

Report No.: EF/2011/10006 **Issue Date: Mar. 24, 2011** 

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### ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

## INTENTIONAL RADIATOR CERTIFICATION TO FCC PART 15 SUBPART C REQUIREMENT AND INDUSTRY CANADA RSS 210

*OF* 

**Tablet PC Product Name:** 

Sahara, Tabletkiosk, PaceBlade **Brand Name: Model Name of Host:** i500, TS500, SlimBook 240 Series

Model No. of WLAN

Modular:

622ANHMW

Different model for different market **Model Difference:** 

XHFTK500ABGNTS500 FCC ID:

8434A-500TS500 IC:

EF/2011/10006 **Report No.:** 

Mar. 24, 2011 **Issue Date:** 

§15.247 **FCC Rule Part:** 

RSS-210 issue 8:2010, Annex 8 **IC Rule Part:** 

**Tabletkiosk Prepared for:** 

2832 Columbia Street, Torrance, California 90503

SGS Taiwan Ltd. Prepared by:

**Electronics & Communication Laboratory** 

No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei

County, Taiwan.





Testing Laborators 0513

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台灣檢驗科技股份有限公司



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### VERIFICATION OF COMPLIANCE

**Applicant: Tabletkiosk** 

2832 Columbia Street, Torrance, California 90503

**Product Name:** 

**Brand Name:** Sahara, Tabletkiosk, PaceBlade

FCC ID: XHFTK500ABGNTS500

IC: 8434A-500TS500

**Model Name of Host:** i500, TS500, SlimBook 240 Series

Model No. of WLAN

622ANHMW Modular:

**Model Difference:** N/A

File Number: EF/2011/10006

Date of test: Jan. 28, 2011 ~ Mar. 23, 2011

**Date of EUT Received:** Jan. 28, 2011

### We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Electronics & Communication Laboratory The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and RSS-Gen. issue 3 the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.247 and IC RSS 210 issue 8: 2010 Annex 8. The test results of this report relate only to the tested sample identified in this report.

Test By:	Bondi Jin	Date:	Mar. 24, 2011	
	Bondi Liu / Engineer			
Prepared By:	Gigi yeh	Date:	Mar. 24, 2011	
	Gigi Yeh / Clerk			
Approved By:	Jim Chang	Date:	Mar. 24, 2011	
	Jim Chang / Supervisor			

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### Version

Version No.	Date	Description	
00	Mar. 24, 2011	Initial creation of document	

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### FCCID: XHFTK500ABGNTS500 IC: 8434A-500TS500

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### **GENERAL INFORMATION**

### 1.1 Product Description

### **General:**

Product name:	Tablet PC			
Brand Name:	Sahara, Tal	bletkiosk, PaceBlade		
Model Name:	i500, TS50	0, SlimBook 240 Series		
Model Difference:	Different model for different market			
WLAN module FCC ID:	PD9622ANXH			
WLAN module IC ID:	1000M-622ANH			
	11.1Vdc Li-Ion battery or 20Vdc from AC/DC power adapte			
	Battery:	Model: TSE57-3CLI,		
Power Supply:	Battery.	Supplier: T-Gee Electronics Co., LTD.		
	Adapter: Model: PA-1650-68			
	ridapter.	Supplier: LITE-ON TECHNOLOGY CORPORATION		

WLAN: 802.11 a/b/g/n

Wi-Fi	Frequency Range (MHz)	Channels	Rated Power	Type of Emission	Modulation Technol- ogy
11b/g	2412-2462	11	b : 16.52dBm g : 16.48dBm	b: 14M0G1D g: 16M6G1D	DSSS, OFDM
11n	HT20 2412-2462	11	n(20M) : 16.55 dBm	17M9G1D	OFDM
(2.4G Band)	HT40 2422-2452	9	n(40M): 16.55 dBm	36M0G1D	OFDM

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Wi-Fi	Frequency Range	Channels	Rated Power	Type of Emission	Modulation Technology
	5150~5250	4	16.50dBm	16M4G1D	
11a	5250~5350	4	16.42 dBm	16M4G1D	OFDM
	5470~5725	11	16.52dBm	16M4G1D	
	HT20 5150~5250	4	HT20:17.03dBm	17M6G1D	
11n	HT20 5250~5350	4	HT20:16.83dBm	17M6G1D	OFDM
	HT20 5470~5725	11	HT20:16.78dBm	17M6G1D	
	HT40 5150~5250	2	HT40:16.71dBm	36M0G1D	
11n	HT40 5250~5350	2	HT40:16.87dBm	36M0G1D	OFDM
	HT40 5470~5725	5	HT40:16.68dBm	36M0G1D	
11a	5725-5850	5	a: 16.68 dBm	16M4G1D	
11n	HT20 5725-5850	5	HT20: 16.67 dBm	17M6G1D	OFDM
(5GHz)	HT40 5725-5850	2	HT40: 16.58 dBm	36M9G1D	

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	Supplier: AEGIS LABS
WLAN FCC Modular Report:	Report Owner: Intel
WLANTEC Wodular Report.	Model: 622ANHMW
	Report Number: INTEL-090601F
	Supplier: AEGIS LABS
WI AN IC Modular Deports	Report Owner: Intel
WLAN IC Modular Report:	Model: 622ANHMW
	Report Number: INTEL-090601IC
	Antenna Type: PIFA
	Antenna A:
	(Aux) Antenna gain : (2.4G)-2.05 dBi, (5G) 2.69dBi
Antenna Designation	Model No.: T12C-L
	Antenna B:
	(Main) Antenna gain : (2.4G)-1.03 dBi, (5G) 3.26dBi
	Model No.: T12C-R
N. 11.2	CCK, DQPSK, DBPSK for DSSS
Modulation type	64QAM. 16QAM, QPSK, BPSK for OFDM
	802.11 a: 6/9/12/18/24/36/48/54 Mbps;
	802.11 b: 1/2/5.5/11 Mbps;
Transition Rate:	802.11 g: 6/9/12/18/24/36/48/54 Mbps
	802.11 n_20MHz: 6.5 – 72.2Mbps

This test report applies for 802.11a/b/g/n WLAN

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#### 1.2 **Related Submittal(s) / Grant (s)**

This submittal(s) (test report) is intended for FCC ID: XHF-TK500ABGNTS5XX filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules and IC: 8434A-500TS5XX filing to comply with Industry Canada RSS-210 issue 8: 2010 Annex 8. The composite system (digital device) is compliance with Subpart B is authorized under a DoC procedure.

#### 1.3 **Test Methodology**

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (2003) and RSS-Gen: 2010. Radiated testing was performed at an antenna to EUT distance 3 meters.

#### **Test Facility** 1.4

The measurement facilities used to collect the 3m Radiated Emission and AC power line conducted data are located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 134, Wu Kung Rd., Wuku Industrial Zone, Taipei Country, Taiwan which are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2003. FCC Registration Number are: 990257 and 236194, Canada Registration Number: 4620A-4.

The 10 m Open Area Test Sites located on the address of SGS Taiwan Ltd. Electronics & Communication Laboratory No. 29, Pau-Tou-Tsuo Valley Chia-Pau Tsuen, Linkou Hsiang, Taipei county, which is constructed and calibrated to meet the CISPR 22/EN 55022 requirements. SGS Site No. 1(3 &10 meters) and FCC Registration Number: 94644.

#### 1.5 **Special Accessories**

Not available for this EUT intended for grant.

#### 1.6 **Equipment Modifications**

Not available for this EUT intended for grant.

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### 2 SYSTEM TEST CONFIGURATION

### 2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

### 2.2 EUT Exercise

The EUT (Transmitter) was operated in the engineering mode to fix the Tx and RX frequency that was for the purpose of the measurements.

### 2.3 Test Procedure

### 2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 7 and 13 of ANSI C63.4-2003. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-Peak and Average detector mode.

### 2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes and measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna. according to the requirements in Section 8 and 13 and Subclause 8.3.1.2 of ANSI C63.4-2003.

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#### 2.4 **Configuration of Tested System**

Fig. 2-1 Radiated Emission Configuration



**Table 2-1 Equipment Used in Tested System** 

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.
1.	AC Adaptor	LITE-ON	PA-1650-68	N/A
2.	WLAN Software	Intel	OET- DRTU_1_3_11_0254_20110215	N/A

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### 3 SUMMARY OF TEST RESULTS

FCC Rules	<b>Description Of Test</b>	Result
§15.207(a)/	AC Power Line Conducted Emis-	Compliant
RSS-Gen §7.2.2	sion	
§15.247(b)/	Peak Output Power	Compliant
§A8.4(2)		
§15.247(b)/	6dB Bandwidth	Reference to modular
§A8.2		report
§15.247(c)/	100 KHz Bandwidth Of	Compliant
§A8.5	Frequency Band Edges	
§15.247(c)/	Spurious Emission	Compliant
§A8.5		
§15.247/,§A8.3(2)	Peak Power Density	Reference to modular
		report
§15.203/	Antenna Requirement	Compliant
RSS-GEN 7.1.4,		
RSS-210 issue 7,§A8.4		
RSS-Gen §4.4.1	99% Power Bandwidth	Reference to modular report

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### DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition.

Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

802.11 b mode: Channel low (2412MHz), mid (2437MHz) and high (2462MHz) with 1Mbps data rate are chosen for above testing.

802.11 g mode: Channel low (2412MHz), mid (2437MHz) and high (2462MHz) with 6Mbps data rate are chosen for above testing.

802.11 n mode(20M): Channel low (2412MHz), mid (2437MHz) and high (2462MHz) with 6.5 Mbps data rate are chosen for conducted power testing.

802.11 n mode(40M): Channel low (2422MHz), mid (2437MHz) and high (2452MHz) with 13.5 Mbps data rate are chosen for conducted power testing.

802.11 a mode: Channel low (5745MHz), mid (5785MHz) and high (5825MHz) with 6Mbps highest data rate are chosen for full testing.

802.11 n (5GHz) 20MHz: Lowest (5745MHz), Mid (5785MHz) and high (5825MHz) with 6.5

highest data rate are chosen for above testing.

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### **OUTPUT POWER MEASUREMENT**

### **Standard Applicable:**

According to  $\S15.247(a)(2)$ , (b)

- (3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and
- 5725-5850 MHz bands: 1 Watt. As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or is transmitting at a reduced power level. If multiple modes of operation are possible (e.g., alternative modulation methods), the maximum conducted output power is the highest total transmit power occurring in any mode.
- (4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (c) Operation with directional antenna gains greater than 6 dBi.
- (1) Fixed point-to-point operation:
- (i) Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.
- (ii) Systems operating in the 5725-5850 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted output power.

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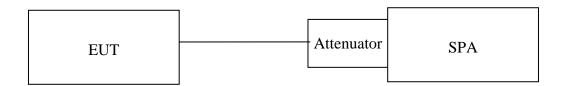
According to RSS-210 issue 8,§A8.4(4), for systems employing digital modulation techniques operating in the bands 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz, the maximum peak conducted output power shall not exceed 1 W. Except as provided in Section A8.4 (5), the e.i.r.p. shall not exceed 4 W.

As an alternative to a peak power measurement, compliance can be based on a measurement of the maximum conducted output power. The maximum conducted output power is the total transmit power delivered to all antennas and antenna elements, averaged across all symbols in the signalling alphabet when the transmitter is operating at its maximum power control level. Power must be summed across all antennas and antenna elements. The average must not include any time intervals during which the transmitter is off or transmitting at a reduced power level. If multiple modes of operation are implemented, the maximum conducted output power is the highest total transmit power occurring in any mode.

**5.2** Measurement Equipment Used:

Conducted Emission Test Site							
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.		
TYPE		NUMBER	NUMBER	CAL.			
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/19/2010	04/18/2012		
Spectrum Analyzer	Agilent	E4440A	MY45304525	01/25/2011	01/24/2012		
Spectrum Analyzer	R&S	FSP 40	100034	02/22/2011	02/21/2012		
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	N/A	01/05/2011	01/04/2012		
Attenuator	Mini-Circuit	BW-S6W5	N/A	07/05/2010	07/04/2011		

### 5.3 .Test Set-up:



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### **5.4 Measurement Procedure:**

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the power meter or spectrum. (Channel power function, RBW =1, VBW = 3MHz, Bandwidth=26dB Emission Bandwidth)
- 3. Peak power is then measured using internal channel power integration function of SPA.
- 4. Power is integrated over a bandwidth greater than or equal to 26dBc bandwidth
- 5. Record the max.reading.
- 6. Repeat above procedures until all frequency measured was completed.

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### 5.5 Measurement Result:

Channal	Eroguopov/MHz)	Chain	Data Pata(Mhas)	Average Power (dBM)
	• • • •			16.50
				16.68
				16.22
				16.40
				16.53
165	5825	В	6	16.44
_				
				16.42
				16.31
11	2462	Α	1	16.46
1	2412	В	1	16.52
6	2437	В	1	16.37
11	2462	В	1	16.52
1	2412	Α	6	15.21
6	2437	Α	6	16.48
11	2462	Α	6	15.35
1	2412	В	6	15.51
6	2437	В	6	16.31
11	2462	В	6	15.63
1	2412	Α	HT0	14.62
6	2437	Α	HT0	16.41
11	2463	Α	HT0	14.30
1	2412	В	HT0	14.51
6	2437	В	HT0	16.31
11	2463	В	HT0	14.20
149	5745	Α	HT0	16.33
157	5785	Α	HT0	16.28
165	5825	Α	HT0	16.42
		В		16.56
				15.32
				16.41
	6 11 1 6 11 1 6 11 1 6 11 1 6 11 1 1 6 11	149     5745       157     5785       165     5825       149     5745       157     5785       165     5825       1     2412       6     2437       11     2462       1     2412       6     2437       11     2462       1     2412       6     2437       11     2462       1     2412       6     2437       11     2462       1     2412       6     2437       11     2463       1     2412       6     2437       11     2463       1     2412       6     2437       11     2463       149     5745       157     5785       165     5825       149     5745       157     5785	149       5745       A         157       5785       A         165       5825       A         149       5745       B         157       5785       B         165       5825       B         1       2412       A         6       2437       A         11       2462       A         1       2412       B         6       2437       B         11       2462       B         1       2412       A         6       2437       A         11       2462       A         1       2412       B         6       2437       B         11       2462       B         1       2412       A         6       2437       B         1       2412       B         6       2437       B         11       2463<	149         5745         A         6           157         5785         A         6           165         5825         A         6           149         5745         B         6           157         5785         B         6           157         5785         B         6           165         5825         B         6           11         2412         A         1           11         2412         B         1           11         2412         A         6           11         2412         B         6           11         2412         B         6           11         2412         B         6           11         2412         A         HTO           11         2412         B         HTO           11         2412

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Mode	Channel	Frequency(MHz)	Chain	Data Rate(Mbps)	Average Power (dBM)
802.11n(40MHz)	3(F)	2422	A	HT0	12.10
802.11n(40MHz)	4(F)	2427	Α	HT0	13.65
802.11n(40MHz)	6(F)	2437	Α	HT0	16.31
802.11n(40MHz)	8(F)	2447	Α	HT0	13.55
802.11n(40MHz)	9(F)	2452	Α	HT0	12.06
802.11n(40MHz)	3(F)	2422	В	HT0	12.03
802.11n(40MHz)	4(F)	2427	В	HT0	13.55
802.11n(40MHz)	6(F)	2437	В	HT0	16.08
802.11n(40MHz)	8(F)	2447	В	HT0	13.55
802.11n(40MHz)	9(F)	2452	В	HT0	12.20
802.11n(40MHz)	151(F)	5755	Α	HT0	16.33
802.11n(40MHz)	159(F)	5795	Α	HT0	16.35
802.11n(40MHz)	151(F)	5755	В	HT0	16.48
802.11n(40MHz)	159(F)	5795	В	HT0	16.56

Mode	Channel	Frequency(MHz)	Chain	Data Rate(Mbps)	Average Power (dBM)	
802.11n(20MHz)	1	2412	A+B	HT8	14.21	
802.11n(20MHz)	6	2437	A+B	HT8	16.55	
802.11n(20MHz)	11	2462	A+B	HT8	14.23	
802.11n(40MHz)	3(F)	2422	A+B	HT8	12.11	
802.11n(40MHz)	6(F)	2437	A+B	HT8	16.55	
802.11n(40MHz)	9(F)	2452	A+B	HT8	12.23	
802.11n(20MHz)	149	5745	A+B	HT8	16.67	
802.11n(20MHz)	157	5785	A+B	HT8	16.55	
802.11n(20MHz)	165	5825	A+B	HT8	16.63	
802.11n(40MHz)	151(F)	5755	A+B	HT8	16.58	
802.11n(40MHz)	159(F)	5795	A+B	HT8	16.48	

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### **CONDUCTED EMISSION TEST**

#### **6.2. Standard Applicable:**

According to §15.207 and RSS-Gen §7.2.4, frequency range within 150KHz to 30MHz shall not exceed the Limit table as below.

