

FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

Activision Publishing, Inc

Portal of Power

Model No.: 84157790

Trade Name: Activision.

FCC ID: XLU84157790

Prepared for : Activision Publishing, Inc
3100 Ocean Park Boulevard., Santa Monica, CA90405,
USA

Prepared By : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block,
Shenzhen Science & Industrial Park,
Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number : ACS-F11154
Date of Test : Jul.19~21, 2011
Date of Report : Jul.22, 2011

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FCC ID: XLU84157790

TEST REPORT CERTIFICATION

Applicant : Activision Publishing, Inc
Manufacturer : Sunlight Technology Electronic Manufacturing Co; Ltd.
EUT Description : Portal of Power
FCC ID : XLU84157790
(A) MODEL NO. : 84157790
(B) Trade Name : Activision.
(C) SERIAL NO. : N/A
(D) Power Supply : DC 5V From PC Input
(E) TEST VOLTAGE : DC 5V From PC Input AC 120V/60Hz

Tested for comply with:
FCC Rules and Regulations Part 15 Subpart C: 2008

Test procedure used:
ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements.

The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

This Report is made under FCC Part 2.1075. No modifications were required during testing to bring this product into compliance.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of AUDIX TECHNOLOGY (SHENZHEN) CO., LTD.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Jul.19~21, 2011 Report of date: Jul.22, 2011

Prepared by :

Blove Ye / Assistant

Reviewer by :

Shun Lu / Senior Assistant



信華科技 (深圳) 有限公司
Audix Technology (Shenzhen) Co., Ltd.

EMC 部門報告專用章

Stamp only for EMC Dept. Report

Signature:

Ken Lu

Approved & Authorized Signer :

Ken Lu / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION		
Description of Test Item	Standard	Results
Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.10: 2009	PASS
Radiated Emission Test	FCC Part 15: 15.205, 15.209 FCC Part 15: 15.225(a)(b)(c)(d) ANSI C63.10: 2009	PASS
Frequency Tolerance Test	FCC Part 15: 15.225(e)	PASS
20dB Bandwidth Test	FCC Part 15: 15.215	PASS

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

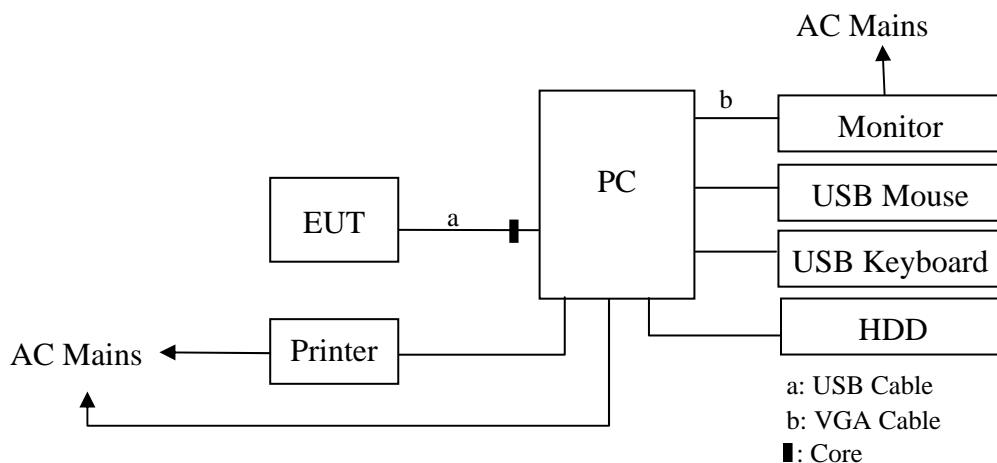
Product Name	:	Portal of Power
Model Number	:	84157790
Trade Name	:	Activision.
FCC ID	:	XLU84157790
Operation frequency	:	RF ID: 13.56MHz
Modulation	:	GMSK
Applicant	:	Activision Publishing, Inc 3100 Ocean Park Boulevard., Santa Monica, CA90405, USA
Manufacturer	:	Sunlight Technology Electronic Manufacturing Co; Ltd. New Asia Industrial City, Lin Village, Tangxia Town, Dongguan City, China
Date of Test	:	Jul.19~21, 2011
Date of Receipt	:	Jul.18, 2011
Sample Type	:	Prototype production

FCC ID: XLU84157790

2.2. Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Personal Computer	Test PC M	DELL	Studio 540	224XK2X	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: R33002
	Power Cord: Unshielded, Detachable, 1.8m Display Card: HD3450 (DVI+VGA+HDMI)					
2.	Monitor	ACS-EMC-LM01R	Viewsonic	VLCDS2606 4-2W	A210521A0131	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: R31374
	Power Cord: Unshielded, Detachable, 1.8m VGA Cable: Shielded, Detachable, 2.0m (with two cores) DVI Cable: Shielded, Detachable, 2.0m (with two cores)					
3.	USB Keyboard	ACS-EMC- K04R	DELL	SK-8115	CN-ODJ313-71616-6BB-049J	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: T3A002
	Power Cord: shielded, Undetachable, 2.0m					
4.	Printer	ACS-EMC-PT04	HP	C9079A	-	<input type="checkbox"/> FCC ID <input checked="" type="checkbox"/> BSMI ID
	USB Cable: shielded, Detachable, 1.5m Power Cord: Unshielded, Detachable, 1.8m Power Adaptor: HP, 0957-2119, DC Cable: Unshielded, Detachable, 1.5m					
5.	USB Mouse	ACS-EMC-M04R	DELL	M056UO	512024282	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: R41108
	Power Cord: shielded, Undetachable, 1.8m					
6.	HDD	ACS-EMC-HDD01	Terasys	F12-UF	A0100215-5390031	<input checked="" type="checkbox"/> FCC DoC <input checked="" type="checkbox"/> BSMI ID: 4912A022
	USB Cable: Shielded, Detachable, 1.8m					

2.3. Block Diagram of connection between EUT and simulators



(EUT: Portal of Power)

FCC ID: XLU84157790

2.4. Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.
No. 6, Ke Feng Rd., 52 Block, Shenzhen
Science & Industrial Park, Nantou,
Shenzhen, Guangdong, China

3m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 90454
Valid Date: Mar.31, 2012

3m & 10m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 794232
Valid Date: Dec.30, 2012

EMC Lab. : Certificated by Industry Canada
Registration Number: IC 5183A-1
Valid Date: Jul. 02, 2011

: Accredited by DATech, German
Registration Number: DAT-P-091/99-01
Valid Date: Feb. 01, 2014

Accredited by NVLAP, USA
NVLAP Code: 200372-0
Valid Date: Mar.31, 2012

2.5. Measurement Uncertainty (95% confidence levels, k=2)

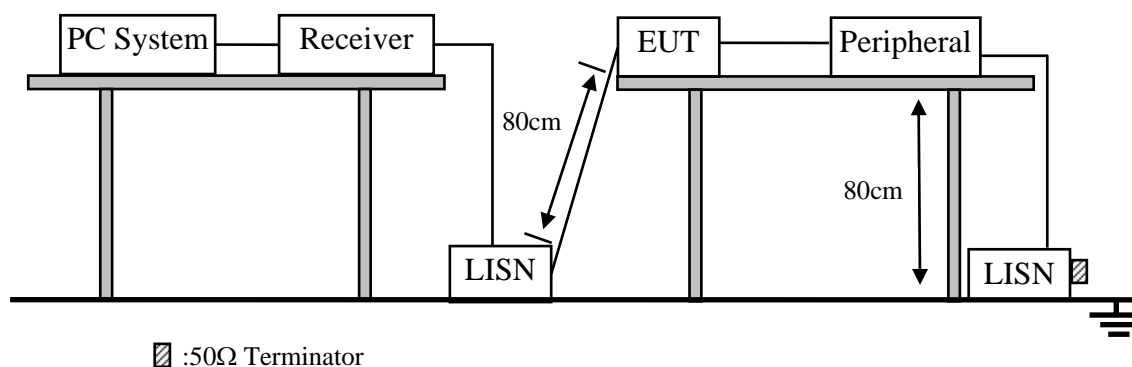
Test Item	Uncertainty
Uncertainty for Radiation Emission test in 10m chamber	3.5dB (30~200MHz, Polarize: H)
	3.7dB (30~200MHz, Polarize: V)
	3.7dB (200M~1GHz, Polarize: H)
	3.7dB (200M~1GHz, Polarize: V)
Uncertainty for Frequency range test	7×10^{-8}
Uncertainty for Bandwidth test	83kHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6°C
	3%

3. POWER LINE CONDUCTED EMISSION TEST

3.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Nov.05, 10	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Nov.05, 11	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 11	1 Year
4.	Terminator	Hubersuhner	50Ω	No. 1	May.08, 11	1 Year
5.	RF Cable	Fujikura	3D-2W	LISN Cable 1#	May.08, 11	1Year
6.	Coaxial Switch	Anritsu	MP59B	M55367	May.08, 11	1 Year
7.	Passive Probe	Rohde & Schwarz	ESH2-Z3	299.7810.52	May.08, 11	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 11	1 Year

3.2. Block Diagram of Test Setup



3.3. Power Line Conducted Disturbance at Mains Terminals Limit

Frequency	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

3.4.EUT Configuration on Test

The following equipments are installed on Conducted Emission Test to meet EN 55022 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1.Port of Power (EUT)

Model Number	: 84157790
Serial Number	: N/A

3.5.Operating Condition of EUT

3.5.1.Setup the EUT and simulator as shown as Section 3.2.

3.5.2.Turned on the power of all equipment.

3.5.3.Let the EUT worked in test mode (Tx Mode) and tested it.

3.6.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#3). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to EN 55022 Class B on conducted Disturbance test.

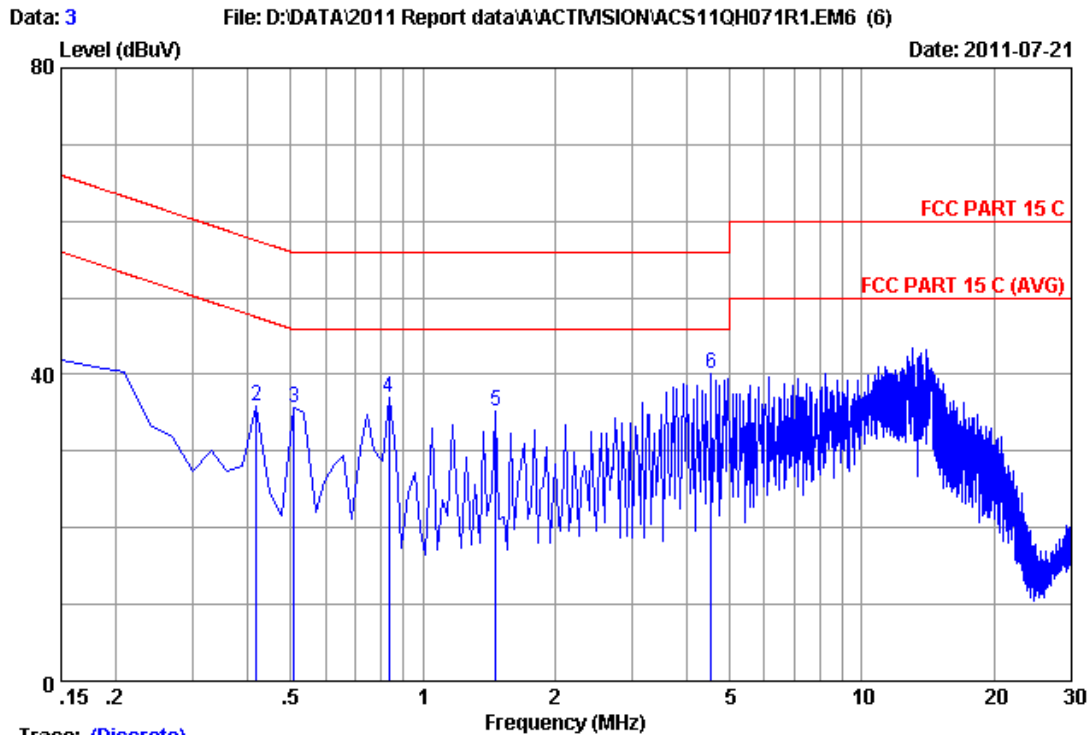
The bandwidth of test receiver (R & S ESHS10) is set at 10kHz.

