FCC PART 15C TEST REPORT FOR CERTIFICATION
On Behalf of

InFocus Corporation

New tab F1

Model No. : F1P

FCC ID: I46-TMF105USA

Prepared for : InFocus Corporation
13190 SW 68th Parkway Suite 200 Portland OR 97223-8368

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-F14023
Date of Test	:	Nov.29~Dec.06, 2013
Date of Report	:	Jan.24, 2014

TABLE OF CONTENTS

TEST REPORT CERTIFICATION

Applicant	:	InFocus Corporation
Manufacturer	:	ANPINDA PRECISION INDUSTRY(HUIZHOU)CO.,LTD
EUT Description	:	New tab F1
FCC ID	:	I46-TMF105USA

(A) MODEL NO. : F1P
(B) SERIAL NO. : N/A
(C) POWER SUPPLY : 100-240V, 50-60Hz
(D) TEST VOLTAGE : DC 5V From Adapter Input AC 120V/60Hz

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. This report contains data that are not covered by the NVLAP accreditation. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC and IC requirements.

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

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

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

Date of Test : Nov.29~ Dec.06, 2013 Report of date: Jan.24, 2014

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

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

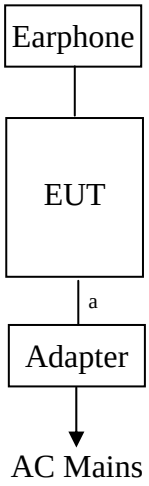
2.1.Description of Device (EUT)

Product Name	:	New tab F1
Model Number	:	F1P
Radio	:	Bluetooth V2.1+EDR; IEEE 802.11b/g/n; GPS
Operation Frequency	:	IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20: 2412MHz—2462MHz Bluetooth: 2402-2480MHz GPS: 1575.42MHz
Channel Number	:	IEEE 802.11b/g, IEEE 802.11n HT20: 11 Channels, Bluetooth V2.1+EDR:79
Modulation Technology	:	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK) Bluetooth V2.1+EDR: GFSK, π/4QPSK, 8-DPSK GPS:BPSK
Antenna Assembly Gain	:	BT: PIFA, 3.5dBi PK Gain WiFi: PIFA, 3.5dBi PK Gain GPS: PIFA, Antenna, 2.1dBi Gain
Applicant	:	InFocus Corporation 13190 SW 68th Parkway Suite 200 Portland OR 97223-8368
Manufacturer	:	ANPINDA PRECISION INDUSTRY(HUIZHOU)CO.,LTD ANPINDA A03 Building, A District, Huizhou Technology Park, Xialiao Village Committees, Longxi Town, Boluo Country, Huizhou City, Guangdong Province.
Power Adapter	:	Manufacturer: InFocus; Model No.:ADS-10BA-06 05010G
USB Cable	:	Shielded, Detachable, 1.2m
Date of Test	:	Nov.29~Dec.06, 2013
Date of Receipt	:	Nov.28, 2013
Sample Type	:	Prototype production

2.2.Tested Supporting System Details

No.	Description	ACS No.	Manufacturer	Model	Serial Number	Approved type
1.	Headphone	ACS-EMC-EP01	OVANN	OV880V	N/A	☐FCC ID ☐BSMI ID
		Cable: Shielded, Undetachabled, 4.0m				

2.3.Block Diagram of connection between EUT and simulators



a: USB Cable

(EUT: New tab F1)

2.4.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
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.			

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)

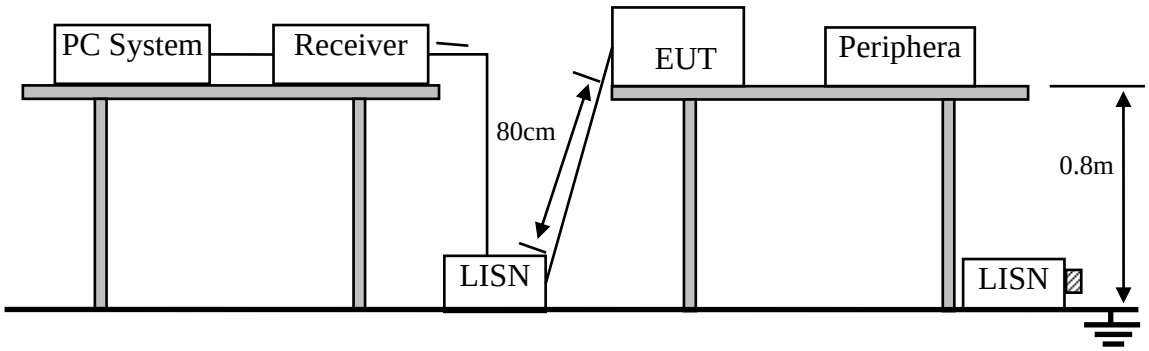
Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.1 dB (150KHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	3.22 dB(30~200MHz, Polarize: H)
	3.23 dB(30~200MHz, Polarize: V)
	3.49 dB(200M~1GHz, Polarize: H)
	3.39 dB(200M~1GHz, Polarize: V)
Uncertainty 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



: 5 Ω Terminator

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.HP Slate 7 (EUT)

Model Number : F1P
Serial Number : N/A

3.5.Operating Condition of EUT

3.5.1.Setup the EUT and simulator as shown as Section 2.4.

3.5.2.Turned on the power of all equipment.

3.5.3.Let the EUT work in test mode (TX Mode) and measure it.

3.6.Test Procedure

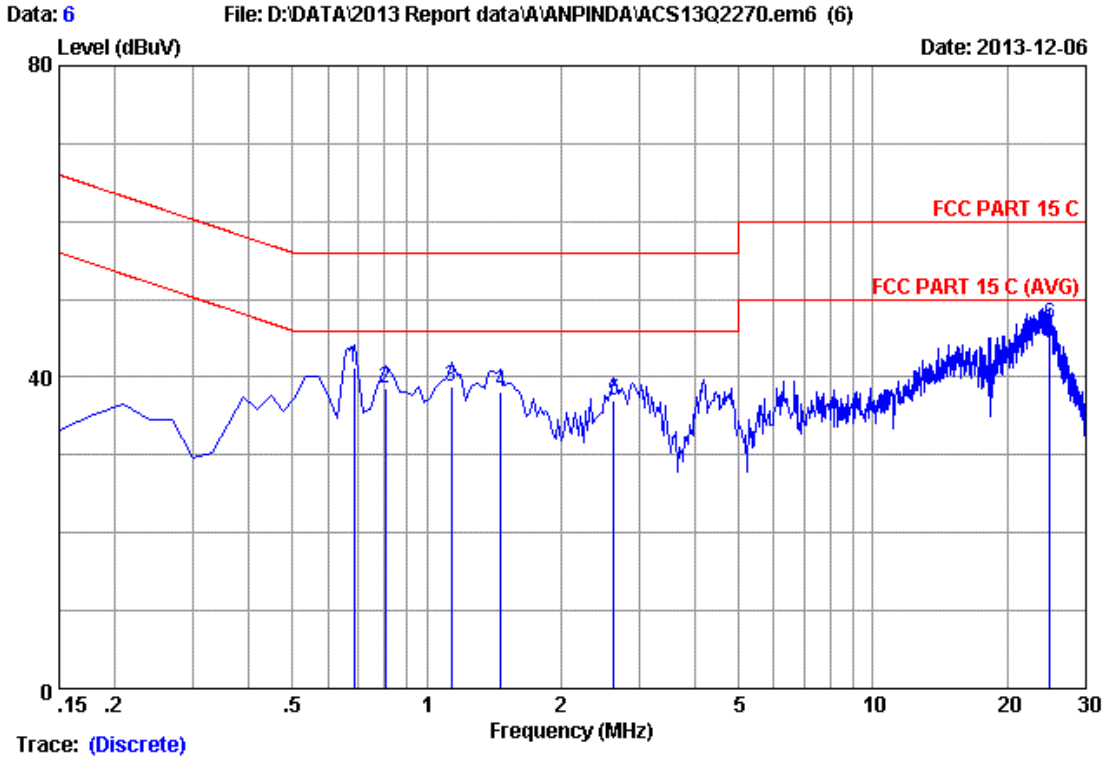
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#3). 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.)

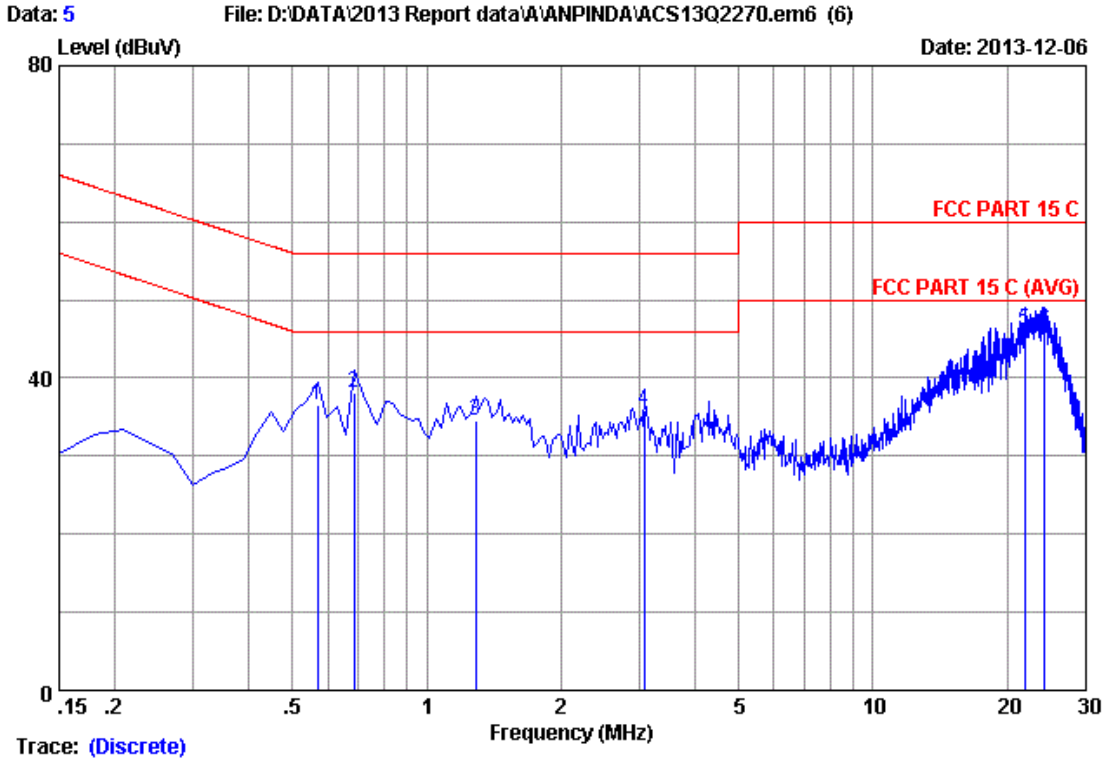


Trace: (Discrete)

Site no :1#conduction Data No :6
Dis./Ant. :** 2013 ESH2-Z5 LINE
Limit :FCC PART 15 C
Env./Ins. :23.1*C/52% Engineer :Leo-Li
EUT :New tab F1 M/N:F1P
Power Rating :DC 5V From Adapter Input AC 120V/60Hz
Test Mode :Tx Mode(WiFi)

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.68730	0.17	0.03	40.99	41.19	56.00	14.81	QP
2	0.80670	0.17	0.03	38.25	38.45	56.00	17.55	QP
3	1.135	0.19	0.03	38.62	38.84	56.00	17.16	QP
4	1.463	0.20	0.03	37.81	38.04	56.00	17.96	QP
5	2.628	0.24	0.05	36.66	36.95	56.00	19.05	QP
6	24.866	2.12	0.16	44.55	46.83	60.00	13.17	QP

Remarks: 1.Emission Level=LISN 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.



Site no :1#conduction Data No :5
Dis./Ant. :** 2013 ESH2-Z5 NEUTRAL
Limit :FCC PART 15 C
Env./Ins. :23.1*C/52% Engineer :Leo-Li
EUT :New tab F1 M/N:F1P
Power Rating :DC 5V From Adapter Input AC 120V/60Hz
Test Mode :Tx Mode(WiFi)

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.56790	0.24	0.02	36.24	36.50	56.00	19.50	QP
2	0.68730	0.27	0.03	37.72	38.02	56.00	17.98	QP
3	1.284	0.26	0.03	34.28	34.57	56.00	21.43	QP
4	3.075	0.29	0.05	35.50	35.84	56.00	20.16	QP
5	21.851	1.33	0.15	44.58	46.06	60.00	13.94	QP
6	24.209	1.35	0.16	44.53	46.04	60.00	13.96	QP

Remarks: 1.Emission Level=LISN 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 MEASUREMENT

4.1.Test Equipment

Frequency rang: 30~1000MHz

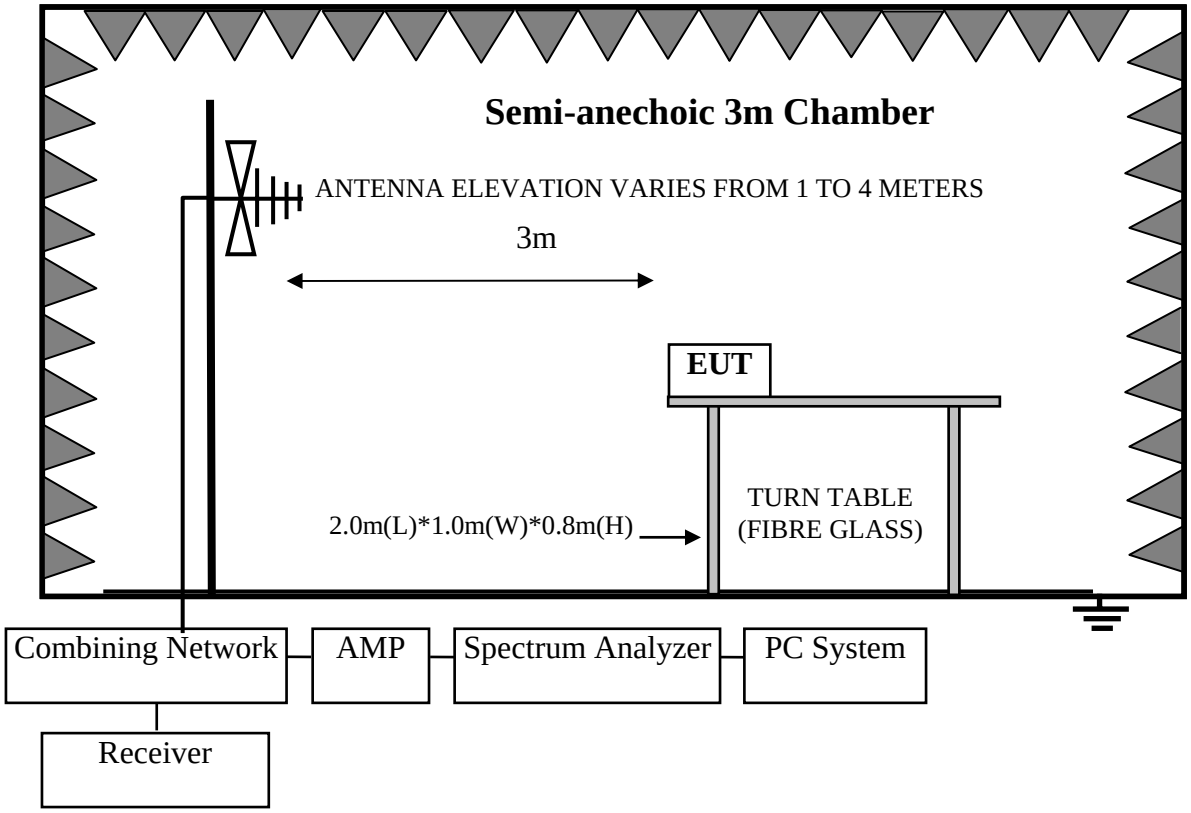
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	3#Chamber	AUDIX	N/A	N/A	Nov.24, 13	1 Year
2	EMI Spectrum	Agilent	E4407B	MY41440292	May.08, 13	1 Year
3	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	May.08, 13	1 Year
4	Amplifier	HP	8447D	2648A04738	May.08, 13	1 Year
5	Bilog 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

Frequency rang: above 1GHz~25GHz

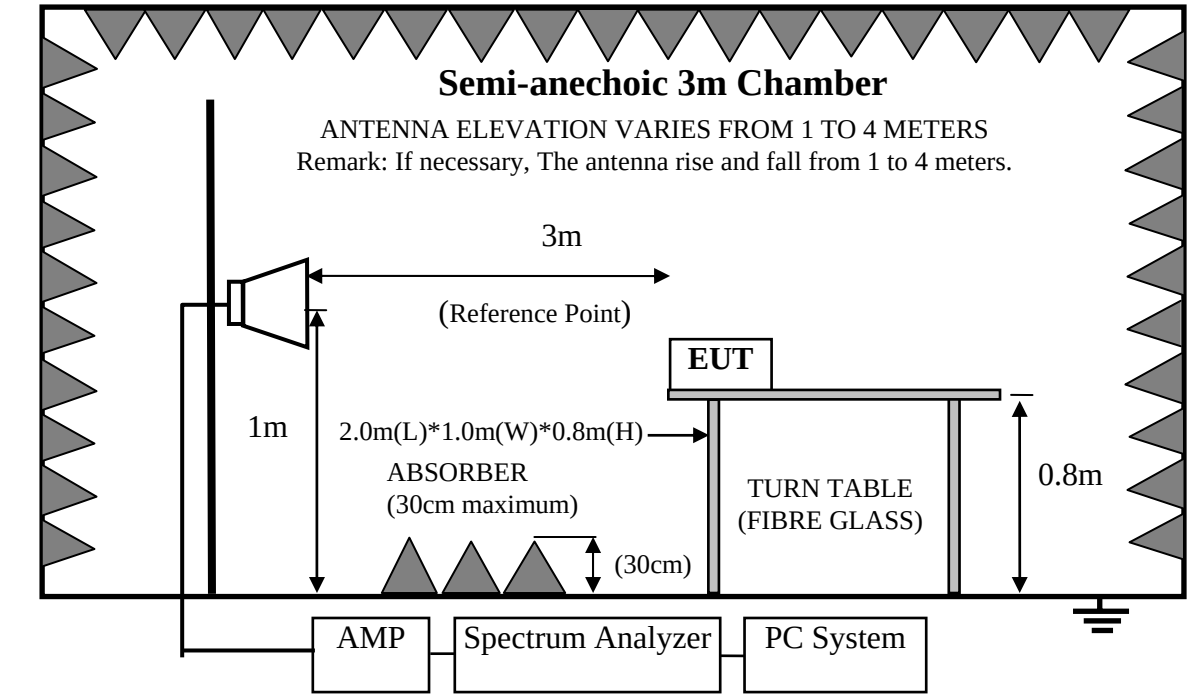
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4407B	MY41440292	May.08, 13	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	May.28, 13	1 Year
3	Amplifier	Agilent	8449B	3008A00863	May.08, 13	1 Year
4	RF Cable	Hubersuhner	SUCOFLEX106	77980/6	May.08, 13	1 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 above 1GHz~25GHz



4.3.Radiated Emission Limit

4.3.1.15.209 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 3.5.

4.5.Operating Condition of EUT

Same as Conducted Emission test that is listed in Section 3.6. 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.

The EUT was tested at X.Y.Z position and found the worst case position reported in the report.

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 10^{th} harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25 GHz, So the radiated emissions from 18GHz to 25GHz were not record.

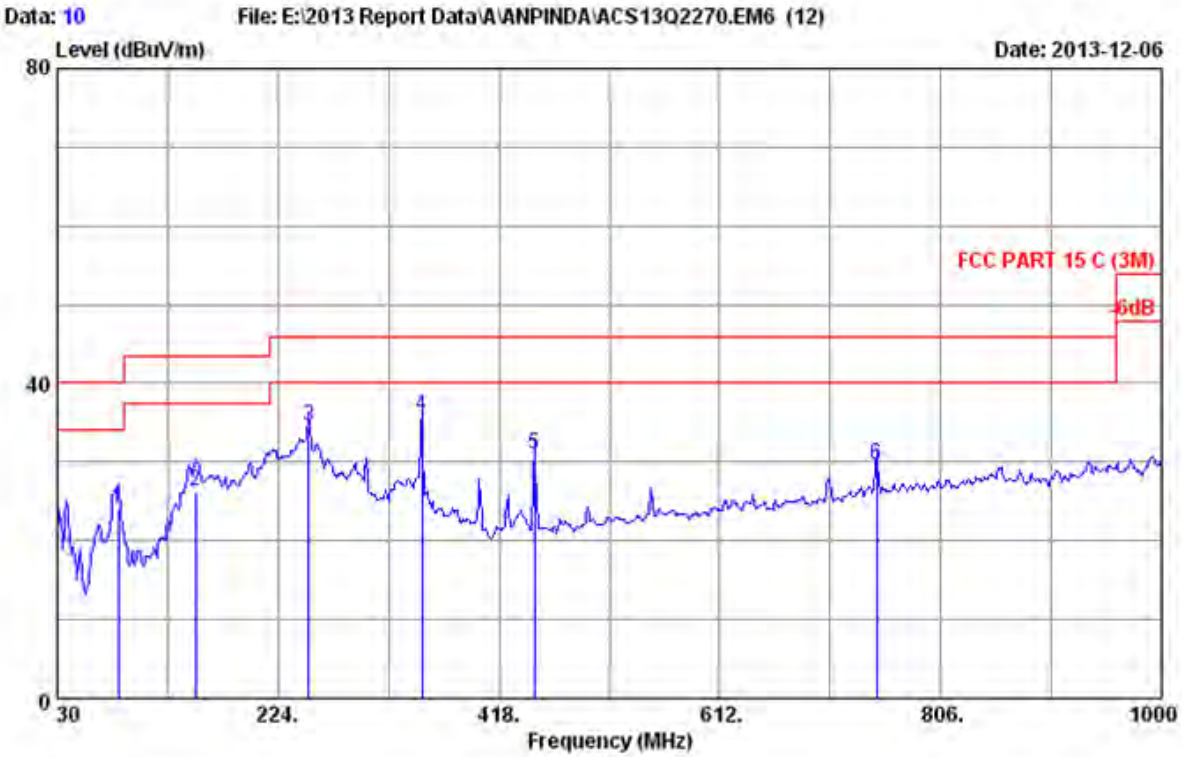
4.7. Radiated Emission Test Results

PASS.

All the emissions from 30MHz to 25 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.

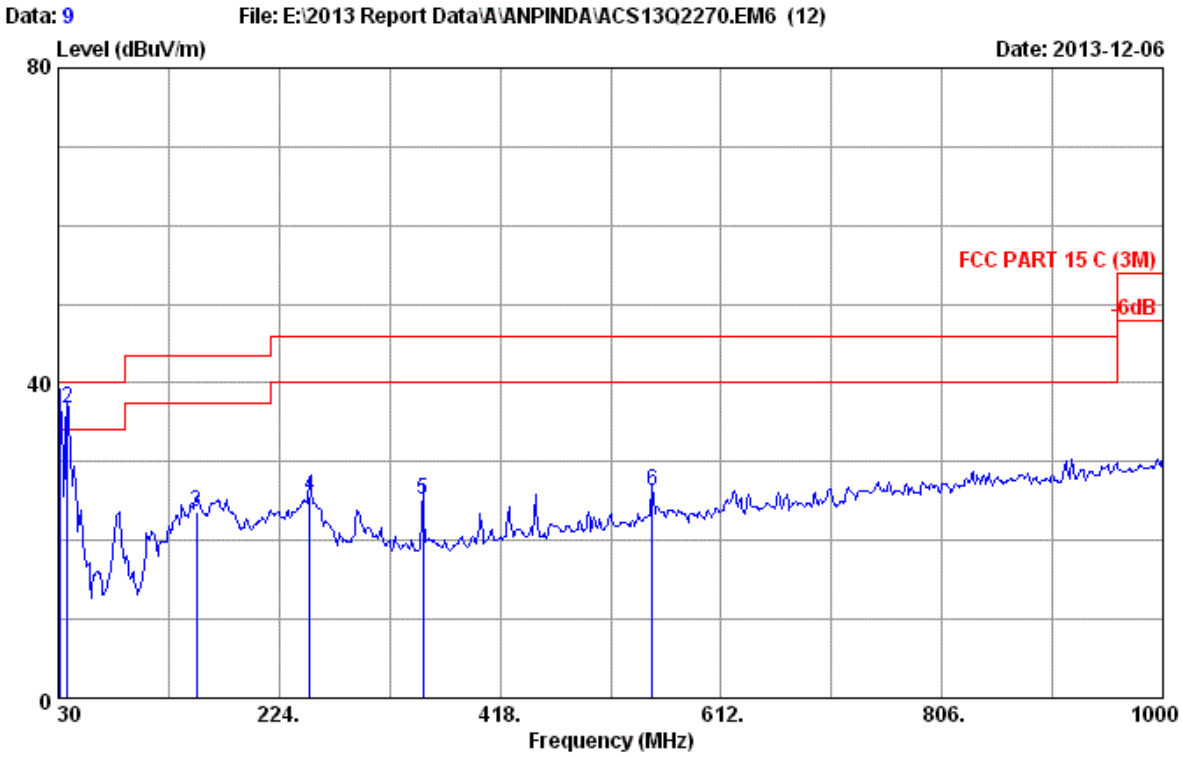
Frequency: 30MHz~1GHz



Site no. : 3m Chamber Data no. : 10
Dis. / Ant. : 3m 2013 CBL6111C 2598 Ant. pol. : HORIZONTAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24°C/65% Engineer : Leo-Li
EUT : New tab F1 M/N:F1P
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : Tx Mode(WiFi)

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	83.350	8.44	1.34	14.32	24.10	40.00	15.90	QP
2	151.250	11.74	1.60	12.86	26.20	43.50	17.30	QP
3	251.160	12.82	1.98	19.63	34.43	46.00	11.57	QP
4	350.100	15.10	2.32	18.40	35.82	46.00	10.18	QP
5	449.040	17.08	2.60	11.25	30.93	46.00	15.07	QP
6	749.740	22.00	3.47	4.16	29.63	46.00	16.37	QP

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

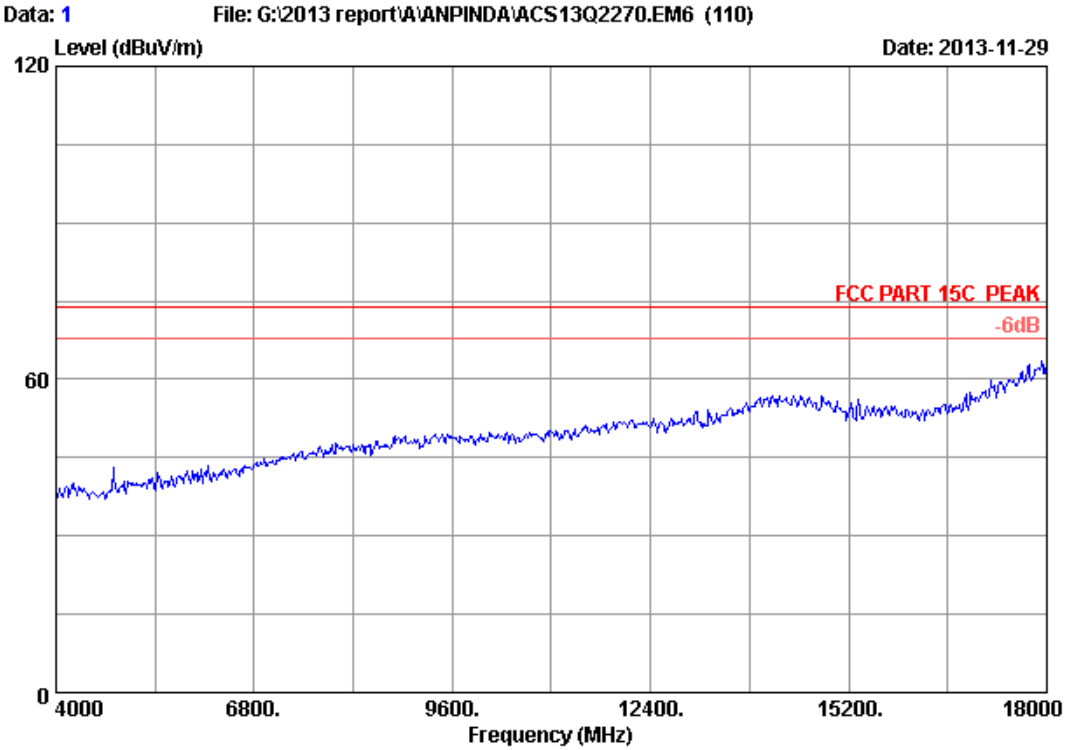


Site no. : 3m Chamber Data no. : 9
Dis. / Ant. : 3m 2013 CBL6111C 2598 Ant. pol. : VERTICAL
Limit : FCC PART 15 C (3M)
Env. / Ins. : 24*C/65% Engineer : Leo-Li
EUT : New tab F1 M/N:F1P
Power rating : DC 5V From Adapter Input AC 120V/60Hz
Test Mode : Tx Mode(WiFi)

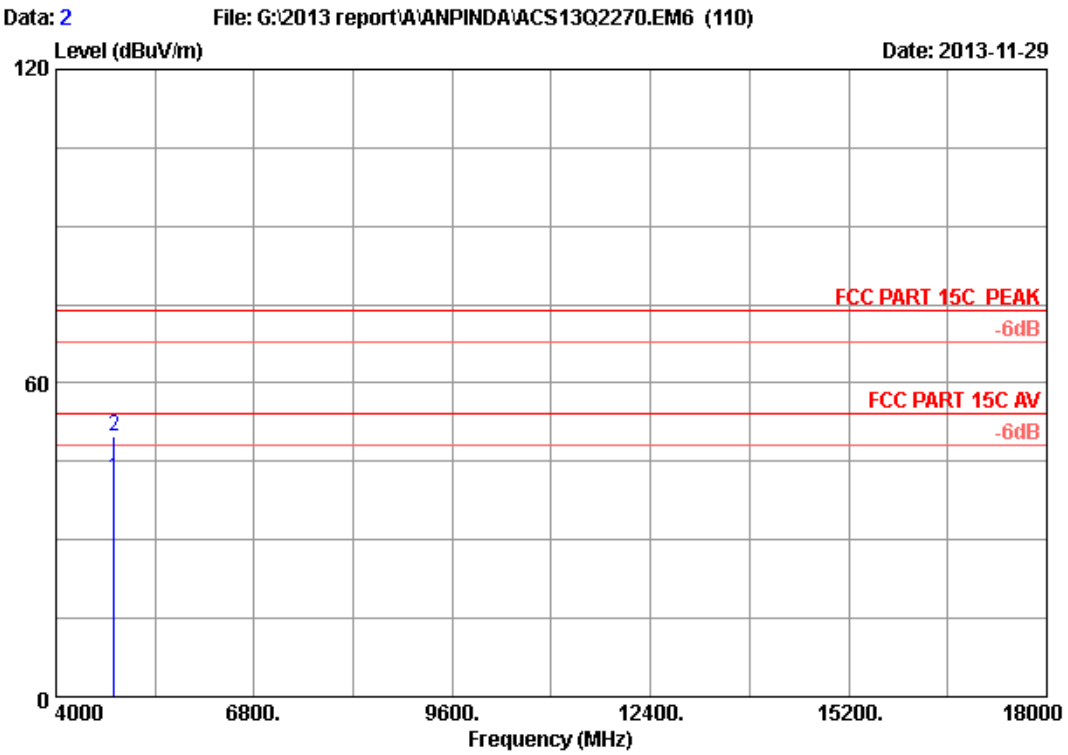
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	31.940	18.93	0.86	16.83	36.62	40.00	3.38	QP
2	37.760	15.44	0.97	20.35	36.76	40.00	3.24	QP
3	151.250	11.74	1.60	10.26	23.60	43.50	19.90	QP
4	251.160	12.82	1.98	10.90	25.70	46.00	20.30	QP
5	350.100	15.10	2.32	7.76	25.18	46.00	20.82	QP
6	551.860	19.31	2.90	3.98	26.19	46.00	19.81	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~18GHz



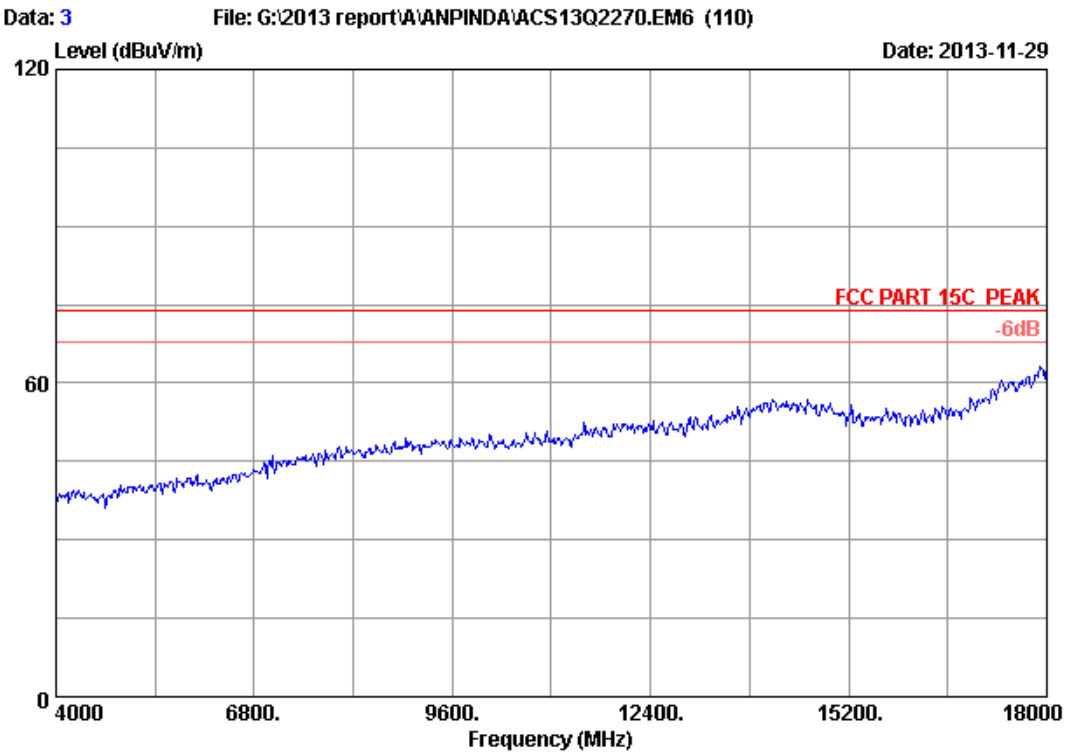

```
Site no.      : RF Chamber              Data no.   : 1
Dis. / Ant.   : 3m   2013 3115 (4580)   Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b 2412MHz Tx Mode
M/N           : F1P
```



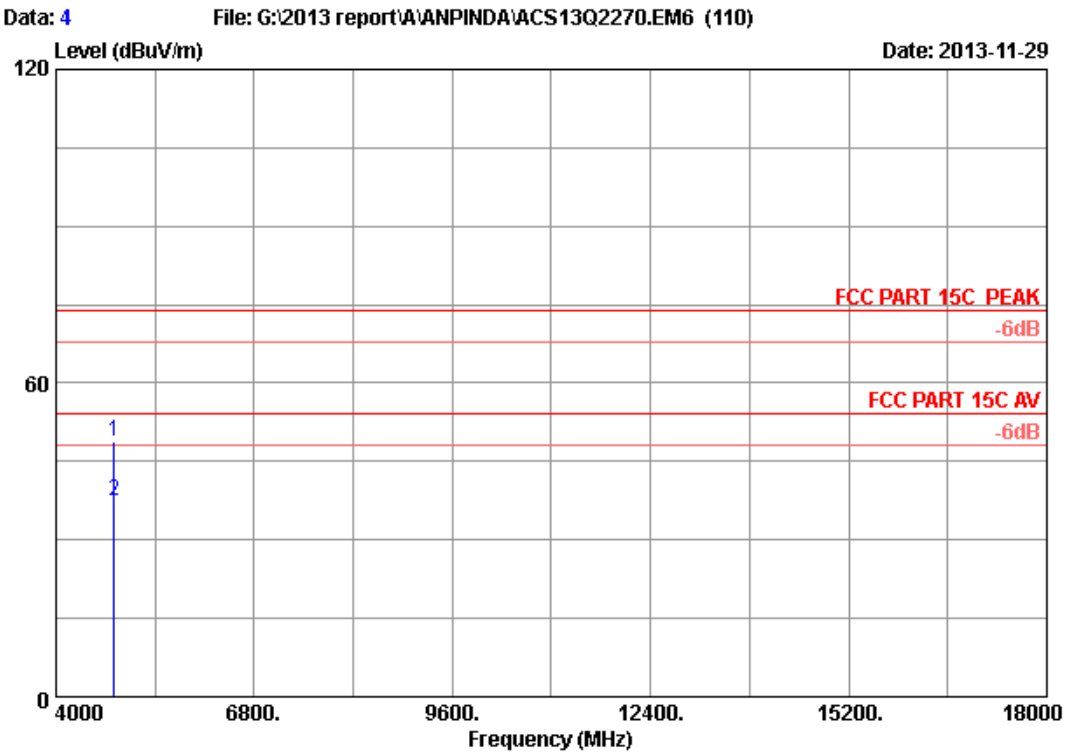
Site no. : RF Chamber Data no. : 2
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	35.96	41.72	54.00	12.28	Average
2	4824.000	32.88	8.58	35.70	44.02	49.78	74.00	24.22	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.