Frequency range	Limits dB(uV)				
MHz	Quasi-peak	Average			
0.15 to 0.50	66 to 56	56 to 46			
0.50 to 5	56	46			
5 to 30	60	50			

### Note

**6.3.** Measurement Equipment Used:

	AC Power Line Conducted Emission Test Site										
<b>EQUIPMENT</b>	MFR	MFR MODEL		LAST	CAL DUE.						
TYPE		NUMBER	NUMBER	CAL.							
EMI Test Receiver	R&S	ESCS30	828985/004	09/15/2010	09/14/2011						
LISN	Rolf-Heine	NNB-2/16Z	99012	02/02/2011	02/01/2012						
LISN	FCC	FCC-LISN-50/250-25-2-01	04034	02/02/2011	02/01/2012						
Coaxial Cables	N/A	WK CE Cable	N/A	11/28/2010	11/27/2011						

### **6.4. EUT Setup:**

- 1. The conducted emission tests were performed in the test site, using the setup in accordance with the ANSI C63.4-2003.
- 2. The AC/DC Power adaptor of EUT was plug-in LISN. The EUT was placed flushed with the rear of the table.
- 3. The LISN was connected with 120Vac/60Hz power source.

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<sup>1.</sup> The lower limit shall apply at the transition frequencies

<sup>2.</sup> The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.



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### **6.5.** Measurement Procedure:

- 1. The EUT was placed on a table which is 0.8m above ground plane.
- 2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 3. Repeat above procedures until all frequency measured were complete.

### **6.6.** Measurement Result:

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

Note: Refer to next page for measurement data and plots.

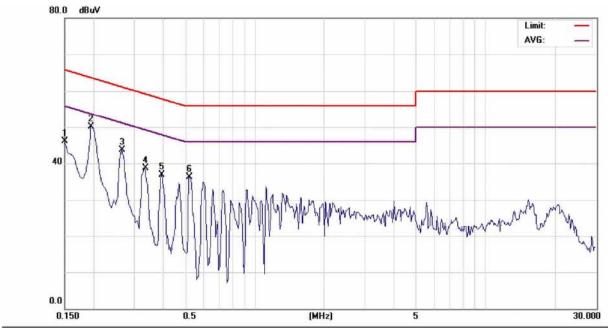


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### AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	BT + WLAN Da	ta Link – Adapter 1	Test Date:	Mar. 24, 2011	
Temperature:	24	Humidity:	60%	Test By:	Bondi



Site SGS CONDUCTED#1

Limit: FCC Class B Conduction(QP)

EUT: TabletPC M/N: TK500

Note: BT+WLANmode

Adaptor: LI SHIN / 0335A2065

Pha	se:	L1	Temperature:	23 ℃
Pov	ver: AC 12	0V/60Hz	Humidity:	59%
Dis	ance:		Air Pressure:	hpa

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dВ	dBuV	dBuV	dВ	Detector	Comment	
1		0.1500	45.99	0.14	46.13	66.00	-19.87	peak		
2	*	0.1950	49.99	0.12	50.11	63.82	-13.71	peak		
3		0.2650	43.65	0.12	43.77	61.27	-17.50	peak		
4		0.3350	38.57	0.12	38.69	59.33	-20.64	peak		
5		0.3950	36.88	0.12	37.00	57.96	-20.96	peak		
6		0.5200	36.12	0.12	36.24	56.00	-19.76	peak		

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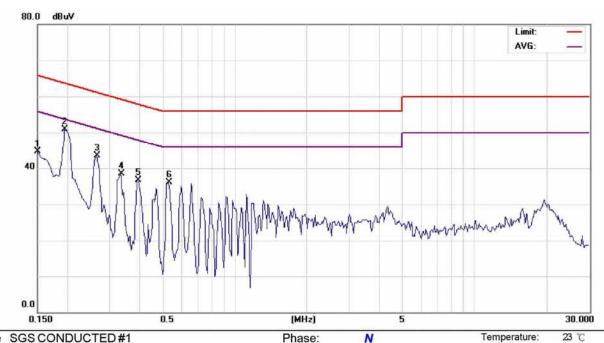
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Humidity:

Air Pressure:

hpa



Power:

Distance:

N

AC 120V/60Hz

Site SGS CONDUCTED#1

Limit: FCC Class B Conduction(QP)

EUT: TabletPC M/N: TK500

Note: BT+WLANmode

Adaptor: LI SHIN / 0335A2065

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dВ	dBuV	dBuV	dВ	Detector	Comment	
1		0.1500	44.52	0.19	44.71	66.00	-21.29	peak		
2	*	0.1950	50.65	0.16	50.81	63.82	-13.01	peak		
3		0.2650	43.31	0.16	43.47	61.27	-17.80	peak		
4		0.3350	38.31	0.16	38.47	59.33	-20.86	peak		
5		0.3950	36.47	0.16	36.63	57.96	-21.33	peak		
6		0.5300	35.92	0.16	36.08	56.00	-19.92	peak		

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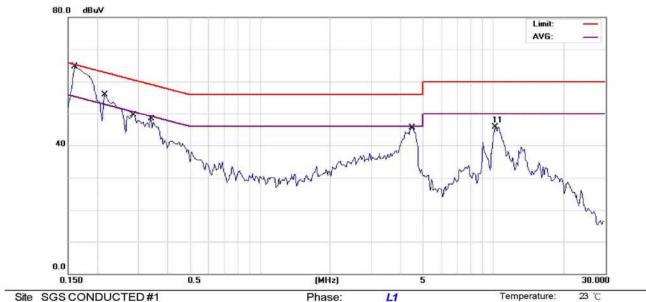
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Humidity:

Air Pressure:

hpa

Operation Mode:	BT + WLAN Da	ta Link – Adapter 2	Test Date:	Mar. 24, 2011	
Temperature:	24	Humidity:	60%	Test By:	Arno



Power:

Distance:

L1

AC 120V/60Hz

Site SGS CONDUCTED#1

Limit: FCC Class B Conduction(QP)

EUT: TabletPC M/N: TK500

Note: BT + WLANmode

Adaptor: LITE-ON/PA-1650-68

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dВ	dBuV	dBuV	dВ	Detector	Comment
1	*	0.1617	61.18	0.13	61.31	65.38	-4.07	QP	
2		0.1617	41.30	0.13	41.43	55.38	-13.95	AVG	
3		0.2160	51.50	0.12	51.62	62.97	-11.35	QP	
4		0.2160	29.37	0.12	29.49	52.97	-23.48	AVG	
5		0.2845	44.05	0.12	44.17	60.68	-16.51	QP	
6		0.2845	28.65	0.12	28.77	50.68	-21.91	AVG	
7		0.3387	42.28	0.12	42.40	59.24	-16.84	QP	
8		0.3387	25.74	0.12	25.86	49.24	-23.38	AVG	
9		4.4768	38.53	0.18	38.71	56.00	-17.29	QP	
10		4.4768	27.54	0.18	27.72	46.00	-18.28	AVG	
11		10.2000	45.22	0.45	45.67	60.00	-14.33	peak	

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Temperature:

Humidity: Air Pressure: 23 ℃

hpa



Phase:

Power:

Distance:

N

AC 120V/60Hz

Site SGS CONDUCTED#1

Limit: FCC Class B Conduction(QP)

EUT: TabletPC M/N: TK500

Note: BT+WLANmode

10.3291

9

Adaptor: LITE-ON/PA-1650-68

34.27

No. MI	c. Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dΒ	dBuV	dBuV	dВ	Detector	Comment
1 *	0.1617	57.68	0.18	57.86	65.38	-7.52	QP	
2	0.1617	39.50	0.18	39.68	55.38	-15.70	AVG	
3	0.2243	48.43	0.16	48.59	62.66	-14.07	QP	
4	0.2243	31.86	0.16	32.02	52.66	-20.64	AVG	
5	0.2650	47.18	0.16	47.34	61.27	-13.93	peak	
6	0.3950	44.44	0.16	44.60	57.96	-13.36	peak	
7	4.2100	42.07	0.21	42.28	56.00	-13.72	peak	
8	10.3291	41.50	0.48	41.98	60.00	-18.02	QP	

50.00

-15.25

AVG

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34.75

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#### 100KHz BANDWIDTH OF BAND EDGES MEASUREMENT 7

### 7.1 Standard Applicable:

According to §15.247(c), in any 100 KHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100KHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

According to RSS-210 issue 8,§A8.5, In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under section A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Tables 2 and 3 is not required. In addition, radiated emissions which fall in the restricted bands of Table 1 must also comply with the radiated emission limits specified in Tables 2 and 3.

### **Measurement Equipment Used:**

### 7.2.1. Conducted Emission at antenna port:

Refer to section 6.2 for details.

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### 7.2.2. Radiated emission:

	90	66 Chamber			
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
TYPE		NUMBER	NUMBER	CAL.	
Spectrum Analyzer	R&S	FSP 40	100034	02/12/2011	02/11/2012
Loop antenna	MESSTEC	FLA30	03/10086	07/08/2009	07/07/2011
Bilog Antenna	SCHWAZBECK	VULB9160	3158	11/29/2009	11/28/2011
Horn antenna	SCHWAZBECK	BBHA 9120D	9120D-673	05/09/2010	05/08/2012
Pre-Amplifier	Agilent	8447D	1937A02834	11/30/2010	11/29/2011
Pre-Amplifier	Agilent	8449B	3008A01973	01/05/2011	01/04/2012
Turn Table	HD	DT420	N/A	N.C.R	N.C.R
Antenna Tower	HD	MA240-N	240/657	N.C.R	N.C.R
Controller	HD	HD100	N/A	N.C.R	N.C.R
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-10M	10m	01/05/2011	01/04/2012
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA-3M	3m	01/05/2011	01/04/2012
3m Site	SGS	966 chamber	N/A	11/08/2010	11/09/2011

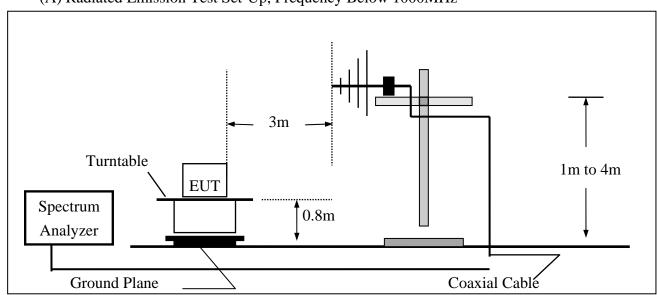
### **7.3 Test SET-UP:**

#### 7.3.1 **Conducted Emission at antenna port:**

Refer to section 6.3 for details.

#### 7.3.2 **Radiated emission:**

(A) Radiated Emission Test Set-Up, Frequency Below 1000MHz



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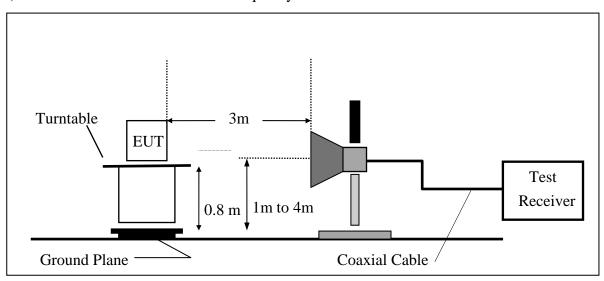
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### (B) Radiated Emission Test Set-UP Frequency Over 1 GHz



### 7.4 Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set center frequency of spectrum analyzer = operating frequency.
- 4. Set the spectrum analyzer as RBW, VBW=100KHz, Span=25MHz, Sweep = auto
- 5. Mark Peak, 2.390GHz and 2.4835GHz, 5,725 and 5,850GHz and record the max. level.
- 6. Repeat above procedures until all frequency measured were complete.

### 7.5 Field Strength Calculation:

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

### 7.6 Measurement Result:

Note: Refer to next page spectrum analyzer data chart and tabular data sheets.

For the measurement of conducted band edge, refer to them from the original modular report: *FCC: INTEL-090601F / IC: INTEL-090601IC* 

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### Radiated Emission: 802.11 b (2.4GHz) mode (Antenna B)

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412 MHz Test By Bondi **Tmperature** Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	1) (dB)	
2390.00	41.35		-1.06	40.29		74.00	54.00	-13.71	Peak
Operation 1	Mode	TX C	CH Low			Test	Date	Mar. 18, 2	011
Fundament	tal Frequer	ncy 2412	MHz			Test	By	Bondi	
Temperatur	re	25				Pol		Hor.	
Humidity		65 %							

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	)(dBuV/m	) <b>(dB)</b>	
2390.00	42.76		-1.06	41.70		74.00	54.00	-12.30	Peak

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200
- (4) Spectrum AV Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11 b (2.4GHz) mode (Antenna B)

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 2462 MHz Test By Bondi Temperature 25 Pol Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Act	ual FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m	) (dBuV/m)	(dBuV/m)	(dBu V/n	n) ( <b>dB</b> )	
2483.50	47.70		-0.59	47.11		74.00	54.00	-6.89	Peak
Operation 1	Mode	TX C	H High			Test	Date	Mar. 18, 2	011
Fundament	tal Frequer	ncy 2462	MHz			Test	By	Bondi	
Temperatu	re	25				Pol		Hor.	
Humidity		65 %							

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	)(dBuV/m)	(dB)	
2483.50	51.88		-0.59	51.29		74.00	54.00	-2.71	Peak

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms
- (4) Spectrum AV Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11 g (2.4GHz) mode (Antenna A)

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412 MHz Test By Bondi **Tmperature** Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Act	ual FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m	) (dBuV/m)	(dBuV/m)	(dBuV/n	<b>n</b> ) ( <b>dB</b> )	
2390.00	71.59	54.02	-1.06	70.53	52.96	74.00	54.00	-1.04	Avg
Operation 1	Mode	TX C	H Low			Test	Date	Mar. 18, 2	011
Fundament	tal Frequer	ncy 2412	MHz			Test	By	Bondi	
Temperatu	re	25				Pol		Hor.	
Humidity		65 %							

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
,	2390.00	73.96	54.13	-1.06	72.90	53.07	74.00	54.00	-0.93	Avg

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11 g (2.4GHz) mode (Antenna A)

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 2462 MHz Test By Bondi Temperature Pol Ver. 25

65 % Humidity

	Peak	$\mathbf{AV}$		Actı	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	<b>a</b> ) ( <b>dB</b> )	
2483.50	65.34	47.55	-0.59	64.75	46.96	74.00	54.00	-7.04	Avg
Operation			H High					Mar. 18, 2	011
Fundamen	tal Frequei	ncy 2462	MHz			Test	t By	Bondi	
Temperatu	re	25				Pol		Hor.	
Humidity		65 %							

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
,	2483.50	69.10	51.86	-0.59	68.51	51.27	74.00	54.00	-2.73	Avg

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200
- (4) Spectrum AV Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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# FCCID: XHFTK500ABGNTS500

IC: 8434A-500TS500

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### Radiated Emission: 802.11 g/n (2.4GHz) 20M mode (Antenna A+B)

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412 MHz Test By Bondi **Tmperature** Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) ( <b>dB</b> )	
2390.00	63.17	49.00	-1.06	62.11	47.94	74.00	54.00	-6.06	Avg
Operation I			CH Low MHz			Test Test		Mar. 18, 2 Bondi	011
Temperatu		25				Pol	J	Hor.	
Humidity		65 %							

	Peak	$\mathbf{AV}$		Actu	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
2390.00	68.17	52.24	-1.06	67.11	51.18	74.00	54.00	-2.82	Avg

