

MEASUREMENT AND TECHNICAL REPORT

OSI SECURITY DEVICES
1580 Jayken Way
San Diego, CA 91911

DATE: 22 May 2006

This Report Concerns:	Original Grant: ☒ X	Class II Change: ☐
Equipment Type:	Reader, Model OW2000, S/N 06189294	
Deferred grant requested per 47 CFR 0.457(d)(1)(ii)?	Yes: ☐ Defer until:	No: ☒ X
Company Name agrees to notify the Commission by: of the intended date of announcement of the product so that the grant can be issued on that date.	N/A	
Transition Rules Request per 15.37?	Yes: ☐	No: ☒ X*
(*) FCC Part 15, Paragraph(s) 15.247(a), 15.247(b), 15.247(c), 15.247(d), and 15.209(a)		
Report Prepared by: TÜV AMERICA, INC 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone: 858 678 1400 Fax: 858 546 0364		

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1.0 GENERAL INFORMATION**1.1 Product Description**

Please complete each section. Enter N/A if field is not applicable.

ApplicantCompany Name &
Contact:

OSI Security Devices

Address (Street):

1580 Jayken Way

Address (:
Person to Receive
Report:

City:

Chula Vista

State:

California

Country:

USA

Zip:

91911

Chris McGill

Title

Engineer

Phone:

(619)628-1000

Fax:

(619)628-1001

E-mail Address:

cmcgill@omnilock.com

General Equipment Description:

EUT Description:

Wireless Access Management System reader .

EUT Name:

Reader

Model No.:

OW2000

Serial No.:

06189294

N/A

Product Options:

Typical Operation

Configurations and modes to
be tested:**EUT Specifications**Length
:

10 inches

Width:

5 inches

Height:

3 inches

Weight:

3 pounds

Power Requirements *(Regulations require testing to be performed at typical power ratings in the countries of intended use. (i.e., European power is typically 230 VAC 50 Hz or 400 VAC 50 Hz, single and three phase, respectively))*

Voltage: Battery Powered (If battery powered, make sure battery life is sufficient to complete testing.)

of Phases:

Current (Amps/phase(max)):

Current

(Amps/phase(nominal)):

EUT Operating Modes to be Tested -- list the operating modes to be used during test. It is recommended the equipment be tested while operating in a typical operation mode. FCC testing of personal computers and/or peripherals requires that a simple program generate a complete line of upper case H's. Provide a general description of all software, firmware, and PLD algorithms used in the equipment. List all code modules as described above, with the revision level used during testing.

Typical Operation.

1.2 Related Submittal Grant

None

1.3 Tested System Details

The FCC ID's for all equipment, plus descriptions of all cables used in the tested system are:

None

1.4 Test Methodology

Purpose of Test: To demonstrate compliance with the following tests.

Test Summary					
Test Description	Paragraph Number	Summary of Results			Pass/Fail
		Low Channel	Mid Channel	High Channel	
Band Edge	15.247(a)(1)	No Emissions Detected	--	No Emissions Detected	Pass
Bandwidth	15.247(a)(2)	2.655 MHz	2.650 MHz	2.650 MHz	Pass
RF Output Power	15.247(b)	15.69 dBm	15.85 dBm	15.57 dBm	Pass
RF Conducted Spurious Emissions	15.247(c)	-28 dB	-29 dB	-29 dB	Pass
Radiated Spurious Emissions – Restricted Bands (1GHz to 25GHz)	15.247(c)/ 15.209(a)	-6.25 dB @ 7217.68 MHz	-3.26 dB @ 7335.7 MHz	-0.8 dB @ 7440.6 MHz	Pass
Power Spectral Density/Radiated Spurious Emissions	15.247(d)	-7.7 dB	-7.7 dB	-7.8 dB	Pass
Radiated Emissions (30 to 1000 MHz)	15.209(a)	-8.8 dB @ 595.74 MHz	--	--	Pass

Testing was performed according to the procedures in FCC/ANSI C63.4 and CSA 108.8-M1983.

1.5 Test Facility

The open area test site and conducted measurement data were tested by:

TÜV AMERICA, INC
10040 Mesa Rim Road
San Diego, CA 92121-2912
Phone: 858 678 1400
Fax: 858 546 0364

The Test Site Data and performance comply with ANSI C63.4 and are registered with the FCC, 7435 Oakland Mills Road, Columbia Maryland 21046. All Measurement Data is acquired according to the content of FCC Measurement Procedure and ANSI C63.4, unless supplemented with additional requirements as noted in the test report.

2.0 SYSTEM TEST CONFIGURATION

2.1 Justification

The EUT was initially tested for FCC emissions in the following configuration:

See Test Setup Photos Exhibit

2.2 EUT Exercise Software

None

2.3 Special Accessories

None

2.4 Equipment Modifications

None

2.5 Configuration of Test System

See Test Setup Photos Exhibit

**3.0 BAND EDGE EQUIPMENT/DATA
BANDWIDTH EQUIPMENT/DATA
RF OUTPUT POWER EQUIPMENT/DATA
RF CONDUCTED SPURIOUS EMISSIONS EQUIPMENT/DATA
RADIATED SPURIOUS EMISSIONS EQUIPMENT/DATA
POWER SPECTRAL DENSITY/RADIATED SPURIOUS EMISSIONS EQUIPMENT/DATA
RADIATED EMISSIONS EQUIPMENT/DATA**

**Test Conditions: BAND EDGE: FCC Part 15.247(a)(1)
BANDWIDTH: FCC Part 15.247(a)(2)
RF OUTPUT POWER: FCC Part 15.247(b)
RF CONDUCTED SPURIOUS EMISSIONS: FCC Part 15.247(c)
RADIATED SPURIOUS EMISSIONS: FCC Parts 15.247(c) and 15.209(a)
POWER SPECTRAL DENSITY/RADIATED SPURIOUS EMISSIONS: FCC Part 15.247(d)
RADIATED EMISSIONS: FCC Part 15.209(a)**

The following measurements were performed at the San Diego Testing Facility:

☐ - Test not applicable

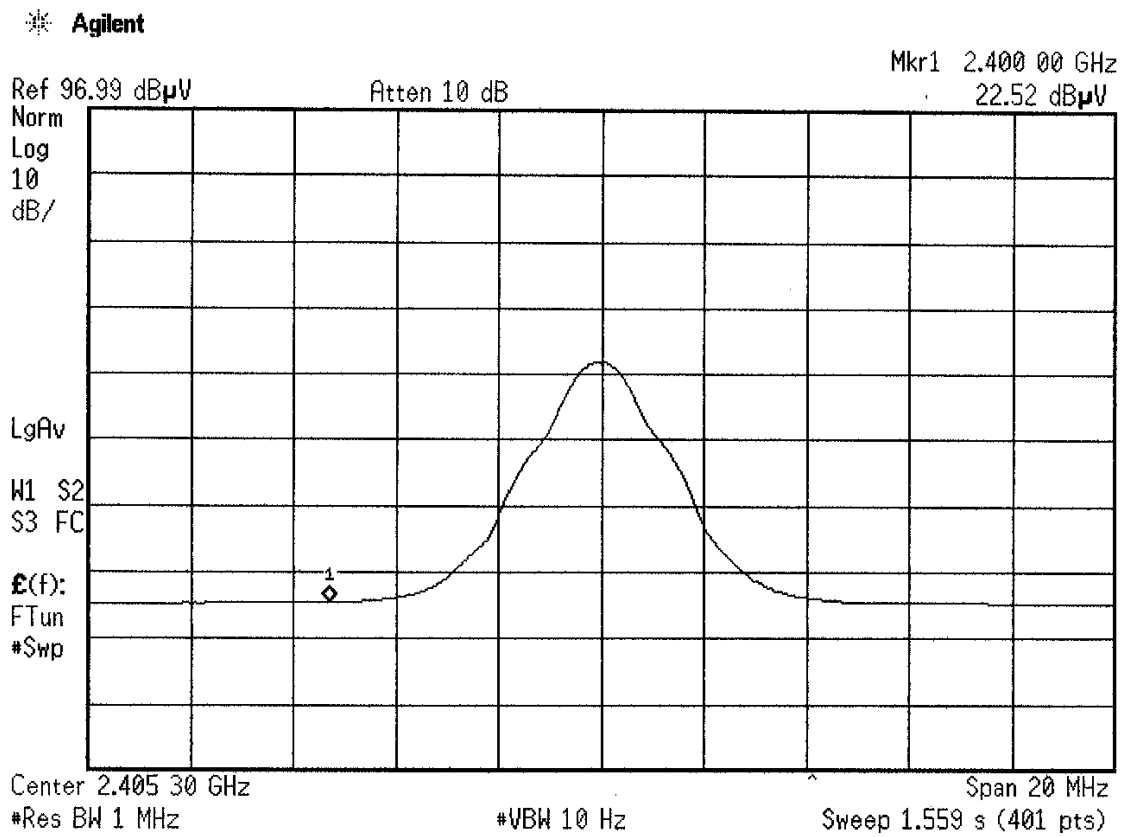
- - TR-2, Test Room
- - Roof (Small Open Area Test Site)
- - Canyon #1 (10- and 30-Meter Open Area Test Site), Carroll Canyon, San Diego

