

HCT CO., LTD.

Product Compliance Division

TEL: +82 31 639 8518 FAX: +82 31 639 8525

CERTIFICATE OF COMPLIANCE

FCC PART 15.247 Certification

Applicant Name:

AXESSTEL INC.

Date of Issue:

June 28, 2010

Test Site/Location: HCT.CO., LTD., San 136-1 Ami-ri, Bubal-eup, Icheon-si,

Address:

Kyungki-do, Korea

6815 Flanders Drive Ste.210 San Diego, CA 92121, U.S.A.

Test Report No.: HCTR1006FR01-1

HCT FRN: 0005866421

IC Recognition No.: 5944A-1

FCC ID:

: PH7MV540V

IC:

: 8484A- MV540V

APPLICANT:

: AXESSTEL INC.

FCC Rule Part(s):

Part 15.247

Application Type:

Certification

EUT Type:

CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway

FCC Model(s):

MV540V

Additional Model(s):

MV540VR, MV540, MV540R

IC Model(s):

MV540V

Additional Model(s):

MV540VR, MV540, MV540R

Tx Frequency:

2412-2462 MHz(DSSS/OFDM)

Rx Frequency:

2412-2462 MHz(DSSS/OFDM)

Max. RF Output Power:

Wi-Fi 802.11b(18.82 dBm) / Wi-Fi 802.11g (18.10 dBm)

IC Rule:

RSS-210 Issue 7 June 2007, RSS-GEN Issue 2 June 2007

IC Registration No.:

5944A-1

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT.CO., LTD. Certifies that no party to this application has been denied FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.862

hang Seek Choi

Report prepared by

Approved by

: Jong Seouk Lee

: Chang Seok Choi

Test engineer of RF Team

Manager of RF Team

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Version

TEST REPORT NO.	DATE	DESCRIPTION
HCTR1006FR01	June 07, 2010	First Approval Report
HCTR1006FR01-1	June 28, 2010	Update Section 3.3 (delete contents of handheld)

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1. GENERAL INFORMATION

Applicant: AXESSTEL INC.

Address:

6815 Flanders Drive Ste.210 San Diego, CA 92121, U.S.A.

FCC ID: PH7MV540V

IC: 8484A-MV540V

EUT: CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway

FCC Model(s): MV540V

Additional Model(s): MV540VR, MV540, MV540R

IC Model(s): MV540V

 Additional Model(s):
 MV540VR, MV540, MV540R

 Date of Test:
 May 24, 2010 ~ May 27, 2010

Contact person: Name: Sang Sick, Byun

Phone #: +858-625-2100

Fax #: +858-625-2110

Place of Tests: HCT Co., Ltd.

Icheon, Kyounki-Do, Korea (IC Recognition No.: 5944A-1)

2. EUT DESCRIPTION

Product	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway
Model Name	MV540V
Power Supply	DC 7.4 V
Battery type	Li-Ion Battery(Standard)
Frequency Range	TX: 2412 ~ 2462 MHz
Trequency runge	RX: 2412 ~ 2462 MHz
Max. RF Output Power	Wi-Fi 802.11b(18.82 dBm) / Wi-Fi 802.11g (18.10 dBm)
Modulation Type	DSSS/CCK(802.11b), OFDM(802.11g)
Antenna Specification	Manufacturer: HANKOOK ANTENNA CO., LTD.
	Antenna type: Dipole Antenna
	Peak Gain : -4.82 dBi

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3. TEST METHODOLOGY

The measurement procedure described in the American National Standard for Methods of Measurement of Radio-Noise Emission from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40GHz(ANSI C63.4-2003)

3.1 EUT CONFIGURATION

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

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4. (Version :2003) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m 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.

3.4 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.

Channel low, mid and high with highest data rate (worst case) is chosen for full testing.

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4. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipments, which is traceable to recognized national standards.

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

The open area test site and conducted measurement facility used to collect the radiated data are located at the 254-1,Maekok-Ri, Hobup-Myun, Ichon-Si, Kyoungki-Do, 467-701, KOREA. The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2003) and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated June 10, 2009 (Registration Number: 90661)

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

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6. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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 antennas of this E.U.T are permanently attached.

*The E.U.T Complies with the requirement of §15.203



7. TEST RESULT

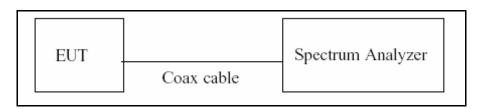
7.1 6dB BANDWIDTH MEASUREMENT (802.11b/g)

Test Requirements and limit, §15.247(a)(2)

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the receive antenna while the EUT is operating in transmission mode at the appropriate frequencies.

The minimum permissible 6dB bandwidth is 500 kHz.

TEST CONFIGURATION



■ TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer.

The Spectrum Analyzer is set to

RBW: 100 kHz VBW: 100 kHz SPAN: 40 MHz

■ TEST RESULTS

Conducted 6dB Bandwidth Measurements for 802.11b

802.11b Mode		Measured Bandwidth	Minimum Bandwidth	
Frequency [MHz]	Channel No.	[MHz] [MHz]		Pass / Fail
2412	1	12.177	0.500	Pass
2437	6	11.865	0.500	Pass
2462	11	12.285	0.500	Pass

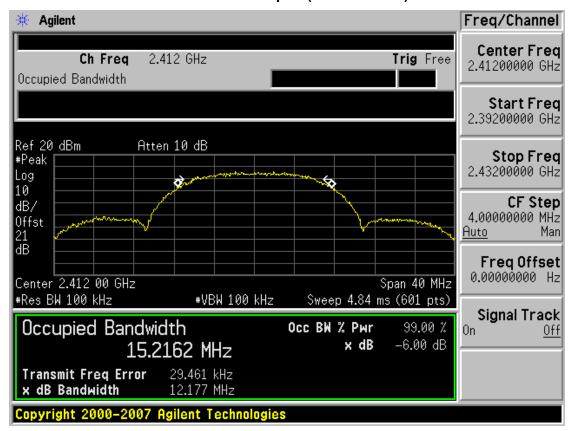
Conducted 6dB Bandwidth Measurements for 802.11g

802.11g Mode		Measured Bandwidth	Minimum Bandwidth	Pass / Fail
Frequency [MHz]	Channel No.	[MHz] [MHz]		
2412	1	16.464	0.500	Pass
2437	6	16.391	0.500	Pass
2462	11	16.417	0.500	Pass

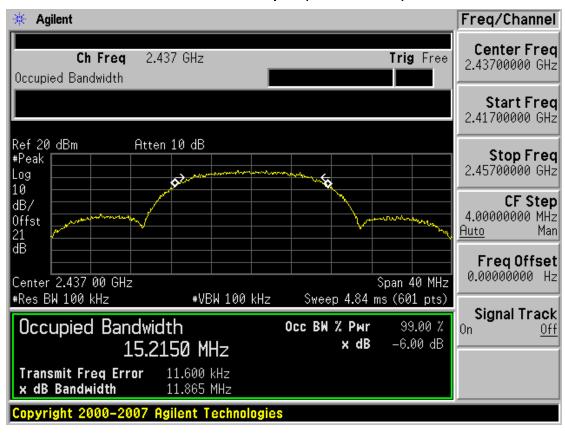
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6dB Bandwidth plot (802.11b-CH 1)



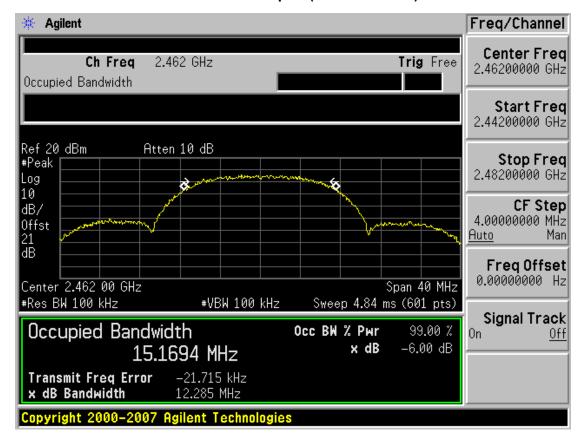
6dB Bandwidth plot (802.11b-CH 6)



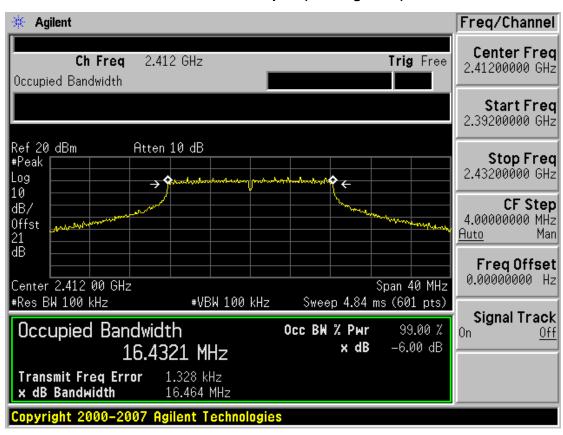
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6dB Bandwidth plot (802.11b-CH 11)



6dB Bandwidth plot (802.11g-CH 1)

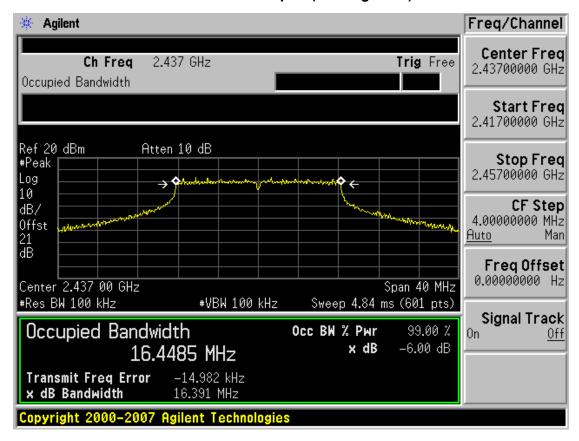


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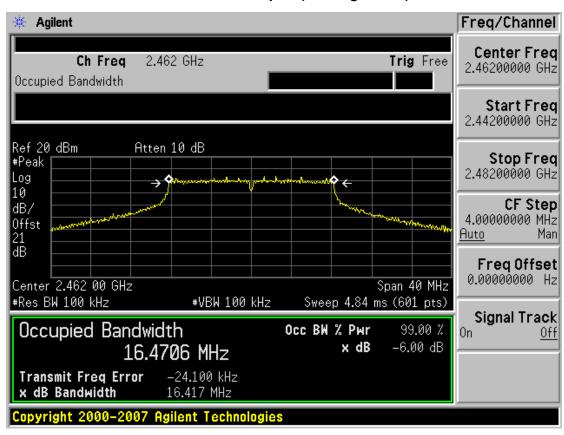
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6dB Bandwidth plot (802.11g-CH 6)



6dB Bandwidth plot (802.11g-CH 11)



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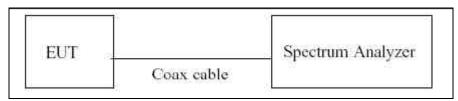
7.2 OUTPUT POWER MEASUREMENT (802.11b/g)

Test Requirements and limit, §15.247(b)(3)

A transmitter antenna terminal of EUT is connected to the input of a Spectrum Analyzer. Measurement is made while the EUT is operating in transmission mode at the appropriate frequencies.

