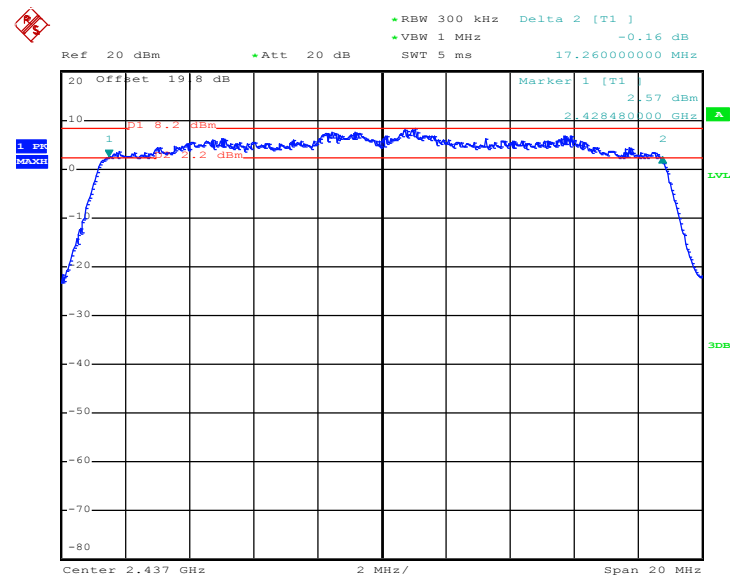
6 dB Bandwidth Plot on 802.11g Channel 11



Date: 22.AUG.2012 22:59:52

6 dB Bandwidth Plot on 2.4G 802.11n HT20 Channel 01


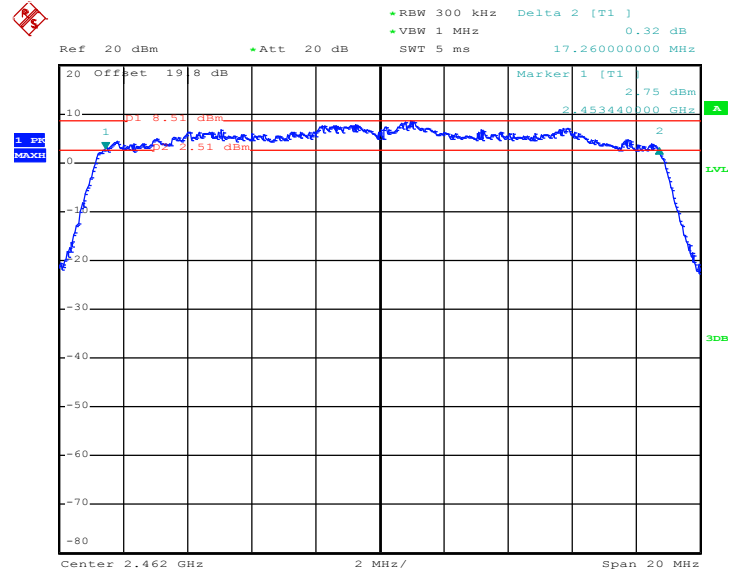
Date: 22.AUG.2012 23:12:25

6 dB Bandwidth Plot on 2.4G 802.11n HT20 Channel 06


Date: 22.AUG.2012 23:17:59

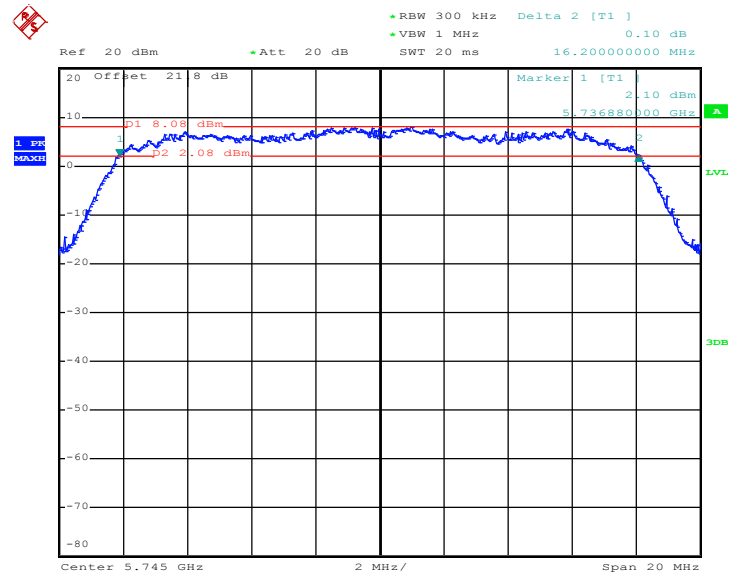


6 dB Bandwidth Plot on 2.4G 802.11n HT20 Channel 11



Date: 22.AUG.2012 23:23:40

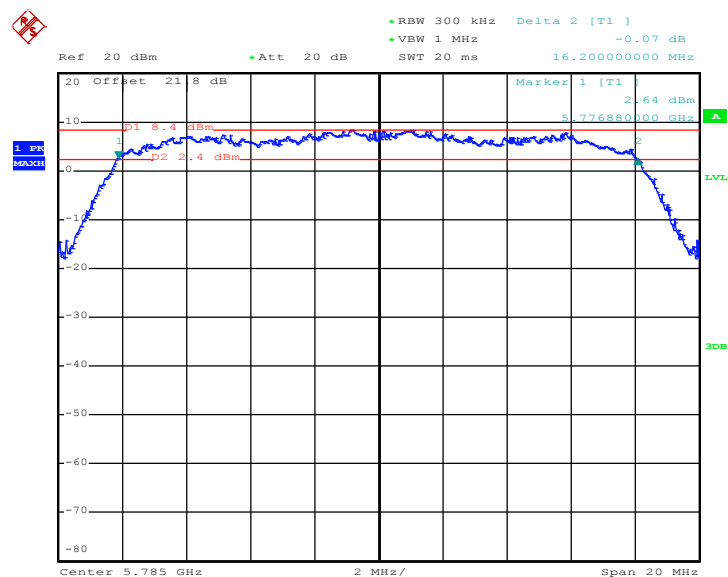
6 dB Bandwidth Plot on 802.11a Channel 149



Date: 23.AUG.2012 00:03:49

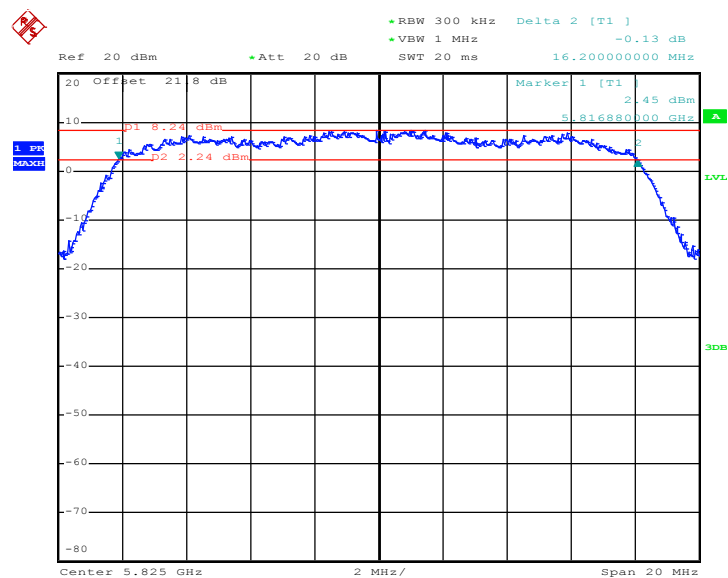


6 dB Bandwidth Plot on 802.11a Channel 157

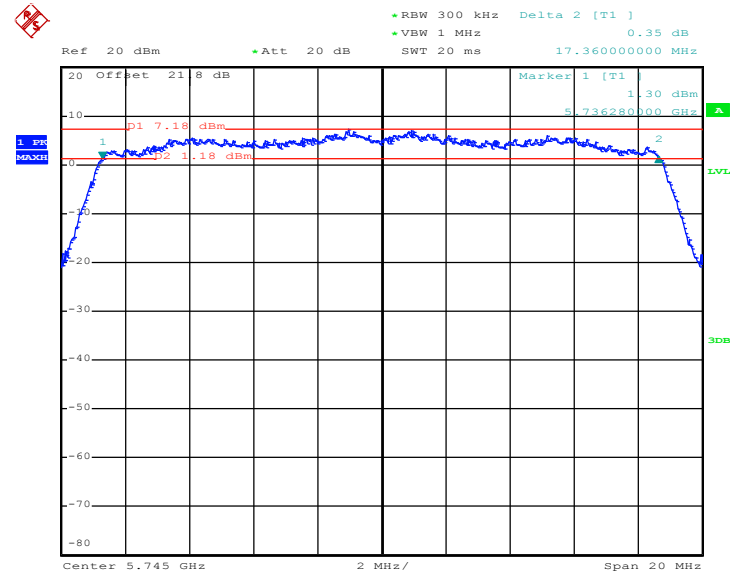


Date: 23.AUG.2012 00:07:07

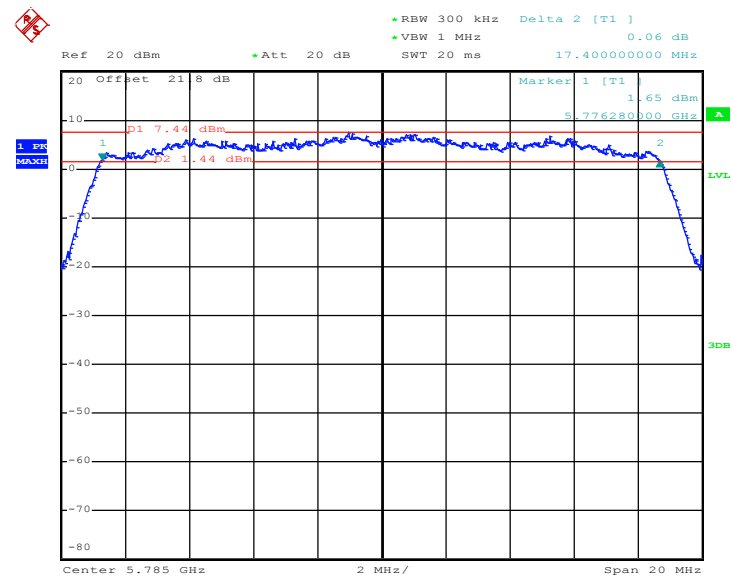
6 dB Bandwidth Plot on 802.11a Channel 165



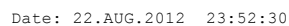
Date: 23.AUG.2012 00:09:24

6 dB Bandwidth Plot on 5G 802.11n HT20 Channel 149


Date: 22.AUG.2012 23:59:00

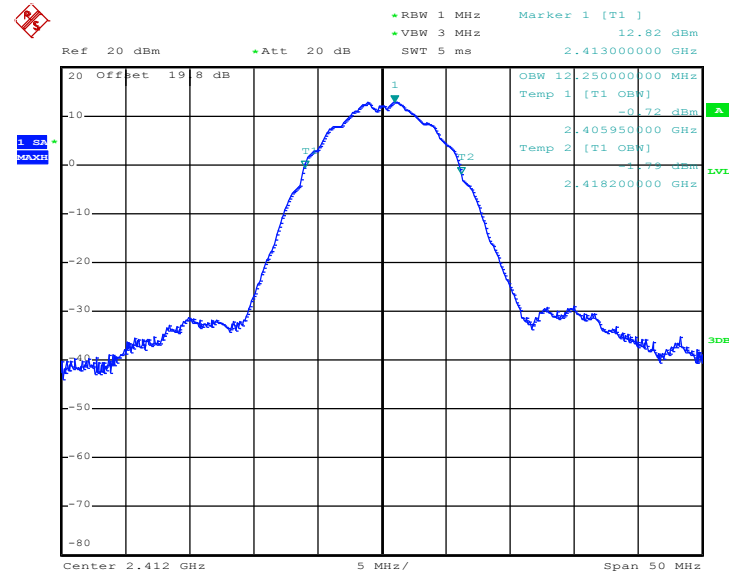
6 dB Bandwidth Plot on 5G 802.11n HT20 Channel 157


Date: 22.AUG.2012 23:55:55



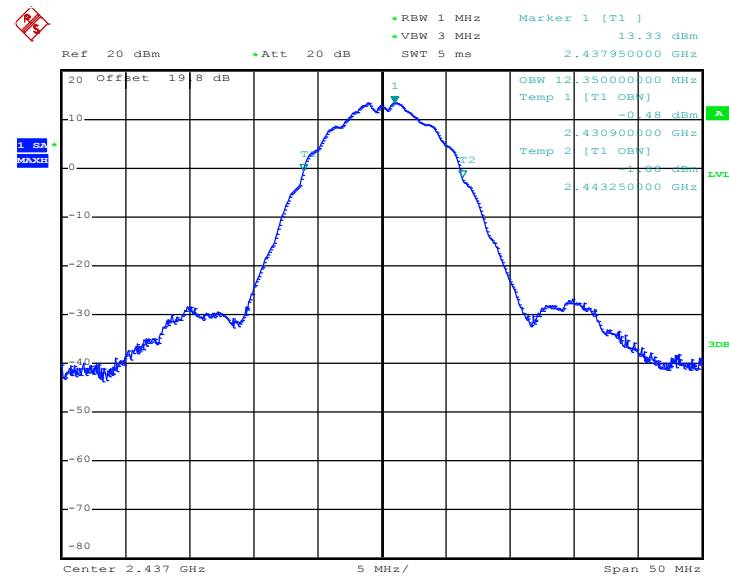
3.1.8 Test Result of 99% Bandwidth Plots

99% Occupied Bandwidth Plot on 802.11b Channel 01



Date: 22.AUG.2012 22:48:02

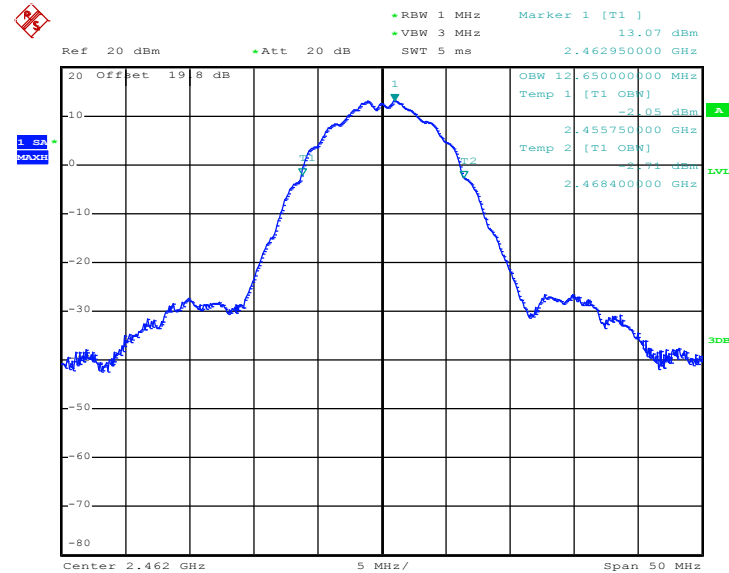
99% Occupied Bandwidth Plot on 802.11b Channel 06



Date: 22.AUG.2012 23:30:06

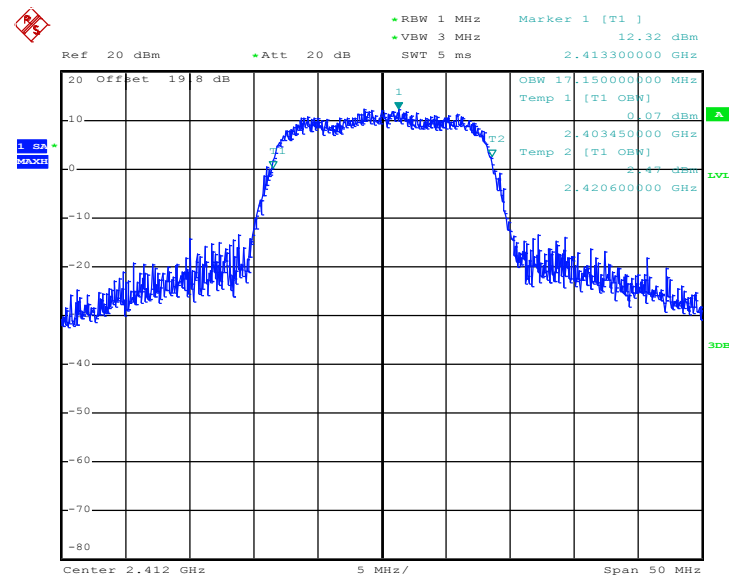


99% Occupied Bandwidth Plot on 802.11b Channel 11



Date: 22.AUG.2012 22:56:17

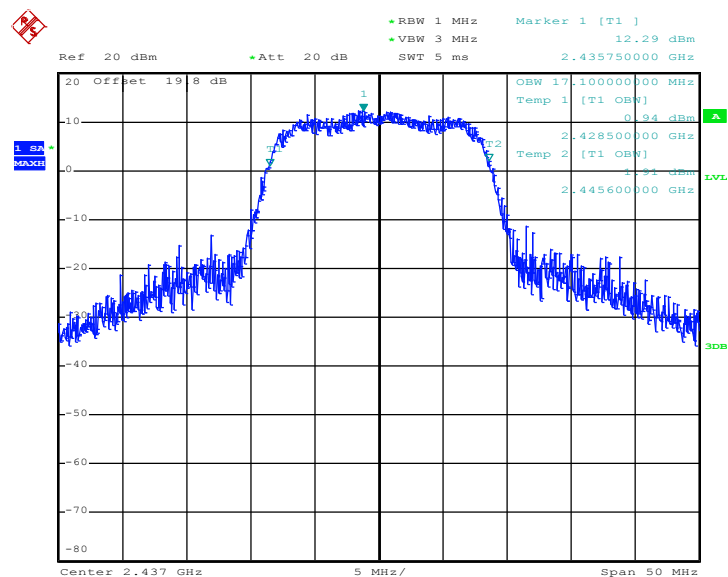
99% Occupied Bandwidth Plot on 802.11g Channel 01



Date: 22.AUG.2012 23:09:10

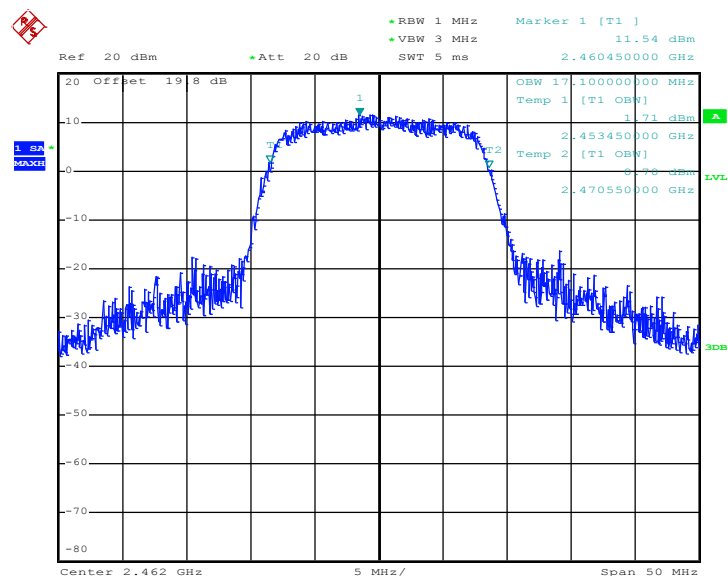


99% Occupied Bandwidth Plot on 802.11g Channel 06



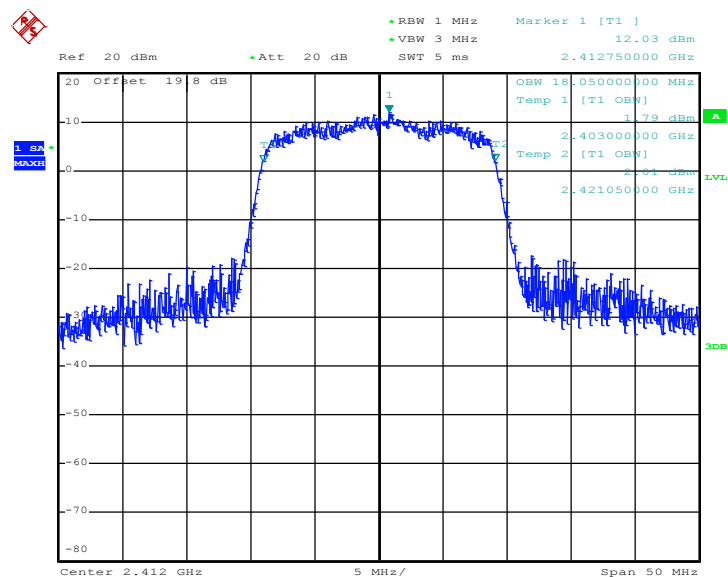
Date: 22.AUG.2012 23:05:02

99% Occupied Bandwidth Plot on 802.11g Channel 11



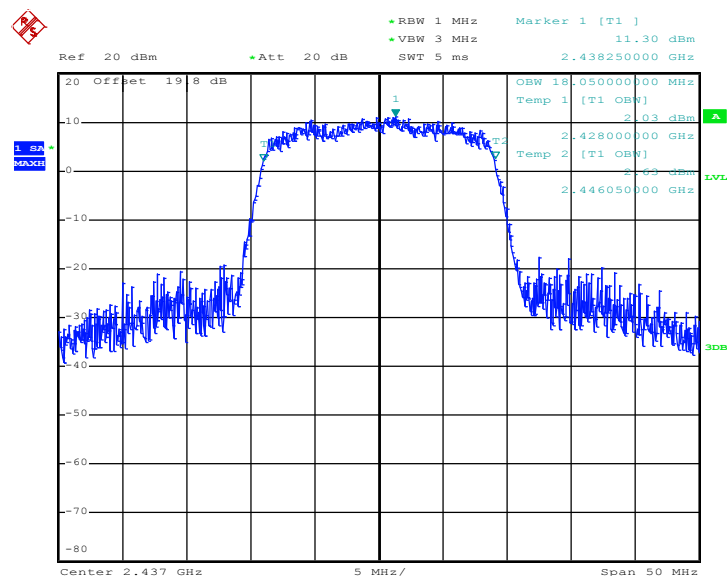
Date: 22.AUG.2012 23:01:32

99% Occupied Bandwidth Plot on 2.4G 802.11n HT20 Channel 01



Date: 22.AUG.2012 23:14:53

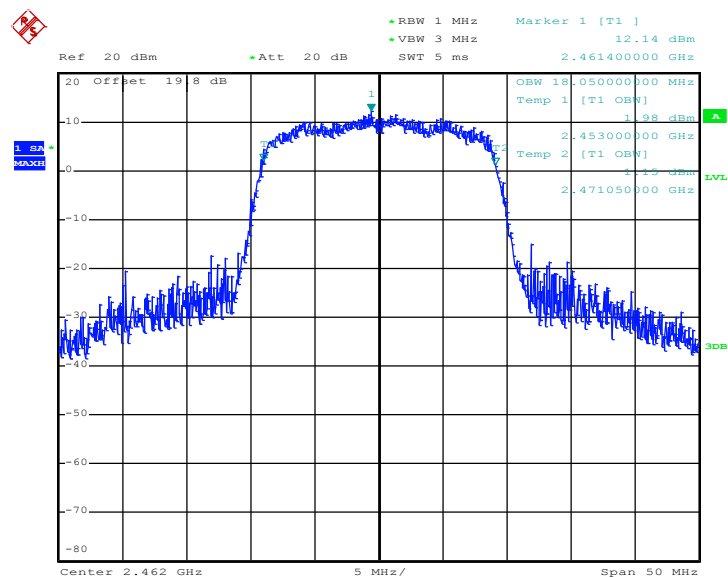
99% Occupied Bandwidth Plot on 2.4G 802.11n HT20 Channel 06



