

Test Report

Industry Canada RSS-Gen Issue 3/RSS-210 Issue 8
FCC Part15 Subpart C

Product Name : IP-STB
Model No. : 3500X
FCC ID : TC2-R1008
IC : 5959A-R1008

Applicant : Roku Inc.

Address : 12980 Saratoga Ave, Suite D Saratoga, CA 95070

Date of Receipt : Jan. 23, 2014
Test Date : Jan. 23, 2014~ Feb. 14, 2014
Issued Date : Feb. 15, 2014
Report No. : 1410471R-RF-US-P05V01
Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

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Test Report Certification

Issued Date : Feb. 15, 2014

Report No. : 1410471R-RF-US-P05V01



Product Name : IP-STB

Applicant : Roku Inc.

Address : 12980 Saratoga Ave, Suite D Saratoga, CA 95070

Manufacturer : Ambit Mircosystems (Shanghai) LTD.

Address : 1925, Nanle Road, Songjiang Export Processing Zone,
Shanghai, China 201613

Model No. : 3500X

FCC ID : TC2-R1008

IC : 5959A-R1008

EUT Voltage : 100-240Vac +/-10%

Brand Name : Roku

Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2012
ANSI C63.4: 2009; KDB 558074
Industry Canada RSS-Gen Issue 3/RSS-210 Issue 8

Test Result : Complied

Performed Location : Suzhou EMC Laboratory
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FCC Registration Number: 800392; IC Lab Code: 4075B

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Laboratory Information

We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
Germany	:	TUV Rheinland
Norway	:	Nemko, DNV
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site :<http://www.quietek.com/tw/ctg/cts/accreditations.htm>

The address and introduction of Quietek Corporation's laboratories can be founded in our Web site :
<http://www.quietek.com/>

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1. General Information

1.1. EUT Description

Product Name	IP-STB
Brand Name	Roku
Model No.	3500X
EUT Voltage	100-240Vac +/-10%
Frequency Range	<p>For 2.4GHz Band</p> <p>802.11b/g/n(20MHz): 2412~2462MHz</p> <p>802.11n(40MHz): 2422~2452MHz</p> <p>For 5.0GHz Band</p> <p>802.11a/n(20MHz):</p> <p>5180~5240MHz, 5745~5825MHz</p> <p>802.11n(40MHz):</p> <p>5190~5230MHz, 5755~5795MHz</p>
Channel Number	<p>For 2.4GHz Band</p> <p>802.11b/g/n(20MHz): 11 802.11n(40MHz): 7</p> <p>For 5.0GHz Band</p> <p>802.11a /n(20MHz): 9 802.11n(40MHz): 4</p>
Type of Modulation	<p>802.11b: DSSS</p> <p>802.11a/g/n: OFDM</p>
Data Rate	<p>802.11a/g: 6/9/12/18/24/36/48/54 Mbps</p> <p>802.11b: 1/2/5.5/11 Mbps</p> <p>802.11n: up to 300 Mbps</p>
Channel Control	Auto
Antenna Delivery	2*Tx + 2*Rx
Antenna Type	Printed Antenna
Peak Antenna Gain	2dBi for 2.4GHz and 5GHz

For 2.4GHz Band

802.11b/g/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
01	2412 MHz	02	2417 MHz	03	2422 MHz	04	2427 MHz
05	2432 MHz	06	2437 MHz	07	2442 MHz	08	2447 MHz
09	2452 MHz	10	2457 MHz	11	2462 MHz	N/A	N/A
802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
03	2422 MHz	04	2427 MHz	05	2432 MHz	06	2437 MHz
07	2442 MHz	08	2447 MHz	09	2452 MHz	N/A	N/A

For 5.0GHz Band

802.11a/n(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz	N/A	N/A	N/A	N/A	N/A	N/A
802.11n(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	151	5755 MHz	159	5795 MHz

Power Parameter Value of the test software

Test Mode	Test Channel	Ant0	Ant1	Ant0+1
802.11b	2412	74	78	×
	2437	66	70	×
	2462	70	66	×
802.11g	2412	70	74	×
	2437	72	84	×
	2462	64	68	×
802.11n(20MHz)	2412	58	74	58
	2437	84	76	84
	2462	56	60	58
802.11n(40MHz)	2422	52	60	46
	2437	84	75	70
	2452	52	54	50

Test Mode	Test Channel	Ant0	Ant1	Ant0+1
802.11a	5745	60	64	×
	5785	66	66	×
	5825	66	66	×
802.11n (20MHz)	5745	48	48	48
	5785	66	70	52
	5825	48	48	40
802.11n (40MHz)	5755	48	48	48
	5795	48	48	48

The test mode of the test software can support.

Test Mode	Ant0	Ant1	Ant0+1
802.11b	√	√	×
802.11g	√	√	×
802.11a	√	√	√
802.11n(20MHz)	√	√	√
802.11n(40MHz)	√	√	√

Duty Cycle

2.4GHz Band

Test Mode	Duty Cycle
802.11b	98%
802.11g	96%
802.11n(20MHz)	92%
802.11n(40MHz)	90%

5.8GHz Band

Test Mode	Duty Cycle
802.11a	96%
802.11n(20MHz)	90%
802.11n(40MHz)	89%

1.2. Mode of Operation

Quietek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: Transmit by 802.11b
Mode 2: Transmit by 802.11g
Mode 3: Transmit by 802.11a
Mode 4: Transmit by 802.11n(20MHz)
Mode 5: Transmit by 802.11n(40MHz)

Note:

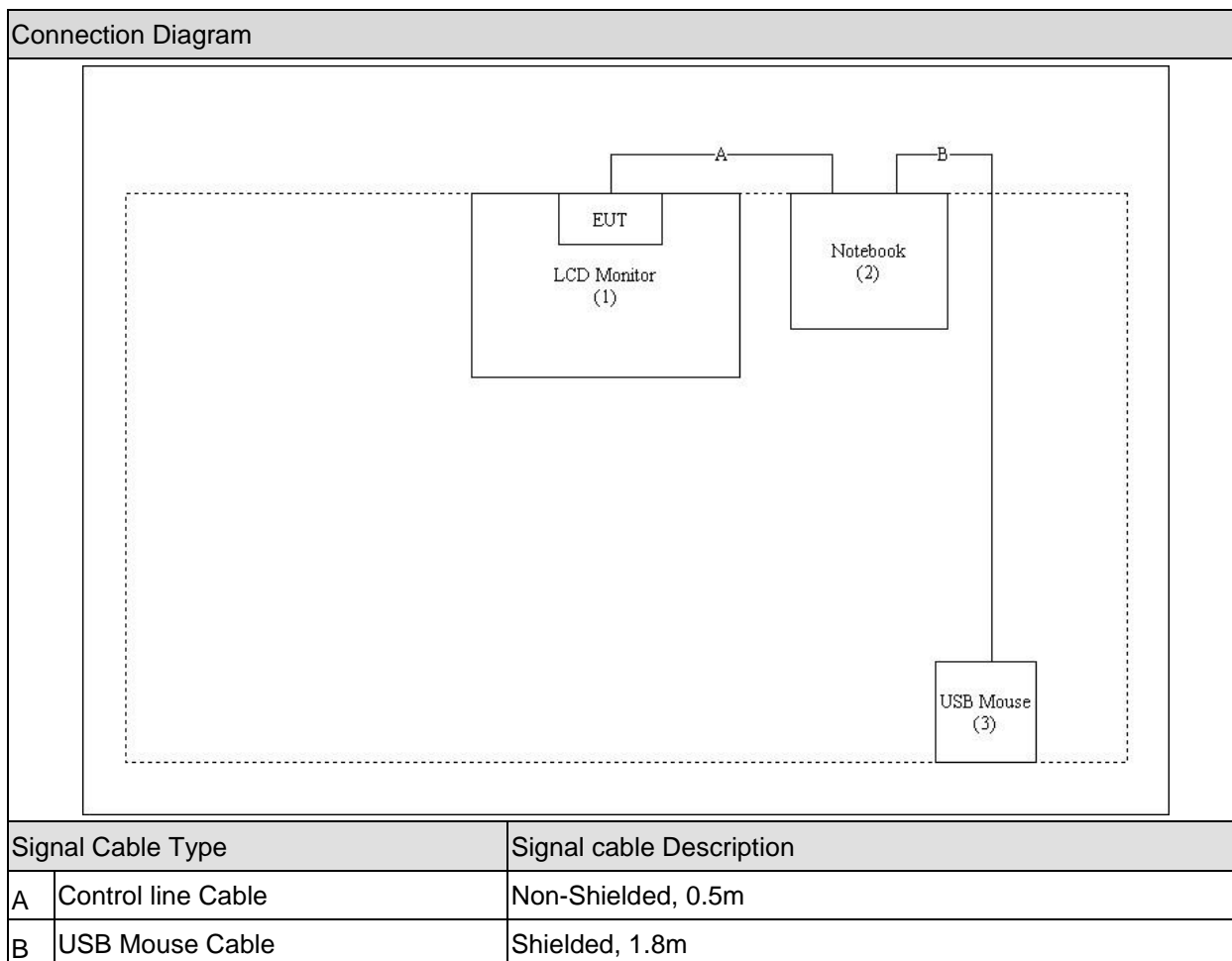
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. For portable device, radiated spurious emission was verified over X, Y, Z Axis, and shown the worst case on this report.
3. This device is a composite device in accordance with Part 15 Subpart B regulations.

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	Power Cord
1 LCD Monitor	DELL	U2410f	N/A	Non-Shielded, 1.8m
2 Notebook	Think Pad	R400	R8-MTNE5	Power by adapter
3 USB Mouse	DELL	M-UVDEL1	LNAS2162651	Power by Notebook

1.4. Configuration of Tested System



1.5. EUT Exercise Software

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of equipment.
3	Input the play instruction to EUT using "hypertrm" and set the test mode and channel, then press OK to start continue transmit or receive.

2. Technical Test

2.1. Summary of Test Result

- No deviations from the test standards
- Deviations from the test standards as below description:

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.207	Yes	No
Radiated Emission	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.209	Yes	No
RF Antenna Conducted Spurious	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.247(d)	Yes	No
Radiated Emission Band Edge	FCC CFR Title 47 Part 15 Subpart C: 2012 15.247(d)	Yes	No
Operation Frequency Range of 20dB Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2012 15.215(c)	Yes	No
Occupied Bandwidth	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.247(a)(2)	Yes	No
Power Output	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.247(b)(3)	Yes	No
Power Spectral Density	FCC CFR Title 47 Part 15 Subpart C: 2012 Section 15.247(e)	Yes	No

Performed Test Item	Normative References	Test Performed	Deviation
Conducted Emission	RSS-Gen Issue 3 December 2010 Section 7.2.2	Yes	No
Radiated Emission	RSS-210 Issue 8 December 2010 Section 2.7 Table 2 and Table 3	Yes	No
RF Antenna Conducted Spurious	RSS-210 Issue 8 December 2010 Section A8.5	Yes	No
Radiated Emission Band Edge	RSS-210 Issue 8 December 2010 Section A8.5	Yes	No
Occupied Bandwidth	RSS-Gen Issue 3 December 2010 Section 4.6.1 and 4.6.2 RSS-210 Issue 8 December 2010 Section A8.2(1)	Yes	No
Power Output	RSS-210 Issue 8 December 2010 Section A8.4(4)	Yes	No
Power Spectral Density	RSS-210 Issue 8 December 2010 Section A8.2(2)	Yes	No

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	50
Barometric pressure (mbar)	860-1060	950-1000

3. Conducted Emission

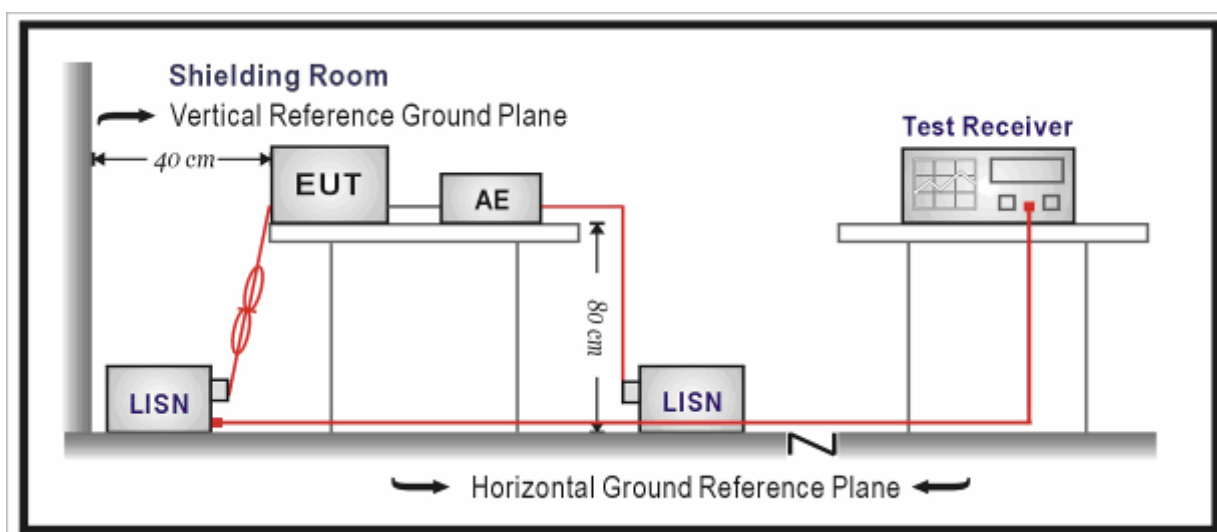
3.1. Test Equipment

Conducted Emission / TR-1

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100726	2015.01.07
Two-Line V-Network	R&S	ENV216	100043	2014.03.30
Two-Line V-Network	R&S	ENV216	100044	2014.09.16
50ohm Coaxial Switch	Anritsu	MP59B	6200464462	2014.03.01
50ohm Termination	SHX	TF2	07081401	2014.09.16
Temperature/Humidity Meter	zhicheng	ZC1-2	TR1-TH	2015.01.08

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

FCC Part 15 Subpart C Paragraph 15.207 Limits		
Frequency (MHz)	QP (dBuV)	AV (dBuV)
0.15 - 0.50	66 - 56	56 – 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to ANSI C63.10: 2009 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

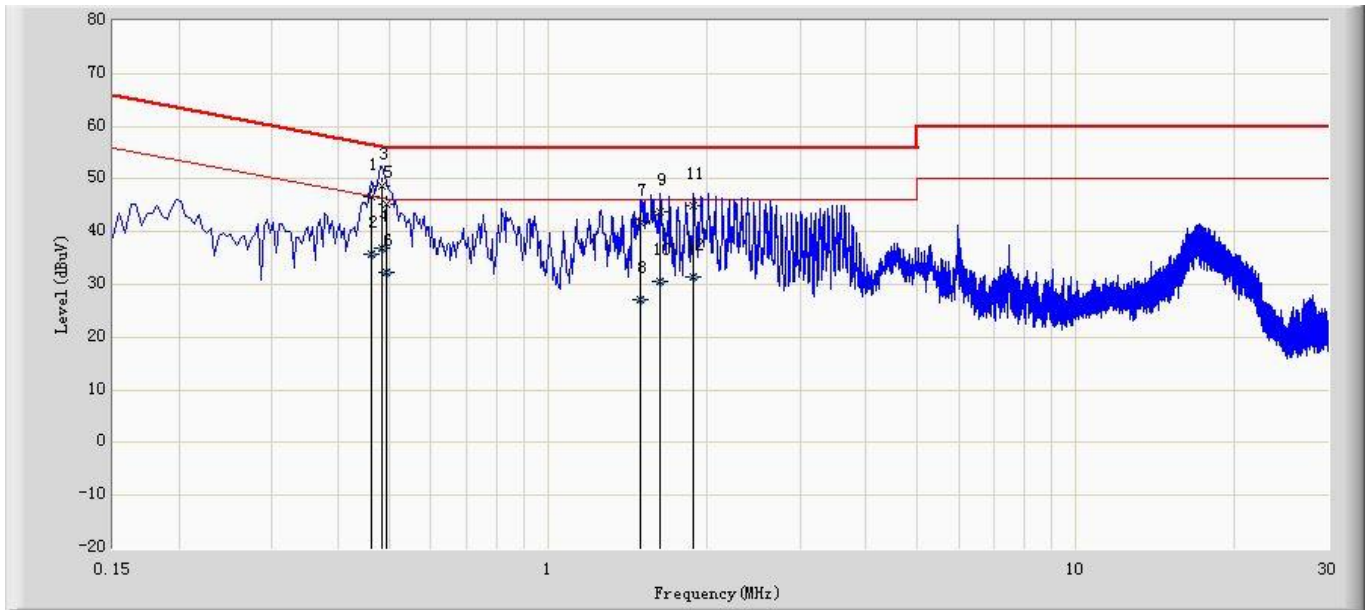
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

3.5. Uncertainty

The measurement uncertainty is defined as ± 2.02 dB

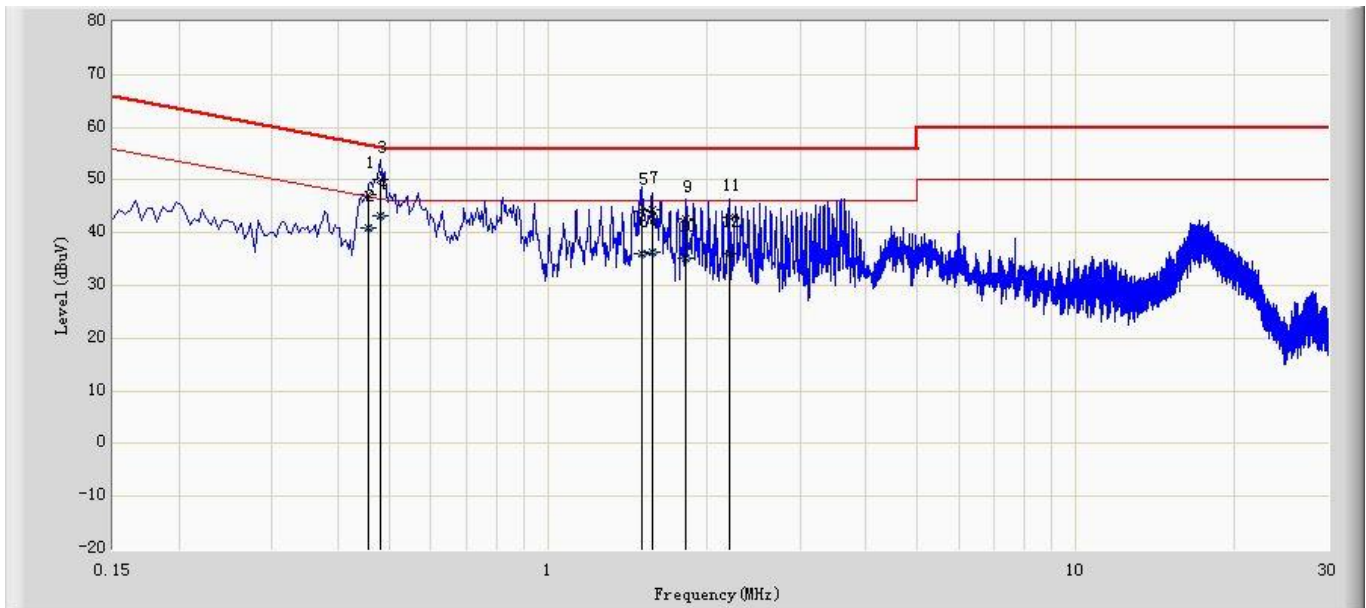
3.6. Test Result

Engineer: Ware	
Site: TR1	Time: 2014/02/10 - 15:52
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: IP-STB	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.462	46.627	36.722	-10.029	56.657	9.905	QP
2		0.462	35.633	25.727	-11.024	46.657	9.905	AV
3	*	0.486	48.813	38.905	-7.422	56.236	9.909	QP
4		0.486	36.949	27.040	-9.287	46.236	9.909	AV
5		0.494	45.278	35.370	-10.822	56.100	9.908	QP
6		0.494	32.408	22.500	-13.693	46.100	9.908	AV
7		1.498	41.868	32.068	-14.132	56.000	9.800	QP
8		1.498	27.102	17.302	-18.898	46.000	9.800	AV
9		1.634	43.936	34.141	-12.064	56.000	9.795	QP
10		1.634	30.613	20.818	-15.387	46.000	9.795	AV
11		1.890	44.826	35.032	-11.174	56.000	9.794	QP
12		1.890	31.327	21.533	-14.673	46.000	9.794	AV

Engineer: Ware	
Site: TR1	Time: 2014/02/10 - 15:55
Limit: FCC_Part15.107_CE_AC Power_ClassB	Margin: 0
Probe: ENV216_101044(0.009-30MHz)	Polarity: Line
EUT: IP-STB	Power: AC 120V/60Hz
Note: Mode 1	



No	Mark	Frequency (MHz)	Measure Level (dBuV)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV)	Factor (dB)	Type
1		0.458	47.215	37.310	-9.513	56.729	9.905	QP
2		0.458	40.943	31.038	-5.786	46.729	9.905	AV
3		0.482	50.105	40.197	-6.200	56.305	9.908	QP
4	*	0.482	43.118	33.210	-3.186	46.305	9.908	AV
5		1.510	44.008	34.208	-11.992	56.000	9.800	QP
6		1.510	36.135	26.335	-9.865	46.000	9.800	AV
7		1.574	44.286	34.489	-11.714	56.000	9.797	QP
8		1.574	36.214	26.417	-9.786	46.000	9.797	AV
9		1.822	42.588	32.801	-13.412	56.000	9.787	QP
10		1.822	35.228	25.441	-10.772	46.000	9.787	AV
11		2.202	43.055	33.264	-12.945	56.000	9.791	QP
12		2.202	36.016	26.225	-9.984	46.000	9.791	AV

4. Radiated Emission

4.1. Test Equipment

Radiated Emission / AC-2

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
EMI Test Receiver	R&S	ESCI	100573	2014.03.30
Loop Antenna	R&S	HFH2-Z2	833799/003	2013.11.17
Bilog Chainenna	Teseq GmbH	CBL6112D	27611	2013.10.15
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC2-C	2014.03.01
Temperature/Humidity Meter	Zhicheng	ZC1-2	AC2-TH	2014.01.09

