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ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT

 ΔE

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

	OF
Product Name:	Touchpad
Brand Name:	hp
Marketing name	HP TouchPad
Model Name:	HSTNH-I29C
Model Different:	N/A
FCC ID:	B94HHI29C
IC:	466P-HSTNHI29C
Report No.:	EF/2011/30012
Issue Date:	Mar. 29, 2011
FCC Rule Part:	§15.247
IC Rule Part:	RSS-210 issue 8 :2010, Annex 8
Prepared for:	Hewlett-Packard Company
	950 W. Maude Ave, Sunnyvale, CA 94085 USA
Prepared by:	SGS Taiwan Ltd.
	Electronics & Communication Laboratory
	No. 134, Wu Kung Rd., Wuku Industrial Zone,
	Taipei County, Taiwan.
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VERIFICATION OF COMPLIANCE

Applicant:	Hewlett-Packard Company 950 W. Maude Ave, Sunnyvale, CA 94085 USA
Product Name:	Touchpad
Brand Name:	hp
Marketing name	HP TouchPad
FCC ID:	B94HHI29C
IC:	466P-HSTNHI29C
Model No.:	HSTNH-I29C
Model Difference:	N/A
File Number:	EF/2011/30012
Date of test:	Mar. 08, 2011 ~ Mar. 21, 2011
Date of EUT Received:	Mar. 08, 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:	Jazz Huang	Date	Mar. 29, 2011
	Jazz Huang / Engineer		
Prepared By:	Tiffany Kao	Date	Mar. 29, 2011
Approved By:	Jim Chang / Supervisor	Date	Mar. 29, 2011

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Version

Version No. Date		Description
00	Mar. 29, 2011	Initial creation of document

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1 **GENERAL INFORMATION**

Product Description 1.1

General:

General.				
Product Name:	Touchpad			
Brand Name:	hp			
Marketing name	HP TouchPad			
Model Name:	HSTNH-I29C			
Model Difference:	N/A			
Data Cable:	Model: 6191-10E8-0181, Supplier: Foxlink			
	3.7Vdc from battery or 5.3Vdc by AC/DC power adapter			
Power Supply	Adapter: Model: 8395-UW01-1070, Supplier: Foxlink			
Battery: Model: HSTNH-F29C-S, Supplier: Fo				

WLAN: 802.11 a/b/g/n

Wi-Fi	Frequency Range	Channels	Rated Power	Modulation Technology	Type of Emission
11b/g	2412-2462	11	b : 18.65dBm g : 19.25dBm	DSSS, OFDM	b : 14M0G1D g : 16M7G1D
11n (2.4GHz)	HT20 2412-2462	11	n : 19.56dBm	OFDM	17M7G1D

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Wi-Fi	Frequency Range	Channels	Rated Power	Modulation Technology	Type of Emission
	5150~5250	4	16.90dBm		16M4G1D
11a	5250~5350	4	18.38 dBm	OFDM	16M4G1D
	5470~5725	8	17.31dBm		16M5G1D
	HT20 5150~5250	4	HT20:16.68dBm		17M6G1D
11n	HT20 5250~5350	4	HT20:19.36dBm	OFDM	17M6G1D
	HT20 5470~5725	8	HT20:17.96dBm		17M6G1D
	HT40 5150~5250	2	HT40:16.85dBm		36M0G1D
11n	HT40 5250~5350	2	HT40:19.13dBm	OFDM	36M0G1D
	HT40 5470~5725	5	HT40:18.25dBm		36M0G1D
11a	5725-5850	5	a : 18.91 dBm		16M4G1D
11n (5GHz)	HT20 5725-5850	5	HT20: 18.92 dBm	OFDM	17M6G1D
11n (5GHz)	HT40 5725-5850	2	HT40: 18.75 dBm		36M0G1D

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	PIFA Antenna
Antenna Designation	2.4G: 1.21dBi
	5G: -2.50dBi
Madulation type	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
	802.11 n_40MHz: 13.5 – 300Mbps

Bluetooth:

Bluetooth Version	\square V1.1 (GFSK) \square V1.2 (GFSK) \square V2.0 (GFSK) \square V2.0 + EDR (GFSK + π /4DQPSK + 8DPSK) \boxtimes V2.1 + EDR (GFSK + π /4DQPSK + 8DPSK)			
Frequency Range	2402 – 2480MHz			
Channel number	79 channels max.			
Rated Power	5.64 dBm (Peak)			
Modulation type	Frequency Hopping Spread Spectrum			
Antenna Designation	PIFA Antenna / 0.56dBi.			

The EUT is compliance with IEEE 802.11 b/g Standard.

The 2.4G max antenna gain is 1.21dBi which was choosing for Radiated Spurious Emission test.

The 5G max antenna gain is -2.50dBi which was choosing for Radiated Spurious Emission test.

The EUT is compliance with IEEE 802.11 a/b/g /n Standard.

This report applies for frequency bands: 2412MHz - 2462MHz, 5725MHz - 5850MHz.

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

This submittal(s) (test report) is intended for FCC ID: <u>B94HHI29C</u> filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules and IC: 466P-HSTNHI29C 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.

1.4 **Test Facility**

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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SYSTEM TEST CONFIGURATION 2

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.

EUT Exercise 2.2

The EUT (Transmitter) was operated in the engineering mode to fix the Tx 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 of ANSI C63.4-2003.

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Configuration of Tested System 2.4

Fig. 2-1 Conducted Emission Configuration

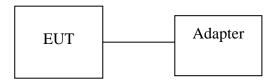


Fig. 2-2 Radiated Emission Configuration



Table 2-1 Equipment Used in Tested System

Item	Equipment	Mfr/Brand	Model/ Type No.	Series No.	Data Cable	Power Cord
1.	N/A					

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3 SUMMARY OF TEST RESULTS

FCC Rules	Description Of Test	Result
§15.207(a)/	AC Power Line Conducted Emission	Compliant
RSS-Gen §7.2.4		
§15.247(b)/	Peak Output Power	Compliant
RSS-210 §A8.4(4)		
§15.247(b)/	6dB Bandwidth	Compliant
RSS-210 §A8.4(4)		
§15.247(c)/	100 KHz Bandwidth Of	Compliant
RSS-210 §A8.4(4)	Frequency Band Edges	
§15.247(c)/	Spurious Emission	Compliant
RSS-210 §A8.4(4)		
§15.247/	Peak Power Density	Compliant
RSS-210 §A8.2(b)		
§15.203/	Antenna Requirement	Compliant
RSS-GEN §7.1.2,		
RSS-Gen §4.6.1	99% Power Bandwidth	Compliant

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4 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) \cdot mid (2437MHz) and high (2462MHz) with 1Mbps data rate are chosen for full testing.

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

802.11 n_20MHz mode: Channel low (2412MHz) \cdot mid (2437MHz) and high (2462MHz) with 6.5Mbps data rate are chosen for full testing.

802.11 a mode: Channel low (5745MHz) \sim 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 Mbps highest data rate are chosen for above testing.

802.11 n (5GHz)_40MHz mode: Channel low (5755MHz) and high (5795MHz) with 13.5Mbps data rate are chosen for full testing.

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CONDUCTED EMISSION TEST 5

5.1. **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								
1. The lower limit shall apply at the transition frequencies								

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

5.2. Measurement Equipment Used:

	AC Power Line Conducted Emission Test Site										
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.						
ТҮРЕ		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						

5.3. 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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5.4. 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.

5.5. 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.

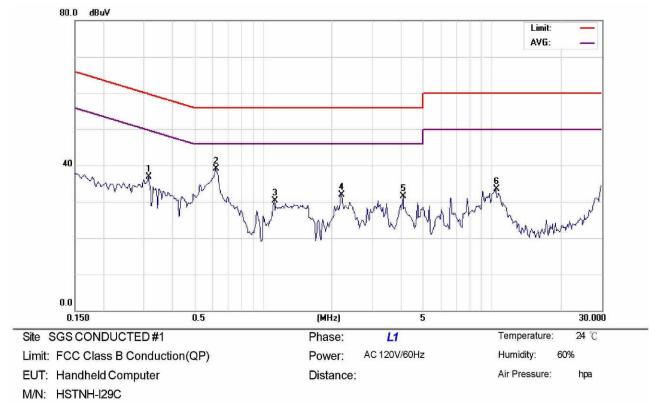
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AC POWER LINE CONDUCTED EMISSION TEST DATA

Operation Mode:	Operation Link			Test Date:	Mar. 23, 2011
Temperature:	22 °C	Humidity:	57 %	Test By:	Jazz



Note: WIFI+BT LINK Mode

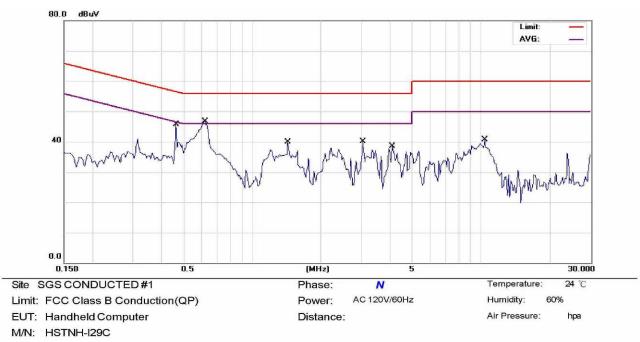
No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over			
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment	
1		0.3150	36.85	0.05	36.90	59.84	-22.94	peak		
2	*	0.6200	38.97	0.06	39.03	56.00	-16.97	peak		
3		1.1200	30.16	0.06	30.22	56.00	-25.78	peak		
4		2.1900	31.85	0.09	31.94	56.00	-24.06	peak		
5		4.1000	31.32	0.11	31.43	56.00	-24.57	peak		
6		10.4800	33.16	0.36	33.52	60.00	-26.48	peak		

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Note: WIFI+BT LINK Mode

No.	Mk.	Freq.	Reading Level	Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4650	32.70	0.06	32.76	56.60	-23.84	QP	
2		0.4650	24.60	0.06	24.66	46.60	-21.94	AVG	
3		0.6200	44.30	0.06	44.36	56.00	-11.64	QP	
4	*	0.6200	35.20	0.06	35.26	46.00	-10.74	AVG	
5		1.4300	33.30	0.07	33.37	56.00	-22.63	QP	
6		1.4300	24.30	0.07	24.37	46.00	-21.63	AVG	
7		3.0500	29.70	0.10	29.80	56.00	-26.20	QP	
8		3.0500	21.80	0.10	21.90	46.00	-24.10	AV/G	
9		4.1000	33.70	0.11	33.81	56.00	-22.19	QP	
10		4.1000	25.00	0.11	25.11	46.00	-20.89	AVG	
11		10.4000	36.00	0.36	36.36	60.00	-23.64	QP	
12		10.4000	27.80	0.36	28.16	50.00	-21.84	AVG	

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6 PEAK OUTPUT POWER MEASUREMENT

6.1 Standard Applicable:

According to §15.247(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 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.

	Conduct	ted Emission T	Test Site		
EQUIPMENT	MFR	MODEL	SERIAL	LAST	CAL DUE.
ТҮРЕ		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
DC Block	Agilent	BLK-18	155452	07/05/2010	07/04/2011
Low Loss Cable	HUBER+SUHNER	SUCOFLEX 104PEA	NT/A		01/04/2012
Attenuator	Mini-Circuit	BW-S6W5	001	07/05/2010	07/04/2011
Attenuator	Mini-Circuit	BW-S10W5	001	07/05/2010	07/04/2011
Attenuator	Mini-Circuit	BW-S20W5	001	07/05/2010	07/04/2011
Splitter	Agilent	11636B	N/A	07/05/2010	07/04/2011
Power Meter	Anritsu	ML2495A	1005007	02/17/2010	02/16/2012

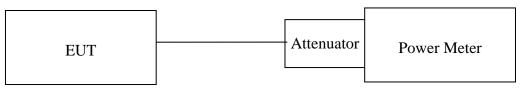
6.2 Measurement Equipment Used:

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6.3 .Test Set-up:



6.4 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.
- 3. Record the max. reading.
- 4. Repeat above procedures until all frequency measured were complete.

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6.5 Measurement Result:

802.11b

	Cable loss $= 0$	Peak Power Output							
СН	Frequency (MHz)		Data	Required Limit					
		1	2						
1	2412	18.65	18.63	18.38	18.22	1 Watt = 30 dBm			
6	2437	18.35	18.24	18.19	18.10	1 Watt = 30 dBm			
11	2462	17.90	17.80	17.45	17.30	1 Watt = 30 dBm			

802.11g

	02.11g											
Cał	ble loss $= 0$		Peak Power Output									
СН	CH Frequency (MHz)		Data Rate									
	(101112)	6	9	12	18	24	36	48	54	Required Limit		
1	2412	13.66	13.44	13.28	13.21	12.63	12.56	12.43	12.12	1 Watt = 30 dBm		
6	2437	19.25	19.20	18.99	18.80	18.10	17.82	17.43	16.70	1 Watt = 30 dBm		
11	2462	15.02	14.95	14.79	14.61	14.12	14.08	13.98	13.85	1 Watt = 30 dBm		

802.11n 20M

Cat	ble loss = 0		Peak Power Output										
СН	Frequency (MHz)		Data Rate										
	(11112)	6.5	13	19.5	26	39	52	58.5	65	— Required Limit			
1	2412	11.59	11.53	11.44	11.25	10.92	10.68	10.35	10.14	1 Watt = 30 dBm			
6	2437	19.56	19.23	19.11	19.02	16.81	16.43	14.61	14.43	1 Watt = 30 dBm			
11	2462	13.00	12.99	12.80	12.70	12.44	12.33	12.22	12.10	1 Watt = 30 dBm			

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80	02.11a									
Cat	ble loss $= 0$									
СН	Frequency (MHz)			Required Limit						
	()	6	9	12	18	24	36	48	54	
149	5745	18.91	18.85	18.52	18.43	18.30	18.11	17.90	17.65	1 Watt = 30 dBm
157	5785	18.42	18.10	17.97	17.79	17.49	17.30	17.11	16.90	1 Watt = 30 dBm
165	5825	18.60	18.35	18.19	18.08	18.02	17.87	17.79	17.73	1 Watt = 30 dBm

802.11n(5GHz)_20M

Cat	ble loss $= 0$		Peak Power Output									
СН	Frequency (MHz)		Data Rate									
	(1/112)	6.5	13	19.5	26	39	52	58.5	65	Required Limit		
149	5745	18.76	18.42	18.13	18.01	17.78	17.57	17.13	16.70	1 Watt = 30 dBm		
157	5785	18.38	18.03	17.98	17.85	17.45	17.27	16.19	16.17	1 Watt = 30 dBm		
165	5825	18.92	18.82	18.46	18.33	18.18	18.08	16.59	15.76	1 Watt = 30 dBm		

802.11n(5GHz) 40M

	ble loss = 0	Peak Power Output								
СН	Frequency (MHz)		Data Rate				Required Limit			
	(1/112)	13.5	27	40.5	54	81	108	121.5	135	nequii cu ziine
151	5755	18.75	18.64	18.11	17.96	17.74	17.22	16.20	15.84	1 Watt = 30 dBm
159	5795	18.23	18.19	17.91	17.56	17.39	16.84	15.17	14.48	1 Watt = 30 dBm

*Note: Offset 0.4dB

Note: Refer to next page for plots.

* Read Power = Output Power + Cable Loss

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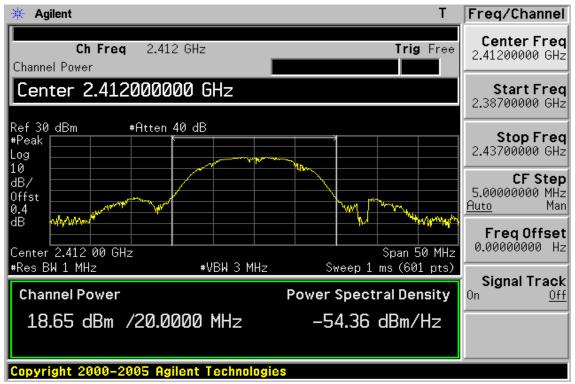
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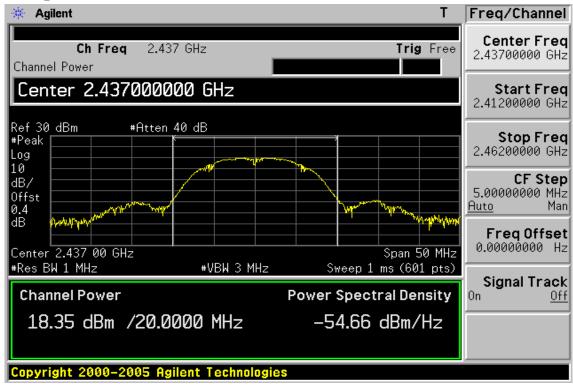


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802.11b, 1Mbps **Power Output Plot (CH Low)**



Power Output Plot (CH Mid)



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Power Output Plot (CH High)



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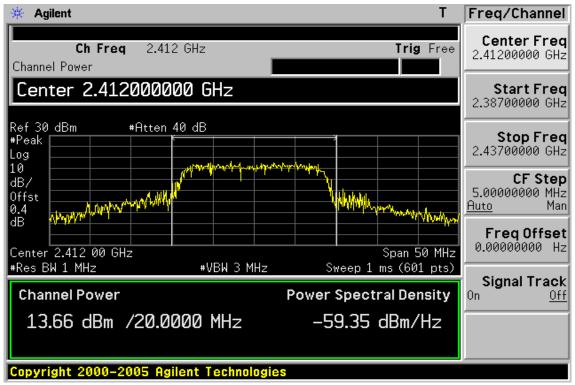
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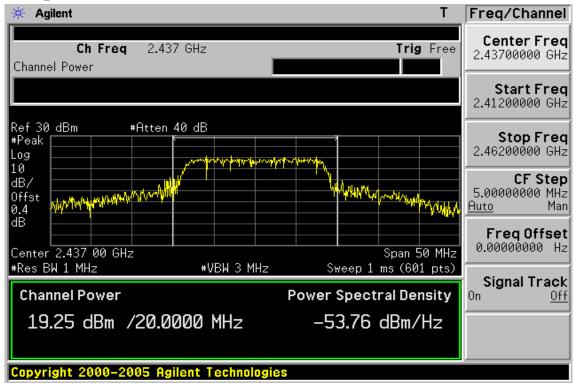


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802.11g, 6Mbps **Power Output Plot (CH Low)**



Power Output Plot (CH Mid)



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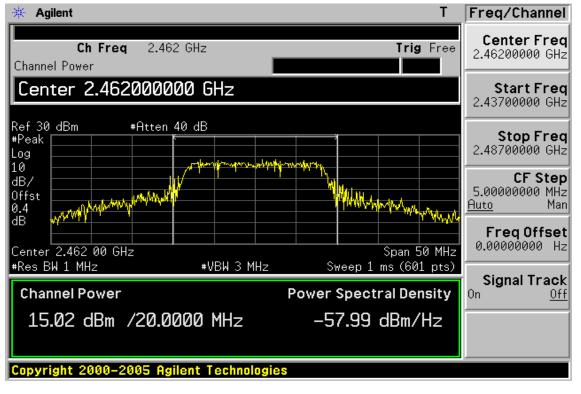
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Power Output Plot (CH High)



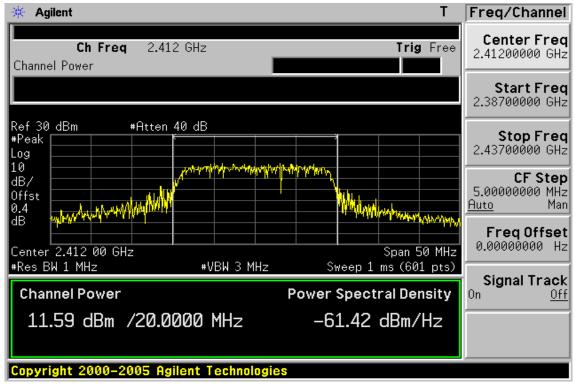
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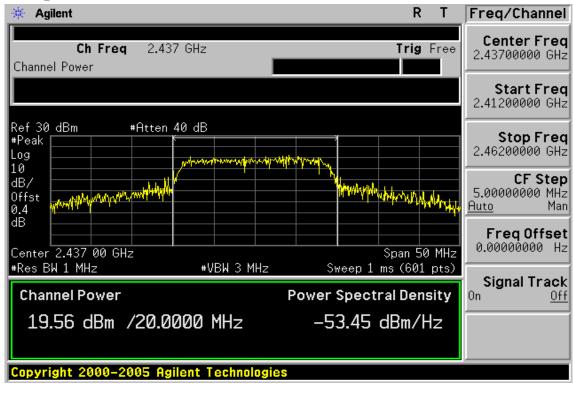


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802.11n 20M, 6.5Mbps **Power Output Plot (CH Low)**



Power Output Plot (CH Mid)



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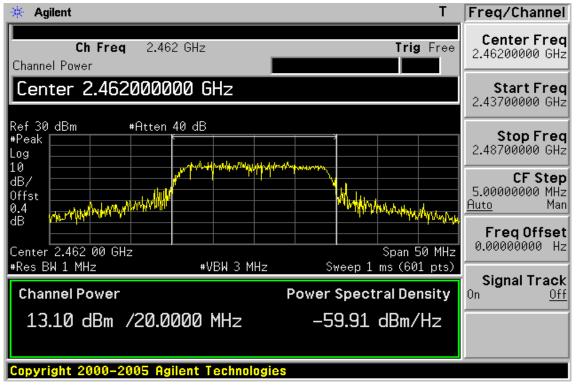
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Power Output Plot (CH High)



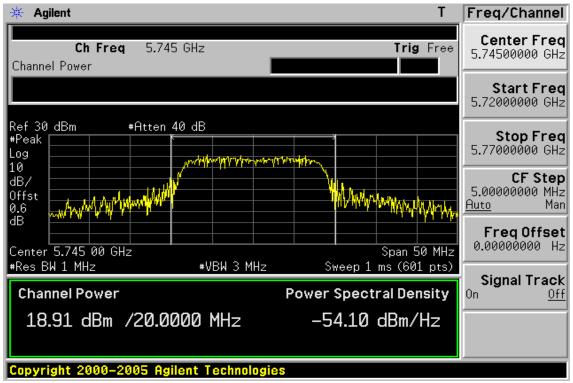
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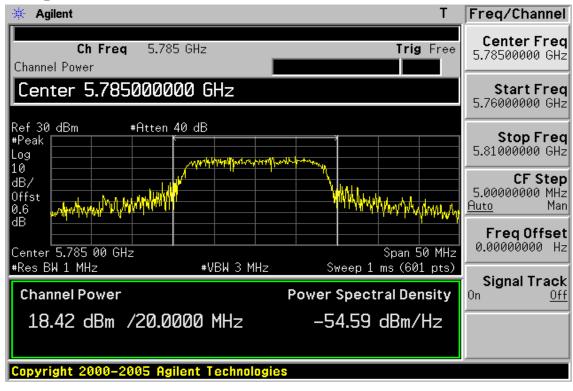


