FCC Test Report

Product Name ： ASUS SRT-AC1900 Wireless Smart Router

Trade Name ： ASUS

Model No. ： SRT-AC1900

FCC ID. ： MSQ-SRTAC1900

Applicant ： ASUSTeK COMPUTER INC.

Address ： 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Date of Receipt ： Jun. 11, 2015

Issued Date ： Aug. 20,2015

Report No. ： 1560358R-RFUSP24V00

Report Version ： V1.0

Test Report Certification

Issued Date : Aug. 20,2015
Report No. : 1560358R-RFUSP24V00

Product Name	：	ASUS SRT-AC1900 Wireless Smart Router
Applicant	：	ASUSTeK COMPUTER INC.
Address	：	4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
Manufacturer	：	MAINTEK Computer(Suzhou) Co., Ltd.
Model No.	：	SRT-AC1900
FCC ID.	：	MSQ-SRTAC1900
EUT Voltage	：	AC 100-240V, 50/60Hz
Testing Voltage	：	AC 120V/60Hz
Trade Name	：	ASUS
Applicable Standard	：	FCC CFR Title 47 Part 15 Subpart C Section 15.247:2014 ANSI C63.4: 2014
Test Lab	：	QuieTek Hsin Chu Laboratory
Test Result	：	Complied

The test results relate only to the samples tested.

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Documented By : (Carol Tsai / Senior Engineering Adm. Specialist)

Tested By : (Bruno Tsai / Engineer)

Approved By : (Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1560358R-RFUSP24V00	Rev. 1.0	Initial issue of report	Aug. 20, 2015

Laboratory Information

We, **QuieTek Corporation**, are an independent RF 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 specified testing scopes:

Taiwan R.O.C.	**:**	**TAF, Accreditation Number: 3024**
USA	**:**	**FCC, Registration Number: 365520**
Canada	**:**	**IC, Submission No: 181665 / IC Registration Number: 4075C-4**

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/english/about/certificates.aspx?bval=5
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/index_en.aspx
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory:
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
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LinKou Testing Laboratory:
No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

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1. General Information

1.1. EUT Description

Product Name	ASUS SRT-AC1900 Wireless Smart Router
Product Type	Zigbee
Trade Name	ASUS
Model No.	SRT-AC1900
Frequency Range/Channel Number	2405~2480MHz / 16 Channels
Type of Modulation	OQPSK
Antenna Type	PIFA
Antenna Gain	3.56dBi

Accessories Information	
LAN Cable	Non-Shielded, 1.8m, 2 PCS
Power Adatper	PIE., AD891M21 I/P: 100-240V~ 50/60Hz 0.8A O/P : 19V⎓1.75A Cable Out: Non-Shielded, 1.8m
Power Adatper	PIE., AD890326 I/P: 100-240V~ 50/60Hz 0.8A O/P : 19V⎓1.75A Cable Out: Non-Shielded, 1.8m
Power Adatper	Delta, ADP-33AW I/P: 100-240V~1A 50-60Hz O/P : 19V⎓1.75A Cable Out: Non-Shielded, 1.8m

Antenna Gain:

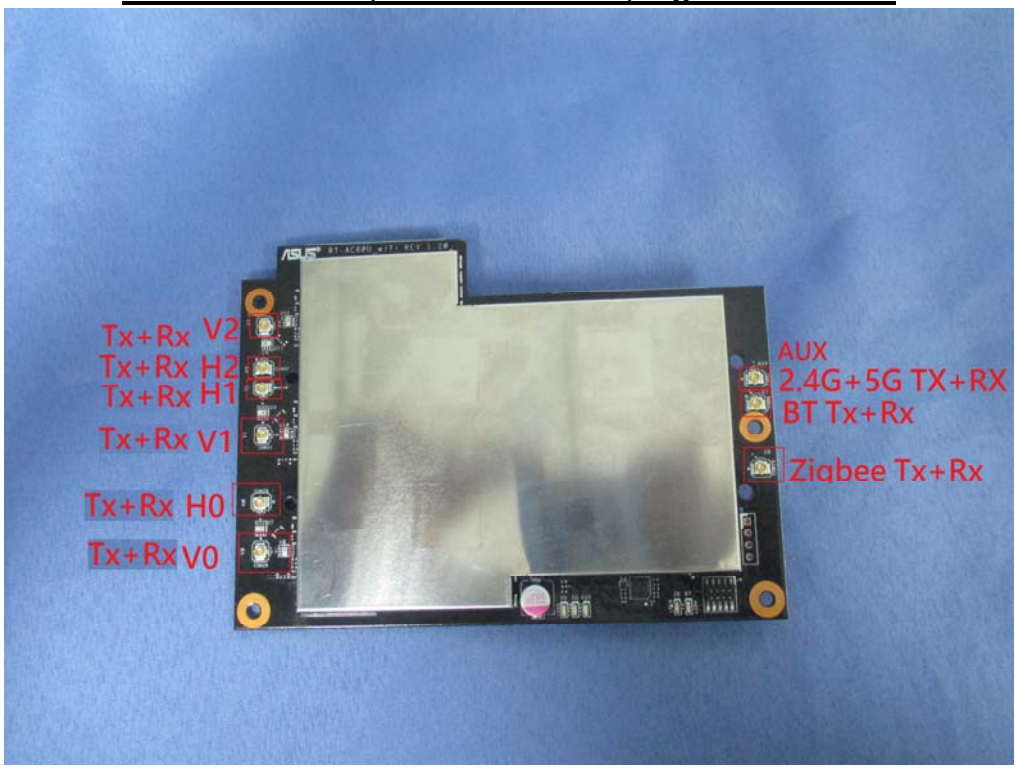
	V0	V1	V2	H0	H1	H2	AUX	ZB	BT
2.4G	3.82	3.90	2.36	2.90	2.26	3.27	5.10	3.56	3.61
5G-band1	4.58	4.87	4.29	5.04	5.37	4.68	4.40	X	X
5G-band2	4.65	5.10	4.59	5.04	5.35	4.28	4.40	X	X
5G-band3	4.93	4.78	5.67	5.00	4.84	4.96	2.92	X	X
5G-band4	4.23	4.70	5.07	5.55	4.55	5.11	3.95	X	X

Antenna array Gain:

	V0 V1 V2	V0 V1 H2	V0 H1 V2	V0 H1 H2	H0 V1 V2	H0 V1 H2	H0 H1 V2	H0,H1,H2
2.4G	6.35	6.10	5.71	6.05	5.50	5.18	4.76	6.25
5G-band1	8.33	7.02	7.58	7.72	7.93	6.31	7.04	9.11
5G-band2	8.33	7.02	7.58	7.74	7.93	6.19	7.06	9.16
5G-band3	8.91	7.58	7.79	7.88	7.99	7.04	7.37	9.15
5G-band4	8.95	7.51	7.80	8.41	7.36	7.17	7.48	9.34

Wifi: 3TX / 3RX(H/V Antenna); Wifi: 1TX / 1RX(AUX Antenna);

BT 2.0: 1TX/1RX; BT4.0: 1TX/1RX; Zigbee: 1TX/1RX



Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 11	2405 MHz	Channel 15	2425 MHz	Channel 19	2445 MHz	Channel 23	2465 MHz
Channel 12	2410 MHz	Channel 16	2430 MHz	Channel 20	2450 MHz	Channel 24	2470 MHz
Channel 13	2415 MHz	Channel 17	2435 MHz	Channel 21	2455 MHz	Channel 25	2475 MHz
Channel 14	2420 MHz	Channel 18	2440 MHz	Channel 22	2460 MHz	Channel 26	2480 MHz

Note:

1. This device is an ASUS SRT-AC1900 Wireless Smart Router including 2.4G & 5GHz Wifi (H/V Antenna): b/g/a/n/ac (3x3) 、2.4G& 5GHz Wifi (AUX Antenna): b/g/a/n/ac (1x1)、BT 2.0、BT4.0 and Zigbee transmitting and receiving function.
2. These test results on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
3. Regards to the frequency band operation; the lowest、middle and highest frequency of channel were selected to perform the test, and then shown on this report.
4. This device has USB and Ethernet ports, which can be connected to computer. It is a Class B personal computer and peripheral. Its test report number is 1560358R-RFUSP01V00 under part 15B with Declaration of Conformity letter.
5. The function of the 2.4GHz & 5GHz transmitting is measured. The test report of the number is 1560358R-RFUSP28V00 & 1560358R-RFUSP28V00-A & 1560358R-RFUSP59V00 & 1560358R-RFUSP59V00-A.
6. The function of the BT2.0 and BT4.0 transmitting are measured and makes a test report of the report number: 1560358R-RFUSP01V00-A and 1560358R-RFUSP01V00-B.

1.2. Test Mode

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

Pre-Test Mode	
TX	Mode 1: Tx-AD891M21 Mode 2: Tx-AD890326 Mode 3: Tx-ADP-33AW
Final Test Mode	
TX	Mode 1: Tx-AD891M21 Mode 2: Tx-AD890326 Mode 3: Tx-ADP-33AW

Emission	Mode 1	Mode 2	Mode 3
Conducted Emission	Yes	Yes	Yes
Peak Power Output	Yes	No	No
Radiated Emission	Yes	Yes	Yes
RF antenna conducted test	Yes	No	No
Band Edge	Yes	No	No
Occupied Bandwidth	Yes	No	No
Power Density	Yes	No	No

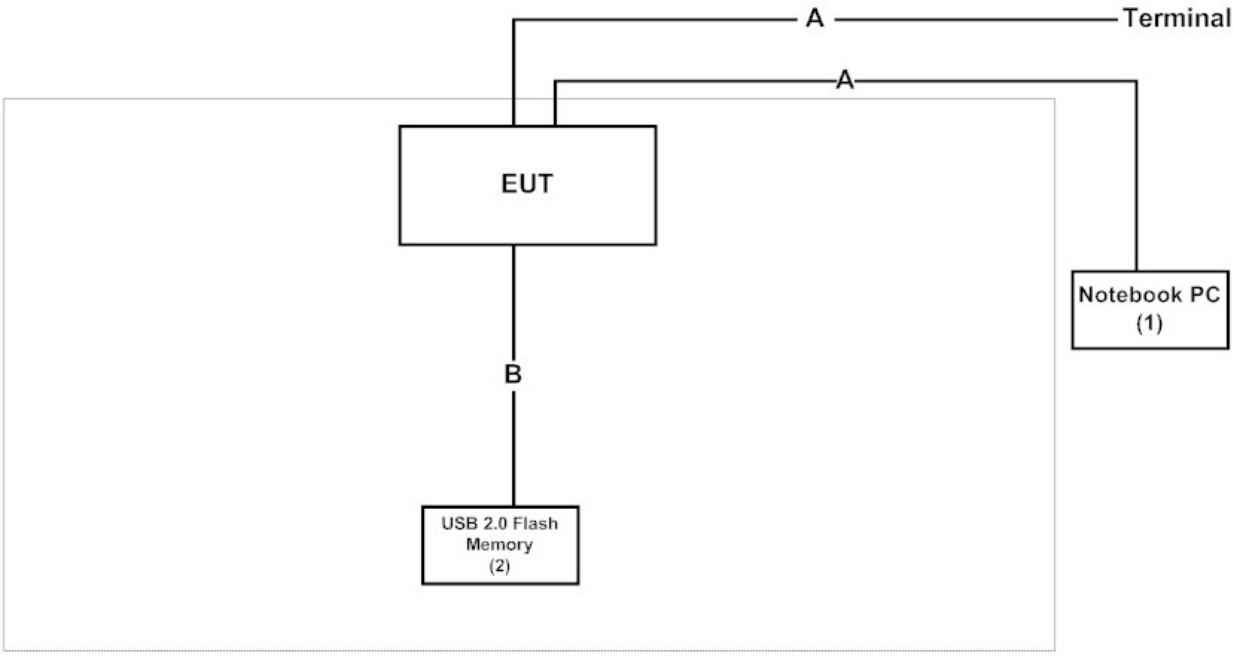
1.3. Tested System Details

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.	FCC ID	Power Cord
1	Notebook PC	DELL	Vostro3400	7F808N1	DoC	Non-Shielded, 1.8m
2	USB 2.0 Flash Memory	Apacer	AH223	N/A	DoC	--

1.4. Configuration of tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	LAN Cable	Non-Shielded, 2.0m, 2 Pcs
B	USB 2.0 Flash Memory Cable	Non-Shielded, 1.8m

1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Execute the telnet command on the EUT.
3	Configure the test mode, the test channel, and the data rate.
4	Press “Start TX” to start the continuous transmitting.
5	Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 C 15.207 Conducted Emission	15 - 35	23
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Peak Power Output	15 - 35	23
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Radiated Emission	15 - 35	25
Humidity (%RH)		25 - 75	54
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 RF antenna conducted test	15 - 35	24
Humidity (%RH)		25 - 75	48
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Band Edge	15 - 35	25
Humidity (%RH)		25 - 75	50
Barometric pressure (mbar)		860 - 1060	950-1000
Temperature (°C)	FCC PART 15 C 15.247 Occupied Bandwidth	15 - 35	24
Humidity (%RH)		25 - 75	48
Barometric pressure (mbar)		860 - 1060	950-1000

2. Conducted Emission

2.1. Test Equipment

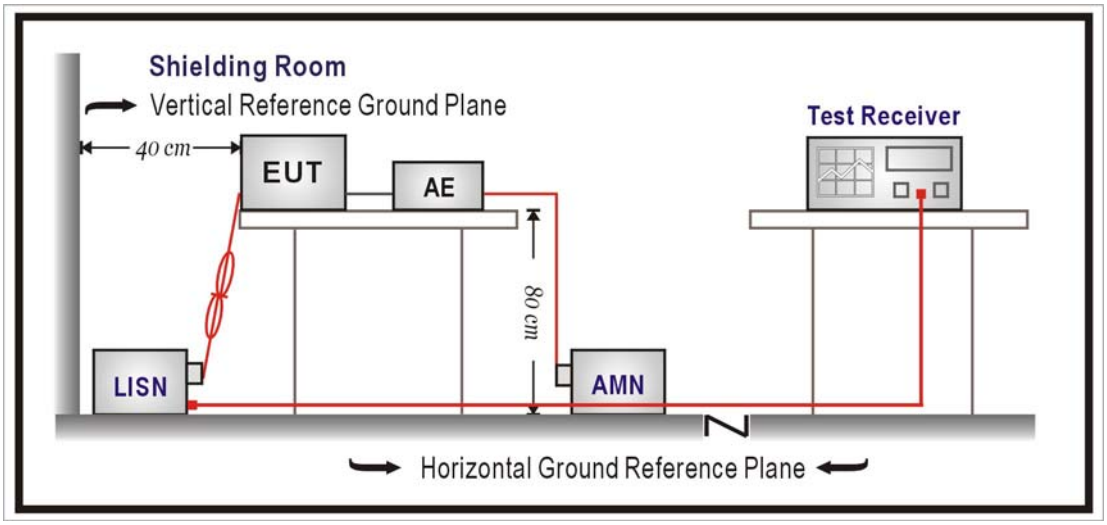
The following test equipments are used during the test:

Conducted Emission / SR3

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
LISN	R&S	ENV216	100096	2016/07/27
LISN	R&S	ESH3-Z5	836679/022	2015/12/15
Test Receiver	R&S	ESCS 30	825442/017	2016/01/14

Note: All equipments that need to calibrate are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

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

Remarks: In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs.)
Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2014 on conducted measurement.
Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

2.5. Test Specification

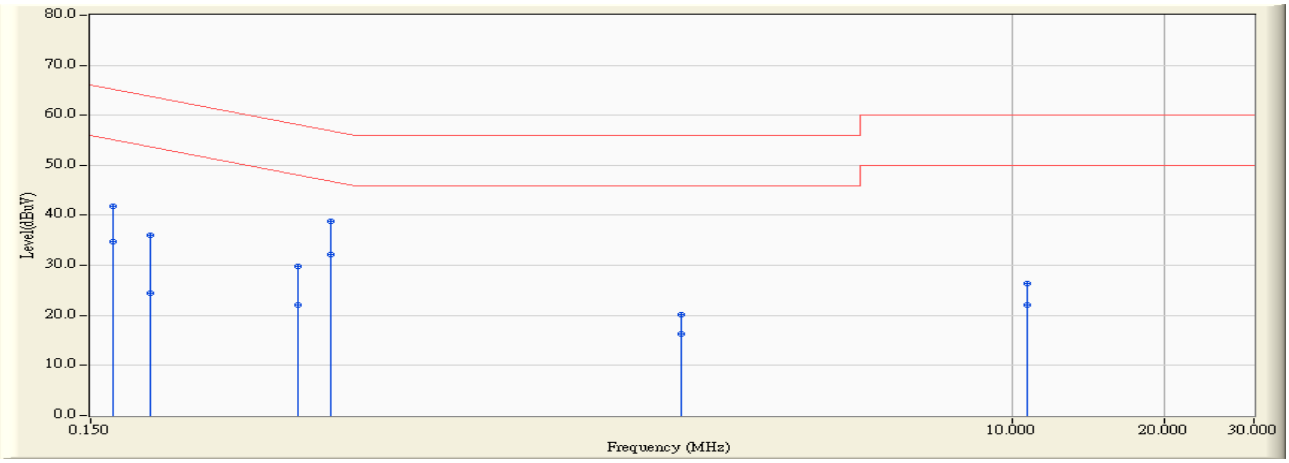
According to FCC Part 15 Subpart C Paragraph 15.207: 2014

2.6. Uncertainty

The measurement uncertainty is defined as ± 2.26 dB.

2.7. Test Result

Site : SR3	**Time : 2015/08/05 - 14:51**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line1	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21**

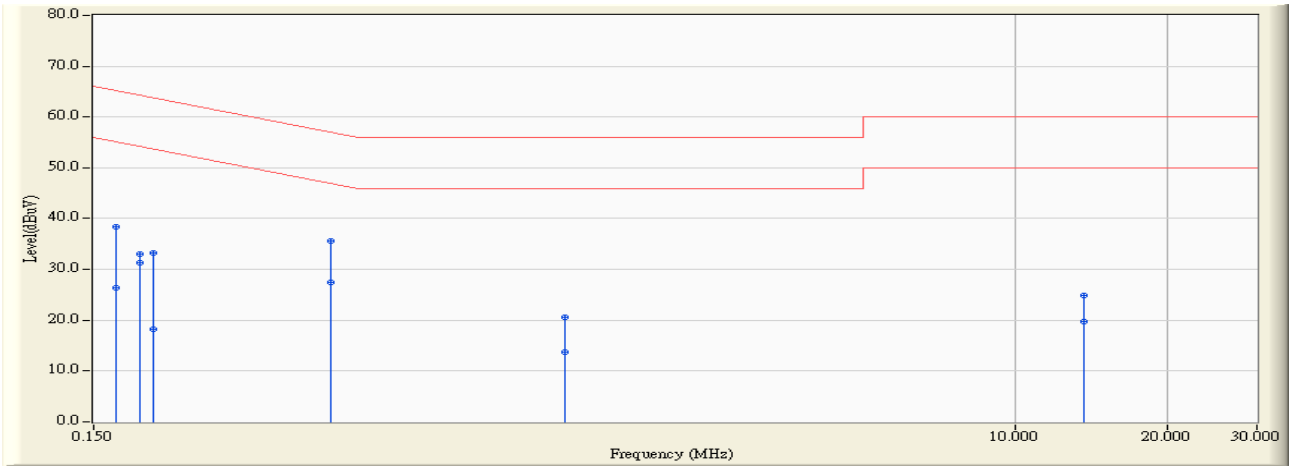


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.665	32.160	41.826	-23.351	65.177	QUASIPEAK
2		0.166	9.665	25.160	34.826	-20.351	55.177	AVERAGE
3		0.197	9.676	26.260	35.936	-27.806	63.741	QUASIPEAK
4		0.197	9.676	14.720	24.396	-29.346	53.741	AVERAGE
5		0.384	9.776	20.020	29.796	-28.388	58.184	QUASIPEAK
6		0.384	9.776	12.330	22.106	-26.078	48.184	AVERAGE
7		0.447	9.813	29.020	38.833	-18.100	56.933	QUASIPEAK
8	*	0.447	9.813	22.410	32.223	-14.710	46.933	AVERAGE
9		2.205	9.962	10.160	20.122	-35.878	56.000	QUASIPEAK
10		2.205	9.962	6.390	16.352	-29.648	46.000	AVERAGE
11		10.658	10.123	16.180	26.303	-33.697	60.000	QUASIPEAK
12		10.658	10.123	11.930	22.053	-27.947	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/08/05 - 14:49**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line2	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21**

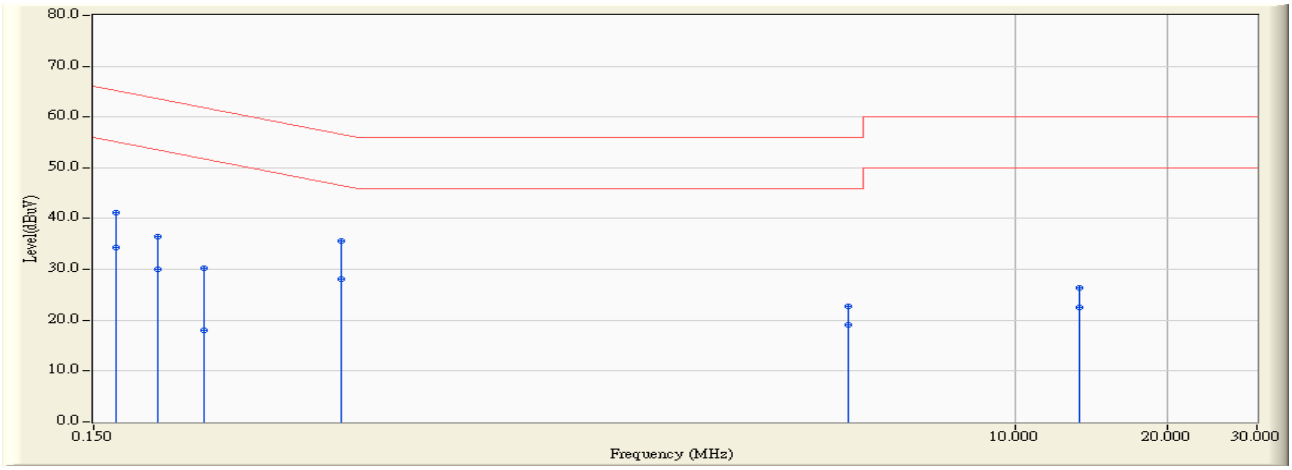


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.659	28.700	38.359	-26.818	65.177	QUASIPEAK
2		0.166	9.659	16.640	26.299	-28.878	55.177	AVERAGE
3		0.185	9.662	23.340	33.002	-31.249	64.251	QUASIPEAK
4		0.185	9.662	21.670	31.332	-22.919	54.251	AVERAGE
5		0.197	9.667	23.500	33.167	-30.575	63.741	QUASIPEAK
6		0.197	9.667	8.630	18.297	-35.445	53.741	AVERAGE
7		0.443	9.810	25.840	35.650	-21.356	57.006	QUASIPEAK
8	*	0.443	9.810	17.540	27.350	-19.656	47.006	AVERAGE
9		1.279	9.953	10.580	20.533	-35.467	56.000	QUASIPEAK
10		1.279	9.953	3.720	13.673	-32.327	46.000	AVERAGE
11		13.681	10.239	14.660	24.899	-35.101	60.000	QUASIPEAK
12		13.681	10.239	9.510	19.749	-30.251	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/08/07 - 13:10**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line1	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 2: Tx-AD890326**

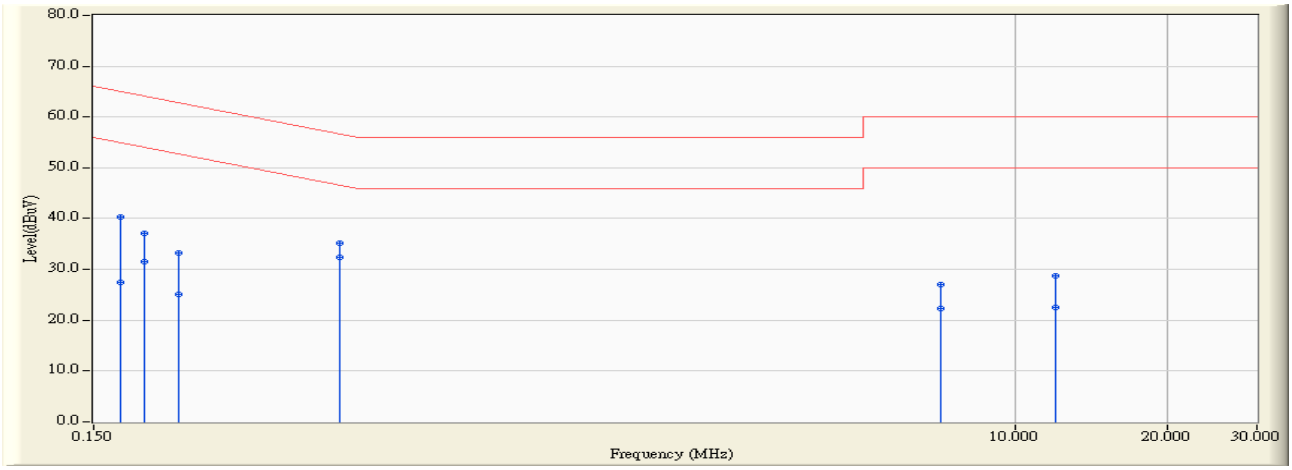


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.665	31.440	41.106	-24.071	65.177	QUASIPEAK
2		0.166	9.665	24.700	34.366	-20.811	55.177	AVERAGE
3		0.201	9.678	26.840	36.518	-27.060	63.578	QUASIPEAK
4		0.201	9.678	20.340	30.018	-23.560	53.578	AVERAGE
5		0.248	9.707	20.600	30.307	-31.529	61.835	QUASIPEAK
6		0.248	9.707	8.300	18.007	-33.829	51.835	AVERAGE
7		0.463	9.822	25.680	35.502	-21.145	56.648	QUASIPEAK
8	*	0.463	9.822	18.350	28.172	-18.475	46.648	AVERAGE
9		4.650	10.065	12.660	22.725	-33.275	56.000	QUASIPEAK
10		4.650	10.065	9.020	19.085	-26.915	46.000	AVERAGE
11		13.412	10.134	16.160	26.294	-33.706	60.000	QUASIPEAK
12		13.412	10.134	12.330	22.464	-27.536	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/08/07 - 13:08**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line2	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 2: Tx-AD890326**