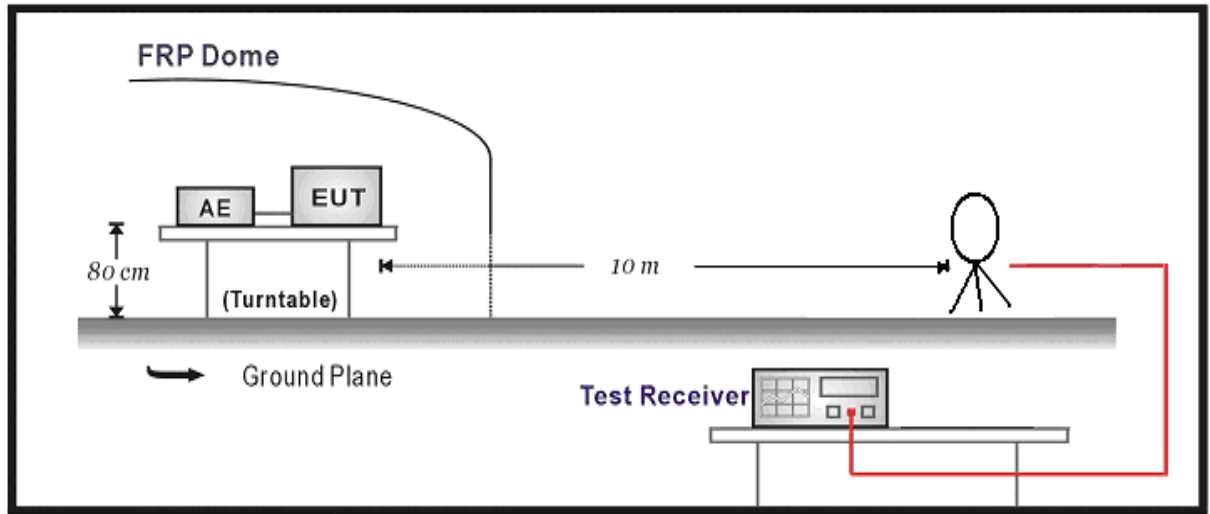
Radiated Emission / AC-5

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	N9020A	MY49100159	2014.03.30
Spectrum Analyzer	Agilent	E4446A	MY45300103	2014.01.21
Preamplifier	Miteq	NSP1800-25	1364185	2014.05.04
Preamplifier	QuieTek	AP-040G	CHM-0906001	2014.05.04
DRG Horn	ETS-Lindgren	3117	00123988	2014.01.21
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	294	2014.11.24
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C1	2014.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 106	AC5-C2	2014.03.01
Coaxial Cable	Huber+Suhner	SUCOFLEX 102	AC5-C3	2014.03.01
EMI Receiver	Agilent	N9038A	MY51210196	2014.06.09
Temperature/Humidity Meter	Zhichen	ZC1-2	AC5-TH	2015.01.08

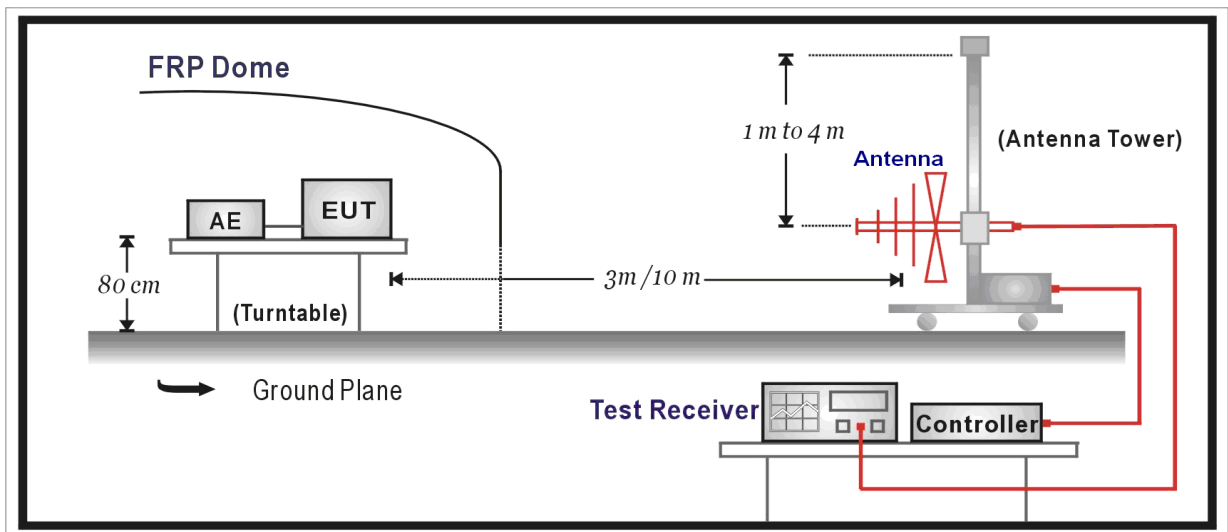
Note 1: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

4.2. Test Setup

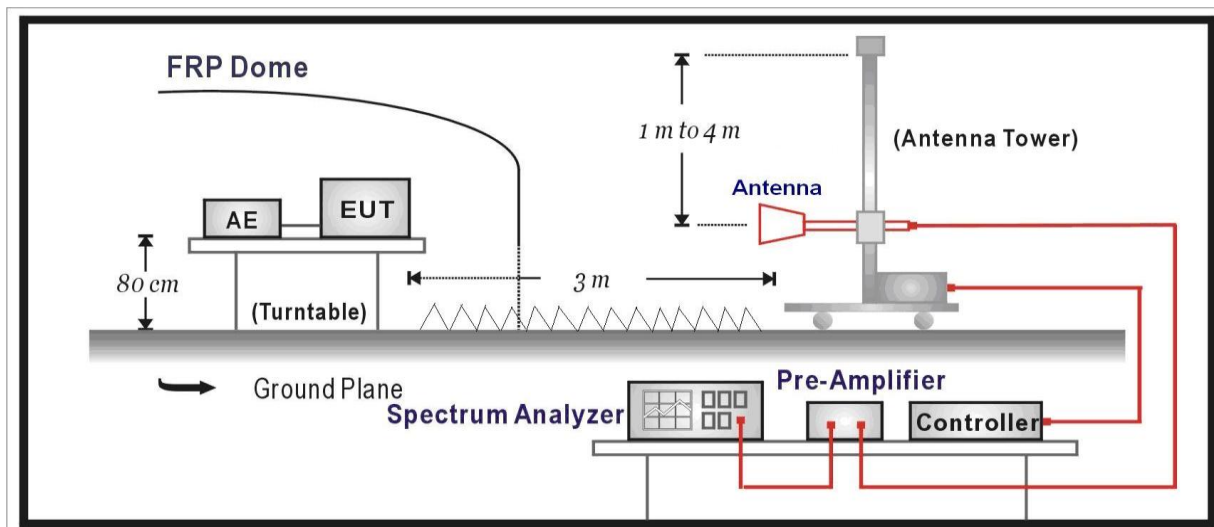
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

FCC Part 15 Subpart C Paragraph 15.209		
Frequency (MHz)	Distance (m)	Level (dBuV/m)
30 - 88	3	40
88 - 216	3	43.5
216 - 960	3	46
Above 960	3	54

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument Antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from Antenna to the EUT was 3 meters.

The Antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This

is repeated for both horizontal and vertical polarization of the Antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2009 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn Antenna will be bended down a little (as horn Antenna has the narrow beamwidth) in order to keeping the Antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

below 1G is defined as ± 3.8 dB

4.6. Test Result

All of the test result shown indicates the worst case, and spectrum analyzer parameters setting as shown below:

Peak detector: RBW = 1MHz, VBW = 3MHz, sweep time = 200ms;

Average detector: RBW = 1MHz, VBW = 10Hz, sweep time = auto.

Measure Level = Reading Level + Cable Loss + Antenna Factor - Preamplifier Gain

Mode1: Transmit by 802.11b

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	
Ant 0	1	H	4825.0	42.6	7.1	49.7	54(note3)	-4.3	PK	
		V	4825.0	46.8	7.1	53.9	74	-20.1	PK	
		V	4825.0	44.6	7.1	51.7	54	-2.3	AV	
		H	7236.0	31.2	10.7	41.9	54(note3)	-12.1	PK	
		V	7236.0	30.9	10.7	41.6	54(note3)	-12.4	PK	
		H	9648.0	39.1	4.9	44.0	54(note3)	-10.0	PK	
		V	9648.0	39.2	4.9	44.1	54(note3)	-9.9	PK	
	6	H	4876.0	44.5	7.2	51.7	54(note3)	-2.3	PK	
		V	4876.0	48.6	7.2	55.8	74	-18.2	PK	
		V	4876.0	46.7	7.2	53.9	54	-0.1	AV	
		H	7311.0	30.2	10.8	41.0	54(note3)	-13.0	PK	
		V	7311.0	30.6	10.8	41.4	54(note3)	-12.6	PK	
		H	9748.0	37.9	5.0	42.9	54(note3)	-11.1	PK	
		V	9748.0	37.3	5.1	42.4	54(note3)	-11.6	PK	
	11	H	4927.0	45.5	7.3	52.8	54(note3)	-1.2	PK	
		V	4927.0	50.7	7.4	58.1	74	-15.9	PK	
		V	4927.0	46.4	7.4	53.8	54	-0.2	AV	
		H	7386.0	31.0	10.9	41.9	54(note3)	-12.1	PK	
		V	7386.0	31.0	10.9	41.9	54(note3)	-12.1	PK	
		H	9848.0	38.6	5.2	43.8	54(note3)	-10.2	PK	
		V	9848.0	37.2	5.3	42.5	54(note3)	-11.5	PK	
	Ant 1	1	H	4825.0	37.2	7.1	44.3	54(note3)	-9.7	PK
			V	4825.0	44.4	7.1	51.5	54(note3)	-2.5	PK
			H	7239.0	46.1	10.7	56.8	74	-17.2	PK
H			7239.0	39.7	10.7	50.4	54	-3.6	AV	
V			7239.0	48.8	10.7	59.5	74	-14.5	PK	
V			7239.0	42.8	10.7	53.5	54	-0.5	AV	

		H	9648.0	39.4	4.9	44.3	54(note3)	-9.7	PK
		V	9648.0	38.5	4.9	43.4	54(note3)	-10.6	PK
	6	H	4876.0	38.8	7.2	46.0	54(note3)	-8.0	PK
		V	4876.0	45.2	7.2	52.4	54(note3)	-1.6	PK
		H	7307.0	42.3	10.8	53.1	54(note3)	-0.9	PK
		V	7307.0	43.4	10.8	54.2	74	-19.8	PK
		V	7307.0	36.0	10.8	46.8	54	-7.2	AV
		H	9748.0	37.8	5.0	42.8	54(note3)	-11.2	PK
	11	V	9748.0	38.2	5.1	43.3	54(note3)	-10.7	PK
		H	4927.0	40.7	7.3	48.0	54(note3)	-6.0	PK
		V	4927.0	44.5	7.4	51.9	54(note3)	-2.1	PK
		H	7383.5	43.0	10.9	53.9	54(note3)	-0.1	PK
		V	7383.5	43.0	10.9	53.9	74	-20.1	PK
		V	7383.5	34.0	10.9	44.9	54	-9.1	AV
H		9848.0	38.4	5.2	43.6	54(note3)	-10.4	PK	
V		9848.0	38.0	5.3	43.3	54(note3)	-10.7	PK	

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode2: Transmit by 802.11g

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 0	1	H	4825.0	37.9	7.1	45.0	54(note3)	-9.0	PK
		V	4825.0	38.7	7.1	45.8	54(note3)	-8.2	PK
		H	7236.0	30.8	10.7	41.5	54(note3)	-12.5	PK
		V	7236.0	30.5	10.7	41.2	54(note3)	-12.8	PK
		H	9648.0	39.0	4.9	43.9	54(note3)	-10.1	PK
		V	9648.0	38.4	4.9	43.3	54(note3)	-10.7	PK
	6	H	4876.0	34.9	7.2	42.1	54(note3)	-11.9	PK
		V	4876.0	45.5	7.2	52.7	54(note3)	-1.3	PK
		H	7311.0	30.3	10.8	41.1	54(note3)	-12.9	PK
		V	7311.0	30.8	10.8	41.6	54(note3)	-12.4	PK

Ant 1		H	9748.0	36.9	5.0	41.9	54(note3)	-12.1	PK	
		V	9748.0	38.1	5.1	43.2	54(note3)	-10.8	PK	
	11	H	4927.0	42.3	7.3	49.6	54(note3)	-4.4	PK	
		V	4918.5	44.6	7.3	51.9	54(note3)	-2.1	PK	
		H	7311.0	30.3	10.8	41.1	54(note3)	-12.9	PK	
		V	7386.0	31.2	10.9	42.1	54(note3)	-11.9	PK	
		H	9848.0	37.4	5.2	42.6	54(note3)	-11.4	PK	
		V	9848.0	37.7	5.3	43.0	54(note3)	-11.0	PK	
	1	1	H	4825.0	37.7	7.1	44.8	54(note3)	-9.2	PK
			V	4833.5	42.1	7.1	49.2	54(note3)	-4.8	PK
			H	7236.0	30.8	10.7	41.5	54(note3)	-12.5	PK
			V	7236.0	31.2	10.7	41.9	54(note3)	-12.1	PK
			H	9648.0	38.7	4.9	43.6	54(note3)	-10.4	PK
			V	9648.0	38.6	4.9	43.5	54(note3)	-10.5	PK
6		H	4876.0	41.9	7.2	49.1	54(note3)	-4.9	PK	
		V	4876.0	45.4	7.2	52.6	54(note3)	-1.4	PK	
		H	7311.0	31.3	10.8	42.1	54(note3)	-11.9	PK	
		V	7311.0	31.6	10.8	42.4	54(note3)	-11.6	PK	
		H	9748.0	38.4	5.0	43.4	54(note3)	-10.6	PK	
		V	9748.0	38.1	5.1	43.2	54(note3)	-10.8	PK	
11		H	4927.0	42.5	7.3	49.8	54(note3)	-4.2	PK	
		V	4927.0	46.1	7.4	53.5	54(note3)	-0.5	PK	
		H	7386.0	31.8	10.9	42.7	54(note3)	-11.3	PK	
		V	7386.0	31.9	10.9	42.8	54(note3)	-11.2	PK	
		H	9848.0	38.5	5.2	43.7	54(note3)	-10.3	PK	
		V	9848.0	37.9	5.3	43.2	54(note3)	-10.8	PK	

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode3: Transmit by 802.11a

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 0	149	H	11489.0	31.6	15.5	47.1	54(note3)	-6.9	PK
		V	11489.0	33.7	15.4	49.1	54(note3)	-4.9	PK
		H	17235.0	23.3	23.1	46.4	54(note3)	-7.6	PK
		V	17235.0	22.8	23.1	45.9	54(note3)	-8.1	PK
	157	H	11565.5	30.4	16.6	47.0	54(note3)	-7.0	PK
		V	11565.5	30.1	16.5	46.6	54(note3)	-7.4	PK
		H	17355.0	22.1	24.5	46.6	54(note3)	-7.4	PK
		V	17294.5	23.7	24.5	48.2	54(note3)	-5.8	PK
	165	H	11650.0	27.9	16.0	43.9	54(note3)	-10.1	PK
		V	11650.5	31.0	15.9	46.9	54(note3)	-7.1	PK
		H	17475.0	22.2	23.7	45.9	54(note3)	-8.1	PK
		V	17475.0	21.4	23.8	45.2	54(note3)	-8.8	PK
Ant 1	147	H	11490.0	27.0	15.5	42.5	54(note3)	-11.5	PK
		V	11489.0	35.9	15.4	51.3	54(note3)	-2.7	PK
		H	17235.0	23.7	23.1	46.8	54(note3)	-7.2	PK
		V	17235.0	22.9	23.1	46.0	54(note3)	-8.0	PK
	157	H	11565.5	27.2	16.6	43.8	54(note3)	-10.2	PK
		V	11557.0	25.9	16.4	42.3	54(note3)	-11.7	PK
		H	17294.5	22.0	24.4	46.4	54(note3)	-7.6	PK
		V	17354.0	21.9	24.6	46.5	54(note3)	-7.5	PK
	165	H	11650.0	23.1	16.0	39.1	54(note3)	-14.9	PK
		V	11599.5	30.4	15.7	46.1	54(note3)	-7.9	PK
		H	17475.0	21.8	23.7	45.5	54(note3)	-8.5	PK
		V	17475.0	20.9	23.8	44.7	54(note3)	-9.3	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode4: Transmit by 802.11n(20MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	
Ant 0	1	H	4825.0	34.0	7.1	41.1	54(note3)	-12.9	PK	
		V	4825.0	38.3	7.1	45.4	54(note3)	-8.6	PK	
		H	7236.0	31.1	10.7	41.8	54(note3)	-12.2	PK	
		V	7236.0	31.1	10.7	41.8	54(note3)	-12.2	PK	
		H	9648.0	38.5	4.9	43.4	54(note3)	-10.6	PK	
		V	9648.0	38.5	4.9	43.4	54(note3)	-10.6	PK	
	6	H	4867.5	41.7	7.2	48.9	54(note3)	-5.1	PK	
		V	4876.0	47.6	7.2	54.8	74	-19.2	PK	
		V	4876.0	33.5	7.2	40.7	54	-13.3	AV	
		H	7311.0	32.2	10.8	43.0	54(note3)	-11.0	PK	
		V	7311.0	32.1	10.8	42.9	54(note3)	-11.1	PK	
		H	9748.0	37.6	5.0	42.6	54(note3)	-11.4	PK	
	11	V	9748.0	37.6	5.1	42.7	54(note3)	-11.3	PK	
		H	4918.5	39.6	7.3	46.9	54(note3)	-7.1	PK	
		V	4927.0	44.4	7.4	51.8	54(note3)	-2.2	PK	
		H	7386.0	31.6	10.9	42.5	54(note3)	-11.5	PK	
		V	7386.0	31.6	10.9	42.5	54(note3)	-11.5	PK	
		H	9848.0	38.1	5.2	43.3	54(note3)	-10.7	PK	
	149	V	9848.0	39.0	5.3	44.3	54(note3)	-9.7	PK	
		H	11489	30.1	15.5	45.6	54(note3)	-8.4	PK	
		V	11489	32.1	15.4	47.5	54(note3)	-6.5	PK	
		H	17235	22.9	23.1	46	54(note3)	-8.0	PK	
	157	V	17235	23.3	23.1	46.4	54(note3)	-7.6	PK	
		H	11565.5	30.3	16.6	46.9	54(note3)	-7.1	PK	
		V	11565.5	29.4	16.5	45.9	54(note3)	-8.1	PK	
		H	17355	21.8	24.5	46.3	54(note3)	-7.7	PK	
	165	V	17303	23.6	24.5	48.1	54(note3)	-5.9	PK	
		H	11650	26.7	16	42.7	54(note3)	-11.3	PK	
		V	11650.5	30.5	15.9	46.4	54(note3)	-7.6	PK	
		H	17475	20.9	23.7	44.6	54(note3)	-9.4	PK	
	Ant 1	1	V	17475	21.5	23.8	45.3	54(note3)	-8.7	PK
			H	4824.0	32.8	7.1	39.9	54(note3)	-14.1	PK
		V	4825.0	37.4	7.1	44.5	54(note3)	-9.5	PK	

		H	7247.5	45.6	10.7	56.3	74	-17.7	PK	
		H	7247.5	26.8	10.7	37.5	54	-16.5	AV	
		V	7239.0	47.3	10.7	58.0	74	-16.0	PK	
		V	7239.0	28.2	10.7	38.9	54	-15.1	AV	
		H	9648.0	38.9	4.9	43.8	54(note3)	-10.2	PK	
		V	9648.0	39.2	4.9	44.1	54(note3)	-9.9	PK	
	6		H	4876.0	36.5	7.2	43.7	54(note3)	-10.3	PK
			V	4876.0	39.7	7.2	46.9	54(note3)	-7.1	PK
			H	7307.0	45.7	10.8	56.5	74	-17.5	PK
			H	7307.0	28.7	10.8	39.5	54	-14.5	AV
			V	7315.5	48.0	10.8	58.8	74	-15.2	PK
			V	7315.5	27.4	10.8	38.2	54	-15.8	AV
			H	9748.0	38.4	5.0	43.4	54(note3)	-10.6	PK
			V	9748.0	37.8	5.1	42.9	54(note3)	-11.1	PK
	11		H	4927.0	36.6	7.3	43.9	54(note3)	-10.1	PK
			V	4918.5	40.9	7.3	48.2	54(note3)	-5.8	PK
			H	7383.5	40.8	10.9	51.7	54(note3)	-2.3	PK
			V	7383.5	42.5	10.9	53.4	54(note3)	-0.6	PK
			H	9848.0	37.8	5.2	43.0	54(note3)	-11.0	PK
			V	9848.0	38.6	5.3	43.9	54(note3)	-10.1	PK
	149		H	11490	27.5	15.5	43	54(note3)	-11.0	PK
			V	11497.5	34.1	15.4	49.5	54(note3)	-4.5	PK
			H	17235	23.7	23.1	46.8	54(note3)	-7.2	PK
			V	17235	22.7	23.1	45.8	54(note3)	-8.2	PK
	157		H	11570	26.7	16.6	43.3	54(note3)	-10.7	PK
			V	11570	27.5	16.5	44	54(note3)	-10.0	PK
			H	17355	22.9	24.5	47.4	54(note3)	-6.6	PK
			V	17355	23.4	24.6	48	54(note3)	-6.0	PK
	165		H	11650	26.3	16	42.3	54(note3)	-11.7	PK
			V	11642	29	15.9	44.9	54(note3)	-9.1	PK
			H	17475	21.8	23.7	45.5	54(note3)	-8.5	PK
			V	17475	21.8	23.8	45.6	54(note3)	-8.4	PK
	Ant 0+1	1	H	4825.0	33.1	7.1	40.2	54(note3)	-13.8	PK
			V	4825.0	34.9	7.1	42.0	54(note3)	-12.0	PK
			H	7230.5	36.3	10.7	47.0	54(note3)	-7.0	PK
			V	7239.0	38.2	10.7	48.9	54(note3)	-5.1	PK
			H	9648.0	38.8	4.9	43.7	54(note3)	-10.3	PK