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802.11a, 6Mbps **Power Output Plot (CH Low)**



Power Output Plot (CH Mid)



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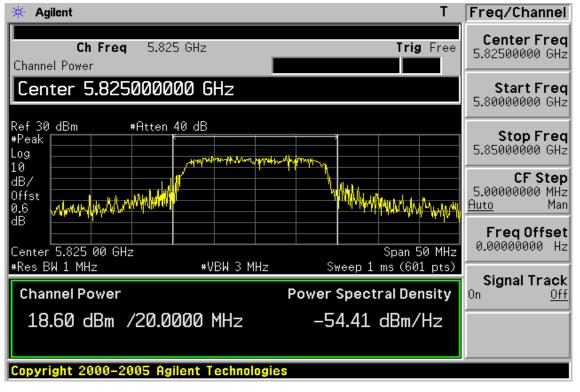
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Power Output Plot (CH High)



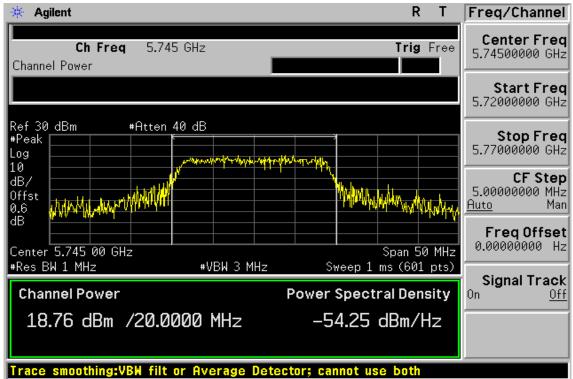
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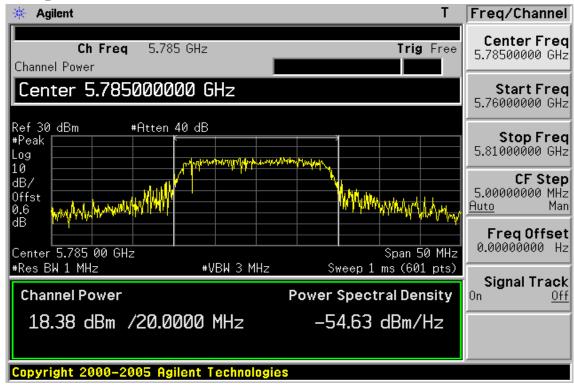


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802.11n(5GHz) 20M, 6.5Mbps **Power Output Plot (CH Low)**



Power Output Plot (CH Mid)



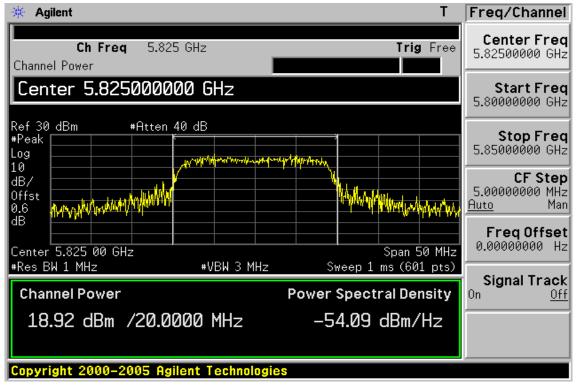
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Power Output Plot (CH High)



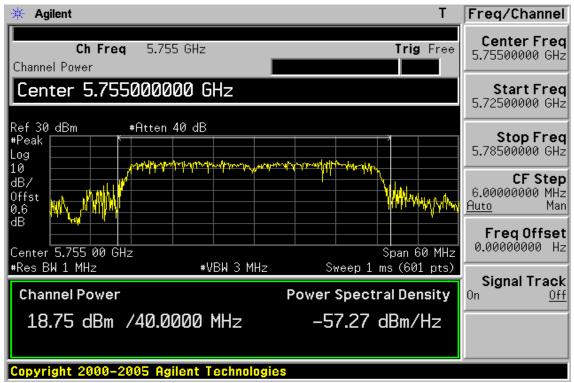
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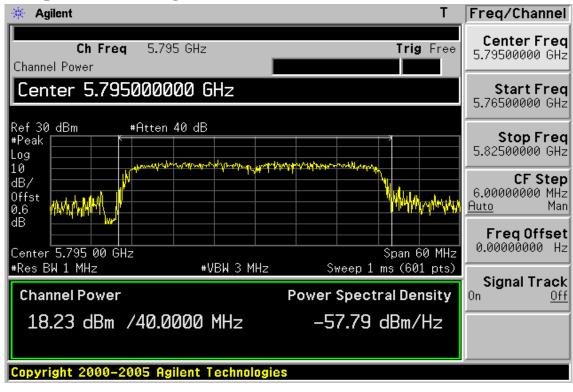


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802.11n(5GHz) 40M, 13.5Mbps **Power Output Plot (CH Low)**



Power Output Plot (CH High)



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7 6dB Bandwidth

7.1 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.

7.2 Measurement Equipment Used:

Refer to section 6.2 for details.

7.3 Test Set-up:

Refer to section 6.3 for details.

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 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.



7.5 Measurement Result:

802.11b

002.110			
Frequency	Bandwidth	Bandwidth	Result
(MHz)	(MHz)	(KHz)	Kesuit
2412	10.143	> 500	PASS
2437	10.117	> 500	PASS
2462	10.126	> 500	PASS

802.11g

Frequency	Bandwidth	Bandwidth	Result
(MHz)	(MHz)	(KHz)	Kesun
2412	16.385	> 500	PASS
2437	16.386	> 500	PASS
2462	16.370	> 500	PASS

802.11n 20M

Frequency	Bandwidth	Bandwidth	Result
(MHz)	(MHz)	(KHz)	
2412	17.566	> 500	PASS
2437	17.001	> 500	PASS
2462	17.304	> 500	PASS

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802.11a

Frequency	Bandwidth	Bandwidth	Result
(MHz)	(MHz)	(KHz)	
5745	16.344	> 500	PASS
5785	16.315	> 500	PASS
5825	16.412	> 500	PASS

802.11n(5GHz)_20M

Frequency	Bandwidth	Bandwidth	Result
(MHz)	(MHz)	(KHz)	
5745	17.019	> 500	PASS
5785	16.939	> 500	PASS
5825	16.973	> 500	PASS

802.11n(5GHz)_40M

Frequency	Bandwidth	Bandwidth	Result
(MHz)	(MHz)	(KHz)	
5755	35.447	> 500	PASS
5795	35.447	> 500	PASS

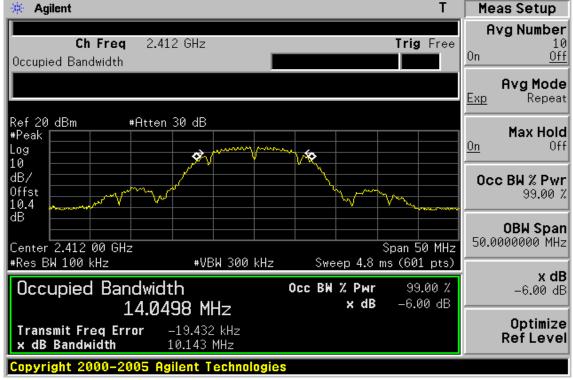
offset: 10.4dB

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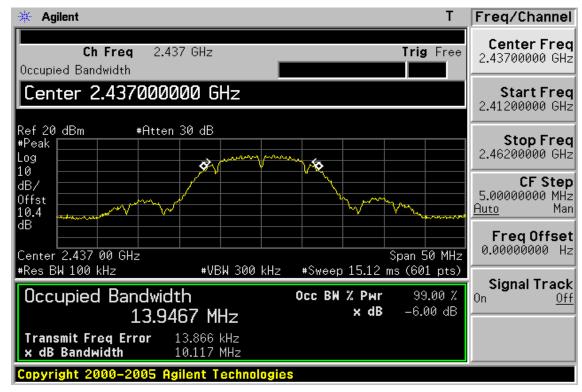


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802.11b 6dB Bandwidth Test Data CH-Low



6dB Bandwidth Test Data CH-Mid



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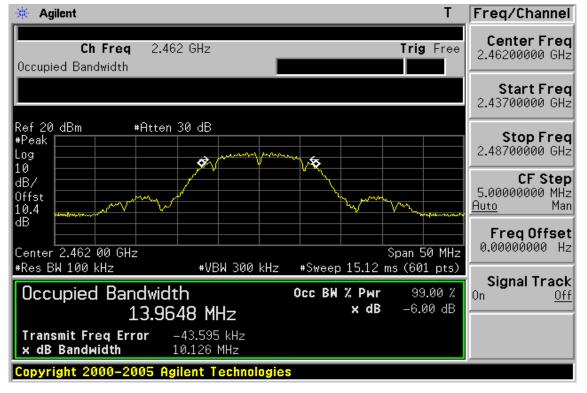
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6dB Bandwidth Test Data CH-High



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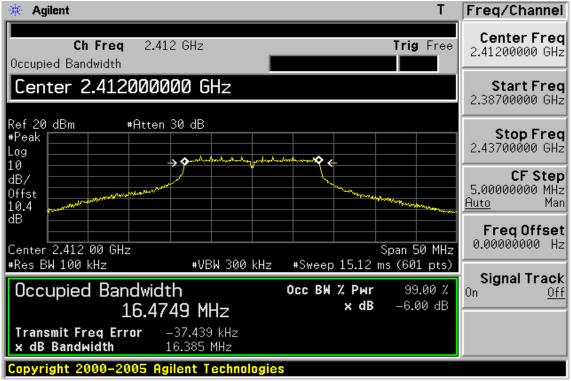
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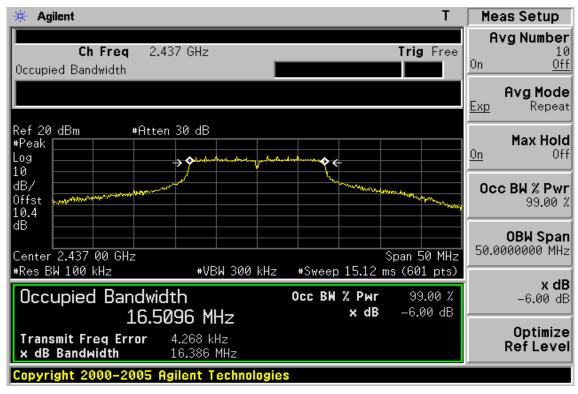


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802.11g 6dB Bandwidth Test Data CH-Low



6dB Bandwidth Test Data CH-Mid



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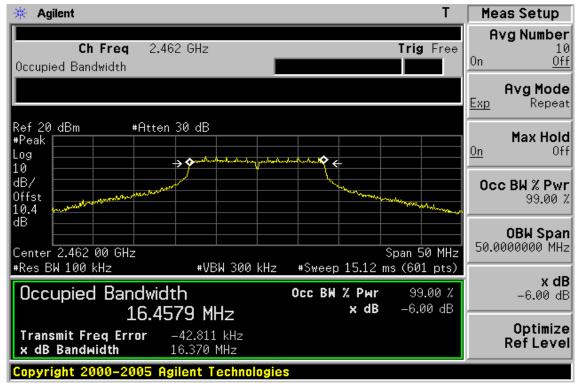
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6dB Bandwidth Test Data CH-High



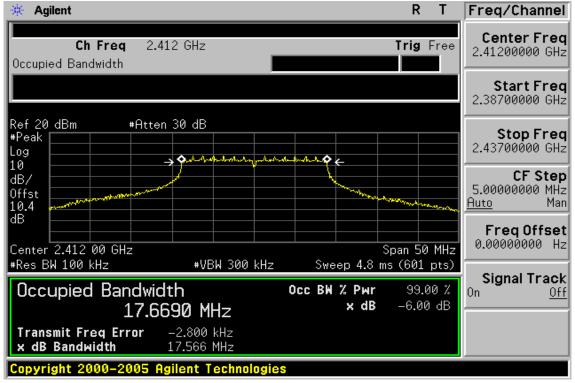
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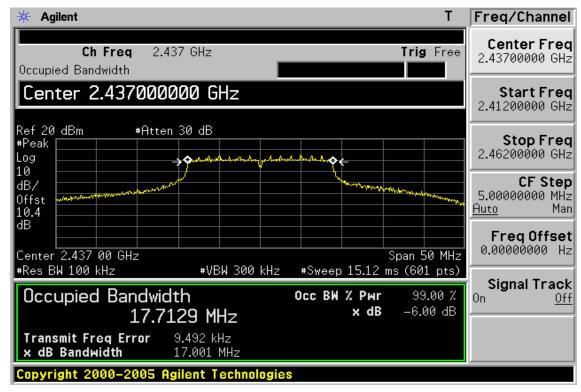


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802.11n 20M 6dB Bandwidth Test Data CH-Low



6dB Bandwidth Test Data CH-Mid



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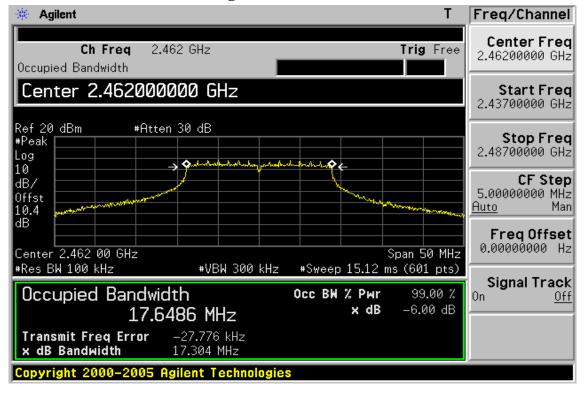
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6dB Bandwidth Test Data CH-High



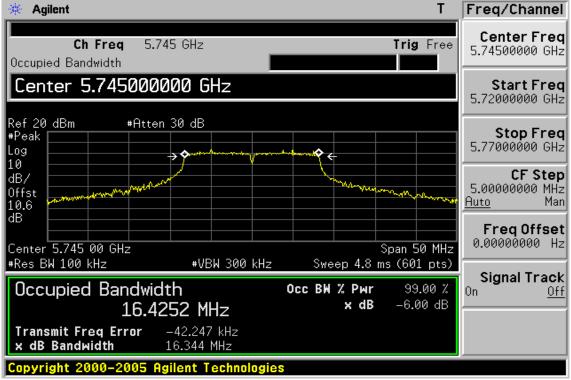
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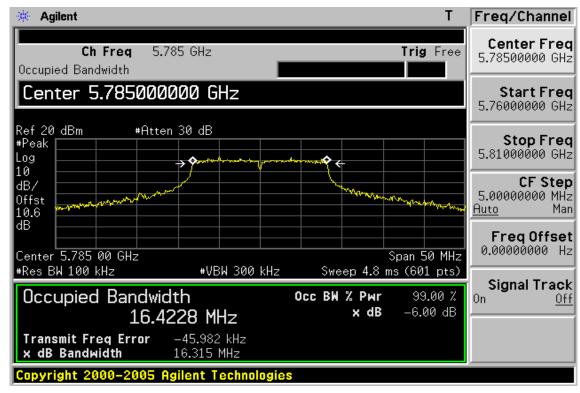


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802.11a 6dB B Bandwidth Test Data CH-Low



6dB Bandwidth Test Data CH-Mid



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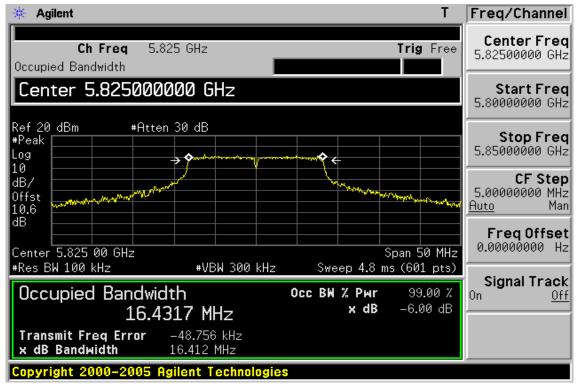
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6dB Bandwidth Test Data CH-High



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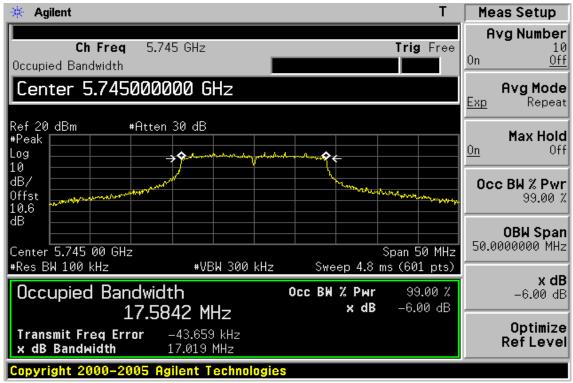
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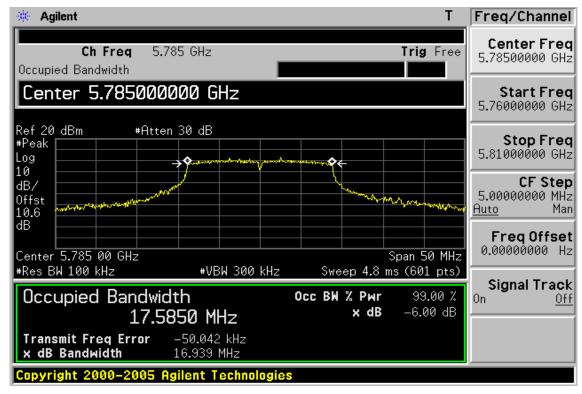


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802.11n(5GHz) 20M 6dB Bandwidth Test Data CH-Low



6dB Bandwidth Test Data CH-Mid



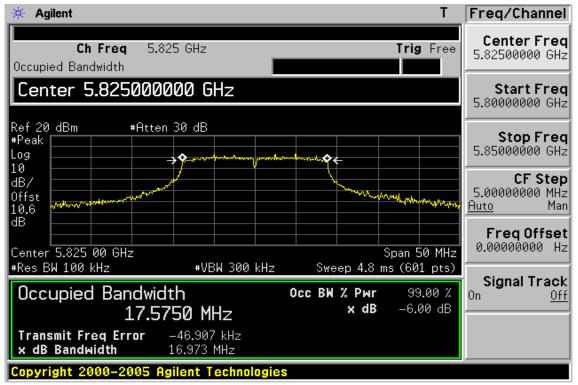
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6dB Bandwidth Test Data CH-High



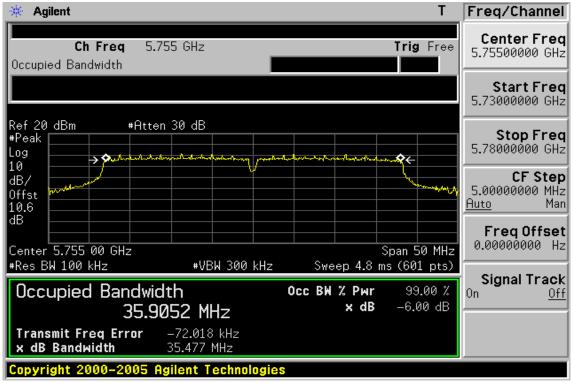
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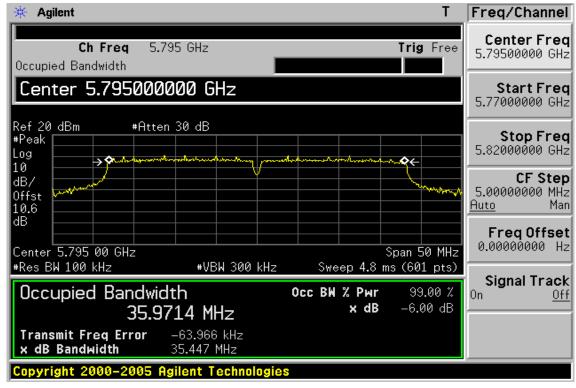


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802.11n(5GHz) 40M 6dB Bandwidth Test Data CH-Low



6dB Bandwidth Test Data CH-High



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8 100KHz BANDWIDTH OF BAND EDGES MEASUREMENT

8.1 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 in15.209(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.

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:

Conducted Emission Test Site									
EQUIPMENT	MFR MODEL S		SERIAL	LAST	CAL DUE.				
ТҮРЕ		NUMBER	NUMBER	CAL.					
Spectrum Analyzer	Agilent	E4446A	MY43360126	04/19/2010	04/18/2012				
Spectrum Analyzer	Agilent E7405A US41160416		12/25/2009	12/24/2011					
Spectrum Analyzer	R&S	FSP 40	100034	02/12/2011	02/11/2012				
Low Loss Cable	HUBER+SUHNER	+SUHNER SUCOFLEX 104PEA N/A		01/05/2011	01/04/2012				
Attenuator	Mini-Circuit	BW-S6W5	N/A	07/05/2010	07/04/2011				
Software	Audix	Ver 6.2009 – 23B	N/A	N/A	N/A				

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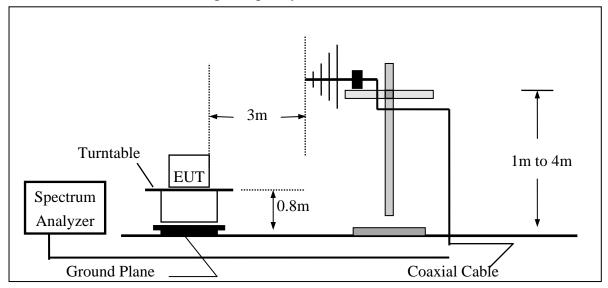
8.3 Test SET-UP:

8.3.1 Conducted Emission at antenna port:

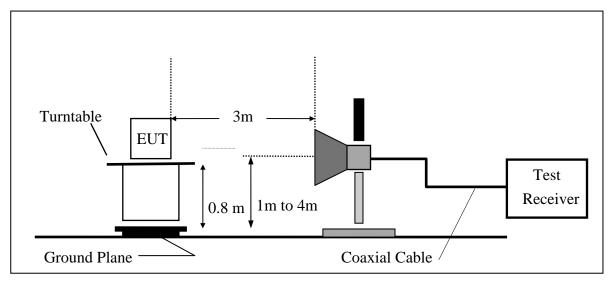
Refer to section 6.3 for details.