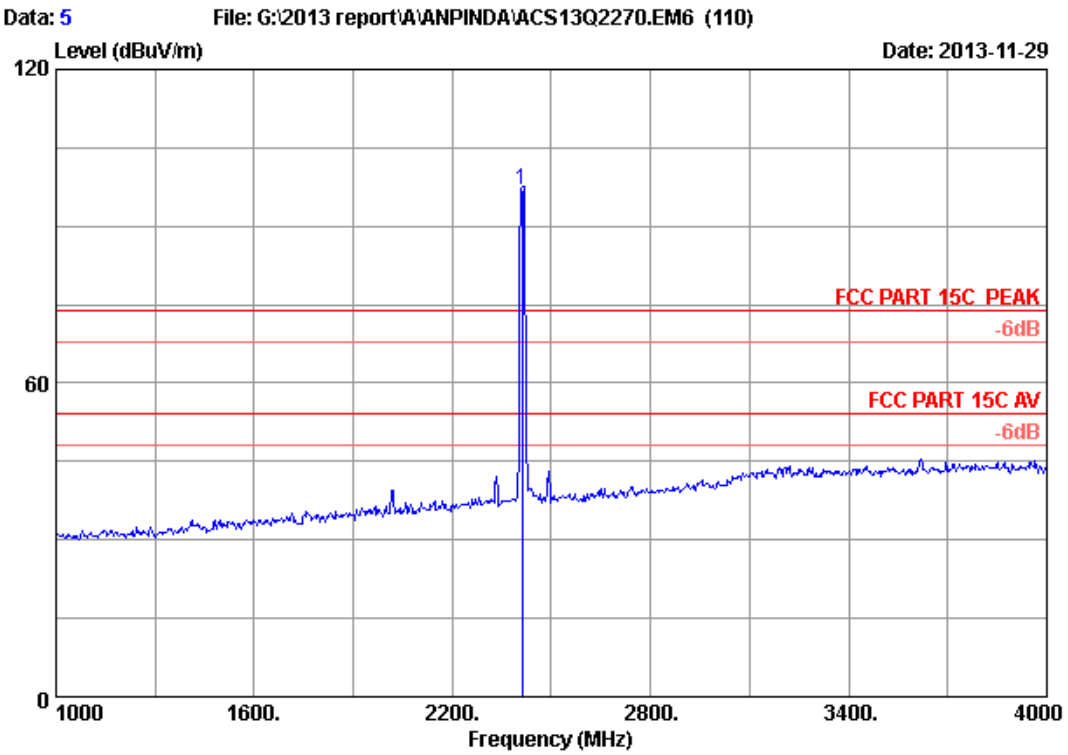

```
Site no.      : RF Chamber                Data no.   : 3
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b 2412MHz Tx Mode
M/N           : F1P
```



Site no. : RF Chamber Data no. : 4
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	42.97	48.73	74.00	25.27	Peak
2	4824.000	32.88	8.58	35.70	31.51	37.27	54.00	16.73	Average

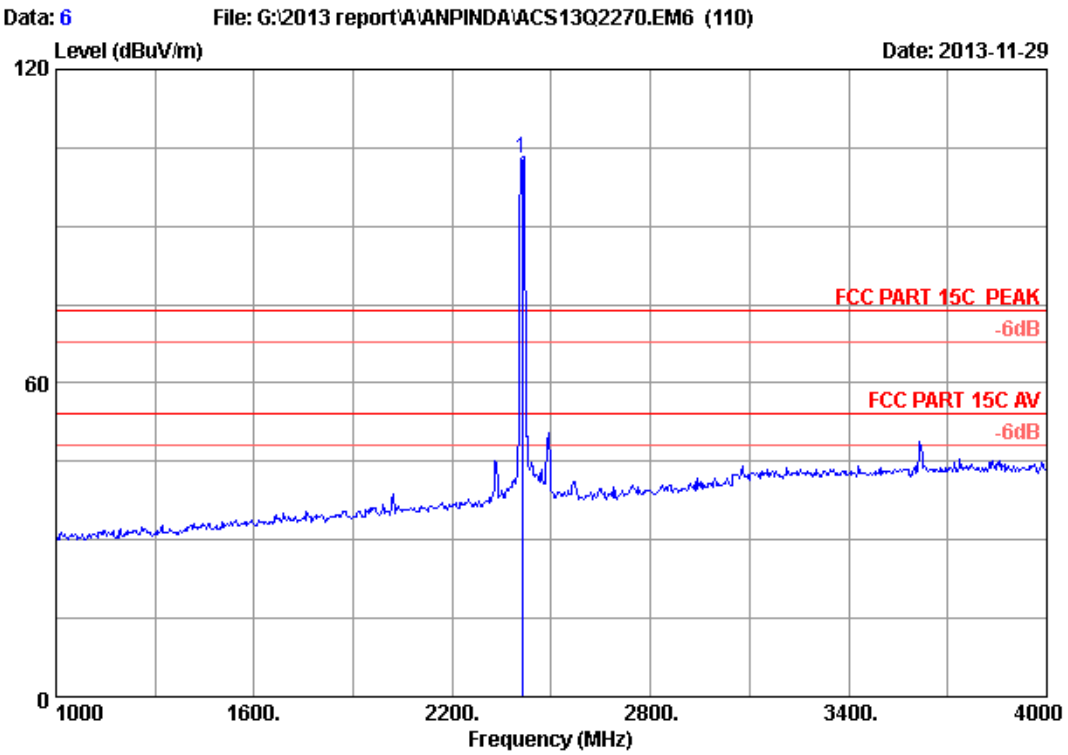
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 5
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	98.63	96.95	74.00	-22.95	Peak

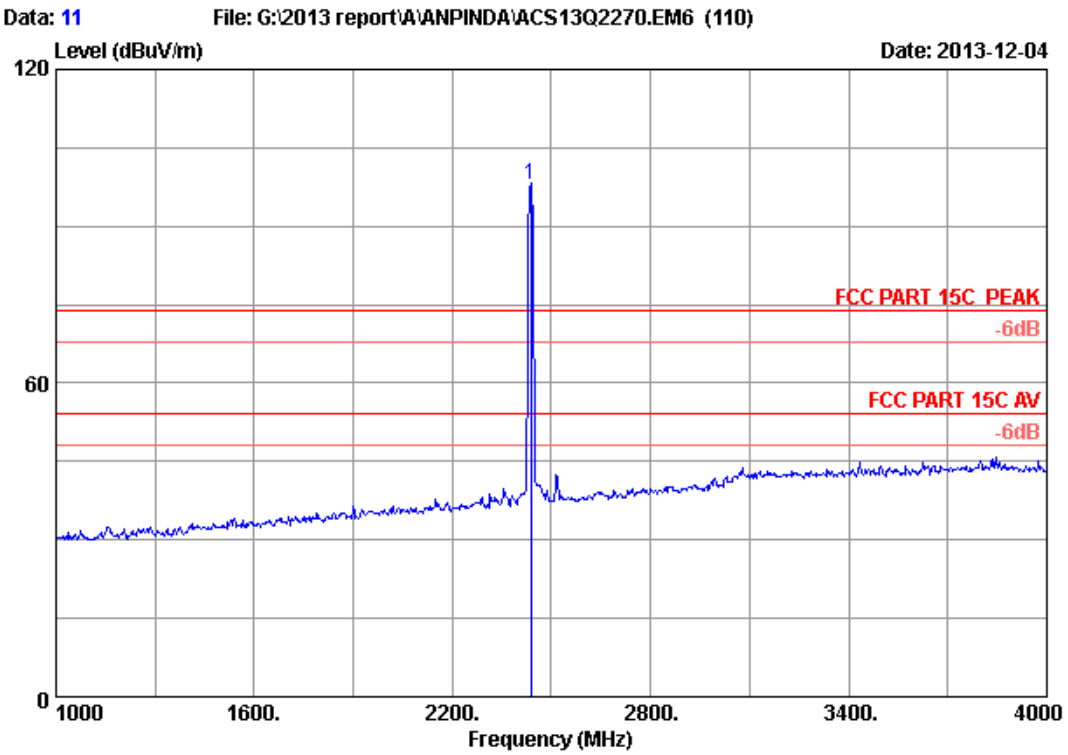
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 6
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	104.69	103.01	74.00	-29.01	Peak

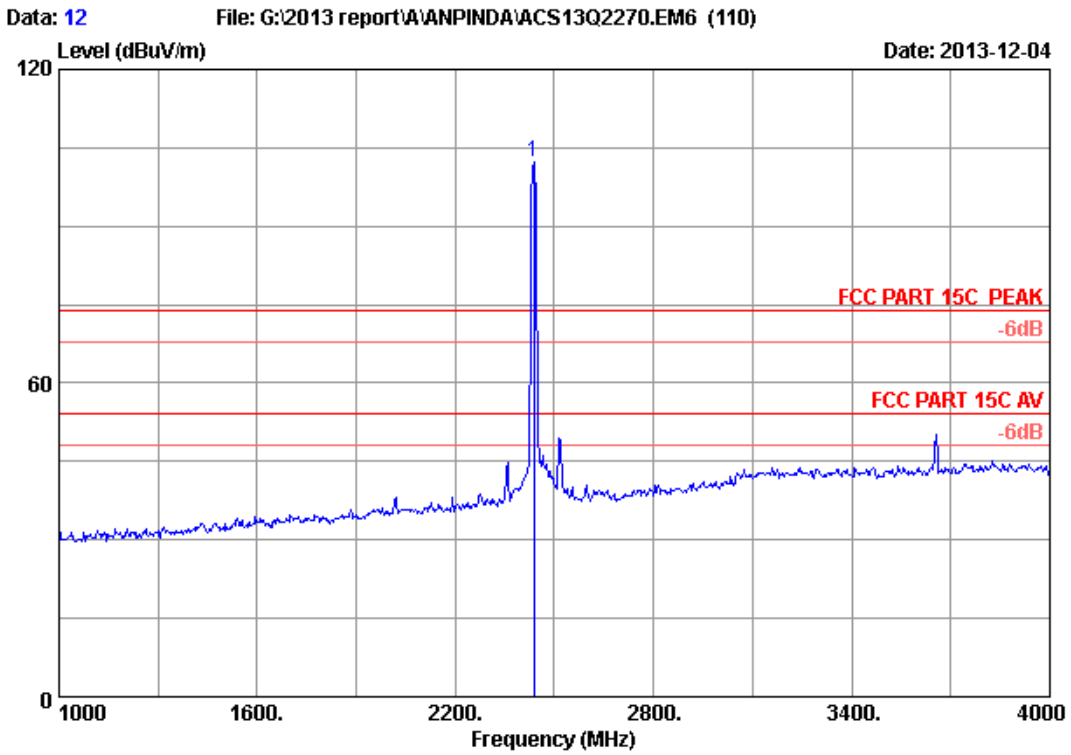
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 11
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2437MHz Tx Mode
M/N : F1P

	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	99.66	98.07	74.00	-24.07	Peak

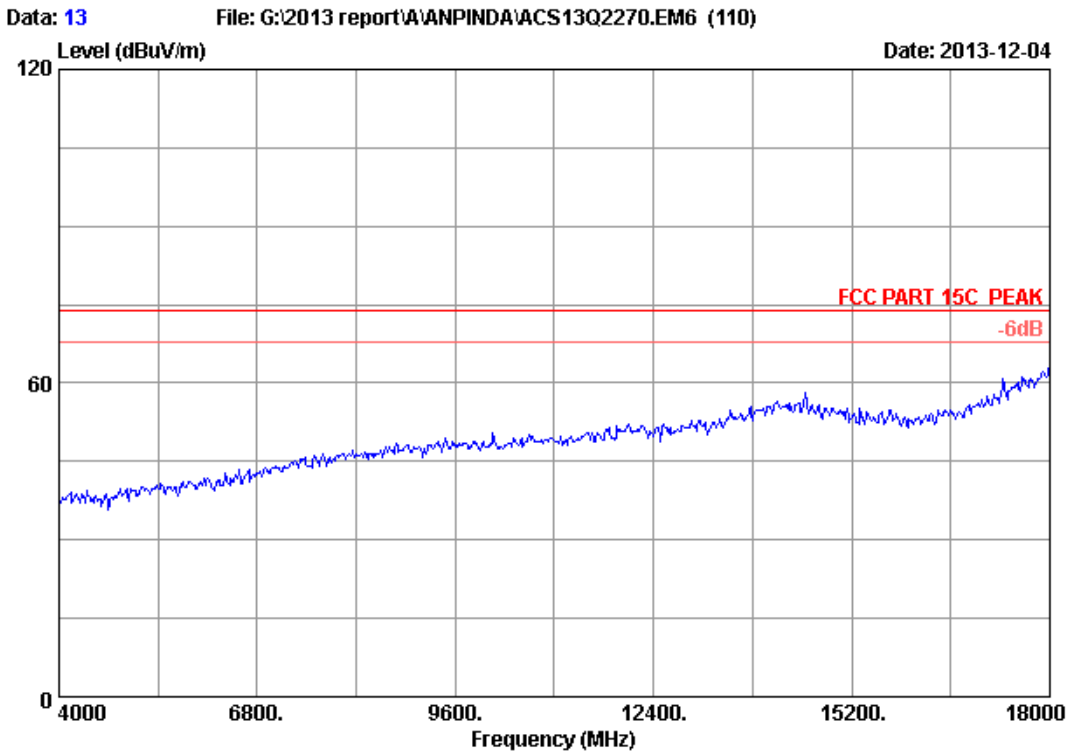
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



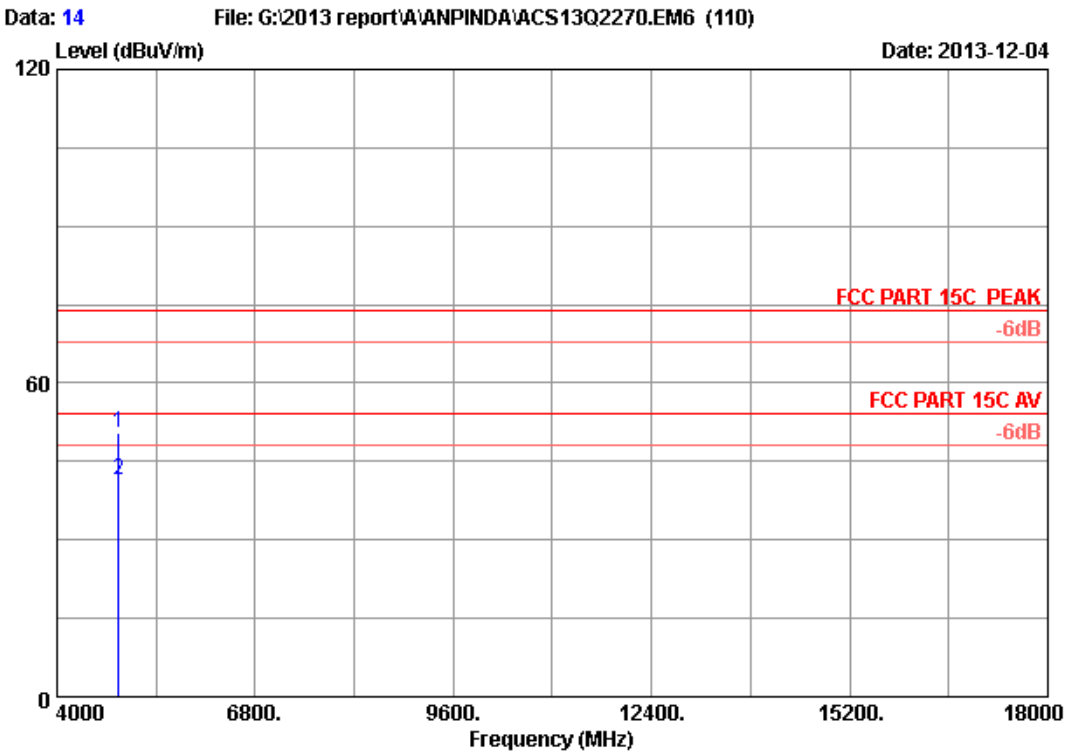
Site no. : RF Chamber Data no. : 12
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2437MHz Tx Mode
M/N : F1P

	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	103.87	102.28	74.00	-28.28	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.



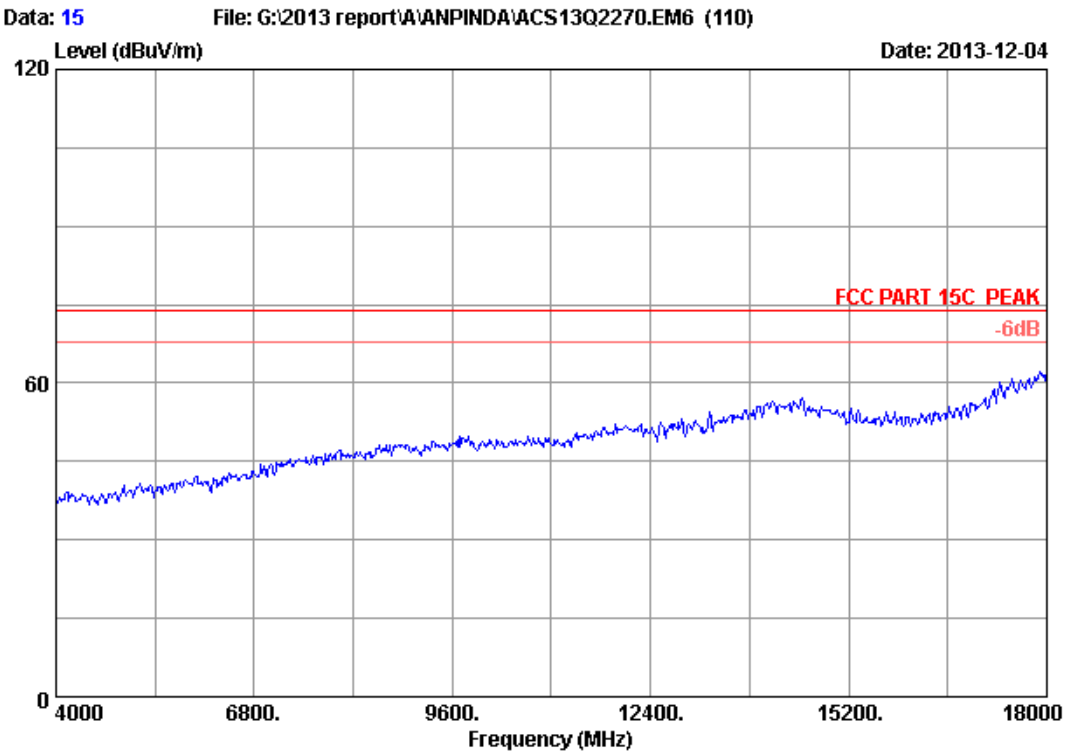

```
Site no.      : RF Chamber                Data no.   : 13
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b 2437MHz Tx Mode
M/N           : F1P
```



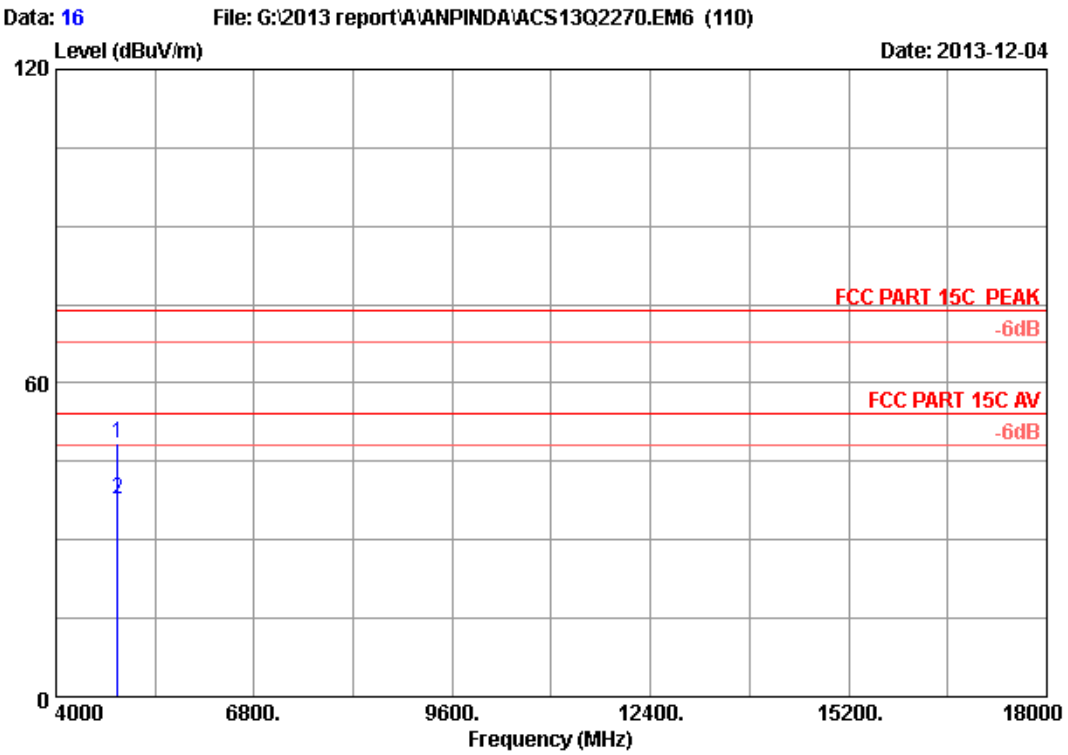
Site no. : RF Chamber Data no. : 14
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2437MHz Tx Mode
M/N : F1P

	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	44.70	50.60	74.00	23.40	Peak
2	4874.000	32.97	8.63	35.70	35.63	41.53	54.00	12.47	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.



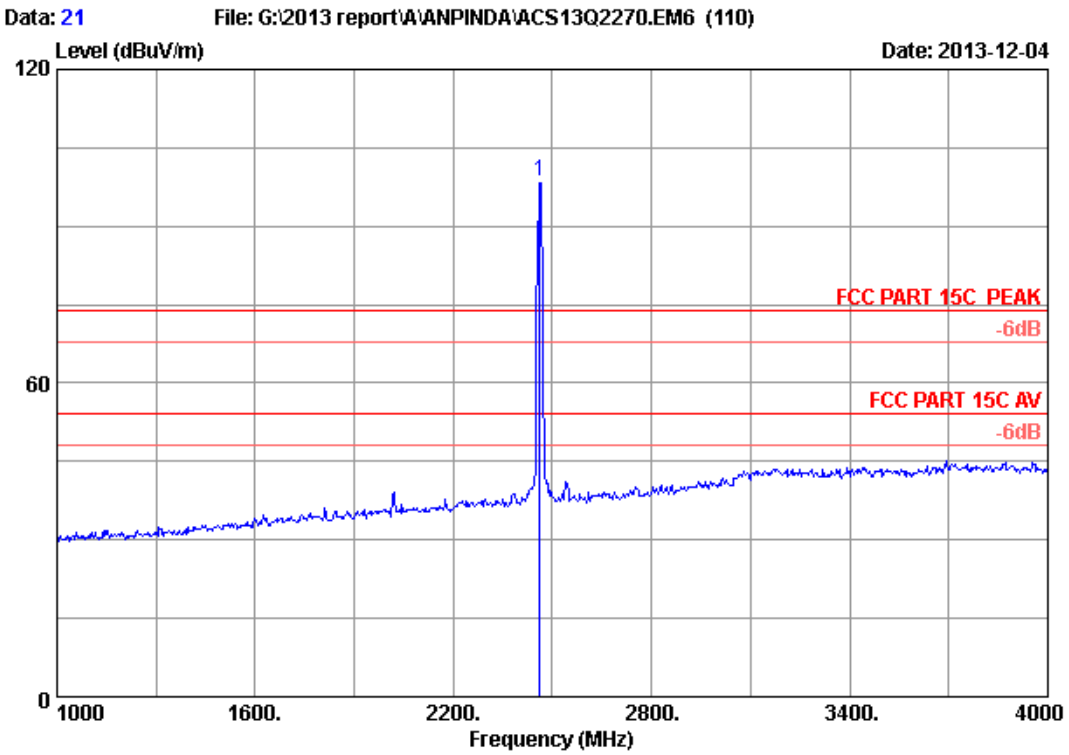

```
Site no.      : RF Chamber                Data no.   : 15
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b 2437MHz Tx Mode
M/N           : F1P
```



Site no. : RF Chamber Data no. : 16
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2437MHz Tx Mode
M/N : F1P

	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	42.64	48.54	74.00	25.46	Peak
2	4874.000	32.97	8.63	35.70	31.96	37.86	54.00	16.14	Average

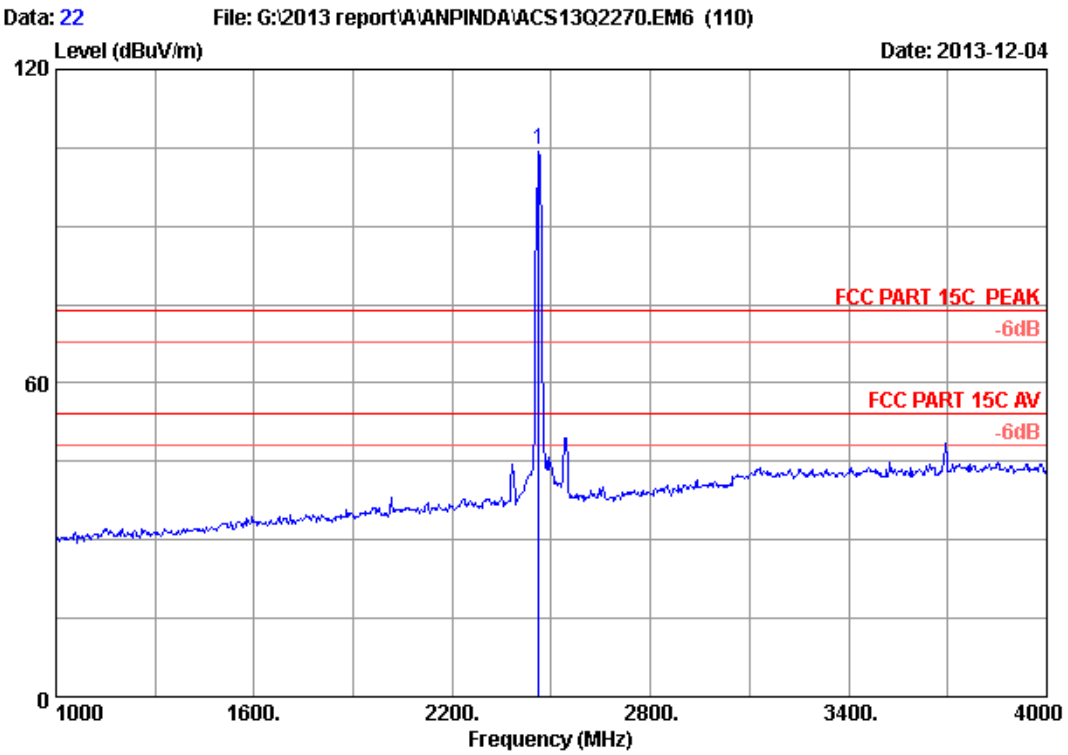
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 21
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	100.05	98.56	74.00	-24.56	Peak

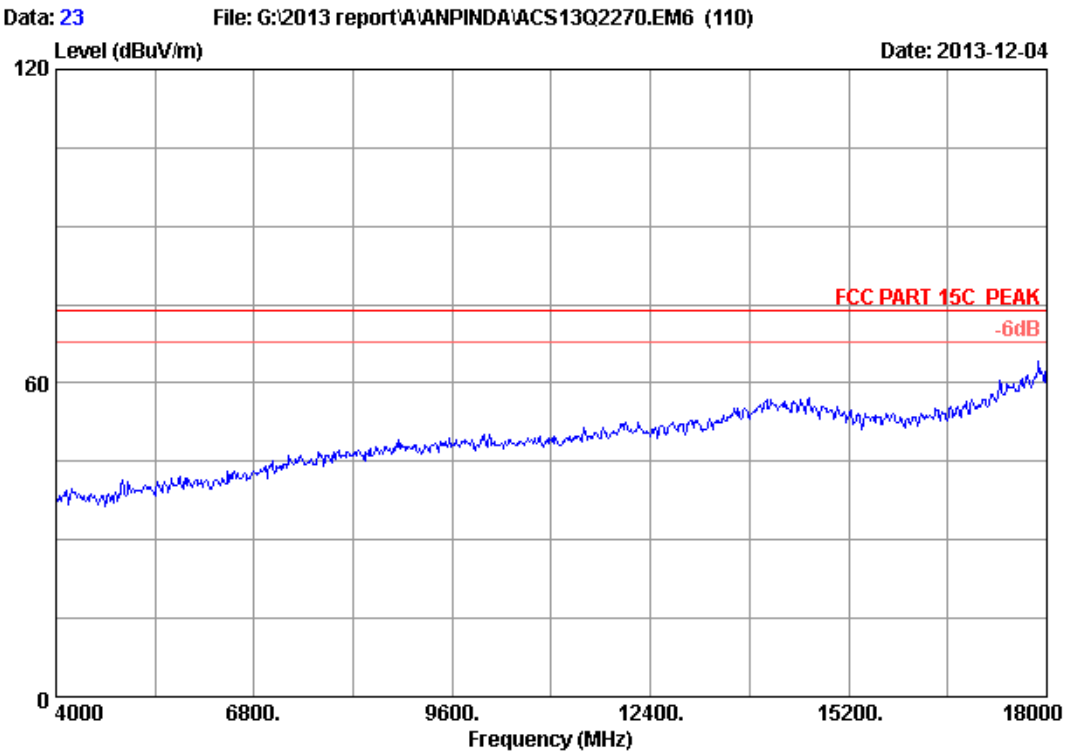
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



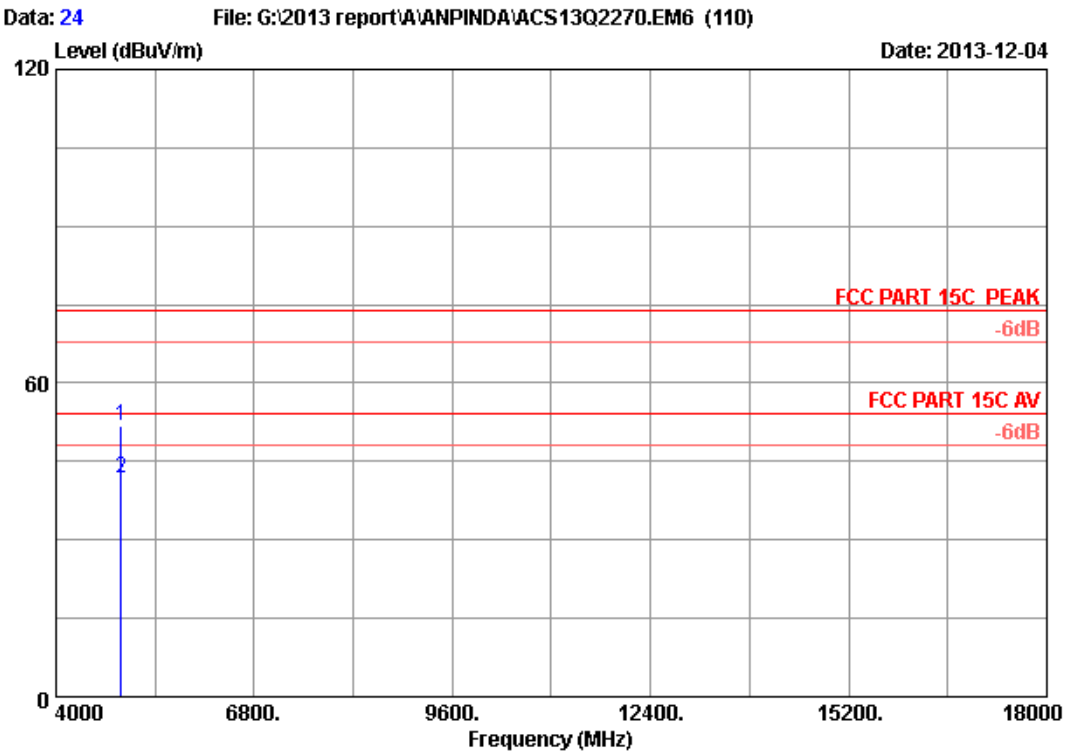
Site no. : RF Chamber Data no. : 22
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	105.96	104.47	74.00	-30.47	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.