		V	9648.0	39.1	4.9	44.0	54(note3)	-10.0	PK
	6	H	4867.5	38.8	7.2	46.0	54(note3)	-8.0	PK
		V	4876.0	45.9	7.2	53.1	54(note3)	-0.9	PK
		H	7307.0	48.1	10.8	58.9	74	-15.1	PK
		H	7307.0	34.1	10.8	44.9	54	-9.1	AV
		V	7315.0	51.2	10.8	62.0	74	-12.0	PK
		V	7315.0	36.2	10.8	47.0	54	-7.0	AV
		H	9748.0	38.2	5.0	43.2	54(note3)	-10.8	PK
		V	9748.0	37.5	5.1	42.6	54(note3)	-11.4	PK
		11	H	4918.5	33.6	7.3	40.9	54(note3)	-13.1
	V		4918.5	37.7	7.3	45.0	54(note3)	-9.0	PK
	H		7392.0	42.6	10.9	53.5	54(note3)	-0.5	PK
	V		7383.5	42.7	10.9	53.6	54(note3)	-0.4	PK
	H		9848.0	34.2	5.2	39.4	54(note3)	-14.6	PK
	V		9848.0	35.4	5.3	40.7	54(note3)	-13.3	PK
	149	H	11489.0	28.5	15.5	44.0	54(note3)	-10.0	PK
		V	11489.0	34.5	15.4	49.9	54(note3)	-4.1	PK
		H	17235.0	24.3	23.1	47.4	54(note3)	-6.6	PK
		V	17235.0	22.9	23.1	46.0	54(note3)	-8.0	PK
	157	H	11570.0	23.5	16.6	40.1	54(note3)	-13.9	PK
		V	11570.0	22.6	16.5	39.1	54(note3)	-14.9	PK
		H	17355.0	20.7	24.5	45.2	54(note3)	-8.8	PK
		V	17355.0	21.3	24.6	45.9	54(note3)	-8.1	PK
	165	H	11650.0	25.8	16.0	41.8	54(note3)	-12.2	PK
		V	11659.0	32.2	16.0	48.2	54(note3)	-5.8	PK
		H	17475.0	23.5	23.7	47.2	54(note3)	-6.8	PK
		V	17475.0	21.7	23.8	45.5	54(note3)	-8.5	PK

Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

Mode5: Transmit by 802.11n(40MHz)

Chain	CH	Antenna	Frequency (MHz)	Reading Level (dBuV/m)	Factor (dB)	Measure Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Ant 0	3	H	4844.0	31.9	7.2	39.1	54(note3)	-14.9	PK
		V	4867.5	38.2	7.2	45.4	54(note3)	-8.6	PK
		H	7266.0	31.0	10.7	41.7	54(note3)	-12.3	PK
		V	7266.0	30.8	10.7	41.5	54(note3)	-12.5	PK
		H	9688.0	38.1	5.0	43.1	54(note3)	-10.9	PK
		V	9688.0	38.1	5.1	43.2	54(note3)	-10.8	PK
	6	H	4876.0	39.8	7.2	47.0	54(note3)	-7.0	PK
		V	4876.0	44.6	7.2	51.8	54(note3)	-2.2	PK
		H	7311.0	31.8	10.8	42.6	54(note3)	-11.4	PK
		V	7311.0	31.0	10.8	41.8	54(note3)	-12.2	PK
		H	9748.0	38.5	5.0	43.5	54(note3)	-10.5	PK
		V	9748.0	37.7	5.1	42.8	54(note3)	-11.2	PK
	9	H	4918.5	35.9	7.3	43.2	54(note3)	-10.8	PK
		V	4918.5	40.2	7.3	47.5	54(note3)	-6.5	PK
		H	7356.0	31.1	10.8	41.9	54(note3)	-12.1	PK
		V	7356.0	30.7	10.8	41.5	54(note3)	-12.5	PK
		H	9808.0	37.5	5.1	42.6	54(note3)	-11.4	PK
		V	9808.0	37.4	5.2	42.6	54(note3)	-11.4	PK
	151	H	11514.5	28.3	15.6	43.9	54(note3)	-10.1	PK
		V	11506	30.7	15.5	46.2	54(note3)	-7.8	PK
		H	17265	22.1	23.1	45.2	54(note3)	-8.8	PK
		V	17265	22.3	23.2	45.5	54(note3)	-8.5	PK
	159	H	11630	23.6	15.9	39.5	54(note3)	-14.5	PK
		V	11630	24.1	15.8	39.9	54(note3)	-14.1	PK
H		17445	20.9	23.6	44.5	54(note3)	-9.5	PK	
V		17445	21	23.7	44.7	54(note3)	-9.3	PK	
Ant 1	3	H	4844.0	32.0	7.2	39.2	54(note3)	-14.8	PK
		V	4842.0	34.6	7.1	41.7	54(note3)	-12.3	PK
		H	7273.0	37.9	10.7	48.6	54(note3)	-5.4	PK
		V	7256.0	38.0	10.7	48.7	54(note3)	-5.3	PK
		H	9688.0	38.3	5.0	43.3	54(note3)	-10.7	PK
		V	9688.0	37.8	5.1	42.9	54(note3)	-11.1	PK
	H	4867.5	33.9	7.2	41.1	54(note3)	-12.9	PK	

	6	V	4867.5	38.2	7.2	45.4	54(note3)	-8.6	PK	
		H	7307.0	42.0	10.8	52.8	54(note3)	-1.2	PK	
		V	7307.0	44.3	10.8	55.1	74	-18.9	PK	
		V	7307.0	28.1	10.8	38.9	54	-15.1	AV	
		H	9748.0	37.8	5.0	42.8	54(note3)	-11.2	PK	
		V	9748.0	37.6	5.1	42.7	54(note3)	-11.3	PK	
	9	H	4986.5	33.4	7.3	40.7	54(note3)	-13.3	PK	
		V	4901.5	36.0	7.3	43.3	54(note3)	-10.7	PK	
		H	7358.0	34.8	10.8	45.6	54(note3)	-8.4	PK	
		V	7366.5	35.6	10.9	46.5	54(note3)	-7.5	PK	
		H	9808.0	37.8	5.1	42.9	54(note3)	-11.1	PK	
		V	9808.0	37.7	5.2	42.9	54(note3)	-11.1	PK	
	151	H	11510	26.3	15.6	41.9	54(note3)	-12.1	PK	
		V	11506	32.7	15.5	48.2	54(note3)	-5.8	PK	
		H	17265	22.6	23.1	45.7	54(note3)	-8.3	PK	
		V	17265	22.8	23.2	46.0	54(note3)	-8.0	PK	
	159	H	11630	24.9	15.9	40.8	54(note3)	-13.2	PK	
		V	11630	24.2	15.8	40.0	54(note3)	-14.0	PK	
		H	17445	21.4	23.6	45.0	54(note3)	-9.0	PK	
		V	17445	21.5	23.7	45.2	54(note3)	-8.8	PK	
	Ant 0+1	3	H	4844.0	30.3	7.2	37.5	54(note3)	-16.5	PK
			V	4986.5	32.4	7.5	39.9	54(note3)	-14.1	PK
			H	7266.0	30.0	10.7	40.7	54(note3)	-13.3	PK
			V	7264.5	32.3	10.7	43.0	54(note3)	-11.0	PK
H			9688.0	35.3	5.0	40.3	54(note3)	-13.7	PK	
V			9688.0	35.5	5.1	40.6	54(note3)	-13.4	PK	
6		H	4876.0	34.7	7.2	41.9	54(note3)	-12.1	PK	
		V	4876.0	38.3	7.2	45.5	54(note3)	-8.5	PK	
		H	7315.5	41.9	10.8	52.7	54(note3)	-1.3	PK	
		V	7298.5	41.8	10.8	52.6	54(note3)	-1.4	PK	
		H	9748.0	35.3	5.0	40.3	54(note3)	-13.7	PK	
		V	9748.0	35.1	5.1	40.2	54(note3)	-13.8	PK	
9		H	4904.0	30.1	7.2	37.3	54(note3)	-16.7	PK	
		V	4893.0	32.2	7.2	39.4	54(note3)	-14.6	PK	
		H	7349.5	33.7	10.8	44.5	54(note3)	-9.5	PK	
		V	7358.0	33.8	10.8	44.6	54(note3)	-9.4	PK	
		H	9808.0	34.3	5.1	39.4	54(note3)	-14.6	PK	

	V	9808.0	34.3	5.2	39.5	54(note3)	-14.5	PK
151	H	11510	27.2	15.6	42.8	54(note3)	-11.2	PK
	V	11506	31.3	15.5	46.8	54(note3)	-7.2	PK
	H	17265	23.1	23.1	46.2	54(note3)	-7.8	PK
	V	17265	22.8	23.2	46.0	54(note3)	-8.0	PK
	H	11630	24	15.9	39.9	54(note3)	-14.1	PK
159	V	11574	28.8	15.7	44.5	54(note3)	-9.5	PK
	H	17445	21	23.6	44.6	54(note3)	-9.4	PK
	V	17445	21	23.7	44.7	54(note3)	-9.3	PK

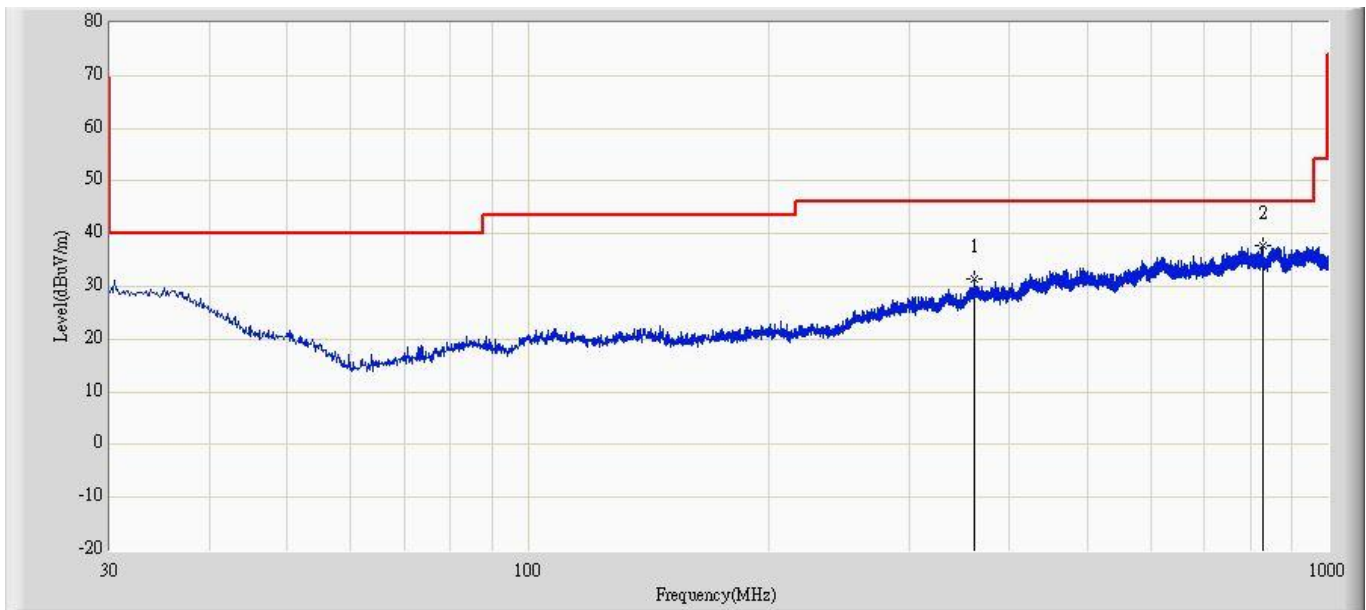
Note: 1. Measure Level = Reading Level + Factor.

2. The test trace is same as the ambient noise (the test frequency range: 9kHz~30MHz, 18GHz~25GHz), therefore no data appear in the report.

3. This limit applies for using average detector, if the test result on peak is lower than average limit, then average measurement needn't be performed.

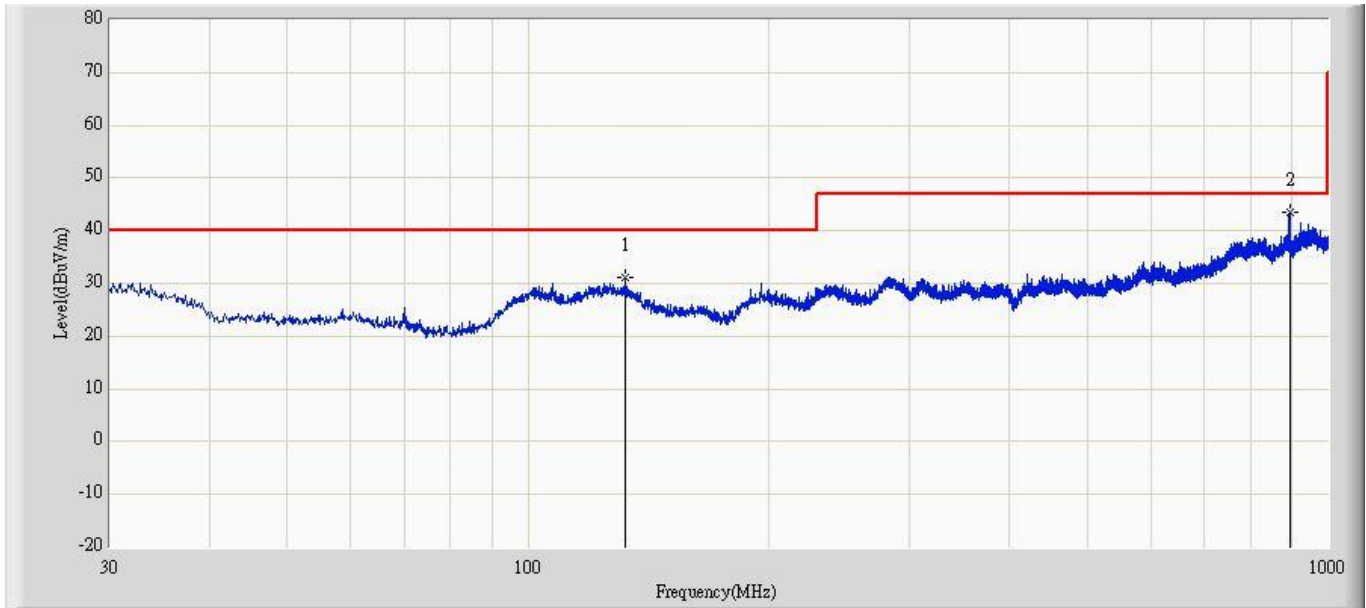
The worst case of Radiated Emission below 1GHz:

Engineer: Pig	
Site: AC3	Time: 2014/01/26 - 15:48
Limit: FCC_Part15.209_RE(3m)	Margin: 0
Probe: AC3_10m (30-1000MHz)20130511	Polarity: Horizontal
EUT: IP-STB	Power: AC120V/60Hz
Note: Mode 4: Transmit at channel 2437MHz by 802.11n20(MHz) Ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		361.497	31.480	5.865	-14.520	46.000	25.616	QP
2	*	828.674	37.635	6.569	-8.365	46.000	31.066	QP

Engineer: Pig	
Site: AC3	Time: 2013/12/19 - 15:58
Limit: EN55022_RE(3m)_ClassB	Margin: 0
Probe: AC3_10m (30-1000MHz)20130511	Polarity: Vertical
EUT: IP-STB	Power: AC120V/60Hz
Note: Mode 4: Transmit at channel 2437MHz by 802.11n20(MHz) Ant0	



No	Mark	Frequency (MHz)	Measure Level (dBuV/m)	Reading Level (dBuV)	Over Limit (dB)	Limit (dBuV/m)	Factor (dB)	Type
1		132.456	31.067	6.499	-8.933	40.000	24.568	QP
2	*	895.240	43.646	10.114	-3.354	47.000	33.532	QP

5. RF Antenna Conducted Spurious

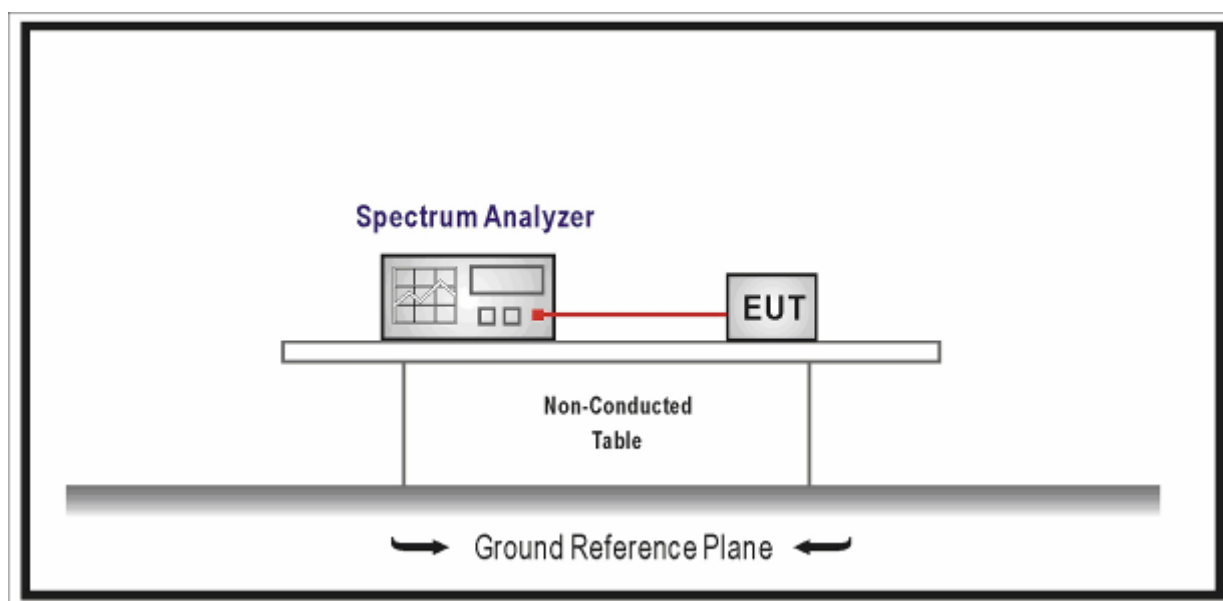
5.1. Test Equipment

RF Antenna Conducted Spurious / TR-8

Instrument	Manufacturer	Type No.	Serial No.	Cal. Date
Spectrum Analyzer	Agilent	E4446A	MY45300103	2015.01.07
Spectrum Analyzer	Agilent	N9010A	MY48030494	2014.03.30
Temperature/Humidity Meter	zhicheng	ZC1-2	TR8-TH	2014.05.07

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2. Test Setup



5.3. Limit

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 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.

5.4. Test Procedure

The EUT was tested according to KDB 558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

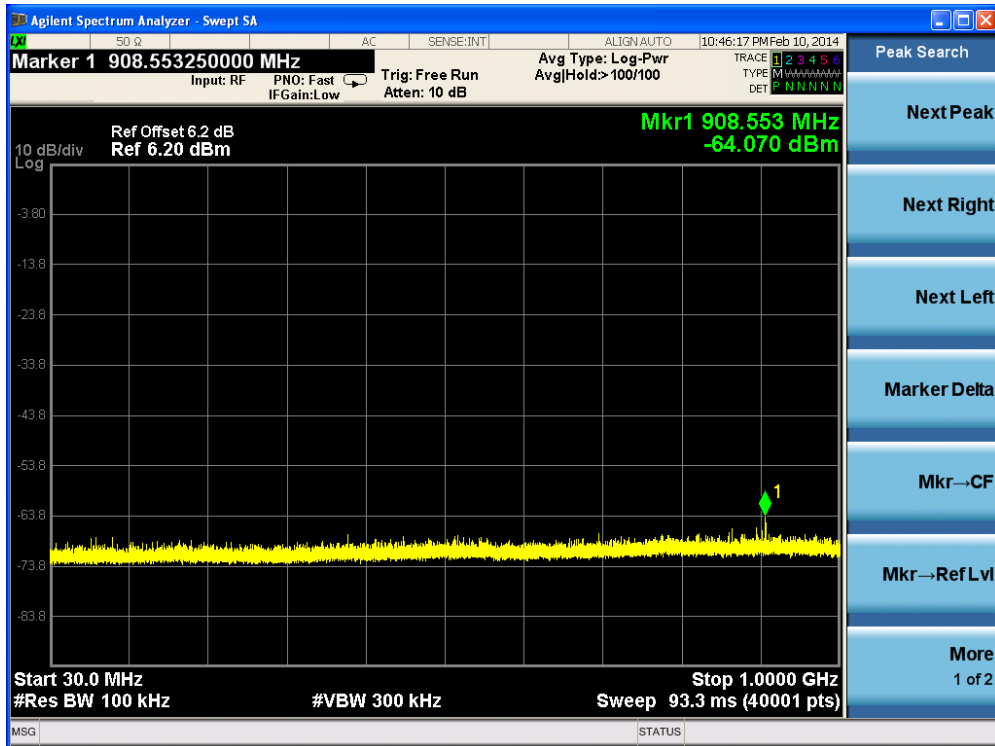
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

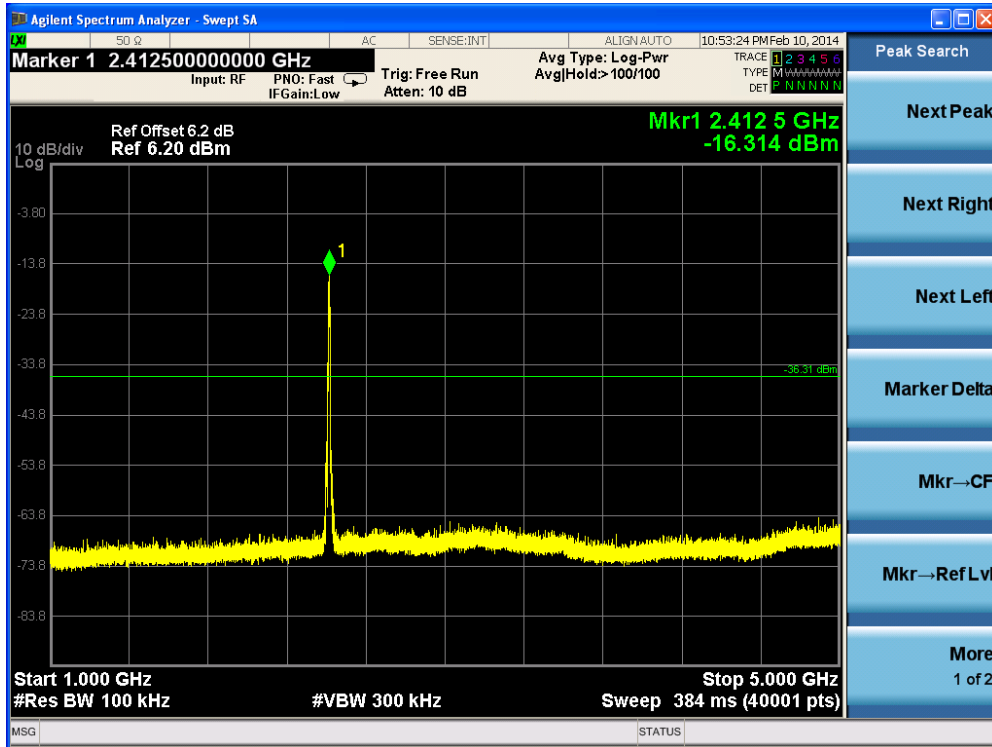
5.6. Test Result

Product	: IP-STB
Test Item	: RF Antenna Conducted Spurious
Test Site	: TR-8
Test Mode	: Mode 1: Transmit by 802.11b (Ant 0)