Test Equipment Used:

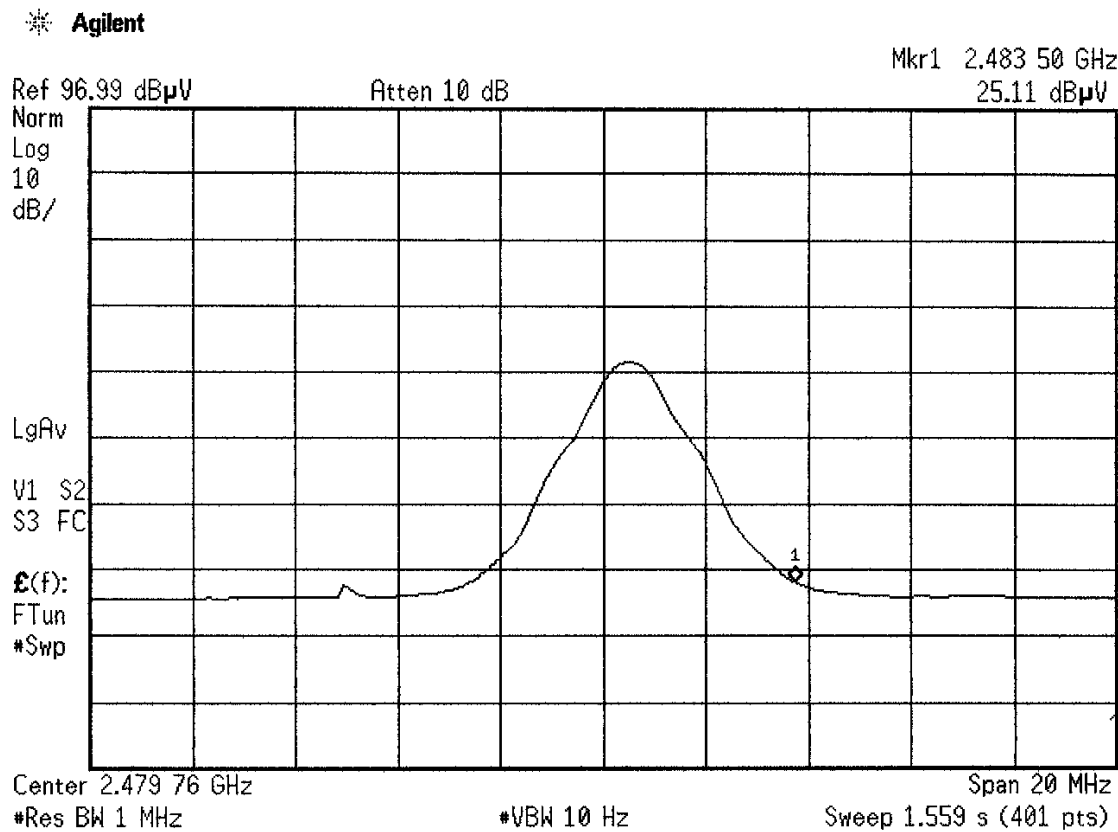
Model No.	Prop. No.	Description	Manufacturer	Serial No.	Date Cal'ed
3146	243	Antenna, Log Periodic Dipole	EMCO	106X	06/05
3115	453	Double Ridge Antenna	EMCO	9412-4364	08/05
3110B	491	Biconical Antenna	EMCO	9508-2134	10/05
E4440A	6814	Spectrum Analyzer	Hewlett Packard	MY42510441	02/06
8493A	--	20 dB Attenuator	Hewlett Packard	05391	Verified
VAT-20	--	20 dB Attenuator	Mini Circuits	--	Verified
LPB 2520/A	739	Antenna, Bilog	Antenna Research	1170	07/05
ESVS 30	6732	EMI Test Receiver	Rhode & Schwarz	833825/003	11/05

Remarks: One year calibration cycle for all test equipment and sites.