Date: 22.AUG.2012 23:19:40

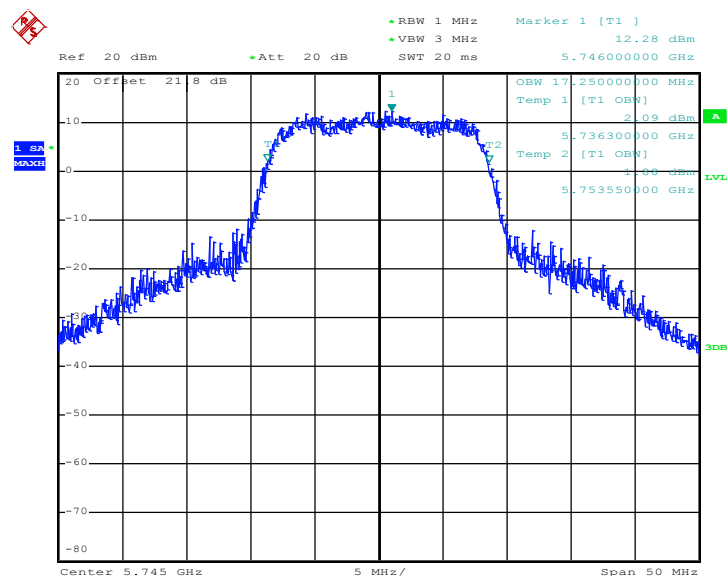


99% Occupied Bandwidth Plot on 2.4G 802.11n HT20 Channel 11



Date: 22.AUG.2012 23:25:15

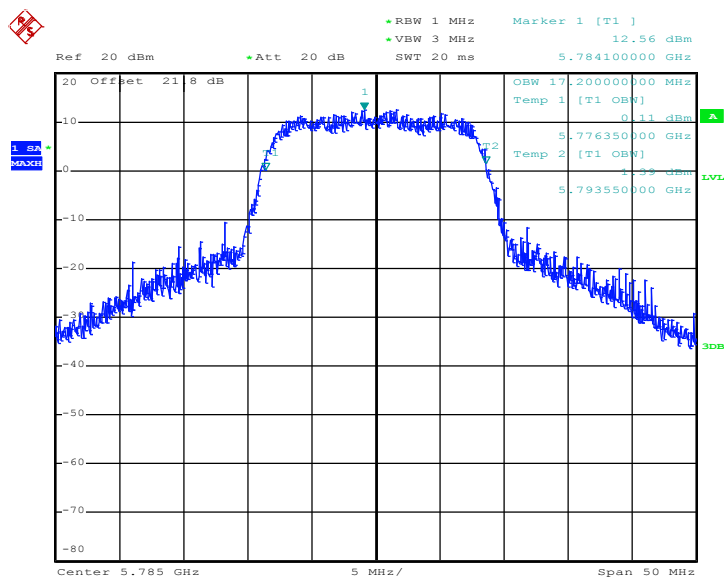
99% Occupied Bandwidth Plot on 802.11a Channel 149



Date: 23.AUG.2012 00:05:16

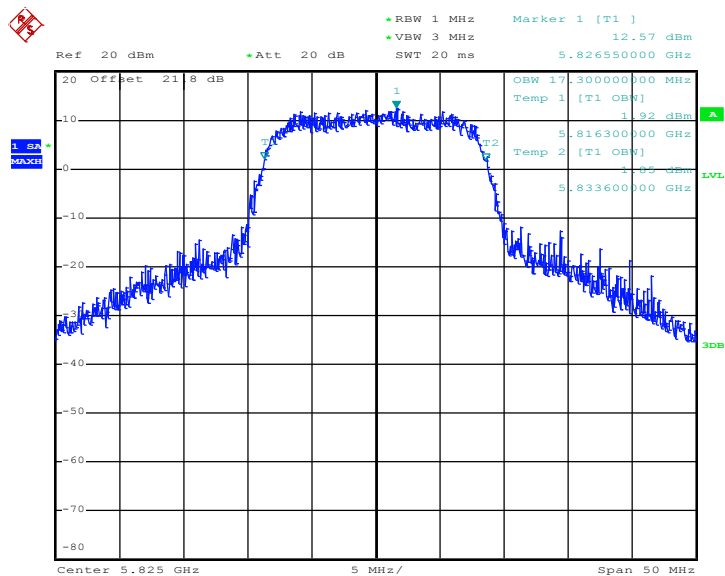


99% Occupied Bandwidth Plot on 802.11a Channel 157



Date: 23.AUG.2012 00:08:22

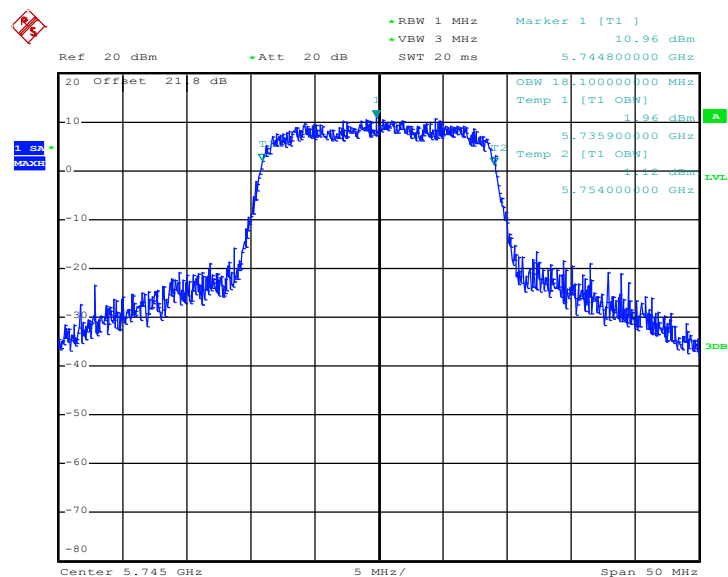
99% Occupied Bandwidth Plot on 802.11a Channel 165



Date: 23.AUG.2012 00:10:50

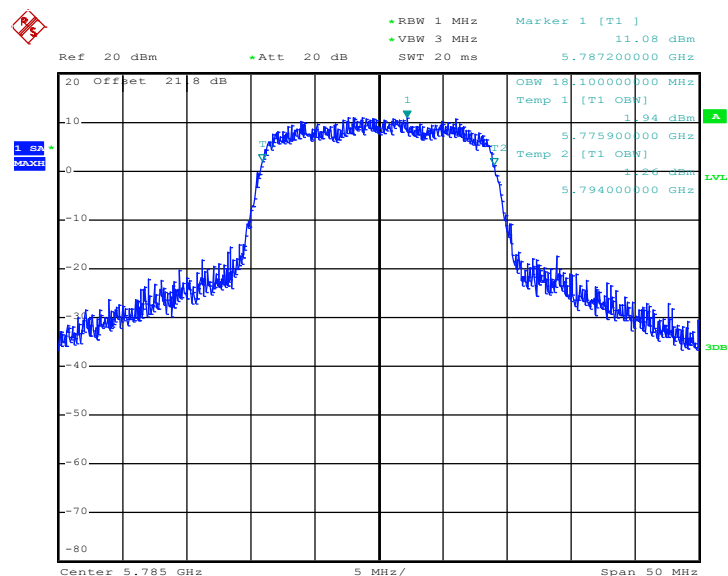


99% Occupied Bandwidth Plot on 5G 802.11n HT20 Channel 149



Date: 23.AUG.2012 00:01:59

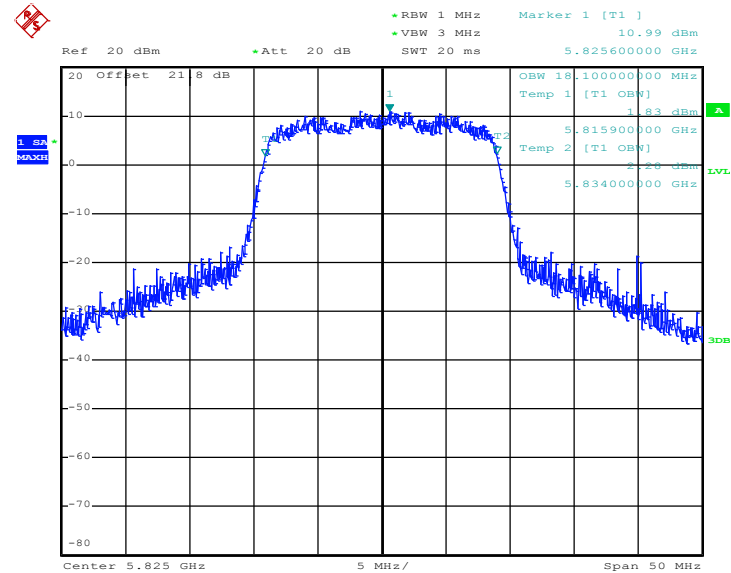
99% Occupied Bandwidth Plot on 5G 802.11n HT20 Channel 157



Date: 22.AUG.2012 23:57:37



99% Occupied Bandwidth Plot on 5G 802.11n HT20 Channel 165



Date: 22.AUG.2012 23:54:15

3.2 Output Power Measurement

3.2.1 Limit of Output Power

For systems using digital modulation in the 2400-2483.5MHz and 5725-5850MHz, the limit for peak output power is 30dBm. If transmitting Antenna of directional gain greater than 6dBi are used the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the Antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the Antenna exceeds 6dBi.

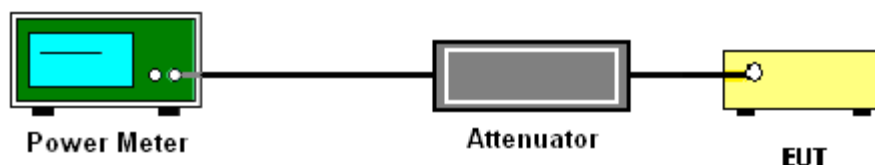
3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

3.2.3 Test Procedures

1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance and TCB Workshop 2012, April.
2. The RF output of EUT was connected to the power meter by a low loss cable
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

3.2.4 Test Setup



3.2.5 Test Result of Peak Output Power

Test Mode :	802.11b	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11b Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	18.81	30	Pass
06	2437	19.77	30	Pass
11	2462	19.90	30	Pass

Test Mode :	802.11g	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11g Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	21.41	30	Pass
06	2437	22.44	30	Pass
11	2462	21.69	30	Pass

Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	2.4G 802.11n HT20 Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
01	2412	21.38	30	Pass
06	2437	22.33	30	Pass
11	2462	21.51	30	Pass

Test Mode :	802.11 a	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11a Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
149	5745	22.89	30	Pass
157	5785	22.66	30	Pass
165	5825	22.53	30	Pass

Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	5G 802.11n HT20 Peak Output Power (dBm)	Max. Limits (dBm)	Pass/Fail
149	5745	22.45	30	Pass
157	5785	22.39	30	Pass
165	5825	22.32	30	Pass

3.2.6 Test Result of Average output Power (Reporting Only)

Test Mode :	802.11b	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%
Duty Cycle:	100.00% for Chain 0 100.00% for Chain 1	Duty Factor:	0.00dB for Chain 0 0.00dB for Chain 1

Channel	Frequency (MHz)	802.11b Average Output Power (dBm) (Chain 0)	802.11b Average Output Power (dBm) (Chain 1)
01	2412	15.77	15.51
06	2437	17.01	16.71
11	2462	17.02	16.68

Test Mode :	802.11g	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%
Duty Cycle:	98.10% for Chain 0 98.57% for Chain 1	Duty Factor:	0.08dB for Chain 0 0.06dB for Chain 1

Channel	Frequency (MHz)	802.11g Average Output Power (dBm) (Chain 0)	802.11g Average Output Power (dBm) (Chain 1)
01	2412	14.00	12.21
06	2437	15.05	15.04
11	2462	13.54	14.58

Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%
Duty Cycle:	98.27% for Chain 0 98.47% for Chain 1	Duty Factor:	0.08dB for Chain 0 0.07dB for Chain 1

Channel	Frequency (MHz)	2.4G 802.11n HT20 Average Output Power (dBm) (Chain 0)	2.4G 802.11n HT20 Average Output Power (dBm) (Chain 1)
01	2412	12.84	12.54
06	2437	13.89	13.87
11	2462	12.95	13.54

Test Mode :	802.11a	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%
Duty Cycle:	98.47% for Chain 0 98.47% for Chain 1	Duty Factor:	0.07dB for Chain 0 0.07dB for Chain 1

Channel	Frequency (MHz)	802.11a Average Output Power (dBm) (Chain 0)	802.11a Average Output Power (dBm) (Chain 1)
149	5745	15.50	15.43
157	5785	15.47	15.40
165	5825	15.38	15.38

Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Engineer :	Reece Li	Relative Humidity :	50~58%
Duty Cycle:	98.36% for Chain 0 98.36% for Chain 1	Duty Factor:	0.07dB for Chain 0 0.07dB for Chain 1

Channel	Frequency (MHz)	5G 802.11n HT20 Average Output Power (dBm) (Chain 0)	5G 802.11n HT20 Average Output Power (dBm) (Chain 1)
149	5745	14.49	14.47
157	5785	14.44	14.42
165	5825	14.35	14.38

3.3 Power Spectral Density Measurement

3.3.1 Limit of Power Spectral Density

The peak power spectral density shall not be greater than 8dBm in any 3KHz band at any time interval of continuous transmission.

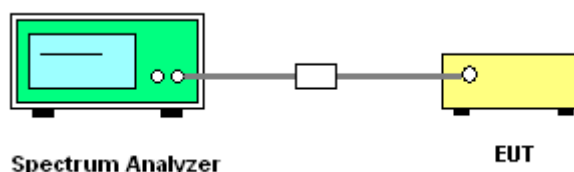
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

1. The testing follows Measurement Procedure 5.3.1 (Peak PSD) of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance and TCB Workshop 2012, April.
2. The RF output of EUT was connected to the spectrum analyzer by a low loss cable. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 KHz. Video bandwidth (VBW) $\geq$ 300 KHz In order to make an accurate measurement, set the span to 5-30% greater than Emission Bandwidth (EBW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
6. Record the measurement data derived from spectrum analyzer.
7. Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(3\text{ kHz}/100\text{ kHz}) = -15.2\text{ dB}$.

3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

Test Mode :	802.11b	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11b Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	9.37	-5.83	8	Pass
06	2437	9.83	-5.37	8	Pass
11	2462	9.55	-5.65	8	Pass

Test Mode :	802.11g	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11g Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	3.94	-11.26	8	Pass
06	2437	4.41	-10.79	8	Pass
11	2462	3.40	-11.80	8	Pass

Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	2.4G 802.11n HT20 Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
01	2412	3.48	-11.72	8	Pass
06	2437	3.13	-12.07	8	Pass
11	2462	3.52	-11.68	8	Pass

Test Mode :	802.11a	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	802.11a Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
149	5745	4.49	-10.71	8	Pass
157	5785	4.69	-10.51	8	Pass
165	5825	4.73	-10.47	8	Pass

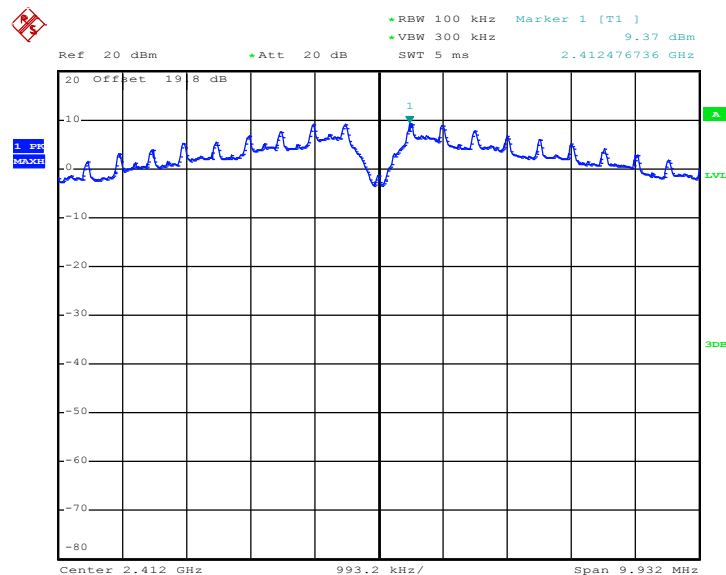
Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Engineer :	Reece Li	Relative Humidity :	50~58%

Channel	Frequency (MHz)	5G 802.11n HT20 Power Density		Max. Limits (dBm)	Pass/Fail
		Measured PSD/100KHz (dBm)	PSD/3KHz (dBm)		
149	5745	3.54	-11.66	8	Pass
157	5785	3.68	-11.52	8	Pass
165	5825	3.43	-11.77	8	Pass

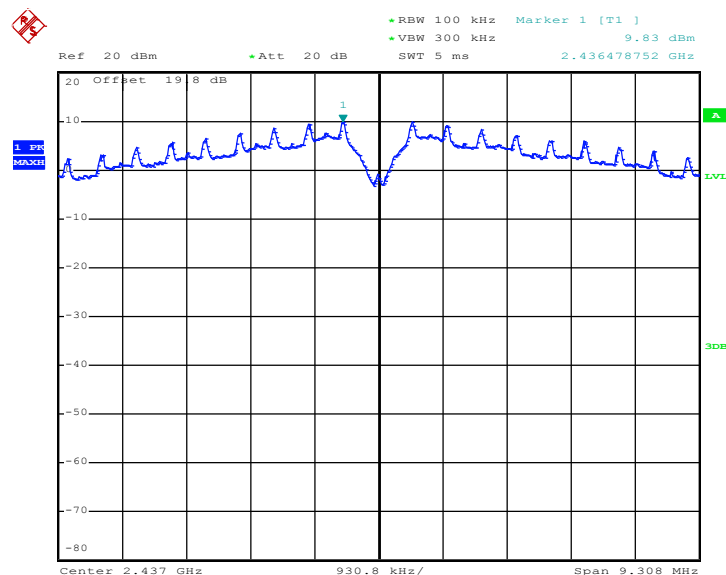
Note:

1. Measured power density (dBm) has offset with cable loss.
2. BWCF (dB) = $10 \log (3k/100k) = -15.2 \text{ dB}$
3. Power Density/ 3kHz (dBm)= Measured power density/ 100KHz (dBm) + BWCF (dB)

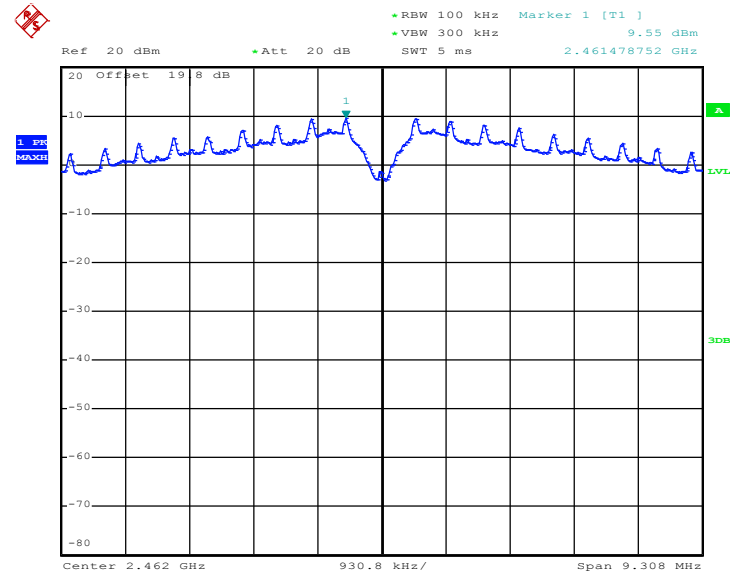
3.3.6 Test Result of Power Spectral Density Plots

PSD Plot on 802.11b Channel 01


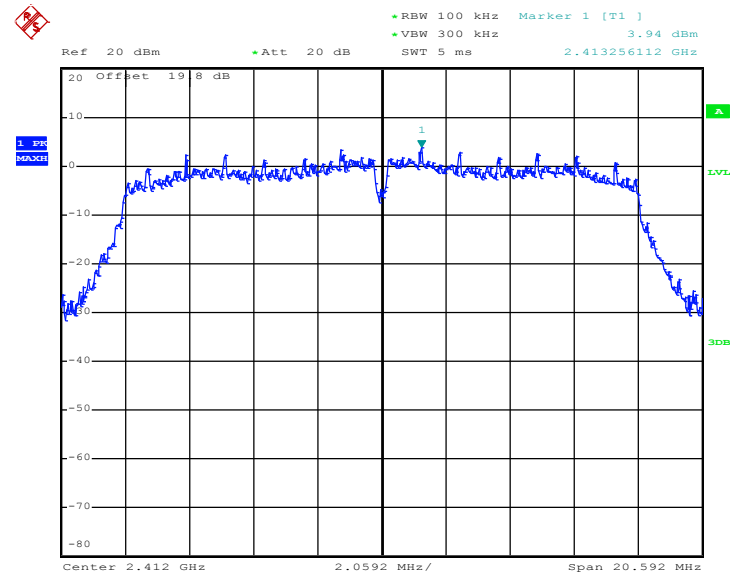
Date: 22.AUG.2012 22:45:53

PSD Plot on 802.11b Channel 06


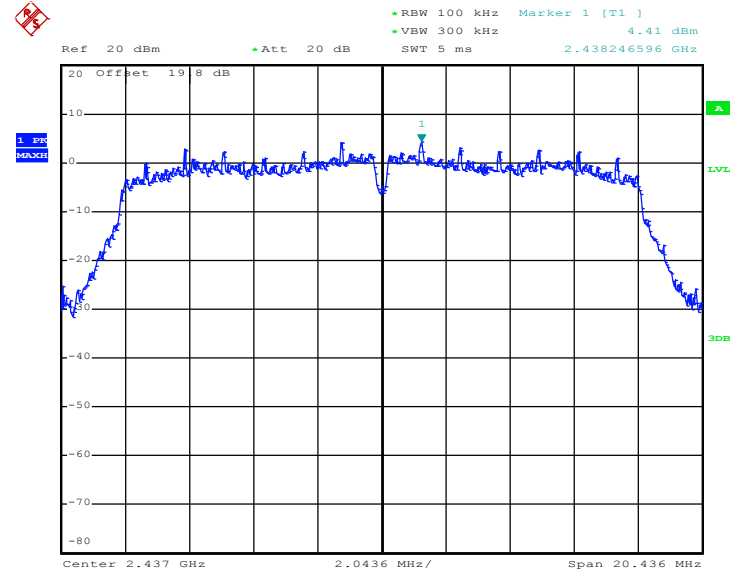
Date: 22.AUG.2012 23:29:15

PSD Plot on 802.11b Channel 11


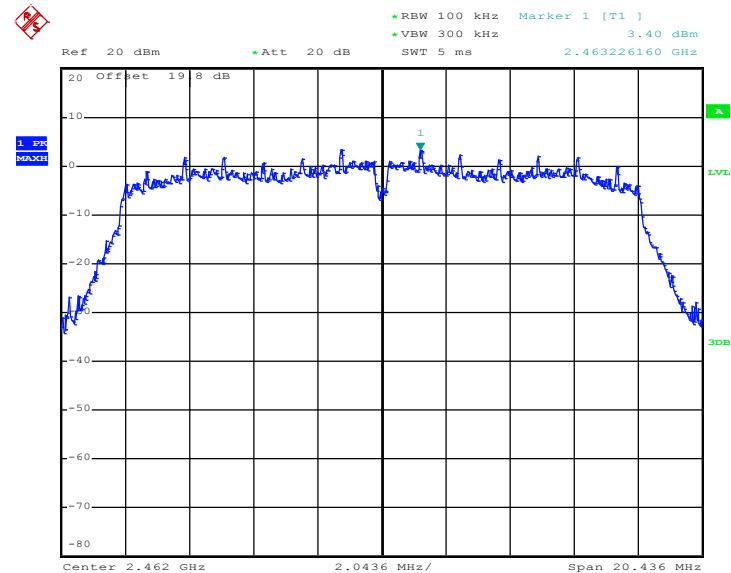
Date: 22.AUG.2012 22:55:11

PSD Plot on 802.11g Channel 01


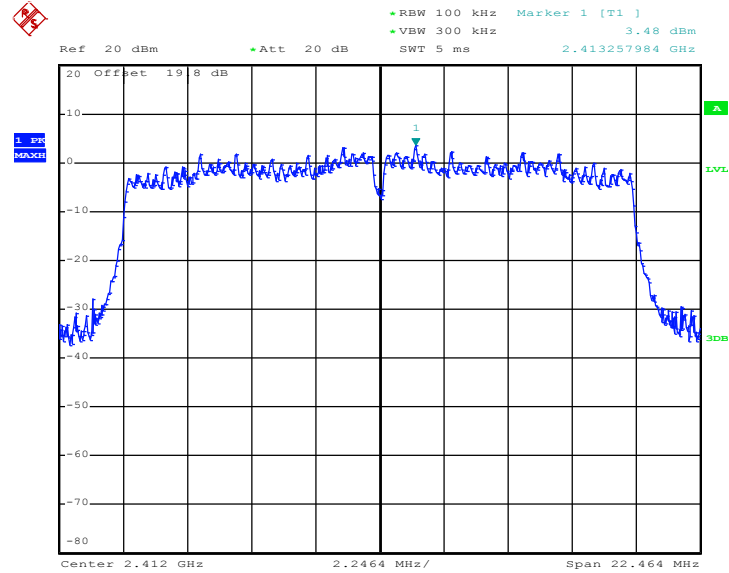
Date: 22.AUG.2012 23:07:57

PSD Plot on 802.11g Channel 06


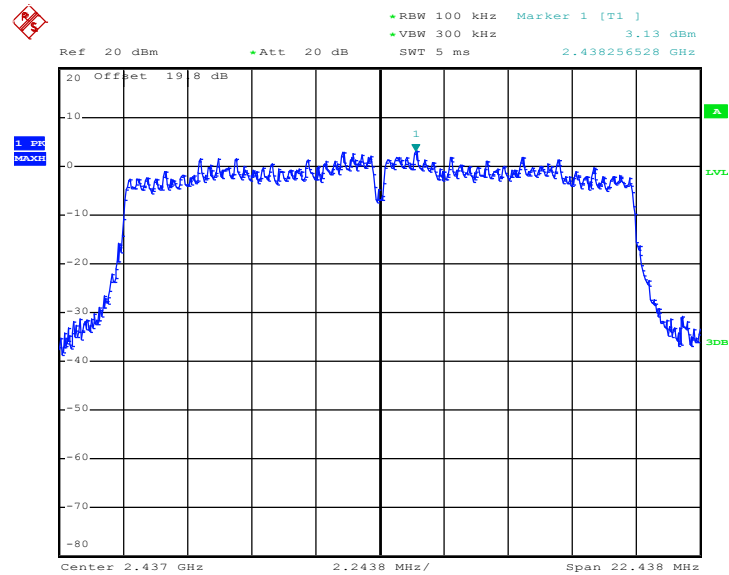
Date: 22.AUG.2012 23:03:52

PSD Plot on 802.11g Channel 11


Date: 22.AUG.2012 23:00:13

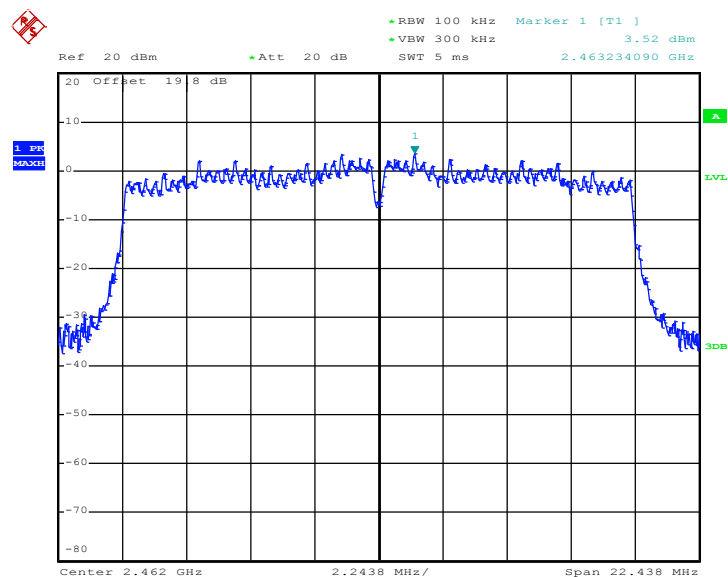
PSD Plot on 2.4G 802.11n HT20 Channel 01