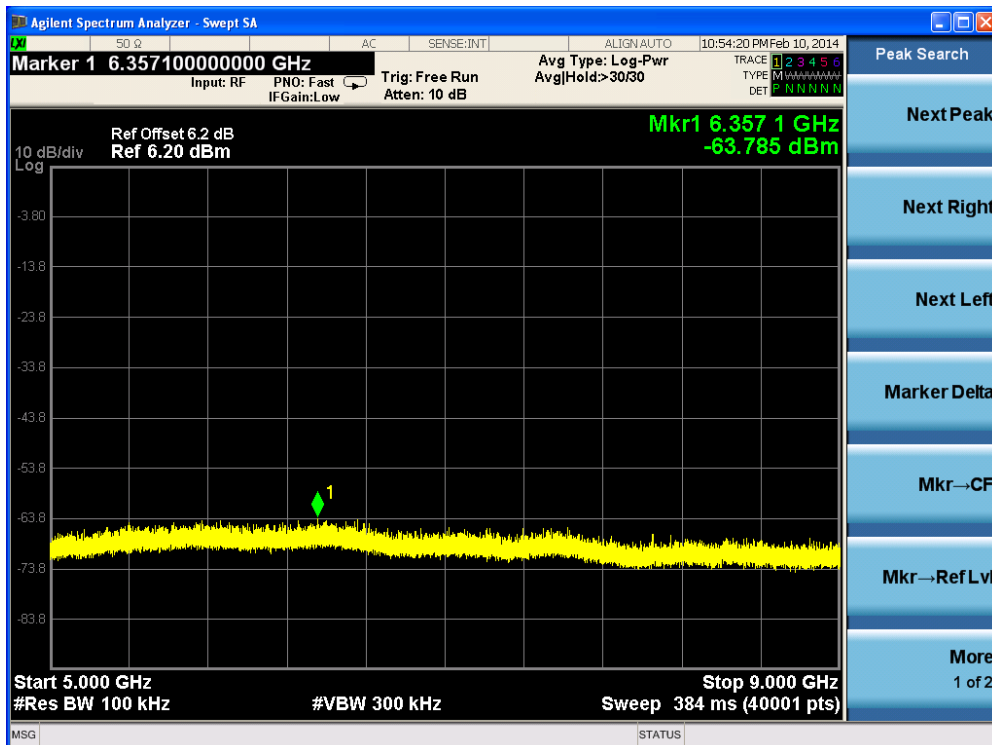
Channel 01 (2412MHz)-1



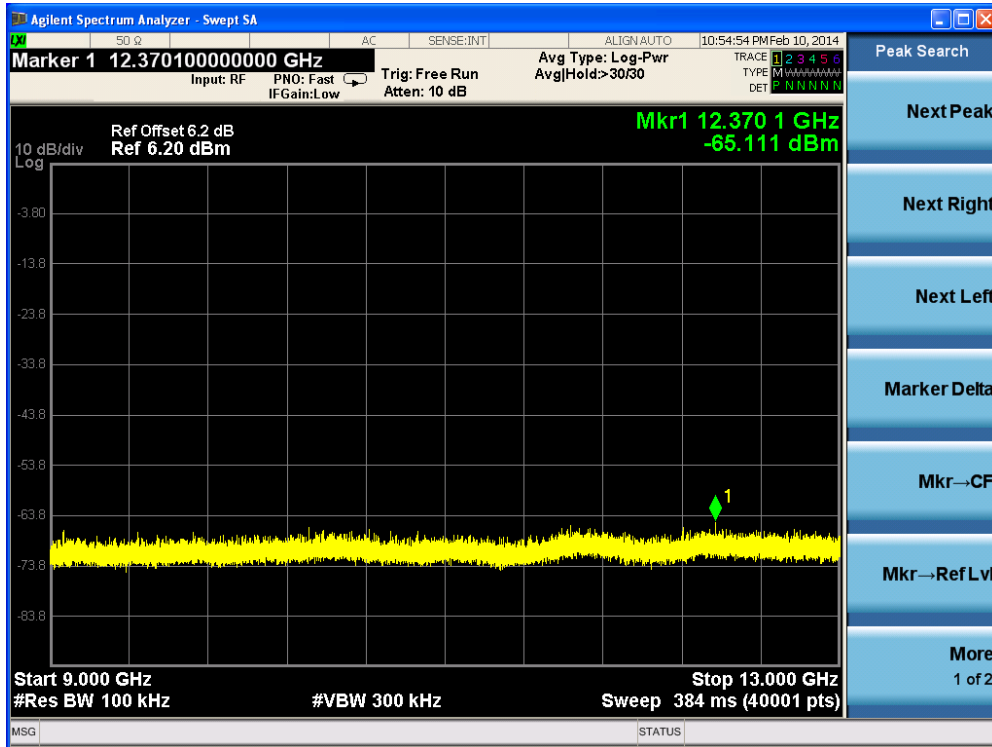
Channel 01 (2412MHz)-2



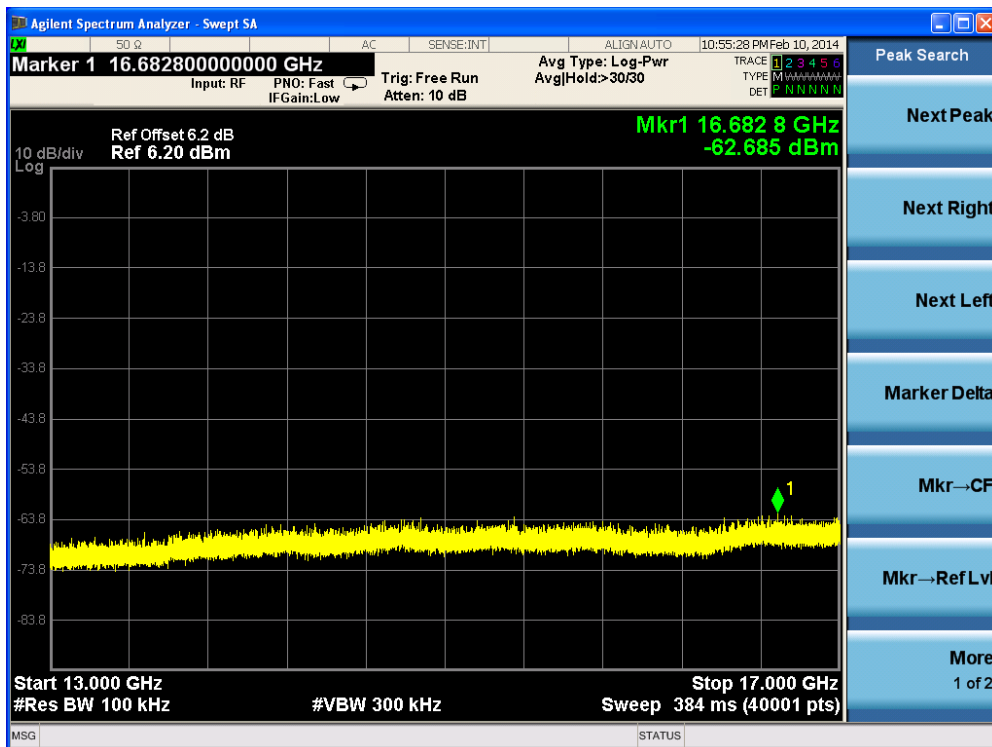
Channel 01 (2412MHz)-3



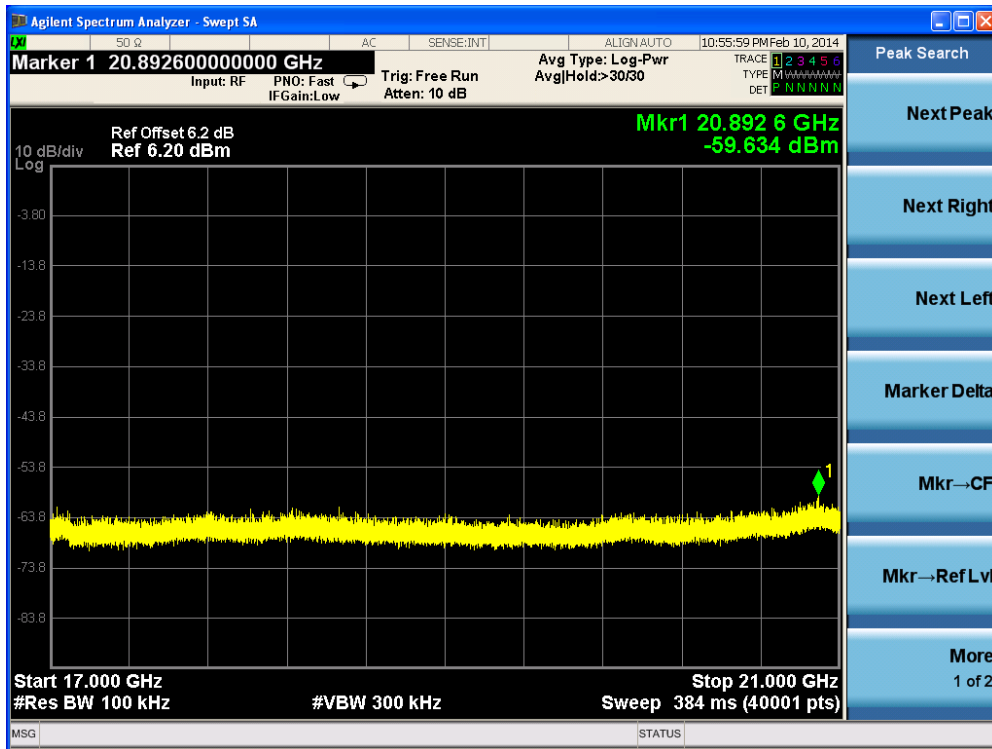
Channel 01 (2412MHz)-4



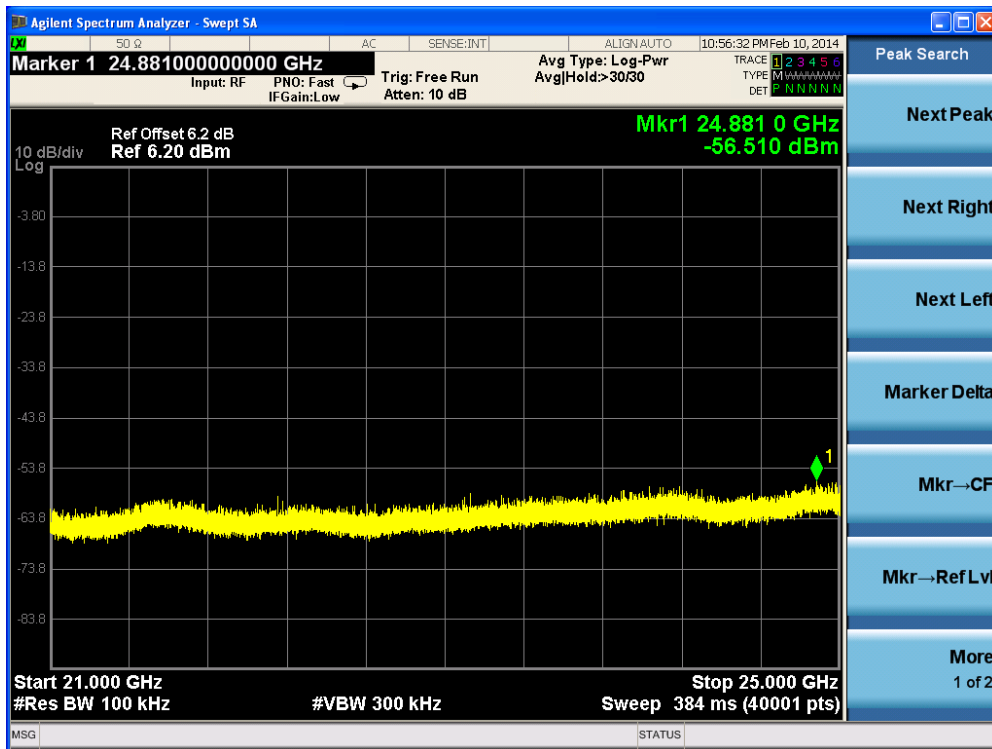
Channel 01 (2412MHz)-5



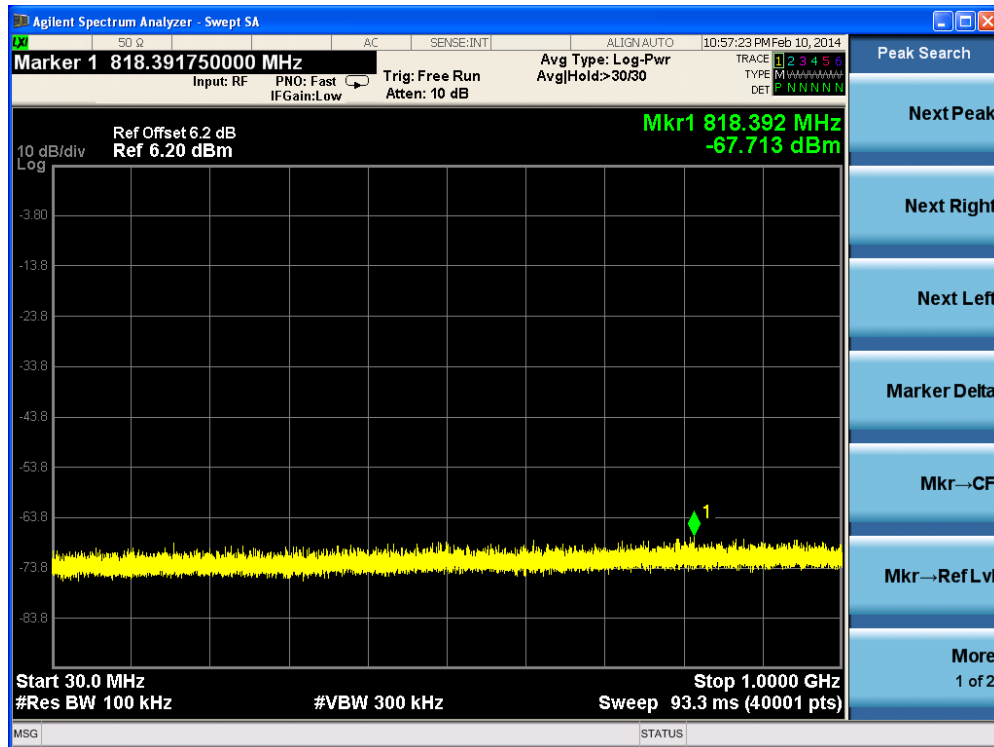
Channel 01 (2412MHz)-6



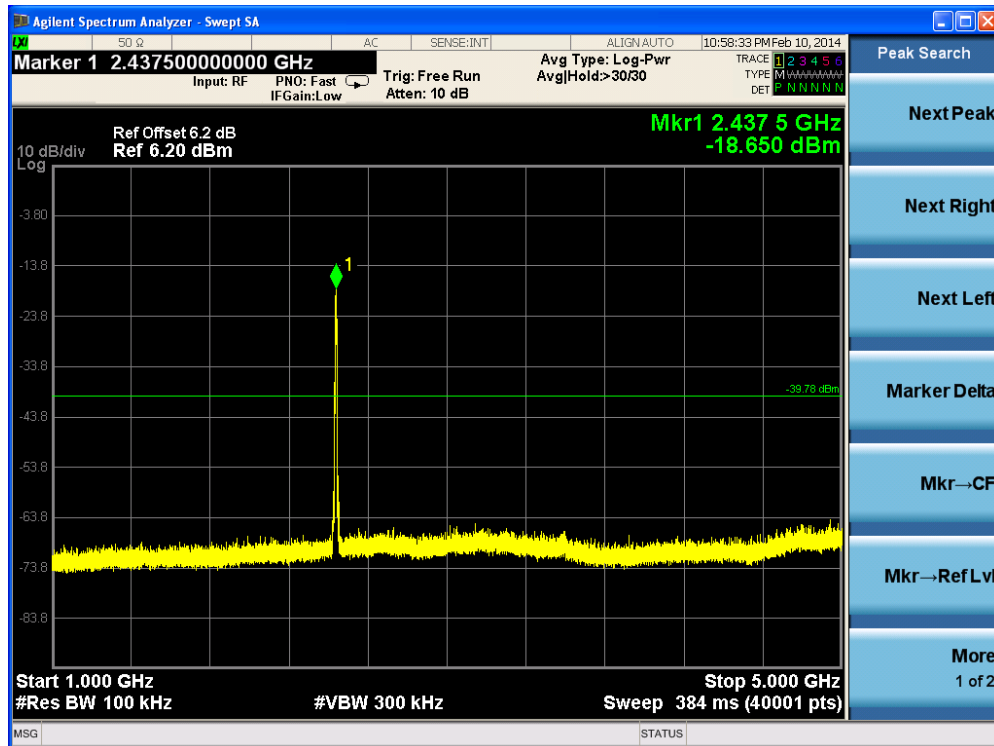
Channel 01 (2412MHz)-7



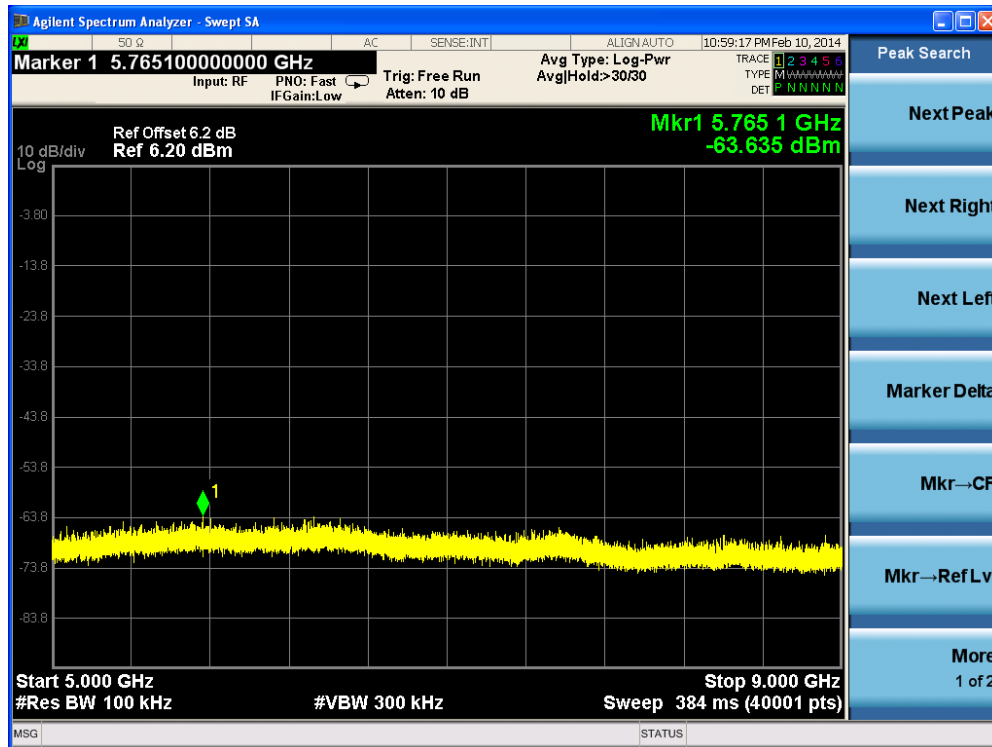
Channel 06 (2437MHz)-1



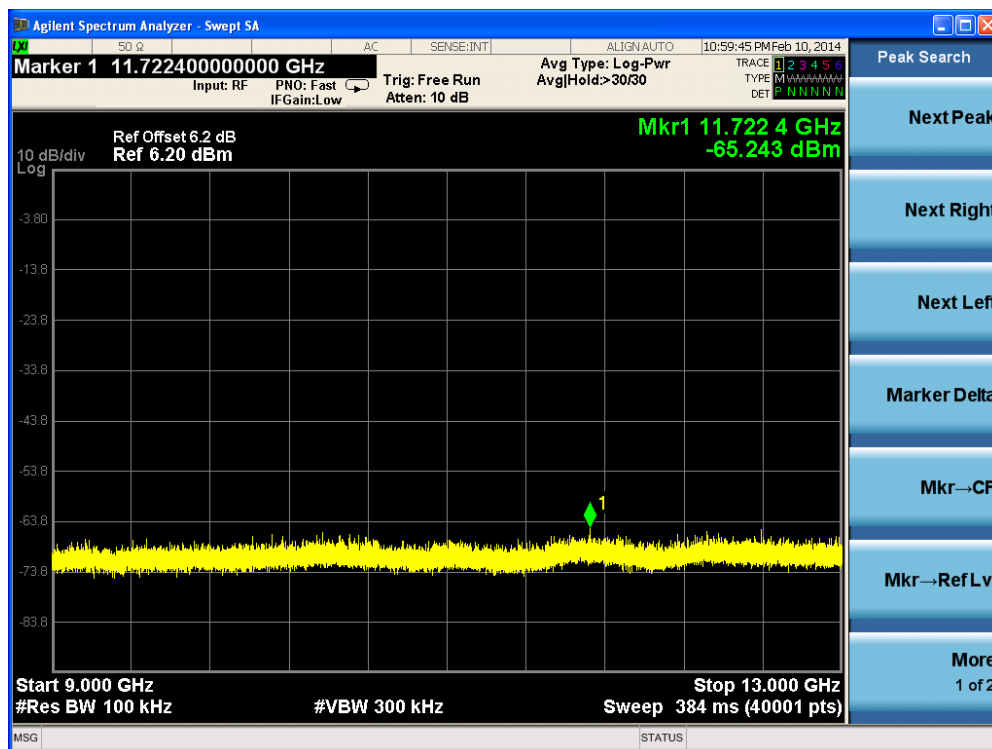
Channel 06 (2437MHz)-2



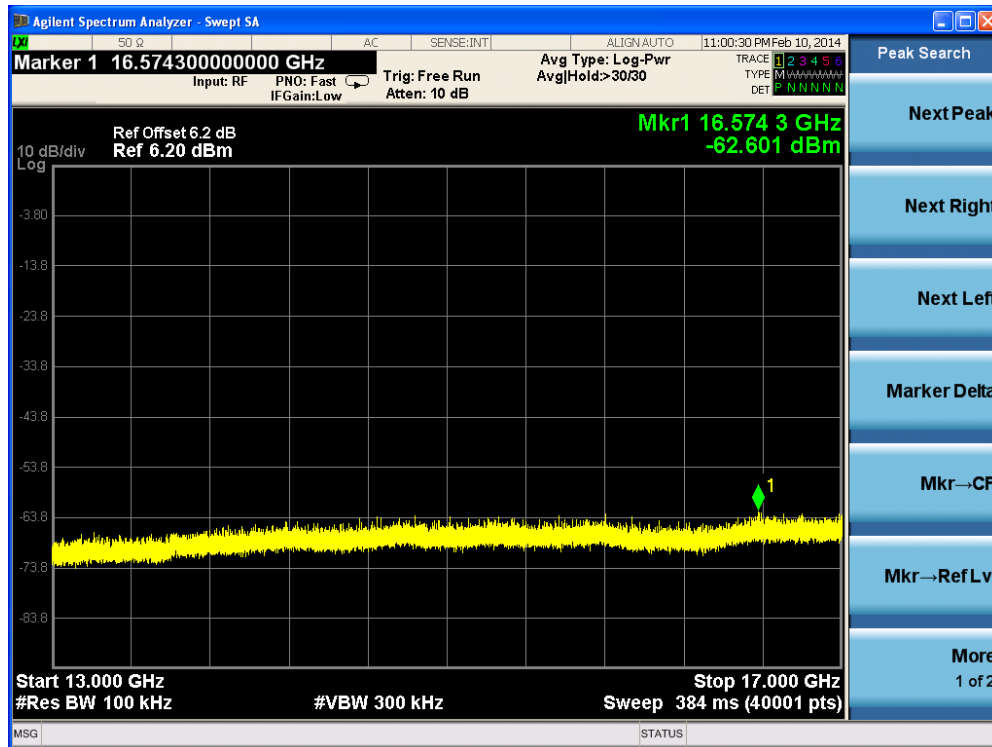
Channel 06 (2437MHz)-3



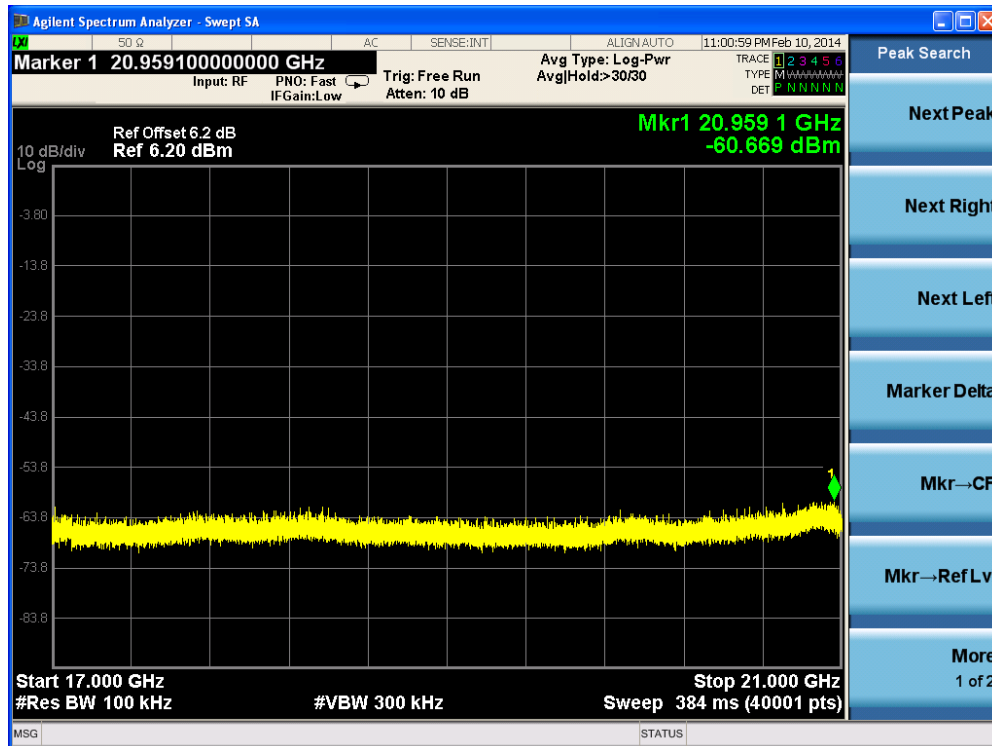
Channel 06 (2437MHz)-4



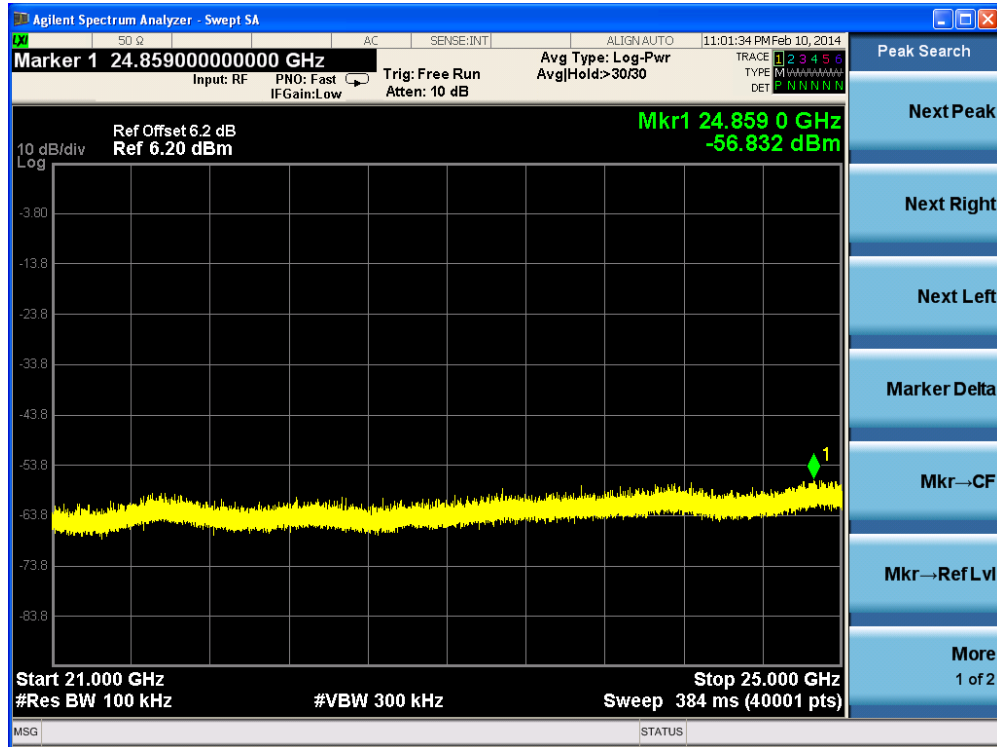