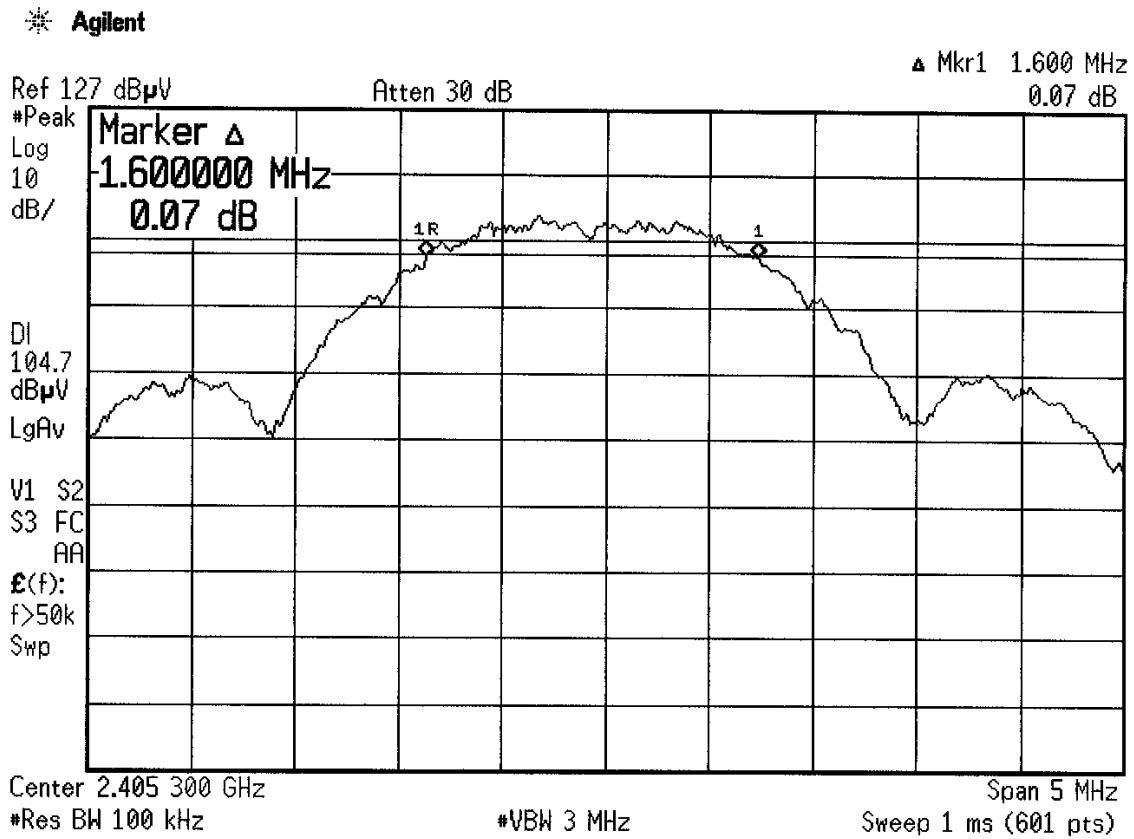
BAND EDGE: FCC Part 15.247(a)(1) - Low



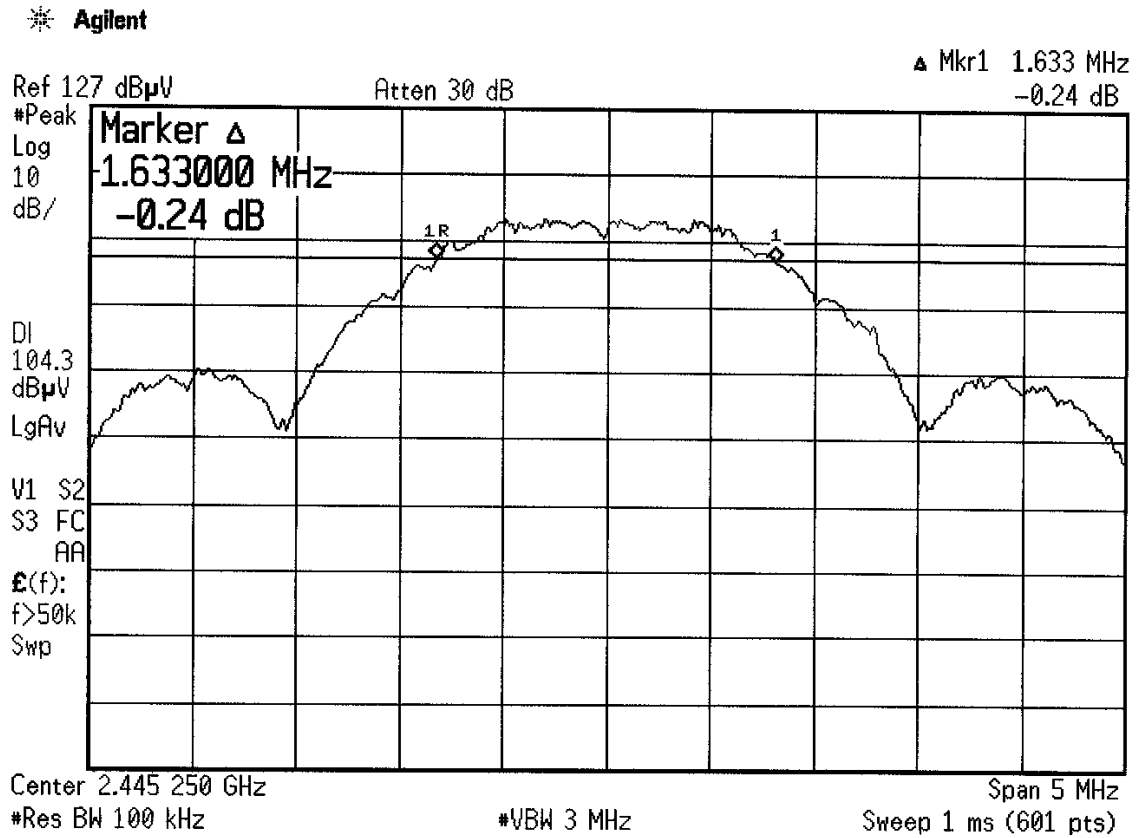
BAND EDGE: FCC Part 15.247(a)(1) - High



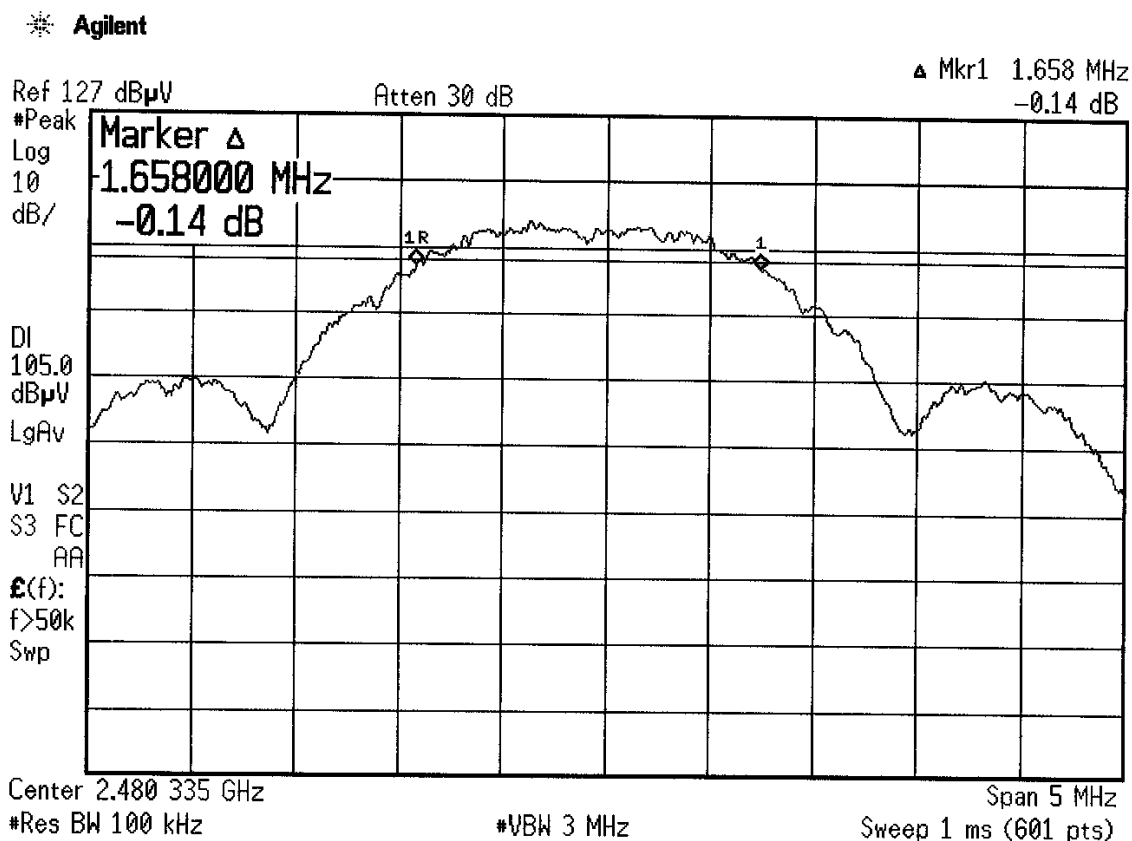
BANDWIDTH: FCC Part 15.247(a)(2) - Low