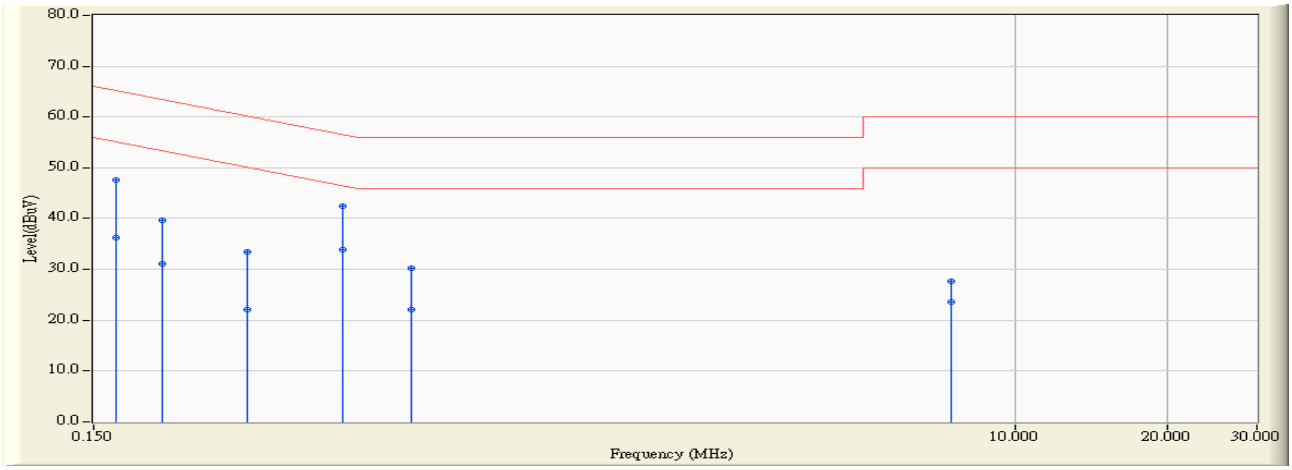


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.170	9.660	30.740	40.400	-24.584	64.983	QUASIPEAK
2		0.170	9.660	17.720	27.380	-27.604	54.983	AVERAGE
3		0.189	9.662	27.520	37.182	-26.895	64.078	QUASIPEAK
4		0.189	9.662	21.780	31.442	-22.635	54.078	AVERAGE
5		0.220	9.681	23.500	33.181	-29.626	62.807	QUASIPEAK
6		0.220	9.681	15.410	25.091	-27.716	52.807	AVERAGE
7		0.459	9.821	25.320	35.141	-21.577	56.718	QUASIPEAK
8	*	0.459	9.821	22.560	32.381	-14.337	46.718	AVERAGE
9		7.130	10.132	16.880	27.012	-32.988	60.000	QUASIPEAK
10		7.130	10.132	12.210	22.342	-27.658	50.000	AVERAGE
11		12.029	10.212	18.500	28.712	-31.288	60.000	QUASIPEAK
12		12.029	10.212	12.410	22.622	-27.378	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/08/04 - 17:50**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line1	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 3: Tx-ADP-33AW**

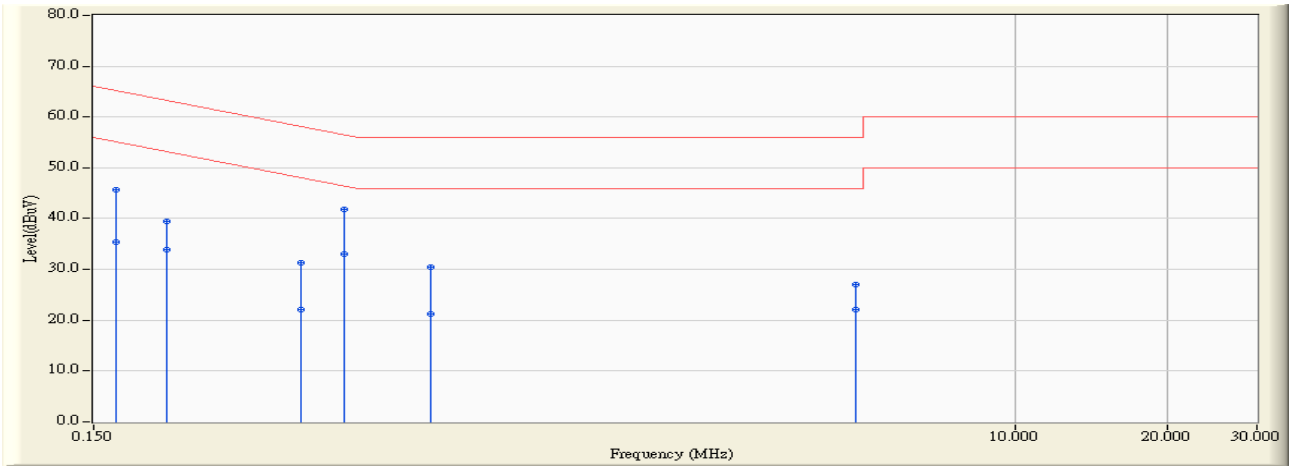


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.665	37.860	47.526	-17.651	65.177	QUASIPEAK
2		0.166	9.665	26.490	36.156	-19.021	55.177	AVERAGE
3		0.205	9.680	30.020	39.701	-23.718	63.418	QUASIPEAK
4		0.205	9.680	21.370	31.051	-22.368	53.418	AVERAGE
5		0.302	9.731	23.640	33.370	-26.808	60.178	QUASIPEAK
6		0.302	9.731	12.410	22.140	-28.038	50.178	AVERAGE
7		0.466	9.824	32.740	42.564	-14.014	56.578	QUASIPEAK
8	*	0.466	9.824	24.060	33.884	-12.694	46.578	AVERAGE
9		0.638	9.874	20.460	30.334	-25.666	56.000	QUASIPEAK
10		0.638	9.874	12.240	22.114	-23.886	46.000	AVERAGE
11		7.478	10.099	17.660	27.759	-32.241	60.000	QUASIPEAK
12		7.478	10.099	13.600	23.699	-26.301	50.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : SR3	**Time : 2015/08/04 - 17:49**
Limit : CISPR_B_00M_QP	**Margin : 10**
Probe : SR3_LISN(16A)-4_0811 - Line2	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 3: Tx-ADP-33AW**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV)	Margin (dB)	Limit (dBuV)	Detector Type
1		0.166	9.659	36.000	45.659	-19.518	65.177	QUASIPEAK
2		0.166	9.659	25.790	35.449	-19.728	55.177	AVERAGE
3		0.209	9.674	29.740	39.414	-23.847	63.261	QUASIPEAK
4		0.209	9.674	24.110	33.784	-19.477	53.261	AVERAGE
5		0.384	9.775	21.520	31.295	-26.889	58.184	QUASIPEAK
6		0.384	9.775	12.240	22.015	-26.169	48.184	AVERAGE
7		0.470	9.825	31.980	41.805	-14.703	56.508	QUASIPEAK
8	*	0.470	9.825	23.270	33.095	-13.413	46.508	AVERAGE
9		0.697	9.884	20.480	30.364	-25.636	56.000	QUASIPEAK
10		0.697	9.884	11.420	21.304	-24.696	46.000	AVERAGE
11		4.834	10.084	17.040	27.124	-28.876	56.000	QUASIPEAK
12		4.834	10.084	12.020	22.104	-23.896	46.000	AVERAGE

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

3. Peak Power Output

3.1. Test Equipment

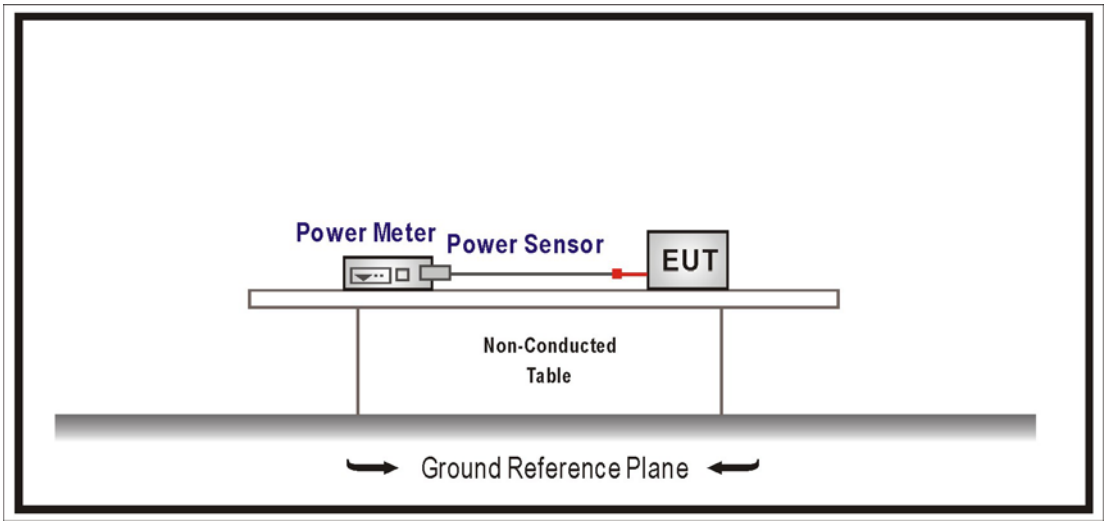
The following test equipment is used during the test:

Peak Power Output / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Power Meter	Agilent	N1911A	MY45101353	2015/10/31

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

3.2. Test Setup



3.3. Test procedures

The EUT was tested according to DTS test procedure section 9.1.2 of KDB558074 v03r02 measurement to FCC 47CFR 15.247 requirements.

3.4. Limits

The maximum peak power shall be less 1 Watt.

3.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

3.6. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB.

3.7. Test Result

Product	ASUS SRT-AC1900 Wireless Smart Router		
Test Item	Peak Power Output		
Test Mode	Mode 1: Tx-AD891M21		
Date of Test	2015/08/10	Test Site	SR7

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
11	2405	19.85	≦30	Pass
18	2440	19.87	≦30	Pass
24	2470	19.89	≦30	Pass
25	2475	13.35	≦30	Pass
26	2480	-4.17	≦30	Pass

4. Radiated Emission

4.1. Test Equipment

The following test equipments are used during the test:

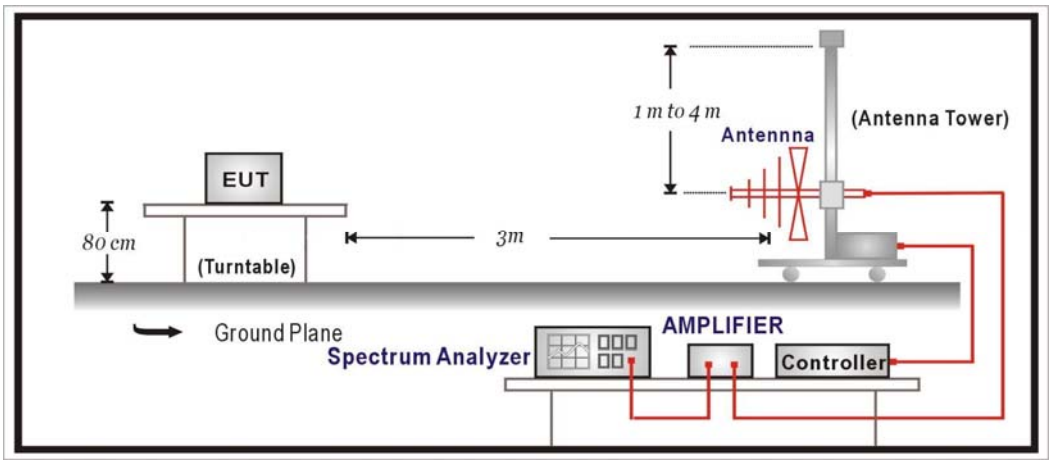
Radiated Emission / CB1

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Bilog Antenna	SCHAFFNER	CBL6112B	2895(CB1)	2016/08/14
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120	D743	2016/01/26
Pre-Amplifier	EMCI	EMC0031835	980233	2016/01/18
Pre-Amplifier	QuieTek	AP-025C	CHM-0706049	2016/01/18
Spectrum Analyzer	Agilent	E4440A	MY46187335	2016/01/07
k Type Cable	Huber Suhner	SF 102	25623/2	2016/01/26

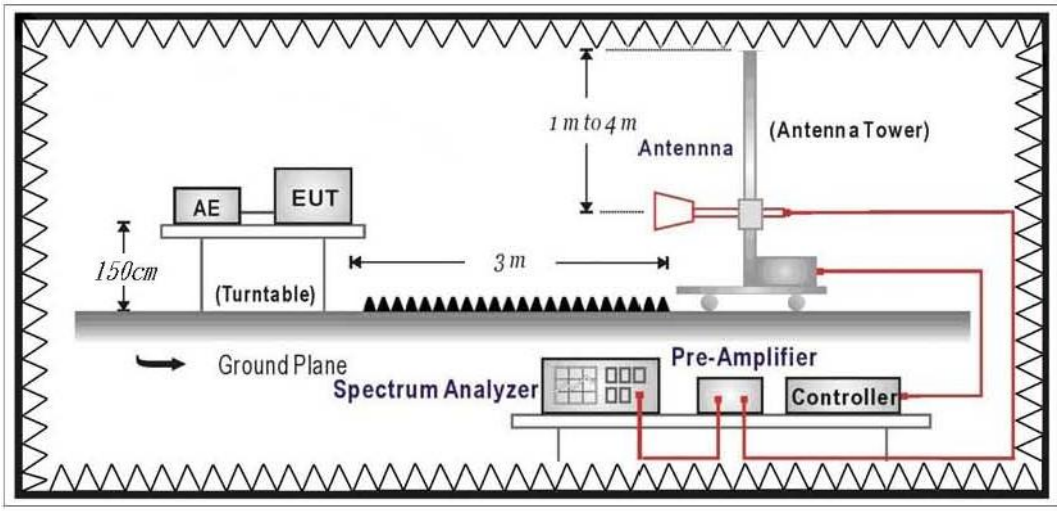
Note: All equipments that need to calibrate are with calibration period of 1 year.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits		
Frequency MHz	uV/m	dBuV/m
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Remarks: 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: 2014 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements.

The EUT and its simulators are placed on a turn table, which is 0.8 and 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2014 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

4.6. Uncertainty

The measurement uncertainty

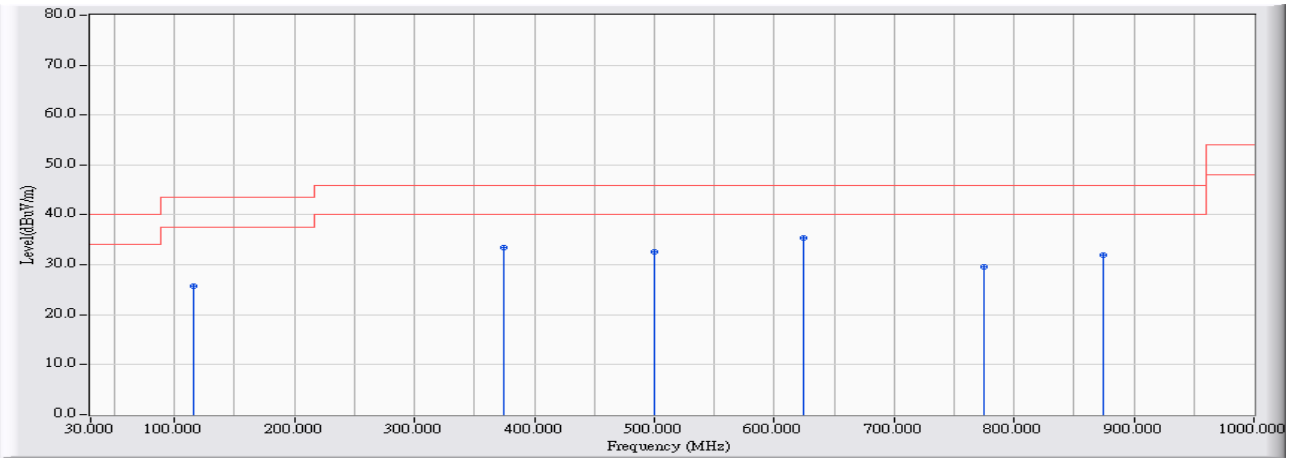
30MHz～1GHz as ±3.43dB

1GHz～26.5Ghz as ±3.65dB

4.7. Test Result

30MHz-1GHz Spurious

Site : CB1	**Time : 2015/08/14 - 13:32**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : ASUS SRT-AC1900 WIRELESS SMART ROUTER	**Note : Mode 1: Tx-AD891M21 802.15.4_2440MHz**

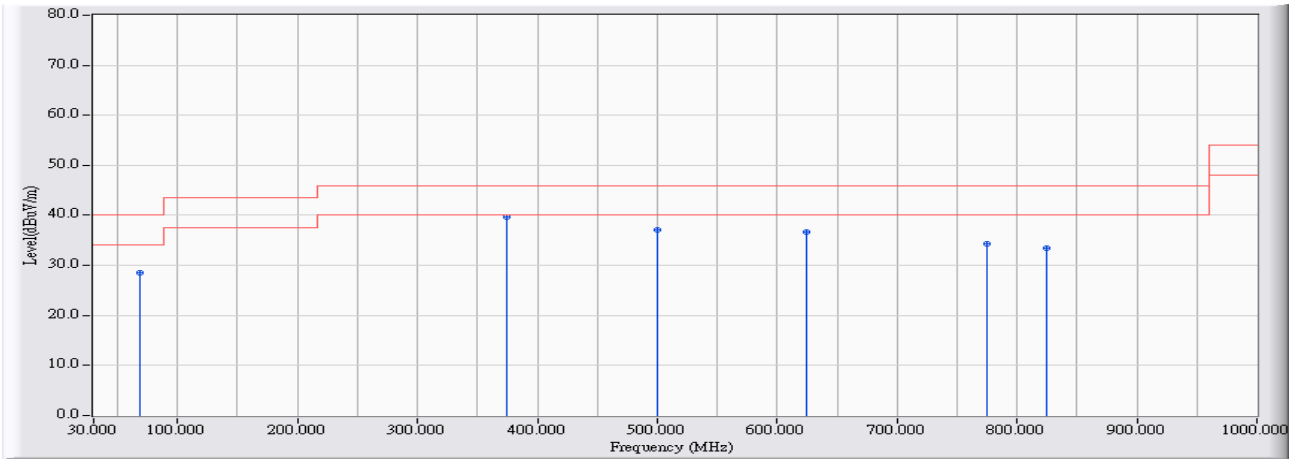


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		115.317	10.590	15.058	25.647	-17.853	43.500	QUASIPEAK
2		374.663	14.546	18.931	33.477	-12.523	46.000	QUASIPEAK
3		499.730	17.175	15.338	32.513	-13.487	46.000	QUASIPEAK
4	*	624.798	17.610	17.836	35.446	-10.554	46.000	QUASIPEAK
5		774.588	18.903	10.666	29.570	-16.430	46.000	QUASIPEAK
6		874.933	19.407	12.600	32.007	-13.993	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB1	**Time : 2015/08/14 - 17:43**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : ASUS SRT-AC1900 WIRELESS SMART ROUTER	**Note : Mode 1: Tx-AD891M21 802.15.4_2440MHz**

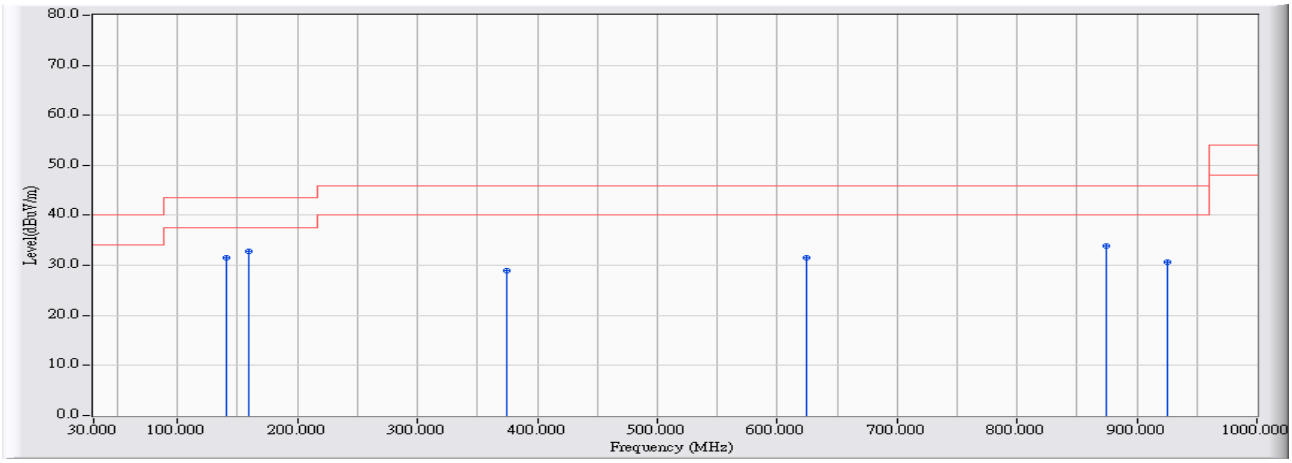


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		68.781	5.555	22.996	28.551	-11.449	40.000	QUASIPEAK
2	*	374.663	14.546	25.232	39.778	-6.222	46.000	QUASIPEAK
3		499.730	17.175	19.834	37.009	-8.991	46.000	QUASIPEAK
4		624.798	17.610	19.026	36.636	-9.364	46.000	QUASIPEAK
5		774.588	18.903	15.484	34.388	-11.612	46.000	QUASIPEAK
6		825.002	19.279	14.149	33.428	-12.572	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB1	**Time : 2015/08/16 - 15:01**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : ASUS SRT-AC1900 WIRELESS SMART ROUTER	**Note : Mode 2: Tx-AD890326 802.15.4_2440MHz**

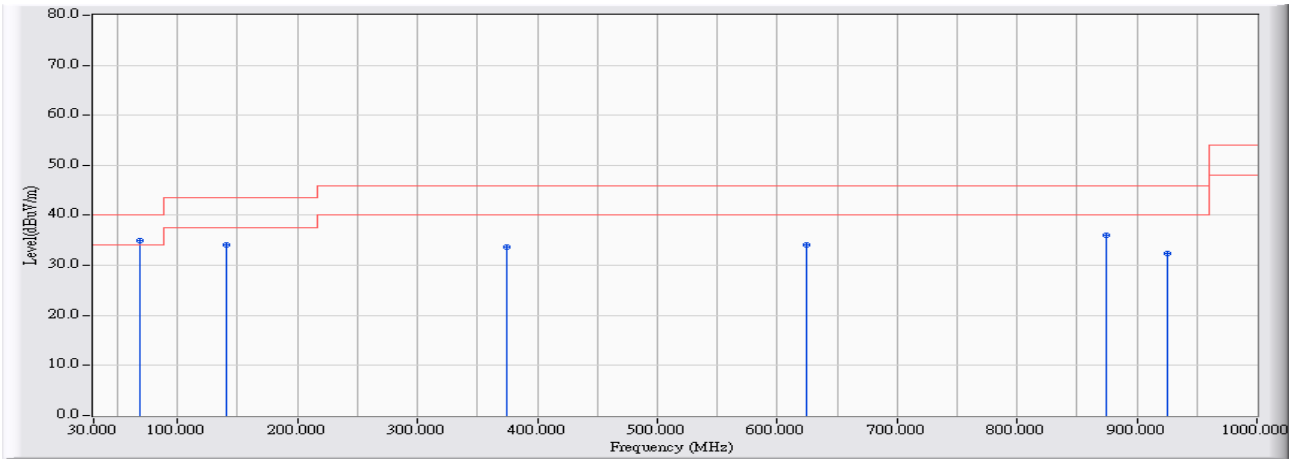


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		141.009	16.236	15.325	31.560	-11.940	43.500	QUASIPEAK
2	*	159.430	17.965	14.782	32.747	-10.753	43.500	QUASIPEAK
3		374.663	15.384	13.635	29.019	-16.981	46.000	QUASIPEAK
4		624.798	20.041	11.499	31.539	-14.461	46.000	QUASIPEAK
5		874.933	23.169	10.794	33.963	-12.037	46.000	QUASIPEAK
6		924.863	23.690	6.951	30.641	-15.359	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB1	**Time : 2015/08/16 - 15:06**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_30M-1G-4_9161 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : ASUS SRT-AC1900 WIRELESS SMART ROUTER	**Note : Mode 2: Tx-AD890326 802.15.4_2440MHz**