Date: 22.AUG.2012 23:13:10

PSD Plot on 2.4G 802.11n HT20 Channel 06


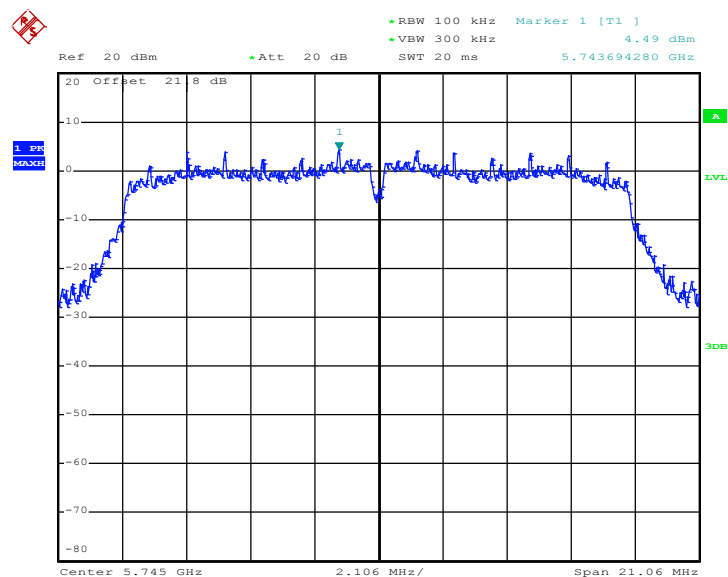
Date: 22.AUG.2012 23:18:19

PSD Plot on 2.4G 802.11n HT20 Channel 11



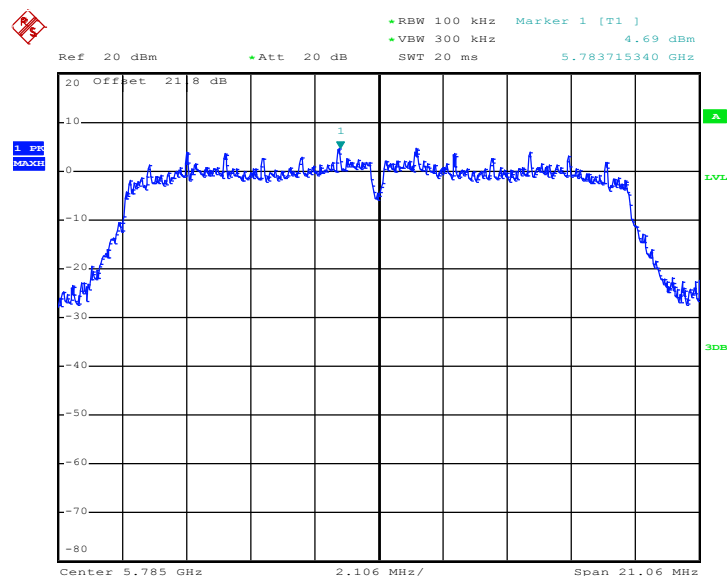
Date: 22.AUG.2012 23:24:04

PSD Plot on 802.11a Channel 149

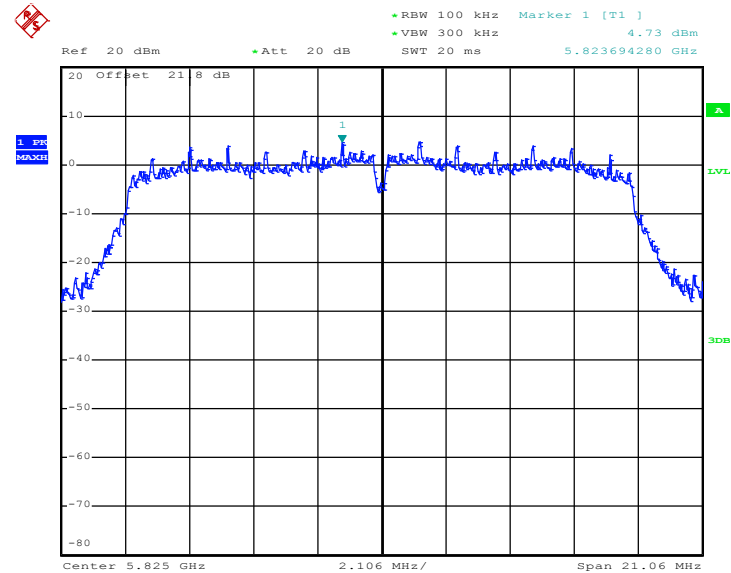


Date: 23.AUG.2012 00:04:10

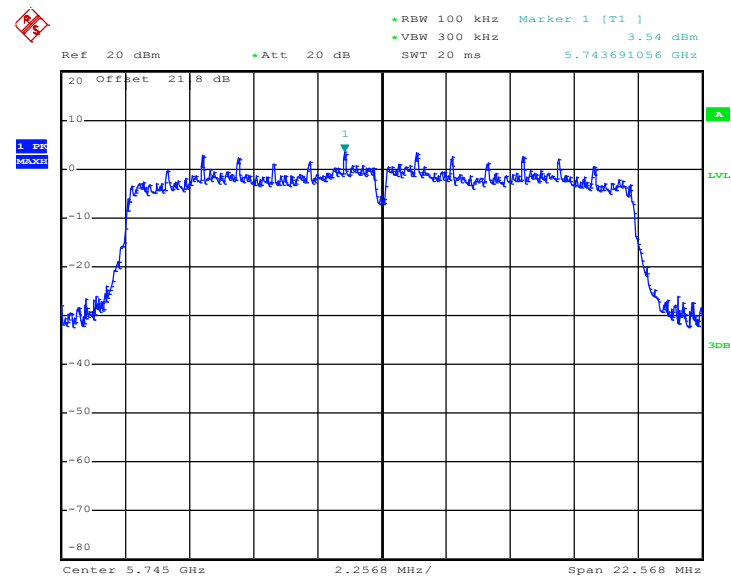
PSD Plot on 802.11a Channel 157



Date: 23.AUG.2012 00:07:27

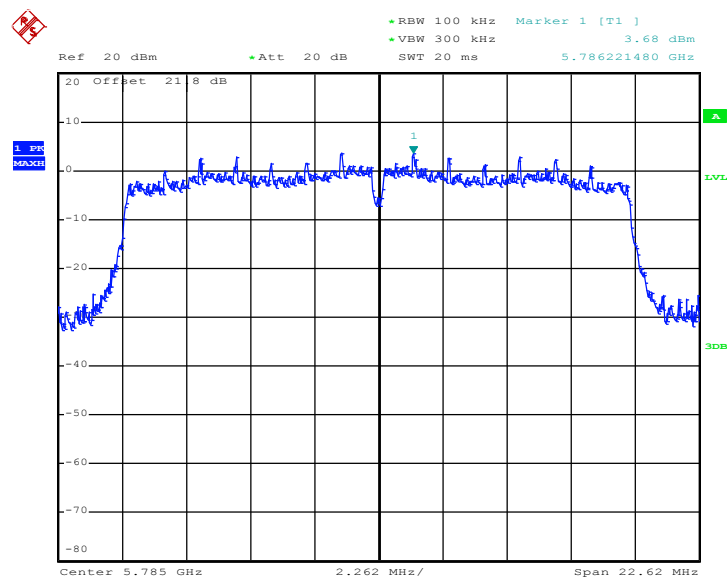
PSD Plot on 802.11a Channel 165


Date: 23.AUG.2012 00:09:44

PSD Plot on 5G 802.11n HT20 Channel 149


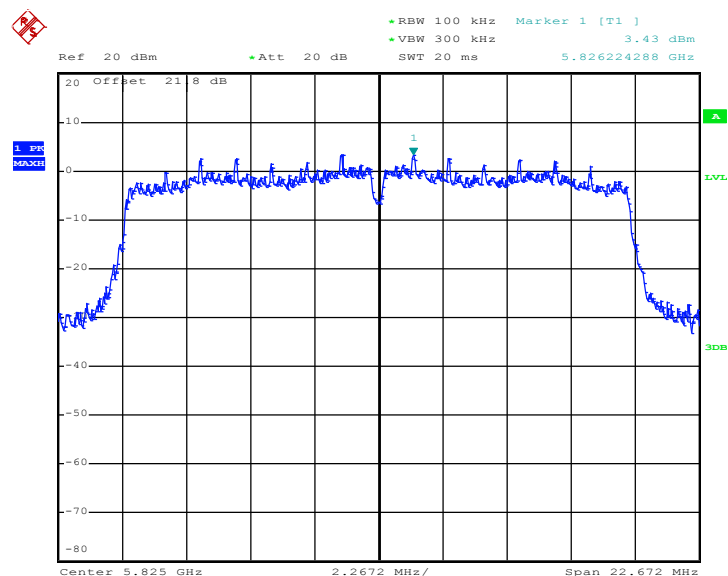
Date: 22.AUG.2012 23:59:20

PSD Plot on 5G 802.11n HT20 Channel 157



Date: 22.AUG.2012 23:56:36

PSD Plot on 5G 802.11n HT20 Channel 165



Date: 22.AUG.2012 23:52:59

3.4 Conducted Band Edges and Spurious Emission Measurement

3.4.1 Limit of Conducted Band Edges and Spurious Emission Measurement

In any 100 kHz bandwidth outside of the authorized frequency band, the emissions which fall in the non-restricted bands shall be attenuated at least 20 dB / 30dB relative to the maximum PSD level in 100 kHz by RF conducted measurement and radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

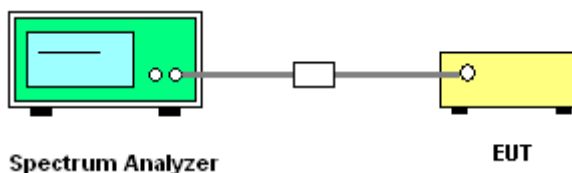
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

1. The testing follows the guidelines in the Measurement Procedure of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance and TCB Workshop 2012, April.
2. Set to the maximum power setting and enable the EUT transmit continuously.
3. Set RBW = 100 KHz, VBW=300 KHz, Peak Detector. Unwanted Emissions measured in any 100 kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz, when maximum peak conducted output power procedure is used. The attenuation is set to 30dB, when maximum conducted output power procedure is used.
4. Measure and record the results in the test report.

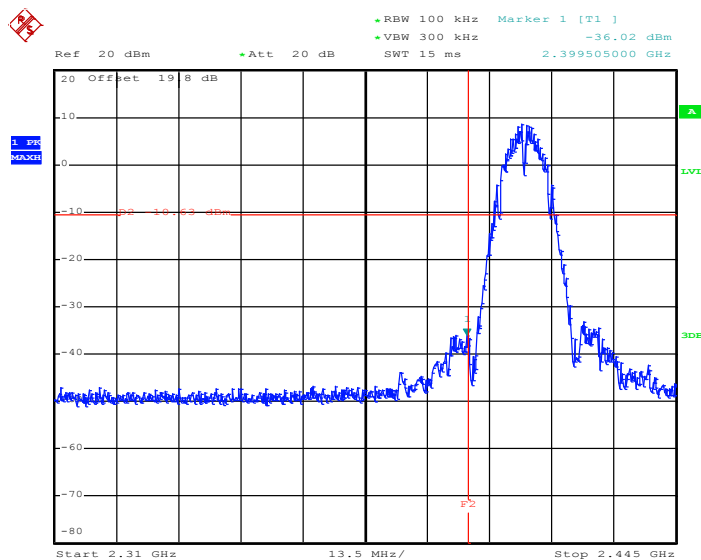
3.4.4 Test Setup



3.4.6 Test Result of Conducted Spurious at Band Edges

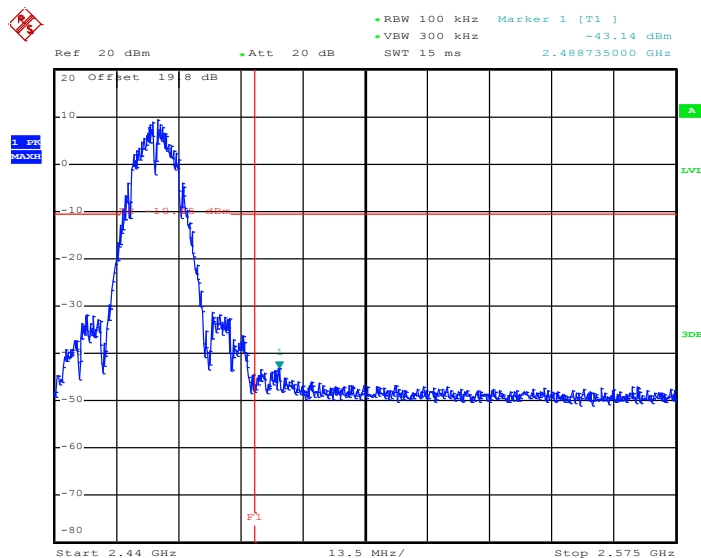
Test Mode :	802.11b	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	50~58%
Test Channel :	01 and 11	Test Engineer :	Reece Li

Low Band Edge Plot on 802.11b Channel 01



Date: 22.AUG.2012 22:46:07

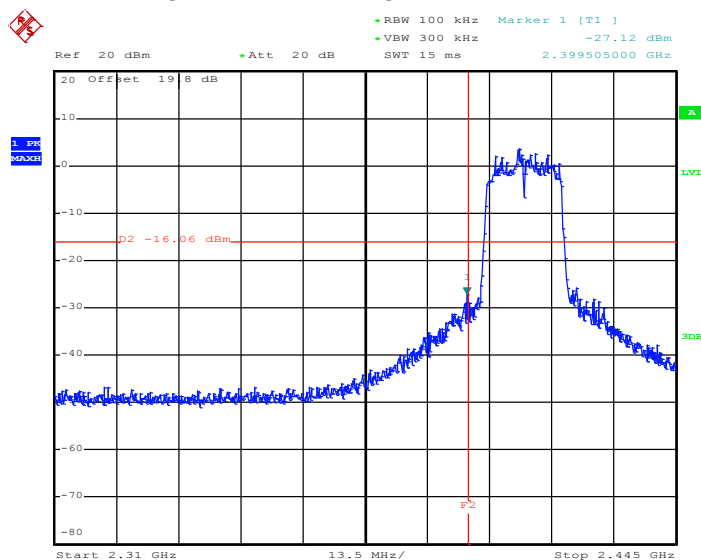
High Band Edge Plot on 802.11b Channel 11



Date: 22.AUG.2012 22:55:26

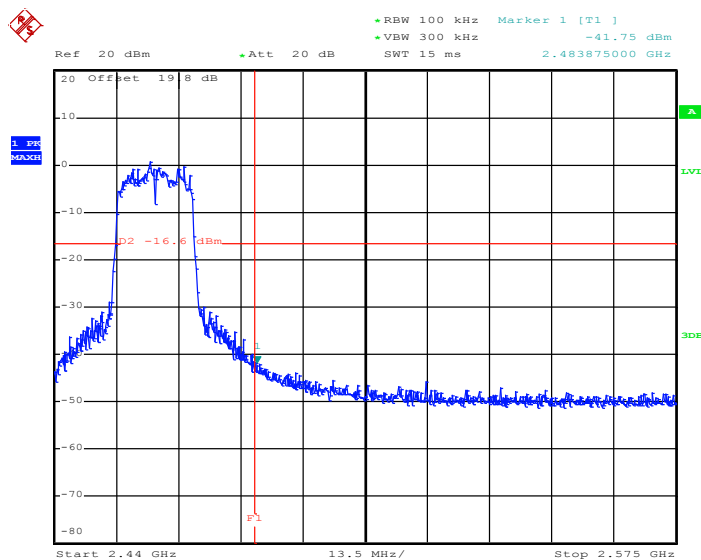
Test Mode :	802.11g	Temperature :	24~26℃
Test Band :	Low and High	Relative Humidity :	50~58%
Test Channel :	01 and 11	Test Engineer :	Reece Li

Low Band Edge Plot on 802.11g Channel 01



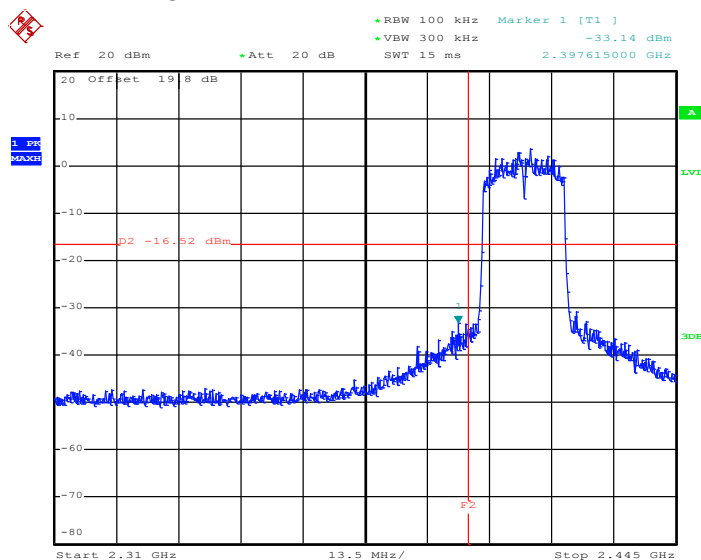
Date: 22.AUG.2012 23:08:13

High Band Edge Plot on 802.11g Channel 11

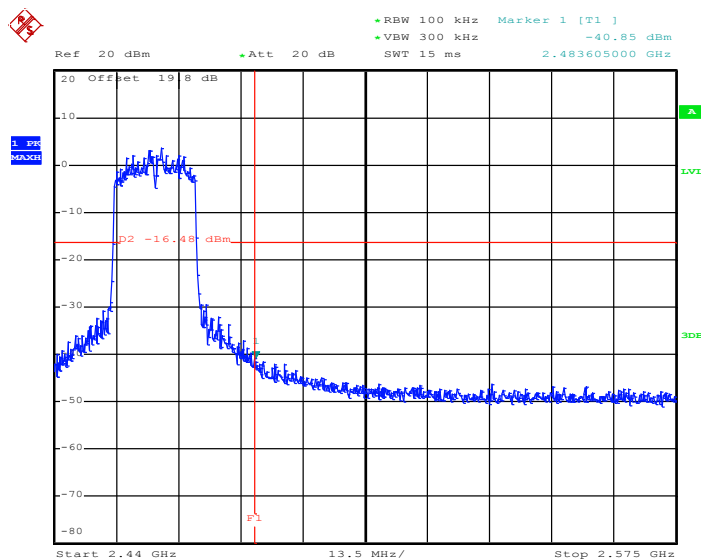


Date: 8.SEP.2012 14:18:22

Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	50~58%
Test Channel :	01 and 11	Test Engineer :	Reece Li

Low Band Edge Plot on 2.4G 802.11n HT20 Channel 01


Date: 22.AUG.2012 23:13:24

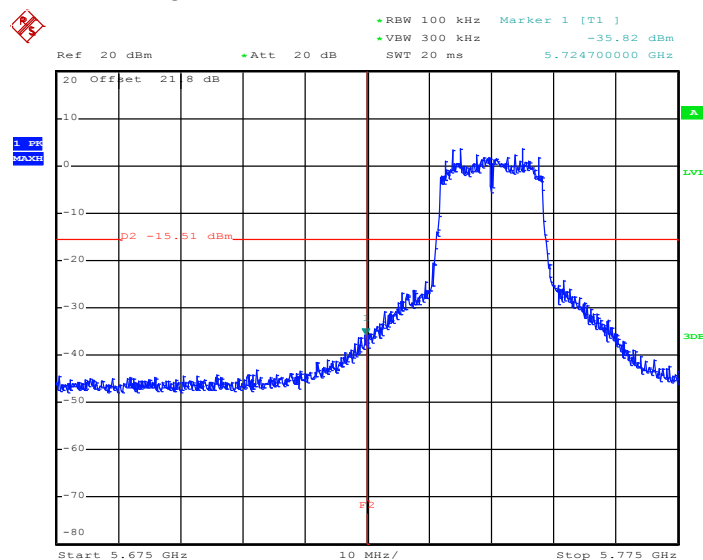
High Band Edge Plot on 2.4G 802.11n HT20 Channel 11


Date: 22.AUG.2012 23:24:20



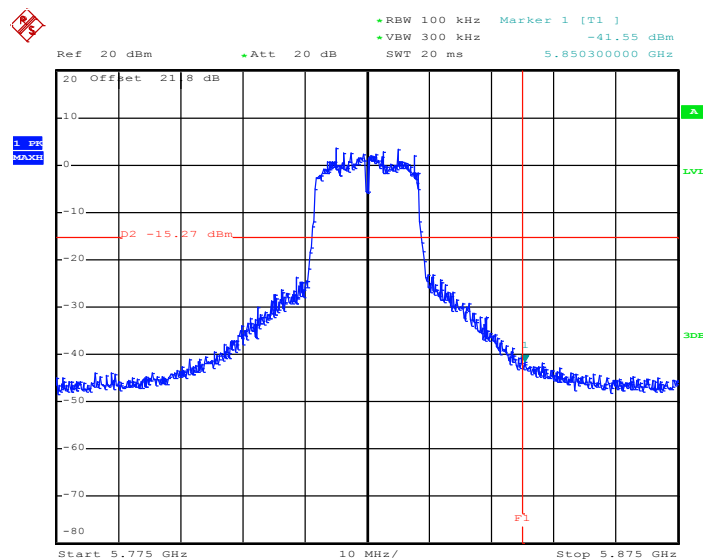
Test Mode :	802.11a	Temperature :	24~26°C
Test Band :	Low and High	Relative Humidity :	50~58%
Test Channel :	149 and 165	Test Engineer :	Reece Li

Low Band Edge Plot on 802.11a Channel 149



Date: 23.AUG.2012 00:04:24

High Band Edge Plot on 802.11a Channel 165



Date: 23.AUG.2012 00:10:00



Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Band :	Low and High	Relative Humidity :	50~58%
Test Channel :	149 and 165	Test Engineer :	Reece Li

Ref 20 dBm Att 20 dB RBW 100 kHz VBW 300 kHz Marker 1 [T1] -37.20 dBm
SWT 20 ms 5.72460000 GHz

20 Offset 218 dB

1. Freq
MASS

p2 -16.46 dBm

F2

Start 5.675 GHz 10 MHz/ Stop 5.775 GHz

Date: 23.AUG.2012 00:01:04

Ref 20 dBm Att 20 dB RBW 100 kHz VBW 300 kHz Marker 1 [T1] -42.25 dBm
SWT 20 ms 5.852800000 GHz

20 Offset 218 dB

dBm

10 MHz

P2 -16.57 dBm

P1

Start 5.775 GHz 1.0 MHz/ Stop 5.875 GHz

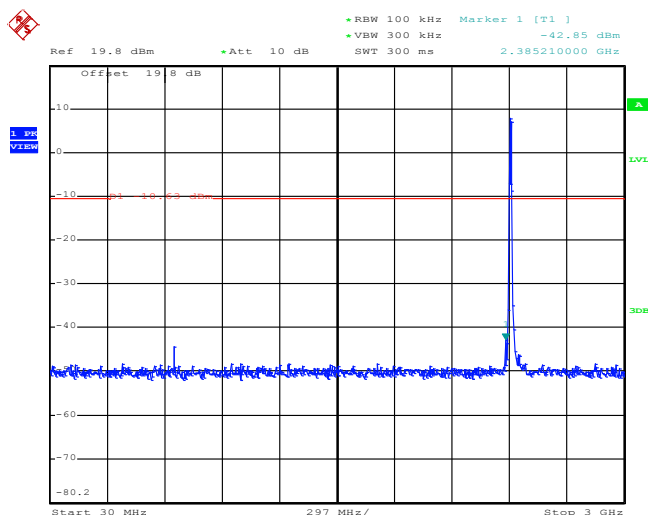
Date: 22.AUG.2012 23:53:15

3.4.7 Test Result of Conducted Spurious Emission

Test Mode :	802.11b	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	50~58%
Test Channel :	01, 06, 11	Test Engineer :	Reece Li