Channel 06 (2437MHz)-5



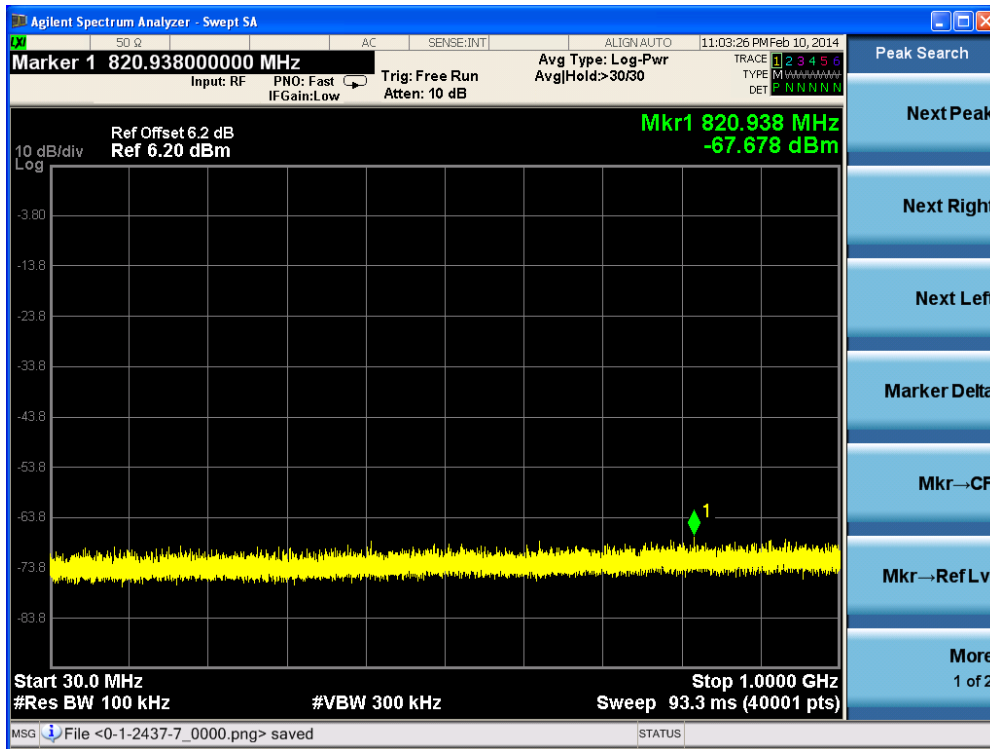
Channel 06 (2437MHz)-6



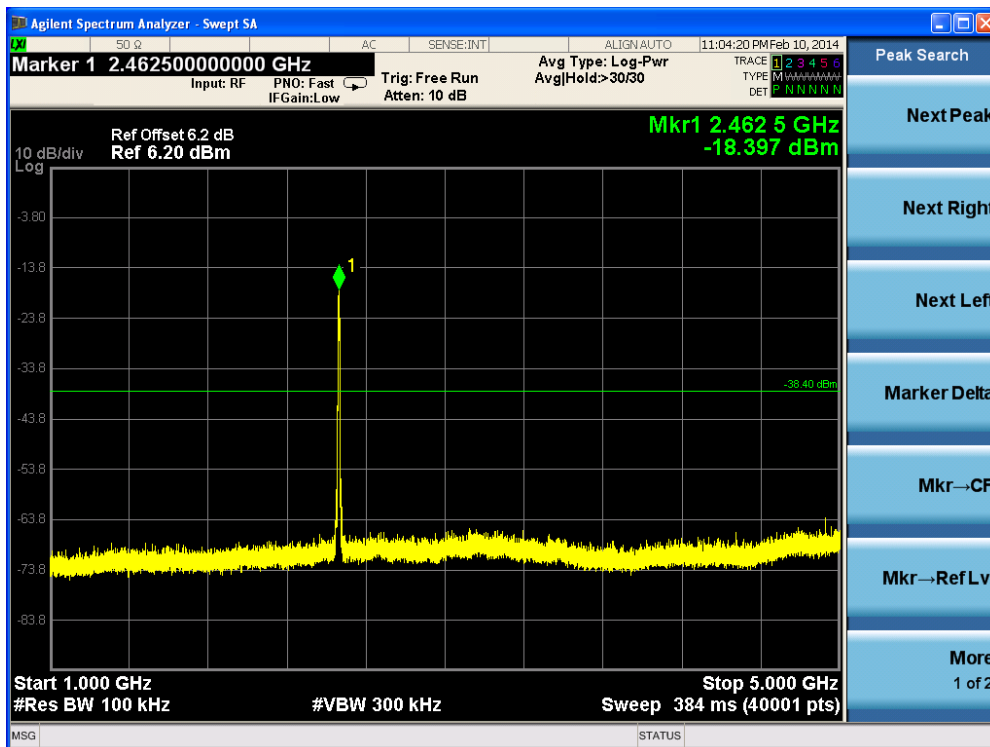
Channel 06 (2437MHz)-7



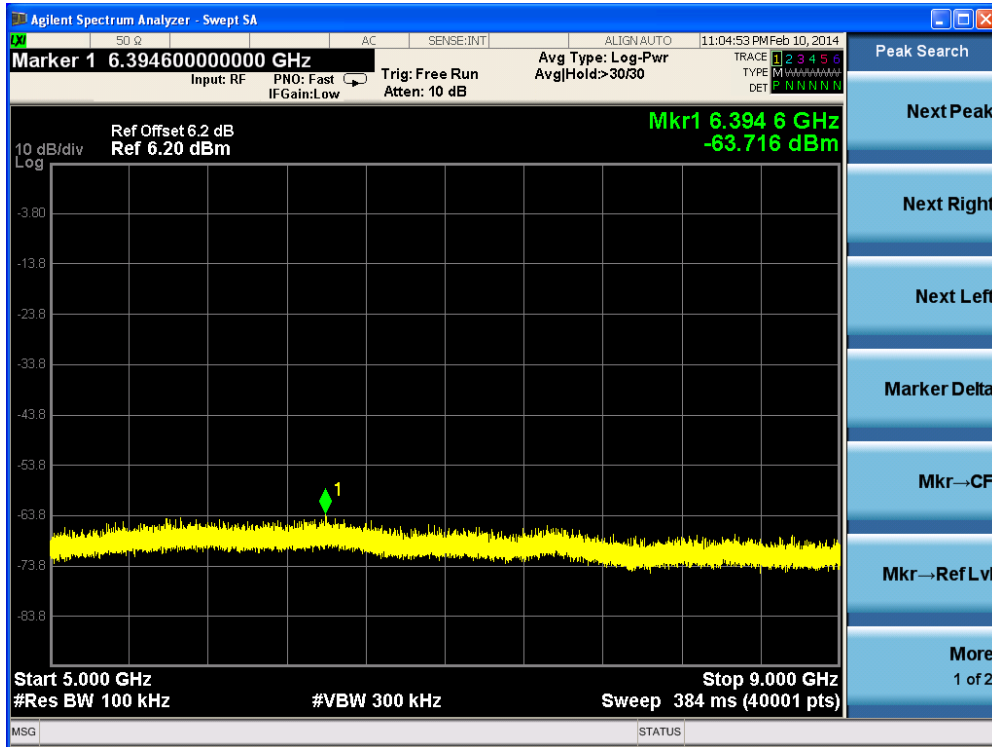
Channel 11 (2462MHz)-1



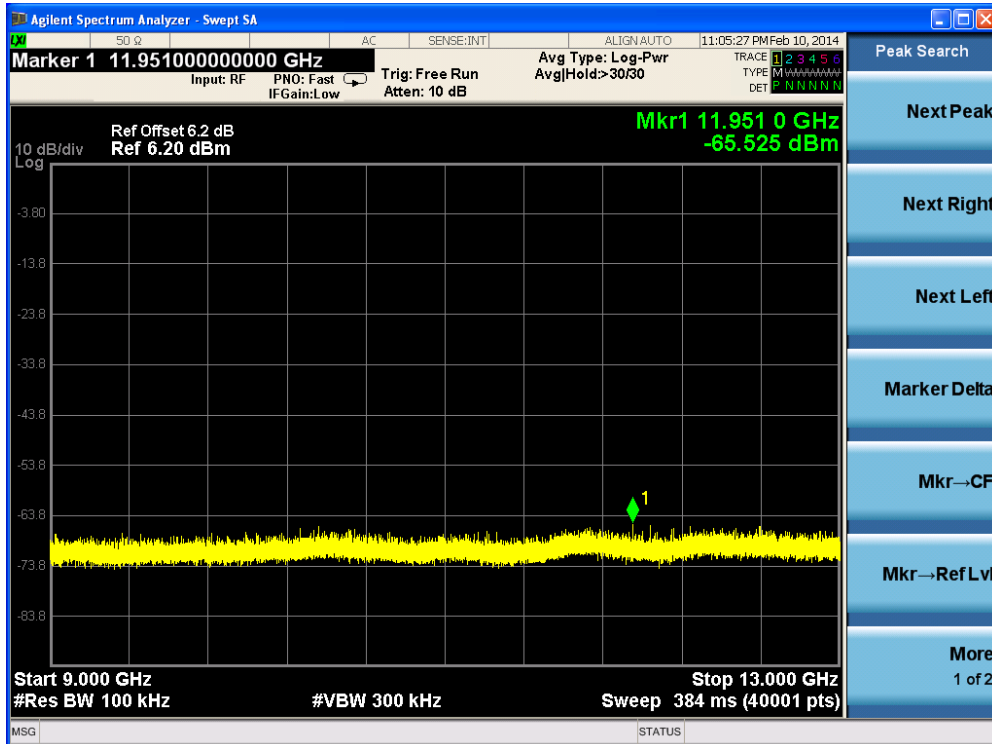
Channel 11 (2462MHz)-2



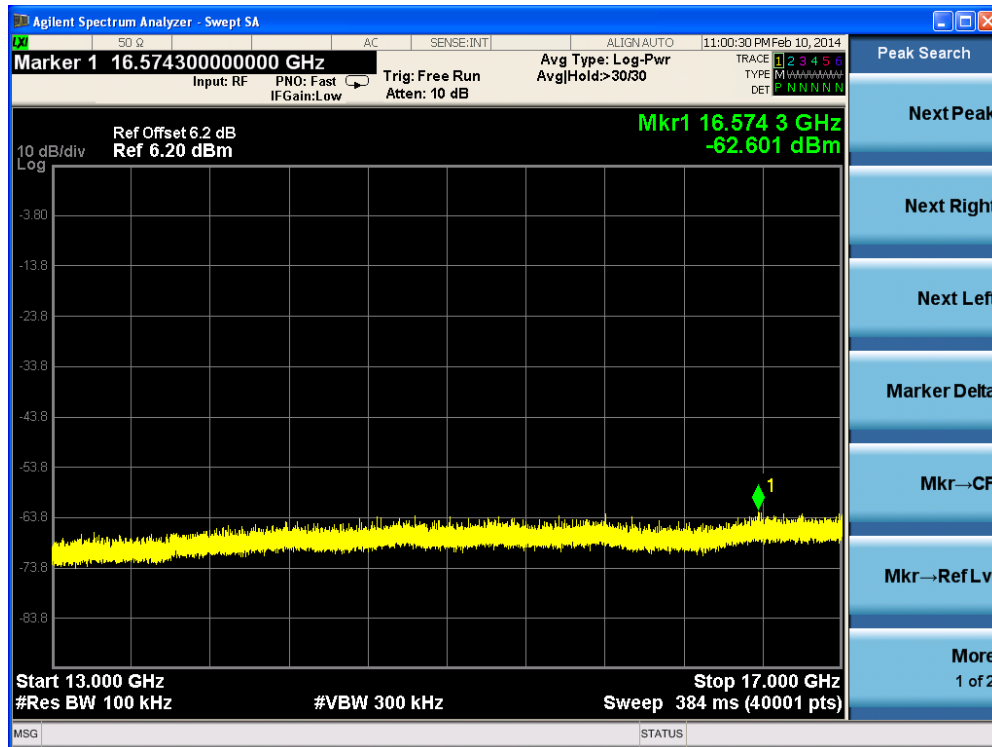
Channel 11 (2462MHz)-3



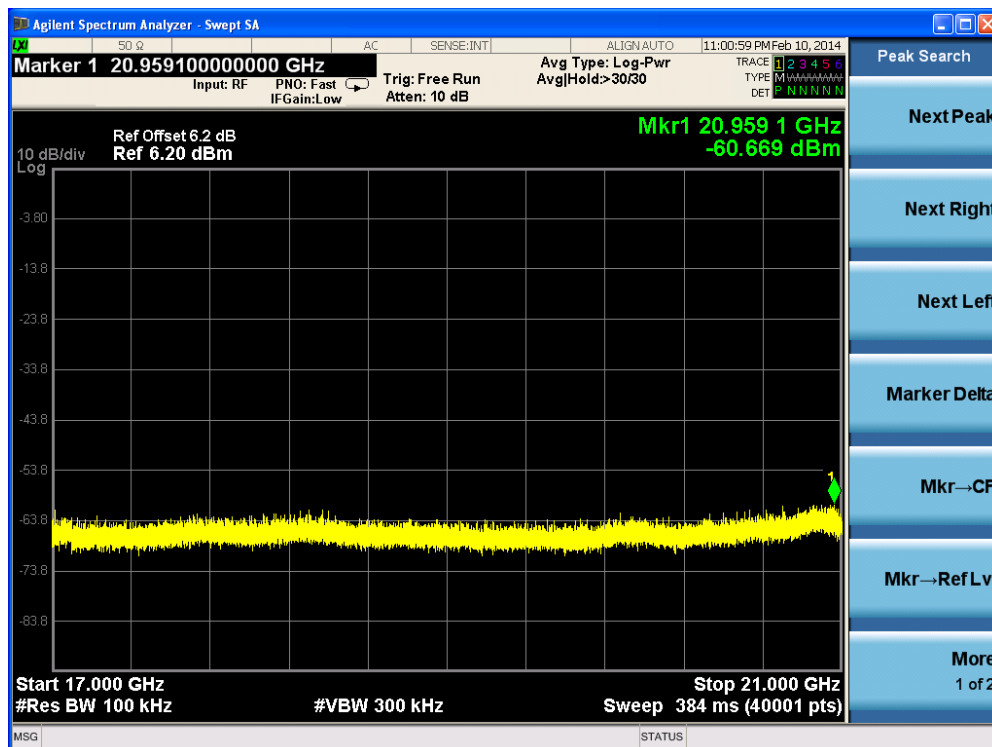
Channel 11 (2462MHz)-4



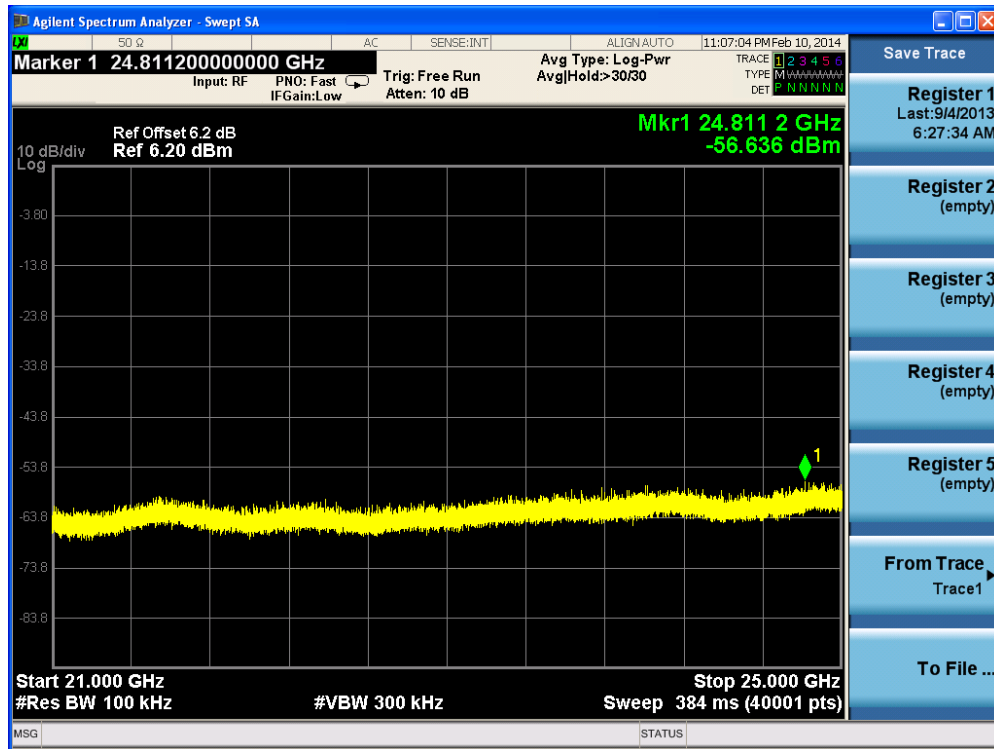
Channel 11 (2462MHz)-5



Channel 11 (2462MHz)-6

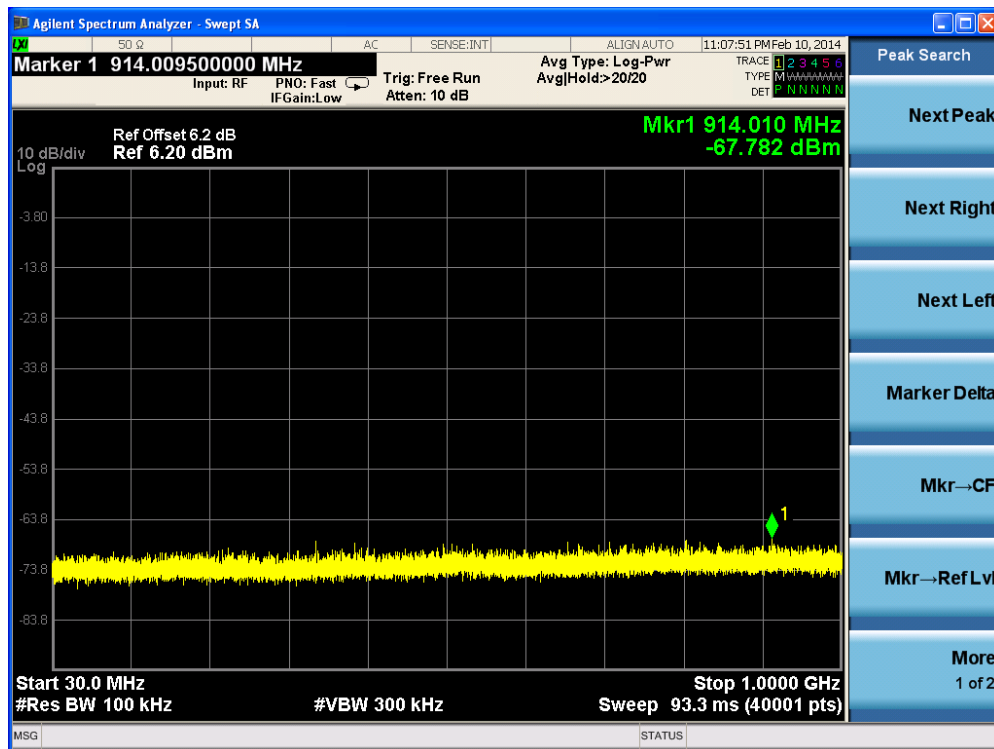


Channel 11 (2462MHz)-7

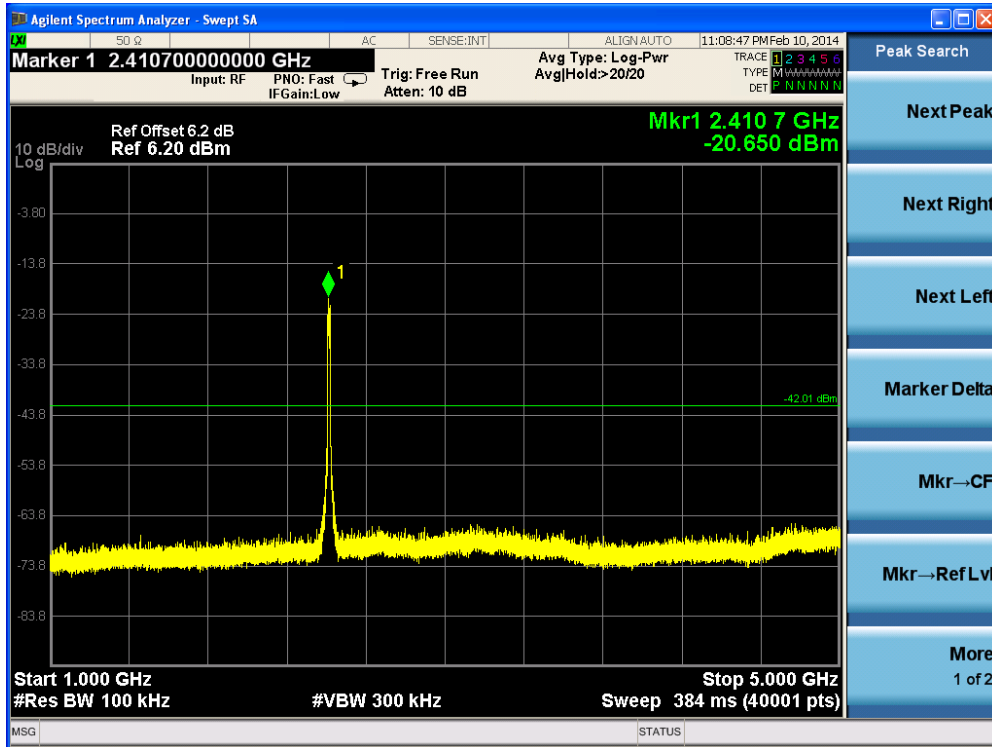


Product	: IP-STB
Test Item	: RF Antenna Conducted Spurious
Test Site	: TR-8
Test Mode	: Mode 2: Transmit by 802.11g (Ant 0)