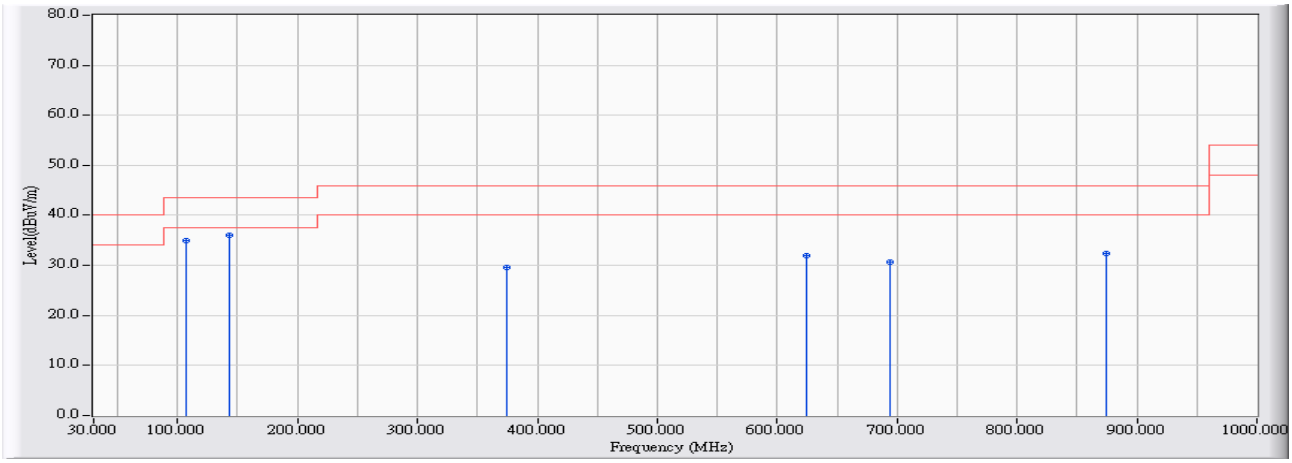


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	68.781	8.481	26.408	34.889	-5.111	40.000	QUASIPEAK
2		141.009	16.236	17.828	34.063	-9.437	43.500	QUASIPEAK
3		374.663	15.384	18.260	33.644	-12.356	46.000	QUASIPEAK
4		624.798	20.041	14.070	34.110	-11.890	46.000	QUASIPEAK
5		874.933	23.169	12.946	36.115	-9.885	46.000	QUASIPEAK
6		924.863	23.690	8.756	32.446	-13.554	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB1	**Time : 2015/07/03 - 16:48**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-2_1011 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : ASUS SRT-AC1900 WIRELESS SMART ROUTER	**Note : Mode 3: Tx-ADP-33AW 802.15.4_2440MHz**

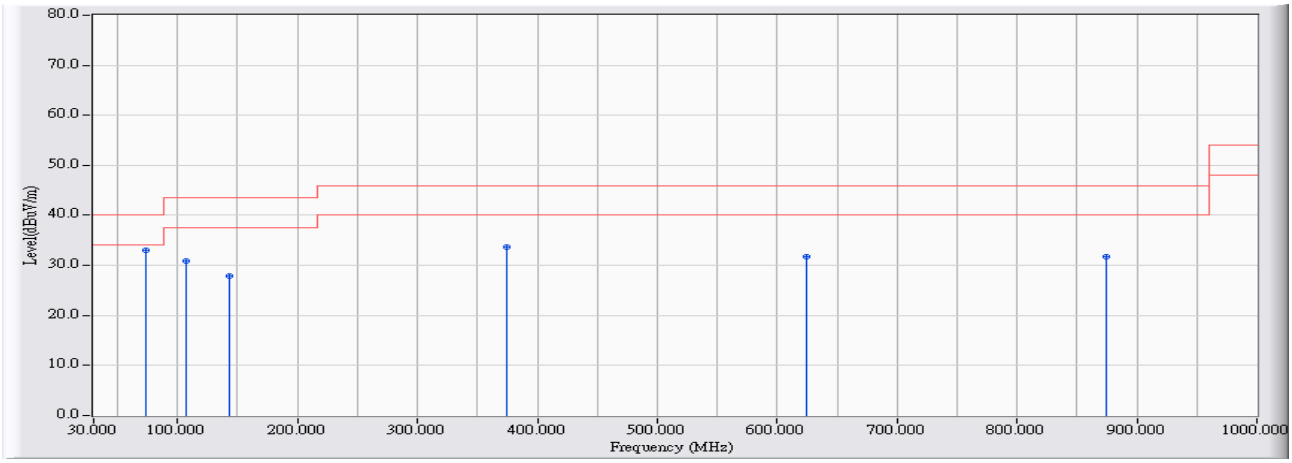


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		106.592	10.165	24.734	34.898	-8.602	43.500	QUASIPEAK
2	*	142.949	9.985	26.130	36.115	-7.385	43.500	QUASIPEAK
3		374.663	14.546	15.139	29.685	-16.315	46.000	QUASIPEAK
4		624.798	17.610	14.440	32.050	-13.950	46.000	QUASIPEAK
5		694.603	17.965	12.690	30.655	-15.345	46.000	QUASIPEAK
6		874.933	19.407	12.880	32.287	-13.713	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Site : CB1	**Time : 2015/07/03 - 17:52**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB1_FCC_EFS_30-1G-2_1011 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : ASUS SRT-AC1900 WIRELESS SMART ROUTER	**Note : Mode 3: Tx-ADP-33AW 802.15.4_2440MHz**



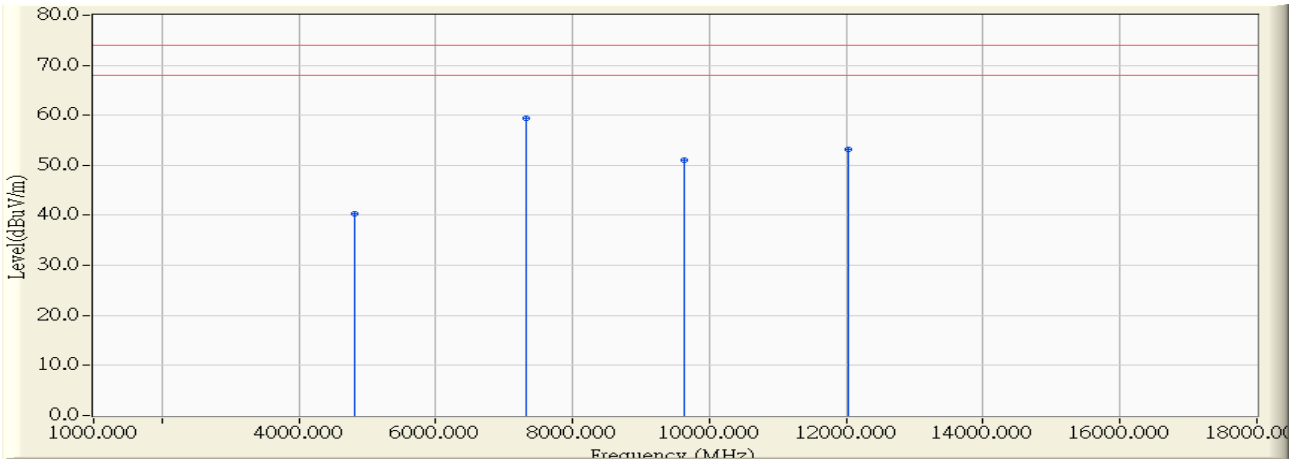
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	73.628	5.799	27.312	33.111	-6.889	40.000	QUASIPEAK
2		106.592	10.165	20.716	30.880	-12.620	43.500	QUASIPEAK
3		142.949	9.985	17.869	27.854	-15.646	43.500	QUASIPEAK
4		374.663	14.546	19.055	33.601	-12.399	46.000	QUASIPEAK
5		624.798	17.610	14.142	31.752	-14.248	46.000	QUASIPEAK
6		874.933	19.407	12.321	31.728	-14.272	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Harmonic & Spurious:

Site : CB1	**Time : 2015/08/04 - 03:27**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

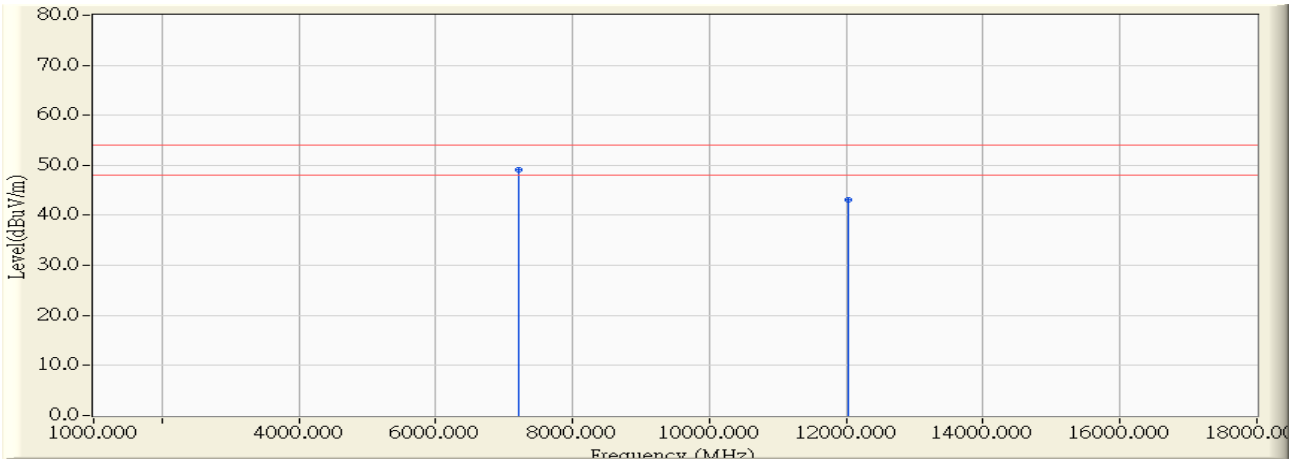


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4810.000	-2.597	42.980	40.383	-33.617	74.000	PEAK
2	*	7316.300	6.084	53.310	59.394	-14.606	74.000	PEAK
3		9622.110	7.519	43.550	51.068	-22.932	74.000	PEAK
4		12022.240	10.381	42.710	53.092	-20.908	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 03:28**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

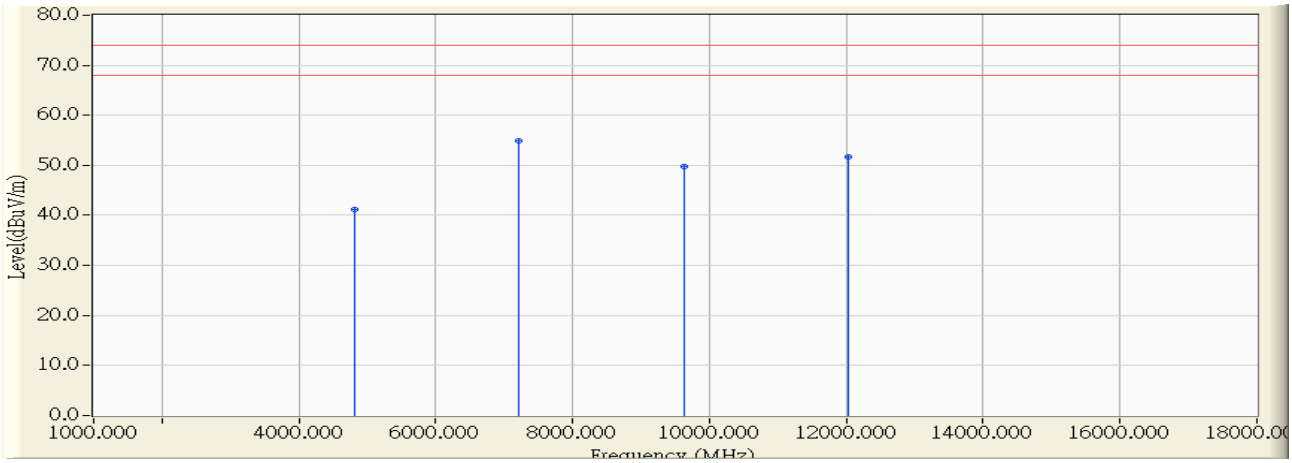


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7213.520	5.882	43.200	49.082	-4.918	54.000	AVERAGE
2		12022.260	10.381	32.830	43.212	-10.788	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 03:38**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

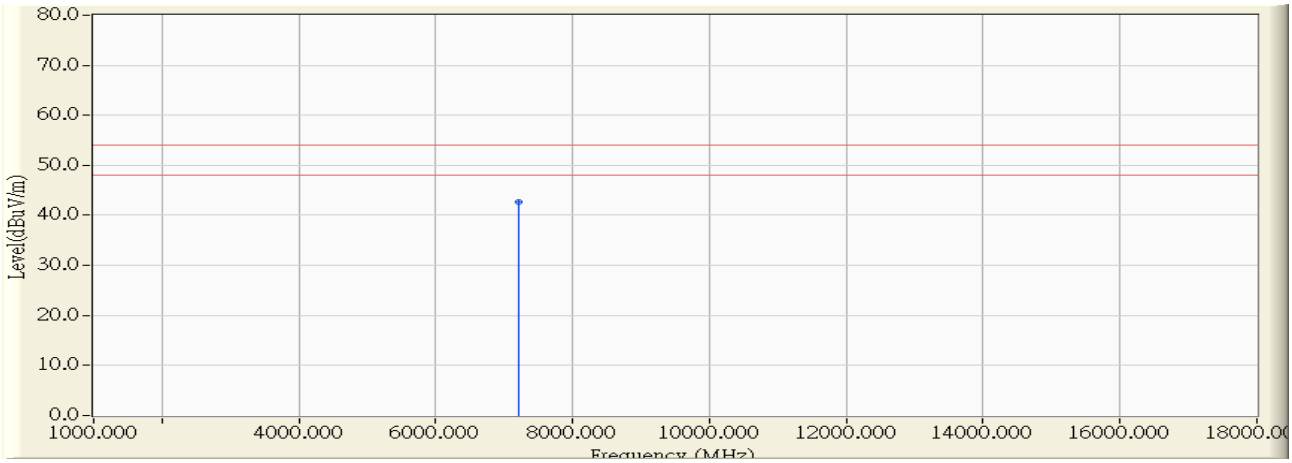


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4810.000	-1.665	42.860	41.195	-32.805	74.000	PEAK
2	*	7213.480	5.382	49.510	54.892	-19.108	74.000	PEAK
3		9622.099	7.060	42.640	49.700	-24.300	74.000	PEAK
4		12022.000	9.921	41.860	51.782	-22.218	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 03:39**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

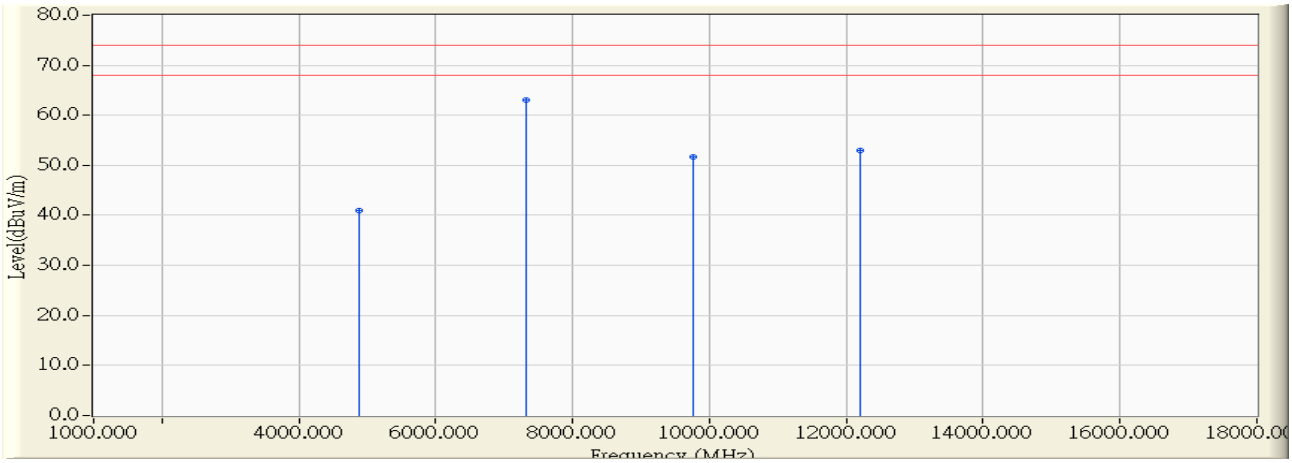


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7213.560	5.382	37.330	42.712	-11.288	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 03:50**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

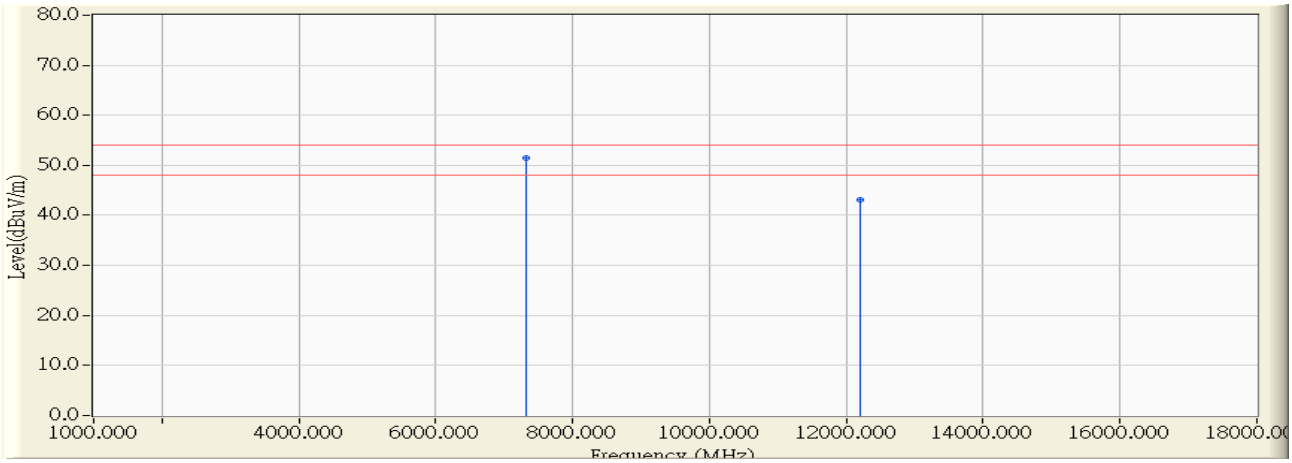


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4882.400	-2.403	43.360	40.957	-33.043	74.000	PEAK
2	*	7318.260	6.088	56.960	63.048	-10.952	74.000	PEAK
3		9762.000	8.276	43.420	51.696	-22.304	74.000	PEAK
4		12197.400	10.174	42.870	53.043	-20.957	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 03:51**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

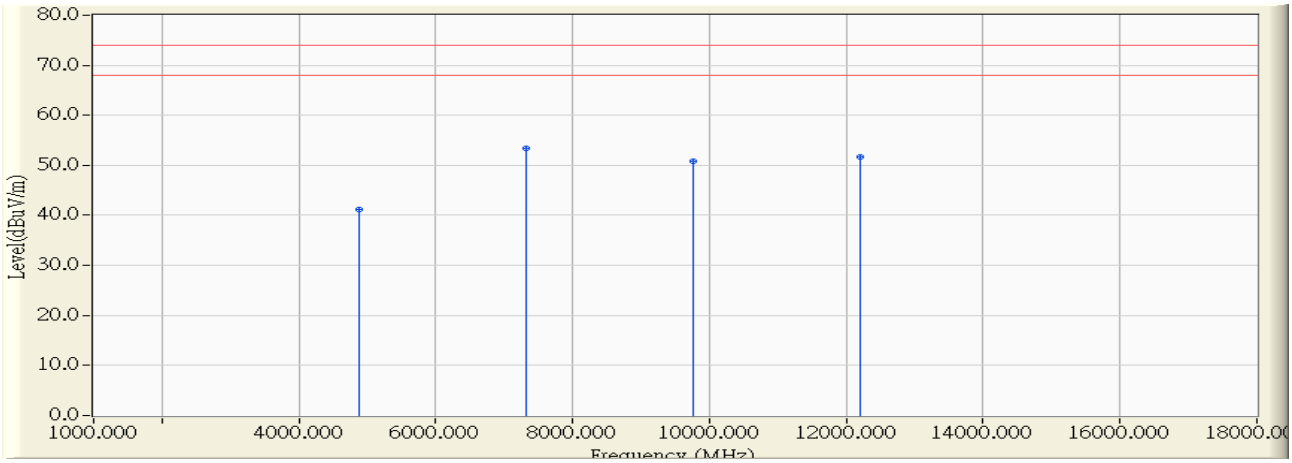


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7318.320	6.088	45.330	51.418	-2.582	54.000	AVERAGE
2		12197.270	10.173	33.000	43.174	-10.826	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 04:04**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

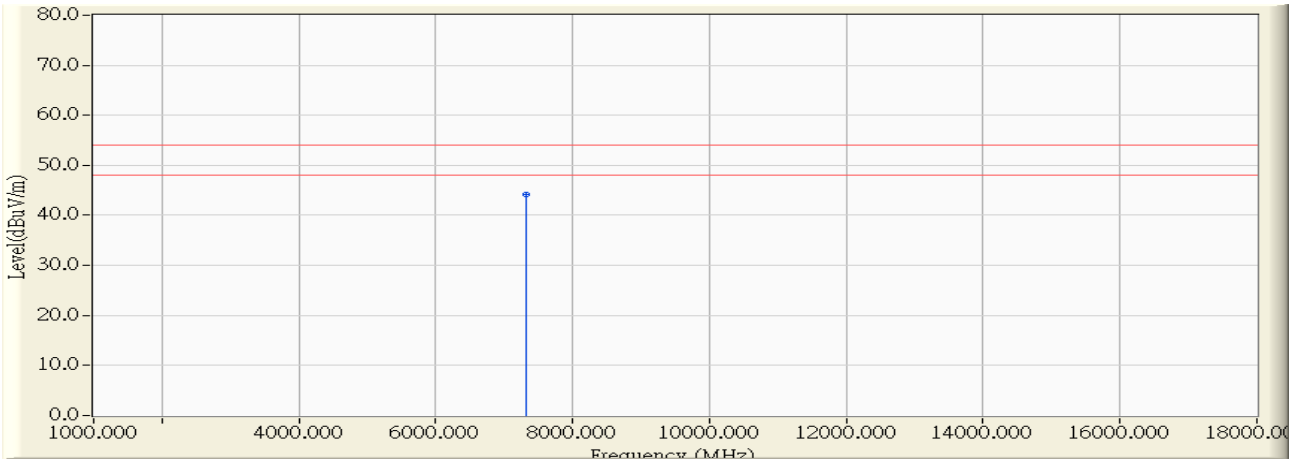


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4880.500	-1.652	42.770	41.118	-32.882	74.000	PEAK
2	*	7321.400	5.594	47.790	53.384	-20.616	74.000	PEAK
3		9762.130	7.608	43.140	50.748	-23.252	74.000	PEAK
4		12202.655	9.887	41.830	51.717	-22.283	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 04:05**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

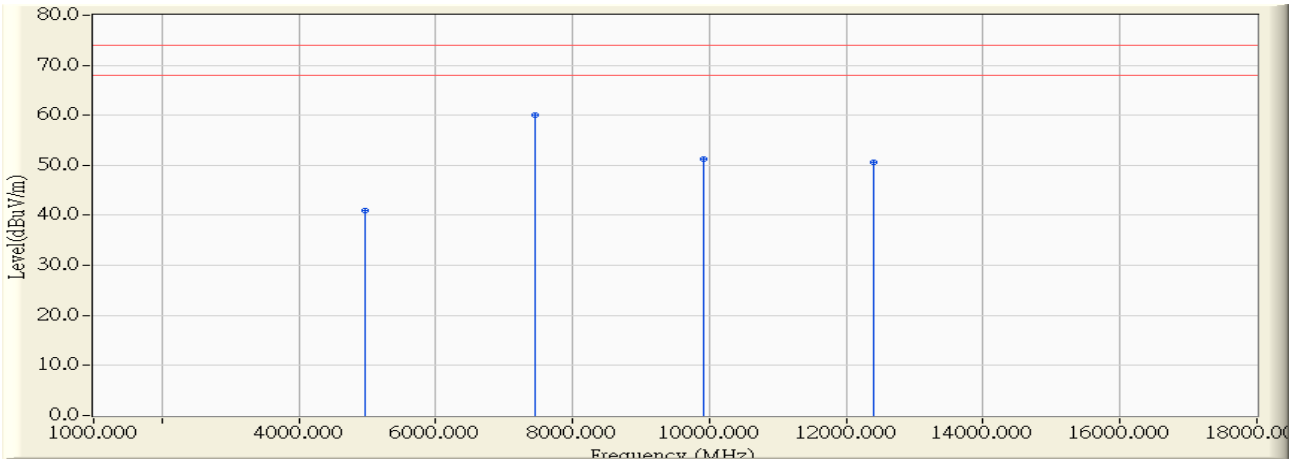


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7318.400	5.588	38.560	44.148	-9.852	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 04:11**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2480MHz**