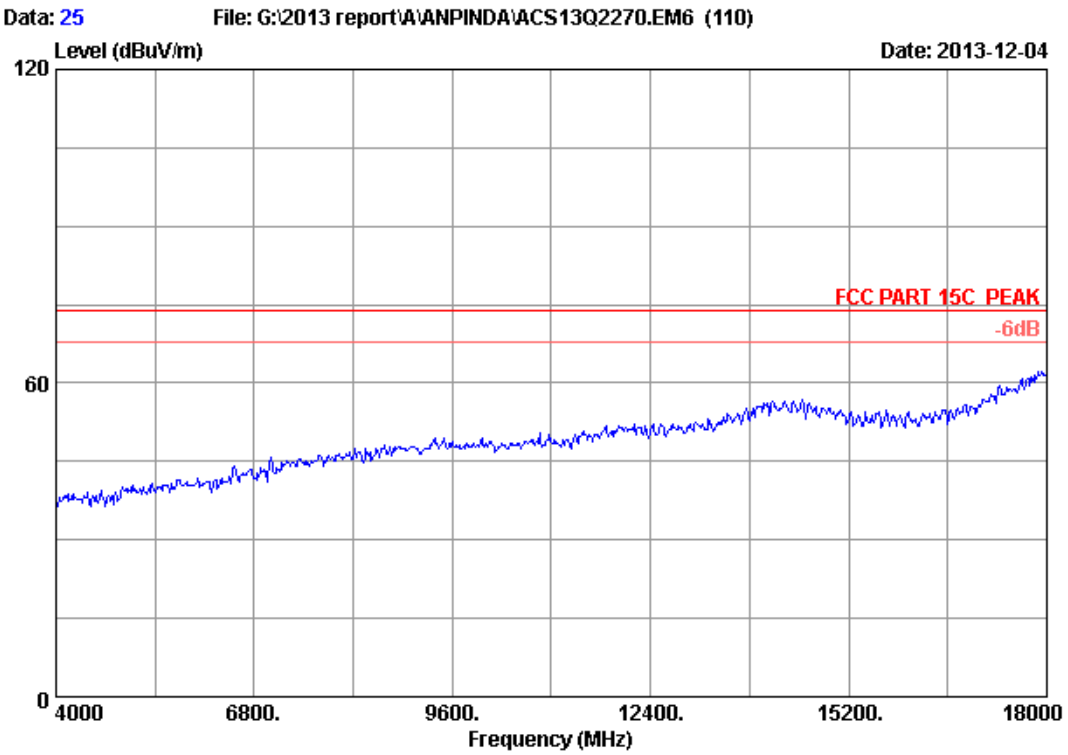

```
Site no.      : RF Chamber                Data no.   : 23
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b 2462MHz Tx Mode
M/N           : F1P
```



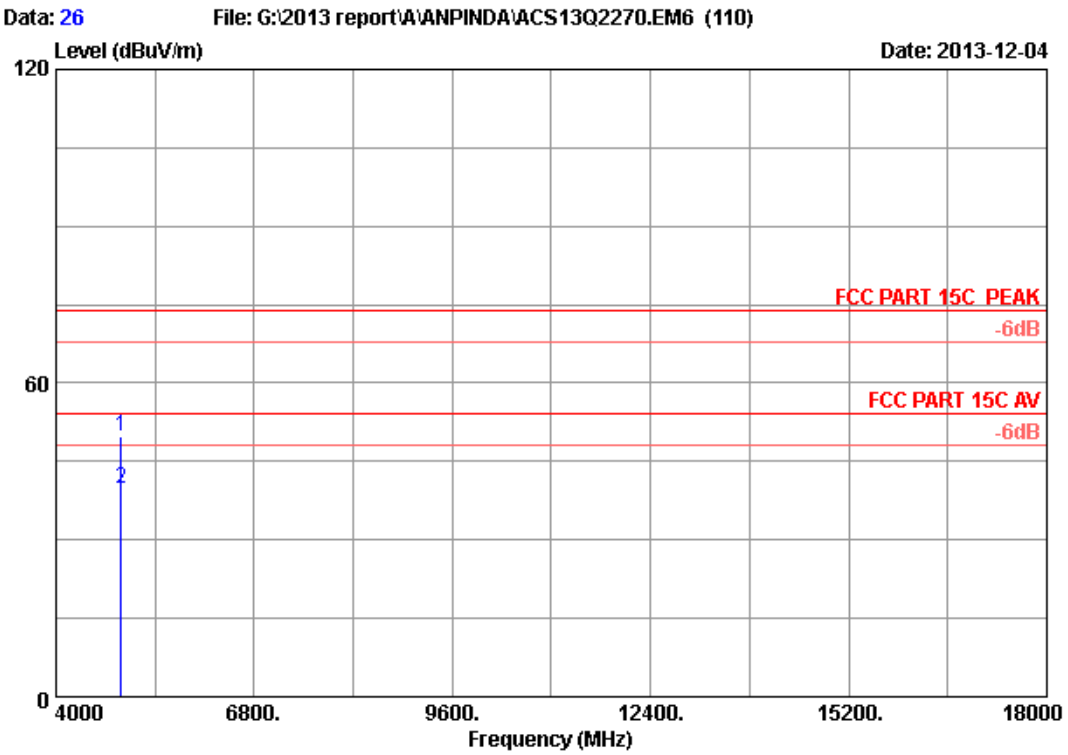
Site no. : RF Chamber Data no. : 24
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	45.69	51.74	74.00	22.26	Peak
2	4924.000	33.06	8.69	35.70	35.62	41.67	54.00	12.33	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.



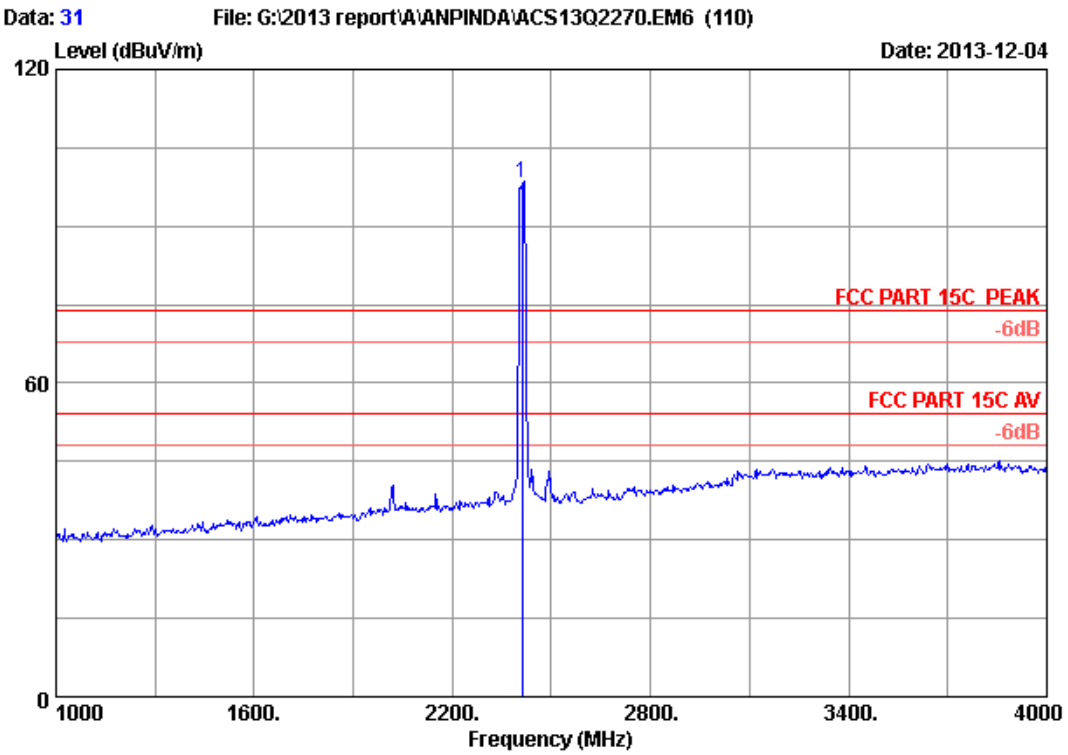

```
Site no.      : RF Chamber                Data no.   : 25
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11b 2462MHz Tx Mode
M/N           : F1P
```



Site no. : RF Chamber Data no. : 26
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	43.69	49.74	74.00	24.26	Peak
2	4924.000	33.06	8.69	35.70	33.69	39.74	54.00	14.26	Average

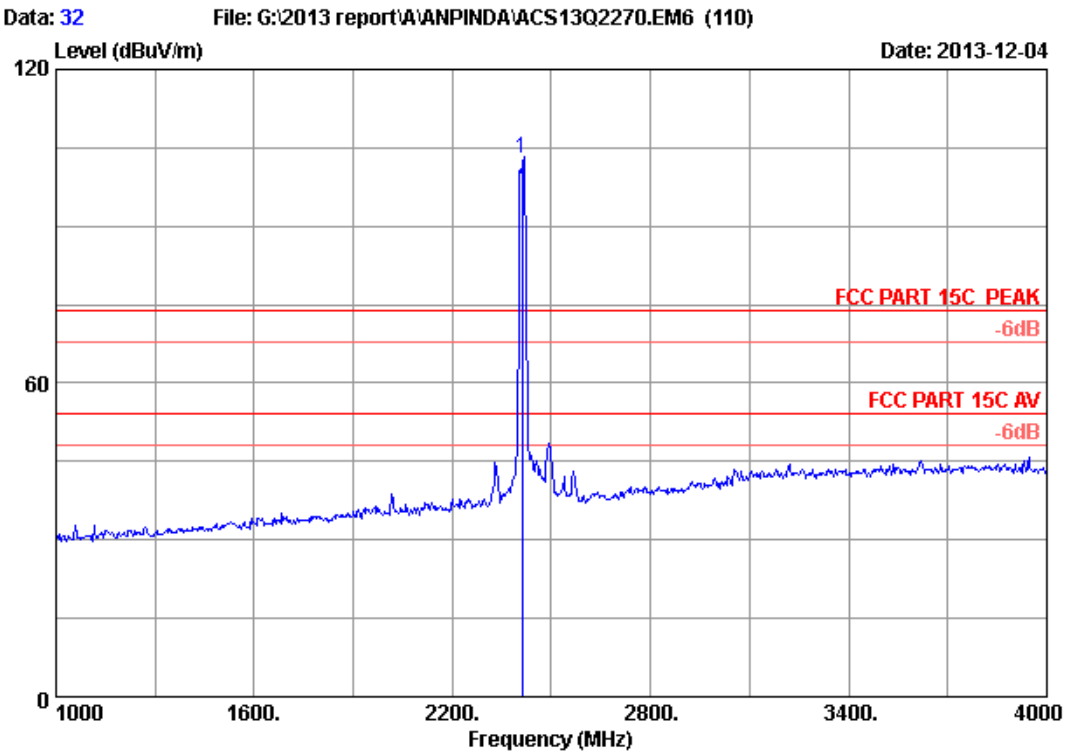
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 31
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	99.83	98.15	74.00	-24.15	Peak

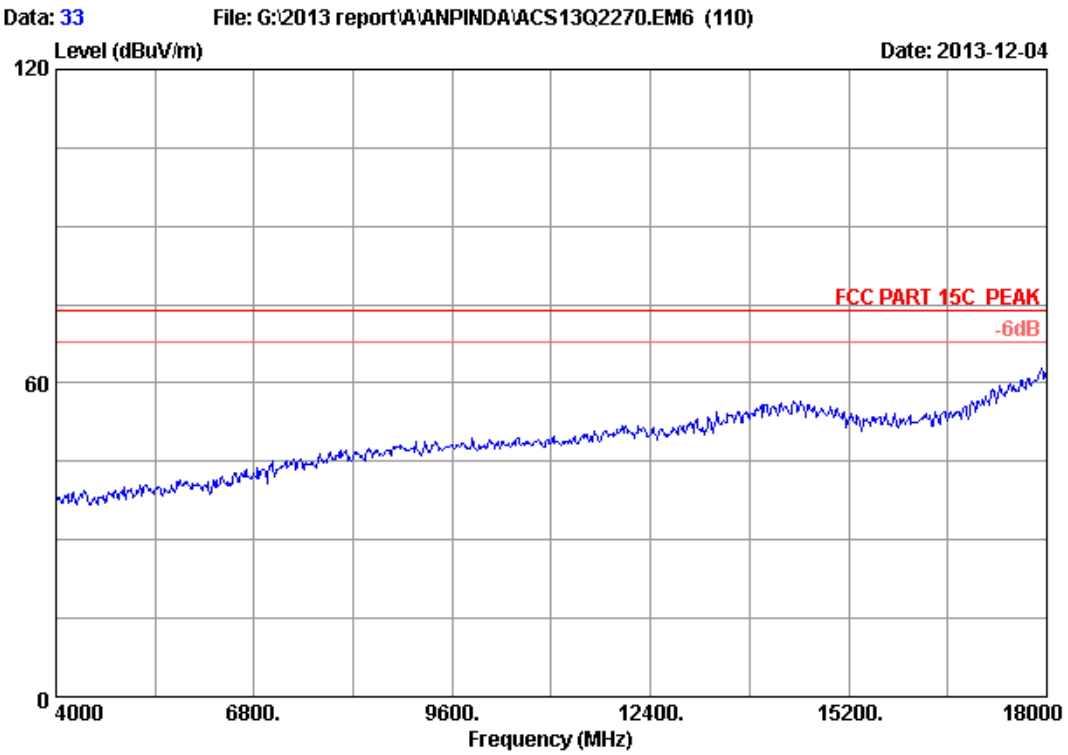
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



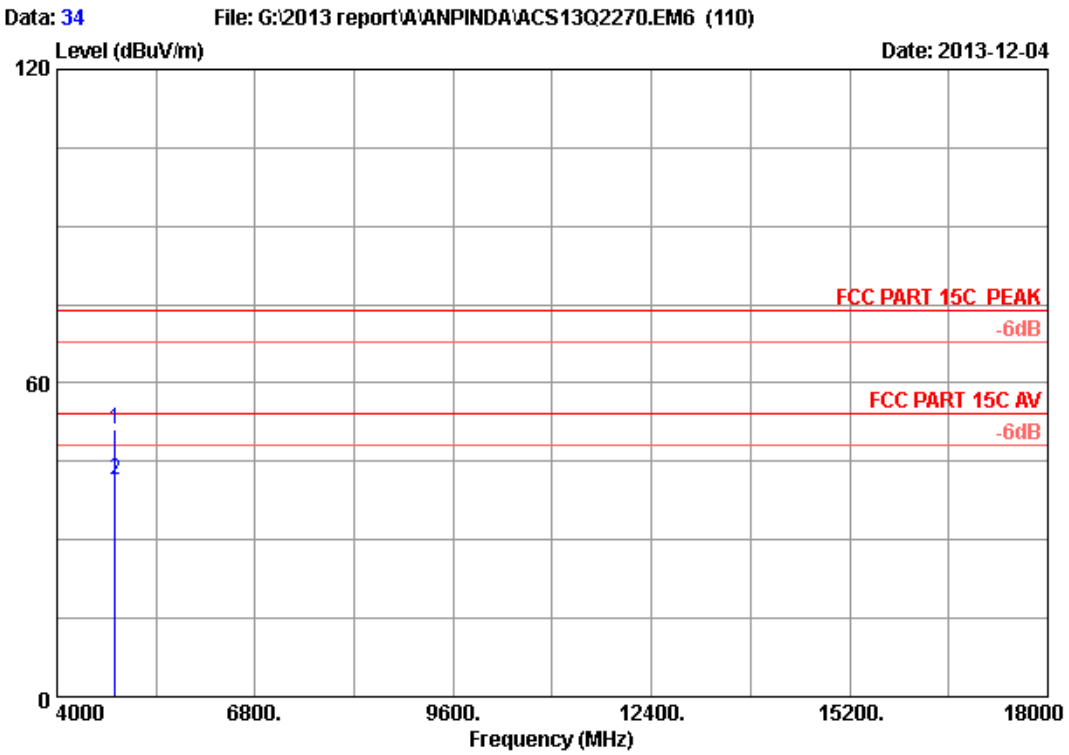
Site no. : RF Chamber Data no. : 32
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	104.70	103.02	74.00	-29.02	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.



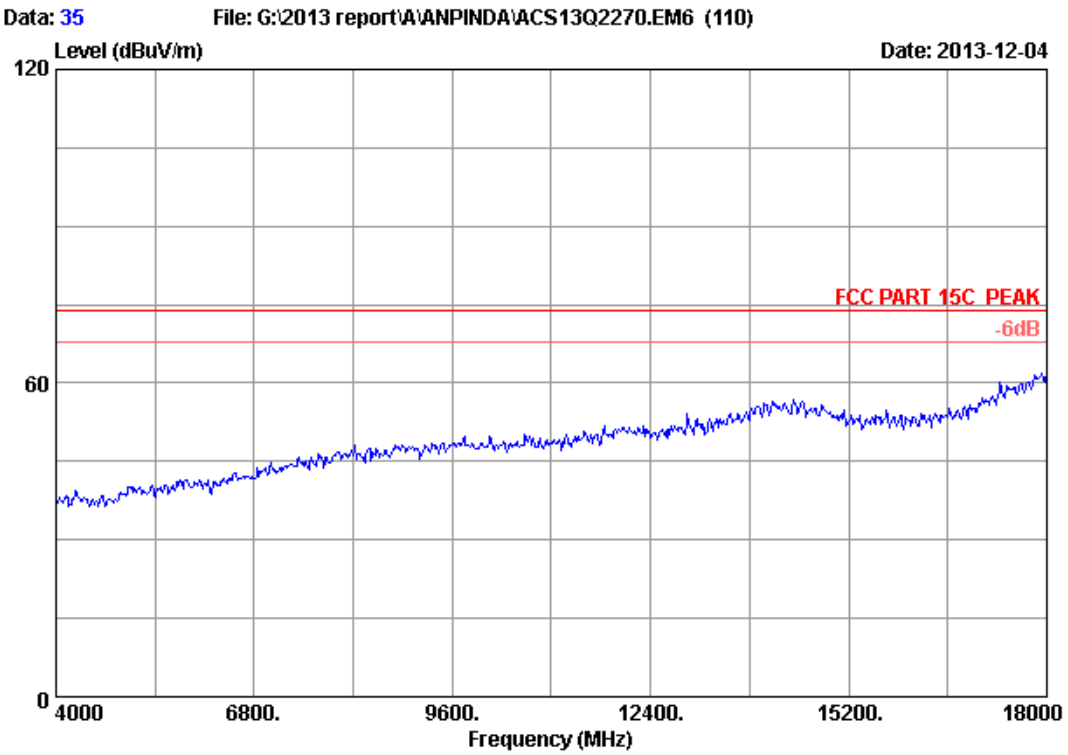

```
Site no.      : RF Chamber                Data no.   : 33
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11g 2412MHz Tx Mode
M/N           : F1P
```



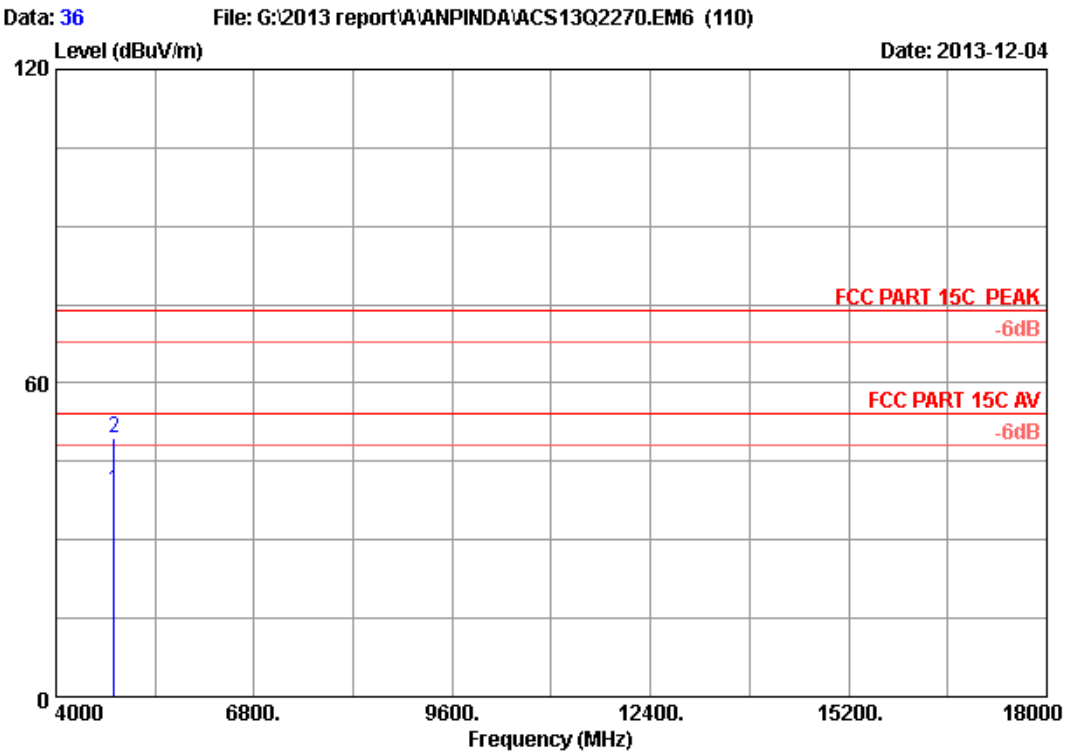
Site no. : RF Chamber Data no. : 34
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	45.26	51.02	74.00	22.98	Peak
2	4824.000	32.88	8.58	35.70	35.70	41.46	54.00	12.54	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.



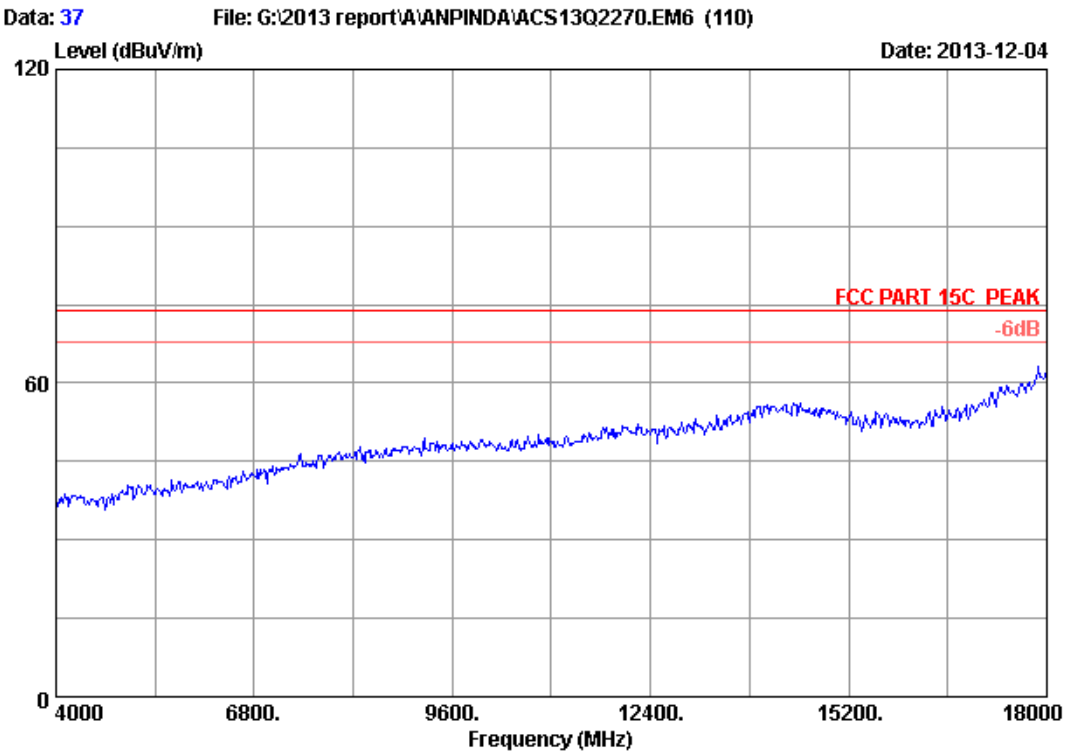

```
Site no.      : RF Chamber                Data no.   : 35
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11g 2412MHz Tx Mode
M/N           : F1P
```



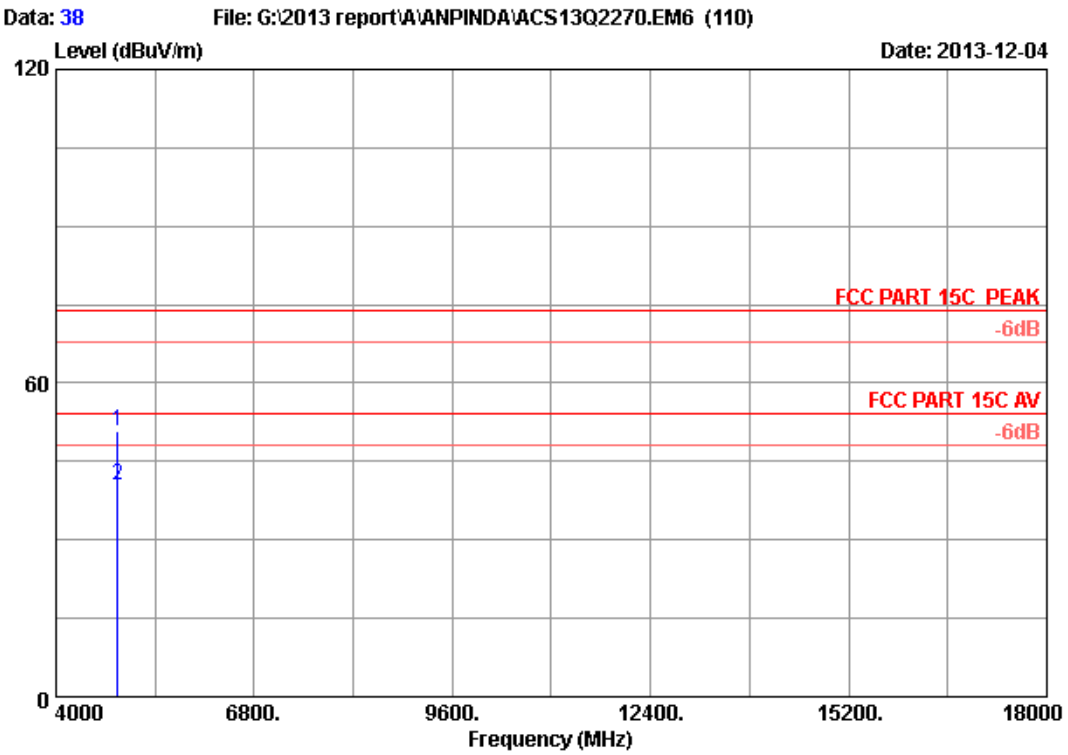
Site no. : RF Chamber Data no. : 36
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	33.60	39.36	54.00	14.64	Average
2	4824.000	32.88	8.58	35.70	43.63	49.39	74.00	24.61	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.