8.3.2 Radiated emission:

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



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



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8.4 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 and record the max. level.
- 6. 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:

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

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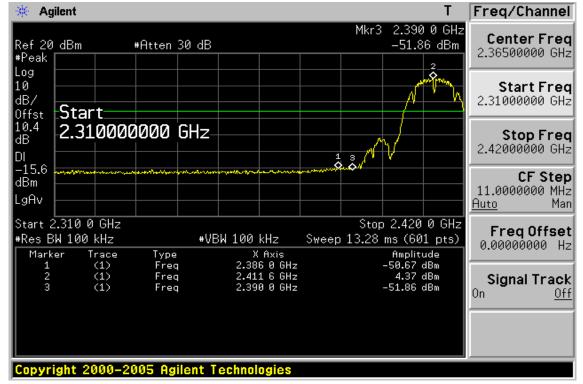
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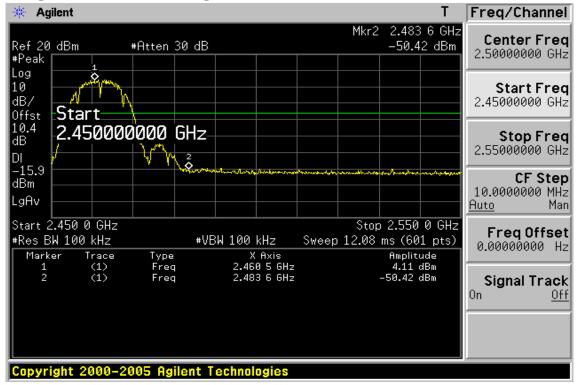


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802.11b **Band Edges Test Data CH-Low**



Band Edges Test Data CH-High



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AV

Radiated Emission: 802.11 b mode

Operation Mode	TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412 MHz	Test By	Jazz
Tmperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (d B)	
2390.00	51.25	40.24	-1.06	50.19	39.18	74.00	54.00	-14.82	AV
Operation	Mode	TX C	H Low			Test	Date	Mar. 22, 2	011
Fundamen	tal Frequer	ncy 2412	MHz			Test	By	Jazz	
Temperatu	re	27 °C				Pol		Hor.	
Humidity		66 %							
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark

(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m))(dBuV/m)	(dB)	
2390.00	57.75	46.13	-1.06	56.69	45.07	74.00	54.00	-8.93	

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 columno
- (3) Spectrum Peak Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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Radiated Emission: 802.11 b mode

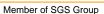
Operation Fundamen Temperatu Humidity	tal Frequei					Test Test Pol	Date By	Mar. 22, 2 Jazz Ver.	011
	Peak	AV		Actu	ual FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m) (dBuV/m)	(dBuV/m)	(dBuV/1	n) (dB)	
2483.56	49.87	38.32	-0.59	49.28	37.73	74.00	54.00	-16.27	AV
Operation Fundamen Temperatu Humidity	tal Frequei					Test Test Pol	Date By	Mar. 22, 2 Jazz Hor.	011
	Peak	AV		Actu	ual FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m) (dBuV/m)	(dBuV/m)	(dBuV/1	n) (dB)	
2483.50	52.75	41.48	-0.59	52.16	40.89	74.00	54.00	-13.11	AV

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- 26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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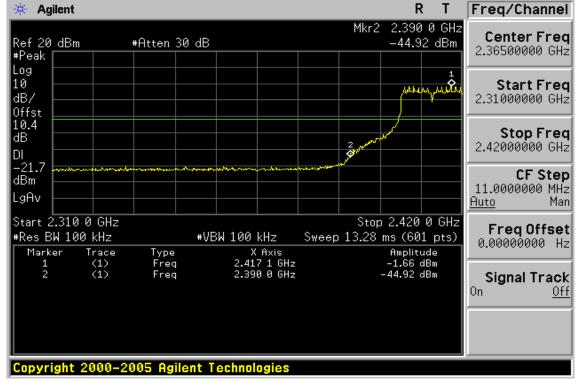


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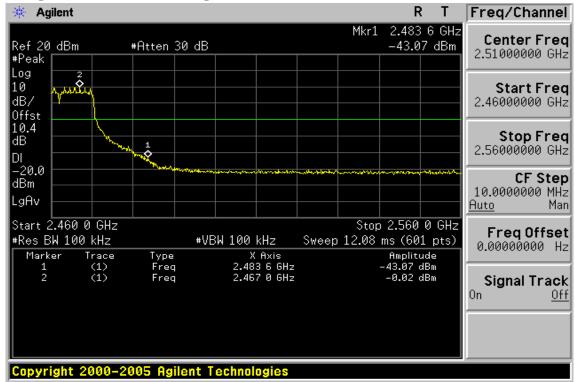


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802.11g **Band Edges Test Data CH-Low**



Band Edges Test Data CH-High



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Radiated Emission: 802.11 g mode

Operation Mode	TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412 MHz	Test By	Jazz
Tmperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
2390.00	60.28	44.40	-1.06	59.22	43.34	74.00	54.00	-10.66	AV
Operation	Mode	TX C	'H Low			Test	Date	Mar. 22, 2	011
Fundament	tal Frequei	ncy 2412	MHz			Test	By	Jazz	
Temperatu	re	27 °C				Pol	-	Hor.	
Humidity		66 %							
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
2390.00	68.42	51.67	-1.06	67.36	50.61	74.00	54.00	-3.39	AV

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- 26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
 - (4) Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

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Radiated Emission: 802.11 g mode

Operation Mode Fundamental Frequency	TX CH High 2462 MHz	Test Date Test By	Mar. 22, 2011 Jazz
Temperature	2402 MHZ 27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
2483.50	65.05	47.58	-0.59	64.46	46.99	74.00	54.00	-7.01	AV
Operation	Mode	TX C	H High			Test	Date	Mar. 22, 2	011
Fundament	tal Frequer	ncy 2462	MHz			Test	By	Jazz	
Temperatu	re	27 °C				Pol	-	Hor.	
Humidity		66 %							
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (d B)	
2483.50	67.91	50.26	-0.59	67.32	49.67	74.00	54.00	-4.33	AV

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- 26GHz, RBW= 1MHz, VBW= 3MHz, Sweep time= 200 ms.
- (4) Spectrum AV Setting: 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 ms.

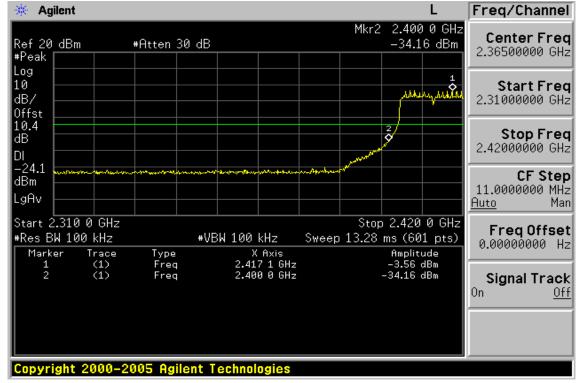
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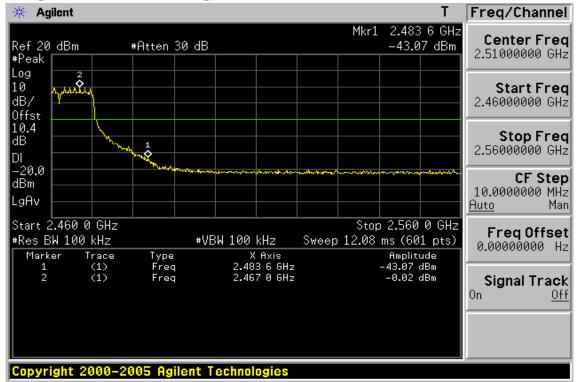


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802.11n 20M **Band Edges Test Data CH-Low**



Band Edges Test Data CH-High



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Radiated Emission: 802.11n_20M mode

Operation Mode	TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
2390.00	60.31	42.69	-1.06	59.25	41.63	74.00	54.00	-12.37	AV
Operation T Fundament Temperatu Humidity	al Frequer	-				Test Test Pol	By	Mar. 22, 20 Jazz Hor.	011
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
2390.00	65.64	46.66	-1.06	64.58	45.60	74.00	54.00	-8.40	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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 n_20M mode

Operation Mode	TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	dBuV/n	n) (dB)	
2483.50	63.51	45.48	-0.59	62.92	44.89	74.00	54.00	-9.11	AV
Operation Fundament Temperatu Humidity	tal Frequer					Test Test Pol	By	Mar. 22, 2 Jazz Hor.	011
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	dBuV/n	n) (dB)	
2483.50	69.65	50.68	-0.59	69.06	50.09	74.00	54.00	-3.91	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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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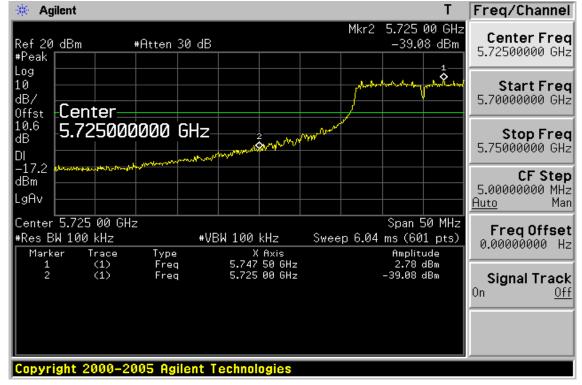
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802.11a **Band Edges Test Data CH-Low**



Band Edges Test Data CH-High



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Radiated Emission: 802.11 a mode

Operation Mode	TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745 MHz	Test By	Jazz
Tmperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m) (dB)	
5725.00	52.16	37.08	7.32	59.48	44.40	74.00	54.00	-9.60	AV
Operation Fundamen Temperatu Humidity	tal Frequer		CH Low MHz			Test Test Pol	By .	Mar. 22, 2 Jazz Hor.	011
Freq.	Peak Reading	AV Reading	Ant./CL	Actu Peak	al FS AV	Peak Limit	AV Limit	Margin	Remark
(MH ₇)	(dRuV)	0		(dRuV/m)				0	Ivenial K

(MHZ) (abuv)	(abuv)	CF(ab)	$(\mathbf{a}\mathbf{B}\mathbf{u}\mathbf{v}/\mathbf{m})$	(abuv/m)) (abu v/m	(abuv/m)	(a b)	
5725.00) 53.44	39.09	7.32	60.76	46.41	74.00	54.00	-7.59	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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 a mode

Operation Mode Fundamental Frequency Temperature Humidity	TX CH High 5825 MHz 25 ℃ 65 %	Test Date Test By Pol	Mar. 22, 2011 Jazz Ver.

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (d B)	
5850.00	44.51	33.24	7.58	52.09	40.82	74.00	54.00	-13.18	AV
Operation	Mode	TX C	H High			Test	Date	Mar. 22, 2	011
Fundamen	tal Frequei	ncy 5825	MHz			Test	By	Jazz	
Temperatu	re	25 °C	2			Pol		Hor.	
Humidity		65 %							
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
5850.00	45.48	34.62	7.58	53.06	42.20	74.00	54.00	-11.80	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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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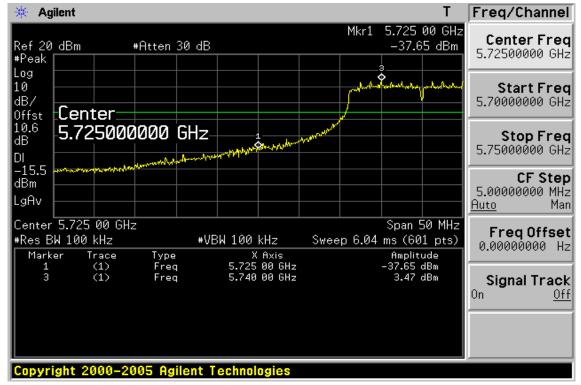
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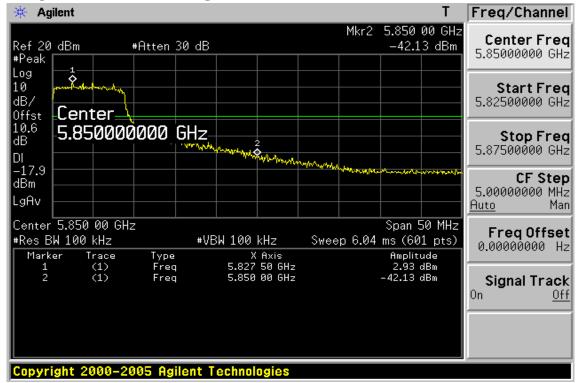


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802.11n(5GHz) 20M **Band Edges Test Data CH-Low**



Band Edges Test Data CH-High



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Radiated Emission: 802.11n(5GHz)_20M mode

Operation Mode	TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745 MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
5725.00	54.08	38.48	7.32	61.40	45.80	74.00	54.00	-8.20	AV
Operation	Mode	TX C	H Low			Test	Date	Mar. 22, 2	011
Fundamen	tal Frequer	ncy 5745	MHz			Test	By	Jazz	
Temperatu	re	25 °C				Pol		Hor.	
Humidity		65 %							
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark

(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)) (dBuV/m)	(dBuV/m))(dBuV/m)	(dB)	
5725.00	54.48	38.58	7.32	61.80	45.90	74.00	54.00	-8.10	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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

Operation Mode	TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825 MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
5850.00	41.86	31.54	7.58	49.44	39.12	74.00	54.00	-14.88	AV
Operation Fundament Temperatu Humidity	tal Frequei		H High MHz			Test Test Pol	By	Mar. 22, 2 Jazz Hor.	011
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
5850.00	46.28	32.07	7.58	53.86	39.65	74.00	54.00	-14.35	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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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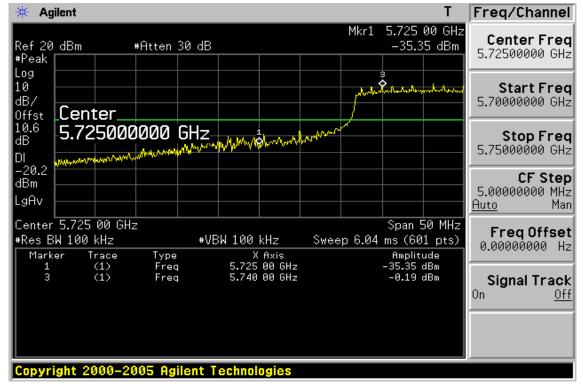
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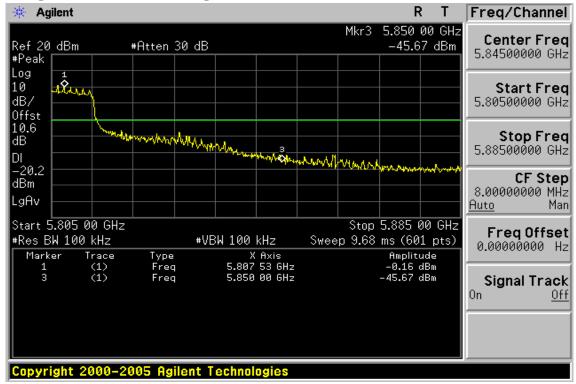


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802.11n(5GHz) 40M **Band Edges Test Data CH-Low**



Band Edges Test Data CH-High



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Radiated Emission: 802.11n(5GHz)_20M mode

Operation Mode	TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5755 MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)) (dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
5725.00	53.89	40.38	7.32	61.21	47.70	74.00	54.00	-6.30	AV
Operation	Mode	TX C	H Low			Test	Date	Mar. 22, 2	011
Fundamen	tal Frequer	ncy 5755	MHz			Test	By	Jazz	
Temperatu	re	25 °C				Pol		Hor.	
Humidity		65 %							
	Peak	AV		Actu	ial FS	Peak	AV		
Freq	Reading	Reading	Ant /CL	Peak	ΔV	Limit	Limit	Margin	Remark

Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
5725.00	55.27	42.79	7.32	62.59	50.11	74.00	54.00	-3.89	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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

Operation Mode	TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5795 MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	e	Reading		Peak	AV	Limit	Limit	U	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
5850.00	41.75	31.46	7.58	49.33	39.04	74.00	54.00	-14.96	AV
Operation Fundament Temperatu Humidity	tal Frequer					Test Test Pol	By	Mar. 22, 2 Jazz Hor.	011
	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/n	n) (dB)	
5850.00	42.16	31.87	7.58	49.74	39.45	74.00	54.00	-14.55	AV

Remark:

- Data of measurement within this frequency range shown "-" in the table above means the (1)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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9 SPURIOUS RADIATED EMISSION TEST

9.1 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.

9.2 Measurement Equipment Used:

9.2.1. Conducted Emission at antenna port:

Refer to section 6.2 for details.

9.2.2. Radiated emission:

Refer to section 7.2 for details.

9.3 Test SET-UP:

9.3.1. Conducted Emission at antenna port:

Refer to section 6.3 for details.

9.3.2. Radiated emission:

Refer to section 7.3 for details.

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9.4 Measurement Procedure:

Radiated Emission:

- 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.

Conducted Emission:

- 1. To connect Antenna Port of EUT to Spectrum.
- 2. Set RBW = 100K & VBW = 100K on Spectrum.
- Sweep the frequency to determine spurious emission as seen on spectrum from span of 30 to 3G, 3G to 8G, 8G to 13G, 13G to 18G and 18G to 26.5GHz
- 4. Via Software, combine 5 spans of frequency range into one plot

9.5 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:

$\mathbf{FS} = \mathbf{RA} + \mathbf{AF} + \mathbf{CL} - \mathbf{AG}$

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

9.6 Measurement Result:

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

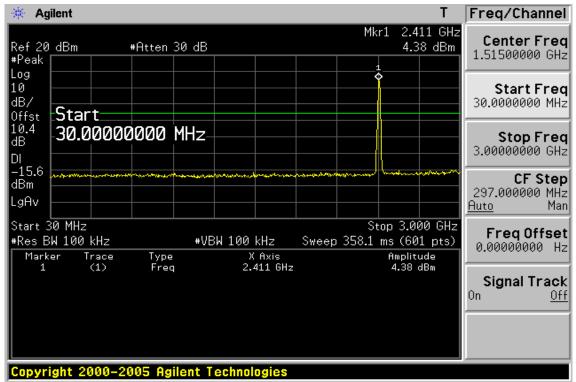
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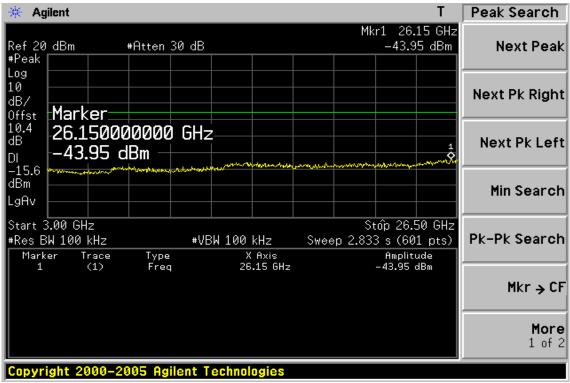


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Conducted Spurious Emission Measurement Result (802.11b) Ch Low 30MHz – 3GHz



Ch Low 3GHz - 26.5GHz



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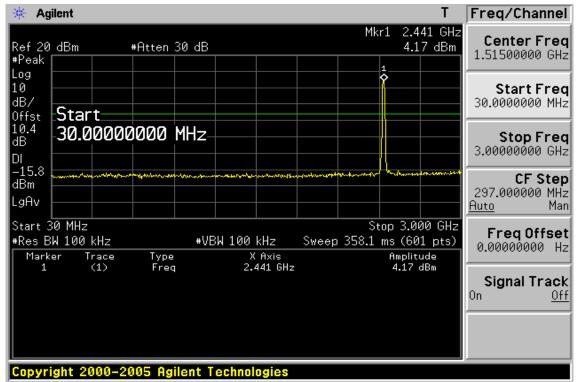
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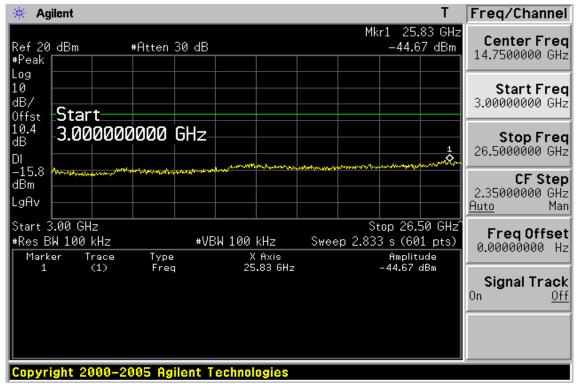


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Ch Mid 30MHz - 3GHz



Ch Mid 3GHz – 26.5GHz



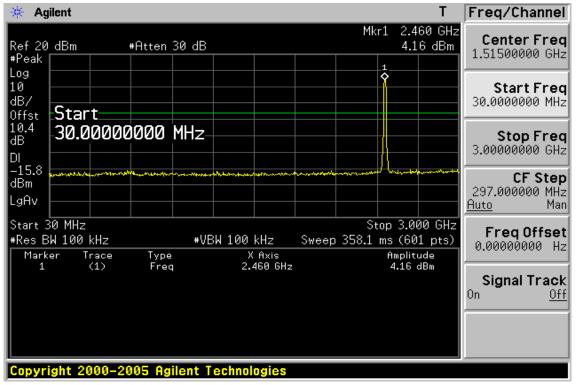
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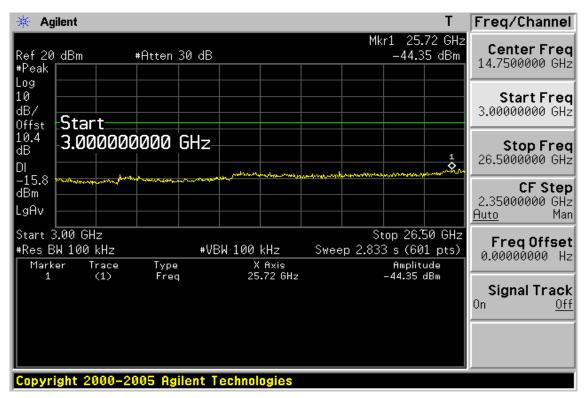


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Ch High 30MHz – 3GHz



Ch High 3GHz – 26.5GHz



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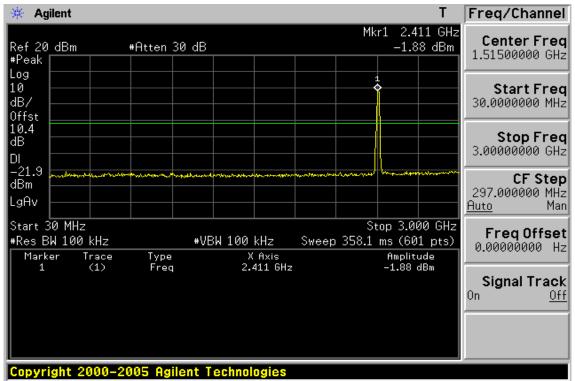
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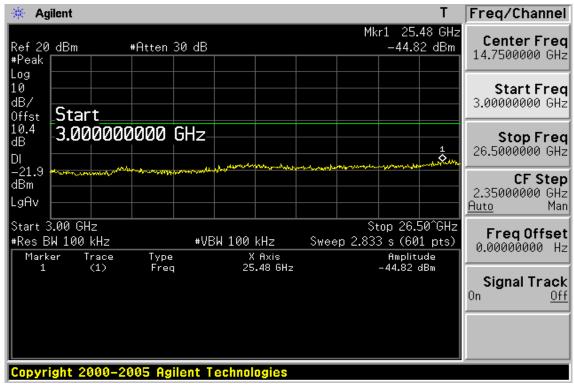


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Conducted Spurious Emission Measurement Result (802.11g) Ch Low 30MHz - 3GHz