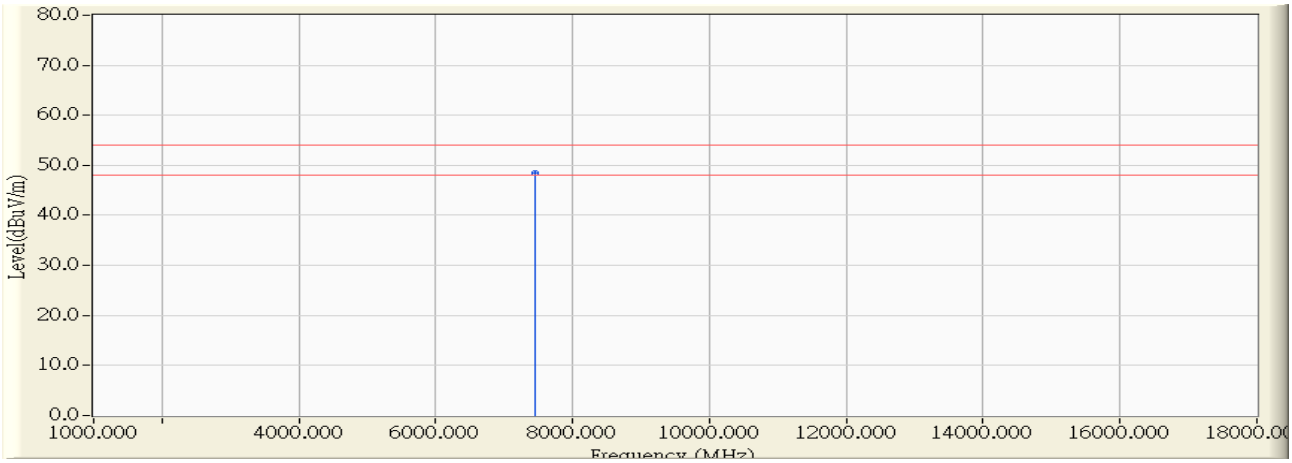


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4959.240	-2.197	43.200	41.003	-32.997	74.000	PEAK
2	*	7441.700	6.330	53.810	60.141	-13.859	74.000	PEAK
3		9921.870	9.142	42.030	51.172	-22.828	74.000	PEAK
4		12399.008	9.934	40.740	50.673	-23.327	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 04:13**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2480MHz**

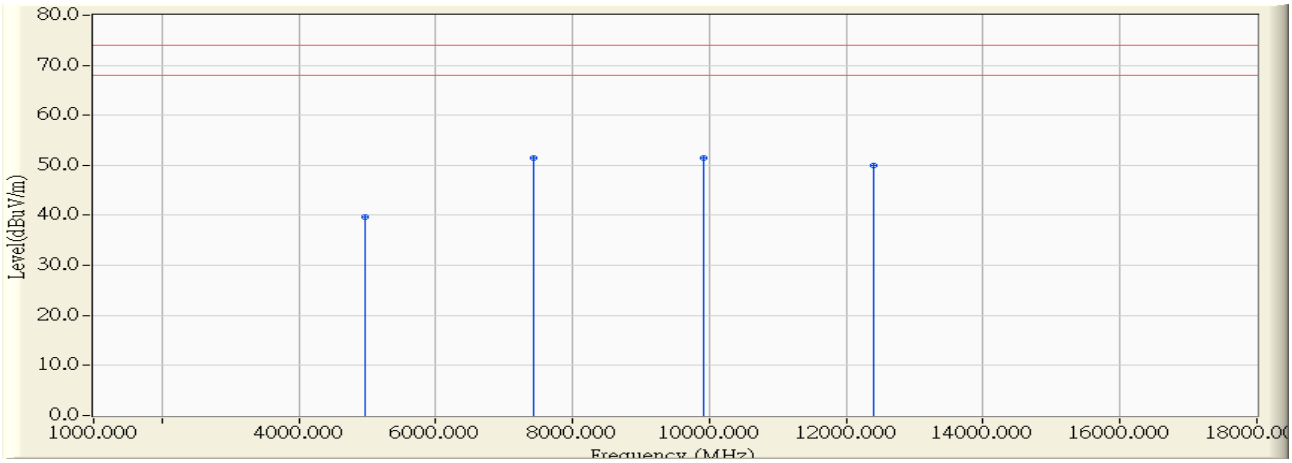


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	7441.630	6.330	42.240	48.571	-5.429	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

Site : CB1	**Time : 2015/08/04 - 04:23**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		4958.832	-1.637	41.360	39.723	-34.277	74.000	PEAK
2	*	7438.240	5.823	45.730	51.554	-22.446	74.000	PEAK
3		9917.890	8.218	43.240	51.458	-22.542	74.000	PEAK
4		12399.470	9.849	40.170	50.019	-23.981	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 13GHz were not included is because their levels are too low.

5. RF antenna conducted test

5.1. Test Equipment

The following test equipment is used during the test:

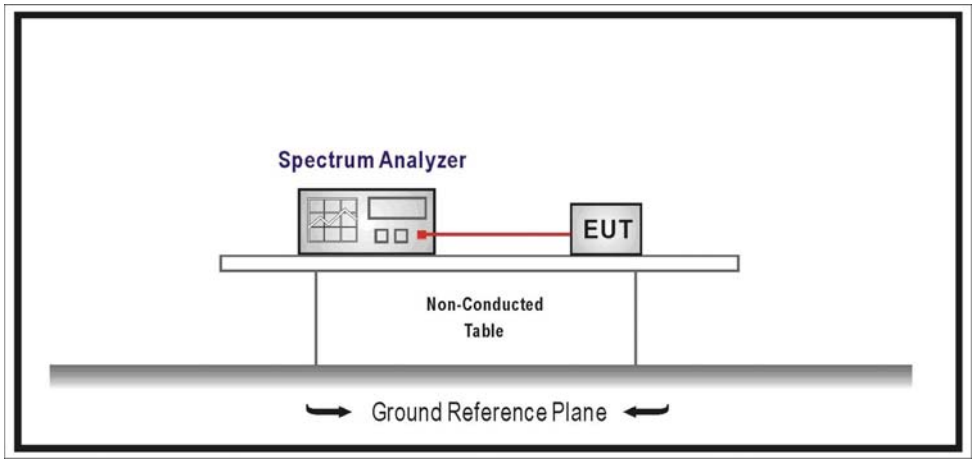
RF antenna conducted test / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

Note: All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup

RF Conducted Measurement:



5.3. Limits

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 an RF conducted or 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)).

5.4. Test Procedure

The EUT was setup according to ANSI C63.4: 2014 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

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

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

5.6. Uncertainty

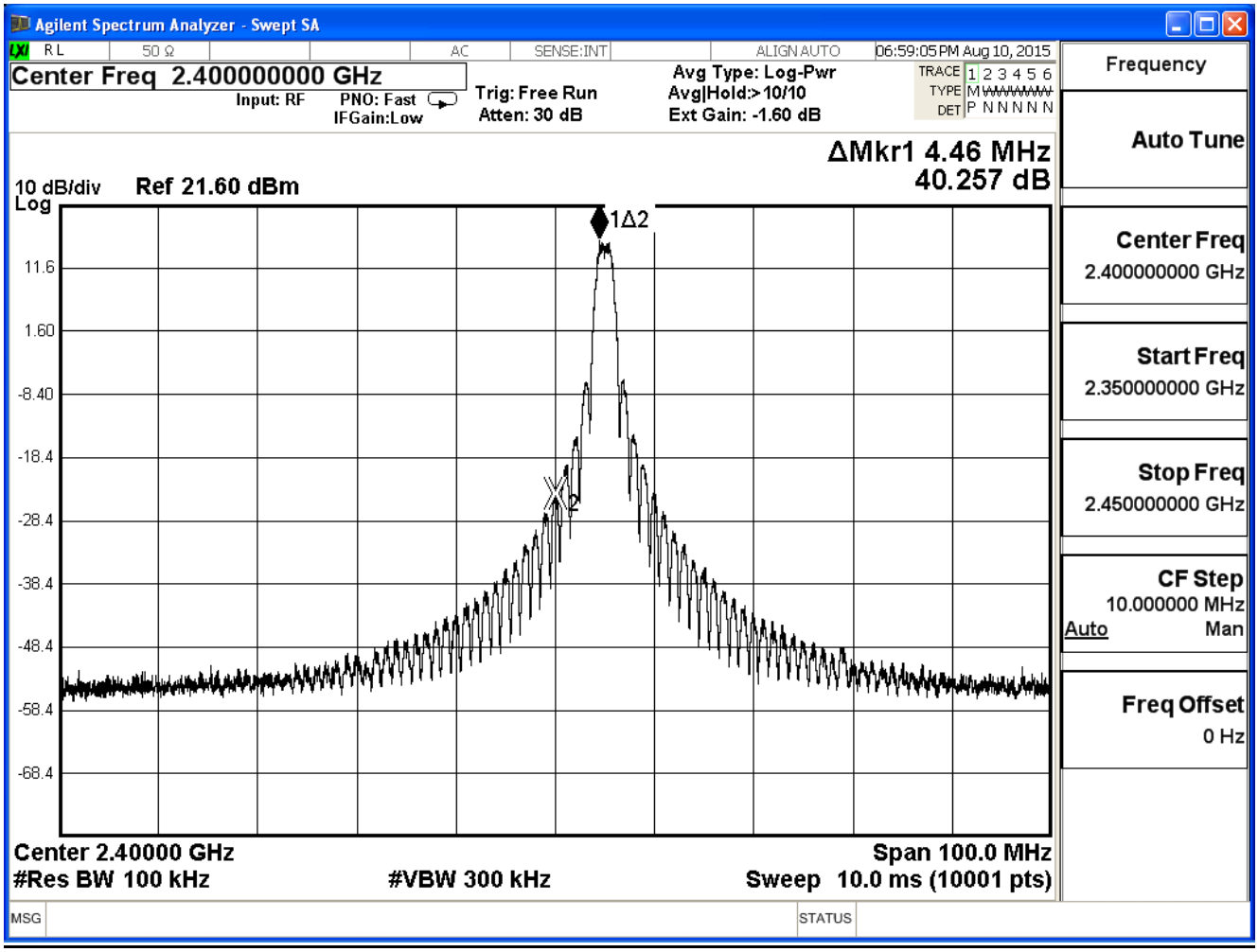
Conducted is defined as ± 1.27dB

5.7. Test Result

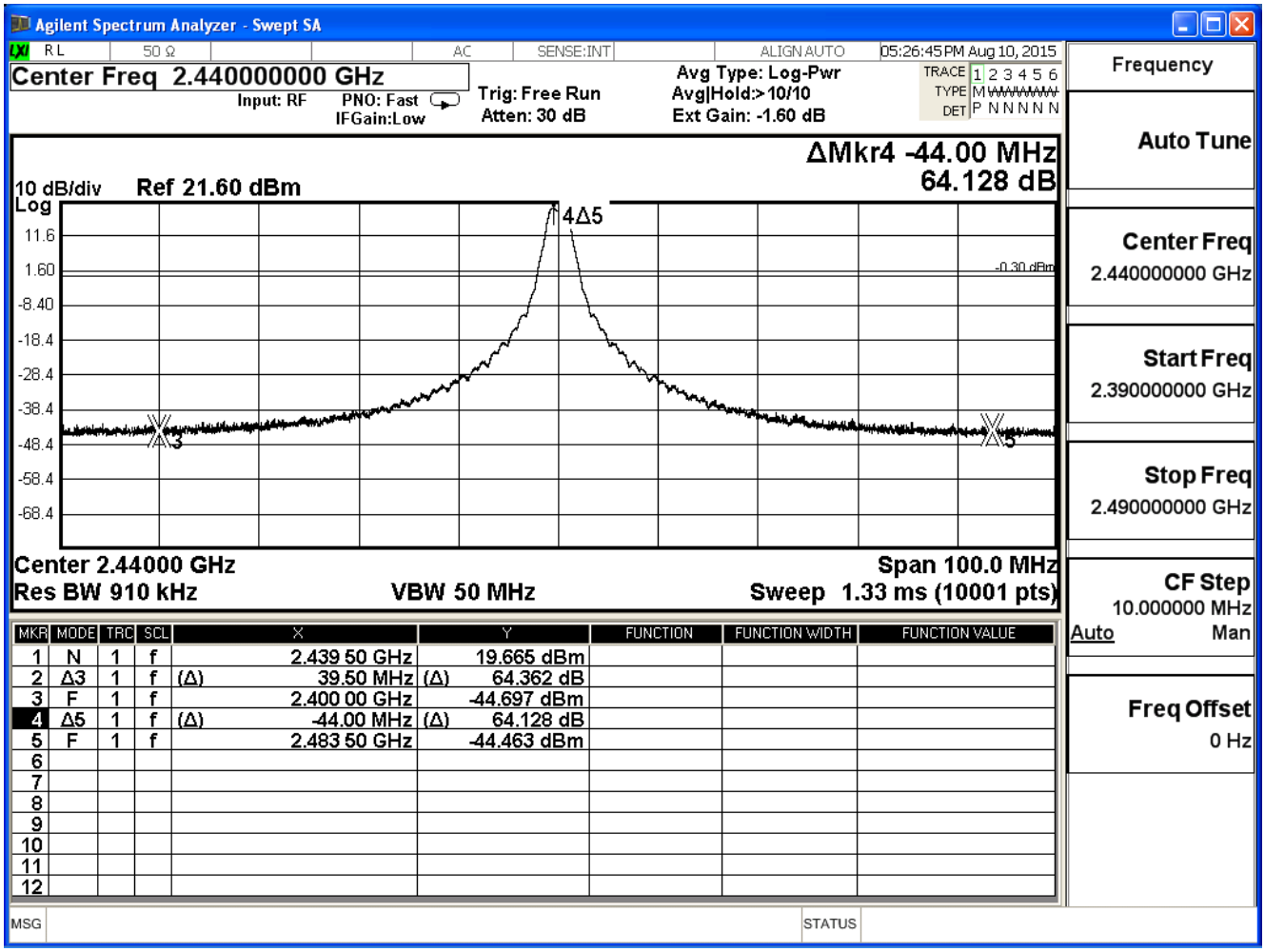
Product	ASUS SRT-AC1900 Wireless Smart Router		
Test Item	RF antenna conducted test		
Test Mode	Mode 1: Tx-AD891M21		
Date of Test	2015/08/10	Test Site	SR7

Channel No.	Frequency (MHz)	Measure Level (dBc)	Limit (dBc)	Result
11	2405	40.257	≧30	Pass
18	2440	64.128	≧30	Pass
26	2480	30.289	≧30	Pass

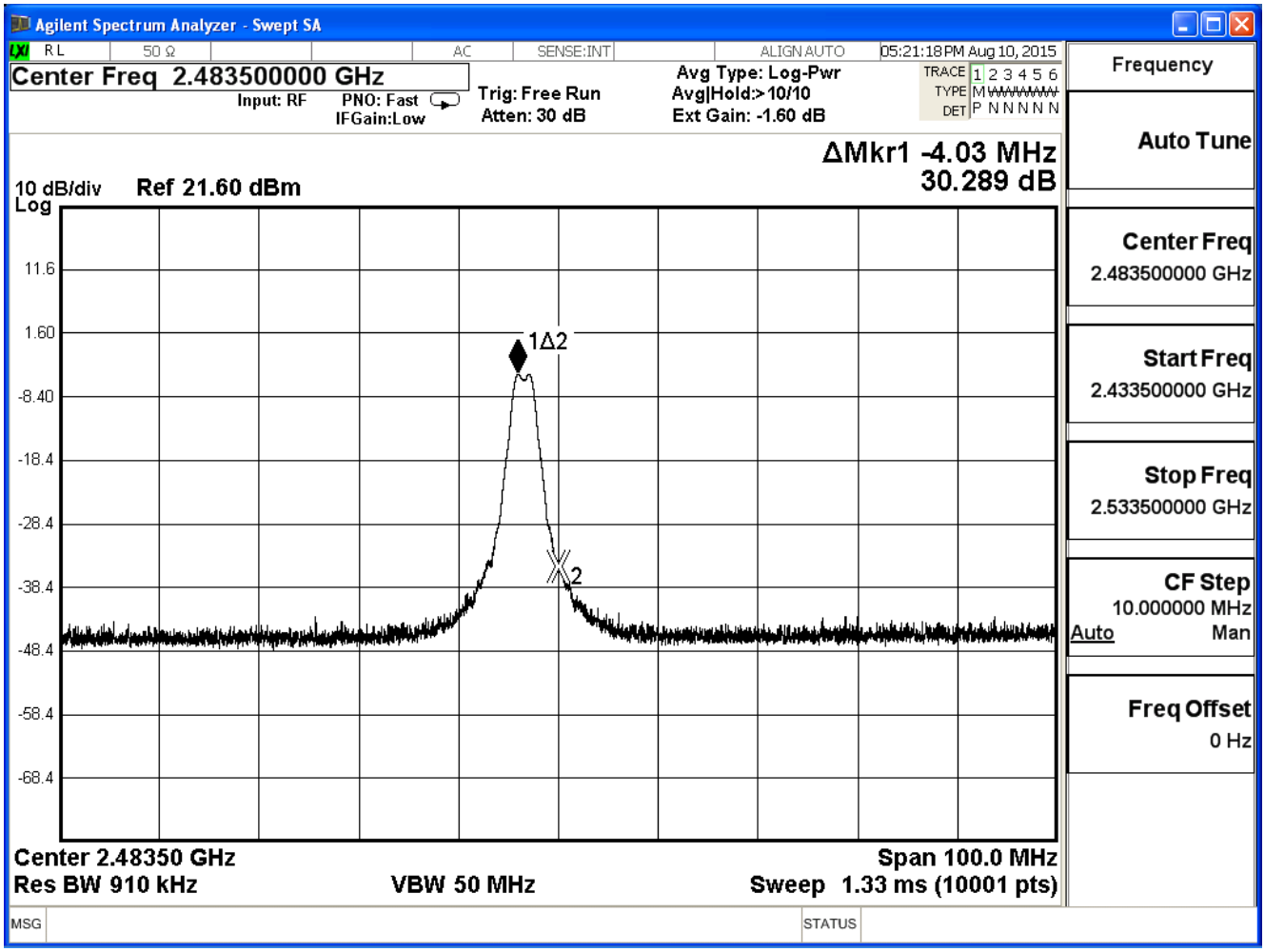
Channel 11



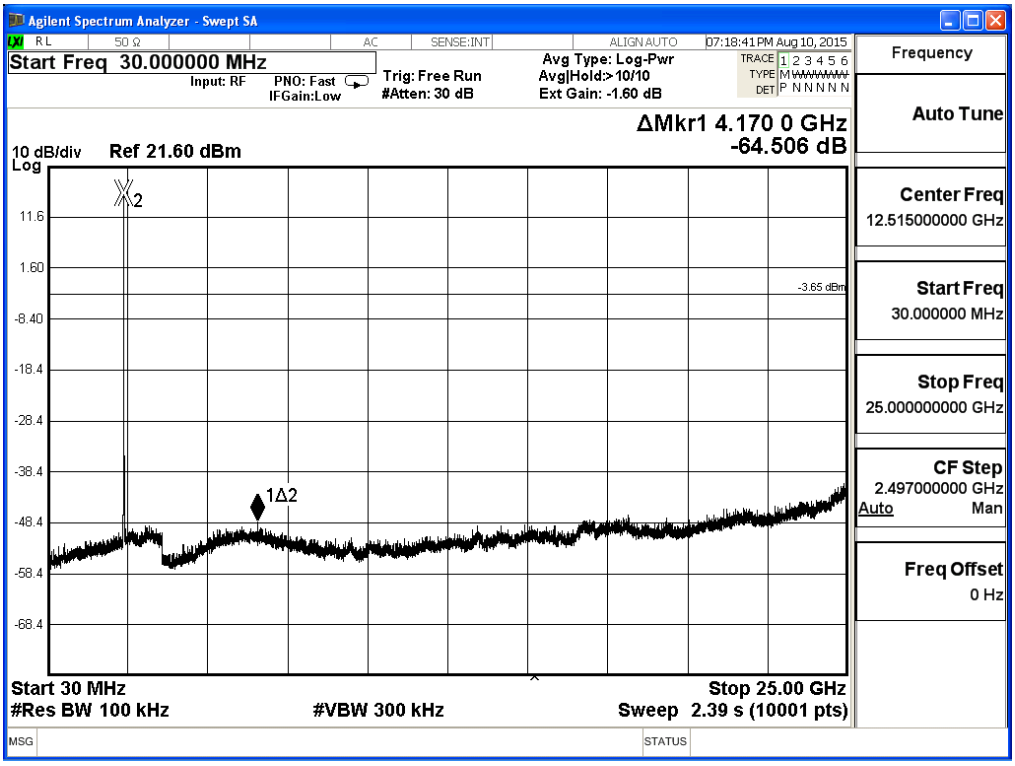
Channel 18


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:26:45 PM Aug 10, 2015
Center Freq 2.440000000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ext Gain: -1.60 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr4 -44.00 MHz
64.128 dB
10 dB/div
Log
Ref 21.60 dBm
11.6
1.60
-8.40
-18.4
-28.4
-38.4
-48.4
-58.4
-68.4
-0.30 dBm
Center 2.44000 GHz
Res BW 910 kHz
VBW 50 MHz
Span 100.0 MHz
Sweep 1.33 ms (10001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.439 50 GHz 19.665 dBm
2 Δ3 1 f (Δ) 39.50 MHz (Δ) 64.362 dB
3 F 1 f 2.400 00 GHz -44.697 dBm
4 Δ5 1 f (Δ) -44.00 MHz (Δ) 64.128 dB
5 F 1 f 2.483 50 GHz -44.463 dBm
6
7
8
9
10
11
12
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.440000000 GHz
Start Freq
2.390000000 GHz
Stop Freq
2.490000000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

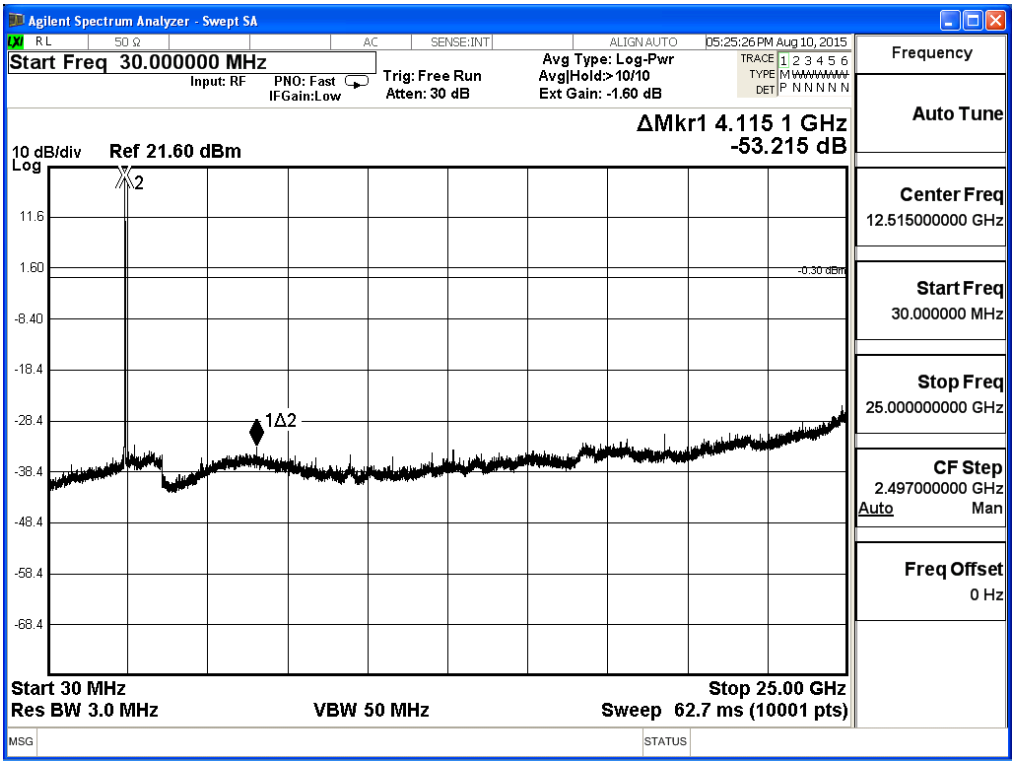
Channel 26


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:21:18 PM Aug 10, 2015
Center Freq 2.483500000 GHz
Input: RF
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ext Gain: -1.60 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
ΔMkr1 -4.03 MHz
30.289 dB
10 dB/div
Log
Ref 21.60 dBm
11.6
1.60
-8.40
-18.4
-28.4
-38.4
-48.4
-58.4
-68.4
1Δ2
2
Center 2.48350 GHz
Res BW 910 kHz
VBW 50 MHz
Span 100.0 MHz
Sweep 1.33 ms (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.483500000 GHz
Start Freq
2.433500000 GHz
Stop Freq
2.533500000 GHz
CF Step
10.000000 MHz
Auto
Man
Freq Offset
0 Hz