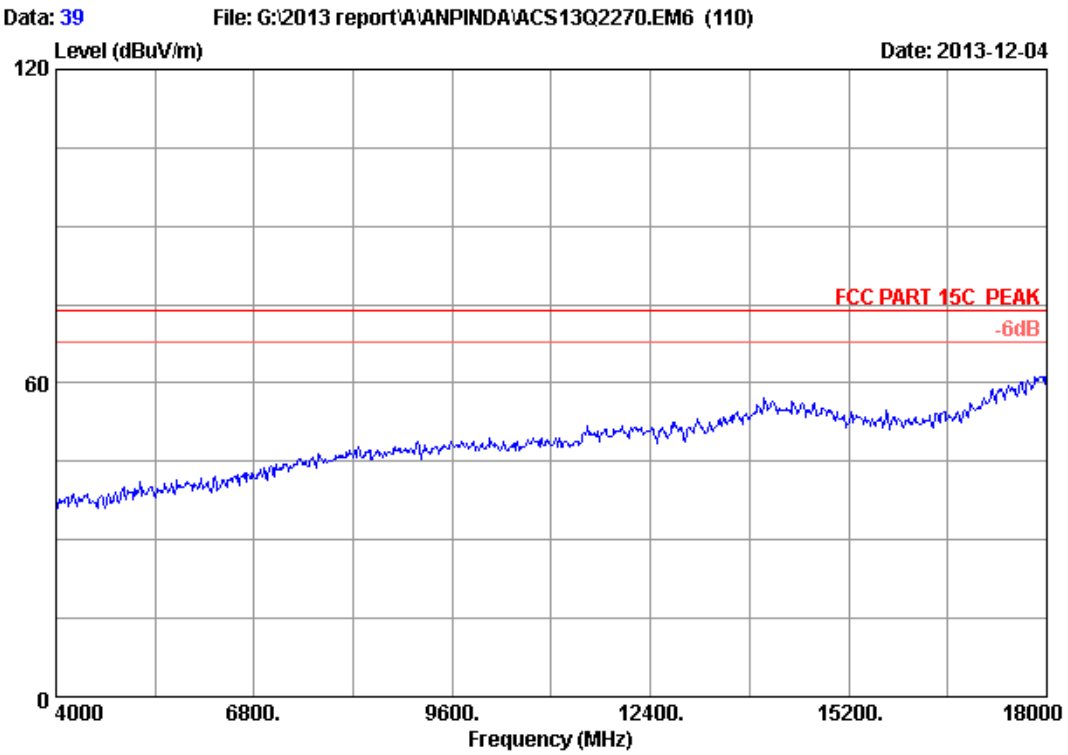

```
Site no.      : RF Chamber                Data no.   : 37
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11g 2437MHz Tx Mode
M/N           : F1P
```



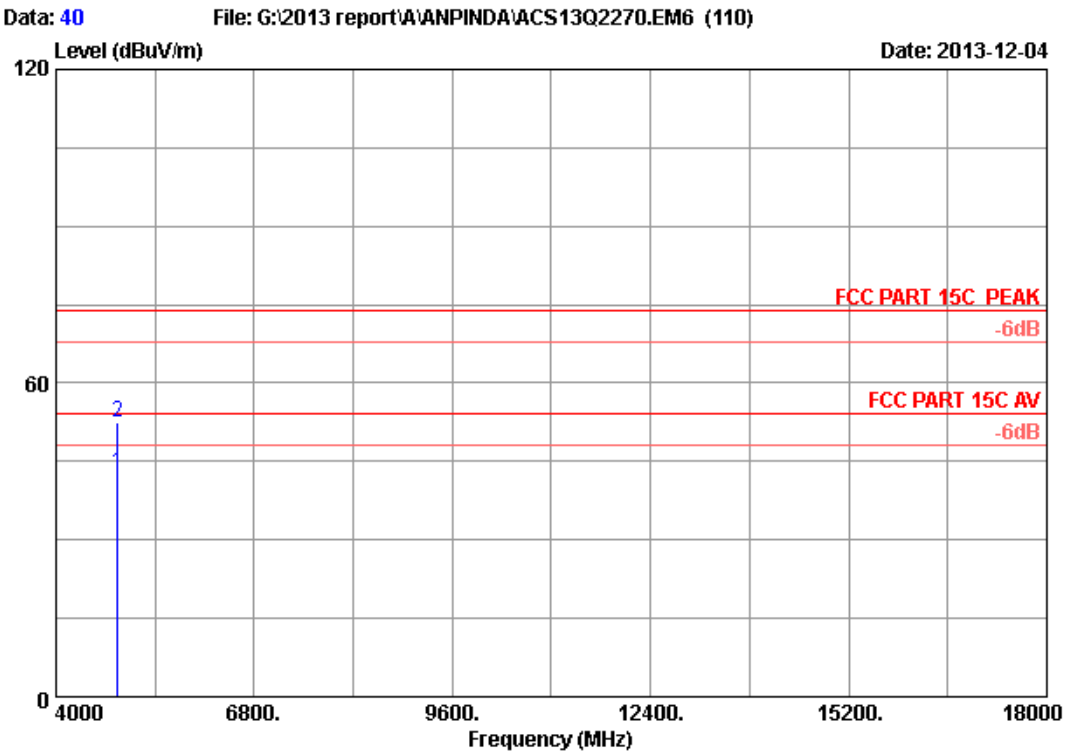
Site no. : RF Chamber Data no. : 38
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2437MHz Tx Mode
M/N : F1P

	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	44.96	50.86	74.00	23.14	Peak
2	4874.000	32.97	8.63	35.70	34.63	40.53	54.00	13.47	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.



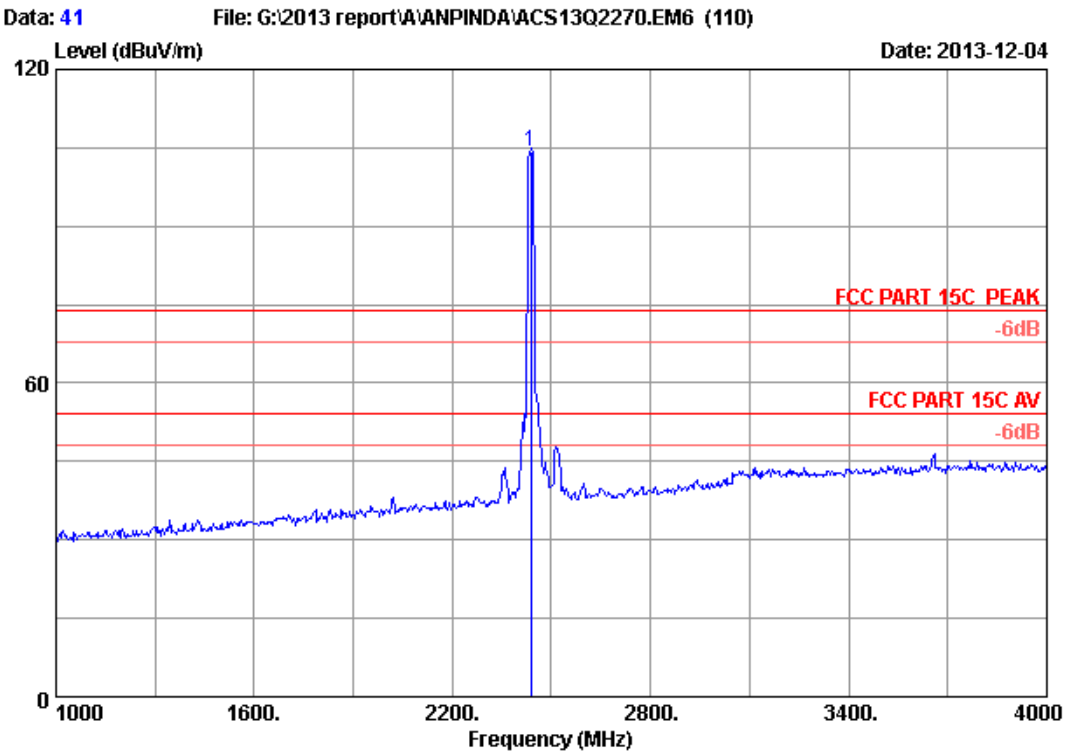

```
Site no.      : RF Chamber                Data no.   : 39
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11g 2437MHz Tx Mode
M/N           : F1P
```



Site no. : RF Chamber Data no. : 40
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2437MHz Tx Mode
M/N : F1P

	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	36.87	42.77	54.00	11.23	Average
2	4874.000	32.97	8.63	35.70	46.54	52.44	74.00	21.56	Peak

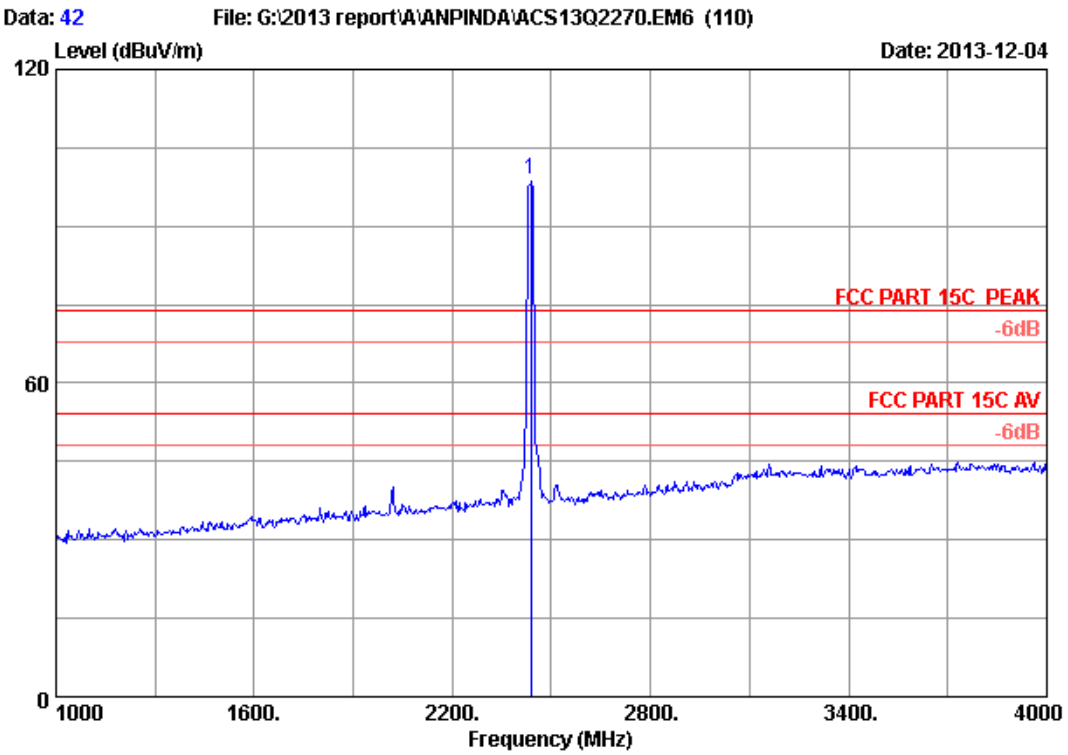
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 41
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2437MHz Tx Mode
M/N : F1P

	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	105.93	104.34	74.00	-30.34	Peak

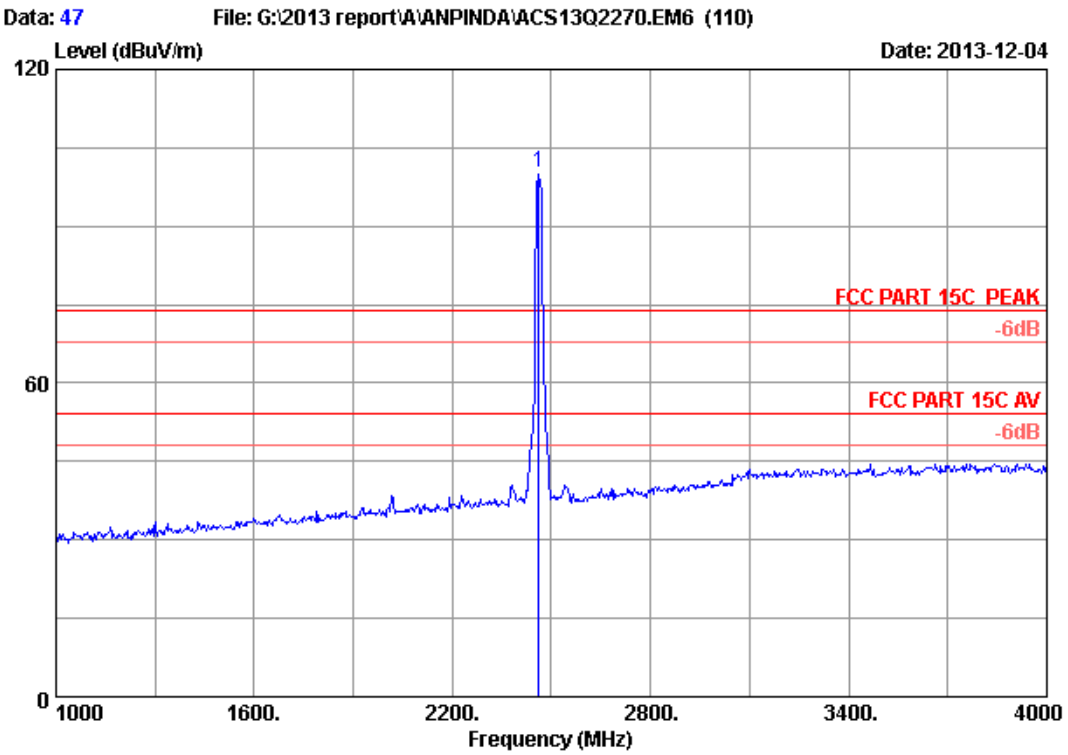
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 42
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2437MHz Tx Mode
M/N : F1P

	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	100.46	98.87	74.00	-24.87	Peak

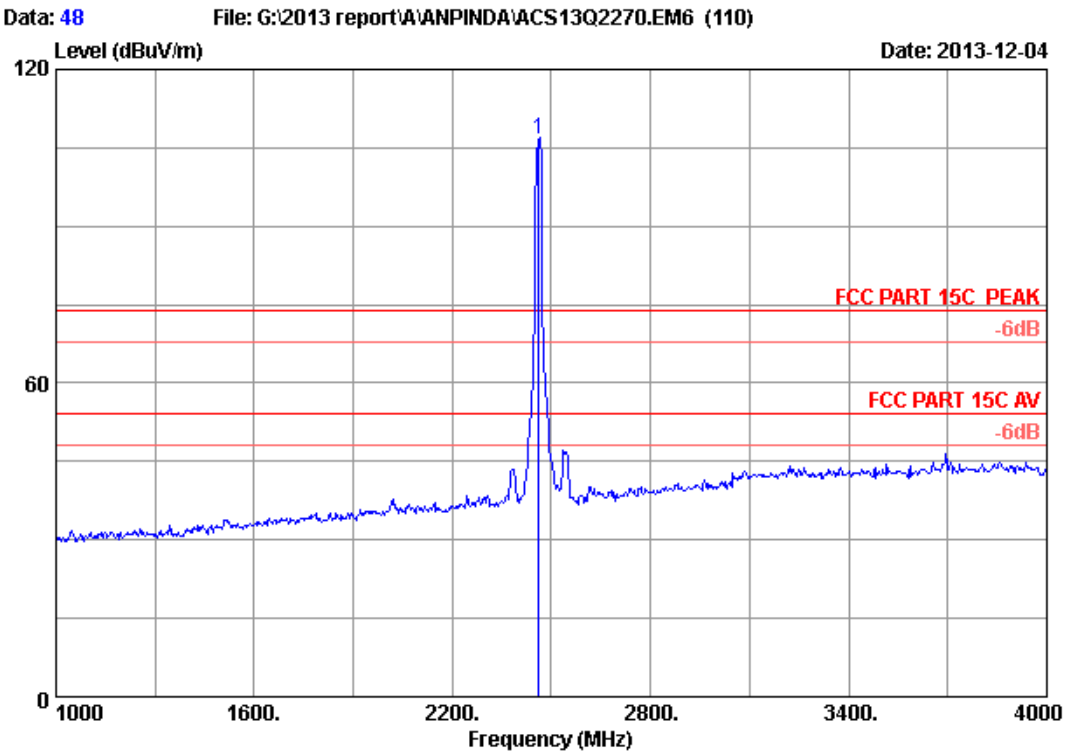
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 47
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	101.89	100.40	74.00	-26.40	Peak

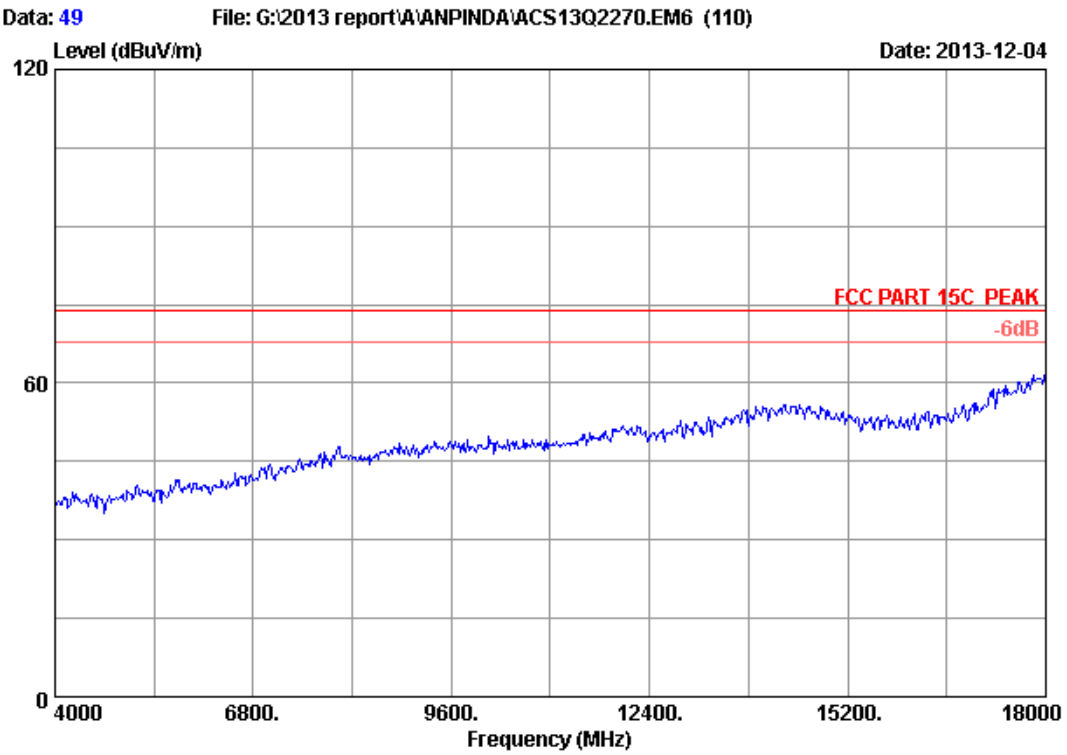
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



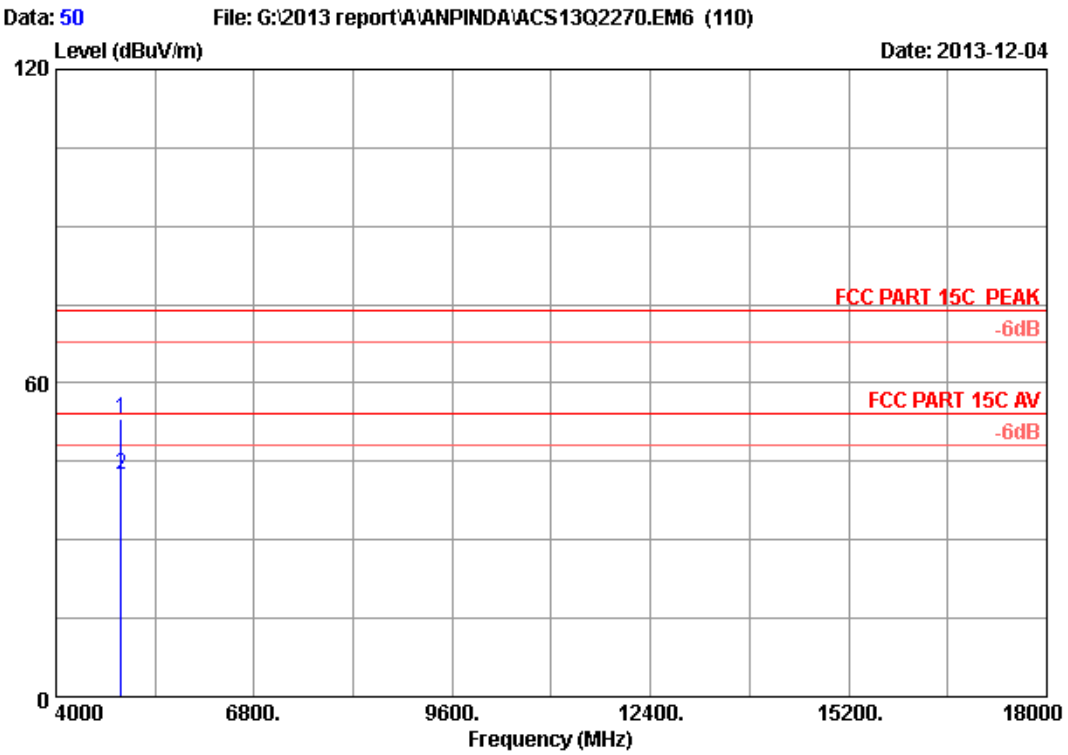
Site no. : RF Chamber Data no. : 48
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	108.24	106.75	74.00	-32.75	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.



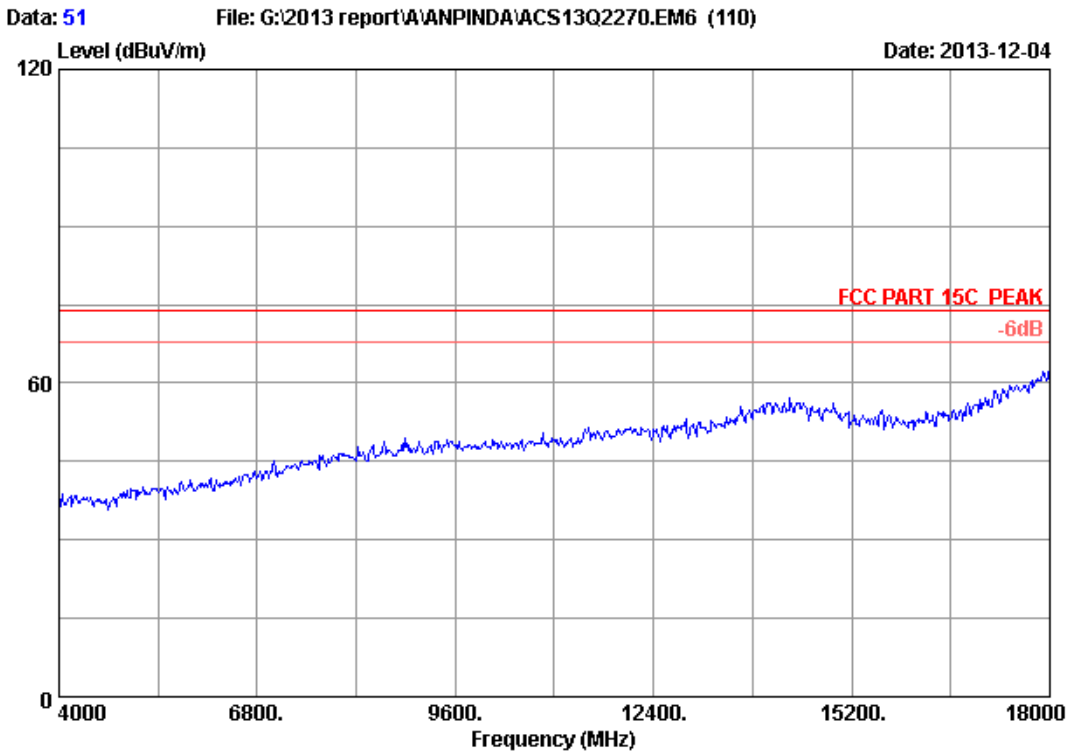

```
Site no.      : RF Chamber                Data no.   : 49
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11g 2462MHz Tx Mode
M/N           : F1P
```



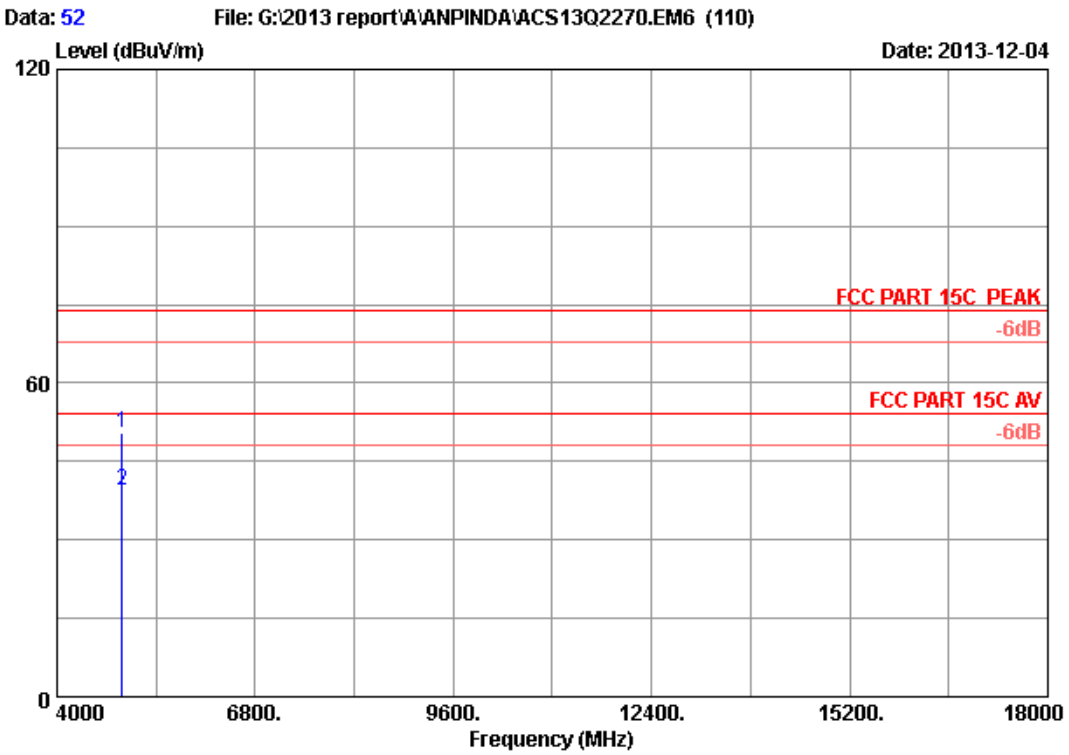
Site no. : RF Chamber Data no. : 50
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	47.17	53.22	74.00	20.78	Peak
2	4924.000	33.06	8.69	35.70	36.53	42.58	54.00	11.42	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.



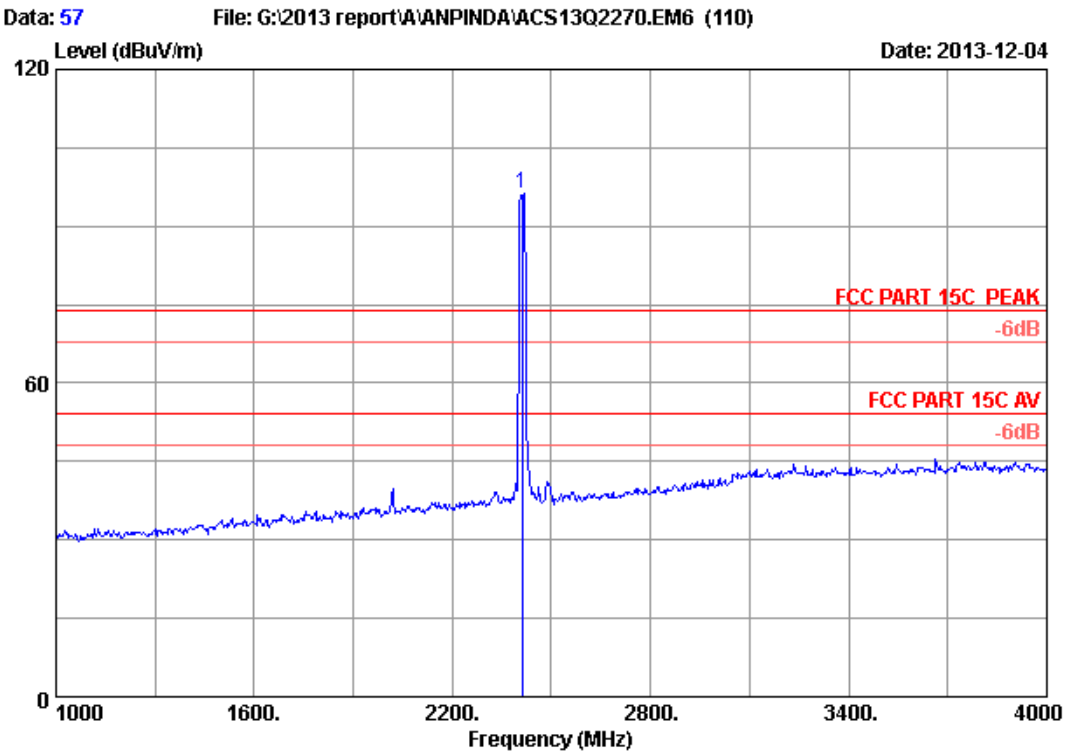

```
Site no.      : RF Chamber                Data no.   : 51
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11g 2462MHz Tx Mode
M/N           : F1P
```



Site no. : RF Chamber Data no. : 52
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	44.53	50.58	74.00	23.42	Peak
2	4924.000	33.06	8.69	35.70	33.26	39.31	54.00	14.69	Average

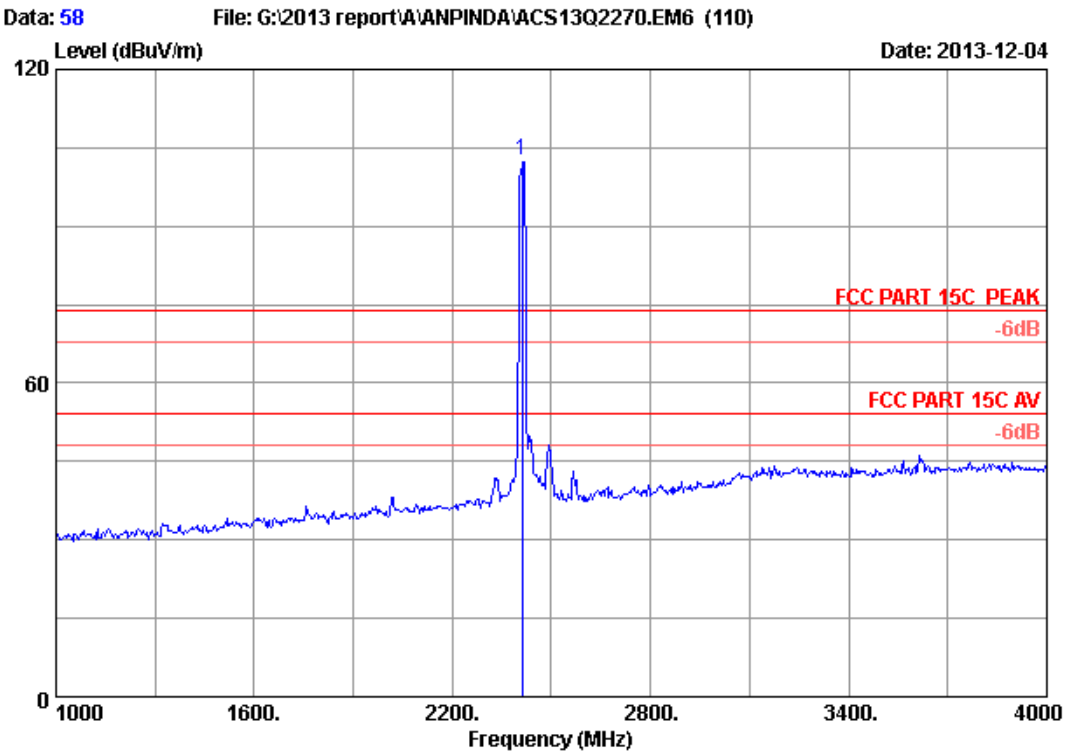
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 57
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

	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	98.07	96.39	74.00	-22.39	Peak

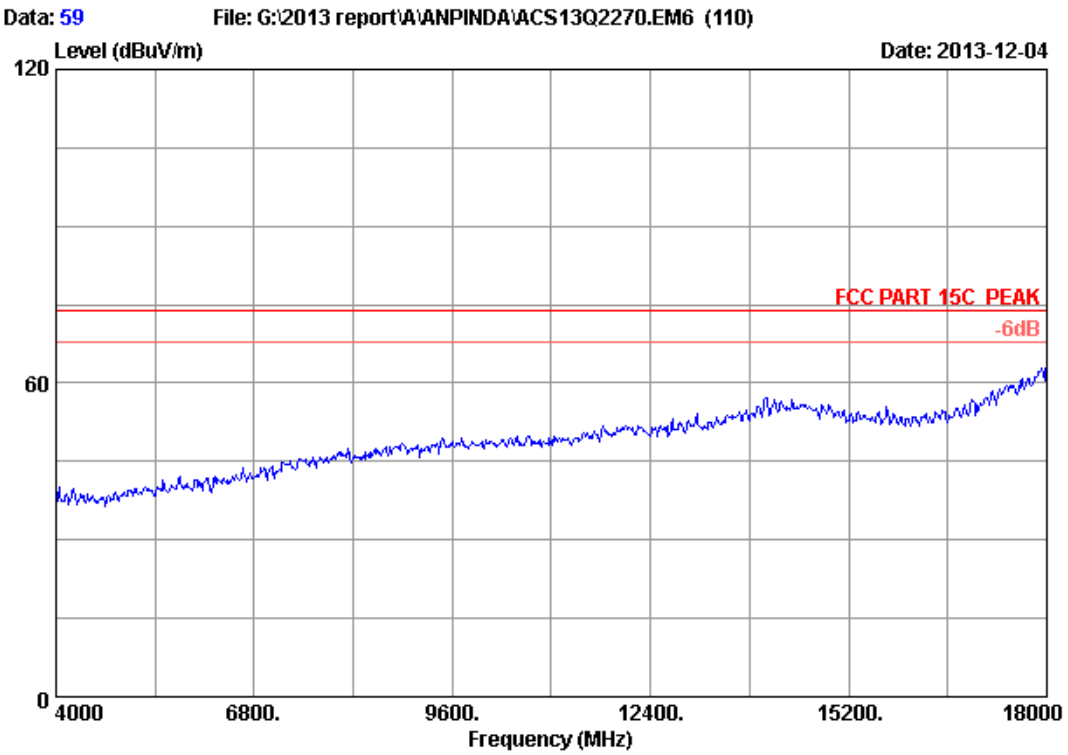
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



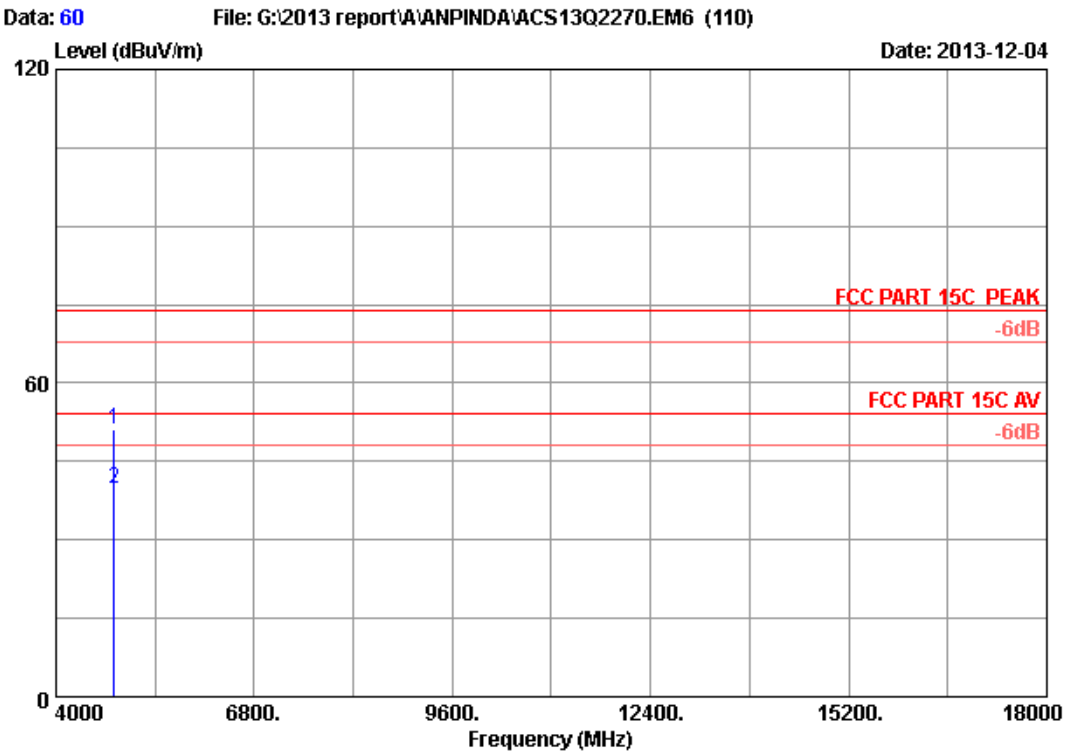
Site no. : RF Chamber Data no. : 58
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

	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	104.29	102.61	74.00	-28.61	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.