Ch Low 3GHz - 26.5GHz



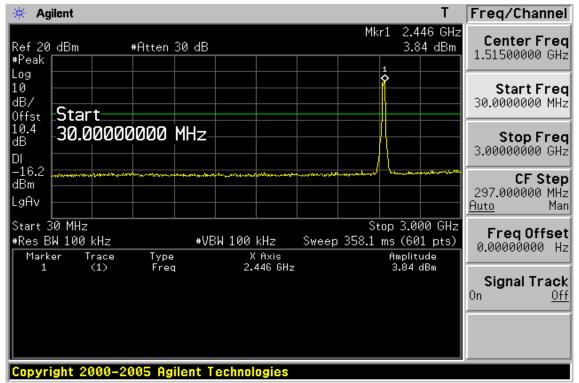
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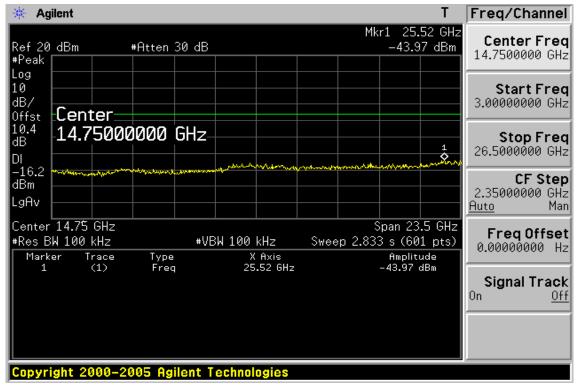


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Ch Mid 30MHz - 3GHz



Ch Mid 3GHz – 26.5GHz



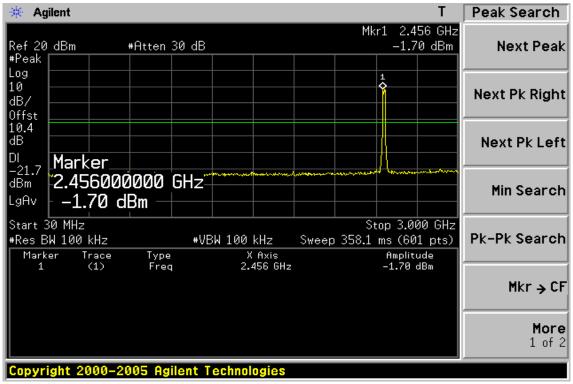
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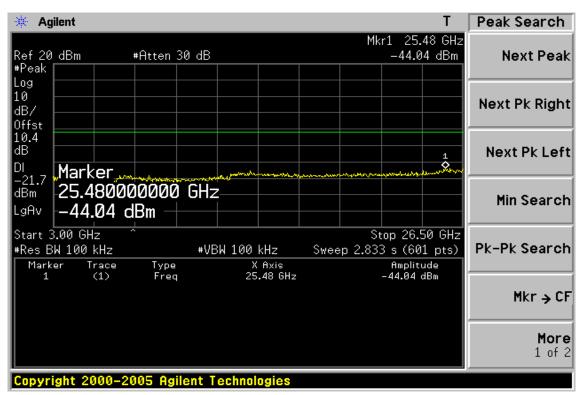


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Ch High 30MHz – 3GHz



Ch High 3GHz – 26.5GHz



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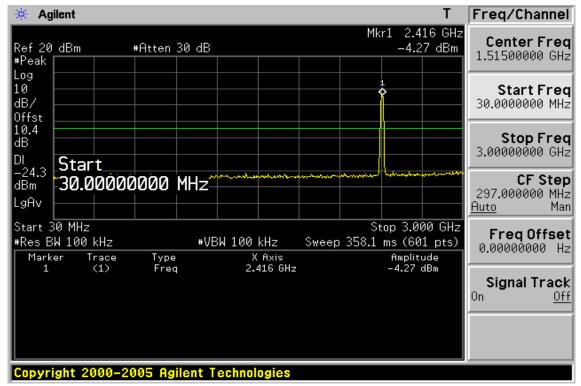
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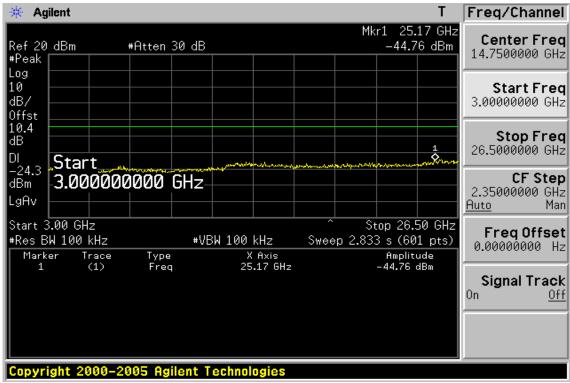


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Conducted Spurious Emission Measurement Result (802.11n_20M) Ch Low 30MHz – 3GHz



Ch Low 3GHz - 26.5GHz



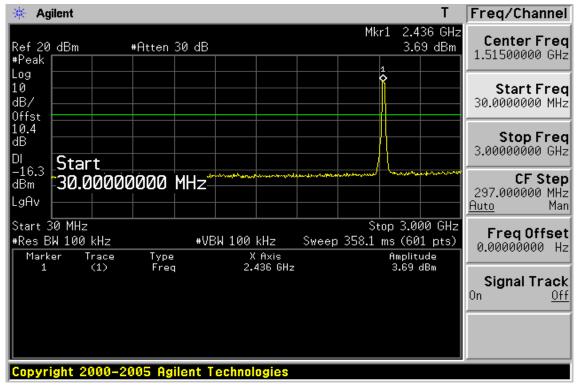
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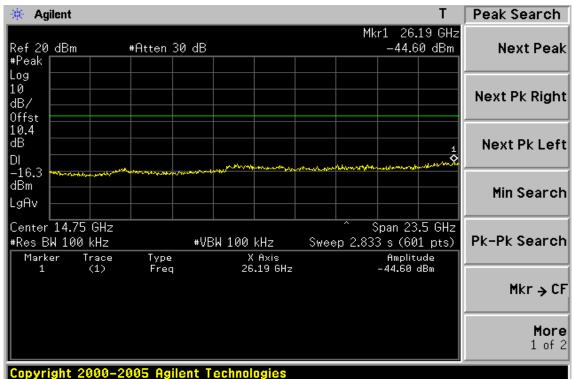


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Ch Mid 30MHz – 3GHz



Ch Mid 3GHz – 26.5GHz



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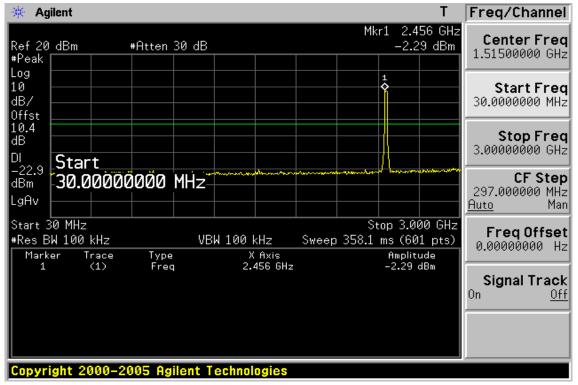
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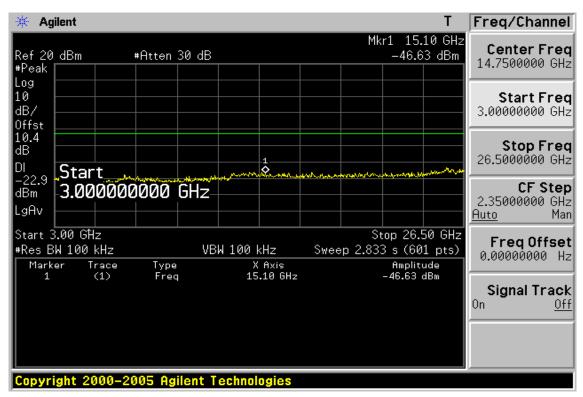


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Ch High 30MHz – 3GHz



Ch High 3GHz – 26.5GHz



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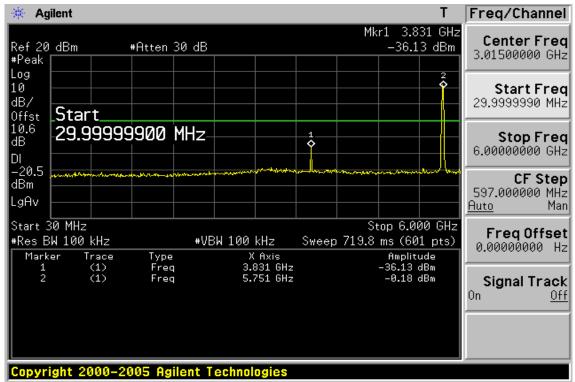
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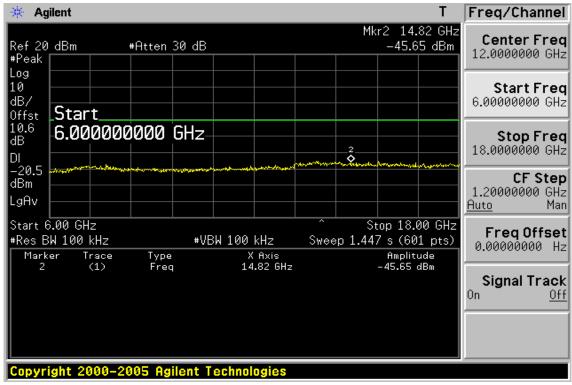


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Conducted Spurious Emission Measurement Result (802.11a) Ch Low 30MHz – 6GHz



Ch Low 6GHz – 18GHz



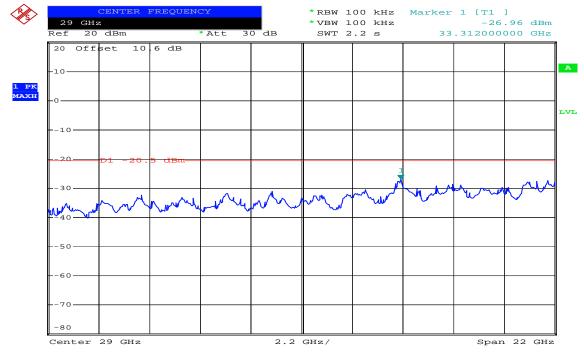
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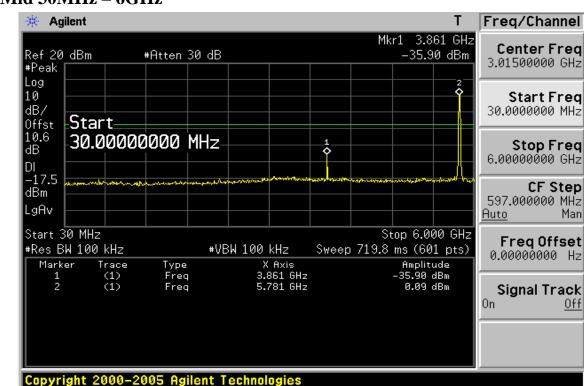


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Ch Low 18GHz – 40GHz



1.APR.2011 Date: 11:31:04



Ch Mid 30MHz – 6GHz

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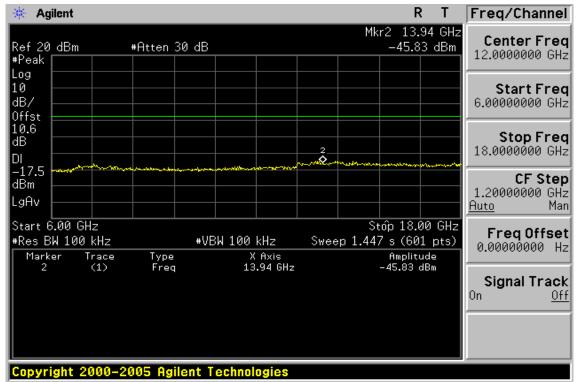
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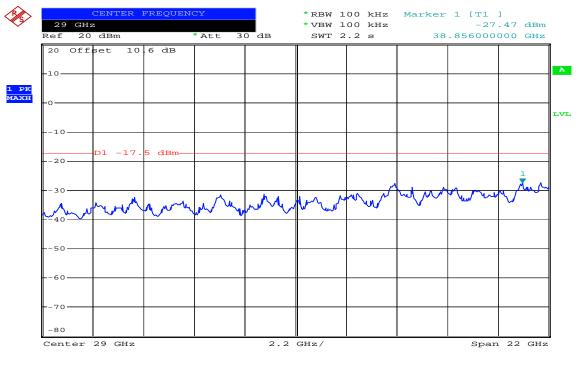


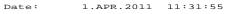
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Ch Mid 6GHz – 18GHz



Ch Mid 18GHz – 40GHz





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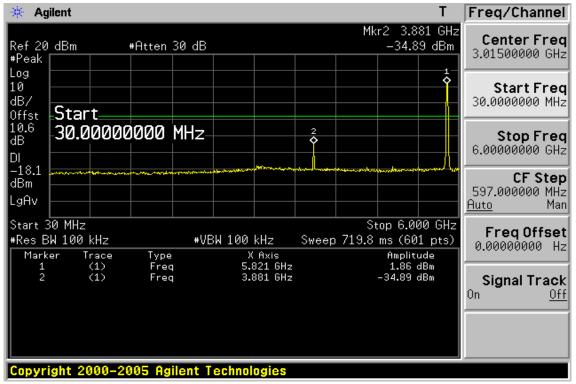
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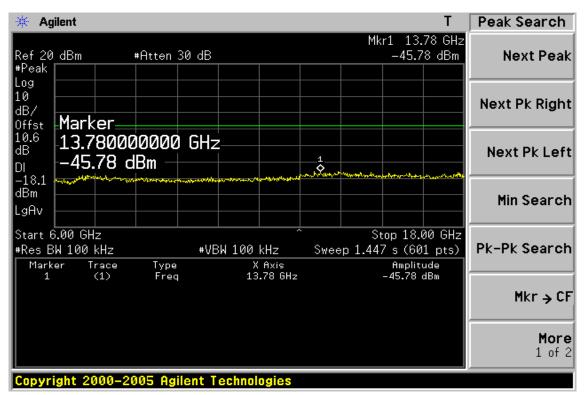


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Ch High 30MHz – 6GHz



Ch High 6GHz – 18GHz



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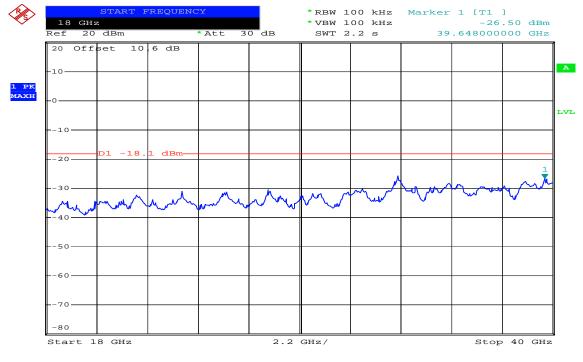
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Ch High 18GHz – 40GHz



Date: 1.APR.2011 11:34:35

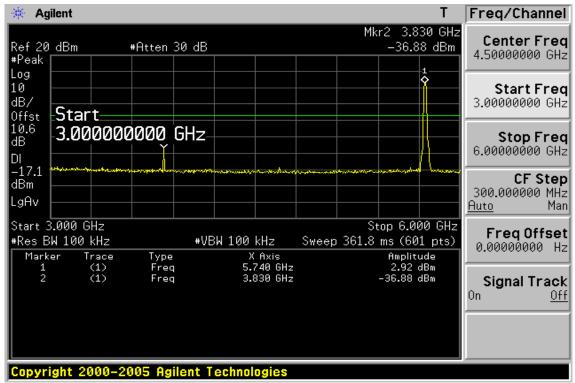
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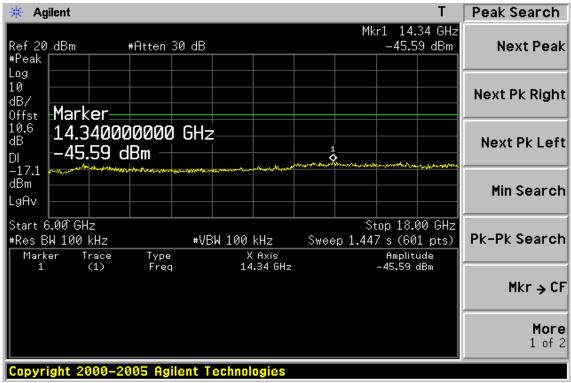


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Conducted Spurious Emission Measurement Result (802.11n(5GHz)_20M) Ch Low 30MHz – 6GHz



Ch Low 6GHz – 18GHz



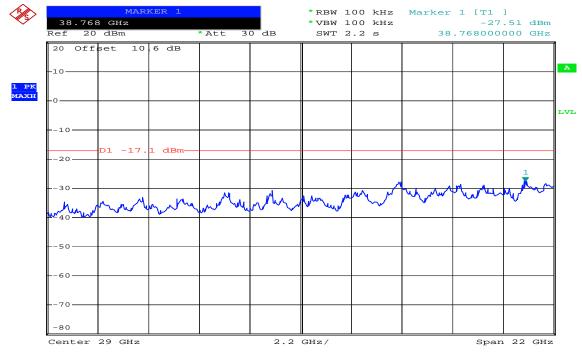
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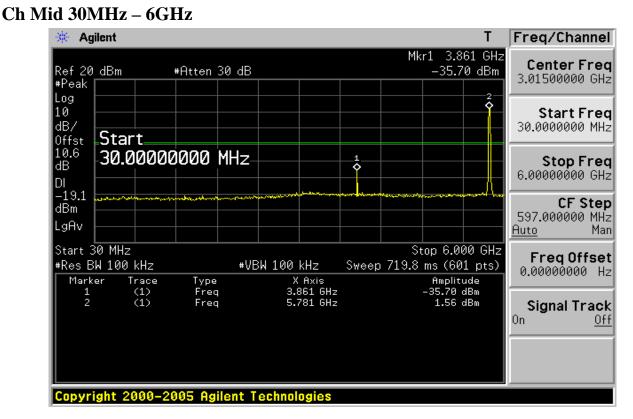


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Ch Low 18GHz - 40GHz



1.APR.2011 Date: 11:20:56



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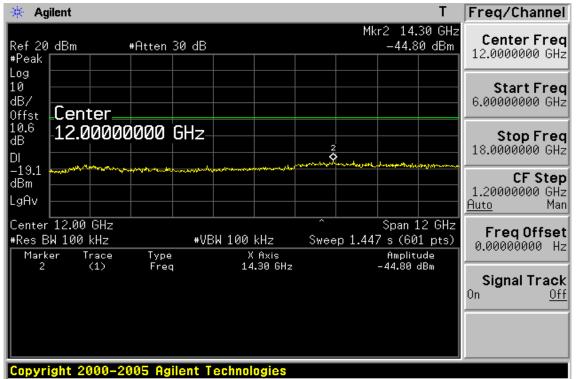
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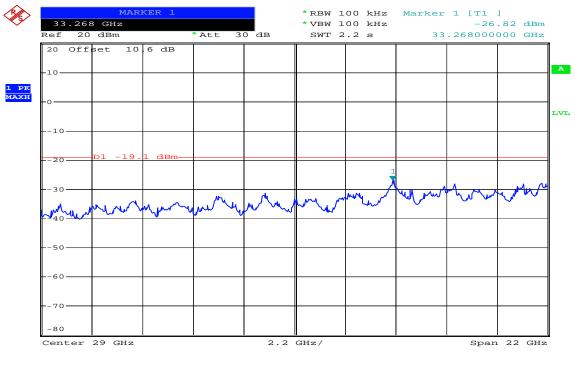


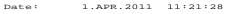
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Ch Mid 6GHz – 18GHz



Ch Mid 18GHz – 40GHz





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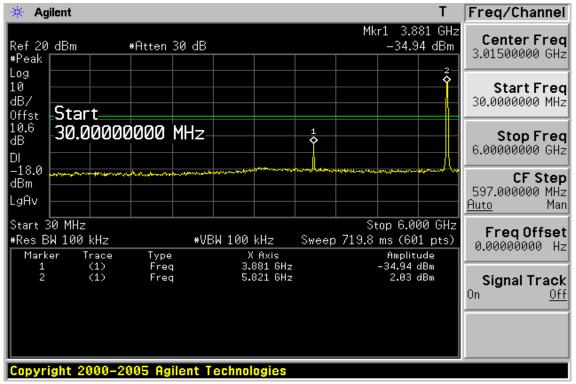
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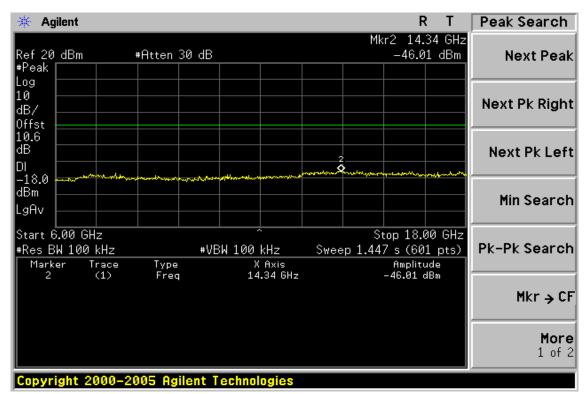


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Ch High 30MHz – 6GHz



Ch High 6GHz – 18GHz



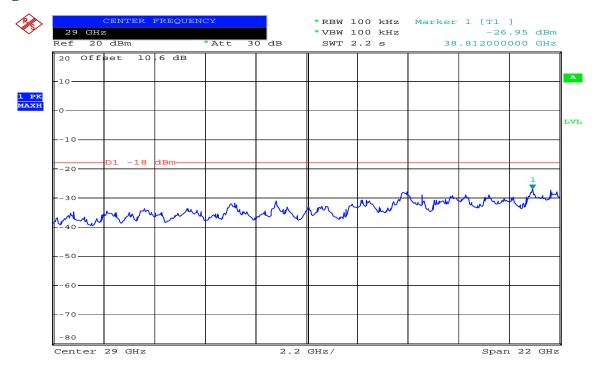
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Ch High 18GHz – 40GHz



1 APR 2011 11:23:56 Date:

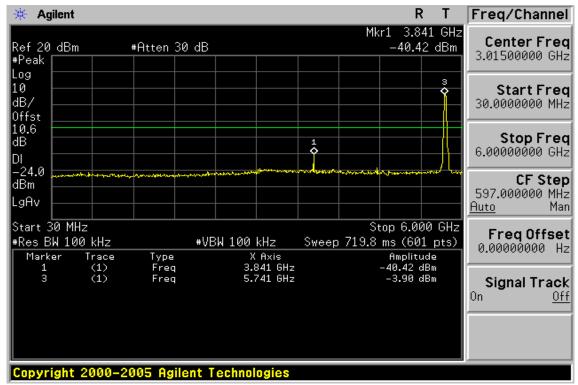
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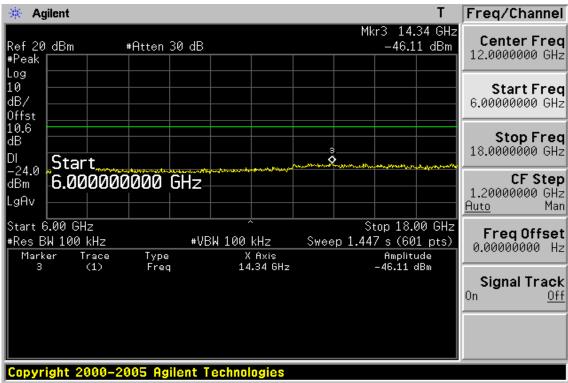


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Conducted Spurious Emission Measurement Result (802.11n(5GHz)_40M) Ch Low 30MHz – 6GHz



Ch Low 6GHz – 18GHz



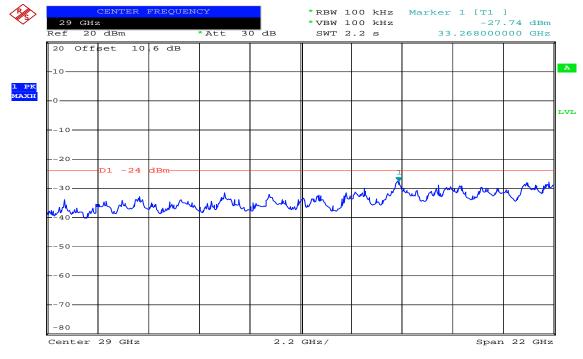
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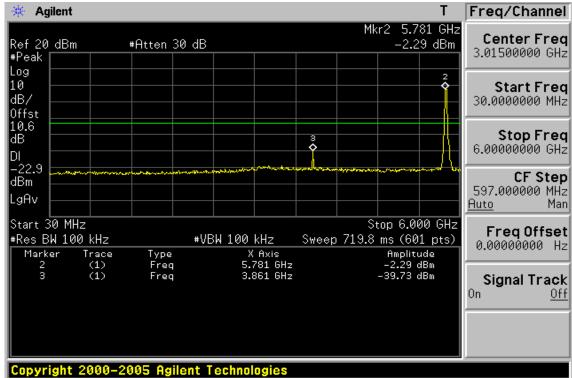
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Ch Low 18GHz – 40GHz



1.APR.2011 11:25:55 Date:





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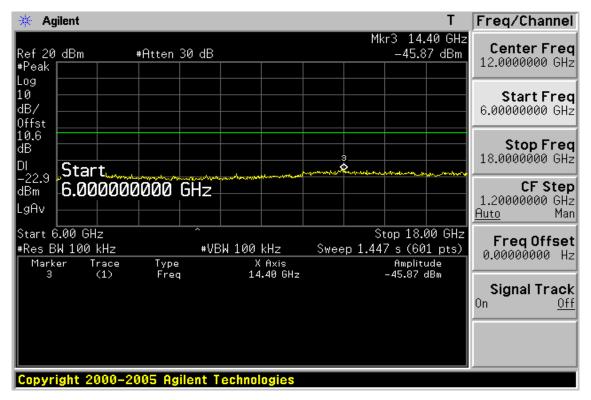
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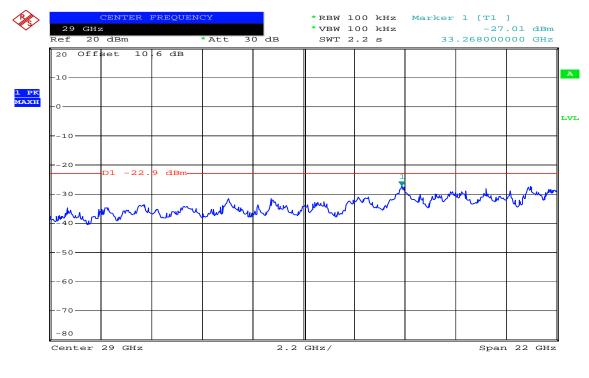


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Ch High 6GHz – 18GHz



Ch High 18GHz – 40GHz



Date: 1.APR.2011 11:28:24

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

Operation Mode	802.11b TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

	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)
	41.64	V	Peak	31.80	-13.51	18.29	40.00	-21.71
	165.80	V	Peak	32.63	-12.54	20.09	43.50	-23.41
	390.84	V	Peak	33.53	-11.03	22.50	46.00	-23.50
	551.86	V	Peak	34.29	-8.15	26.14	46.00	-19.86
	726.46	V	Peak	33.08	-4.82	28.26	46.00	-17.74
	910.76	V	Peak	32.69	-2.10	30.59	46.00	-15.41
	39.70	Н	Peak	31.83	-13.38	18.45	40.00	-21.55
	148.34	Н	Peak	32.49	-12.36	20.13	43.50	-23.37
	418.00	Н	Peak	33.52	-10.54	22.98	46.00	-23.02
	565.44	Н	Peak	33.24	-7.81	25.43	46.00	-20.57
	710.94	Н	Peak	33.21	-5.10	28.11	46.00	-17.89
	871.96	Н	Peak	34.88	-2.86	32.02	46.00	-13.98

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (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) (802.11b)

Operation Mode	802.11b TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

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)
39.70	V	Peak	31.40	-13.38	18.02	40.00	-21.98
156.10	V	Peak	32.13	-12.01	20.12	43.50	-23.38
422.85	V	Peak	33.01	-10.42	22.59	46.00	-23.41
568.35	V	Peak	33.12	-7.75	25.37	46.00	-20.63
726.46	V	Peak	33.49	-4.82	28.67	46.00	-17.33
903.00	V	Peak	32.81	-2.25	30.56	46.00	-15.44
37.76	Н	Peak	32.05	-13.73	18.32	40.00	-21.68
154.16	Н	Peak	32.32	-12.18	20.14	43.50	-23.36
422.85	Н	Peak	33.43	-10.42	23.01	46.00	-22.99
555.74	Н	Peak	33.31	-7.97	25.34	46.00	-20.66
726.46	Н	Peak	33.39	-4.82	28.57	46.00	-17.43
881.66	Н	Peak	33.33	-2.70	30.63	46.00	-15.37

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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) (802.11b)

Operation Mode	802.11b TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

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)
39.70	V	Peak	31.37	-13.38	17.99	40.00	-22.01
156.10	V	Peak	32.12	-12.01	20.11	43.50	-23.39
422.85	V	Peak	32.99	-10.42	22.57	46.00	-23.43
568.35	V	Peak	33.92	-7.75	26.17	46.00	-19.83
728.40	V	Peak	33.09	-4.78	28.31	46.00	-17.69
920.46	V	Peak	32.70	-1.93	30.77	46.00	-15.23
49.40	Н	Peak	32.20	-13.93	18.27	40.00	-21.73
154.16	Н	Peak	32.08	-12.18	19.90	43.50	-23.60
416.06	Н	Peak	33.33	-10.58	22.75	46.00	-23.25
561.56	Н	Peak	34.29	-7.86	26.43	46.00	-19.57
723.55	Н	Peak	32.99	-4.88	28.11	46.00	-17.89
864.20	Н	Peak	33.77	-3.01	30.76	46.00	-15.24

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

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)
44.55	V	Peak	32.01	-13.62	18.39	40.00	-21.61
154.16	V	Peak	31.98	-12.18	19.80	43.50	-23.70
406.36	V	Peak	33.33	-10.78	22.55	46.00	-23.45
565.44	V	Peak	33.35	-7.81	25.54	46.00	-20.46
704.15	V	Peak	33.15	-5.21	27.94	46.00	-18.06
912.70	V	Peak	32.69	-2.05	30.64	46.00	-15.36
39.70	Н	Peak	31.68	-13.38	18.30	40.00	-21.70
154.16	Н	Peak	32.49	-12.18	20.31	43.50	-23.19
384.05	Н	Peak	33.42	-11.08	22.34	46.00	-23.66
565.44	Н	Peak	32.71	-7.81	24.90	46.00	-21.10
730.34	Н	Peak	33.39	-4.75	28.64	46.00	-17.36
893.30	Н	Peak	33.66	-2.49	31.17	46.00	-14.83

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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 Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

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)
44.55	V	Peak	32.01	-13.62	18.39	40.00	-21.61
154.16	5 V	Peak	32.31	-12.18	20.13	43.50	-23.37
410.24	4 V	Peak	32.90	-10.70	22.20	46.00	-23.80
570.29) V	Peak	33.29	-7.71	25.58	46.00	-20.42
701.24	4 V	Peak	33.55	-5.27	28.28	46.00	-17.72
871.96	5 V	Peak	33.93	-2.86	31.07	46.00	-14.93
41.64	Н	Peak	32.10	-13.51	18.59	40.00	-21.41
156.10) H	Peak	31.94	-12.01	19.93	43.50	-23.57
384.05	5 Н	Peak	33.36	-11.08	22.28	46.00	-23.72
553.80) Н	Peak	33.85	-8.01	25.84	46.00	-20.16
679.90) H	Peak	33.38	-5.55	27.83	46.00	-18.17
873.90) Н	Peak	33.24	-2.83	30.41	46.00	-15.59

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz °
- (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 High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

Fre	q. Ant	POL	tector R Iode R	eading I	Factor A	ctual FS	Limit3m	Safe Mar- gin
(ME	Hz) H	/V (PH	K/QP) (d	lBuV)	(dB) (d	dBuV/m) (dBuV/m)	(dB)
44.5	55	V P	Peak (31.64	-13.62	18.02	40.00	-21.98
144.	46	V P	Peak (32.95	-12.66	20.29	43.50	-23.21
422.	85 V	V P	Peak (32.75	-10.42	22.33	46.00	-23.67
555.	74	V P	Peak (33.70	-7.97	25.73	46.00	-20.27
720.	64	V P	Peak (33.02	-4.92	28.10	46.00	-17.90
895.	24	V P	eak 2	33.67	-2.45	31.22	46.00	-14.78
51.3	34 I	H P	eak .	32.35	-13.93	18.42	40.00	-21.58
154.	16 I	H P	eak .	32.04	-12.18	19.86	43.50	-23.64
384.	05 I	H P	Peak .	33.69	-11.08	22.61	46.00	-23.39
565.	44 I	H P	Peak (33.53	-7.81	25.72	46.00	-20.28
718.	70 I	H P	Peak (32.80	-4.96	27.84	46.00	-18.16
912.	70 I	H P	Peak 2	33.00	-2.05	30.95	46.00	-15.05

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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_20M)

Operation Mode	802.11n_20M TX CH Low	Test Date	Jan. 19, 2011
Fundamental Frequency	2412MHz	Test By	Jason
Temperature	27 °C	Pol	Ver./Hor
Humidity	66 %		

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
41.64	V	Peak	31.36	-13.51	17.85	40.00	-22.15
154.16	V	Peak	32.03	-12.18	19.85	43.50	-23.65
418.00	V	Peak	33.05	-10.54	22.51	46.00	-23.49
544.10	V	Peak	33.48	-8.28	25.20	46.00	-20.80
726.46	V	Peak	32.30	-4.82	27.48	46.00	-18.52
914.64	V	Peak	33.32	-2.02	31.30	46.00	-14.70
37.76	Н	Peak	32.13	-13.73	18.40	40.00	-21.60
151.25	Н	Peak	32.59	-12.20	20.39	43.50	-23.11
403.45	Н	Peak	32.92	-10.82	22.10	46.00	-23.90
548.95	Н	Peak	33.66	-8.21	25.45	46.00	-20.55
723.55	Н	Peak	32.99	-4.88	28.11	46.00	-17.89
917.55	Н	Peak	32.82	-1.98	30.84	46.00	-15.16

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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_20M)

Operation Mode	802.11n_20M TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor
Humidity	66 %		

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	39.70	V	Peak	31.88	-13.38	18.50	40.00	-21.50
	156.10	V	Peak	32.55	-12.01	20.54	43.50	-22.96
	424.79	V	Peak	32.90	-10.38	22.52	46.00	-23.48
	558.65	V	Peak	33.60	-7.93	25.67	46.00	-20.33
	726.46	V	Peak	33.30	-4.82	28.48	46.00	-17.52
	856.44	V	Peak	34.14	-3.13	31.01	46.00	-14.99
	41.64	Н	Peak	31.76	-13.51	18.25	40.00	-21.75
	160.95	Н	Peak	31.81	-11.98	19.83	43.50	-23.67
	416.06	Н	Peak	32.75	-10.58	22.17	46.00	-23.83
	563.50	Н	Peak	33.26	-7.85	25.41	46.00	-20.59
	720.64	Н	Peak	32.91	-4.92	27.99	46.00	-18.01
	914.64	Н	Peak	32.45	-2.02	30.43	46.00	-15.57

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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_20M)

Operation Mode	802.11n_20M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor
Humidity	66 %		

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	39.70	V	Peak	31.56	-13.38	18.18	40.00	-21.82
	148.34	V	Peak	32.17	-12.36	19.81	43.50	-23.69
	422.85	V	Peak	32.58	-10.42	22.16	46.00	-23.84
	548.95	V	Peak	33.98	-8.21	25.77	46.00	-20.23
	730.34	V	Peak	33.06	-4.75	28.31	46.00	-17.69
	898.15	V	Peak	33.12	-2.33	30.79	46.00	-15.21
	47.46	Н	Peak	31.90	-13.85	18.05	40.00	-21.95
	156.10	Н	Peak	32.96	-12.01	20.95	43.50	-22.55
	419.94	Н	Peak	33.69	-10.50	23.19	46.00	-22.81
	551.86	Н	Peak	33.32	-8.15	25.17	46.00	-20.83
	726.46	Н	Peak	33.23	-4.82	28.41	46.00	-17.59
	912.70	Н	Peak	32.96	-2.05	30.91	46.00	-15.09

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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 Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver./Hor
Humidity	65 %		

Freq.	. Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz	2) H /V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
39.70) V	Peak	31.68	-13.38	18.30	40.00	-21.70
158.04	4 V	Peak	31.77	-12.00	19.77	43.50	-23.73
422.85	5 V	Peak	33.03	-10.42	22.61	46.00	-23.39
565.44	4 V	Peak	33.60	-7.81	25.79	46.00	-20.21
728.40	0 V	Peak	32.60	-4.78	27.82	46.00	-18.18
898.1	5 V	Peak	33.55	-2.33	31.22	46.00	-14.78
39.70) Н	Peak	31.56	-13.38	18.18	40.00	-21.82
148.34	4 H	Peak	32.21	-12.36	19.85	43.50	-23.65
390.84	4 H	Peak	33.67	-11.03	22.64	46.00	-23.36
565.44	4 H	Peak	33.13	-7.81	25.32	46.00	-20.68
726.40	6 H	Peak	32.58	-4.82	27.76	46.00	-18.24
893.30	0 Н	Peak	33.57	-2.49	31.08	46.00	-14.92

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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 Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	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)
	41.64	V	Peak	32.39	-13.51	18.88	40.00	-21.12
	154.16	V	Peak	32.25	-12.18	20.07	43.50	-23.43
	418.00	V	Peak	32.76	-10.54	22.22	46.00	-23.78
	563.50	V	Peak	33.16	-7.85	25.31	46.00	-20.69
	726.46	V	Peak	33.21	-4.82	28.39	46.00	-17.61
	888.45	V	Peak	33.34	-2.57	30.77	46.00	-15.23
	41.64	Н	Peak	31.99	-13.51	18.48	40.00	-21.52
	156.10	Н	Peak	32.04	-12.01	20.03	43.50	-23.47
	424.79	Н	Peak	32.58	-10.38	22.20	46.00	-23.80
	570.29	Н	Peak	32.97	-7.71	25.26	46.00	-20.74
	713.85	Н	Peak	33.23	-5.05	28.18	46.00	-17.82
	920.46	Н	Peak	33.19	-1.93	31.26	46.00	-14.74

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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 High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	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)
	41.64	V	Peak	31.90	-13.51	18.39	40.00	-21.61
	154.16	V	Peak	32.13	-12.18	19.95	43.50	-23.55
4	410.24	V	Peak	33.36	-10.70	22.66	46.00	-23.34
	555.74	V	Peak	33.64	-7.97	25.67	46.00	-20.33
(691.54	V	Peak	33.34	-5.39	27.95	46.00	-18.05
(901.06	V	Peak	32.94	-2.29	30.65	46.00	-15.35
	44.55	Н	Peak	32.25	-13.62	18.63	40.00	-21.37
	158.04	Н	Peak	32.48	-12.00	20.48	43.50	-23.02
2	413.15	Н	Peak	32.78	-10.62	22.16	46.00	-23.84
	565.44	Н	Peak	33.09	-7.81	25.28	46.00	-20.72
,	726.46	Н	Peak	32.81	-4.82	27.99	46.00	-18.01
8	871.96	Н	Peak	33.83	-2.86	30.97	46.00	-15.03

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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	802.11n(5GHz)_20M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	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)
	39.70	V	Peak	32.62	-13.38	19.24	40.00	-20.76
	160.95	V	Peak	32.26	-11.98	20.28	43.50	-23.22
	413.15	V	Peak	33.03	-10.62	22.41	46.00	-23.59
	570.29	V	Peak	32.97	-7.71	25.26	46.00	-20.74
	697.36	V	Peak	33.36	-5.33	28.03	46.00	-17.97
	917.55	V	Peak	33.10	-1.98	31.12	46.00	-14.88
	47.46	Н	Peak	31.80	-13.85	17.95	40.00	-22.05
	158.04	Н	Peak	32.09	-12.00	20.09	43.50	-23.41
	396.66	Н	Peak	33.62	-10.94	22.68	46.00	-23.32
	568.35	Н	Peak	33.24	-7.75	25.49	46.00	-20.51
	728.40	Н	Peak	32.63	-4.78	27.85	46.00	-18.15
	904.94	Н	Peak	33.09	-2.21	30.88	46.00	-15.12

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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	802.11n(5GHz)_20M TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	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)
	34.85	V	Peak	32.36	-14.14	18.22	40.00	-21.78
	163.86	V	Peak	32.20	-12.35	19.85	43.50	-23.65
	388.90	V	Peak	33.78	-11.05	22.73	46.00	-23.27
	558.65	V	Peak	34.30	-7.93	26.37	46.00	-19.63
	728.40	V	Peak	32.91	-4.78	28.13	46.00	-17.87
	895.24	V	Peak	33.67	-2.45	31.22	46.00	-14.78
	41.64	Н	Peak	31.34	-13.51	17.83	40.00	-22.17
	148.34	Н	Peak	32.26	-12.36	19.90	43.50	-23.60
	406.36	Н	Peak	32.87	-10.78	22.09	46.00	-23.91
	563.50	Н	Peak	33.34	-7.85	25.49	46.00	-20.51
	726.46	Н	Peak	32.69	-4.82	27.87	46.00	-18.13
	917.55	Н	Peak	32.89	-1.98	30.91	46.00	-15.09

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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)_20M)

Operation Mode	802.11n(5GHz)_20M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	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	31.82	-13.51	18.31	40.00	-21.69
V	Peak	32.14	-12.01	20.13	43.50	-23.37
V	Peak	32.88	-10.38	22.50	46.00	-23.50
V	Peak	33.53	-7.93	25.60	46.00	-20.40
V	Peak	33.17	-4.88	28.29	46.00	-17.71
V	Peak	32.73	-2.02	30.71	46.00	-15.29
Н	Peak	32.40	-13.38	19.02	40.00	-20.98
Н	Peak	32.63	-12.66	19.97	43.50	-23.53
Н	Peak	33.34	-11.07	22.27	46.00	-23.73
Н	Peak	33.69	-7.93	25.76	46.00	-20.24
Н	Peak	33.09	-4.75	28.34	46.00	-17.66
Н	Peak	32.63	-1.98	30.65	46.00	-15.35
	H/V V V V V V H H H H H	Ant.Pol.ModeH/V(PK/QP)VPeakVPeakVPeakVPeakVPeakVPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeak	Ant.Pol. Mode Reading H/V (PK/QP) (dBuV) V Peak 31.82 V Peak 32.14 V Peak 32.14 V Peak 32.88 V Peak 33.53 V Peak 33.17 V Peak 32.73 H Peak 32.40 H Peak 32.63 H Peak 33.34 H Peak 33.69 H Peak 33.09	Ant.Pol. Mode Reading Factor H/V (PK/QP) (dBuV) (dB) V Peak 31.82 -13.51 V Peak 32.14 -12.01 V Peak 32.88 -10.38 V Peak 33.53 -7.93 V Peak 33.17 -4.88 V Peak 32.73 -2.02 H Peak 32.63 -13.38 H Peak 32.63 -12.66 H Peak 33.34 -11.07 H Peak 33.69 -7.93 H Peak 33.09 -4.75	Ant.Pol.ModeReadingFactorActual FSH/V(PK/QP)(dBuV)(dB)(dBuV/m)VPeak31.82-13.5118.31VPeak32.14-12.0120.13VPeak32.88-10.3822.50VPeak33.53-7.9325.60VPeak33.17-4.8828.29VPeak32.73-2.0230.71HPeak32.63-12.6619.97HPeak33.34-11.0722.27HPeak33.69-7.9325.76HPeak33.09-4.7528.34	Ant.Pol.ModeReadingFactorActual FSLimit3mH/V(PK/QP)(dBuV)(dB)(dBuV/m)(dBuV/m)VPeak31.82-13.5118.3140.00VPeak32.14-12.0120.1343.50VPeak32.88-10.3822.5046.00VPeak33.53-7.9325.6046.00VPeak33.17-4.8828.2946.00VPeak32.73-2.0230.7146.00HPeak32.63-12.6619.9743.50HPeak33.34-11.0722.2746.00HPeak33.69-7.9325.7646.00HPeak33.09-4.7528.3446.00

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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	802.11n(5GHz)_40M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5755MHz	Test By	Jazz
Temperature	25 °C	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)
49.40	V	Peak	32.30	-13.93	18.37	40.00	-21.63
156.10	V	Peak	32.08	-12.01	20.07	43.50	-23.43
332.64	V	Peak	33.87	-11.83	22.04	46.00	-23.96
546.04	V	Peak	33.53	-8.25	25.28	46.00	-20.72
660.50	V	Peak	34.30	-5.79	28.51	46.00	-17.49
910.76	V	Peak	32.87	-2.10	30.77	46.00	-15.23
41.64	Н	Peak	31.53	-13.51	18.02	40.00	-21.98
154.16	Н	Peak	32.44	-12.18	20.26	43.50	-23.24
419.94	Н	Peak	33.08	-10.50	22.58	46.00	-23.42
565.44	Н	Peak	33.27	-7.81	25.46	46.00	-20.54
723.55	Н	Peak	33.20	-4.88	28.32	46.00	-17.68
917.55	Н	Peak	32.50	-1.98	30.52	46.00	-15.48

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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	802.11n(5GHz)_40M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5795MHz	Test By	Jazz
Temperature	25 °C	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)
41.64	V	Peak	31.81	-13.51	18.30	40.00	-21.70
148.34	V	Peak	32.45	-12.36	20.09	43.50	-23.41
403.45	V	Peak	33.72	-10.82	22.90	46.00	-23.10
563.50	V	Peak	32.84	-7.85	24.99	46.00	-21.01
709.00	V	Peak	33.11	-5.13	27.98	46.00	-18.02
920.46	V	Peak	32.41	-1.93	30.48	46.00	-15.52
49.40	Н	Peak	31.82	-13.93	17.89	40.00	-22.11
156.10	Н	Peak	31.84	-12.01	19.83	43.50	-23.67
386.96	Н	Peak	33.71	-11.07	22.64	46.00	-23.36
534.40	Н	Peak	34.15	-8.44	25.71	46.00	-20.29
726.46	Н	Peak	32.76	-4.82	27.94	46.00	-18.06
883.60	Н	Peak	33.68	-2.66	31.02	46.00	-14.98

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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) (802.11b)

Operation Mode	802.11b TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0	34.31		5.30	39.61		74.00	54.00	-14.39	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:

- Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental (1)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.
- Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 (5) 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) (802.11b)

Operation Mode	802.11b TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actual FS		Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4757.0	31.42		5.33	36.75		74.00	54.00	-17.25	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 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
- (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) (802.11b)

Operation Mode	802.11b TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	31.56		5.42	36.98		74.00	54.00	-17.02	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:

- Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental (1)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.
- Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 (5) 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) (802.11b)

Operation Mode	802.11b TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	30.42		5.46	35.88		74.00	54.00	-18.12	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 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
- (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) (802.11b)

Operation Mode	802.11b TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

		Peak	AV		Actu	al FS	Peak	AV		
	Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
_	(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
	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 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
- (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) (802.11b)

Operation Mode	802.11b TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4924.0	30.40		5.49	35.89		74.00	54.00	-18.11	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:

- Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental (1)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.
- Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 (5) 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 Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

Peak	AV		Actual FS		Peak	AV		
Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
31.73		4.65	36.38		74.00	54.00	-17.62	Peak
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
	Reading (dBuV) 31.73 	Reading Reading (dBuV) (dBuV) 31.73	ReadingReadingAnt./CL(dBuV)(dBuV)CF(dB)31.734.65<	ReadingAnt./CLPeak(dBuV)CF(dB)(dBuV/n)31.734.6536.38	ReadingReadingAnt./CLPeakAV(dBuV)CF(dB)(dBuV/m)(dBuV/m)31.7336.38<	ReadingReadingAnt./CLPeakAVLimit(dBuV)CF(dB)(dBuV/m)(dBuV/m)(dBuV/m)31.734.6536.3874.00<	Reading (dBuv)Ant./CLPeakAVLinni(dBuv)CF(dB)(dBuV)(dBuV)(dBuV)(dBuV)31.734.6536.3874.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.00	Reading (dBuv)Ant./CLPeakAVLimitLimitMargin (dBuV/m)31.734.6536.3874.0054.00-17.6274.0054.00-17.6274.0054.00-17.6274.0054.00-17.6274.0054.00-17.6274.0054.00-17.6274.0054.00-17.6274.0054.00-17.6274.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.00

Remark:

- Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental (1)frequency
- Data of measurement within this frequency range shown " " in the table above means (2)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 instru-(3)ment 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.
- Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 (5) 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 Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

		Peak	AV		Actual FS		Peak	AV		
	Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
_	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
	4737.5	31.02		5.08	36.10		74.00	54.00	-17.90	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 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.
- (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)

Operation Mode	802.11g TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actual FS		Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0						74.00	54.00		
4965.0	30.34		5.62	35.96		74.00	54.00	-18.04	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 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.
- (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)

Operation Mode	802.11g TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0	31.35		5.30	36.65		74.00	54.00	-17.35	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:

- Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental (1)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.
- Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 (5) 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 High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4924.0	30.51		5.67	36.18		74.00	54.00	-17.82	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:

- Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental (1)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.
- Spectrum AV Setting : 1GHz- 26GHz, RBW= 1MHz, VBW= 10Hz, Sweep time= 200 (5) 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 High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4783.0	31.01		5.20	36.21		74.00	54.00	-17.79	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 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.
- (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_20M)

Operation Mode	802.11n_20M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0	30.52		5.42	35.94		74.00	54.00	-18.06	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 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_20M)

Operation Mode	802.11n_20M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0						74.00	54.00		
4913.0	30.53		5.51	36.04		74.00	54.00	-17.96	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 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) (802.11n_20M)

Operation Mode	802.11n_20M TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4770.0	30.83		5.18	36.01		74.00	54.00	-17.99	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 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) (802.11n_20M)

Operation Mode	802.11n_20M TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	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		
4978.0	30.14		5.67	35.81		74.00	54.00	-18.19	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 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) (802.11n_20M)

Operation Mode	802.11n_20M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver
Humidity	66 %		

		Peak	AV		Actu	al FS	Peak	AV		
	Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
_	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
	4575.0	31.27		4.56	35.83		74.00	54.00	-18.17	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 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) (802.11n_20M)

Operation Mode	802.11n_20M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor
Humidity	66 %		

		Peak	AV		Actu	al FS	Peak	AV		
	Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
_	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
	4887.0	30.60		5.46	36.06		74.00	54.00	-17.94	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 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)

Operation Mode	802.11a TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

		Peak	AV		Actu	al FS	Peak	AV		
	Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
_	(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
	11490.0						74.00	54.00		
	11542.5	23.19		18.76	41.95		74.00	54.00	-12.05	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_o
- (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 columno
- (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. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11490.0	23.30		18.76	42.06		74.00	54.00	-11.94	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。
- (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 Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11570.0						74.00	54.00		
11647.50	23.63		18.64	42.27		74.00	54.00	-11.73	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_o
- (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- 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. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11570.0	23.80		18.72	42.52		74.00	54.00	-11.48	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。
- (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. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

Peak

Remark :

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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- 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. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

Peak	AV		Actu	al FS	Peak	AV		
Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
23.36		18.80	42.16		74.00	54.00	-11.84	Peak
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
	Reading (dBuV) 23.36 	Reading Reading (dBuV) (dBuV) 23.36	Reading Reading Ant./CL (dBuV) (dBuV) CF(dB) 23.36 18.80 - - - - - - - - - - - - - - - - - - - - - - - - - -	ReadingAnt./CLPeak(dBuV)CF(dB)(dBuV/m)23.3618.8042.16 <td< td=""><td>ReadingAnt./CLPeakAV(dBuV)(dBuV)(dBuV/m)(dBuV/m)23.3618.8042.16<</td><td>ReadingReadingAnt./ClPeakAVLimit(dBuv)CF(dB)(dBuv)(dBuv)(dBuv)23.3618.8042.1674.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.00</td><td>Reading (dBuv)Ant./ClPeakAVLinit(dBuv)CF(dB)(dBuV)(dBuV)(dBuV)(dBuV)23.3618.8042.1674.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.00</td><td>Reading (dBuv)Ant./CLPeakAVLimitLimitMargin (dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)23.3618.8042.1674.0054.00-11.8474.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.00</td></td<>	ReadingAnt./CLPeakAV(dBuV)(dBuV)(dBuV/m)(dBuV/m)23.3618.8042.16<	ReadingReadingAnt./ClPeakAVLimit(dBuv)CF(dB)(dBuv)(dBuv)(dBuv)23.3618.8042.1674.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.0074.00	Reading (dBuv)Ant./ClPeakAVLinit(dBuv)CF(dB)(dBuV)(dBuV)(dBuV)(dBuV)23.3618.8042.1674.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.00	Reading (dBuv)Ant./CLPeakAVLimitLimitMargin (dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)(dBuv)23.3618.8042.1674.0054.00-11.8474.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.00

Remark :

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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- 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	802.11n(5GHz)_20M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

Freq. Reading Reading Ant./CL Peak AV Limit Limit Margin R	Remark
(MHz) (dBuV) (dBuV) CF(dB) (dBuV/m) (dBuV/m) (dBuV/m) (dBuV/m) (dB)	
11490.0 74.00 54.00	
11616.0 23.77 18.69 42.46 74.00 54.00 -11.54	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- 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) (802.11n(5Ghz)_20M)

Operation Mode	802.11n(5GHz)_20M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11490.0	23.92		18.75	42.67		74.00	54.00	-11.33	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- 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) (802.11n(5Ghz)_20M)

Operation Mode	802.11n(5GHz)_20M TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

Peak	AV		Actu	al FS	Peak	AV		
Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
23.43		18.65	42.08		74.00	54.00	-11.92	Peak
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
	Reading (dBuV) 23.43 	Reading Reading (dBuV) (dBuV) 23.43 <tr< td=""><td>ReadingReadingAnt./CL(dBuV)(dBuV)CF(dB)23.4318.65</td><td>ReadingAnt./CLPeak(dBu/)CF(dB)(dBu/)23.4318.6542.08</td><td>ReadingReadingAnt./CLPeakAV(dBu/)CF(dB)(dBu/)(dBu/)23.4318.6542.0818.6542.08</td><td>ReadingReadingAnt./ClPeakAVLimit(dBuV)CF(dB)(dBuV)(dBuV)(dBuV)23.4318.6542.0874.00</td><td>Reading (dBuv)Ant./ClPeakAVLimit(dBuv)CF(dB)(dBuV)(dBuV)(dBuV)(dBuV)23.4318.6542.0874.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.00</td><td>ReadingReadingAnt./CLPeakAVLinitLinitMargin(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)23.4318.6542.0874.0054.00-11.9274.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.00</td></tr<>	ReadingReadingAnt./CL(dBuV)(dBuV)CF(dB)23.4318.65	ReadingAnt./CLPeak(dBu/)CF(dB)(dBu/)23.4318.6542.08	ReadingReadingAnt./CLPeakAV(dBu/)CF(dB)(dBu/)(dBu/)23.4318.6542.0818.6542.08	ReadingReadingAnt./ClPeakAVLimit(dBuV)CF(dB)(dBuV)(dBuV)(dBuV)23.4318.6542.0874.00	Reading (dBuv)Ant./ClPeakAVLimit(dBuv)CF(dB)(dBuV)(dBuV)(dBuV)(dBuV)23.4318.6542.0874.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.00	ReadingReadingAnt./CLPeakAVLinitLinitMargin(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)23.4318.6542.0874.0054.00-11.9274.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.00

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- 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) (802.11n(5GHz)_20M)

Operation Mode	802.11n(5GHz)_20M TX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11570.0	24.02		18.72	42.74		74.00	54.00	-11.26	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- 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) (802.11n(5Ghz)_20M)

Operation Mode	802.11n(5GHz)_20M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11070.0	23.66		18.23	41.89		74.00	54.00	-12.11	Peak
11364.0						74.00	54.00		
11650.0						74.00	54.00		
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		

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- 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) (802.11n(5GHz)_20M)

Operation Mode	802.11n(5GHz)_20M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11542.0	23.80		18.76	42.56		74.00	54.00	-11.44	Peak
11650.0						74.00	54.00		
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- 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) (802.11n(5GHz)_40M)

Operation Mode	802.11n(5GHz)_40M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5755MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
3487.0	37.93		2.13	40.06		74.00	54.00	-13.94	Peak
11510.0						74.00	54.00		
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- 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) (802.11n(5Ghz)_40M)

Operation Mode	802.11n(5GHz)_40M TX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5755MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

Peak	AV		Actu	al FS	Peak	AV		
Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
35.46		2.13	37.59		74.00	54.00	-16.41	Peak
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
	Reading (dBuV) 35.46 	Reading Reading (dBuV) (dBuV) 35.46 -	ReadingReadingAnt./CL(dBuV)(dBuV)CF(dB)35.462.13 <trr><</trr>	ReadingAnt./CLPeak(dBuV)CF(dB)(dBuV/m)35.462.1337.592.1337.59	ReadingReadingAnt./CLPeakAV(dBuV)CF(dB)(dBuV)(dBuV)35.4637.592.1337.59	ReadingReadingAnt./CLPeakAVLimit(dBuV)CF(dB)(dBuV)(dBuV)(dBuV)35.462.1337.5974.00	Reading (dBuv)Ant./ClPeakAVLinit(dBuv)CF(dB)(dBuV)(dBuV)(dBuV)(dBuV)35.462.1337.5974.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.0054.00	ReadingReadingAnt./CLPeakAVLimitLimitMargin(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)(dBuV)35.462.1337.5974.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.0074.0054.00

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- 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) (802.11n(5Ghz)_40M)

Operation Mode	802.11n(5GHz)_40M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5795MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
3860.0	38.37		2.18	40.55		74.00	54.00	-13.45	Peak
11590.0						74.00	54.00		
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- 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) (802.11n(5GHz)_40M)

Operation Mode	802.11n(5GHz)_40M TX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5795MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
3860.0	37.62		2.18	39.80		74.00	54.00	-14.20	Peak
11590.0						74.00	54.00		
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- 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 (below 1GHz)

Operation Mode	802.11b RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	37.76	V	Peak	32.86	-13.73	19.13	40.00	-20.87
	160.95	V	Peak	32.43	-11.98	20.45	43.50	-23.05
	400.54	V	Peak	33.05	-10.91	22.14	46.00	-23.86
	558.65	V	Peak	33.70	-7.93	25.77	46.00	-20.23
	720.64	V	Peak	32.92	-4.92	28.00	46.00	-18.00
	903.00	V	Peak	33.52	-2.25	31.27	46.00	-14.73
	39.70	Н	Peak	31.26	-13.38	17.88	40.00	-22.12
	154.16	Н	Peak	32.82	-12.18	20.64	43.50	-22.86
	422.85	Н	Peak	32.91	-10.42	22.49	46.00	-23.51
	568.35	Н	Peak	33.02	-7.75	25.27	46.00	-20.73
	713.85	Н	Peak	33.41	-5.05	28.36	46.00	-17.64
	917.55	Н	Peak	32.66	-1.98	30.68	46.00	-15.32

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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)

Operation Mode	802.11b RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
 (MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
51.34	V	Peak	32.30	-13.93	18.37	40.00	-21.63
154.16	V	Peak	32.32	-12.18	20.14	43.50	-23.36
419.94	V	Peak	32.51	-10.50	22.01	46.00	-23.99
568.35	V	Peak	33.90	-7.75	26.15	46.00	-19.85
720.64	V	Peak	33.26	-4.92	28.34	46.00	-17.66
912.70	V	Peak	32.99	-2.05	30.94	46.00	-15.06
49.40	Н	Peak	31.91	-13.93	17.98	40.00	-22.02
156.10	Н	Peak	32.12	-12.01	20.11	43.50	-23.39
400.54	Н	Peak	33.21	-10.91	22.30	46.00	-23.70
548.95	Н	Peak	33.89	-8.21	25.68	46.00	-20.32
660.50	Н	Peak	33.56	-5.79	27.77	46.00	-18.23
914.64	Н	Peak	32.68	-2.02	30.66	46.00	-15.34

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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)

Operation Mode	802.11b RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
44.55	V	Peak	31.60	-13.62	17.98	40.00	-22.02
154.16	V	Peak	33.35	-12.18	21.17	43.50	-22.33
416.06	V	Peak	34.05	-10.58	23.47	46.00	-22.53
555.74	V	Peak	33.06	-7.97	25.09	46.00	-20.91
728.40	V	Peak	33.57	-4.78	28.79	46.00	-17.21
904.94	V	Peak	33.43	-2.21	31.22	46.00	-14.78
44.55	Н	Peak	32.39	-13.62	18.77	40.00	-21.23
160.95	Н	Peak	31.95	-11.98	19.97	43.50	-23.53
416.06	Н	Peak	33.06	-10.58	22.48	46.00	-23.52
558.65	Н	Peak	33.87	-7.93	25.94	46.00	-20.06
716.76	Н	Peak	32.71	-4.99	27.72	46.00	-18.28
893.30	Н	Peak	33.23	-2.49	30.74	46.00	-15.26

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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)

Operation Mode	802.11g RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	39.70	V	Peak	31.66	-13.38	18.28	40.00	-21.72
	148.34	V	Peak	32.52	-12.36	20.16	43.50	-23.34
	403.45	V	Peak	33.33	-10.82	22.51	46.00	-23.49
	553.80	V	Peak	33.41	-8.01	25.40	46.00	-20.60
	723.55	V	Peak	32.96	-4.88	28.08	46.00	-17.92
	914.64	V	Peak	32.86	-2.02	30.84	46.00	-15.16
	41.64	Н	Peak	31.46	-13.51	17.95	40.00	-22.05
	146.40	Н	Peak	32.51	-12.51	20.00	43.50	-23.50
	424.79	Н	Peak	32.66	-10.38	22.28	46.00	-23.72
	555.74	Н	Peak	33.57	-7.97	25.60	46.00	-20.40
	730.34	Н	Peak	32.87	-4.75	28.12	46.00	-17.88
	862.26	Н	Peak	34.02	-3.04	30.98	46.00	-15.02

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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)

Operation Mode	802.11g RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
 (MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
44.55	V	Peak	31.58	-13.62	17.96	40.00	-22.04
148.34	V	Peak	32.82	-12.36	20.46	43.50	-23.04
374.35	V	Peak	33.54	-11.15	22.39	46.00	-23.61
558.65	V	Peak	33.75	-7.93	25.82	46.00	-20.18
626.55	V	Peak	34.40	-6.47	27.93	46.00	-18.07
917.55	V	Peak	33.08	-1.98	31.10	46.00	-14.90
44.55	Н	Peak	32.47	-13.62	18.85	40.00	-21.15
156.10	Н	Peak	31.89	-12.01	19.88	43.50	-23.62
400.54	Н	Peak	33.57	-10.91	22.66	46.00	-23.34
565.44	Н	Peak	33.13	-7.81	25.32	46.00	-20.68
726.46	Н	Peak	32.79	-4.82	27.97	46.00	-18.03
920.46	Н	Peak	32.80	-1.93	30.87	46.00	-15.13

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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)

Operation Mode	802.11g RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor.
Humidity	66 %		

Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
 (MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
39.70	V	Peak	31.45	-13.38	18.07	40.00	-21.93
156.10	V	Peak	32.35	-12.01	20.34	43.50	-23.16
384.05	V	Peak	33.45	-11.08	22.37	46.00	-23.63
546.04	V	Peak	33.46	-8.25	25.21	46.00	-20.79
723.55	V	Peak	33.27	-4.88	28.39	46.00	-17.61
885.54	V	Peak	33.63	-2.64	30.99	46.00	-15.01
39.70	Н	Peak	32.06	-13.38	18.68	40.00	-21.32
156.10	Н	Peak	31.94	-12.01	19.93	43.50	-23.57
422.85	Н	Peak	33.09	-10.42	22.67	46.00	-23.33
553.80	Н	Peak	33.35	-8.01	25.34	46.00	-20.66
730.34	Н	Peak	32.53	-4.75	27.78	46.00	-18.22
910.76	Н	Peak	32.57	-2.10	30.47	46.00	-15.53

Remark :

- (1) Measuring frequencies from 30 MHz to the 1GHz \circ
- (2) Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using Peak/OP 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 RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor
Humidity	66 %		

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	37.76	V	Peak	31.77	-13.73	18.04	40.00	-21.96
	156.10	V	Peak	32.44	-12.01	20.43	43.50	-23.07
	419.94	V	Peak	33.11	-10.50	22.61	46.00	-23.39
	568.35	V	Peak	33.40	-7.75	25.65	46.00	-20.35
	643.04	V	Peak	33.99	-6.12	27.87	46.00	-18.13
	859.35	V	Peak	33.73	-3.07	30.66	46.00	-15.34
	47.46	Н	Peak	32.79	-13.85	18.94	40.00	-21.06
	156.10	Н	Peak	31.70	-12.01	19.69	43.50	-23.81
	422.85	Н	Peak	32.89	-10.42	22.47	46.00	-23.53
	565.44	Н	Peak	33.31	-7.81	25.50	46.00	-20.50
	728.40	Н	Peak	32.77	-4.78	27.99	46.00	-18.01
	910.76	Н	Peak	33.08	-2.10	30.98	46.00	-15.02

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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_20M)

Operation Mode	802.11n_20M RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor
Humidity	66 %		

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	47.46	V	Peak	33.30	-13.85	19.45	40.00	-20.55
	148.34	V	Peak	32.44	-12.36	20.08	43.50	-23.42
	424.79	V	Peak	32.60	-10.38	22.22	46.00	-23.78
	570.29	V	Peak	32.89	-7.71	25.18	46.00	-20.82
	691.54	V	Peak	33.45	-5.39	28.06	46.00	-17.94
	878.75	V	Peak	33.86	-2.74	31.12	46.00	-14.88
	34.85	Н	Peak	32.04	-14.14	17.90	40.00	-22.10
	158.04	Н	Peak	32.06	-12.00	20.06	43.50	-23.44
	384.05	Н	Peak	33.59	-11.08	22.51	46.00	-23.49
	553.80	Н	Peak	34.75	-8.01	26.74	46.00	-19.26
	720.64	Н	Peak	32.69	-4.92	27.77	46.00	-18.23
	917.55	Н	Peak	32.78	-1.98	30.80	46.00	-15.20

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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_20M)

Operation Mode	802.11n_20M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver./Hor
Humidity	66 %		

	Freq.	Ant.Pol.	Detector Mode	Reading	Factor	Actual FS	Limit3m	Safe Margin
_	(MHz)	H/V	(PK/QP)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
	39.70	V	Peak	31.73	-13.38	18.35	40.00	-21.65
	146.40	V	Peak	32.43	-12.51	19.92	43.50	-23.58
	424.79	V	Peak	32.77	-10.38	22.39	46.00	-23.61
	558.65	V	Peak	33.36	-7.93	25.43	46.00	-20.57
	730.34	V	Peak	32.74	-4.75	27.99	46.00	-18.01
	881.66	V	Peak	33.25	-2.70	30.55	46.00	-15.45
	37.76	Н	Peak	32.44	-13.73	18.71	40.00	-21.29
	160.95	Н	Peak	32.20	-11.98	20.22	43.50	-23.28
	408.30	Н	Peak	33.32	-10.74	22.58	46.00	-23.42
	555.74	Н	Peak	33.52	-7.97	25.55	46.00	-20.45
	726.46	Н	Peak	32.93	-4.82	28.11	46.00	-17.89
	912.70	Н	Peak	33.18	-2.05	31.13	46.00	-14.87

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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 RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	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)
49.40	V	Peak	32.18	-13.93	18.25	40.00	-21.75
156.10	V	Peak	32.25	-12.01	20.24	43.50	-23.26
413.15	V	Peak	32.87	-10.62	22.25	46.00	-23.75
561.56	V	Peak	33.12	-7.86	25.26	46.00	-20.74
701.24	V	Peak	33.27	-5.27	28.00	46.00	-18.00
881.66	V	Peak	33.72	-2.70	31.02	46.00	-14.98
39.70	Н	Peak	31.63	-13.38	18.25	40.00	-21.75
163.86	Н	Peak	32.42	-12.35	20.07	43.50	-23.43
398.60	Н	Peak	33.14	-10.93	22.21	46.00	-23.79
570.29	Н	Peak	33.60	-7.71	25.89	46.00	-20.11
728.40	Н	Peak	33.04	-4.78	28.26	46.00	-17.74
878.75	Н	Peak	33.50	-2.74	30.76	46.00	-15.24

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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 RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	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)
54.25	V	Peak	32.34	-14.07	18.27	40.00	-21.73
154.16	V	Peak	32.45	-12.18	20.27	43.50	-23.23
406.36	V	Peak	32.91	-10.78	22.13	46.00	-23.87
568.35	V	Peak	33.15	-7.75	25.40	46.00	-20.60
730.34	V	Peak	33.12	-4.75	28.37	46.00	-17.63
869.05	V	Peak	33.58	-2.92	30.66	46.00	-15.34
41.64	Н	Peak	31.41	-13.51	17.90	40.00	-22.10
151.25	Н	Peak	32.22	-12.20	20.02	43.50	-23.48
422.85	Н	Peak	34.08	-10.42	23.66	46.00	-22.34
565.44	Н	Peak	33.23	-7.81	25.42	46.00	-20.58
728.40	Н	Peak	32.77	-4.78	27.99	46.00	-18.01
912.70	Н	Peak	32.77	-2.05	30.72	46.00	-15.28

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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 RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	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)
44.55	V	Peak	32.19	-13.62	18.57	40.00	-21.43
151.25	V	Peak	32.17	-12.20	19.97	43.50	-23.53
418.00	V	Peak	32.76	-10.54	22.22	46.00	-23.78
555.74	V	Peak	33.47	-7.97	25.50	46.00	-20.50
650.80	V	Peak	34.58	-6.00	28.58	46.00	-17.42
864.20	V	Peak	33.94	-3.01	30.93	46.00	-15.07
44.55	Н	Peak	31.87	-13.62	18.25	40.00	-21.75
159.98	Н	Peak	31.85	-11.98	19.87	43.50	-23.63
408.30	Н	Peak	33.17	-10.74	22.43	46.00	-23.57
558.65	Н	Peak	33.83	-7.93	25.90	46.00	-20.10
716.76	Н	Peak	32.85	-4.99	27.86	46.00	-18.14
864.20	Н	Peak	33.49	-3.01	30.48	46.00	-15.52

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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	802.11n(5GHz)_20M RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	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)
	39.70	V	Peak	31.74	-13.38	18.36	40.00	-21.64
	165.80	V	Peak	33.82	-12.54	21.28	43.50	-22.22
	424.79	V	Peak	32.67	-10.38	22.29	46.00	-23.71
	551.86	V	Peak	33.68	-8.15	25.53	46.00	-20.47
	723.55	V	Peak	33.48	-4.88	28.60	46.00	-17.40
	912.70	V	Peak	33.34	-2.05	31.29	46.00	-14.71
	41.64	Н	Peak	31.92	-13.51	18.41	40.00	-21.59
	158.04	Н	Peak	31.96	-12.00	19.96	43.50	-23.54
	424.79	Н	Peak	32.77	-10.38	22.39	46.00	-23.61
	551.86	Н	Peak	33.66	-8.15	25.51	46.00	-20.49
	709.00	Н	Peak	32.93	-5.13	27.80	46.00	-18.20
	912.70	Н	Peak	33.14	-2.05	31.09	46.00	-14.91

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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)_20M)

Operation Mode	802.11n(5GHz)_20M RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	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)
	41.64	V	Peak	32.19	-13.51	18.68	40.00	-21.32
	146.40	V	Peak	33.11	-12.51	20.60	43.50	-22.90
	416.06	V	Peak	32.56	-10.58	21.98	46.00	-24.02
	558.65	V	Peak	33.28	-7.93	25.35	46.00	-20.65
	716.76	V	Peak	33.23	-4.99	28.24	46.00	-17.76
	903.00	V	Peak	33.23	-2.25	30.98	46.00	-15.02
	39.70	Н	Peak	31.33	-13.38	17.95	40.00	-22.05
	158.04	Н	Peak	32.25	-12.00	20.25	43.50	-23.25
	422.85	Н	Peak	32.59	-10.42	22.17	46.00	-23.83
	551.86	Н	Peak	33.41	-8.15	25.26	46.00	-20.74
	704.15	Н	Peak	33.08	-5.21	27.87	46.00	-18.13
	893.30	Н	Peak	33.53	-2.49	31.04	46.00	-14.96

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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)_20M)

Operation Mode	802.11n(5GHz)_20M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	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	31.97	-13.93	18.04	40.00	-21.96
V	Peak	32.25	-12.18	20.07	43.50	-23.43
V	Peak	33.42	-11.08	22.34	46.00	-23.66
V	Peak	33.93	-8.15	25.78	46.00	-20.22
V	Peak	32.84	-4.96	27.88	46.00	-18.12
V	Peak	32.80	-2.10	30.70	46.00	-15.30
Н	Peak	31.58	-13.51	18.07	40.00	-21.93
Н	Peak	32.31	-12.01	20.30	43.50	-23.20
Н	Peak	32.79	-10.50	22.29	46.00	-23.71
Н	Peak	33.53	-7.71	25.82	46.00	-20.18
Н	Peak	32.80	-4.75	28.05	46.00	-17.95
Н	Peak	33.25	-2.70	30.55	46.00	-15.45
	H/V V V V V V H H H H H	Ant.Pol.ModeH/V(PK/QP)VPeakVPeakVPeakVPeakVPeakVPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeakPakPeak	Ant.Pol. Mode Reading H/V (PK/QP) (dBuV) V Peak 31.97 V Peak 32.25 V Peak 33.42 V Peak 33.93 V Peak 32.84 V Peak 32.80 H Peak 31.58 H Peak 32.31 H Peak 32.79 H Peak 33.53 H Peak 32.80	Ant.Pol. Mode Reading Factor H/V (PK/QP) (dBuV) (dB) V Peak 31.97 -13.93 V Peak 32.25 -12.18 V Peak 33.42 -11.08 V Peak 33.93 -8.15 V Peak 32.84 -4.96 V Peak 32.80 -2.10 H Peak 31.58 -13.51 H Peak 32.31 -12.01 H Peak 32.79 -10.50 H Peak 32.53 -7.71 H Peak 32.80 -4.75	Ant.Pol.ModeReadingFactorActual FSH/V(PK/QP)(dBuV)(dB)(dBuV/m)VPeak31.97-13.9318.04VPeak32.25-12.1820.07VPeak33.42-11.0822.34VPeak33.93-8.1525.78VPeak32.84-4.9627.88VPeak32.80-2.1030.70HPeak31.58-13.5118.07HPeak32.31-12.0120.30HPeak32.79-10.5022.29HPeak32.80-4.7528.05	Ant.Pol.ModeReadingFactorActual FSLimit3mH/V(PK/QP)(dBuV)(dB)(dBuV/m)(dBuV/m)VPeak31.97-13.9318.0440.00VPeak32.25-12.1820.0743.50VPeak33.42-11.0822.3446.00VPeak33.93-8.1525.7846.00VPeak32.84-4.9627.8846.00VPeak32.80-2.1030.7046.00HPeak31.58-13.5118.0740.00HPeak32.31-12.0120.3043.50HPeak32.79-10.5022.2946.00HPeak33.53-7.7125.8246.00HPeak32.80-4.7528.0546.00

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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	802.11n(5GHz)_40M RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5755MHz	Test By	Jazz
Temperature	25 °C	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)
	39.70	V	Peak	31.41	-13.38	18.03	40.00	-21.97
	160.95	V	Peak	31.88	-11.98	19.90	43.50	-23.60
	424.79	V	Peak	32.93	-10.38	22.55	46.00	-23.45
	561.56	V	Peak	33.85	-7.86	25.99	46.00	-20.01
	710.94	V	Peak	33.17	-5.10	28.07	46.00	-17.93
	869.05	V	Peak	33.39	-2.92	30.47	46.00	-15.53
	44.55	Н	Peak	32.01	-13.62	18.39	40.00	-21.61
	158.04	Н	Peak	31.86	-12.00	19.86	43.50	-23.64
	419.94	Н	Peak	32.73	-10.50	22.23	46.00	-23.77
	565.44	Н	Peak	33.18	-7.81	25.37	46.00	-20.63
	730.34	Н	Peak	32.58	-4.75	27.83	46.00	-18.17
	869.05	Н	Peak	33.72	-2.92	30.80	46.00	-15.20

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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	802.11n(5GHz)_40M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5795MHz	Test By	Jazz
Temperature	25 °C	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)
41.64	V	Peak	31.85	-13.51	18.34	40.00	-21.66
144.46	V	Peak	32.97	-12.66	20.31	43.50	-23.19
419.94	V	Peak	33.29	-10.50	22.79	46.00	-23.21
563.50	V	Peak	33.35	-7.85	25.50	46.00	-20.50
720.64	V	Peak	33.05	-4.92	28.13	46.00	-17.87
917.55	V	Peak	33.22	-1.98	31.24	46.00	-14.76
39.70	Н	Peak	31.27	-13.38	17.89	40.00	-22.11
160.95	Н	Peak	31.76	-11.98	19.78	43.50	-23.72
403.45	Н	Peak	32.97	-10.82	22.15	46.00	-23.85
563.50	Н	Peak	33.89	-7.85	26.04	46.00	-19.96
726.46	Н	Peak	33.32	-4.82	28.50	46.00	-17.50
859.35	Н	Peak	34.86	-3.07	31.79	46.00	-14.21

Remark :

- 1 Measuring frequencies from 30 MHz to the 1GHz °
- 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)

Operation Mode	802.11b RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4718.0						74.00	54.00		
4913.0	29.80		5.47	35.27		74.00	54.00	-18.73	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		

Remark 2

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11b RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412 MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4770.0	30.37		5.10	35.47		74.00	54.00	-18.53	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		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11b RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4822.0	30.31		5.24	35.55		74.00	54.00	-18.45	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		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11b RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437 MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4783.0	29.84		5.14	34.98		74.00	54.00	-19.02	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		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11b RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4822.0	30.44		5.24	35.68		74.00	54.00	-18.32	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		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11b RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462 MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4924.0						74.00	54.00		
4997.5	29.43		5.70	35.13		74.00	54.00	-18.87	Peak
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11g RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0						74.00	54.00		
4887.0	30.01		5.41	35.42		74.00	54.00	-18.58	Peak
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11g RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412 MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0	29.85		5.19	35.04		74.00	54.00	-18.96	Peak
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						74.00	54.00		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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 columno
- (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)

Operation Mode	802.11g RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4737.5	29.91		5.00	34.91		74.00	54.00	-19.09	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		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11g RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437 MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4874.0						74.00	54.00		
4978.0	29.77		5.66	35.43		74.00	54.00	-18.57	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						74.00	54.00		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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)

Operation Mode	802.11g RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462 MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4924.0	29.79		5.52	35.31		74.00	54.00	-18.69	Peak
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						74.00	54.00		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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 columno
- (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)

Operation Mode	802.11g RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462 MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4867.5	30.96		5.37	36.33		74.00	54.00	-17.67	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		

Remark :

- (1) Measuring frequencies from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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) (802.11n_20M)

Operation Mode	802.11n_20M RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver.
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4824.0						74.00	54.00		
4965.0	29.90		5.61	35.51		74.00	54.00	-18.49	Peak
7236.0						74.00	54.00		
9648.0						74.00	54.00		
12060.0						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 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_20M)

Operation Mode	802.11n_20M RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	2412MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4705.0	30.63		4.90	35.53		74.00	54.00	-18.47	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		

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_20M)

Operation Mode	802.11n_20M RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	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	29.76		5.61	35.37		74.00	54.00	-18.63	Peak
7311.0						74.00	54.00		
9748.0						74.00	54.00		
12185.0						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 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_20M)

Operation Mode	802.11n_20M RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	2437MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4757.0	30.79		5.05	35.84		74.00	54.00	-18.16	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		

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_20M)

Operation Mode	802.11n_20M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Ver
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4924.0	30.07		5.44	35.51		74.00	54.00	-18.49	Peak
7386.0						74.00	54.00		
9848.0						74.00	54.00		
12310.0						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 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) (802.11n_20M)

Operation Mode	802.11n_20M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	2462MHz	Test By	Jazz
Temperature	27 °C	Pol	Hor
Humidity	66 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4737.5	30.62		5.00	35.62		74.00	54.00	-18.38	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		

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)

Operation Mode	802.11a RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11437.5	23.15		18.68	41.83		74.00	54.00	-12.17	Peak
11490.0						74.00	54.00		
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						74.00	54.00		

Remark :

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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- 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 RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11490.0	23.55		18.75	42.30		74.00	54.00	-11.70	Peak
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						74.00	54.00		

Remark :

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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- 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 RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11469.0	23.01		18.76	41.77		74.00	54.00	-12.23	Peak
11570.0						74.00	54.00		
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						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。
- (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 RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11570.0	23.31		18.76	42.07		74.00	54.00	-11.93	Peak
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						74.00	54.00		

Remark :

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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- 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 RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11595.0	23.51		18.70	42.21		74.00	54.00	-11.79	Peak
11650.0						74.00	54.00		
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						74.00	54.00		

Remark :

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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 column₀
- (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 RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11437.5	23.43		18.68	42.11		74.00	54.00	-11.89	Peak
11650.0						74.00	54.00		
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						74.00	54.00		

Remark :

- (1) Measuring frequencies scanned from 1GHz to the 10th harmonic of highest fundamental frequency_o
- (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 column₀
- (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 RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11490.0	23.43		18.72	42.15		74.00	54.00	-11.85	Peak
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						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- 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	802.11n(5GHz)_20M RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5745MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11406.0	23.31		18.65	41.96		74.00	54.00	-12.04	Peak
11490.0						74.00	54.00		
17235.0						74.00	54.00		
22980.0						74.00	54.00		
28725.0						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- 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) (802.11n(5Ghz)_20M)

Operation Mode	802.11n(5GHz)_20M RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11570.0	23.56		18.76	42.32		74.00	54.00	-11.68	Peak
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						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- 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	802.11n(5GHz)_20M RX CH Mid	Test Date	Mar. 22, 2011
Fundamental Frequency	5785MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11500.5	23.24		18.80	42.04		74.00	54.00	-11.96	Peak
11570.0						74.00	54.00		
17355.0						74.00	54.00		
23140.0						74.00	54.00		
28925.0						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- 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) (802.11n(5Ghz)_20M)

Operation Mode	802.11n(5GHz)_20M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11437.5	23.97		18.68	42.65		74.00	54.00	-11.35	Peak
11650.0						74.00	54.00		
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						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- 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.



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

Operation Mode	802.11n(5GHz)_20M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5825MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
11650.0						74.00	54.00		
11700.0	23.55		18.59	42.14		74.00	54.00	-11.86	Peak
17475.0						74.00	54.00		
23300.0						74.00	54.00		
29125.0						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- 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) (802.11n(5GHz)_40M)

Operation Mode	802.11n(5GHz)_40M RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5755MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver.
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4887.0	29.93		5.41	35.34		74.00	54.00	-18.66	Peak
11510.0						74.00	54.00		
17265.0						74.00	54.00		
23020.0						74.00	54.00		
28775.0						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- 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) (802.11n(5Ghz)_40M)

Operation Mode	802.11n(5GHz)_40M RX CH Low	Test Date	Mar. 22, 2011
Fundamental Frequency	5755MHz	Test By	Jazz
Temperature	25 °C	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4718.0	30.49		4.97	35.46		74.00	54.00	-18.54	Peak
11510.0						74.00	54.00		
17265.0						74.00	54.00		
23020.0						74.00	54.00		
28775.0						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- 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) (802.11n(5Ghz)_40M)

Operation Mode	802.11n(5GHz)_40M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5795MHz	Test By	Jazz
Temperature	25 °C	Pol	Ver
Humidity	65 %		

Peak	AV		Actu	al FS	Peak	AV		
Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
29.48		5.57	35.05		74.00	54.00	-18.95	Peak
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
					74.00	54.00		
	Reading (dBuV) 29.48	Reading Reading (dBuV) (dBuV) 29.48	Reading Reading Ant./CL (dBuV) (dBuV) CF(dB) 29.48 5.57 - - - - - - - - - -	Reading Reading Ant./CL Peak (dBuV) (dBuV) CF(dB) (dBuV/m) 29.48 5.57 35.05	Reading Reading Ant./CL Peak AV (dBuV) (dBuV) (dBuV/m) (dBuV/m) 29.48 5.57 35.05	Reading Reading Ant./CL Peak AV Limit (dBuV) (dBuV) CF(dB) (dBuV) (dBuV) (dBuV) 29.48 5.57 35.05 74.00 74.00 74.00 74.00 74.00	Reading Reading Ant./CL Peak AV Limit Limit (dBuV) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m) (dBuV/m) (dBuV/m) 29.48 5.57 35.05 74.00 54.00 74.00 54.00 74.00 54.00 74.00 54.00 74.00 54.00 74.00 54.00	Reading Reading Ant./CL Peak AV Limit Limit Margin (dBuV) (dBuV) (dBuV/m) (

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- 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) (802.11n(5GHz)_40M)

Operation Mode	802.11n(5GHz)_40M RX CH High	Test Date	Mar. 22, 2011
Fundamental Frequency	5795MHz	Test By	Jazz
Temperature	25 ℃	Pol	Hor
Humidity	65 %		

	Peak	AV		Actu	al FS	Peak	AV		
Freq.	Reading	Reading	Ant./CL	Peak	AV	Limit	Limit	Margin	Remark
(MHz)	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dB)	
4997.5	30.19		5.70	35.89		74.00	54.00	-18.11	Peak
11590.0						74.00	54.00		
17385.0						74.00	54.00		
23180.0						74.00	54.00		
28975.0						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- 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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10 Peak Power Spectral Density

10.1 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.

10.2 Measurement Equipment Used:

Refer to section 6.2 for details.

10.3 Test Set-up:

Refer to section 6.3 for details.

10.4 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.

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Measurement Result: 10.5

802.11b

Frequency MHz	RF Power Density Reading (dBm)	Cable loss (dB)	RF Power Density Level (dBm)	Maximum Limit (dBm)
2412	-11.31	0.00	-11.31	8
2437	-11.15	0.00	-11.15	8
2462	-10.94	0.00	-10.94	8

802.11g

Frequency	RF Power Density	Cable loss	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dB)	Level (dBm)	(dBm)
2412	-15.98	0.00	-15.98	8
2437	-9.16	0.00	-9.16	8
2462	-15.43	0.00	-15.43	8

802.11n_20M

Frequency	RF Power Density	Cable loss	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dB)	Level (dBm)	(dBm)
2412	-18.06	0.00	-18.06	8
2437	-9.71	0.00	-9.71	8
2462	-16.81	0.00	-16.81	8

* Cable Loss (0.3dBm) & Attenuator (10dB) as offset is added in the Spectrum

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802.11	la
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Frequency MHz	RF Power Density Reading (dBm)	Cable loss (dB)	RF Power Density Level (dBm)	Maximum Limit (dBm)
5745	-12.62	0.00	-12.62	8
5785	-12.50	0.00	-12.50	8
5825	-10.17	0.00	-10.17	8

802.11n(5GHz)_20M

Frequency	RF Power Density	Cable loss	RF Power Density	Maximum Limit
MHz	Reading (dBm)	(dB)	Level (dBm)	(dBm)
5745	-10.77	0.00	-10.77	8
5785	-11.29	0.00	-11.29	8
5825	-11.70	0.00	-11.70	8

802.11n(5GHz)_40M

Frequency MHz	RF Power Density Reading (dBm)	Cable loss (dB)	RF Power Density Level (dBm)	Maximum Limit (dBm)
5755	-13.31	0.00	-13.31	8
5795	-13.44	0.00	-13.44	8

* Cable Loss (0.3dBm) & Attenuator (10dB) as offset is added in the Spectrum Note: Refer to next page for plots.