802.11b 30 MHz~3 GHz

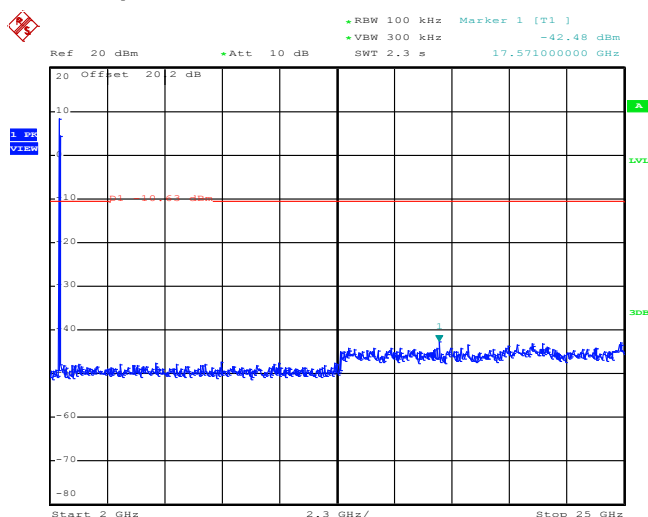
Conducted Spurious Emission Plot on Channel 01



Date: 22.AUG.2012 22:47:21

802.11b 2 GHz~25 GHz

Conducted Spurious Emission Plot on Channel 01

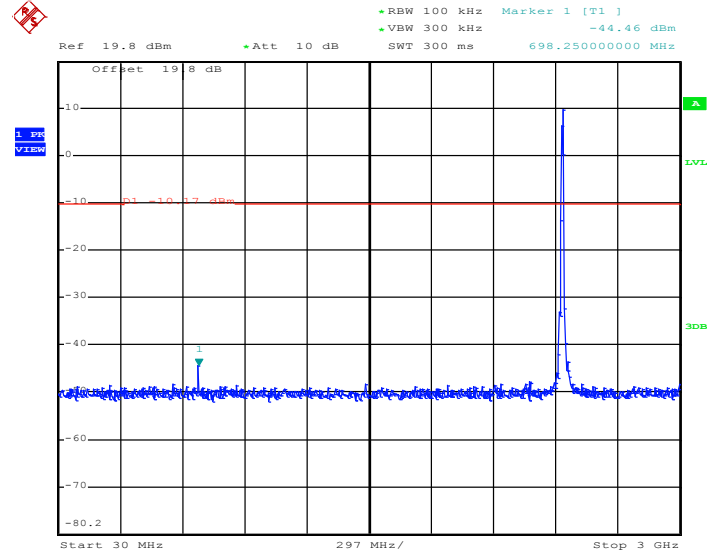


Date: 22.AUG.2012 22:47:39



802.11b 30 MHz~3 GHz

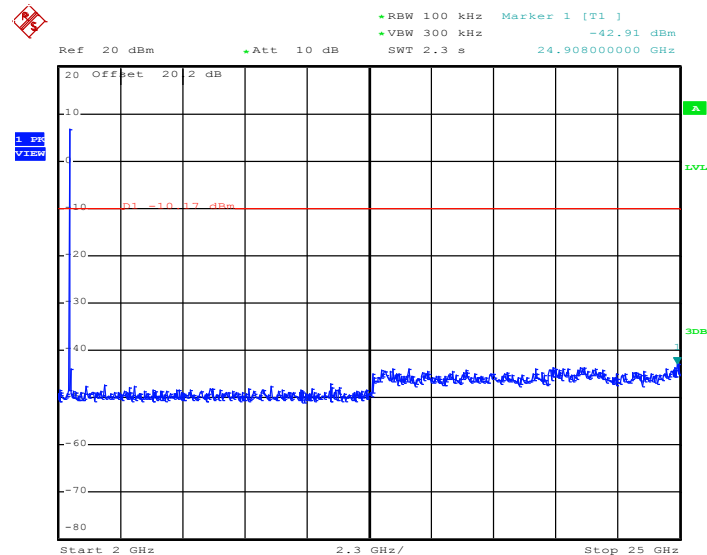
Conducted Spurious Emission Plot on Channel 06



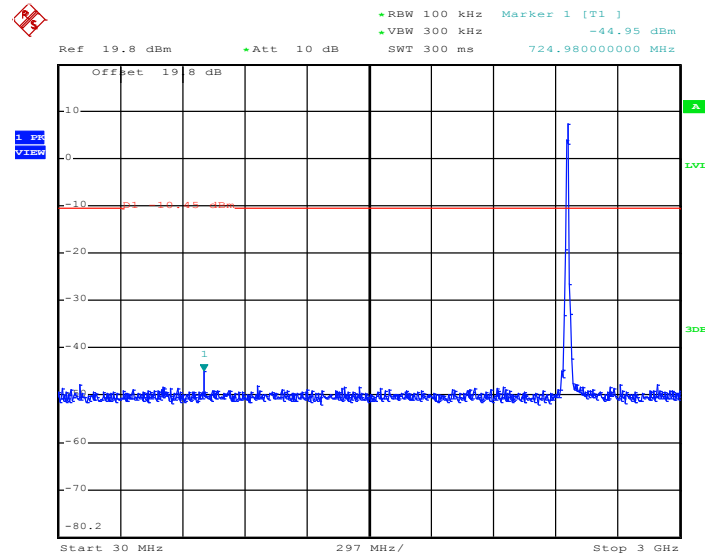
Date: 22.AUG.2012 23:29:36

802.11b 2 GHz~25 GHz

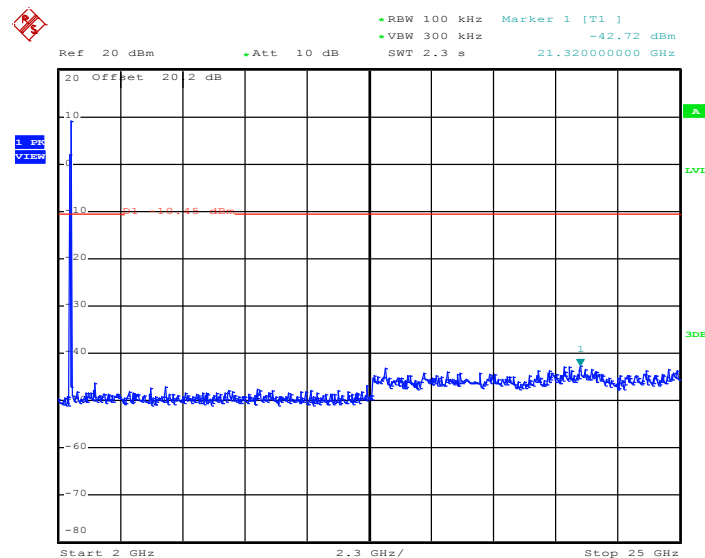
Conducted Spurious Emission Plot on Channel 06



Date: 22.AUG.2012 23:29:53

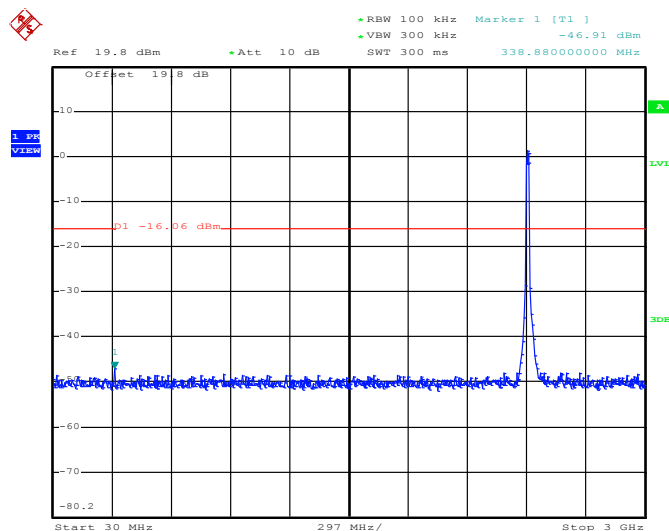
802.11b 30 MHz~3 GHz
Conducted Spurious Emission Plot on Channel 11


Date: 22.AUG.2012 22:55:47

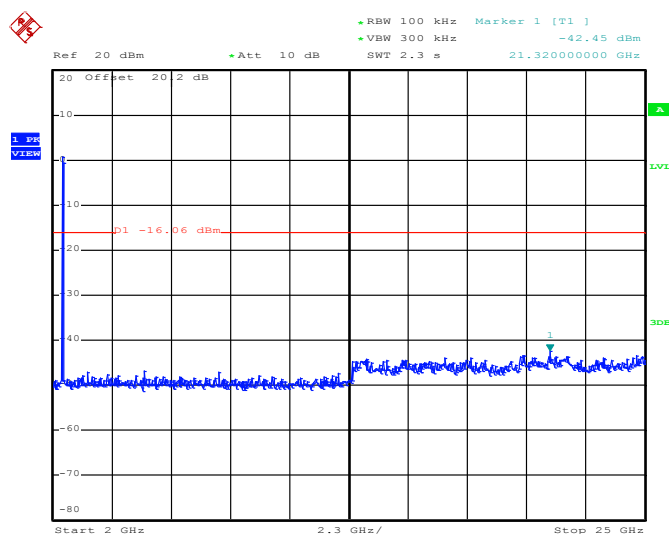
802.11b 2 GHz~25 GHz
Conducted Spurious Emission Plot on Channel 11


Date: 22.AUG.2012 22:56:05

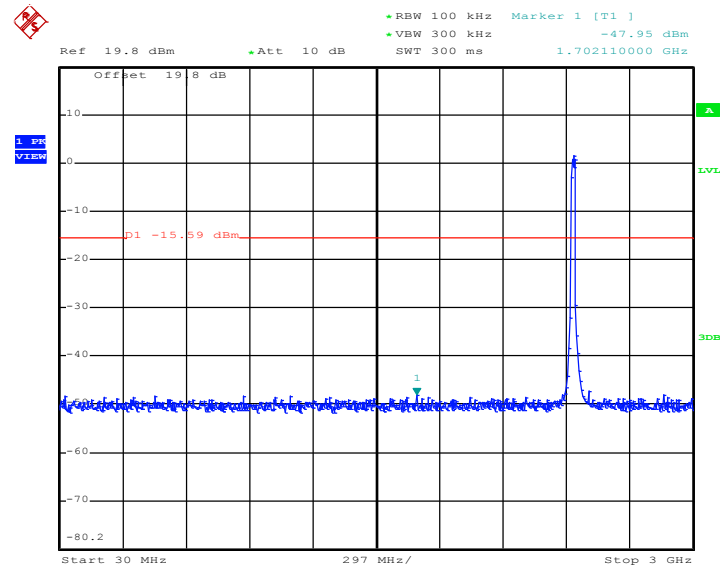
Test Mode :	802.11g	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	50~58%
Test Channel :	01, 06, 11	Test Engineer :	Reece Li

802.11g 30 MHz~3 GHz
Conducted Spurious Emission Plot on Channel 01


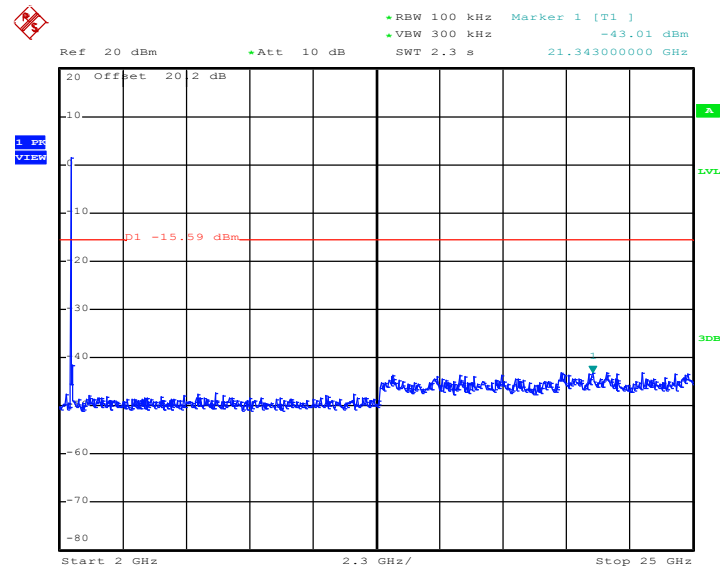
Date: 22.AUG.2012 23:08:39

802.11g 2 GHz~25 GHz
Conducted Spurious Emission Plot on Channel 01


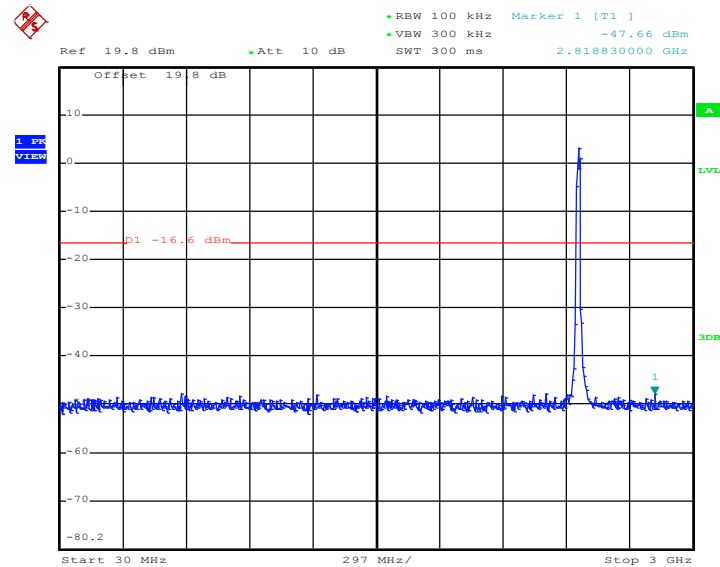
Date: 22.AUG.2012 23:08:57

802.11g 30 MHz~3 GHz
Conducted Spurious Emission Plot on Channel 06


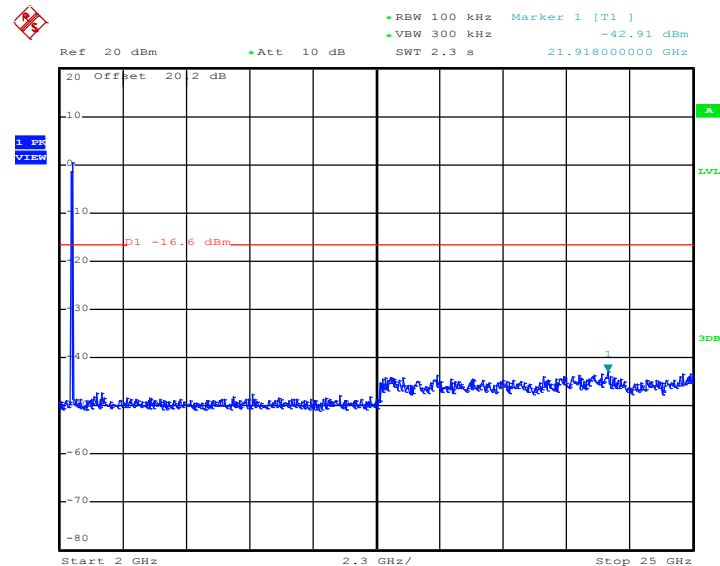
Date: 22.AUG.2012 23:04:29

802.11g 2 GHz~25 GHz
Conducted Spurious Emission Plot on Channel 06


Date: 22.AUG.2012 23:04:46

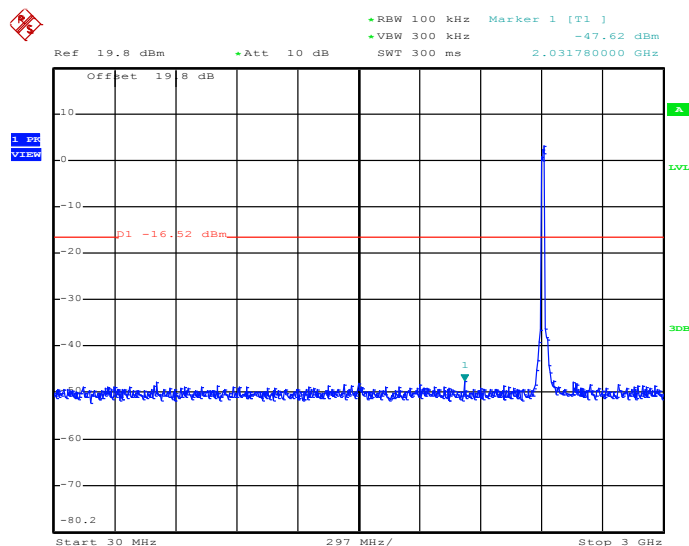
802.11g 30 MHz~3 GHz
Conducted Spurious Emission Plot on Channel 11


Date: 22.AUG.2012 23:01:00

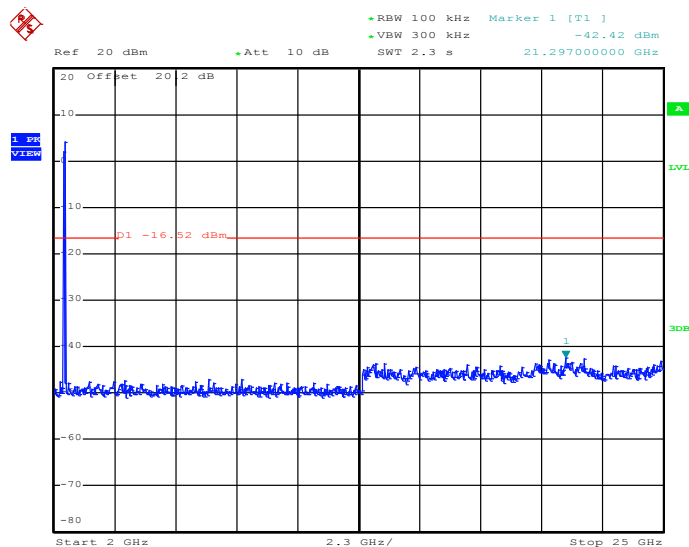
802.11g 2 GHz~25 GHz
Conducted Spurious Emission Plot on Channel 11


Date: 22.AUG.2012 23:01:18

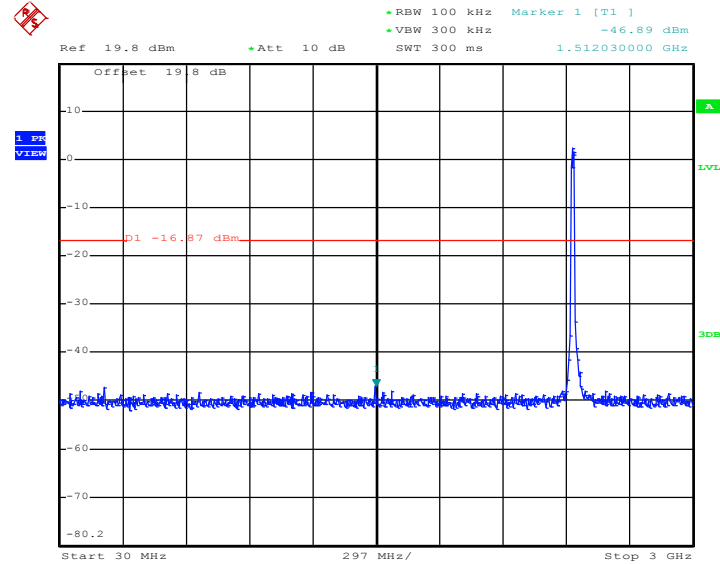
Test Mode :	802.11n HT20	Temperature :	24~26°C
Test Band :	30MHz-3GHz and 2G-25GHz	Relative Humidity :	50~58%
Test Channel :	01, 06, 11	Test Engineer :	Reece Li

2.4G 802.11n HT20 30 MHz~3 GHz
Conducted Spurious Emission Plot on Channel 01


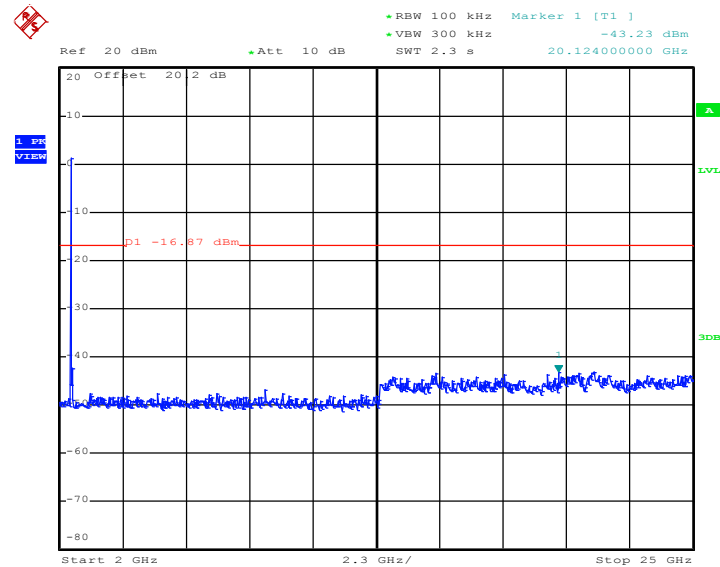
Date: 22.AUG.2012 23:14:16

2.4G 802.11n HT20 2 GHz~25 GHz
Conducted Spurious Emission Plot on Channel 01


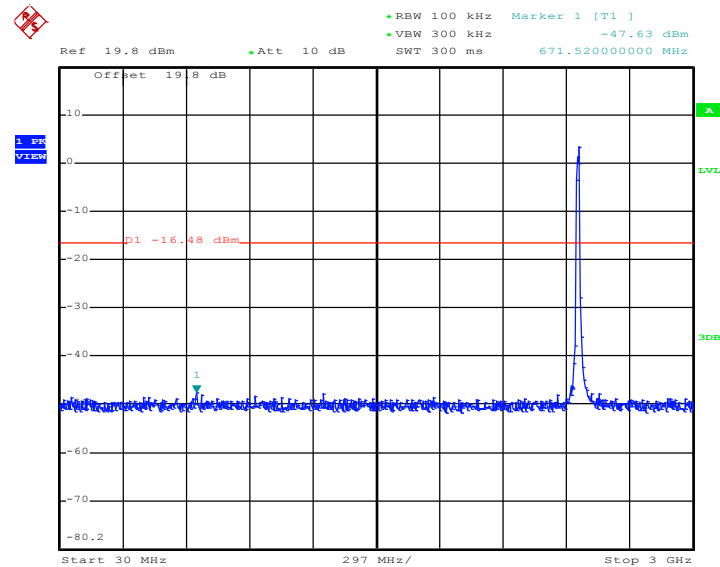
Date: 22.AUG.2012 23:14:34

2.4G 802.11n HT20 30 MHz~3 GHz
Conducted Spurious Emission Plot on Channel 06


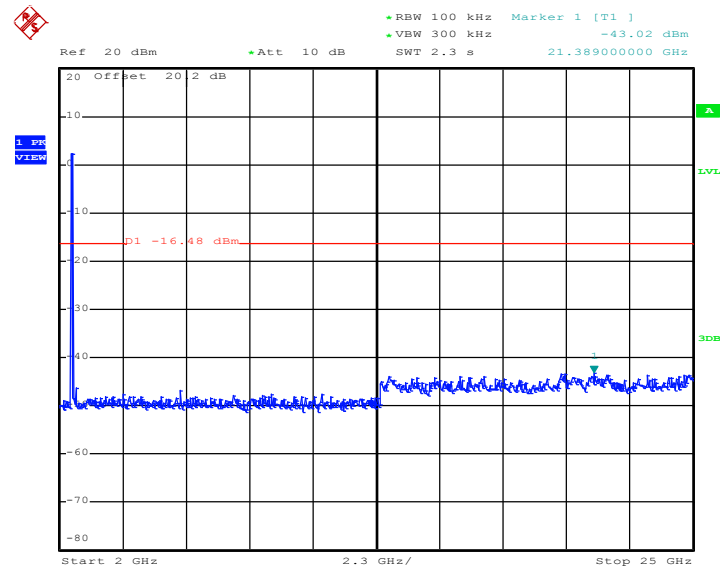
Date: 22.AUG.2012 23:18:46

2.4G 802.11n HT20 2 GHz~25 GHz
Conducted Spurious Emission Plot on Channel 06


Date: 22.AUG.2012 23:19:03

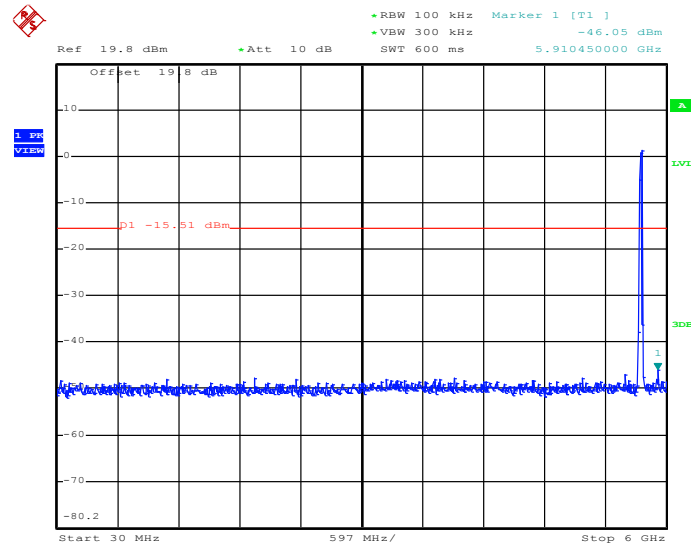
2.4G 802.11n HT20 30 MHz~3 GHz
Conducted Spurious Emission Plot on Channel 11