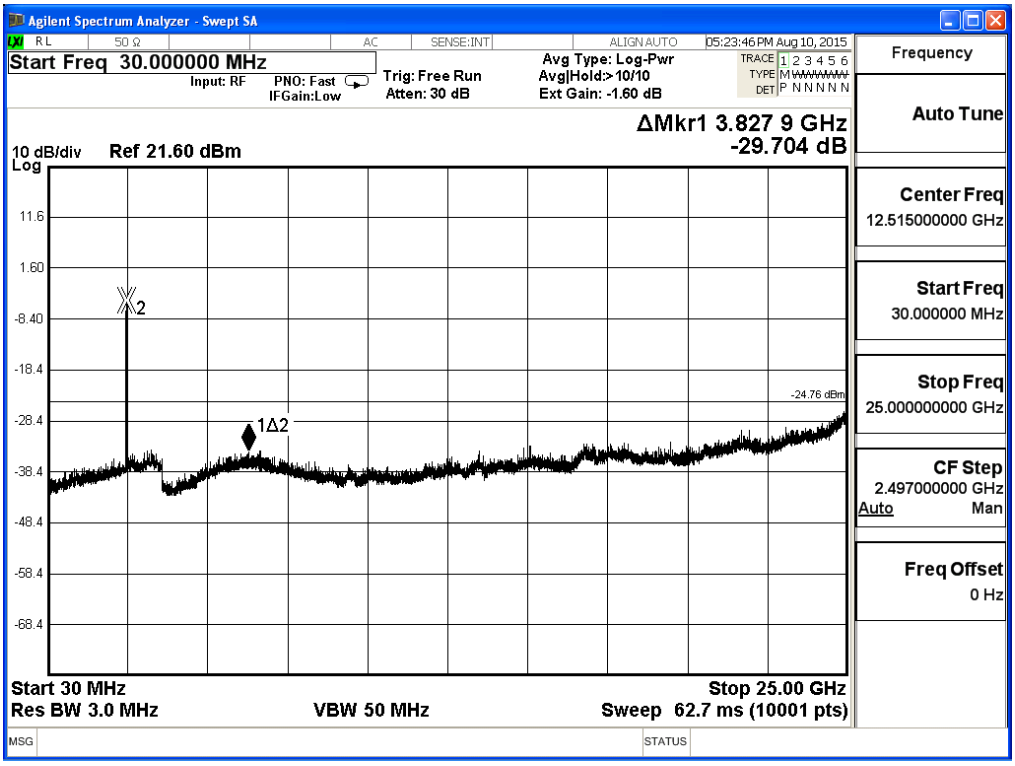
2405MHz (30MHz-25GHz)



2440MHz (30MHz-25GHz)



2480MHz (30MHz-25GHz)



6. Band Edge

6.1. Test Equipment

The following test equipments are used during the test:

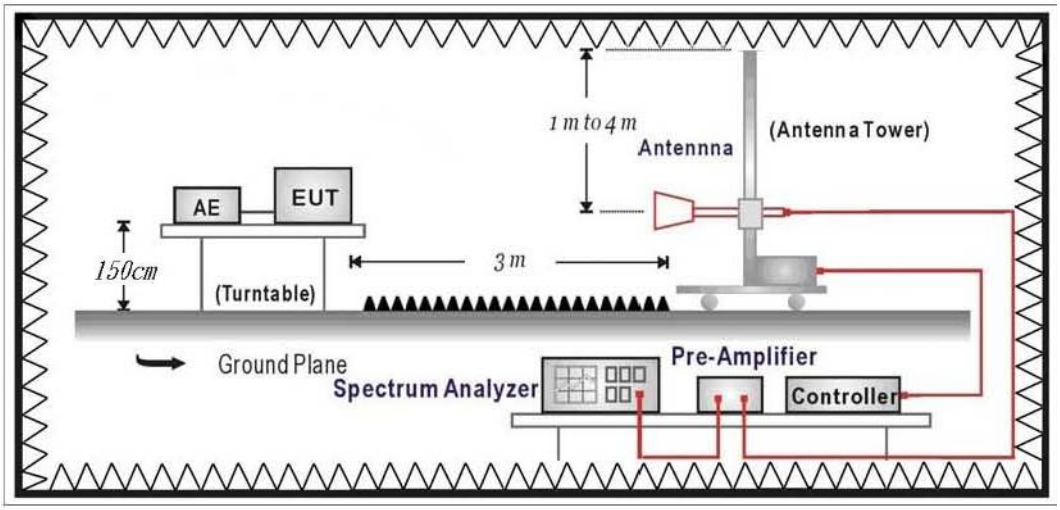
Band Edge / CB1

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Double Ridged Guide Horn Antenna	Schwarzback	BBHA 9120	D743	2016/01/26
Spectrum Analyzer	Agilent	E4440A	MY46187335	2016/01/07
k Type Cable	Huber Suhner	Sucoflex 102	25623/2	2016/01/26

Note: All equipments that need to calibrate are with calibration period of 1 year.

6.2. Test Setup

RF Radiated Measurement:



6.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

6.4. Test Procedure

The EUT was setup according to ANSI C63.10: 2013 and tested according to FHSS test procedure of FCC Public Notice DA 00-705 for compliance to FCC 47CFR 15.247 requirements

The EUT and its simulators are placed on a turn table which is 1.5 meter above ground. The turn table can rotate 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 can move up and down between 1 meter and 4 meters to find out the maximum emission level.

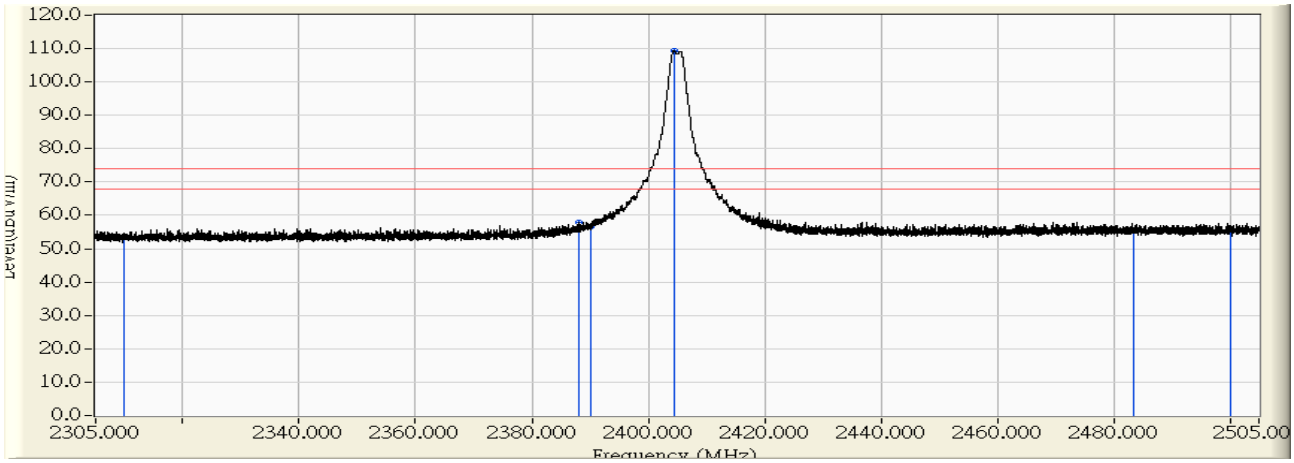
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2014 on radiated measurement.

6.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

6.6. Test Result

Site : CB1	**Time : 2015/07/31 - 19:50**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

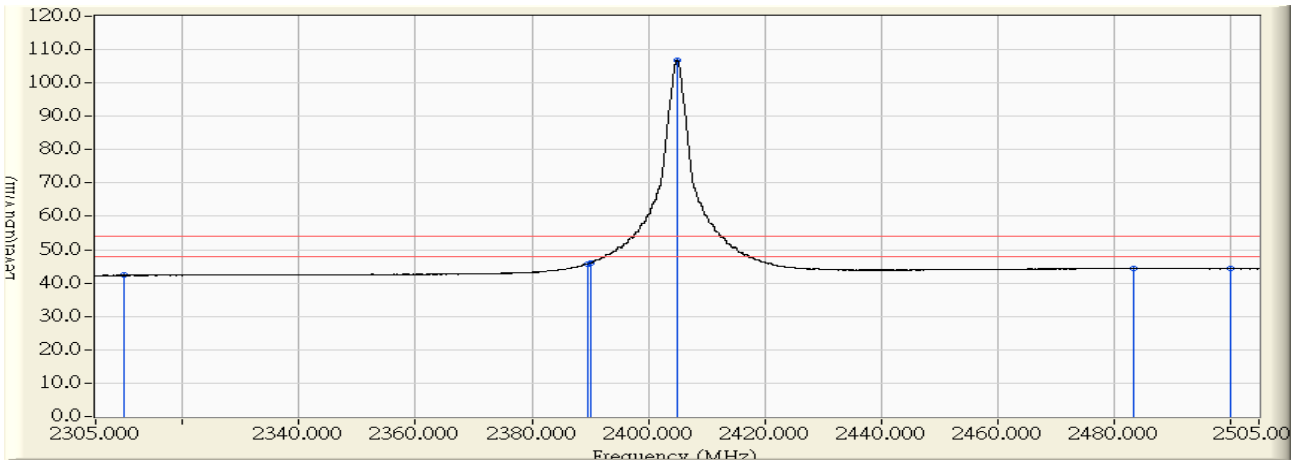


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	25.574	53.704	-20.296	74.000	PEAK
2		2388.072	28.914	28.916	57.830	-16.170	74.000	PEAK
3		2390.000	28.933	27.696	56.629	-17.371	74.000	PEAK
4	*	2404.470	29.078	80.242	109.320	35.320	74.000	PEAK
5		2483.500	29.829	25.538	55.367	-18.633	74.000	PEAK
6		2500.000	29.826	25.498	55.323	-18.677	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 19:51**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

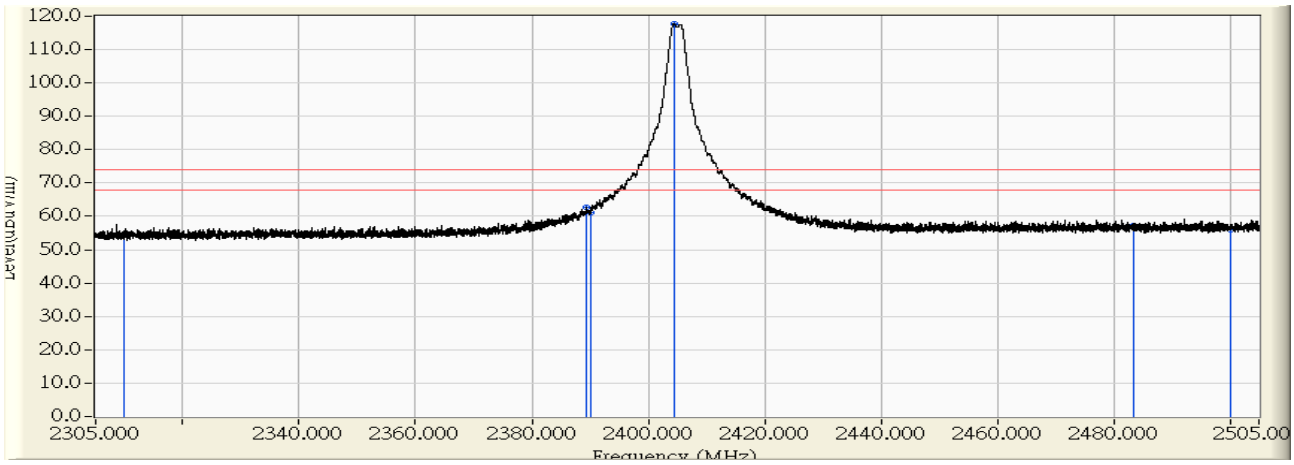


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	14.239	42.369	-11.631	54.000	AVERAGE
2		2389.651	28.930	16.827	45.757	-8.243	54.000	AVERAGE
3		2390.000	28.933	17.143	46.076	-7.924	54.000	AVERAGE
4	*	2404.950	29.083	77.790	106.873	52.873	54.000	AVERAGE
5		2483.500	29.829	14.567	44.396	-9.604	54.000	AVERAGE
6		2500.000	29.826	14.560	44.385	-9.615	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 19:55**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

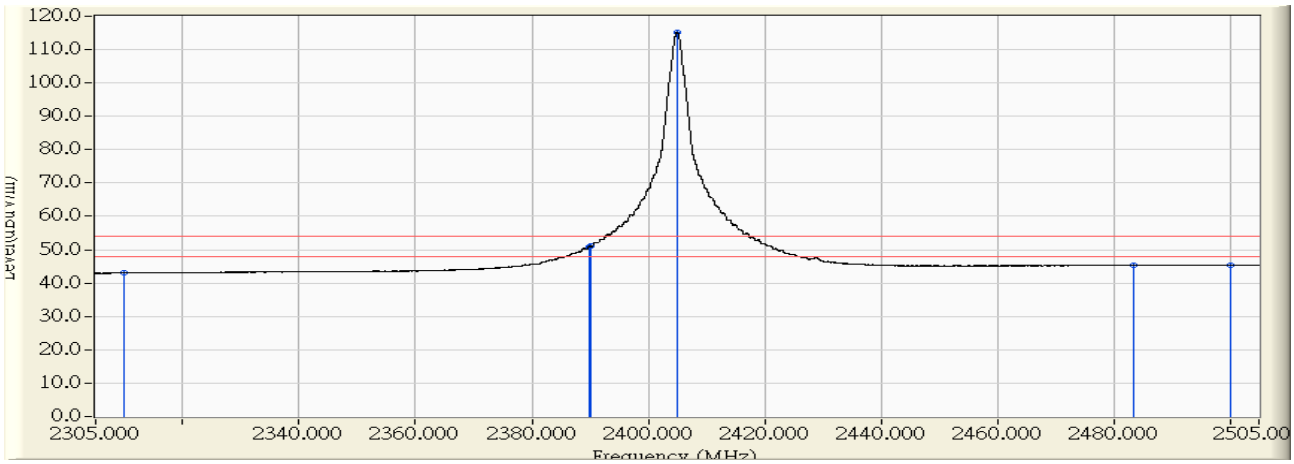


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	25.687	54.471	-19.529	74.000	PEAK
2		2389.332	29.739	32.945	62.684	-11.316	74.000	PEAK
3		2390.000	29.747	31.446	61.193	-12.807	74.000	PEAK
4	*	2404.450	29.921	87.761	117.682	43.682	74.000	PEAK
5		2483.500	30.830	26.401	57.231	-16.769	74.000	PEAK
6		2500.000	30.860	25.089	55.948	-18.052	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 19:56**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2405MHz**

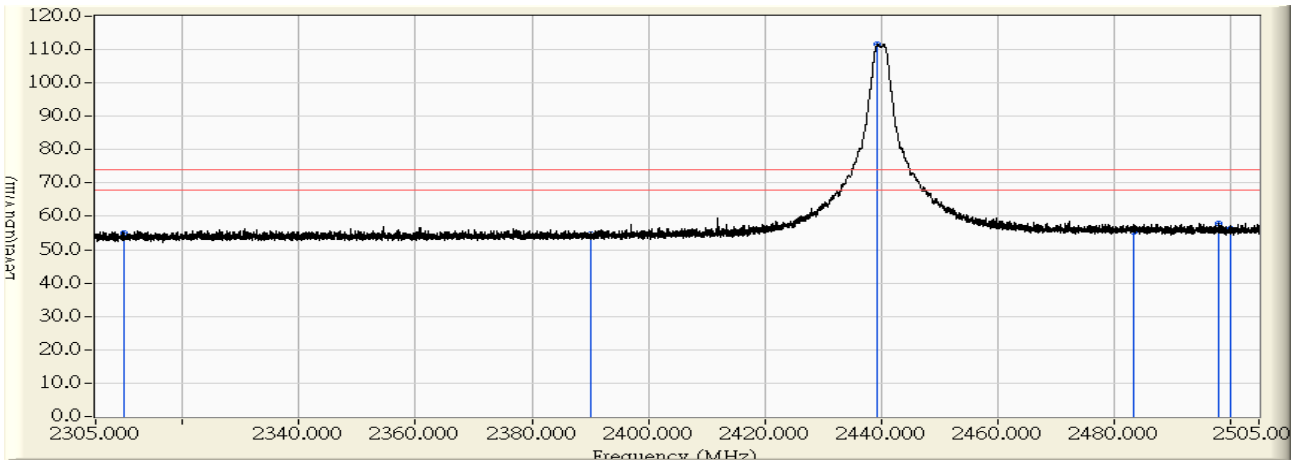


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	14.323	43.107	-10.893	54.000	AVERAGE
2		2389.771	29.744	21.033	50.777	-3.223	54.000	AVERAGE
3		2390.000	29.747	21.268	51.015	-2.985	54.000	AVERAGE
4	*	2404.950	29.927	85.301	115.228	61.228	54.000	AVERAGE
5		2483.500	30.830	14.519	45.349	-8.651	54.000	AVERAGE
6		2500.000	30.860	14.517	45.376	-8.624	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:03**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

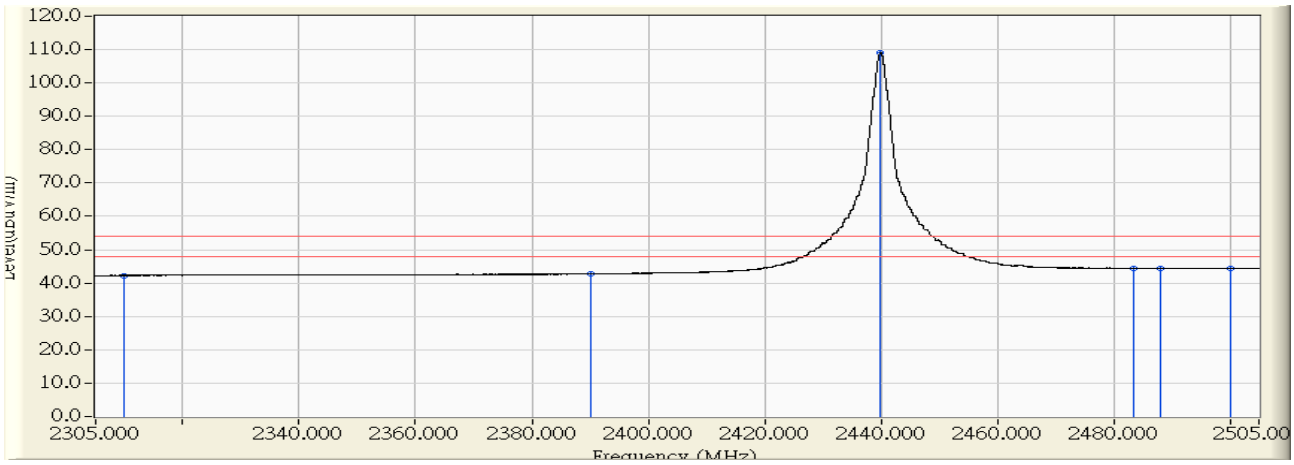


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	26.841	54.971	-19.029	74.000	PEAK
2		2390.000	28.933	25.704	54.637	-19.363	74.000	PEAK
3	*	2439.446	29.430	82.103	111.533	37.533	74.000	PEAK
4		2483.500	29.829	25.605	55.434	-18.566	74.000	PEAK
5		2498.001	29.830	27.922	57.752	-16.248	74.000	PEAK
6		2500.000	29.826	26.516	56.341	-17.659	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:04**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

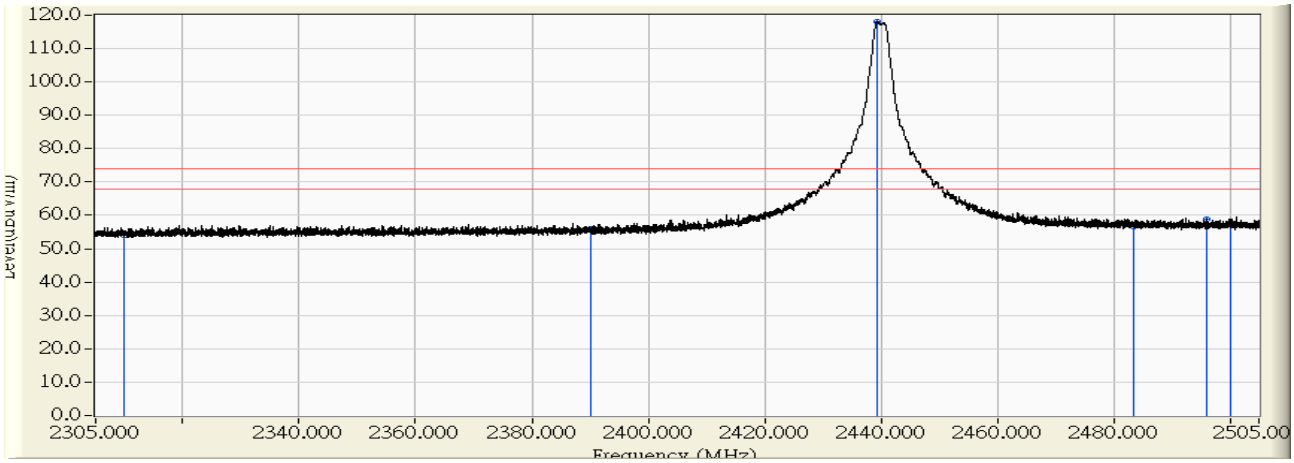


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	14.145	42.275	-11.725	54.000	AVERAGE
2		2390.000	28.933	13.799	42.732	-11.268	54.000	AVERAGE
3	*	2439.966	29.435	79.662	109.097	55.097	54.000	AVERAGE
4		2483.500	29.829	14.591	44.420	-9.580	54.000	AVERAGE
5		2487.962	29.831	14.695	44.526	-9.474	54.000	AVERAGE
6		2500.000	29.826	14.574	44.399	-9.601	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:10**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

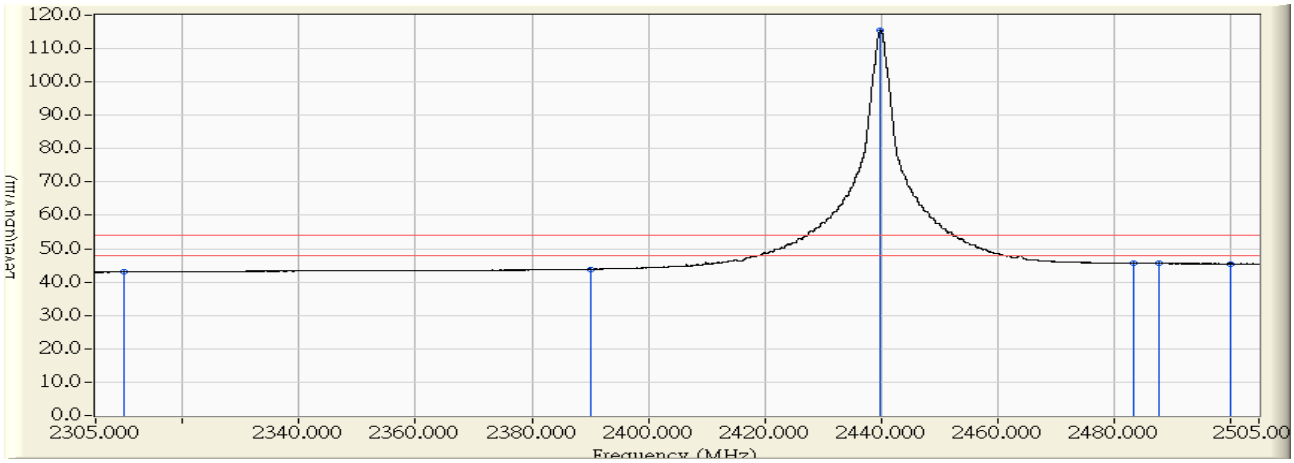


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	25.320	54.104	-19.896	74.000	PEAK
2		2390.000	29.747	26.074	55.821	-18.179	74.000	PEAK
3	*	2439.446	30.342	87.648	117.991	43.991	74.000	PEAK
4		2483.500	30.830	25.952	56.782	-17.218	74.000	PEAK
5		2496.041	30.861	27.907	58.768	-15.232	74.000	PEAK
6		2500.000	30.860	26.917	57.776	-16.224	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2440MHz**

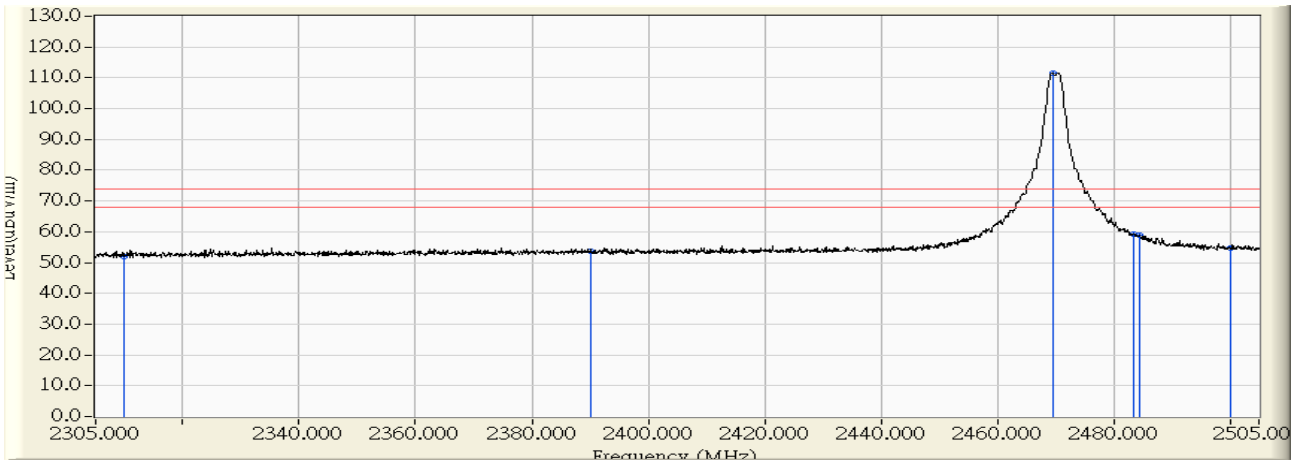


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	14.236	43.020	-10.980	54.000	AVERAGE
2		2390.000	29.747	14.115	43.862	-10.138	54.000	AVERAGE
3	*	2439.966	30.349	85.171	115.520	61.520	54.000	AVERAGE
4		2483.500	30.830	14.832	45.662	-8.338	54.000	AVERAGE
5		2487.742	30.840	14.911	45.752	-8.248	54.000	AVERAGE
6		2500.000	30.860	14.612	45.471	-8.529	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2470MHz**