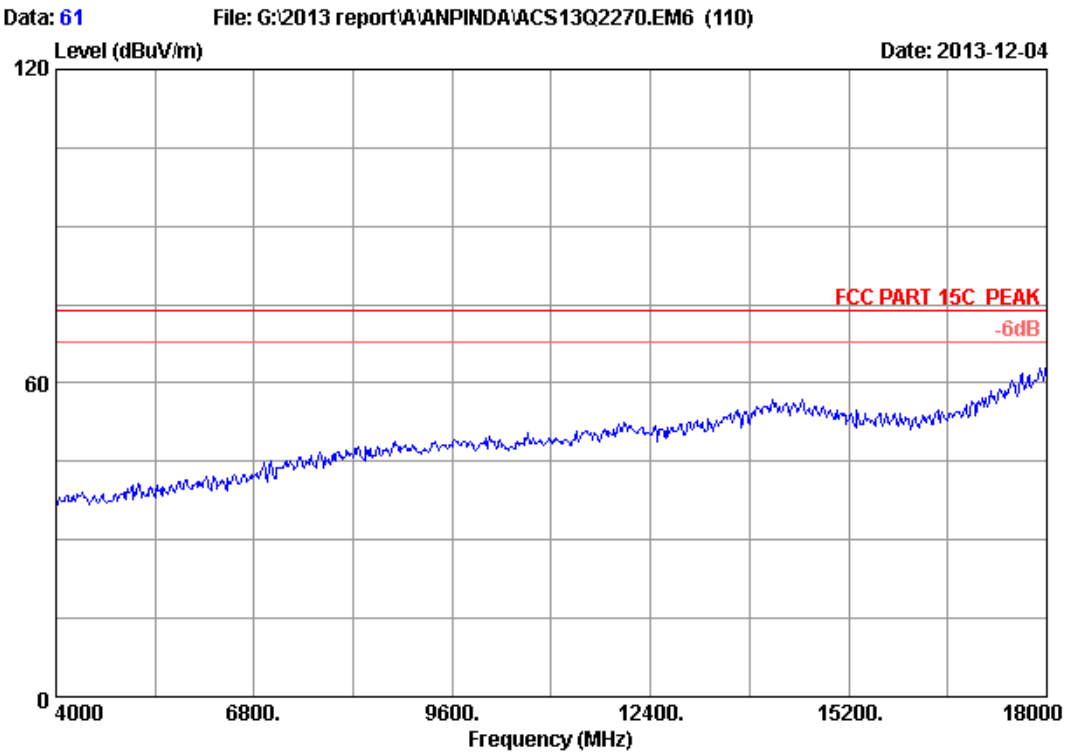
Site no.	: RF Chamber	Data no.	: 59
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: HORIZONTAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: New tab F1		
Power supply	: DC 5V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT20 2412MHz Tx Mode		
M/N	: F1P		



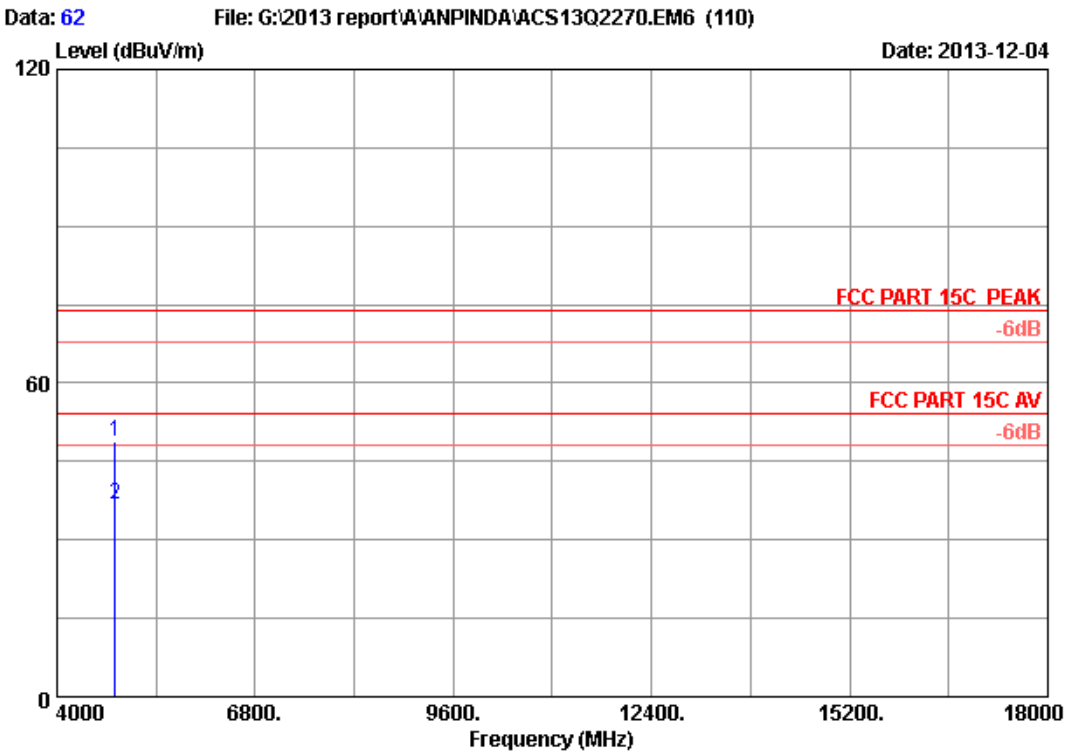
Site no. : RF Chamber Data no. : 60
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

	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	45.27	51.03	74.00	22.97	Peak
2	4824.000	32.88	8.58	35.70	34.13	39.89	54.00	14.11	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.



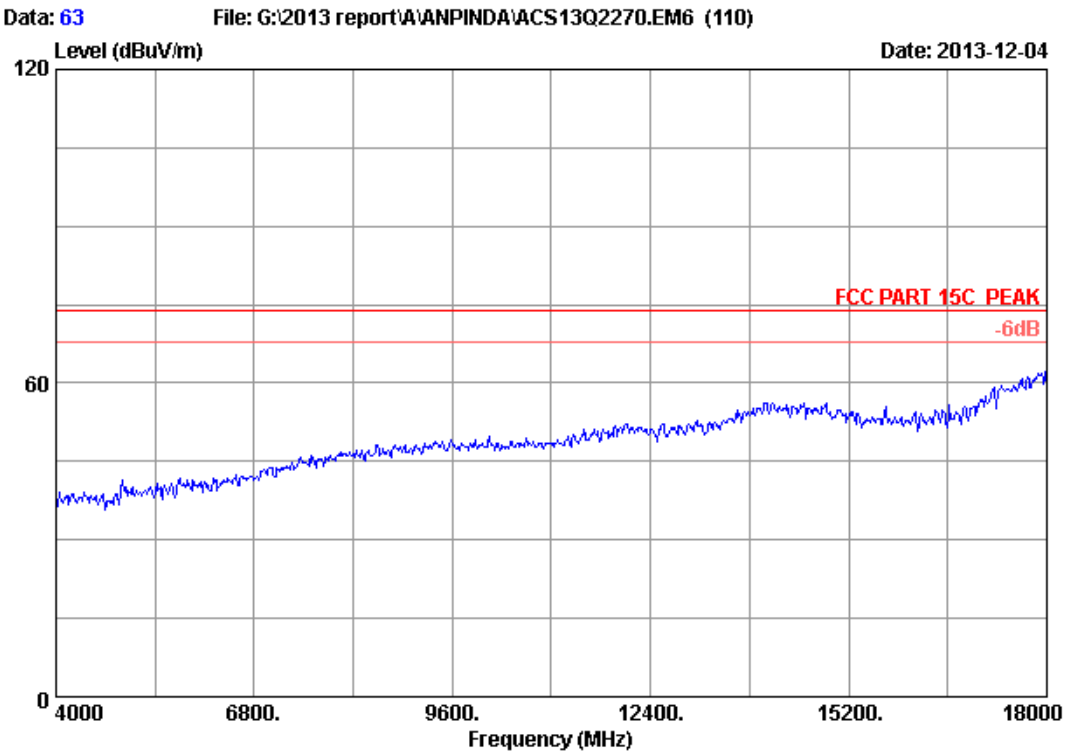
Site no.	: RF Chamber	Data no.	: 61
Dis. / Ant.	: 3m 2013 3115 (4580)	Ant. pol.	: VERTICAL
Limit	: FCC PART 15C PEAK		
Env. / Ins.	: 23*C/54%	Engineer	: Leo-Li
EUT	: New tab F1		
Power supply	: DC 5V From Adapter Input AC 120V/60Hz		
Test mode	: IEEE802.11n HT20 2412MHz Tx Mode		
M/N	: F1P		



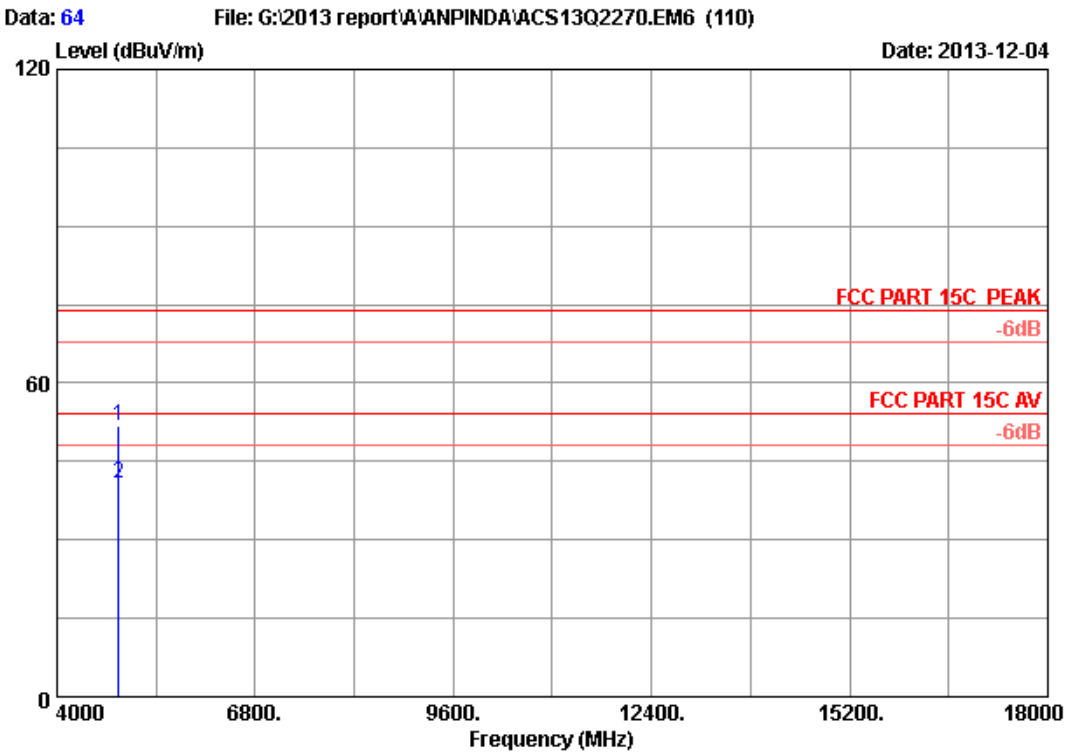
Site no. : RF Chamber Data no. : 62
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

	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	43.19	48.95	74.00	25.05	Peak
2	4824.000	32.88	8.58	35.70	31.07	36.83	54.00	17.17	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.



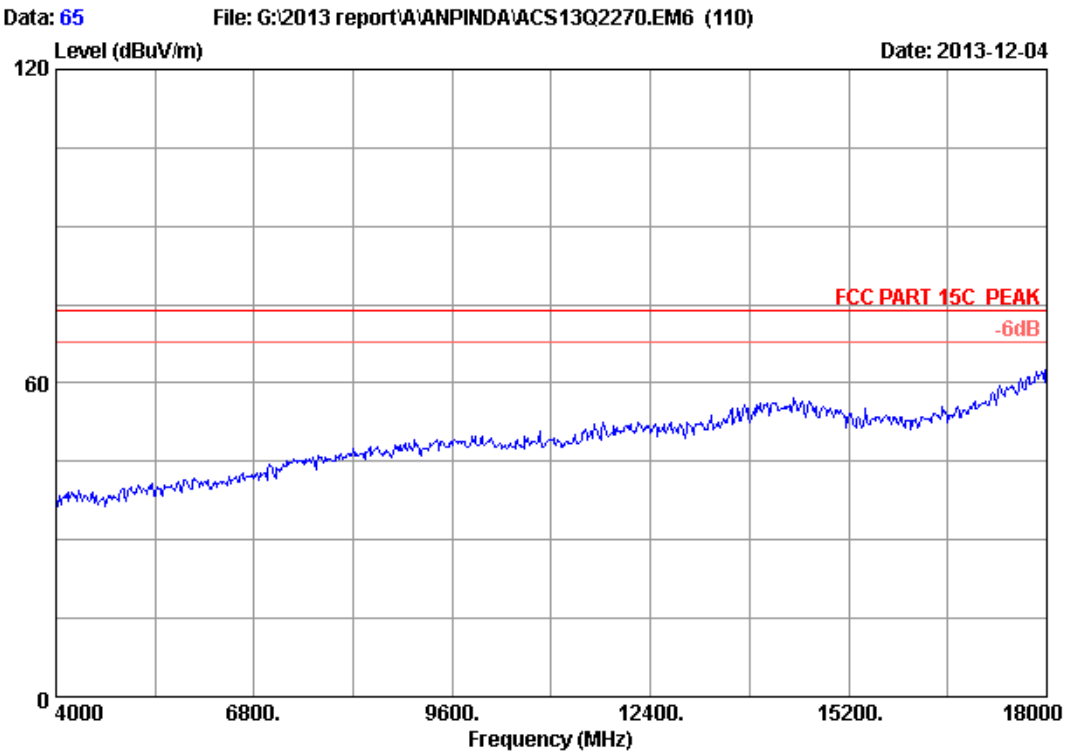

```
Site no.      : RF Chamber                Data no.   : 63
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT20 2437MHz Tx Mode
M/N           : F1P
```



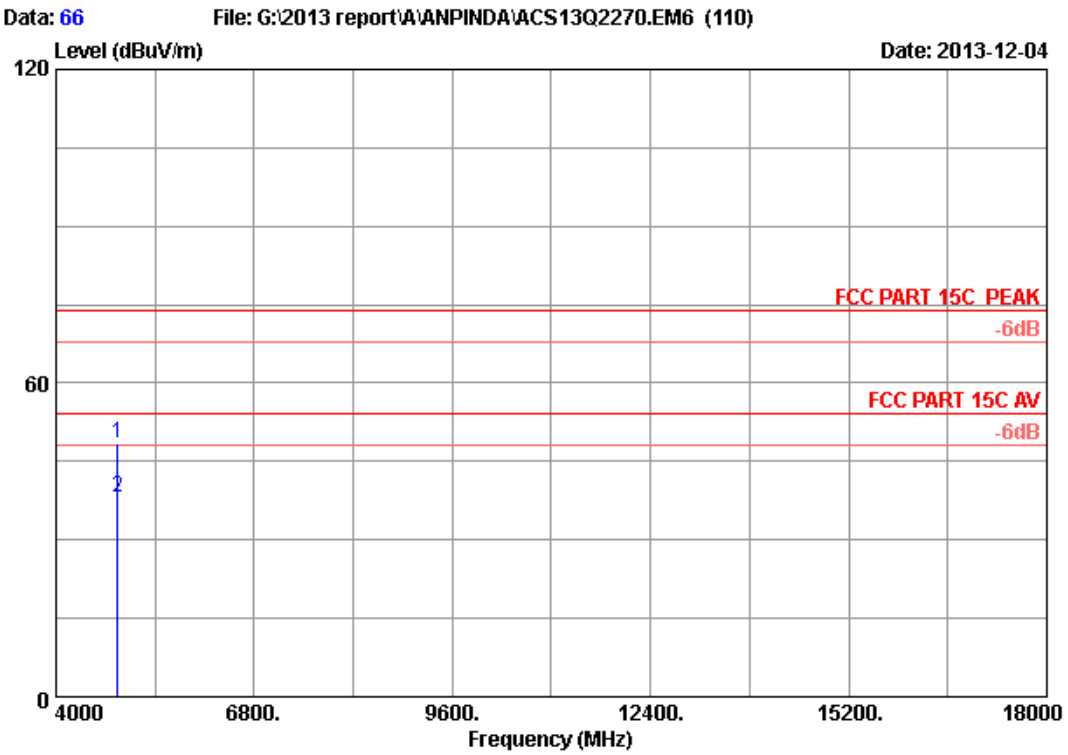
Site no. : RF Chamber Data no. : 64
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2437MHz Tx Mode
M/N : F1P

	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	45.98	51.88	74.00	22.12	Peak
2	4874.000	32.97	8.63	35.70	34.72	40.62	54.00	13.38	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.



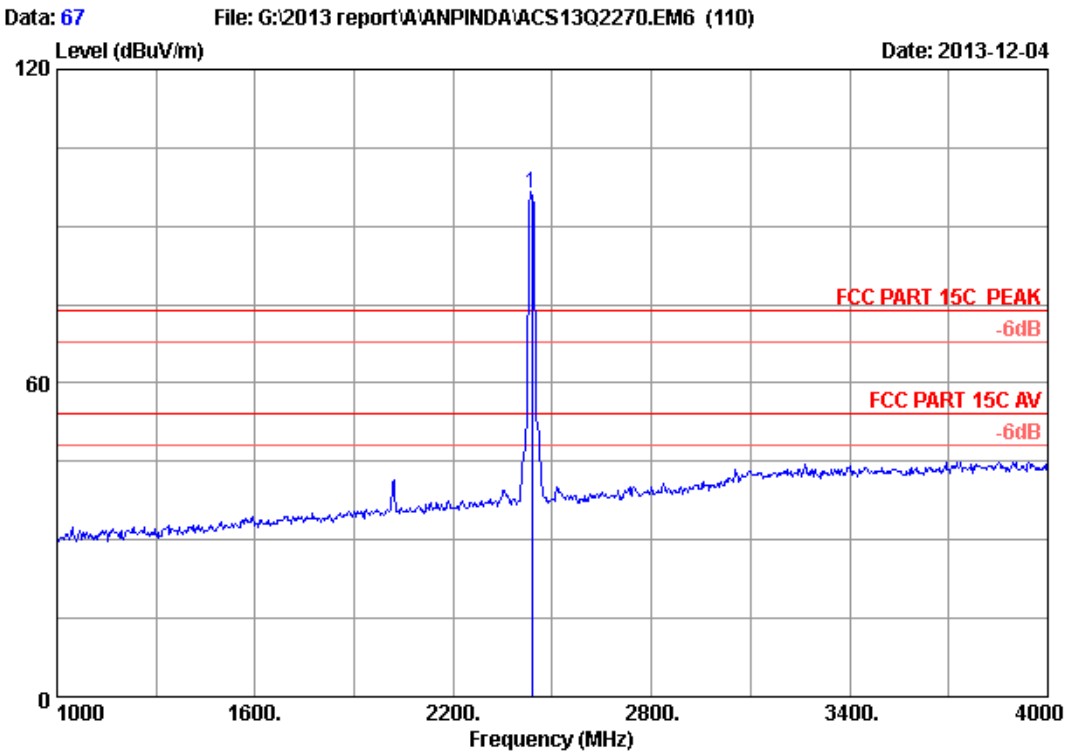

```
Site no.      : RF Chamber                Data no.   : 65
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT20 2437MHz Tx Mode
M/N           : F1P
```



Site no. : RF Chamber Data no. : 66
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2437MHz Tx Mode
M/N : F1P

	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	42.60	48.50	74.00	25.50	Peak
2	4874.000	32.97	8.63	35.70	32.18	38.08	54.00	15.92	Average

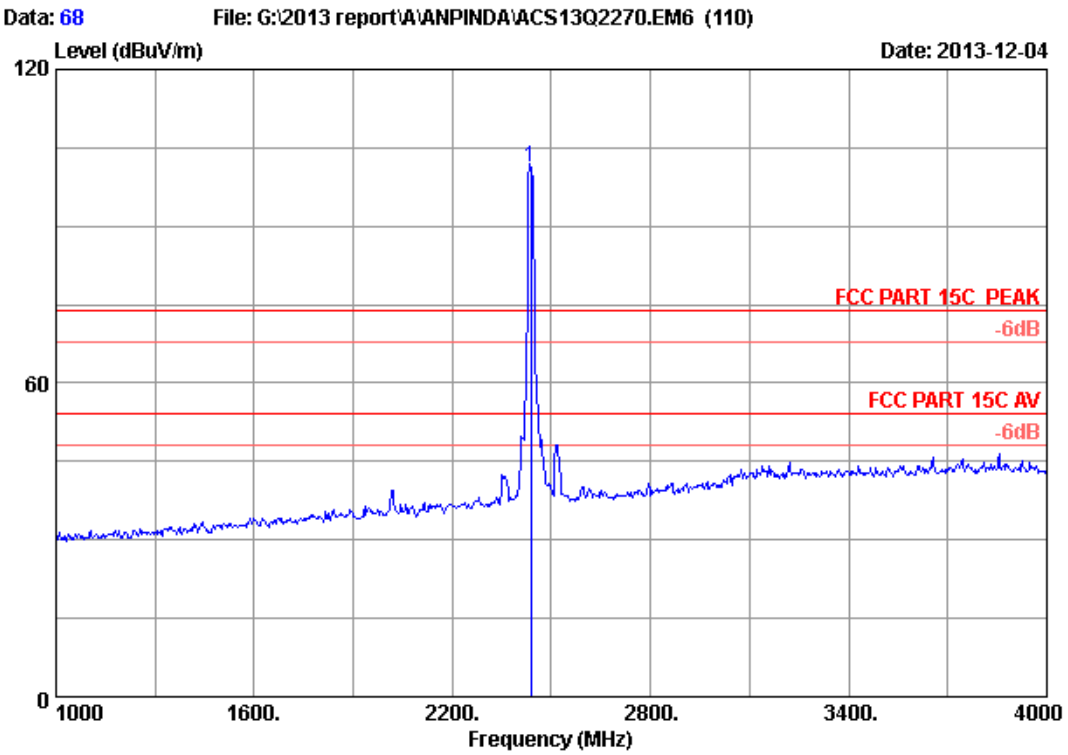
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 67
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2437MHz Tx Mode
M/N : F1P

	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	97.69	96.10	74.00	-22.10	Peak

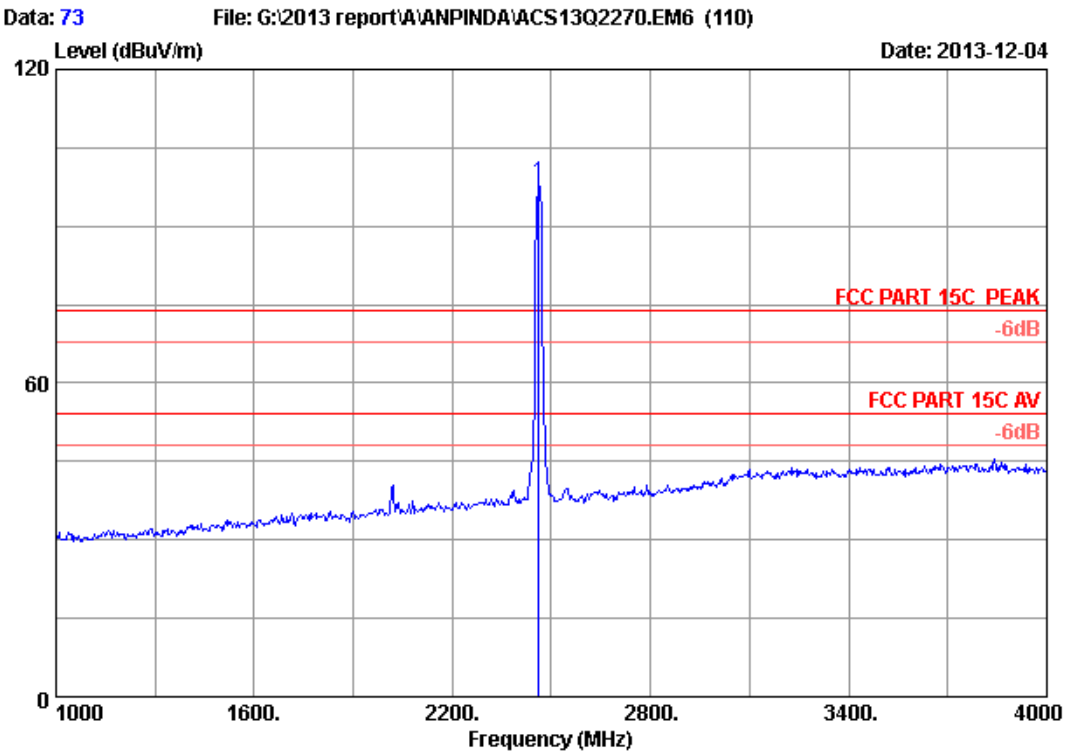
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 68
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2437MHz Tx Mode
M/N : F1P

	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	102.87	101.28	74.00	-27.28	Peak

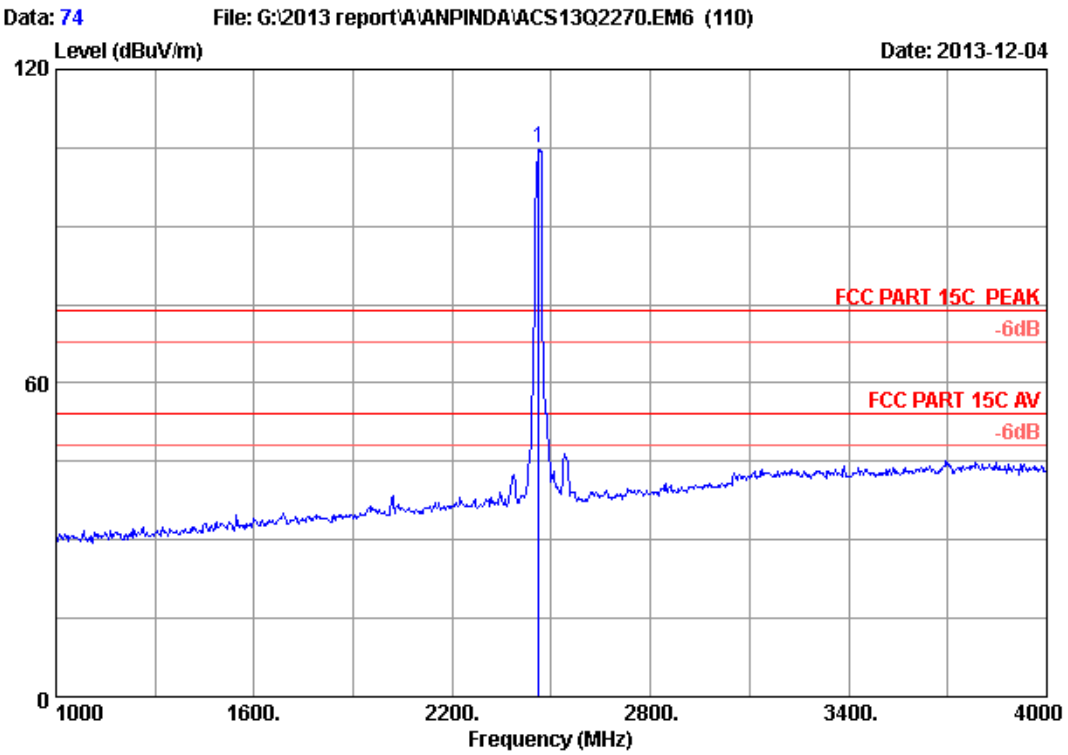
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 73
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	99.68	98.19	74.00	-24.19	Peak

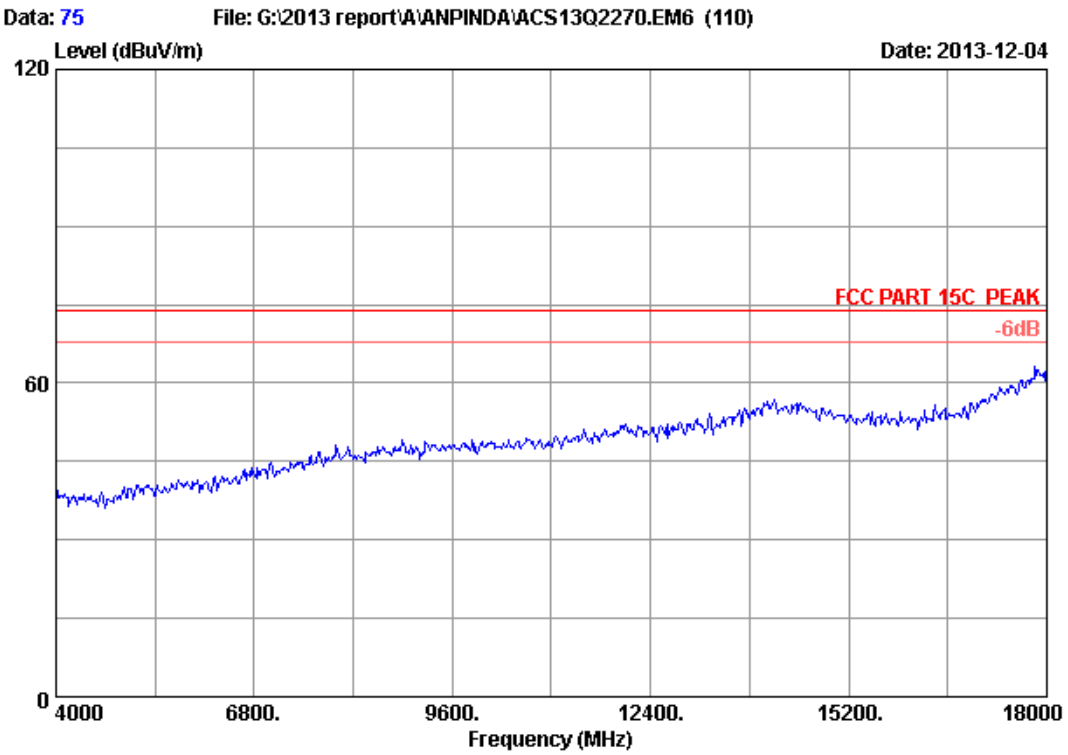
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



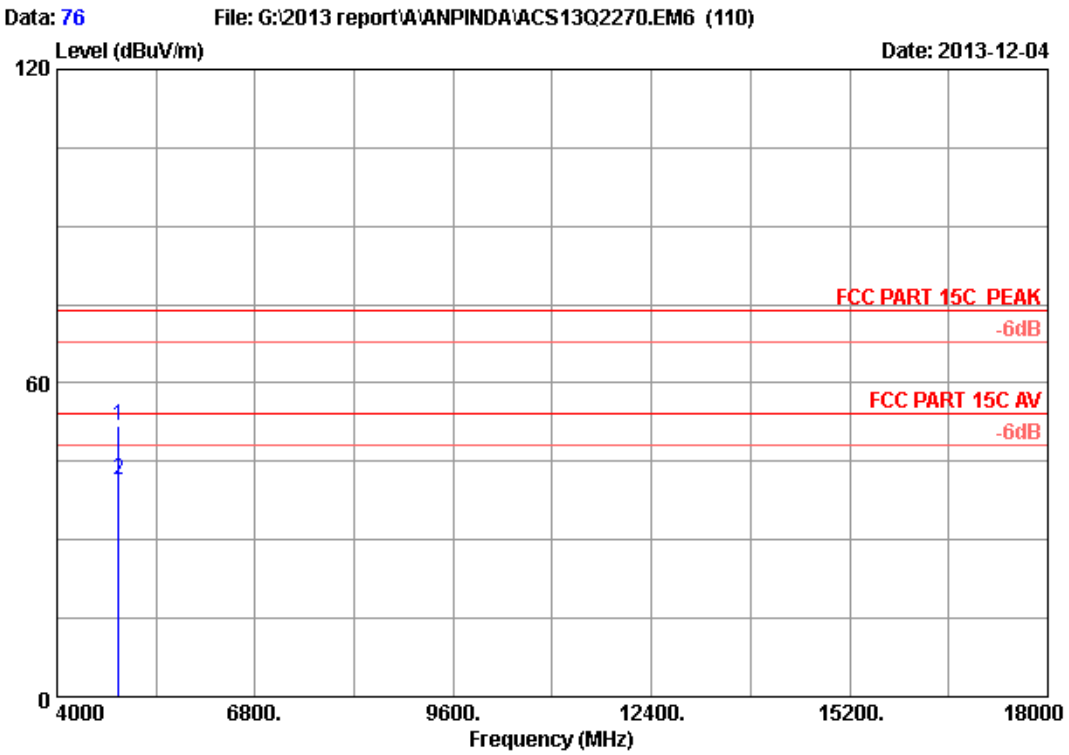
Site no. : RF Chamber Data no. : 74
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	106.36	104.87	74.00	-30.87	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.