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200
- (4) Spectrum AV Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11 g/n (2.4GHz) 20M mode (Antenna A+B)

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 2462 MHz Test By Bondi Temperature Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m	(dB)	
2483.50	60.20	46.21	-0.59	59.61	45.62	74.00	54.00	-8.38	Avg
Operation 1	Mode	TX C	H High			Test	Date	Mar. 18, 2	011
Fundament	tal Frequer	ncy 2462	MHz			Test	By	Bondi	
Temperatu	re	25				Pol		Hor.	
Humidity		65 %							

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m	)(dBuV/m)	(dB)	
2	483.50	64.32	50.18	-0.59	63.73	49.59	74.00	54.00	-4.41	Avg

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11 g/n (2.4GHz) 40M mode (Antenna A+B)

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2422 MHz Test By Bondi **Tmperature** Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actı	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	<b>1</b> ) ( <b>dB</b> )	
2390.00	67.72	49.96	-1.06	66.66	48.90	74.00	54.00	-5.10	Avg
Operation 1	Mode	TX C	H Low			Test	Date	Mar. 18, 2	011
Fundament	tal Frequer	ncy 2422	MHz			Test By		Bondi	
Temperatu	re	25				Pol		Hor.	
Humidity		65 %							

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	)(dBuV/m)	(dB)	
2390.00	72.21	54.06	-1.06	71.15	53.00	74.00	54.00	-1.00	Avg

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11 g/n(2.4GHz) 40M mode (Antenna A+B)

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 2452 MHz Test By Bondi Temperature Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m	) (dBuV/m)	(dBuV/m)	(dBu V/n	<b>1</b> ) ( <b>dB</b> )	
2483.50	66.35	49.11	-0.59	65.76	48.52	74.00	54.00	-5.48	Avg
Operation 1	Mode	TX C	H High			Test	Date	Mar. 18, 2	011
Fundament	al Frequer	ncy 2452	MHz			Test By		Bondi	
Temperatu	re	25				Pol		Hor.	
Humidity		65 %							

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
,	2483.50	71.39	53.90	-0.59	70.80	53.31	74.00	54.00	-0.69	Avg

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200
- (4) Spectrum AV Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11 a (5G) mode (Antenna A)

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745 MHz Test By Bondi Tmperature 25 Pol Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq. (MHz)	Reading (dBuV)	Reading (dBuV)		Peak (dBuV/m)	AV (dBuV/m)	Limit (dBuV/m)	Limit (dBu V/n	O	Remark
5725.00	63.68	45.32	7.32	71.00	52.64	74.00	54.00	-1.36	AV
Operation 1	Mode	TX C	H Low			Test	Date	Mar. 18, 2	011
Fundament	tal Frequer	ncy 5745	MHz			Test	By	Bondi	
Temperatu	re	25				Pol		Hor.	
Humidity		65 %							

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
,	5725.00	64.51	46.21	7.32	71.83	53.53	74.00	54.00	-0.47	ΑV

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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Radiated Emission: 802.11 (5G) mode (Antenna A)

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825 MHz Test By Bondi Temperature Pol Ver. 25

65 % Humidity

	Peak	$\mathbf{AV}$		Actu	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m	)(dBuV/m)	(dB)	
5850.00	57.01	43.55	7.58	64.59	51.13	74.00	54.00	-2.87	ΑV

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825 MHz Test By Bondi Temperature Pol Hor. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m	( <b>dB</b> )	
5850.00	56.85	43.44	7.58	64.43	51.02	74.00	54.00	-2.98	ΑV

#### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11n(5Ghz) 20M mode (Antenna A+B)

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745 MHz Test By Bondi Temperature Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
5725.00	62.33	46 13	7 32	69 65	53 45	74 00	54 00	-0.55	ΑV

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745 MHz Test By Bondi Temperature Pol Hor. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m	)(dBuV/m)	(dB)	
5725.00	60.90	47.29	5.95	66.85	53.24	74.00	54.00	-0.76	ΑV

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11n(5Ghz) 20M mode (Antenna A+B)

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825 MHz Test By Bondi Temperature Pol Ver. 25

65 % Humidity

	Peak	$\mathbf{AV}$		Actu	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m	)(dBuV/m)	(dB)	
5850.00	54.81	43.21	7.58	62.39	50.79	74.00	54.00	-3.21	ΑV

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825 MHz Test By Bondi Temperature Pol Hor. 25

Humidity 65 %

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	)(dBuV/m)	(dB)	
•	5850.00	58.21	45.08	7.58	65.79	52.66	74.00	54.00	-1.34	ΑV

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11n(5Ghz) 40M mode (Antenna A+B)

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745 MHz Test By Bondi Temperature Pol Ver. 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m	)(dBuV/m)	(dB)	
5725.00	60.95	46.11	7.33	68.28	53.44	74.00	54.00	-0.56	ΑV

Operation Mode TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745 MHz Test By Bondi Temperature Pol Hor. 25

Humidity 65 %

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
-	5725.00	62.25	46.23	7.33	69.58	53.56	74.00	54.00	-0.44	ΑV

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Emission: 802.11n(5Ghz) 40M mode (Antenna A+B)

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825 MHz Test By Bondi Temperature 25 Pol Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	ıal FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m	)(dBuV/m)	( <b>dB</b> )	
5850.00	49.33	38.74	7.58	56.91	46.32	74.00	54.00	-7.68	ΑV

Operation Mode TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825 MHz Test By Bondi Temperature 25 Pol Hor.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
5850.00	51.43	39.64	7.58	59.01	47.22	74.00	54.00	-6.78	ΑV

### Remark:

- (1) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (2) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- (3) Spectrum Peak Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz- 40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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#### SPURIOUS RADIATED EMISSION TEST 8

# 8.1 Standard Applicable

According to §15.247(c), all other emissions outside these bands shall not exceed the general radiated emission limits specified in §15.209(a). And according to §15.33(a)(1), for an intentional radiator operates below 10GHz, the frequency range of measurements: to the tenth harmonic of the highest fundamental frequency or to 40GHz, whichever is lower.

According to RSS-210 issue 8,§A8.5, In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the radio frequency power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under section A8.4(4), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Tables 2 and 3 is not required. In addition, radiated emissions which fall in the restricted bands of Table 1 must also comply with the radiated emission limits specified in Tables 2 and 3

### 8.2 Measurement Equipment Used:

### 8.2.1. Conducted Emission at antenna port:

Refer to section 6.2 for details.

### 8.2.2. Radiated emission:

Refer to section 7.2.2 for details.

### 8.3 Test SET-UP:

### 8.3.1. Conducted Emission at antenna port:

Refer to section 6.3 for details.

### 8.3.2. Radiated emission:

Refer to section 7.3 for details.

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### **8.4 Measurement Procedure:**

- 1. The EUT was placed on a turn table which is 0.8m above ground plane.
- 2. The turn table shall rotate 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emissions.
- 4. When measurement procedures for electric field radiated emissions above 1 GHz the EUT measurement is to be made "while keeping the antenna in the 'cone of radiation' from that area and pointed at the area both in azimuth and elevation, with polarization oriented for maximum response." is still within the 3dB illumination BW of the measurement antenna.
- 5. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 6. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 7. Repeat above procedures until all frequency measured were complete.

# 8.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor(if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where	FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
	RA = Reading Amplitude	AG = Amplifier Gain
	AF = Antenna Factor	

### **8.6 Measurement Result:**

For the measurement of conducted spurious emission, refer to them from the original modular report:

FCC: INTEL-090601F / IC: INTEL-090601IC

Note: Refer to next page spectrum analyzer data chart and tabular data sheets for radiated emission.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11b)

Operation Mode 802.11b TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Temperature Pol Ver./Hor 25

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
127.00	V	Peak	48.55	-14.09	34.46	43.50	-9.04
228.85	V	Peak	41.64	-14.56	27.08	46.00	-18.92
299.66	V	Peak	44.81	-12.45	32.36	46.00	-13.64
398.60	V	Peak	49.96	-10.93	39.03	46.00	-6.97
422.85	V	Peak	52.37	-10.42	41.95	46.00	-4.05
532.46	V	Peak	48.10	-8.48	39.62	46.00	-6.38
151.25	Н	Peak	39.78	-12.20	27.58	43.50	-15.92
248.25	Н	Peak	45.74	-13.91	31.83	46.00	-14.17
272.50	Н	Peak	50.24	-13.12	37.12	46.00	-8.88
393.75	Н	Peak	47.70	-11.00	36.70	46.00	-9.30
427.70	Н	Peak	43.73	-10.29	33.44	46.00	-12.56
534.40	Н	Peak	39.87	-8.44	31.43	46.00	-14.57

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11b)

Operation Mode 802.11b TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature Ver./Hor 25

Humidity 65 %

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	128.94	V	Peak	48.58	-13.97	34.61	43.50	-8.89
	228.85	V	Peak	41.20	-14.56	26.64	46.00	-19.36
	299.66	V	Peak	44.43	-12.45	31.98	46.00	-14.02
	396.66	V	Peak	49.43	-10.94	38.49	46.00	-7.51
	422.85	V	Peak	52.34	-10.42	41.92	46.00	-4.08
	532.46	V	Peak	47.63	-8.48	39.15	46.00	-6.85
	136.70	Н	Peak	41.49	-13.26	28.23	43.50	-15.27
	248.25	Н	Peak	45.86	-13.91	31.95	46.00	-14.05
	277.35	Н	Peak	49.47	-13.01	36.46	46.00	-9.54
	396.66	Н	Peak	47.36	-10.94	36.42	46.00	-9.58
	422.85	Н	Peak	42.67	-10.42	32.25	46.00	-13.75
	532.46	Н	Peak	40.21	-8.48	31.73	46.00	-14.27

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11b)

802.11b TX CH High Operation Mode Test Date Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Temperature Pol Ver./Hor 25

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	<b>Actual FS</b>	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	48.77	-13.97	34.80	43.50	-8.70
248.25	V	Peak	40.97	-13.91	27.06	46.00	-18.94
299.66	V	Peak	43.46	-12.45	31.01	46.00	-14.99
390.84	V	Peak	48.97	-11.03	37.94	46.00	-8.06
425.76	V	Peak	52.54	-10.33	42.21	46.00	-3.79
532.46	V	Peak	49.31	-8.48	40.83	46.00	-5.17
151.25	Н	Peak	39.61	-12.20	27.41	43.50	-16.09
248.25	Н	Peak	46.54	-13.91	32.63	46.00	-13.37
280.26	Н	Peak	49.14	-12.95	36.19	46.00	-9.81
398.60	Н	Peak	46.69	-10.93	35.76	46.00	-10.24
427.70	Н	Peak	42.65	-10.29	32.36	46.00	-13.64
532.46	Н	Peak	39.03	-8.48	30.55	46.00	-15.45

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11g)

Operation Mode 802.11g TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Temperature Pol Ver./Hor 25

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	47.73	-13.97	33.76	43.50	-9.74
228.85	V	Peak	41.16	-28.82	-14.56	46.00	-60.56
301.60	V	Peak	44.72	-30.89	-12.41	46.00	-58.41
393.75	V	Peak	50.38	-28.73	-11.00	46.00	-57.00
425.76	V	Peak	52.40	-22.52	-10.33	46.00	-56.33
534.40	V	Peak	46.21	-20.08	-8.44	46.00	-54.44
146.40	Н	Peak	39.68	-12.51	27.17	43.50	-16.33
243.40	Н	Peak	45.39	-13.99	31.40	46.00	-14.60
277.35	Н	Peak	49.25	-13.01	36.24	46.00	-9.76
400.54	Н	Peak	46.15	-10.91	35.24	46.00	-10.76
415.09	Н	Peak	43.16	-10.58	32.58	46.00	-13.42
532.46	Н	Peak	37.63	-8.48	29.15	46.00	-16.85

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11g)

802.11g TX CH Mid Operation Mode Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Temperature Pol Ver./Hor 25

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
131.85	V	Peak	47.65	-13.72	33.93	43.50	-9.57
243.40	V	Peak	40.68	-13.99	26.69	46.00	-19.31
301.60	V	Peak	44.97	-12.41	32.56	46.00	-13.44
393.75	V	Peak	50.11	-11.00	39.11	46.00	-6.89
425.76	V	Peak	52.13	-10.33	41.80	46.00	-4.20
532.46	V	Peak	47.64	-8.48	39.16	46.00	-6.84
119.24	Н	Peak	41.68	-14.63	27.05	43.50	-16.45
250.19	Н	Peak	45.55	-13.88	31.67	46.00	-14.33
267.65	Н	Peak	49.86	-13.30	36.56	46.00	-9.44
393.75	Н	Peak	46.91	-11.00	35.91	46.00	-10.09
427.70	Н	Peak	42.45	-10.29	32.16	46.00	-13.84
652.74	Н	Peak	35.22	-5.97	29.25	46.00	-16.75

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11g)

802.11g TX CH High Operation Mode Test Date Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	<b>Actual FS</b>	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	47.86	-13.97	33.89	43.50	-9.61
250.19	V	Peak	40.75	-13.88	26.87	46.00	-19.13
299.66	V	Peak	44.82	-12.45	32.37	46.00	-13.63
390.84	V	Peak	50.49	-11.03	39.46	46.00	-6.54
425.76	V	Peak	52.25	-10.33	41.92	46.00	-4.08
532.46	V	Peak	46.48	-8.48	38.00	46.00	-8.00
134.76	Н	Peak	42.79	-13.41	29.38	43.50	-14.12
248.25	Н	Peak	45.69	-13.91	31.78	46.00	-14.22
282.20	Н	Peak	49.49	-12.90	36.59	46.00	-9.41
396.66	Н	Peak	47.50	-10.94	36.56	46.00	-9.44
427.70	Н	Peak	42.47	-10.29	32.18	46.00	-13.82
665.35	Н	Peak	35.15	-5.72	29.43	46.00	-16.57

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n 20M)

Operation Mode 802.11n\_20M TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Pol Temperature Ver./Hor 25

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
125.06	V	Peak	50.71	-14.21	36.50	43.50	-7.00
228.85	V	Peak	41.60	-14.56	27.04	46.00	-18.96
301.60	V	Peak	43.72	-12.41	31.31	46.00	-14.69
388.90	V	Peak	49.52	-11.05	38.47	46.00	-7.53
425.76	V	Peak	52.08	-10.33	41.75	46.00	-4.25
534.40	V	Peak	48.10	-8.44	39.66	46.00	-6.34
175.50	Н	Peak	41.55	-13.79	27.76	43.50	-15.74
250.19	Н	Peak	45.86	-13.88	31.98	46.00	-14.02
270.56	Н	Peak	49.03	-13.17	35.86	46.00	-10.14
396.66	Н	Peak	47.89	-10.94	36.95	46.00	-9.05
422.85	Н	Peak	42.84	-10.42	32.42	46.00	-13.58
534.40	Н	Peak	38.24	-8.44	29.80	46.00	-16.20

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n\_20M)

Operation Mode 802.11g/n\_20M TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature Ver./Hor 25

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
127.00	V	Peak	49.20	-14.09	35.11	43.50	-8.39
228.85	V	Peak	41.49	-14.56	26.93	46.00	-19.07
299.66	V	Peak	44.58	-12.45	32.13	46.00	-13.87
396.66	V	Peak	52.12	-10.94	41.18	46.00	-4.82
427.70	V	Peak	52.17	-10.29	41.88	46.00	-4.12
534.40	V	Peak	49.02	-8.44	40.58	46.00	-5.42
151.25	Н	Peak	39.29	-12.20	27.09	43.50	-16.41
243.40	Н	Peak	45.73	-13.99	31.74	46.00	-14.26
267.65	Н	Peak	49.45	-13.30	36.15	46.00	-9.85
393.75	Н	Peak	46.94	-11.00	35.94	46.00	-10.06
427.70	Н	Peak	43.04	-10.29	32.75	46.00	-13.25
534.40	Н	Peak	41.53	-8.44	33.09	46.00	-12.91

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n 20M)

802.11g/n\_20M TX CH High Operation Mode Test Date Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature Ver./Hor 25