The maximum permissible conducted output power is 1 Watt.

■ TEST CONFIGURATION



■ TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer.

The Spectrum Analyzer is set to

RBW: 1 MHz VBW: 1 MHz SPAN: 40 MHz

Detector Mode = Peak

■ TEST RESULTS

Conducted Output Power Measurements (802.11b Mode)

802.11b Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
		1 Mbps	17.11	30
2412	1	2 Mbps	17.89	30
2412	1	5.5 Mbps	18.23	30
		11 Mbps	18.32	30
		1 Mbps	17.67	30
2437	6	2 Mbps	18.21	30
2437	0	5.5 Mbps	18.56	(dBm) 30 30 30 30 30 30
		11 Mbps	18.80	
		1 Mbps	17.83	30
2462	11	2 Mbps	18.34	30 30 30 30 30 30 30 30 30 30 30
	11	5.5 Mbps	18.78	30
		11 Mbps	18.82	(dBm) 30 30 30 30 30 30 30 30 30 3

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Conducted Output Power Measurements (802.11g Mode)

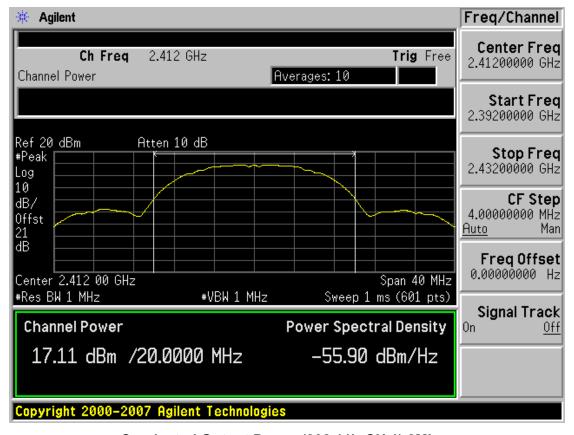
802.11g Mode		Rate	Measured	Limit
Frequency[MHz]	Channel No.	(Mbps)	Power(dBm)	(dBm)
-		6 Mbps	17.60	30
		9 Mbps	17.50	30
		12 Mbps	17.88	30
2412	1	18 Mbps	17.75	30
2412	1	24 Mbps	17.55	30
		36 Mbps	17.51	30
		48 Mbps	17.46	30
		54 Mbps	16.02	30
		6 Mbps	18.06	30
	6	9 Mbps	17.81	30
		12 Mbps	18.10	30
2437		18 Mbps	17.97	30
2437		24 Mbps	17.90	30
		36 Mbps	17.82	30
		48 Mbps	17.75	30
		54 Mbps	16.23	30
		6 Mbps	17.79	30
		9 Mbps	17.72	30
		12 Mbps	17.95	30
2462	11	18 Mbps	17.80	30
	111	24 Mbps	17.77	30
		36 Mbps	17.71	30
		48 Mbps	17.63	30
		54 Mbps	16.17	30

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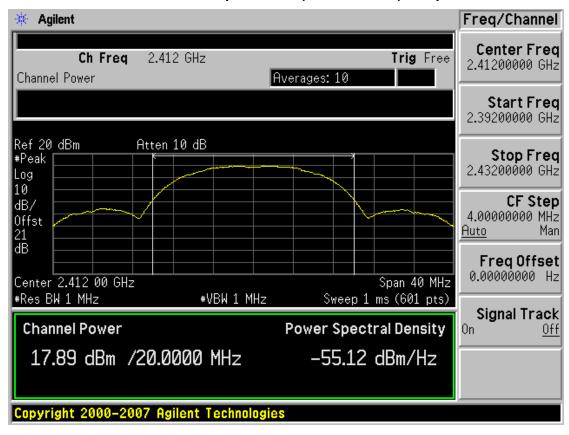
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Conducted Output Power (802.11b-CH 1) 1Mbps



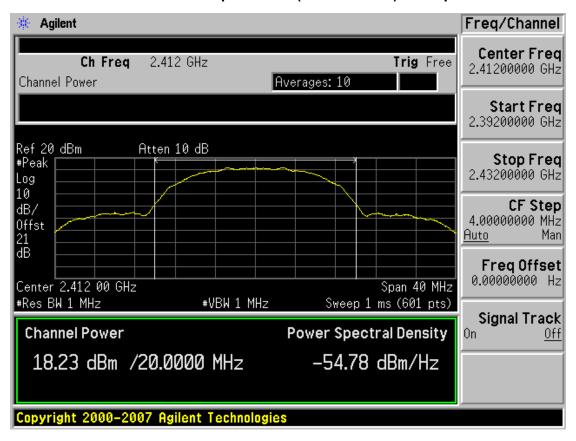
Conducted Output Power (802.11b-CH 1) 2Mbps



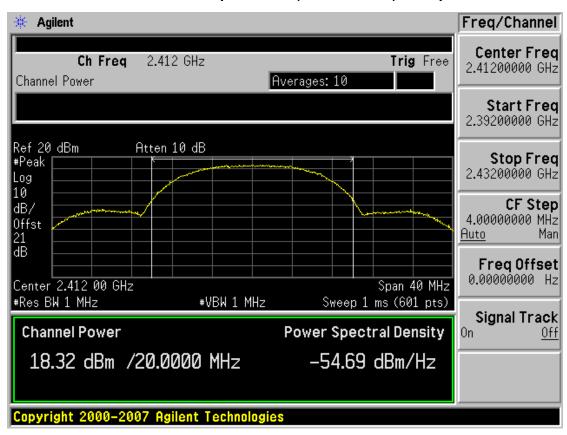
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Conducted Output Power (802.11b-CH 1) 5.5Mbps



Conducted Output Power (802.11b-CH 1) 11Mbps

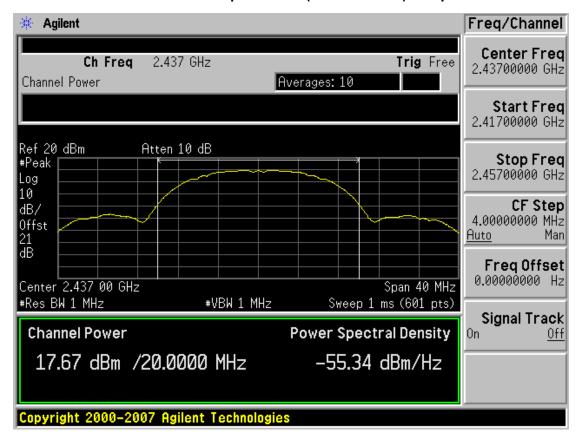


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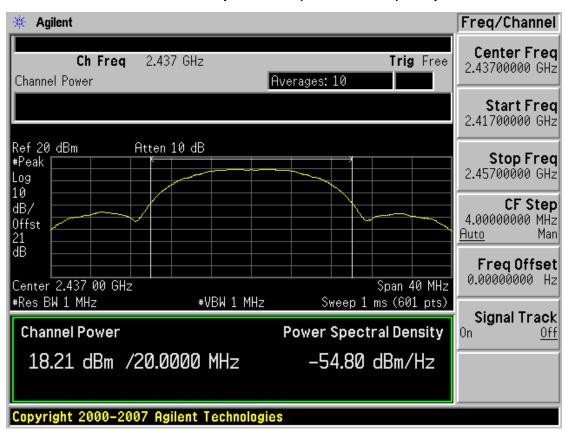
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Conducted Output Power (802.11b-CH 6) 1Mbps



Conducted Output Power (802.11b-CH 6) 2Mbps

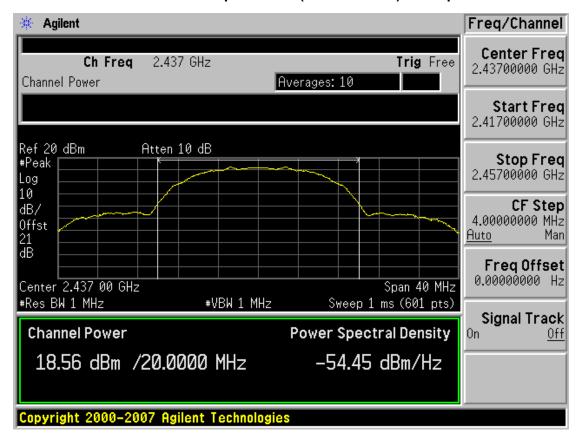


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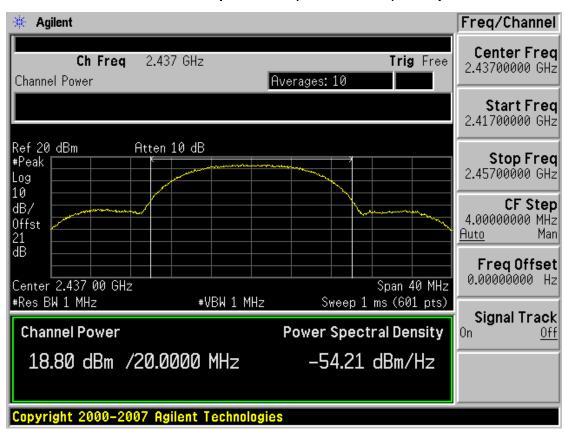
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Conducted Output Power (802.11b-CH 6) 5.5Mbps



Conducted Output Power (802.11b-CH 6) 11Mbps

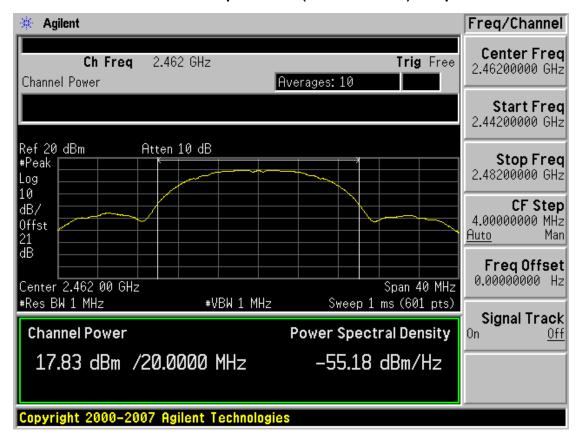


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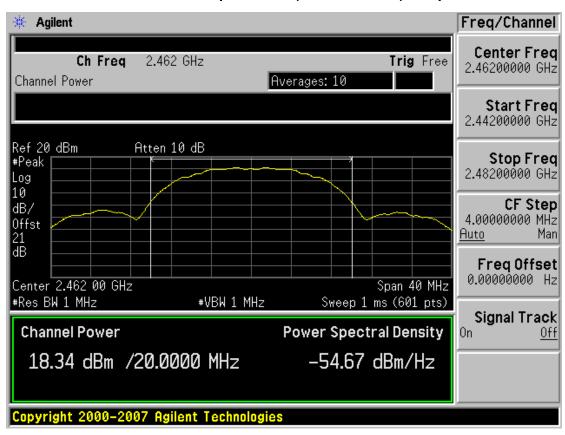
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Conducted Output Power (802.11b-CH 11) 1Mbps



Conducted Output Power (802.11b-CH 11) 2Mbps

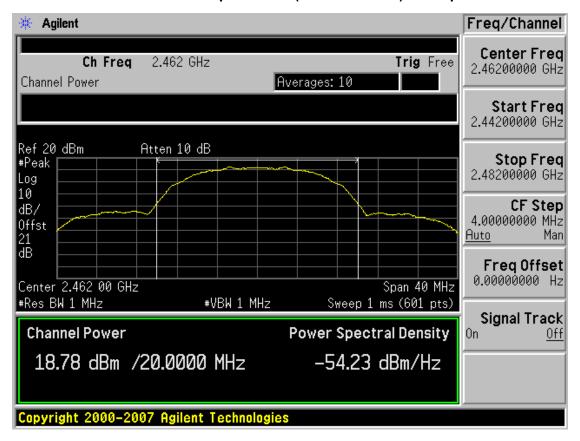


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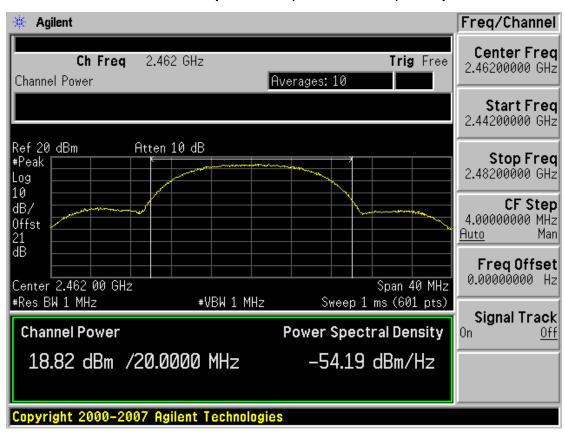
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Conducted Output Power (802.11b-CH 11) 5.5Mbps



Conducted Output Power (802.11b-CH 11) 11Mbps

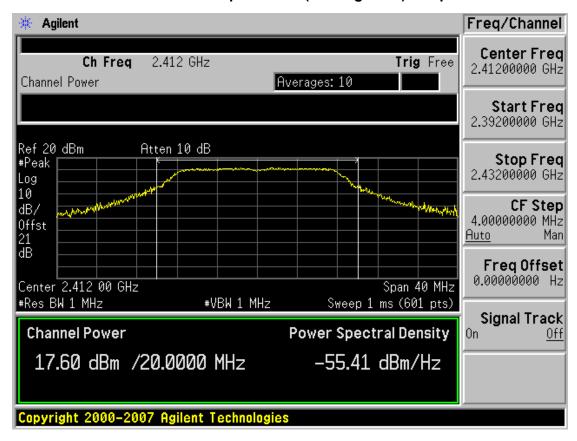


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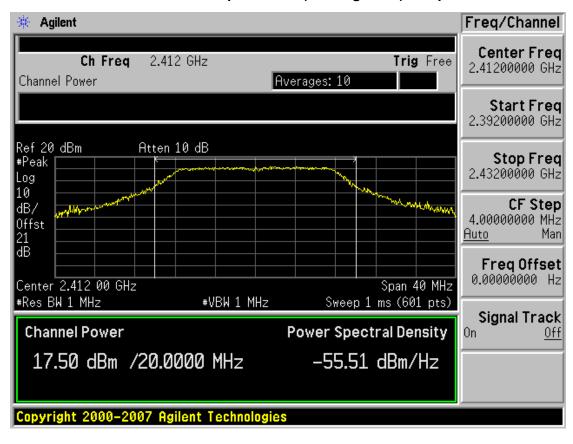
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Conducted Output Power (802.11g-CH 1) 6Mbps



Conducted Output Power (802.11g-CH 1) 9Mbps

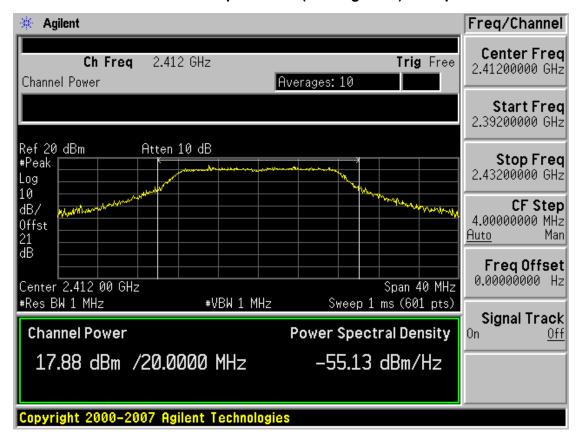


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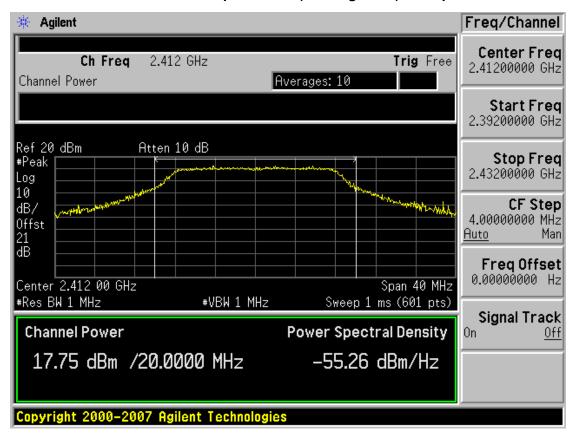
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Conducted Output Power (802.11g-CH 1) 12Mbps



Conducted Output Power (802.11g-CH 1) 18Mbps

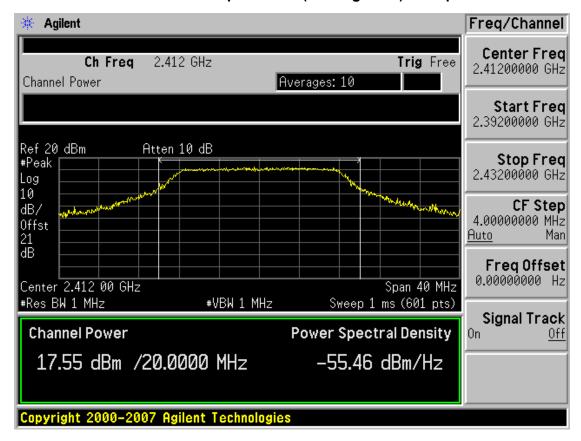


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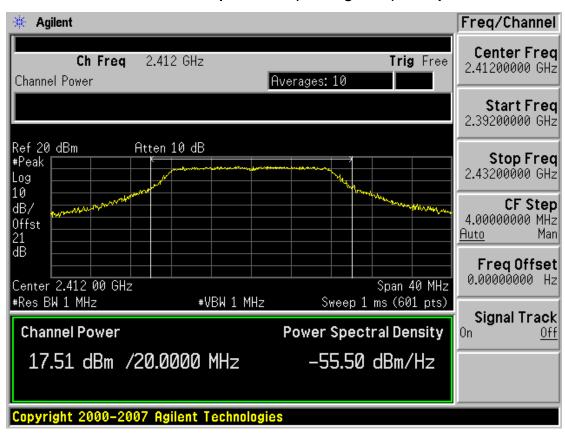
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Conducted Output Power (802.11g-CH 1) 24Mbps



Conducted Output Power (802.11g-CH 1) 36Mbps

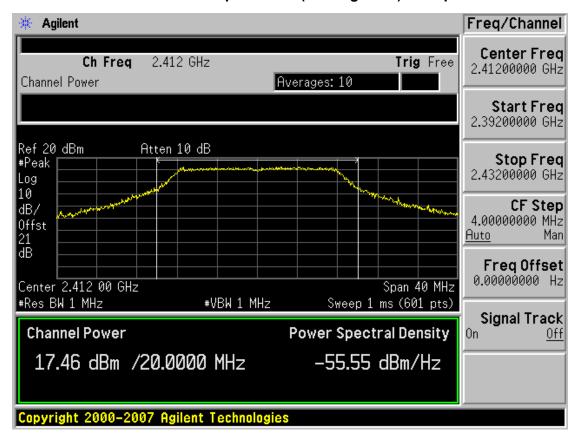


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HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

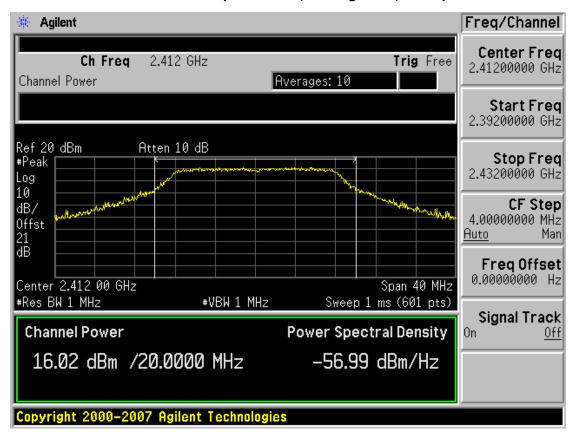
Page 2 2 of 60



Conducted Output Power (802.11g-CH 1) 48Mbps



Conducted Output Power (802.11g-CH 1) 54Mbps

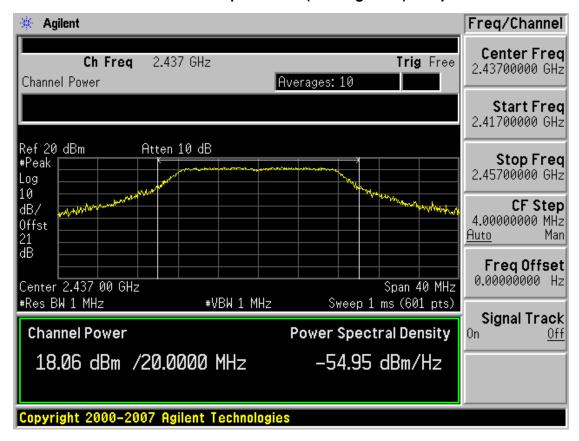


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

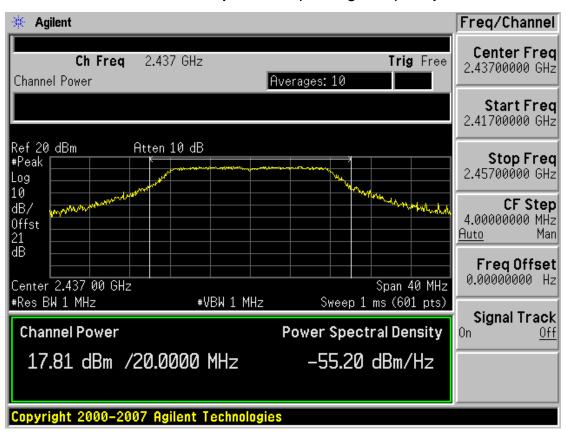
Page 2 3 of 60



Conducted Output Power (802.11g-CH 6) 6Mbps



Conducted Output Power (802.11g-CH 6) 9Mbps

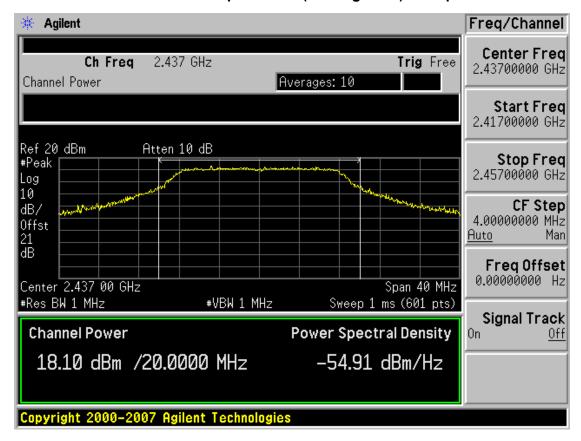


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

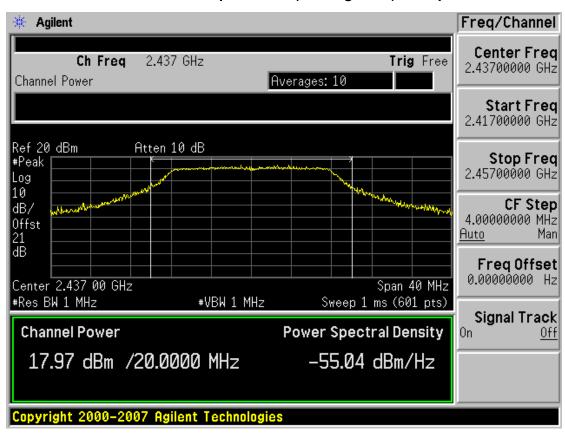
Page 2 4 of 60



Conducted Output Power (802.11g-CH 6) 12Mbps



Conducted Output Power (802.11g-CH 6) 18Mbps

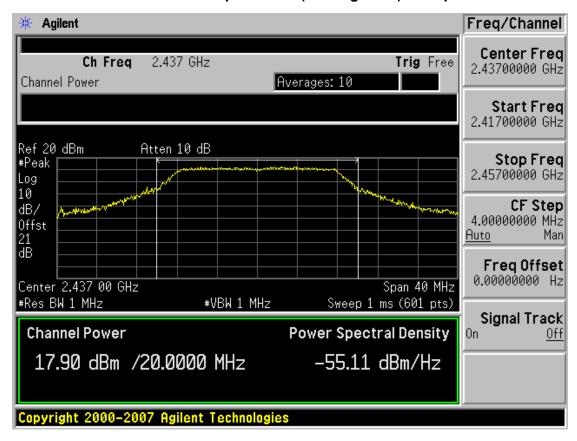


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

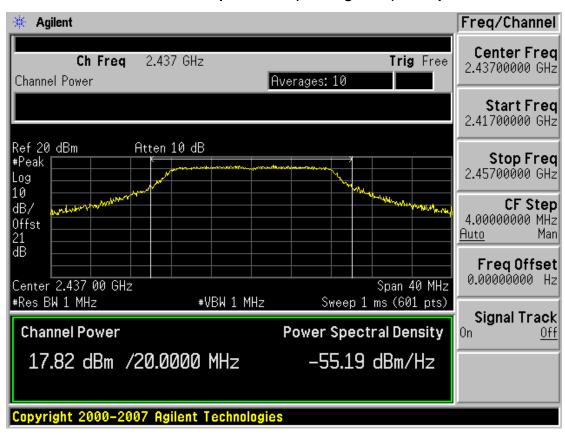
Page 2 5 of 60



Conducted Output Power (802.11g-CH 6) 24Mbps



Conducted Output Power (802.11g-CH 6) 36Mbps

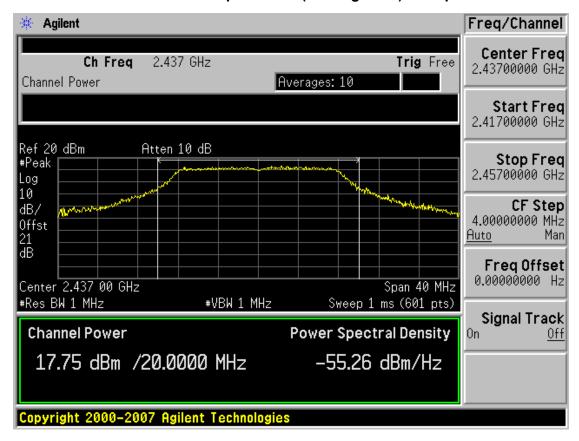


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

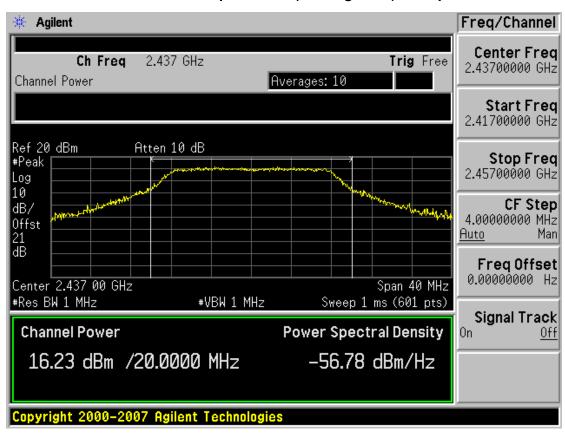
Page 2 6 of 60



Conducted Output Power (802.11g-CH 6) 48Mbps



Conducted Output Power (802.11g-CH 6) 54Mbps

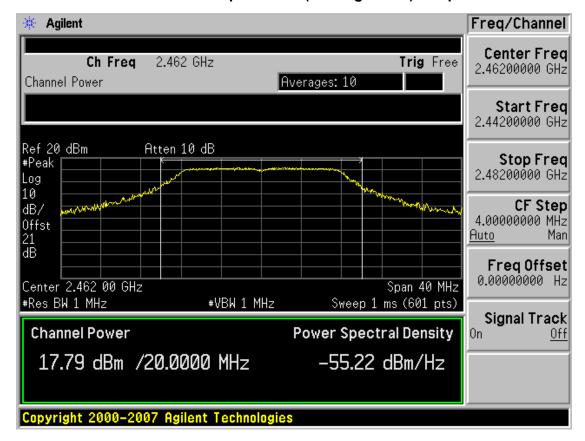


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

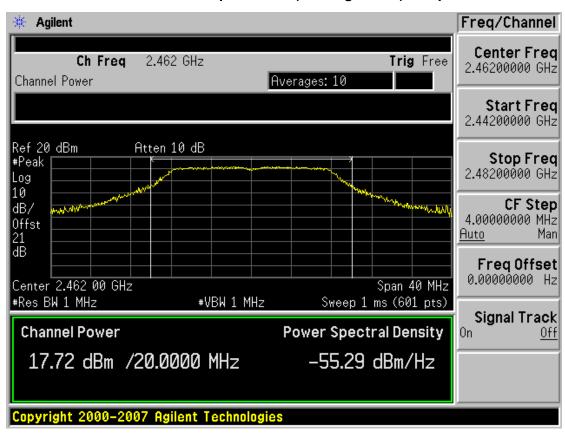
Page 2 7 of 60



Conducted Output Power (802.11g-CH 11) 6Mbps



Conducted Output Power (802.11g-CH 11) 9Mbps

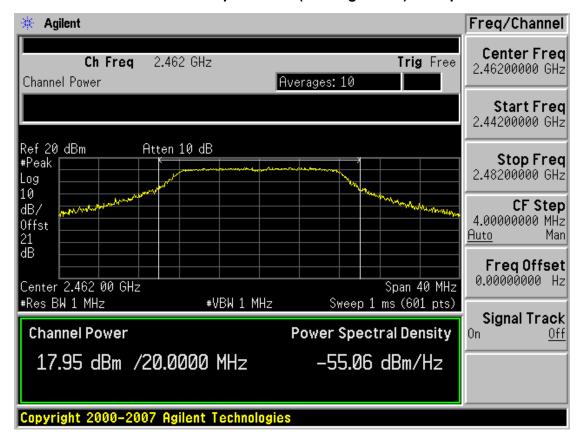


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

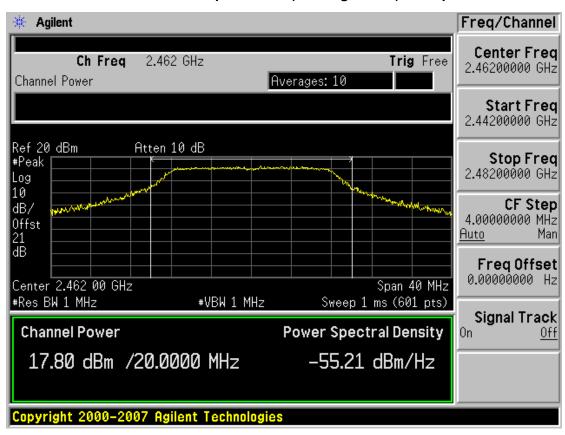
Page 2 8 of 60



Conducted Output Power (802.11g-CH 11) 12Mbps



Conducted Output Power (802.11g-CH 11) 18Mbps

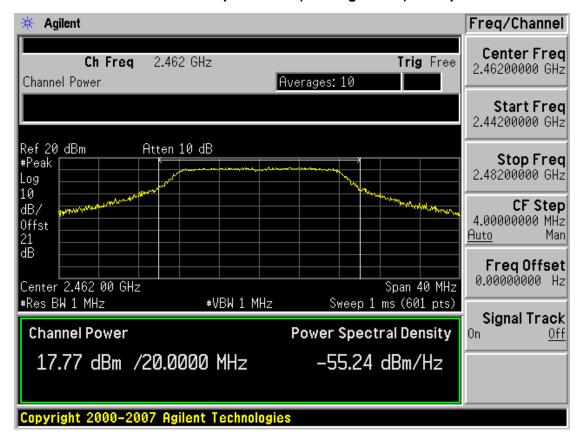


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

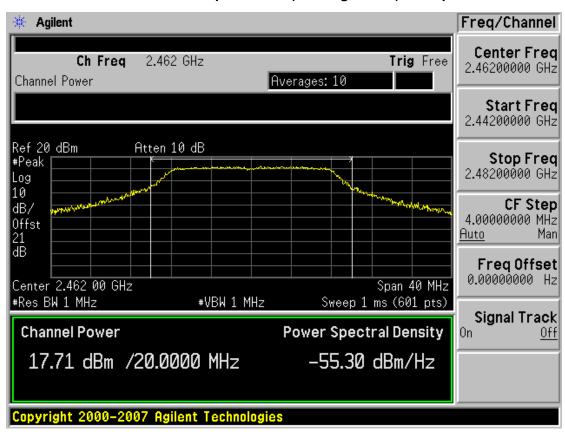
Page 2 9 of 60



Conducted Output Power (802.11g-CH 11) 24Mbps



Conducted Output Power (802.11g-CH 11) 36Mbps

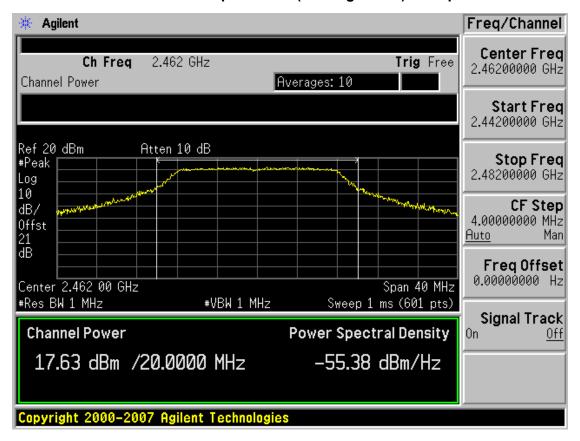


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

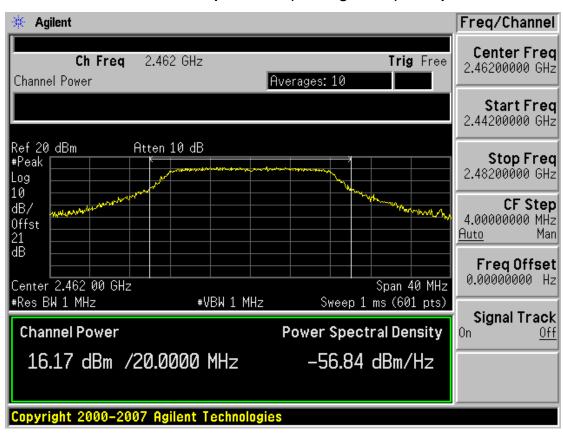
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Conducted Output Power (802.11g-CH 11) 48Mbps



Conducted Output Power (802.11g-CH 11) 54Mbps



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



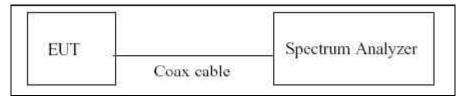
7.3 POWER SPECTRAL DENSITY (802.11b/g)

Test Requirements and limit, §15.247(e)

The peak power density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies.

Minimum Standard – The transmitter power density average over 1-second interval shall not be greater than 8dBm in any 3kHz BW.

TEST CONFIGURATION



■ TEST PROCEDURE

The spectrum analyzer is set to:

- 1. Span = 300 kHz
- 2. RBW = 3 kHz (7dB/div)
- 3. VBW = 3 kHz
- 4. Sweep = 100 sec
- 5. Detector Mode = Peak

■ TEST RESULTS

Conducted Power Density Measurements

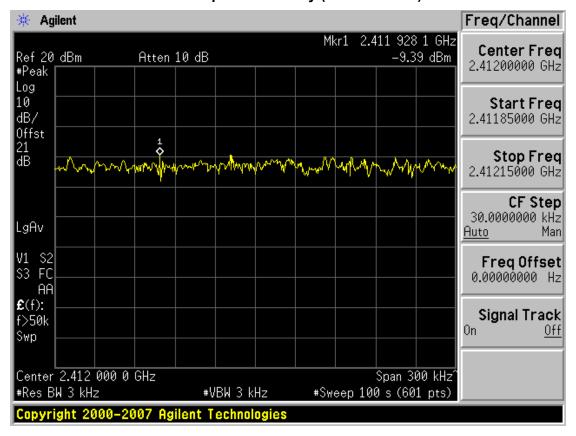
			Test Result	
Frequency (MHz)	Channel No.	Mode	Power Density (dBm)	Pass/Fail
2412	1		-9.39	Pass
2437	6	802.11b	-8.74	Pass
2462	11		-8.92	Pass
2412	1		-14.65	Pass
2437	6	802.11g	-16.26	Pass
2462	11		-16.53	Pass

RESULT PLOTS

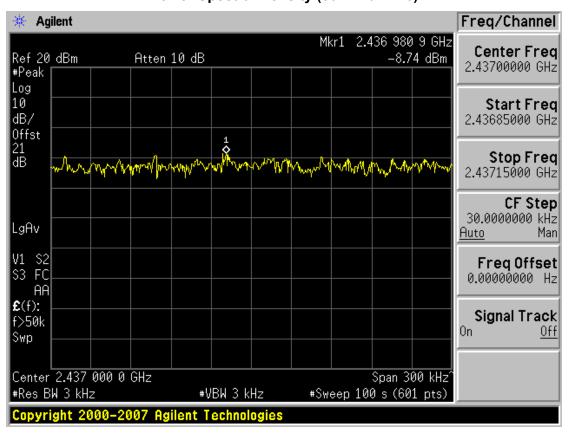
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



Power Spectral Density (802.11b-CH 1)



Power Spectral Density (802.11b-CH 6)

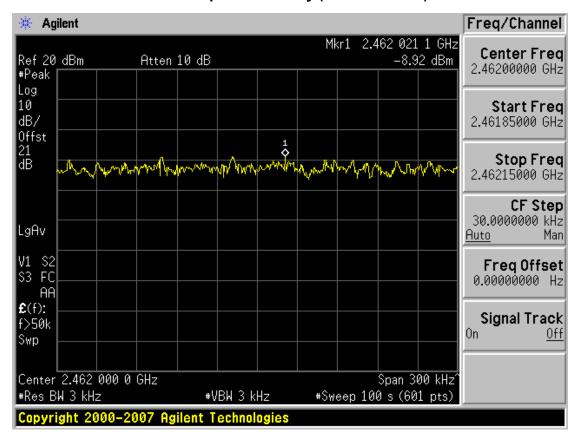


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

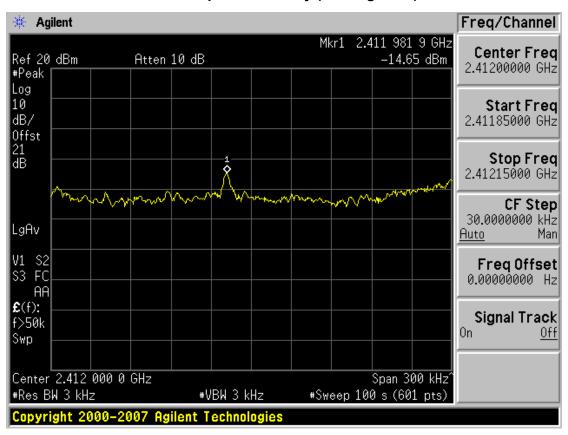
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Power Spectral Density (802.11b-CH 11)



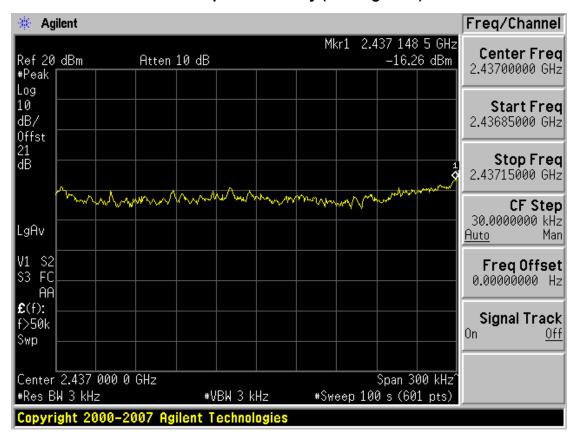
Power Spectral Density (802.11g-CH 1)



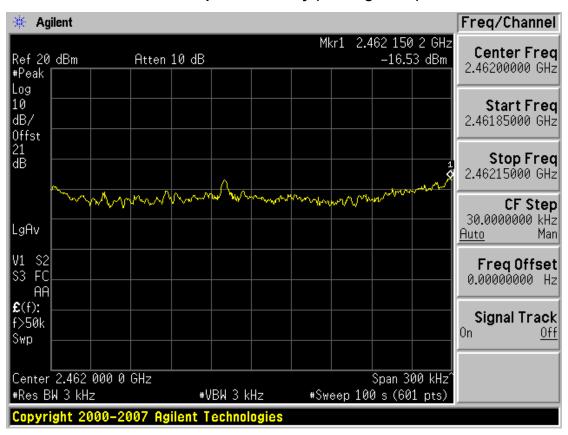
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



Power Spectral Density (802.11g-CH 6)



Power Spectral Density (802.11g-CH11)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

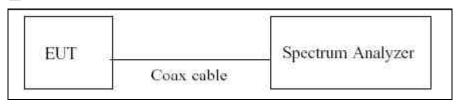
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7.4 OUT OF BAND EMISSIONS AT THE BAND EDGE/ CONDUCTED SPURIOUS EMISSIONS Test Requirements and limit, §15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB 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. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

TEST CONFIGURATION



TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

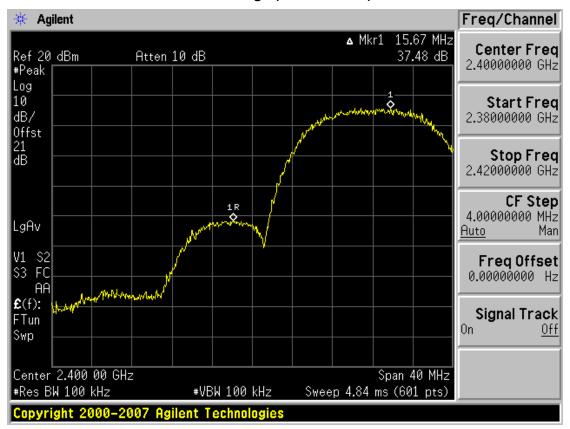
Detector Mode is set to a peak detector Mode.

Measurements are made over the 30 MHz to 26 GHz range with the transmitter set to the lowest, middle, and highest channels.

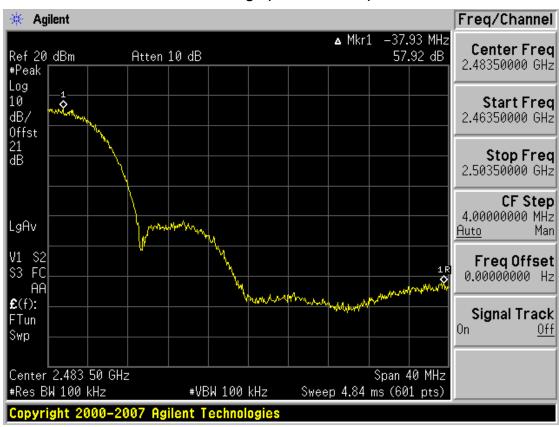
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type: CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDIMA/ PGS CDIMA IX EV-DO Rev.A WI-FI Gateway	PH7MV540V	8484A-MV540V



BandEdge (802.11b-CH1)



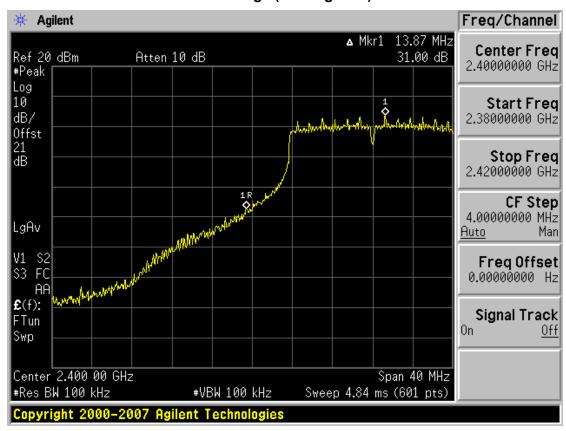
BandEdge (802.11b-CH11)



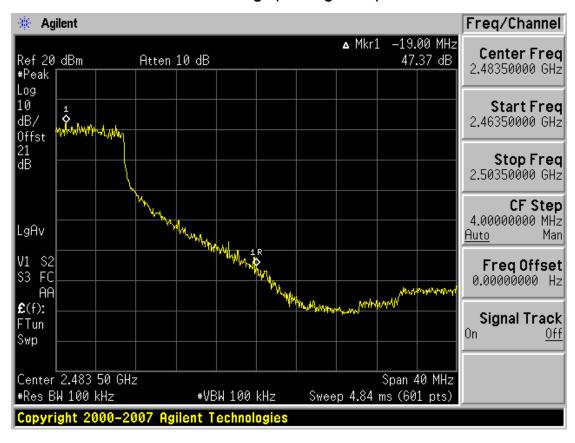
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



BandEdge (802.11g-CH1)



BandEdge (802.11g-CH11)



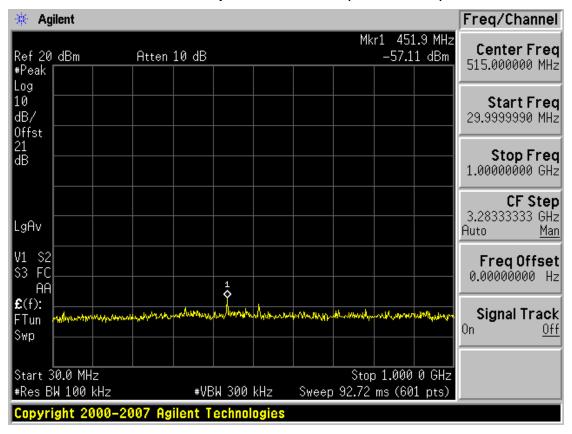
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

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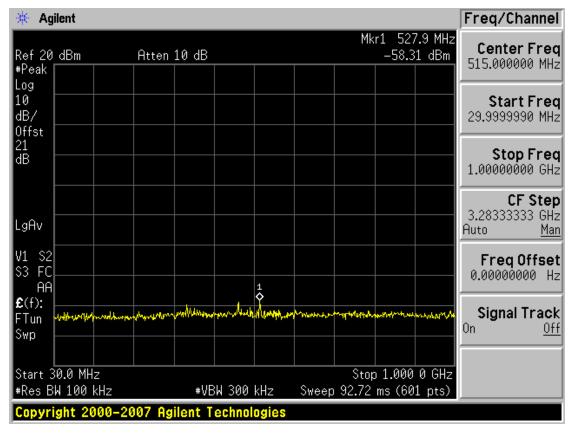


30 MHz ~ 1 GHz

Conducted Spurious Emission (802.11b-CH1)



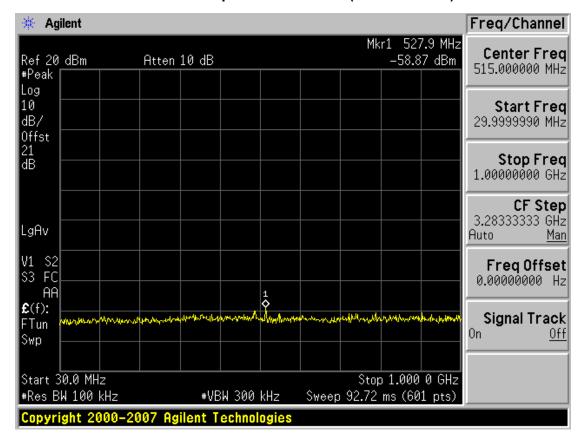
Conducted Spurious Emission (802.11b-CH6)



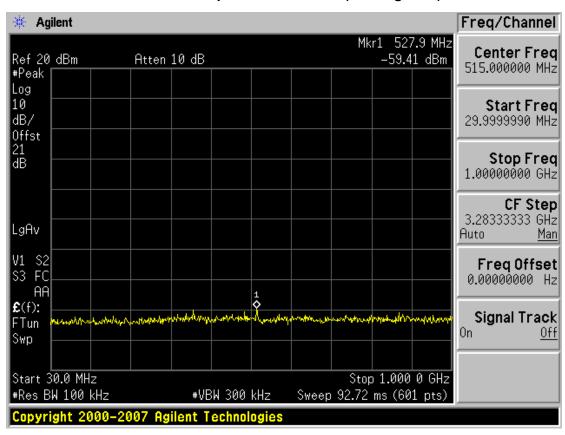
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



Conducted Spurious Emission (802.11b-CH11)



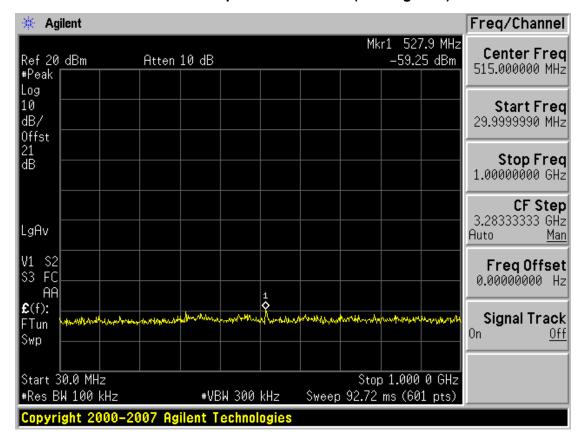
Conducted Spurious Emission (802.11g-CH1)



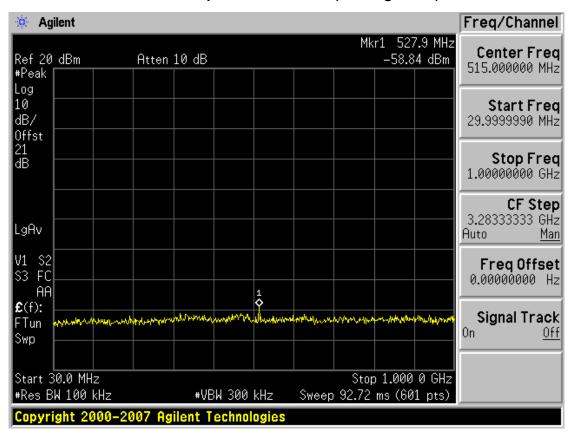
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



Conducted Spurious Emission (802.11g-CH6)



Conducted Spurious Emission (802.11g-CH11)

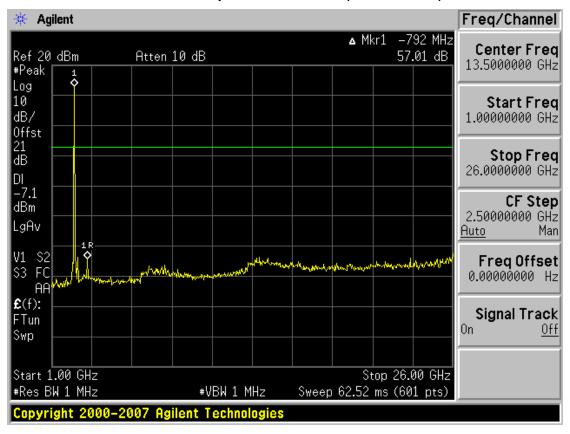


FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

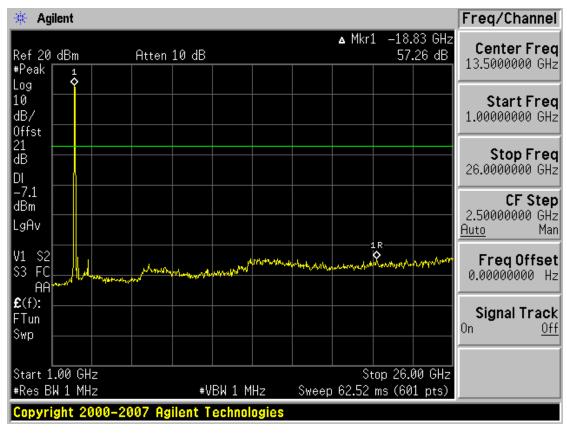


1 GHz ~ 26 GHz

Conducted Spurious Emission (802.11b-CH1)



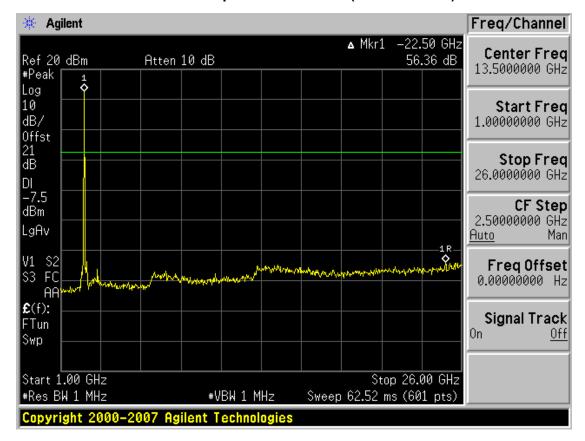
Conducted Spurious Emission (802.11b-CH6)



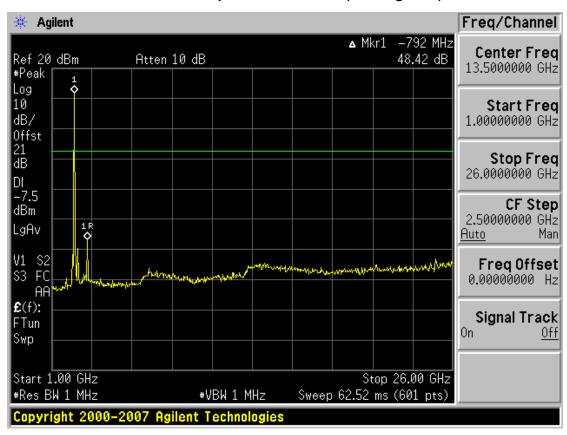
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



Conducted Spurious Emission (802.11b-CH11)



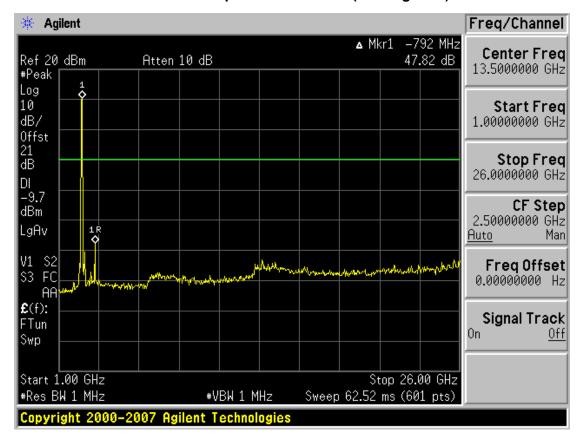
Conducted Spurious Emission (802.11g-CH1)



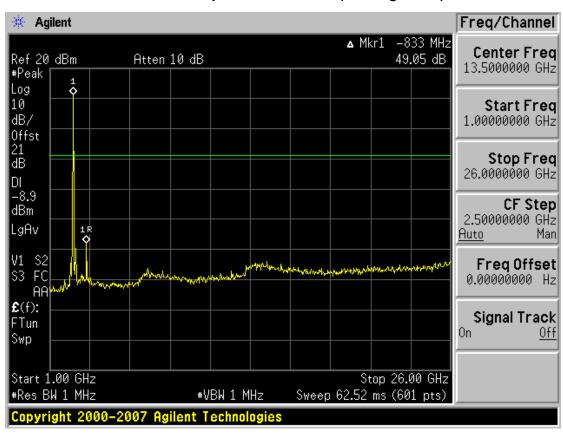
FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT		www.hct.co.kr	
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



Conducted Spurious Emission (802.11g-CH6)



Conducted Spurious Emission (802.11g-CH11)



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

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7.5 RADIATED MEASUREMENT.

7.5.1 RADIATED SPURIOUS EMISSIONS.

Test Requirements and limit, §15.205, §15.209

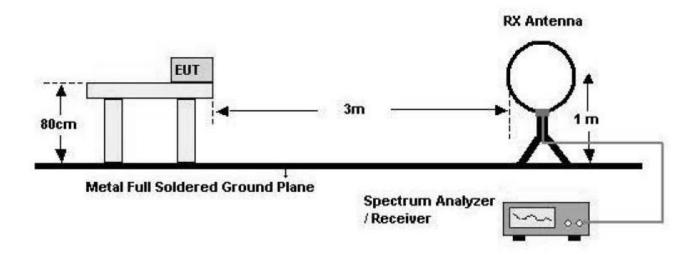
Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V

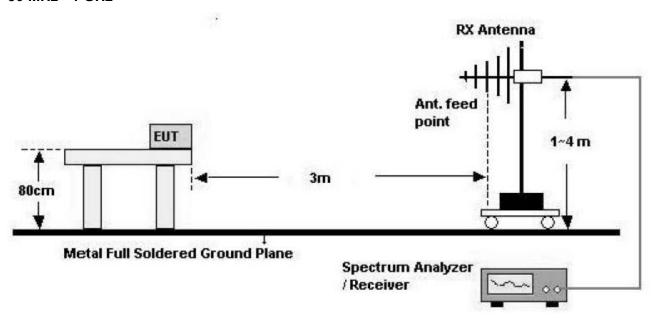


Test Configuration

Below 30 MHz



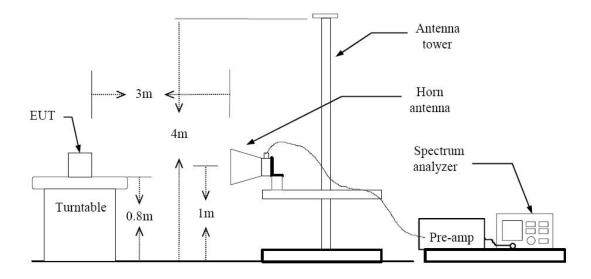
30 MHz - 1 GHz



FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
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HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



Above 1 GHz



TEST PROCEDURE

- 1. The EUT is placed on a turntable, which is 0.8 m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.

FCC PT.15.247 TEST REPORT	FCC CERTIFICATION REPORT			www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



TEST RESULTS

9 kHz - 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin	
MHz	$dB\mu V$	dB /m	dB	(H/V)	dBμV/m	dB <i>μ</i> V/m	dB	
No Critical peaks found								

- 1. Measuring frequencies from 9 kHz to the 30MHz.
- 2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
- 3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 4. Limit line = specific Limits (dBuV) + Distance extrapolation factor

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:		
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V		



TEST RESULTS

Below 1 GHz

Operation Mode: 802.11b Mode (Channel: 11, Data rate: 11 Mbps)

Frequency MHz	Reading dBuV	Ant. Factor dB/m	Cable Loss dB	ANT POL (H/V)	Total dBuV/m	Limit dBuV/m	Margin dB
94.99	21.95	8.60	2.30	V	32.85	43.5	10.7
137.67	25.21	12.20	2.80	V	40.21	43.5	3.3
324.88	7.63	13.30	4.30	Н	25.23	46	20.8
881.66	5.70	22.20	7.20	Н	35.10	46	10.9

- 1. Measuring frequencies from 30 MHz to the 1 GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
- 3. We have done 802.11b Mode and 802.11g mode test. Worst case of EUT is 802.11b Mode.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type: CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	FCC ID:	IC:		
HCTR1006FR01-1	June 28, 2010	CDIMA/ PGS CDIMA IX EV-DO Rev.A WI-FI Gateway	PH7MV540V	8484A-MV540V		



Above 1 GHz

Operation Mode: 802.11 b
Transfer Rate: 11 Mbps
Operating Frequency 2412
Channel No. 01 Ch

Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
4824	48.06	-6.01	V	42.05	74	31.95	PK
4824	33.54	-6.01	V	27.53	54	26.47	AV
7236	49.87	1.38	V	51.25	74	22.75	PK
7236	35.71	1.38	V	37.09	54	16.91	AV
4804	48.21	-6.01	Н	42.20	74	31.80	PK
4804	33.55	-6.01	Н	27.54	54	26.46	AV
7206	50.05	1.38	Н	51.43	74	22.57	PK
7206	35.73	1.38	Н	37.11	54	16.89	AV

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 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 setting:
 - a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
 - b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 5. We have done 802.11b and 802.11g test. Worst case of EUT is 11 Mbps in 802.11b.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT			
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:	
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Operation Mode: 802.11 b

Transfer Rate: 11 Mbps

Operating Frequency 2437

Channel No. 06 Ch

Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
4874	47.20	-5.83	V	41.37	74	32.63	PK
4874	32.70	-5.83	V	26.87	54	27.13	AV
7311	48.28	1.62	V	49.90	74	24.10	PK
7311	34.44	1.62	V	36.06	54	17.94	AV
4882	47.42	-5.83	Н	41.59	74	32.41	PK
4882	32.58	-5.83	Н	26.75	54	27.25	AV
7323	48.21	1.62	Н	49.83	74	24.17	PK
7323	34.43	1.62	Н	36.05	54	17.95	AV

•

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000 MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Spectrum setting:
 - a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
 - b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 5. We have done 802.11b and 802.11g test. Worst case of EUT is 11 Mbps in 802.11b.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type: CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	FCC ID:	IC:		
HCTR1006FR01-1	June 28, 2010	CDIMA/ PGS CDIMA IX EV-DO Rev.A WI-FI Gateway	PH7MV540V	8484A-MV540V		



Operation Mode: 802.11 b

Transfer Rate: 11 Mbps

Operating Frequency 2462

Channel No. 11 Ch

Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
4924	47.17	-5.66	V	41.51	74	32.49	PK
4924	33.45	-5.66	V	27.79	54	26.21	AV
7386	49.30	1.86	V	51.16	74	22.84	PK
7386	35.48	1.86	V	37.34	54	16.66	AV
4960	46.94	-5.66	Н	41.28	74	32.72	PK
4960	33.08	-5.66	Н	27.42	54	26.58	AV
7440	49.73	1.86	Н	51.59	74	22.41	PK
7440	35.51	1.86	Н	37.37	54	16.63	AV

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- 2. Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20dB from the applicable limit) and considered that's already beyond the background noise floor.
- 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 setting:
 - a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MH.
 - b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 5. We have done 802.11b and 802.11g test. Worst case of EUT is 11 Mbps in 802.11b.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type: CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	FCC ID:	IC:		
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7.5.2 RADIATED RESTRICTED BAND EDGE MEASUREMENTS

Test Requirements and limit, §15.247(d) §15.205, §15.209

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum is operating, the radio frequency power that is produced by the intentional radiator 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (See section 15.205(c)).

Operation Mode:

Transfer Rate:

Operating Frequency

Channel No.

802.11 b

11 Mbps

2412 MHz, 2462 MHz

01 Ch, 11 Ch

Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
2319.92	50.99	-12.63	V	38.36	74	35.64	PK
2319.92	38.55	-12.63	V	25.92	54	28.08	AV
2326.16	55.48	-12.60	Н	42.88	74	31.12	PK
2326.16	44.35	-12.60	Н	31.75	54	22.25	AV
2490.07	50.13	-11.89	V	38.24	74	35.76	PK
2490.07	35.66	-11.89	V	23.77	54	30.23	AV
2493.51	50.21	-11.88	Н	38.33	74	35.67	PK
2493.51	35.67	-11.88	Н	23.79	54	30.21	AV

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Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:		
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V		



Operation Mode: 802.11 g

Transfer Rate: 12 Mbps

Operating Frequency 2412 MHz, 2462 MHz

Channel No. 01 Ch, 11 Ch

Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
2364.40	52.74	-12.44	V	40.30	74	33.70	PK
2364.40	39.76	-12.44	V	27.32	54	26.68	AV
2373.52	57.10	-12.40	Н	44.70	74	29.30	PK
2373.52	44.52	-12.40	Н	32.12	54	21.88	AV
2492.38	49.90	-11.88	V	38.02	74	35.98	PK
2492.38	35.04	-11.88	V	23.16	54	30.84	AV
2493.83	49.93	-11.88	Н	38.05	74	35.95	PK
2493.83	35.21	-11.88	Н	23.33	54	30.67	AV

- 1. Spectrum setting:
 - a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
 - b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 2. We have done 802.11b and 802.11g test.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT		www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type: CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDIMA/ PGS CDIMA IX EV-DO Rev.A WI-FI Gateway	PH7MV540V	8484A-MV540V



7.6 POWERLINE CONDUCTED EMISSIONS

Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

Evenuency Benne (MUT)	Limits (dBμV)			
Frequency Range (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		

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

- 1. The EUT is placed on a wooden table 80 cm above the reference groundplane.
- 2. The EUT is connected via LISN to a test power supply.
- 3. The measurement results are obtained as described below:
- 4. Detectors Quasi Peak and Average Detector.

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HCTR1006FR01-1	June 28, 2010	CDIMA/ PGS CDIMA IX EV-DO Rev.A WI-FI Gateway	PH7MV540V	8484A-MV540V



■ RESULT PLOTS

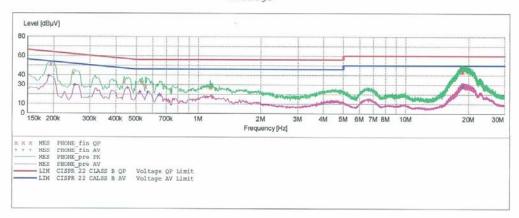
HCT

EMC

EUT: MV540V
Manufacturer: AXESSTEL
Operating Condition: WLAN MODE
Test Site: SHIELD ROOM
Operator: JS LEE
Test Specification: CISPR22 CLASS B
Comment: H

SCAN TABLE: "CISPR22 CLASS B"

Short Desc	ription:	CISPR22 CLASS B				
Start	Stop	Step	Detector	Meas.	IF	Transducer
Frequency	Frequency	Width		Time	Bandw.	
150.0 kHz	500.0 kHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	ESH3 (20100210)
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	ESH3 (20100210)
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	ESH3 (20100210)



MEASUREMENT RESULT: "PHONE fin QP"

5/26/2010 2:2	4PM					
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.194001	51.20	10.0	64	12.7		
0.250001	42.10	10.0	62	19.7		
0.438001	33.10	10.1	57	24.0		
0.536000	31.90	10.1	56	24.1		
0.556000	27.70	10.1	56	28.3		
1.144000	26.80	10.1	56	29.2		
18.444000	43.40	11.5	60	16.6		
18.652000	43.70	11.5	60	16.3		
18.808000	43.70	11.5	60	16.3		

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FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT			
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:	
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V	



MEASUREMENT RESULT: "PHONE_fin AV"

5/26/2010 2:2	4PM					
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.190001	38.70	10.0	54	15.3		
0.254001	29.30	10.0	52	22.3		
0.458001	26.60	10.1	47	20.1		
0.524000	22.10	10.1	46	23.9		
0.572000	22.00	10.1	46	24.0		
0.648000	19.40	10.1	46	26.6		
18.564000	28.30	11.5	50	21.7		
18.804000	28.90	11.5	50	21.1		
18.884000	28.70	11.5	50	21.3		

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FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT		www.hct.co.kr
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HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



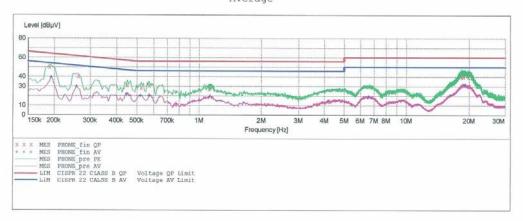
HCT

EMC

EUT: MV540V Manufacturer: AXESSTEL Operating Condition: WLAN MODE
Test Site: SHIELD ROO
Operator: JS LEE SHIELD ROOM Operator: JS LEE
Test Specification: CISPR22 CLASS B
Comment: N

SCAN TABLE: "CISPR22 CLASS B"

Short Desc		C	ISPR22 CLAS	SB		
Start	Stop	Step	Detector	Meas.	IF	Transducer
Frequency	Frequency	Width		Time	Bandw.	
150.0 kHz	500.0 kHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	ESH3 (20100210)
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	ESH3 (20100210)
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	ESH3 (20100210)



MEASUREMENT RESULT: "PHONE_fin QP"

					1PM	5/26/2010 2:3
PE	Line	Margin dB	Limit dBµV	Transd dB	Level dBµV	Frequency MHz
		13.9	64	10.0	50.20	0.190001
		21.1	61	10.0	40.30	0.262001
		25.8	57	10.1	31.10	0.450001
		27.5	56	10.1	28.50	0.524000
		25.4	56	10.1	30.60	0.572000
		29.2	56	10.1	26.80	1.116000
		20.3	60	11.5	39.70	18.368000
		19.7	60	11.5	40.30	18.712000
		20.2	60	11.5	39.80	19.792000

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FCC PT.15.247 TEST REPORT		www.hct.co.kr		
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
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MEASUREMENT RESULT: "PHONE_fin AV"

5/26/2010 2:3	31PM					
Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE
0.194001	39.10	10.0	54	14.8		
0.258001	29.50	10.0	52	22.0		
0.450001	21.90	10.1	47	24.9		
0.520000	20.10	10.1	46	25.9		
0.572000	20.20	10.1	46	25.8		
1.132000	19.30	10.1	46	26.7		
6.584000	18.90	10.6	50	31.1		
16.216000	20.50	11.3	50	29.5		
19.192000	30.80	11.5	50	19.2		

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FCC PT.15.247 TEST REPORT		www.hct.co.kr		
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V



8. LIST OF TEST EQUIPMENT

Manufacturer	Model / Equipment	Calibration Interval	Calibration Due	Serial No.
Rohde & Schwarz	ESH2-Z5/ LISN	Annual	04/05/2011	861741/013
Rohde & Schwarz	ESH3-Z6/ LISN	Annual	06/13/2010	100329
Schwarzbeck	VULB 9160/ TRILOG Antenna	Biennial	12/18/2010	9160-3150
HD	MA240/ Antenna Position Tower	N/A	N/A	556
EMCO	1050/ Turn Table	N/A	N/A	114
HD GmbH	HD 100/ Controller	N/A	N/A	13
HD GmbH	KMS 560/ SlideBar	N/A	N/A	12
Rohde & Schwarz	ESH3-Z2/ PULSE LIMITER	Annual	10/30/2010	375.8810.352
MITEQ	AMF-6D-001180-35-20P/AMP	Annual	05/20/2011	990893
Schwarzbeck	BBHA 9120D/ Horn Antenna	Biennial	09/23/2011	296
Rohde & Schwarz	FSP30 / Spectrum Analyzer	Annual	07/31/2010	839117/011
Agilent	E4440A / Spectrum Analyzer	Annual	12/23/2010	US45303008
Agilent	E4416A /Power Meter	Annual	01/14/2011	GB41291412
Agilent	E9327A /POWER SENSOR	Annual	07/28/2010	MY4442009
Wainwright Instrument	WHF3.3/18G-10EF / High Pass Filter	Annual	06/29/2010	1
Hewlett Packard	11636B/Power Divider	Annual	12/24/2010	11377
DIGITAL	EP-3010 /DC POWER SUPPLY	Annual	01/08/2011	3110117
ITECH	IT6720 / DC POWER SUPPLY	Annual	12/01/2010	010002156287001199
TESCOM	TC-3000A / BLUETOOTH TESTER	Annual	01/11/2011	3000A490112
Rohde & Schwarz	CBT / BLUETOOTH TESTER	Annual	06/22/2010	100422
EMCO	6502.LOOP ANTENNA	Biennial	01/13/2012	9009-2536

FCC PT.15.247 TEST REPORT		www.hct.co.kr		
Test Report No.	Date of Issue:	EUT Type:	FCC ID:	IC:
HCTR1006FR01-1	June 28, 2010	CDMA/ PCS CDMA 1x EV-DO Rev.A Wi-Fi Gateway	PH7MV540V	8484A-MV540V