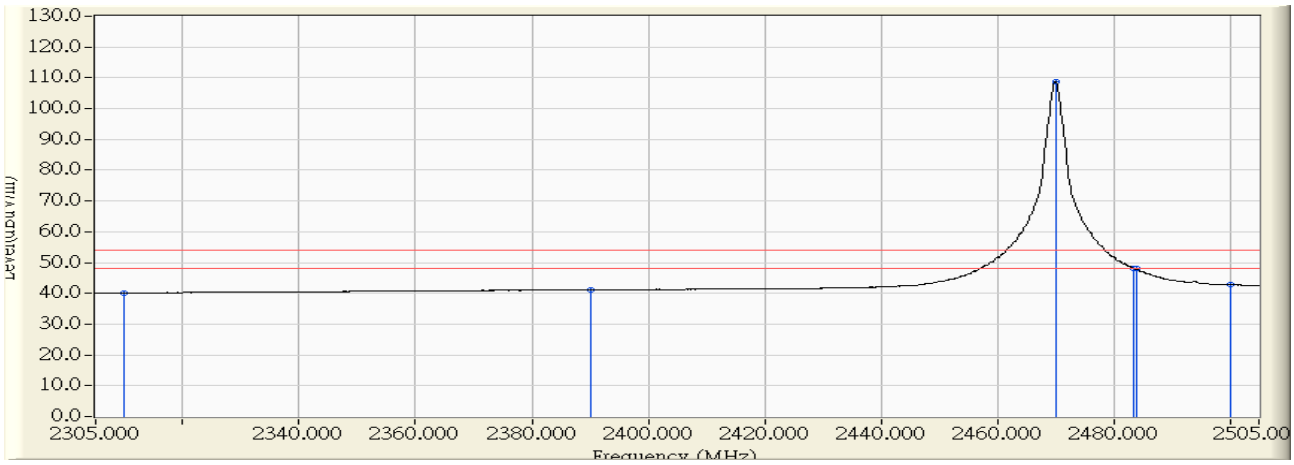


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	23.943	52.073	-21.927	74.000	PEAK
2		2390.000	28.933	24.720	53.653	-20.347	74.000	PEAK
3	*	2469.500	29.731	81.906	111.637	37.637	74.000	PEAK
4		2483.500	29.829	29.553	59.382	-14.618	74.000	PEAK
5		2484.500	29.830	28.959	58.789	-15.211	74.000	PEAK
6		2500.000	29.826	24.725	54.550	-19.450	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2470MHz**

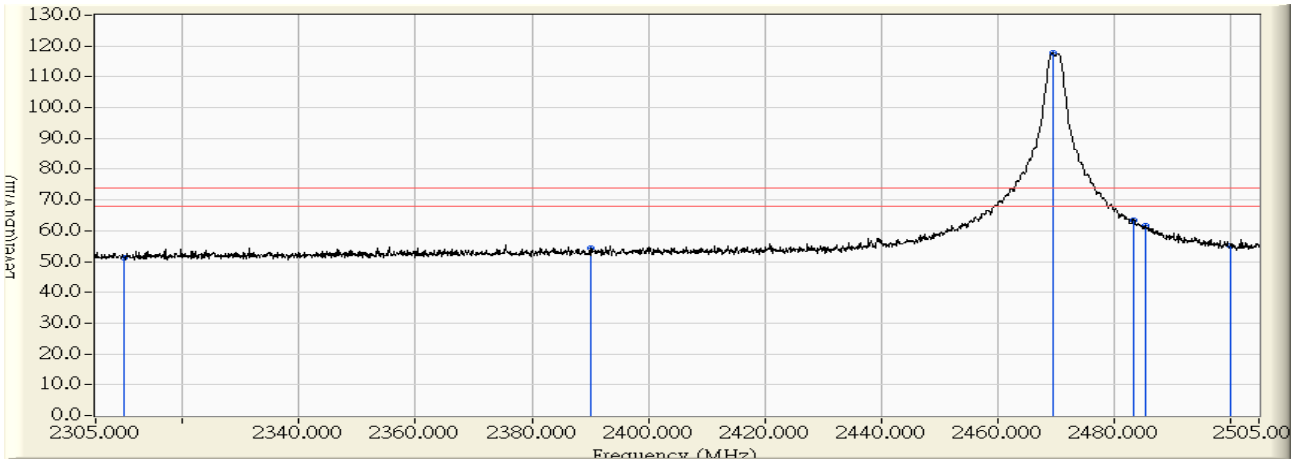


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.025	40.155	-13.845	54.000	AVERAGE
2		2390.000	28.933	12.280	41.213	-12.787	54.000	AVERAGE
3	*	2470.000	29.737	78.944	108.680	54.680	54.000	AVERAGE
4		2483.500	29.829	18.148	47.977	-6.023	54.000	AVERAGE
5		2483.900	29.830	18.153	47.982	-6.018	54.000	AVERAGE
6		2500.000	29.826	12.985	42.810	-11.190	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2470MHz**

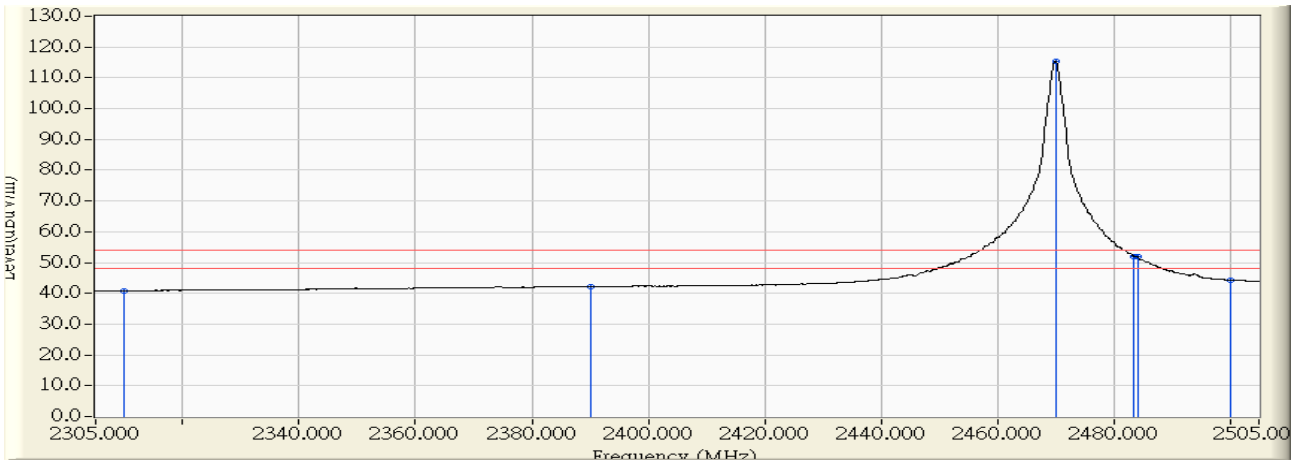


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	22.403	51.187	-22.813	74.000	PEAK
2		2390.000	29.747	24.663	54.410	-19.590	74.000	PEAK
3	*	2469.500	30.704	87.029	117.733	43.733	74.000	PEAK
4		2483.500	30.830	32.547	63.377	-10.623	74.000	PEAK
5		2485.400	30.834	30.986	61.821	-12.179	74.000	PEAK
6		2500.000	30.860	24.275	55.134	-18.866	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2470MHz**

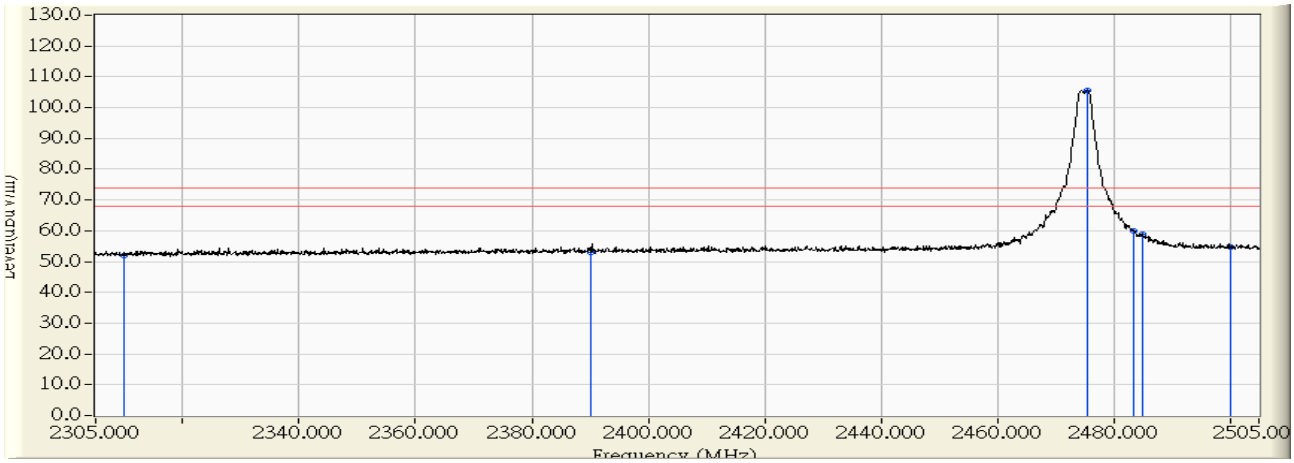


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	12.085	40.869	-13.131	54.000	AVERAGE
2		2390.000	29.747	12.449	42.196	-11.804	54.000	AVERAGE
3	*	2470.000	30.711	84.687	115.397	61.397	54.000	AVERAGE
4		2483.500	30.830	21.153	51.983	-2.017	54.000	AVERAGE
5		2484.200	30.832	20.961	51.793	-2.207	54.000	AVERAGE
6		2500.000	30.860	13.512	44.371	-9.629	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2475MHz**

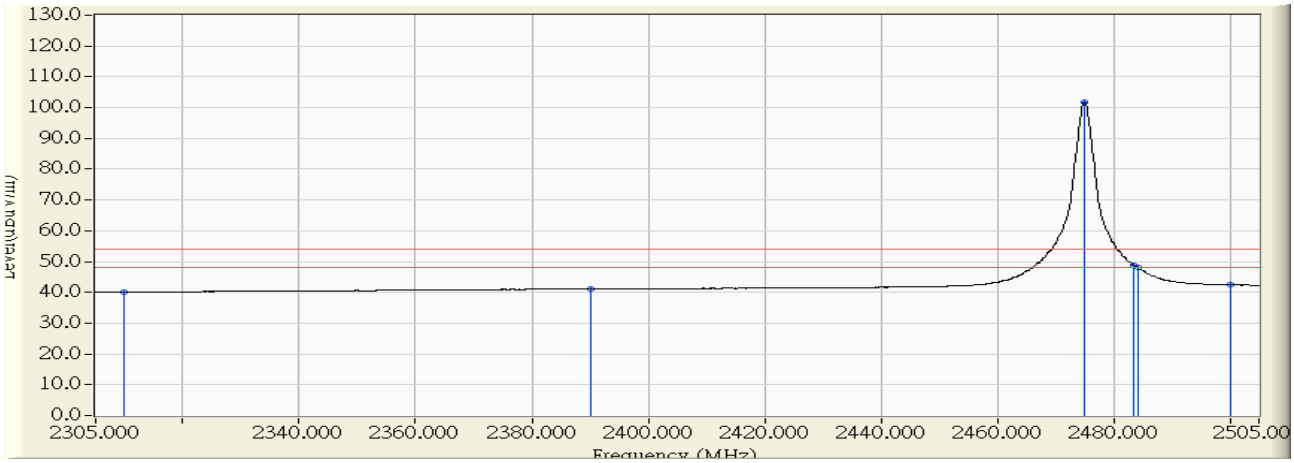


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	23.891	52.021	-21.979	74.000	PEAK
2		2390.000	28.933	24.035	52.968	-21.032	74.000	PEAK
3	*	2475.400	29.790	75.828	105.619	31.619	74.000	PEAK
4		2483.500	29.829	30.041	59.870	-14.130	74.000	PEAK
5		2484.900	29.830	28.956	58.786	-15.214	74.000	PEAK
6		2500.000	29.826	25.029	54.854	-19.146	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2475MHz**

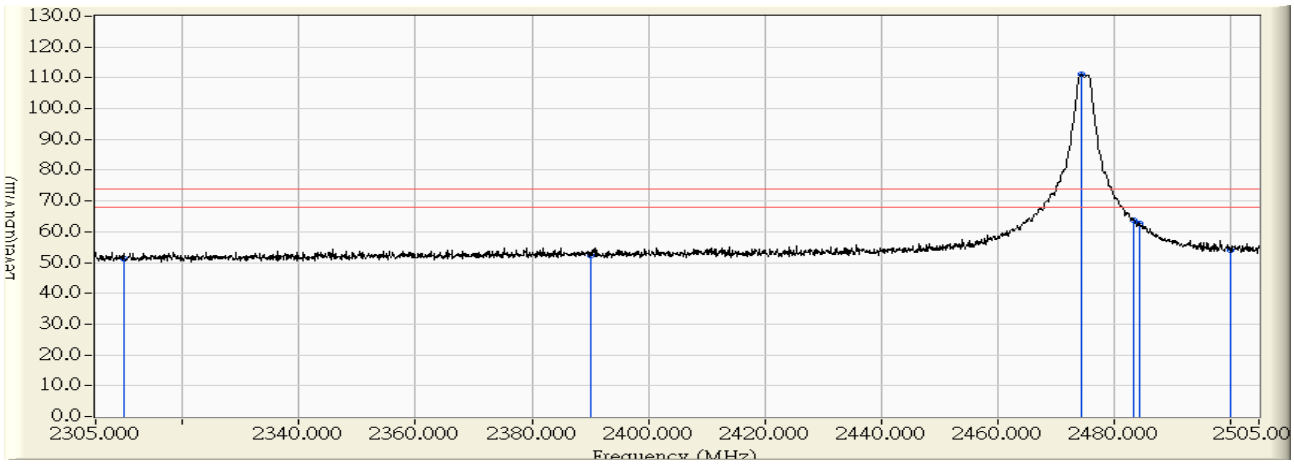


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	12.010	40.140	-13.860	54.000	AVERAGE
2		2390.000	28.933	12.188	41.121	-12.879	54.000	AVERAGE
3	*	2475.000	29.786	71.989	101.776	47.776	54.000	AVERAGE
4		2483.500	29.829	18.871	48.700	-5.300	54.000	AVERAGE
5		2484.200	29.830	18.111	47.940	-6.060	54.000	AVERAGE
6		2500.000	29.826	12.561	42.386	-11.614	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2475MHz**

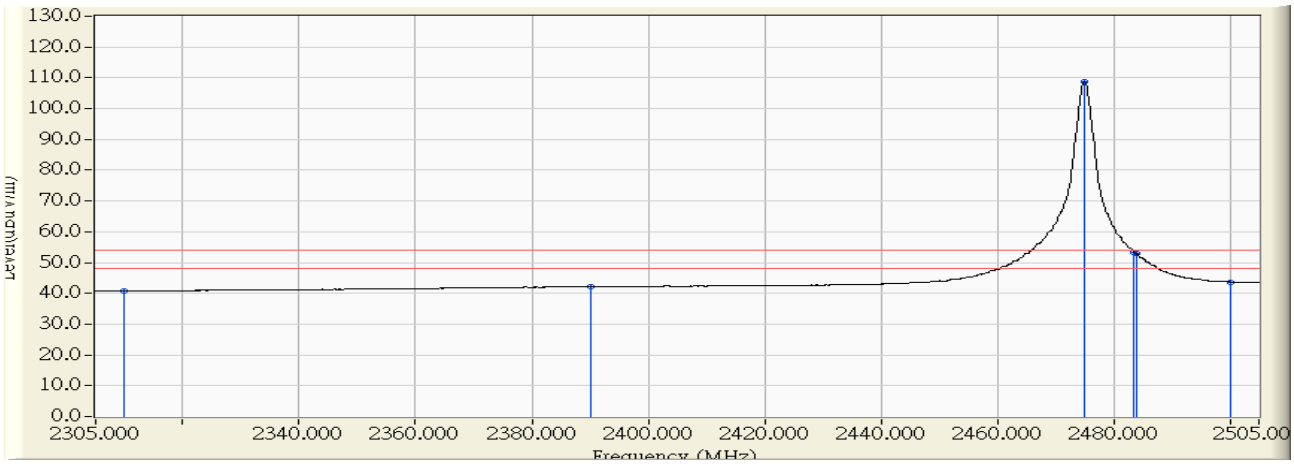


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	22.414	51.198	-22.802	74.000	PEAK
2		2390.000	29.747	22.631	52.378	-21.622	74.000	PEAK
3	*	2474.500	30.765	80.276	111.041	37.041	74.000	PEAK
4		2483.500	30.830	33.074	63.904	-10.096	74.000	PEAK
5		2484.400	30.832	32.059	62.891	-11.109	74.000	PEAK
6		2500.000	30.860	23.172	54.031	-19.969	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:14**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2475MHz**

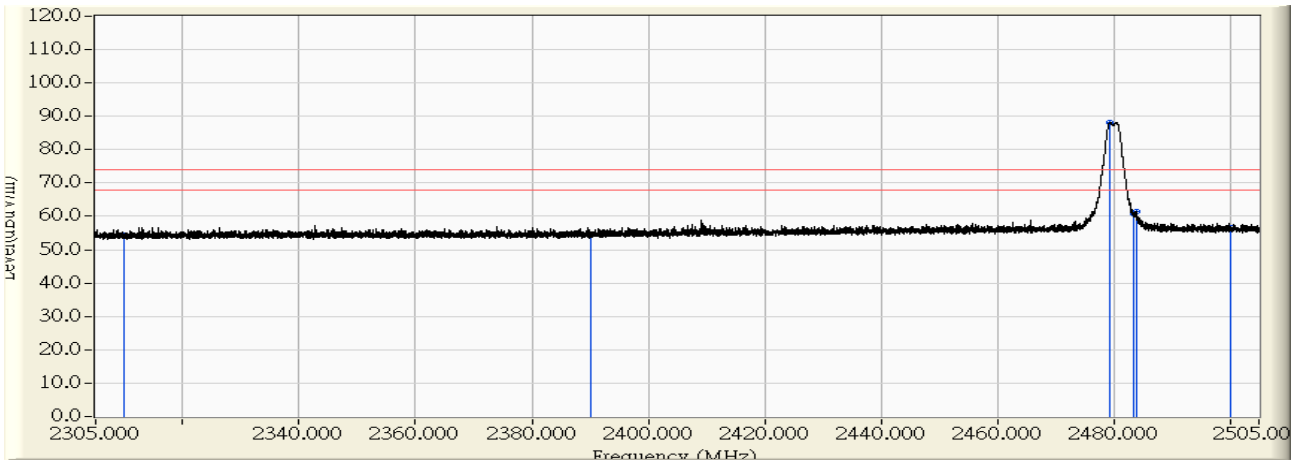


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	11.994	40.778	-13.222	54.000	AVERAGE
2		2390.000	29.747	12.346	42.093	-11.907	54.000	AVERAGE
3	*	2475.000	30.770	78.019	108.790	54.790	54.000	AVERAGE
4		2483.500	30.830	22.497	53.327	-0.673	54.000	AVERAGE
5		2483.900	30.831	22.010	52.841	-1.159	54.000	AVERAGE
6		2500.000	30.860	12.872	43.731	-10.269	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:38**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2480MHz**

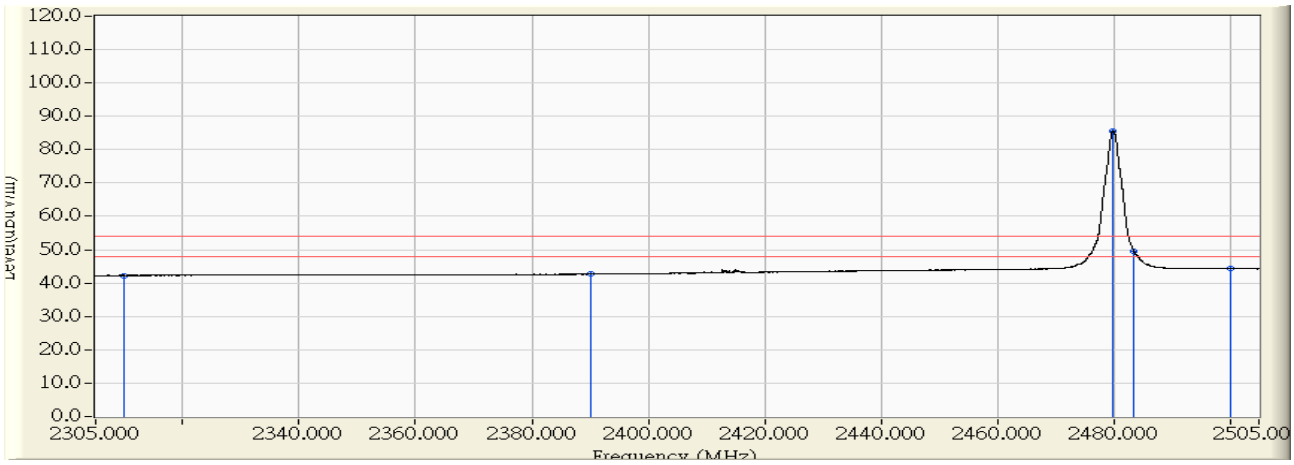


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	26.365	54.495	-19.505	74.000	PEAK
2		2390.000	28.933	25.364	54.297	-19.703	74.000	PEAK
3	*	2479.442	29.827	58.467	88.294	14.294	74.000	PEAK
4		2483.500	29.829	31.037	60.866	-13.134	74.000	PEAK
5		2483.862	29.830	31.655	61.484	-12.516	74.000	PEAK
6		2500.000	29.826	26.793	56.618	-17.382	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:40**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - HORIZONTAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2480MHz**

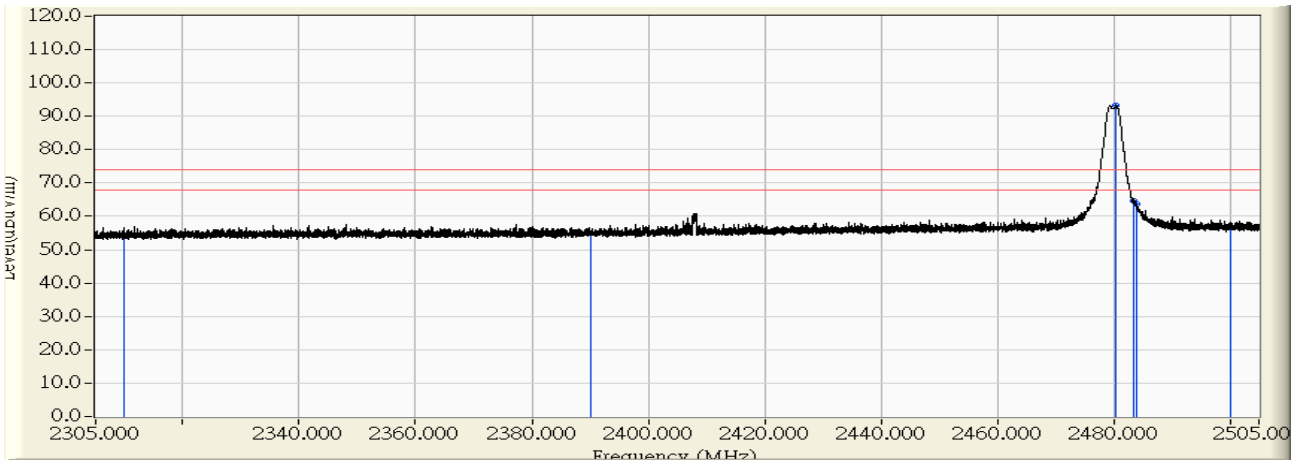


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.130	14.121	42.251	-11.749	54.000	AVERAGE
2		2390.000	28.933	13.750	42.683	-11.317	54.000	AVERAGE
3	*	2479.982	29.827	55.818	85.645	31.645	54.000	AVERAGE
4		2483.500	29.829	19.752	49.581	-4.419	54.000	AVERAGE
5		2483.502	29.829	19.742	49.571	-4.429	54.000	AVERAGE
6		2500.000	29.826	14.569	44.394	-9.606	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:43**
Limit : FCC_SpartC_15.247_H_03M_PK	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2480MHz**