The frequency range from 150kHz to 30MHz is checked. The test result is reported on Section 3.8.

3.7.Power Line Conducted Emission Test Results

PASS. (All emissions not reported below are too low against the prescribed limits.)

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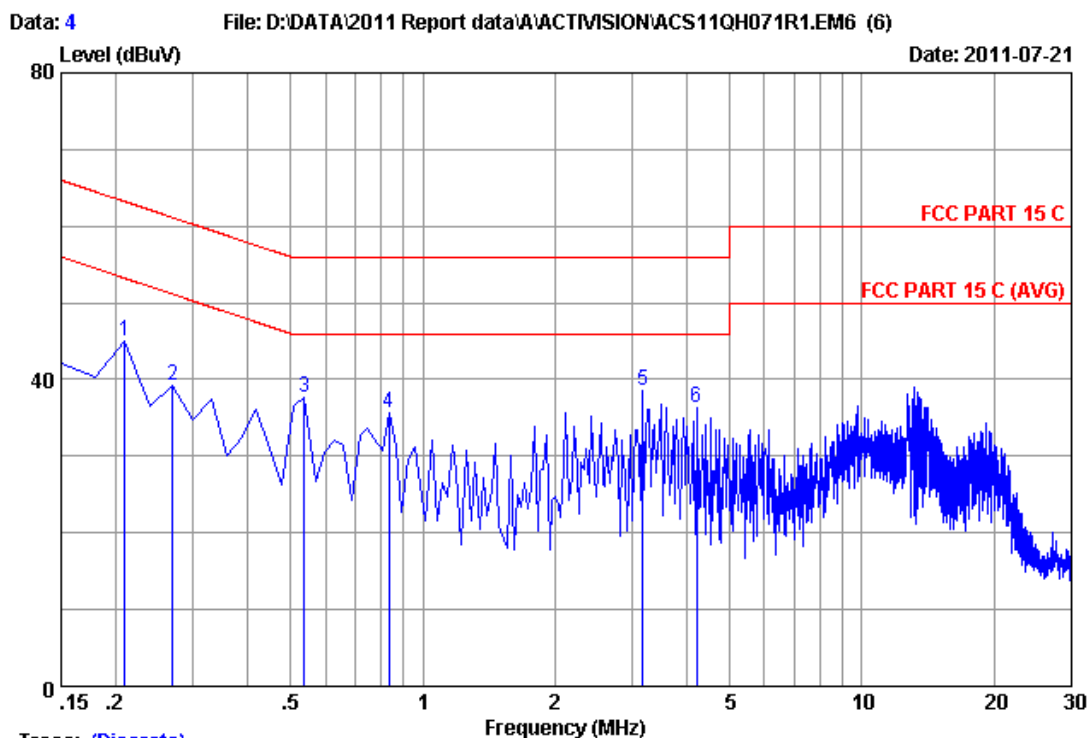
Trace: (Discrete)

Site no : 1#conduction Data No : 3
 Dis./Ant. : ** 2011 ESH2-25 LINE
 Limit : FCC PART 15 C
 Env./Ins. : 29.5°C/55% Engineer : Leo-Li
 EUT : Portal of Power M/N: 84157790
 Power Rating : DC 5V From PC Input AC 120V/60Hz
 Test Mode : Tx Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	0.17	9.98	31.85	42.00	66.00	24.00	QP
2	0.41865	0.19	9.98	25.78	35.95	57.47	21.52	QP
3	0.50820	0.19	9.98	25.49	35.66	56.00	20.34	QP
4	0.83655	0.21	9.97	26.88	37.06	56.00	18.94	QP
5	1.463	0.27	9.97	25.08	35.32	56.00	20.68	QP
6	4.538	0.36	9.93	29.75	40.04	56.00	15.96	QP

Remarks: 1. Emission Level = LISN Factor + Cable Loss (Include 10dB pulse limit) + Reading.
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

FCC ID: XLU84157790



Trace: (Discrete)

Site no : 1#conduction Data No : 4
 Dis./Ant. : ** 2011 ESH2-Z5 NEUTRAL
 Limit : FCC PART 15 C
 Env./Ins. : 29.5°C/55% Engineer : Leo-Li
 EUT : Portal of Power M/N:84157790
 Power Rating : DC 5V From PC Input AC 120V/60Hz
 Test Mode : Tx Mode

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.20970	0.21	9.98	34.88	45.07	63.22	18.15	QP
2	0.26940	0.21	9.98	29.05	39.24	61.14	21.90	QP
3	0.53805	0.22	9.98	27.42	37.62	56.00	18.38	QP
4	0.83655	0.23	9.97	25.55	35.75	56.00	20.25	QP
5	3.165	0.29	9.95	28.35	38.59	56.00	17.41	QP
6	4.210	0.31	9.94	25.98	36.23	56.00	19.77	QP

Remarks: 1. Emission Level = LISN Factor + Cable Loss (Include 10dB pulse limit) + Reading.
 2. If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1. Test Equipment

Frequency Range: 30-1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	10m Chamber	AUDIX	N/A	N/A	Dec.05, 10	1 Year
2	EMC Analyzer	Agilent	E7405A	MY42000131	May.08, 11	1 Year
3	EMC Analyzer	Agilent	E7405A	MY45116588	May.08, 11	1 Year
4	Test Receiver	Rohde & Schwarz	ESCI	100842	May.08, 11	1 Year
5	Amplifier	Agilent	8447D	2944A10684	May.08, 11	1Year
6	Amplifier	Agilent	8447D	2944A11140	May.08, 11	1 Year
7	Bilog Antenna	Schaffner	CBL6112D	25238	Mar.27, 10	1.5 Year
8	Bilog Antenna	Schaffner	CBL6112D	25237	Mar.27, 10	1.5 Year
9	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.1	May.08, 11	1 Year
10	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.2	May.08, 11	1 Year
11	Coaxial Switch	Anritsu	MP59B	6200766906	May.08, 11	1 Year
12	Coaxial Switch	Anritsu	MP59B	6200766905	May.08, 11	1 Year
13	Coaxial Switch	Anritsu	MP59B	6200313662	May.08, 11	1 Year

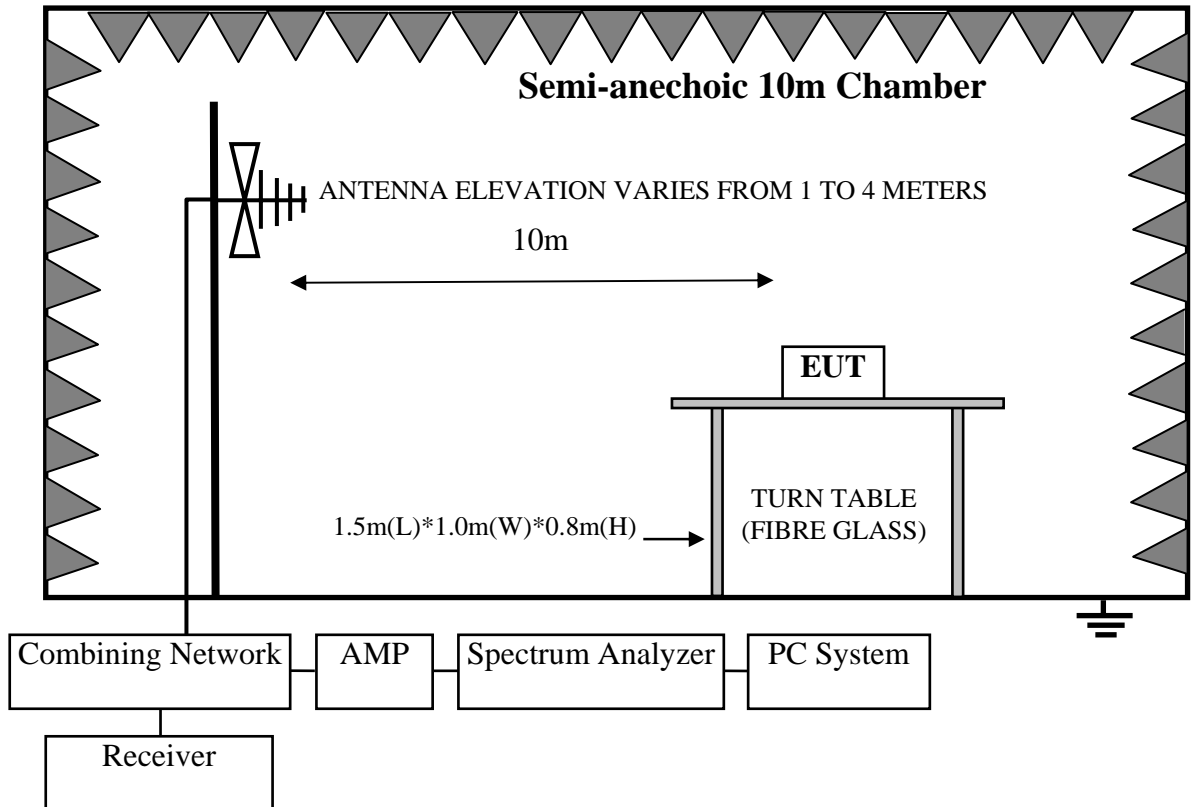
Frequency Range: 1.705-30MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	10m Chamber	AUDIX	N/A	N/A	Dec.05, 10	1 Year
2	EMC Analyzer	Agilent	E7405A	MY42000131	May.08, 11	1 Year
3	EMC Analyzer	Agilent	E7405A	MY45116588	May.08, 11	1 Year
4	Test Receiver	Rohde & Schwarz	ESCI	100842	May.08, 11	1 Year
5	Amplifier	Agilent	8447D	2944A10684	May.08, 11	1Year
6	Amplifier	Agilent	8447D	2944A11140	May.08, 11	1 Year
7	Loop Antenna	Chase	HLA6120	1062	May.08, 11	1 Year
8	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.1	May.08, 11	1 Year
9	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.2	May.08, 11	1 Year
10	Coaxial Switch	Anritsu	MP59B	6200766906	May.08, 11	1 Year
11	Coaxial Switch	Anritsu	MP59B	6200766905	May.08, 11	1 Year
12	Coaxial Switch	Anritsu	MP59B	6200313662	May.08, 11	1 Year