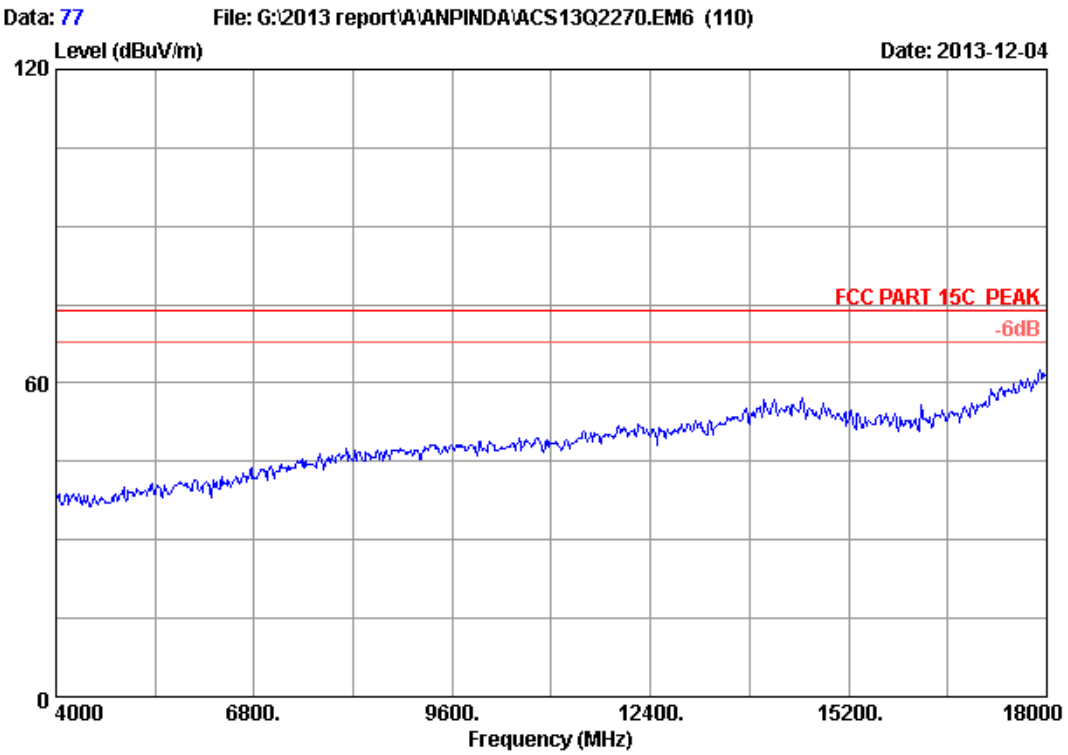

```
Site no.      : RF Chamber                Data no.   : 75
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : HORIZONTAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT20 2462MHz Tx Mode
M/N           : F1P
```