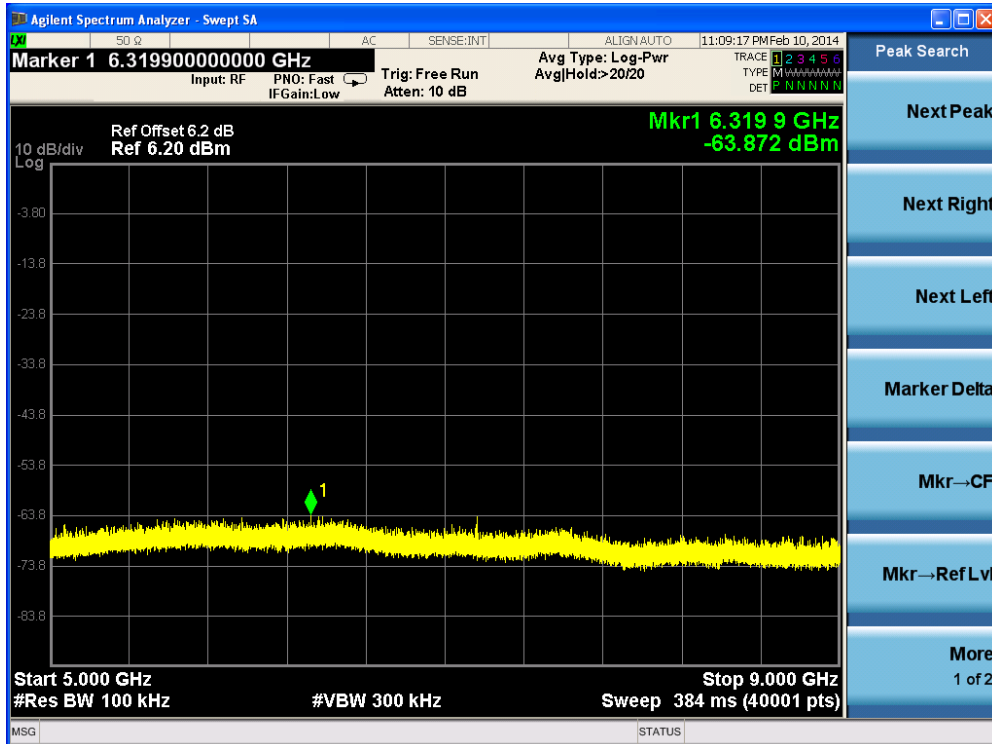
Channel 01 (2412MHz)-1



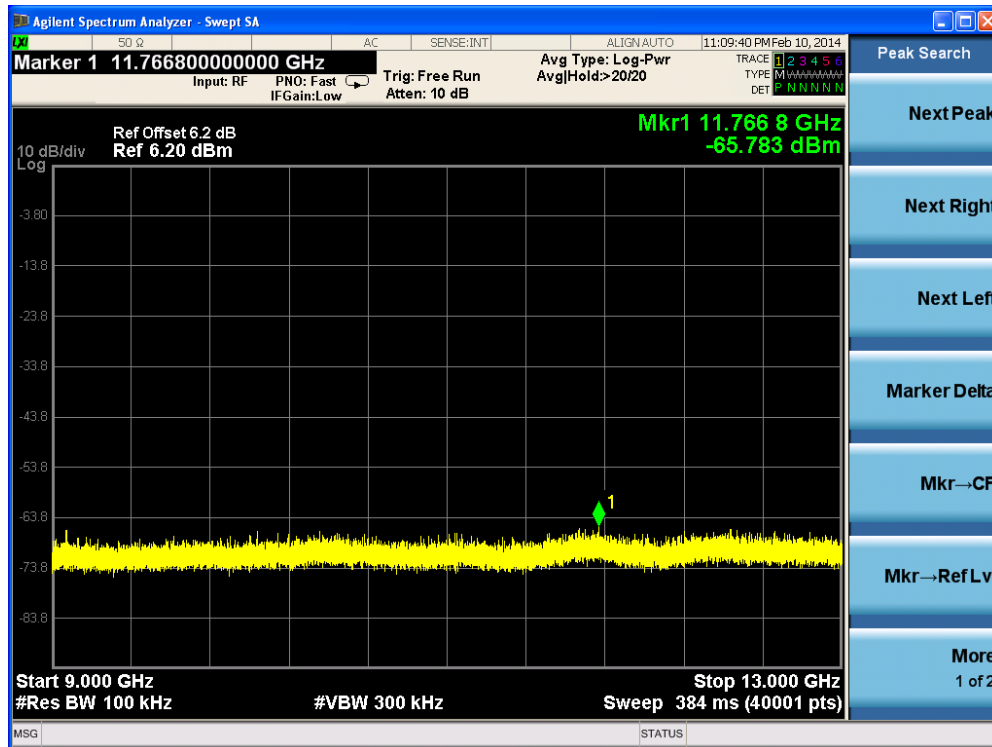
Channel 01 (2412MHz)-2



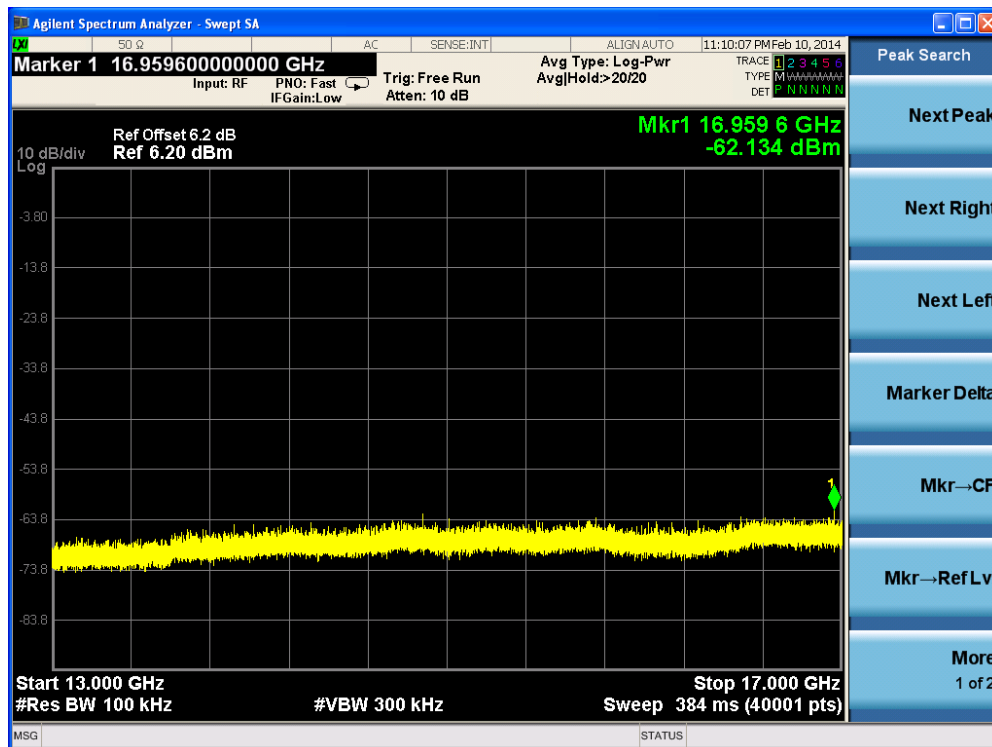
Channel 01 (2412MHz)-3



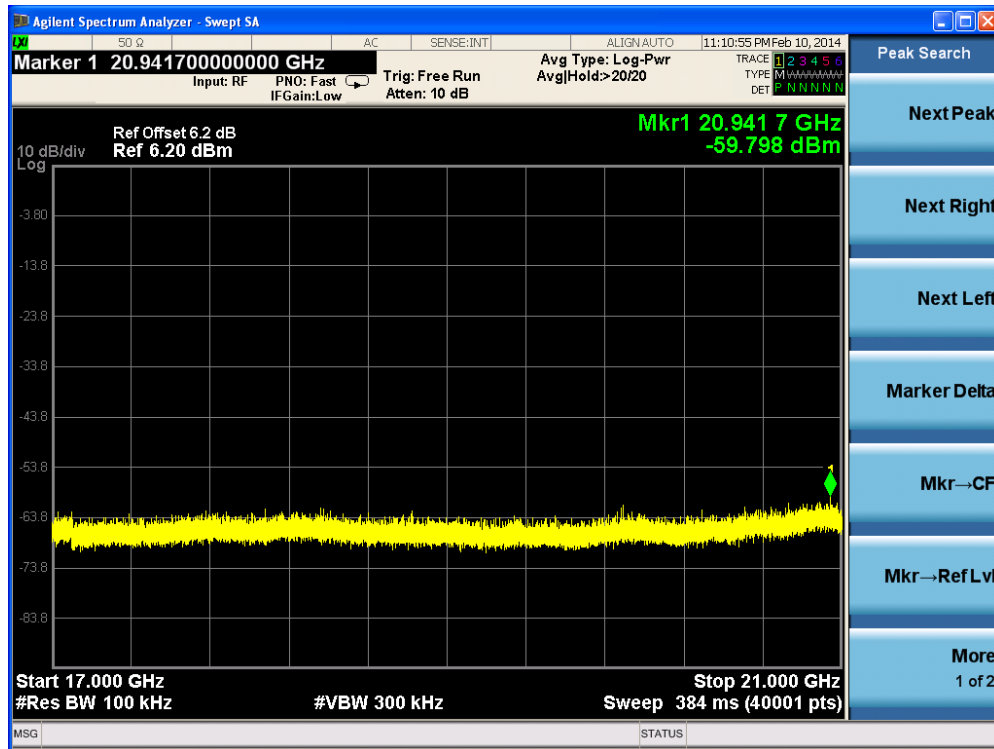
Channel 01 (2412MHz)-4



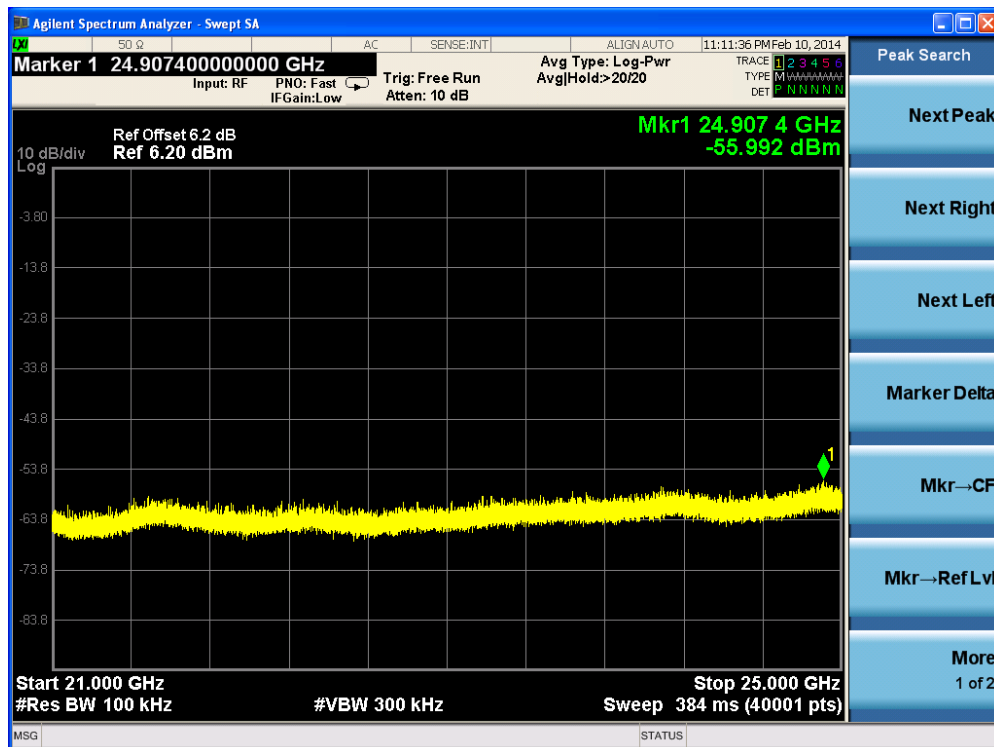
Channel 01 (2412MHz)-5



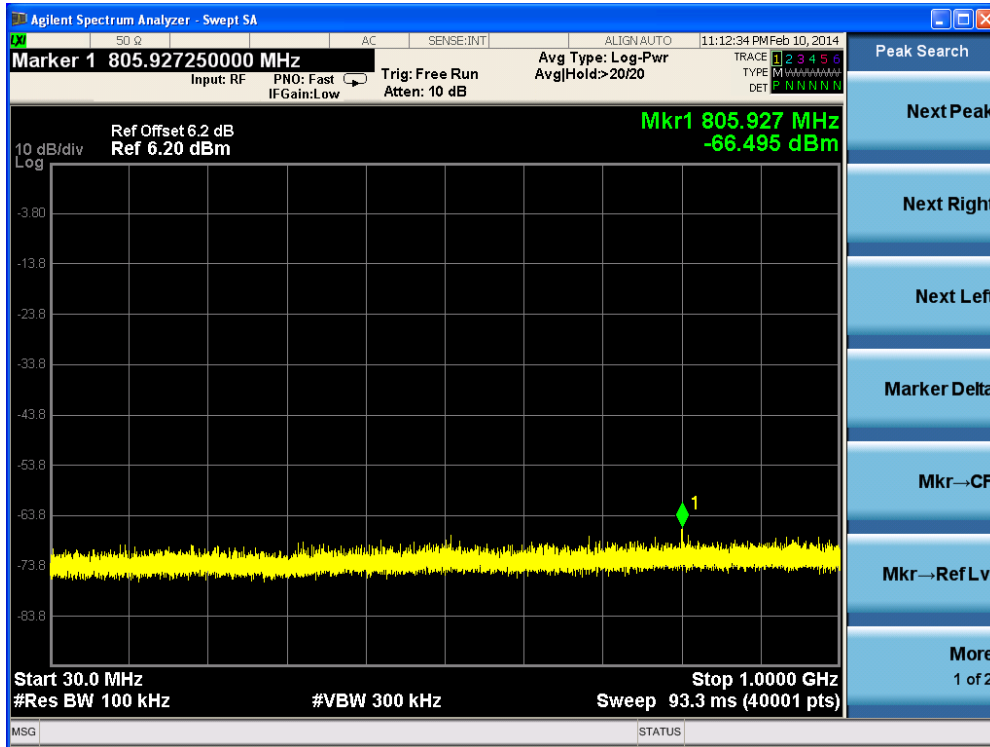
Channel 01 (2412MHz)-6



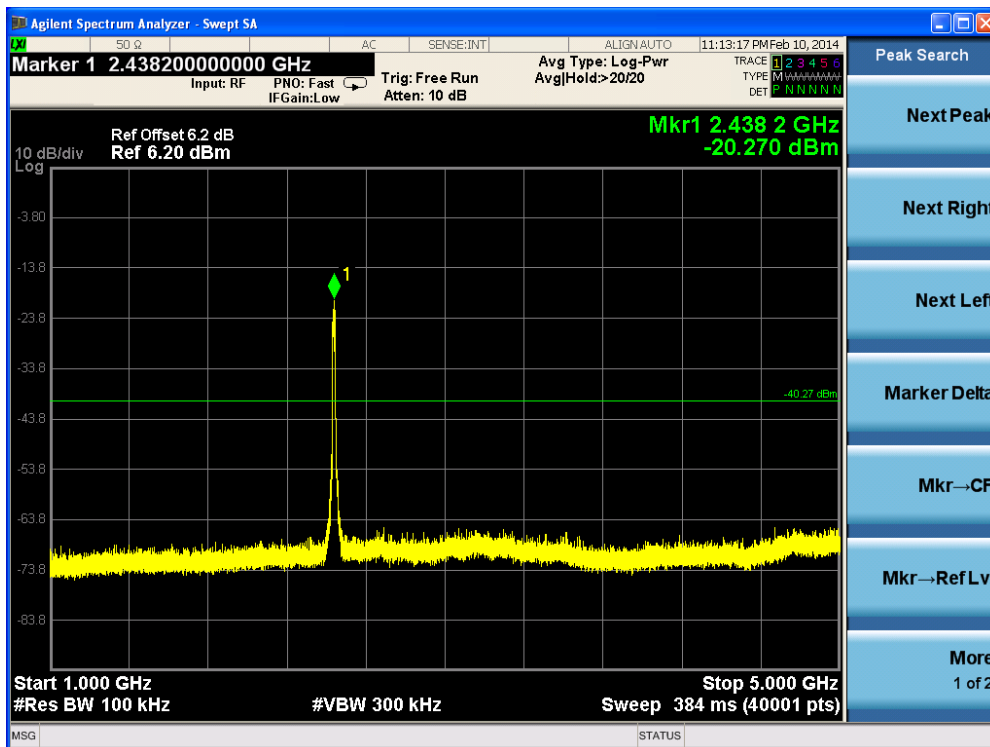
Channel 01 (2412MHz)-7



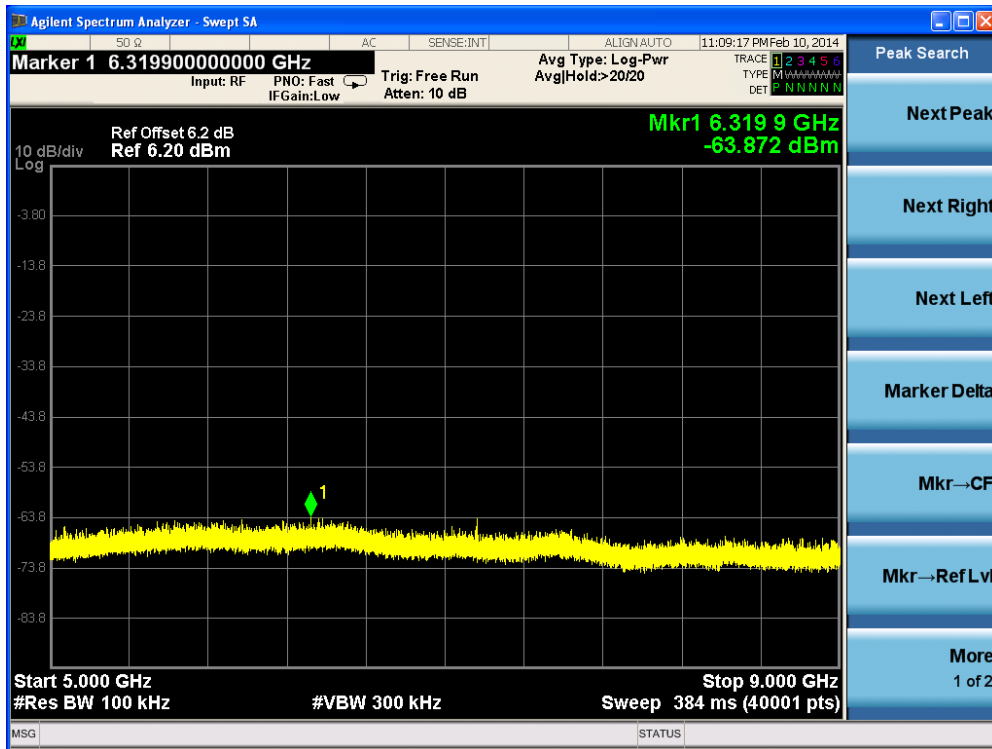
Channel 06 (2437MHz)-1



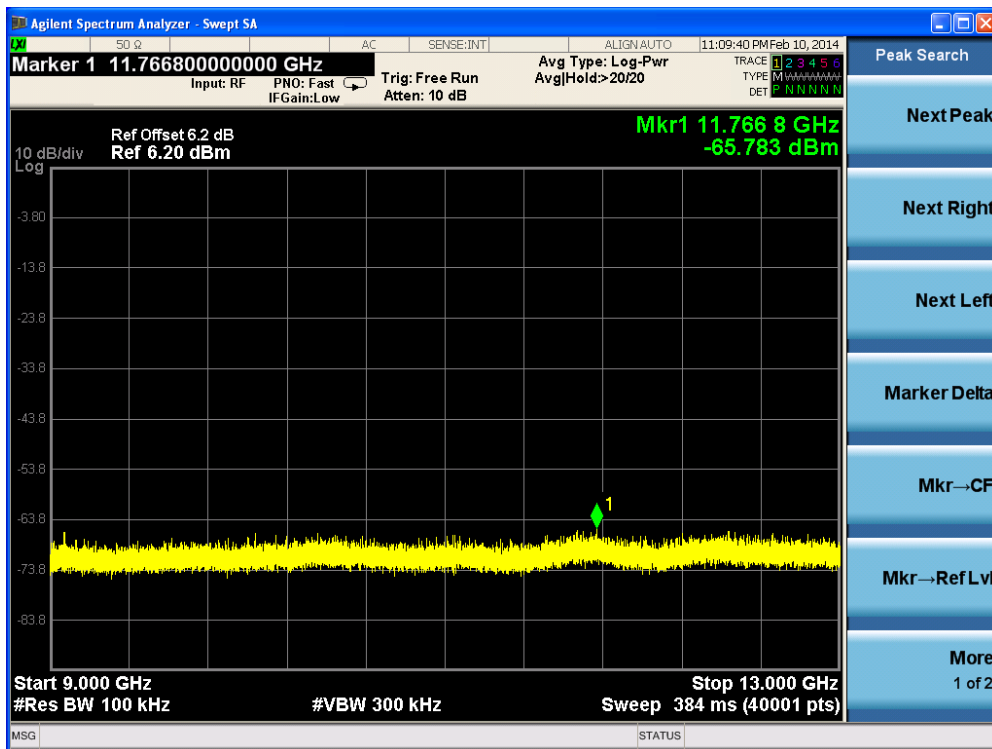
Channel 06 (2437MHz)-2



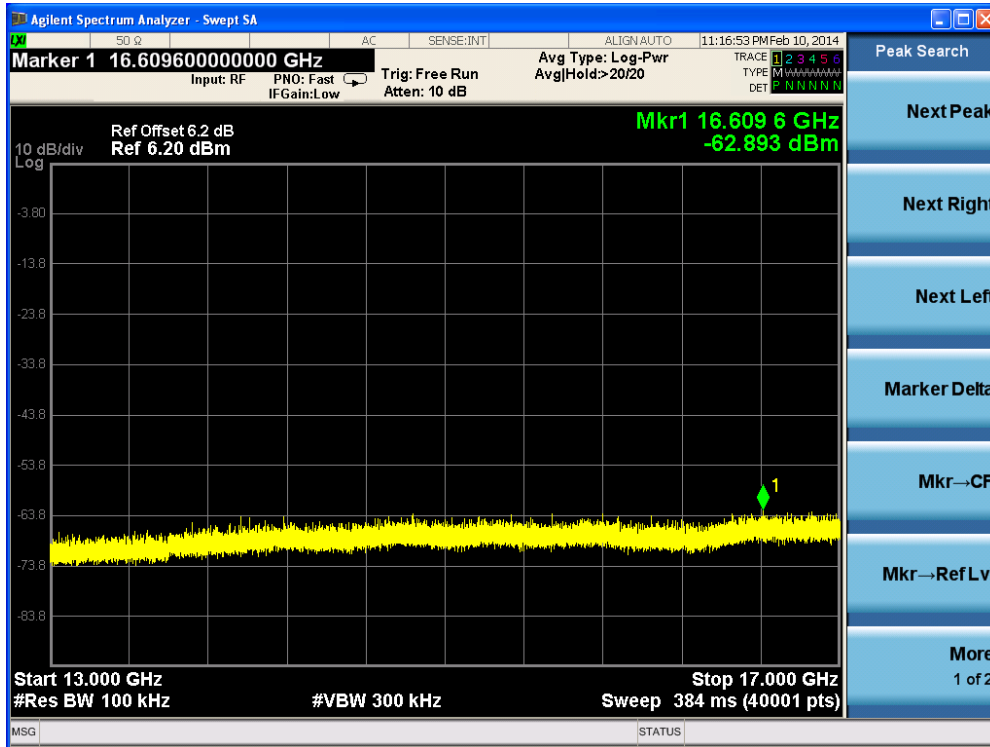
Channel 06 (2437MHz)-3



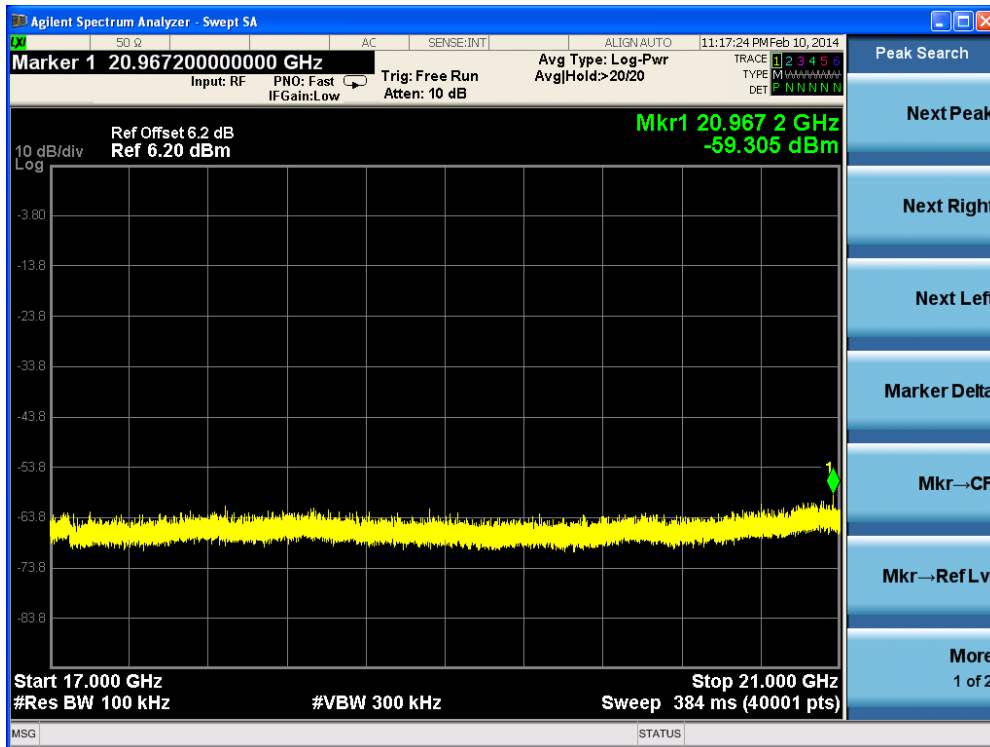
Channel 06 (2437MHz)-4



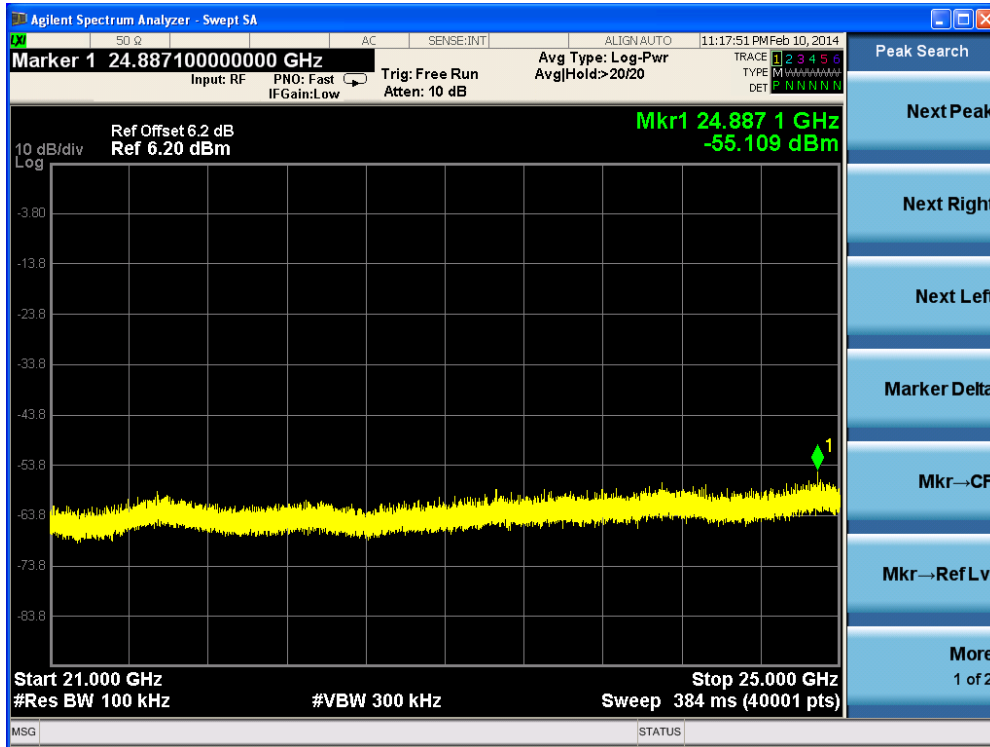
Channel 06 (2437MHz)-5



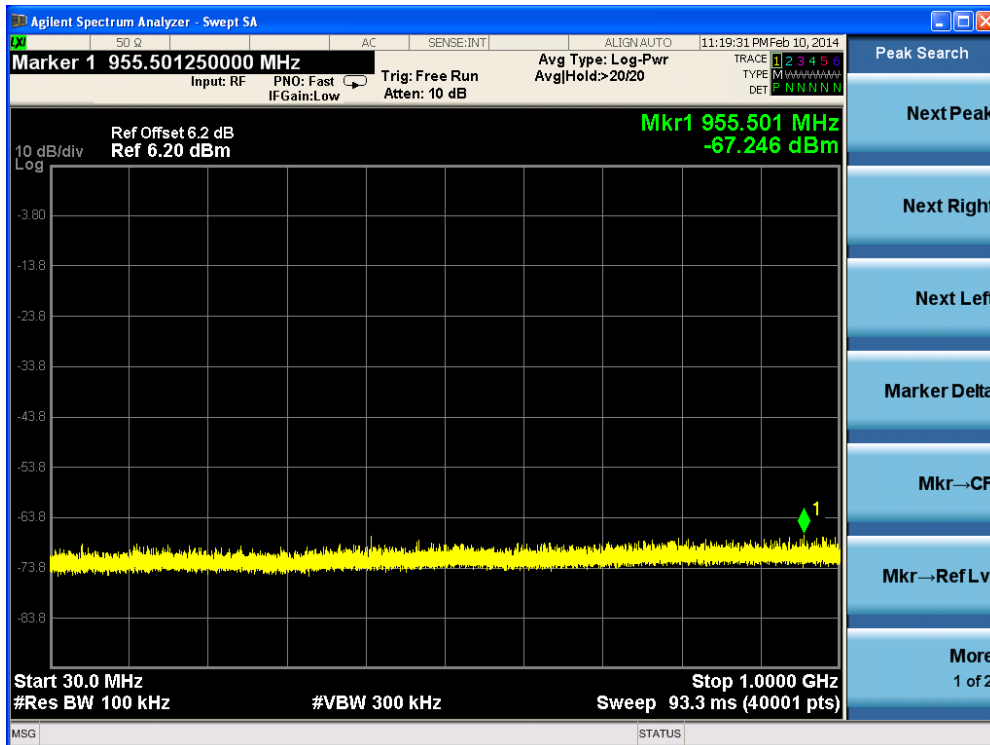
Channel 06 (2437MHz)-6



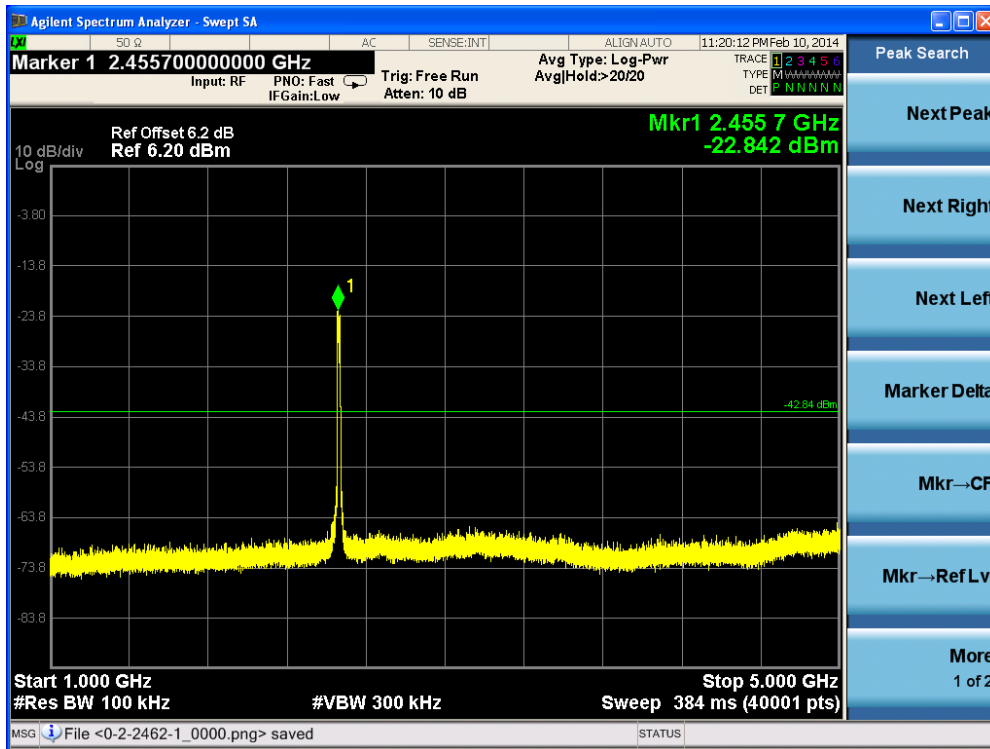
Channel 06 (2437MHz)-7



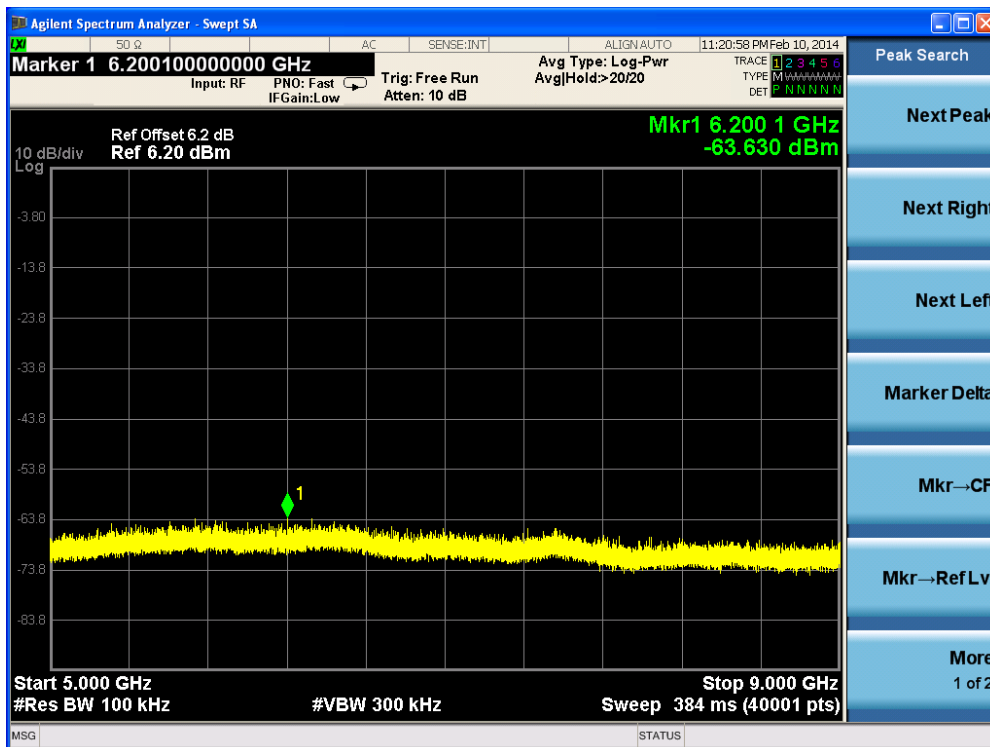
Channel 11 (2462MHz)-1



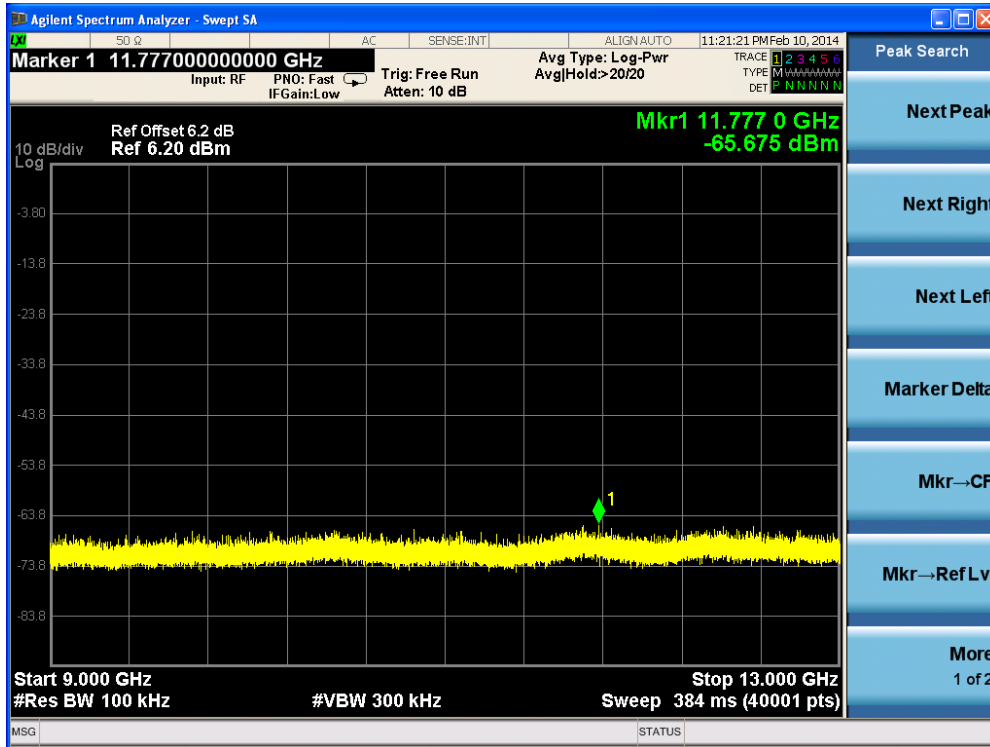
Channel 11 (2462MHz)-2



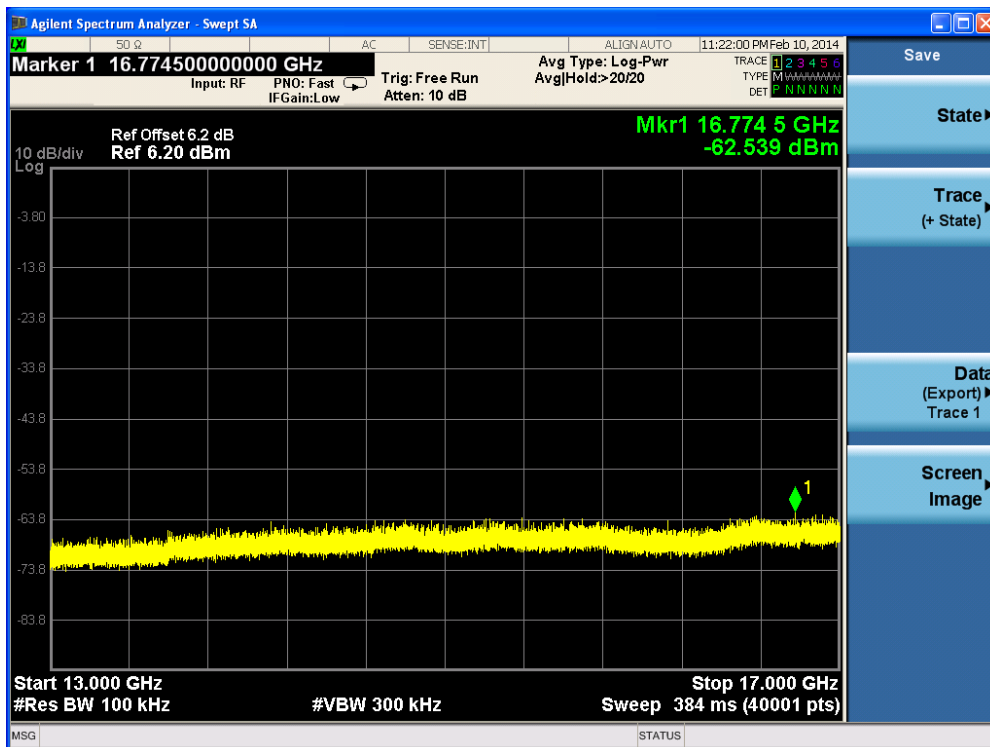
Channel 11 (2462MHz)-3



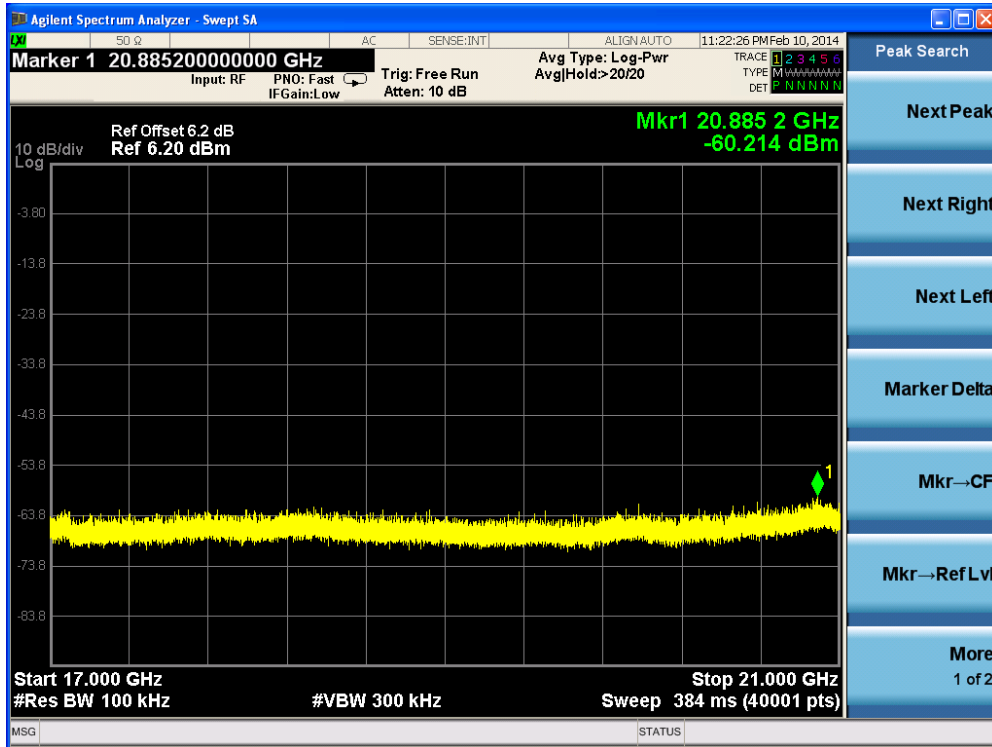
Channel 11 (2462MHz)-4



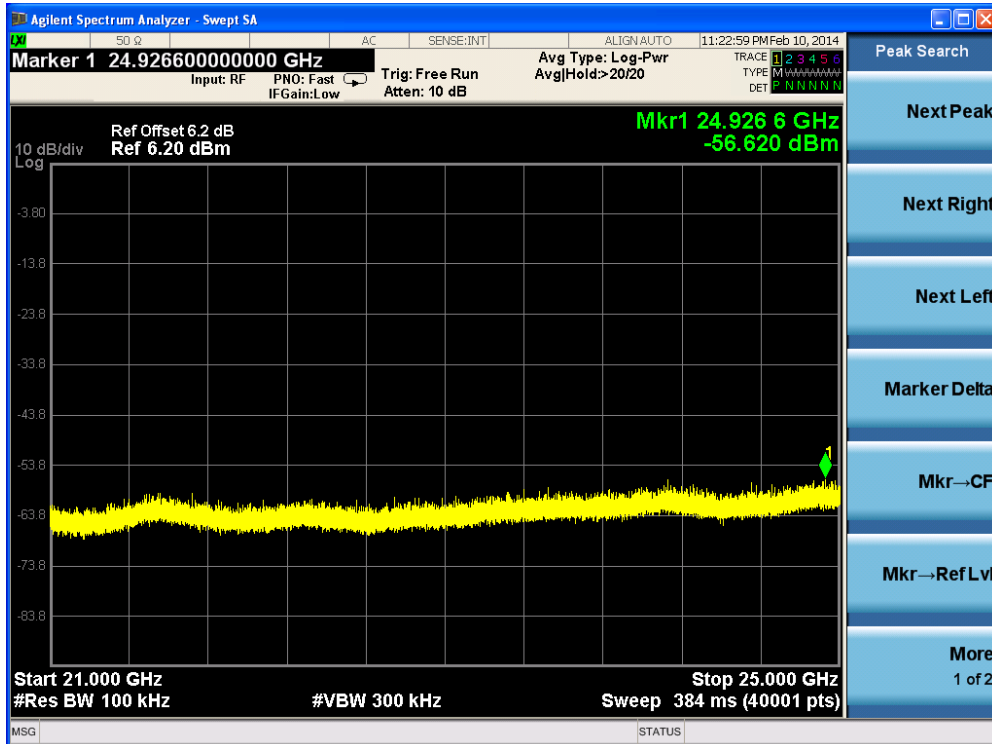