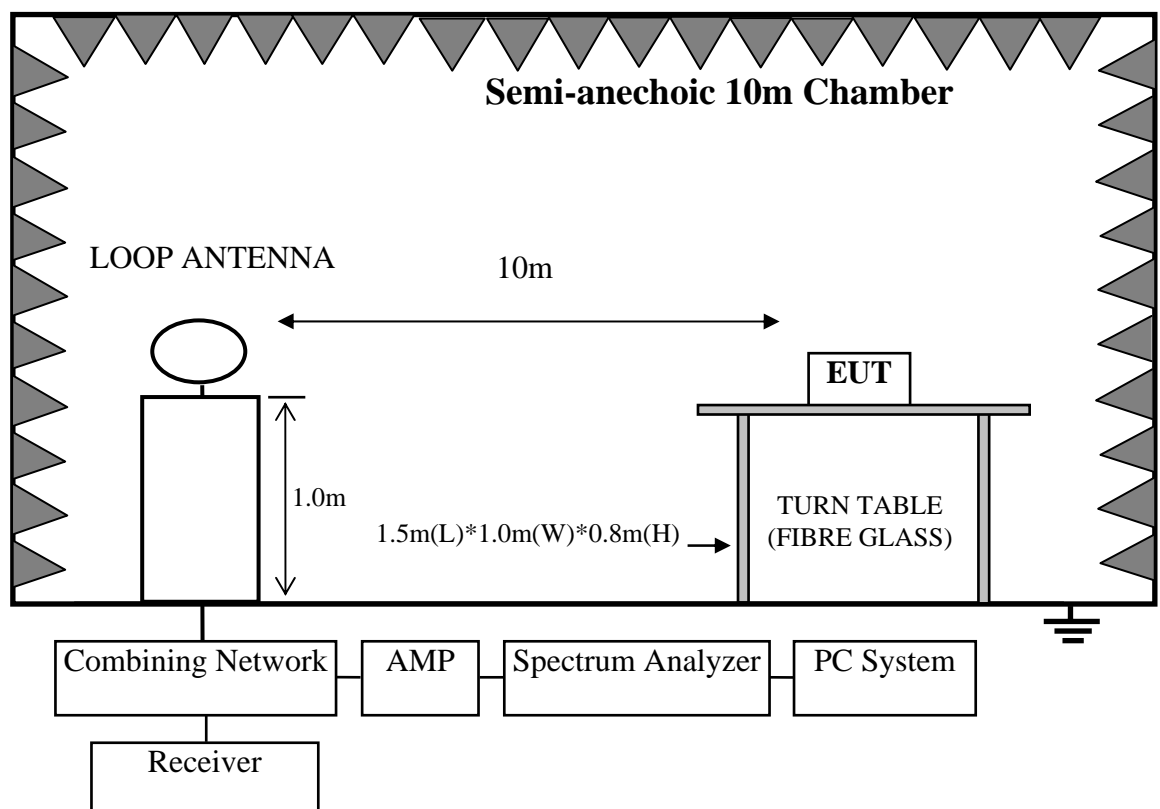
FCC ID: XLU84157790

4.2. Block Diagram of Test Setup

Frequency Range: 30-1000MHz



Frequency Range: 1.705-30MHz



4.3. Radiated Emission Limit

- (a) The field strength of any emissions within the band 13.553-13.567 MHz shall not exceed 15,848 microvolts/meter at 30 meters.
- (b) Within the bands 13.410-13.553 MHz and 13.567-13.710 MHz, the field strength of any emissions shall not exceed 334 microvolts/meter at 30 meters.
- (c) Within the bands 13.110-13.410 MHz and 13.710-14.010 MHz the field strength of any emissions shall not exceed 106 microvolts/meter at 30 meters.
- (d) The field strength of any emissions appearing outside of the 13.110-14.010 MHz band shall not exceed the general radiated emission limits in § 15.209.

Remark : (1) Emission level dBμV = 20 log Emission level μV/m

(2) The smaller limit shall apply at the cross point between two frequency bands.

(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

4.4. 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

4.5. EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

4.6. Operating Condition of EUT

4.6.1. Setup the EUT as shown in Section 4.2.

4.6.2. Turned on the power of all equipment.

4.6.3. Let the EUT work in test mode (Tx Mode) and tested it.

4.7. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it work in test mode, then test it. EUT is set 10 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

For frequency range below 30MHz the Loop antenna was used at 10m measurement distance with antenna heights of 1m and antenna loop front and side faced to the EUT. The axis of the antenna was rotated to maximize the emission. A CISPR quasi-peak detector is used for measurements below 30MHz and RBW/VBW is 9kHz/30kHz.

The limit 1.705MHz to 30MHz in clause 4.3 are specified at 30 meters, and measurements were made at 10 meters, the limit is translated to 10 meters by using a formula as follows:
$$\text{Limit}_{30\text{m}} = \text{Limit}_{10\text{m}} + 40\log(30\text{m}/10)$$

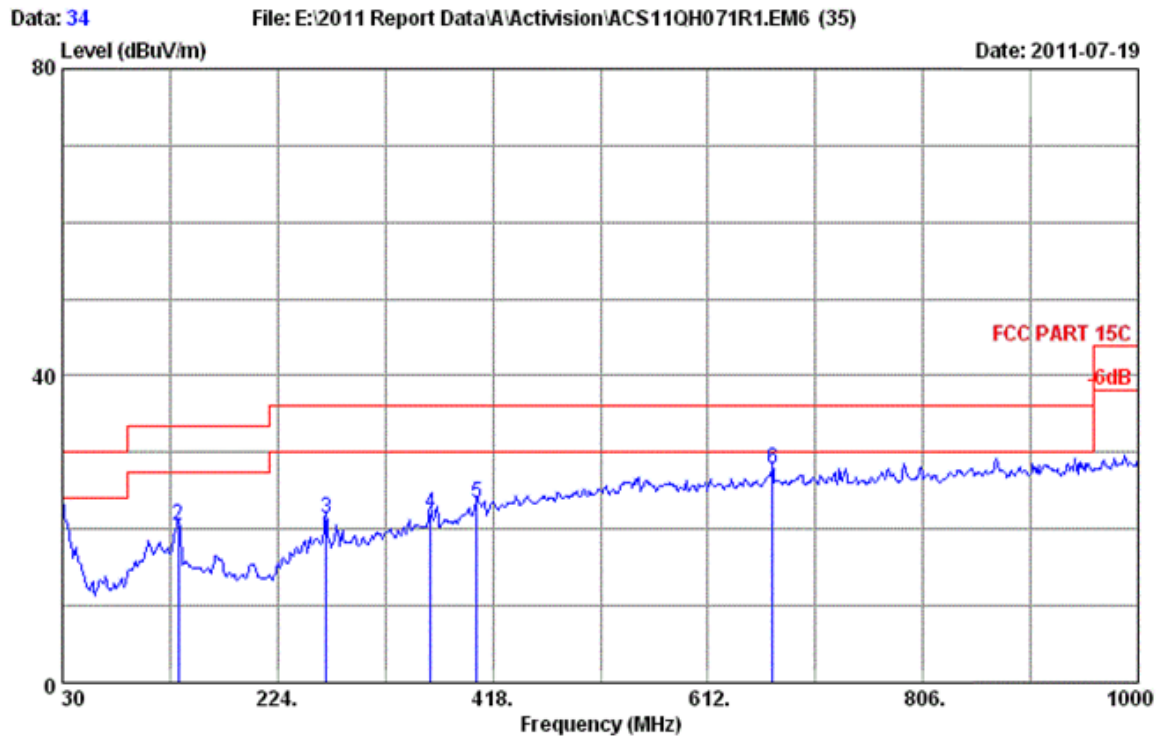
4.8. Radiated Emission Test Results

PASS.

The frequency range from 30MHz to 1000MHz and 1.705MHz to 30MHz is investigated. Please see the following pages.

Note: According to exploratory test, 9kHz to 1.705MHz no obvious signal can be detected.

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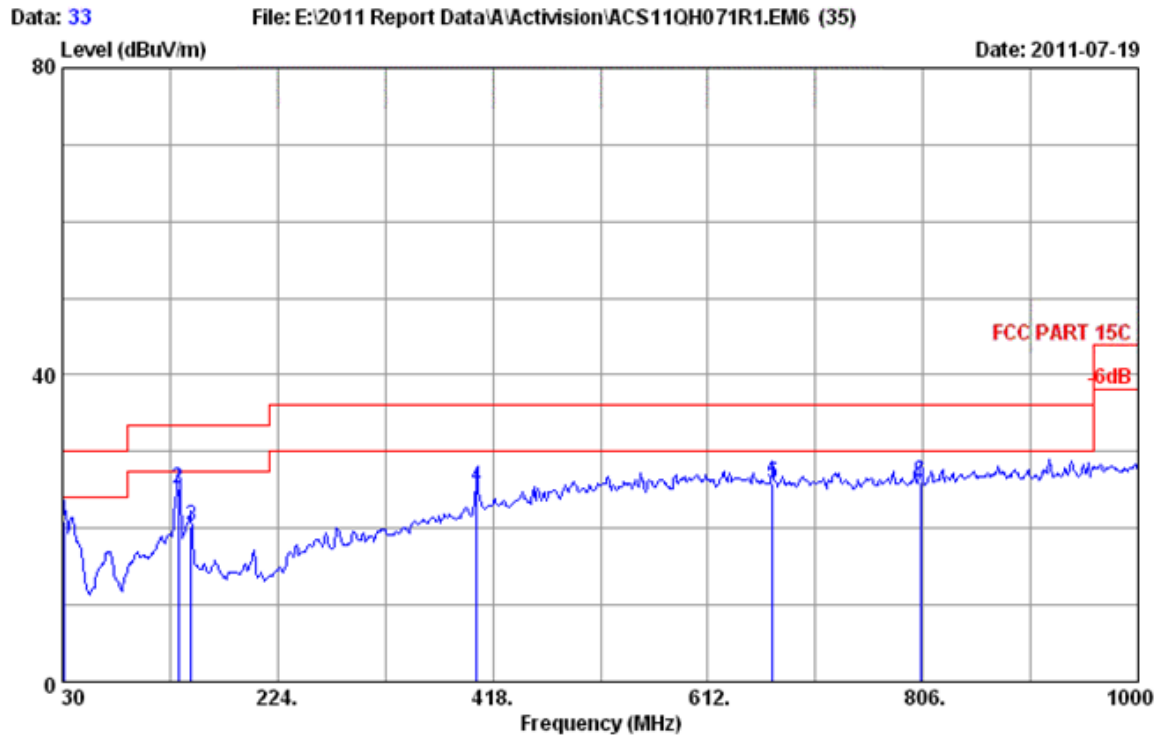


Site no. : 10m Chamber Data no. : 34
 Dis. / Ant. : 10m 10 CBL6112D 25237 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Portal of Power
 Power rating : DC 5V From PC Input AC 120V/60Hz
 Test Mode : Tx Mode
 M/N:84157790

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	30.000	19.00	0.75	3.05	22.80	30.00	7.20	QP
2	134.760	11.60	1.56	7.26	20.42	33.50	13.08	QP
3	267.650	12.78	2.57	6.03	21.38	36.00	14.62	QP
4	361.740	14.79	3.25	3.97	22.01	36.00	13.99	QP
5	403.450	15.75	3.52	4.11	23.38	36.00	12.62	QP
6	670.200	18.90	5.09	3.85	27.84	36.00	8.16	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID: XLU84157790