Date: 22.AUG.2012 23:24:46

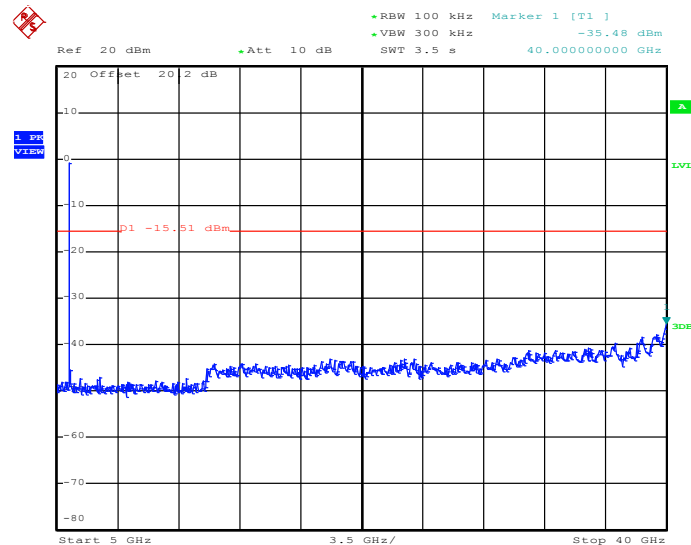
2.4G 802.11n HT20 2 GHz~25 GHz
Conducted Spurious Emission Plot on Channel 11


Date: 22.AUG.2012 23:25:04

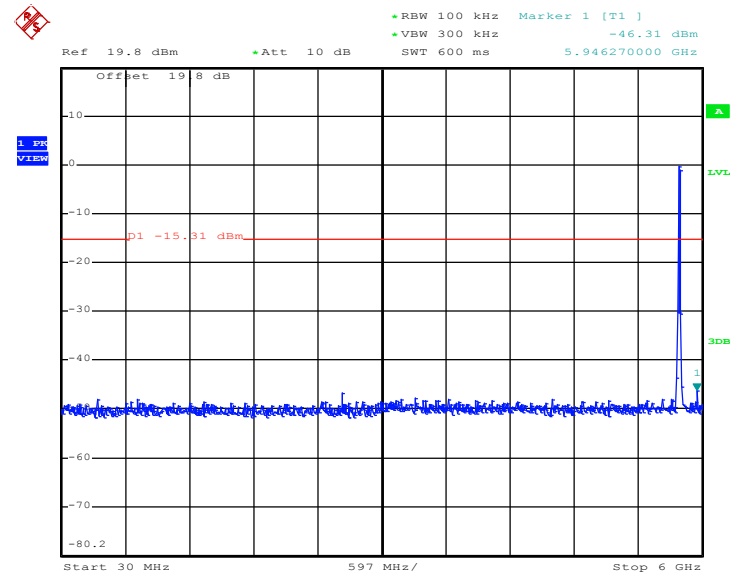
Test Mode :	802.11a	Temperature :	24~26°C
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	50~58%
Test Channel :	149, 157, 165	Test Engineer :	Reece Li

802.11a 30 MHz~6 GHz
Conducted Spurious Emission Plot on Channel 149


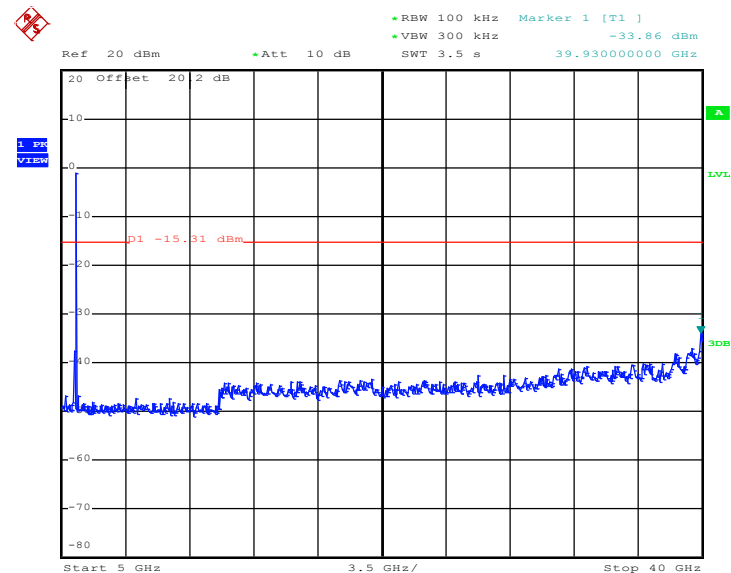
Date: 23.AUG.2012 00:04:44

802.11a 5 GHz~40 GHz
Conducted Spurious Emission Plot on Channel 149


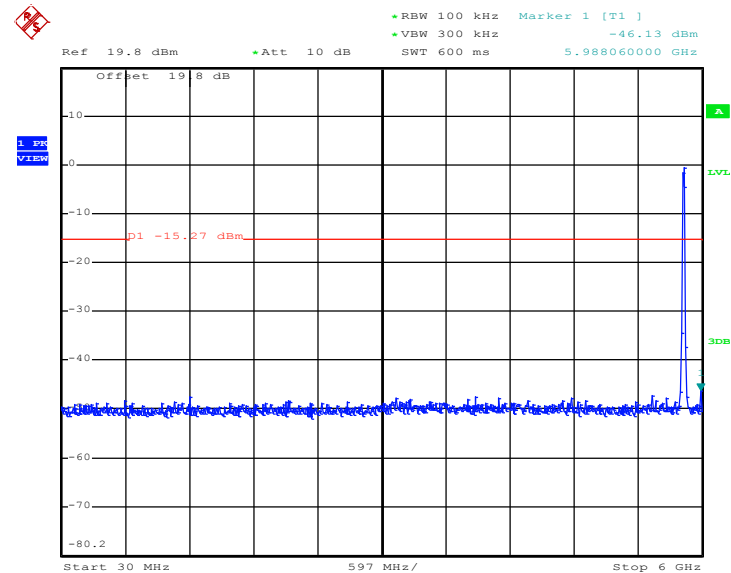
Date: 23.AUG.2012 00:05:02

802.11a 30 MHz~6 GHz
Conducted Spurious Emission Plot on Channel 157


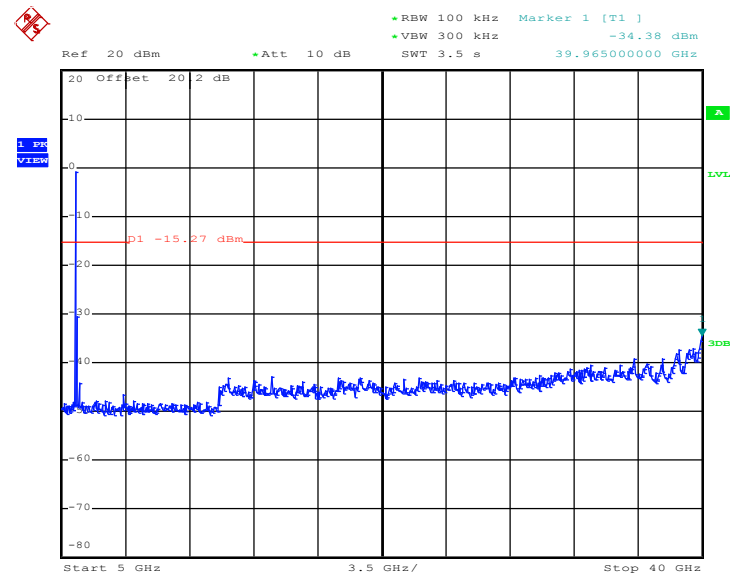
Date: 23.AUG.2012 00:07:50

802.11a 5 GHz~40 GHz
Conducted Spurious Emission Plot on Channel 157


Date: 23.AUG.2012 00:08:07

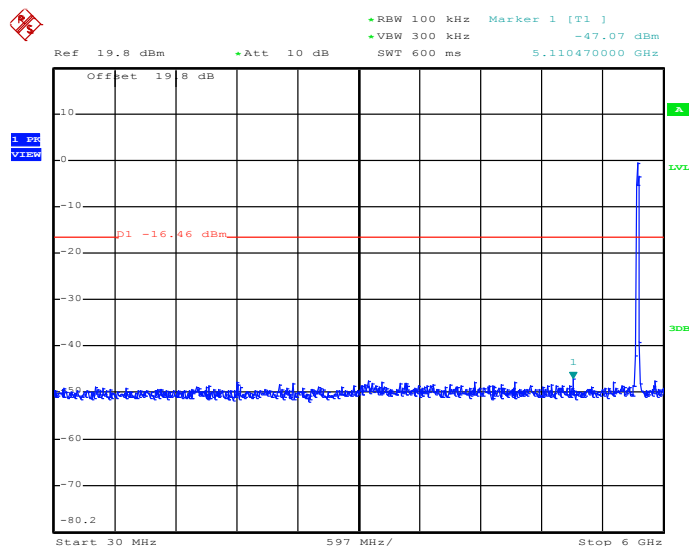
802.11a 30 MHz~6 GHz
Conducted Spurious Emission Plot on Channel 165


Date: 23.AUG.2012 00:10:21

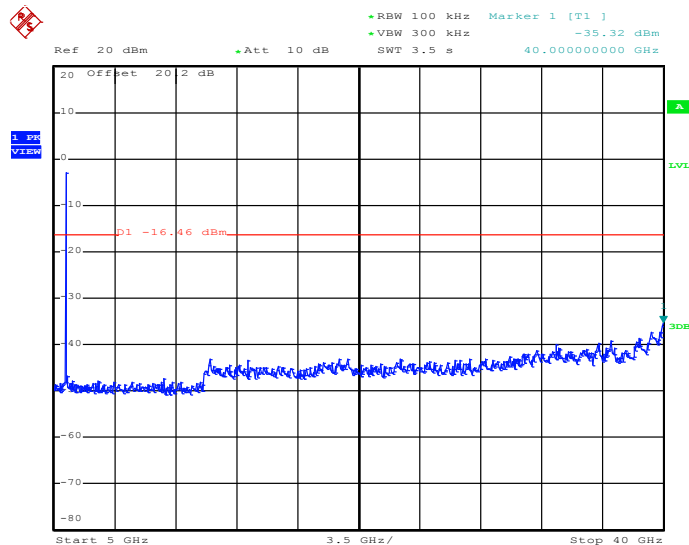
802.11a 5 GHz~40 GHz
Conducted Spurious Emission Plot on Channel 165


Date: 23.AUG.2012 00:10:39

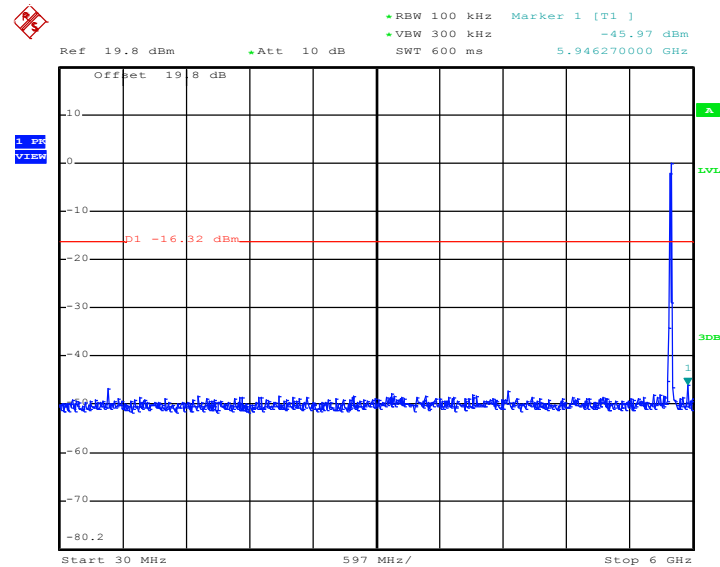
Test Mode :	802.11n HT20	Temperature :	24~26℃
Test Band :	30MHz-6GHz and 5G-40GHz	Relative Humidity :	50~58%
Test Channel :	149, 157, 165	Test Engineer :	Reece Li

5G 802.11n HT20 30 MHz~6 GHz
Conducted Spurious Emission Plot on Channel 149


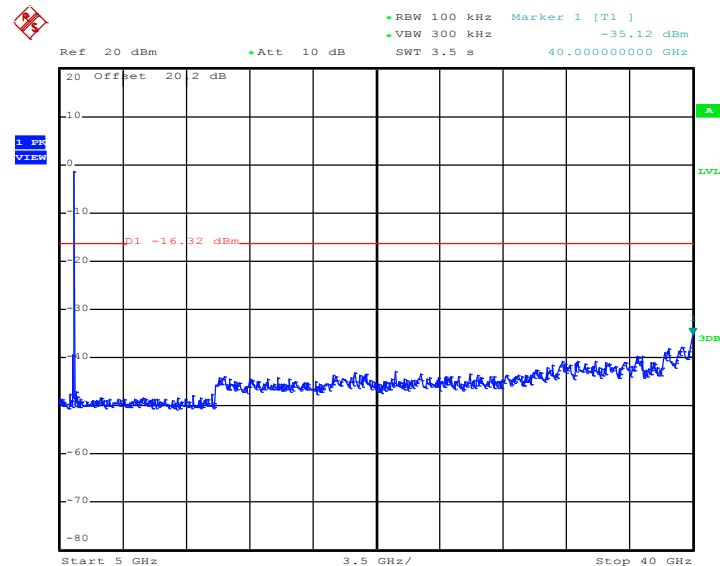
Date: 23.AUG.2012 00:01:29

5G 802.11n HT20 5 GHz ~ 40 GHz
Conducted Spurious Emission Plot on Channel 149


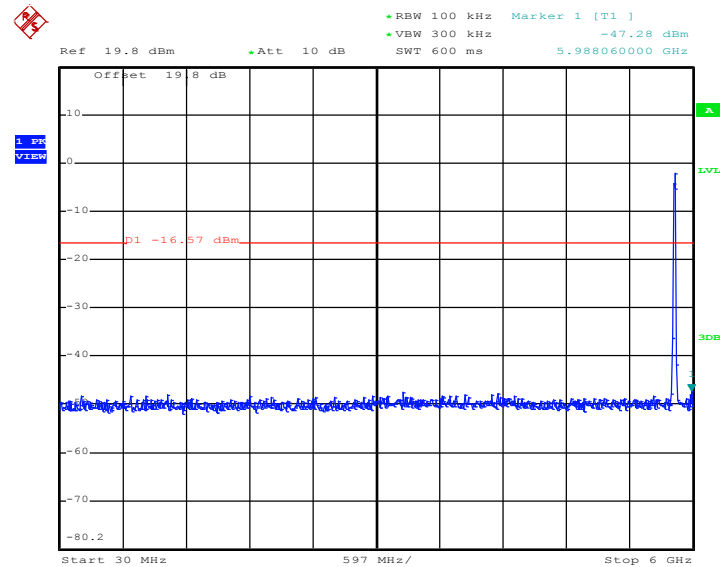
Date: 23.AUG.2012 00:01:46

5G 802.11n HT20 30 MHz~6 GHz
Conducted Spurious Emission Plot on Channel 157


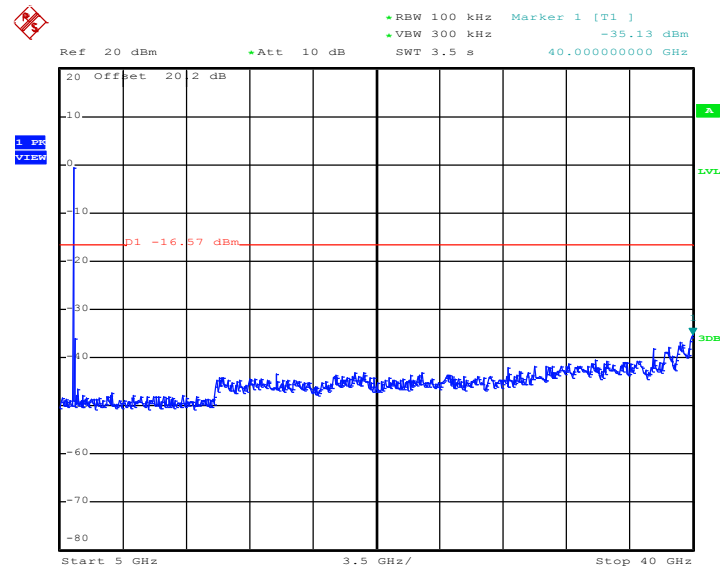
Date: 22.AUG.2012 23:57:05

5G 802.11n HT20 5 GHz~40 GHz
Conducted Spurious Emission Plot on Channel 157


Date: 22.AUG.2012 23:57:23

5G 802.11n HT20 30 MHz~6 GHz
Conducted Spurious Emission Plot on Channel 165


Date: 22.AUG.2012 23:53:39

5G 802.11n HT20 5 GHz~40 GHz
Conducted Spurious Emission Plot on Channel 165


Date: 22.AUG.2012 23:53:57

3.5 Radiated Band Edges and Spurious Emission Measurement

3.5.1 Limit of Radiated band edge and Spurious Emission Measurement

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

3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

1. The testing follows the guidelines in ANSI C63. 10-2009
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
 - (1) Span shall wide enough to fully capture the emission being measured;
 - (2) Set RBW=100 KHz for $f < 1$ GHz; $VBW \geq RBW$; Sweep = auto; Detector function = peak; Trace = max hold;
 - (3) Set RBW = 1 MHz, $VBW = 3$ MHz for $f \geq 1$ GHz for peak measurement.

For average measurement:

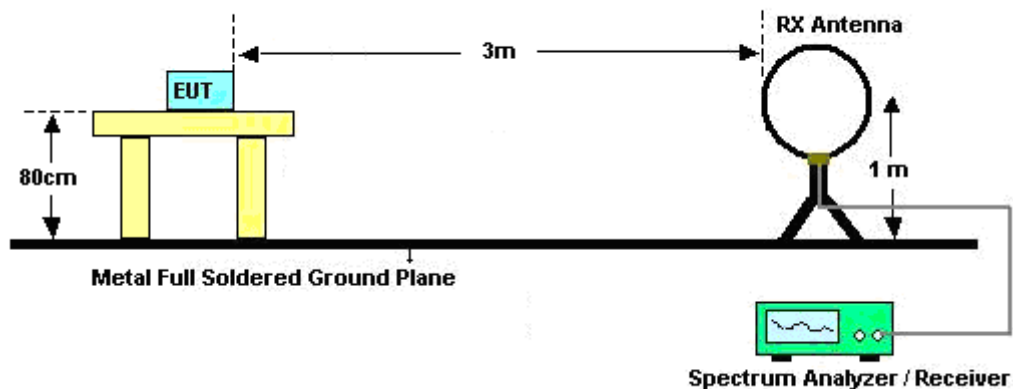
 - $VBW = 10$ Hz, when duty cycle is no less than 98 percent.
 - $VBW \geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

Band	Duty Cycle(%)	T(us)	1/T(KHz)	VBW Setting
802.11b	100.00	-	-	10Hz
802.11g	98.10	-	-	10Hz
2.4G 802.11n HT20	98.27	-	-	10Hz
802.11a	98.47	-	-	10Hz
5G 802.11n HT20	98.36	-	-	10Hz

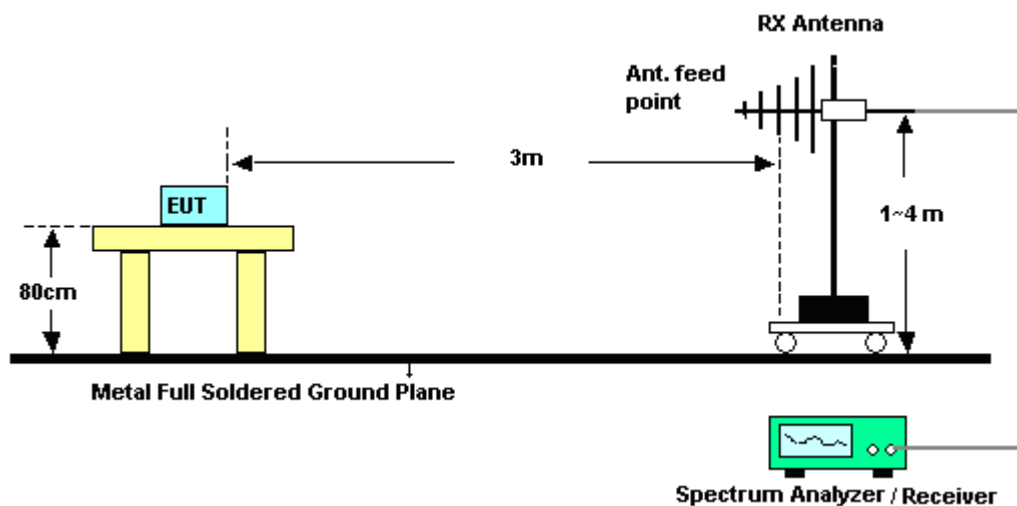
Note: For average measurement with duty cycle < 98%, use reduced VBW measurement method 4.2.3.2.3 in ANSI C63.10.

3.5.4 Test Setup

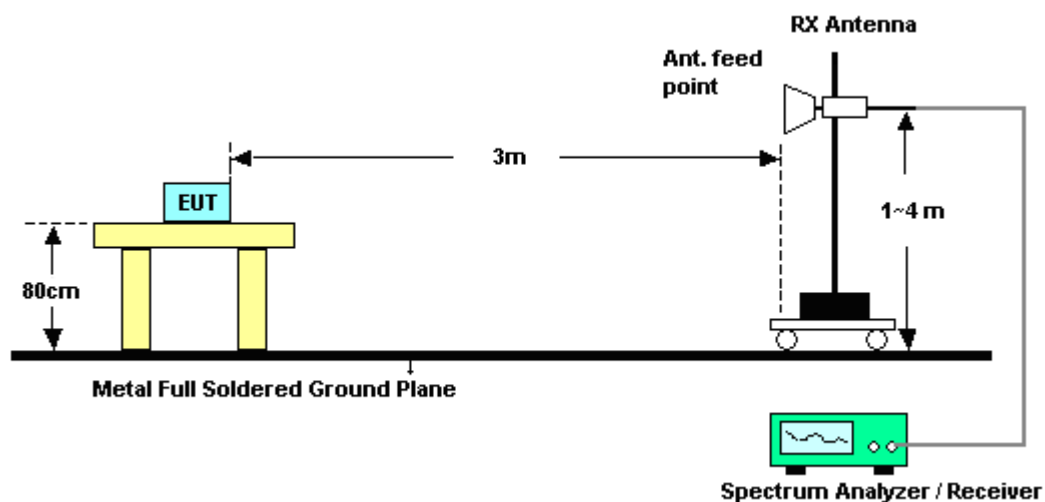
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



3.5.5 Test Results of Radiated Emissions (9KHz ~ 30MHz)

The low frequency, which started from 9 KHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.