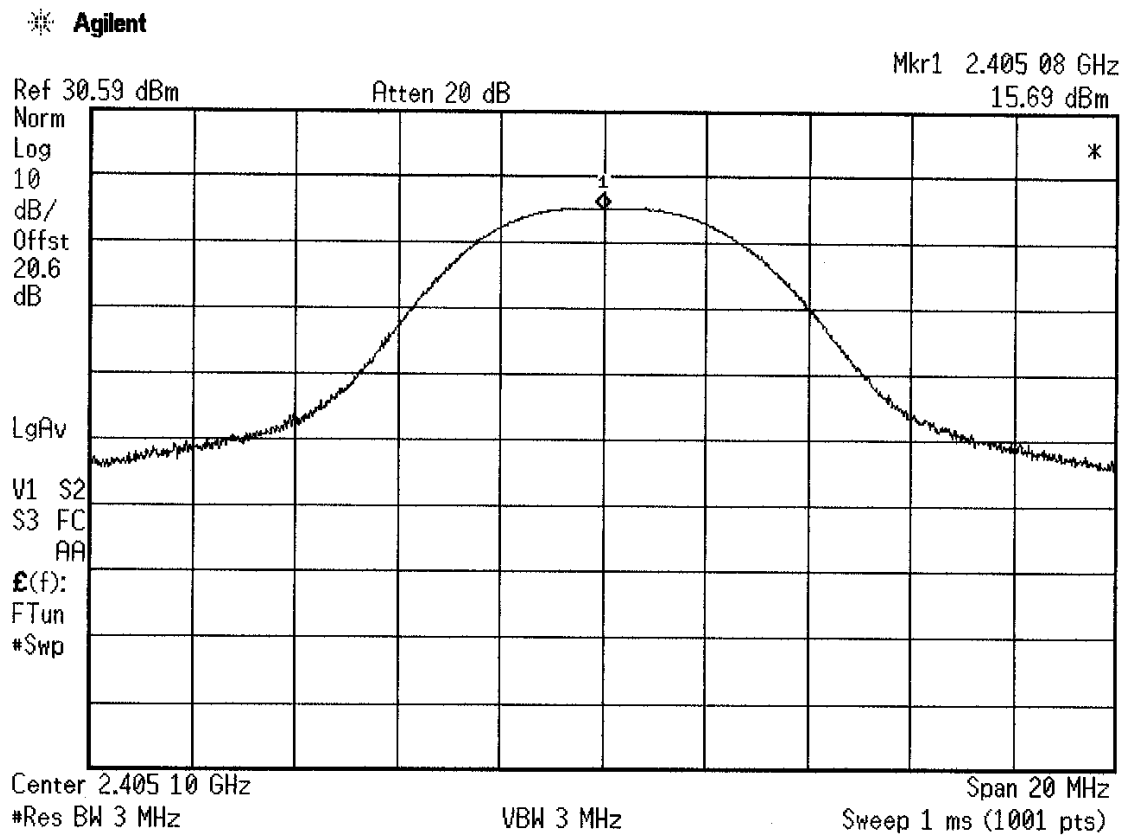
BANDWIDTH: FCC Part 15.247(a)(2) - Mid



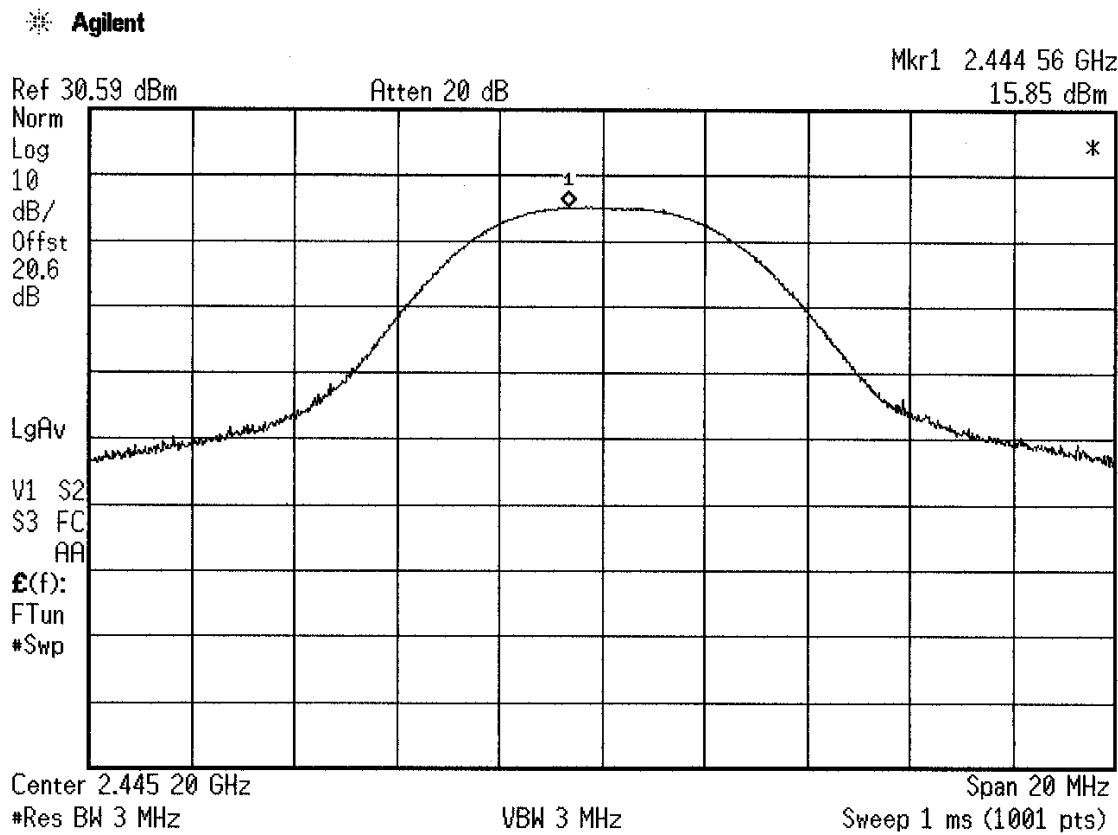
BANDWIDTH: FCC Part 15.247(a)(2) - High



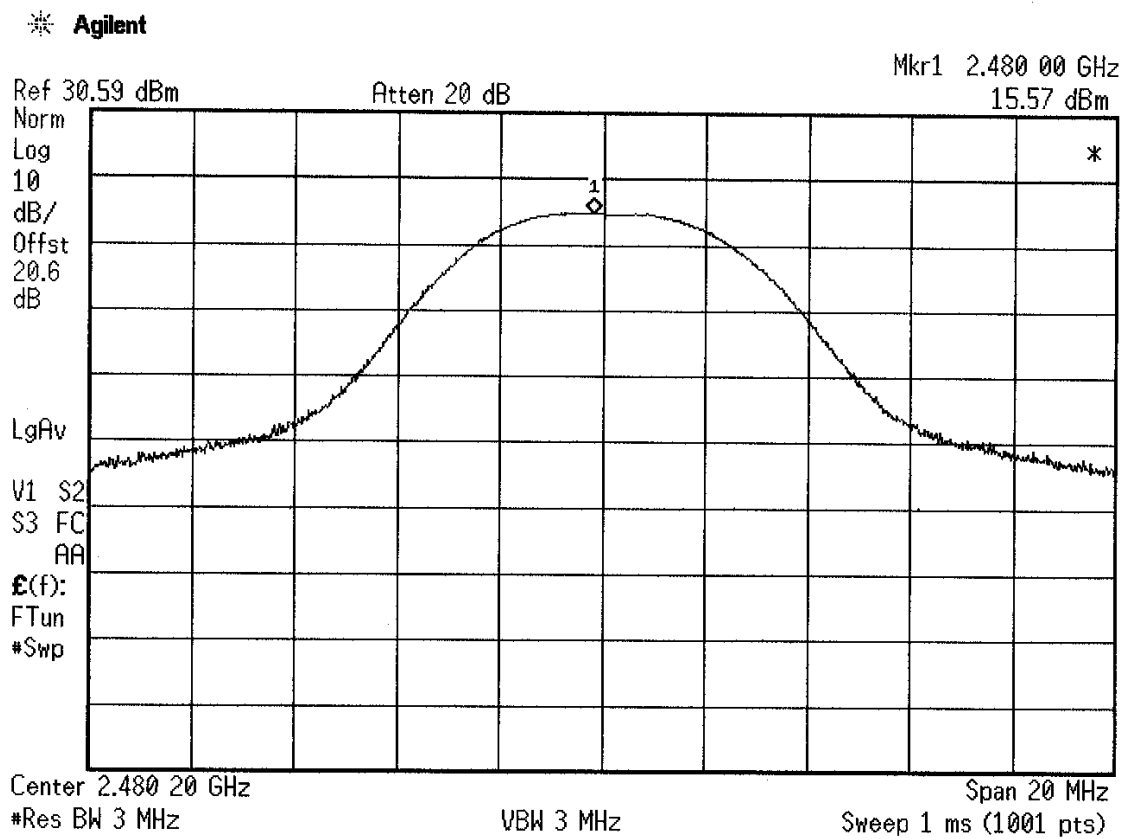
RF OUTPUT POWER: FCC Part 15.247(b) - Low