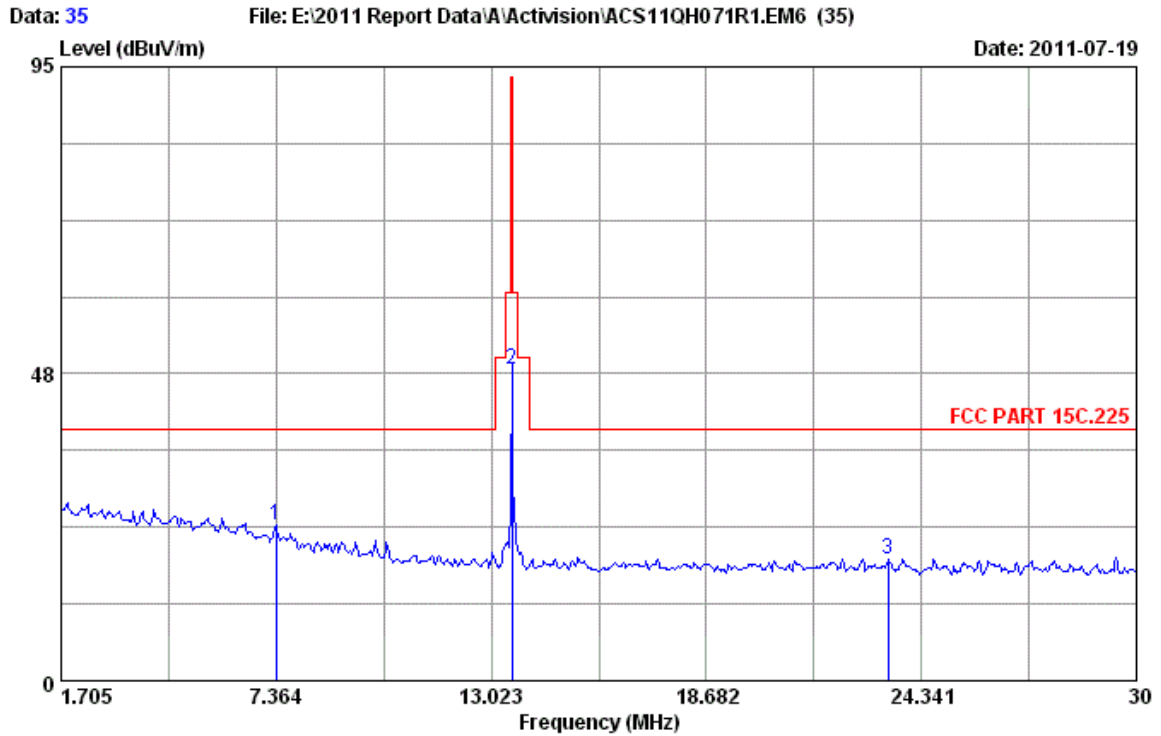


Site no. : 10m Chamber Data no. : 33
 Dis. / Ant. : 10m 10 CBL6112D 25237 Ant. pol. : VERTICAL
 Limit : FCC PART 15C
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Portal of Power
 Power rating : DC 5V From PC Input AC 120V/60Hz
 Test Mode : Tx Mode
 M/N:84157790

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission			Margin (dB)	Remark
					Level (dBuV/m)	Limits (dBuV/m)			
1	31.940	17.70	1.81	2.43	21.94	30.00		8.06	QP
2	134.760	11.80	3.29	11.76	26.85	33.50		6.65	QP
3	146.400	10.48	3.38	7.33	21.19	33.50		12.31	QP
4	403.450	15.85	5.53	5.24	26.62	36.00		9.38	QP
5	670.200	18.80	7.75	1.26	27.81	36.00		8.19	QP
6	804.060	19.80	8.34	-0.54	27.60	36.00		8.40	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

FCC ID: XLU84157790



Site no. : 10m Chamber Data no. : 35
 Dis. / Ant. : 10m 2011 LOOP ANTENNA Ant. pol. :
 Limit : FCC PART 15C.225
 Env. / Ins. : 24°C/56% Engineer : Leo-Li
 EUT : Portal of Power
 Power rating : DC 5V From PC Input AC 120V/60Hz
 Test Mode : Tx Mode
 M/N:84157790

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	7.357	20.82	0.45	2.85	24.12	39.00	14.88	QP
2	13.565	21.43	0.52	26.15	48.10	93.50	45.40	QP
3	23.462	21.96	0.54	-3.78	18.72	39.00	20.28	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.

5. FREQUENCY STABILITY TEST

5.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

5.2. Limits

The frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency over a temperature variation of -20 degrees to +50 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C. For battery operated equipment, the equipment tests shall be performed using a new battery.

5.3. Test Procedure

The EUT was placed in an environmental test chamber and powered such that control element received normal voltage and the transmitter provided maximum RF output.

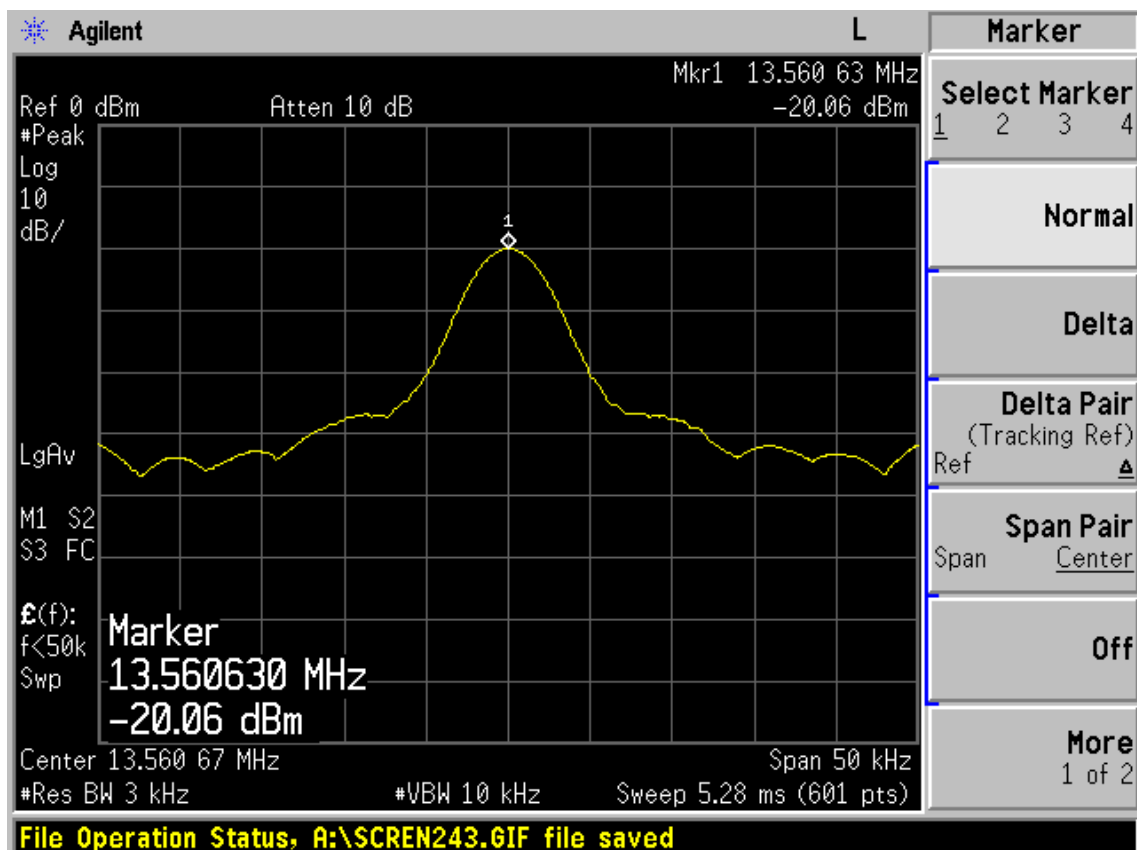
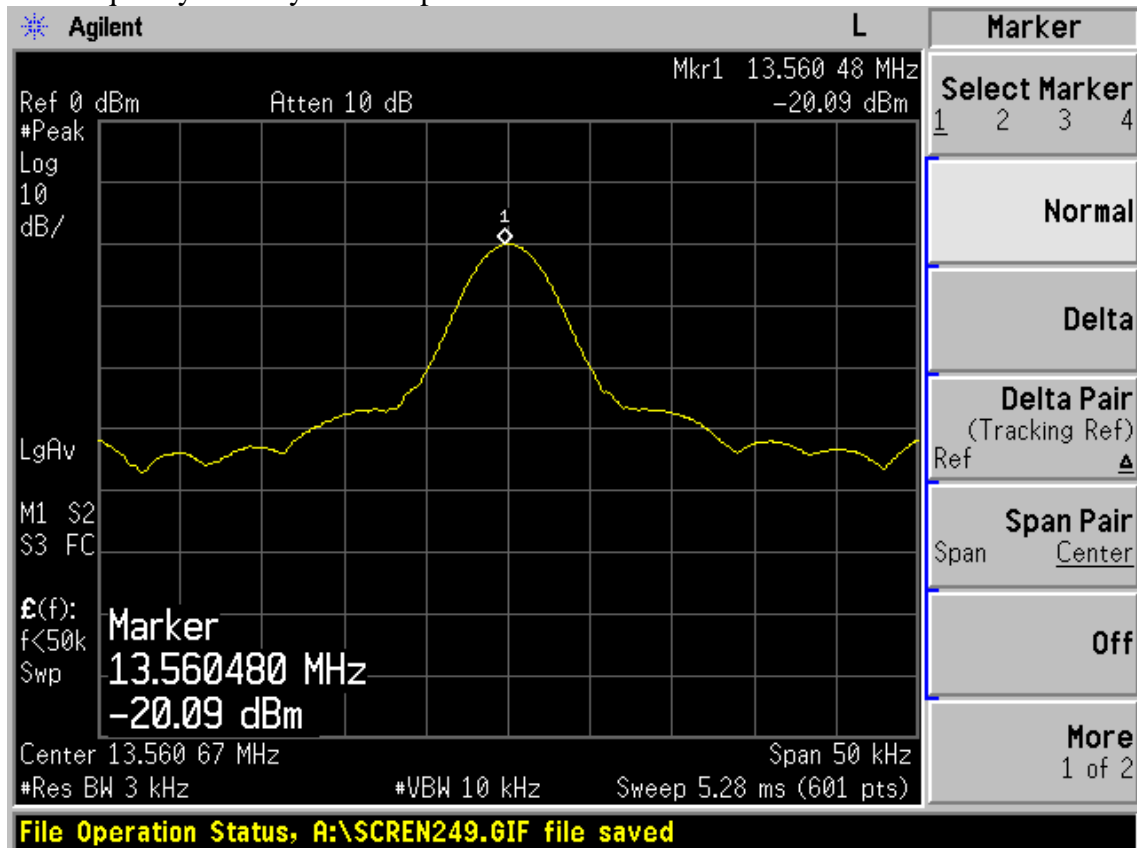
FCC ID: XLU84157790