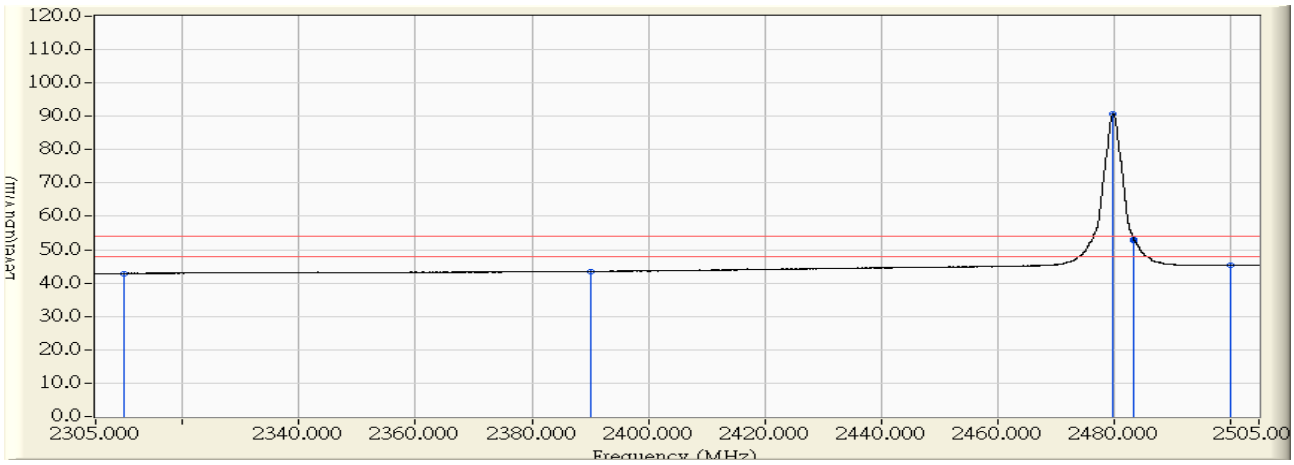


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	25.274	54.058	-19.942	74.000	PEAK
2		2390.000	29.747	25.383	55.130	-18.870	74.000	PEAK
3	*	2480.482	30.822	62.361	93.183	19.183	74.000	PEAK
4		2483.500	30.830	33.788	64.618	-9.382	74.000	PEAK
5		2483.862	30.831	32.864	63.695	-10.305	74.000	PEAK
6		2500.000	30.860	25.716	56.575	-17.425	74.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

Site : CB1	**Time : 2015/07/31 - 20:45**
Limit : FCC_SpartC_15.247_H_03M_AV	**Margin : 6**
Probe : CB1_FCC_EFS_1-18G_H2 - VERTICAL	**Power : AC 120V/60Hz**
EUT : ASUS SRT-AC1900 Wireless Smart Router	**Note : Mode 1: Tx-AD891M21 2480MHz**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		2310.000	28.784	14.120	42.904	-11.096	54.000	AVERAGE
2		2390.000	29.747	13.732	43.479	-10.521	54.000	AVERAGE
3	*	2479.962	30.821	59.842	90.663	36.663	54.000	AVERAGE
4		2483.500	30.830	22.294	53.124	-0.876	54.000	AVERAGE
5		2483.562	30.831	22.034	52.864	-1.136	54.000	AVERAGE
6		2500.000	30.860	14.446	45.305	-8.695	54.000	AVERAGE

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measure Level = Reading Level + Correct Factor。
6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. Occupied Bandwidth

7.1. Test Equipment

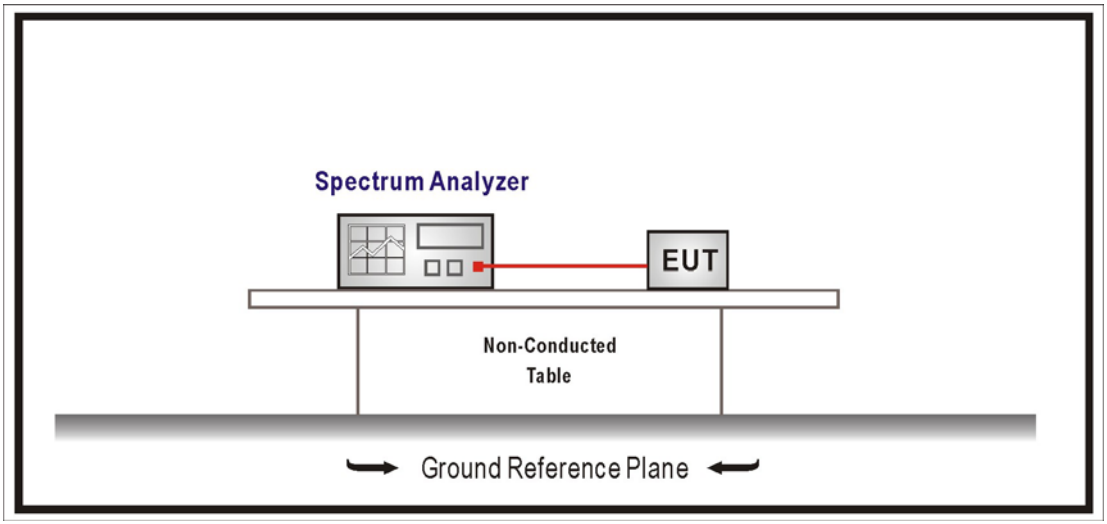
The following test equipment is used during the test:

Occupied Bandwidth / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

Note: All equipments that need to calibrate are with calibration period of 1 year.

7.2. Test Setup



7.3. Limits

The 6 dB bandwidth must be greater than 500 kHz.

7.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2014; tested procedure section 8.1 of KDB558074 v03r02 for compliance to FCC 47CFR 15.247 requirements. Set RBW = 100KHz, Set the VBW≧3xRBW, Sweep Time=Auto, Set Peak Detector.

7.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

7.6. Uncertainty

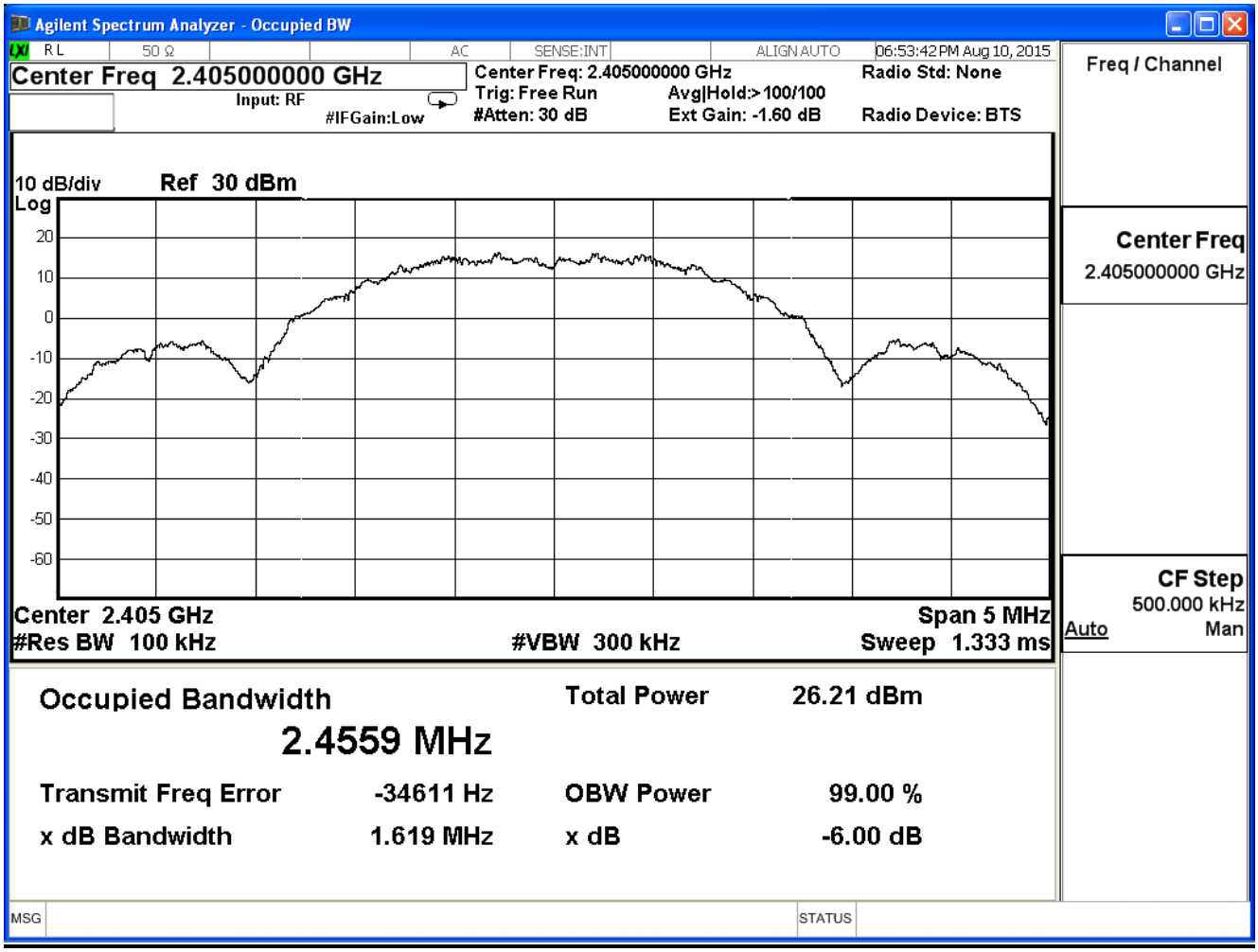
The measurement uncertainty is defined as ±150Hz

7.7. Test Result

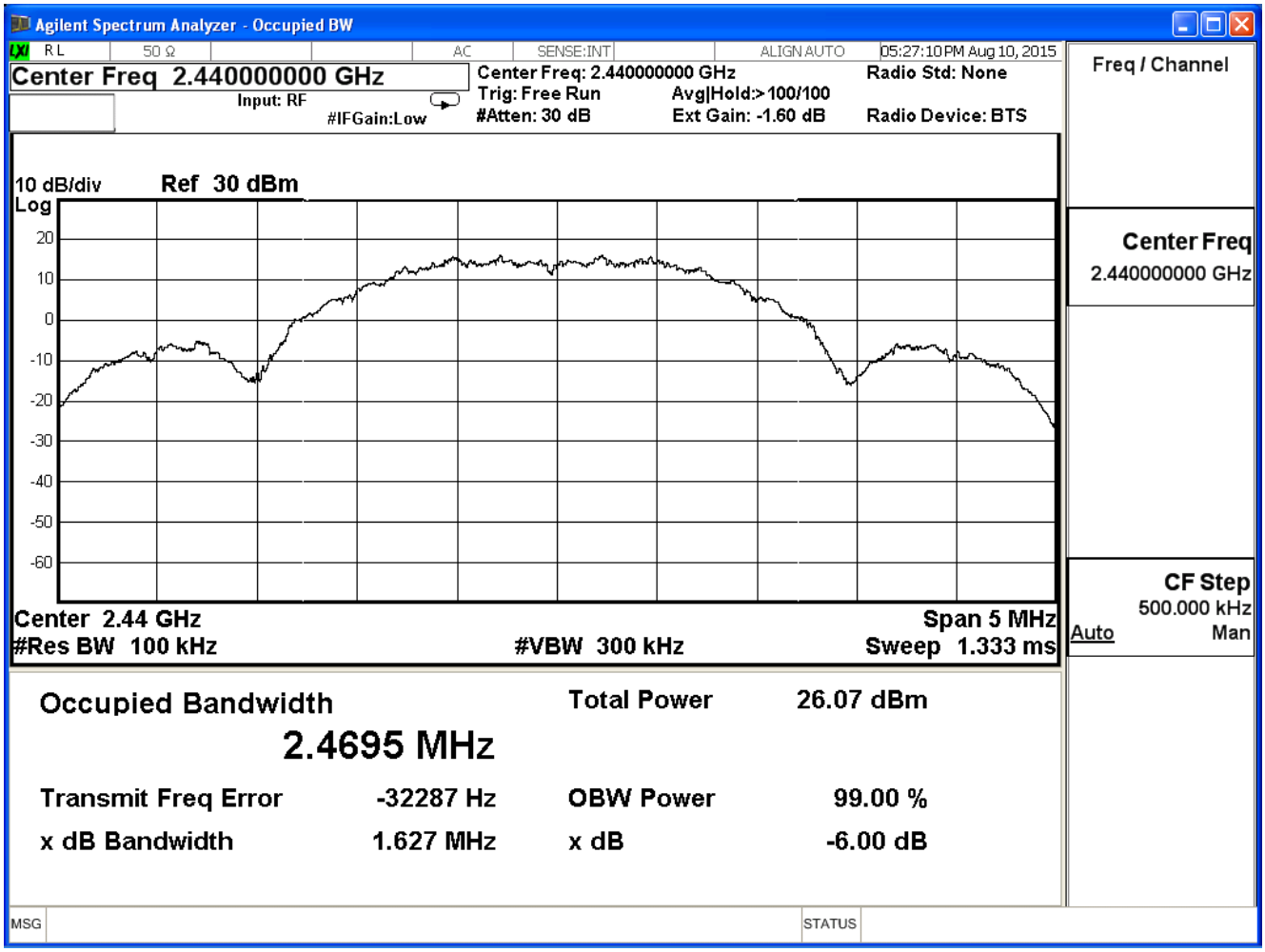
Product	ASUS SRT-AC1900 Wireless Smart Router		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: Tx-AD891M21		
Date of Test	2015/08/10	Test Site	SR7

Channel No.	Frequency (MHz)	Measure Level (MHz)	Required Limit (MHz)	Result
11	2405	1.619	≧0.5	Pass
18	2440	1.627	≧0.5	Pass
24	2470	1.624	≧0.5	Pass
25	2475	1.638	≧0.5	Pass
26	2480	1.631	≧0.5	Pass

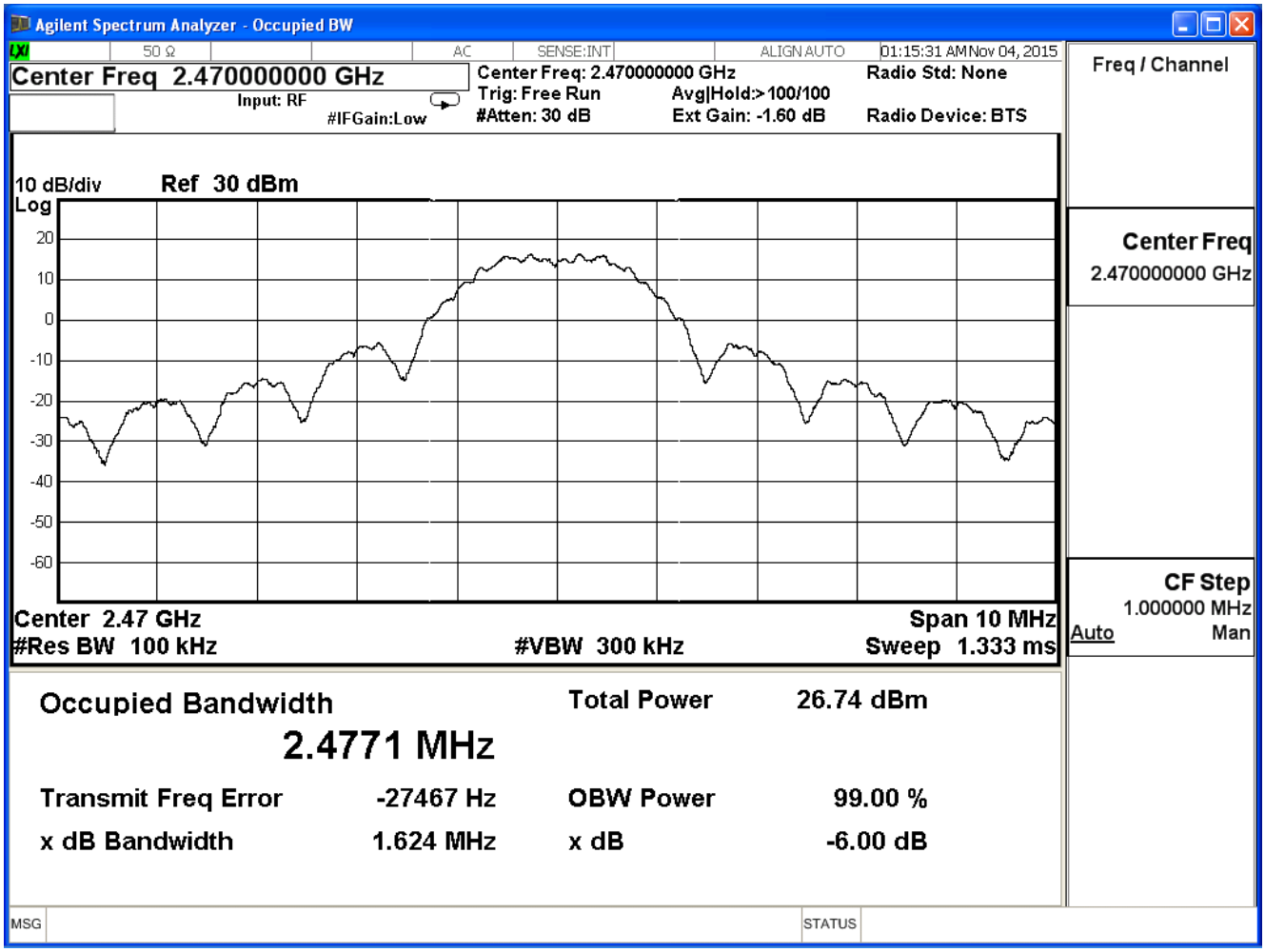
Channel 11



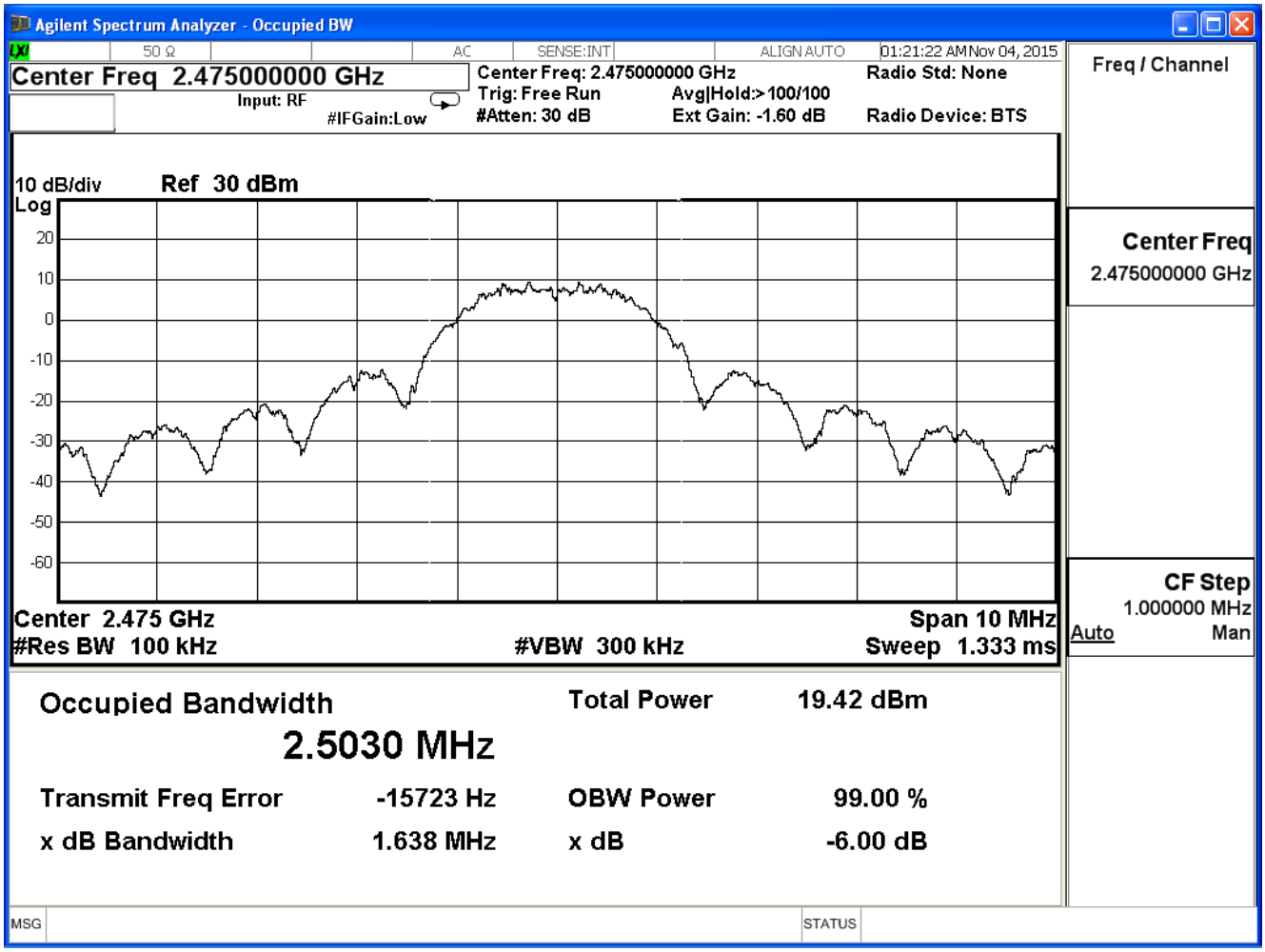
Channel 18


Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:27:10 PM Aug 10, 2015
Center Freq 2.440000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.440000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 30 dB
Ext Gain: -1.60 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.440000000 GHz
Center 2.44 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 5 MHz
Sweep 1.333 ms
CF Step
500.000 kHz
Auto
Man
Occupied Bandwidth
2.4695 MHz
Total Power
26.07 dBm
Transmit Freq Error
-32287 Hz
OBW Power
99.00 %
x dB Bandwidth
1.627 MHz
x dB
-6.00 dB
MSG
STATUS

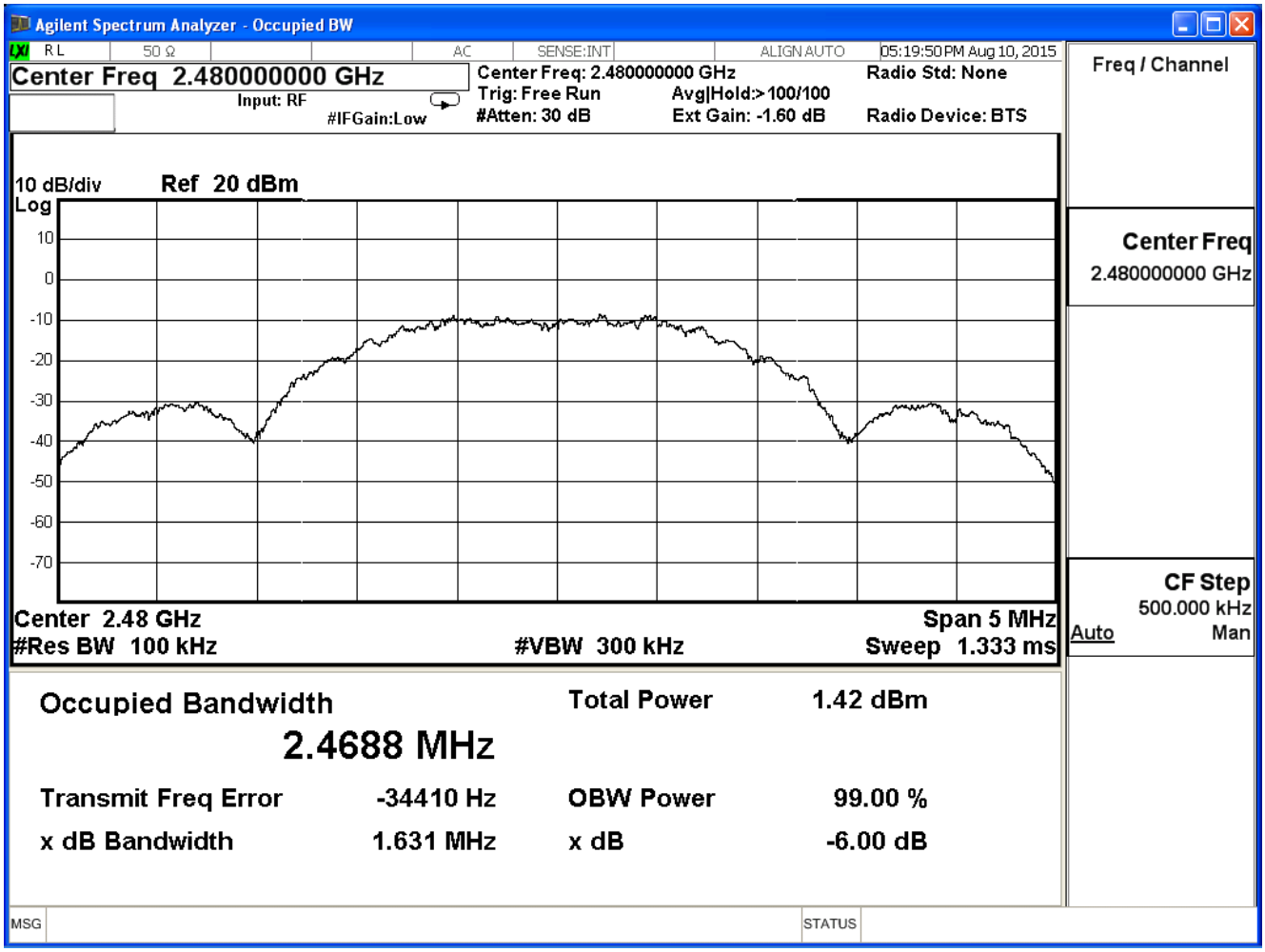
Channel 24


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:15:31 AM Nov 04, 2015
Center Freq 2.470000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.470000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 30 dB
Ext Gain: -1.60 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.470000000 GHz
Center 2.47 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 10 MHz
Sweep 1.333 ms
CF Step
1.000000 MHz
Auto
Man
Occupied Bandwidth
2.4771 MHz
Total Power
26.74 dBm
Transmit Freq Error
-27467 Hz
OBW Power
99.00 %
x dB Bandwidth
1.624 MHz
x dB
-6.00 dB
MSG
STATUS

Channel 25


Agilent Spectrum Analyzer - Occupied BW
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:21:22 AM Nov 04, 2015
Center Freq 2.475000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.475000000 GHz
Trig: Free Run
Avg|Hold:>100/100
#Atten: 30 dB
Ext Gain: -1.60 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 30 dBm
20
10
0
-10
-20
-30
-40
-50
-60
Center Freq
2.475000000 GHz
Center 2.475 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 10 MHz
Sweep 1.333 ms
CF Step
1.000000 MHz
Auto
Man
Occupied Bandwidth
2.5030 MHz
Total Power
19.42 dBm
Transmit Freq Error
-15723 Hz
OBW Power
99.00 %
x dB Bandwidth
1.638 MHz
x dB
-6.00 dB
MSG
STATUS

Channel 26


Agilent Spectrum Analyzer - Occupied BW
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:19:50 PM Aug 10, 2015
Center Freq 2.480000000 GHz
Input: RF
#IFGain:Low
Center Freq: 2.480000000 GHz
Trig: Free Run
#Atten: 30 dB
Avg|Hold:>100/100
Ext Gain: -1.60 dB
Radio Std: None
Radio Device: BTS
Freq / Channel
10 dB/div
Log
Ref 20 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 5 MHz
Sweep 1.333 ms
CF Step
500.000 kHz
Auto
Man
Occupied Bandwidth
2.4688 MHz
Total Power
1.42 dBm
Transmit Freq Error
-34410 Hz
OBW Power
99.00 %
x dB Bandwidth
1.631 MHz
x dB
-6.00 dB
MSG
STATUS

8. Power Density

8.1. Test Equipment

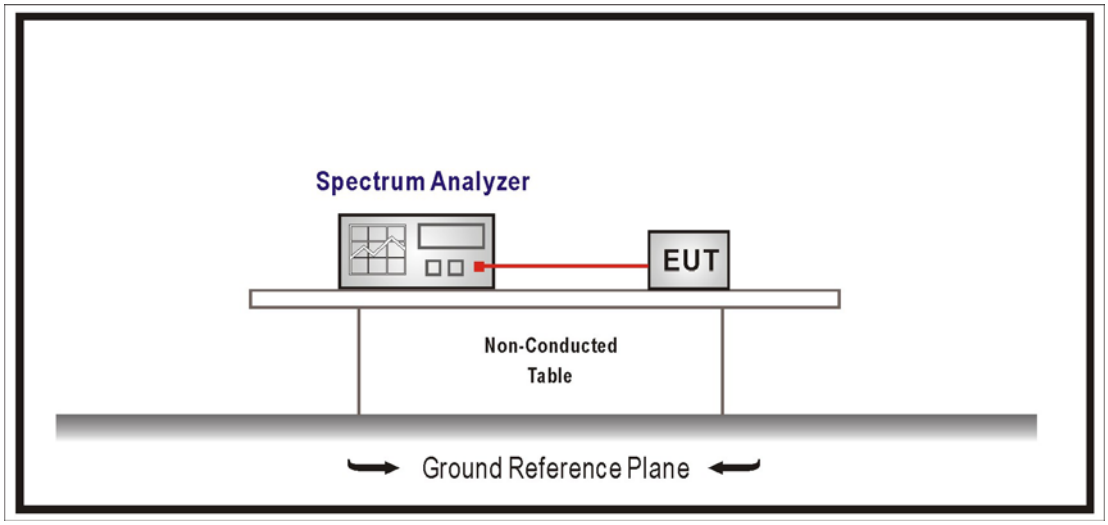
The following test equipment is used during the test:

Power Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/07/13

Note: All equipments that need to calibrate are with calibration period of 1 year.