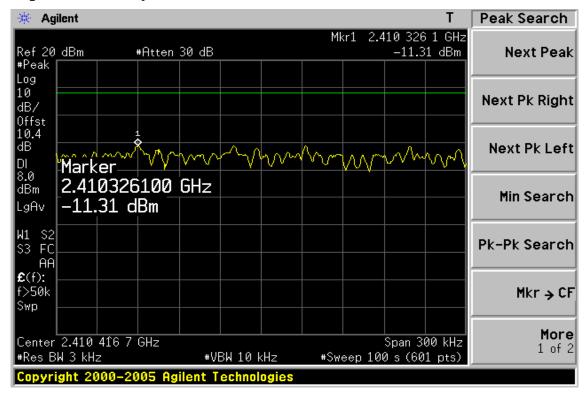
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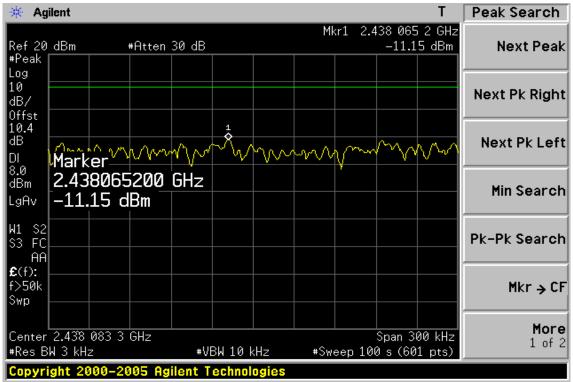


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802.11b **Power Spectral Density Test Plot (CH-Low)**



Power Spectral Density Test Plot (CH-Mid)



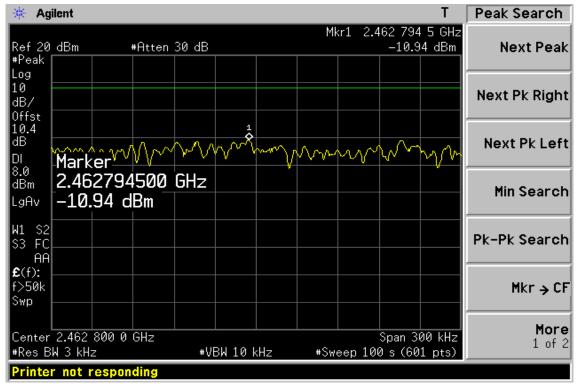
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Power Spectral Density Test Plot (CH-High)

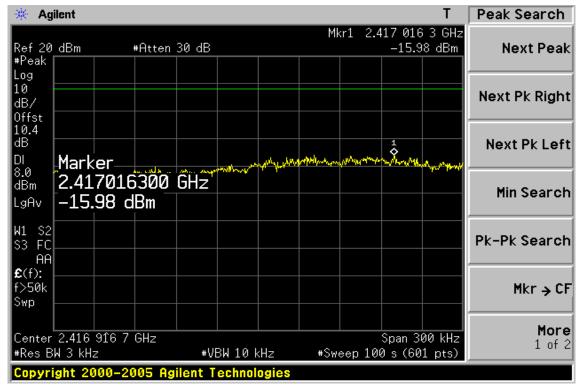


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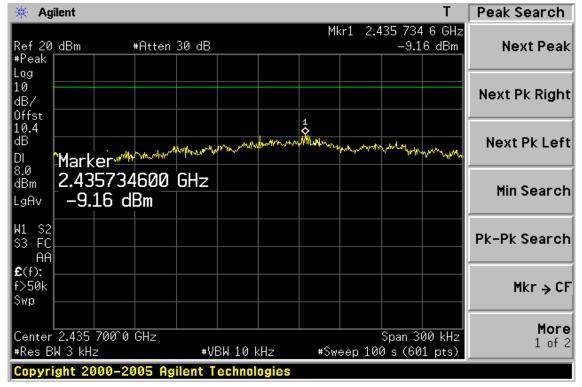


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802.11g **Power Spectral Density Test Plot (CH-Low)**



Power Spectral Density Test Plot (CH-Mid)



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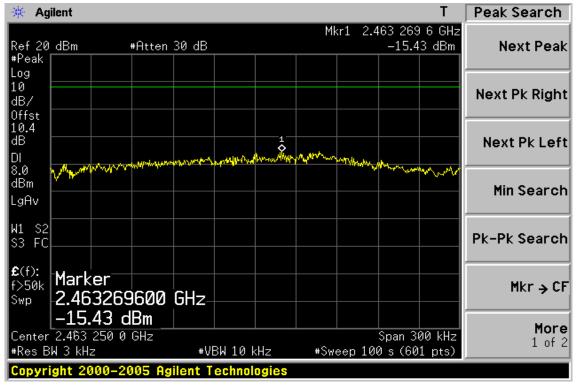
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Power Spectral Density Test Plot (CH-High)



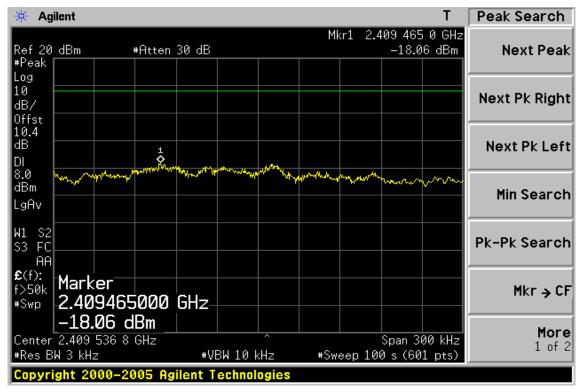
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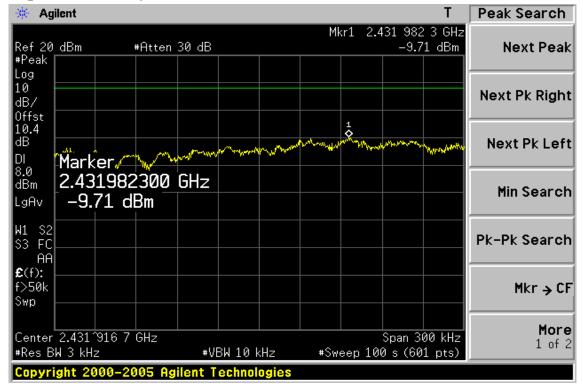
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802.11n 20M

Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)

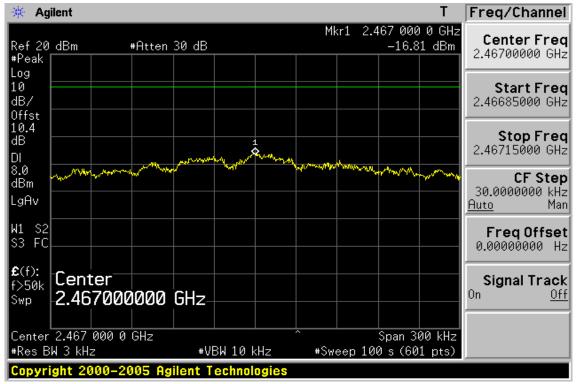


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Power Spectral Density Test Plot (CH-High)



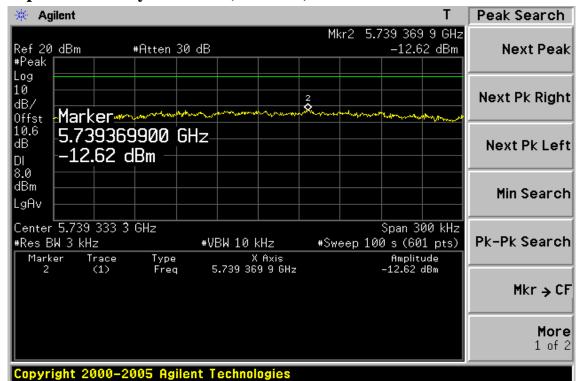
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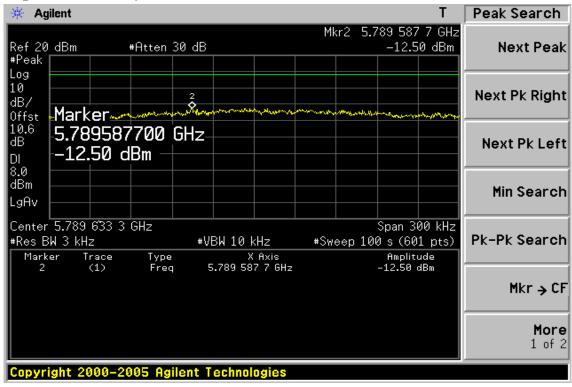
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802.11a

Power Spectral Density Test Plot (CH-Low)



Power Spectral Density Test Plot (CH-Mid)

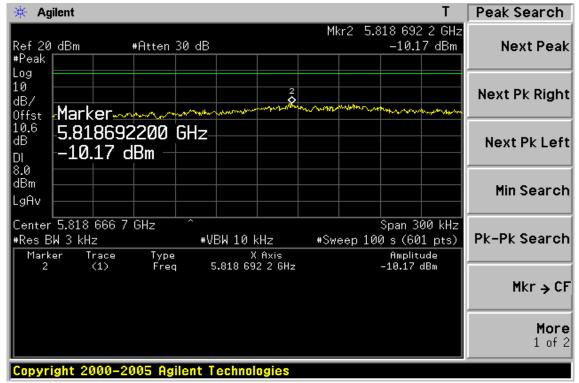


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Power Spectral Density Test Plot (CH-High)



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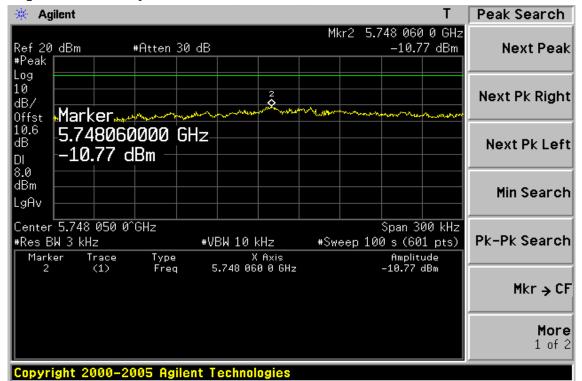
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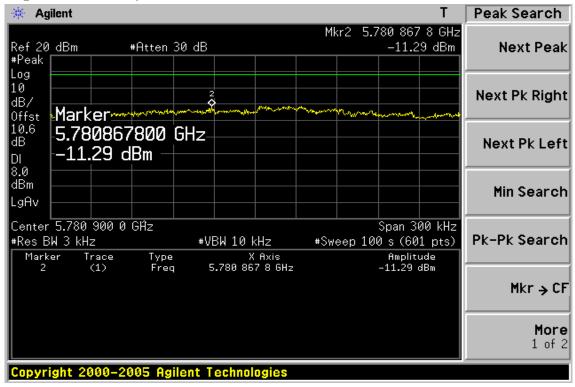


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802.11n(5GHz) 20M **Power Spectral Density Test Plot (CH-Low)**



Power Spectral Density Test Plot (CH-Mid)



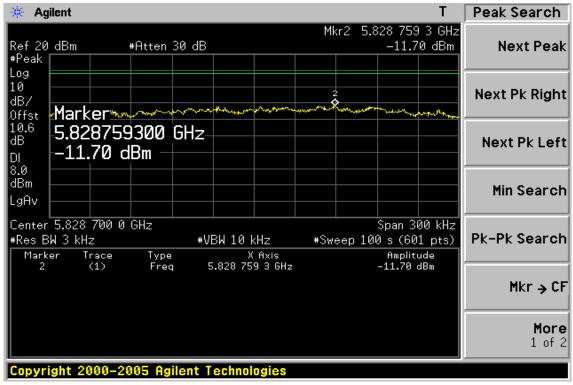
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Power Spectral Density Test Plot (CH-High)

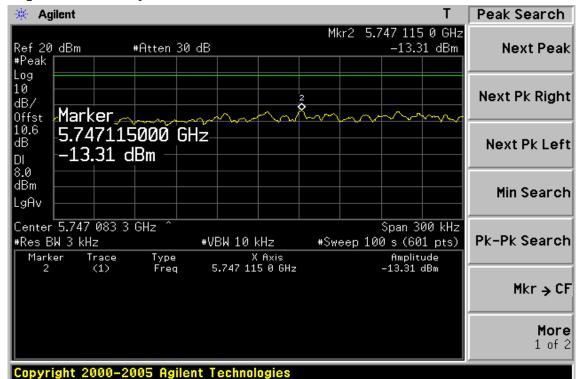


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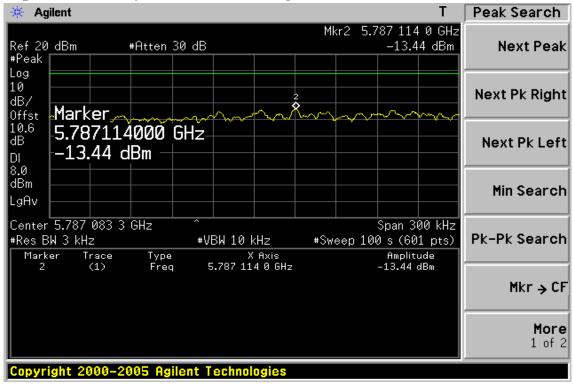


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802.11n(5GHz) 40M **Power Spectral Density Test Plot (CH-Low)**



Power Spectral Density Test Plot (CH-High)



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11 ANTENNA REQUIREMENT

11.1. 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 7.1.2, 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.

11.2. Antenna Connected Construction:

The directional gains of antenna used for transmitting is 1.21 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Please see EUT photo for details.

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12 99% Bandwidth Measurement

12.1. 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.

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 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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12.5. Measurement Result:

802.11b

Frequency MHz	99%Bandwidth (MHz)
2412	14.0498
2437	13.9467
2462	13.9648

802.11g

Frequency MHz	99%Bandwidth (MHz)
2412	16.4586
2437	16.5703
2462	16.4327

802.11n_20M

Frequency MHz	99%Bandwidth (MHz)
2412	17.6690
2437	17.7549
2462	17.6540

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802.11a

Frequency	99%Bandwidth
MHz	(MHz)
5745	16.4252
5785	16.4228
5825	16.4317

802.11n(5GHz)_20M

Frequency MHz	99%Bandwidth (MHz)
5745	17.5842
5785	17.5850
5825	17.5750

802.11n(5GHz)_40M

Frequency MHz	99%Bandwidth (MHz)
5755	35.9052
5795	35.9714

Note: Refer to next page for plots.

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802.11b 99% Band Width Test Data CH-Low



99% Band Width Test Data CH-Mid

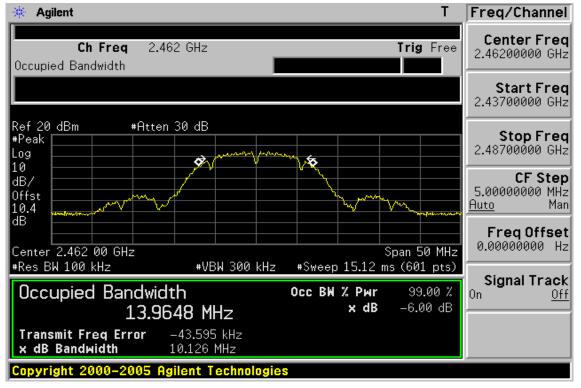


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99% Band Width Test Data CH-High

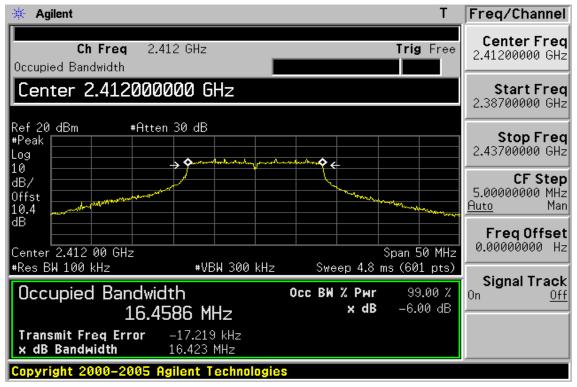


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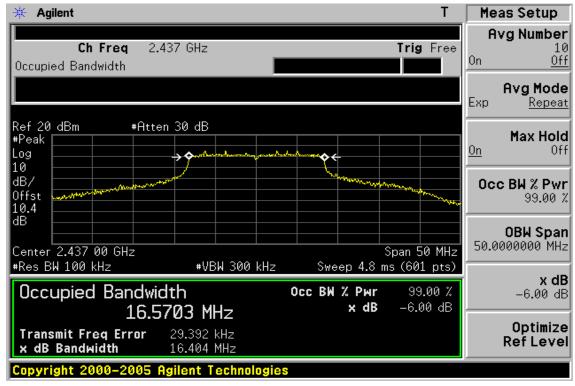


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802.11g 99% Band Width Test Data CH-Low



99% Band Width Test Data CH-Mid

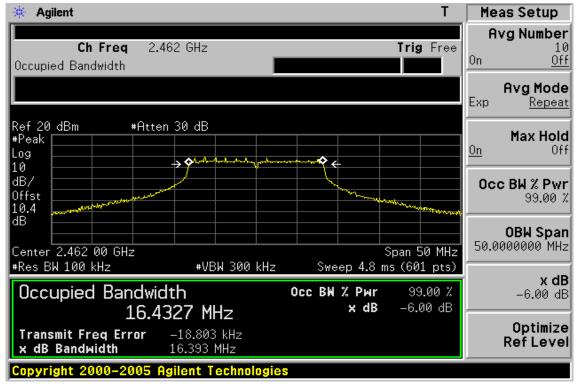


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99% Band Width Test Data CH-High



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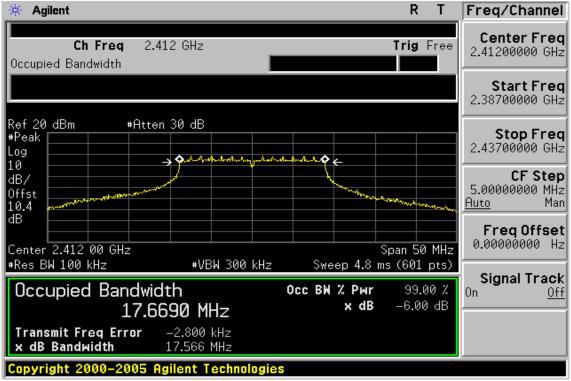
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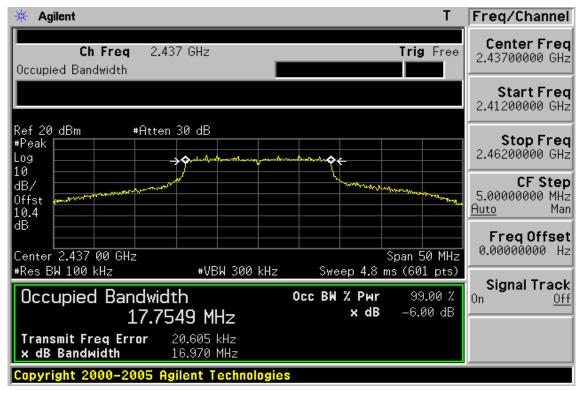


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802.11n 20M 99% Band Width Test Data CH-Low



99% Band Width Test Data CH-Mid

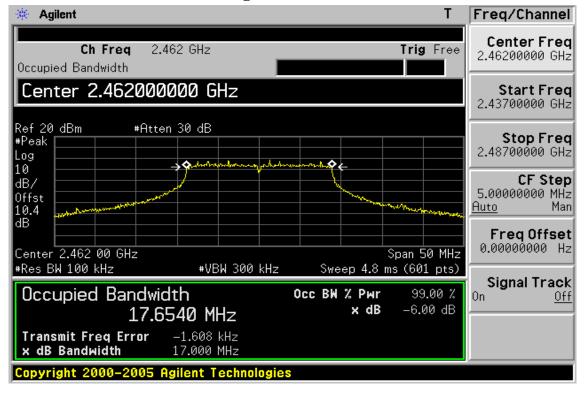


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99% Band Width Test Data CH-High

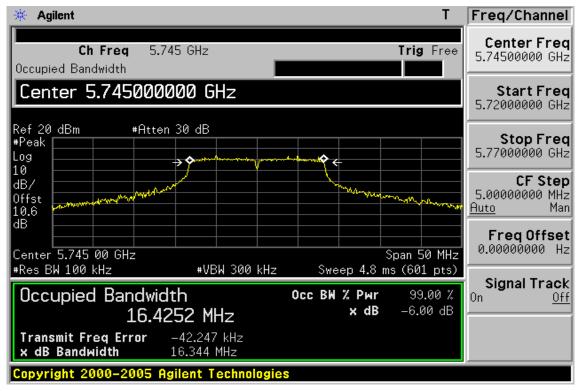


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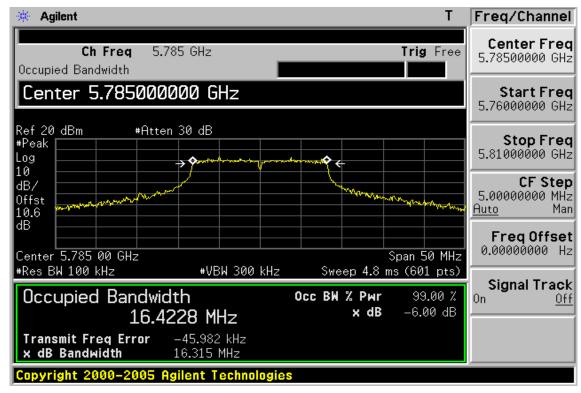


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802.11a 99% Band Width Test Data CH-Low



99% Band Width Test Data CH-Mid



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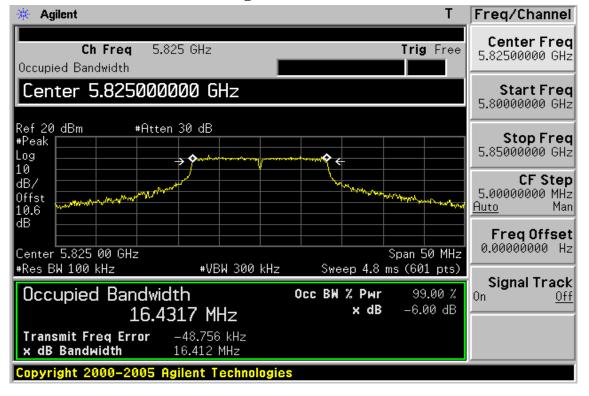
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99% Band Width Test Data CH-High

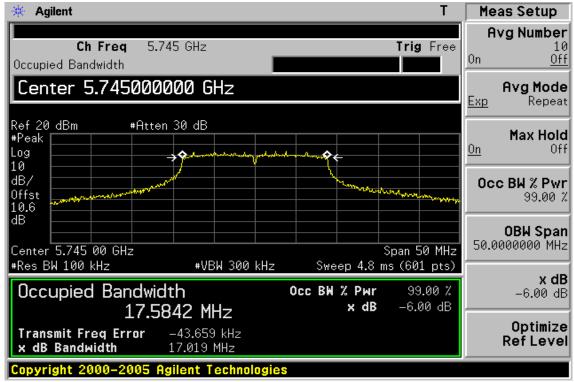


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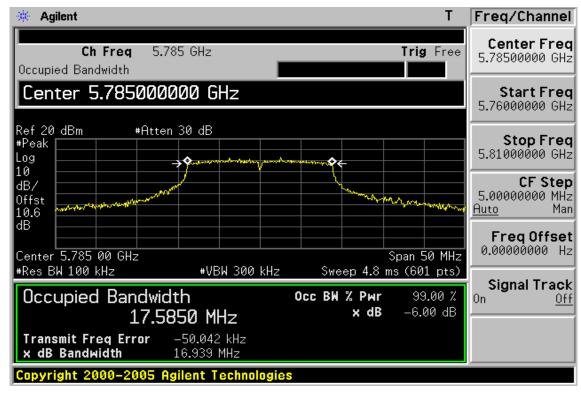


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802.11n (5GHz) 20M 99% Band Width Test Data CH-Low



99% Band Width Test Data CH-Mid



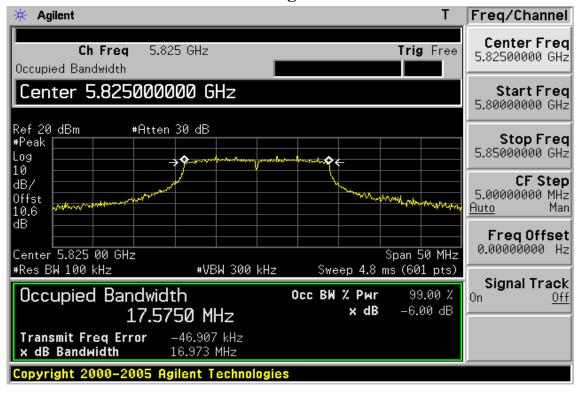
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99% Band Width Test Data CH-High

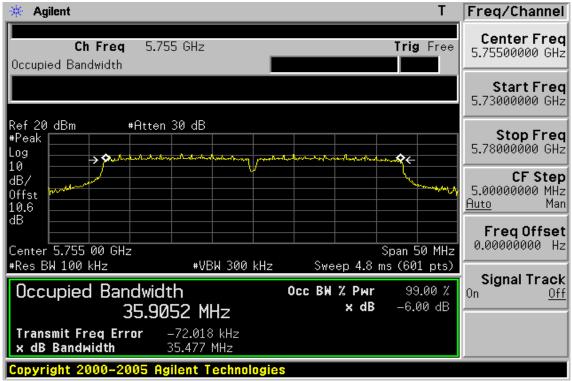


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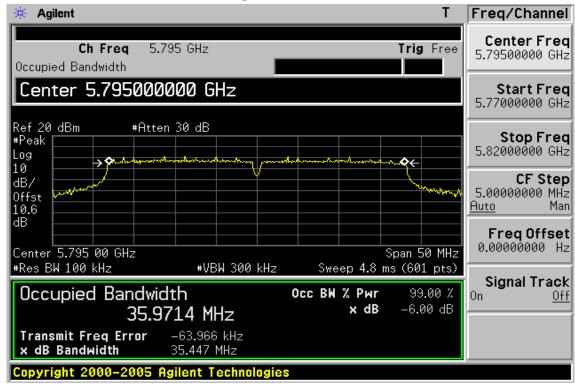


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802.11n (5GHz) 40M 99% Band Width Test Data CH-Low



99% Band Width Test Data CH-High



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