5.4. Test result

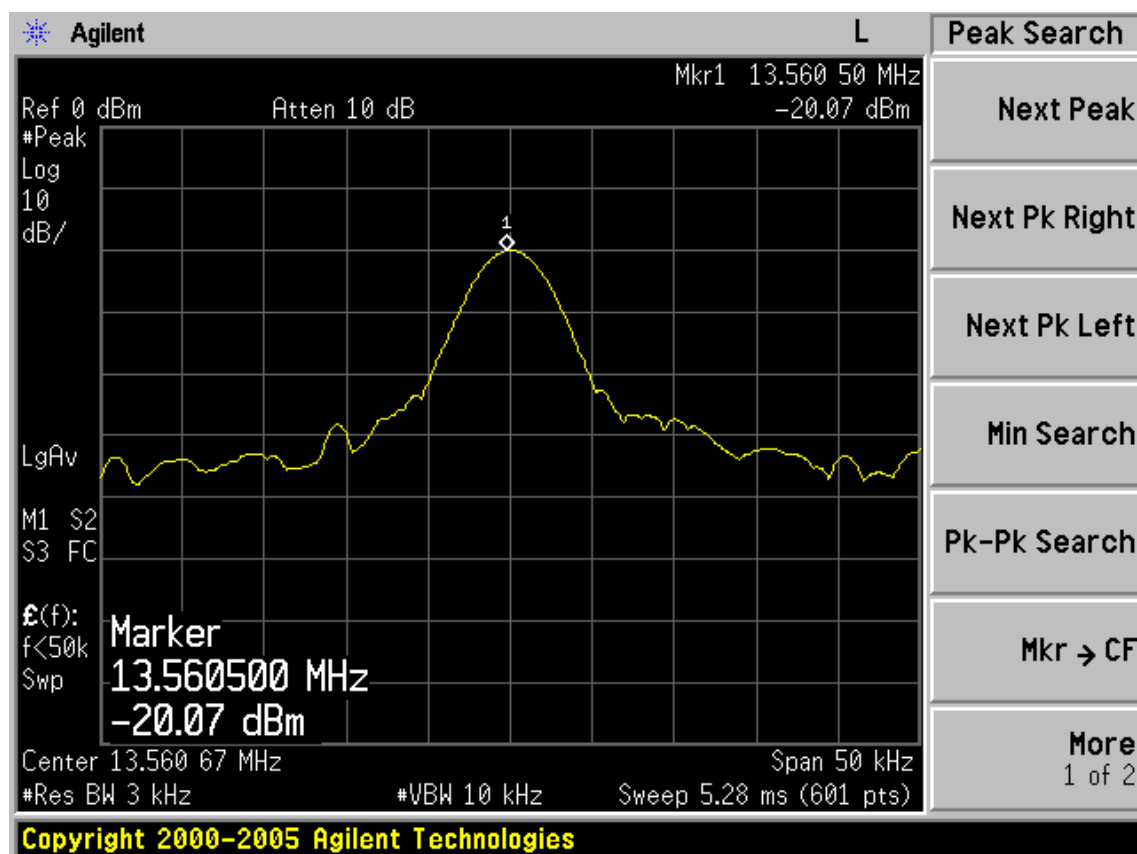
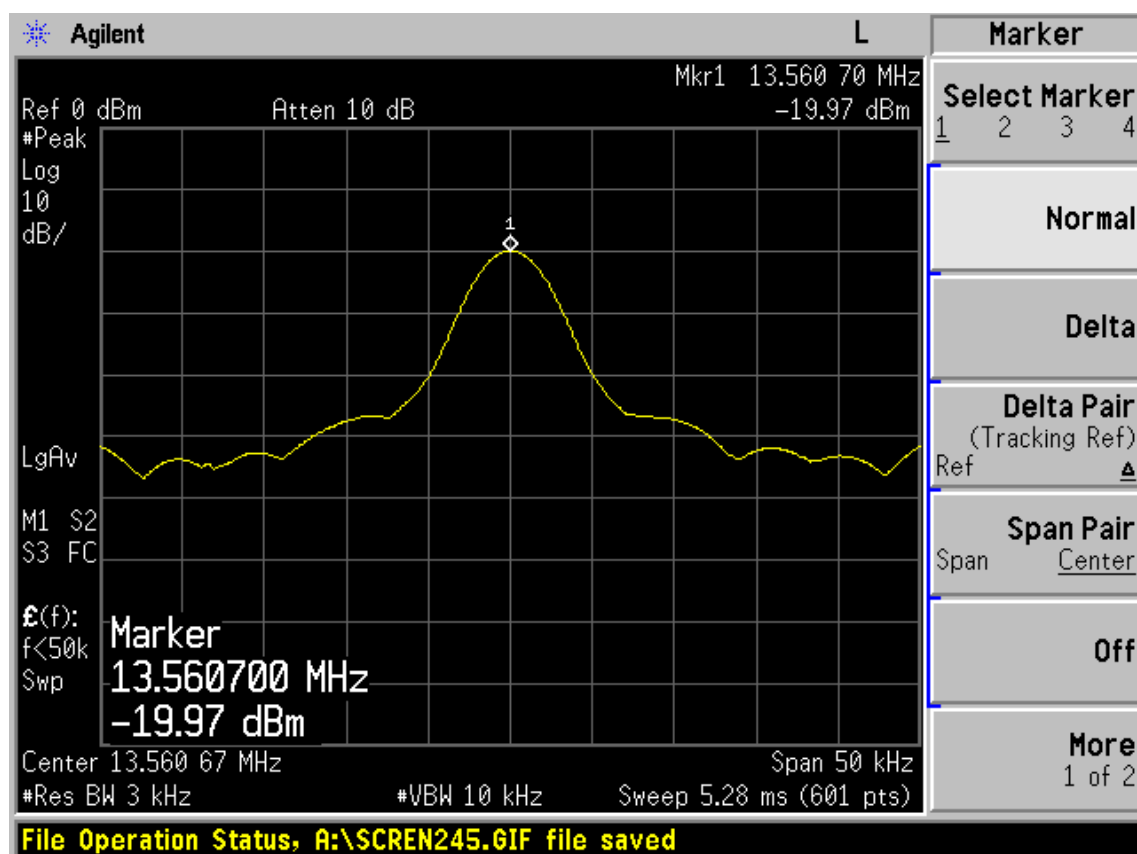
Frequency Stability				
EUT: Portal of Power				
M/N: 84157790				
Power: DC 4.5V				
Test Date: 2011-07-19		Test site: RF Chamber		Tested by: Leo-Li
Ambient Temperature: 20℃		Relative Humidity: 56%		Pressure:101.7 kpa
Test Frequency:13.56MHz				
Frequency stability VS Voltage (Temperature:20℃)				
Supply Voltage (V)	Test result (MHz)	Deviation (ppm)	Limit (ppm)	Conclusion <

FCC ID: XLU84157790

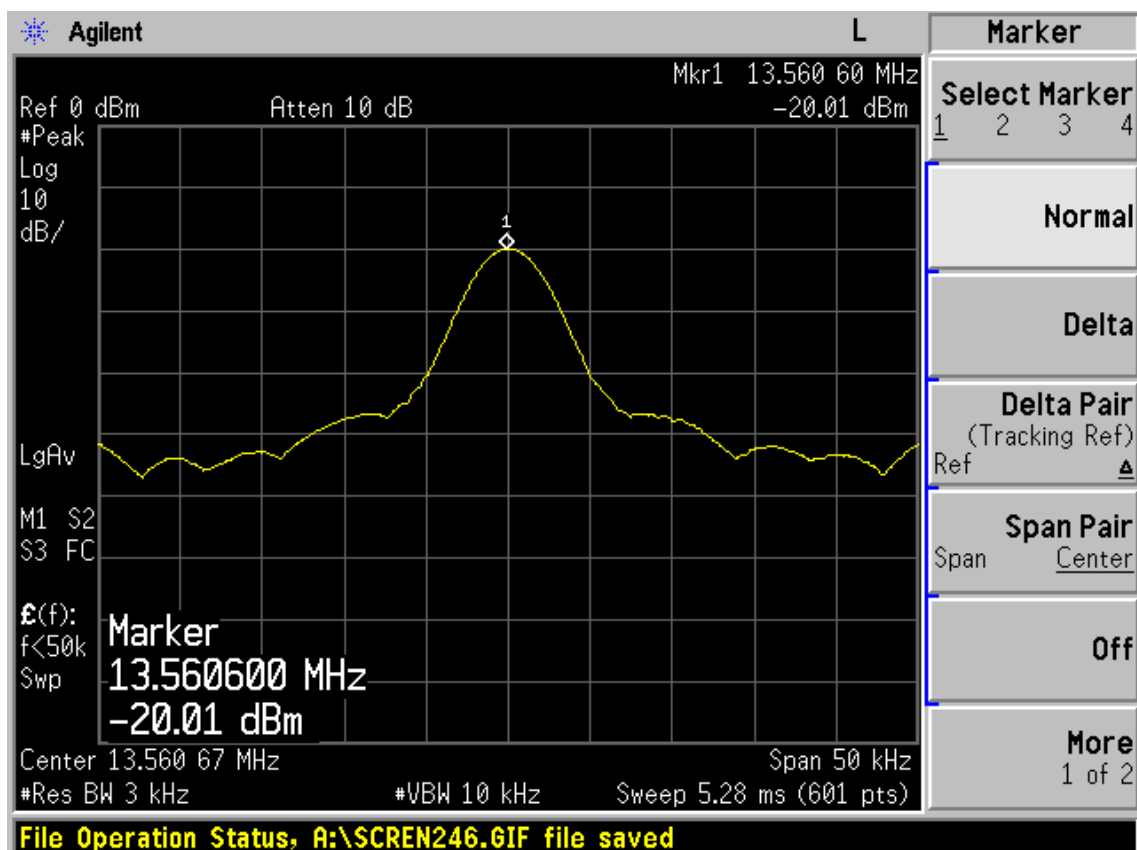
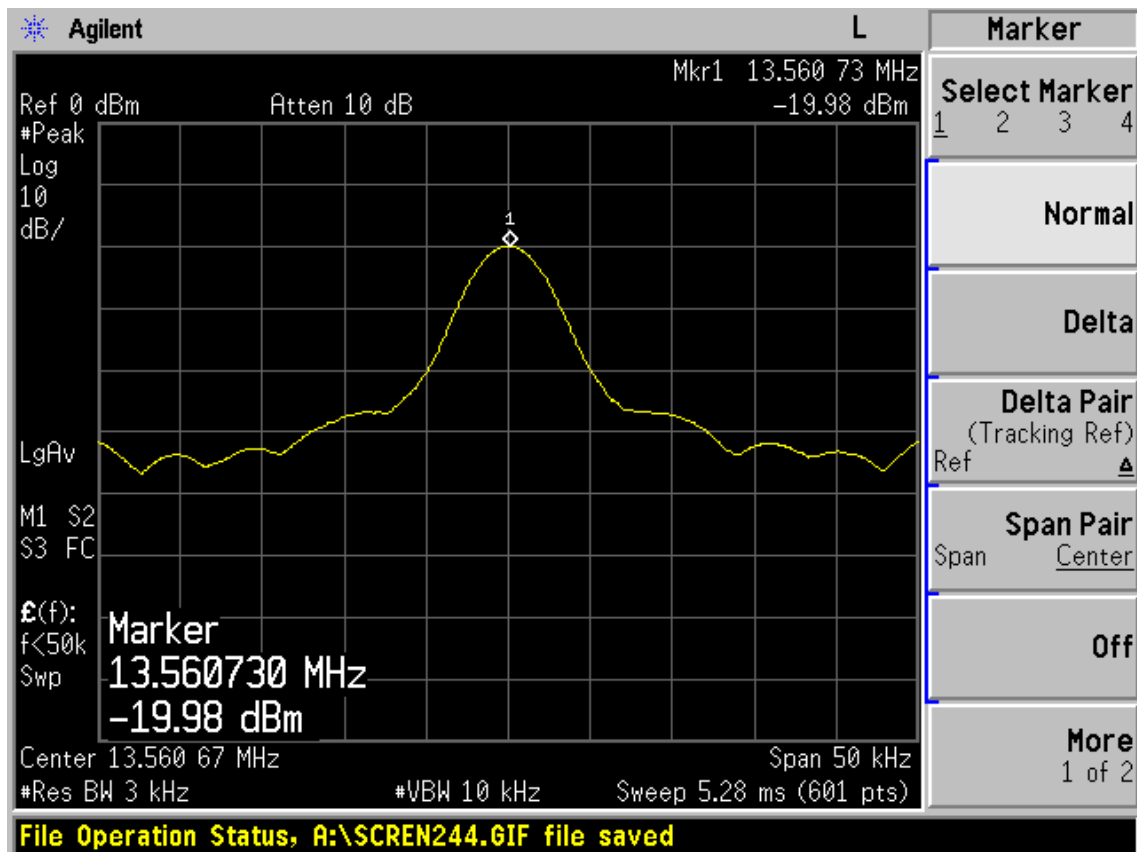
Frequency stability VS Temperature:



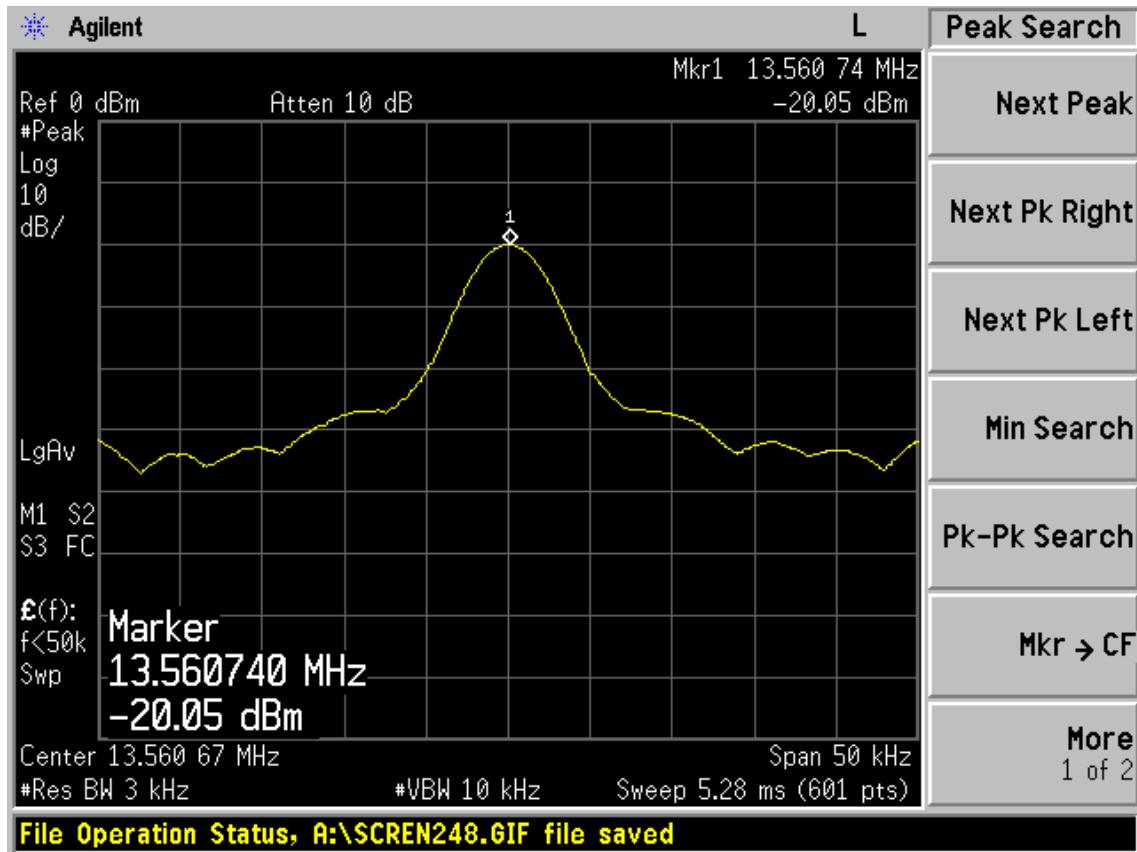
FCC ID: XLU84157790



FCC ID: XLU84157790

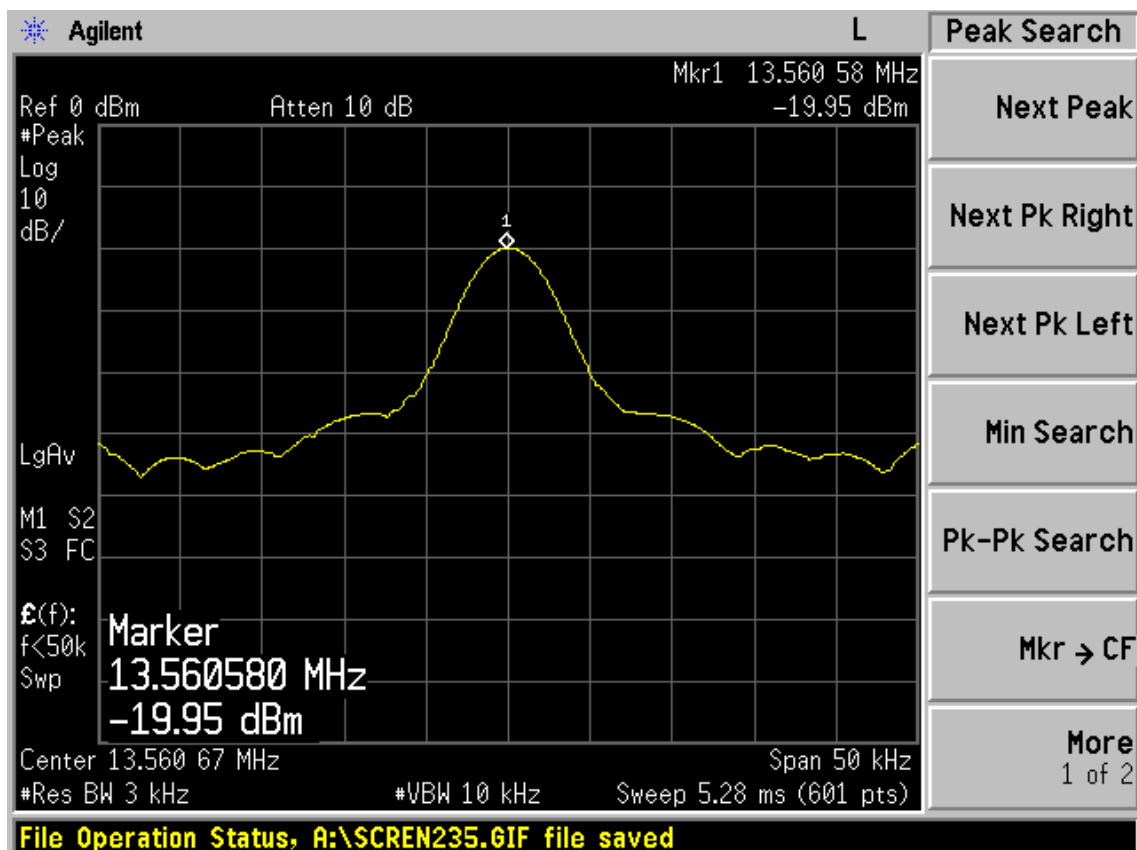
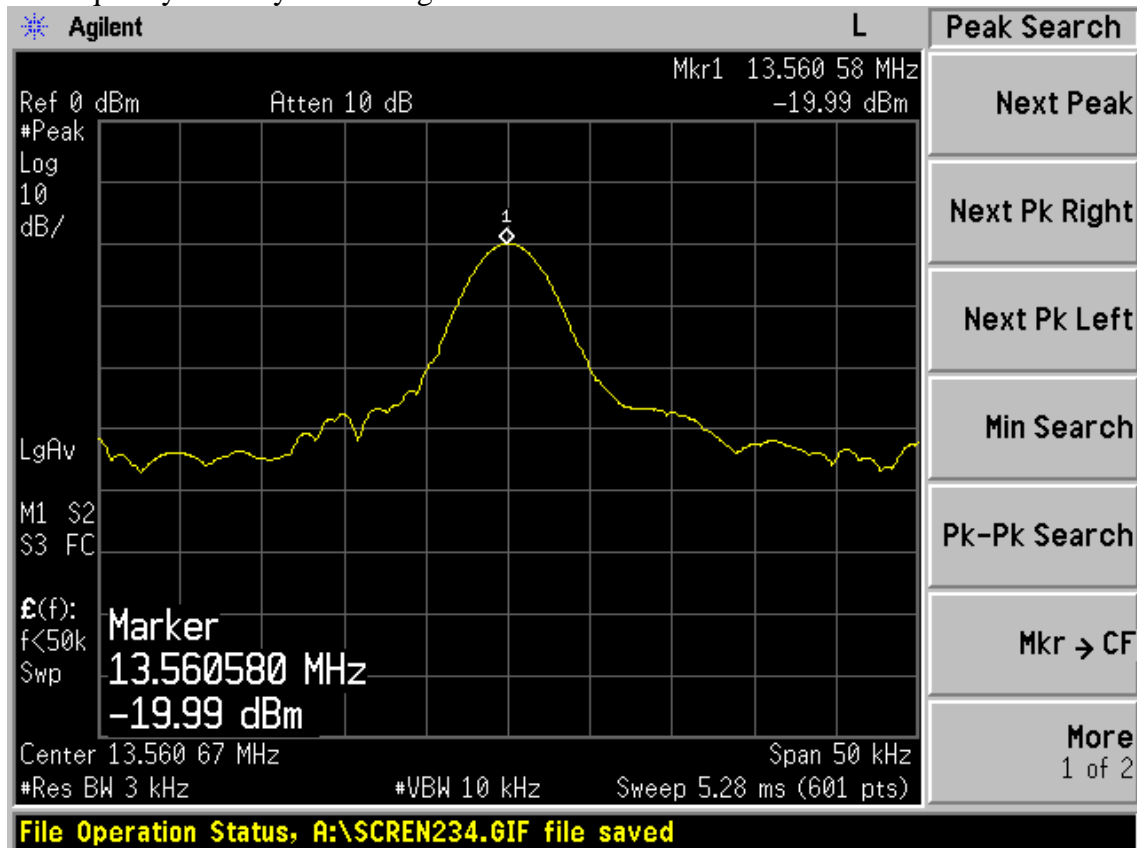