3.5.6 Test Result of Radiated Band Edges

<Antenna 1> <Chain 0>

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2386.32	58.29	-15.71	74	57.57	32.02	4.58	35.88	120	127	Peak
2390	51.02	-2.98	54	50.28	32.02	4.58	35.86	120	127	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2386.41	52.19	-21.81	74	51.47	32.02	4.58	35.88	174	221	Peak
2385.33	43.49	-10.51	54	42.79	32	4.58	35.88	174	221	Average

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2491.16	57.88	-16.12	74	56.95	32.1	4.64	35.81	148	126	Peak
2488.7	47.77	-6.23	54	46.84	32.1	4.64	35.81	148	126	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2491.38	51.7	-22.3	74	50.77	32.1	4.64	35.81	166	222	Peak
2488.62	40.8	-13.2	54	39.87	32.1	4.64	35.81	166	222	Average



Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.65	73.54	-0.46	74	72.82	32.02	4.58	35.88	119	133	Peak
2390	52.62	-1.38	54	51.88	32.02	4.58	35.86	119	133	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.92	66.59	-7.41	74	65.85	32.02	4.58	35.86	174	227	Peak
2390	45.03	-8.97	54	44.29	32.02	4.58	35.86	174	227	Average

Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.76	73.88	-0.12	74	72.96	32.09	4.64	35.81	145	125	Peak
2483.52	48.48	-5.52	54	47.56	32.09	4.64	35.81	145	125	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.78	64.87	-9.13	74	63.95	32.09	4.64	35.81	131	256	Peak
2483.56	39.95	-14.05	54	39.03	32.09	4.64	35.81	131	256	Average



Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.02	71.63	-2.37	74	70.91	32.02	4.58	35.88	116	128	Peak
2390	49.74	-4.26	54	49	32.02	4.58	35.86	116	128	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.74	62.32	-11.68	74	61.6	32.02	4.58	35.88	140	223	Peak
2390	40.54	-13.46	54	39.8	32.02	4.58	35.86	140	223	Average

Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2488.32	73.65	-0.35	74	72.72	32.1	4.64	35.81	153	128	Peak
2483.56	48.68	-5.32	54	47.76	32.09	4.64	35.81	153	128	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2487	64.16	-9.84	74	63.24	32.09	4.64	35.81	146	305	Peak
2488	40.62	-13.38	54	39.69	32.1	4.64	35.81	146	305	Average



Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	77.45	-12.71	90.16	70.47	34.66	7.17	34.85	102	199	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	72.35	-13.69	86.04	65.37	34.66	7.17	34.85	152	295	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	63.25	-27.45	90.7	55.98	34.85	7.29	34.87	100	200	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	60.94	-26.64	87.58	53.67	34.85	7.29	34.87	175	299	Peak

Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	72.23	-17.53	89.76	65.25	34.66	7.17	34.85	101	203	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	70.76	-15.31	86.07	63.78	34.66	7.17	34.85	194	300	Peak

Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	62.64	-26.26	88.9	55.37	34.85	7.29	34.87	100	205	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	61.46	-25.37	86.83	54.19	34.85	7.29	34.87	175	298	Peak

<Antenna1> <Chain 1>

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.38	58.36	-15.64	74	57.64	32.02	4.58	35.88	116	128	Peak
2389.11	49.45	-4.55	54	48.73	32.02	4.58	35.88	116	128	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.2	49.82	-24.18	74	49.1	32.02	4.58	35.88	137	250	Peak
2389.02	39.46	-14.54	54	38.74	32.02	4.58	35.88	137	250	Average

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2492	58.64	-15.36	74	57.7	32.1	4.64	35.8	147	121	Peak
2491.8	51.31	-2.69	54	50.37	32.1	4.64	35.8	147	121	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2492.54	51.58	-22.42	74	50.64	32.1	4.64	35.8	108	221	Peak
2492.14	41.69	-12.31	54	40.75	32.1	4.64	35.8	108	221	Average

Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.65	73.16	-0.84	74	72.24	32.22	4.58	35.88	120	337	Peak
2390	52.4	-1.6	54	51.46	32.22	4.58	35.86	120	337	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2390	59.14	-14.86	74	58.2	32.22	4.58	35.86	147	159	Peak
2389.83	41.61	-12.39	54	40.67	32.22	4.58	35.86	147	159	Average

Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.98	73.72	-0.28	74	72.8	32.09	4.64	35.81	147	124	Peak
2483.5	53.6	-0.4	54	52.68	32.09	4.64	35.81	147	124	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.86	65.62	-8.38	74	64.7	32.09	4.64	35.81	108	220	Peak
2483.5	45.09	-8.91	54	44.17	32.09	4.64	35.81	108	220	Average

Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.65	72.27	-1.73	74	71.35	32.22	4.58	35.88	148	31	Peak
2390	49.06	-4.94	54	48.12	32.22	4.58	35.86	148	31	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.93	59.59	-14.41	74	58.67	32.22	4.58	35.88	147	157	Peak
2389.92	39.09	-14.91	54	38.15	32.22	4.58	35.86	147	157	Average

Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.94	73.89	-0.11	74	72.77	32.29	4.64	35.81	118	30	Peak
2483.5	49.41	-4.59	54	48.29	32.29	4.64	35.81	118	30	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.72	63.48	-10.52	74	62.36	32.29	4.64	35.81	174	159	Peak
2483.52	41.51	-12.49	54	40.39	32.29	4.64	35.81	174	159	Average

Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	73.71	-15.86	89.57	66.73	34.66	7.17	34.85	103	199	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	67.35	-17.22	84.57	60.37	34.66	7.17	34.85	137	296	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	64.05	-25.47	89.52	56.78	34.85	7.29	34.87	102	195	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	57.81	-27.03	84.84	50.54	34.85	7.29	34.87	110	297	Peak



Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	74.66	-13.86	88.52	67.68	34.66	7.17	34.85	103	199	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	71.11	-11.73	82.84	64.13	34.66	7.17	34.85	137	297	Peak

Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	63.31	-25.6	88.91	56.04	34.85	7.29	34.87	101	181	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	59.56	-24.05	83.61	52.29	34.85	7.29	34.87	108	297	Peak

<Antenna 2><Chain 0>

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2386.5	61.84	-12.16	74	60.96	32.18	4.58	35.88	118	329	Peak
2385.6	52.84	-1.16	54	51.96	32.18	4.58	35.88	118	329	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2386.41	56.04	-17.96	74	55.16	32.18	4.58	35.88	178	224	Peak
2385.24	47.25	-6.75	54	46.39	32.16	4.58	35.88	178	224	Average

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2487.82	61.21	-12.79	74	60.08	32.3	4.64	35.81	113	102	Peak
2488.86	50.97	-3.03	54	49.84	32.3	4.64	35.81	113	102	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2488.82	55.51	-18.49	74	54.38	32.3	4.64	35.81	136	225	Peak
2488.74	45.18	-8.82	54	44.05	32.3	4.64	35.81	136	225	Average



Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.75	73	-1	74	72.12	32.18	4.58	35.88	117	328	Peak
2390	53.74	-0.26	54	52.84	32.18	4.58	35.86	117	328	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.74	68.63	-5.37	74	67.75	32.18	4.58	35.88	179	219	Peak
2390	48.98	-5.02	54	48.08	32.18	4.58	35.86	179	219	Average

Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.56	73.59	-0.41	74	72.48	32.28	4.64	35.81	117	299	Peak
2483.52	51.44	-2.56	54	50.33	32.28	4.64	35.81	117	299	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.52	71.35	-2.65	74	70.24	32.28	4.64	35.81	137	203	Peak
2483.5	48.33	-5.67	54	47.22	32.28	4.64	35.81	137	203	Average



Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.12	73.61	-0.39	74	72.73	32.18	4.58	35.88	119	328	Peak
2390	52.22	-1.78	54	51.32	32.18	4.58	35.86	119	328	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.74	71.68	-2.32	74	70.8	32.18	4.58	35.88	178	219	Peak
2390	47.74	-6.26	54	46.84	32.18	4.58	35.86	178	219	Average

Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.86	73.28	-0.72	74	72.17	32.28	4.64	35.81	149	327	Peak
2483.5	52.27	-1.73	54	51.16	32.28	4.64	35.81	149	327	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.44	70.79	-3.21	74	69.68	32.28	4.64	35.81	140	210	Peak
2483.5	47.97	-6.03	54	46.86	32.28	4.64	35.81	140	210	Average



Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	80.55	-12.11	92.66	73.16	35.07	7.17	34.85	101	6	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	67.02	-17.76	84.78	59.63	35.07	7.17	34.85	150	281	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	67.87	-23.82	91.69	60.24	35.21	7.29	34.87	100	12	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	59.68	-25.86	85.54	52.05	35.21	7.29	34.87	107	127	Peak

Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	76.22	-15.27	91.49	68.83	35.07	7.17	34.85	100	6	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	64.36	-19.63	83.99	56.97	35.07	7.17	34.85	111	286	Peak

Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	66.39	-24.77	91.16	58.76	35.21	7.29	34.87	100	11	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	61.84	-21.04	82.88	54.21	35.21	7.29	34.87	108	127	Peak

<Antenna 2> <Chain 1>

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.56	62.84	-11.16	74	61.96	32.18	4.58	35.88	120	328	Peak
2389.29	53.09	-0.91	54	52.21	32.18	4.58	35.88	120	328	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.65	57.69	-16.31	74	56.81	32.18	4.58	35.88	179	212	Peak
2389.29	47.79	-6.21	54	46.91	32.18	4.58	35.88	179	212	Average

Test Mode :	802.11b	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2486.54	61.39	-12.61	74	60.28	32.28	4.64	35.81	113	98	Peak
2487.46	50.3	-3.7	54	49.19	32.28	4.64	35.81	113	98	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2487.5	56.17	-17.83	74	55.04	32.3	4.64	35.81	136	222	Peak
2487.48	44.07	-9.93	54	42.96	32.28	4.64	35.81	136	222	Average



Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.11	73.7	-0.3	74	72.82	32.18	4.58	35.88	118	326	Peak
2390	52.8	-1.2	54	51.9	32.18	4.58	35.86	118	326	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2388.93	70.58	-3.42	74	69.7	32.18	4.58	35.88	178	207	Peak
2390	48.49	-5.51	54	47.59	32.18	4.58	35.86	178	207	Average

Test Mode :	802.11g	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.72	73.64	-0.36	74	72.53	32.28	4.64	35.81	113	96	Peak
2483.5	50.72	-3.28	54	49.61	32.28	4.64	35.81	113	96	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.78	66.44	-7.56	74	65.33	32.28	4.64	35.81	135	220	Peak
2483.5	44.41	-9.59	54	43.3	32.28	4.64	35.81	135	220	Average

Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	01	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.83	71.34	-2.66	74	70.44	32.18	4.58	35.86	117	325	Peak
2390	50.83	-3.17	54	49.93	32.18	4.58	35.86	117	325	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2389.56	63.41	-10.59	74	62.53	32.18	4.58	35.88	178	212	Peak
2390	46.24	-7.76	54	45.34	32.18	4.58	35.86	178	212	Average

Test Mode :	2.4G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	11	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2484.38	73.4	-0.6	74	72.29	32.28	4.64	35.81	113	97	Peak
2483.52	50.69	-3.31	54	49.58	32.28	4.64	35.81	113	97	Average

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2483.5	67.81	-6.19	74	66.7	32.28	4.64	35.81	136	220	Peak
2483.5	44.51	-9.49	54	43.4	32.28	4.64	35.81	136	220	Average

Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	78.14	-13.56	91.7	70.75	35.07	7.17	34.85	100	7	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	70.09	-14.97	85.06	62.7	35.07	7.17	34.85	111	110	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	67.75	-23.86	91.61	60.12	35.21	7.29	34.87	100	6	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	60.25	-24.8	85.05	52.62	35.21	7.29	34.87	119	113	Peak

Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	Low	Relative Humidity :	40~42%
Test Channel :	149	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	75.49	-16.87	92.36	68.1	35.07	7.17	34.85	100	7	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5725	66.71	-16.91	83.62	59.32	35.07	7.17	34.85	121	117	Peak

Test Mode :	5G 802.11n HT20	Temperature :	20~22°C
Test Band :	High	Relative Humidity :	40~42%
Test Channel :	165	Test Engineer :	David Ke

ANTENNA POLARITY : HORIZONTAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	70.61	-20.53	91.14	62.98	35.21	7.29	34.87	100	4	Peak

ANTENNA POLARITY : VERTICAL										
Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5850	62.11	-22.66	84.77	54.48	35.21	7.29	34.87	120	113	Peak

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

<Antenna 1> <Chain 0 >

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 7236 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. For example, 105.77 dBuV/m - 20dB = 85.77 dBuV/m. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	101.38	-	-	100.62	32.03	4.59	35.86	120	127	Average
2412	105.77	-	-	105.01	32.03	4.59	35.86	120	127	Peak
3618	50.19	-3.81	54	70.78	32.84	5.76	59.19	109	177	Average
3618	54.55	-19.45	74	75.14	32.84	5.76	59.19	109	177	Peak
4824	45.08	-28.92	74	63.76	33.83	6.51	59.02	100	0	Peak
7236	45.46	-40.31	85.77	59.44	35.6	8.29	57.87	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3483 MHz, 5244 MHz, and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	92.52	-	-	91.76	32.03	4.59	35.86	174	221	Average
2412	96.73	-	-	95.97	32.03	4.59	35.86	174	221	Peak
3483	45.78	-30.95	76.73	66.34	32.7	5.68	58.94	100	0	Peak
3618	49.41	-24.59	74	70	32.84	5.76	59.19	100	0	Peak
4824	45.06	-28.94	74	63.74	33.83	6.51	59.02	100	0	Peak
5244	45.27	-31.46	76.73	62.6	34.05	6.76	58.14	100	0	Peak
7236	46.26	-30.47	76.73	60.24	35.6	8.29	57.87	100	0	Peak
12060	48.51	-5.49	54	55.1	38.77	10.6	55.96	151	355	Average
12060	52.94	-21.06	74	59.53	38.77	10.6	55.96	151	355	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	102.02	-	-	101.19	32.06	4.61	35.84	151	125	Average
2437	106.18	-	-	105.35	32.06	4.61	35.84	151	125	Peak
3654	49.74	-4.26	54	70.33	32.89	5.78	59.26	108	177	Average
3654	52.85	-21.15	74	73.44	32.89	5.78	59.26	108	177	Peak
4874	43.21	-30.79	74	61.74	33.82	6.53	58.88	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3090 MHz, 3486 MHz, 5229 MHz, and 9748 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	93.41	-	-	92.58	32.06	4.61	35.84	137	220	Average
2437	97.68	-	-	96.85	32.06	4.61	35.84	137	220	Peak
3090	45.66	-32.02	77.68	65.84	32.78	5.5	58.46	100	0	Peak
3486	45.65	-32.03	77.68	66.2	32.7	5.69	58.94	100	0	Peak
3654	46.07	-27.93	74	66.66	32.89	5.78	59.26	100	0	Peak
4874	45.07	-28.93	74	63.6	33.82	6.53	58.88	100	0	Peak
5229	46.98	-30.7	77.68	64.38	34.03	6.74	58.17	100	0	Peak
7311	47.74	-26.26	74	61.71	35.6	8.42	57.99	100	0	Peak
9748	48.32	-29.36	77.68	57.96	36.76	9.49	55.89	100	0	Peak
12185	49.57	-4.43	54	56.15	38.89	10.6	56.07	150	355	Average
12185	54.18	-19.82	74	60.76	38.89	10.6	56.07	150	355	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 9848MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	101.78	-	-	100.92	32.07	4.62	35.83	148	126	Average
2462	106.08	-	-	105.22	32.07	4.62	35.83	148	126	Peak
3693	46.32	-27.68	74	66.92	32.93	5.8	59.33	100	0	Peak
4924	43.18	-30.82	74	61.55	33.81	6.56	58.74	100	0	Peak
9848	49.9	-36.18	86.08	59.35	36.88	9.51	55.84	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3483 MHz, 5226 MHz, and 9848 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	93.44	-	-	92.58	32.07	4.62	35.83	166	222	Average
2462	97.61	-	-	96.75	32.07	4.62	35.83	166	222	Peak
3483	45.27	-32.34	77.61	65.83	32.7	5.68	58.94	100	0	Peak
3693	42.66	-31.34	74	63.26	32.93	5.8	59.33	100	0	Peak
4924	45.16	-28.84	74	63.53	33.81	6.56	58.74	100	0	Peak
5226	46.08	-31.53	77.61	63.48	34.03	6.74	58.17	100	0	Peak
9848	50.06	-27.55	77.61	59.51	36.88	9.51	55.84	100	0	Peak
12310	50.3	-23.7	74	56.87	39.01	10.61	56.19	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 7236 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	95.43	-	-	94.67	32.03	4.59	35.86	119	133	Average
2412	107.43	-	-	106.67	32.03	4.59	35.86	119	133	Peak
3618	44.43	-9.57	54	65.02	32.84	5.76	59.19	111	170	Average
3618	51.81	-22.19	74	72.4	32.84	5.76	59.19	111	170	Peak
7236	46.35	-41.08	87.43	60.33	35.6	8.29	57.87	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3192 MHz, 3489 MHz, and 5235 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	86.31	-	-	85.55	32.03	4.59	35.86	174	227	Average
2412	98.5	-	-	97.74	32.03	4.59	35.86	174	227	Peak
3192	43.71	-34.79	78.5	63.99	32.76	5.55	58.59	100	0	Peak
3489	46.22	-32.28	78.5	66.77	32.7	5.69	58.94	100	0	Peak
3618	48.16	-25.84	74	68.75	32.84	5.76	59.19	100	0	Peak
5235	44.45	-34.05	78.5	61.85	34.03	6.74	58.17	100	0	Peak
12060	39.56	-14.44	54	46.15	38.77	10.6	55.96	152	360	Average
12060	52.87	-21.13	74	59.46	38.77	10.6	55.96	152	360	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per 15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	94.13	-	-	93.3	32.06	4.61	35.84	117	134	Average
2437	105.74	-	-	104.91	32.06	4.61	35.84	117	134	Peak
3654	43.19	-10.81	54	63.78	32.89	5.78	59.26	110	173	Average
3654	51.29	-22.71	74	71.88	32.89	5.78	59.26	110	173	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3189 MHz, 3486 MHz, and 5241 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	86.23	-	-	85.4	32.06	4.61	35.84	139	223	Average
2437	97.86	-	-	97.03	32.06	4.61	35.84	139	223	Peak
3189	45.78	-32.08	77.86	66.06	32.76	5.55	58.59	100	0	Peak
3486	45.38	-32.48	77.86	65.93	32.7	5.69	58.94	100	0	Peak
3654	44.27	-29.73	74	64.86	32.89	5.78	59.26	100	0	Peak
4874	43.16	-30.84	74	61.68	33.82	6.54	58.88	100	0	Peak
5241	43.74	-34.12	77.86	61.12	34.03	6.76	58.17	100	0	Peak
12185	38.22	-15.78	54	44.8	38.89	10.6	56.07	150	355	Average
12185	52.08	-21.92	74	58.67	38.87	10.6	56.06	150	355	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per 15.31		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
138	35.37	-8.13	43.5	54.05	11.34	1.26	31.28	100	44	Peak
153.93	33.03	-10.47	43.5	52.01	10.96	1.3	31.24	-	-	Peak
226.83	36.26	-9.74	46	55.69	9.93	1.57	30.93	-	-	Peak
365.1	36.88	-9.12	46	51.26	14.74	1.93	31.05	-	-	Peak
456.1	36.83	-9.17	46	48.35	17.32	2.15	30.99	-	-	Peak
479.9	35.45	-10.55	46	46.26	17.7	2.19	30.7	-	-	Peak
2462	93.66	-	-	92.8	32.07	4.62	35.83	145	125	Average
2462	106.07	-	-	105.21	32.07	4.62	35.83	145	125	Peak
3693	45.09	-28.91	74	65.69	32.93	5.8	59.33	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3195 MHz, 3486 MHz, and 5229 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
33.24	36.49	-3.51	40	49.64	17.76	0.72	31.63	100	119	Peak
83.19	34.68	-5.32	40	57.09	7.94	1.02	31.37	-	-	Peak
166.08	33.21	-10.29	43.5	53.01	9.98	1.36	31.14	-	-	Peak
349.7	32.31	-13.69	46	47.01	14.5	1.9	31.1	-	-	Peak
407.8	30.53	-15.47	46	43.43	16.22	2.03	31.15	-	-	Peak
552	30.66	-15.34	46	39.45	19.9	2.33	31.02	-	-	Peak
2462	84.92	-	-	84.06	32.07	4.62	35.83	131	256	Average
2462	96.88	-	-	96.02	32.07	4.62	35.83	131	256	Peak
3195	43.36	-33.52	76.88	63.64	32.76	5.55	58.59	100	0	Peak
3486	45.37	-31.51	76.88	65.92	32.7	5.69	58.94	100	0	Peak
4924	42.8	-31.2	74	61.18	33.81	6.55	58.74	100	0	Peak
5229	44.95	-31.93	76.88	62.35	34.03	6.74	58.17	100	0	Peak
12310	48.79	-25.21	74	55.36	39.01	10.61	56.19	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 7236MHz are not within a restricted band, and its limit line is 20dB below the highest emission level.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	94.03	-	-	93.27	32.03	4.59	35.86	116	128	Average
2412	105.97	-	-	105.21	32.03	4.59	35.86	116	128	Peak
3618	43.66	-10.34	54	64.25	32.84	5.76	59.19	110	171	Average
3618	52.68	-21.32	74	73.27	32.84	5.76	59.19	110	171	Peak
7236	45.98	-39.99	85.97	59.96	35.6	8.29	57.87	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3198 MHz, 3483 MHz, 5241 MHz, and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	85.33	-	-	84.57	32.03	4.59	35.86	140	223	Average
2412	97.98	-	-	97.22	32.03	4.59	35.86	140	223	Peak
3198	42.44	-35.54	77.98	62.71	32.76	5.56	58.59	100	0	Peak
3483	45.42	-32.56	77.98	65.98	32.7	5.68	58.94	100	0	Peak
3618	45.37	-28.63	74	65.96	32.84	5.76	59.19	100	0	Peak
5241	45.79	-32.19	77.98	63.17	34.03	6.76	58.17	100	0	Peak
7236	45.99	-31.99	77.98	59.97	35.6	8.29	57.87	100	0	Peak
12060	37.86	-16.14	54	44.45	38.77	10.6	55.96	159	360	Average
12060	53.96	-20.04	74	60.55	38.77	10.6	55.96	159	360	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	92.98	-	-	92.15	32.06	4.61	35.84	148	125	Average
2437	104.78	-	-	103.95	32.06	4.61	35.84	148	125	Peak
3654	42.22	-11.78	54	62.81	32.89	5.78	59.26	109	173	Average
3654	51.08	-22.92	74	71.67	32.89	5.78	59.26	109	173	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3186 MHz, 3483 MHz, and 5229 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	82.92	-	-	82.09	32.06	4.61	35.84	141	283	Average
2437	95.06	-	-	94.23	32.06	4.61	35.84	141	283	Peak
3186	43.06	-32	75.06	63.34	32.76	5.55	58.59	100	0	Peak
3483	45.02	-30.04	75.06	65.58	32.7	5.68	58.94	100	0	Peak
3654	44.17	-29.83	74	64.76	32.89	5.78	59.26	100	0	Peak
5229	45.78	-29.28	75.06	63.18	34.03	6.74	58.17	100	0	Peak
12185	36.53	-17.47	54	43.11	38.89	10.6	56.07	143	0	Average
12185	51.05	-22.95	74	57.63	38.89	10.6	56.07	143	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	92.92	-	-	92.06	32.07	4.62	35.83	153	128	Average
2462	104.49	-	-	103.63	32.07	4.62	35.83	153	128	Peak
3693	45.92	-28.08	74	66.52	32.93	5.8	59.33	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3486 MHz and 5229 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	83.65	-	-	82.79	32.07	4.62	35.83	146	305	Average
2462	95.59	-	-	94.73	32.07	4.62	35.83	146	305	Peak
3486	45.7	-29.89	75.59	66.25	32.7	5.69	58.94	100	0	Peak
4924	43.09	-30.91	74	61.47	33.81	6.55	58.74	100	0	Peak
5229	45.68	-29.91	75.59	63.08	34.03	6.74	58.17	100	0	Peak
12310	48.54	-25.46	74	55.1	39.03	10.61	56.2	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
99.93	37.17	-6.33	43.5	57.62	9.9	1.09	31.44	-	-	Peak
225.21	36.06	-9.94	46	55.69	9.75	1.56	30.94	-	-	Peak
254.1	34.91	-11.09	46	51.06	13.12	1.67	30.94	-	-	Peak
348.3	40	-6	46	54.79	14.42	1.9	31.11	100	318	Peak
382.6	37.95	-8.05	46	51.72	15.29	1.97	31.03	-	-	Peak
527.5	36.45	-9.55	46	46.63	18.38	2.28	30.84	-	-	Peak
5745	98.52	-	-	91.49	34.69	7.19	34.85	102	199	Average
5745	110.16	-	-	103.13	34.69	7.19	34.85	102	199	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
32.97	33.27	-6.73	40	46.42	17.76	0.72	31.63	103	102	Peak
143.94	32.76	-10.74	43.5	51.58	11.17	1.27	31.26	-	-	Peak
265.71	38.86	-7.14	46	54.85	13.36	1.7	31.05	-	-	Peak
382.6	29.95	-16.05	46	43.72	15.29	1.97	31.03	-	-	Peak
456.1	30.72	-15.28	46	42.24	17.32	2.15	30.99	-	-	Peak
516.3	29.95	-16.05	46	40.17	18.26	2.26	30.74	-	-	Peak
5745	94.86	-	-	87.83	34.69	7.19	34.85	152	295	Average
5745	106.04	-	-	99.01	34.69	7.19	34.85	152	295	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	99.31	-	-	92.18	34.77	7.22	34.86	100	204	Average
5785	110.68	-	-	103.55	34.77	7.22	34.86	100	204	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	95.91	-	-	88.81	34.74	7.22	34.86	178	297	Average
5785	107.15	-	-	100.05	34.74	7.22	34.86	178	297	Peak
11570	48.31	-25.69	74	55.19	38.1	10.32	55.3	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per 15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	99.18	-	-	91.96	34.82	7.27	34.87	100	200	Average
5825	110.7	-	-	103.48	34.82	7.27	34.87	100	200	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	96.14	-	-	88.92	34.82	7.27	34.87	175	299	Average
5825	107.58	-	-	100.36	34.82	7.27	34.87	175	299	Peak
11650	49.88	-24.12	74	56.7	38.22	10.37	55.41	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	98.03	-	-	91	34.69	7.19	34.85	101	203	Average
5745	109.76	-	-	102.73	34.69	7.19	34.85	101	203	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	94.11	-	-	87.08	34.69	7.19	34.85	194	300	Average
5745	106.07	-	-	99.04	34.69	7.19	34.85	194	300	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	97.7	-	-	90.6	34.74	7.22	34.86	100	205	Average
5785	109.87	-	-	102.77	34.74	7.22	34.86	100	205	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	94.75	-	-	87.65	34.74	7.22	34.86	162	300	Average
5785	106.09	-	-	98.99	34.74	7.22	34.86	162	300	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	97.43	-	-	90.21	34.82	7.27	34.87	100	205	Average
5825	108.9	-	-	101.68	34.82	7.27	34.87	100	205	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	94.43	-	-	87.21	34.82	7.27	34.87	175	298	Average
5825	106.83	-	-	99.61	34.82	7.27	34.87	175	298	Peak
11650	49.29	-24.71	74	56.11	38.22	10.37	55.41	100	0	Peak

<Antenna1> <Chain 1>

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 7236 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	99.79	-	-	99.03	32.03	4.59	35.86	116	128	Average
2412	104.28	-	-	103.52	32.03	4.59	35.86	116	128	Peak
3618	43.77	-10.23	54	64.36	32.84	5.76	59.19	117	223	Average
3618	51.22	-22.78	74	71.81	32.84	5.76	59.19	117	223	Peak
4824	47.21	-26.79	74	65.89	33.83	6.51	59.02	100	0	Peak
7236	45.88	-38.4	84.28	59.86	35.6	8.29	57.87	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3483 MHz, 5229 MHz, and 7236 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	91.18	-	-	90.42	32.03	4.59	35.86	137	250	Average
2412	95.59	-	-	94.83	32.03	4.59	35.86	137	250	Peak
3483	46.75	-28.84	75.59	67.31	32.7	5.68	58.94	100	0	Peak
3618	44.27	-29.73	74	64.86	32.84	5.76	59.19	100	0	Peak
4824	45.29	-28.71	74	63.97	33.83	6.51	59.02	100	0	Peak
5229	45.26	-30.33	75.59	62.66	34.03	6.74	58.17	100	0	Peak
7236	45.66	-29.93	75.59	59.64	35.6	8.29	57.87	100	0	Peak
12060	43.78	-10.22	54	50.37	38.75	10.6	55.94	132	292	Average
12060	51.28	-22.72	74	57.87	38.75	10.6	55.94	132	292	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 9748 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	101.37	-	-	100.54	32.06	4.61	35.84	148	125	Average
2437	105.67	-	-	104.86	32.04	4.61	35.84	148	125	Peak
3654	50.27	-23.73	74	70.86	32.89	5.78	59.26	100	0	Peak
4874	48.15	-25.85	74	66.68	33.82	6.53	58.88	100	0	Peak
7311	47.15	-26.85	74	61.12	35.6	8.42	57.99	100	0	Peak
9748	50.8	-34.87	85.67	60.44	36.76	9.49	55.89	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3483 MHz, 5232 MHz, and 9748 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	93.53	-	-	92.7	32.06	4.61	35.84	138	217	Average
2437	97.83	-	-	97	32.06	4.61	35.84	138	217	Peak
3483	45.65	-32.18	77.83	66.21	32.7	5.68	58.94	100	0	Peak
3657	45.56	-28.44	74	66.15	32.89	5.78	59.26	100	0	Peak
4874	46.24	-27.76	74	64.77	33.82	6.53	58.88	100	0	Peak
5232	46.12	-31.71	77.83	63.52	34.03	6.74	58.17	100	0	Peak
7311	47.41	-26.59	74	61.38	35.6	8.42	57.99	100	0	Peak
9748	49.59	-28.24	77.83	59.23	36.76	9.49	55.89	100	0	Peak
12185	45.34	-8.66	54	51.92	38.89	10.6	56.07	150	10	Average
12185	52.45	-21.55	74	59.03	38.89	10.6	56.07	150	10	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 9848 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	101.46	-	-	100.6	32.07	4.62	35.83	147	121	Average
2462	105.72	-	-	104.86	32.07	4.62	35.83	147	121	Peak
3693	45.21	-28.79	74	65.81	32.93	5.8	59.33	100	0	Peak
4924	44.09	-29.91	74	62.46	33.81	6.56	58.74	100	0	Peak
9848	49.93	-35.79	85.72	59.34	36.91	9.51	55.83	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3489 MHz, 5229 MHz, and 9848 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	92.9	-	-	92.04	32.07	4.62	35.83	108	221	Average
2462	97.09	-	-	96.23	32.07	4.62	35.83	108	221	Peak
3489	45.31	-31.78	77.09	65.86	32.7	5.69	58.94	100	0	Peak
4924	46.53	-27.47	74	64.91	33.81	6.55	58.74	100	0	Peak
5229	44.94	-32.15	77.09	62.34	34.03	6.74	58.17	100	0	Peak
9848	49.1	-27.99	77.09	58.55	36.88	9.51	55.84	100	0	Peak
12310	48.45	-25.55	74	55.02	39.01	10.61	56.19	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	95.24	-	-	94.28	32.23	4.59	35.86	120	337	Average
2412	107.6	-	-	106.64	32.23	4.59	35.86	120	337	Peak
3615	36.7	-17.3	54	57.29	32.84	5.76	59.19	135	214	Average
3615	52.05	-21.95	74	72.64	32.84	5.76	59.19	135	214	Peak
4824	43.03	-30.97	74	61.71	33.83	6.51	59.02	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3486 MHz and 5229 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	86.71	-	-	85.75	32.23	4.59	35.86	147	159	Average
2412	98.72	-	-	97.76	32.23	4.59	35.86	147	159	Peak
3486	46.29	-32.43	78.72	66.84	32.7	5.69	58.94	100	0	Peak
4824	41.94	-32.06	74	60.62	33.83	6.51	59.02	100	0	Peak
5229	45.97	-32.75	78.72	63.37	34.03	6.74	58.17	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	93.7	-	-	92.87	32.06	4.61	35.84	148	124	Average
2437	106.39	-	-	105.56	32.06	4.61	35.84	148	124	Peak
3654	39.54	-14.46	54	60.13	32.89	5.78	59.26	114	217	Average
3654	52.39	-21.61	74	72.98	32.89	5.78	59.26	114	217	Peak
4874	42.75	-31.25	74	61.27	33.82	6.54	58.88	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3486 MHz and 5229 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	85.04	-	-	84.21	32.06	4.61	35.84	140	219	Average
2437	97.79	-	-	96.96	32.06	4.61	35.84	140	219	Peak
3486	45.49	-32.3	77.79	66.04	32.7	5.69	58.94	100	0	Peak
3654	45.34	-28.66	74	65.93	32.89	5.78	59.26	100	0	Peak
4874	42.79	-31.21	74	61.32	33.82	6.53	58.88	100	0	Peak
5229	45.39	-32.4	77.79	62.79	34.03	6.74	58.17	100	0	Peak
12185	36.59	-17.41	54	43.17	38.89	10.6	56.07	135	295	Average
12185	51.34	-22.66	74	57.92	38.89	10.6	56.07	135	295	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	93.58	-	-	92.72	32.07	4.62	35.83	147	124	Average
2462	105.8	-	-	104.94	32.07	4.62	35.83	147	124	Peak
3687	44.84	-29.16	74	65.44	32.93	5.8	59.33	100	0	Peak
4924	41.57	-32.43	74	59.89	33.81	6.57	58.7	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3486 MHz and 5229 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	84.92	-	-	84.06	32.07	4.62	35.83	108	220	Average
2462	96.84	-	-	95.98	32.07	4.62	35.83	108	220	Peak
3486	46.29	-30.55	76.84	66.84	32.7	5.69	58.94	100	0	Peak
4924	42.92	-31.08	74	61.29	33.81	6.56	58.74	100	0	Peak
5229	46.09	-30.75	76.84	63.49	34.03	6.74	58.17	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	92.61	-	-	91.65	32.23	4.59	35.86	148	31	Average
2412	105.27	-	-	104.31	32.23	4.59	35.86	148	31	Peak
3618	50.76	-23.24	74	71.35	32.84	5.76	59.19	100	0	Peak
4824	42.41	-31.59	74	61.09	33.83	6.51	59.02	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3486 MHz and 5232 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	85.13	-	-	84.17	32.23	4.59	35.86	147	157	Average
2412	97.57	-	-	96.61	32.23	4.59	35.86	147	157	Peak
3486	45.95	-31.62	77.57	66.5	32.7	5.69	58.94	100	0	Peak
3618	45.09	-28.91	74	65.68	32.84	5.76	59.19	100	0	Peak
4824	43.1	-30.9	74	61.87	33.84	6.5	59.11	100	0	Peak
5232	47.7	-29.87	77.57	65.1	34.03	6.74	58.17	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 9748 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	92.63	-	-	91.8	32.06	4.61	35.84	148	126	Average
2437	105.26	-	-	104.45	32.04	4.61	35.84	148	126	Peak
3654	39.01	-14.99	54	59.6	32.89	5.78	59.26	113	204	Average
3654	51.32	-22.68	74	71.91	32.89	5.78	59.26	113	204	Peak
4874	42.33	-31.67	74	60.86	33.82	6.53	58.88	100	0	Peak
9748	47.61	-37.65	85.26	57.24	36.76	9.5	55.89	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3486 MHz and 5232 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	84.22	-	-	83.39	32.06	4.61	35.84	138	216	Average
2437	96.99	-	-	96.16	32.06	4.61	35.84	138	216	Peak
3486	45.74	-31.25	76.99	66.29	32.7	5.69	58.94	100	0	Peak
3654	43.79	-30.21	74	64.38	32.89	5.78	59.26	100	0	Peak
4874	42.36	-31.64	74	60.89	33.82	6.53	58.88	100	0	Peak
5232	46.3	-30.69	76.99	63.7	34.03	6.74	58.17	100	0	Peak
7311	46.34	-27.66	74	60.31	35.6	8.42	57.99	100	0	Peak
12185	36.84	-17.16	54	43.42	38.89	10.6	56.07	128	296	Average
12185	52.9	-21.1	74	59.48	38.89	10.6	56.07	128	296	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 5229 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
71.85	33.34	-6.66	40	57.42	6.46	0.93	31.47	-	-	Peak
99.66	37.57	-5.93	43.5	58.02	9.9	1.09	31.44	100	57	Peak
143.94	35.27	-8.23	43.5	54.09	11.17	1.27	31.26	-	-	Peak
348.3	39.69	-6.31	46	54.48	14.42	1.9	31.11	-	-	Peak
395.9	36.12	-9.88	46	49.48	15.8	2	31.16	-	-	Peak
456.1	35.23	-10.77	46	46.75	17.32	2.15	30.99	-	-	Peak
2462	92.59	-	-	91.53	32.27	4.62	35.83	118	30	Average
2462	105	-	-	103.94	32.27	4.62	35.83	118	30	Peak
3690	43.94	-30.06	74	64.54	32.93	5.8	59.33	100	0	Peak
4924	41.64	-32.36	74	60.01	33.81	6.56	58.74	100	0	Peak
5229	41.87	-43.13	85	59.27	34.03	6.74	58.17	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3483 MHz and 5229 MHz are not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
31.35	35.16	-4.84	40	46.97	19.12	0.71	31.64	100	207	Peak
99.66	28.77	-14.73	43.5	49.22	9.9	1.09	31.44	-	-	Peak
143.94	30.83	-12.67	43.5	49.65	11.17	1.27	31.26	-	-	Peak
456.1	33.25	-12.75	46	44.77	17.32	2.15	30.99	-	-	Peak
515.6	32.67	-13.33	46	42.88	18.26	2.26	30.73	-	-	Peak
729.8	26.32	-19.68	46	31.85	21.96	2.71	30.2	-	-	Peak
2462	83.29	-	-	82.23	32.27	4.62	35.83	174	159	Average
2462	95.79	-	-	94.73	32.27	4.62	35.83	174	159	Peak
3483	45.2	-30.59	75.79	65.76	32.7	5.68	58.94	100	0	Peak
4924	41.78	-32.22	74	60.15	33.81	6.56	58.74	100	0	Peak
5229	46.36	-29.43	75.79	63.76	34.03	6.74	58.17	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	98.21	-	-	91.18	34.69	7.19	34.85	103	199	Average
5745	109.57	-	-	102.54	34.69	7.19	34.85	103	199	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	92.53	-	-	85.5	34.69	7.19	34.85	137	296	Average
5745	104.57	-	-	97.54	34.69	7.19	34.85	137	296	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per 15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	98.2	-	-	91.1	34.74	7.22	34.86	102	195	Average
5785	109.52	-	-	102.42	34.74	7.22	34.86	102	195	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	93.86	-	-	86.76	34.74	7.22	34.86	100	298	Average
5785	104.89	-	-	97.76	34.77	7.22	34.86	100	298	Peak
11570	48.35	-25.65	74	55.25	38.1	10.3	55.3	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per 15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	97.89	-	-	90.67	34.82	7.27	34.87	102	195	Average
5825	109.52	-	-	102.3	34.82	7.27	34.87	102	195	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	93.27	-	-	86.05	34.82	7.27	34.87	110	297	Average
5825	104.84	-	-	97.62	34.82	7.27	34.87	110	297	Peak
11650	48.55	-25.45	74	55.38	38.19	10.37	55.39	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
99.66	37.23	-6.27	43.5	57.68	9.9	1.09	31.44	100	277	Peak
133.14	36.33	-7.17	43.5	55	11.4	1.24	31.31	-	-	Peak
224.4	34.64	-11.36	46	54.36	9.66	1.56	30.94	-	-	Peak
332.9	34.21	-11.79	46	49.53	13.88	1.86	31.06	-	-	Peak
515.6	36.91	-9.09	46	47.12	18.26	2.26	30.73	-	-	Peak
563.9	33.68	-12.32	46	42.05	20.15	2.35	30.87	-	-	Peak
5745	96.97	-	-	89.94	34.69	7.19	34.85	103	199	Average
5745	108.52	-	-	101.49	34.69	7.19	34.85	103	199	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
82.92	33.92	-6.08	40	56.34	7.94	1.02	31.38	100	336	Peak
116.13	36.8	-6.7	43.5	55.26	11.8	1.18	31.44	-	-	Peak
153.12	30.17	-13.33	43.5	49.1	11.02	1.29	31.24	-	-	Peak
348.3	31.64	-14.36	46	46.43	14.42	1.9	31.11	-	-	Peak
468	34.1	-11.9	46	45.26	17.56	2.17	30.89	-	-	Peak
564.6	30.44	-15.56	46	38.83	20.12	2.36	30.87	-	-	Peak
5745	91.75	-	-	84.72	34.69	7.19	34.85	137	297	Average
5745	102.84	-	-	95.81	34.69	7.19	34.85	137	297	Peak
11490	48.04	-25.96	74	55	37.99	10.26	55.21	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	96.93	-	-	89.83	34.74	7.22	34.86	102	194	Average
5785	108.94	-	-	101.84	34.74	7.22	34.86	102	194	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	92.49	-	-	85.39	34.74	7.22	34.86	100	291	Average
5785	104.33	-	-	97.23	34.74	7.22	34.86	100	291	Peak
11570	48.01	-25.99	74	54.91	38.1	10.3	55.3	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	97.41	-	-	90.19	34.82	7.27	34.87	101	181	Average
5825	108.91	-	-	101.69	34.82	7.27	34.87	101	181	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Test result of emissions which are 20 dB lower than the limit is not reported per15.31.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	92.12	-	-	84.9	34.82	7.27	34.87	108	297	Average
5825	103.61	-	-	96.39	34.82	7.27	34.87	108	297	Peak

<Antenna 2> <Chain 0>

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	108.17	-	-	107.24	32.2	4.59	35.86	118	329	Average
2412	112.42	-	-	111.49	32.2	4.59	35.86	118	329	Peak
3618	46.21	-27.79	74	66.77	32.87	5.76	59.19	100	0	Peak
4824	46.46	-27.54	74	64.7	34.27	6.51	59.02	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 9648 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	103.92	-	-	102.99	32.2	4.59	35.86	178	224	Average
2412	108.19	-	-	107.26	32.2	4.59	35.86	178	224	Peak
4824	44.49	-29.51	74	62.73	34.27	6.51	59.02	100	0	Peak
9648	47.65	-40.54	88.19	57.02	37.09	9.48	55.94	100	0	Peak
12060	50.21	-23.79	74	56.61	38.96	10.6	55.96	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	107.61	-	-	106.6	32.24	4.61	35.84	151	330	Average
2437	111.81	-	-	110.8	32.24	4.61	35.84	151	330	Peak
4875	42.9	-31.1	74	60.97	34.28	6.53	58.88	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 9747 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	104.15	-	-	103.14	32.24	4.61	35.84	175	225	Average
2437	108.43	-	-	107.42	32.24	4.61	35.84	175	225	Peak
4875	43.42	-30.58	74	61.49	34.28	6.53	58.88	100	0	Peak
9747	48.43	-40	88.43	57.62	37.21	9.49	55.89	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	108.02	-	-	106.97	32.26	4.62	35.83	113	102	Average
2462	112.23	-	-	111.18	32.26	4.62	35.83	113	102	Peak
4926	38.91	-35.09	74	56.8	34.29	6.56	58.74	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	103.86	-	-	102.81	32.26	4.62	35.83	136	225	Average
2462	108.23	-	-	107.18	32.26	4.62	35.83	136	225	Peak
4923	40.48	-33.52	74	58.38	34.29	6.55	58.74	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
133.14	36.33	-7.17	43.5	55	11.4	1.24	31.31	-	-	Peak
143.94	36.48	-7.02	43.5	55.3	11.17	1.27	31.26	100	211	Peak
154.74	33.45	-10.05	43.5	52.48	10.9	1.31	31.24	-	-	Peak
332.9	35.21	-10.79	46	50.53	13.88	1.86	31.06	-	-	Peak
515.6	36.91	-9.09	46	47.12	18.26	2.26	30.73	-	-	Peak
563.9	32.68	-13.32	46	41.05	20.15	2.35	30.87	-	-	Peak
2412	101.23	-	-	100.3	32.2	4.59	35.86	117	328	Average
2412	113.73	-	-	112.8	32.2	4.59	35.86	117	328	Peak
4824	40.97	-33.03	74	59.21	34.27	6.51	59.02	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
45.12	30.32	-9.68	40	51.08	9.98	0.78	31.52	100	214	Peak
133.14	30.8	-12.7	43.5	49.47	11.4	1.24	31.31	-	-	Peak
149.07	33.12	-10.38	43.5	51.92	11.18	1.27	31.25	-	-	Peak
468	34.1	-11.9	46	45.26	17.56	2.17	30.89	-	-	Peak
634.6	26.91	-19.09	46	33.97	20.6	2.54	30.2	-	-	Peak
750.1	27.48	-18.52	46	32.52	22.4	2.75	30.19	-	-	Peak
2412	96.41	-	-	95.48	32.2	4.59	35.86	179	219	Average
2412	108.98	-	-	108.05	32.2	4.59	35.86	179	219	Peak
4824	41.45	-32.55	74	59.69	34.27	6.51	59.02	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	99.89	-	-	98.88	32.24	4.61	35.84	122	298	Average
2437	111.25	-	-	110.24	32.24	4.61	35.84	122	298	Peak
3654	47.83	-26.17	74	68.39	32.92	5.78	59.26	200	0	Peak
4874	40.94	-33.06	74	59.01	34.28	6.53	58.88	200	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3279 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	96.82	-	-	95.81	32.24	4.61	35.84	139	201	Average
2437	108.77	-	-	107.76	32.24	4.61	35.84	139	201	Peak
3279	47.16	-41.61	88.77	67.52	32.74	5.59	58.69	100	0	Peak
4874	42.63	-31.37	74	60.7	34.28	6.53	58.88	100	0	Peak
8208	49.98	-24.02	74	62.36	36.14	9.07	57.59	200	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	99.14	-	-	98.09	32.26	4.62	35.83	117	299	Average
2462	111.25	-	-	110.2	32.26	4.62	35.83	117	299	Peak
3693	44.76	-29.24	74	65.32	32.97	5.8	59.33	200	0	Peak
4924	42.56	-31.44	74	60.45	34.29	6.56	58.74	200	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3276 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	96.58	-	-	95.53	32.26	4.62	35.83	137	203	Average
2462	108.33	-	-	107.28	32.26	4.62	35.83	137	203	Peak
3276	46.89	-41.44	88.33	67.25	32.74	5.59	58.69	100	0	Peak
4924	41.93	-32.07	74	59.83	34.29	6.55	58.74	100	0	Peak
8196	49.45	-24.55	74	61.87	36.14	9.07	57.63	200	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	99.57	-	-	98.64	32.2	4.59	35.86	119	328	Average
2412	111.45	-	-	110.52	32.2	4.59	35.86	119	328	Peak
3621	45.12	-28.88	74	65.68	32.87	5.76	59.19	200	0	Peak
4824	41.05	-32.95	74	59.29	34.27	6.51	59.02	200	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. 3282 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	95.32	-	-	94.39	32.2	4.59	35.86	178	219	Average
2412	107.19	-	-	106.26	32.2	4.59	35.86	178	219	Peak
3282	47.6	-39.59	87.19	67.96	32.74	5.59	58.69	100	0	Peak
4824	41.16	-32.84	74	59.4	34.27	6.51	59.02	100	0	Peak
8202	49.11	-24.89	74	61.49	36.14	9.07	57.59	200	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	97.44	-	-	96.43	32.24	4.61	35.84	118	342	Average
2437	109.77	-	-	108.76	32.24	4.61	35.84	118	342	Peak
3654	48.26	-25.74	74	68.82	32.92	5.78	59.26	200	0	Peak
4874	41.52	-32.48	74	59.59	34.28	6.53	58.88	200	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. 3279 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	95.03	-	-	94.02	32.24	4.61	35.84	175	218	Average
2437	107.16	-	-	106.15	32.24	4.61	35.84	175	218	Peak
3279	47.64	-39.52	87.16	68	32.74	5.59	58.69	100	0	Peak
4874	42.32	-31.68	74	60.39	34.28	6.53	58.88	100	0	Peak
8202	49.76	-24.24	74	62.14	36.14	9.07	57.59	200	212	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	98.61	-	-	97.56	32.26	4.62	35.83	149	327	Average
2462	110.56	-	-	109.51	32.26	4.62	35.83	149	327	Peak
4924	41.37	-32.63	74	59.27	34.29	6.55	58.74	200	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 3279 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	94.69	-	-	93.64	32.26	4.62	35.83	140	210	Average
2462	106.66	-	-	105.61	32.26	4.62	35.83	140	210	Peak
3279	46.79	-39.87	86.66	67.15	32.74	5.59	58.69	100	0	Peak
4924	43.39	-30.61	74	61.29	34.29	6.55	58.74	100	0	Peak
8202	49.18	-24.82	74	61.56	36.14	9.07	57.59	200	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
71.85	33.34	-6.66	40	57.42	6.46	0.93	31.47	112	125	Peak
133.14	36.32	-7.18	43.5	54.99	11.4	1.24	31.31	-	-	Peak
143.94	35.27	-8.23	43.5	54.09	11.17	1.27	31.26	-	-	Peak
332.9	34.88	-11.12	46	50.2	13.88	1.86	31.06	-	-	Peak
395.9	36.12	-9.88	46	49.48	15.8	2	31.16	-	-	Peak
503.7	33.71	-12.29	46	43.96	18.13	2.24	30.62	-	-	Peak
5745	101.21	-	-	93.78	35.09	7.19	34.85	101	6	Average
5745	112.66	-	-	105.23	35.09	7.19	34.85	101	6	Peak
11490	45.25	-28.75	74	51.72	38.48	10.26	55.21	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
31.35	35.16	-4.84	40	46.97	19.12	0.71	31.64	100	236	Peak
42.42	31.86	-8.14	40	51.1	11.56	0.76	31.56	-	-	Peak
143.94	30.83	-12.67	43.5	49.65	11.17	1.27	31.26	-	-	Peak
456.1	33.25	-12.75	46	44.77	17.32	2.15	30.99	-	-	Peak
515.6	32.67	-13.33	46	42.88	18.26	2.26	30.73	-	-	Peak
729.8	26.32	-19.68	46	31.85	21.96	2.71	30.2	-	-	Peak
5745	93.64	-	-	86.21	35.09	7.19	34.85	150	281	Average
5745	104.78	-	-	97.35	35.09	7.19	34.85	150	281	Peak
11490	47.14	-26.86	74	53.61	38.48	10.26	55.21	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	101.65	-	-	94.16	35.13	7.22	34.86	100	11	Average
5785	112.85	-	-	105.36	35.13	7.22	34.86	100	11	Peak
11570	46.03	-27.97	74	52.47	38.56	10.3	55.3	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	93.72	-	-	86.23	35.13	7.22	34.86	124	119	Average
5785	104.83	-	-	97.34	35.13	7.22	34.86	124	119	Peak
11571	47.19	-26.81	74	53.63	38.56	10.3	55.3	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	100.85	-	-	93.26	35.19	7.27	34.87	100	12	Average
5825	111.69	-	-	104.1	35.19	7.27	34.87	100	12	Peak
11652	45.84	-28.16	74	52.26	38.62	10.37	55.41	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	93.4	-	-	85.81	35.19	7.27	34.87	107	127	Average
5825	105.54	-	-	97.95	35.19	7.27	34.87	107	127	Peak
11652	46.97	-27.03	74	53.39	38.62	10.37	55.41	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	99.56	-	-	92.13	35.09	7.19	34.85	100	6	Average
5745	111.49	-	-	104.06	35.09	7.19	34.85	100	6	Peak
11490	45.31	-28.69	74	51.78	38.48	10.26	55.21	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	92.64	-	-	85.21	35.09	7.19	34.85	111	286	Average
5745	103.99	-	-	96.56	35.09	7.19	34.85	111	286	Peak
11487	46.97	-27.03	74	53.44	38.48	10.26	55.21	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	100.25	-	-	92.76	35.13	7.22	34.86	100	11	Average
5785	111.5	-	-	104.01	35.13	7.22	34.86	100	11	Peak
11571	46.21	-27.79	74	52.65	38.56	10.3	55.3	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	92.16	-	-	84.67	35.13	7.22	34.86	120	119	Average
5785	103.33	-	-	95.84	35.13	7.22	34.86	120	119	Peak
11568	47.1	-26.9	74	53.54	38.56	10.3	55.3	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	99.31	-	-	91.72	35.19	7.27	34.87	100	11	Average
5825	111.16	-	-	103.57	35.19	7.27	34.87	100	11	Peak
11649	45.81	-28.19	74	52.22	38.61	10.37	55.39	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	91.61	-	-	84.02	35.19	7.27	34.87	108	127	Average
5825	102.88	-	-	95.29	35.19	7.27	34.87	108	127	Peak
11649	47.3	-26.7	74	53.71	38.61	10.37	55.39	100	0	Peak

<Antenna 2> <Chain 1>

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	107.4	-	-	106.47	32.2	4.59	35.86	120	328	Average
2412	111.8	-	-	110.87	32.2	4.59	35.86	120	328	Peak
3618	45.52	-28.48	74	66.08	32.87	5.76	59.19	100	0	Peak
4824	48.19	-25.81	74	66.43	34.27	6.51	59.02	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	103.65	-	-	102.72	32.2	4.59	35.86	179	212	Average
2412	107.85	-	-	106.92	32.2	4.59	35.86	179	212	Peak
4824	44.53	-29.47	74	62.77	34.27	6.51	59.02	100	0	Peak
12060	49.12	-24.88	74	55.52	38.96	10.6	55.96	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	108.43	-	-	107.42	32.24	4.61	35.84	109	99	Average
2437	112.79	-	-	111.78	32.24	4.61	35.84	109	99	Peak
3654	45.02	-28.98	74	65.58	32.92	5.78	59.26	100	0	Peak
4875	48.06	-25.94	74	66.13	34.28	6.53	58.88	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	104.06	-	-	103.05	32.24	4.61	35.84	175	216	Average
2437	108.48	-	-	107.49	32.22	4.61	35.84	175	216	Peak
4875	46.72	-27.28	74	64.79	34.28	6.53	58.88	100	0	Peak
12183	48.71	-25.29	74	55.13	39.05	10.6	56.07	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	108.08	-	-	107.03	32.26	4.62	35.83	113	98	Average
2462	112.34	-	-	111.29	32.26	4.62	35.83	113	98	Peak
3693	43.2	-30.8	74	63.76	32.97	5.8	59.33	100	0	Peak
4926	45.95	-28.05	74	63.84	34.29	6.56	58.74	100	0	Peak

Test Mode :	802.11b	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. 9846 MHz is not within a restricted band, and its limit line is 20dB below the highest emission level. 3. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	103.6	-	-	102.55	32.26	4.62	35.83	136	222	Average
2462	107.99	-	-	106.94	32.26	4.62	35.83	136	222	Peak
4926	45.5	-28.5	74	63.39	34.29	6.56	58.74	100	0	Peak
9846	48.13	-39.86	87.99	57.15	37.31	9.51	55.84	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
133.14	36.38	-7.12	43.5	55.05	11.4	1.24	31.31	112	132	Peak
143.94	36.06	-7.44	43.5	54.88	11.17	1.27	31.26	-	-	Peak
155.55	33.24	-10.26	43.5	52.26	10.9	1.31	31.23	-	-	Peak
365.1	36.88	-9.12	46	51.26	14.74	1.93	31.05	-	-	Peak
456.1	36.83	-9.17	46	48.35	17.32	2.15	30.99	-	-	Peak
528.9	34.78	-11.22	46	44.96	18.39	2.29	30.86	-	-	Peak
2412	97.04	-	-	96.11	32.2	4.59	35.86	118	326	Average
2412	109.15	-	-	108.22	32.2	4.59	35.86	118	326	Peak
4827	43.15	-30.85	74	61.39	34.27	6.51	59.02	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
32.97	36.56	-3.44	40	49.71	17.76	0.72	31.63	100	256	Peak
83.19	34.68	-5.32	40	57.09	7.94	1.02	31.37	-	-	Peak
155.55	30.8	-12.7	43.5	49.82	10.9	1.31	31.23	-	-	Peak
516.3	30.97	-15.03	46	41.19	18.26	2.26	30.74	-	-	Peak
644.4	27.34	-18.66	46	34.43	20.48	2.57	30.14	-	-	Peak
746.6	29.07	-16.93	46	34.15	22.37	2.74	30.19	-	-	Peak
2412	93.52	-	-	92.59	32.2	4.59	35.86	178	207	Average
2412	105.46	-	-	104.53	32.2	4.59	35.86	178	207	Peak
4821	43.03	-30.97	74	61.27	34.27	6.51	59.02	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	100.25	-	-	99.24	32.24	4.61	35.84	109	97	Average
2437	112.04	-	-	111.03	32.24	4.61	35.84	109	97	Peak
3657	45.97	-28.03	74	66.53	32.92	5.78	59.26	100	0	Peak
4872	43.35	-30.65	74	61.42	34.28	6.53	58.88	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	97.96	-	-	96.95	32.24	4.61	35.84	174	208	Average
2437	109.01	-	-	108	32.24	4.61	35.84	174	208	Peak
4872	41.96	-32.04	74	60.03	34.28	6.53	58.88	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	98.38	-	-	97.33	32.26	4.62	35.83	113	96	Average
2462	110.48	-	-	109.43	32.26	4.62	35.83	113	96	Peak
4926	42.28	-31.72	74	60.17	34.29	6.56	58.74	100	0	Peak

Test Mode :	802.11g	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	93.62	-	-	92.57	32.26	4.62	35.83	135	220	Average
2462	105.33	-	-	104.28	32.26	4.62	35.83	135	220	Peak
4926	41.31	-32.69	74	59.2	34.29	6.56	58.74	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	96.34	-	-	95.41	32.2	4.59	35.86	117	325	Average
2412	108.33	-	-	107.4	32.2	4.59	35.86	117	325	Peak
4821	42.75	-31.25	74	60.99	34.27	6.51	59.02	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	01	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2412 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2412	93.45	-	-	92.52	32.2	4.59	35.86	178	212	Average
2412	105.21	-	-	104.28	32.2	4.59	35.86	178	212	Peak
4824	41.83	-32.17	74	60.07	34.27	6.51	59.02	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	100.73	-	-	99.72	32.24	4.61	35.84	109	96	Average
2437	111.68	-	-	110.67	32.24	4.61	35.84	109	96	Peak
4875	42.94	-31.06	74	61.01	34.28	6.53	58.88	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	06	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2437 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2437	94.77	-	-	93.76	32.24	4.61	35.84	173	211	Average
2437	107.14	-	-	106.13	32.24	4.61	35.84	173	211	Peak
4878	43.39	-30.61	74	61.45	34.28	6.54	58.88	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	97.35	-	-	96.3	32.26	4.62	35.83	113	97	Average
2462	109.08	-	-	108.03	32.26	4.62	35.83	113	97	Peak
4926	40.97	-33.03	74	58.86	34.29	6.56	58.74	100	0	Peak

Test Mode :	2.4G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	11	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 2462 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
2462	92.94	-	-	91.89	32.26	4.62	35.83	136	220	Average
2462	104.78	-	-	103.73	32.26	4.62	35.83	136	220	Peak
4926	41.31	-32.69	74	59.2	34.29	6.56	58.74	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
132.87	35.95	-7.55	43.5	54.62	11.4	1.24	31.31	112	236	Peak
143.94	35.3	-8.2	43.5	54.12	11.17	1.27	31.26	-	-	Peak
155.82	34.51	-8.99	43.5	53.6	10.82	1.32	31.23	-	-	Peak
332.9	35.18	-10.82	46	50.5	13.88	1.86	31.06	-	-	Peak
407.8	34.22	-11.78	46	47.12	16.22	2.03	31.15	-	-	Peak
527.5	36.45	-9.55	46	46.63	18.38	2.28	30.84	-	-	Peak
5745	100.53	-	-	93.1	35.09	7.19	34.85	100	7	Average
5745	111.7	-	-	104.27	35.09	7.19	34.85	100	7	Peak
11490	45.17	-28.83	74	51.64	38.48	10.26	55.21	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
67.8	27.78	-12.22	40	52.27	6.14	0.9	31.53	-	-	Peak
133.14	30.68	-12.82	43.5	49.35	11.4	1.24	31.31	-	-	Peak
143.94	32.76	-10.74	43.5	51.58	11.17	1.27	31.26	111	215	Peak
456.1	30.72	-15.28	46	42.24	17.32	2.15	30.99	-	-	Peak
516.3	29.95	-16.05	46	40.17	18.26	2.26	30.74	-	-	Peak
746.6	29.97	-16.03	46	35.05	22.37	2.74	30.19	-	-	Peak
5745	93.75	-	-	86.32	35.09	7.19	34.85	111	110	Average
5745	105.06	-	-	97.63	35.09	7.19	34.85	111	110	Peak
11493	49.09	-24.91	74	55.56	38.48	10.26	55.21	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	101.02	-	-	93.53	35.13	7.22	34.86	100	6	Average
5785	112.1	-	-	104.59	35.15	7.22	34.86	100	6	Peak
11571	46.57	-27.43	74	53.01	38.56	10.3	55.3	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	94.19	-	-	86.7	35.13	7.22	34.86	120	115	Average
5785	105.5	-	-	98.01	35.13	7.22	34.86	120	115	Peak
11571	49.14	-24.86	74	55.58	38.56	10.3	55.3	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	100.41	-	-	92.82	35.19	7.27	34.87	100	6	Average
5825	111.61	-	-	104.02	35.19	7.27	34.87	100	6	Peak
11652	45.69	-28.31	74	52.11	38.62	10.37	55.41	100	0	Peak

Test Mode :	802.11a	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	93.74	-	-	86.15	35.19	7.27	34.87	119	113	Average
5825	105.05	-	-	97.46	35.19	7.27	34.87	119	113	Peak
11655	48.31	-25.69	74	54.73	38.62	10.37	55.41	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	99.43	-	-	92	35.09	7.19	34.85	100	7	Average
5745	112.36	-	-	104.93	35.09	7.19	34.85	100	7	Peak
11490	45.2	-28.8	74	51.67	38.48	10.26	55.21	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	149	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5745 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5745	92.44	-	-	85.01	35.09	7.19	34.85	121	117	Average
5745	103.62	-	-	96.19	35.09	7.19	34.85	121	117	Peak
11490	47.7	-26.3	74	54.17	38.48	10.26	55.21	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	100.07	-	-	92.58	35.13	7.22	34.86	100	5	Average
5785	112	-	-	104.51	35.13	7.22	34.86	100	5	Peak
11571	47.98	-26.02	74	54.42	38.56	10.3	55.3	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	157	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5785 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5785	93.11	-	-	85.62	35.13	7.22	34.86	120	114	Average
5785	104.92	-	-	97.43	35.13	7.22	34.86	120	114	Peak
11571	48.24	-25.76	74	54.68	38.56	10.3	55.3	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Horizontal
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	99.45	-	-	91.86	35.19	7.27	34.87	100	4	Average
5825	111.14	-	-	103.55	35.19	7.27	34.87	100	4	Peak
11649	46.18	-27.82	74	52.59	38.61	10.37	55.39	100	0	Peak

Test Mode :	5G 802.11n-HT20	Temperature :	20~22°C
Test Channel :	165	Relative Humidity :	40~42%
Test Engineer :	David Ke	Polarization :	Vertical
Remark :	1. 5825 MHz is fundamental signal which can be ignored. 2. Average measurement was not performed if peak level went lower than the average limit.		

Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Remark
5825	93.22	-	-	85.63	35.19	7.27	34.87	120	113	Average
5825	104.77	-	-	97.18	35.19	7.27	34.87	120	113	Peak
11655	46.26	-27.74	74	52.68	38.62	10.37	55.41	100	0	Peak

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.

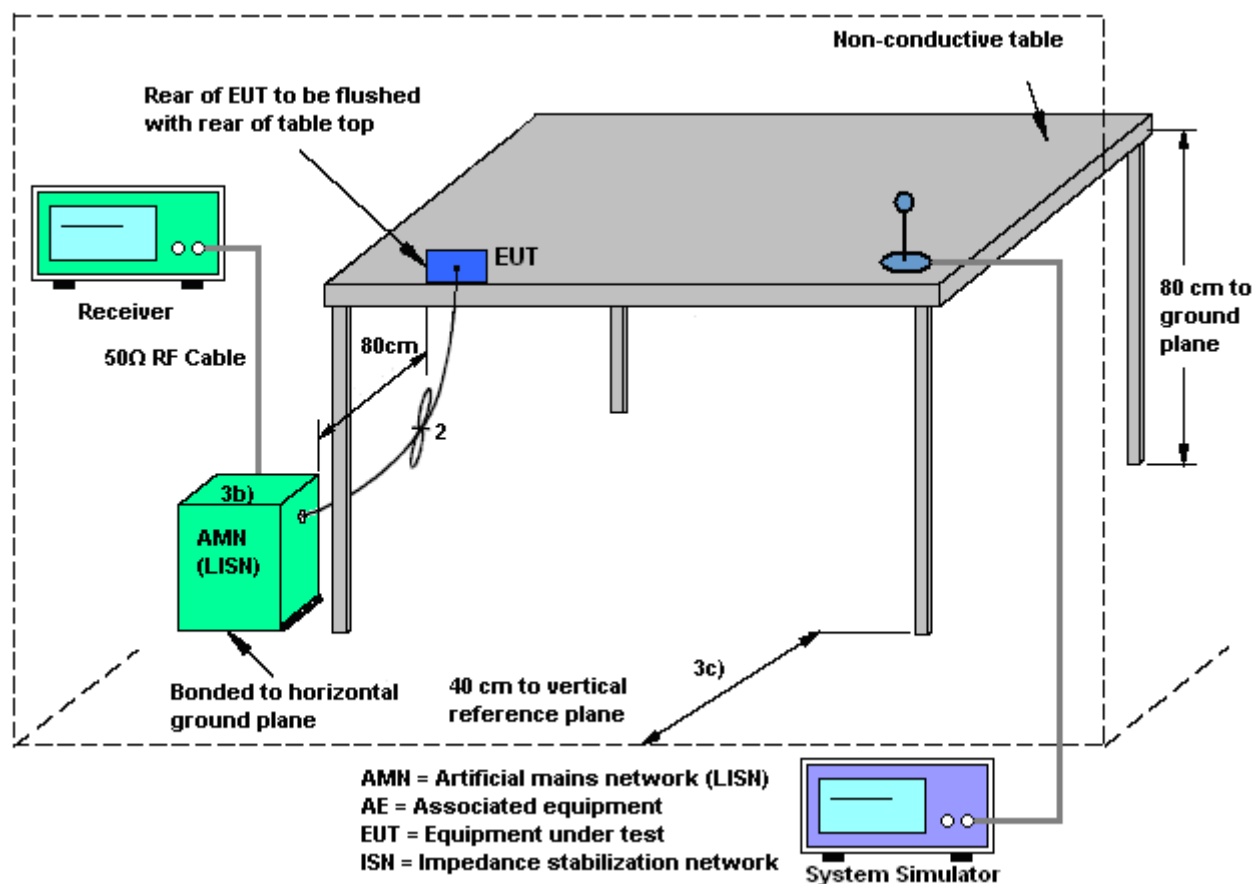
3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

3.6.3 Test Procedures

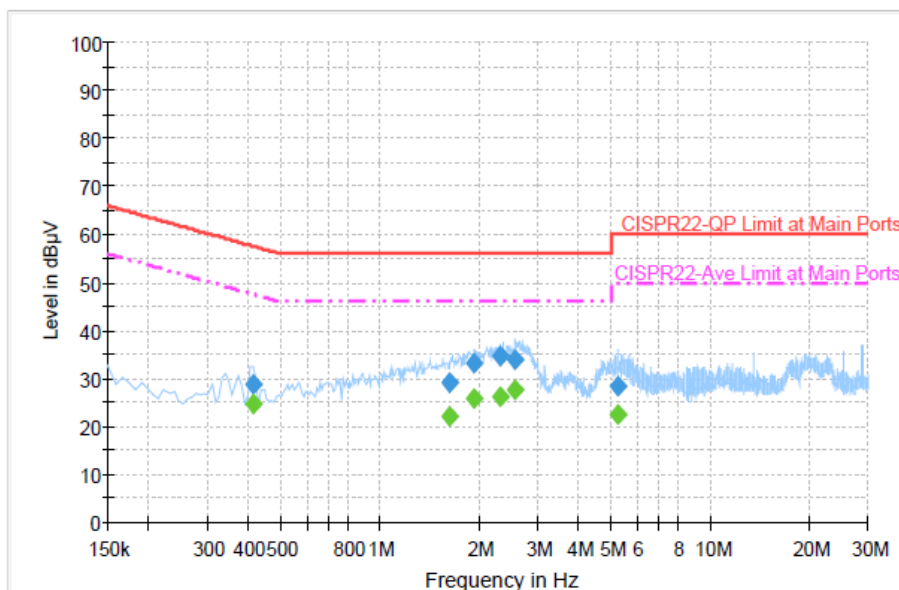
1. The testing follows the guidelines in ANSI C63.4-2003 and ANSI C63.10-2009.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance 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.

3.6.4 Test Setup



3.6.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	20~22℃
Test Engineer :	Slash Huang	Relative Humidity :	45~47%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	Bluetooth Link + WLAN (2.4G) Link		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



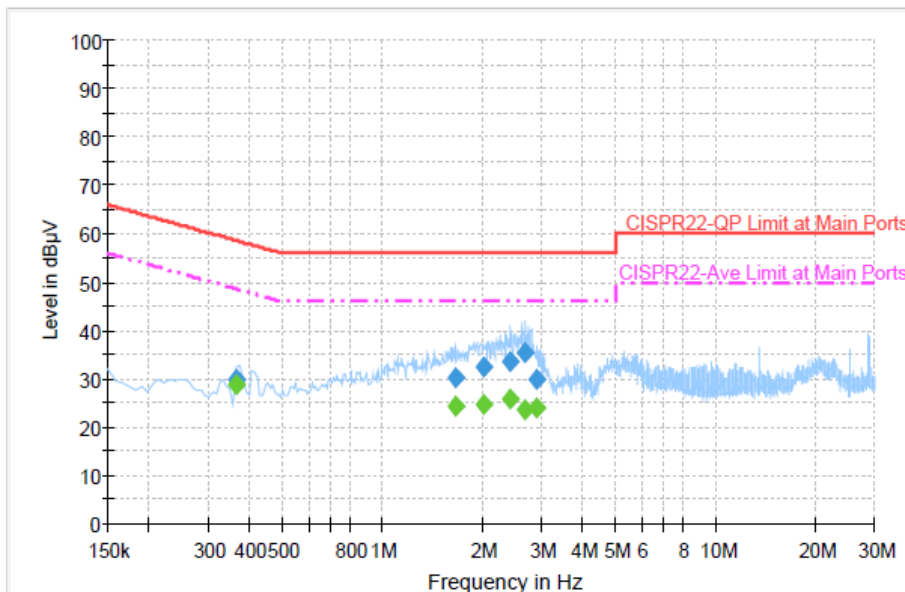
Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.414000	28.7	Off	L1	19.4	28.9	57.6
1.622000	29.2	Off	L1	19.4	26.8	56.0
1.926000	33.4	Off	L1	19.5	22.6	56.0
2.302000	34.6	Off	L1	19.5	21.4	56.0
2.574000	34.0	Off	L1	19.6	22.0	56.0
5.262000	28.4	Off	L1	19.6	31.6	60.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.414000	24.6	Off	L1	19.4	23.0	47.6
1.622000	22.0	Off	L1	19.4	24.0	46.0
1.926000	25.8	Off	L1	19.5	20.2	46.0
2.302000	26.4	Off	L1	19.5	19.6	46.0
2.574000	27.6	Off	L1	19.6	18.4	46.0
5.262000	22.7	Off	L1	19.6	27.3	50.0

Test Mode :	Mode 1	Temperature :	20~22°C
Test Engineer :	Slash Huang	Relative Humidity :	45~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	Bluetooth Link + WLAN (2.4G) Link		
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		


Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.366000	29.8	Off	N	19.4	28.8	58.6
1.662000	30.3	Off	N	19.5	25.7	56.0
2.014000	32.5	Off	N	19.5	23.5	56.0
2.430000	33.4	Off	N	19.6	22.6	56.0
2.694000	35.5	Off	N	19.6	20.5	56.0
2.910000	30.0	Off	N	19.7	26.0	56.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.366000	28.6	Off	N	19.4	20.0	48.6
1.662000	24.3	Off	N	19.5	21.7	46.0
2.014000	24.7	Off	N	19.5	21.3	46.0
2.430000	25.8	Off	N	19.6	20.2	46.0
2.694000	23.7	Off	N	19.6	22.3	46.0
2.910000	24.1	Off	N	19.7	21.9	46.0

3.7 Antenna Requirements

3.7.1 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.

3.7.2 Antenna Connected Construction

Non-standard connector used.

3.7.3 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	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100055	9kHz~40GHz	Jun. 06, 2012	Jul. 20, 2012~ Sep. 08, 2012	Jun. 05, 2013	Conducted (TH02-HY)
Power Meter	Anritsu	ML2495A	0932001	N/A	Sep. 18, 2011	Jul. 20, 2012~ Sep. 08, 2012	Sep. 17, 2012	Conducted (TH02-HY)
Power Sensor	Anritsu	MA2411B	0846202	N/A	Sep. 18, 2011	Jul. 20, 2012~ Sep. 08, 2012	Sep. 17, 2012	Conducted (TH02-HY)
EMI Test Receiver	R&S	ESCS 30	100356	9KHz ~ 2.75GHz	Oct. 27, 2011	Aug. 20, 2012	Oct. 26, 2012	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100081	9KHz ~ 30MHz	Dec. 09, 2011	Aug. 20, 2012	Dec. 08, 2012	Conduction (CO05-HY)
Two-LISN	R&S	ENV216	11-100080	9KHz ~ 30MHz	Dec. 06, 2011	Aug. 20, 2012	Dec. 05, 2012	Conduction (CO05-HY)
AC Power Source	APC	APC-1000W	N/A	N/A	N/A	Aug. 20, 2012	N/A	Conduction (CO05-HY)
Spectrum Analyzer	R&S	ESU26	100390	20Hz ~ 26.5GHz	Dec. 22, 2011	Jul. 27, 2012~ Sep. 11, 2012	Dec. 21, 2012	Radiation (03CH05-HY)
Bilog Antenna	SCHAFFNER	CBL6111C	2725	30MHz ~ 2GHz	Oct. 22, 2011	Jul. 27, 2012~ Sep. 11, 2012	Oct. 21, 2012	Radiation (03CH05-HY)
Turn Table	HD	Deis HD 2000	420/611	0 ~ 360 degree	N/A	Jul. 27, 2012~ Sep. 11, 2012	N/A	Radiation (03CH05-HY)
Antenna Mast	HD	MA 240	240/666	1 m ~ 4 m	N/A	Jul. 27, 2012~ Sep. 11, 2012	N/A	Radiation (03CH05-HY)
Horn Antenna	ESCO	3117	66584	1GHz ~ 18GHz	Aug. 04, 2011	Jul. 27, 2012~ Aug. 03, 2012	Aug. 03, 2012	Radiation (03CH05-HY)
Horn Antenna	ESCO	3117	66584	1GHz~18GHz	Aug. 10, 2012	Aug. 10, 2012~ Sep. 11, 2012	Aug. 09, 2013	Radiation (03CH05-HY)
Pre Amplifier	COM-POWER	PA-103A	161075	10Hz ~ 1000MHz Gain:32dB	Feb. 27, 2012	Jul. 27, 2012~ Sep. 11, 2012	Feb. 26, 2013	Radiation (03CH05-HY)
Pre Amplifier	MITEQ	AMF-7D-0010 1800-30-10P	159087	1GHz~18GHz	Feb. 27, 2012	Jul. 27, 2012~ Sep. 11, 2012	Feb. 26, 2013	Radiation (03CH05-HY)
Pre Amplifier	Agilent	8449B	3008A019 17	1GHz~26.5GHz	Aug. 30, 2011	Jul. 27, 2012~ Sep. 11, 2012	Aug. 29, 2012	Radiation (03CH05-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170 251	15GHz ~ 40GHz	Oct. 21, 2011	Jul. 27, 2012~ Sep. 11, 2012	Oct. 20, 2012	Radiation (03CH05-HY)
Loop Antenna	R&S	HFH2-Z2	100315	9KHz ~ 30MHz	May 14, 2012	Jul. 27, 2012~ Sep. 11, 2012	May 13, 2013	Radiation (03CH05-HY)

5 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.26
---	------

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.54
---	------

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

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 EP271030 as below.