8.2. Test Setup



8.3. Limits

The peak power spectral density conducted from the intentional radiated to the antenna shall not be greater than +8dBm in any 3kHz band during any time interval of continuous transmission.

8.4. Test Procedures

The EUT was setup according to ANSI C63.4: 2014; tested according to DTS test procedure of KDB558074 v03r02 for compliance to FCC 47CFR 15.247 requirements.
Set RBW= 100 kHz, Set VBW= 300 kHz, Sweep time=Auto, Set detector=Peak detector

8.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.247: 2014

8.6. Uncertainty

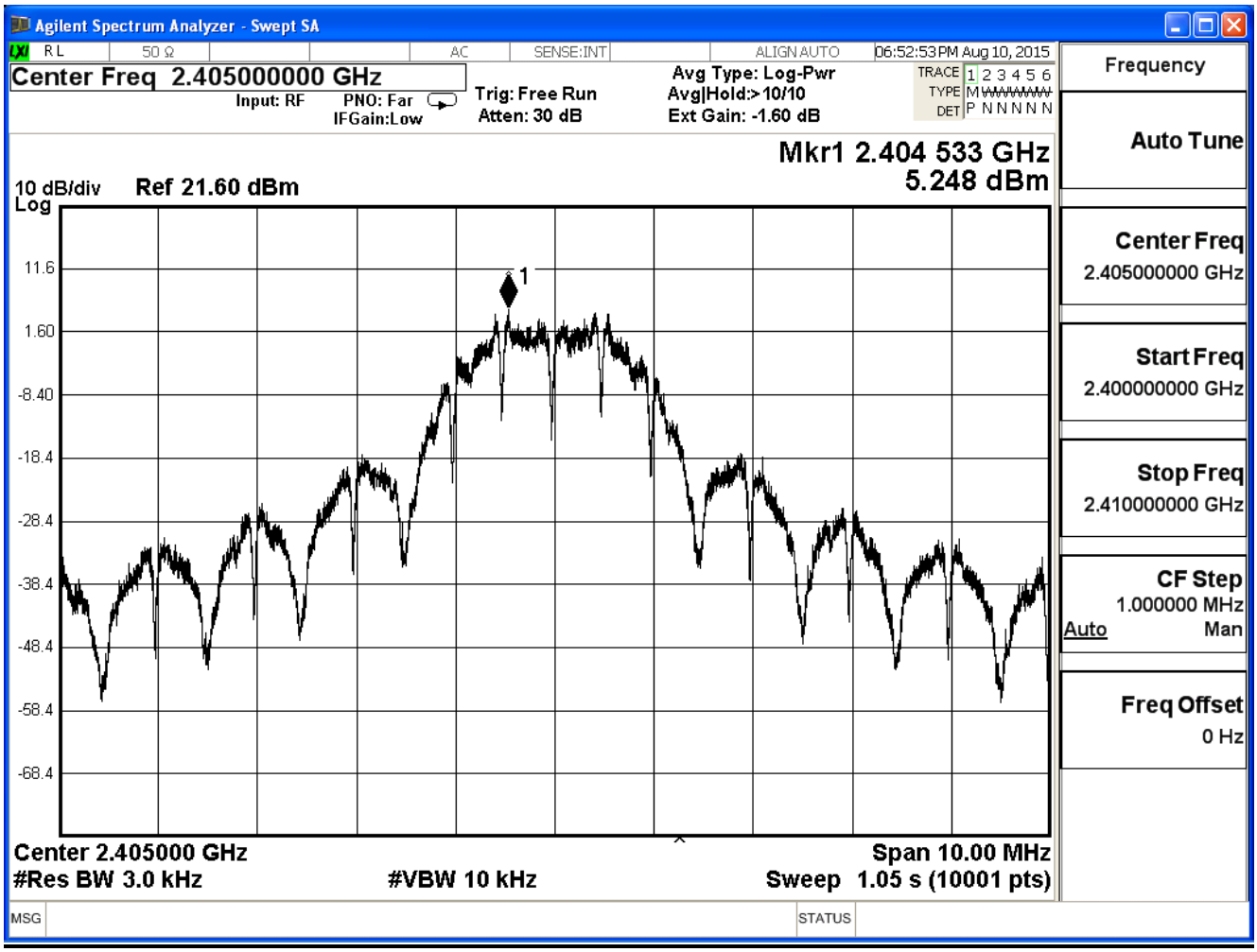
The measurement uncertainty is defined as ±1.27dB.

8.7. Test Result

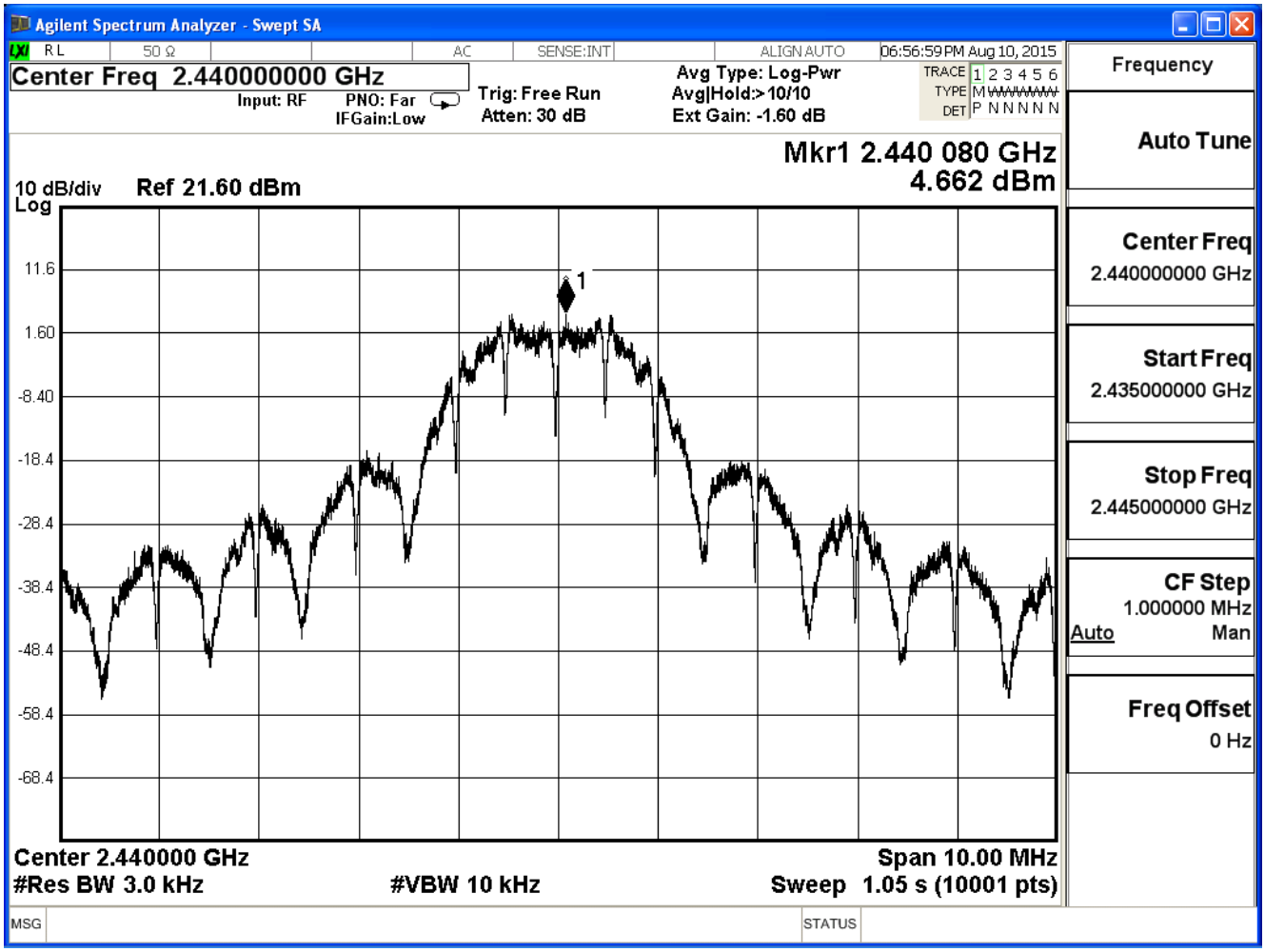
Product	ASUS SRT-AC1900 Wireless Smart Router		
Test Item	Power Density		
Test Mode	Mode 1: Tx-AD891M21		
Date of Test	2015/08/10	Test Site	

Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Result
11	2405	5.248	≦8	Pass
18	2440	4.662	≦8	Pass
24	2470	4.646	≦8	Pass
25	2475	-2.344	≦8	Pass
26	2480	-20.021	≦8	Pass

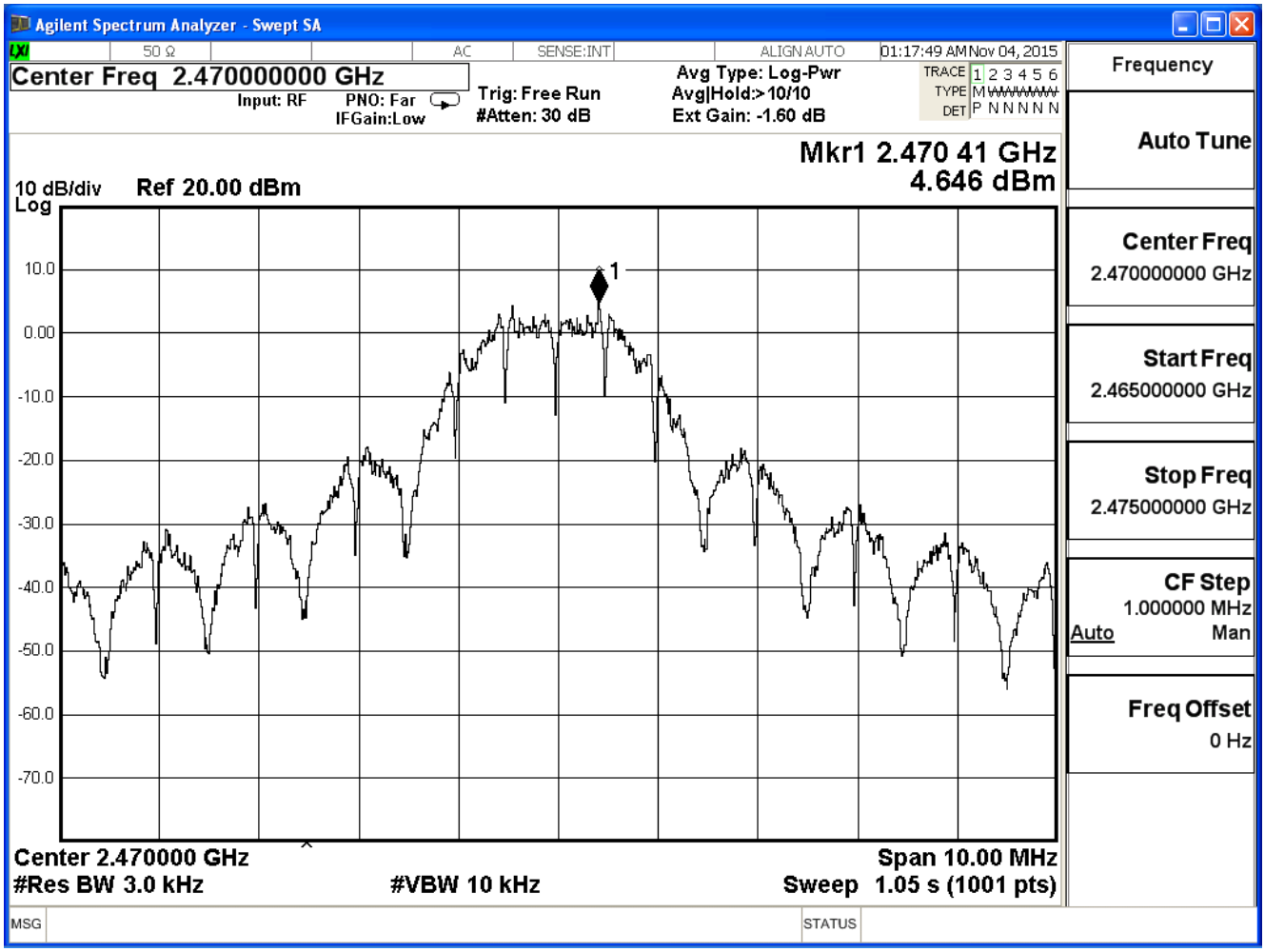
Channel 11



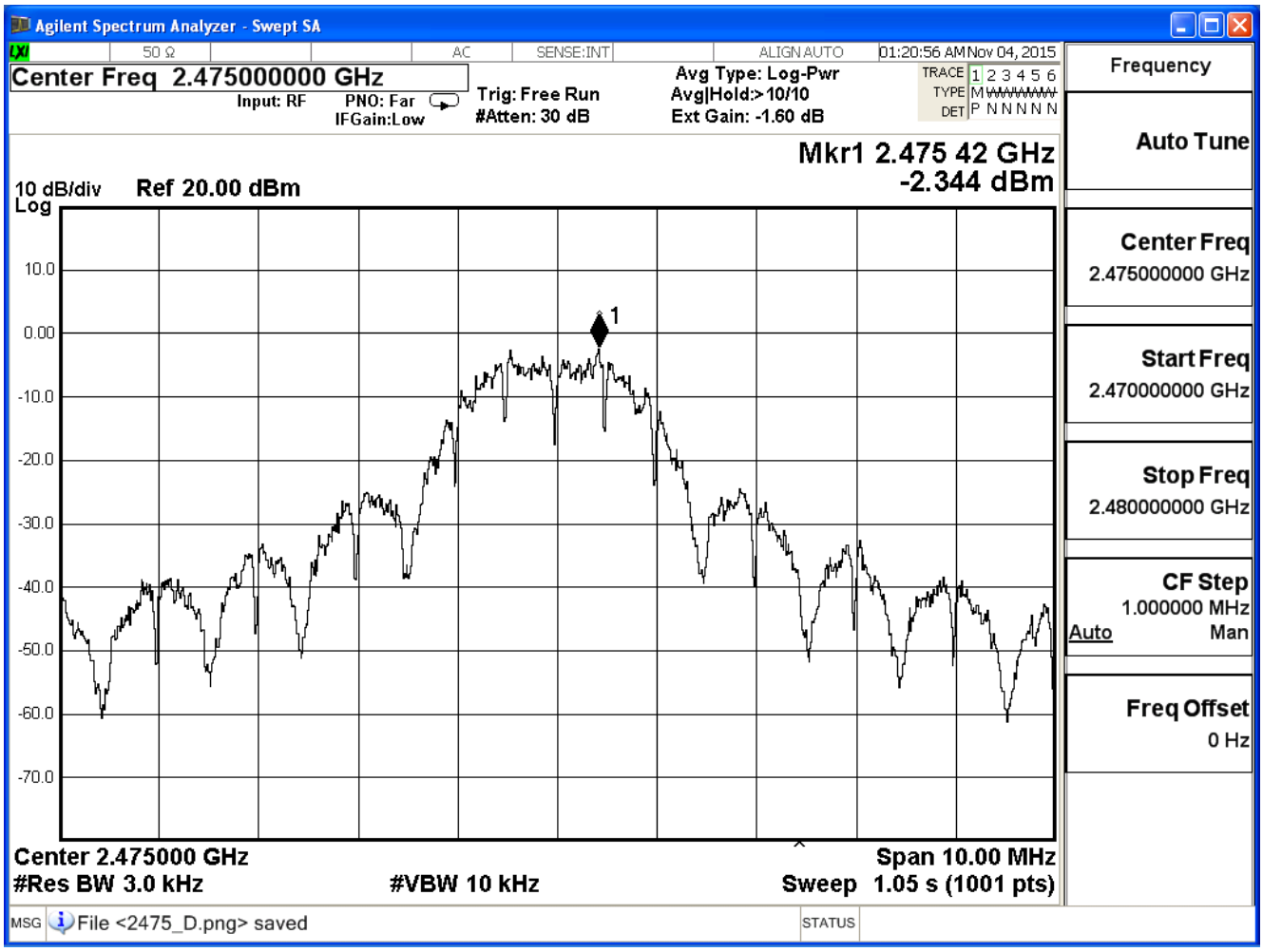
Channel 18


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
06:56:59 PM Aug 10, 2015
Center Freq 2.440000000 GHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ext Gain: -1.60 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.440 080 GHz
4.662 dBm
10 dB/div
Log
Ref 21.60 dBm
11.6
1.60
-8.40
-18.4
-28.4
-38.4
-48.4
-58.4
-68.4
1
Center 2.440000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 10.00 MHz
Sweep 1.05 s (10001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.440000000 GHz
Start Freq
2.435000000 GHz
Stop Freq
2.445000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

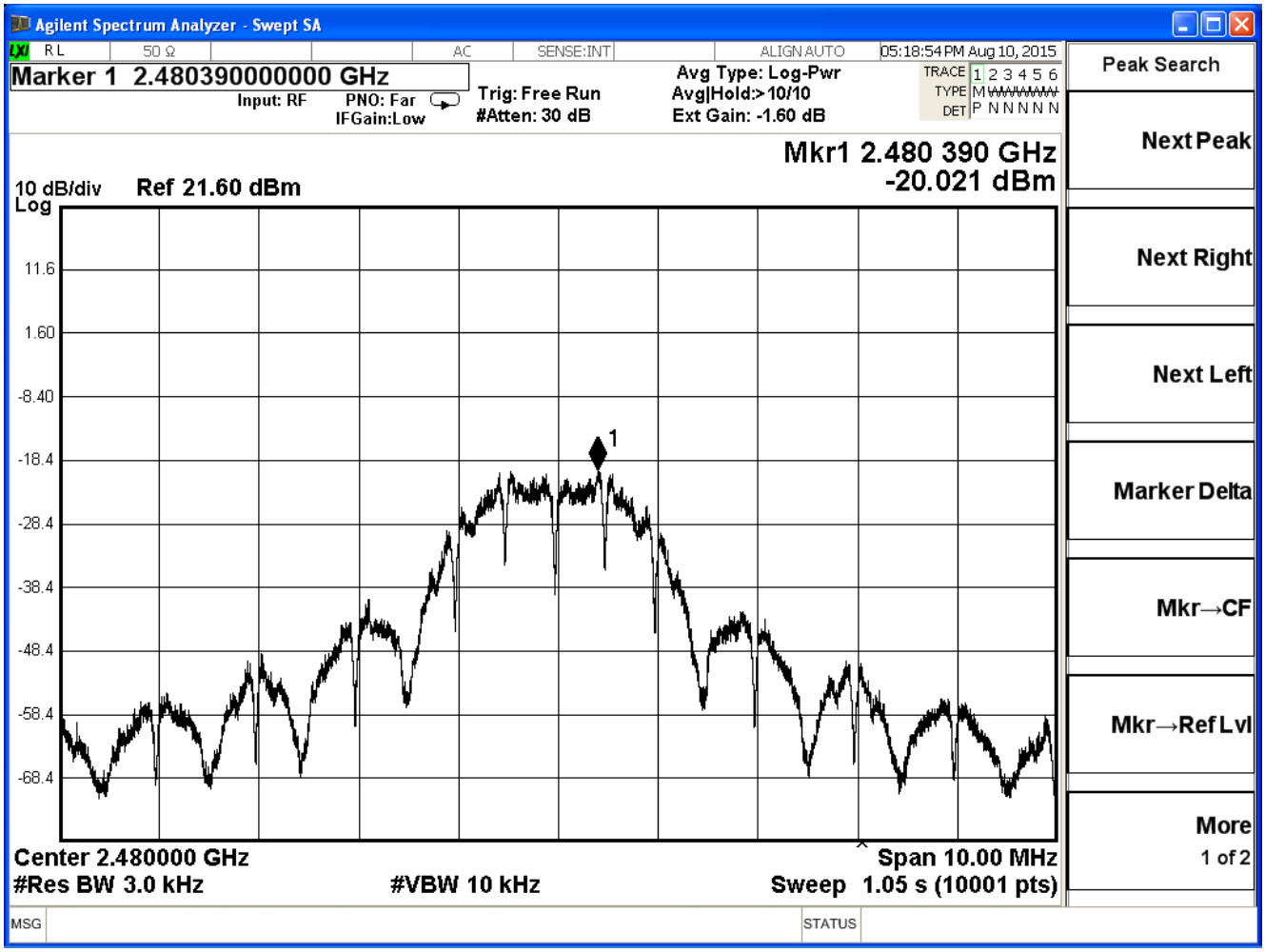
Channel 24


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:17:49 AM Nov 04, 2015
Center Freq 2.470000000 GHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ext Gain: -1.60 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.470 41 GHz
4.646 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 2.470000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 10.00 MHz
Sweep 1.05 s (1001 pts)
MSG
STATUS
Frequency
Auto Tune
Center Freq
2.470000000 GHz
Start Freq
2.465000000 GHz
Stop Freq
2.475000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

Channel 25


Agilent Spectrum Analyzer - Swept SA
50 Ω
AC
SENSE:INT
ALIGN AUTO
01:20:56 AM Nov 04, 2015
Center Freq 2.475000000 GHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ext Gain: -1.60 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.475 42 GHz
-2.344 dBm
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center 2.475000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 10.00 MHz
Sweep 1.05 s (1001 pts)
Frequency
Auto Tune
Center Freq
2.475000000 GHz
Start Freq
2.470000000 GHz
Stop Freq
2.480000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
File <2475_D.png> saved
STATUS

Channel 26


Agilent Spectrum Analyzer - Swept SA
RL
50 Ω
AC
SENSE:INT
ALIGN AUTO
05:18:54 PM Aug 10, 2015
Marker 1 2.480390000000 GHz
Input: RF
PNO: Far
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>10/10
Ext Gain: -1.60 dB
TRACE 1 2 3 4 5 6
TYPE M
DET P N N N N N
Mkr1 2.480 390 GHz
-20.021 dBm
10 dB/div
Log
Ref 21.60 dBm
11.6
1.60
-8.40
-18.4
-28.4
-38.4
-48.4
-58.4
-68.4
1
Center 2.480000 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 10.00 MHz
Sweep 1.05 s (10001 pts)
Peak Search
Next Peak
Next Right
Next Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS