FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

TCL TECHNOLY ELECTRONICS (HUIZHOU) CO., LTD

WIRELESS USB ADAPTER

Brand Name	Model No.
TCL	MT-WN731NM

FCC ID: ZVA05

Prepared for : TCL TECHNOLY ELECTRONICS (HUIZHOU) CO., LTD
Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China, 516006

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

Tel: (0755) 26639496

Report Number : ACS-F13343
Date of Test : Nov.29~Dec.04, 2013
Date of Report : Dec.11, 2013

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TEST REPORT CERTIFICATION

Applicant : TCL TECHNOLY ELECTRONICS (HUIZHOU) CO., LTD

Manufacturer : TCL TECHNOLY ELECTRONICS (HUIZHOU) CO., LTD

EUT Description : WIRELESS USB ADAPTER

FCC ID : ZVA05

(A) MODEL NO. & BRAND NAME :

Brand Name	Model No.
TCL	MT-WN731NM

(B) SERIAL NO. : N/A

(C) TEST VOLTAGE : DC 3.3V

Tested for comply with:
FCC Rules and Regulations Part 15 Subpart C: 2012

Test procedure used:
ANSI C63.10:2009

The device described above is tested by AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. to confirm comply with all the FCC Part 15 Subpart C requirements. The test results are contained in this test report and AUDIX TECHNOLOGY (SHENZHEN) CO., LTD. is assumed full responsibility for the accuracy and completeness of these tests. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements. This report contains data that are not covered by the NVLAP accreditation.

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

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

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

Date of Test : Nov.29~ Dec.04, 2013 Report of date: Dec.11, 2013

Prepared by : Julia Zhu
Julia Zhu / Assistant

Reviewed by :
Sunny Lu / Assistant Manager

AUDIX® 信華科技（深圳）有限公司
Audix Technology (Shenzhen) Co., Ltd.
EMC 部門報告專用章
Stamp only for EMC Dept. Report
Signature: David Jin 12.11

Approved & Authorized Signer :
David Jin / Manager

1. SUMMARY OF STANDARDS AND RESULTS

1.1.Description of Standards and Results

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

EMISSION		
Description of Test Item	**Standard**	**Results**
Power Line Conducted Emission	FCC Part 15: 15.207 ANSI C63.10: 2009	PASS
Radiated Emission	FCC Part 15: 15.209 ANSI C63.10: 2009	PASS
Band Edge Compliance	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Conducted spurious emissions	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
6dB Bandwidth	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Peak Output Power	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Power Spectral Density	FCC Part 15: 15.247 ANSI C63.10: 2009	PASS
Antenna requirement	FCC Part 15: 15.203	PASS

2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product Name : WIRELESS USB ADAPTER

Model Number& Brand Name :

Brand Name	Model No.
TCL	MT-WN731NM

FCC ID : ZVA05

Radio : IEEE802.11 b/g/n

Channel Number : IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels
IEEE 802.11n HT40: 7Channels

Operation Frequency : IEEE 802.11b: 2412MHz—2462MHz
IEEE 802.11g: 2412MHz—2462MHz
IEEE802.11nHT20: 2412MHz—2462MHz
IEEE802.11nHT40: 2422MHz—2452MHz

Modulation Technology : IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)
IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)
IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)

Antenna Assembly Gain : PCB Antenna, 1.06dBi

Applicant : TCL TECHNOLY ELECTRONICS (HUIZHOU) CO., LTD
Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China, 516006

Manufacturer : TCL TECHNOLY ELECTRONICS (HUIZHOU) CO., LTD
Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guang Dong Province, China, 516006

Date of Test : Nov.29~Dec.04, 2013

Date of Receipt : Nov.28, 2013

Sample Type : Prototype production

2.2.Test Information

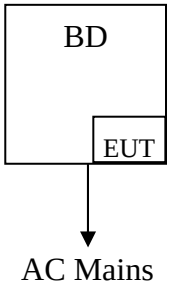
A special test software was used to control EUT work in Continuous TX mode(100% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information			
Mode	data rate (Mpbs)(see Note)	Channel	Frequency (MHz)
IEEE 802.11b	1	Low :CH1	2412
	1	Middle: CH6	2437
	1	High: CH11	2462
IEEE 802.11g	6	Low :CH1	2412
	6	Middle: CH6	2437
	6	High: CH11	2462
IEEE 802.11n HT20	6.5	Low :CH1	2412
	6.5	Middle: CH6	2437
	6.5	High: CH11	2462
IEEE 802.11n HT40	13.5	Low :CH1	2422
	13.5	Middle: CH4	2437
	13.5	High: CH7	2452
Note 1: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.			

2.3.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	BD	--	LG	BP340/BPM34	--	--

2.4. Block Diagram of Test Setup



(EUT: WIRELESS USB ADAPTER)

2.5. Test Facility

Site Description

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

3m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 90454
Valid Date: Feb.22, 2015

3m & 10m Anechoic Chamber : Certificated by FCC, USA
Registration Number: 794232
Valid Date: Oct.31, 2015

EMC Lab. : Certificated by Industry Canada
Registration Number: IC 5183A-1
Valid Date: Jun.13, 2014

: Certificated by DAkkS, Germany
Registration No: D-PL-12151-01-01
Valid Date: Feb.01, 2014

: Accredited by NVLAP, USA
NVLAP Code: 200372-0
Valid Date: Mar.31, 2014

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

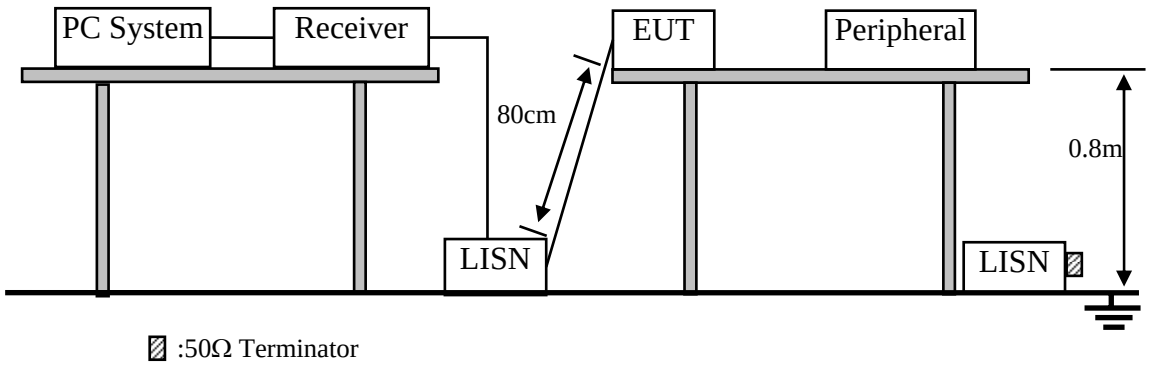
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.1 dB (150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.22 dB(30~200MHz, Polarize: H)
	3.23 dB(30~200MHz, Polarize: V)
	3.49 dB(200M~1GHz, Polarize: H)
	3.39 dB(200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in 3m chamber (1GHz-18GHz)	4.97 dB (1~6GHz, Distance: 3m)
	4.99 dB (6~18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.57 dB
Uncertainty for Conduction Spurious emission test	2.00 dB
Uncertainty for Output power test	0.73 dB
Uncertainty for Power density test	2.00 dB
Uncertainty for Frequency range test	$7x10^{-8}$
Uncertainty for Bandwidth test	83 kHz
Uncertainty for DC power test	0.038 %
Uncertainty for test site temperature and humidity	0.6℃
	3%

3. POWER LINE CONDUCTED EMISSION TEST

3.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESHS10	838693/001	Oct.31, 13	1 Year
2.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	834066/011	Oct.31, 13	1 Year
3.	L.I.S.N.#3	Kyoritsu	KNW-242C	8-1920-1	May.08, 13	1 Year
4.	Terminator	Hubersuhner	50Ω	No.1	May.08, 13	1 Year
5.	Terminator	Hubersuhner	50Ω	No.2	May.08, 13	1 Year
6.	RF Cable	Fujikura	3D-2W	No.1	May.08, 13	1Year
7.	Coaxial Switch	Anritsu	MP59B	M50564	May.08, 13	1 Year
8.	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100341	May.08, 13	1 Year

3.2.Block Diagram of Test Setup



3.3.Power Line Conducted Emission Test Limits

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

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

3.4.Configuration of EUT on Test

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

3.4.1. WIRELESS USB ADAPTER (EUT)

Model Number : MT-WN731NM
Serial Number : N/A

3.4.2. Support Equipment: As Tested Supporting System Details, in Section 2.2.

3.5. Operating Condition of EUT

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

3.5.2. Turned on the power of all equipment.

3.5.3. TV run test software to control EUT work in Tx mode.

3.6. Test Procedure

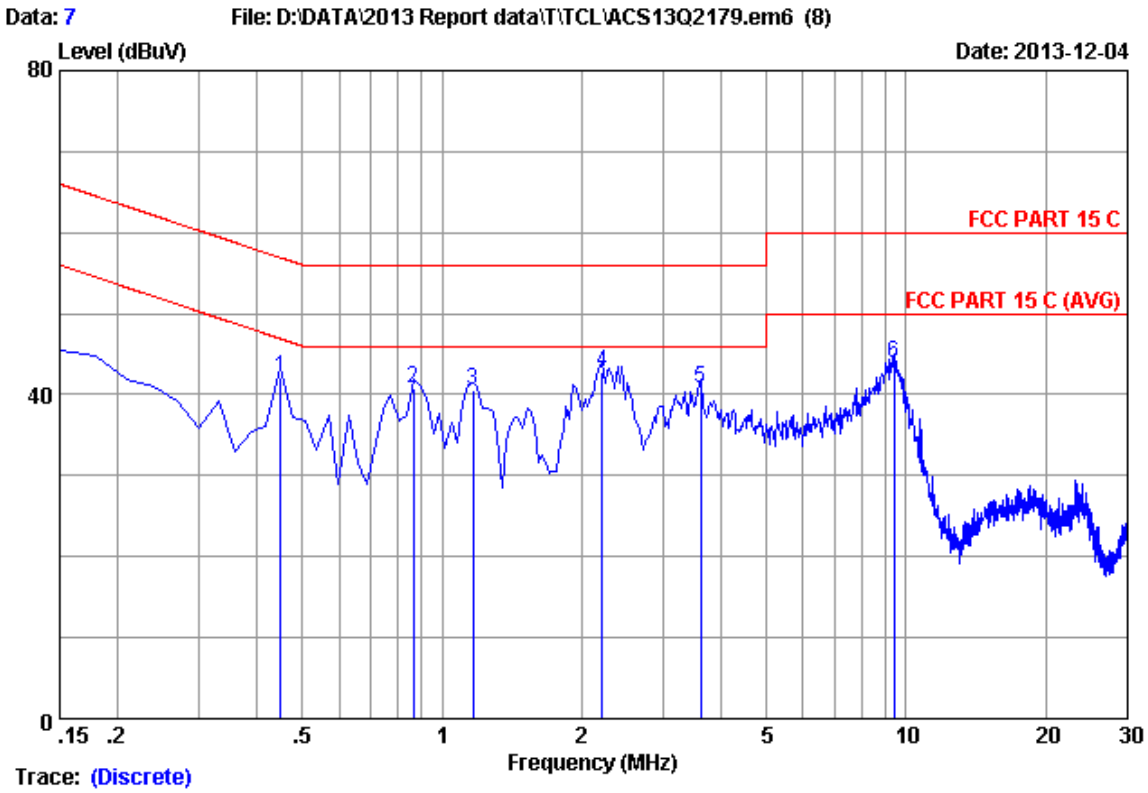
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESHS10) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

3.7. Power Line Conducted Emission Test Results

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

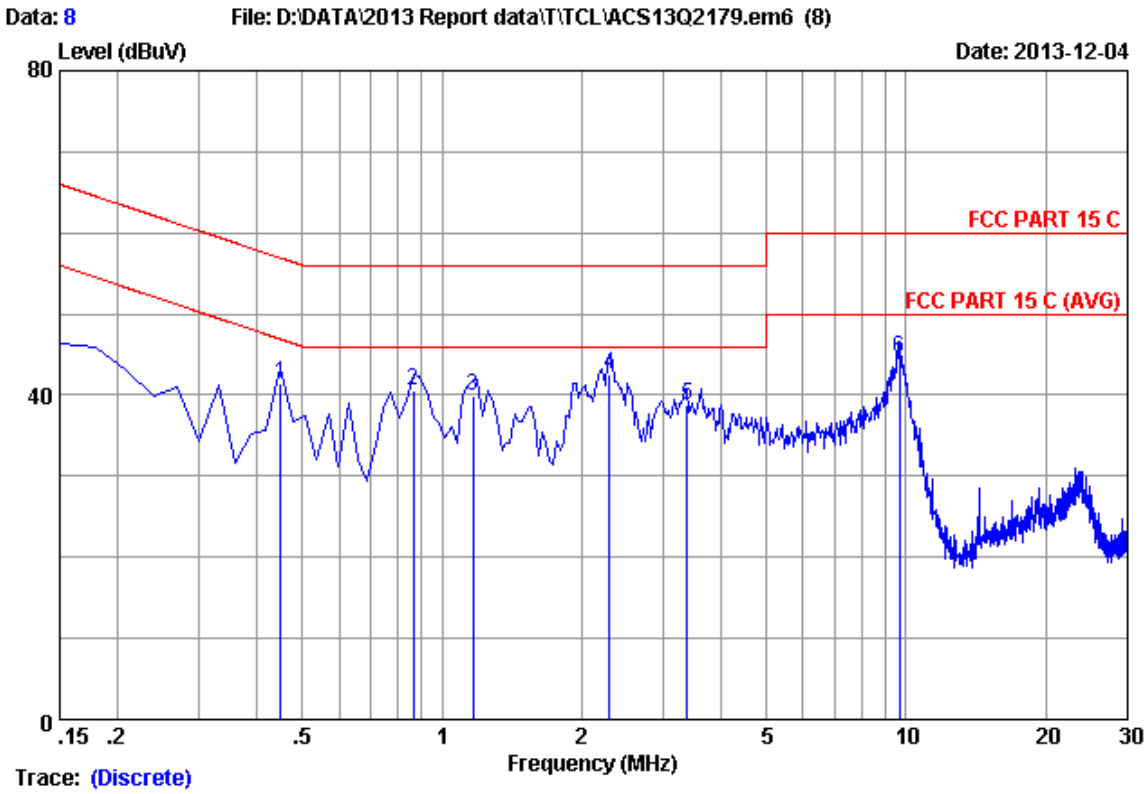


Trace: (Discrete)

Site no :1#conduction
Data No :7
Dis./Ant. :** 2013 ESH2-Z5 LINE
Limit :FCC PART 15 C
Env./Ins. :24.5*C/56%
Engineer :Alan_Chen
EUT :WIRELESS USB ADAPTER
Power Rating :AC 120V/60Hz
Test Mode :Tx Mode
M/N:MT-WN731NM

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.44850	0.16	0.02	41.96	42.14	56.90	14.76	QP
2	0.86640	0.18	0.03	40.63	40.84	56.00	15.16	QP
3	1.165	0.19	0.03	40.25	40.47	56.00	15.53	QP
4	2.210	0.23	0.04	42.53	42.80	56.00	13.20	QP
5	3.613	0.27	0.06	40.48	40.81	56.00	15.19	QP
6	9.404	0.52	0.10	43.34	43.96	60.00	16.04	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.



Trace: (Discrete)

Site no :1#conduction Data No :8
Dis./Ant. :** 2013 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 C
Env./Ins. :24.5*C/56% Engineer :Alan_Chen
EUT :WIRELESS USB ADAPTER
Power Rating :AC 120V/60Hz
Test Mode :Tx Mode
M/N:MT-WN731NM

No	Freq (MHz)	ISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.44850	0.22	0.02	41.26	41.50	56.90	15.40	QP
2	0.86640	0.26	0.03	40.29	40.58	56.00	15.42	QP
3	1.165	0.26	0.03	39.56	39.85	56.00	16.15	QP
4	2.299	0.27	0.04	42.20	42.51	56.00	13.49	QP
5	3.374	0.30	0.05	38.44	38.79	56.00	17.21	QP
6	9.672	0.48	0.10	44.07	44.65	60.00	15.35	QP

Remarks: 1.Emission Level=ISN Factor+Cable Loss+Reading.
2.If the average limit is met when useing a quasi-peak detector.
the EUT shall be deemed to meet both limits and measurement
with average detector is unnecessary.

4. RADIATED EMISSION TEST

4.1.Test Equipment

4.1.1. For frequency range 30MHz~1000MHz (At Anechoic Chamber)

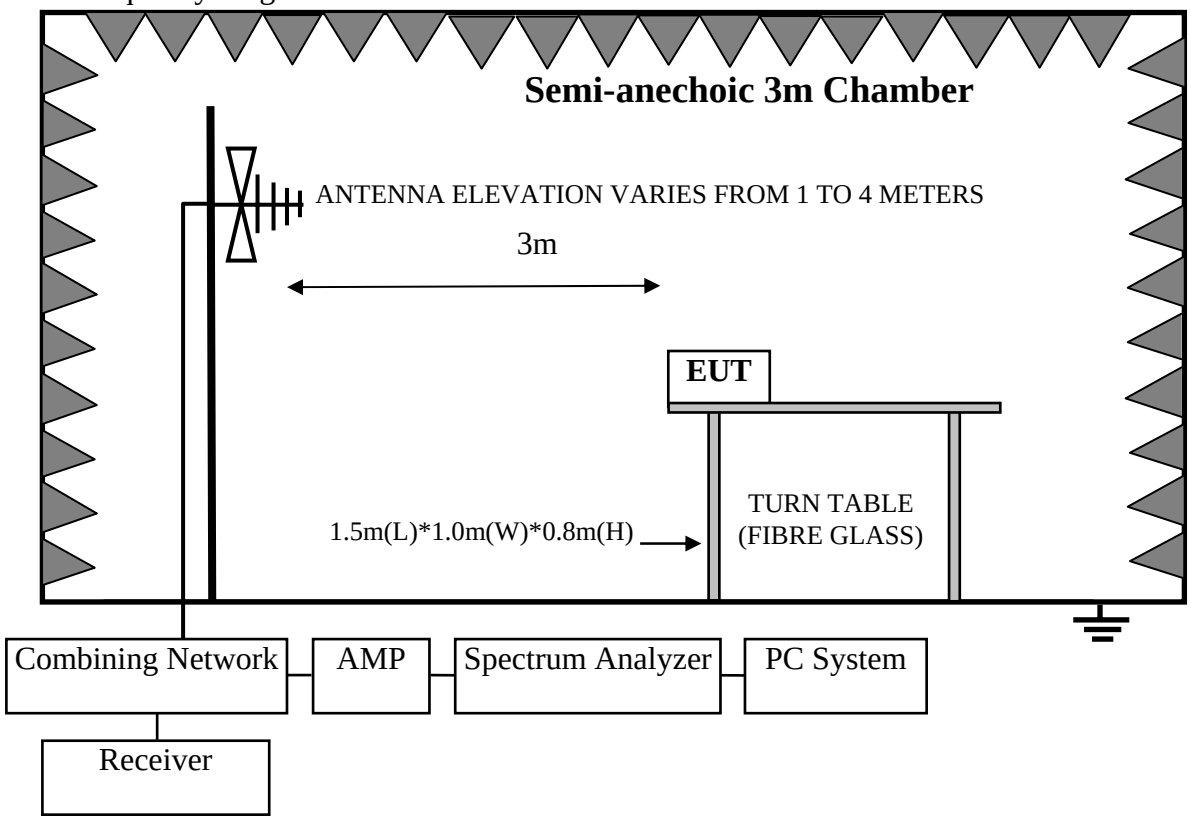
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24, 13	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 13	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 13	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 13	1 Year
5	Bilog Antenna	TESEQ	CBL6112D	35375	May.30, 13	1 Year
6	RF Cable	MIYAZAKI	CFD400-NL	3# Chamber No.1	May.08, 13	1 Year
7	Coaxial Switch	Anritsu	MP59B	M74389	May.08, 13	1 Year

4.1.2. For frequency range 1GHz~40GHz (At Anechoic Chamber)

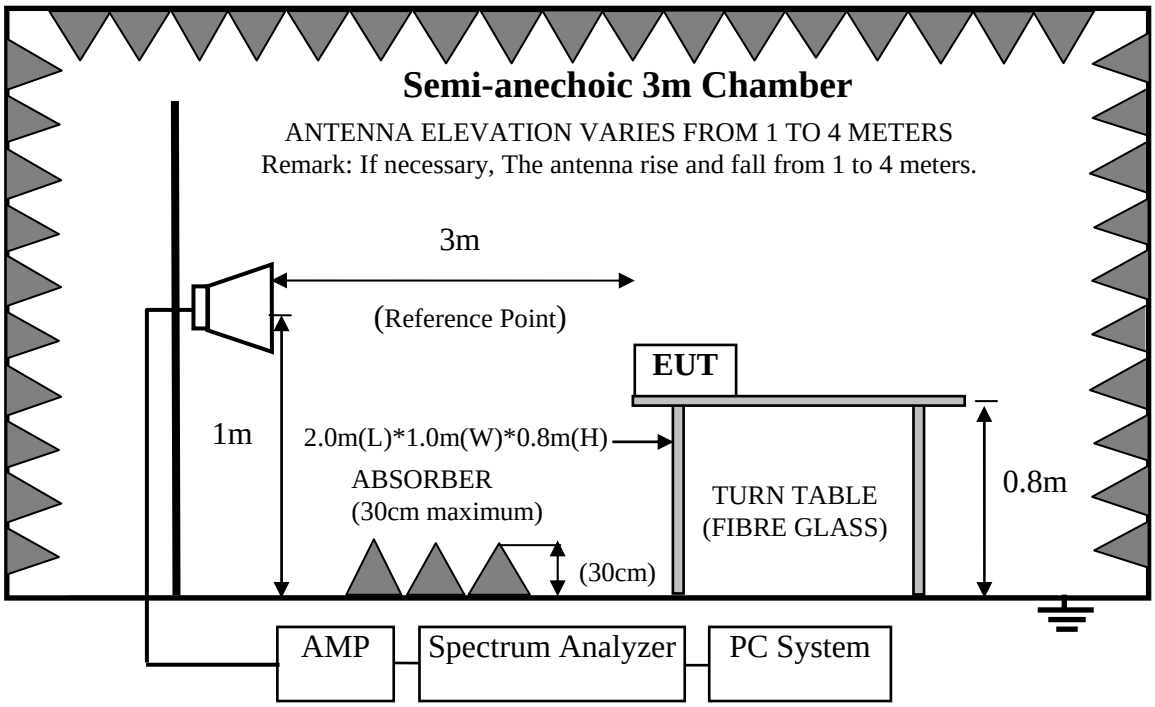
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 13	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	May.28, 13	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 13	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 13	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX106	77977/6	May.08, 13	1 Year
6	Horn Antenna	EMCO	3116	00060089	Aug.28, 13	1 Year

4.2.Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-40GHz



4.3.Radiated Emission Limit

4.3.1. 15.247&209 limits

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 dB(μV)/m (Peak) 54.0 dB(μV)/m (Average)	

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

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

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

4.3.2. 15.205 Restricted bands of operation

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

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

4.4. EUT Configuration on Test

The configurations of EUT are listed in Section 3.4.

4.5. Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.5. except the test set up replaced by Section 4.2.

4.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. Power on the EUT and let it working in test mode, then test it. EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna are set on test.

This test was performed with EUT in X, Y, Z position, and the worse case was found when EUT in X position as test photo indicated.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

The frequency range from 30MHz to 10th harmonic (40GHz) are checked. and no any emissions were found from 18GHz to 40 GHz, So the radiated emissions from 18GHz to 40GHz were not record.

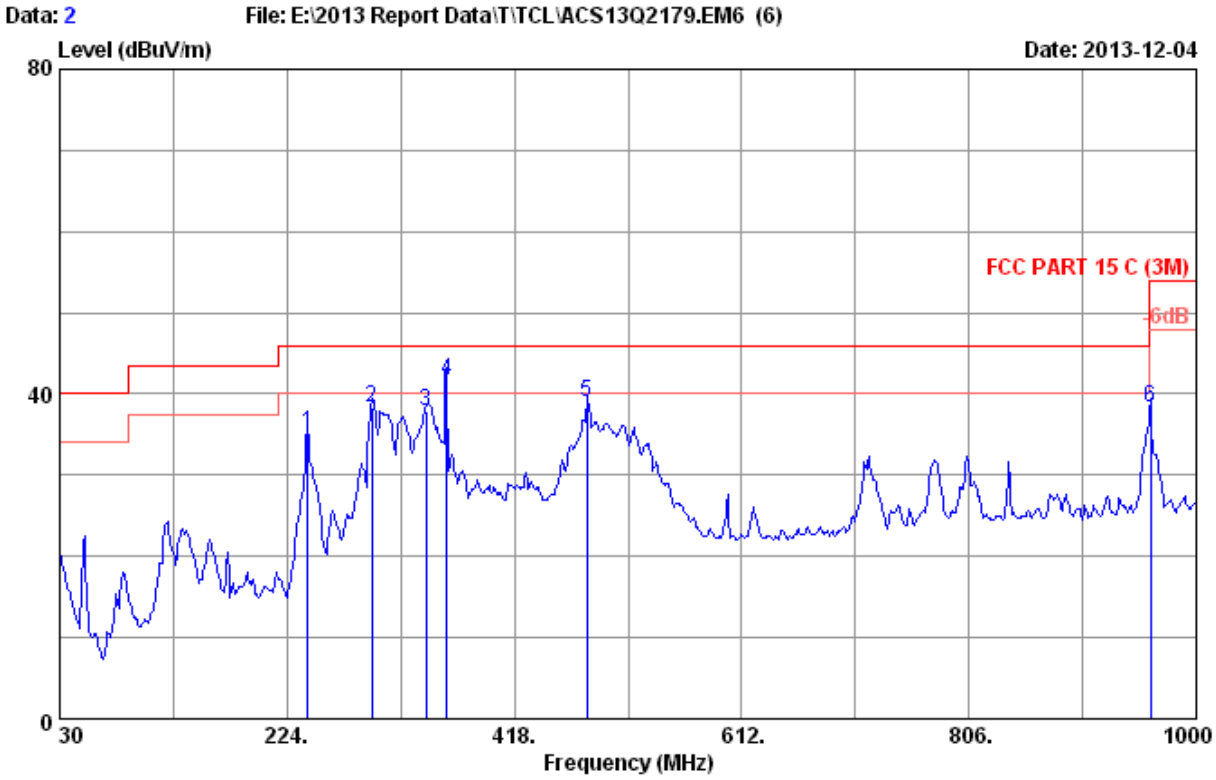
4.7.Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 40 GHz were comply with 15.209 limits.

Note: For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.

Frequency: 30MHZ-1GHZ

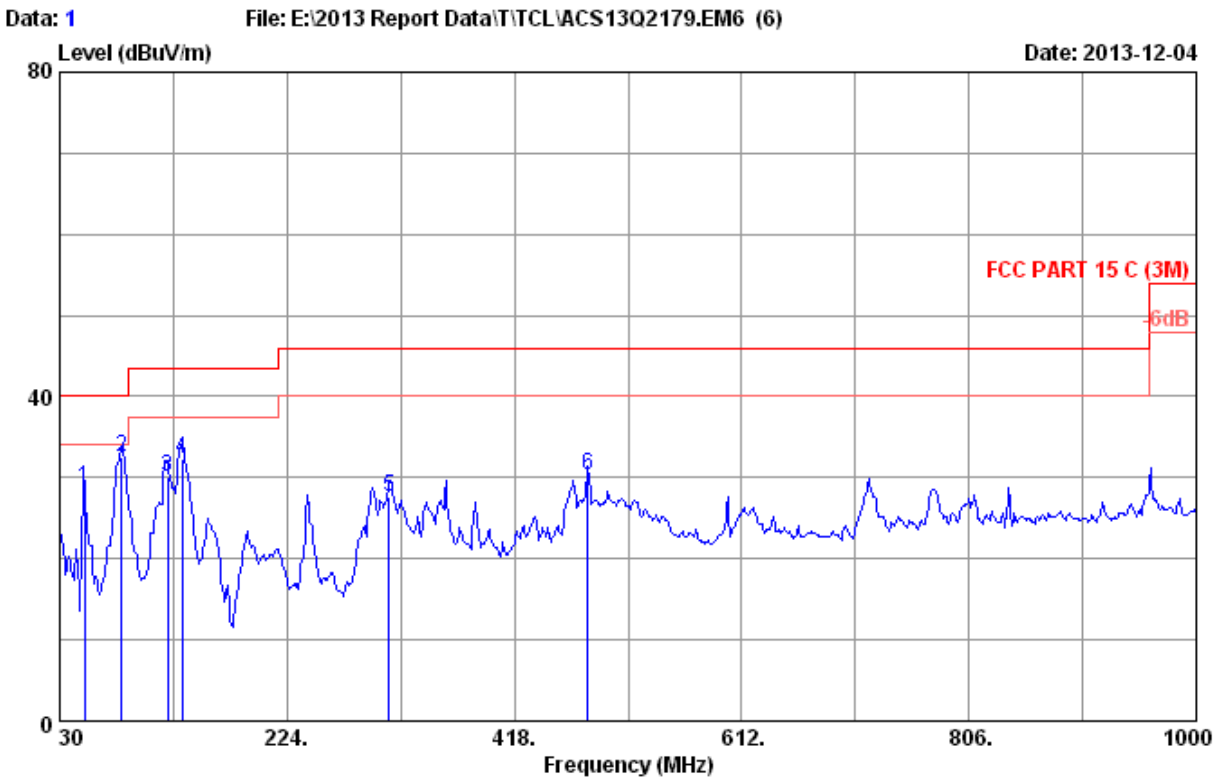


Site no. : 3m Chamber
Dis. / Ant. : 3m 2013 CBL6112D 35375
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/65%
EUT : WIRELESS USB ADAPTER
Power rating : AC 120V/60Hz
Test Mode : TX Mode
M/N:MT-WN731NM

Data no. : 2
Ant. pol. : HORIZONTAL
Engineer : Even_Deng

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	241.460	12.35	1.95	20.87	35.17	46.00	10.83	QP
2	296.750	13.90	2.16	22.35	38.41	46.00	7.59	QP
3	342.340	15.05	2.29	20.48	37.82	46.00	8.18	QP
4	360.030	15.70	2.34	23.60	41.64	46.00	4.36	QP
5	480.000	17.80	2.69	18.50	38.99	46.00	7.01	QP
6	961.200	22.20	4.12	12.10	38.42	54.00	15.58	QP

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



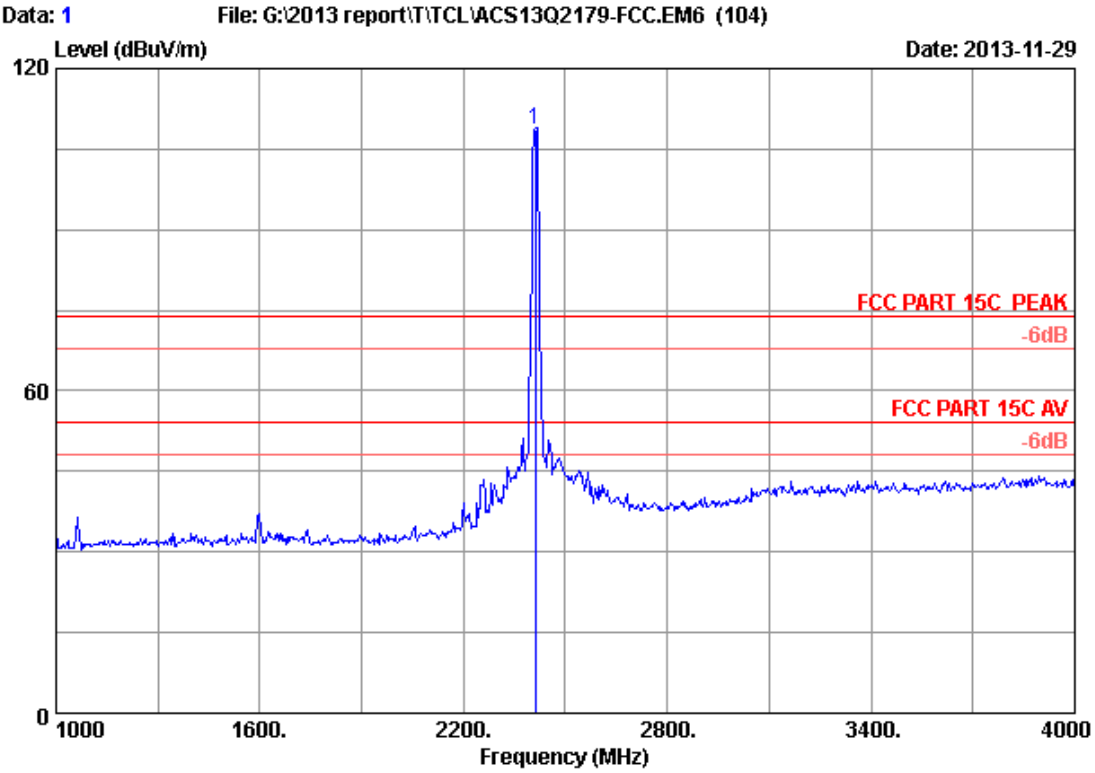
Site no. : 3m Chamber
Dis. / Ant. : 3m 2013 CBL6112D 35375
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/65%
EUT : WIRELESS USB ADAPTER
Power rating : AC 120V/60Hz
Test Mode : TX Mode
M/N:MT-WN731NM

Data no. : 1
Ant. pol. : VERTICAL
Engineer : Even_Deng

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	51.340	8.63	1.20	18.86	28.69	40.00	11.31	QP
2	83.000	8.05	1.34	23.10	32.49	40.00	7.51	QP
3	122.150	12.81	1.49	15.79	30.09	43.50	13.41	QP
4	134.760	12.42	1.54	18.42	32.38	43.50	11.12	QP
5	311.300	14.23	2.20	11.22	27.65	46.00	18.35	QP
6	481.050	17.80	2.70	9.84	30.34	46.00	15.66	QP

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

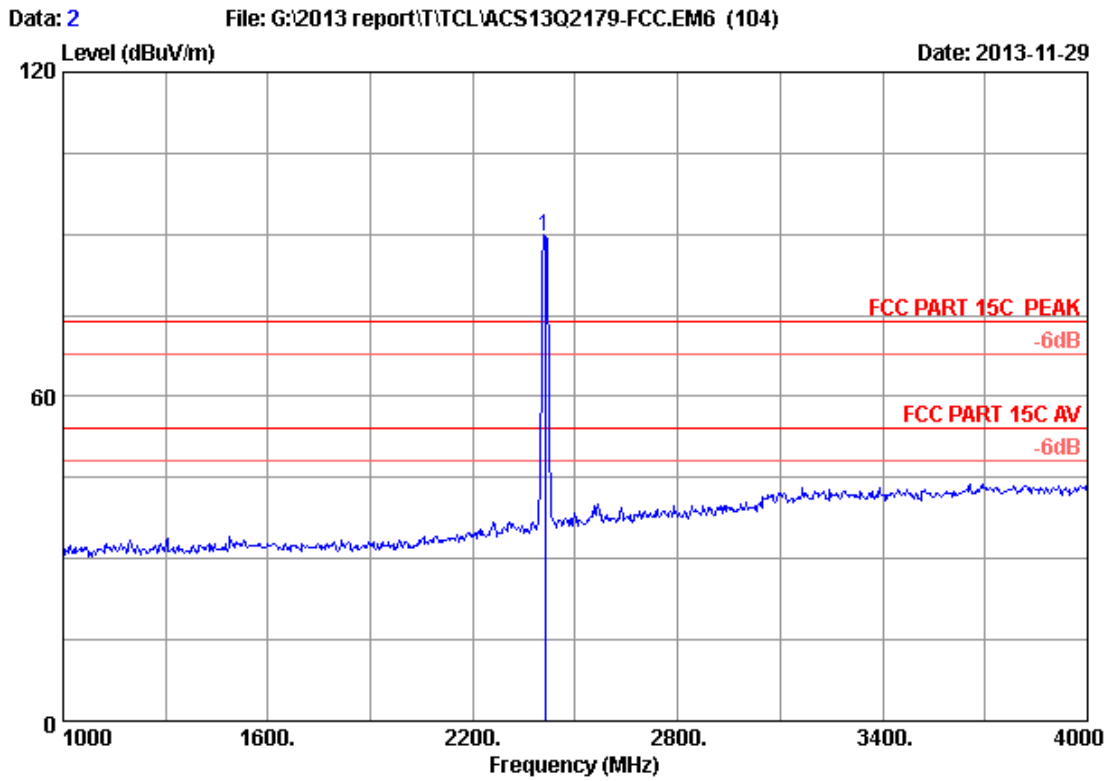
Frequency: 1GHz~6GHz




```
Site no.      : 3m Chamber              Data no.   : 1
Dis. / Ant.   : 3m   2013 3115 (4580)   Ant. pol. : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11b 2412MHz Tx Mode
                MT-WN731NM
```

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	110.31	108.63	74.00	-34.63	Peak

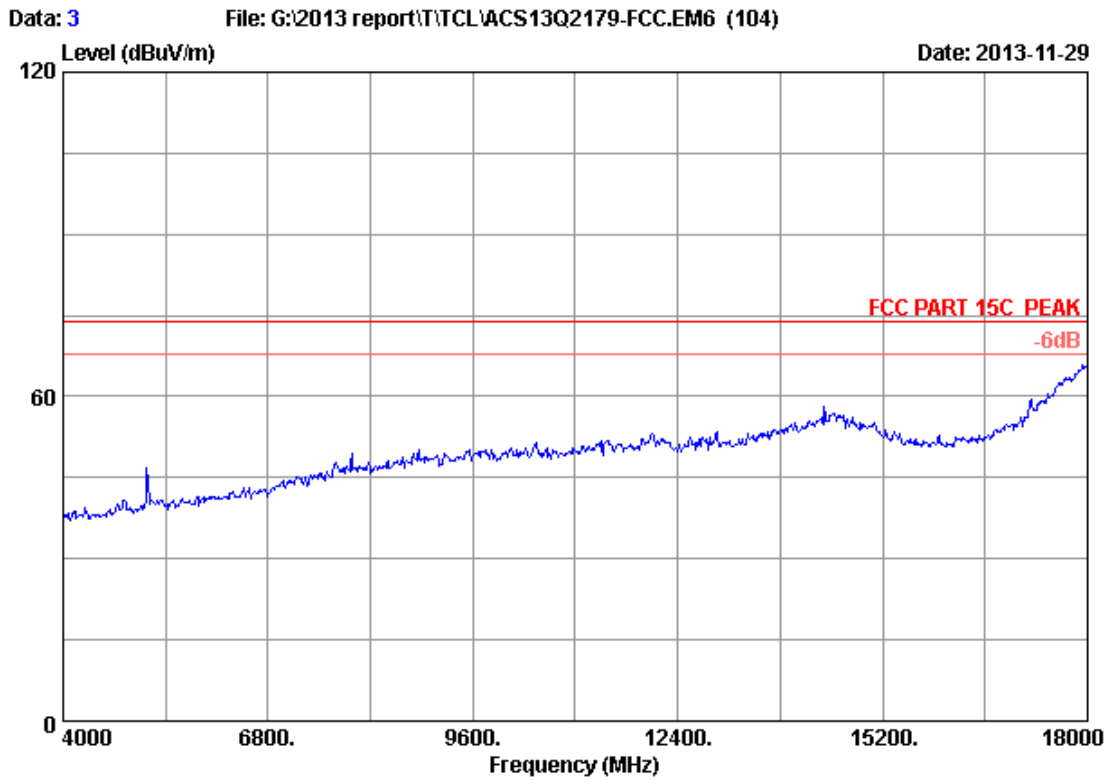
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



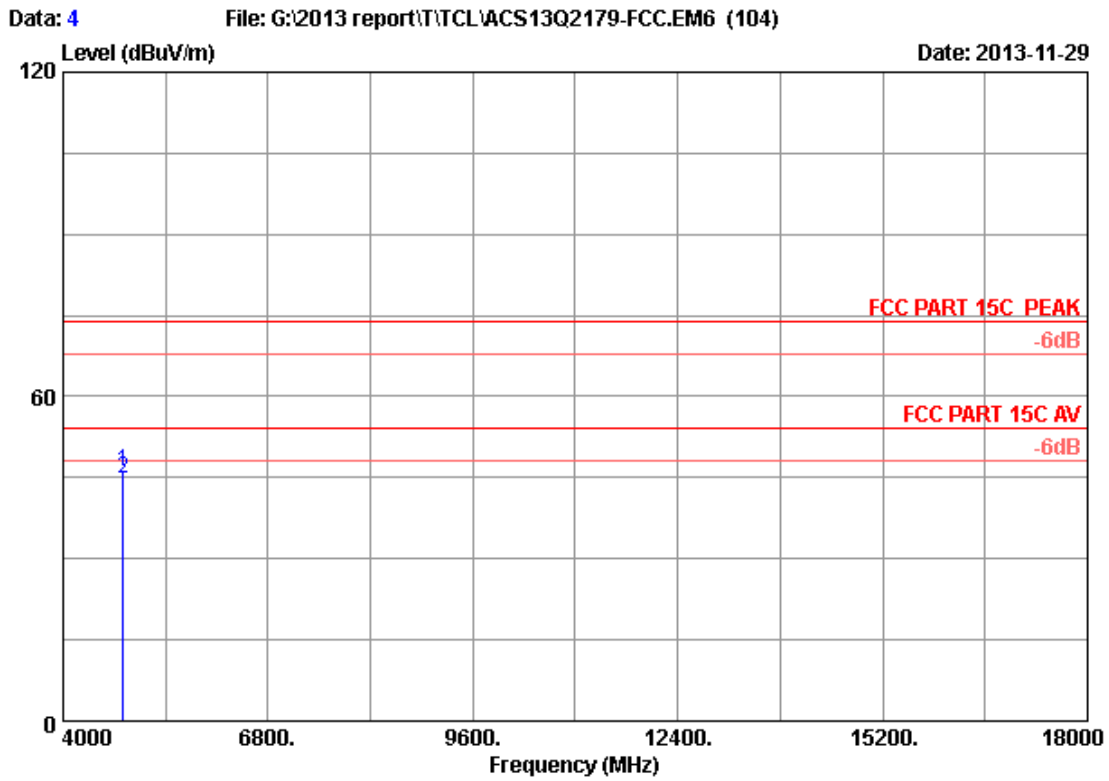
Site no. : 3m Chamber Data no. : 2
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	91.16	89.48	74.00	-15.48	Peak

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



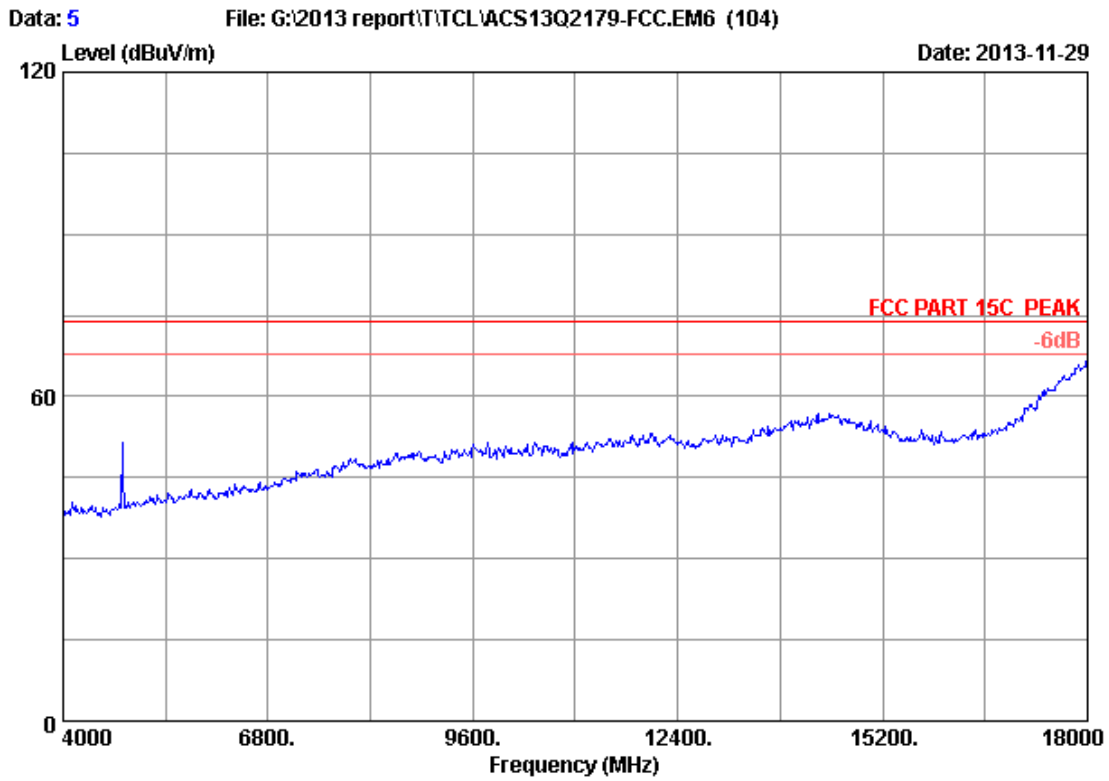

```
Site no.      : 3m Chamber                Data no.   : 3
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11b 2412MHz Tx Mode
                MT-WN731NM
```



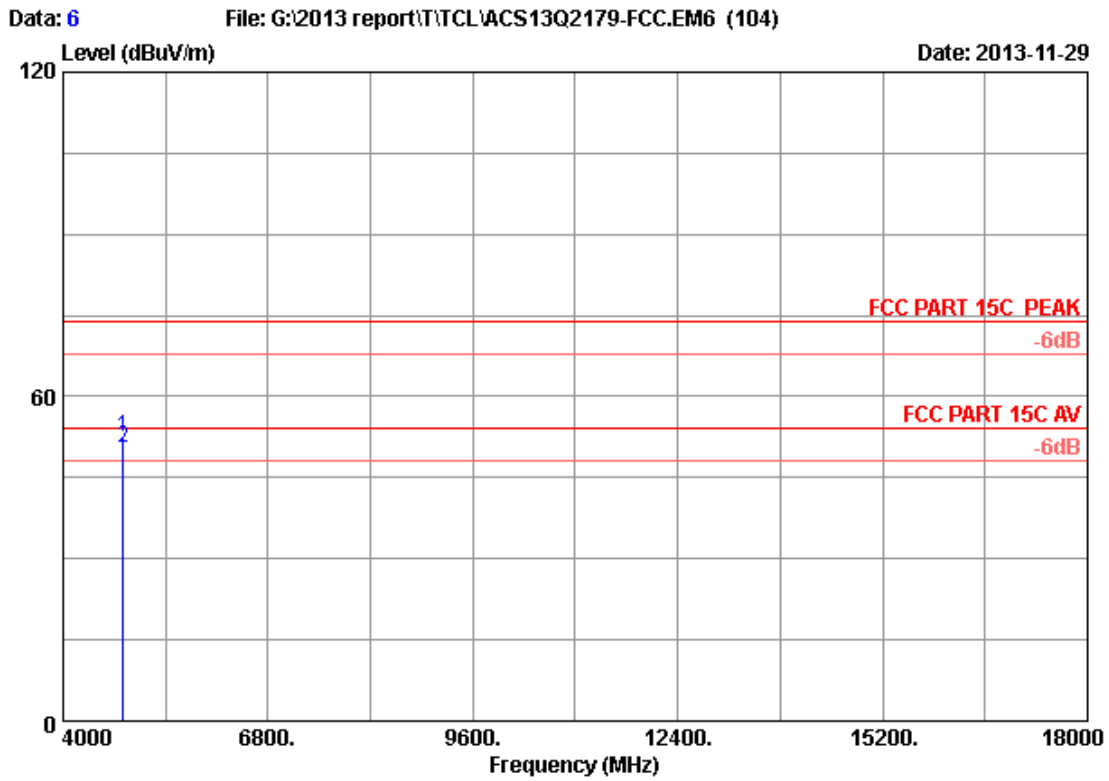
Site no. : 3m Chamber Data no. : 4
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	40.45	46.21	74.00	27.79	Peak
2	4824.000	32.88	8.58	35.70	39.14	44.90	54.00	9.10	Average

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



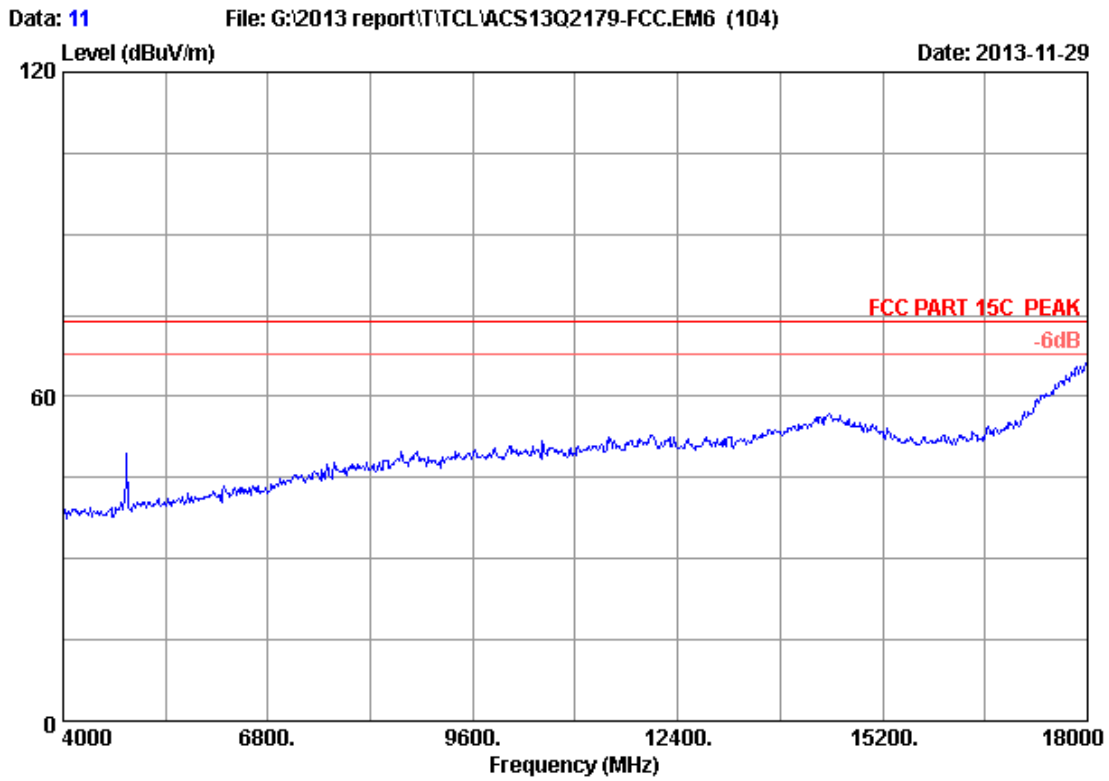

```
Site no.      : 3m Chamber                Data no.   : 5
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11b 2412MHz Tx Mode
                MT-WN731NM
```



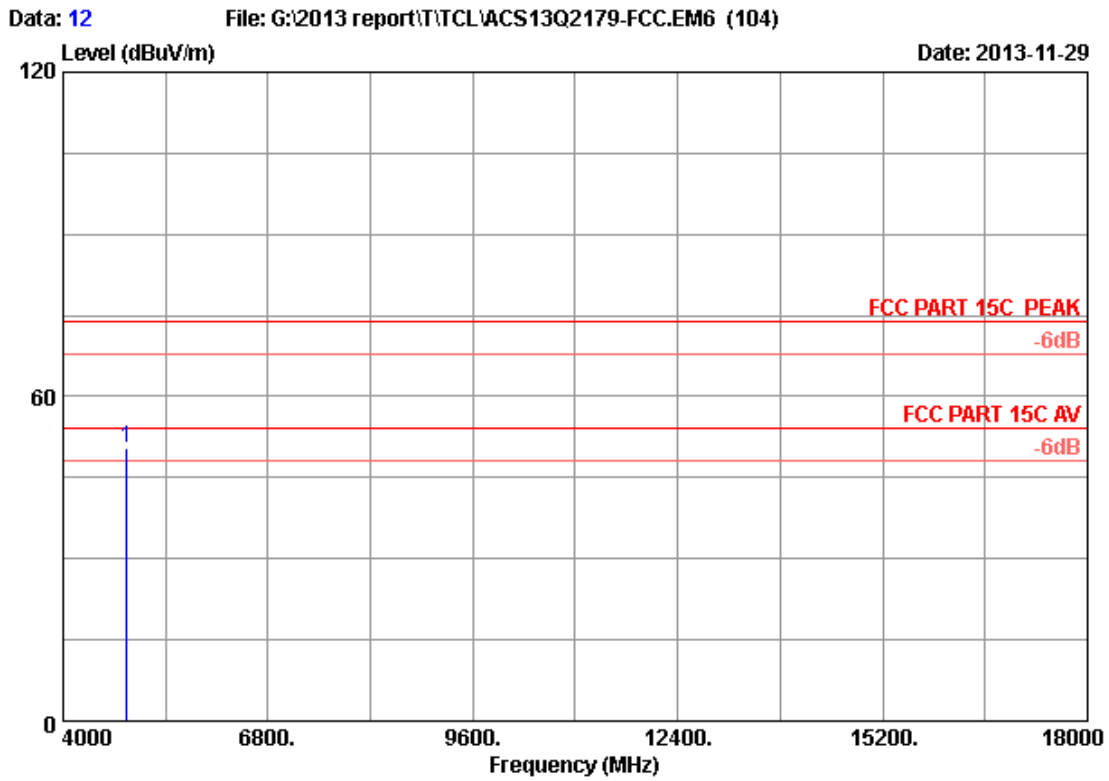
Site no. : 3m Chamber Data no. : 6
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	46.65	52.41	74.00	21.59	Peak
2	4824.000	32.88	8.58	35.70	44.68	50.44	54.00	3.56	Average

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



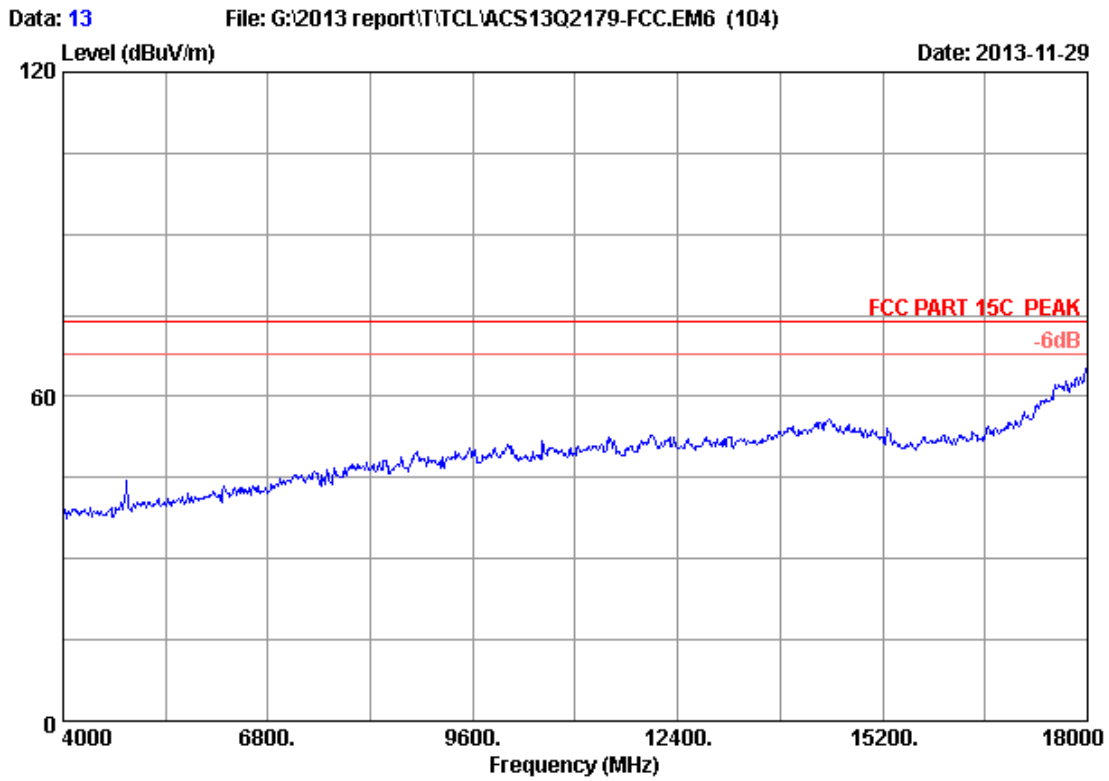

```
Site no.      : 3m Chamber                Data no.   : 11
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11b 2437MHz Tx Mode
                MT-WN731NM
```



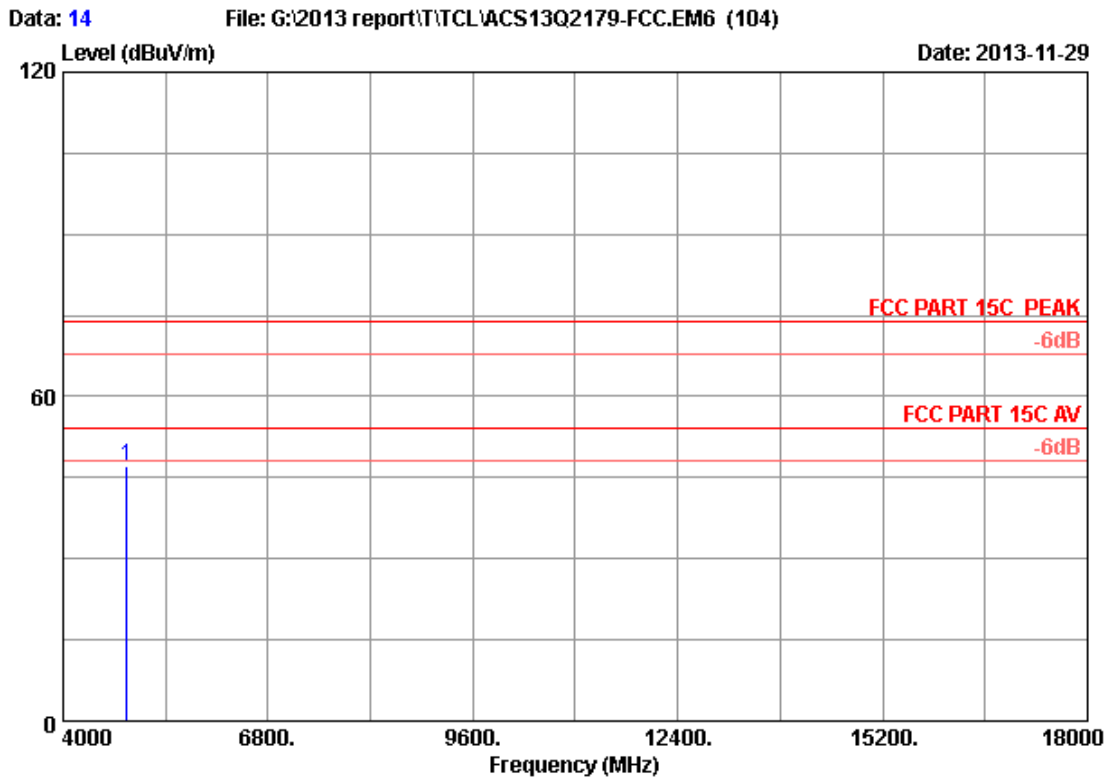
Site no. : 3m Chamber Data no. : 12
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	44.72	50.62	54.00	3.38	Average

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



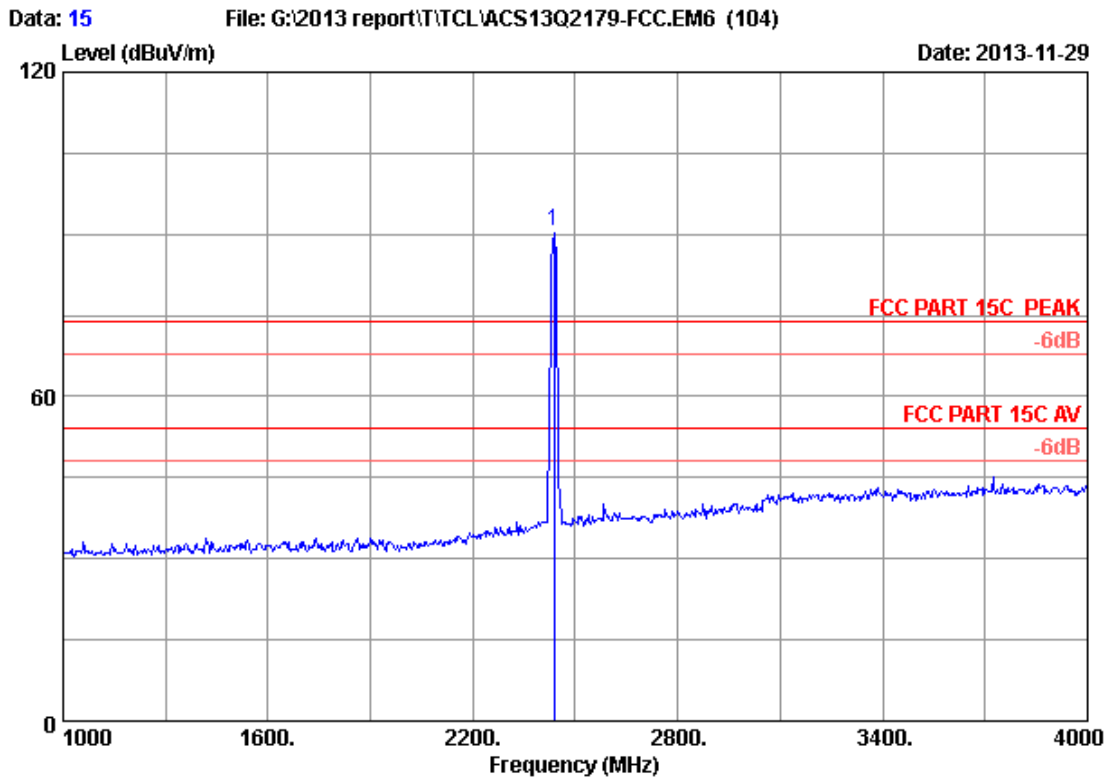

```
Site no.      : 3m Chamber                Data no.   : 13
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11b 2437MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 14
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	41.07	46.97	54.00	7.03	Average

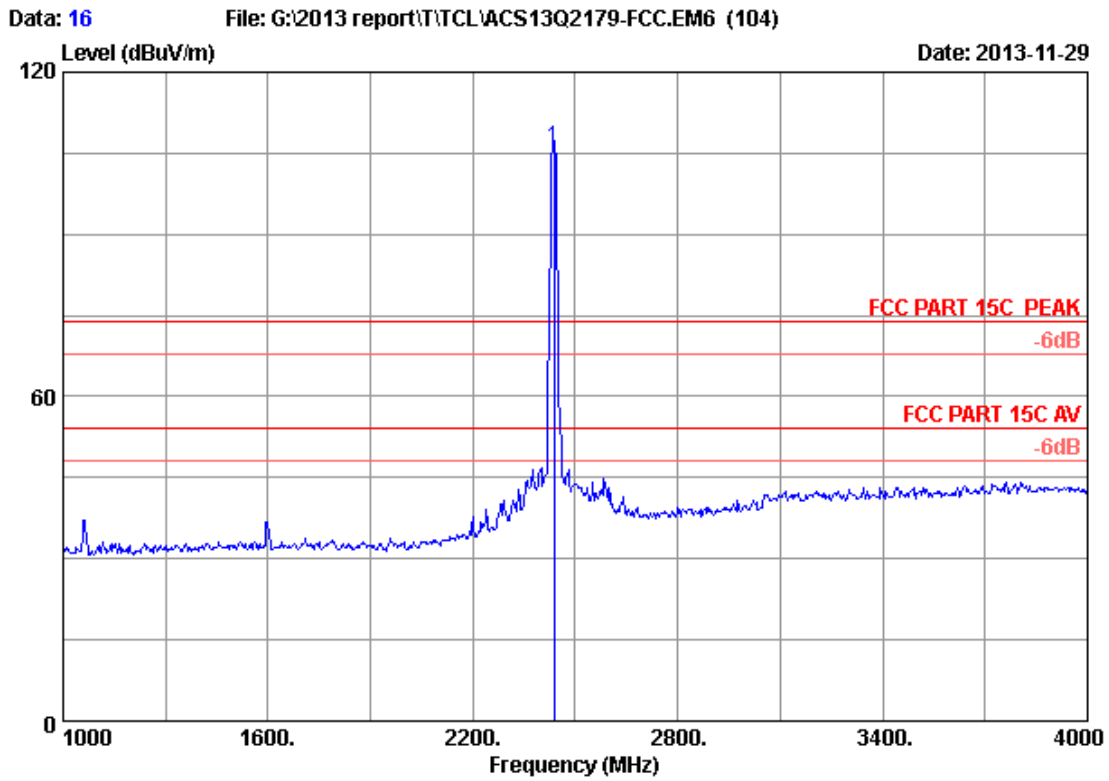
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 15
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	92.16	90.57	74.00	-16.57	Peak

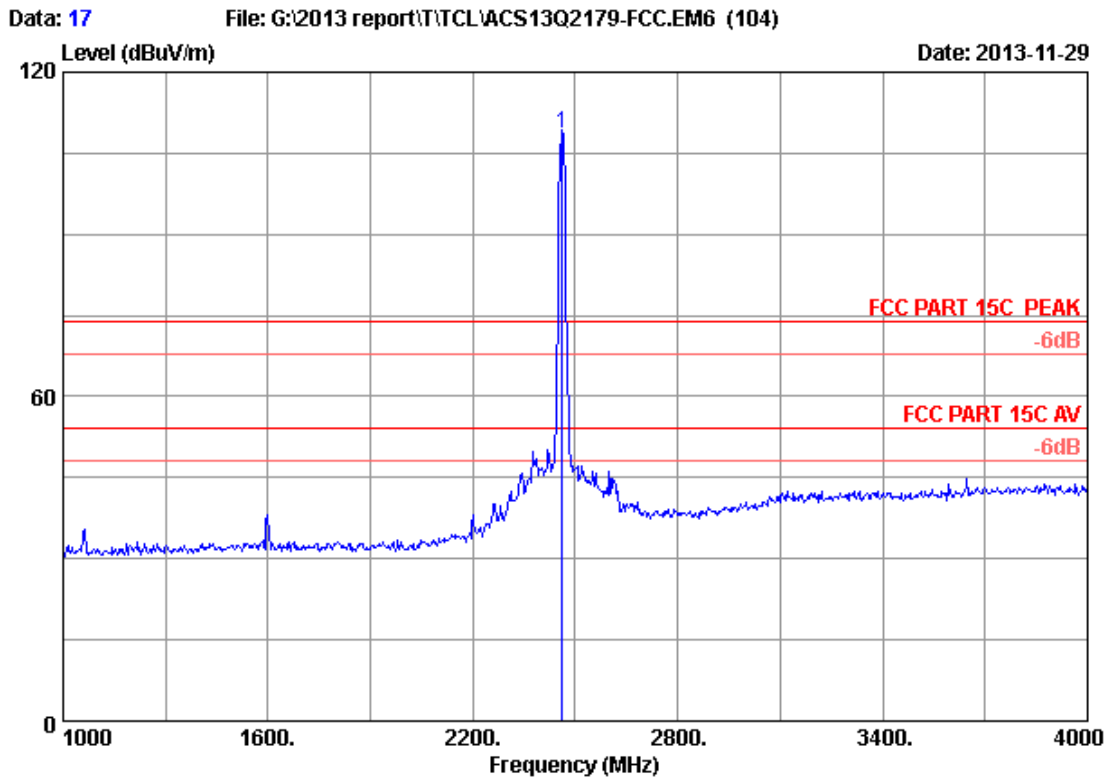
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 16
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	107.46	105.87	74.00	-31.87	Peak

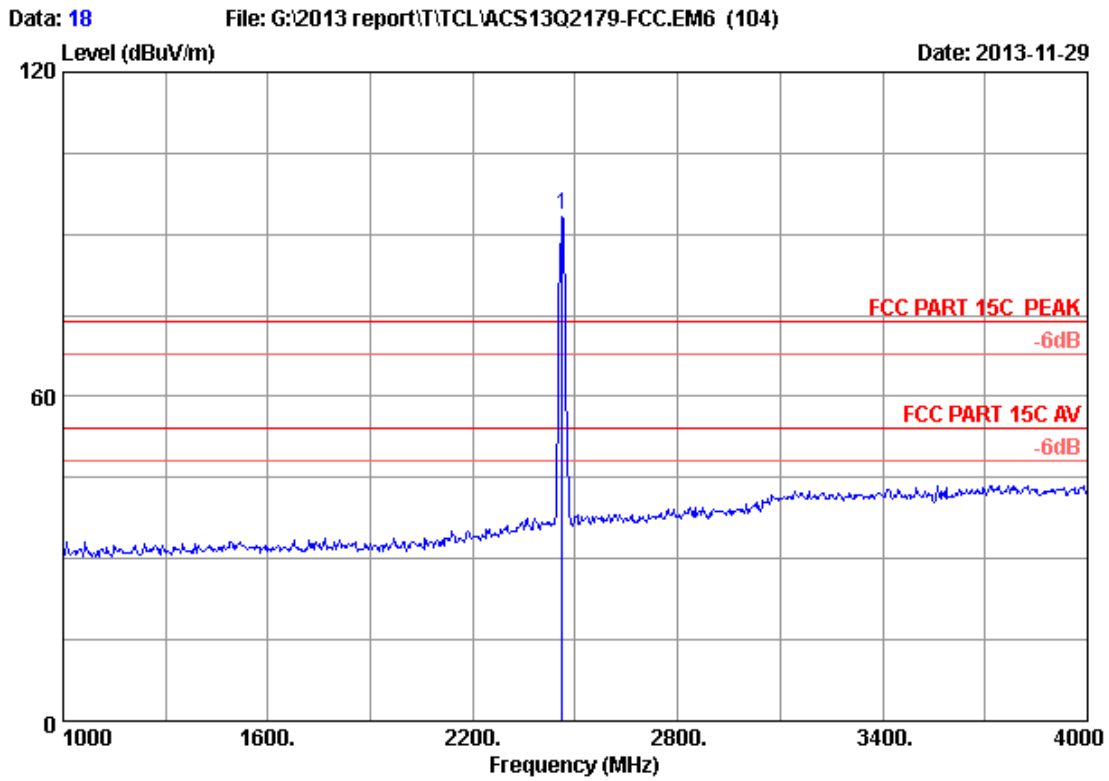
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 17
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	110.25	108.76	74.00	-34.76	Peak

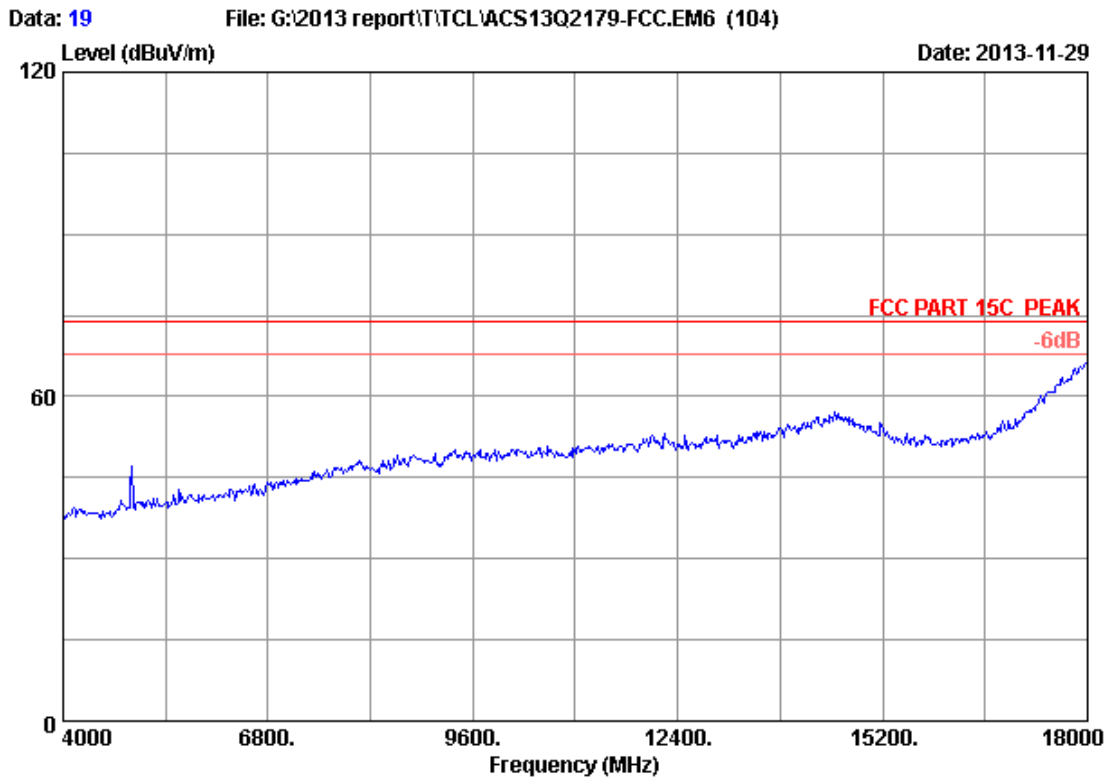
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



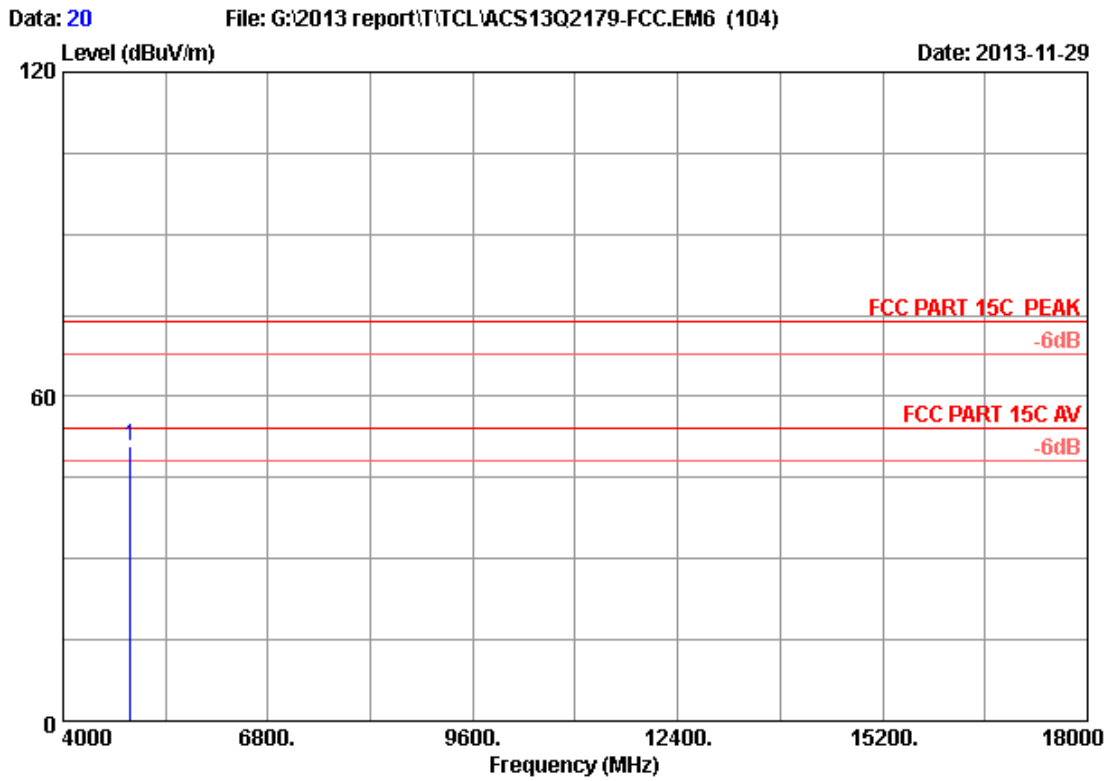
Site no. : 3m Chamber Data no. : 18
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	95.16	93.67	74.00	-19.67	Peak

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



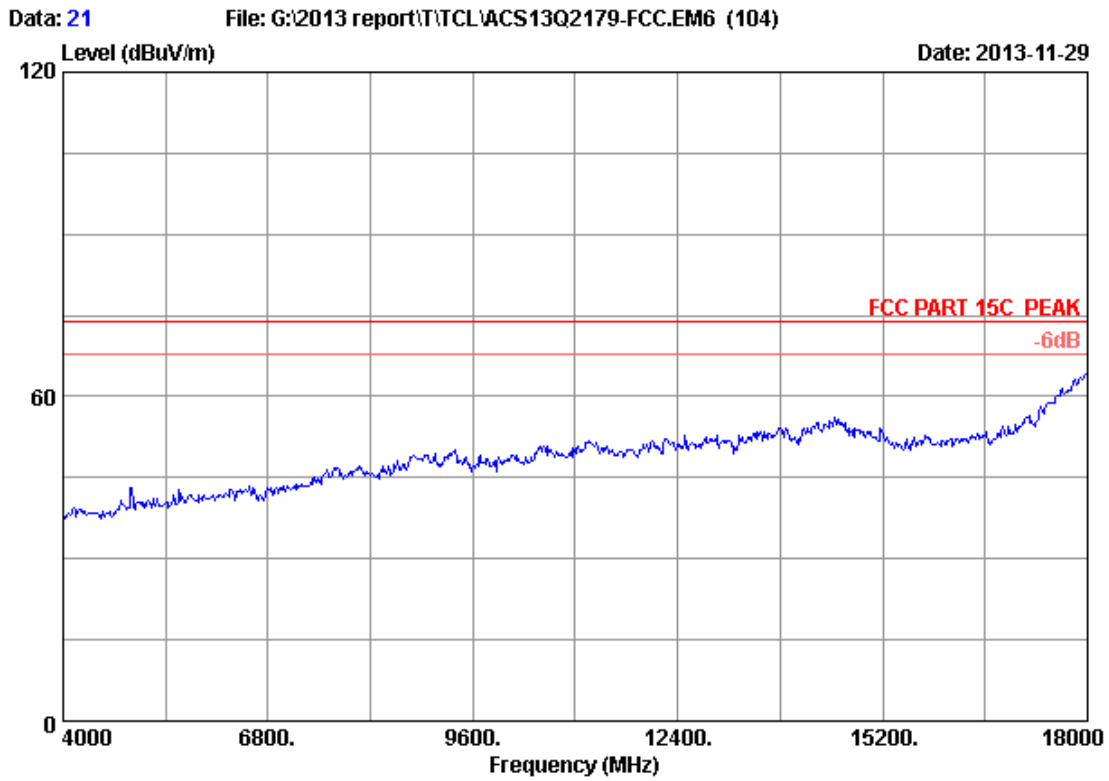

```
Site no.      : 3m Chamber                Data no.   : 19
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11b 2462MHz Tx Mode
                MT-WN731NM
```



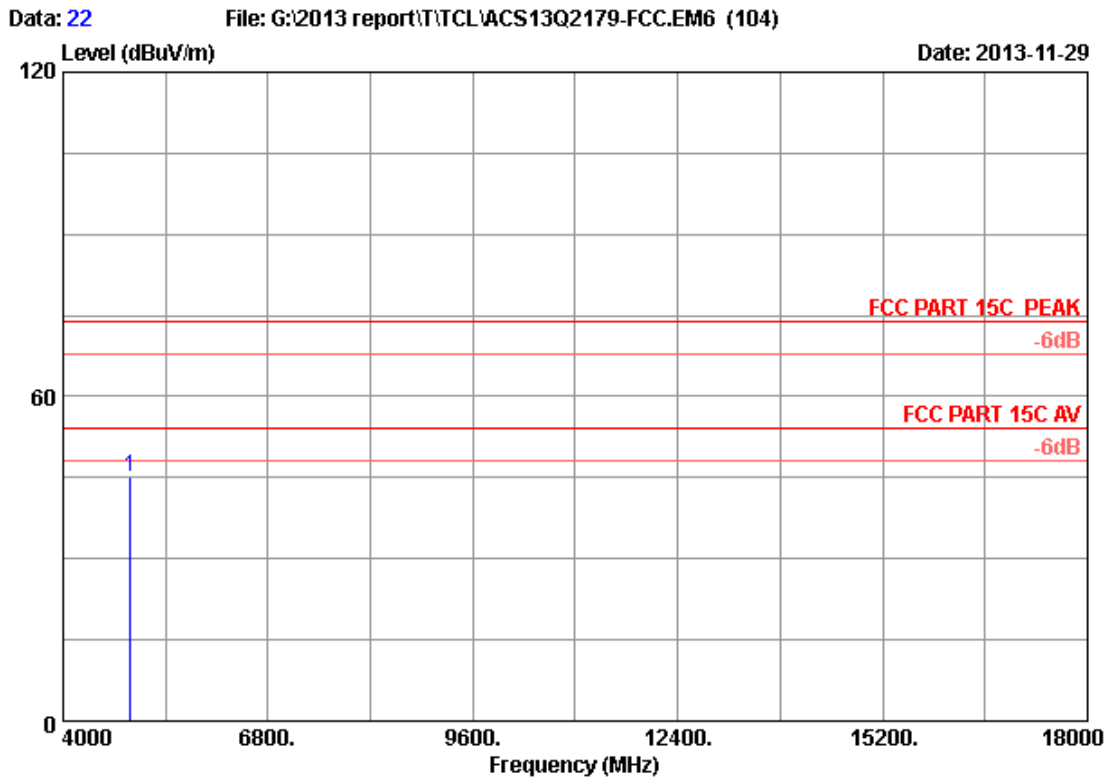
Site no. : 3m Chamber Data no. : 20
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	44.69	50.74	54.00	3.26	Average

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



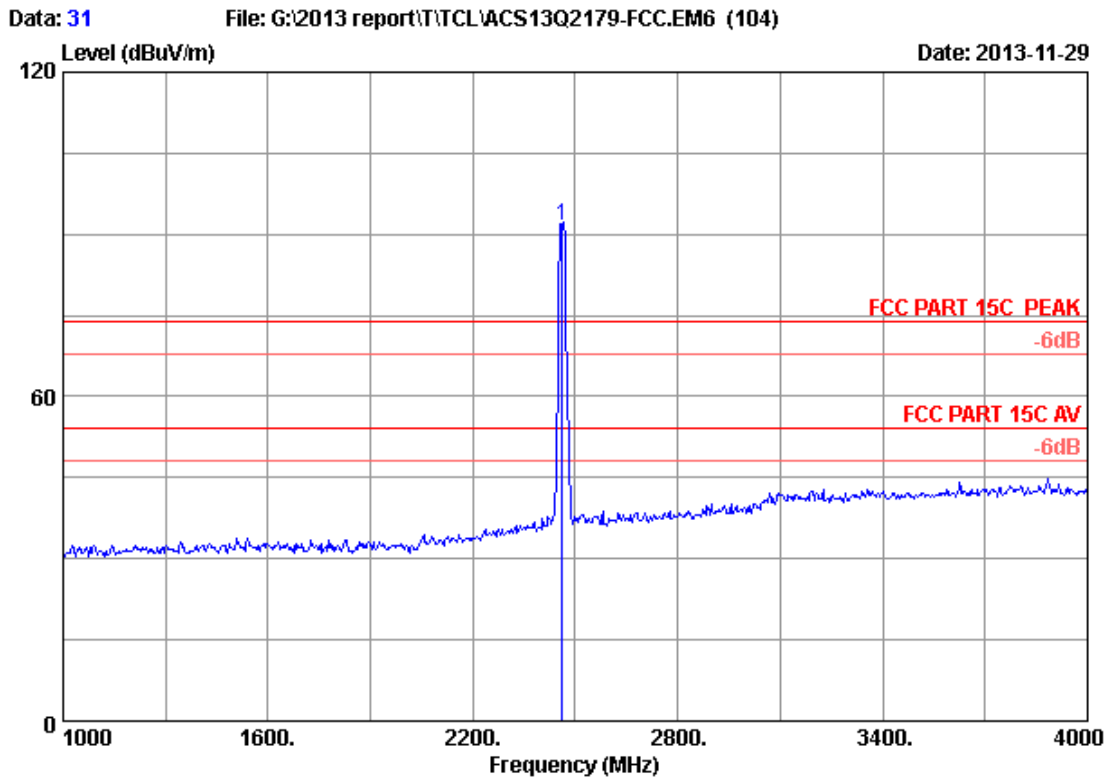

```
Site no.      : 3m Chamber                Data no.   : 21
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11b 2462MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 22
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	39.15	45.20	54.00	8.80	Average

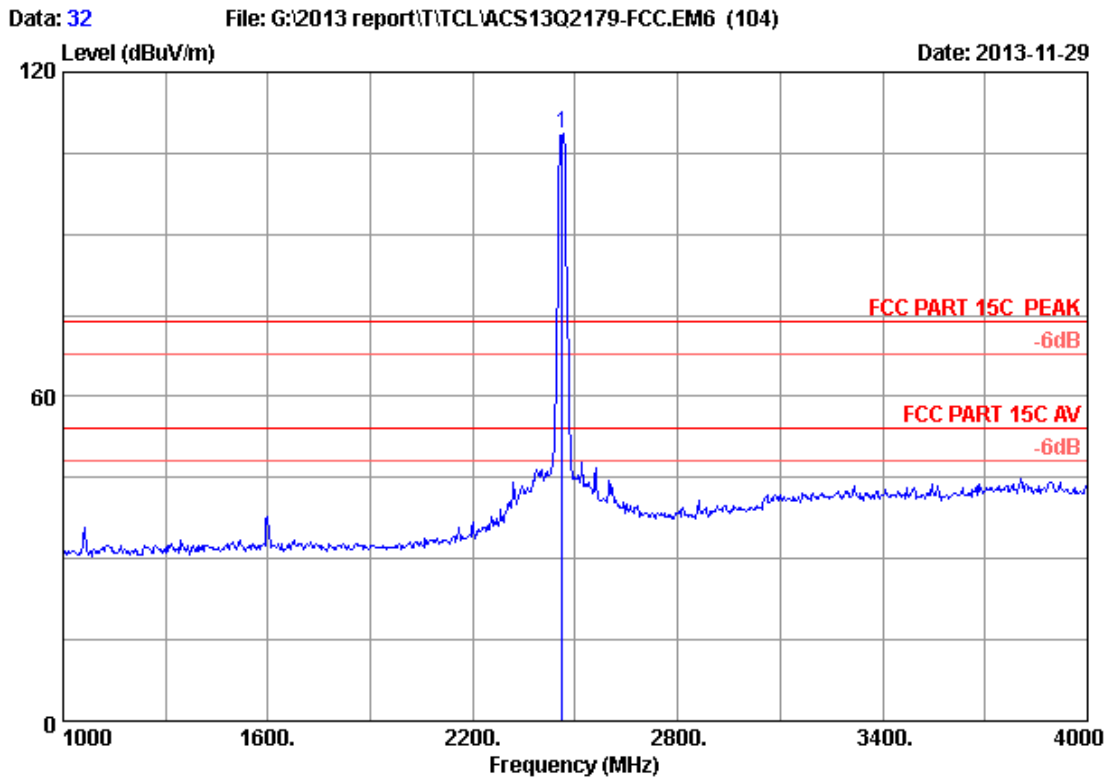
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	93.18	91.69	74.00	-17.69	Peak

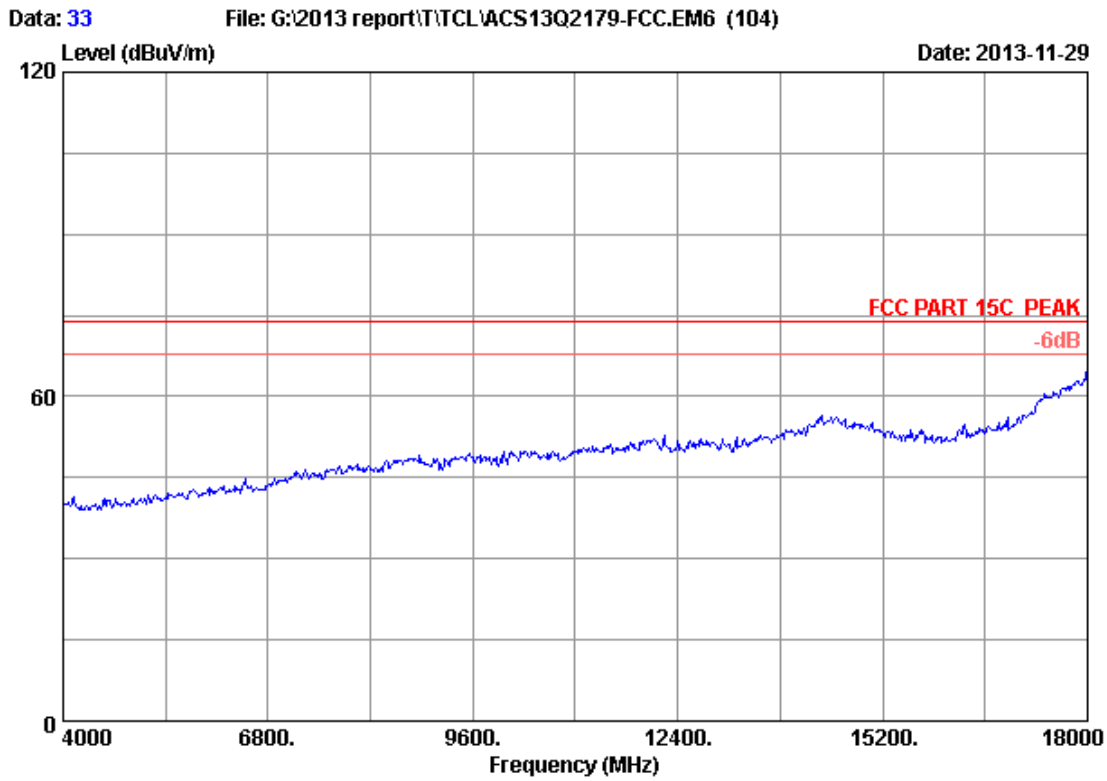
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



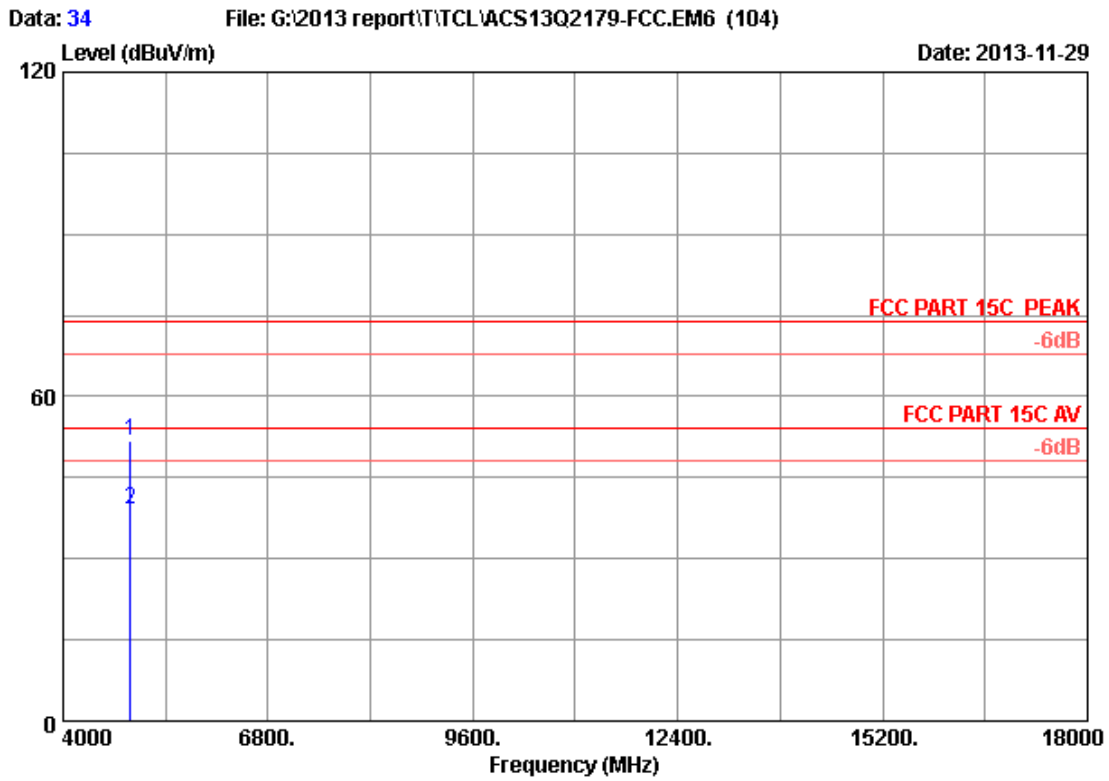
Site no. : 3m Chamber Data no. : 32
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	110.09	108.60	74.00	-34.60	Peak

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



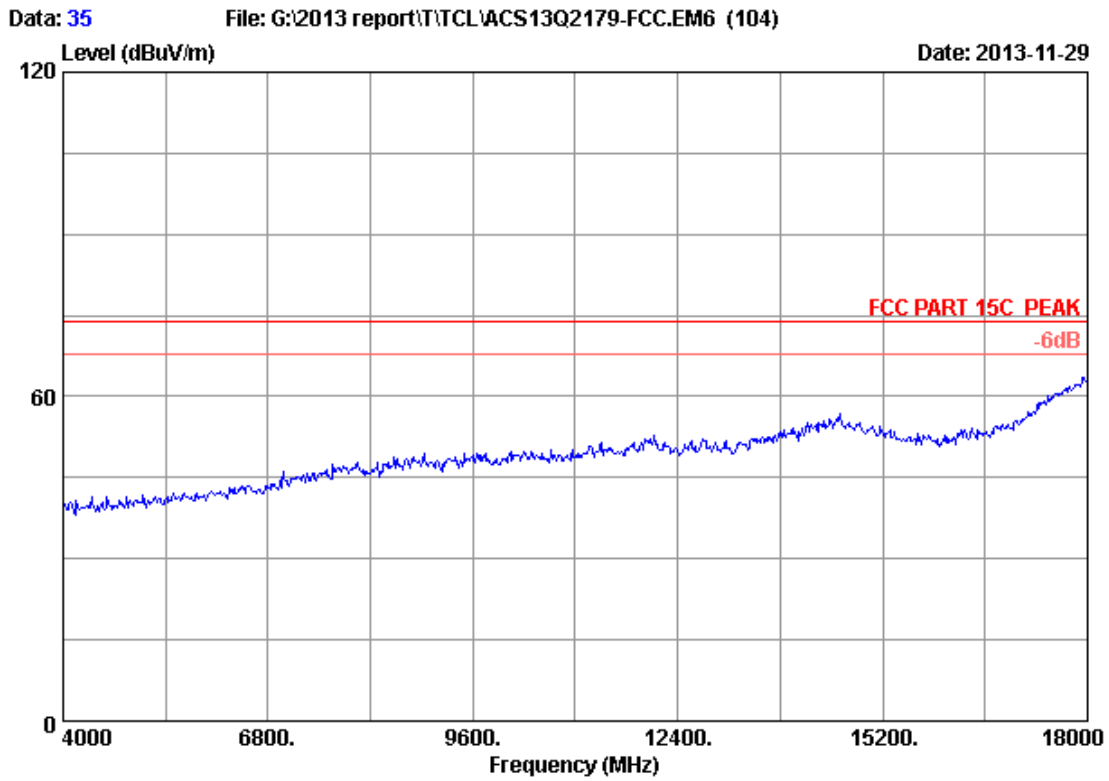

```
Site no.      : 3m Chamber                Data no.   : 33
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11g 2462MHz Tx Mode
                MT-WN731NM
```



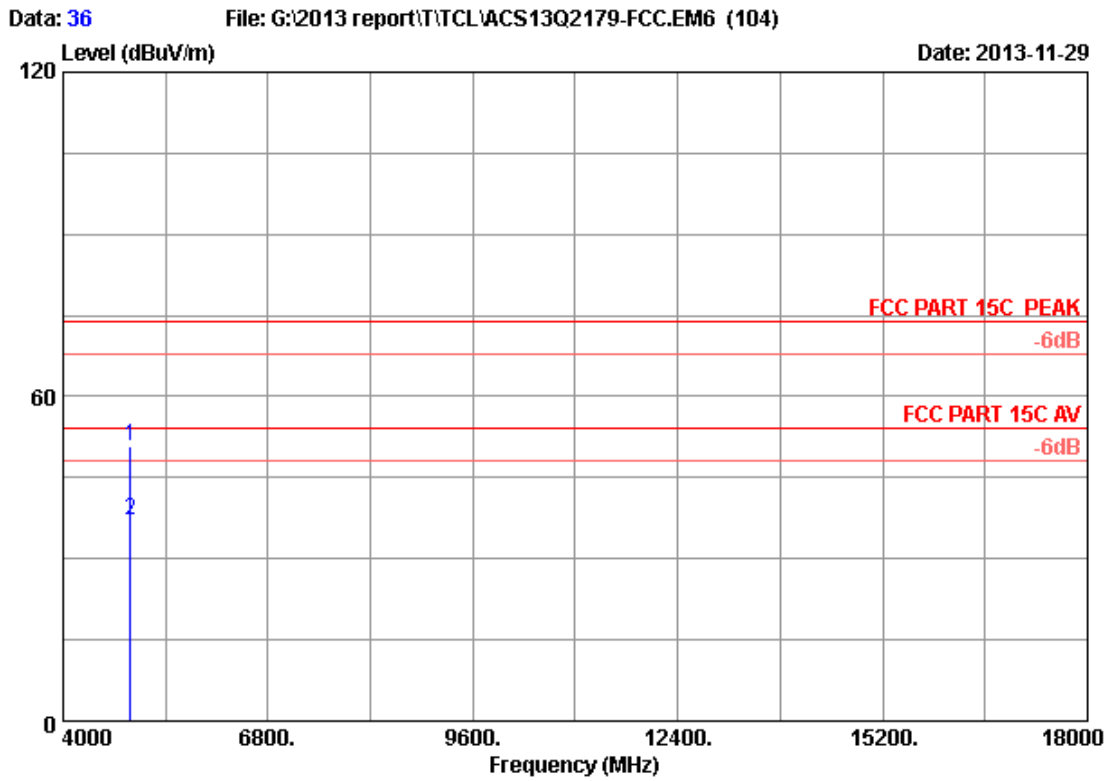
Site no. : 3m Chamber Data no. : 34
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	45.76	51.81	74.00	22.19	Peak
2	4924.000	33.06	8.69	35.70	33.16	39.21	54.00	14.79	Average

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



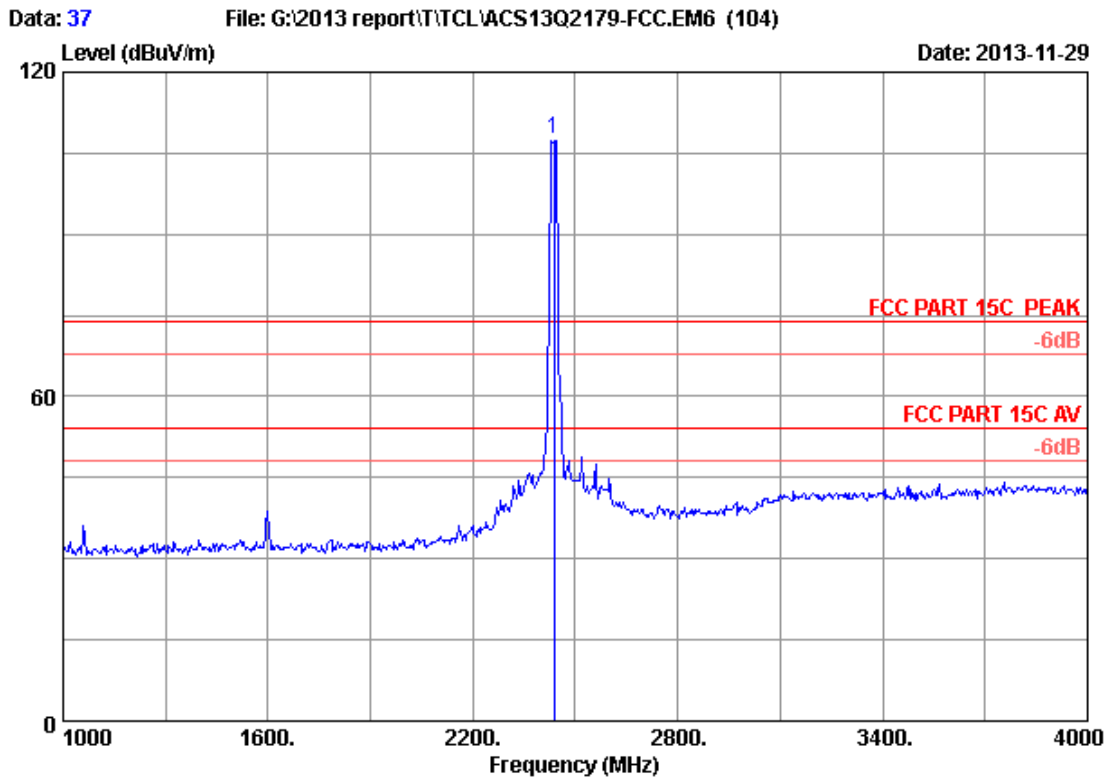
Site no.	: 3m Chamber	Data no.	: 35
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Kevin_Hu
EUT	: WIRELESS USB ADAPTER		
Power supply	: DC 3.3V		
Test mode	: IEEE802.11g 2462MHz Tx Mode MT-WN731NM		



Site no. : 3m Chamber Data no. : 36
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	44.78	50.83	74.00	23.17	Peak
2	4924.000	33.06	8.69	35.70	31.16	37.21	54.00	16.79	Average

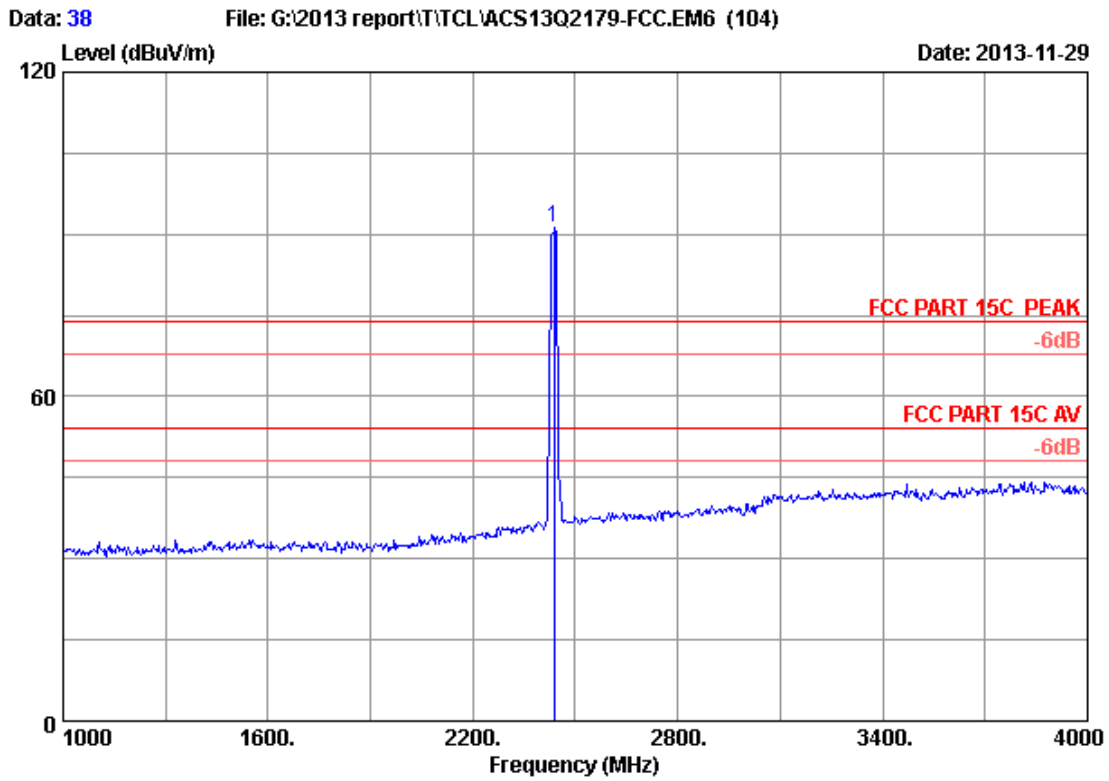
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 37
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	109.06	107.47	74.00	-33.47	Peak

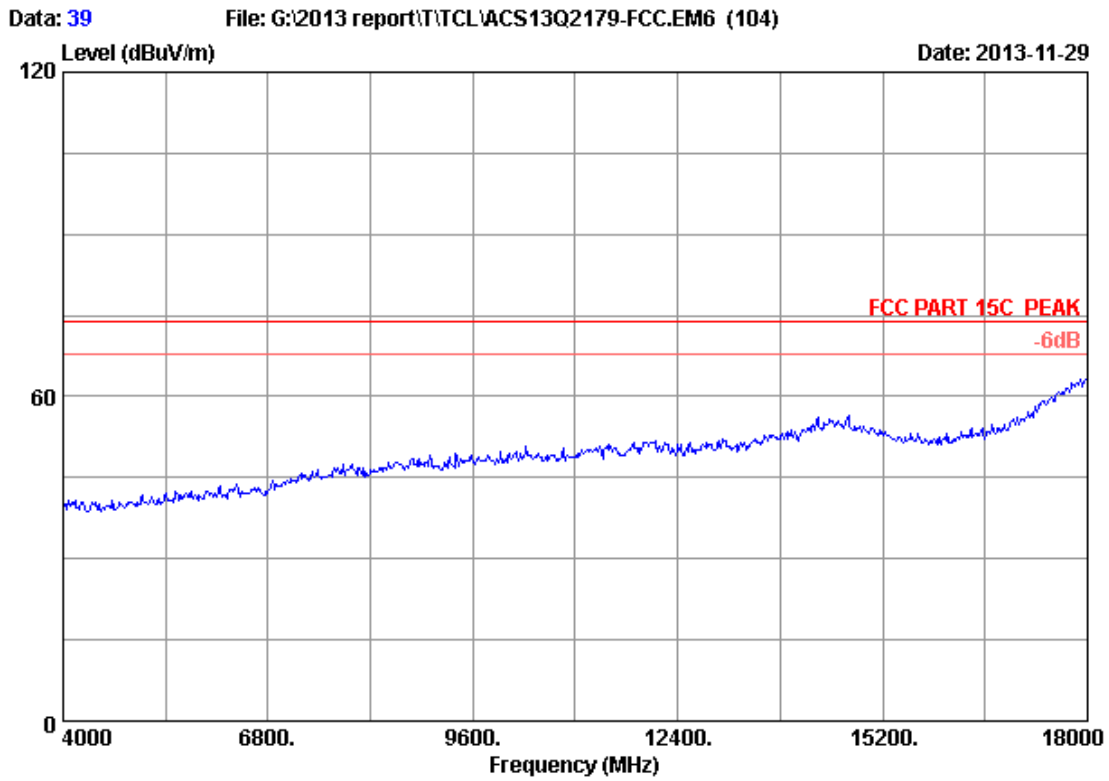
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



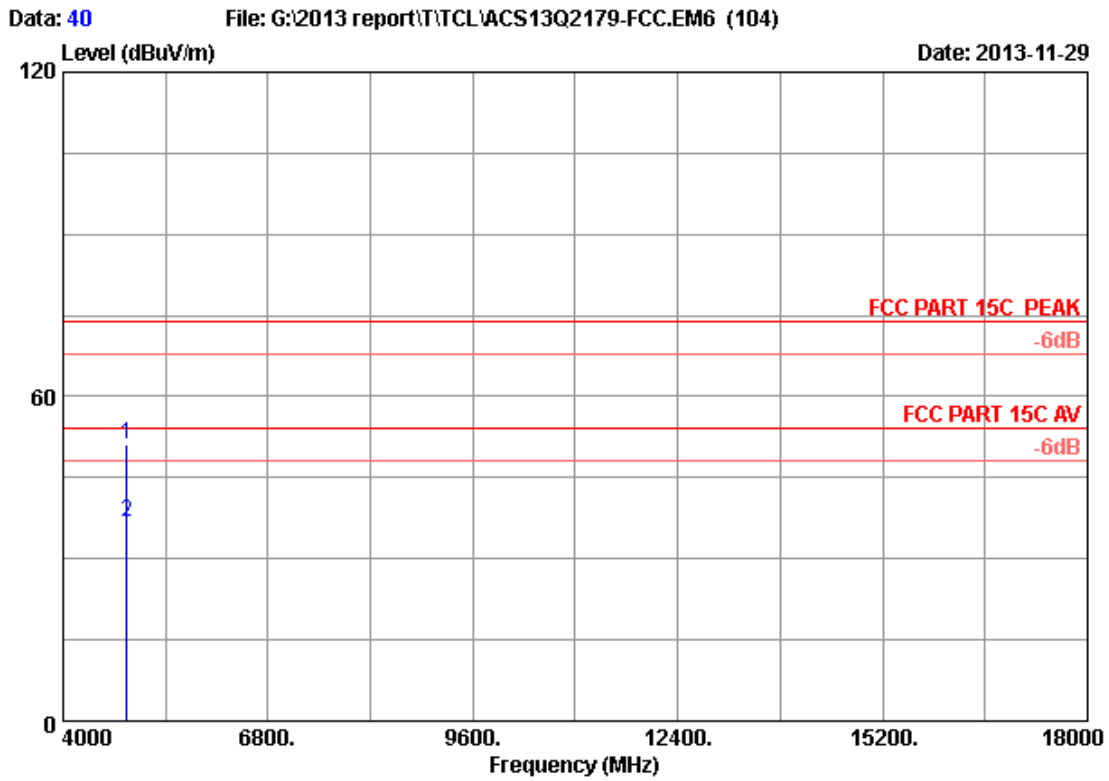
Site no. : 3m Chamber Data no. : 38
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	92.86	91.27	74.00	-17.27	Peak

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



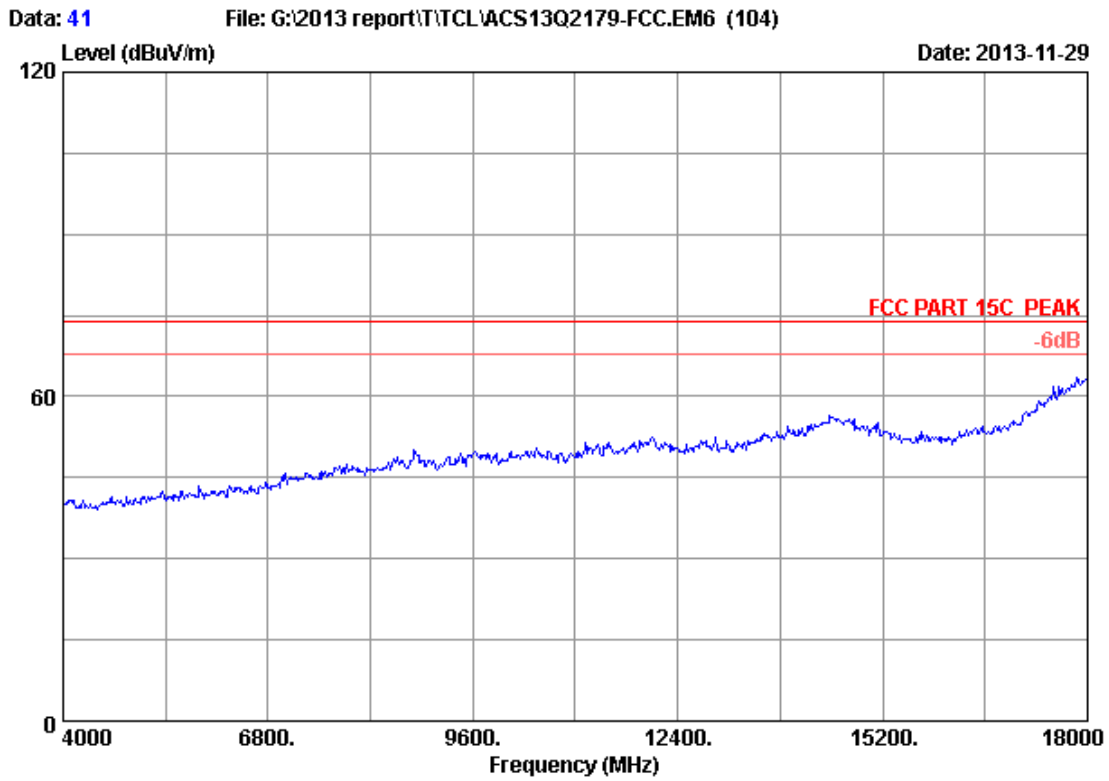

```
Site no.      : 3m Chamber                Data no.   : 39
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11g 2437MHz Tx Mode
                MT-WN731NM
```



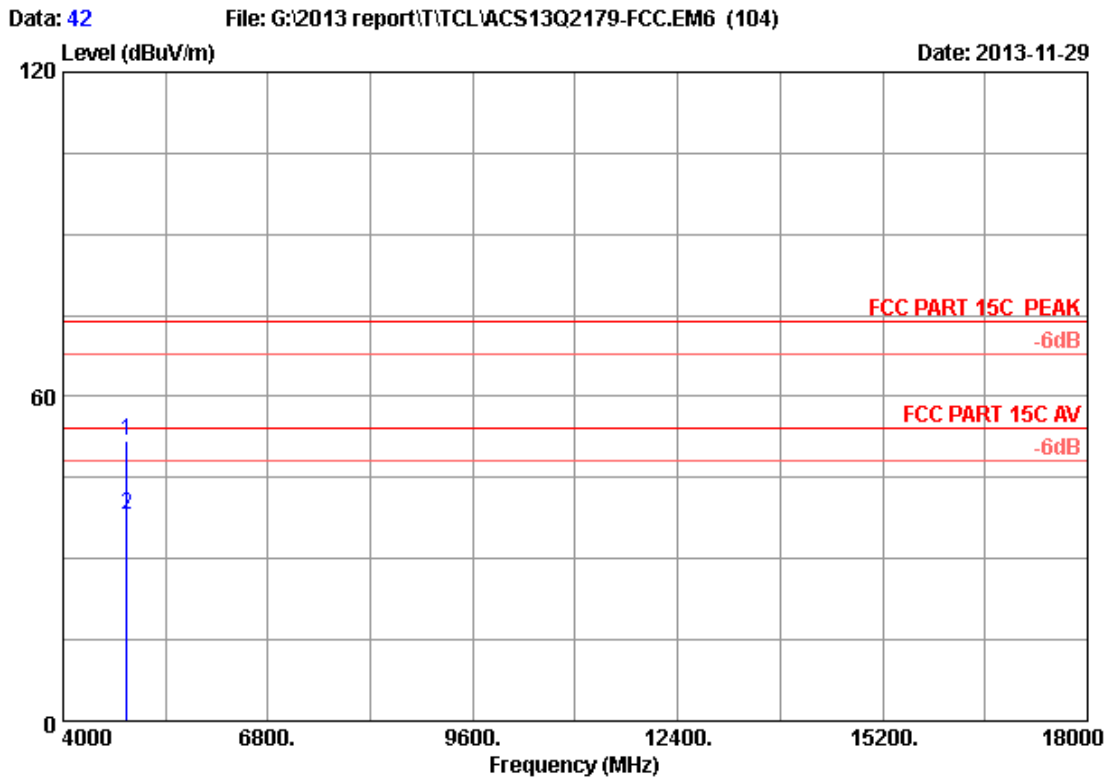
Site no. : 3m Chamber Data no. : 40
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	45.20	51.10	74.00	22.90	Peak
2	4874.000	32.97	8.63	35.70	31.03	36.93	54.00	17.07	Average

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



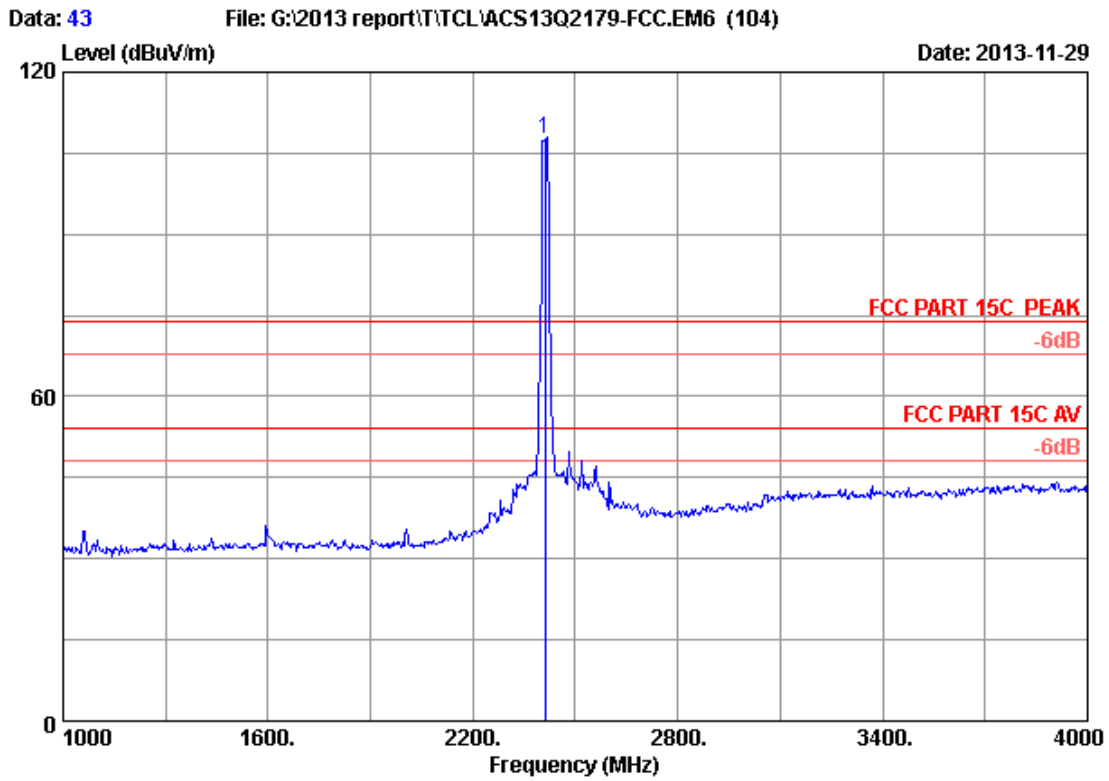

```
Site no.      : 3m Chamber                Data no.   : 41
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11g 2437MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 42
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	45.82	51.72	74.00	22.28	Peak
2	4874.000	32.97	8.63	35.70	32.07	37.97	54.00	16.03	Average

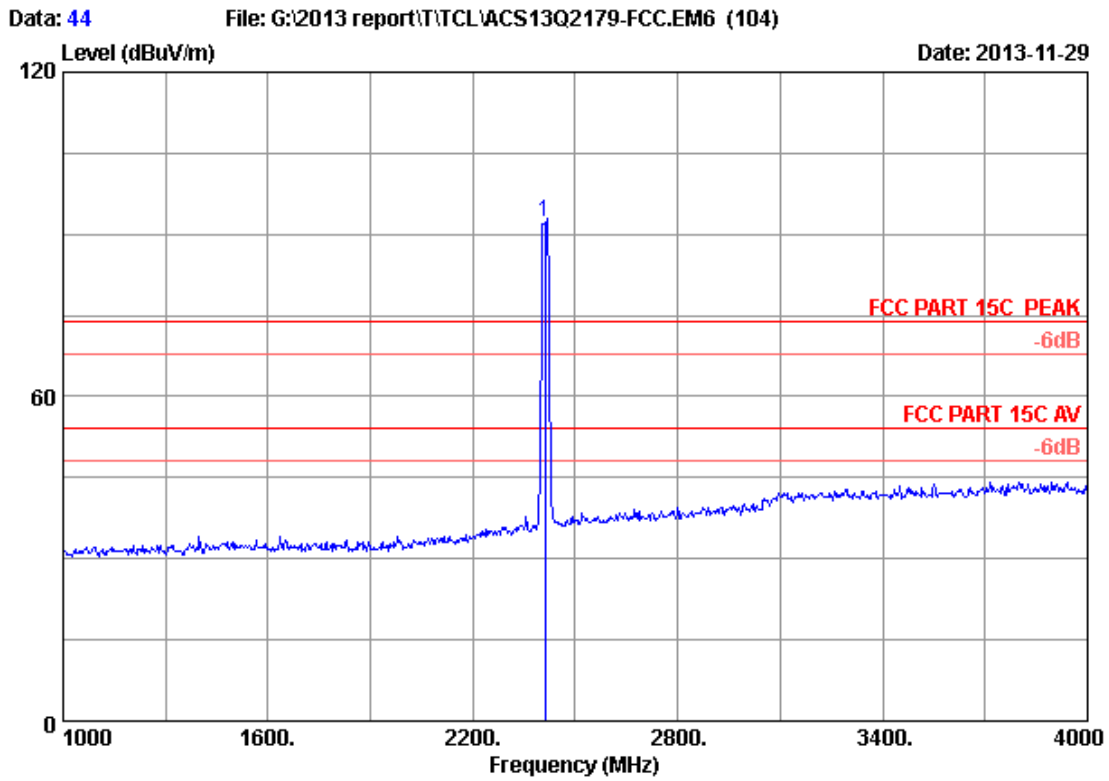
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 43
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	109.46	107.78	74.00	-33.78	Peak

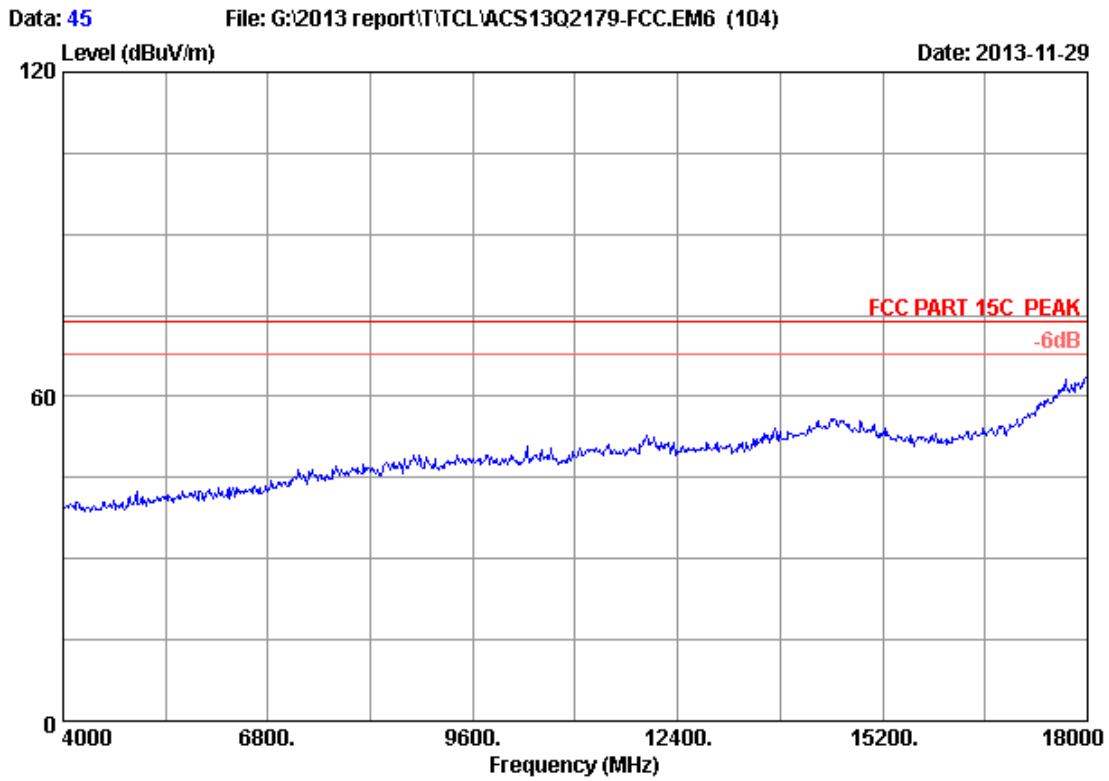
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



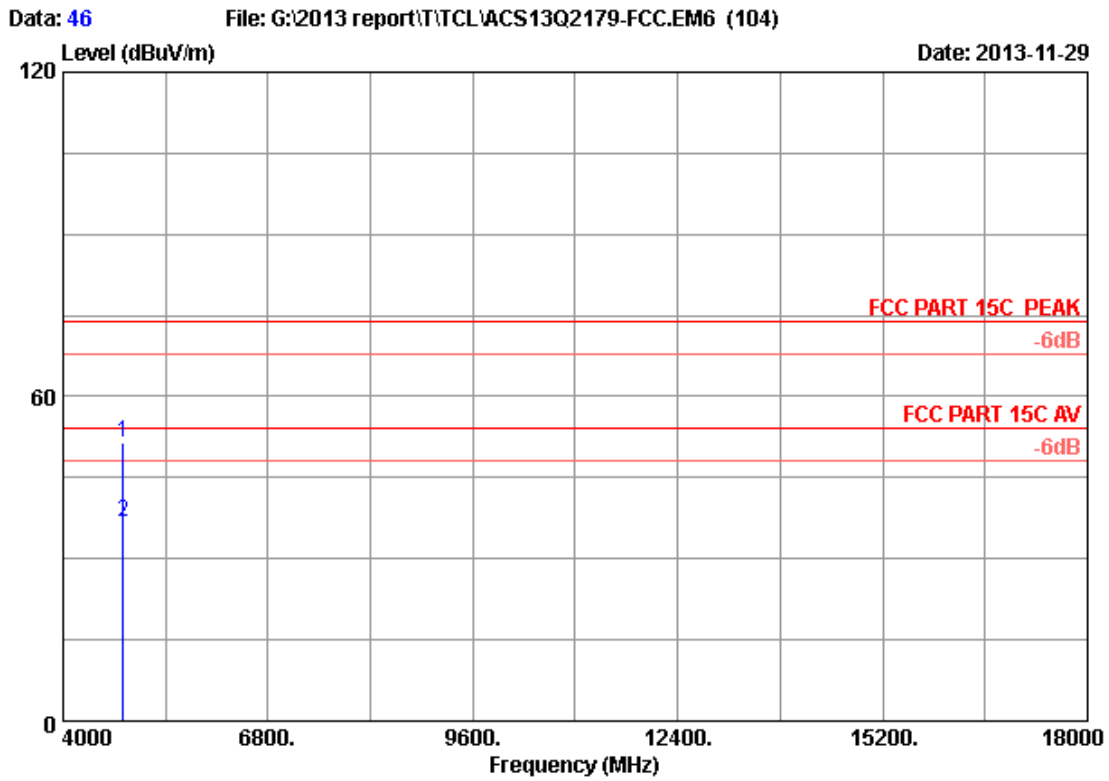
Site no. : 3m Chamber Data no. : 44
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	93.87	92.19	74.00	-18.19	Peak

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



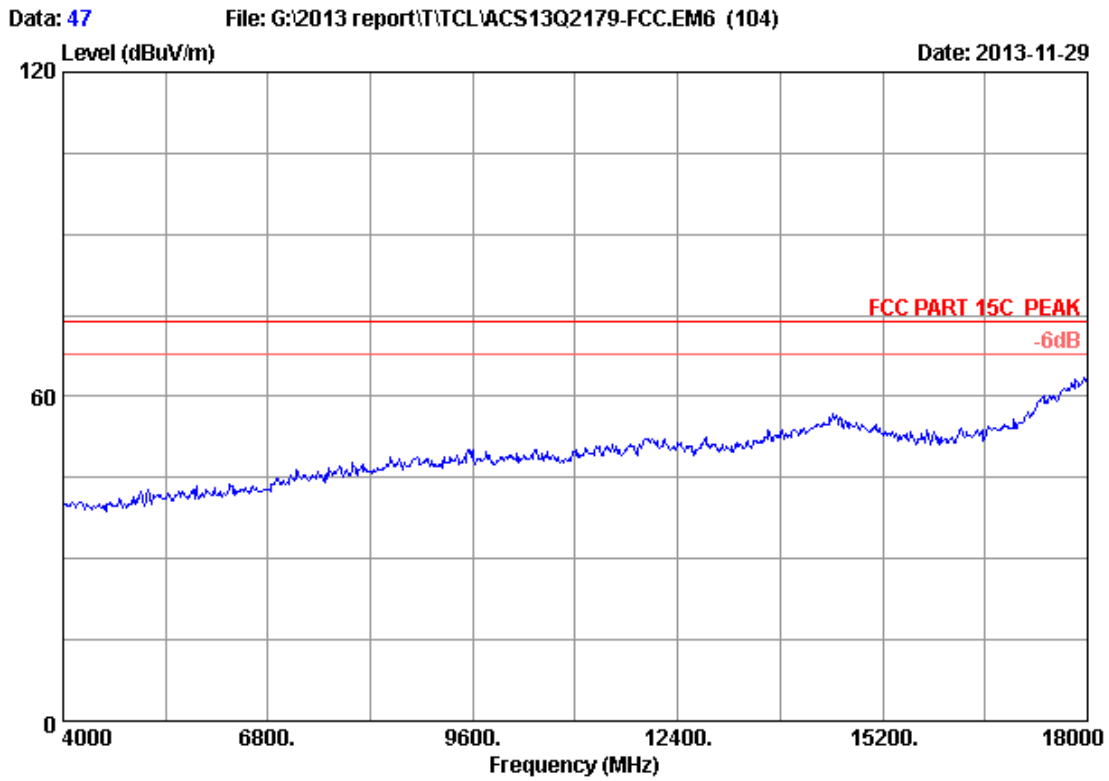

```
Site no.      : 3m Chamber                Data no.   : 45
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11g 2412MHz Tx Mode
                MT-WN731NM
```



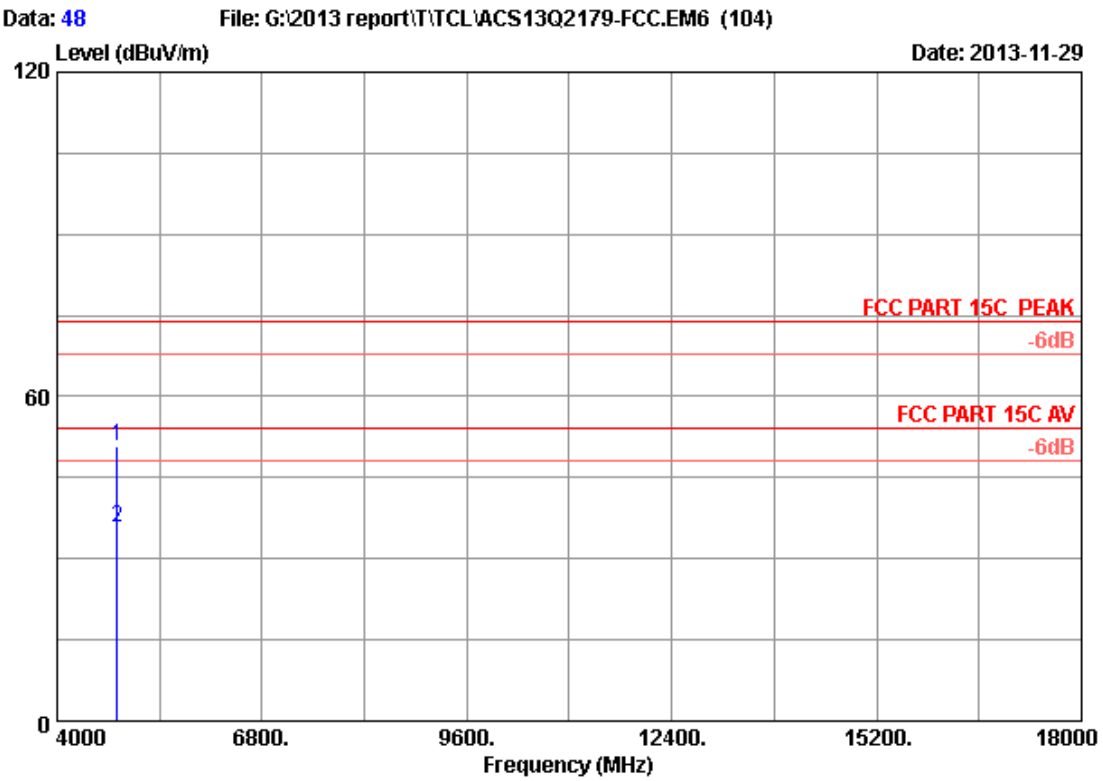
Site no. : 3m Chamber Data no. : 46
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	45.79	51.55	74.00	22.45	Peak
2	4824.000	32.88	8.58	35.70	31.13	36.89	54.00	17.11	Average

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



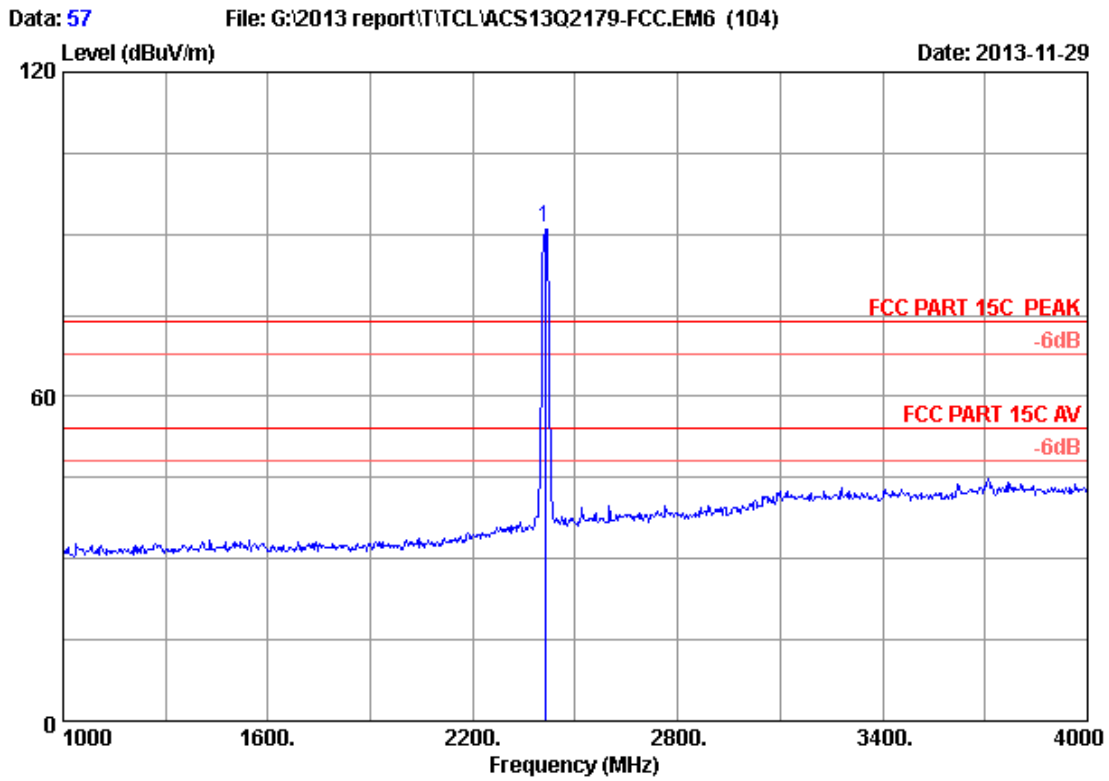

```
Site no.      : 3m Chamber                Data no.   : 47
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11g 2412MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 48
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11g 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	45.16	50.92	74.00	23.08	Peak
2	4824.000	32.88	8.58	35.70	30.13	35.89	54.00	18.11	Average

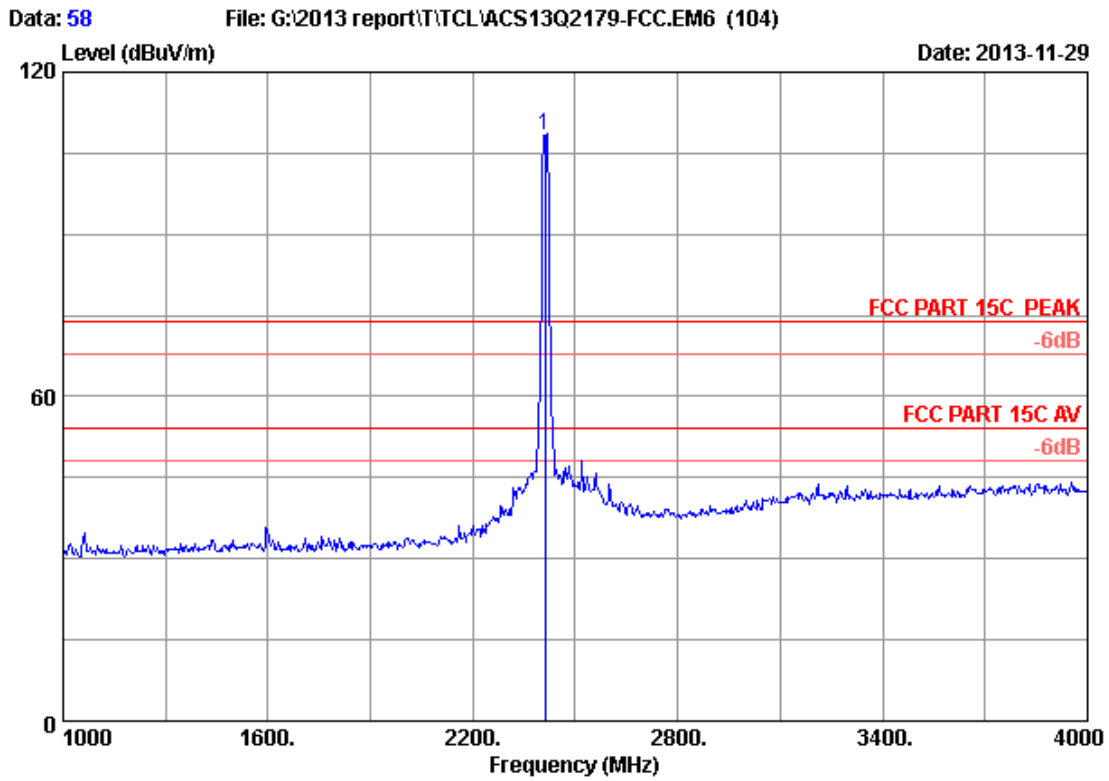
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 57
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	92.89	91.21	74.00	-17.21	Peak

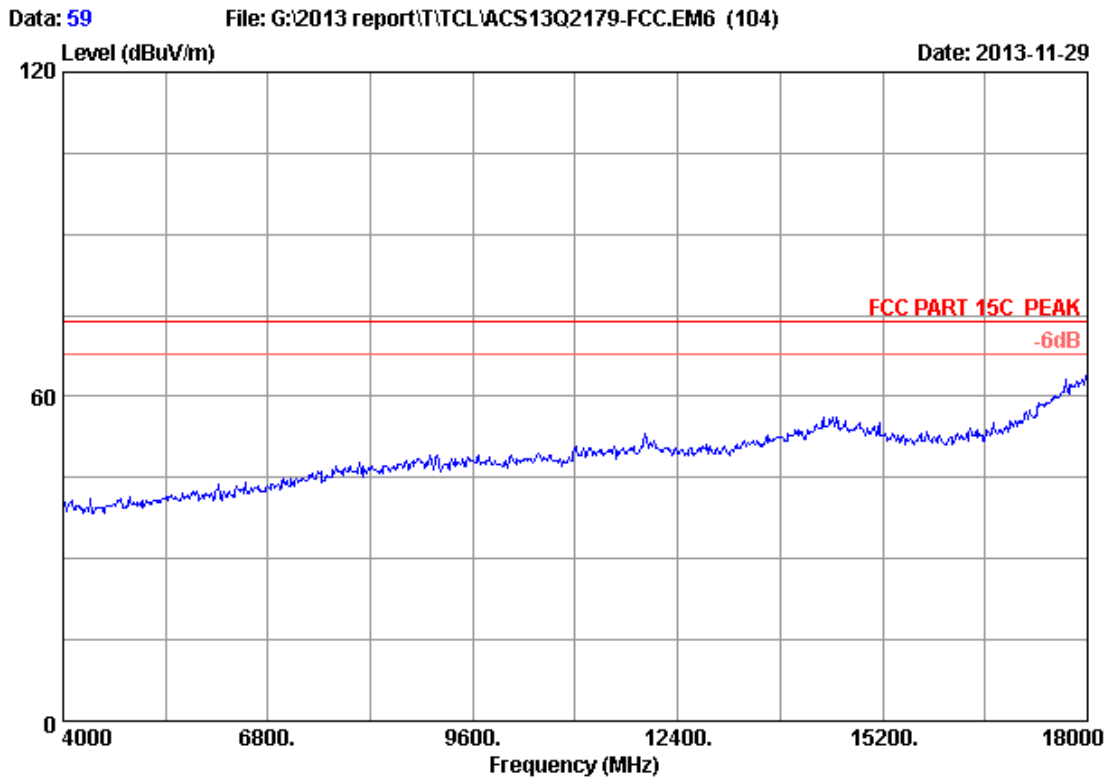
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



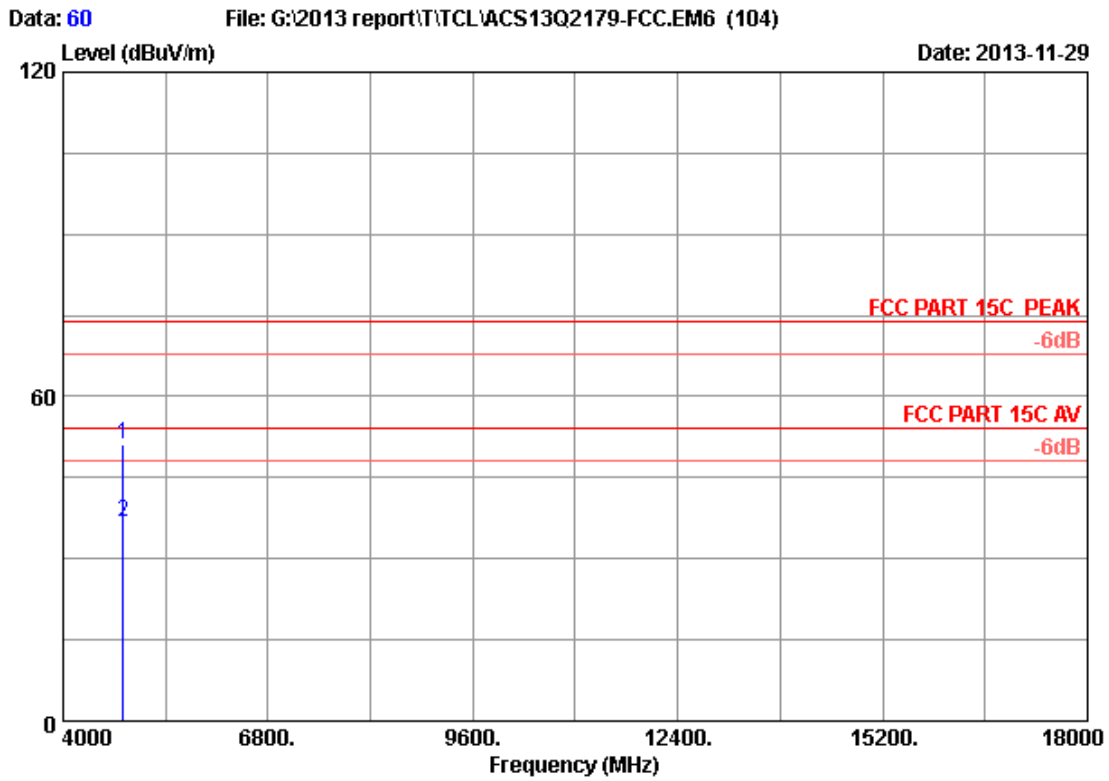
Site no. : 3m Chamber Data no. : 58
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.000	28.21	5.81	35.70	110.05	108.37	74.00	-34.37	Peak

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



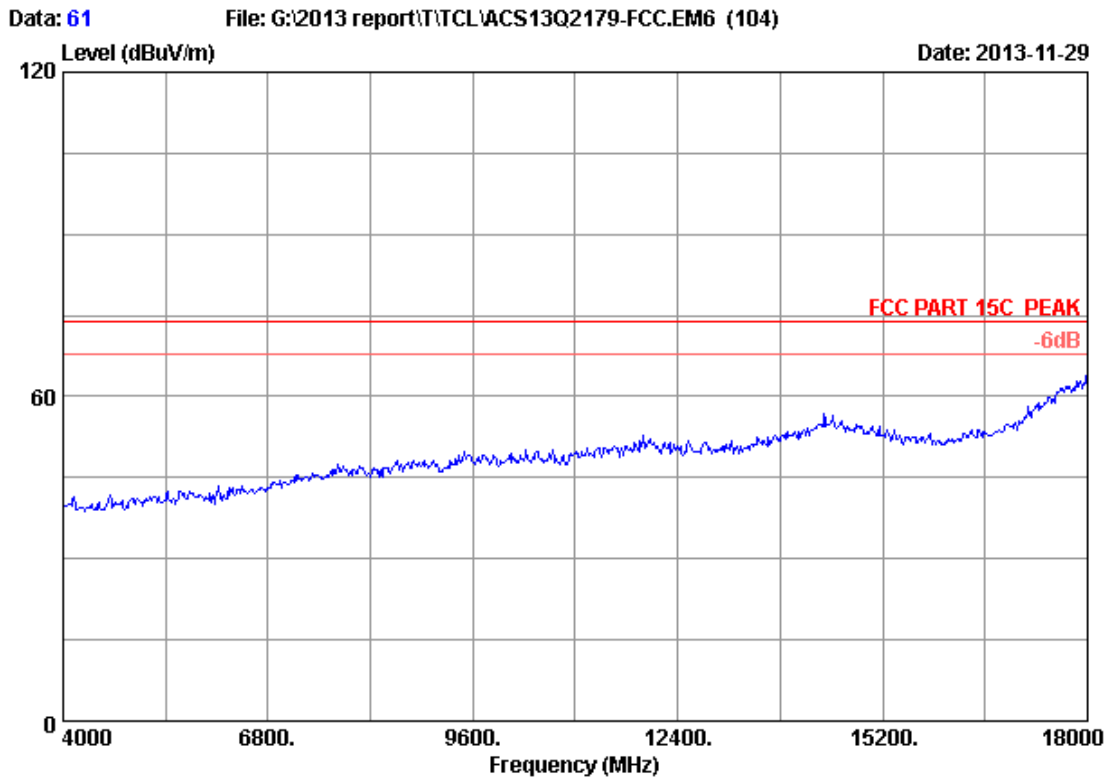

```
Site no.      : 3m Chamber                Data no.   : 59
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT20 2412MHz Tx Mode
                MT-WN731NM
```



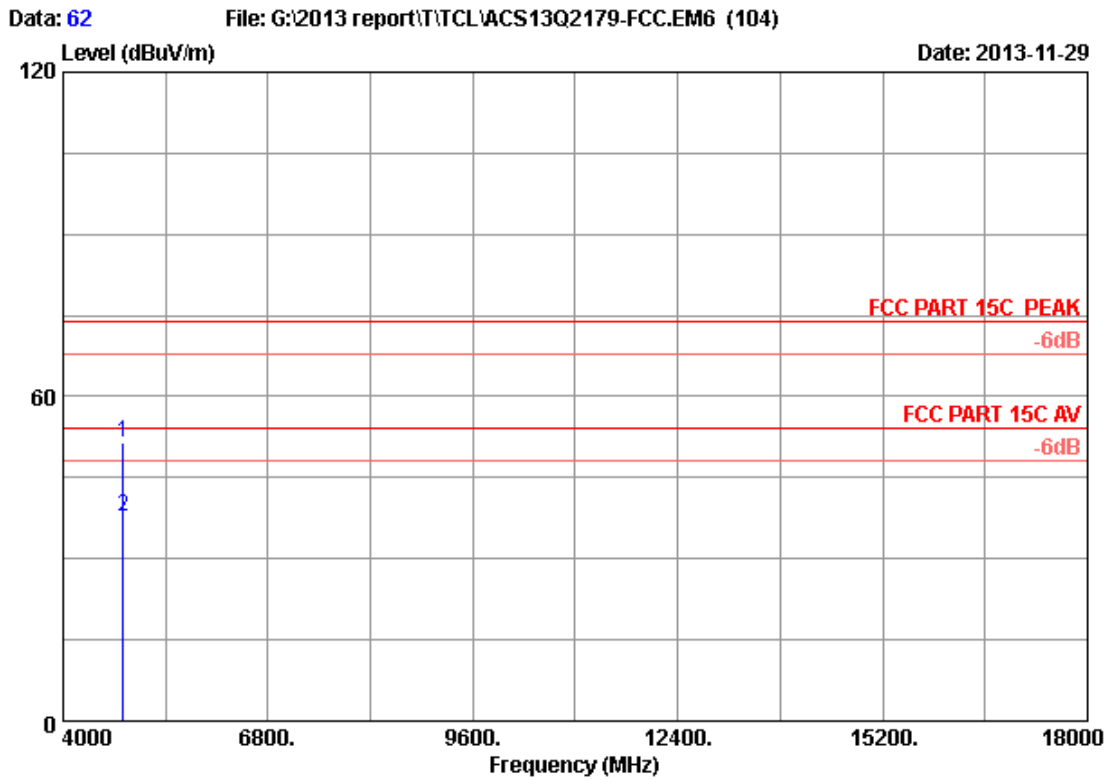
Site no. : 3m Chamber Data no. : 60
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	45.24	51.00	74.00	23.00	Peak
2	4824.000	32.88	8.58	35.70	31.16	36.92	54.00	17.08	Average

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



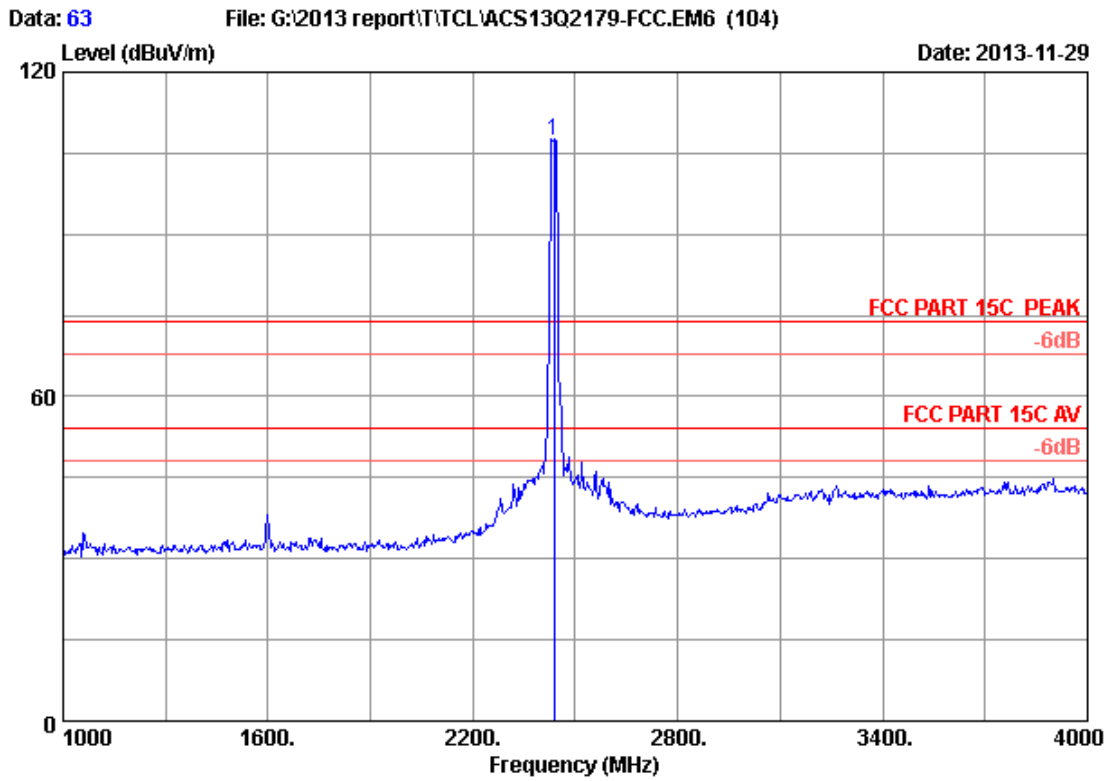

```
Site no.      : 3m Chamber                Data no.   : 61
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT20 2412MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 62
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.000	32.88	8.58	35.70	45.85	51.61	74.00	22.39	Peak
2	4824.000	32.88	8.58	35.70	31.88	37.64	54.00	16.36	Average

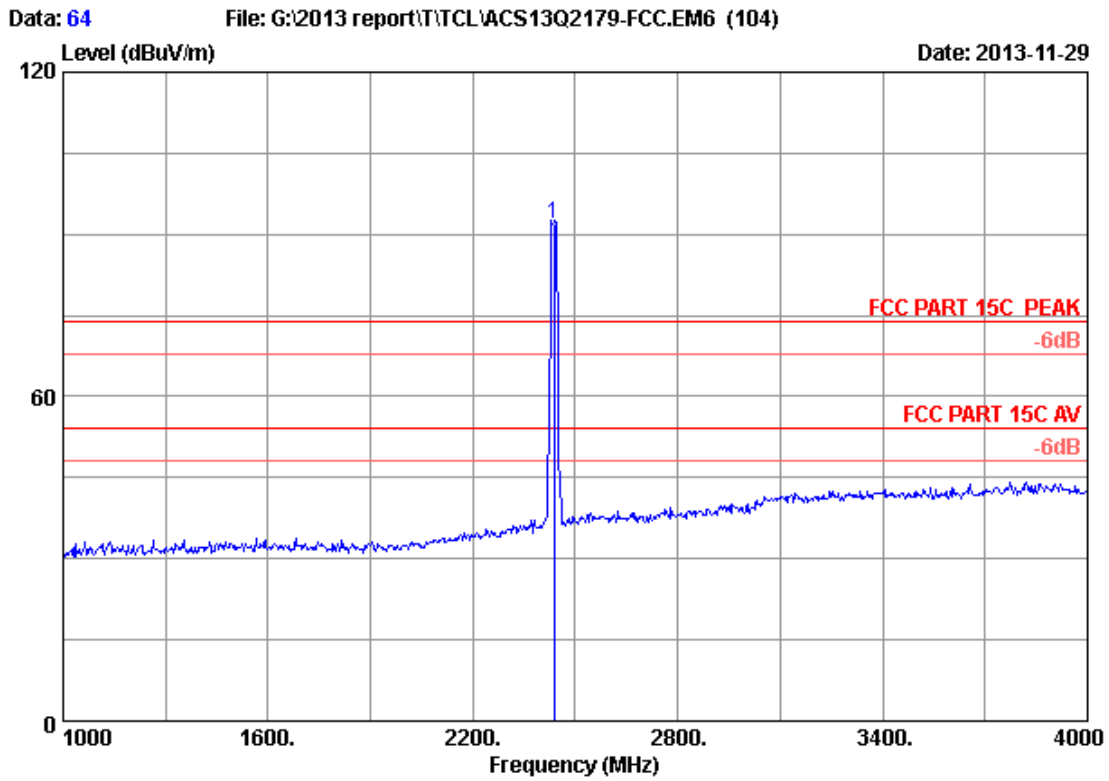
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 63
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	109.05	107.46	74.00	-33.46	Peak

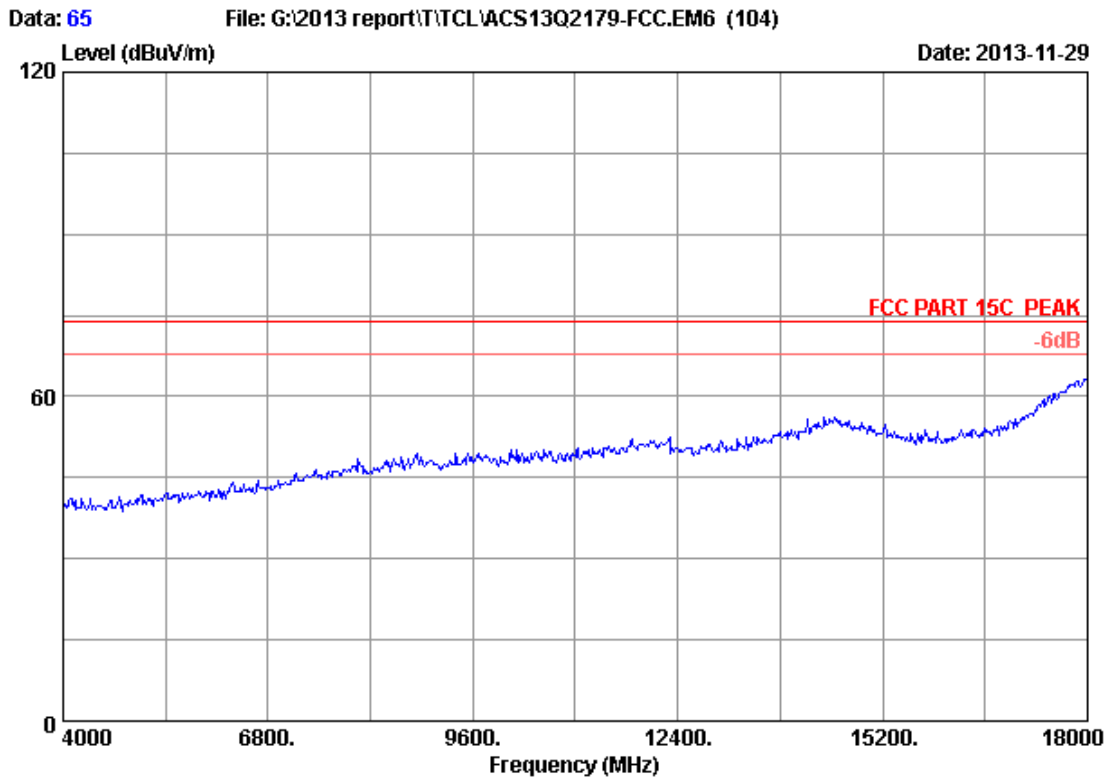
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



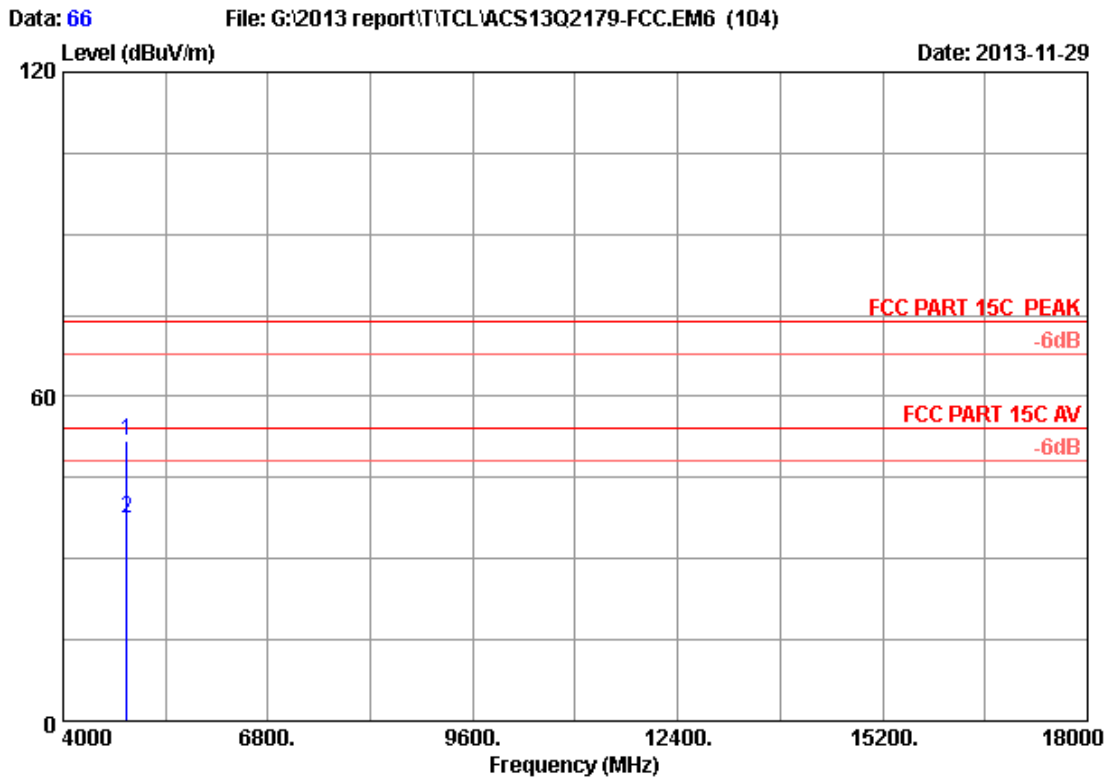
Site no. : 3m Chamber Data no. : 64
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	93.68	92.09	74.00	-18.09	Peak

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



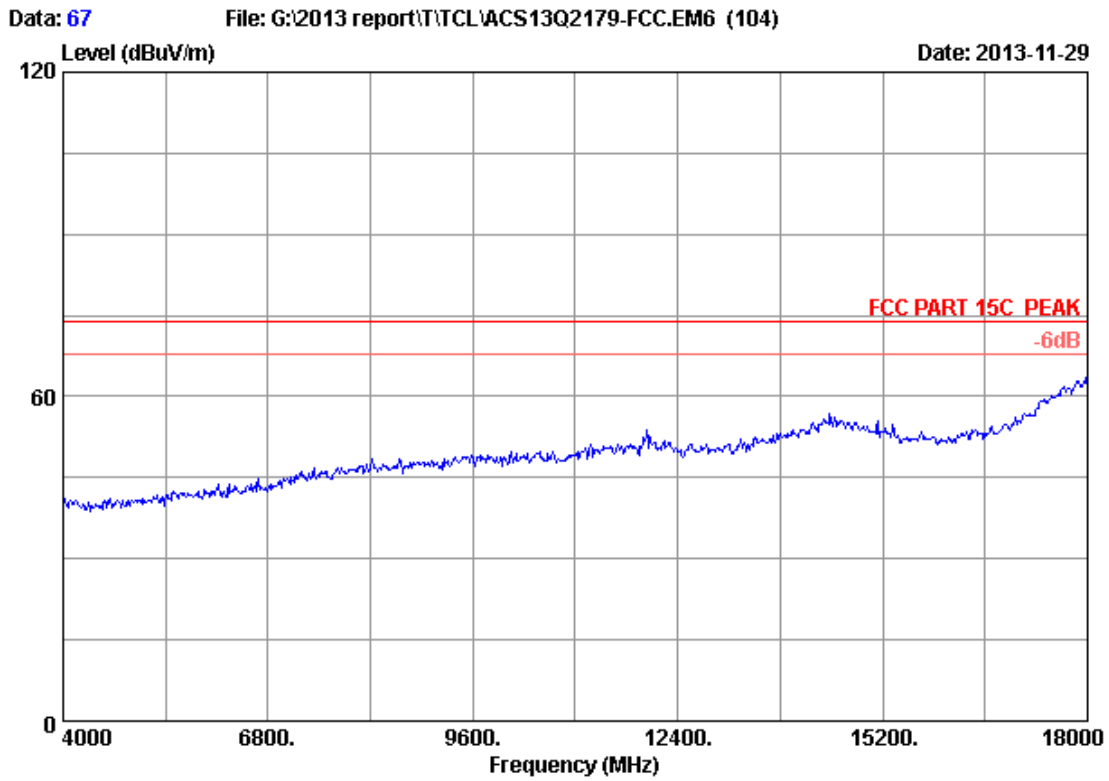

```
Site no.      : 3m Chamber                Data no.   : 65
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT20 2437MHz Tx Mode
                MT-WN731NM
```



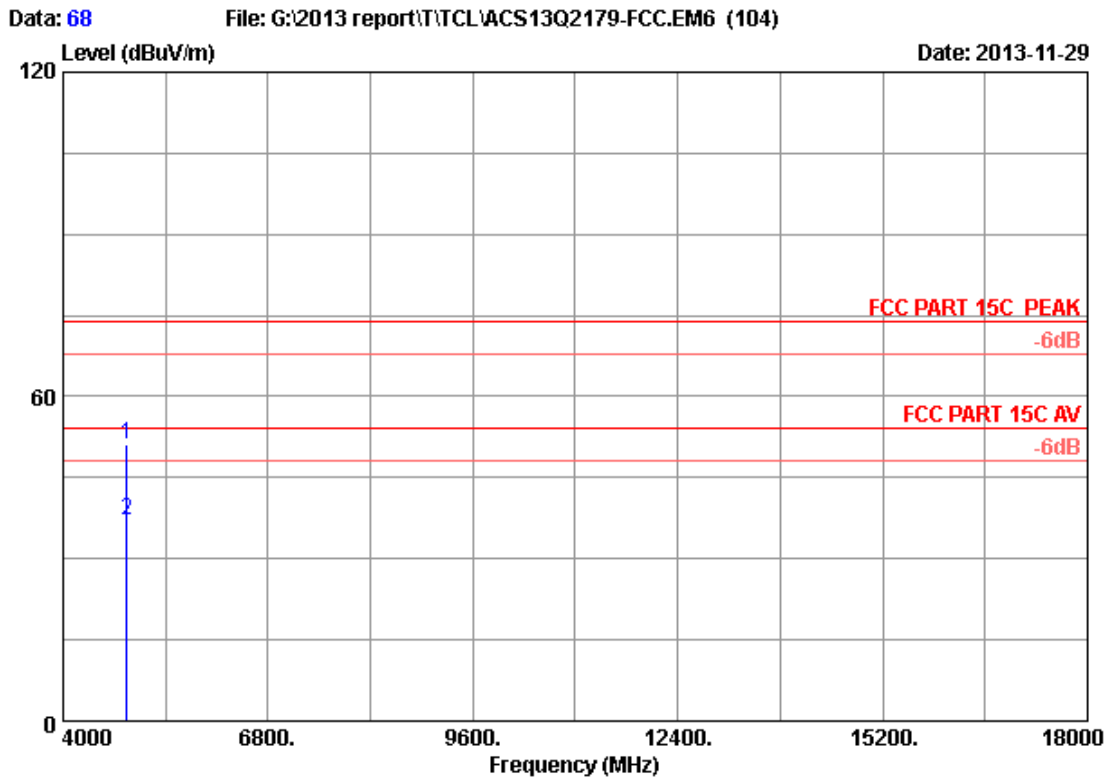
Site no. : 3m Chamber Data no. : 66
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	45.90	51.80	74.00	22.20	Peak
2	4874.000	32.97	8.63	35.70	31.48	37.38	54.00	16.62	Average

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



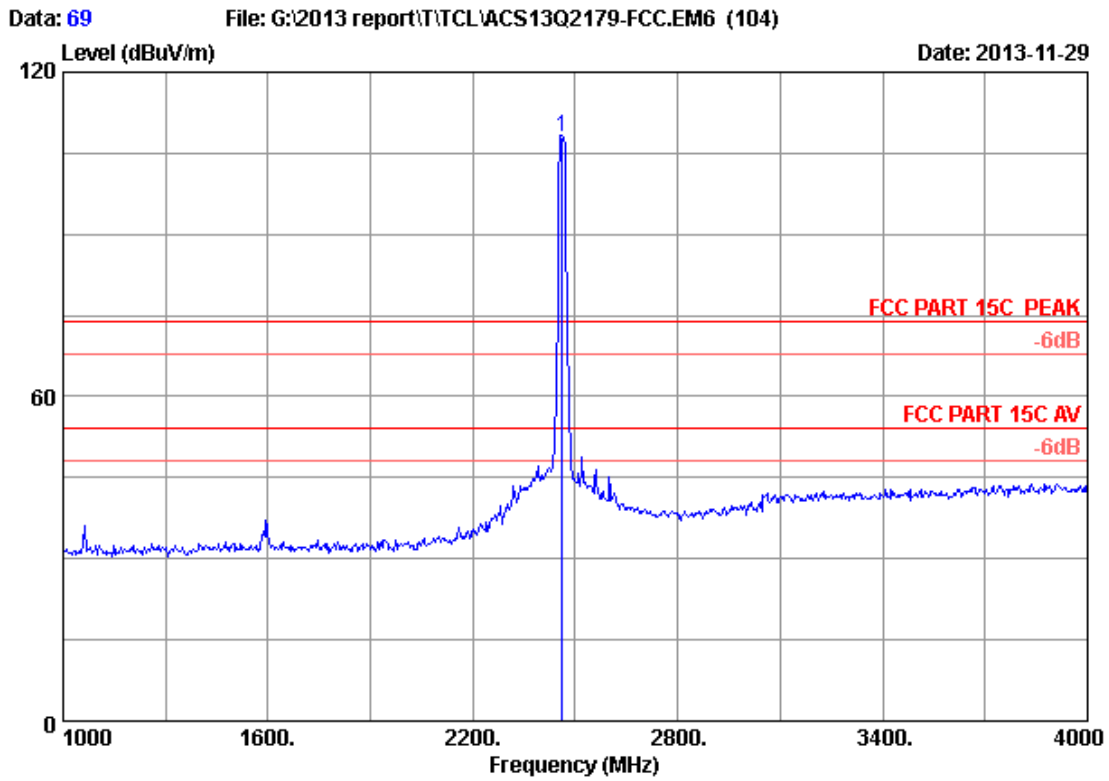

```
Site no.      : 3m Chamber                Data no.   : 67
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT20 2437MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 68
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	45.17	51.07	74.00	22.93	Peak
2	4874.000	32.97	8.63	35.70	31.22	37.12	54.00	16.88	Average

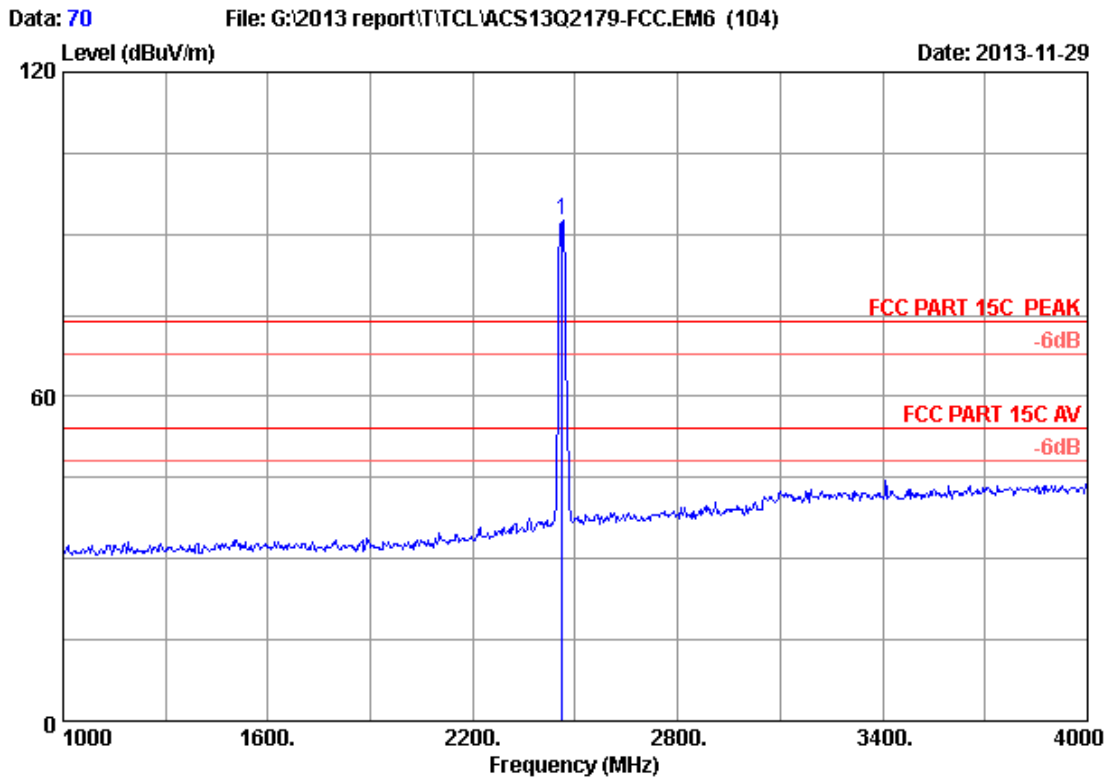
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 69
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	109.55	108.06	74.00	-34.06	Peak

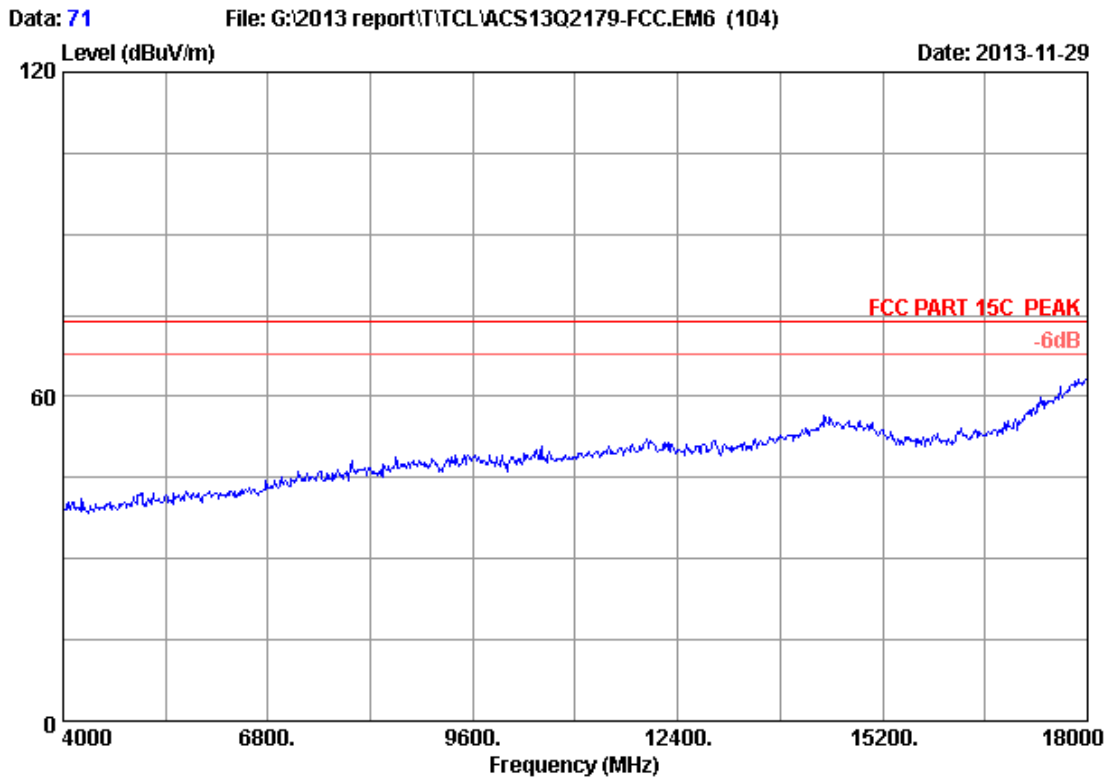
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



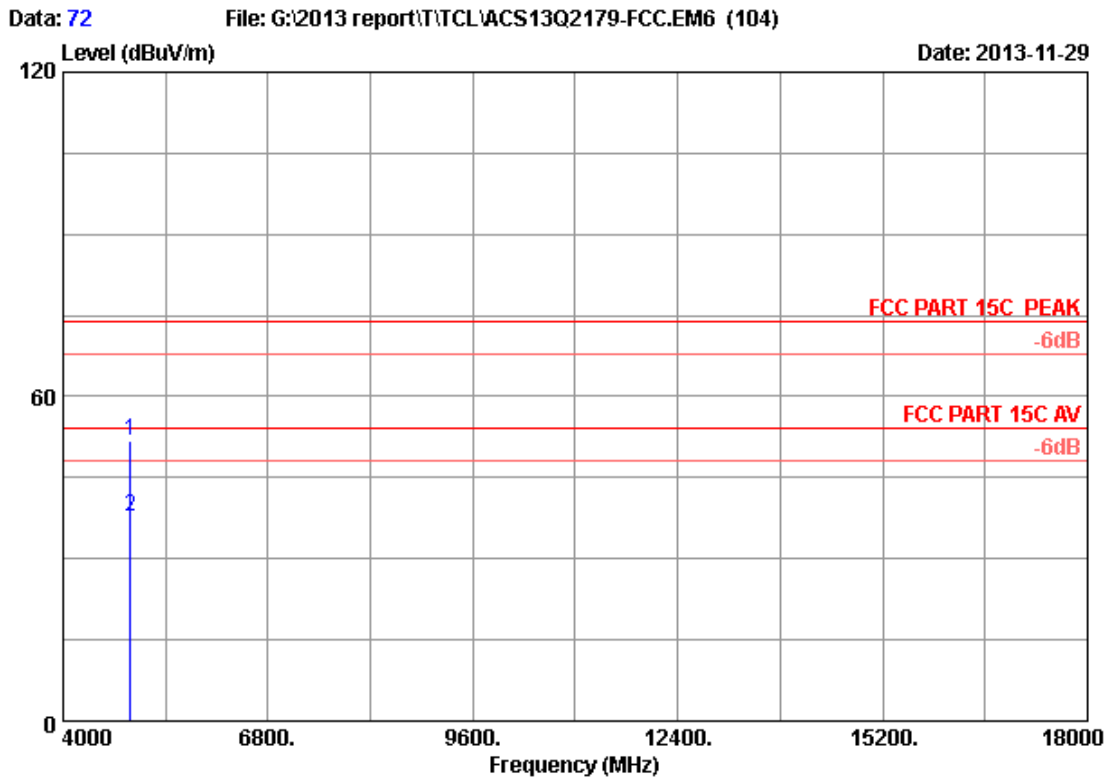
Site no. : 3m Chamber Data no. : 70
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.32	5.89	35.70	94.12	92.63	74.00	-18.63	Peak

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



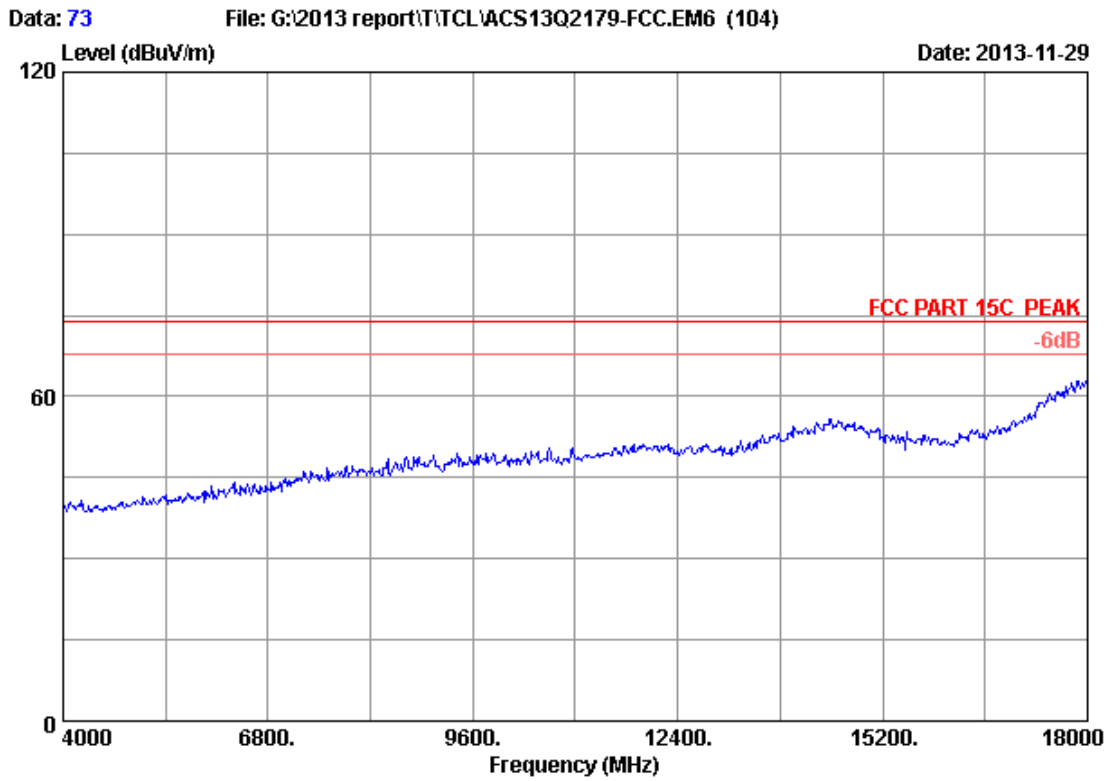

```
Site no.      : 3m Chamber                Data no.   : 71
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT20 2462MHz Tx Mode
                MT-WN731NM
```



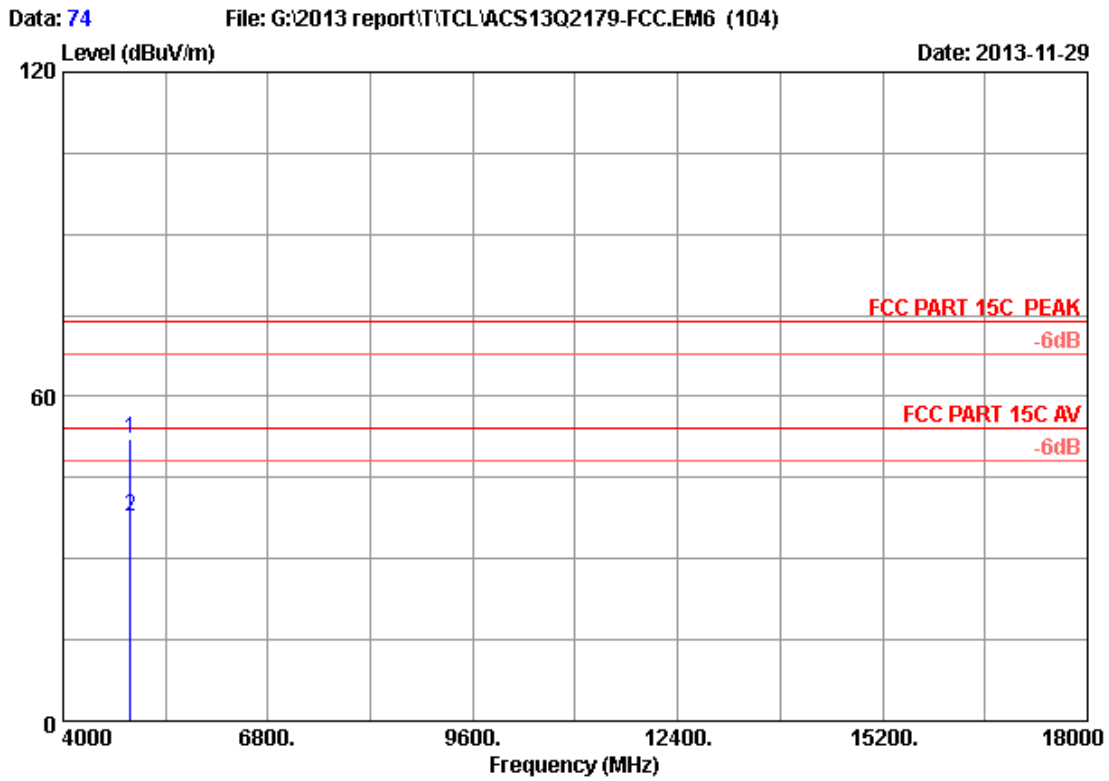
Site no. : 3m Chamber Data no. : 72
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	45.63	51.68	74.00	22.32	Peak
2	4924.000	33.06	8.69	35.70	31.86	37.91	54.00	16.09	Average

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



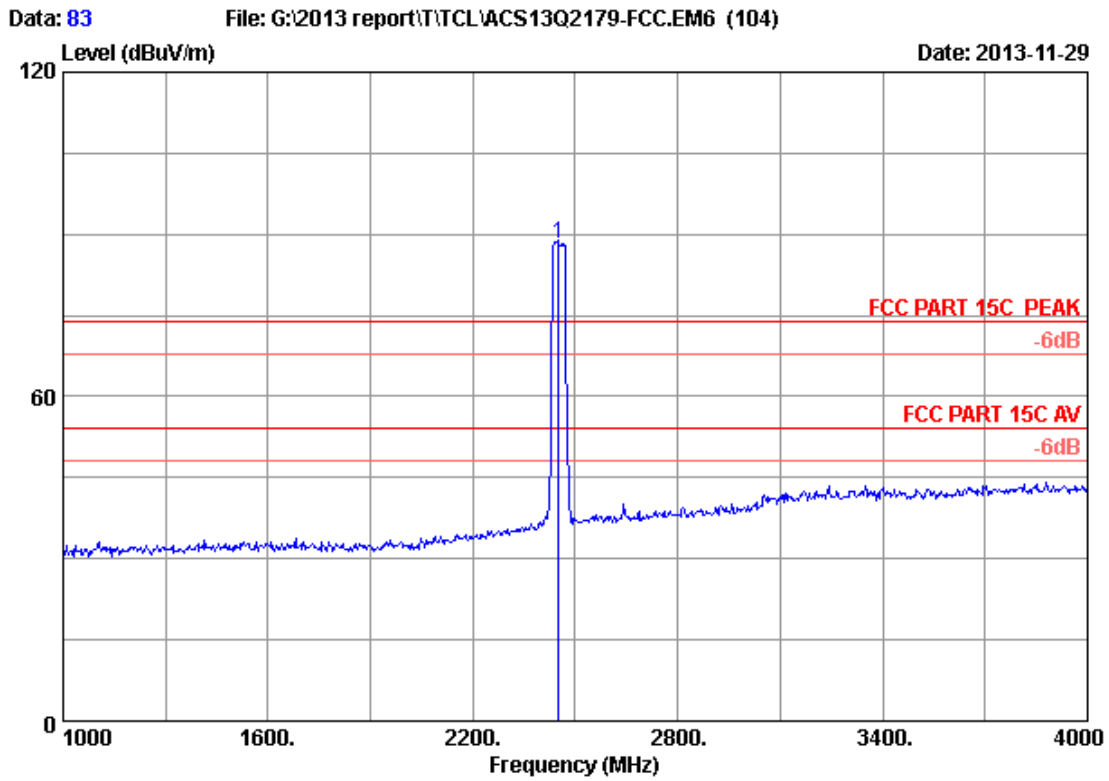

```
Site no.      : 3m Chamber                Data no.   : 73
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT20 2462MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 74
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT20 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.000	33.06	8.69	35.70	46.13	52.18	74.00	21.82	Peak
2	4924.000	33.06	8.69	35.70	31.56	37.61	54.00	16.39	Average

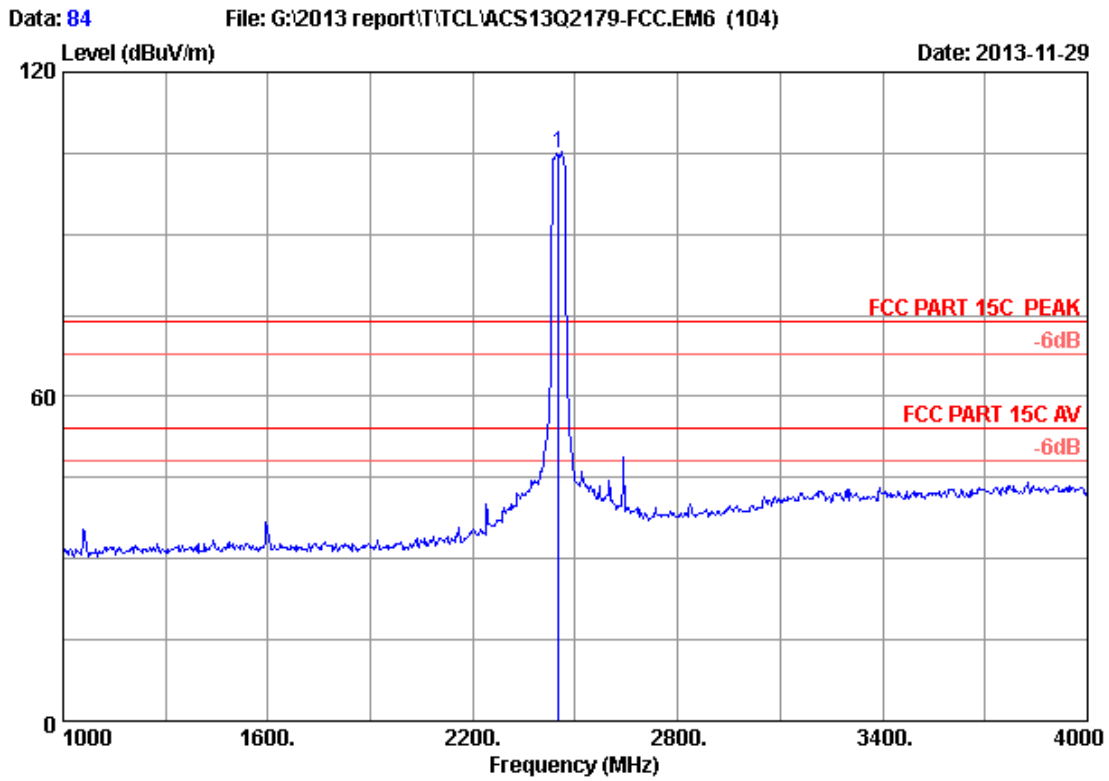
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 83
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2452MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.000	28.29	5.87	35.70	89.65	88.11	74.00	-14.11	Peak

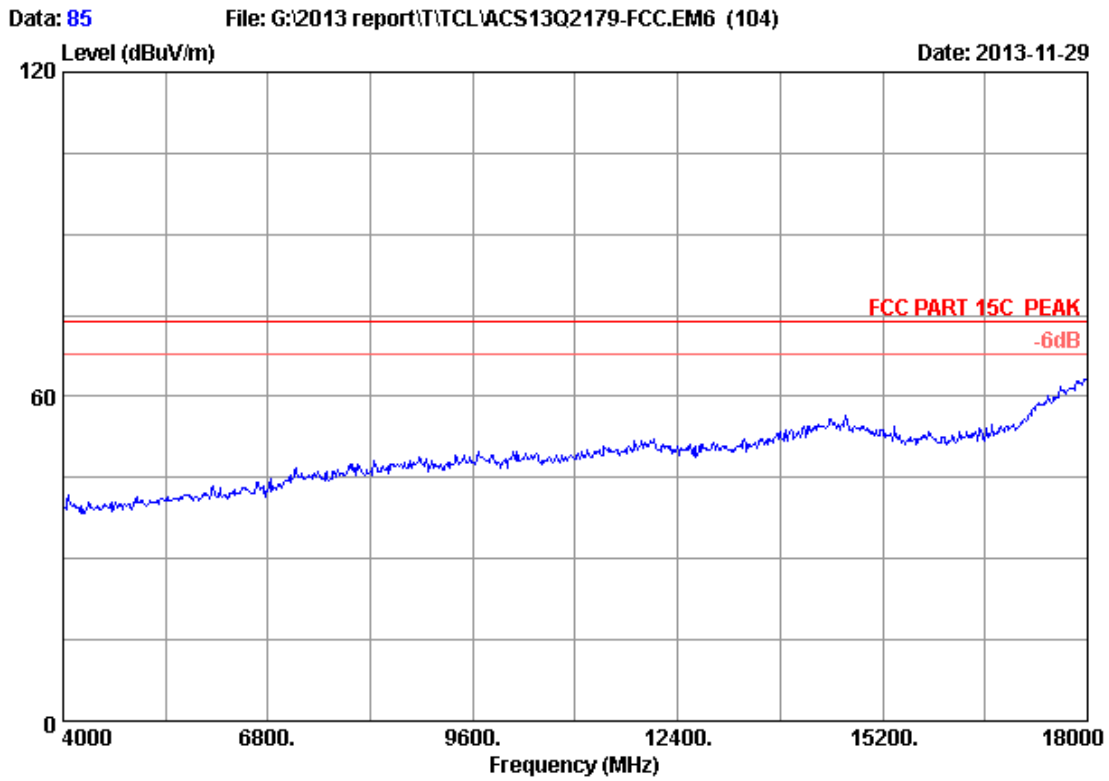
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 84
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2452MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2452.000	28.29	5.87	35.70	106.35	104.81	74.00	-30.81	Peak

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

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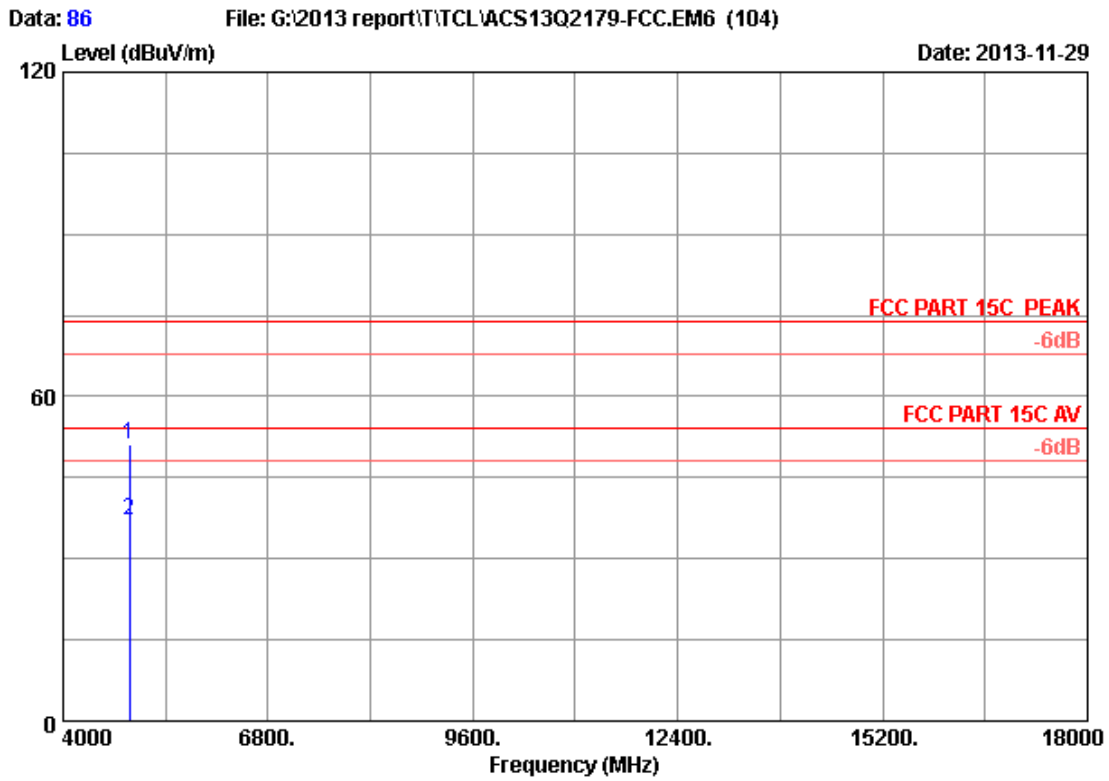
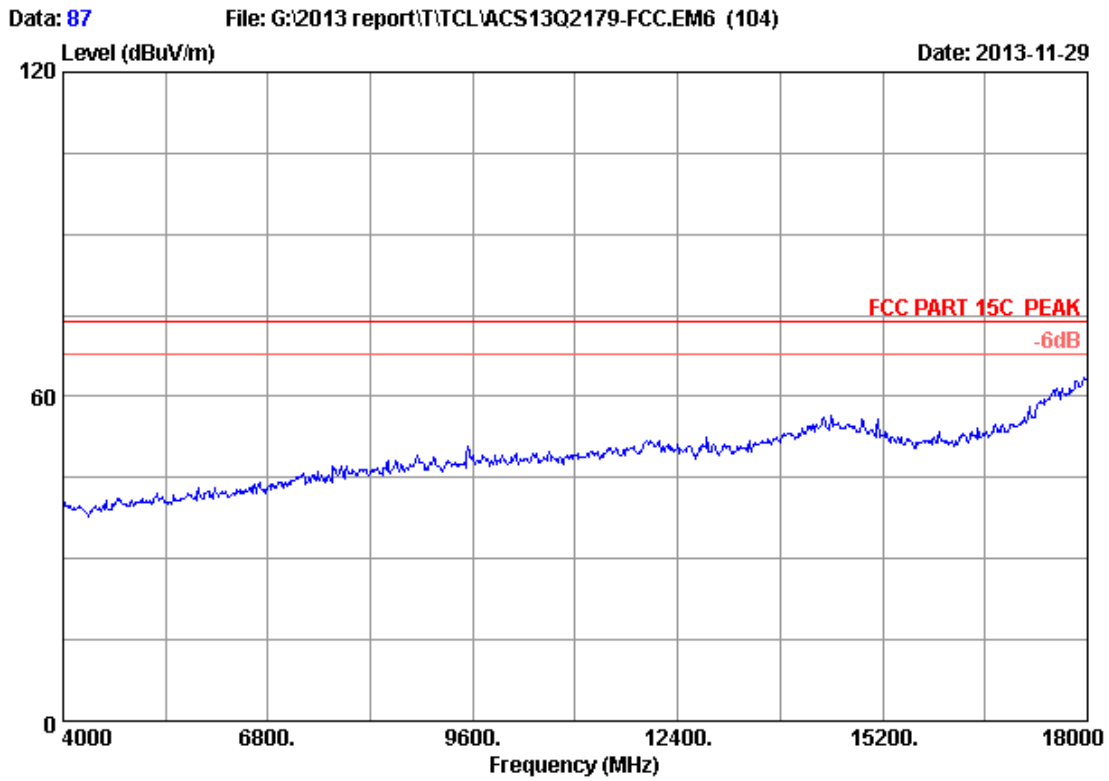
Site no.      : 3m Chamber                Data no.   : 85
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT40 2452MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 86
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2452MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.000	33.03	8.66	35.70	45.16	51.15	74.00	22.85	Peak
2	4904.000	33.03	8.66	35.70	31.26	37.25	54.00	16.75	Average

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

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Site no.      : 3m Chamber                Data no.   : 87
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT40 2452MHz Tx Mode
                MT-WN731NM
```
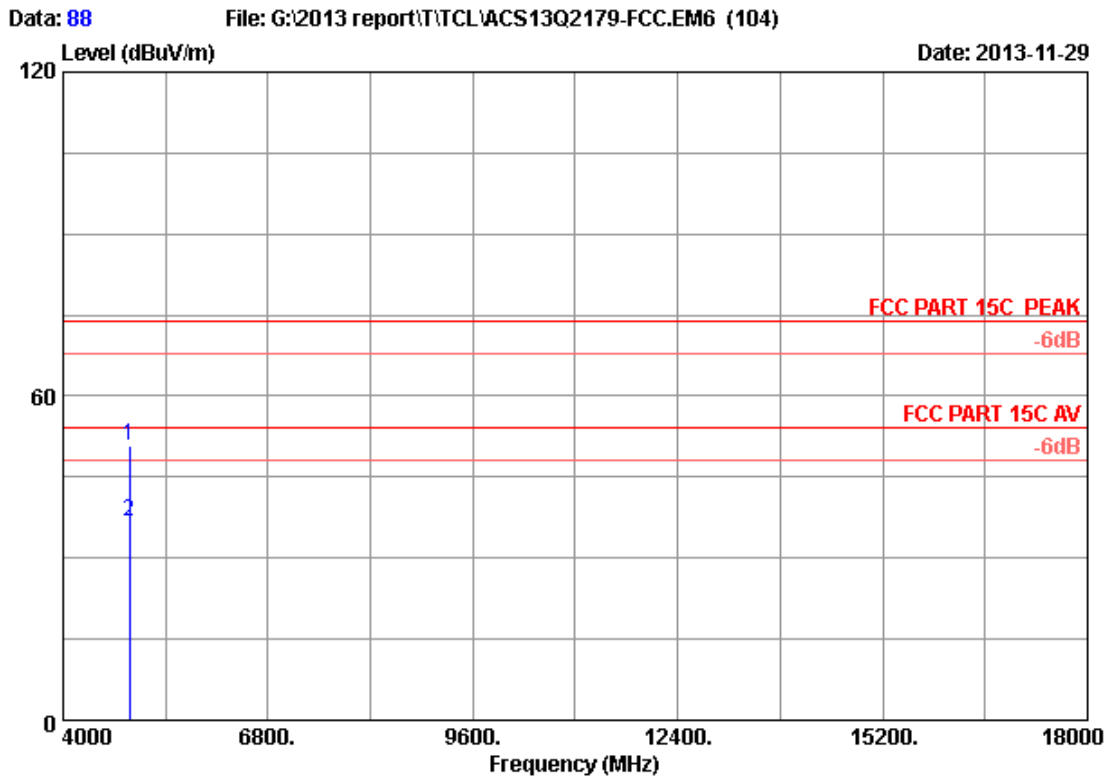
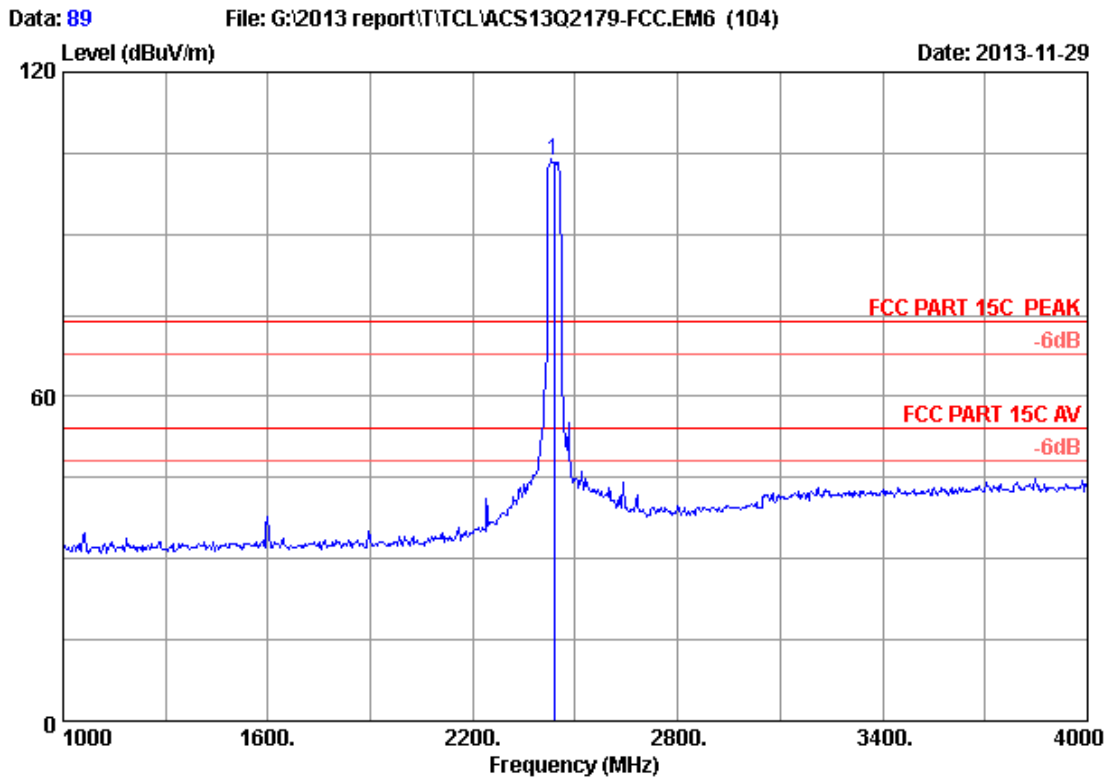



Site no. : 3m Chamber Data no. : 88
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2452MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4904.000	33.03	8.66	35.70	44.83	50.82	74.00	23.18	Peak
2	4904.000	33.03	8.66	35.70	30.67	36.66	54.00	17.34	Average

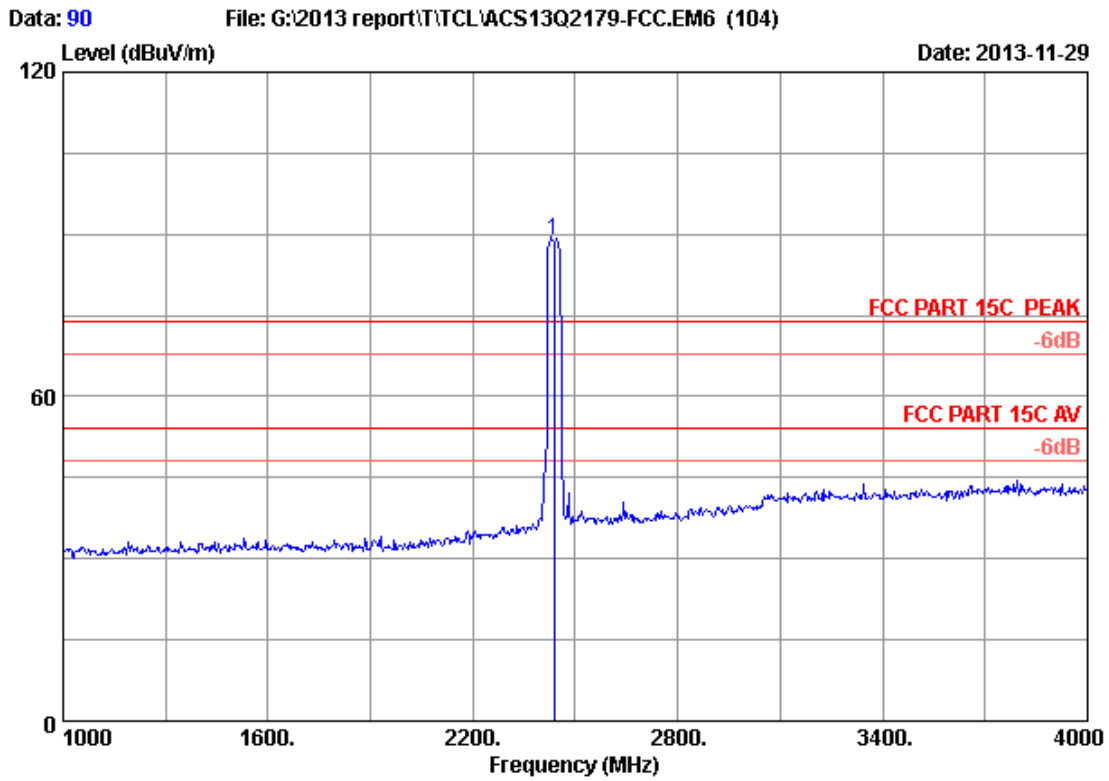
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 89
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	105.09	103.50	74.00	-29.50	Peak

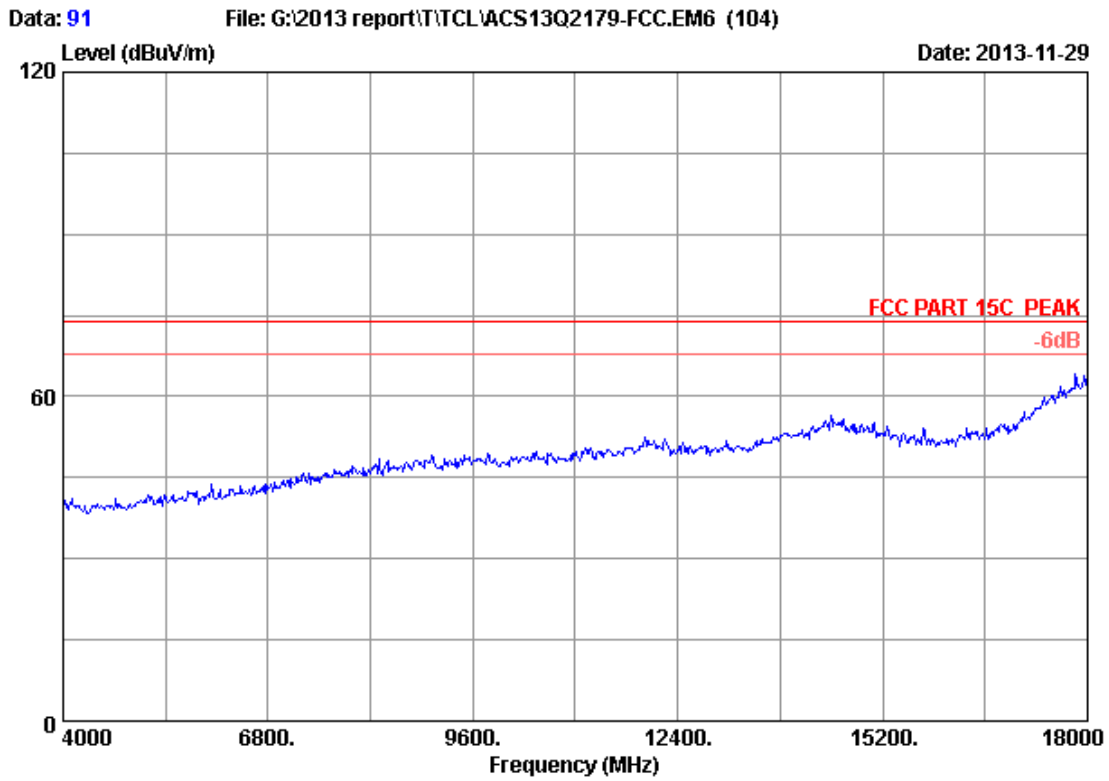
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 90
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.000	28.26	5.85	35.70	90.54	88.95	74.00	-14.95	Peak

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

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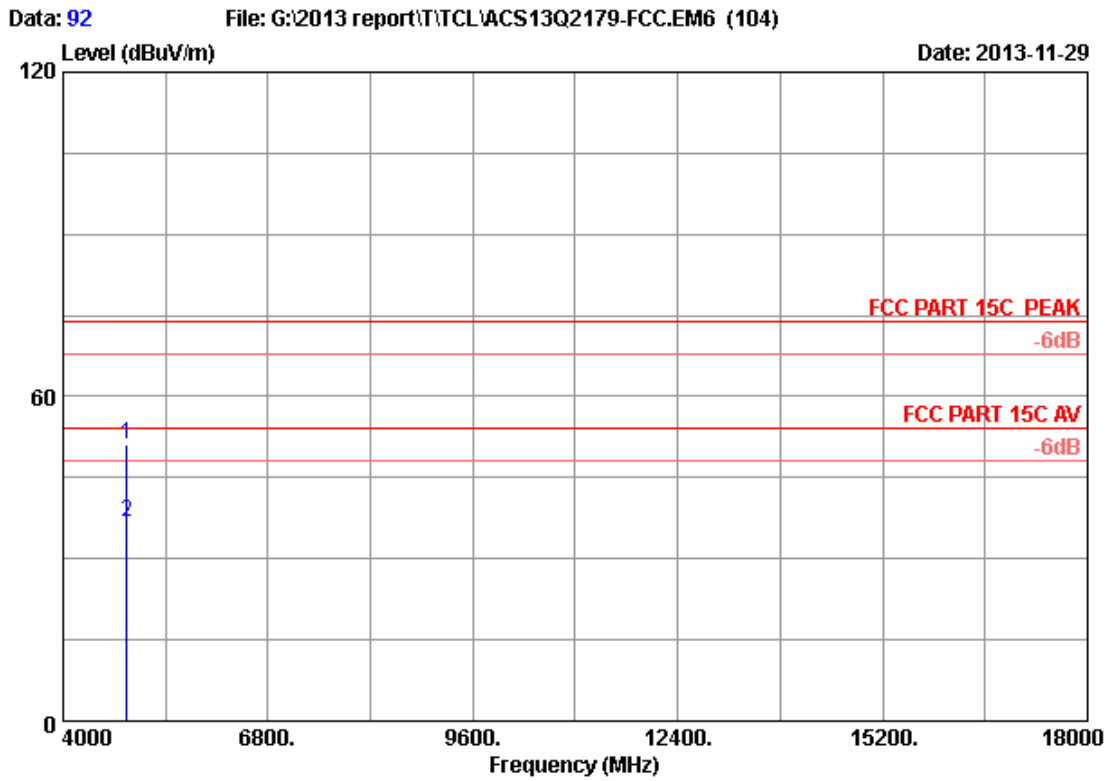
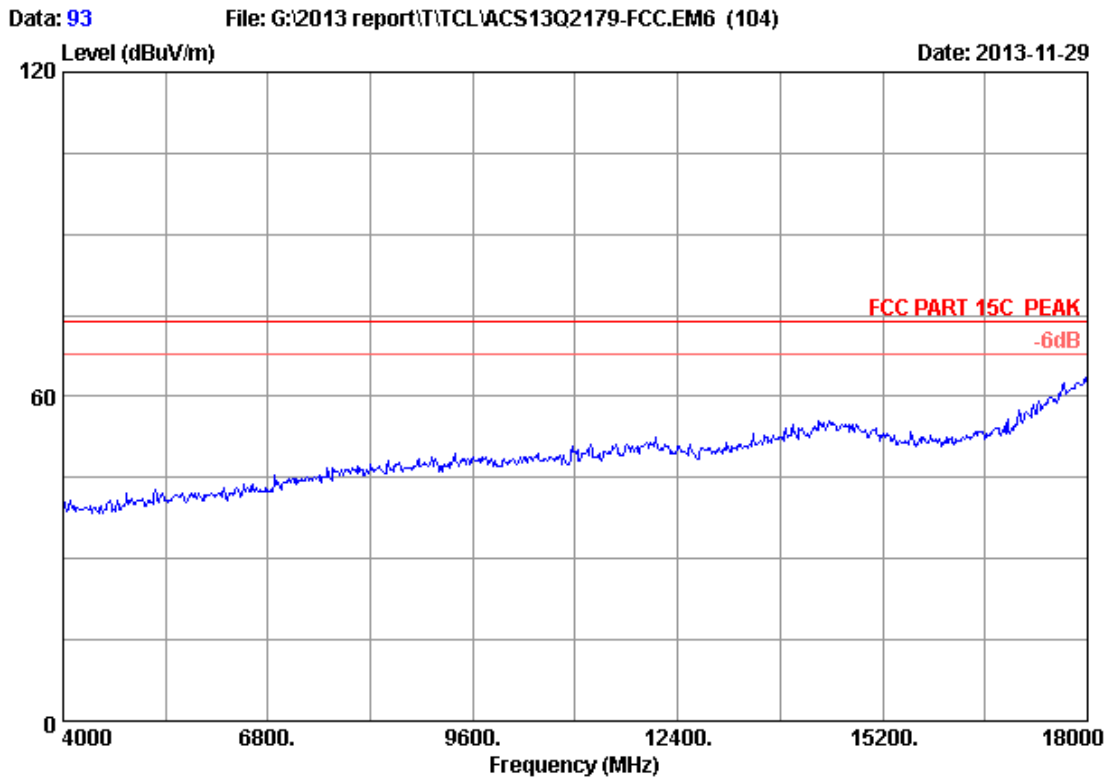
Site no.      : 3m Chamber                Data no.   : 91
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT40 2437MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 92
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	45.14	51.04	74.00	22.96	Peak
2	4874.000	32.97	8.63	35.70	31.00	36.90	54.00	17.10	Average

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

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Site no.      : 3m Chamber                Data no.   : 93
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT40 2437MHz Tx Mode
                MT-WN731NM
```
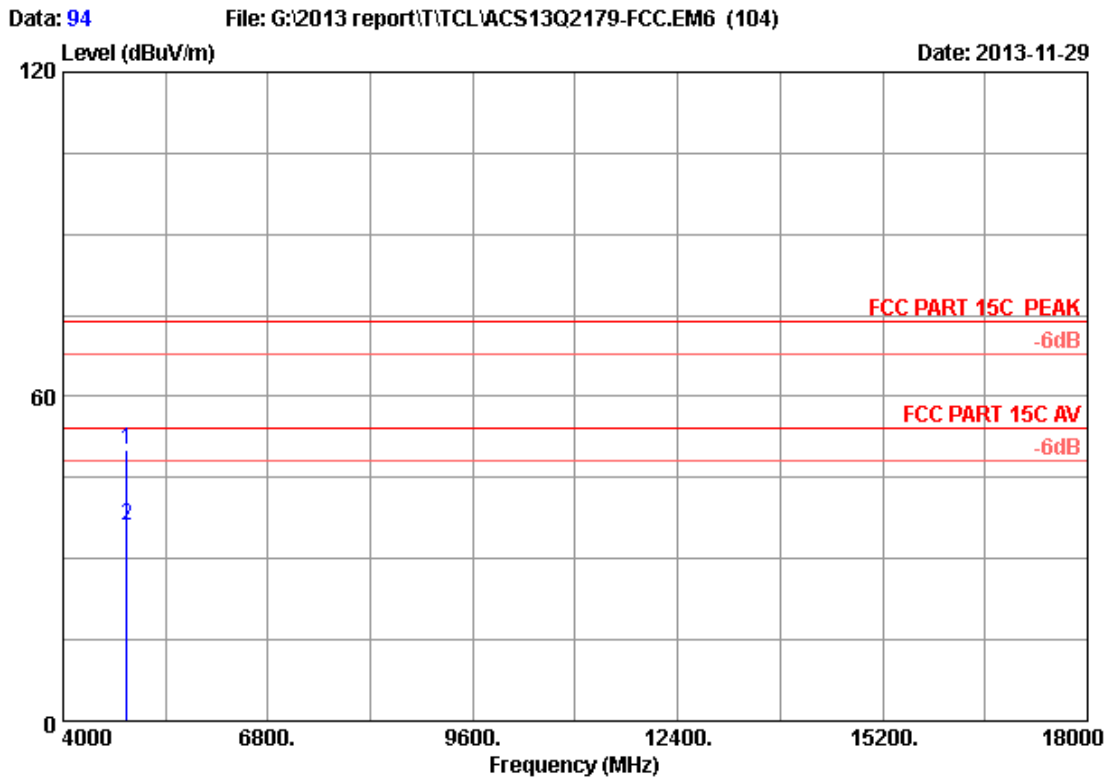
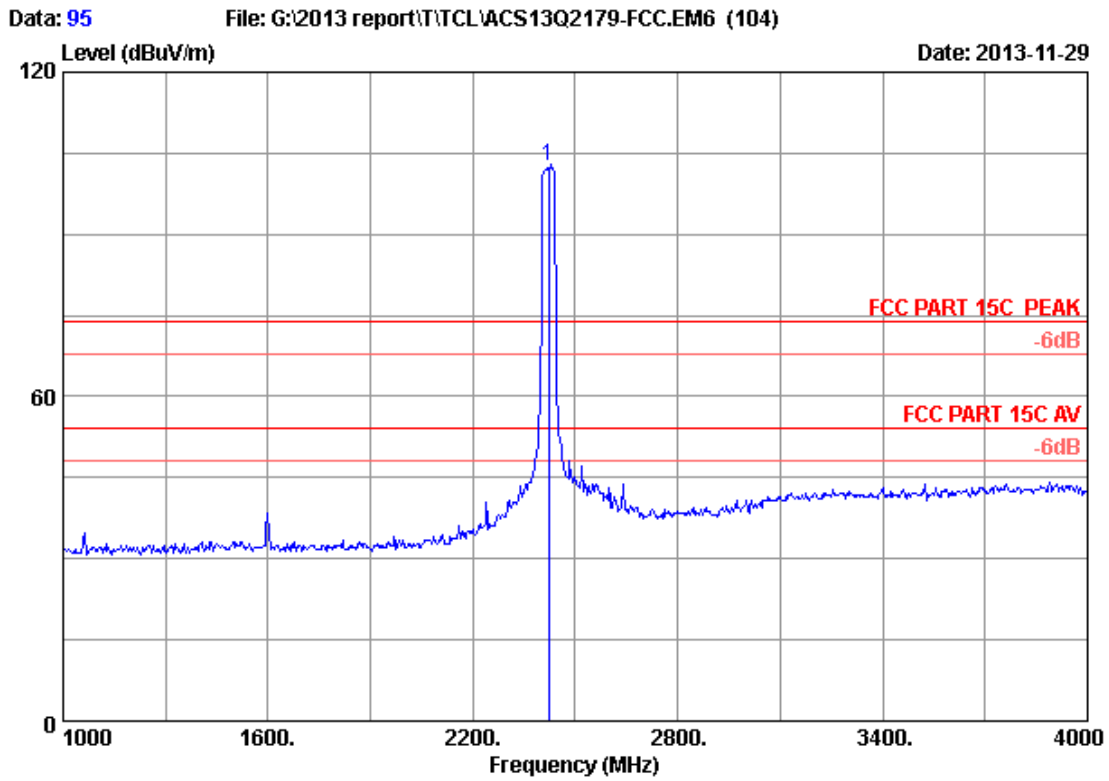



Site no. : 3m Chamber Data no. : 94
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2437MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.000	32.97	8.63	35.70	44.32	50.22	74.00	23.78	Peak
2	4874.000	32.97	8.63	35.70	30.14	36.04	54.00	17.96	Average

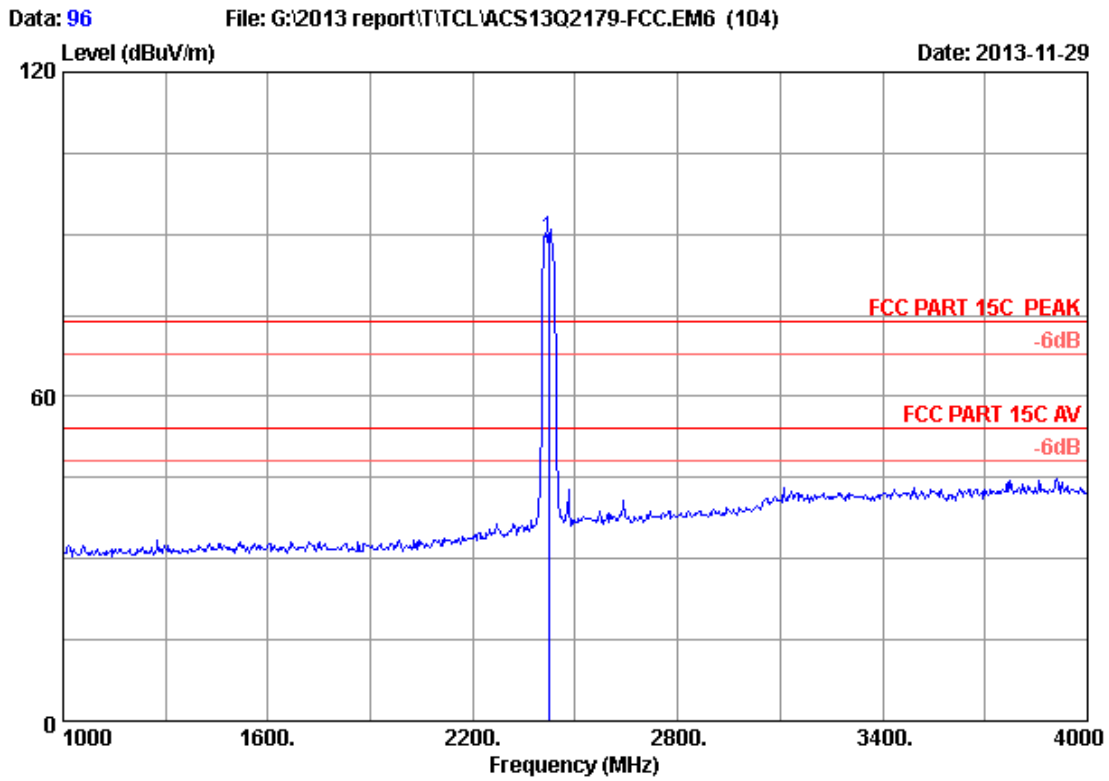
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 95
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2422MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2422.000	28.23	5.83	35.70	104.13	102.49	74.00	-28.49	Peak

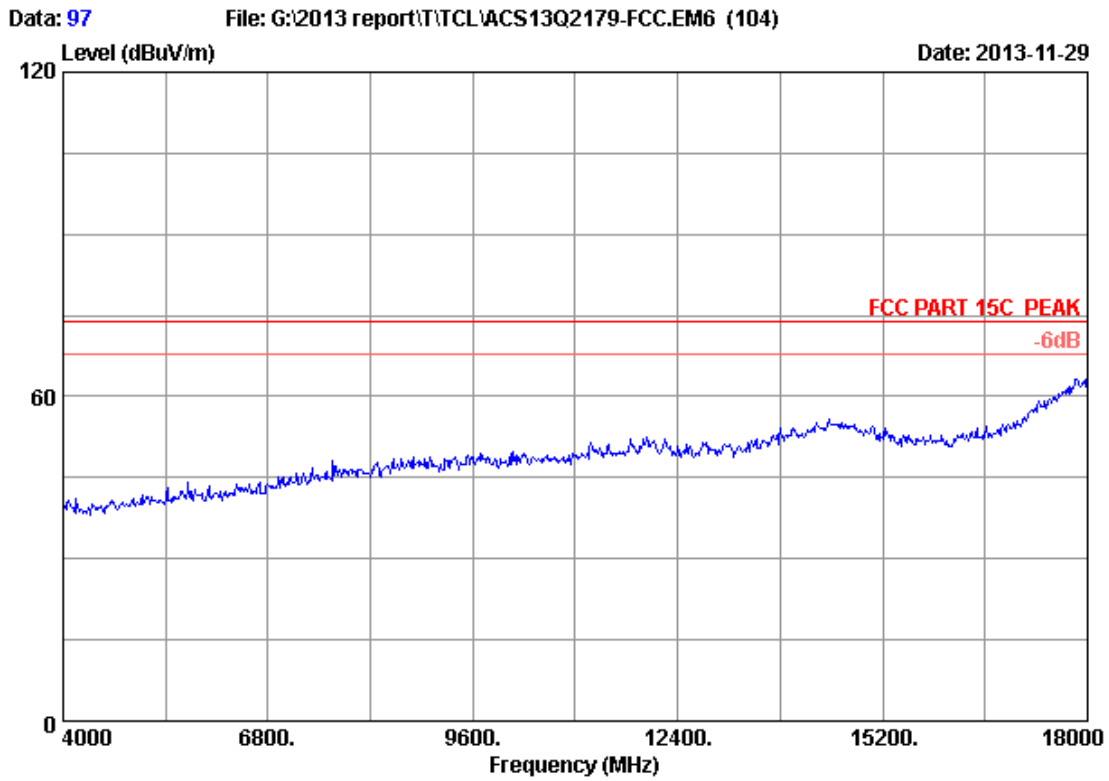
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



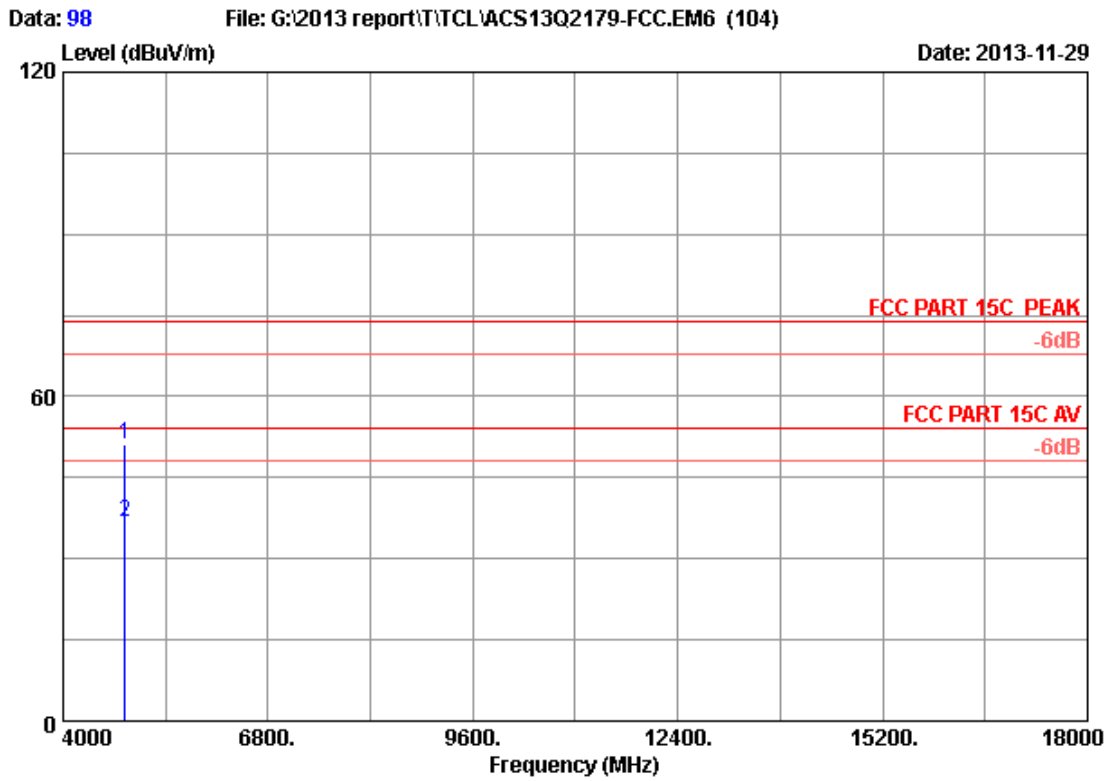
Site no. : 3m Chamber Data no. : 96
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2422MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2422.000	28.23	5.83	35.70	90.81	89.17	74.00	-15.17	Peak

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



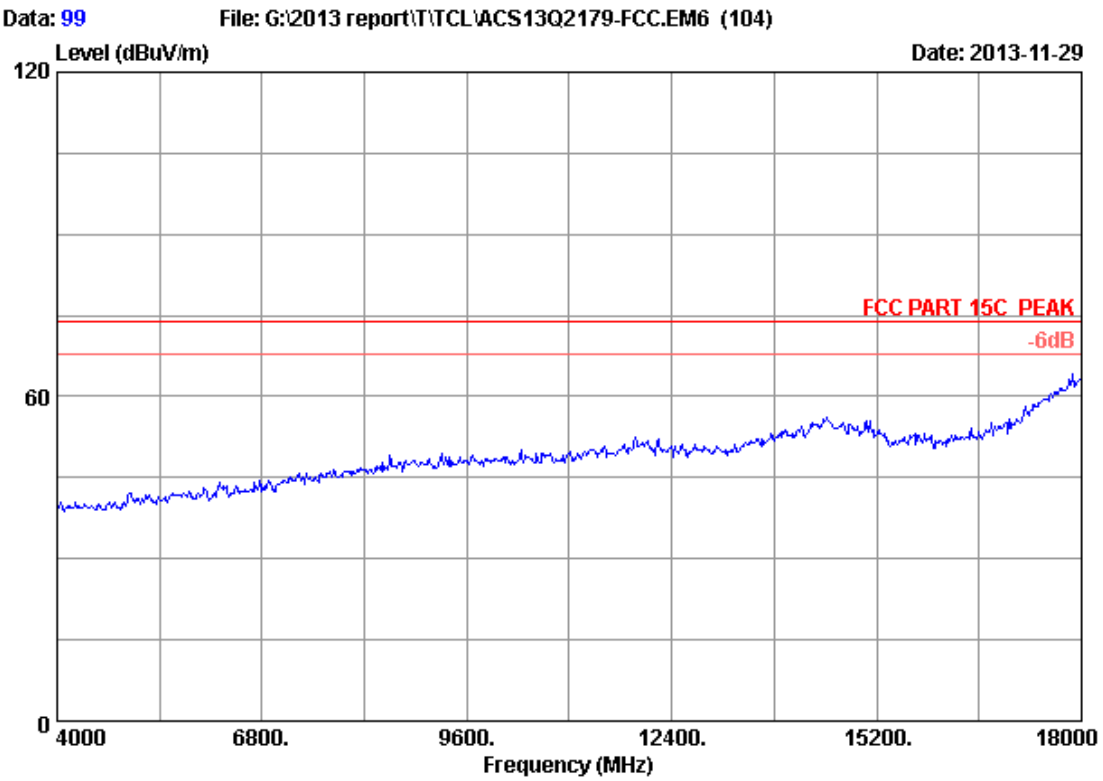

```
Site no.      : 3m Chamber                Data no.   : 97
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT40 2422MHz Tx Mode
                MT-WN731NM
```



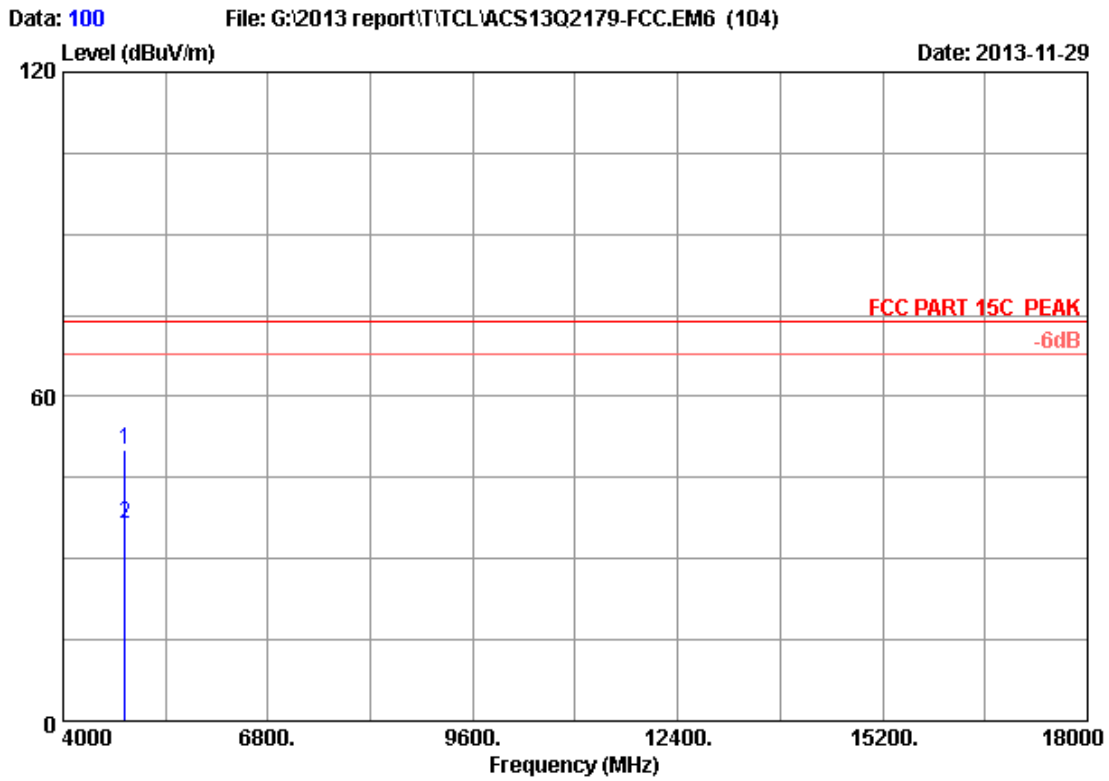
Site no. : 3m Chamber Data no. : 98
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2422MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	32.92	8.60	35.70	45.17	50.99	74.00	23.01	Peak
2	4844.000	32.92	8.60	35.70	31.04	36.86	54.00	17.14	Average

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




```
Site no.      : 3m Chamber                Data no.   : 99
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Kevin_Hu
EUT           : WIRELESS USB ADAPTER
Power supply  : DC 3.3V
Test mode     : IEEE802.11nHT40 2422MHz Tx Mode
                MT-WN731NM
```



Site no. : 3m Chamber Data no. : 100
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11nHT40 2422MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4844.000	32.92	8.60	35.70	44.38	50.20	74.00	23.80	Peak
2	4844.000	32.92	8.60	35.70	30.51	36.33	74.00	37.67	Average

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

5. CONDUCTED SPURIOUS EMISSIONS

5.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Oct.31,13	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	May.08,13	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,13	1Year

5.2.Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.

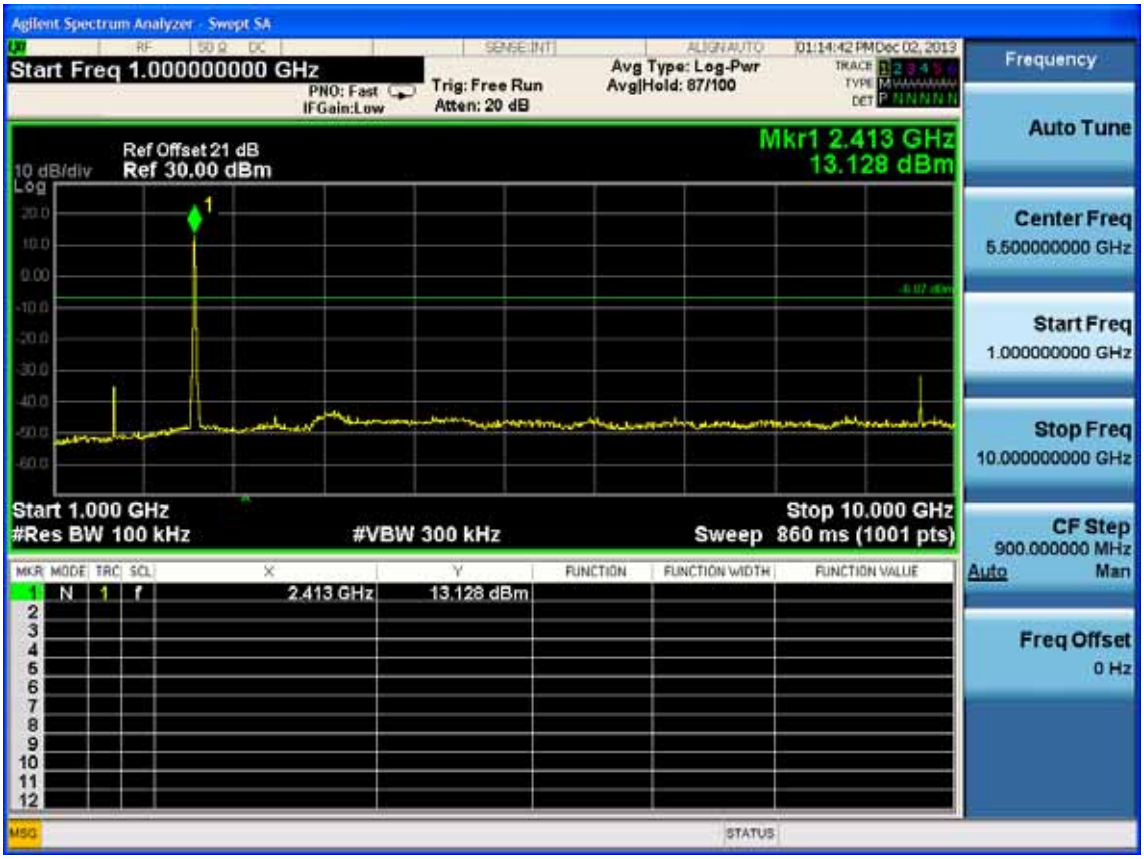
5.3.Test Procedure

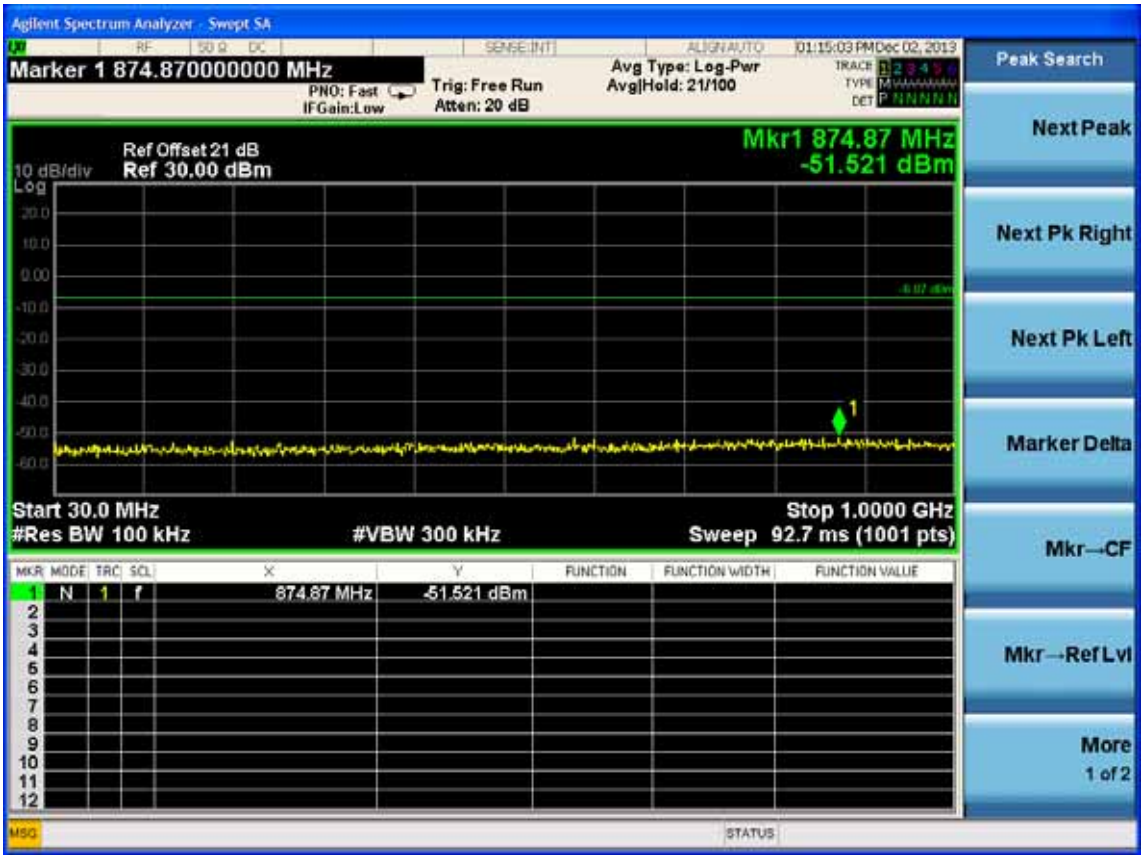
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

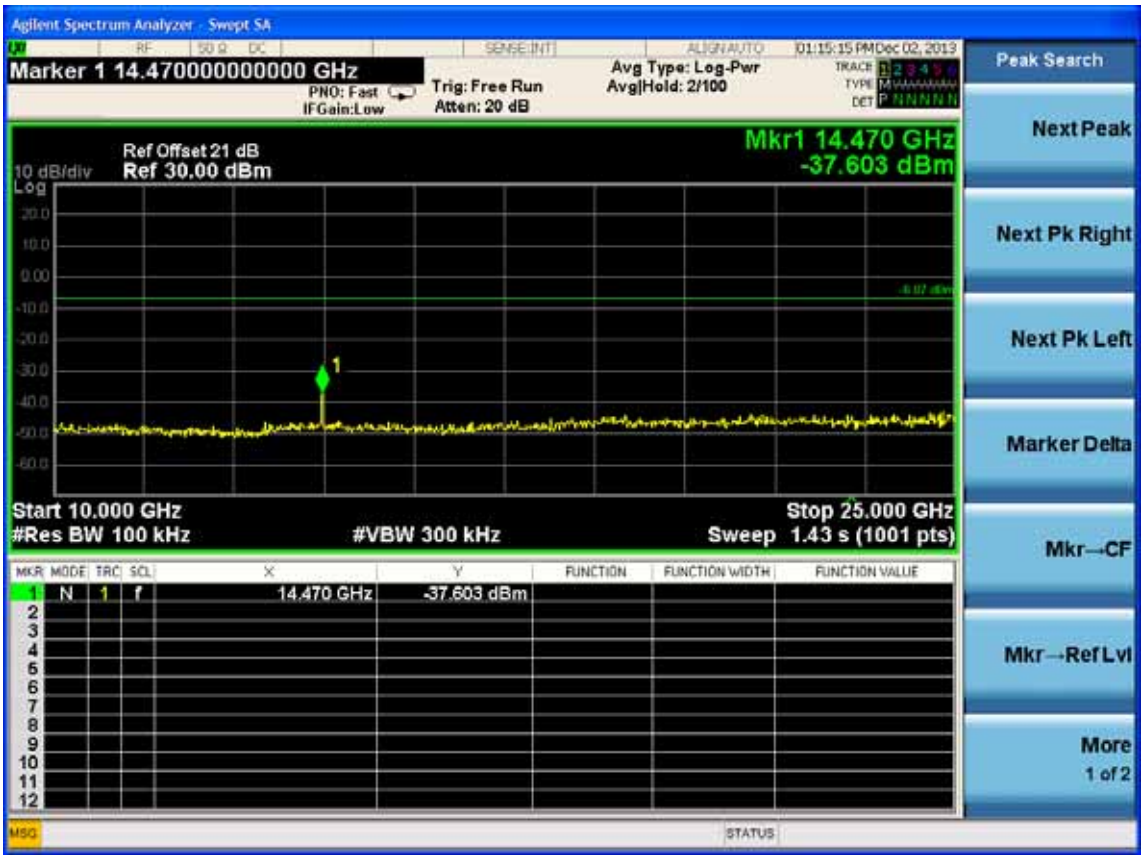
5.4.Test result

PASS (The testing data was attached in the next pages.)

Test Mode: IEEE 802.11b TX
Test CH1: 2412MHz

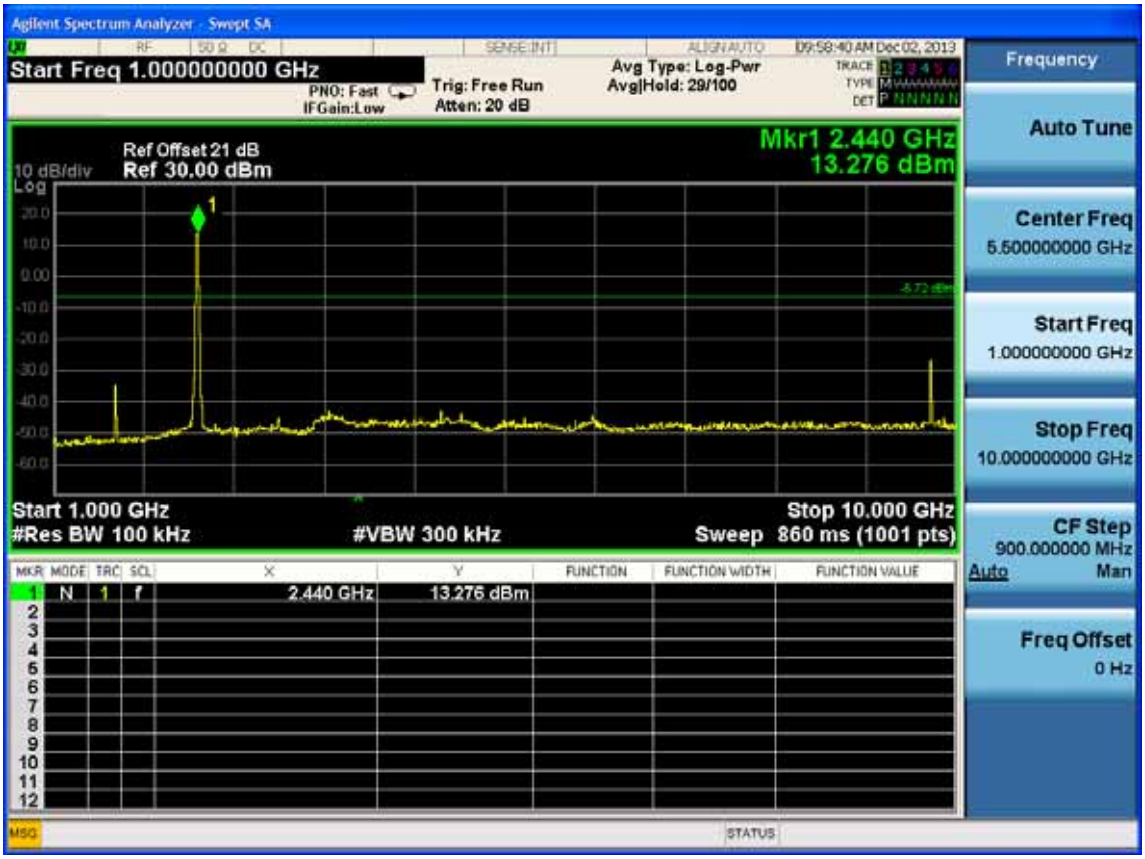


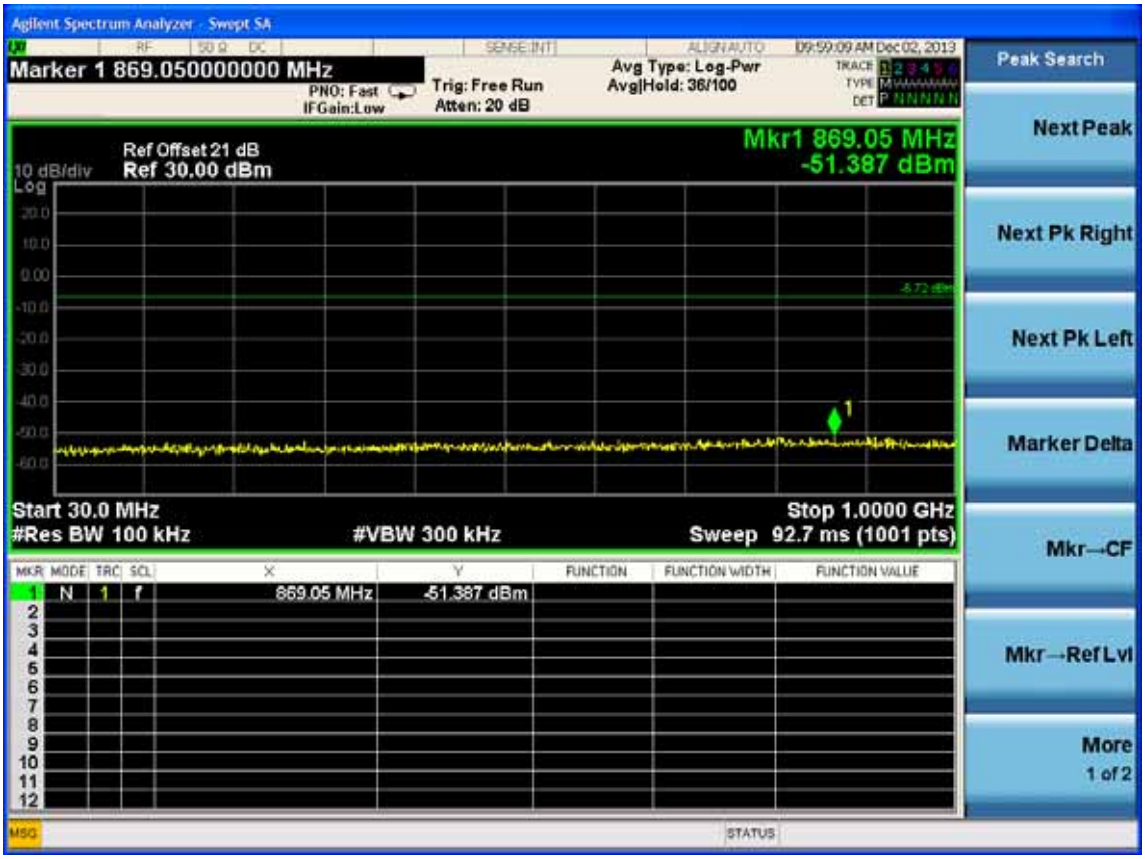


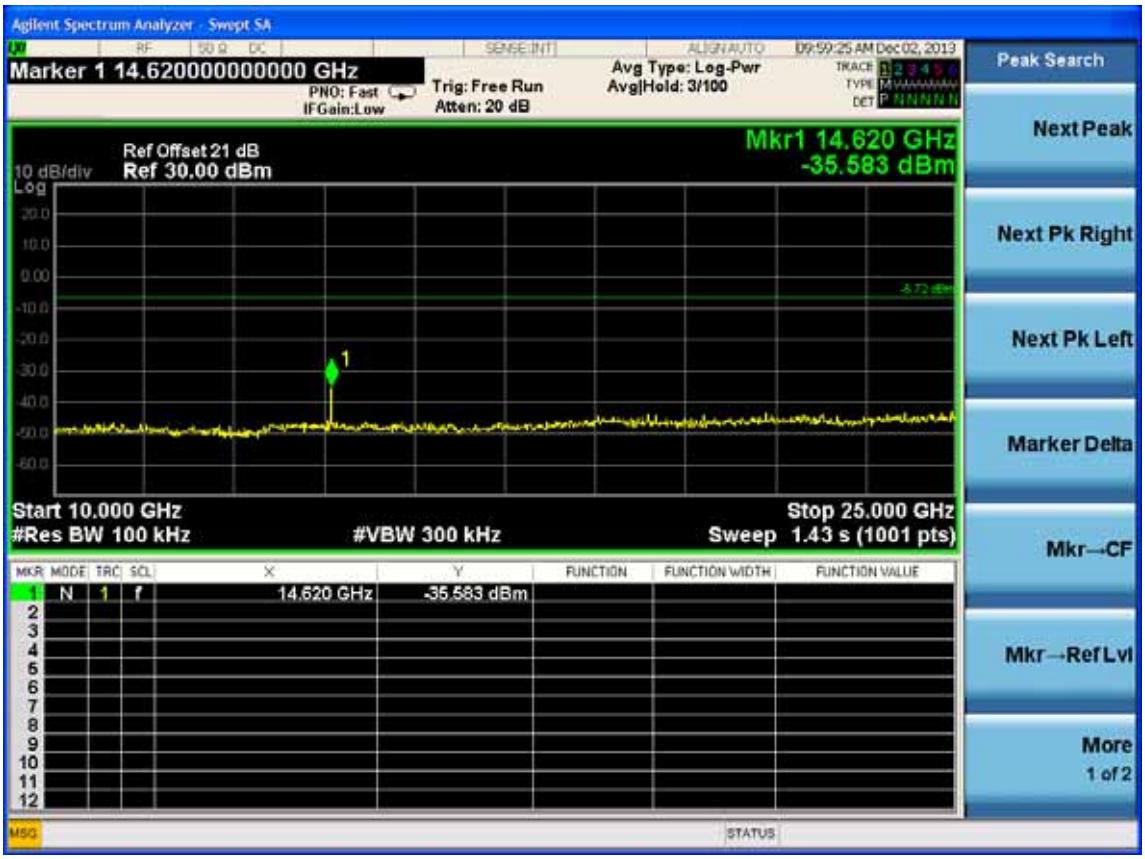

Agilent Spectrum Analyzer - Swept SA
Marker 1 14.470000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
01:15:15 PM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 14.470 GHz
-37.603 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 14.470 GHz -37.603 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Start Freq 2.310000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
01:16:49 PM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr5 2.397 98 GHz
-16.358 dBm
Start 2.31000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.42500 GHz
Sweep 11.0 ms (1001 pts)
1 N 1 f 2.410 51 GHz 13.241 dBm
2 N 1 f 2.390 00 GHz -40.842 dBm
3 N 1 f 2.400 00 GHz -18.791 dBm
4 N 1 f 2.387 05 GHz -31.470 dBm
5 N 1 f 2.397 98 GHz -16.358 dBm
Frequency
Auto Tune
Center Freq
2.367500000 GHz
Start Freq
2.310000000 GHz
Stop Freq
2.425000000 GHz
CF Step
11.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

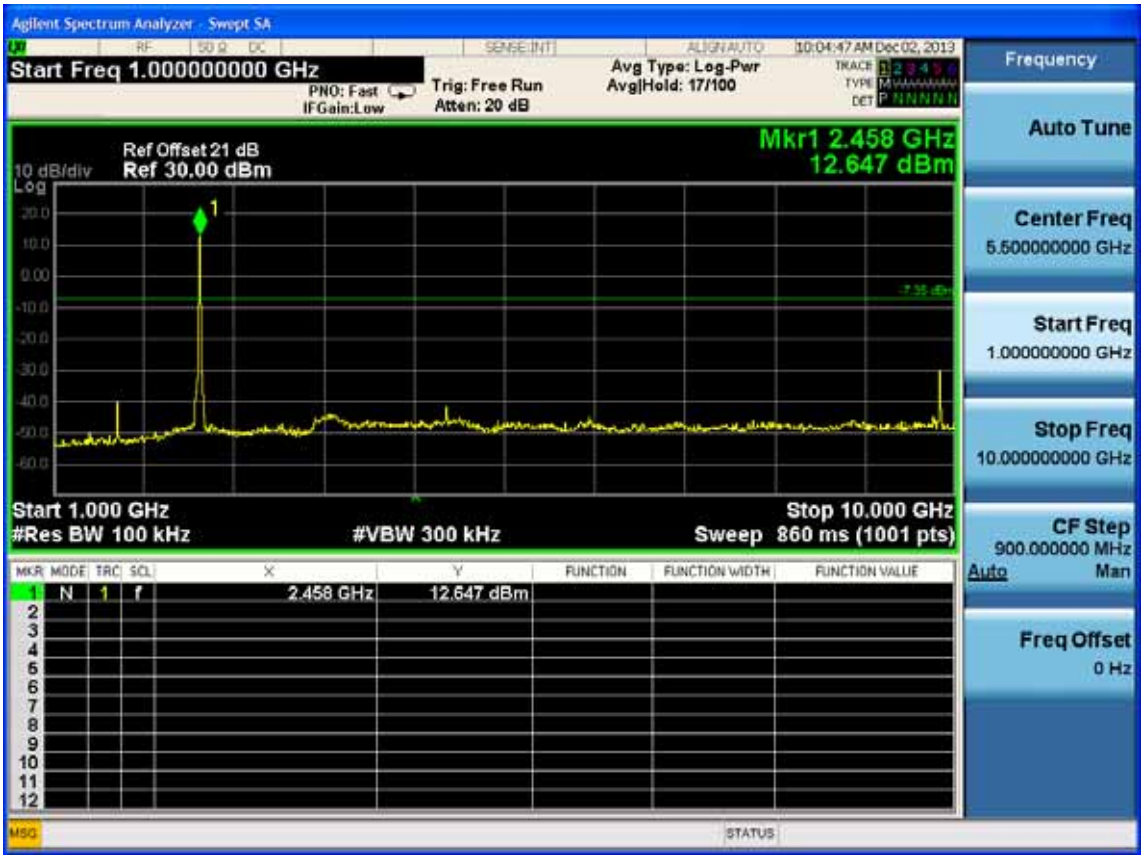
Test CH6: 2437MHz

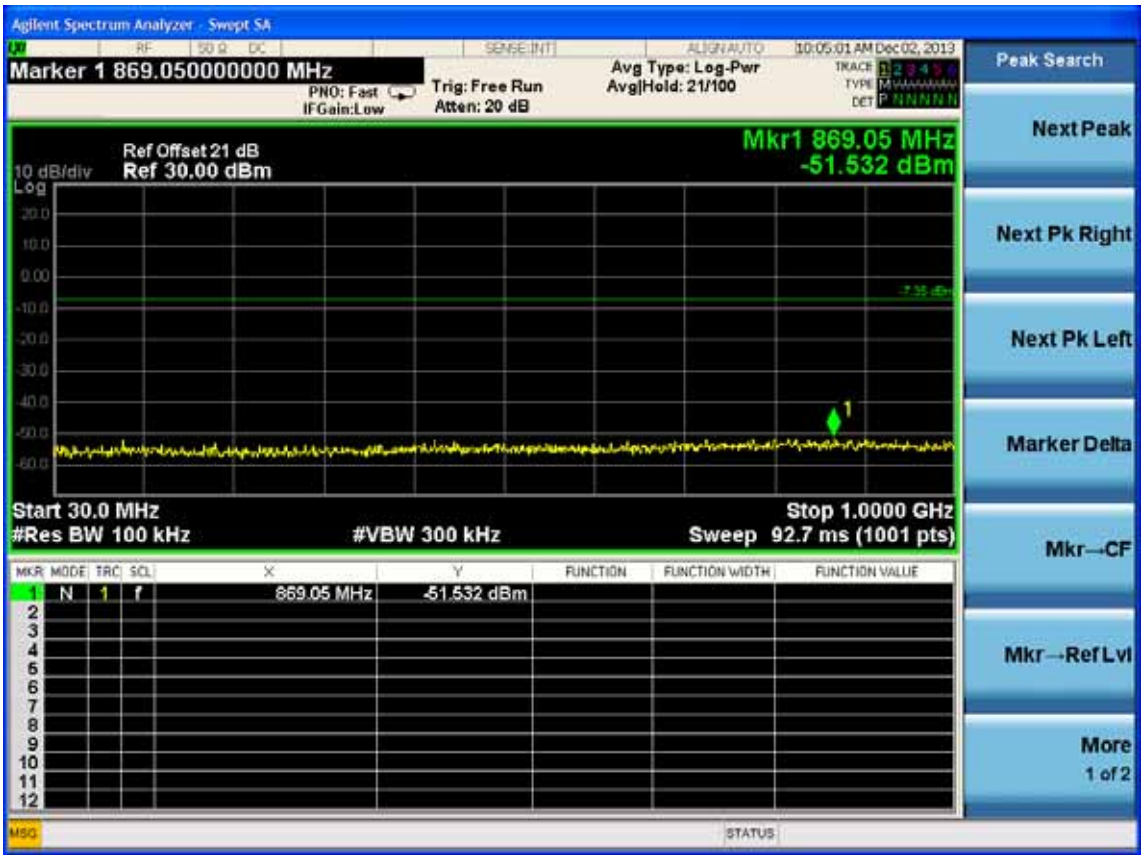


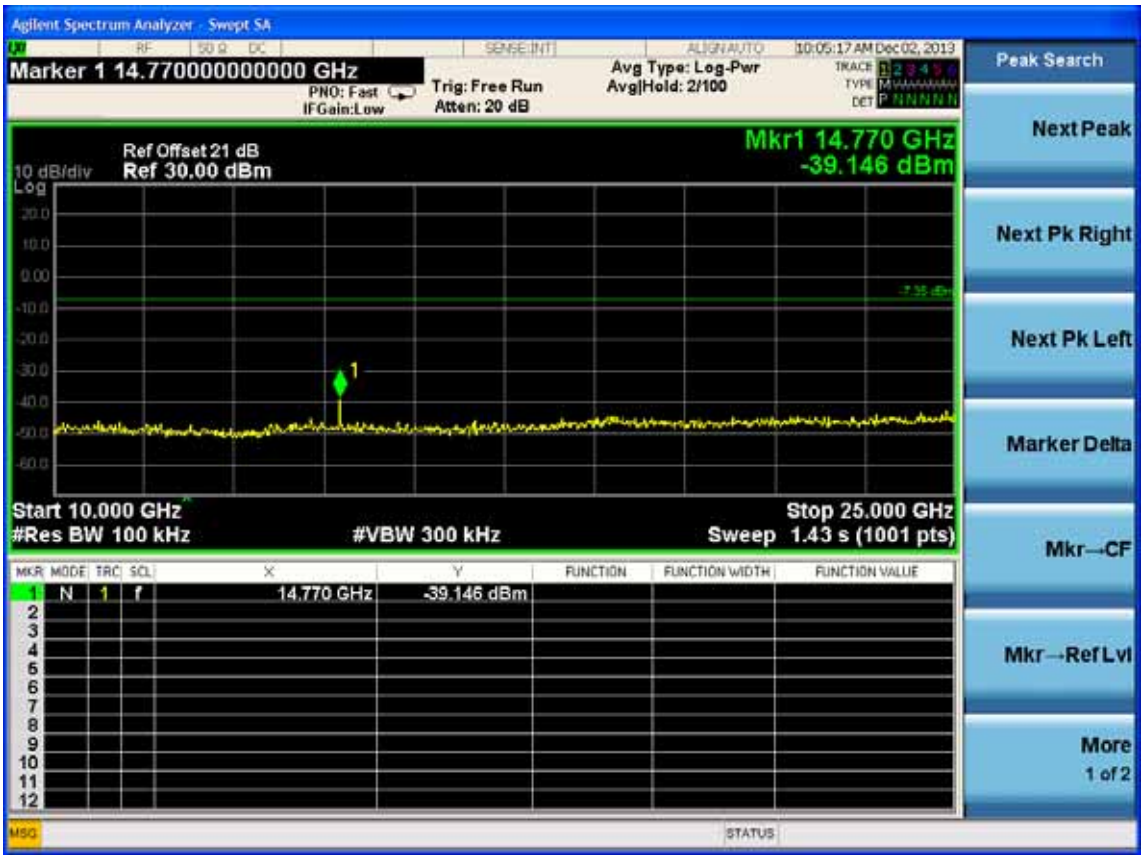




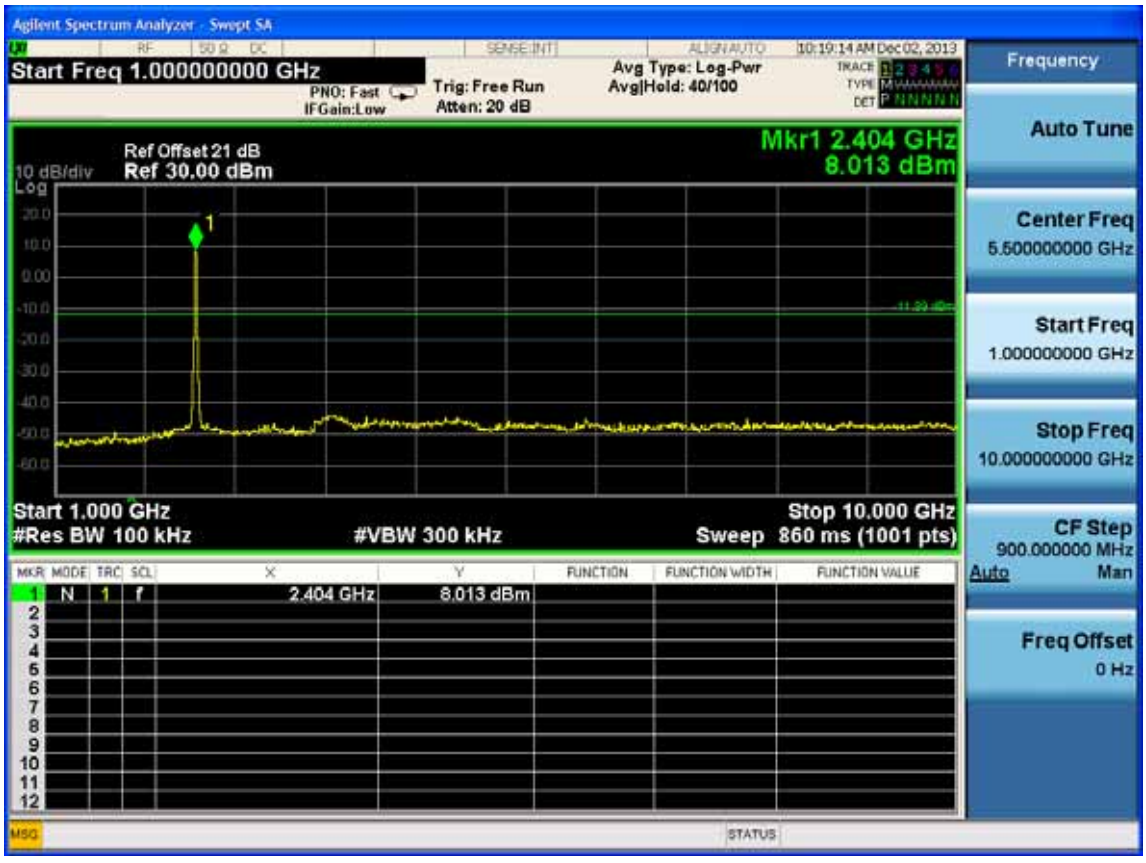
Test CH11: 2462MHz

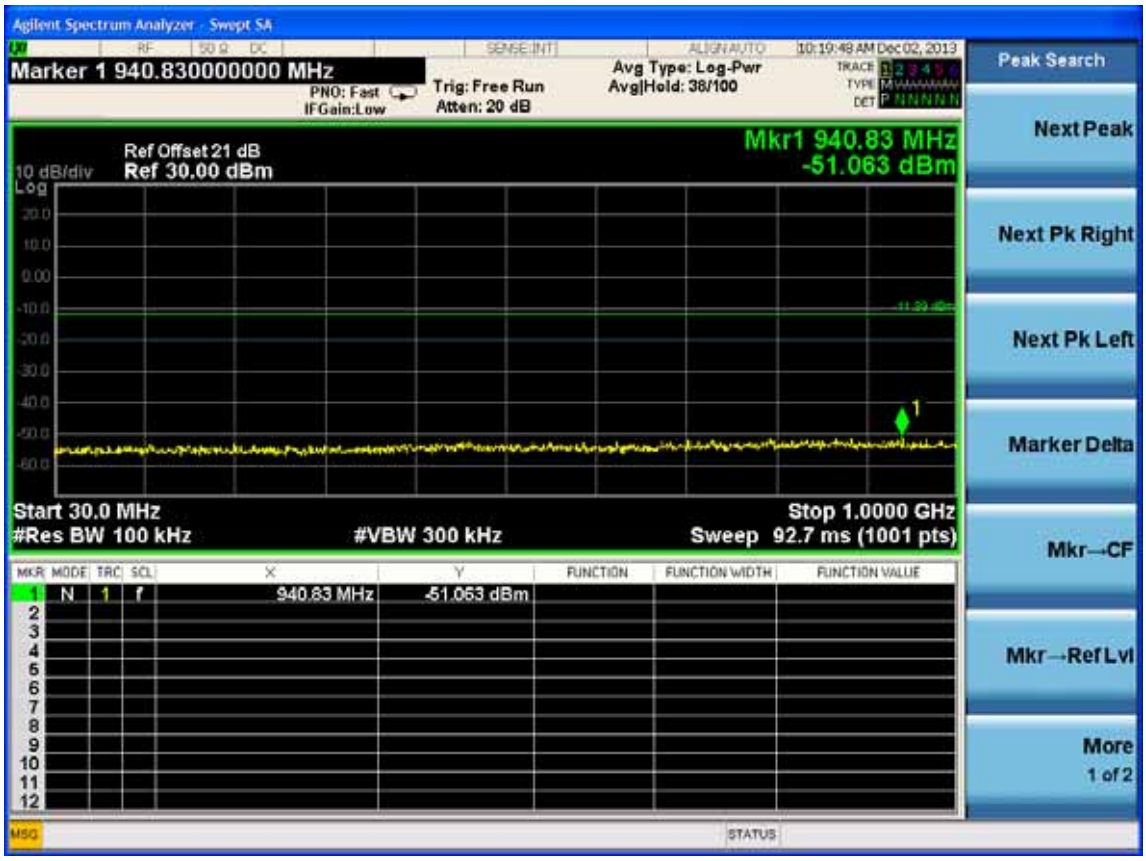


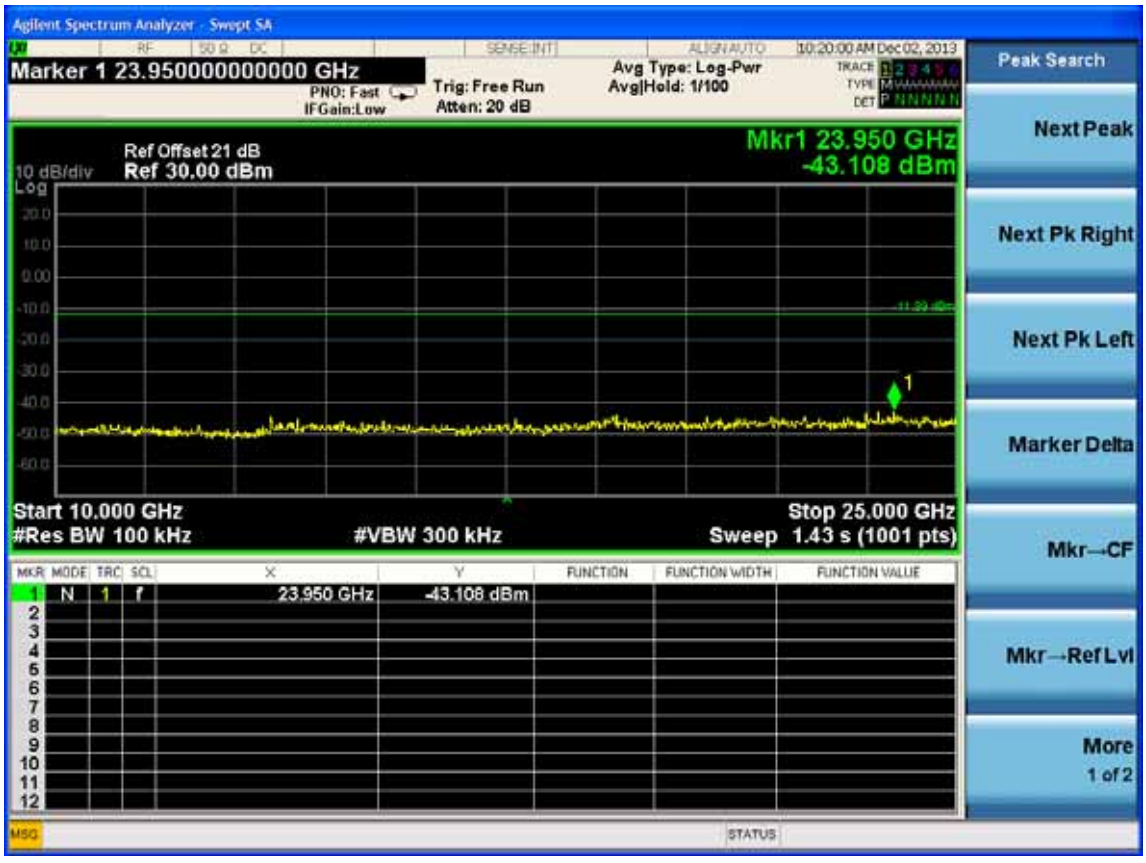

Agilent Spectrum Analyzer - Swept SA
Marker 1 869.050000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 21/100
10:05:01 AM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 869.05 MHz
-51.532 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 869.05 MHz -51.532 dBm
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 14.770000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
10:05:17 AM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 14.770 GHz
-39.146 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 14.770 GHz -39.146 dBm
MSG
STATUS

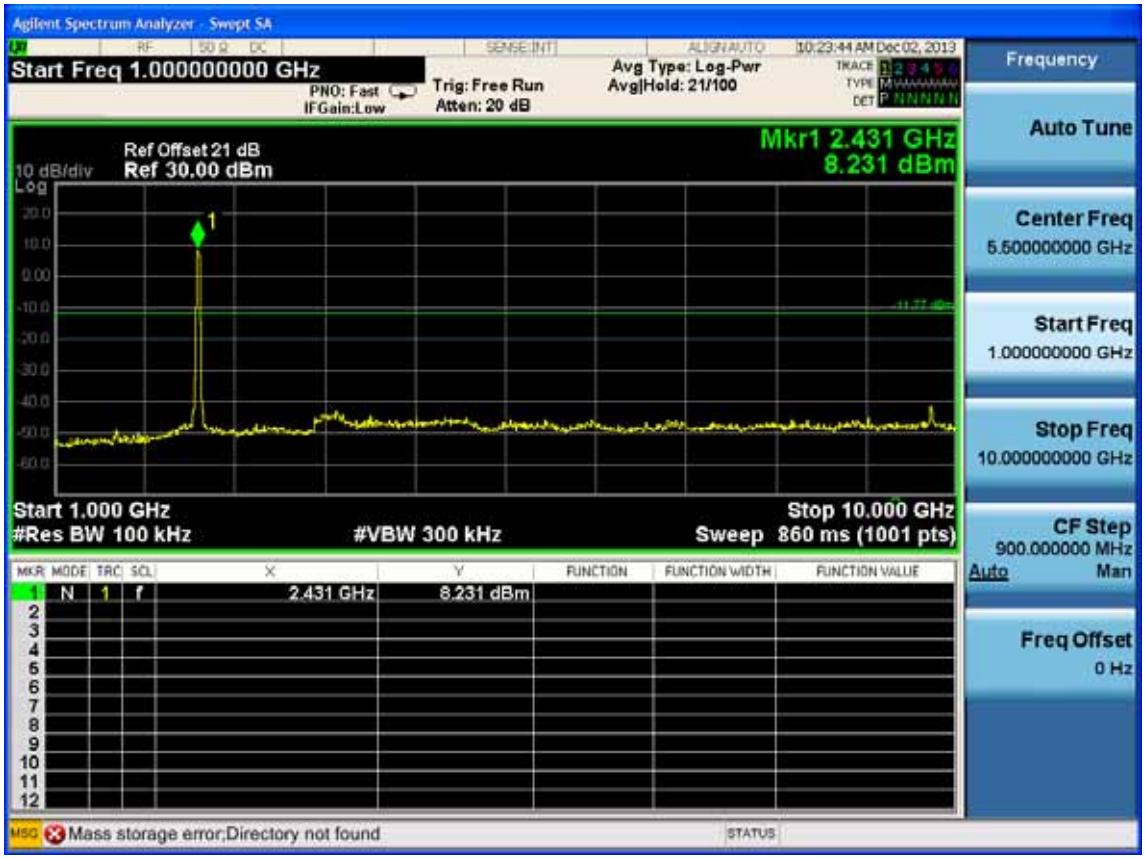
Test Mode: IEEE 802.11g TX
Test CH1: 2412MHz

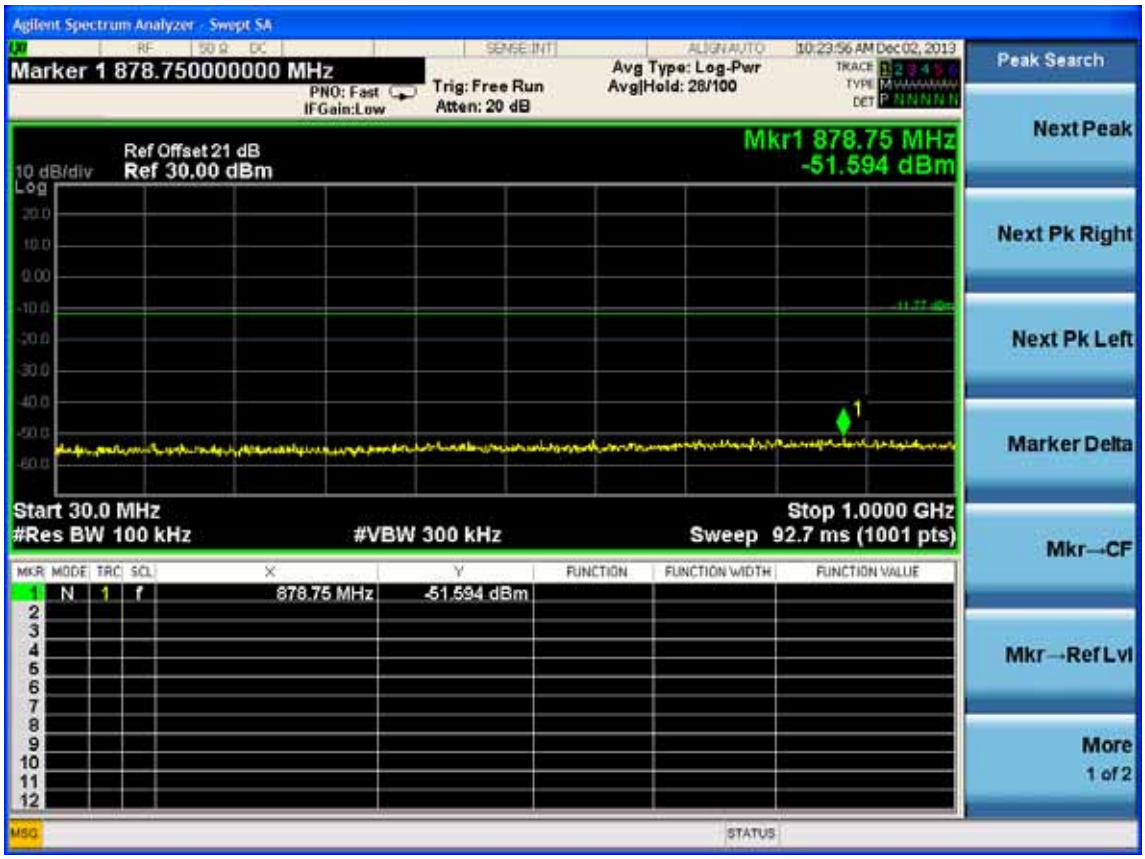


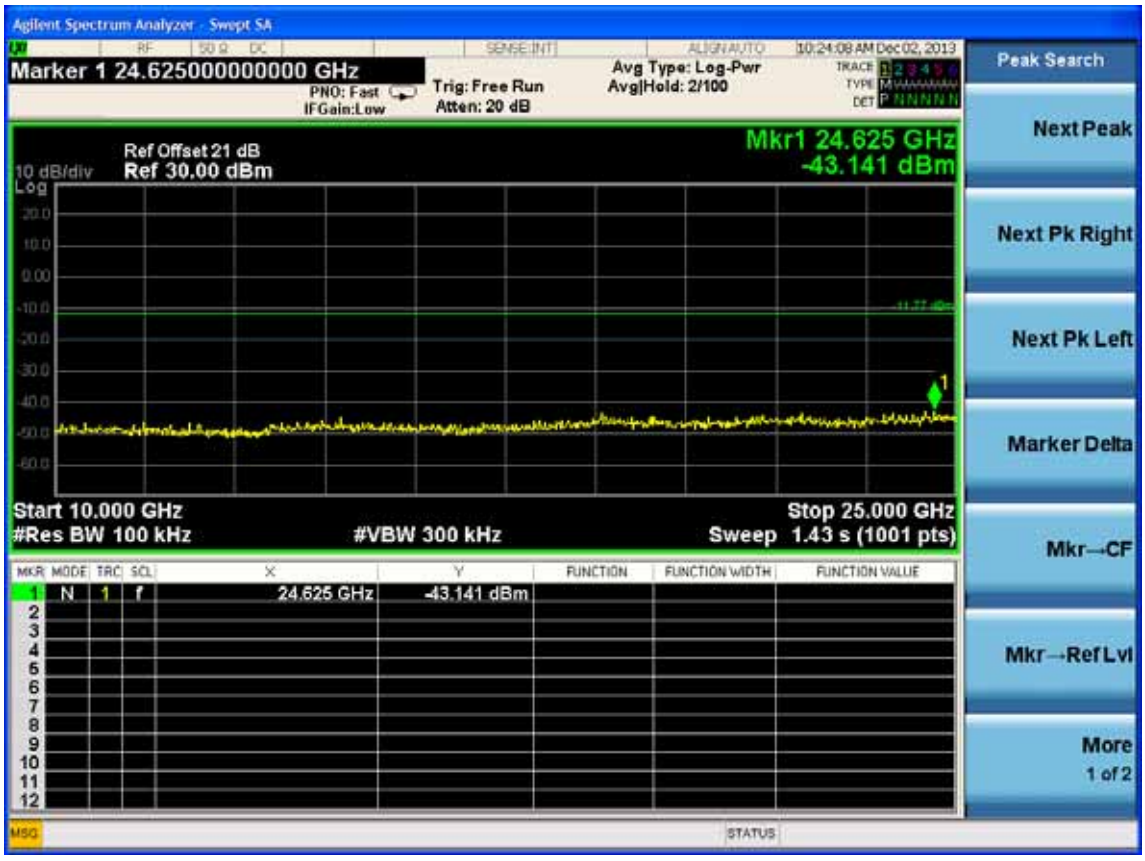

Agilent Spectrum Analyzer - Swept SA
Marker 1 940.830000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 38/100
10:19:48 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 940.83 MHz
-51.063 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 940.83 MHz -51.063 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 1 23.950000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
10:20:00 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 23.950 GHz
-43.108 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 23.950 GHz -43.108 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

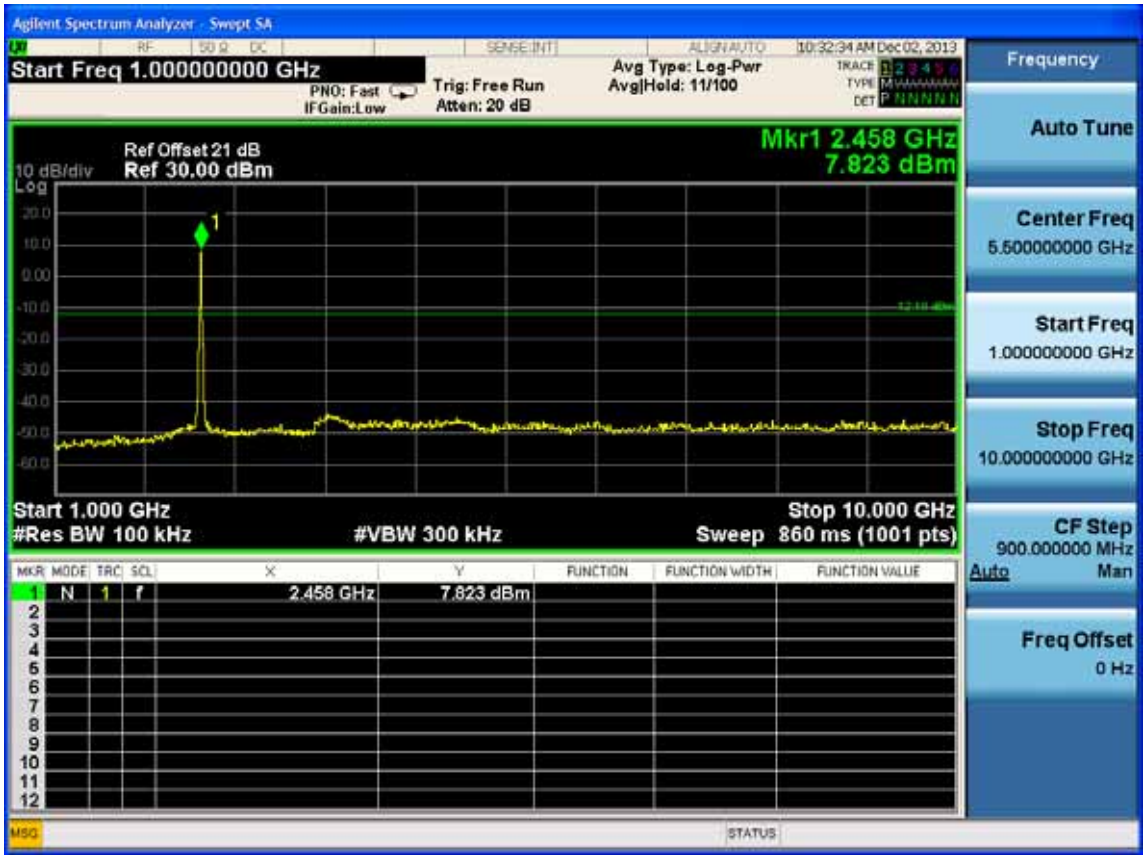
Test CH6: 2437MHz

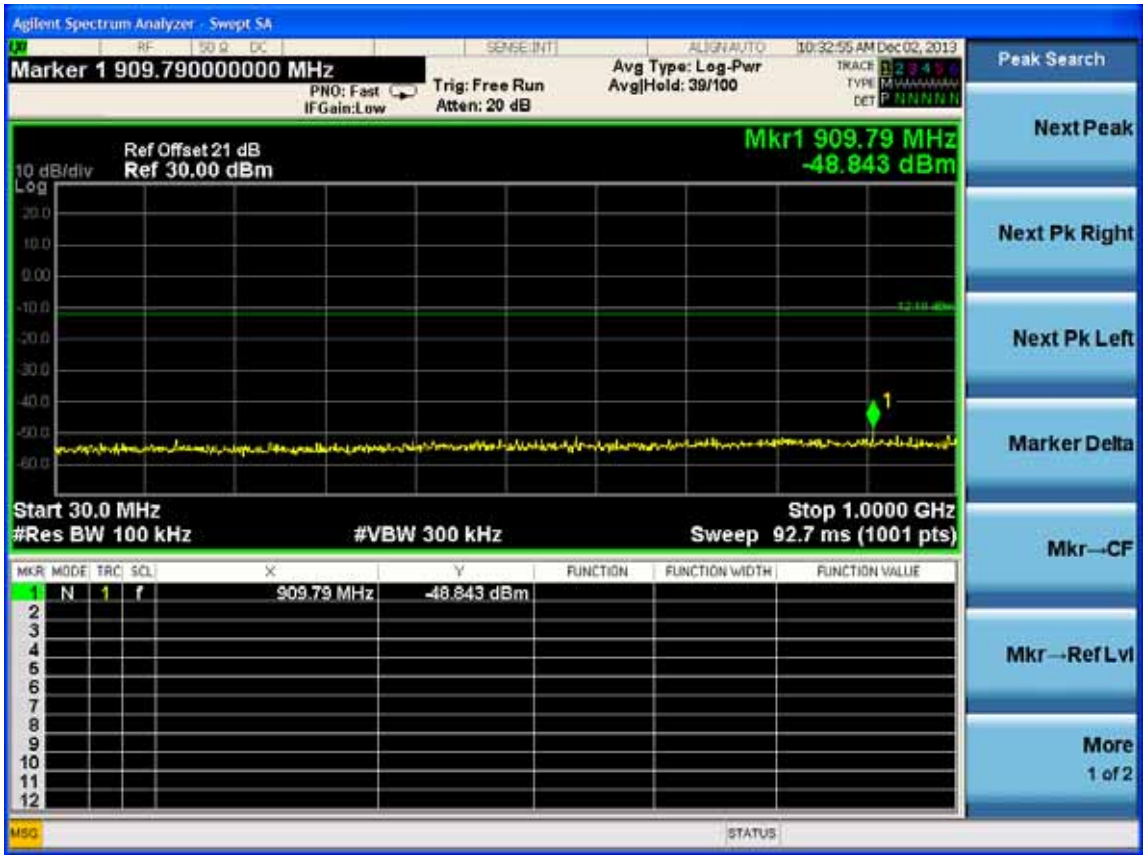


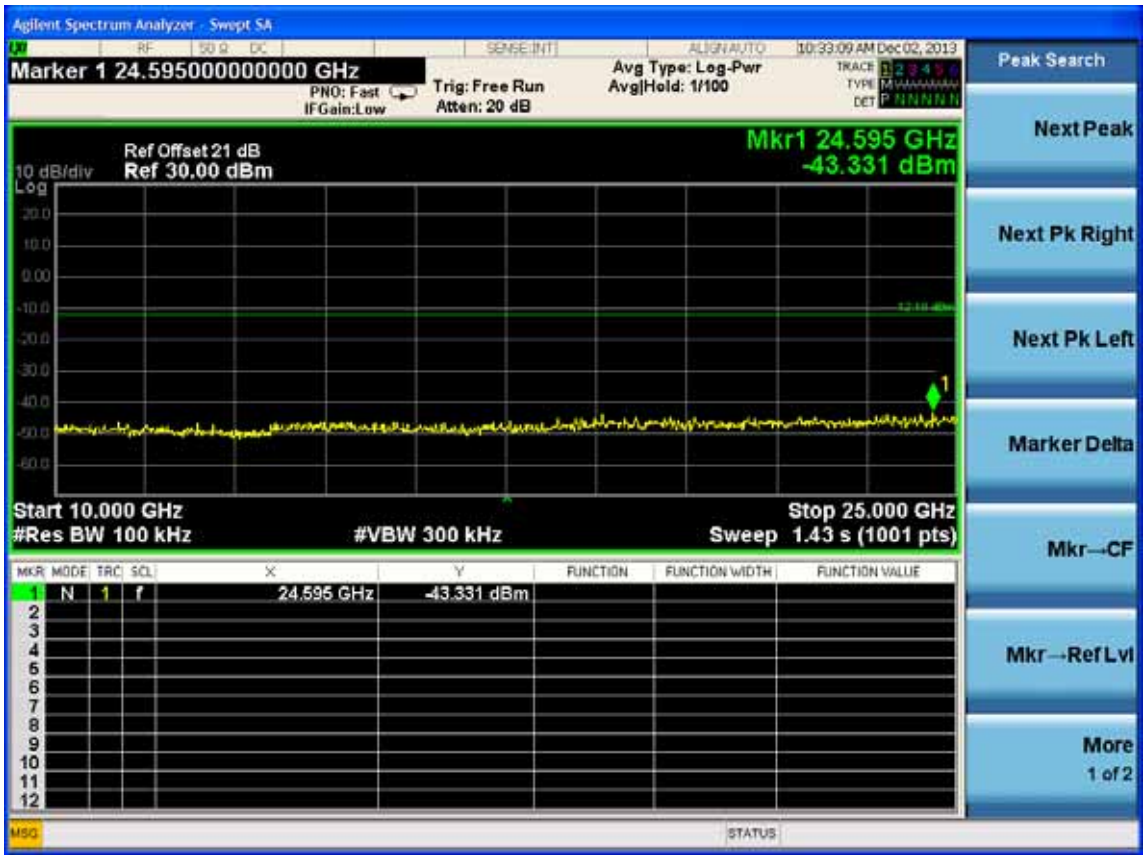

Agilent Spectrum Analyzer - Swept SA
Marker 1 878.750000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 28/100
10:23:56 AM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 878.75 MHz
-51.594 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 878.75 MHz -51.594 dBm
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 24.625000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
10:24:08 AM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 24.625 GHz
-43.141 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 24.625 GHz -43.141 dBm
MSG
STATUS

Test CH11: 2462MHz

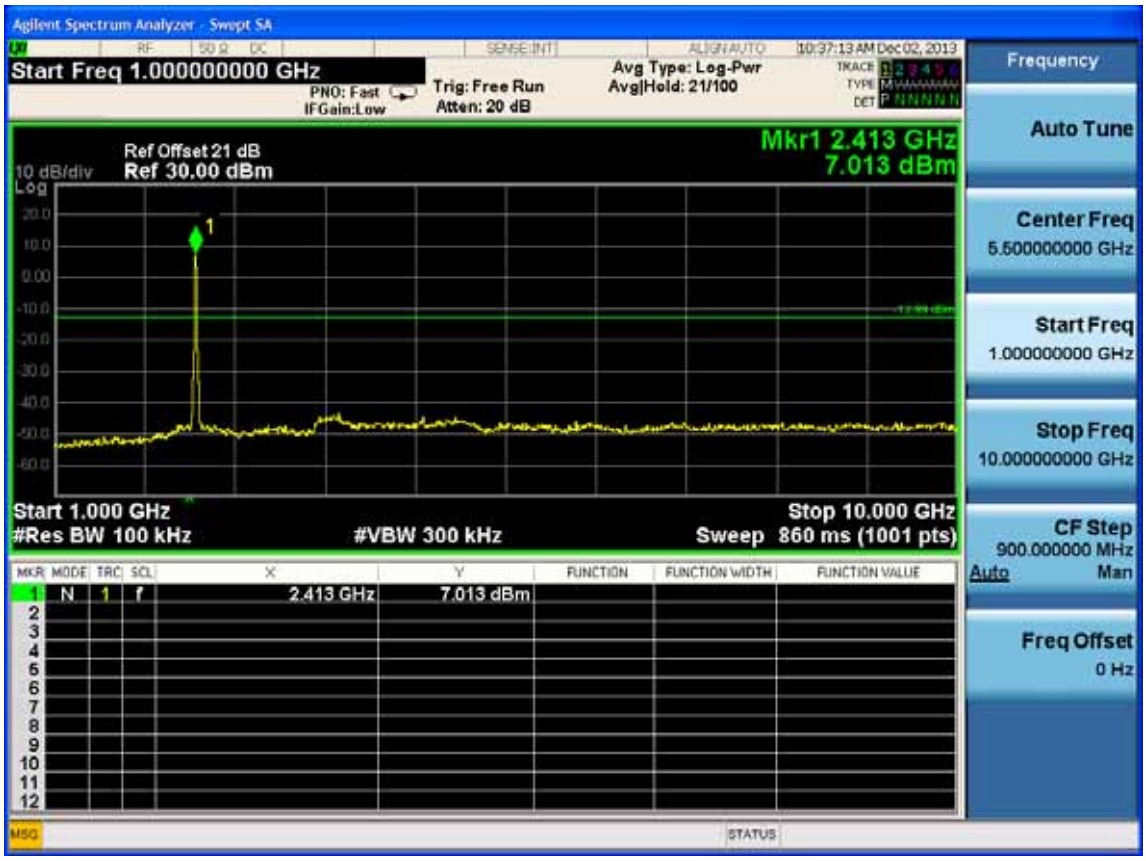


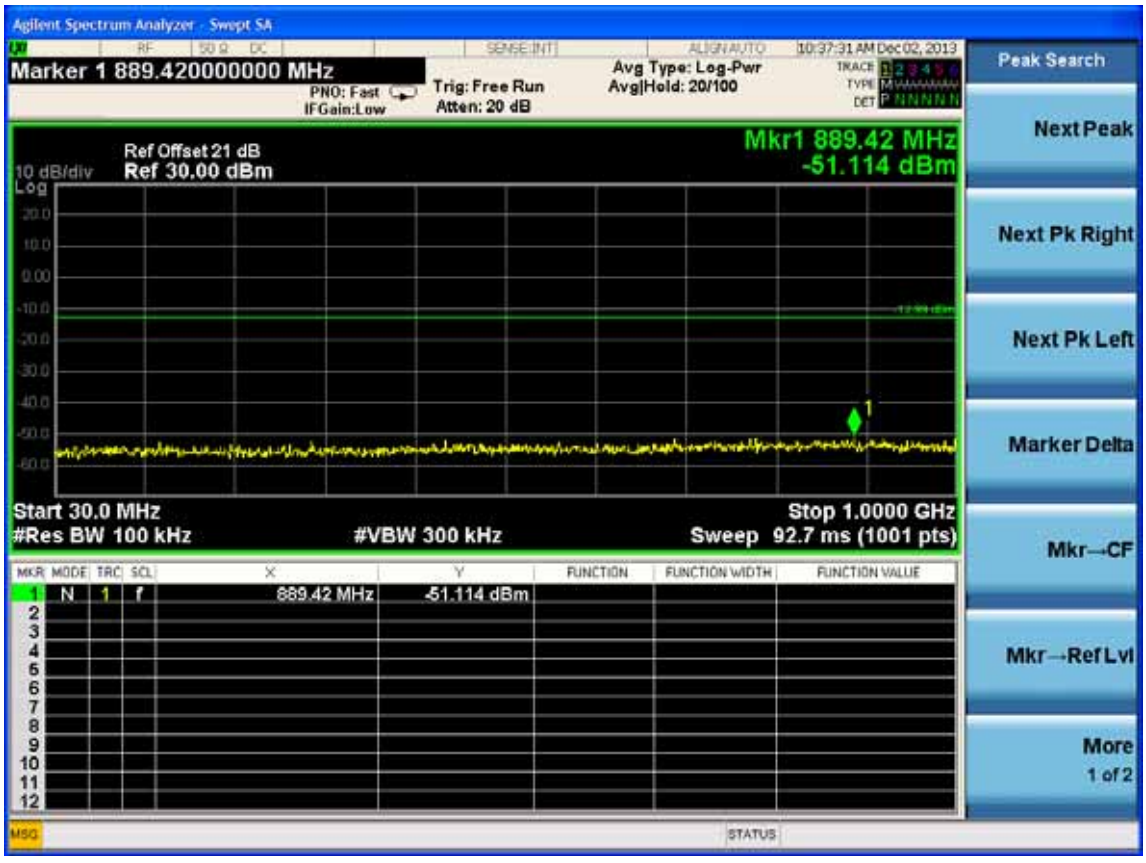


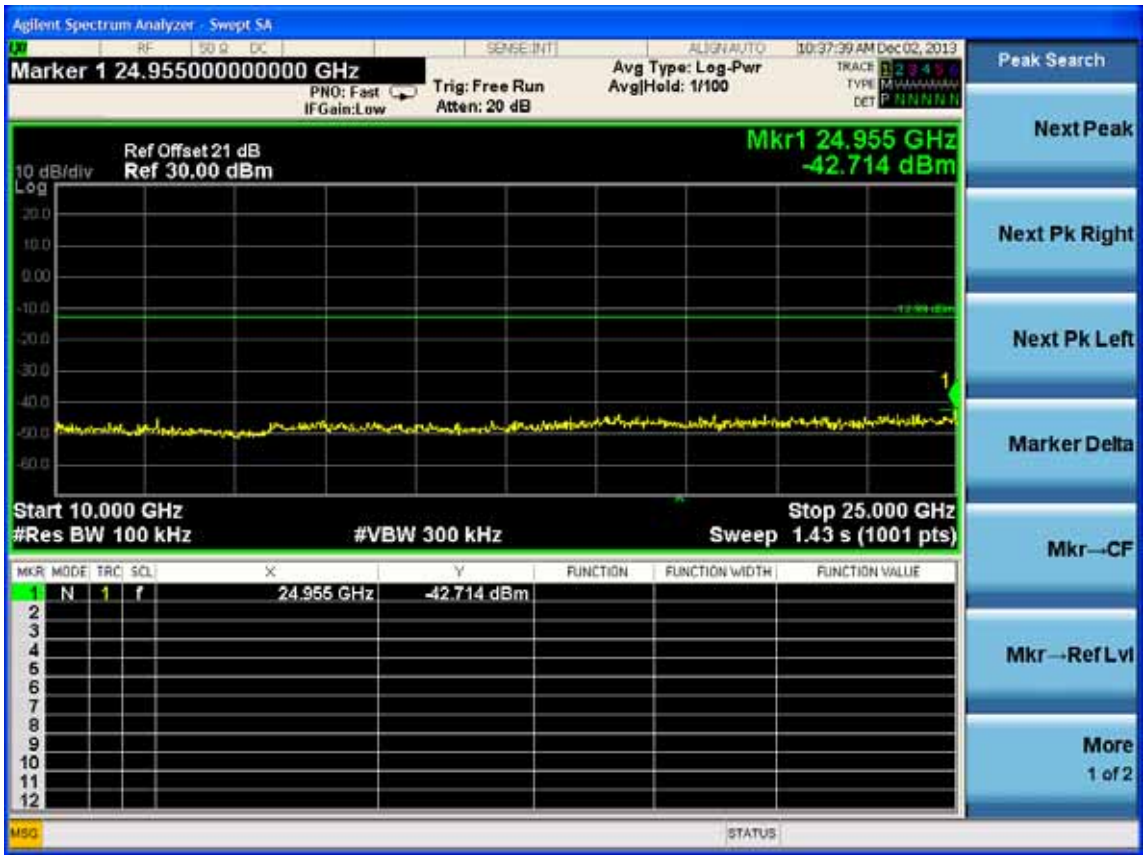

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.595000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
10:33:09 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 24.595 GHz
-43.331 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 24.595 GHz -43.331 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Start Freq 2.450000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
10:34:03 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 2.454 56 GHz
9.198 dBm
Start 2.45000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.51000 GHz
Sweep 5.80 ms (1001 pts)
1 N 1 f 2.454 56 GHz 9.198 dBm
2 N 1 f 2.483 50 GHz -26.777 dBm
3 N 1 f 2.500 00 GHz -44.810 dBm
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.450000000 GHz
Stop Freq
2.510000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

Test Mode: IEEE 802.11n HT20 TX
Test CH1: 2412MHz

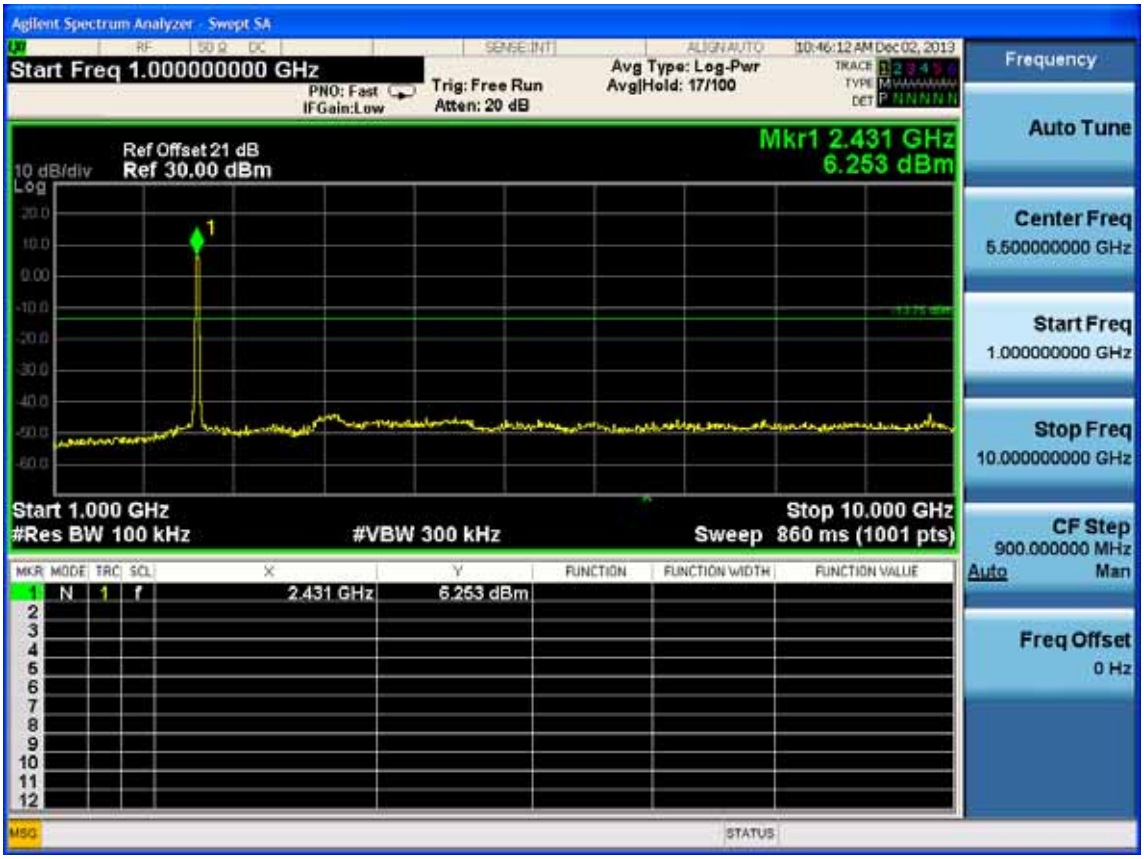


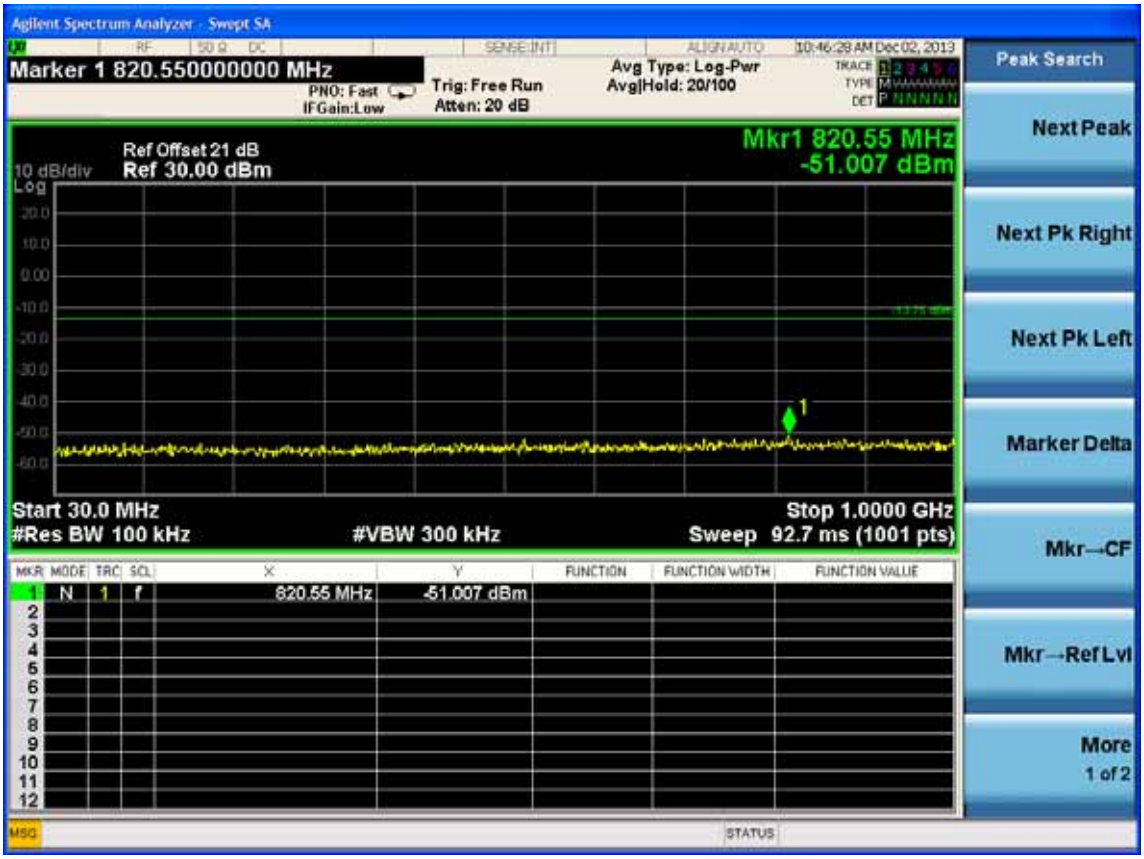


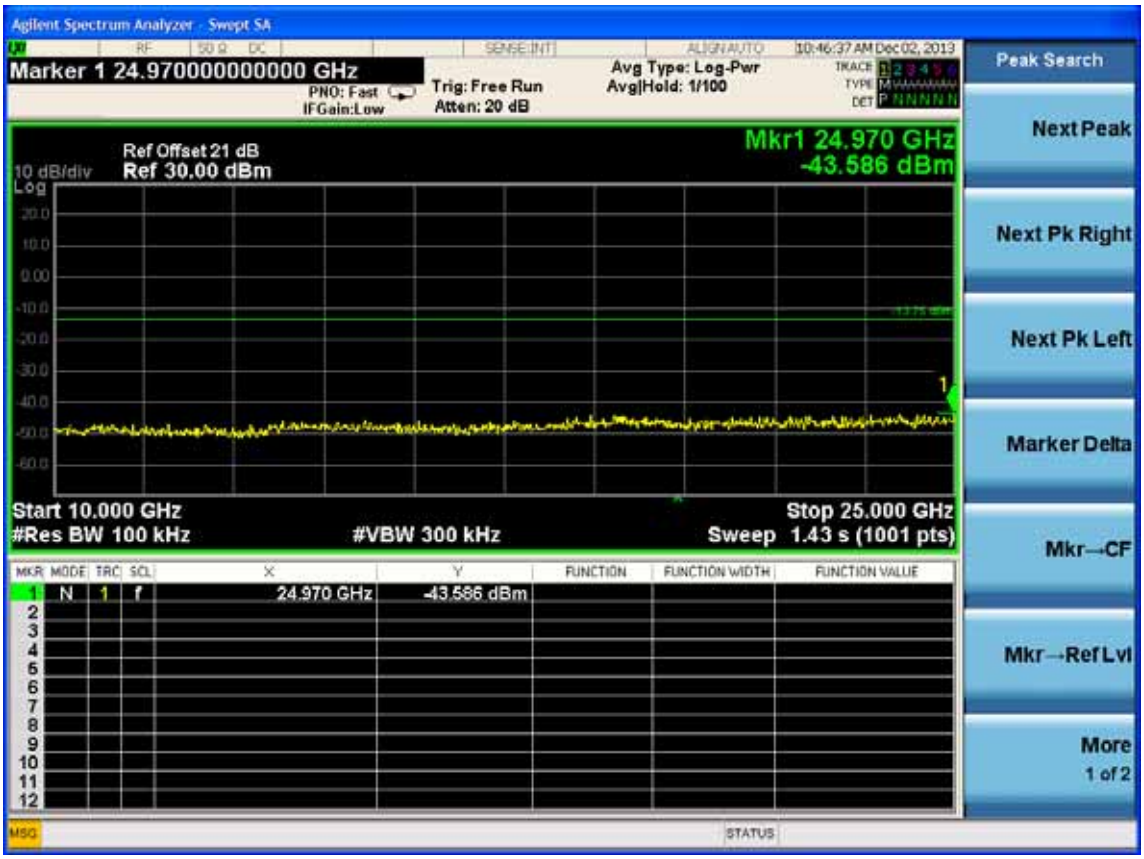

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.955000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
10:37:39 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 24.955 GHz
-42.714 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 24.955 GHz -42.714 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Start Freq 2.310000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
10:38:16 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 2.404 53 GHz
7.489 dBm
Start 2.31000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.42500 GHz
Sweep 11.0 ms (1001 pts)
1 N 1 f 2.404 53 GHz 7.489 dBm
2 N 1 f 2.390 00 GHz -30.966 dBm
3 N 1 f 2.400 00 GHz -22.055 dBm
Frequency
Auto Tune
Center Freq
2.367500000 GHz
Start Freq
2.310000000 GHz
Stop Freq
2.425000000 GHz
CF Step
11.500000 MHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

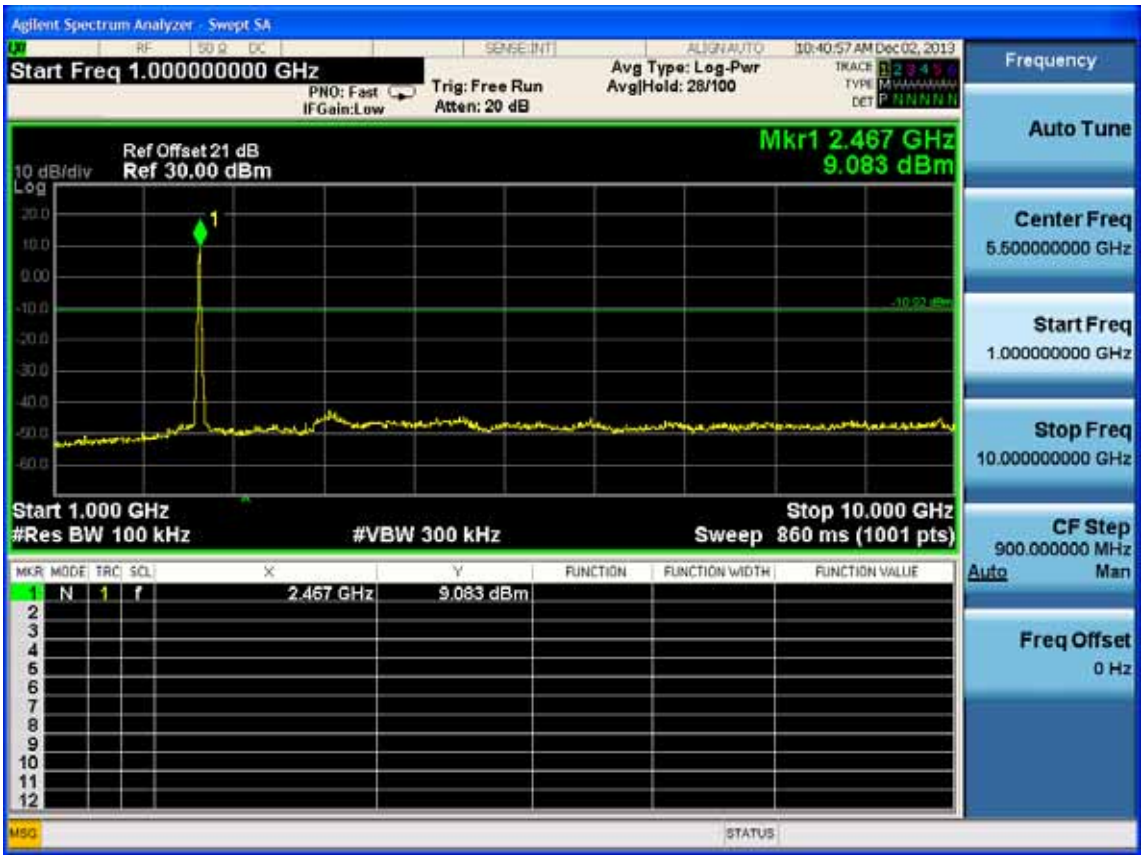
Test CH6: 2437MHz

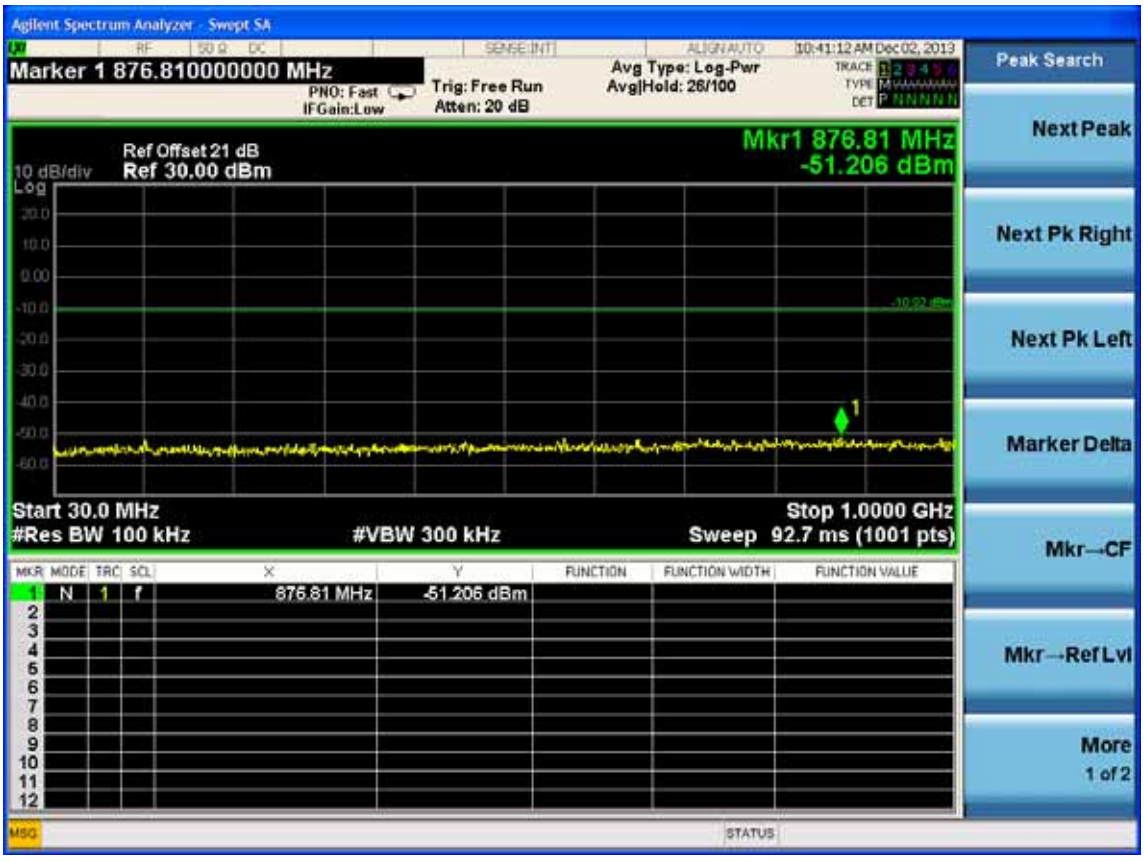


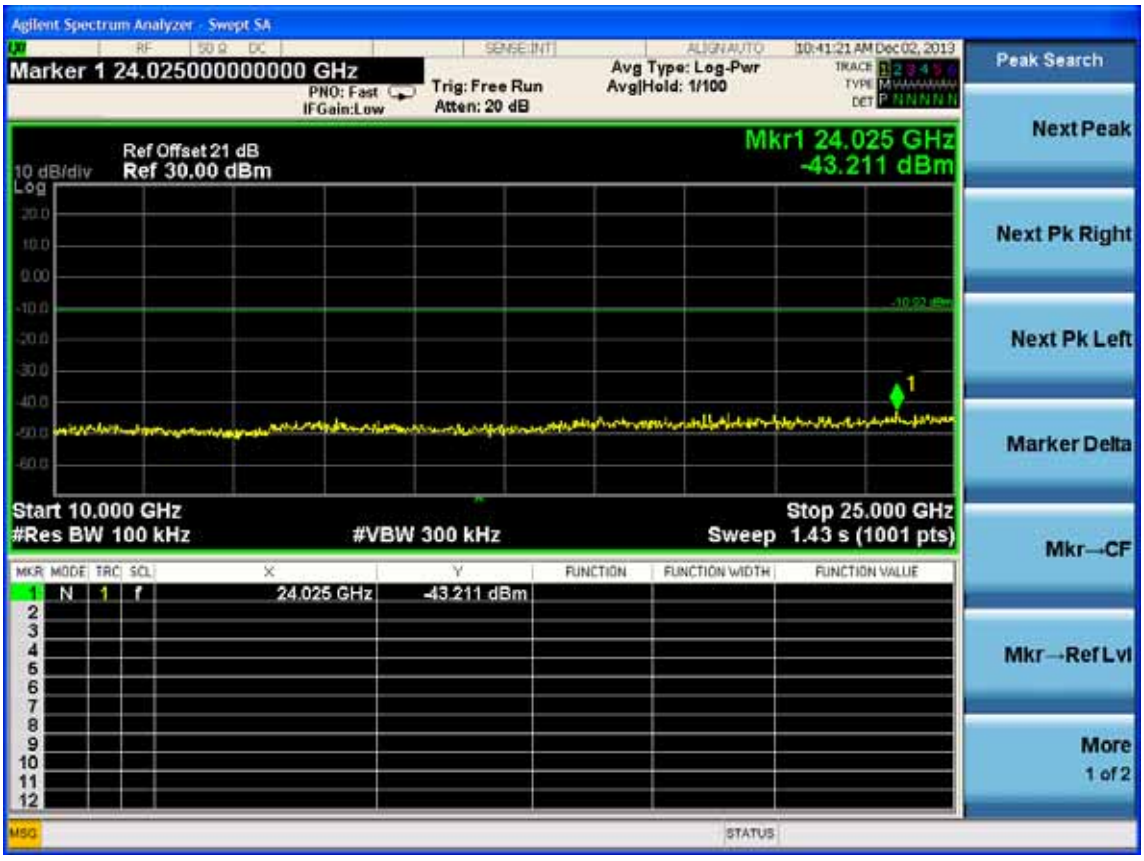




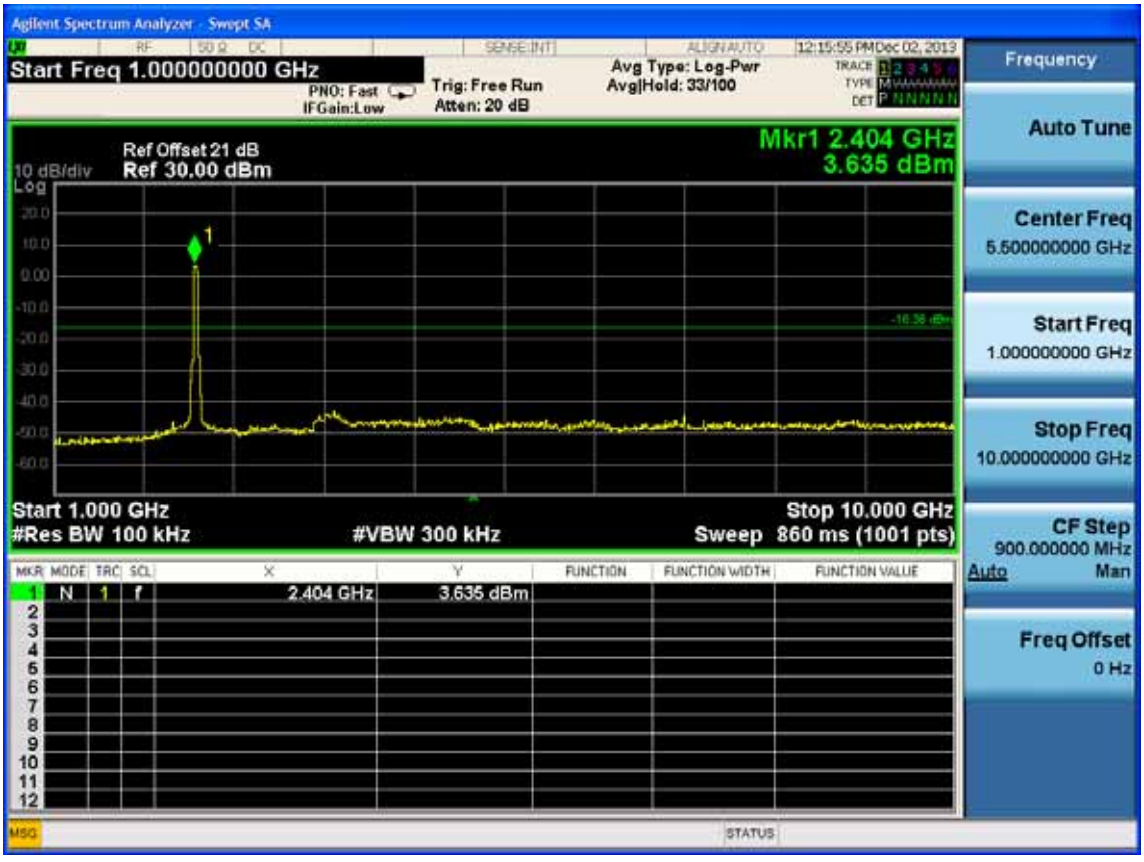
Test CH11: 2462MHz

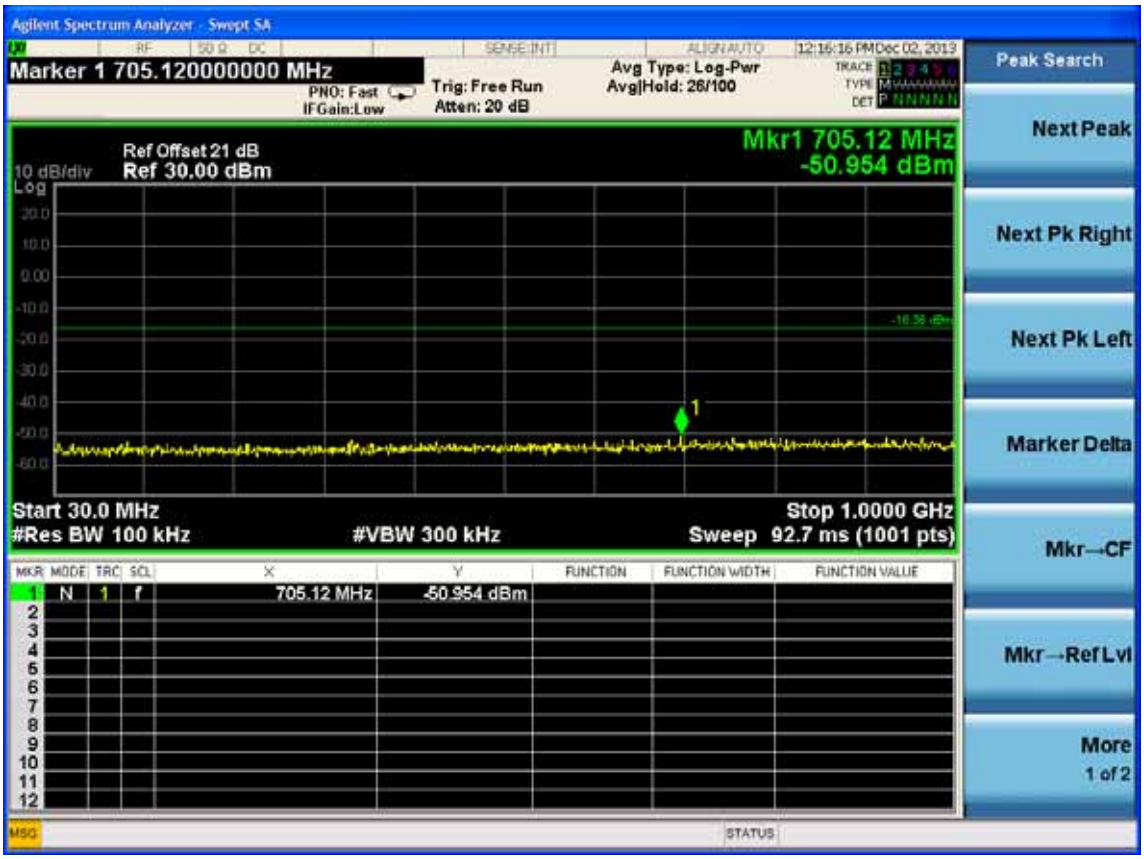

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 26/100
10:40:57 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 2.467 GHz
9.083 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 860 ms (1001 pts)
1 N 1 f 2.467 GHz 9.083 dBm
Frequency
Auto Tune
Center Freq
5.500000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
10.000000000 GHz
CF Step
900.000000 MHz
Auto
Man
Freq Offset
0 Hz

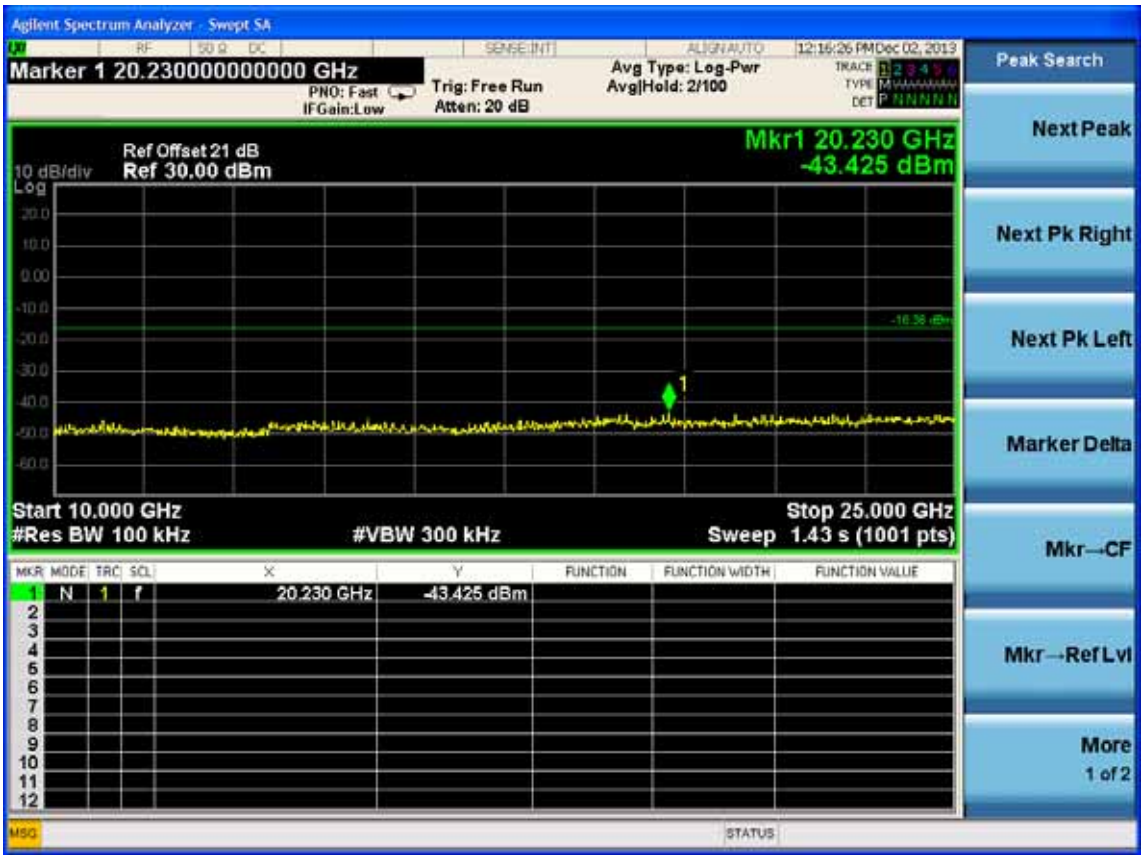

Agilent Spectrum Analyzer - Swept SA
Marker 1 876.810000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 26/100
10:41:12 AM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 876.81 MHz
-51.206 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 876.81 MHz -51.206 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2



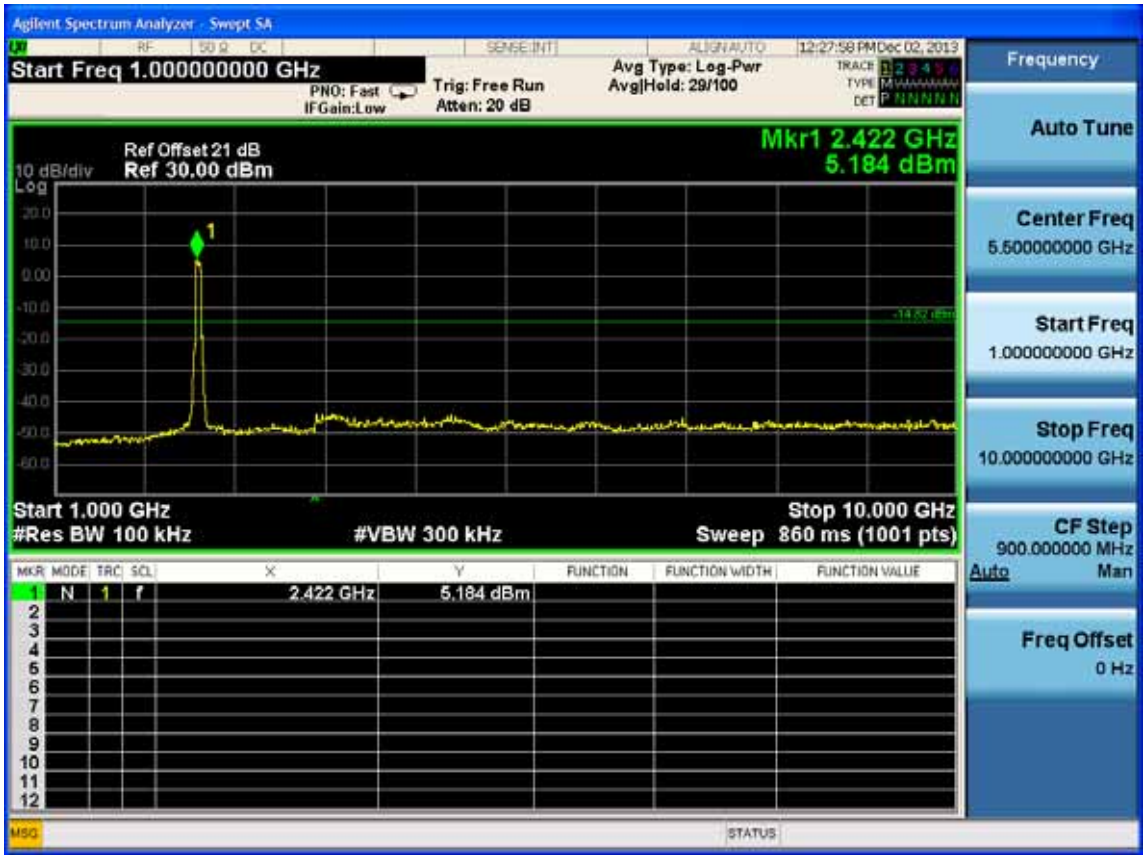
Test Mode: IEEE 802.11n HT40 TX
Test CH1: 2422MHz

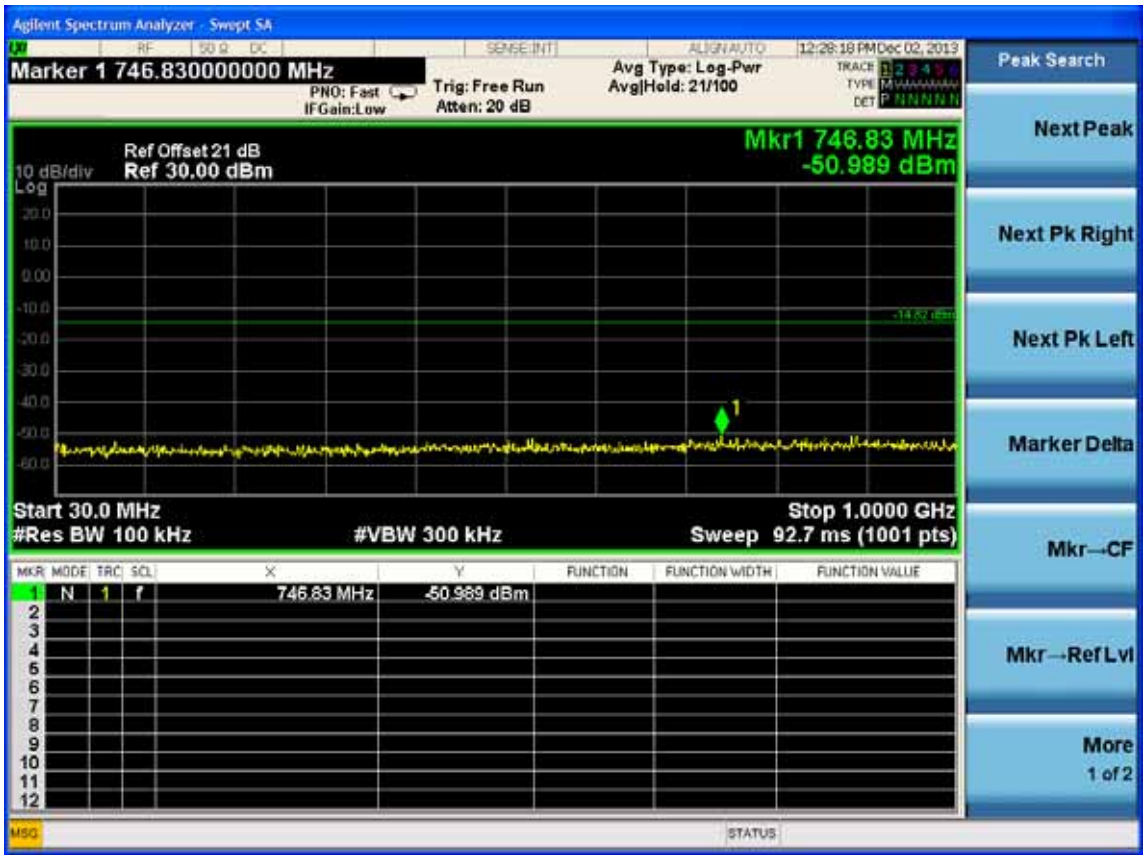


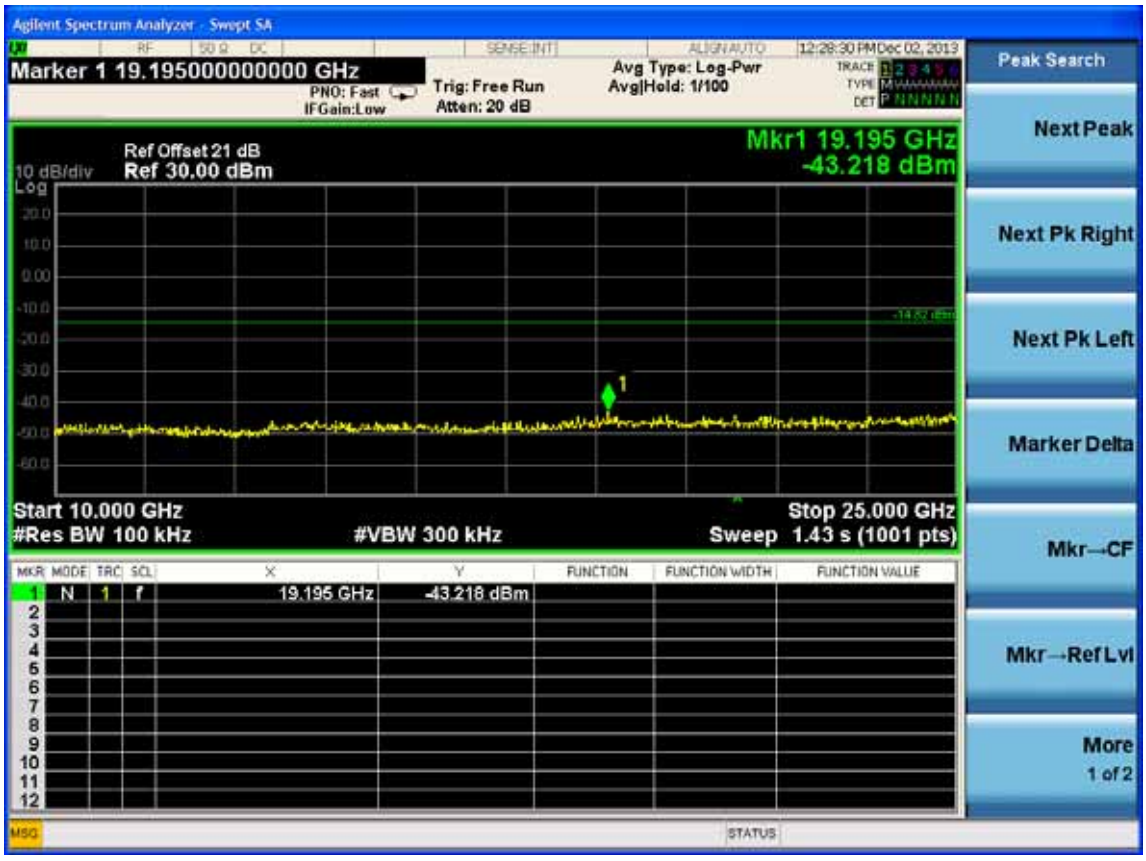

Agilent Spectrum Analyzer - Swept SA
Marker 1 705.120000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 26/100
12:16:16 PM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 705.12 MHz
-50.954 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 705.12 MHz -50.954 dBm
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 20.230000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
12:16:26 PM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 20.230 GHz
-43.425 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 20.230 GHz -43.425 dBm
MSG
STATUS

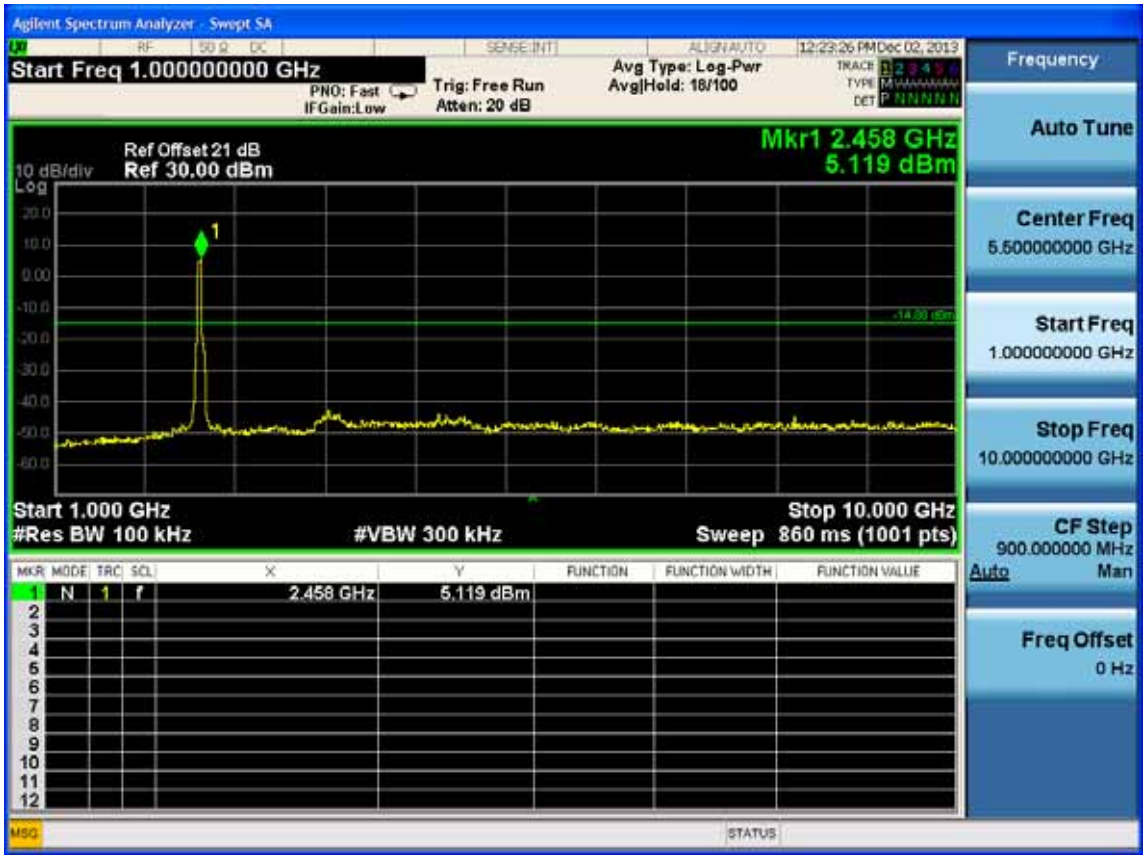
Test CH4: 2437MHz

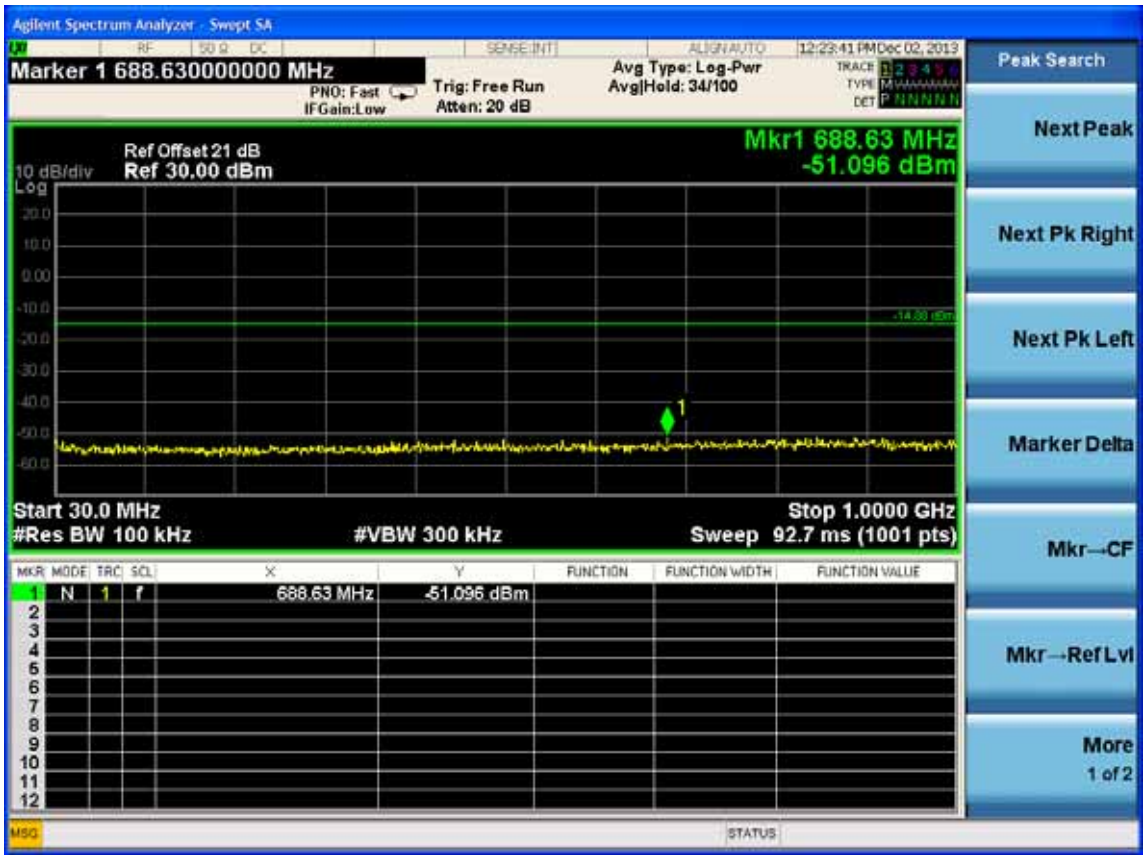


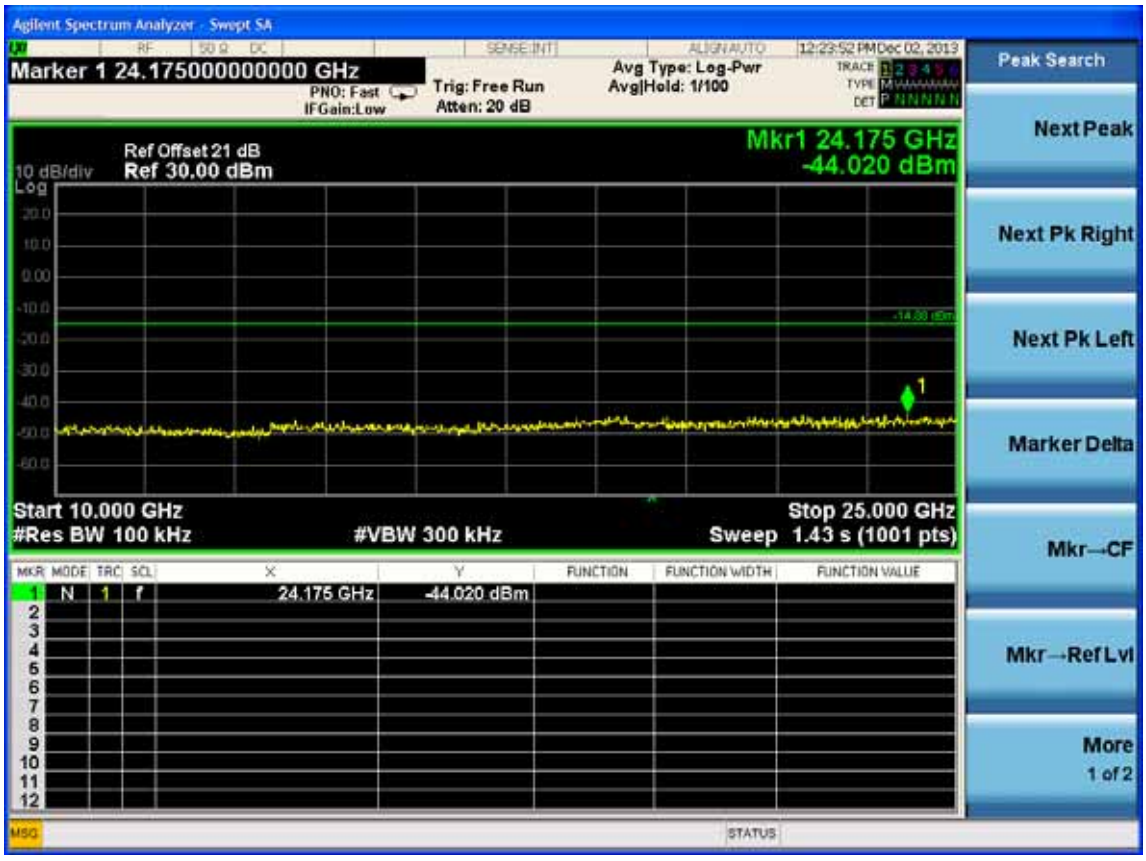

Agilent Spectrum Analyzer - Swept SA
Marker 1 746.830000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 21/100
12:28:18 PM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 746.83 MHz
-50.989 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 746.83 MHz -50.989 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2


Agilent Spectrum Analyzer - Swept SA
Marker 1 19.195000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
12:28:30 PM Dec 02, 2013
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 19.195 GHz
-43.218 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 19.195 GHz -43.218 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2

Test CH7: 2452MHz




Agilent Spectrum Analyzer - Swept SA
Marker 1 688.630000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 34/100
12:23:41 PM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 688.63 MHz
-51.096 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 688.63 MHz -51.096 dBm
MSG
STATUS


Agilent Spectrum Analyzer - Swept SA
Marker 1 24.175000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
12:23:52 PM Dec 02, 2013
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr1 24.175 GHz
-44.020 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 24.175 GHz -44.020 dBm
MSG
STATUS

6. BAND EDGE COMPLIANCE TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 13	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 13	1 Year
3.	Horn Antenna	EMCO	3115	9510-4580	May.28, 13	1 Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 13	1 Year

6.2.Limit

All the lower and upper band-edges emissions appearing within 5.35-5.46GHz and 7.25-7.75GHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 5725MHz to 5850MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

6.3.Test Produce

1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.

2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

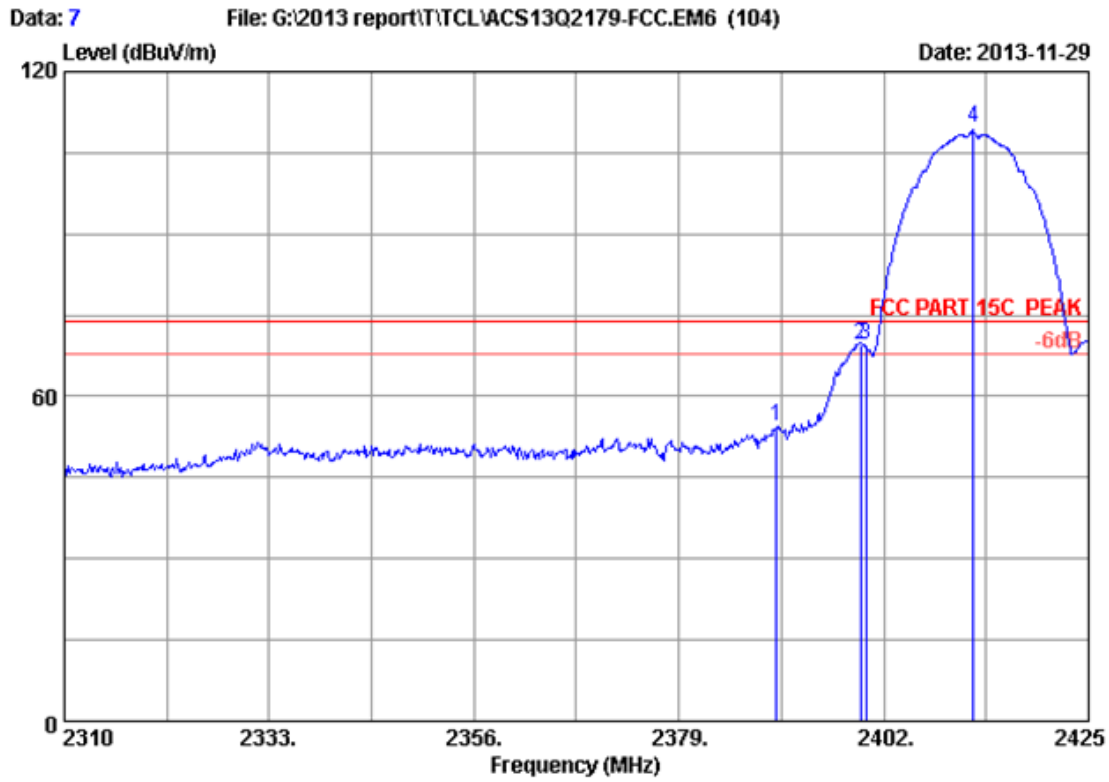
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

(a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
(b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

6.4.Test Results

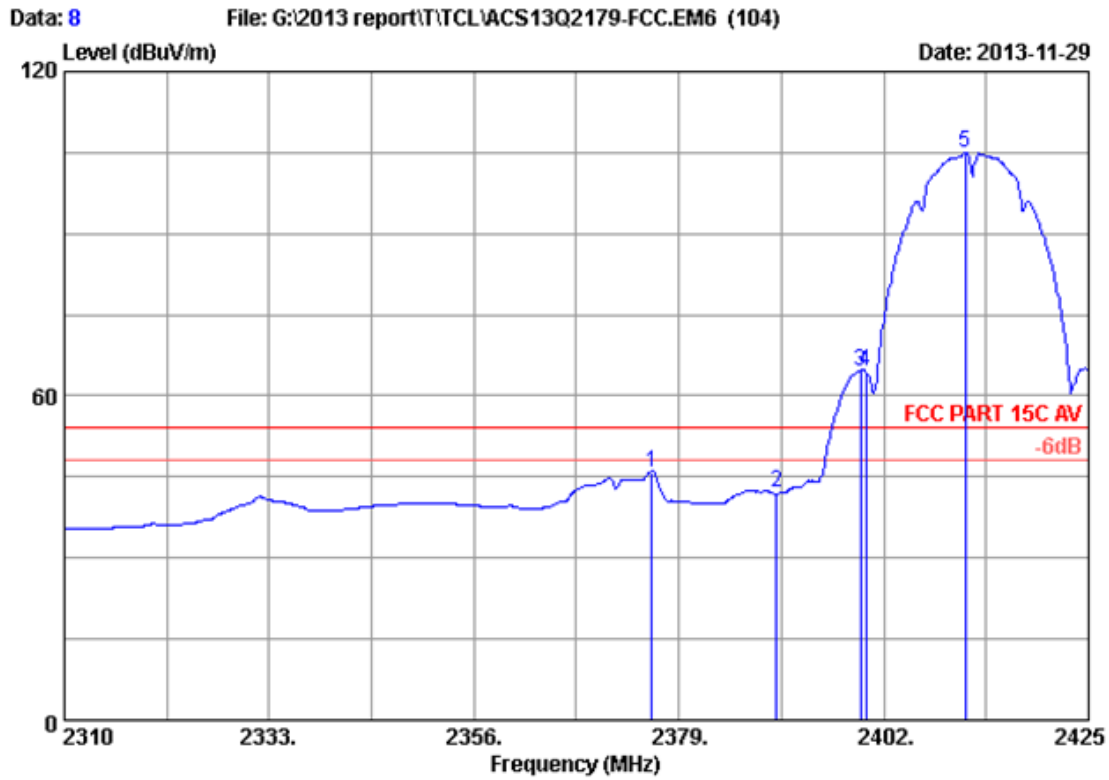
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 7
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	56.29	54.53	74.00	19.47	Peak
2	2399.355	28.18	5.80	35.70	71.34	69.62	74.00	4.38	Peak
3	2400.000	28.18	5.80	35.70	71.32	69.60	74.00	4.40	Peak
4	2412.106	28.21	5.81	35.70	111.18	109.50	74.00	-35.50	Peak

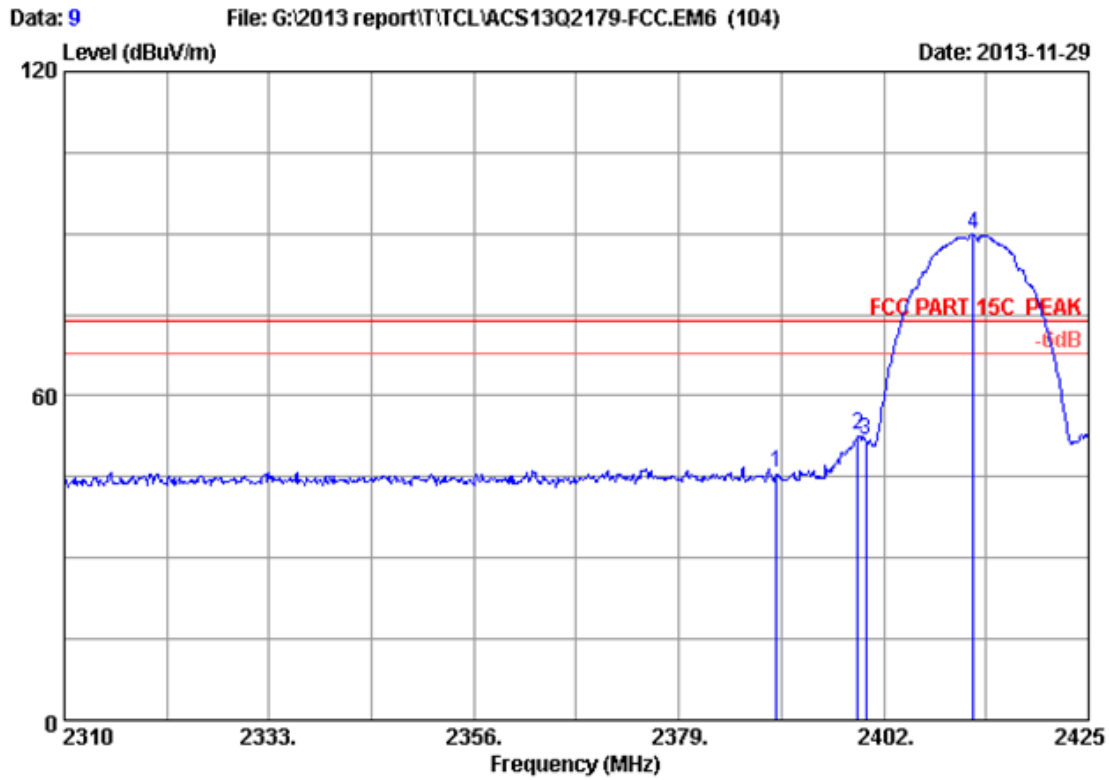
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 8
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2376.011	28.13	5.76	35.70	47.54	45.73	54.00	8.27	Average
2	2390.000	28.16	5.78	35.70	43.97	42.21	54.00	11.79	Average
3	2399.350	28.18	5.80	35.70	66.24	64.52	54.00	-10.52	Average
4	2400.000	28.18	5.80	35.70	66.18	64.46	54.00	-10.46	Average
5	2411.200	28.20	5.81	35.70	106.62	104.93	54.00	-50.93	Average

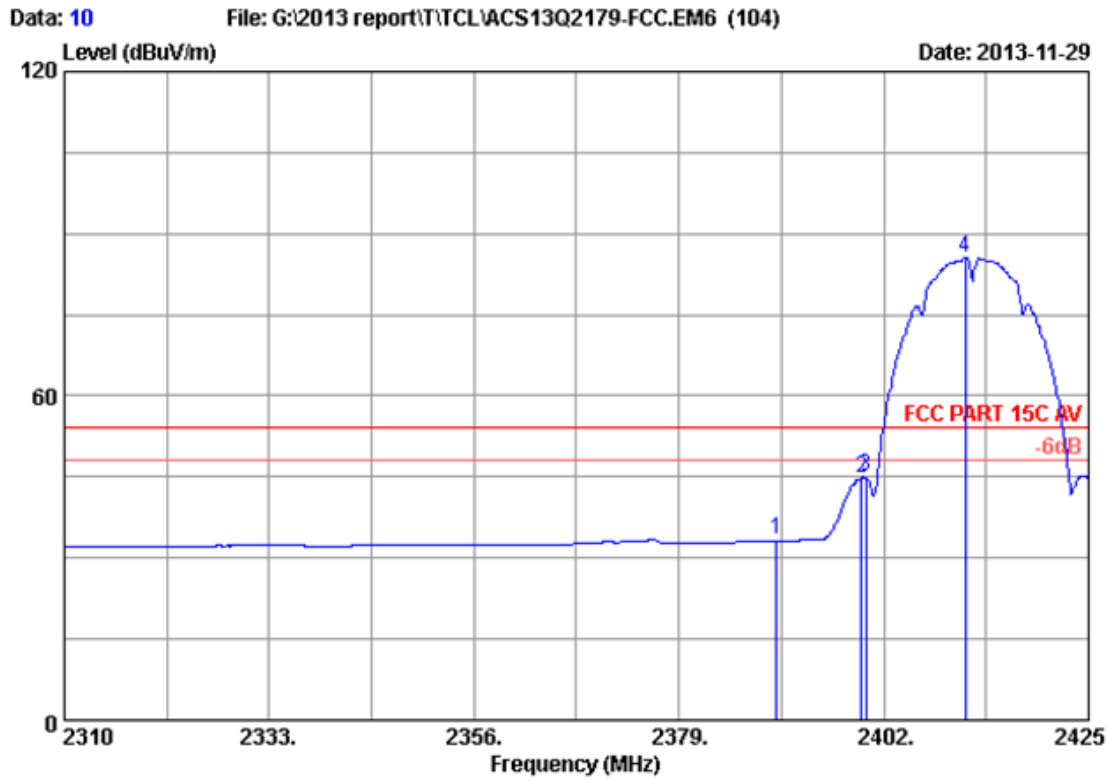
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	47.47	45.71	74.00	28.29	Peak
2	2399.125	28.18	5.80	35.70	54.48	52.76	74.00	21.24	Peak
3	2400.000	28.18	5.80	35.70	53.41	51.69	74.00	22.31	Peak
4	2412.089	28.21	5.81	35.70	91.48	89.80	74.00	-15.80	Peak

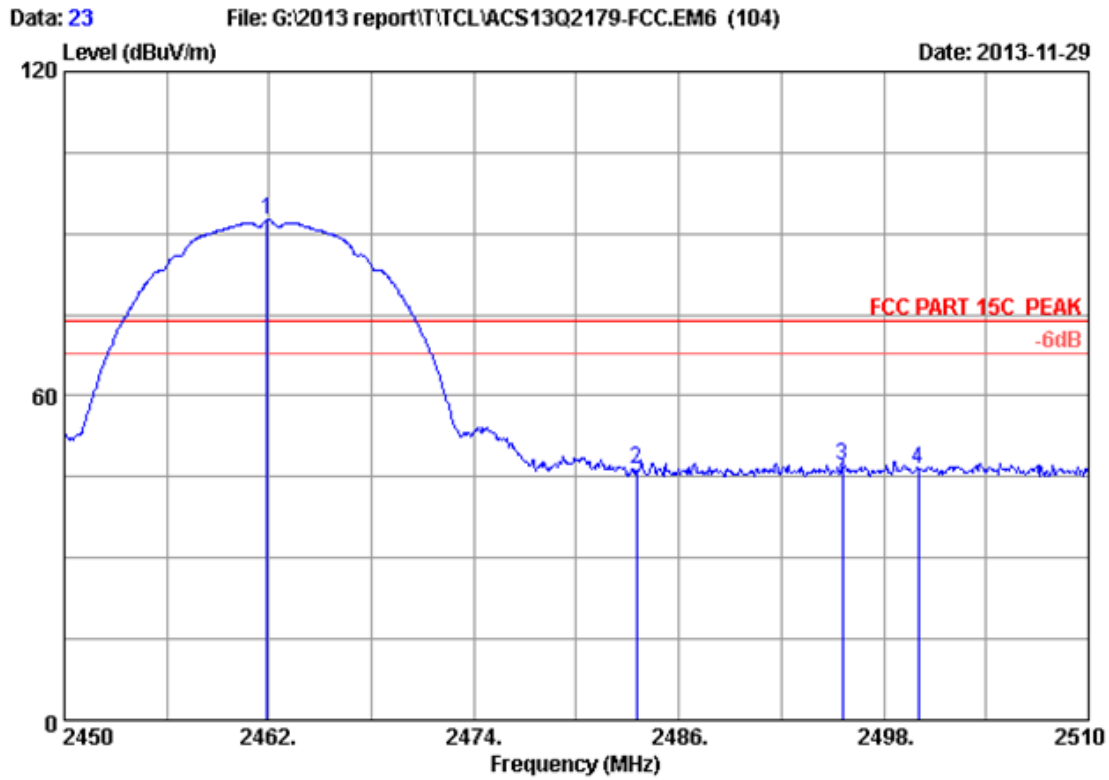
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2412MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	28.16	5.78	35.70	35.28	33.52	54.00	20.48	Average
2	2399.460	28.18	5.80	35.70	46.36	44.64	54.00	9.36	Average
3	2400.000	28.18	5.80	35.70	46.76	45.04	54.00	8.96	Average
4	2411.200	28.20	5.81	35.70	87.27	85.58	54.00	-31.58	Average

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



Site no. : 3m Chamber Data no. : 23
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Kevin_Hu
EUT : WIRELESS USB ADAPTER
Power supply : DC 3.3V
Test mode : IEEE802.11b 2462MHz Tx Mode
MT-WN731NM

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.880	28.32	5.89	35.70	94.06	92.57	74.00	-18.57	Peak
2	2483.500	28.36	5.92	35.70	47.74	46.32	74.00	27.68	Peak
3	2495.600	28.39	5.94	35.70	48.61	47.24	74.00	26.76	Peak
4	2500.000	28.40	5.94	35.70	47.98	46.62	74.00	27.38	Peak

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