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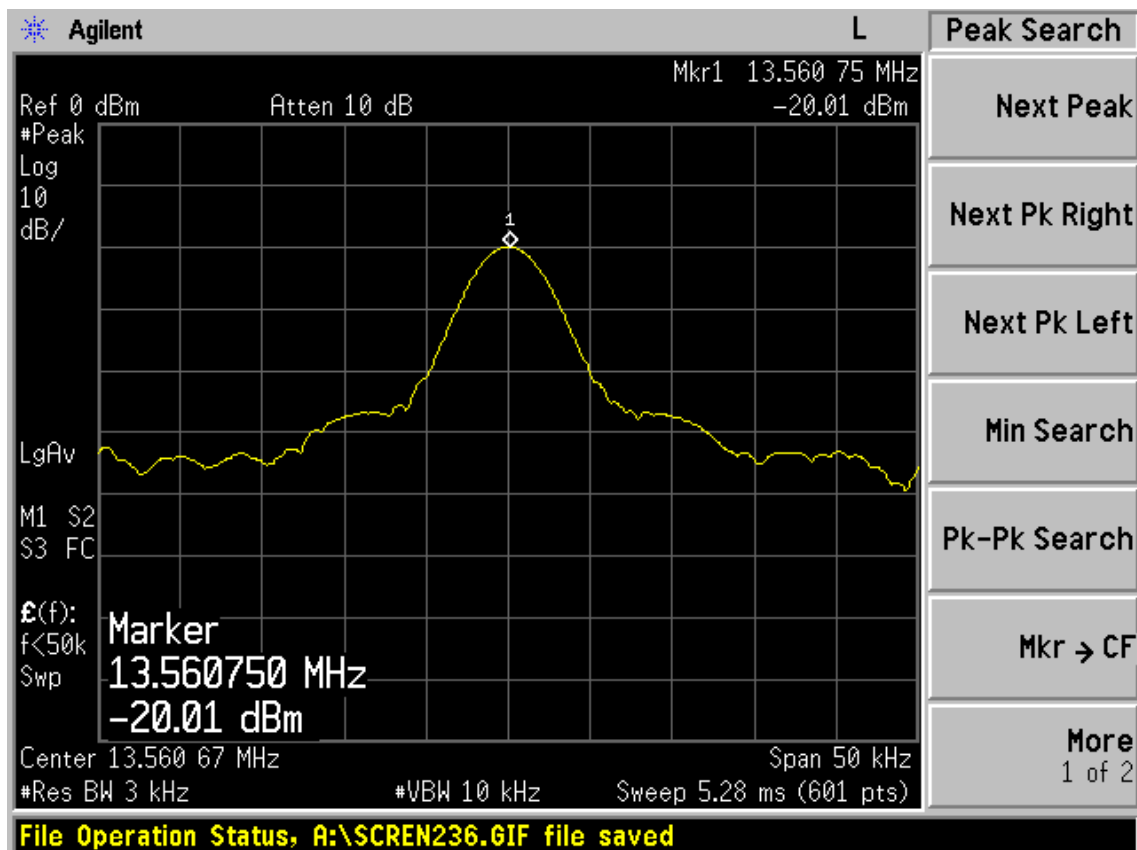
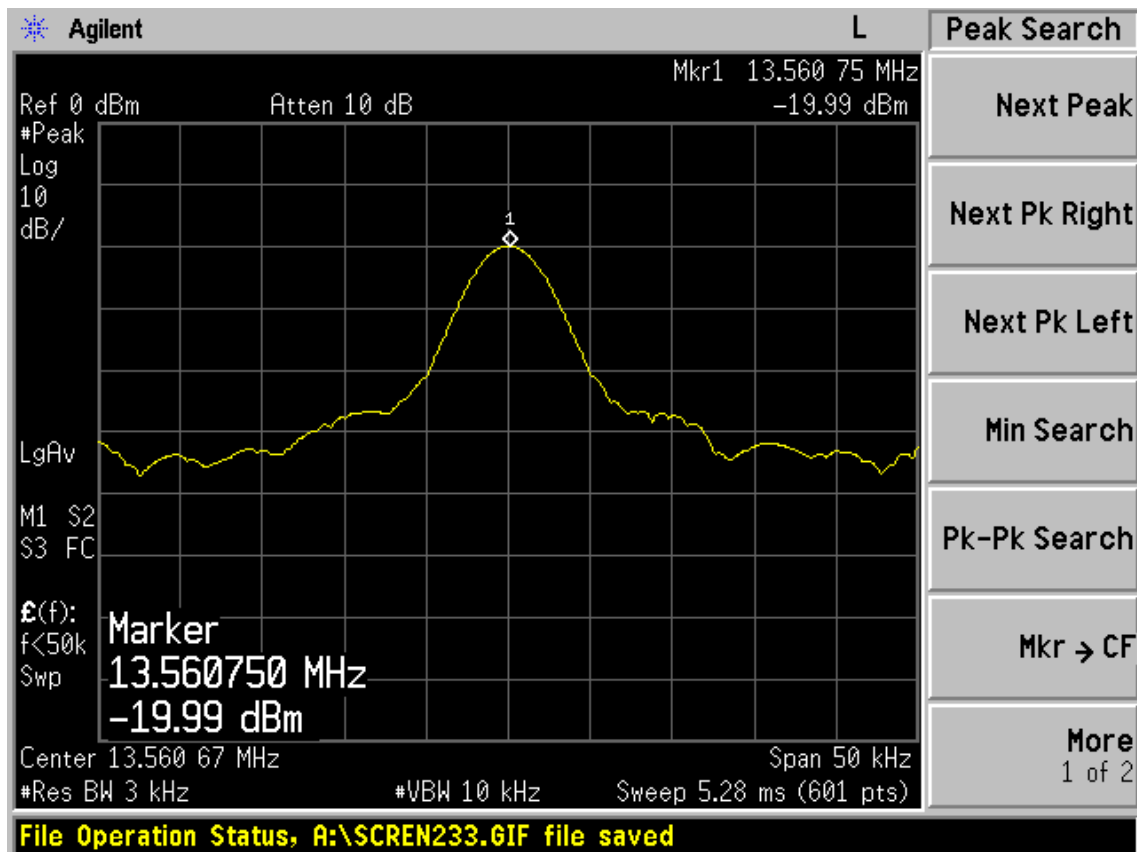


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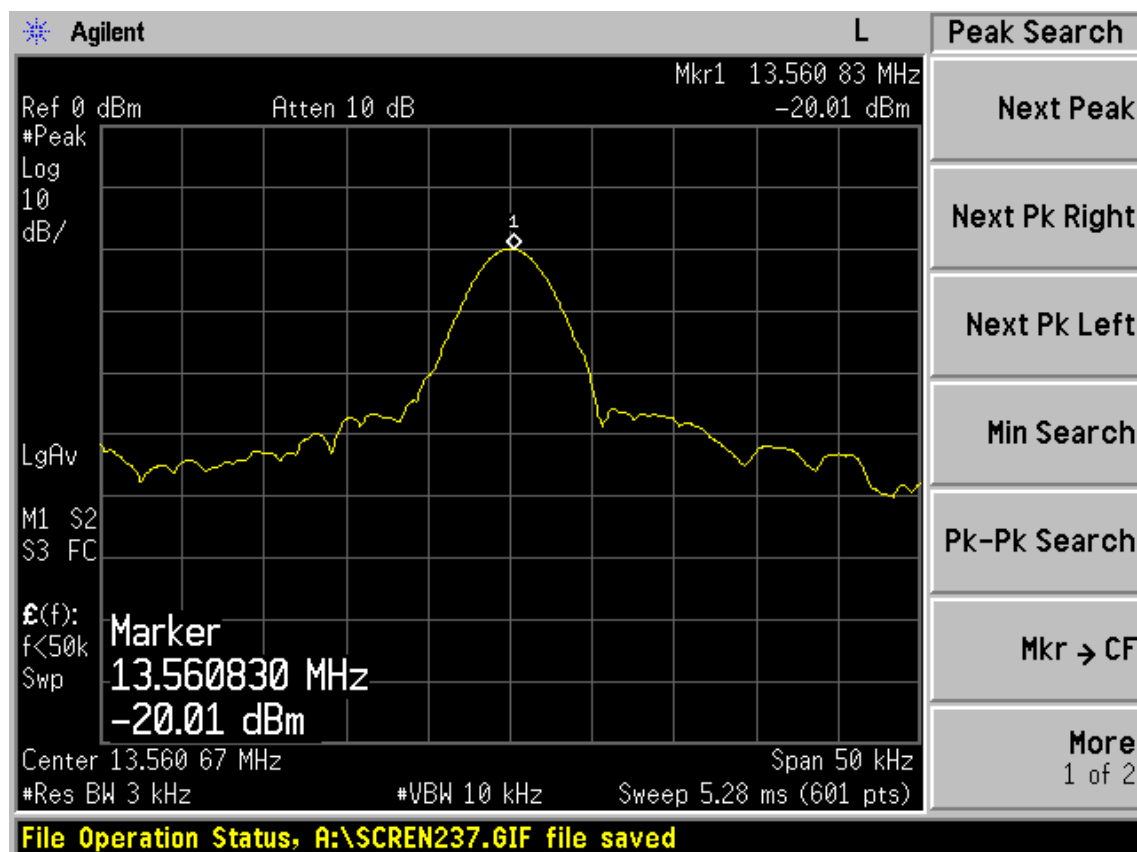
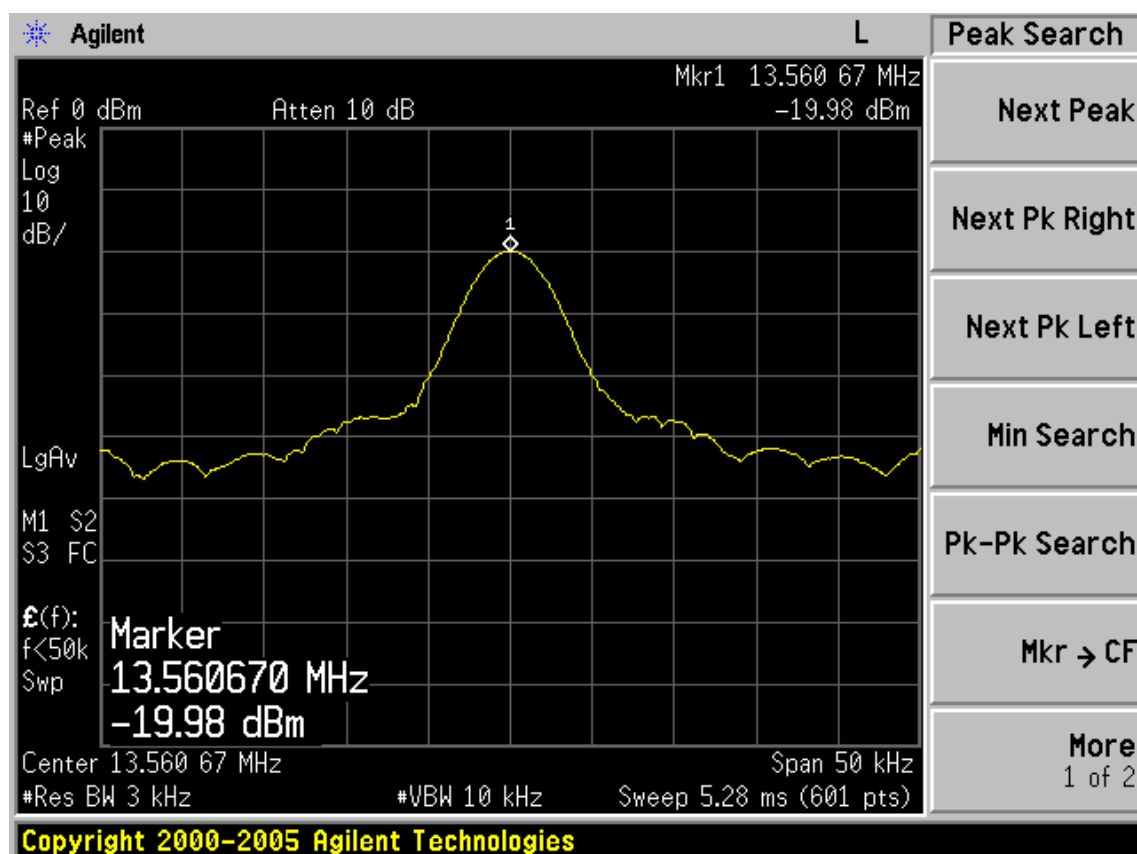
Frequency stability VS Voltage:



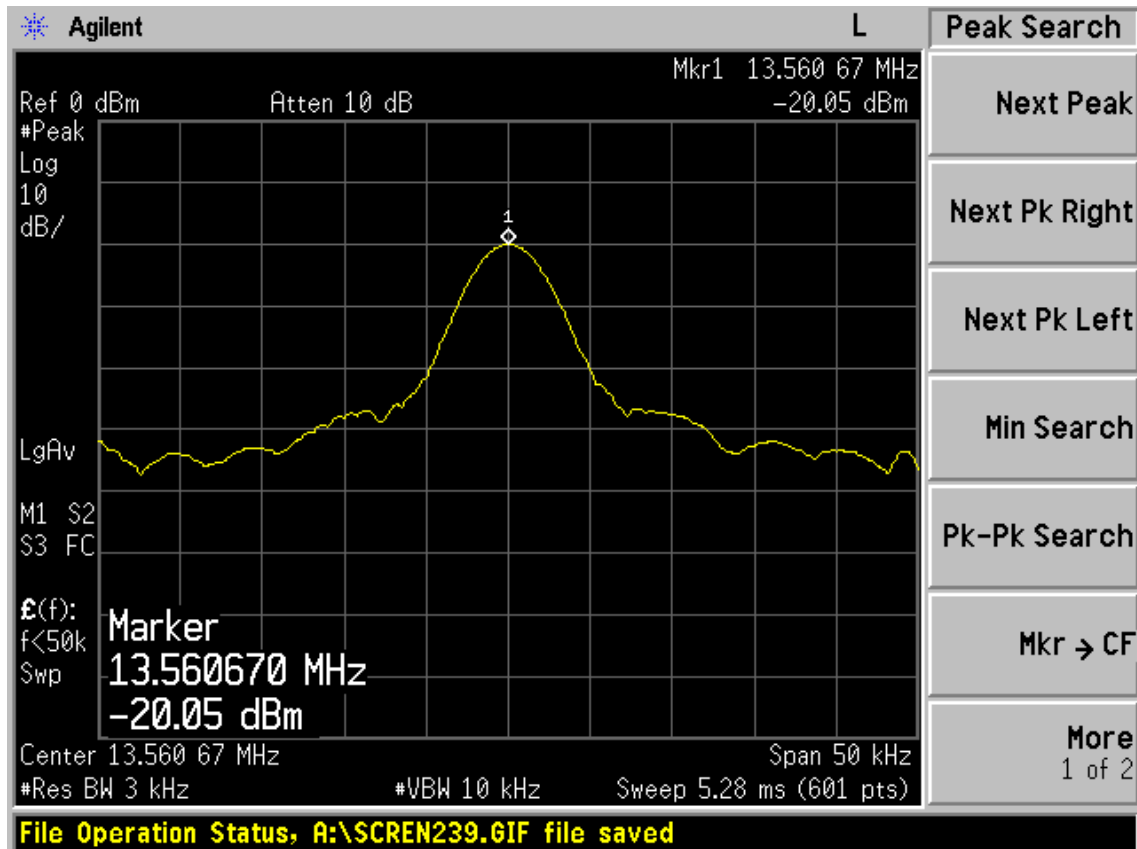
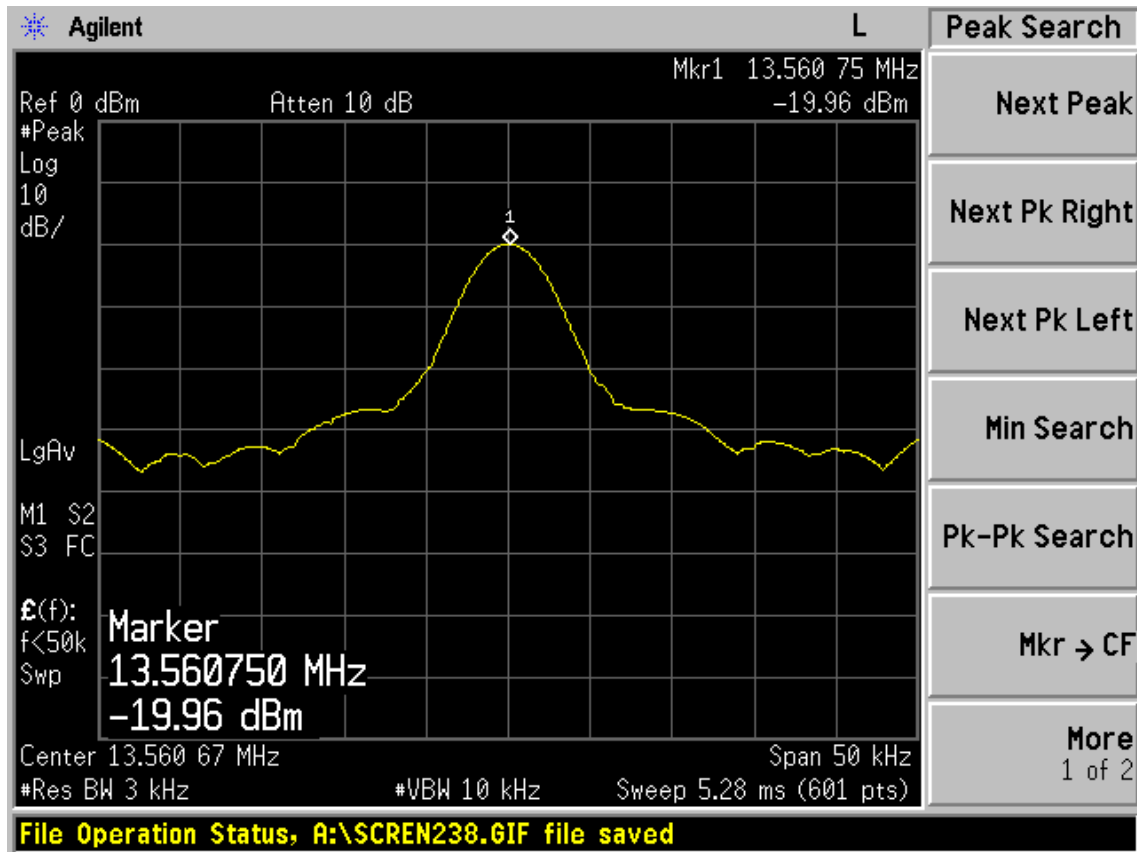
FCC ID: XLU84157790



FCC ID: XLU84157790



FCC ID: XLU84157790



6. 20 DB BANDWIDTH TEST

6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08,11	1 Year
2.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,11	1Year

6.2.Limit

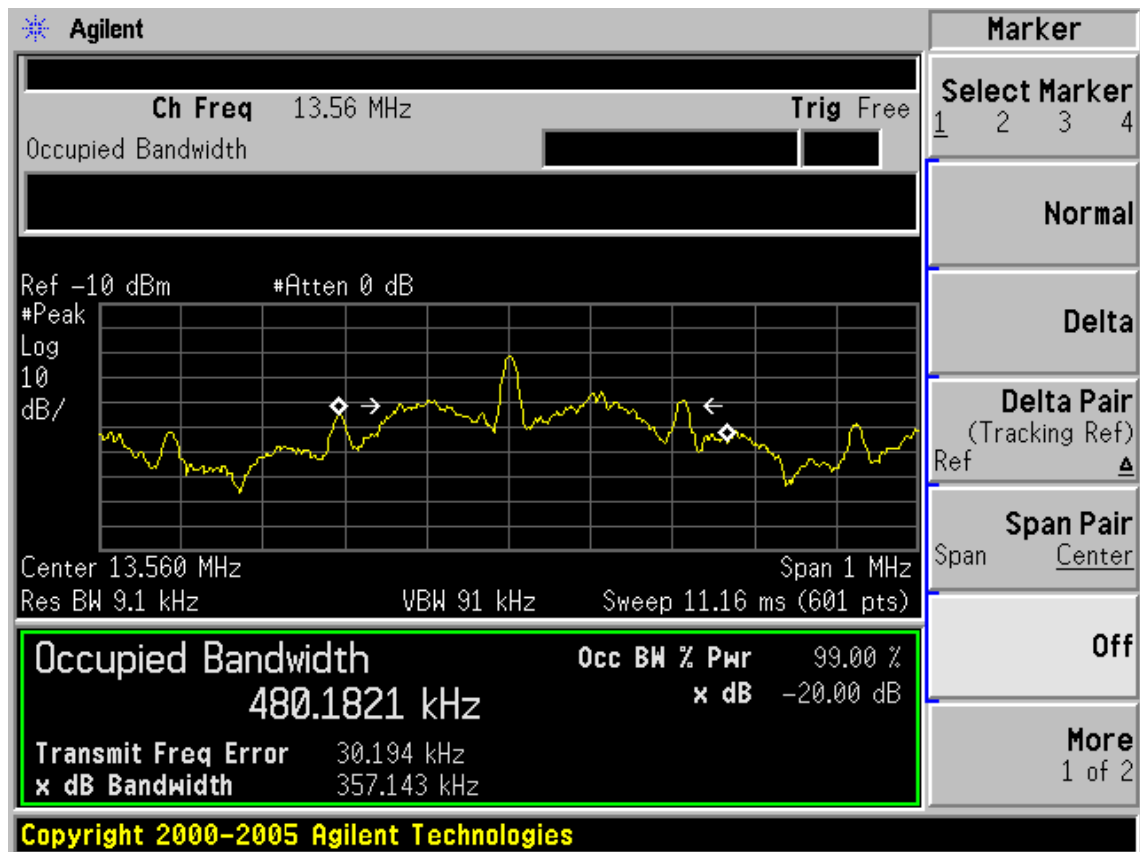
Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

6.3. Test Results

EUT: Portal of Power		
M/N: 84157790		
Test date:2011-07-19	Pressure: 101.8 kpa	Humidity: 52 %
Tested by: Leo-Li	Test site: RF site	Temperature : 24.8°C

Frequency	20dB bandwidth (KHz)	Limit (KHz)
13.56MHz	480.1821	N/A
Conclusion : PASS		

FCC ID: XLU84157790



7. DEVIATION TO TEST SPECIFICATIONS

[NONE]