Channel 11 (2462MHz)-5



Channel 11 (2462MHz)-6

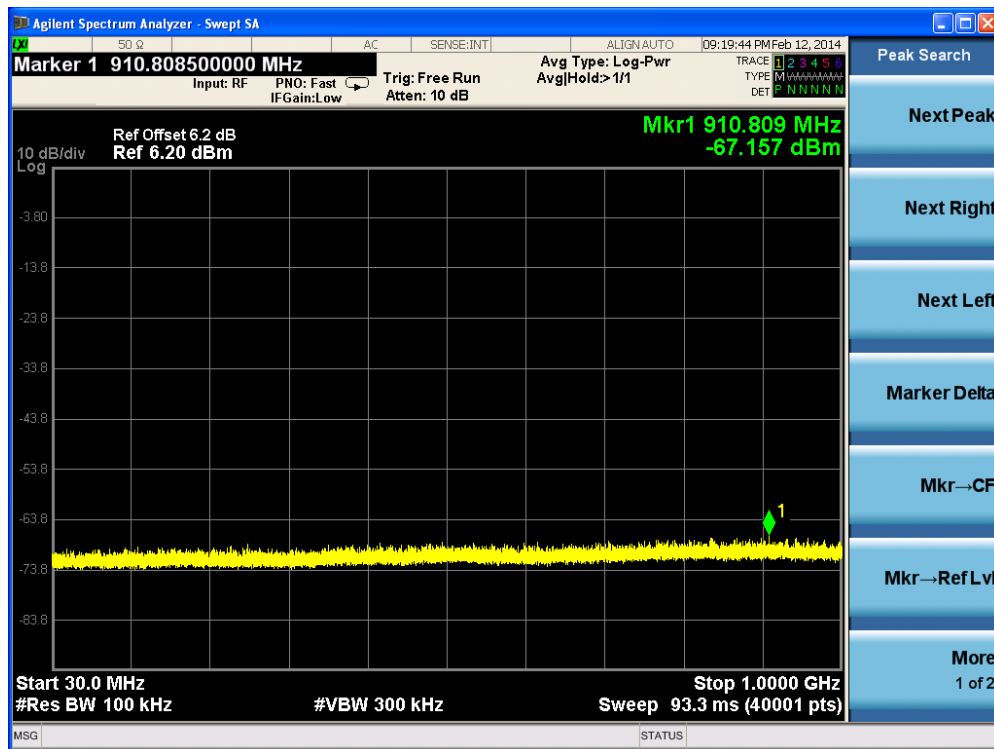


Channel 11 (2462MHz)-7

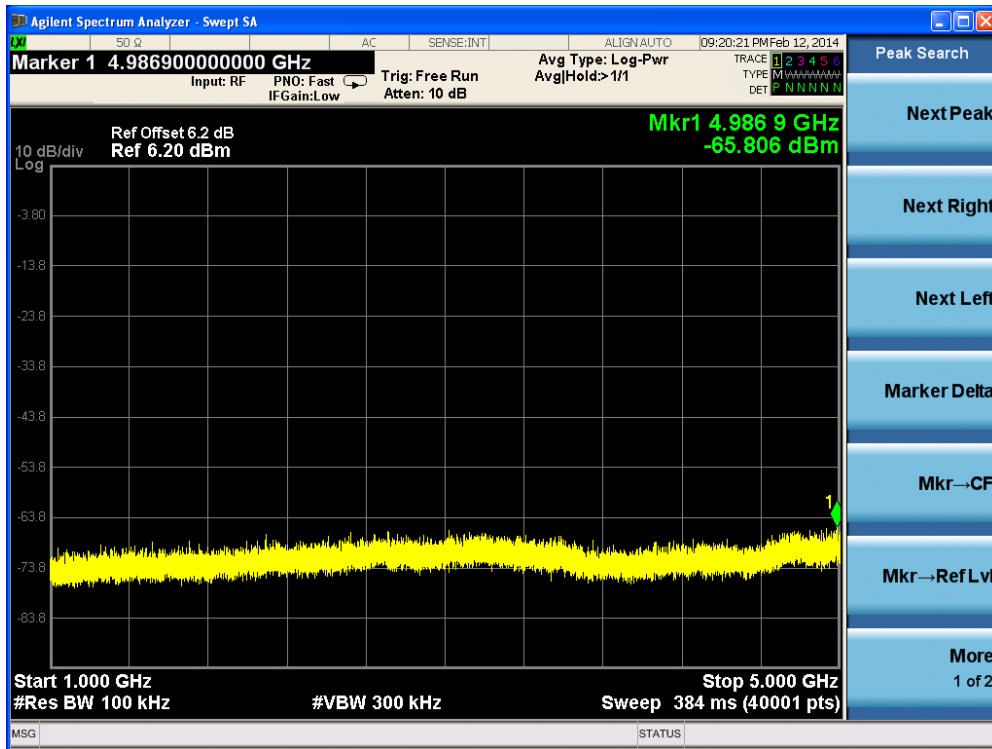


Product	: IP-STB
Test Item	: RF Antenna Conducted Spurious
Test Site	: TR-8
Test Mode	: Mode 3: Transmit by 802.11a (Ant 0)

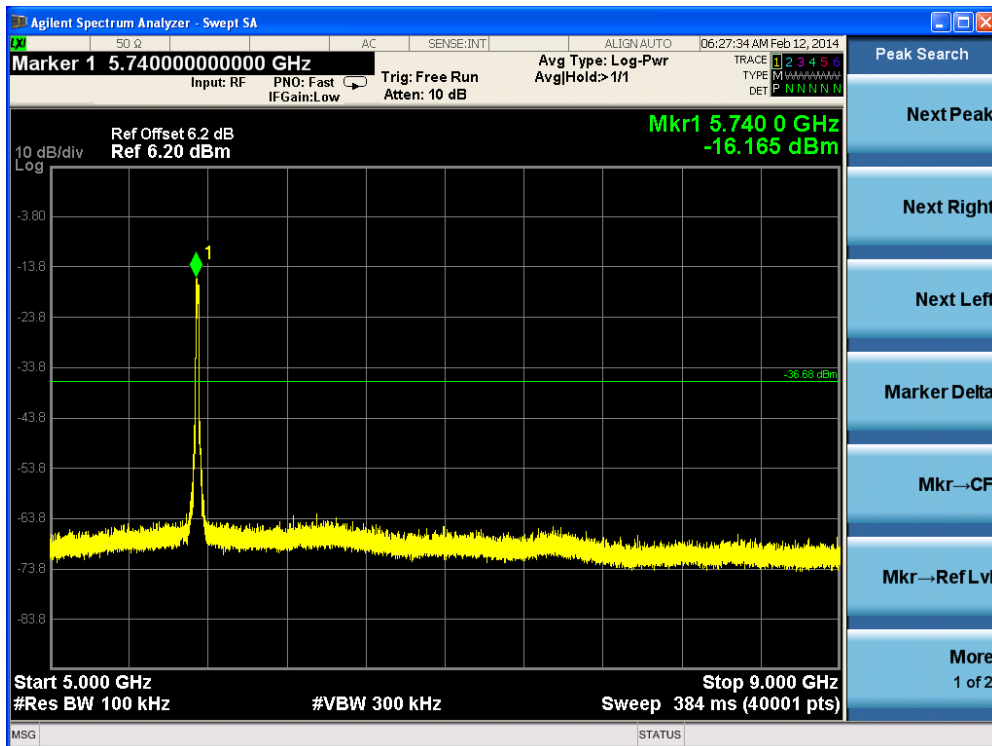
Channel 149 (5745MHz)-1



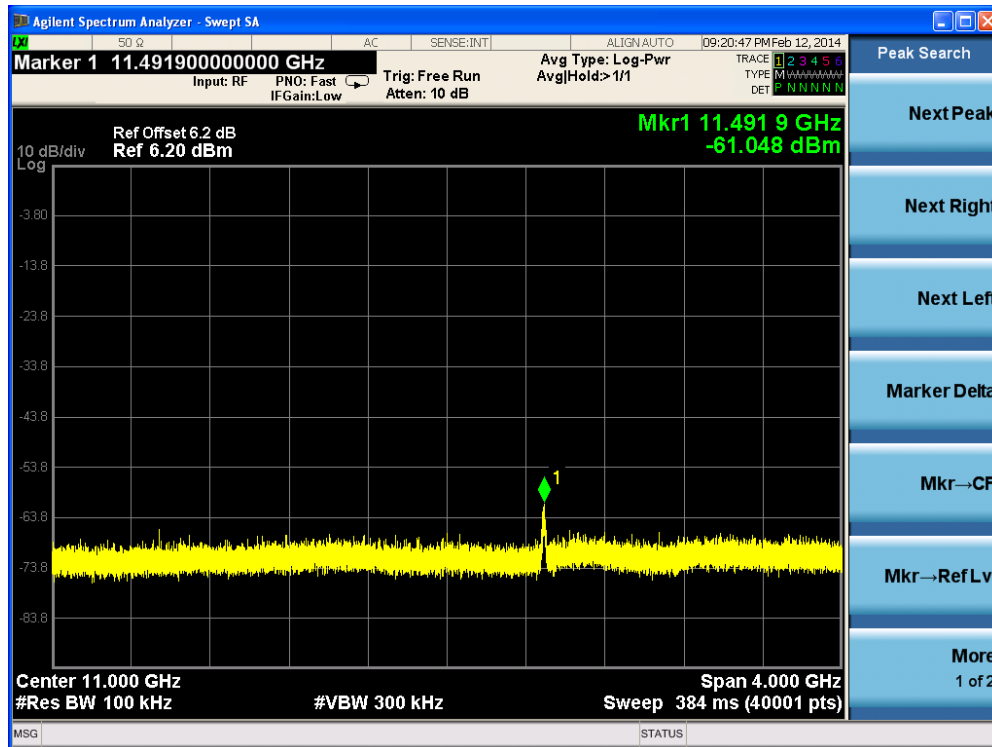
Channel 149 (5745MHz)-2



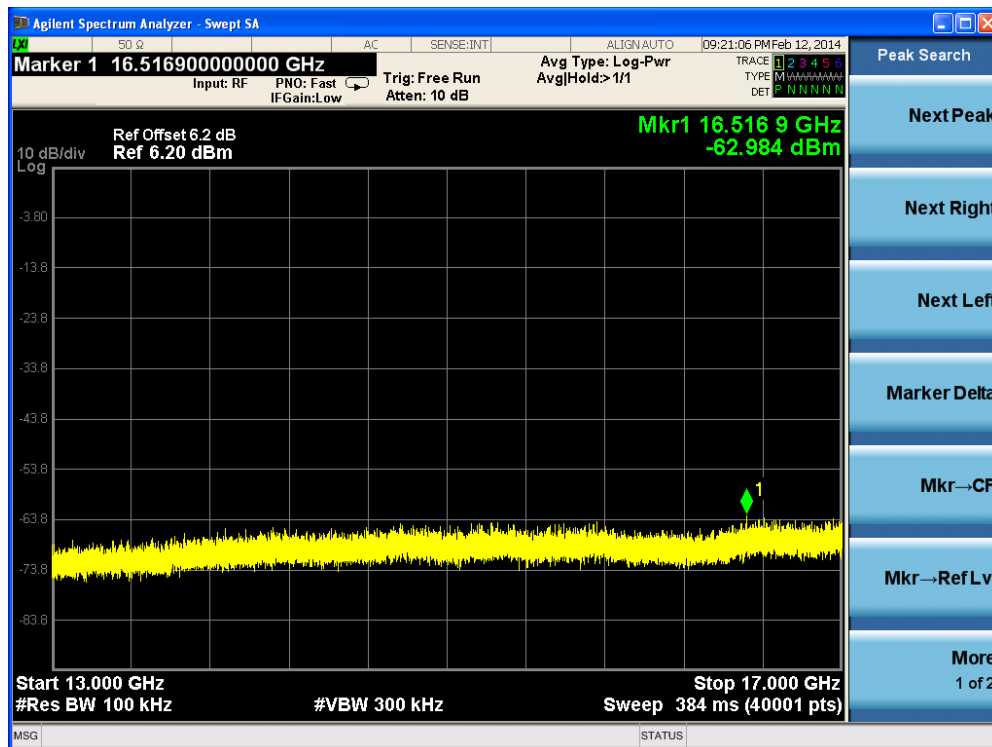
Channel 149 (5745MHz)-3



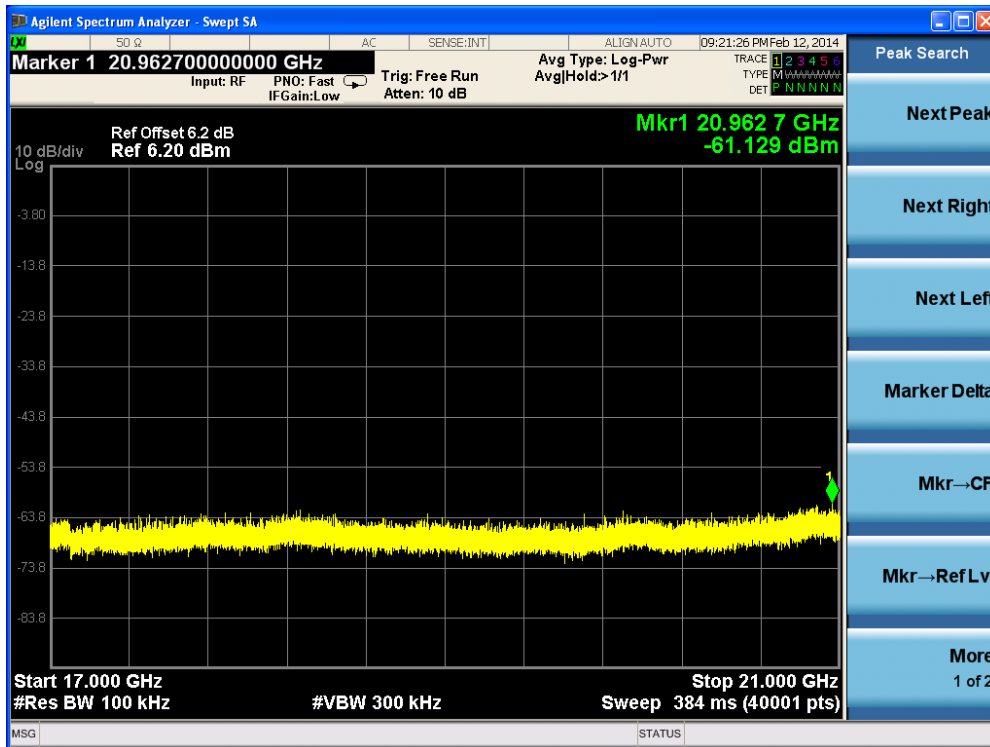
Channel 149 (5745MHz)-4



Channel 149 (5745MHz)-5



Channel 149 (5745MHz)-6



Channel 149 (5745MHz)-7