Humidity 65 %

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	128.94	V	Peak	47.51	-13.97	33.54	43.50	-9.96
	231.76	V	Peak	41.44	-14.38	27.06	46.00	-18.94
	299.66	V	Peak	43.44	-12.45	30.99	46.00	-15.01
	390.84	V	Peak	52.33	-11.03	41.30	46.00	-4.70
	425.76	V	Peak	52.55	-10.33	42.22	46.00	-3.78
	532.46	V	Peak	46.17	-8.48	37.69	46.00	-8.31
	151.25	Н	Peak	39.82	-12.20	27.62	43.50	-15.88
	248.25	Н	Peak	45.92	-13.91	32.01	46.00	-13.99
	270.56	Н	Peak	49.19	-13.17	36.02	46.00	-9.98
	400.54	Н	Peak	46.54	-10.91	35.63	46.00	-10.37
	427.70	Н	Peak	42.58	-10.29	32.29	46.00	-13.71
	532.46	Н	Peak	37.66	-8.48	29.18	46.00	-16.82

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n\_40M)

Operation Mode 802.11g/n\_40M TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 2422MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	<b>Actual FS</b>	Limit3m	Safe Margin
 (MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	48.10	-13.97	34.13	43.50	-9.37
248.25	V	Peak	40.58	-13.91	26.67	46.00	-19.33
299.66	V	Peak	44.48	-12.45	32.03	46.00	-13.97
398.60	V	Peak	49.11	-10.93	38.18	46.00	-7.82
425.76	V	Peak	53.15	-10.33	42.82	46.00	-3.18
532.46	V	Peak	49.67	-8.48	41.19	46.00	-4.81
151.25	Н	Peak	39.46	-12.20	27.26	43.50	-16.24
248.25	Н	Peak	45.95	-13.91	32.04	46.00	-13.96
272.50	Н	Peak	49.39	-13.12	36.27	46.00	-9.73
388.90	Н	Peak	48.56	-11.05	37.51	46.00	-8.49
416.06	Н	Peak	43.11	-10.58	32.53	46.00	-13.47
532.46	Н	Peak	38.89	-8.48	30.41	46.00	-15.59

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n\_40M)

Operation Mode 802.11g/n\_40M TX CH Mid **Test Date** Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
13185	V	Peak	47.30	-13.72	33.58	54.00	-20.42
228.85	V	Peak	41.76	-14.56	27.20	46.00	-18.80
301.60	V	Peak	45.24	-12.41	32.83	46.00	-13.17
396.66	V	Peak	49.24	-10.94	38.30	46.00	-7.70
422.85	V	Peak	52.46	-10.42	42.04	46.00	-3.96
534.40	V	Peak	46.26	-8.44	-1.49	46.00	-47.49
151.25	Н	Peak	39.77	-12.20	27.57	43.50	-15.93
248.25	Н	Peak	45.57	-13.91	31.66	46.00	-14.34
267.65	Н	Peak	49.36	-13.30	36.06	46.00	-9.94
393.75	Н	Peak	46.52	-11.00	35.52	46.00	-10.48
427.70	Н	Peak	43.12	-10.29	32.83	46.00	-13.17
532.46	Н	Peak	39.66	-8.48	31.18	46.00	-14.82

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n 40M)

Operation Mode 802.11g/n\_40M TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2452MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
131.85	V	Peak	49.33	-13.72	35.61	43.50	-7.89
228.85	V	Peak	40.95	-14.56	26.39	46.00	-19.61
301.60	V	Peak	44.27	-12.41	31.86	46.00	-14.14
398.60	V	Peak	51.19	-10.93	40.26	46.00	-5.74
425.76	V	Peak	52.40	-10.33	42.07	46.00	-3.93
534.40	V	Peak	46.44	-8.44	38.00	46.00	-8.00
158.04	Н	Peak	39.20	-12.00	27.20	43.50	-16.30
248.25	Н	Peak	45.65	-13.91	31.74	46.00	-14.26
284.14	Н	Peak	49.08	-12.86	36.22	46.00	-9.78
396.66	Н	Peak	48.18	-10.94	37.24	46.00	-8.76
427.70	Н	Peak	43.01	-10.29	32.72	46.00	-13.28
672.14	Н	Peak	34.96	-5.65	29.31	46.00	-16.69

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11a)

Operation Mode 802.11a TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 5745MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Mar- gin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	48.01	-13.97	34.04	43.50	-9.46
228.85	V	Peak	41.48	-14.56	26.92	46.00	-19.08
299.66	V	Peak	45.11	-12.45	32.66	46.00	-13.34
400.54	V	Peak	48.95	-10.91	38.04	46.00	-7.96
425.76	V	Peak	52.49	-10.33	42.16	46.00	-3.84
532.46	V	Peak	48.66	-8.48	40.18	46.00	-5.82
151.25	Н	Peak	39.35	-12.20	27.15	43.50	-16.35
241.46	Н	Peak	46.02	-14.03	31.99	46.00	-14.01
267.65	Н	Peak	51.10	-13.30	37.80	46.00	-8.20
398.60	Н	Peak	48.43	-10.93	37.50	46.00	-8.50
427.70	Н	Peak	42.95	-10.29	32.66	46.00	-13.34
534.40	Н	Peak	38.08	-8.44	29.64	46.00	-16.36

### Remark:

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11a)

Operation Mode 802.11a TX CH Mid **Test Date** Mar. 18, 2011

Fundamental Frequency 5785MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Mar- gin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
131.85	V	Peak	48.78	-13.72	35.06	43.50	-8.44
243.4	V	Peak	40.93	-13.99	26.94	46.00	-19.06
299.66	V	Peak	44.72	-12.45	32.27	46.00	-13.73
393.75	V	Peak	49.97	-11	38.97	46.00	-7.03
425.76	V	Peak	52.51	-10.33	42.18	46.00	-3.82
534.4	V	Peak	45.79	-8.44	37.35	46.00	-8.65
141.55	Н	Peak	40.13	-12.95	27.18	43.50	-16.32
248.25	Н	Peak	45.95	-13.91	32.04	46.00	-13.96
287.05	Н	Peak	49.12	-12.77	36.35	46.00	-9.65
396.66	Н	Peak	47.1	-10.94	36.16	46.00	-9.84
427.7	Н	Peak	43.35	-10.29	33.06	46.00	-12.94
532.46	Н	Peak	38.71	-8.48	30.23	46.00	-15.77

### Remark:

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11a)

Operation Mode 802.11a TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Mar- gin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
131.85	V	Peak	46.7	-13.72	32.98	43.50	-10.52
228.85	V	Peak	41.54	-14.56	26.98	46.00	-19.02
301.6	V	Peak	43.63	-12.41	31.22	46.00	-14.78
393.75	V	Peak	51.79	-11	40.79	46.00	-5.21
425.76	V	Peak	52.77	-10.33	42.44	46.00	-3.56
534.4	V	Peak	46.9	-8.44	38.46	46.00	-7.54
154.16	Н	Peak	39.11	-12.18	26.93	43.50	-16.57
248.25	Н	Peak	46.23	-13.91	32.32	46.00	-13.68
282.2	Н	Peak	49.21	-12.9	36.31	46.00	-9.69
390.84	Н	Peak	46.95	-11.03	35.92	46.00	-10.08
427.7	Н	Peak	42.67	-10.29	32.38	46.00	-13.62
532.46	Н	Peak	38.13	-8.48	29.65	46.00	-16.35

### Remark:

- (1) Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- (3) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (4) The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n(5GHz)\_20M)

Operation Mode 802.11a/n\_20M TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 5745MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	47.59	-13.97	33.62	43.50	-9.88
231.76	V	Peak	41.33	-14.38	26.95	46.00	-19.05
299.66	V	Peak	44.52	-12.45	32.07	46.00	-13.93
393.75	V	Peak	48.40	-11.00	37.40	46.00	-8.60
425.76	V	Peak	52.66	-10.33	42.33	46.00	-3.67
534.40	V	Peak	47.84	-8.44	39.40	46.00	-6.60
154.16	Н	Peak	39.27	-12.18	27.09	43.50	-16.41
243.40	Н	Peak	46.19	-13.99	32.20	46.00	-13.80
280.26	Н	Peak	49.63	-12.95	36.68	46.00	-9.32
393.75	Н	Peak	45.86	-11.00	34.86	46.00	-11.14
427.70	Н	Peak	43.17	-10.29	32.88	46.00	-13.12
532.46	Н	Peak	39.14	-8.48	30.66	46.00	-15.34

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n(5GHz)\_20M)

Operation Mode 802.11a/n 20M TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 5785MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
131.85	V	Peak	47.10	-13.72	33.38	43.50	-10.12
228.85	V	Peak	41.44	-14.56	26.88	46.00	-19.12
301.60	V	Peak	41.42	-12.41	29.01	46.00	-16.99
393.75	V	Peak	53.46	-11.00	42.46	46.00	-3.54
425.76	V	Peak	53.40	-10.33	43.07	46.00	-2.93
534.40	V	Peak	43.54	-8.44	35.10	46.00	-10.90
154.16	Н	Peak	39.41	-12.18	27.23	43.50	-16.27
212.36	Н	Peak	46.70	-15.58	31.12	43.50	-12.38
282.20	Н	Peak	49.47	-12.90	36.57	46.00	-9.43
400.54	Н	Peak	45.13	-10.91	34.22	46.00	-11.78
425.76	Н	Peak	42.83	-10.33	32.50	46.00	-13.50
691.54	Н	Peak	35.42	-5.39	30.03	46.00	-15.97

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n(5GHz) 20M)

Operation Mode 802.11a/n\_20M TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature Ver./Hor 25

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	47.46	-13.97	33.49	43.50	-10.01
228.85	V	Peak	41.98	-14.56	27.42	46.00	-18.58
301.60	V	Peak	41.38	-12.41	28.97	46.00	-17.03
400.54	V	Peak	49.64	-10.91	38.73	46.00	-7.27
425.76	V	Peak	53.06	-10.33	42.73	46.00	-3.27
534.40	V	Peak	48.91	-8.44	40.47	46.00	-5.53
177.44	Н	Peak	41.46	-14.09	27.37	43.50	-16.13
212.36	Н	Peak	46.93	-15.58	31.35	43.50	-12.15
267.65	Н	Peak	50.09	-13.30	36.79	46.00	-9.21
396.66	Н	Peak	49.01	-10.94	38.07	46.00	-7.93
425.76	Н	Peak	42.74	-10.33	32.41	46.00	-13.59
691.54	Н	Peak	35.43	-5.39	30.04	46.00	-15.96

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n(5GHz)\_40M)

Operation Mode 802.11a/n 40M TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 5755MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	128.94	V	Peak	43.39	-13.97	29.42	43.50	-14.08
	224.00	V	Peak	42.16	-14.82	27.34	46.00	-18.66
	299.66	V	Peak	41.87	-12.45	29.42	46.00	-16.58
	425.76	V	Peak	49.00	-10.33	38.67	46.00	-7.33
	505.30	V	Peak	39.93	-9.02	30.91	46.00	-15.09
	864.20	V	Peak	35.72	-3.01	32.71	46.00	-13.29
	151.25	Н	Peak	39.68	-12.20	27.48	43.50	-16.02
	212.36	Н	Peak	45.71	-15.58	30.13	43.50	-13.37
	274.44	Н	Peak	48.66	-13.06	35.60	46.00	-10.40
	427.70	Н	Peak	42.89	-10.29	32.60	46.00	-13.40
	500.45	Н	Peak	35.31	-9.09	26.22	46.00	-19.78
	864.20	Н	Peak	34.45	-3.01	31.44	46.00	-14.56

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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# Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n(5GHz) 40M)

Operation Mode 802.11a/n\_40M TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 5795MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
128.94	V	Peak	44.01	-13.97	30.04	43.50	-13.46
228.85	V	Peak	41.63	-14.56	27.07	46.00	-18.93
299.66	V	Peak	42.41	-12.45	29.96	46.00	-16.04
427.70	V	Peak	49.16	-10.29	38.87	46.00	-7.13
516.94	V	Peak	43.97	-8.81	35.16	46.00	-10.84
864.20	V	Peak	34.97	-3.01	31.96	46.00	-14.04
151.25	Н	Peak	39.85	-12.20	27.65	43.50	-15.85
212.36	Н	Peak	45.76	-15.58	30.18	43.50	-13.32
282.20	Н	Peak	47.07	-12.90	34.17	46.00	-11.83
384.05	Н	Peak	40.15	-11.08	29.07	46.00	-16.93
427.70	Н	Peak	44.56	-10.29	34.27	46.00	-11.73
641.10	Н	Peak	35.33	-6.15	29.18	46.00	-16.82

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

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# Radiated Spurious Emission Measurement Result (above 1GHz) (802.11b)

802.11b TX CH Low Operation Mode Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Temperature 25 Pol Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4770.0	30.66		5.18	35.84		74.00	54.00	-18.16	Peak
4824.0						74.00	54.00		
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		
14472.0						74.00	54.00		
16884.0						74.00	54.00		
19296.0						74.00	54.00		
21708.0						74.00	54.00		
24120.0						74.00	54.00		

#### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11b)

Operation Mode 802.11b TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0	30.48		5.33	35.81		74.00	54.00	-18.19	Peak
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		
14472.0						74.00	54.00		
16884.0						74.00	54.00		
19296.0						74.00	54.00		
21708.0						74.00	54.00		
24120.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11b)

Operation Mode 802.11b TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	29.87		5.42	35.29		74.00	54.00	-18.71	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11b)

Operation Mode 802.11b TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	31.15		5.42	36.57		74.00	54.00	-17.43	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11b)

Operation Mode 802.11b TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4802.5	29.85		5.25	35.10		74.00	54.00	-18.90	Peak
4924.0						74.00	54.00		
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		
14772.0						74.00	54.00		
17234.0						74.00	54.00		
19696.0						74.00	54.00		
22158.0						74.00	54.00		
24620.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11b)

Operation Mode 802.11b TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		<b>Actual FS</b>		Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4924.0	30.76		5.51	36.27		74.00	54.00	-17.73	Peak
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		
14772.0						74.00	54.00		
17234.0						74.00	54.00		
19696.0						74.00	54.00		
22158.0						74.00	54.00		
24620.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g)

Operation Mode 802.11g TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Temperature 25 Pol Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		<b>Actual FS</b>		Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4757.0	29.99		5.13	35.12		74.00	54.00	-18.88	Peak
4824.0						74.00	54.00		
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		
14472.0						74.00	54.00		
16884.0						74.00	54.00		
19296.0						74.00	54.00		
21708.0						74.00	54.00		

#### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g)

Operation Mode 802.11g TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4692.0	30.41		4.95	35.36		74.00	54.00	-18.64	Peak
4824.0						74.00	54.00		
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		
14472.0						74.00	54.00		
16884.0						74.00	54.00		
19296.0						74.00	54.00		
21708.0						74.00	54.00		
24120.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g)

Operation Mode 802.11g TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Temperature Pol Ver 25

Humidity 65 %

	Peak	$\mathbf{AV}$		<b>Actual FS</b>		Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	29.48		5.36	34.84		74.00	54.00	-19.16	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

#### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g)

Operation Mode 802.11g TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	30.06		5.25	35.31		74.00	54.00	-18.69	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g)

Operation Mode 802.11g TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4705.0	30.27		5.00	35.27		74.00	54.00	-18.73	Peak
4924.0						74.00	54.00		
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		
14772.0						74.00	54.00		
17234.0						74.00	54.00		
19696.0						74.00	54.00		
22158.0						74.00	54.00		
24620.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g)

Operation Mode 802.11g TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4867.5	29.57		5.42	34.99		74.00	54.00	-19.01	Peak
4924.0						74.00	54.00		
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		
14772.0						74.00	54.00		
17234.0						74.00	54.00		
19696.0						74.00	54.00		
22158.0						74.00	54.00		
24620.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n 20M)

Operation Mode 802.11n 20M TX CH Low Mar. 18, 2011 **Test Date** 

Fundamental Frequency 2412MHz Test By Bondi Pol Temperature 25 Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0	29.64		5.20	34.84		74.00	54.00	-19.16	Peak
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		
14472.0						74.00	54.00		
16884.0						74.00	54.00		
19296.0						74.00	54.00		
21708.0						74.00	54.00		
24120.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n\_20M)

Operation Mode 802.11n 20M TX CH Low Mar. 18, 2011 **Test Date** 

Fundamental Frequency 2412MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0	30.10		5.30	35.40		74.00	54.00	-18.60	Peak
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		
14472.0						74.00	54.00		
16884.0						74.00	54.00		
19296.0						74.00	54.00		
21708.0						74.00	54.00		
24120.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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## Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 20M)

Operation Mode 802.11n 20M TX CH Mid **Test Date** Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4705.0	30.21		5.00	35.21		74.00	54.00	-18.79	Peak
4874.0						74.00	54.00		
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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## Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 20M)

Operation Mode 802.11n 20M TX CH Mid **Test Date** Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4692.0	30.65		4.95	35.60		74.00	54.00	-18.40	Peak
4874.0						74.00	54.00		
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 20M)

Operation Mode 802.11n\_20M TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4672.5	30.53		4.88	35.41		74.00	54.00	-18.59	Peak
4924.0						74.00	54.00		
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		
14772.0						74.00	54.00		
17234.0						74.00	54.00		
19696.0						74.00	54.00		
22158.0						74.00	54.00		
24620.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 20M)

Operation Mode 802.11n\_20M TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2462MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4737.5	29.76		5.08	34.84		74.00	54.00	-19.16	Peak
4924.0						74.00	54.00		
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		
14772.0						74.00	54.00		
17234.0						74.00	54.00		
19696.0						74.00	54.00		
22158.0						74.00	54.00		
24620.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n\_40M)

Operation Mode 802.11n 40M TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 2422MHz Test By Bondi Pol Temperature 25 Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4844.0	30.18		5.30	35.48		74.00	54.00	-18.52	Peak
7266.0						74.00	54.00		
9688.0						74.00	54.00		
12110.0						74.00	54.00		
14532.0						74.00	54.00		
16954.0						74.00	54.00		
19376.0						74.00	54.00		
21798.0						74.00	54.00		
24220.0						74.00	54.00		

#### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n\_40M)

Operation Mode 802.11n 40M TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 2422MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4844.0	29.48		5.51	34.99		74.00	54.00	-19.01	Peak
7266.0						74.00	54.00		
9688.0						74.00	54.00		
12110.0						74.00	54.00		
14532.0						74.00	54.00		
16954.0						74.00	54.00		
19376.0						74.00	54.00		
21798.0						74.00	54.00		
24220.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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## Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 40M)

Operation Mode 802.11n 40M TX CH Mid **Test Date** Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0						74.00	54.00		
4965.0	30.20		5.62	35.82		74.00	54.00	-18.18	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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## Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 40M)

Operation Mode 802.11n 40M TX CH Mid **Test Date** Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0						74.00	54.00		
5043.0	29.41		5.87	35.28		74.00	54.00	-18.72	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		
14622.0						74.00	54.00		
17059.0						74.00	54.00		
19496.0						74.00	54.00		
21933.0						74.00	54.00		
24370.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 40M)

802.11n\_40M TX CH High Operation Mode Test Date Mar. 18, 2011

Test By Fundamental Frequency 2452MHz Bondi Pol Temperature Ver 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4904.0	29.88		5.46	35.34		74.00	54.00	-18.66	Peak
7356.0						74.00	54.00		
9808.0						74.00	54.00		
12260.0						74.00	54.00		
14712.0						74.00	54.00		
17164.0						74.00	54.00		
19616.0						74.00	54.00		
22068.0						74.00	54.00		
24520.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n 40M)

Operation Mode 802.11n\_40M TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 2452MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4904.0						74.00	54.00		
5095.0	29.46		6.02	35.48		74.00	54.00	-18.52	Peak
7356.0						74.00	54.00		
9808.0						74.00	54.00		
12260.0						74.00	54.00		
14712.0						74.00	54.00		
17164.0						74.00	54.00		
19616.0						74.00	54.00		
22068.0						74.00	54.00		
24520.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a)

Operation Mode 802.11a TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745MHz Test By Bondi Temperature 25 Pol Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4770.0	30.18		5.18	35.36		74.00	54.00	-18.64	Peak
11490.0	22.93		18.80	41.73		74.00	54.00	-12.27	Peak
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						74.00	54.00		
34470.0						74.00	54.00		
40215.0						74.00	54.00		
45960.0						74.00	54.00		
51705.0						74.00	54.00		
57450.0						74.00	54.00		

### Remark:

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column<sub>o</sub>
- (4) Spectrum Peak Setting: 1GHz-40GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a)

Operation Mode 802.11a TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 5745MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	-
4588.00	30.59		4.60	35.19		74.00	54.00	-18.81	Peak
11490.0	22.76		18.76	41.52		74.00	54.00	-12.48	Peak
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						74.00	54.00		
34470.0						74.00	54.00		
40215.0						74.00	54.00		
45960.0						74.00	54.00		
51705.0						74.00	54.00		
57450.0						74.00	54.00		

#### Remark:

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column<sub>o</sub>
- (4) Spectrum Peak Setting: 1GHz-40GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a)

Operation Mode 802.11a TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 5785MHz Test By Bondi Pol Temperature Ver 25

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	ī
4653.00	30.64		4.82	35.46		74.00	54.00	-18.54	Peak
11570.0	22.77		18.72	41.49		74.00	54.00	-12.51	Peak
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						74.00	54.00		
34710.0						74.00	54.00		
40495.0						74.00	54.00		
46280.0						74.00	54.00		
52065.0						74.00	54.00		
57850.0						74.00	54.00		

#### Remark:

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column<sub>o</sub>
- (4) Spectrum Peak Setting: 1GHz-40GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a)

Operation Mode 802.11a TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 5785MHz Test By Bondi Temperature 25 Pol Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4770.00	30.84		5.18	36.02		74.00	54.00	-17.98	Peak
11570.0	22.88		18.75	41.63		74.00	54.00	-12.37	Peak
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						74.00	54.00		
34710.0						74.00	54.00		
40495.0						74.00	54.00		
46280.0						74.00	54.00		
52065.0						74.00	54.00		
57850.0						74.00	54.00		

### Remark:

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column<sub>o</sub>
- (4) Spectrum Peak Setting: 1GHz-40GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a)

Operation Mode 802.11a TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	-
4757.00	30.35		5.13	35.48		74.00	54.00	-18.52	Peak
11469.00	23.25		18.76	42.01		74.00	54.00	-11.99	Peak
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						74.00	54.00		
34950.0						74.00	54.00		
40775.0						74.00	54.00		
46600.0						74.00	54.00		
52425.0						74.00	54.00		
58250.0						74.00	54.00		

#### Remark:

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column<sub>o</sub>
- (4) Spectrum Peak Setting: 1GHz-40GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a)

Operation Mode 802.11a TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
3873.00	34.21		2.25	36.46		74.00	54.00	-17.54	Peak
11650.0	22.97		18.64	41.61		74.00	54.00	-12.39	Peak
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						74.00	54.00		
34950.0						74.00	54.00		
40775.0						74.00	54.00		
46600.0						74.00	54.00		
52425.0						74.00	54.00		
58250.0						74.00	54.00		

#### Remark:

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency.
- (2) Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (3) Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column<sub>o</sub>
- (4) Spectrum Peak Setting: 1GHz-40GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- (5) Spectrum AV Setting: 1GHz-40GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5GHz) 20M)

Operation Mode 802.11a/n 20M TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745MHz Test By Bondi Pol Temperature 25 Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4822.0	30.21		5.30	35.51		74.00	54.00	-18.49	Peak
11490.0	23.11		18.8	41.91		74.00	54.00	-12.09	Peak
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						74.00	54.00		
34470.0						74.00	54.00		
40215.0						74.00	54.00		
45960.0						74.00	54.00		
51705.0						74.00	54.00		
57450.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5Ghz) 20M)

Operation Mode 802.11a/n 20M TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5745MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4802.5	31.20		5.25	36.45		74.00	54.00	-17.55	Peak
11490.0	23.28		18.52	41.80		74.00	54.00	-12.20	Peak
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						74.00	54.00		
34470.0						74.00	54.00		
40215.0						74.00	54.00		
45960.0						74.00	54.00		
51705.0						74.00	54.00		
57450.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5Ghz)\_20M)

Operation Mode 802.11a/n 20M TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 5785MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4802.5	30.42		5.25	35.67		74.00	54.00	-18.33	Peak
11570.0	23.1		18.75	41.85		74.00	54.00	-12.15	Peak
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						74.00	54.00		
34710.0						74.00	54.00		
40495.0						74.00	54.00		
46280.0						74.00	54.00		
52065.0						74.00	54.00		
57850.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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## Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5GHz) 20M)

Operation Mode 802.11a/n 20M TX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 5785MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4757.0	30.99		5.13	36.12		74.00	54.00	-17.88	Peak
11570.0	23.92		18.76	42.68		74.00	54.00	-11.32	Peak
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						74.00	54.00		
34710.0						74.00	54.00		
40495.0						74.00	54.00		
46280.0						74.00	54.00		
52065.0						74.00	54.00		
57850.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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## Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5Ghz) 20M)

Operation Mode 802.11a/n\_20M TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
7155.5	34.31		2.25	36.56		74.00	54.00	-17.44	Peak
11650.0	23.65		18.59	42.24		74.00	54.00	-11.76	Peak
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						74.00	54.00		
34950.0						74.00	54.00		
40775.0						74.00	54.00		
46600.0						74.00	54.00		
52425.0						74.00	54.00		
58250.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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## Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5GHz) 20M)

Operation Mode 802.11a/n\_20M TX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4822.0	30.49		5.30	35.79		74.00	54.00	-18.21	Peak
11650.0	23.06		18.76	41.82		74.00	54.00	-12.18	Peak
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						74.00	54.00		
34950.0						74.00	54.00		
40775.0						74.00	54.00		
46600.0						74.00	54.00		
52425.0						74.00	54.00		
58250.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5GHz) 40M)

Operation Mode 802.11a/n 40M TX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5755MHz Test By Bondi Pol Temperature 25 Ver.

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4757.0	30.93		5.13	36.06		74.00	54.00	-17.94	Peak
11510.0	23.32		18.75	42.07		74.00	54.00	-11.93	Peak
17265.0						74.00	54.00		
23020.0						74.00	54.00		
28775.0						74.00	54.00		
34530.0						74.00	54.00		
40285.0						74.00	54.00		
46040.0						74.00	54.00		
51795.0						74.00	54.00		
57550.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5Ghz)\_40M)

Operation Mode 802.11a/n 40M TX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 5755MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4822.0	30.48		5.30	35.78		74.00	54.00	-18.22	Peak
11510.0	23.20		18.68	41.88		74.00	54.00	-12.12	Peak
17265.0						74.00	54.00		
23020.0						74.00	54.00		
28775.0						74.00	54.00		
34530.0						74.00	54.00		
40285.0						74.00	54.00		
46040.0						74.00	54.00		
51795.0						74.00	54.00		
57550.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5Ghz) 40M)

Operation Mode 802.11a/n\_40M TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 5795MHz Test By Bondi Pol Temperature 25 Ver

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4867.5	30.34		5.42	35.76		74.00	54.00	-18.24	Peak
11590.0	23.13		18.69	41.82		74.00	54.00	-12.18	Peak
17385.0						74.00	54.00		
23180.0						74.00	54.00		
28975.0						74.00	54.00		
34770.0						74.00	54.00		
40565.0						74.00	54.00		
46360.0						74.00	54.00		
52155.0						74.00	54.00		
57950.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n(5GHz) 40M)

Operation Mode 802.11a/n\_40M TX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 5795MHz Test By Bondi Pol Temperature 25 Hor

Humidity 65 %

	Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4770.0	30.51		5.18	35.69		74.00	54.00	-18.31	Peak
11590.0	23.26		18.80	42.06		74.00	54.00	-11.94	Peak
17385.0						74.00	54.00		
23180.0						74.00	54.00		
28975.0						74.00	54.00		
34770.0						74.00	54.00		
40565.0						74.00	54.00		
46360.0						74.00	54.00		
52155.0						74.00	54.00		
57950.0						74.00	54.00		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11b) (worst case)

Operation Mode 802.11b RX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Temperature 25 Pol Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
134.76	V	Peak	42.96	-13.41	29.55	43.50	-13.95
224.00	V	Peak	41.97	-14.82	27.15	46.00	-18.85
299.66	V	Peak	41.64	-12.45	29.19	46.00	-16.81
427.70	V	Peak	50.19	-10.29	39.90	46.00	-6.10
536.34	V	Peak	40.50	-8.41	32.09	46.00	-13.91
641.10	V	Peak	38.34	-6.15	32.19	46.00	-13.81
154.16	Н	Peak	39.80	-12.18	27.62	43.50	-15.88
212.36	Н	Peak	46.00	-15.58	30.42	43.50	-13.08
282.20	Н	Peak	46.64	-12.90	33.74	46.00	-12.26
425.76	Н	Peak	42.58	-10.33	32.25	46.00	-13.75
493.66	Н	Peak	39.73	-9.24	30.49	46.00	-15.51
689.60	Н	Peak	35.01	-5.41	29.60	46.00	-16.40

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11g) (worst case)

Operation Mode 802.11g RX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
V	Peak	42.60	-13.40	29.20	43.50	-14.30
V	Peak	41.77	-14.82	26.95	46.00	-19.05
V	Peak	42.06	-12.45	29.61	46.00	-16.39
V	Peak	49.80	-10.42	39.38	46.00	-6.62
V	Peak	40.42	-9.09	31.33	46.00	-14.67
V	Peak	38.49	-6.15	32.34	46.00	-13.66
Н	Peak	39.58	-12.20	27.38	43.50	-16.12
Н	Peak	46.30	-15.58	30.72	43.50	-12.78
Н	Peak	47.67	-13.30	34.37	46.00	-11.63
Н	Peak	41.22	-10.93	30.29	46.00	-15.71
Н	Peak	42.41	-10.42	31.99	46.00	-14.01
Н	Peak	36.24	-6.12	30.12	46.00	-15.88
	H/V  V  V  V  V  V  H  H  H  H	Mode H/V (PK/QP)  V Peak V Peak V Peak V Peak V Peak V Peak H Peak	Ant.Pol.         Mode         Reading           H/V         (PK/QP)         (dBuV)           V         Peak         42.60           V         Peak         41.77           V         Peak         42.06           V         Peak         49.80           V         Peak         40.42           V         Peak         38.49           H         Peak         46.30           H         Peak         47.67           H         Peak         41.22           H         Peak         42.41	Ant.Pol. H/VMode (PK/QP)Reading (dBuV)Factor 	Ant.Pol. H/VMode (PK/QP)Reading (dBuV)Factor (dB)Actual FSVPeak42.60-13.4029.20VPeak41.77-14.8226.95VPeak42.06-12.4529.61VPeak49.80-10.4239.38VPeak40.42-9.0931.33VPeak38.49-6.1532.34HPeak46.30-15.5830.72HPeak47.67-13.3034.37HPeak41.22-10.9330.29HPeak42.41-10.4231.99	Ant.Pol.         Mode         Reading         Factor         Actual FS         Limitsm           H/V         (PK/QP)         (dBuV)         (dB)         (dBuV/m)         (dBuV/m)           V         Peak         42.60         -13.40         29.20         43.50           V         Peak         41.77         -14.82         26.95         46.00           V         Peak         42.06         -12.45         29.61         46.00           V         Peak         49.80         -10.42         39.38         46.00           V         Peak         40.42         -9.09         31.33         46.00           V         Peak         38.49         -6.15         32.34         46.00           H         Peak         46.30         -15.58         30.72         43.50           H         Peak         47.67         -13.30         34.37         46.00           H         Peak         41.22         -10.93         30.29         46.00           H         Peak         42.41         -10.42         31.99         46.00

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n\_20M) (worst case)

Operation Mode 802.11g/n RX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
 (MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
136.70	V	Peak	42.23	-13.26	28.97	43.50	-14.53
224.00	V	Peak	42.00	-14.82	27.18	46.00	-18.82
299.66	V	Peak	42.49	-12.45	30.04	46.00	-15.96
425.76	V	Peak	49.53	-10.33	39.20	46.00	-6.80
493.66	V	Peak	42.82	-9.24	33.58	46.00	-12.42
643.04	V	Peak	37.83	-6.12	31.71	46.00	-14.29
158.04	Н	Peak	39.33	-12.00	27.33	43.50	-16.17
212.36	Н	Peak	45.75	-15.58	30.17	43.50	-13.33
267.65	Н	Peak	47.51	13.30	60.81	46.00	14.81
427.70	Н	Peak	43.27	-10.29	32.98	46.00	-13.02
500.45	Н	Peak	35.13	-9.09	26.04	46.00	-19.96
668.26	Н	Peak	35.26	-5.70	29.56	46.00	-16.44