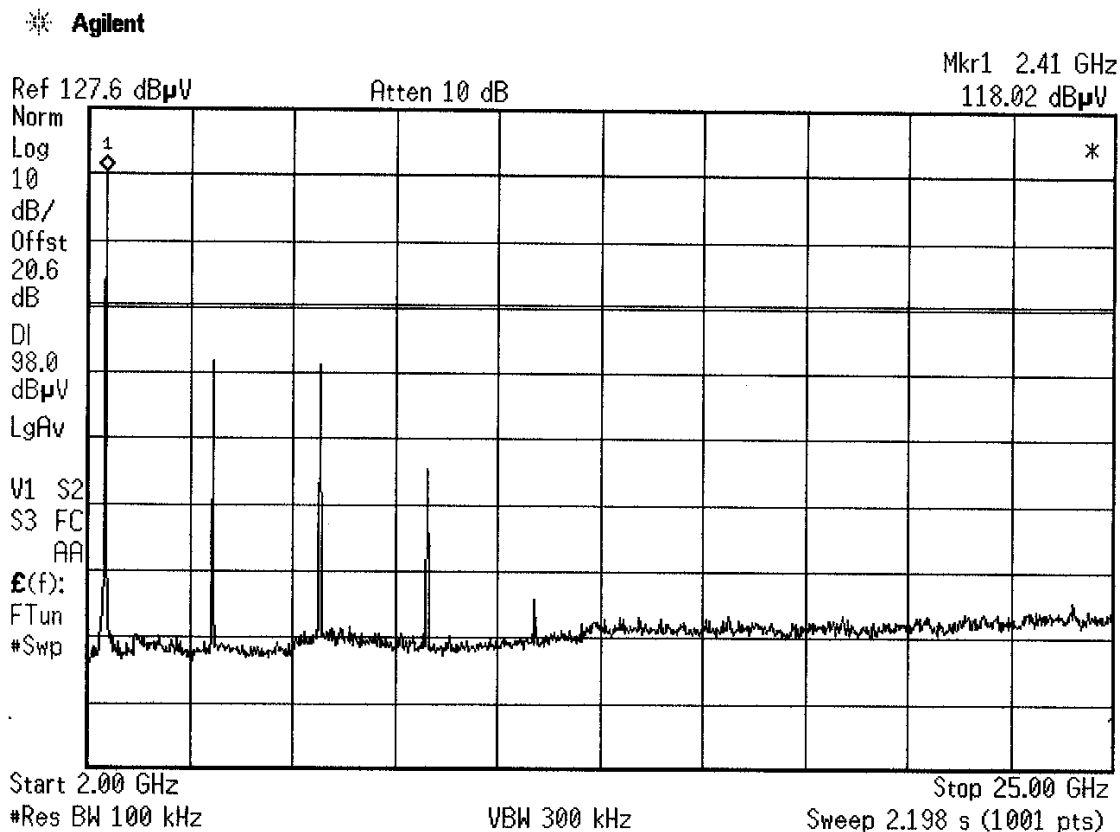
RF OUTPUT POWER: FCC Part 15.247(b) - Mid



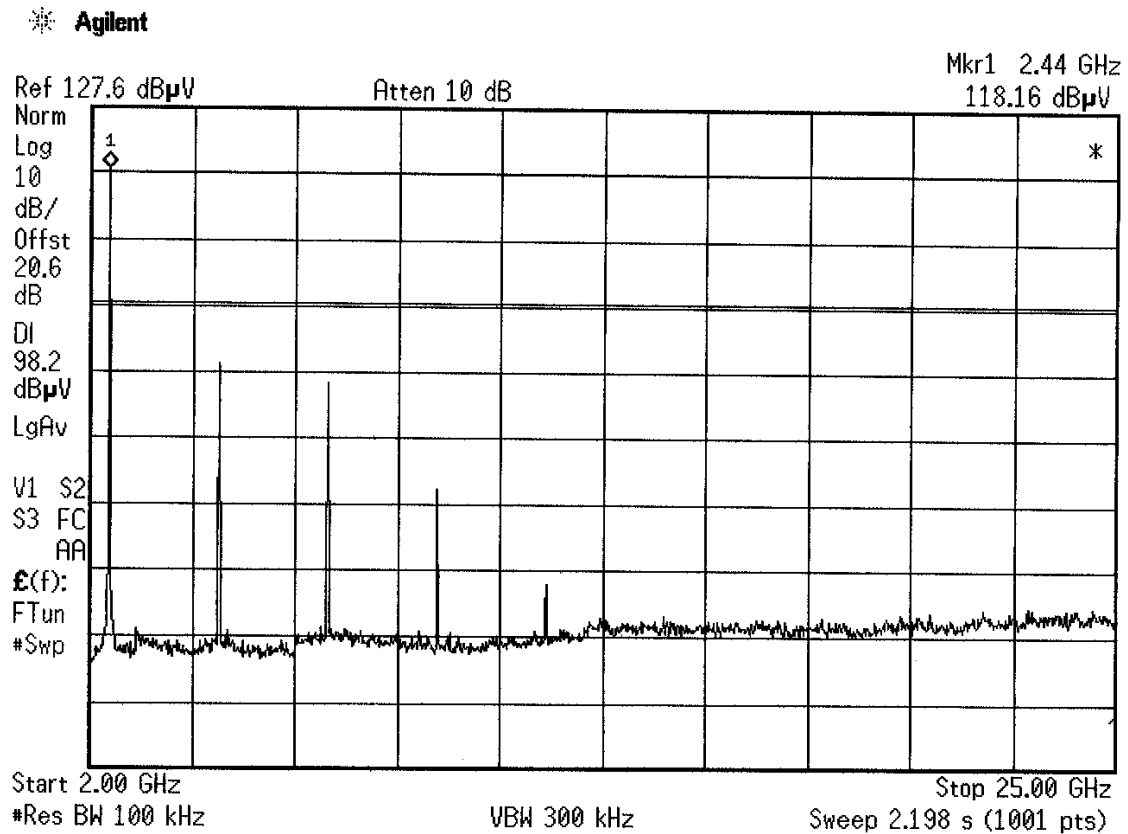
RF OUTPUT POWER: FCC Part 15.247(b) - High



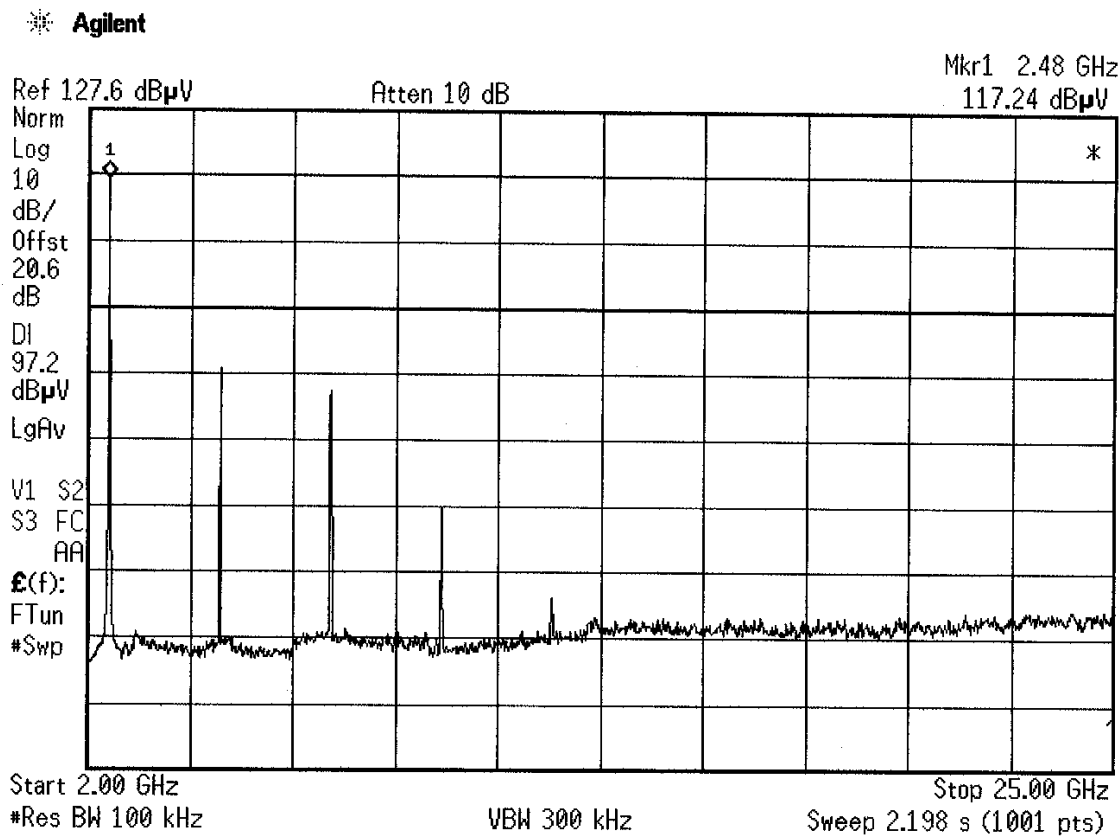
RF CONDUCTED SPURIOUS EMISSIONS: FCC Part 15.247(c) - Low



RF CONDUCTED SPURIOUS EMISSIONS: FCC Part 15.247(c) - Mid



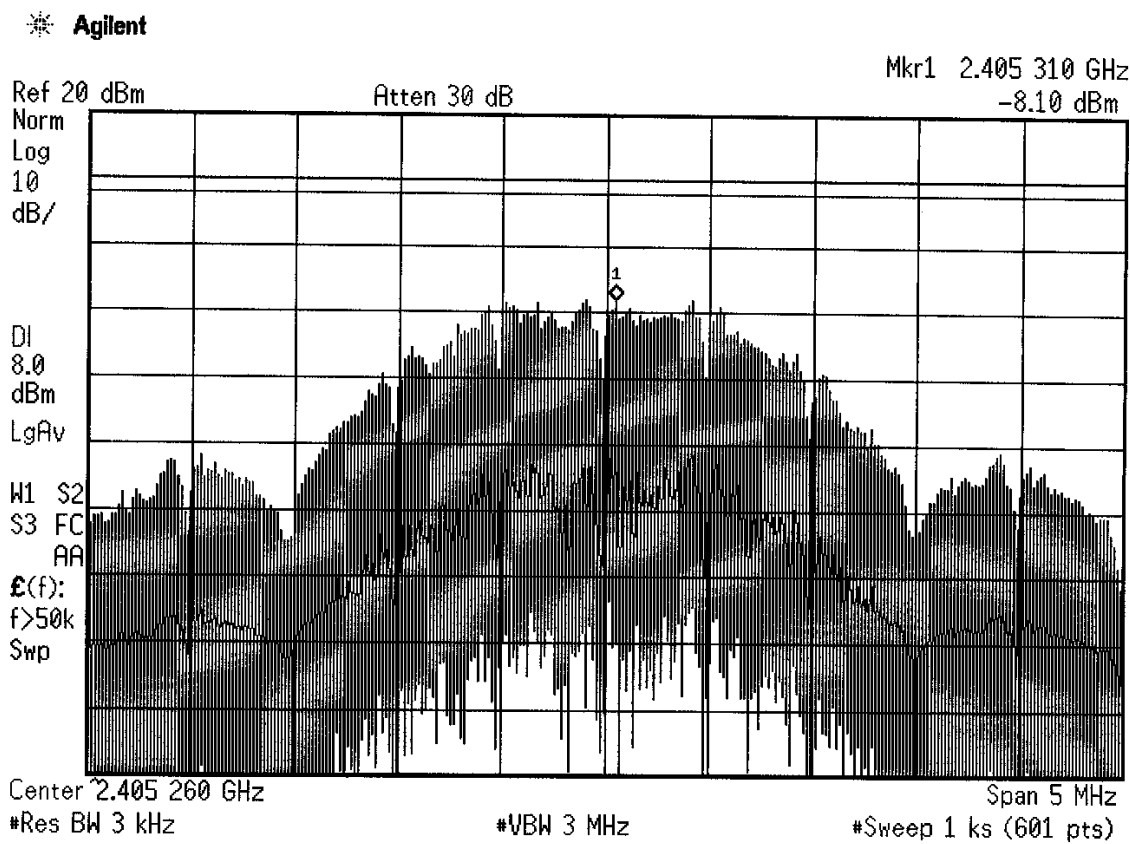
RF CONDUCTED SPURIOUS EMISSIONS: FCC Part 15.247(c) - High



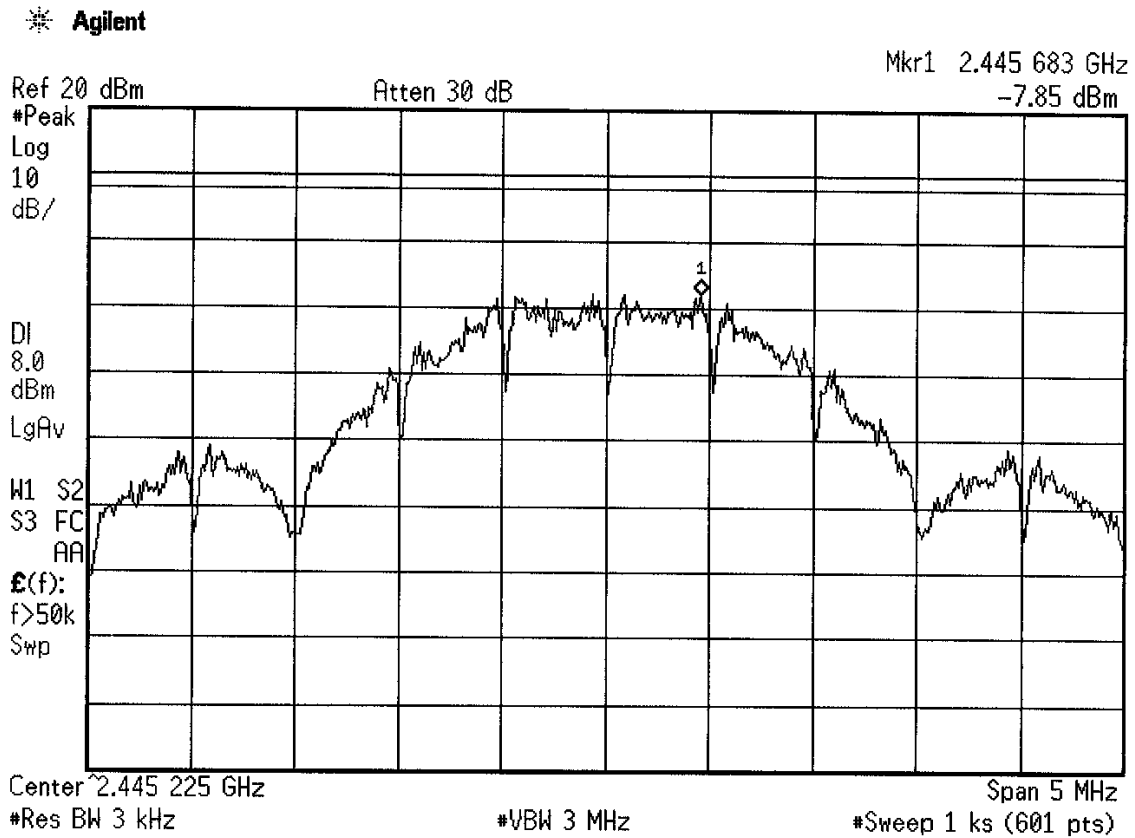
REPORT No:	SC601953	TESTER:	CHUCK RICKANS	SPEC:	FCC Part 15 para 15.209(a) 15.247(c)
CUSTOMER:	OSI Security Devices	TEST DIST:	3 Meters		
E U T:	Wireless Reader	TEST SITE:	Roof		
EUT MODE:	Transmit	BICONICAL:	491		
DATE:	April 24, 2006	LOG:	243		
NOTES:		OTHER:	453		
above 1GHz: RBW & VBW 1 MHz for Pk; RBW 1MHz and VBW 10Hz for AVG below 1GHz: RBW & VBW 100 kHz for Pk; RBW 100kHz and VBW 10Hz for AVG CF = Antenna Factor + Cable Loss - Preamplifier Gain + Preselector Loss					

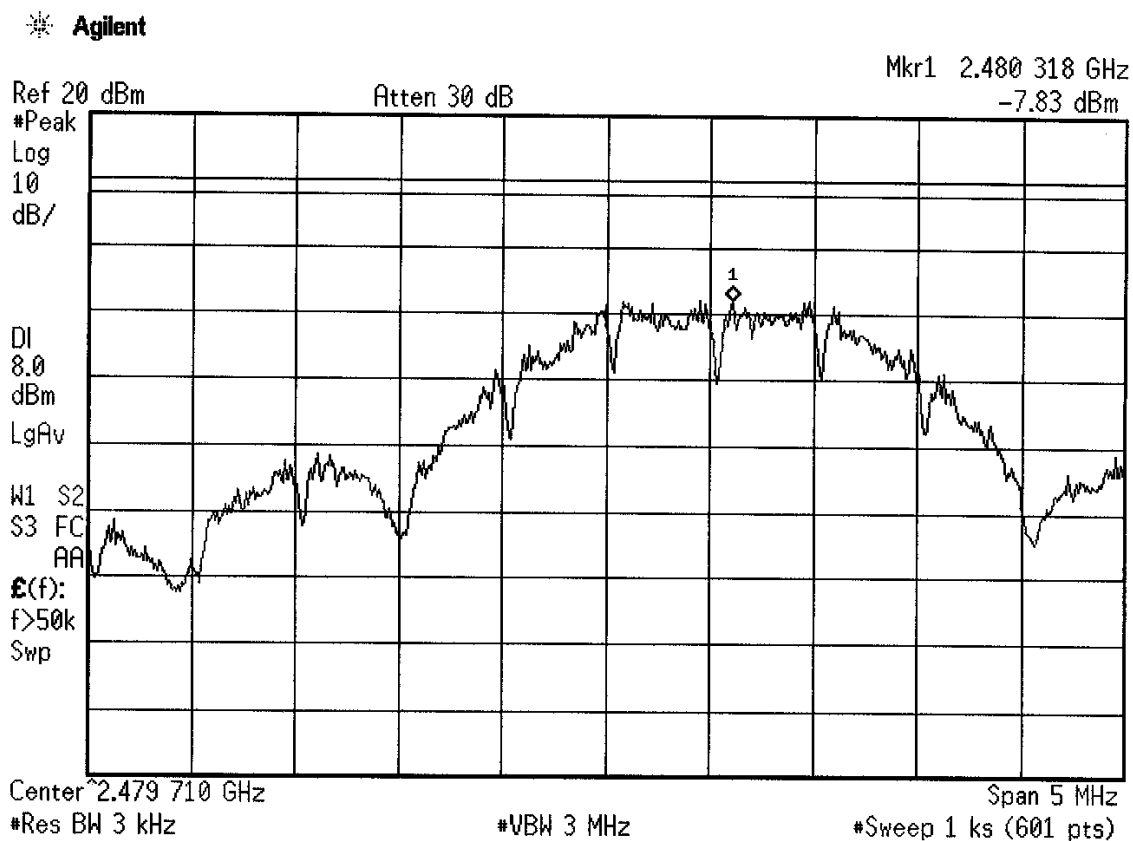
[illegible]

POWER SPECTRAL DENSITY: FCC Part 15.247(d) - Low

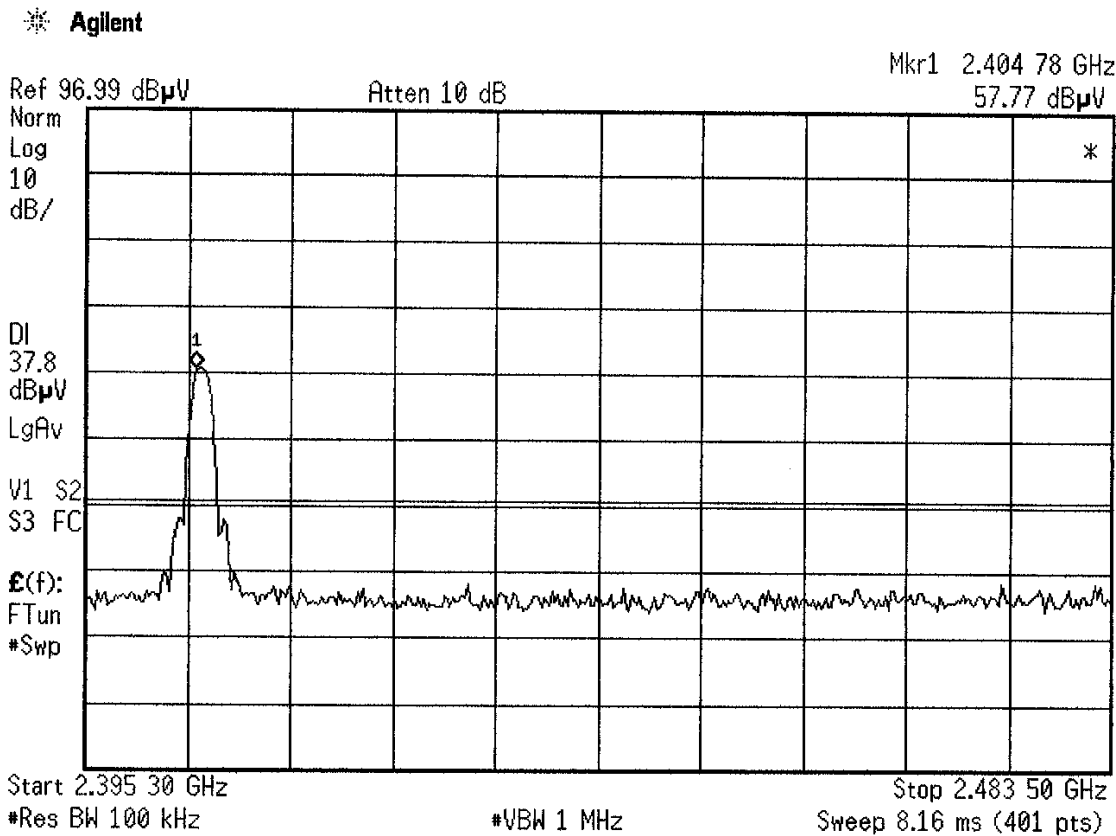


POWER SPECTRAL DENSITY: FCC Part 15.247(d) - Mid

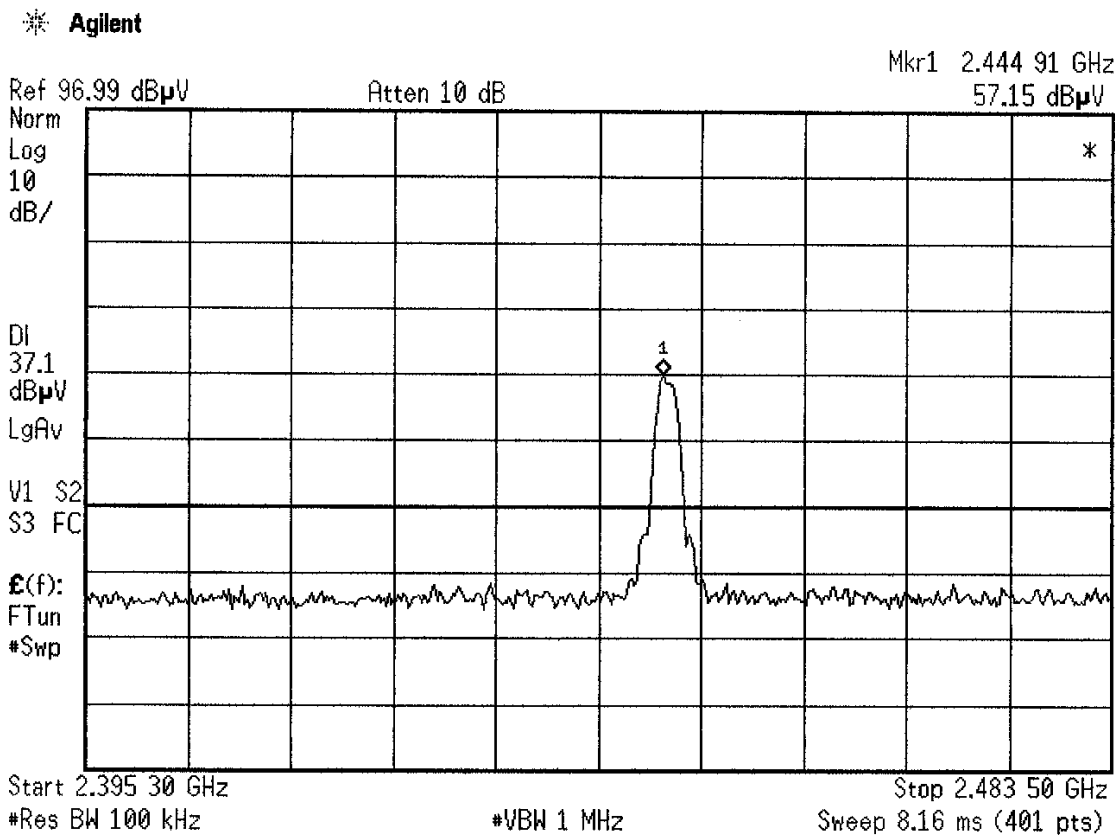




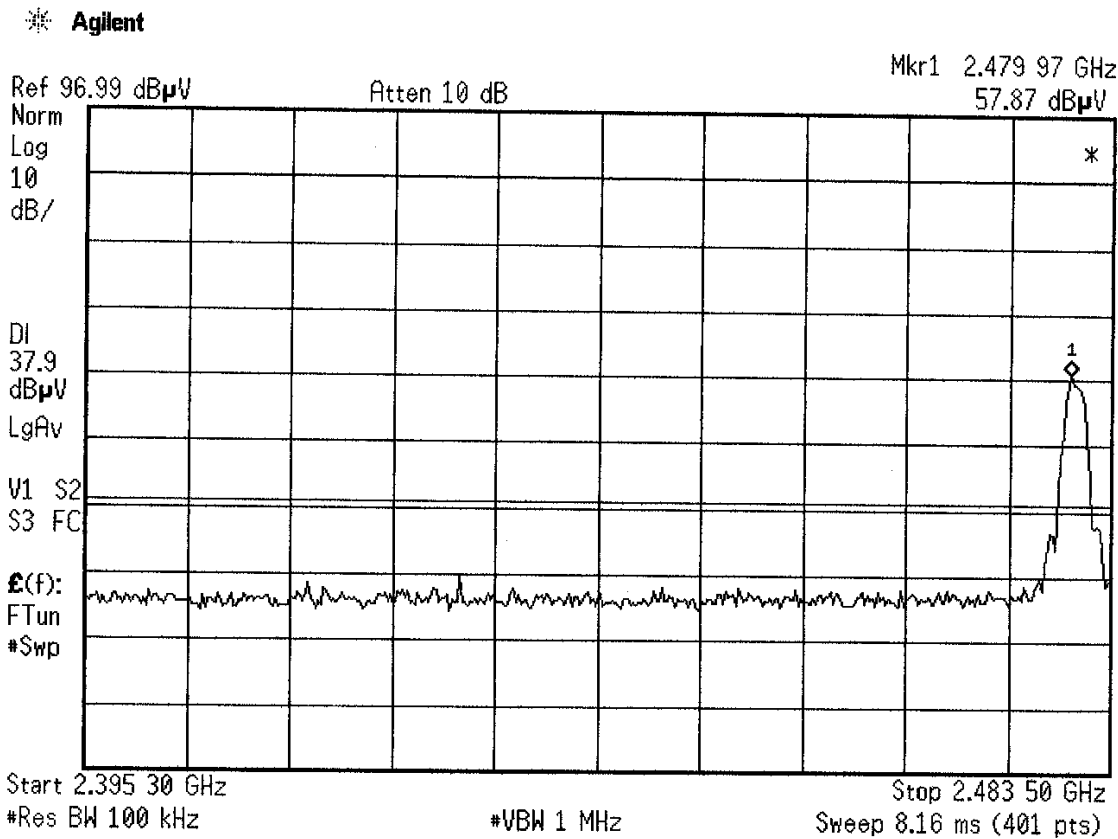
RADIATED SPURIOUS EMISSIONS: FCC Part 15.247(d) - Low



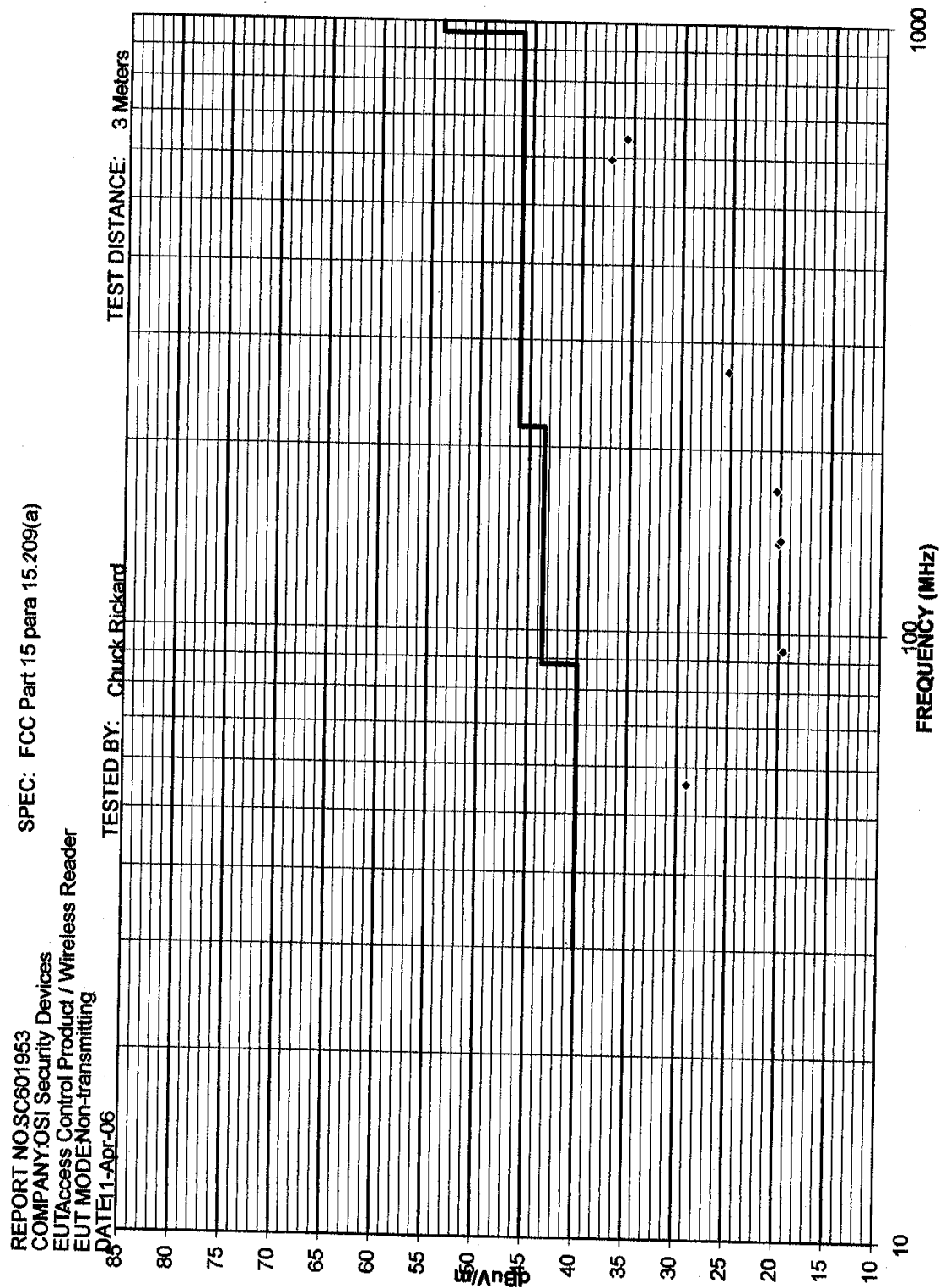
RADIATED SPURIOUS EMISSIONS: FCC Part 15.247(d) - Mid



RADIATED SPURIOUS EMISSIONS: FCC Part 15.247(d) - High



RADIATED EMISSIONS: FCC Part 15.209(a)



RCVR: 6732

TÜV AMERICA INC 10040 Mesa Rim Road San Diego, CA 92121-2912 Phone 858 678 1400 FAX 858 546 0364

4.0 ATTESTATION STATEMENT

GENERAL REMARKS:

SUMMARY:

All tests were performed per CFR 47, Part(s) 15.247(a), 15.247(b), 15.247(c), 15.247(d), and 15.209(a)

■ - Performed

The Equipment Under Test

■ - **Fulfills** the requirements of CFR 47, Part(s) 15.247(a), 15.247(b), 15.247(c), 15.247(d), and 15.209(a)

Testing Start Date: 11 April 2006

Testing End Date: 24 April 2006

- TÜV AMERICA, INC. -

Reviewing Engineer:



David Gray
(EMC Engineer In Charge)

Test Engineer:



Chuck Rickard
(EMC Engineer)