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11n 40M) (worst case)

Operation Mode 802.11g/n\_40M RX CH High Test Date Mar. 18, 2011

Fundamental Frequency 2452MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
134.76	V	Peak	43.01	-13.41	29.60	43.50	-13.90
224.00	V	Peak	41.69	-14.82	26.87	46.00	-19.13
301.60	V	Peak	42.63	-12.41	30.22	46.00	-15.78
427.70	V	Peak	49.57	-10.29	39.28	46.00	-6.72
505.30	V	Peak	39.92	-9.02	30.90	46.00	-15.10
864.20	V	Peak	35.89	-3.01	32.88	46.00	-13.12
158.04	Н	Peak	39.59	-12.00	27.59	43.50	-15.91
206.54	Н	Peak	46.00	-15.86	30.14	43.50	-13.36
277.35	Н	Peak	48.70	-13.01	35.69	46.00	-10.31
427.70	Н	Peak	42.63	-10.29	32.34	46.00	-13.66
500.45	Н	Peak	37.84	-9.09	28.75	46.00	-17.25
864.20	Н	Peak	35.74	-3.01	32.73	46.00	-13.27

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11a) (worst case)

Operation Mode 802.11a RX CH High **Test Date** Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	134.76	V	Peak	42.43	-13.41	29.02	43.50	-14.48
	228.85	V	Peak	41.83	-14.56	27.27	46.00	-18.73
	301.60	V	Peak	43.89	-12.41	31.48	46.00	-14.52
	427.70	V	Peak	49.66	-10.29	39.37	46.00	-6.63
	516.94	V	Peak	39.46	-8.81	30.65	46.00	-15.35
	864.20	V	Peak	36.03	-3.01	33.02	46.00	-12.98
	151.25	Н	Peak	39.94	-12.20	27.74	43.50	-15.76
	206.54	Н	Peak	46.35	-15.86	30.49	43.50	-13.01
	267.65	Н	Peak	48.21	-13.30	34.91	46.00	-11.09
	357.86	Н	Peak	41.70	-11.45	30.25	46.00	-15.75
	427.70	Н	Peak	42.39	-10.29	32.10	46.00	-13.90
	668.26	Н	Peak	35.20	-5.70	29.50	46.00	-16.50

### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11a/n 20M) (worst case)

Operation Mode 802.11a/n\_20M RX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5825MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
134.76	V	Peak	43.12	-13.41	29.71	43.50	-13.79
228.85	V	Peak	41.80	-14.56	27.24	46.00	-18.76
301.60	V	Peak	42.74	-12.41	30.33	46.00	-15.67
427.70	V	Peak	49.81	-10.29	39.52	46.00	-6.48
534.40	V	Peak	40.90	-8.44	32.46	46.00	-13.54
864.20	V	Peak	36.26	-3.01	33.25	46.00	-12.75
151.25	Н	Peak	39.59	-12.20	27.39	43.50	-16.11
212.36	Н	Peak	46.05	-15.58	30.47	43.50	-13.03
280.26	Н	Peak	47.05	-12.95	34.10	46.00	-11.90
427.70	Н	Peak	42.80	-10.29	32.51	46.00	-13.49
571.26	Н	Peak	35.92	-7.70	28.22	46.00	-17.78
864.20	Н	Peak	35.89	-3.01	32.88	46.00	-13.12

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (below 1GHz) (802.11a/n\_40M) (worst case)

Operation Mode 802.11a/n\_40M RX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 5755MHz Test By Bondi Pol Temperature 25 Ver./Hor

Humidity 65 %

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
134.76	V	Peak	42.23	-13.41	28.82	43.50	-14.68
228.85	V	Peak	41.77	-14.56	27.21	46.00	-18.79
299.66	V	Peak	42.86	-12.45	30.41	46.00	-15.59
427.70	V	Peak	49.85	-10.29	39.56	46.00	-6.44
505.30	V	Peak	40.48	-9.02	31.46	46.00	-14.54
641.10	V	Peak	38.79	-6.15	32.64	46.00	-13.36
154.16	Н	Peak	39.42	-12.18	27.24	43.50	-16.26
212.36	Н	Peak	46.36	-15.58	30.78	43.50	-12.72
267.65	Н	Peak	47.59	-13.30	34.29	46.00	-11.71
427.70	Н	Peak	42.65	-10.29	32.36	46.00	-13.64
561.56	Н	Peak	34.82	-7.86	26.96	46.00	-19.04
864.20	Н	Peak	36.84	-3.01	33.83	46.00	-12.17

#### Remark:

- 1 Measuring frequencies from 30 MHz to the 1GHz<sub>o</sub>
- 2 Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/QP detector mode.
- 3 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 4 The IF bandwidth of SPA between 30MHz to 1GHz was 100KHz.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11 b) (worst case)

Operation Mode 802.11b RX CH High Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Pol Ver. / Hor Temperature 25

Humidity 65 %

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Ant.Pol.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4924.0	V	30.20		5.61	35.81		74.00	54.00	-18.19	Peak
7386.0	V						74.0	54.0		
9848.0	V						74.0	54.0		
12310.0	V						74.0	54.0		
4705.0	Н	31.89		4.90	36.79		74.00	54.00	-17.21	Peak
4924.0	H						74.0	54.0		
7386.0	H						74.0	54.0		
9848.0	H						74.0	54.0		
12310.0	H						74.0	54.0		

#### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g) (worst case)

Operation Mode 802.11g RX CH Low Test Date Mar. 18, 2011

Fundamental Frequency 2412MHz Test By Bondi Pol Ver. / Hor. Temperature 25

Humidity 65 %

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Ant.Pol.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0	V						74.0	54.0		
4952.0	V	30.80		5.57	36.37		74.00	54.00	-17.63	Peak
7236.0	V						74.0	54.0		
9648.0	V						74.0	54.0		
12060.0	V						74.0	54.0		
4824.0	Н						74.0	54.0		
4932.5	Н	30.84		5.52	36.36		74.00	54.00	-17.64	Peak
7236.0	Н						74.0	54.0		
9648.0	Н						74.0	54.0		
12060.0	H						74.0	54.0		

#### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown "-" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW=1MHz, VBW=3MHz, Sweep time=200 ms.
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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# Radiated Spurious Emission Measurement Result (above 1GHz) (802.11g/n\_20M) (worst case)

Operation Mode 802.11n 20M RX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2437MHz Test By Bondi Pol Ver. / Hor. Temperature 25

Humidity 65 %

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Ant.Pol.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	V						74.0	54.0		
4913.0	V	31.12		5.47	36.59		74.00	54.00	-17.41	Peak
7311.0	V						74.0	54.0		
9748.0	V						74.0	54.0		
12185.0	V						74.0	54.0		
4653.0	Н	31.14		4.78	35.92		74.00	54.00	-18.08	Peak
4874.0	H						74.0	54.0		
7311.0	H						74.0	54.0		
9748.0	H						74.0	54.0		
12185.0	Н						74.0	54.0		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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# Radiated Spurious Emission Measurement Result (above 1GHz) (802.11n\_40M) (worst case)

Operation Mode 802.11g/n\_40M RX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 2452MHz Test By Bondi Pol Ver. / Hor. Temperature 25

Humidity 65 %

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Ant.Pol.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	V						74.0	54.0		
4978.0	V	30.95		5.66	36.61		74.00	54.00	-17.39	Peak
7311.0	V						74.0	54.0		
9748.0	V						74.0	54.0		
12185.0	V						74.0	54.0		
4874.0	Н						74.0	54.0		
4952.0	H	30.31		5.57	35.88		74.00	54.00	-18.12	Peak
7311.0	H						74.0	54.0		
9748.0	H						74.0	54.0		
12185.0	Н						74.0	54.0		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a) (worst case)

Operation Mode 802.11a RX CH Low **Test Date** Mar. 18, 2011

Fundamental Frequency 5745MHz Test By Bondi Pol Ver. / Hor. Temperature 25

Humidity 65 %

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Ant.Pol.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4900.0	V						74.0	54.0		
11490.0	V	30.95		5.66	36.61		74.00	54.00	-17.39	Peak
17235.0	V						74.0	54.0		
22980.0	V						74.0	54.0		
28725.0	V						74.0	54.0		
4932.5	Н	28.76		5.52	34.28		74.00	54.00	-19.72	Peak
11490.0	Н	22.80		18.75	41.55		74.00	54.00	-12.45	Peak
17235.0	Н						74.0	54.0		
22980.0	H						74.0	54.0		
28725.0	H						74.0	54.0		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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# Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a/n\_20M) (worst case)

Operation Mode 802.11a/n 20M RX CH Mid Test Date Mar. 18, 2011

Fundamental Frequency 5785MHz Test By Bondi Pol Ver. / Hor. Temperature 25

65 % Humidity

			Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
	Freq.	Ant.Pol.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
_	(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
_	4802.5	V	31.04		5.19	36.23		74.00	54.00	-17.77	Peak
	11570.0	V	24.38		18.59	42.97		74.00	54.00	-11.03	Peak
	17355.0	V						74.0	54.0		
	23140.0	V						74.0	54.0		
	28925.0	V						74.0	54.0		
	4887.0	Н	30.69		5.41	36.10		74.00	54.00	-17.90	Peak
	11570.0	H	24.67		18.76	43.43		74.00	54.00	-10.57	Peak
	17355.0	H						74.0	54.0		
	23140.0	H						74.0	54.0		
	28925.0	H						74.0	54.0		

### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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### Radiated Spurious Emission Measurement Result (above 1GHz) (802.11a/n 40M) (worst case)

Operation Mode 802.11a/n\_40M RX CH High Test Date Mar. 18, 2011

Fundamental Frequency 5795MHz Test By Bondi Pol Ver. / Hor. Temperature 25

65 % Humidity

		Peak	$\mathbf{AV}$		Actu	al FS	Peak	$\mathbf{AV}$		
Freq.	Ant.Pol.	Reading	Reading	Ant./CL	Peak	$\mathbf{AV}$	Limit	Limit	Margin	Remark
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4757.0	V	31.46		5.05	36.51		74.00	54.00	-17.49	Peak
11590.0	V	25.39		18.76	44.15		74.00	54.00	-9.85	Peak
17385.0	V						74.0	54.0		
23180.0	V						74.0	54.0		
28975.0	V						74.0	54.0		
4867.5	Н	30.83		5.37	36.20		74.00	54.00	-17.80	Peak
11590.0	H	24.62		18.68	43.30		74.00	54.00	-10.70	Peak
17385.0	H						74.0	54.0		
23180.0	H						74.0	54.0		
28975.0	H						74.0	54.0		

#### Remark:

- 1 Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency.
- 2 Data of measurement within this frequency range shown " " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- 3 Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4 Spectrum Peak Setting: 1GHz-26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- 5 Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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# 9 Peak Power Spectral Density

# **Standard Applicable:**

According to §15.247(e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

According to RSS-210 issue 8, §A8.2(b) The transmitter power spectral density (into the antenna) shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission or over 1.0 second if the transmission exceeds 1.0 second duration.

# **Measurement Equipment Used:**

Refer to section 6.2 for details.

# 9.3 Test Set-up:

Refer to section 6.3 for details.

#### **9.4** Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as RBW = 3KHz, VBW = 10KHz, Span = 1.5MHz, Sweep=100s
- 4. Record the max. reading.
- 5. Repeat above procedures until all frequency measured were complete.

#### 9.5 **Measurement Result:**

For the measurement of result, refer to them from the original modular report: FCC: INTEL-090601F IC: INTEL-0906011C

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# 10. ANTENNA REQUIREMENT

# 10.1 Standard Applicable:

According to §15.203, Antenna requirement.

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. 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 provisions of this Section. The manufacturer may design the unit so that a broken antenna can be

replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of Sections 15.211, 15.213, 15.217, 15.219, or 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some

field disturbance sensors, or to other intentional radiators which, in accordance with Section 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the

proper antenna is employed so that the limits in this Part are not exceeded.

According to RSS-GEN 7.1.4, a transmitter can only be sold or operated with antennas with which it was certified. A transmitter may be certified with multiple antenna types. An antenna type comprises antennas having similar in-band and out-of-band radiation patterns. Testing shall be performed using the highest-gain antenna of each combination of transmitter and antenna type for which certification is being sought, with the transmitter output power set at the maximum level. Any antenna of the same type and having equal or lesser gain as an antenna that had been successfully tested for certification with the transmitter, will also be considered certified with the transmitter, and may be used and marketed with the transmitter. The manufacturer shall include with the application for certification a list of acceptable antenna types to be used with the transmitter.

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When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on measurement or on data from the antenna manufacturer. Any antenna gain in excess of 6 dBi (6 dB above isotropic gain) shall be added to the measured RF output power before using the power limits specified in RSS-210 or RSS-310 for devices of RF output powers of 10 milliwatts or less. For devices of output powers greater than 10 milliwatts, except devices subject to RSS-210 Annex 8 (Frequency Hopping and Digital Modulation Systems Operating in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz Bands) or RSS-210 Annex 9 (Local Area Network Devices), the total antenna gain shall be added to the measured RF output power before using the specified power limits. For devices subject to RSS-210 Annex 8 or Annex 9, the antenna gain shall not be added.

#### **10.2 Antenna Connected Construction:**

The directional gins of antenna used for transmitting is (Main): 3.26 dBi and the antenna connector is designed with unique type RF connector and no consideration of replacement. Please see EUT photo and antenna spec. for details.

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# 11 99% Bandwidth Measurement

# 11.1. Standard Applicable:

RSS-Gen §4.6.1, the transmitter shall be operated at its maximum carrier power measured under normal test conditions. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution bandwidth shall be set to as close to 1% of the selected span as is possible without being below 1%. The video bandwidth shall be set to 3 times the resolution bandwidth. Video averaging is not permitted. Where practical, a sampling detector shall be used since a peak or, peak hold, may produce a wider bandwidth than actual.

The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded.

The span between the two recorded frequencies is the occupied bandwidth.

# 11.2. Measurement Equipment Used:

Refer to section 6.2 for details.

### 11.3. Test Set-up:

Refer to section 6.3 for details.

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### 11.4. Measurement Procedure:

- 1. Place the EUT on the table and set it in transmitting mode.
- 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
- 3. Set the spectrum analyzer as RBW=1% of the approximate emission bandwidth, VBW = 3 times RBW, Span= 30/60
- 4. Turn on the 99% bandwidth function, max reading...
- 5. Repeat above procedures until all frequency measured were complete.

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### 11.5. Measurement Result:

#### 802.11b

Frequency MHz	99%Bandwidth (MHz)
2412	14.0328
2437	14.0063
2462	14.0359

### 802.11g

002020	
Frequency	99%Bandwidth
MHz	(MHz)
2412	16.9111
2437	16.6126
2462	16.6313

### 802.11n\_20M

Frequency MHz	99%Bandwidth (MHz)
2412	17.9298
2437	17.7422
2462	17.7737

### 802.11n\_40M

Frequency MHz	99%Bandwidth (MHz)
2422	36.0843
2437	35.9909
2462	36.0464

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#### 802.11a

Frequency MHz	99%Bandwidth (MHz)
5745	16.4216
5785	16.4202
5825	16.4228

#### 802.11n(5GHz) 20M

00_11_11(00_111)0111	
Frequency	99%Bandwidth
MHz	(MHz)
5745	17.5919
5785	17.5895
5825	17.5987

#### 802.11n(5GHz) 40M

Frequency MHz	99%Bandwidth (MHz)
5755	35.9457
5795	35.9342

Note: Refer to next page for plots.

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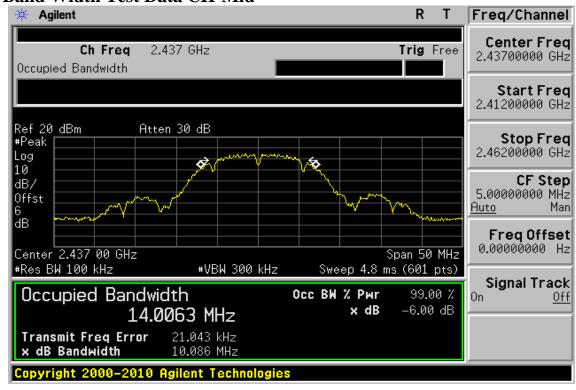
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802.11b 99% Band Width Test Data CH-Low



### 99% Band Width Test Data CH-Mid



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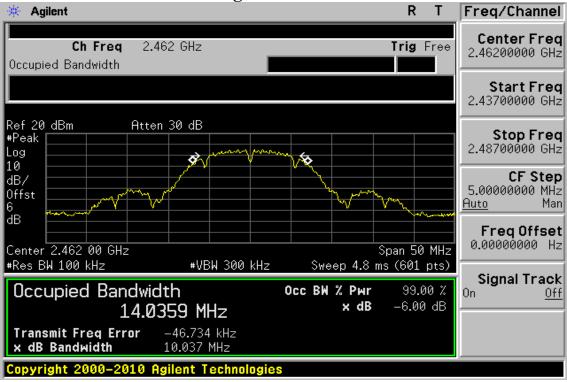
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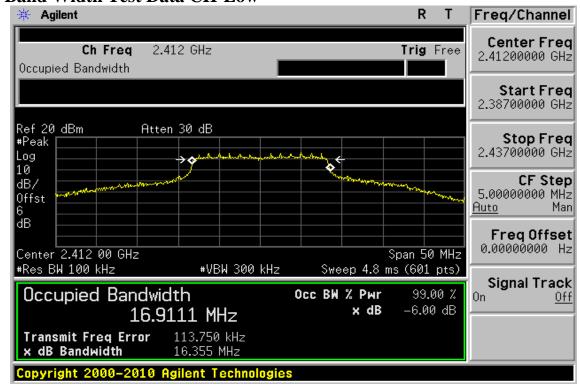
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# 99% Band Width Test Data CH-High



# 802.11g

### 99% Band Width Test Data CH-Low



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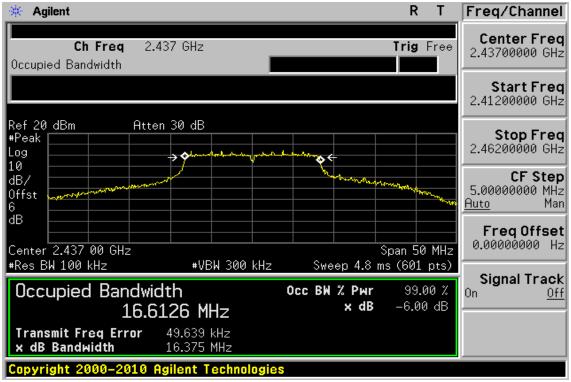
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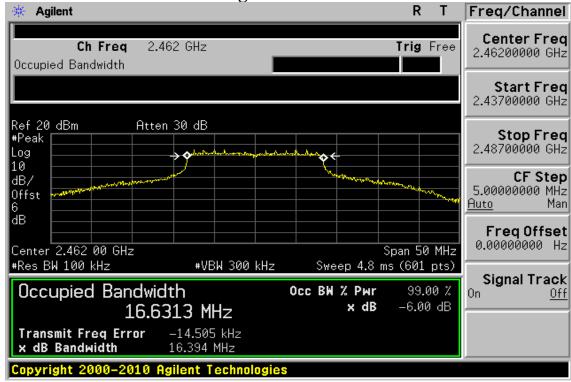
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### 99% Band Width Test Data CH-Mid



# 99% Band Width Test Data CH-High



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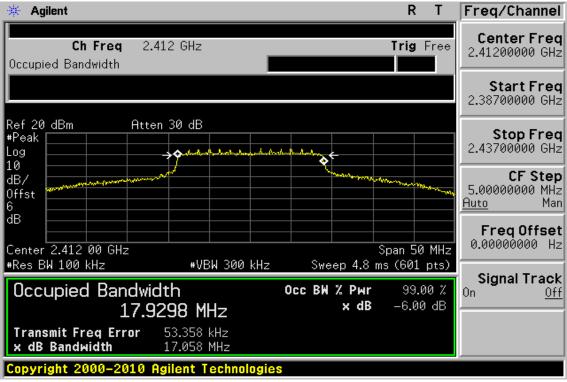
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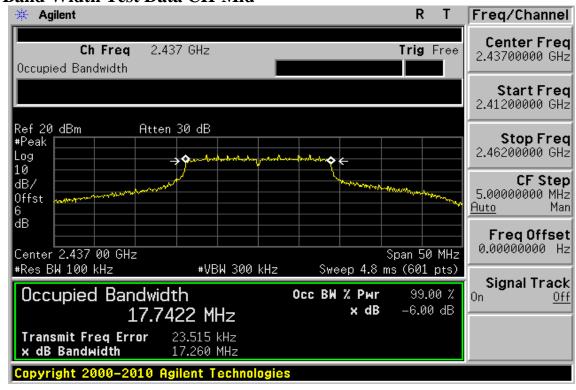
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# 802.11n 20M 99% Band Width Test Data CH-Low



### 99% Band Width Test Data CH-Mid



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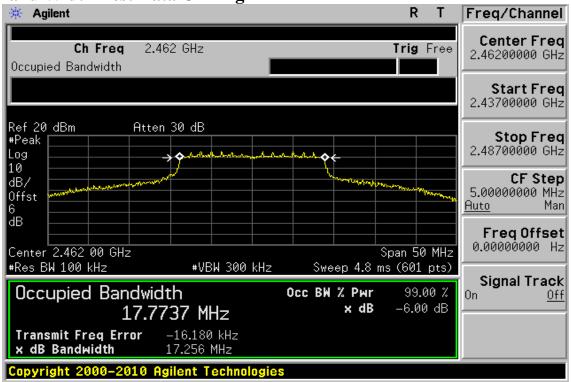
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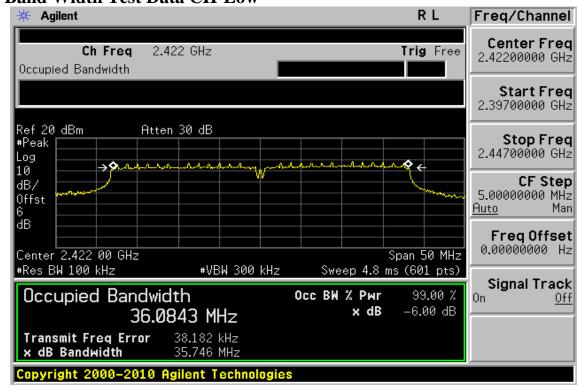
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# 99% Band Width Test Data CH-High



#### 802.11n 40M

### 99% Band Width Test Data CH-Low



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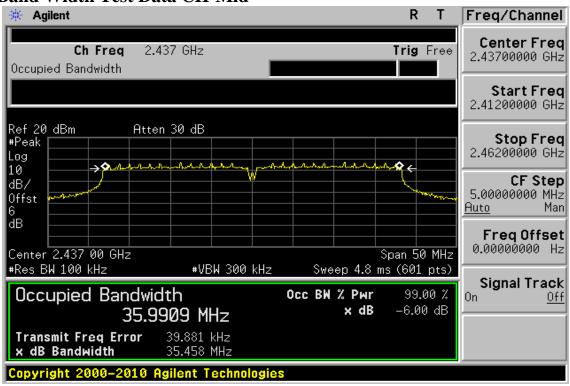
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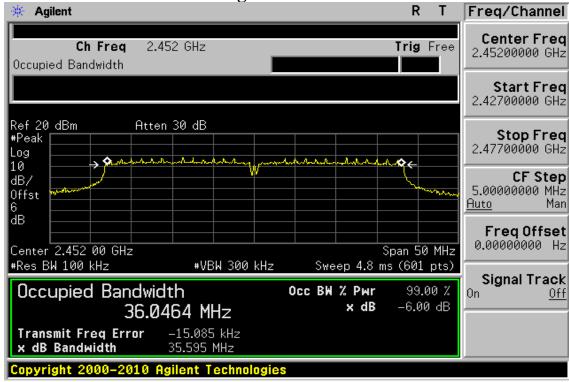
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### 99% Band Width Test Data CH-Mid



# 99% Band Width Test Data CH-High



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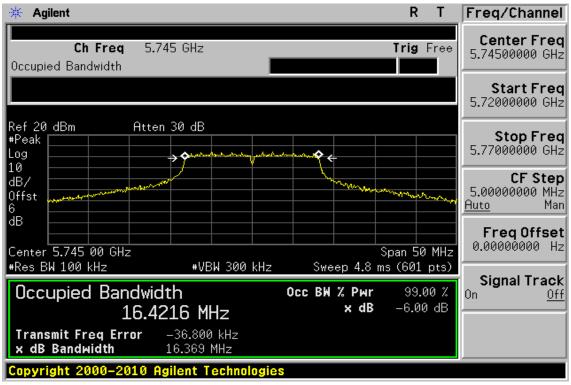
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# 802.11a 99% Band Width Test Data CH-Low



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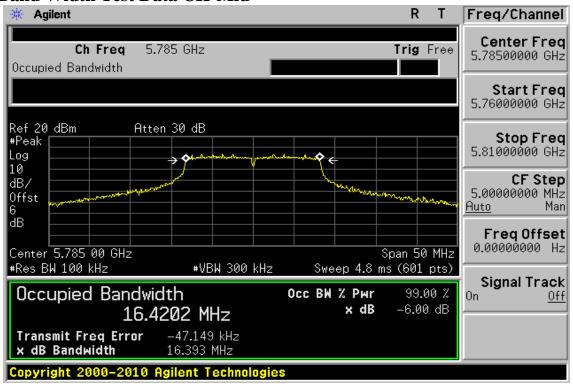
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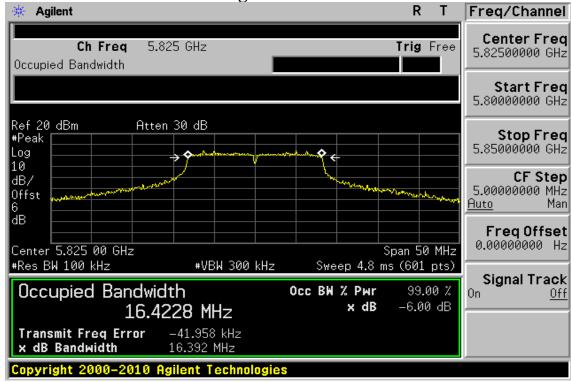
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### 99% Band Width Test Data CH-Mid



# 99% Band Width Test Data CH-High



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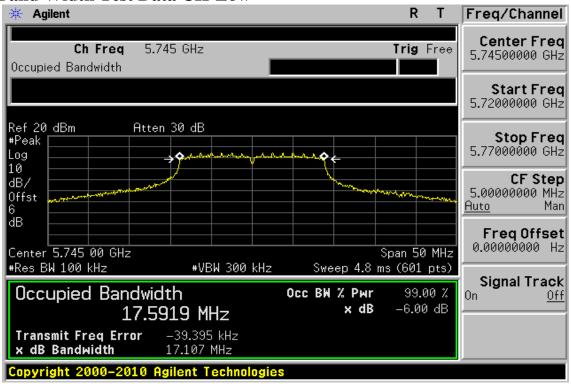
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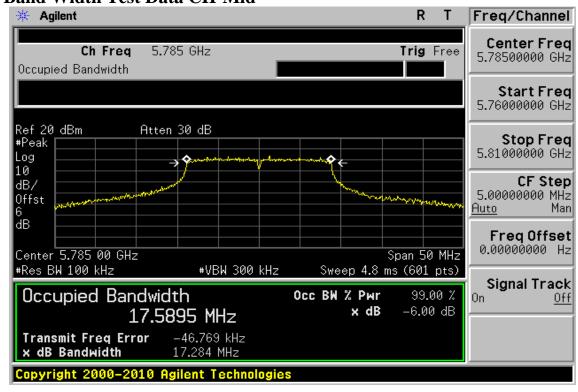
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# 802.11n (5GHz) 20M 99% Band Width Test Data CH-Low



#### 99% Band Width Test Data CH-Mid



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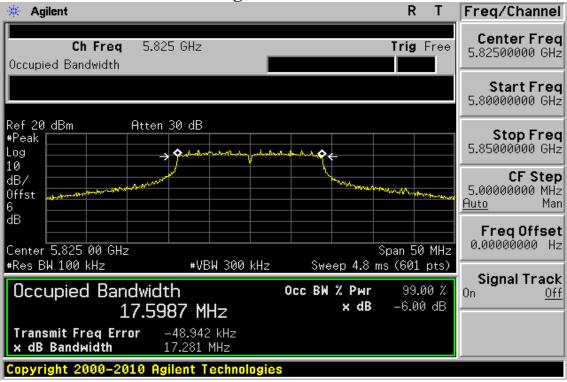
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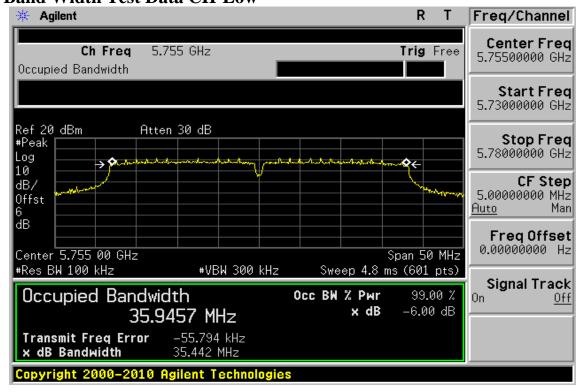
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# 99% Band Width Test Data CH-High



# 802.11n<sub>(5GHz)</sub> 40M

### 99% Band Width Test Data CH-Low



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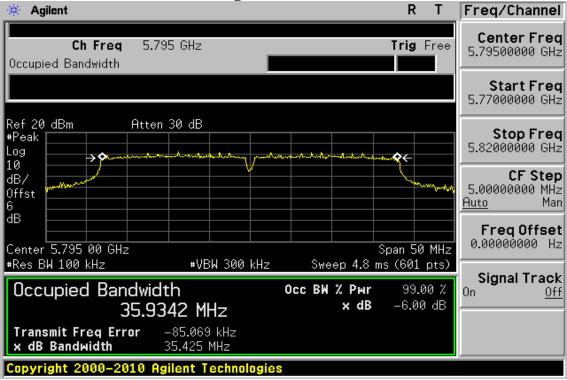
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# 99% Band Width Test Data CH-High



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#### 12 6dB Bandwidth

# 12.1 Standard Applicable:

According to §15.247(a)(2), Systems using digital modulation techniques may operate in the 902 - 928 MHz,2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500kHz.

According to RSS 210 issue 8: 2010Annex 8.2. Systems employing digital modulation techniques (which includes direct sequence) can now be certified under RSS-210 provided they comply with the following requirements: The minimum 6 dB bandwidth shall be at least 500 kHz.

# 12.2 Measurement Equipment Used:

Refer to section 6.2 for details.

# 12.3 Test Set-up:

Refer to section 6.3 for details.

#### 12.4 Measurement Procedure:

- 1.Place the EUT on the table and set it in transmitting mode.
- 2.Remove the antenna from the EUT and then connect a low loss RF cable from the 3.antenna port to the spectrum analyzer.
- 3.Set the spectrum analyzer as RBW=100KHz, VBW = 3\*RBW, Span= 30M/60MHz, Sweep=auto
- 4. Mark the peak frequency and –6dB (upper and lower) frequency.
- 5. Repeat above procedures until all frequency measured were complete.

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# 12.5 Measurement Result:

#### 802.11b

Frequency MHz	6dB Bandwidth (MHz)
2412	10.130
2437	10.086
2462	10.037

### 802.11g

Frequency	6dB Bandwidth
MHz	(MHz)
2412	16.355
2437	16.375
2462	16.394

### 802.11n\_20M

Frequency MHz	6dB Bandwidth (MHz)
2412	17.058
2437	17.260
2462	17.256

### 802.11n\_40M

Frequency MHz	6dB Bandwidth (MHz)
2422	35.746
2437	35.458
2462	35.595

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#### 802.11a

Frequency MHz	6dB Bandwidth (MHz)
5745	16.369
5785	16.393
5825	16.392

### 802.11n(5GHz)\_20M

Frequency MHz	6dB Bandwidth (MHz)
5745	17.107
5785	17.284
5825	17.281

#### 802.11n(5GHz) 40M

Frequency MHz	6dB Bandwidth (MHz)
5755	35.442
5795	35.425

Note: Refer to next page for plots.

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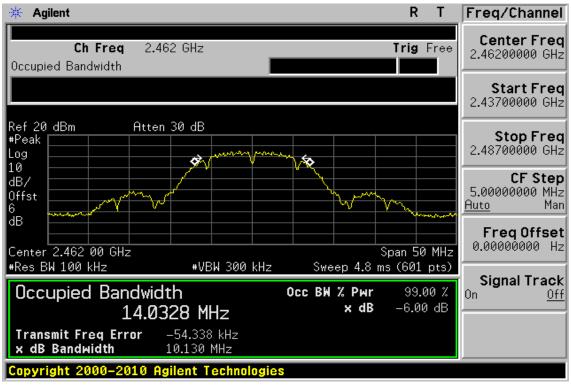
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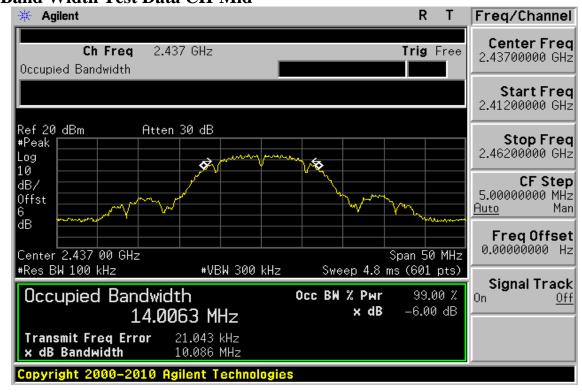
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802.11b 6dB Band Width Test Data CH-Low



#### 6dB Band Width Test Data CH-Mid



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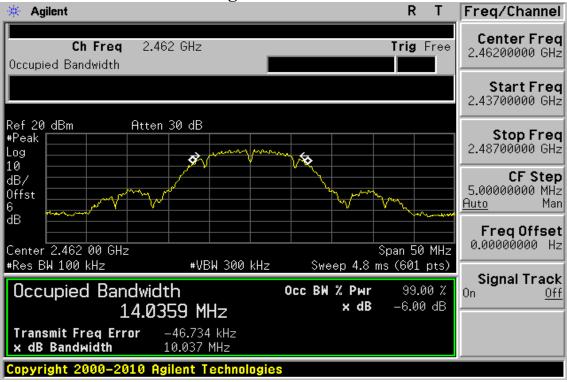
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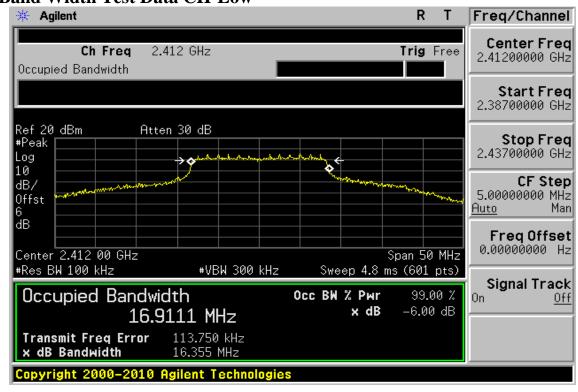
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# 6dB Band Width Test Data CH-High



#### 802.11g

#### 6dB Band Width Test Data CH-Low



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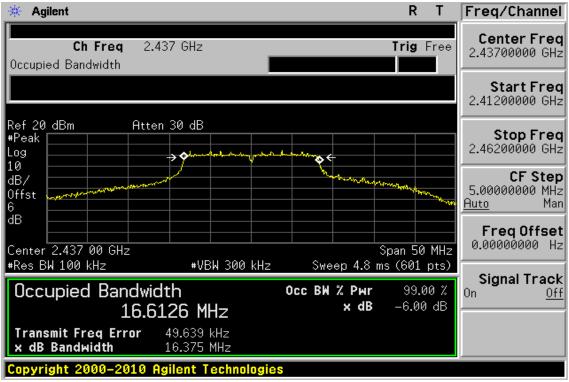
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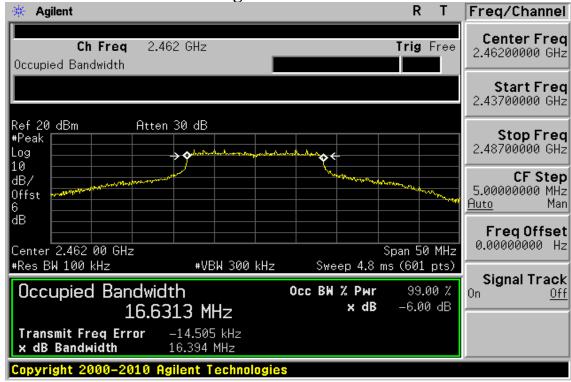
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# 6dB Band Width Test Data CH-Mid



# 6dB Band Width Test Data CH-High



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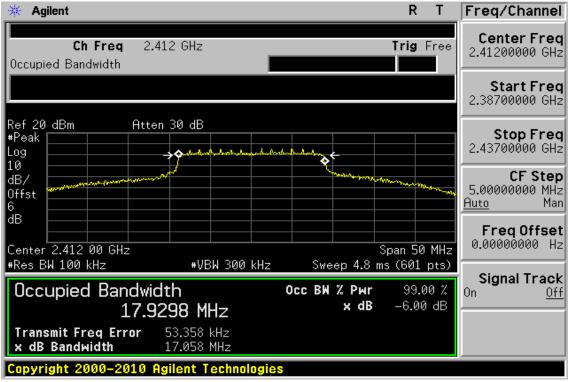
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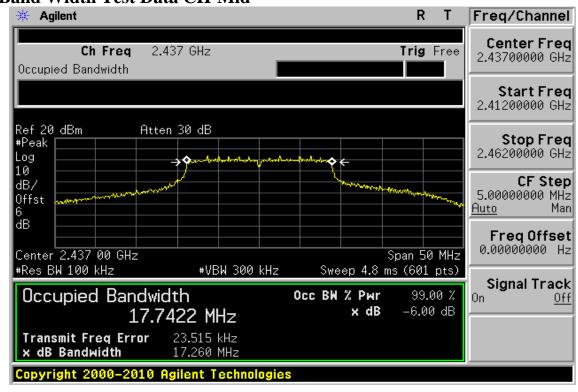
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# 802.11n 20M 6dB Band Width Test Data CH-Low



#### 6dB Band Width Test Data CH-Mid



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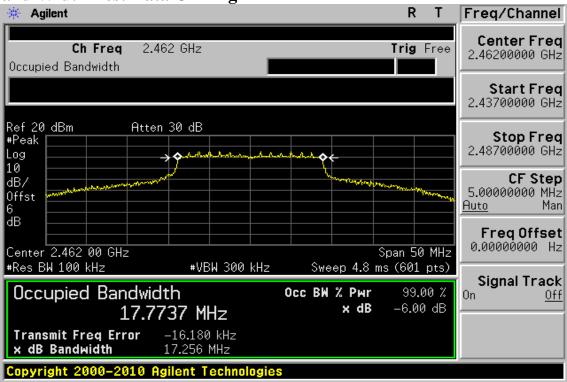
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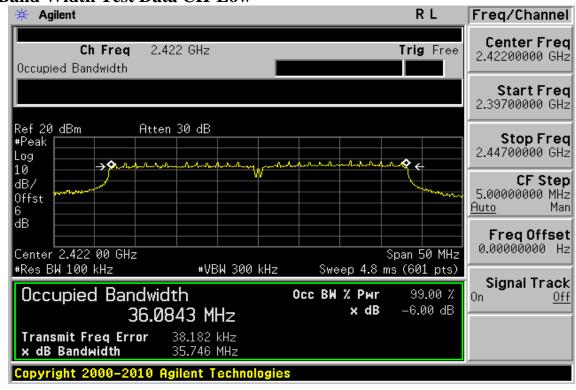
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# 6dB Band Width Test Data CH-High



#### 802.11n 40M

### 6dB Band Width Test Data CH-Low



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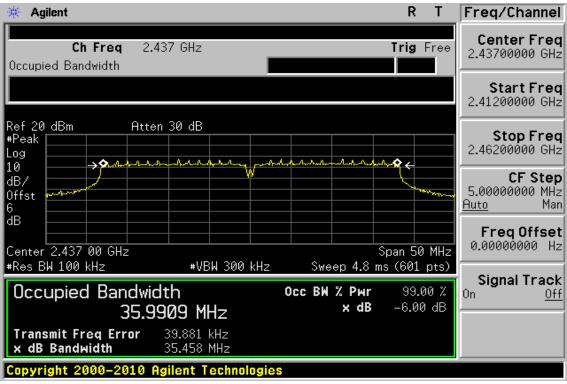
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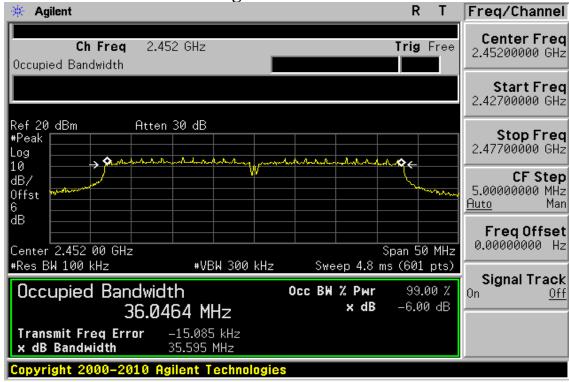
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# 6dB Band Width Test Data CH-Mid



# 6dB Band Width Test Data CH-High



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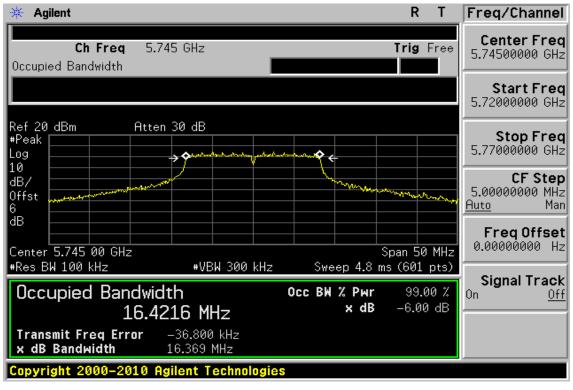
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# 802.11a 6dB Band Width Test Data CH-Low



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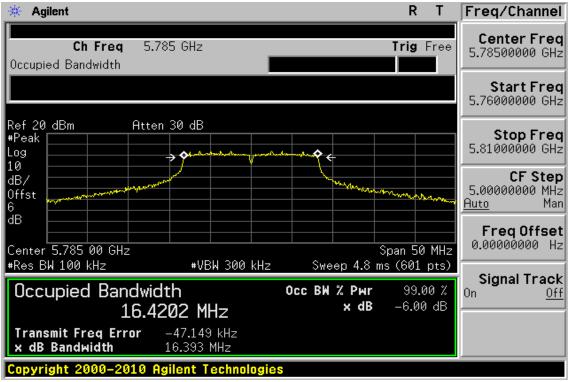
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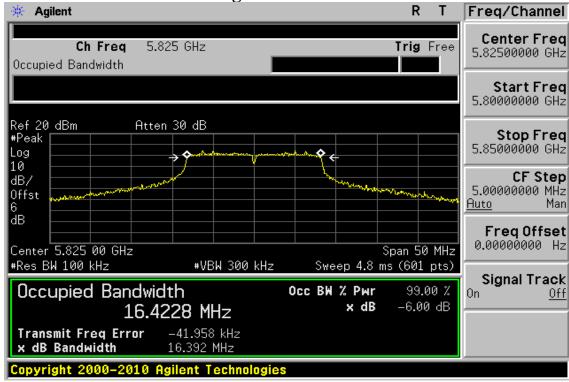
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# 6dB Band Width Test Data CH-Mid



# 6dB Band Width Test Data CH-High



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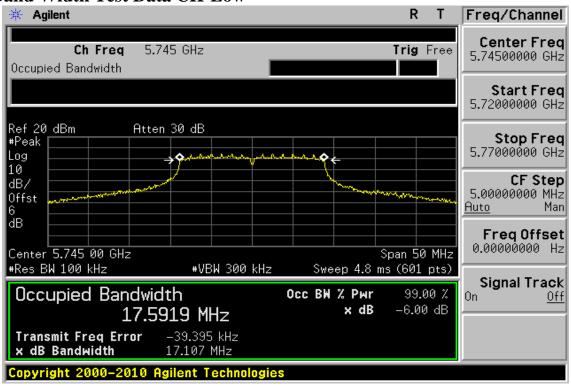
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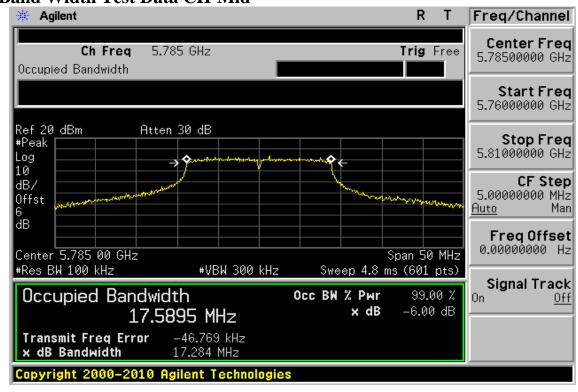
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# 802.11n\_ (5GHz) 20M 6dB Band Width Test Data CH-Low



#### 6dB Band Width Test Data CH-Mid



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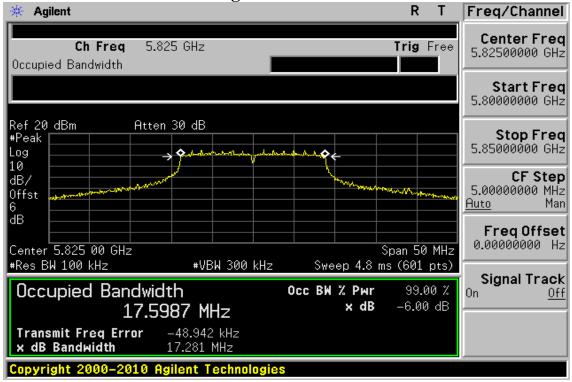
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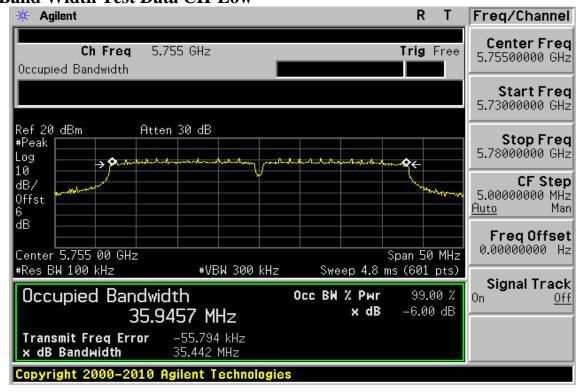
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# 6dB Band Width Test Data CH-High



# 802.11n<sub>(5GHz)</sub> 40M

#### 6dB Band Width Test Data CH-Low



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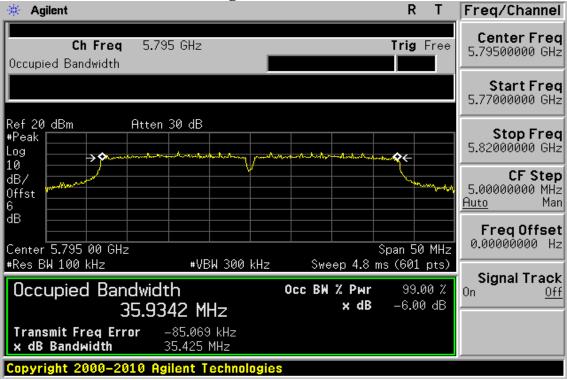
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# 6dB Band Width Test Data CH-High



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