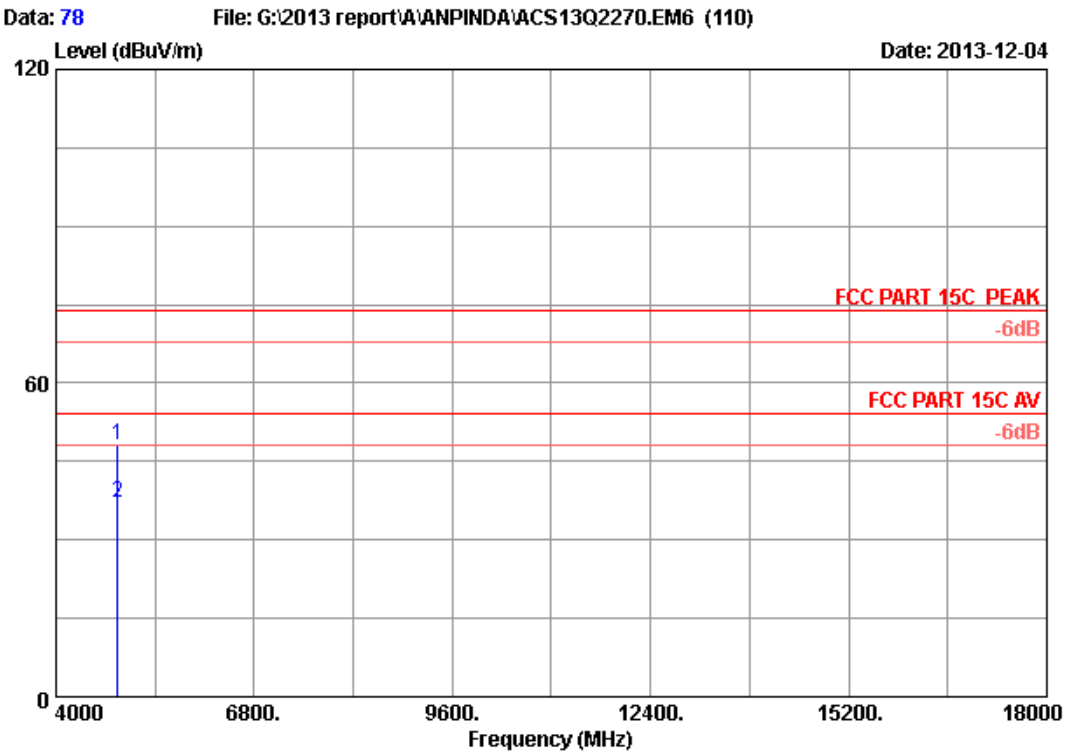
Site no. : RF Chamber Data no. : 76
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	45.93	51.83	74.00	22.17	Peak
2	4874.000	32.97	8.63	35.70	35.63	41.53	54.00	12.47	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.      : RF Chamber                Data no.   : 77
Dis. / Ant.   : 3m   2013 3115 (4580)     Ant. pol.  : VERTICAL
Limit         : FCC PART 15C  PEAK
Env. / Ins.   : 23*C/54%                  Engineer   : Leo-Li
EUT           : New tab F1
Power supply  : DC 5V From Adapter Input AC 120V/60Hz
Test mode     : IEEE802.11n HT20 2462MHz Tx Mode
M/N           : F1P
```



Site no. : RF Chamber Data no. : 78
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23*C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	42.28	48.18	74.00	25.82	Peak
2	4874.000	32.97	8.63	35.70	31.25	37.15	54.00	16.85	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.	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
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.

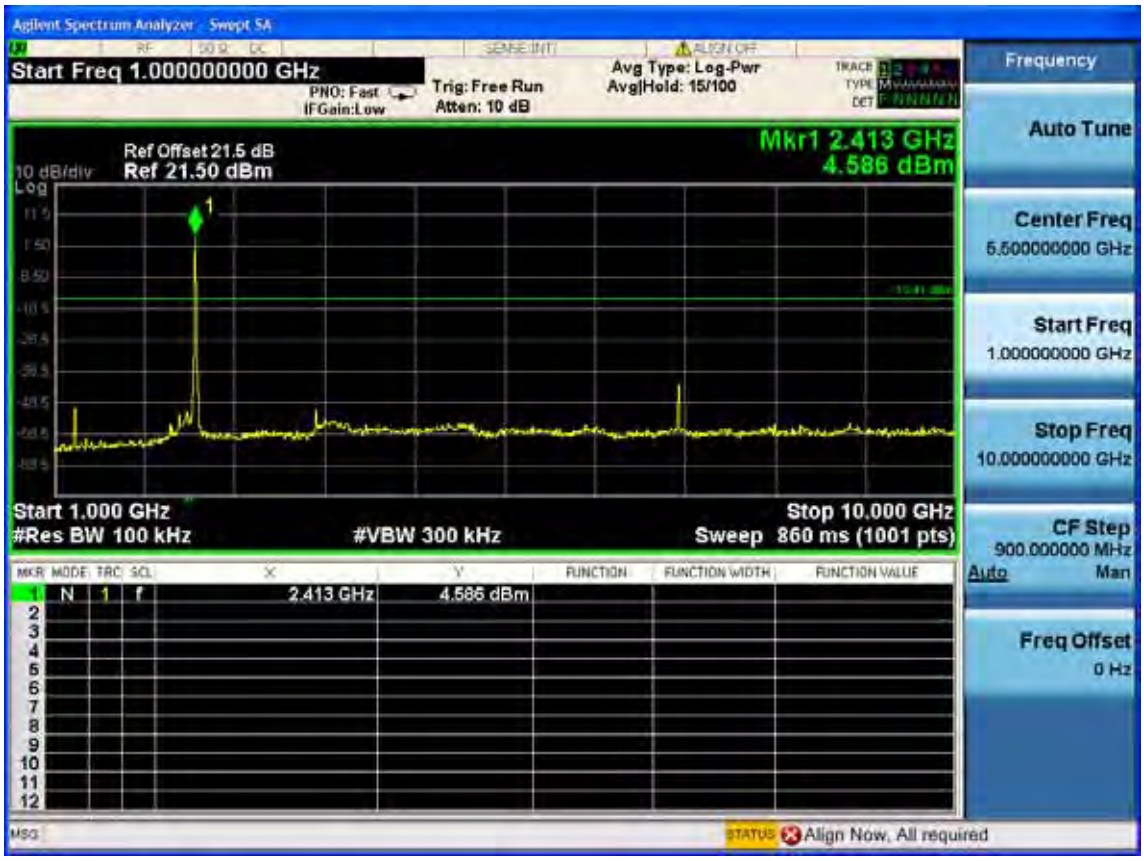
5.3. Test Procedure

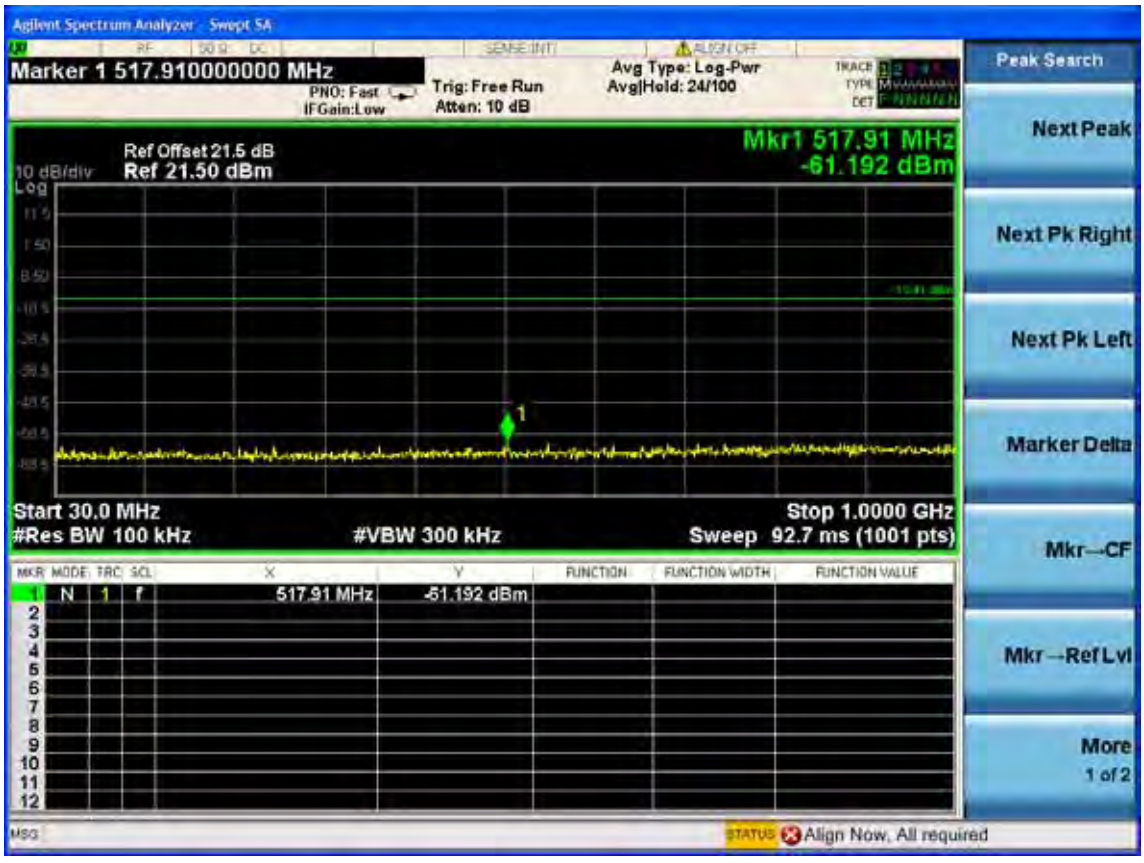
The transmitter output was connected to a spectrum analyzer, The resolution bandwidth is set to 100 kHz, The video bandwidth is set to 300 kHz and measure all the emissions detected.

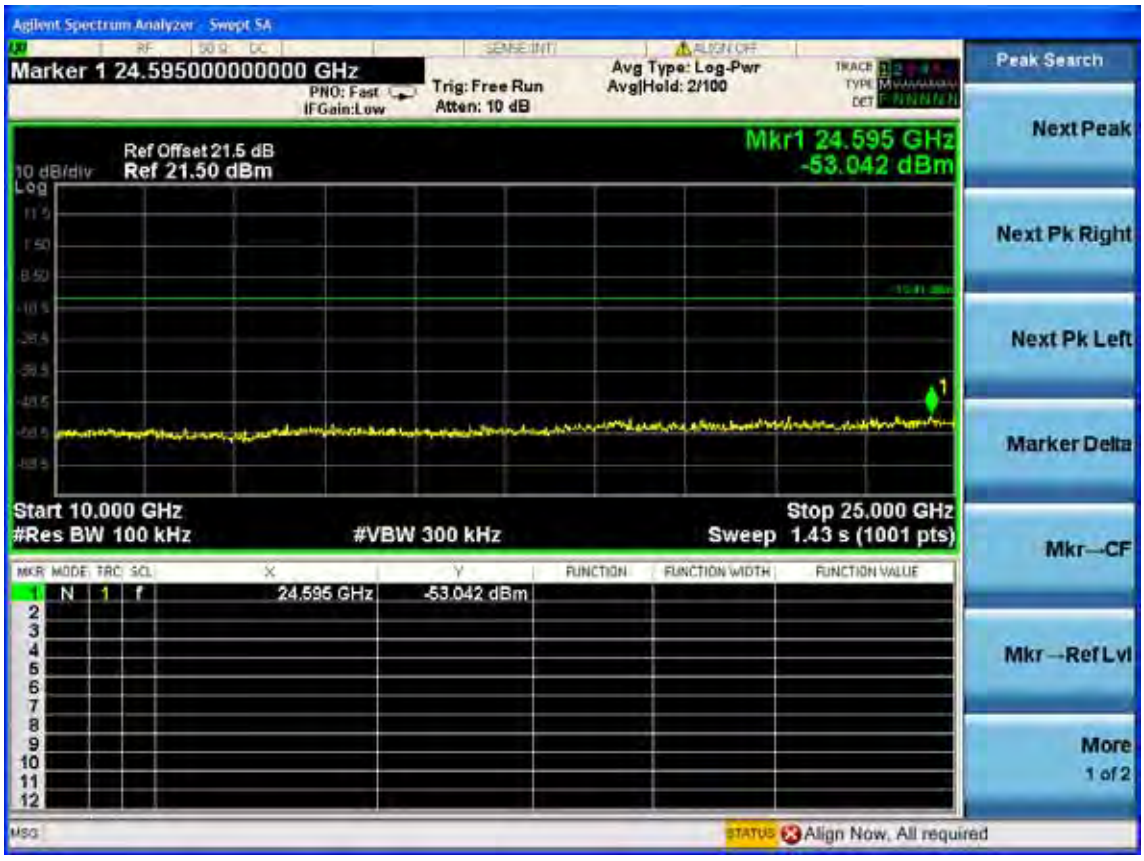
Conducted emission test data:

Test Mode: IEEE 802.11b

Test CH1: 2412MHz

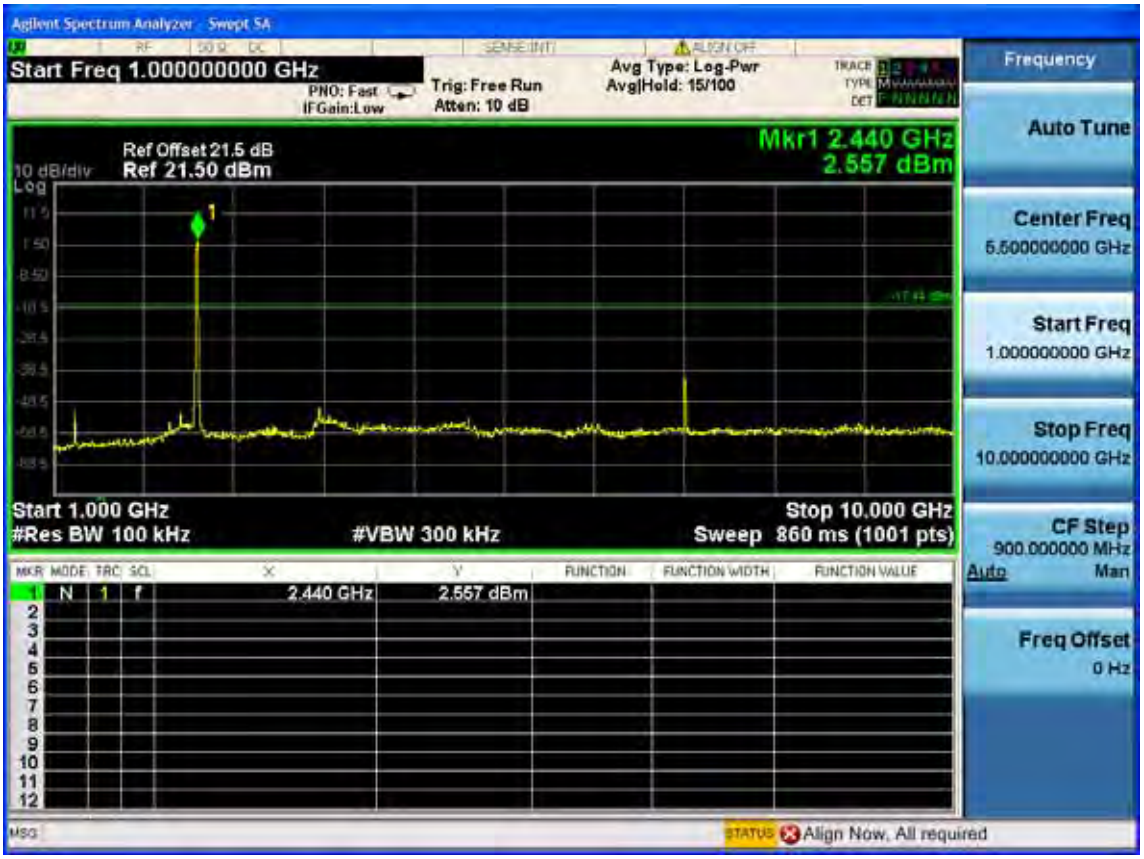


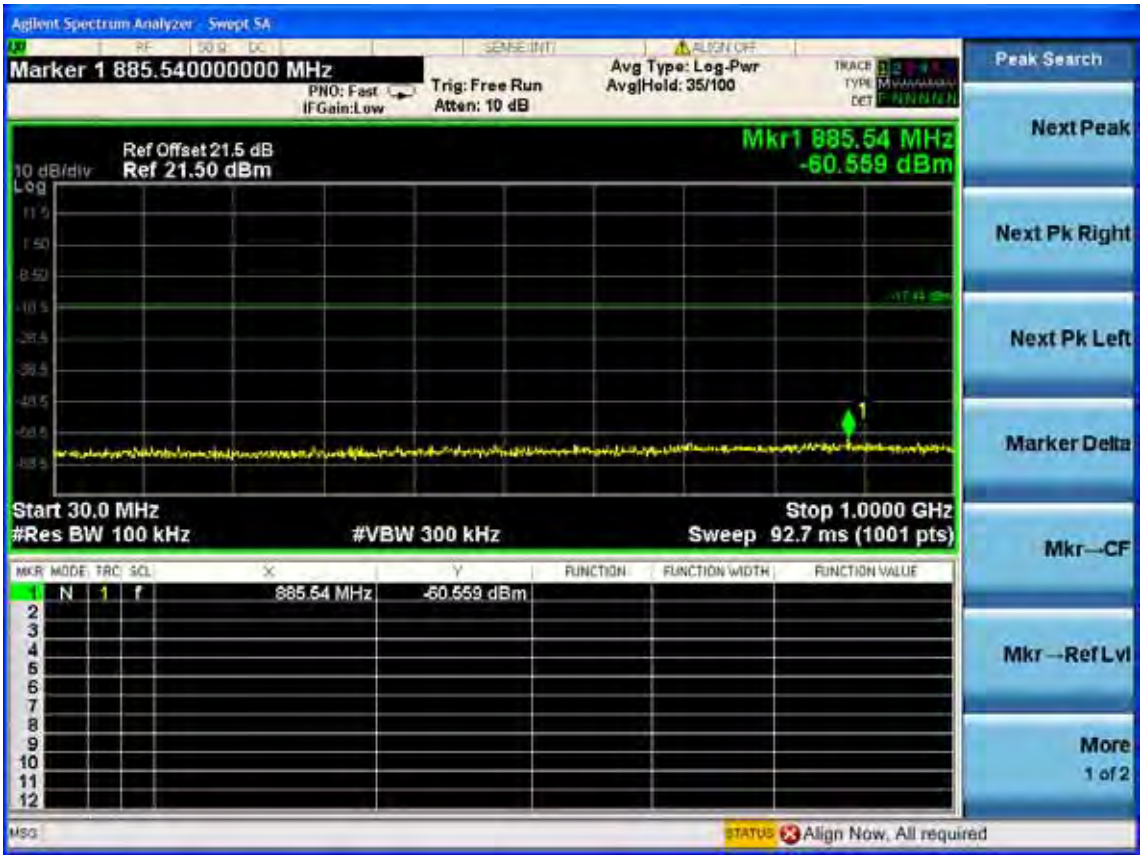


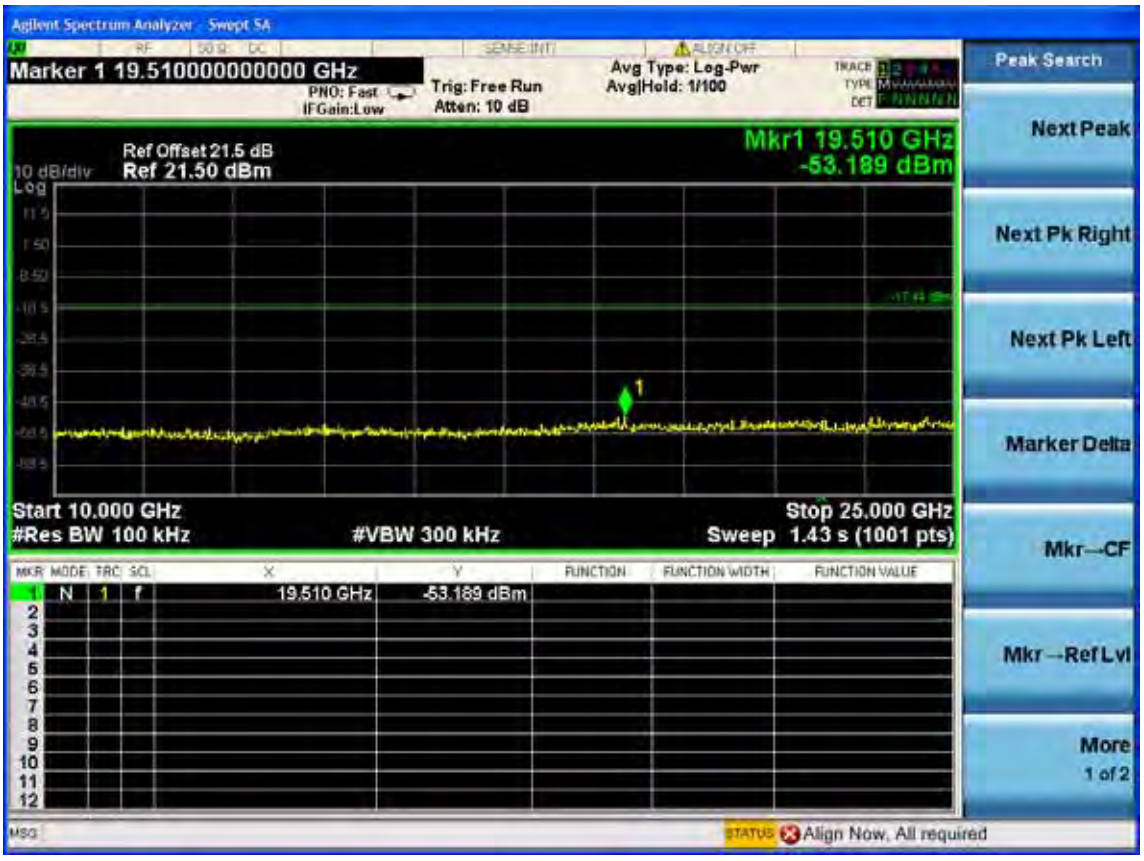

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.595000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Ref Offset 21.5 dB
10 dB/div
Log
Ref 21.50 dBm
Mkr1 24.595 GHz
-53.042 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 24.595 GHz -53.042 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer - Swept SA
Start Freq 2.310000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ref Offset 21.5 dB
10 dB/div
Log
Ref 21.50 dBm
Mkr1 2.411 55 GHz
5.798 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 2.411 55 GHz 5.798 dBm
2 N 1 f 2.390 00 GHz -48.618 dBm
3 N 1 f 2.400 00 GHz -35.370 dBm
4 N 1 f 2.397 98 GHz -33.139 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
Align Now, All required

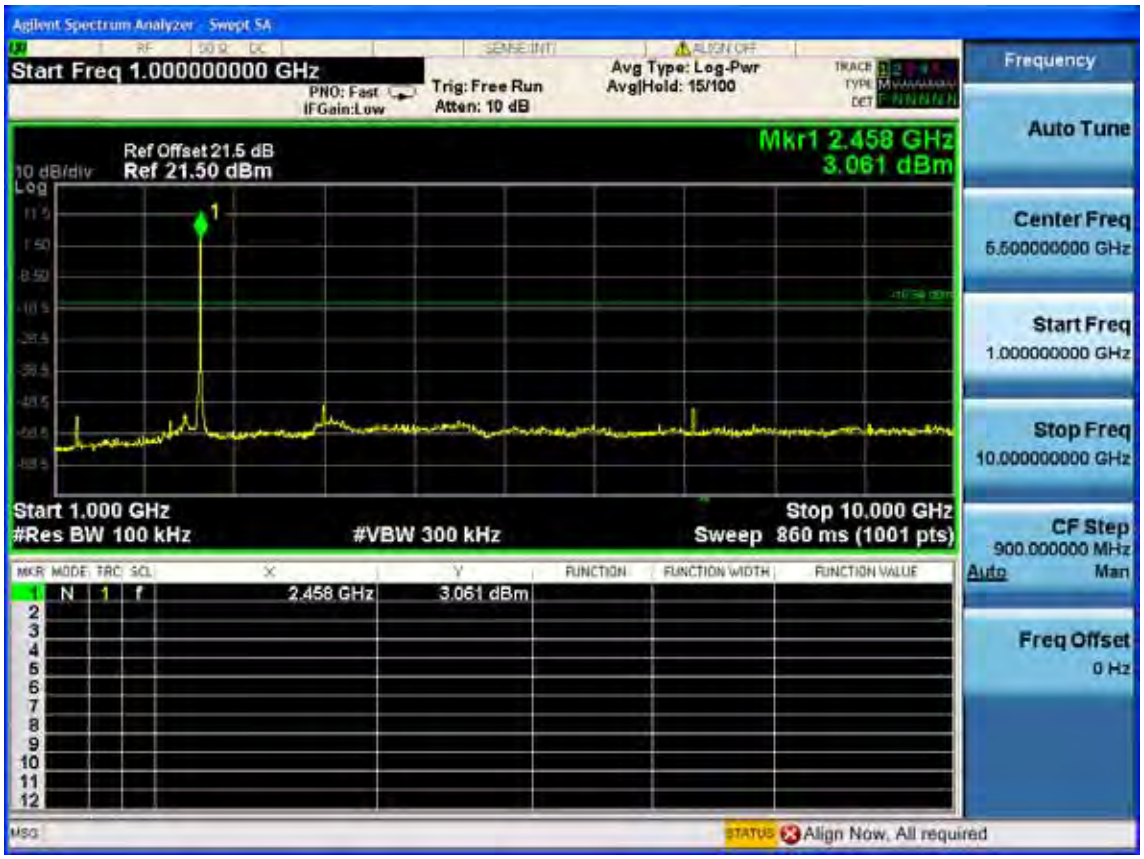
Test CH6: 2437MHz

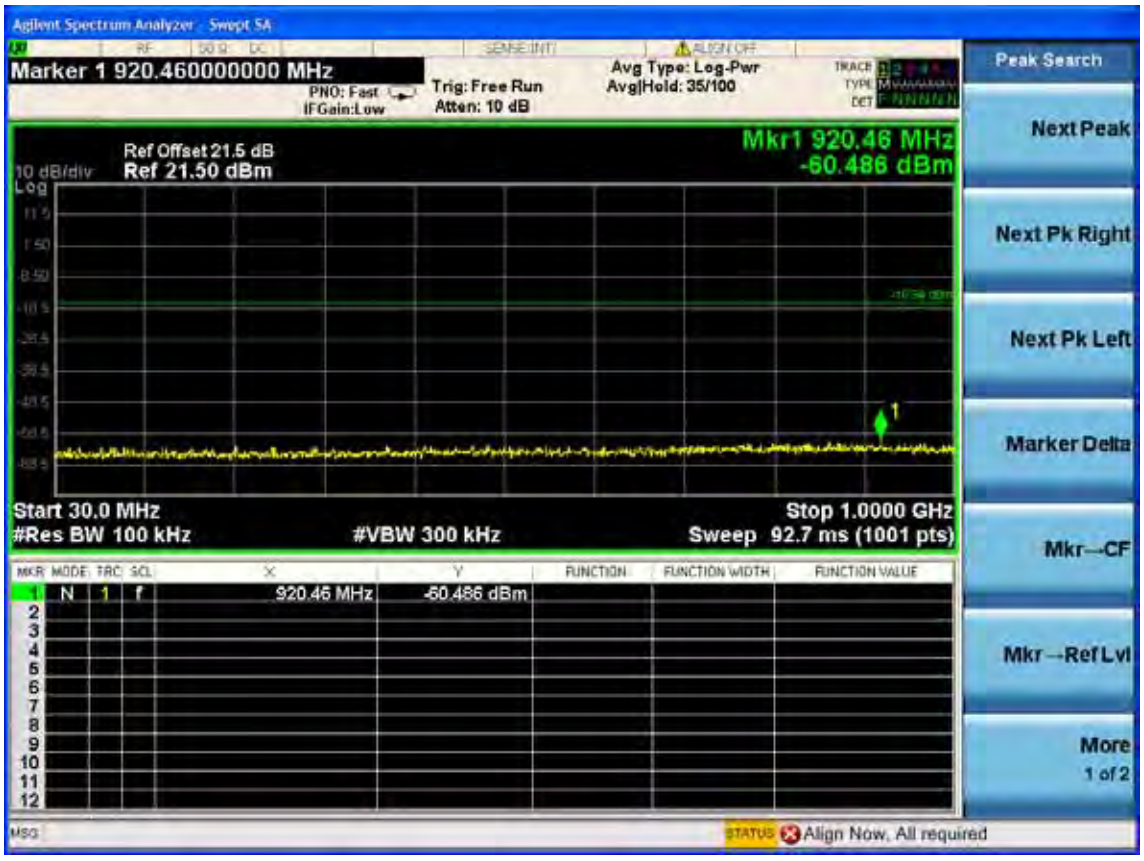


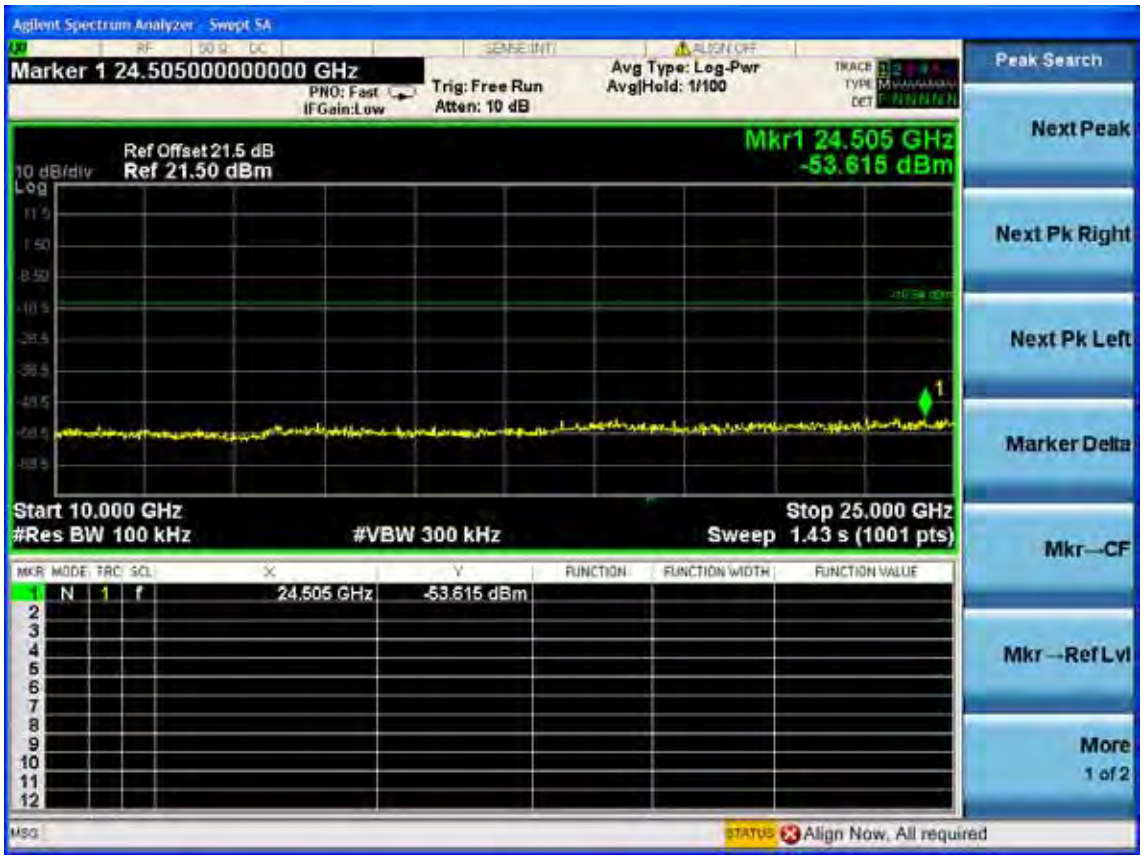




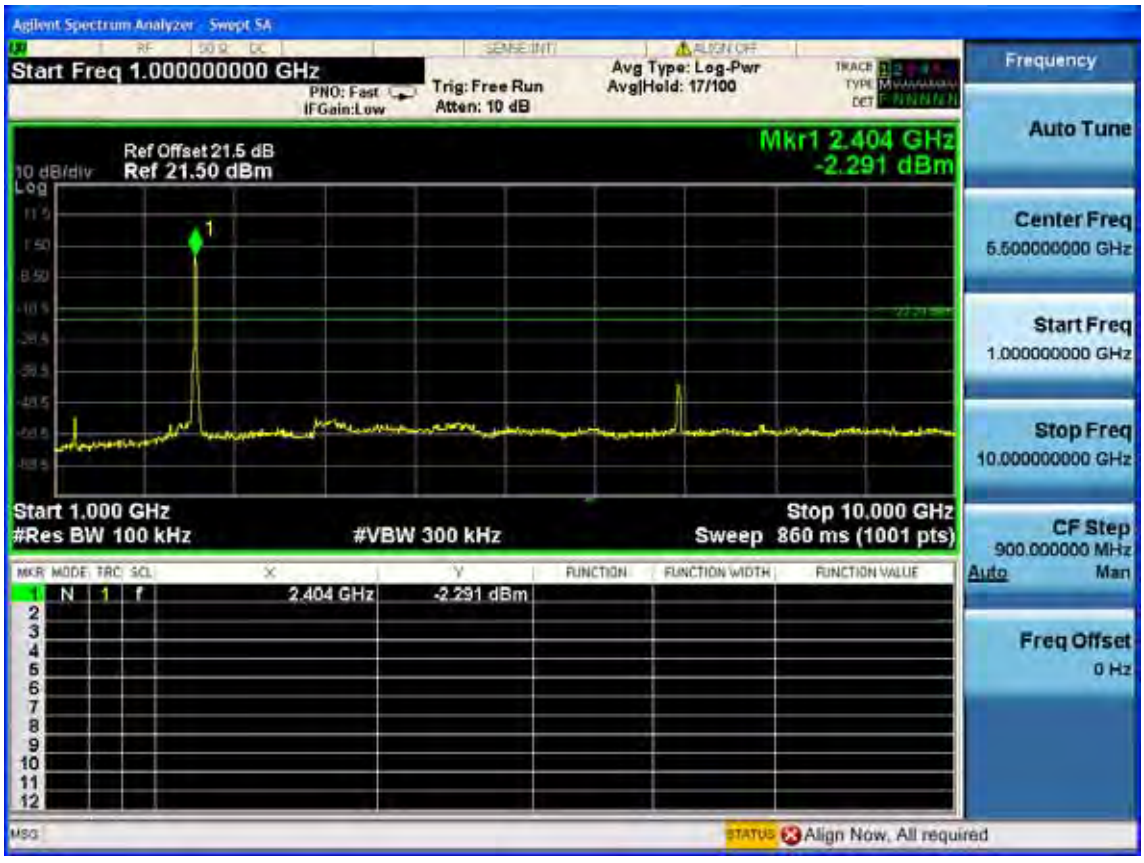
Test CH11: 2462MHz

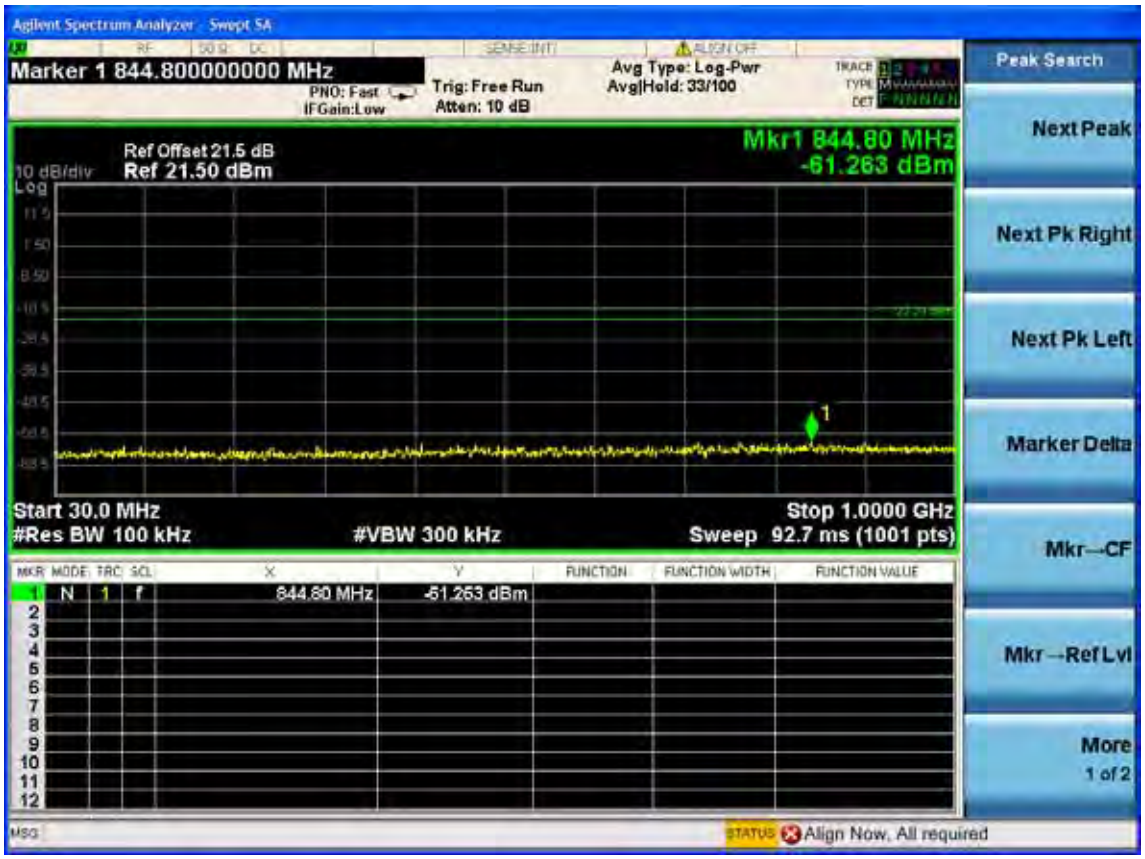

Agilent Spectrum Analyzer - Swept SA
Start Freq 1.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 15/100
Ref Offset 21.5 dB
10 dB/div
Log
Ref 21.50 dBm
Mkr1 2.458 GHz
3.061 dBm
Start 1.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 860 ms (1001 pts)
1 N 1 f 2.458 GHz 3.061 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
Align Now, All required

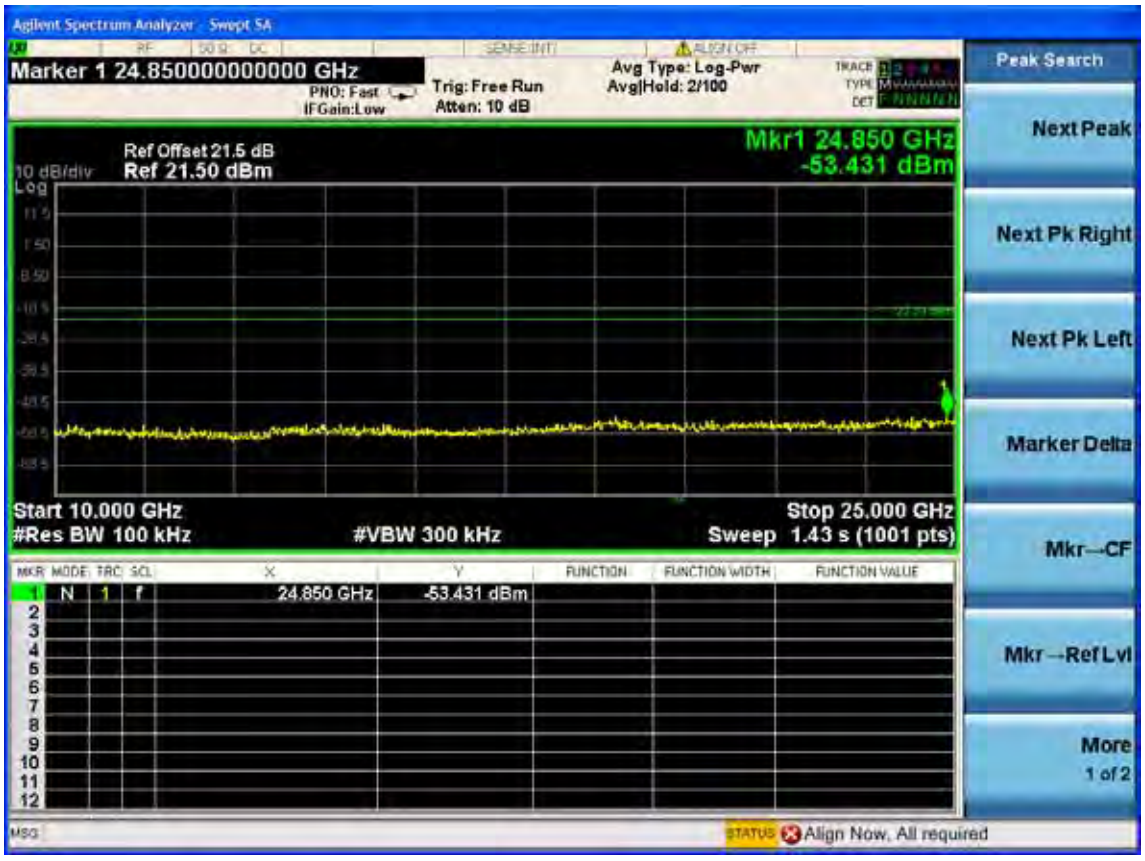

Agilent Spectrum Analyzer - Swept SA
Marker 1 920.460000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 35/100
Ref Offset 21.5 dB
10 dB/div
Log
Ref 21.50 dBm
Mkr1 920.46 MHz
-60.486 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 92.7 ms (1001 pts)
1 N 1 f 920.46 MHz -60.486 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required



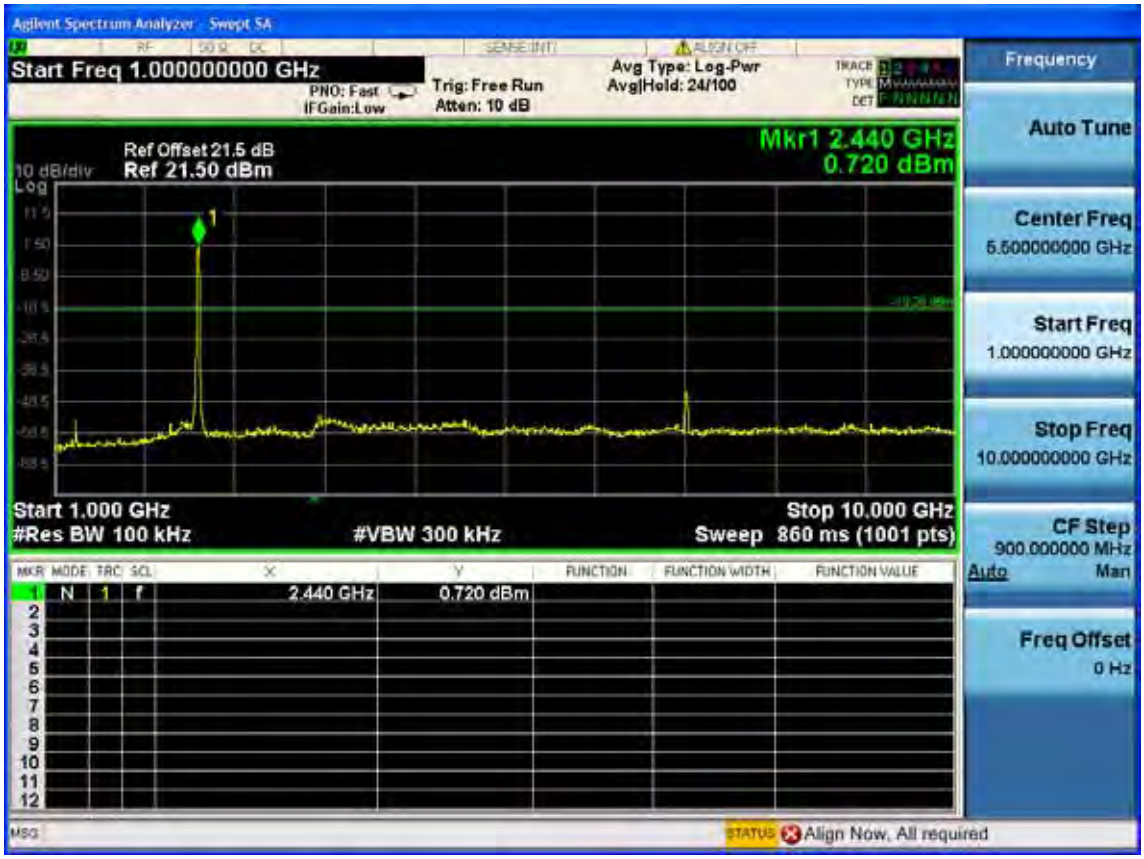
Test Mode: IEEE 802.11g
Test CH1: 2412MHz

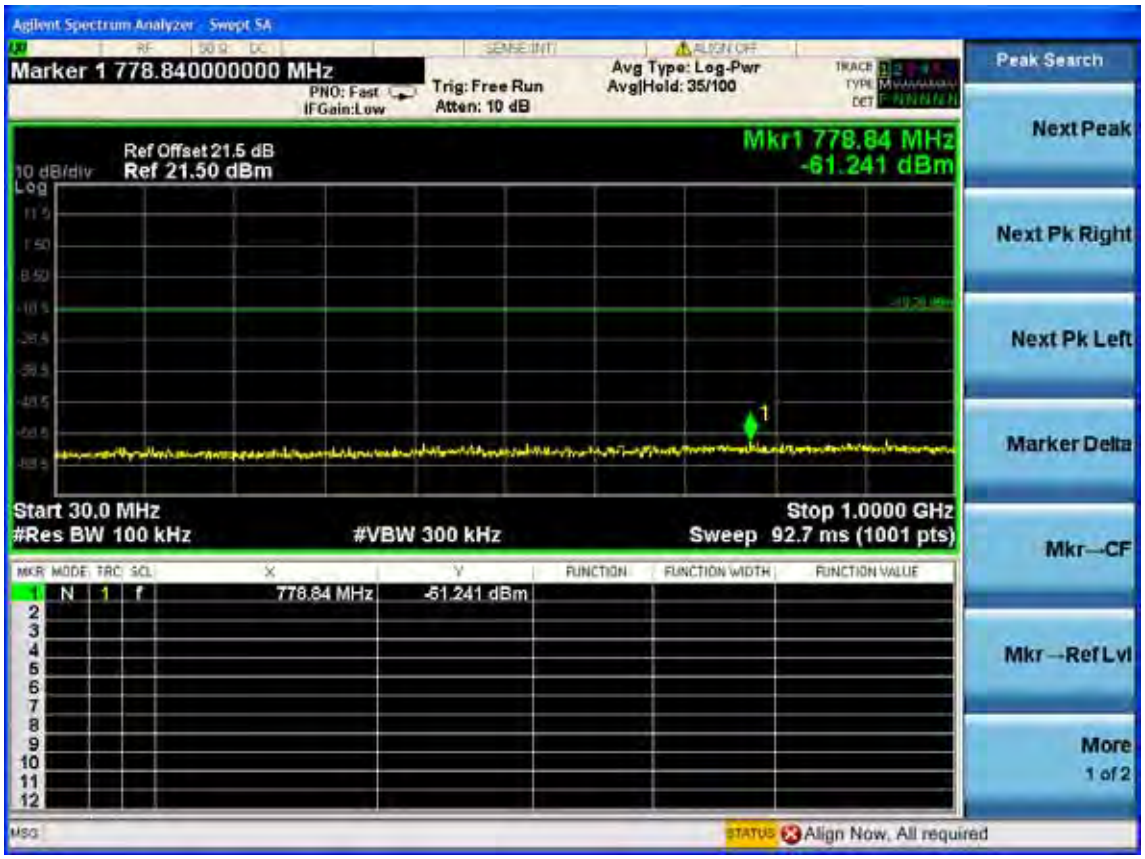


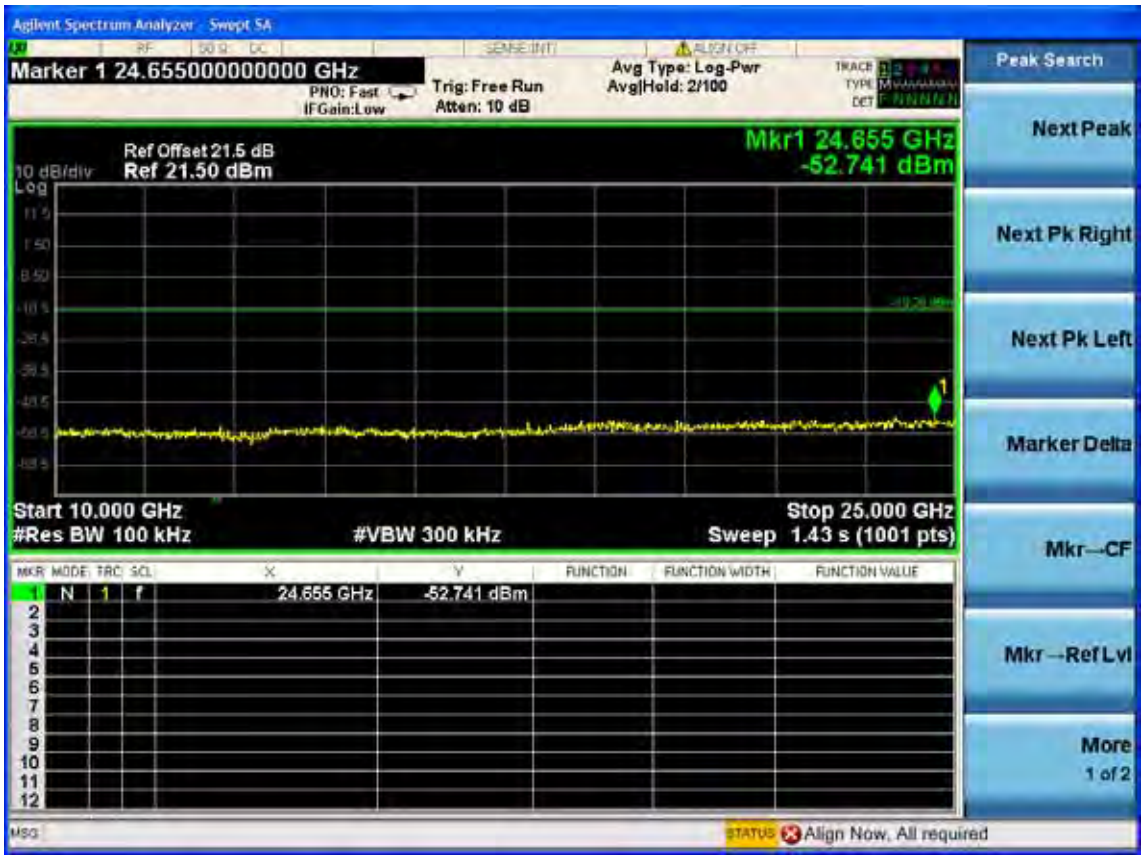

Agilent Spectrum Analyzer - Swept SA
Marker 1 844.800000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 33/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div
Ref 21.50 dBm
Log
Mkr1 844.80 MHz
-61.263 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 844.80 MHz -61.263 dBm
Align Now, All required


Agilent Spectrum Analyzer - Swept SA
Marker 1 24.850000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div
Ref 21.50 dBm
Log
Mkr1 24.850 GHz
-53.431 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 24.850 GHz -53.431 dBm
Align Now, All required

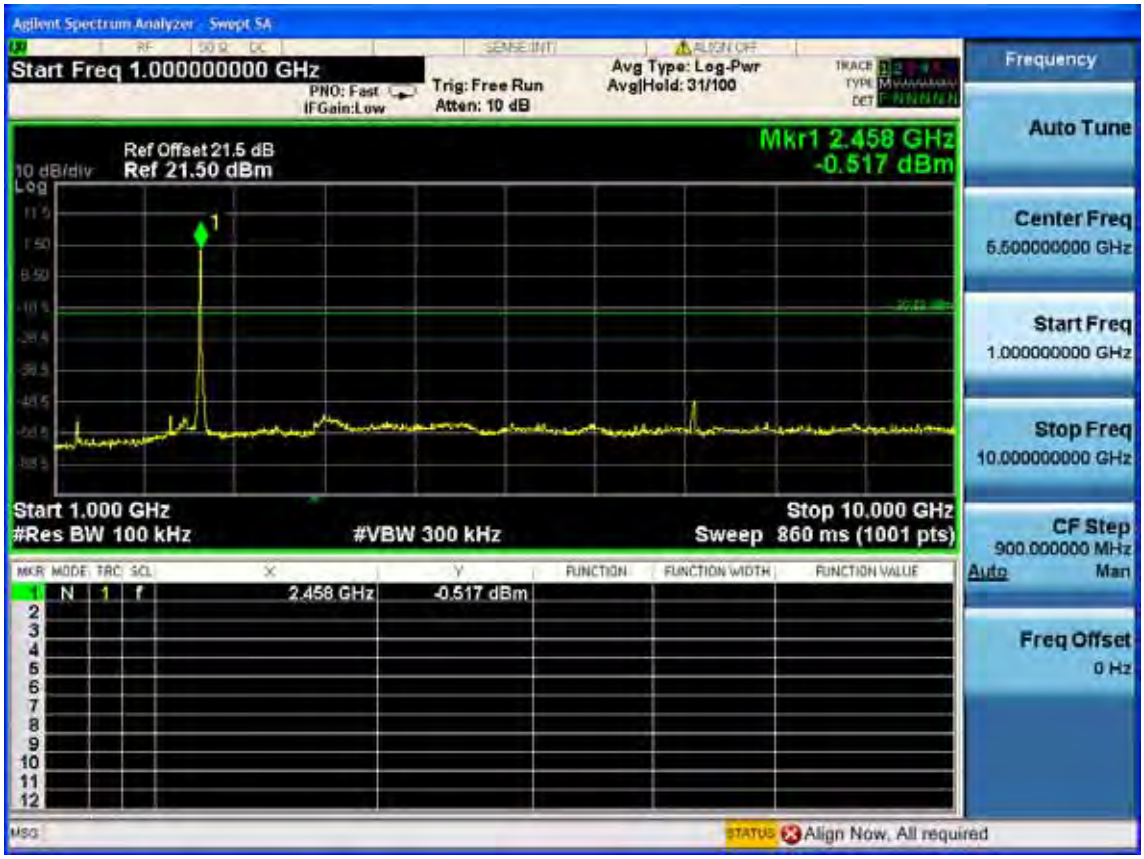
Test CH6: 2437MHz

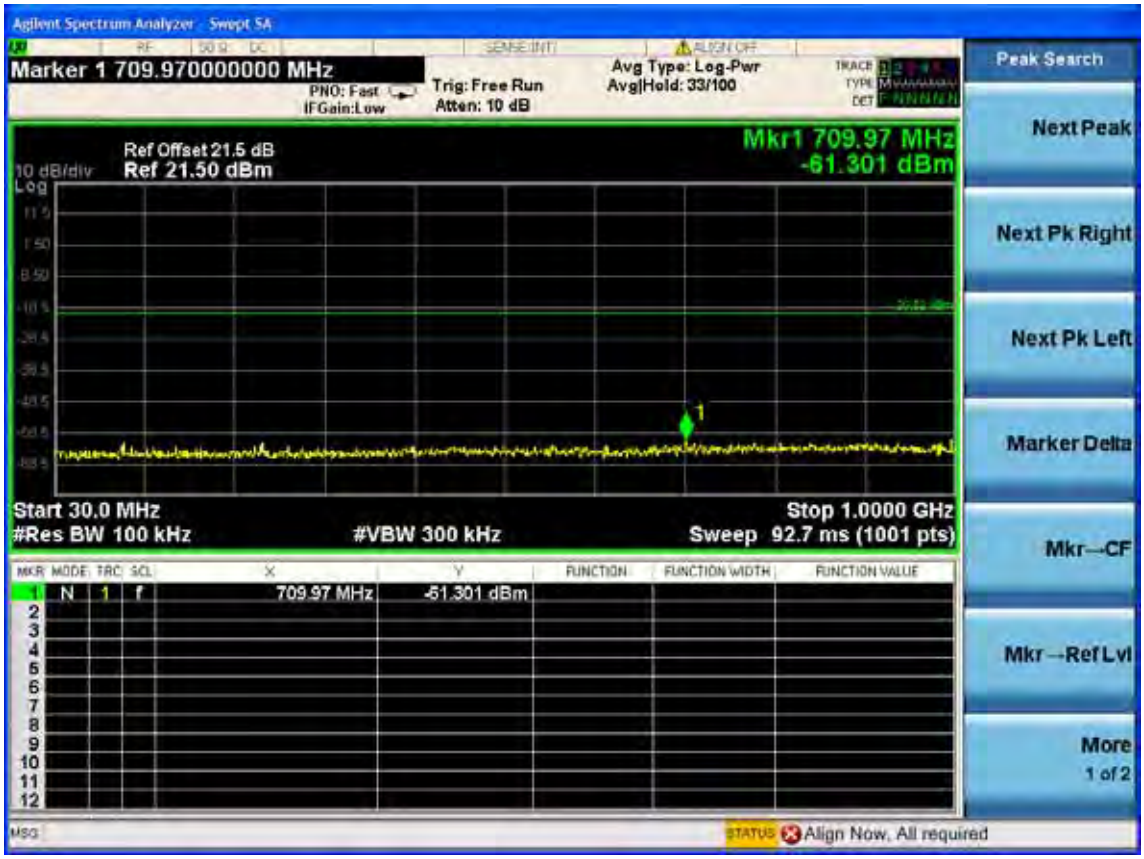


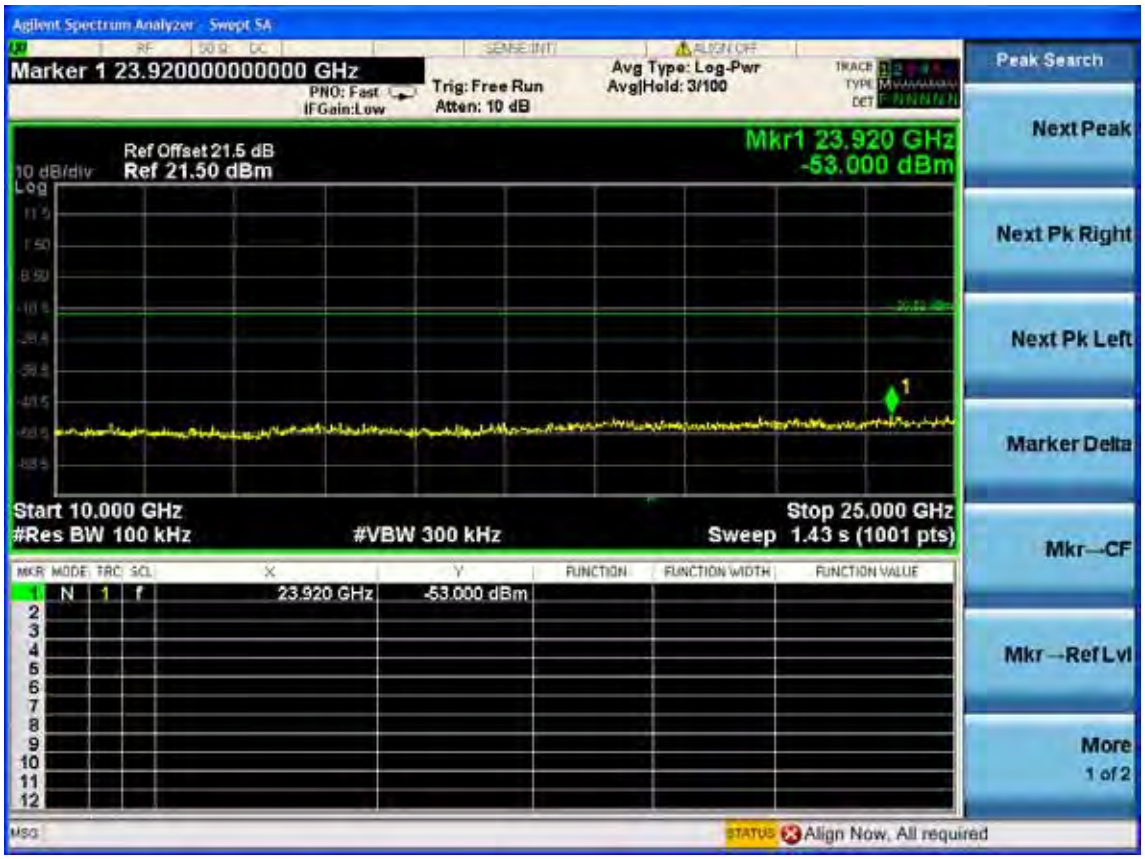

Agilent Spectrum Analyzer - Swept SA
Marker 1 778.840000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 35/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div
Ref 21.50 dBm
Log
Mkr1 778.84 MHz
-61.241 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 778.84 MHz -61.241 dBm
Align Now, All required


Agilent Spectrum Analyzer - Swept SA
Marker 1 24.655000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div
Ref 21.50 dBm
Log
Mkr1 24.655 GHz
-52.741 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 24.655 GHz -52.741 dBm
Align Now, All required

Test CH11: 2462MHz

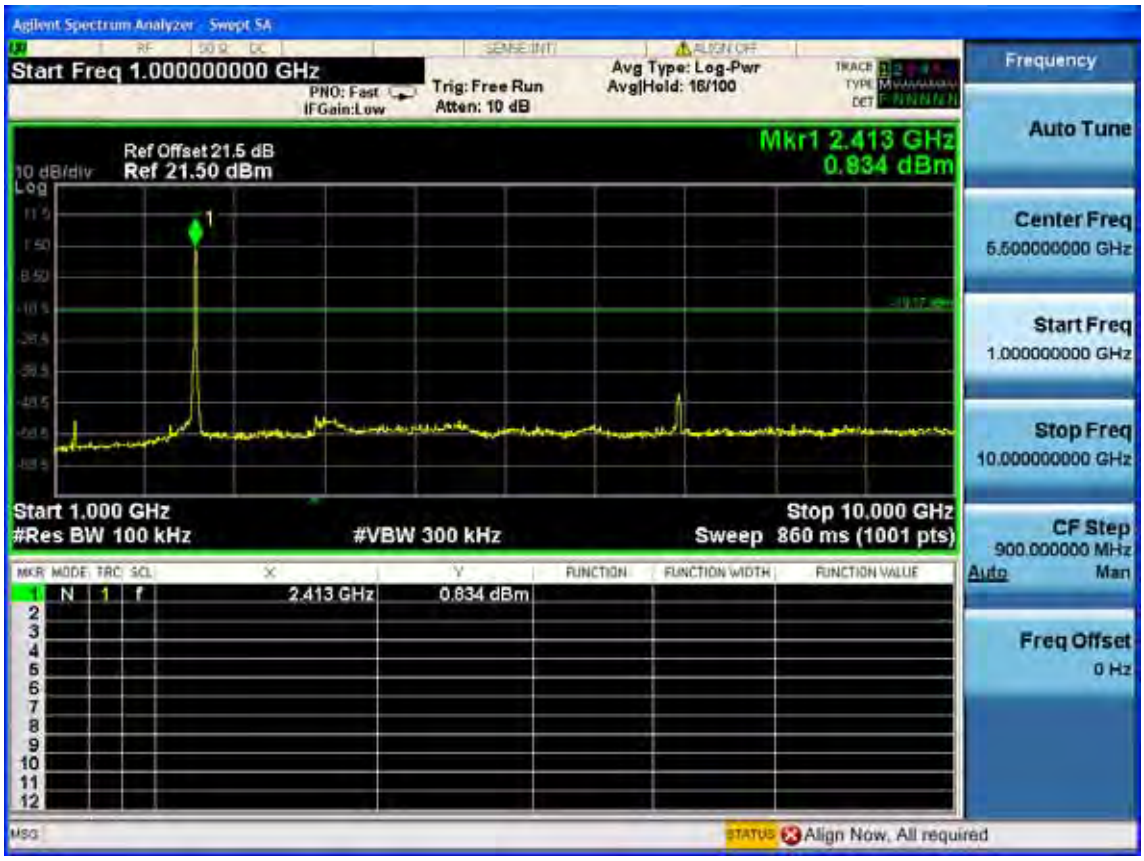


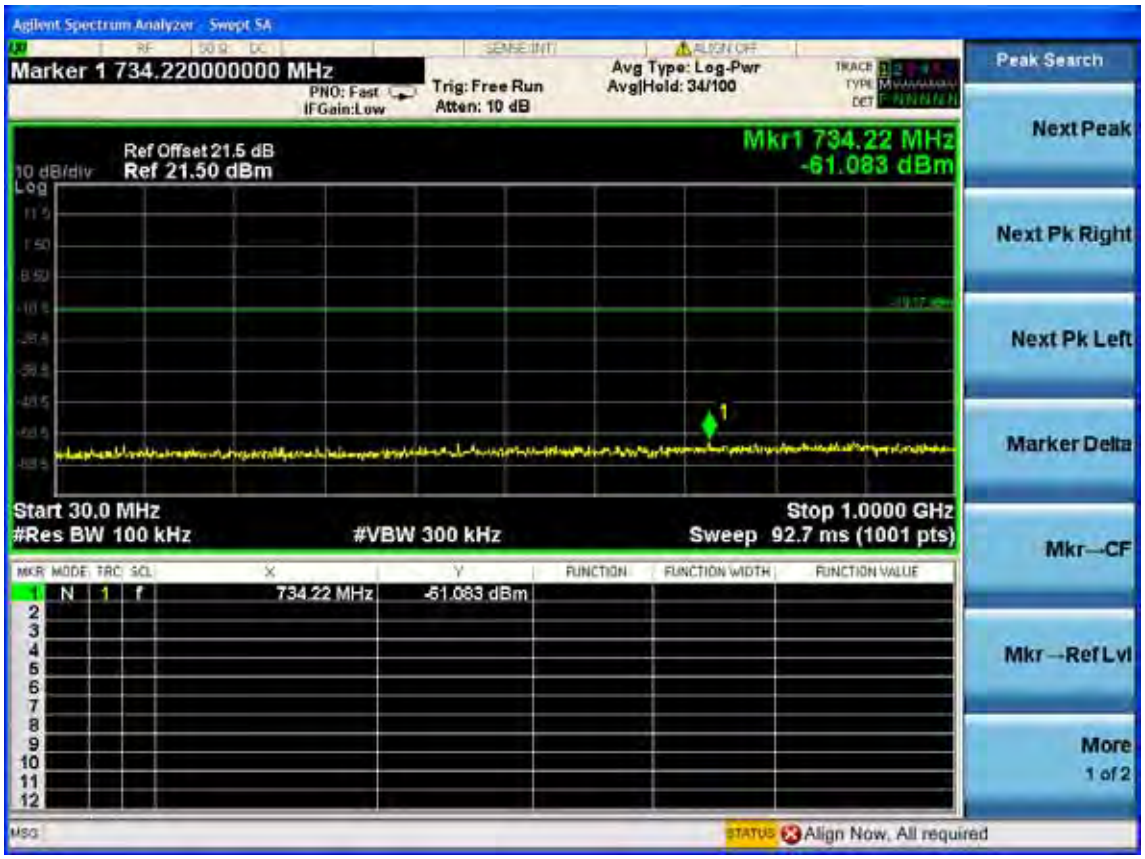


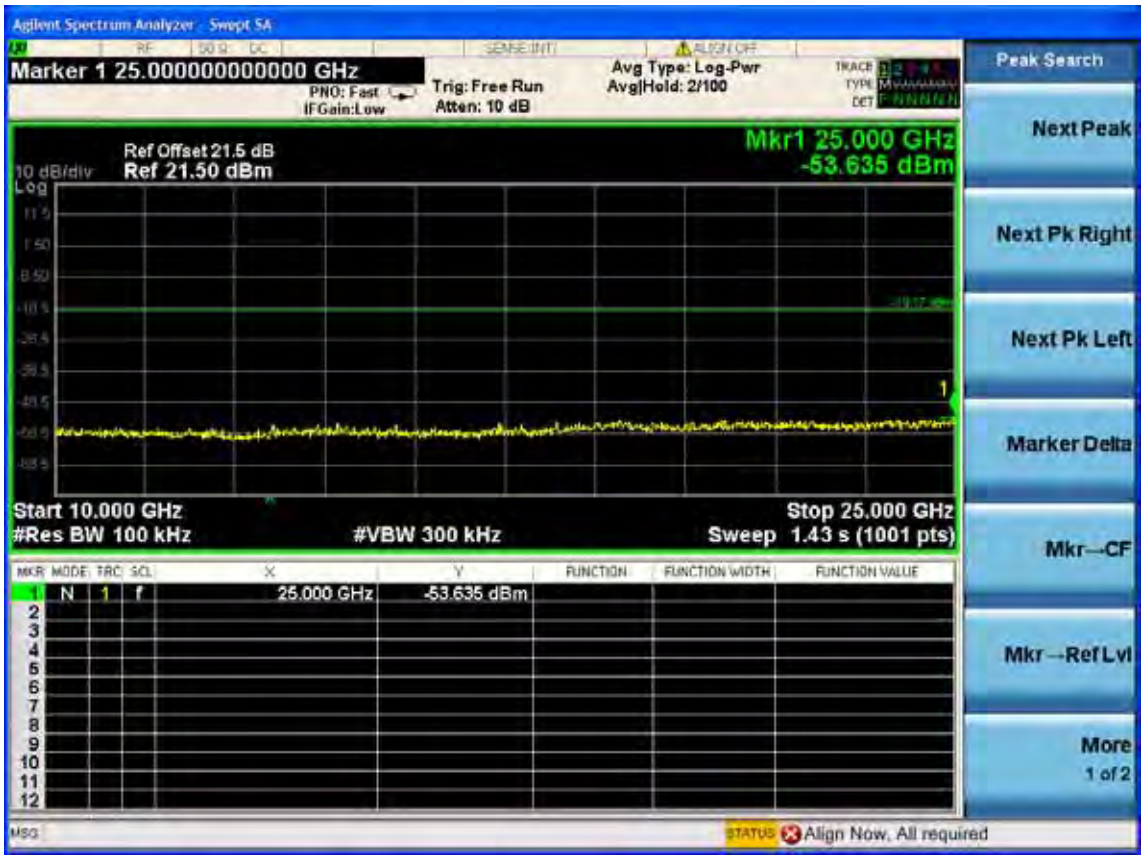

Agilent Spectrum Analyzer - Swept SA
Marker 1 23.920000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 3/100
Ref Offset 21.5 dB
10 dB/div
Ref 21.50 dBm
Log
Mkr1 23.920 GHz
-53.000 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.000 GHz
Sweep 1.43 s (1001 pts)
1 N 1 f 23.920 GHz -53.000 dBm
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Align Now, All required


Agilent Spectrum Analyzer - Swept SA
Start Freq 2.450000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ref Offset 21.5 dB
10 dB/div
Ref 21.50 dBm
Log
Mkr1 2.463 26 GHz
0.776 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 2.463 26 GHz 0.776 dBm
2 N 1 f 2.483 50 GHz -40.964 dBm
3 N 1 f 2.500 00 GHz -52.836 dBm
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.450000000 GHz
Stop Freq
2.510000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Align Now, All required

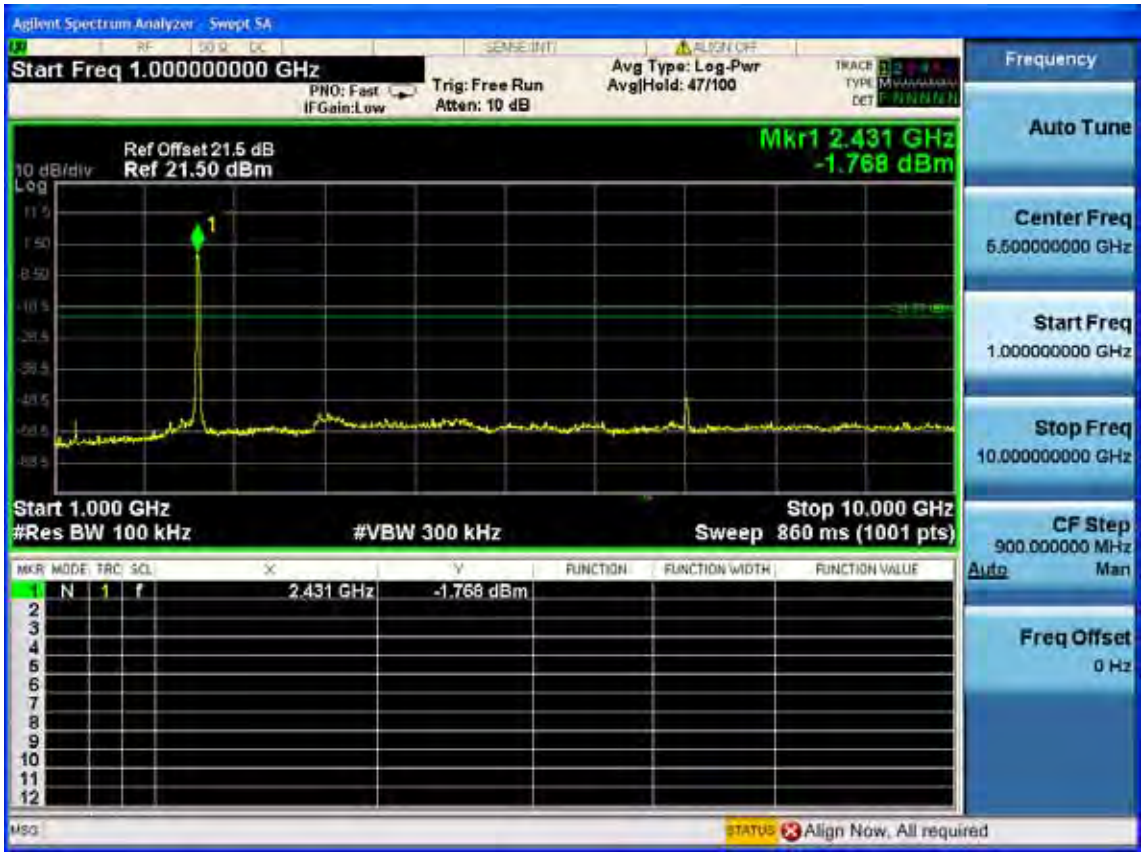
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

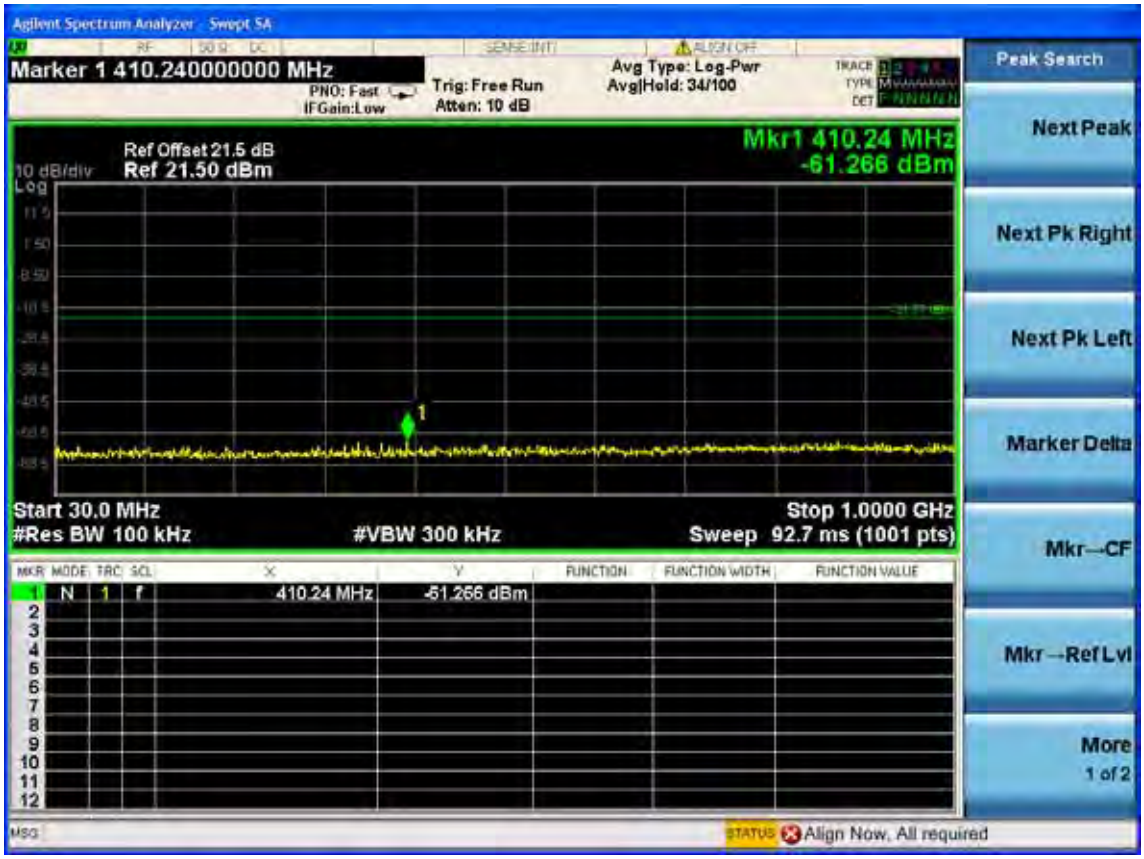


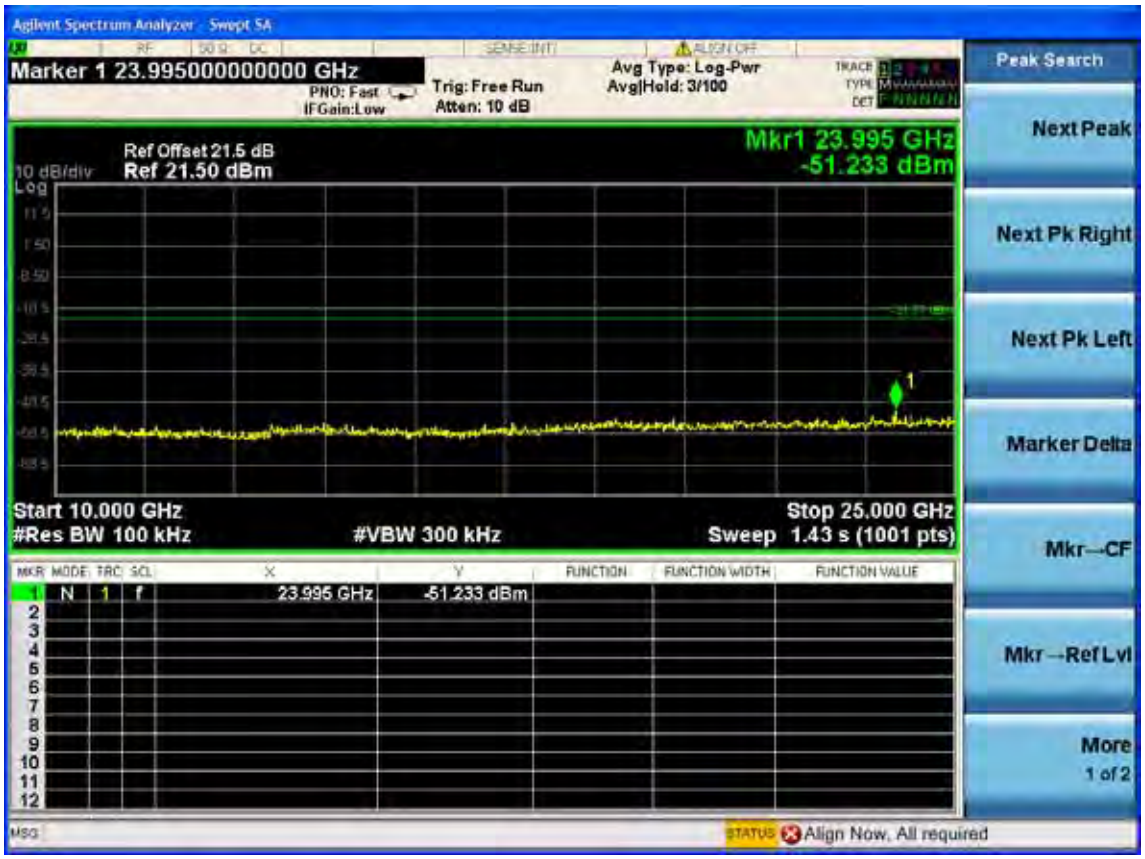

Agilent Spectrum Analyzer - Swept SA
Marker 1 734.220000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 34/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div Ref 21.50 dBm
Log
Mkr1 734.22 MHz
-61.083 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 734.22 MHz -61.083 dBm
Align Now, All required


Agilent Spectrum Analyzer - Swept SA
Marker 1 25.000000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 2/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div Ref 21.50 dBm
Log
Mkr1 25.000 GHz
-53.635 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 25.000 GHz -53.635 dBm
Align Now, All required

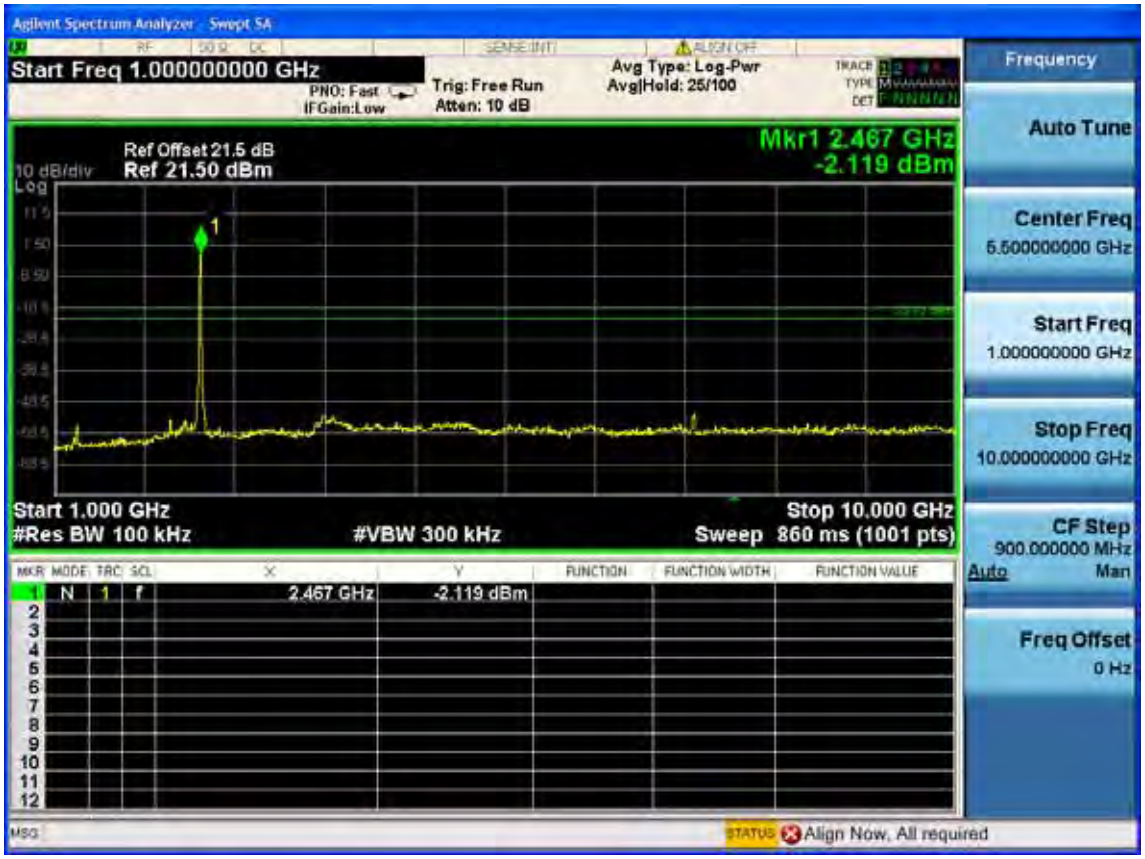
Test CH6: 2437MHz

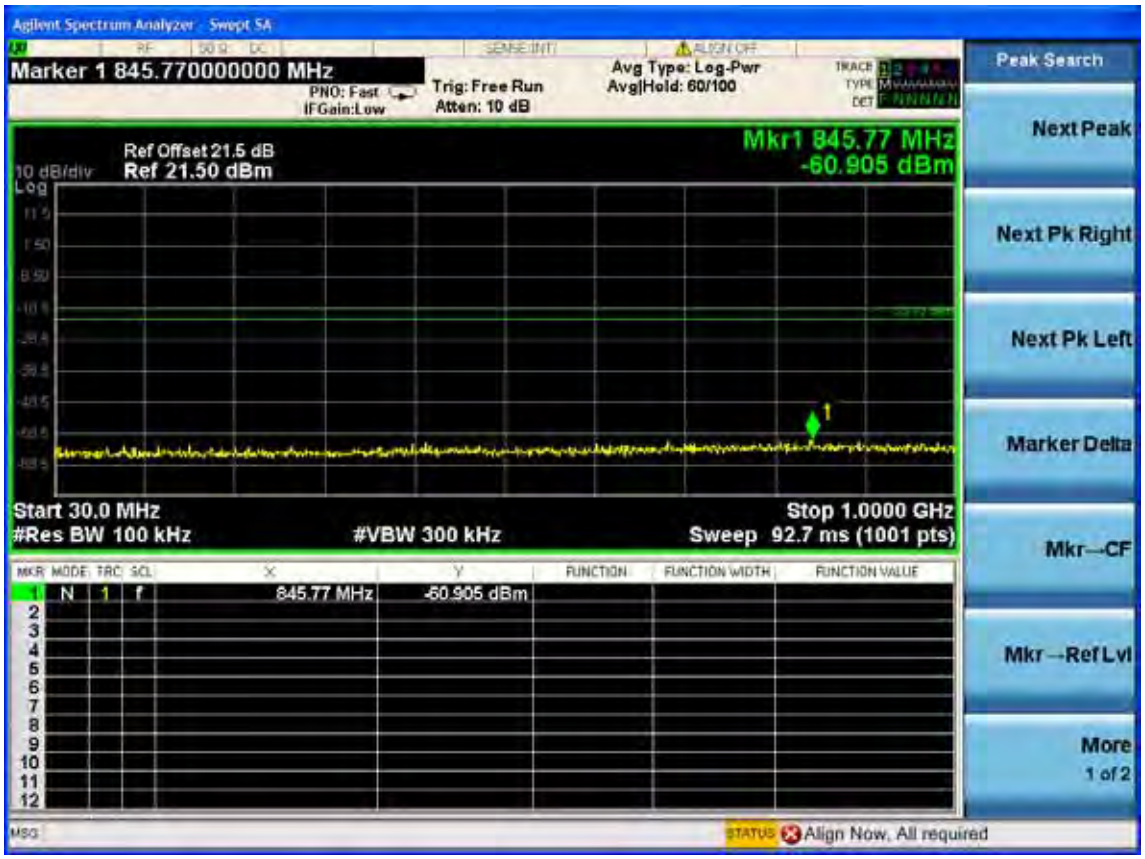


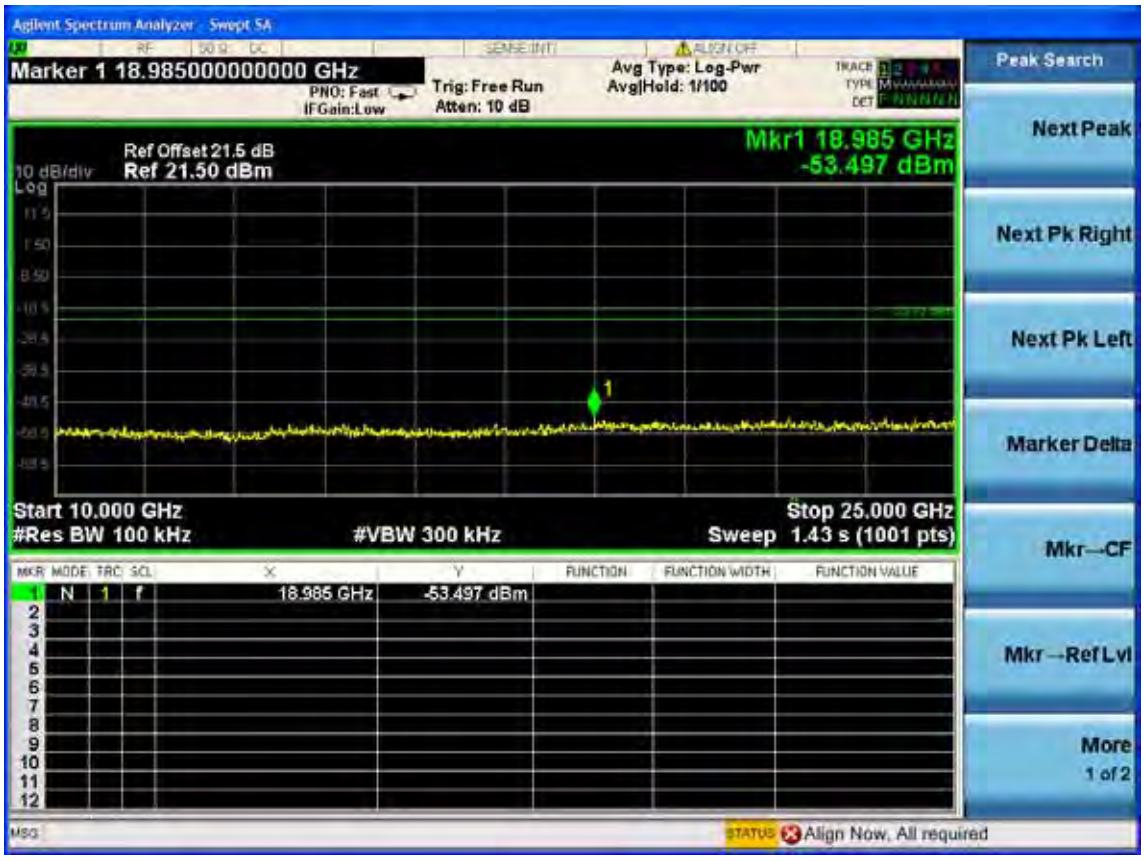




Test CH11: 2462MHz




Agilent Spectrum Analyzer - Swept SA
Marker 1 845.770000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 60/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div Ref 21.50 dBm
Log
Mkr1 845.77 MHz
-60.905 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 845.77 MHz -60.905 dBm
Align Now, All required


Agilent Spectrum Analyzer - Swept SA
Marker 1 18.985000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold: 1/100
Peak Search
Next Peak
Next Pk Right
Next Pk Left
Marker Delta
Mkr→CF
Mkr→Ref Lvl
More
1 of 2
Ref Offset 21.5 dB
10 dB/div Ref 21.50 dBm
Log
Mkr1 18.985 GHz
-53.497 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 18.985 GHz -53.497 dBm
Align Now, All required


Agilent Spectrum Analyzer - Swept SA
Start Freq 2.450000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 10 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Ref Offset 21.5 dB
10 dB/div
Ref 21.50 dBm
Mkr1 2.463 26 GHz
-0.391 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 2.463 26 GHz -0.391 dBm
2 N 1 f 2.483 50 GHz -45.927 dBm
3 N 1 f 2.500 00 GHz -55.783 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
Align Now, All required

6. BAND EDGE COMPLIANCE TEST

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
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 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz 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.

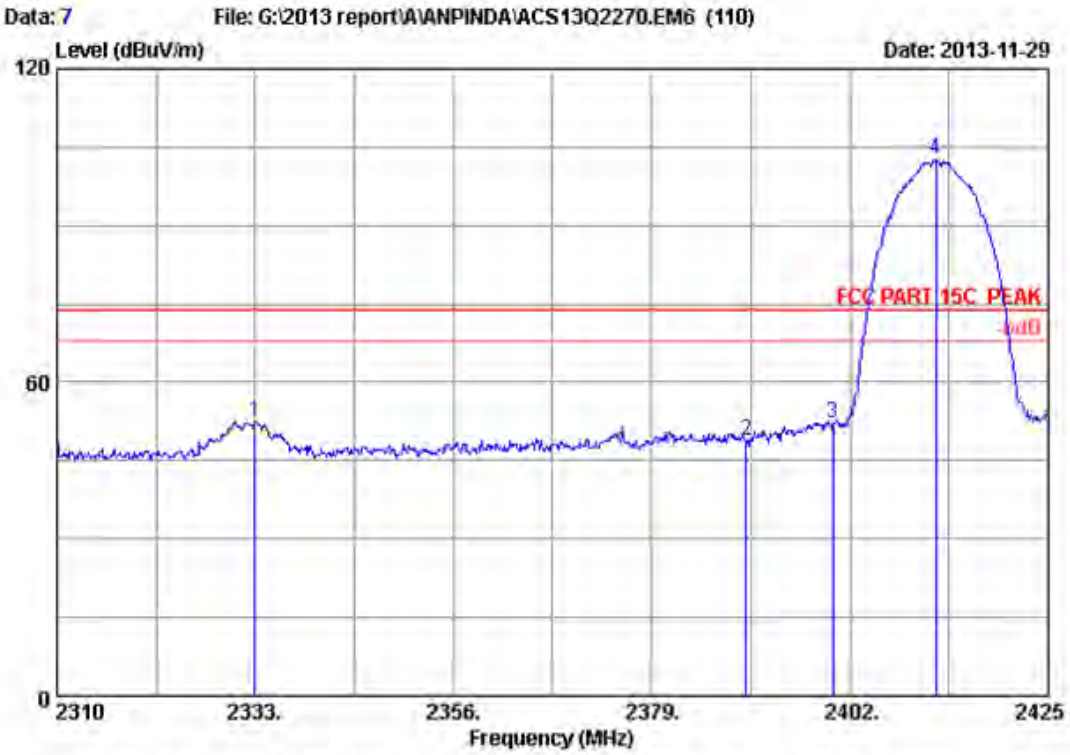
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

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

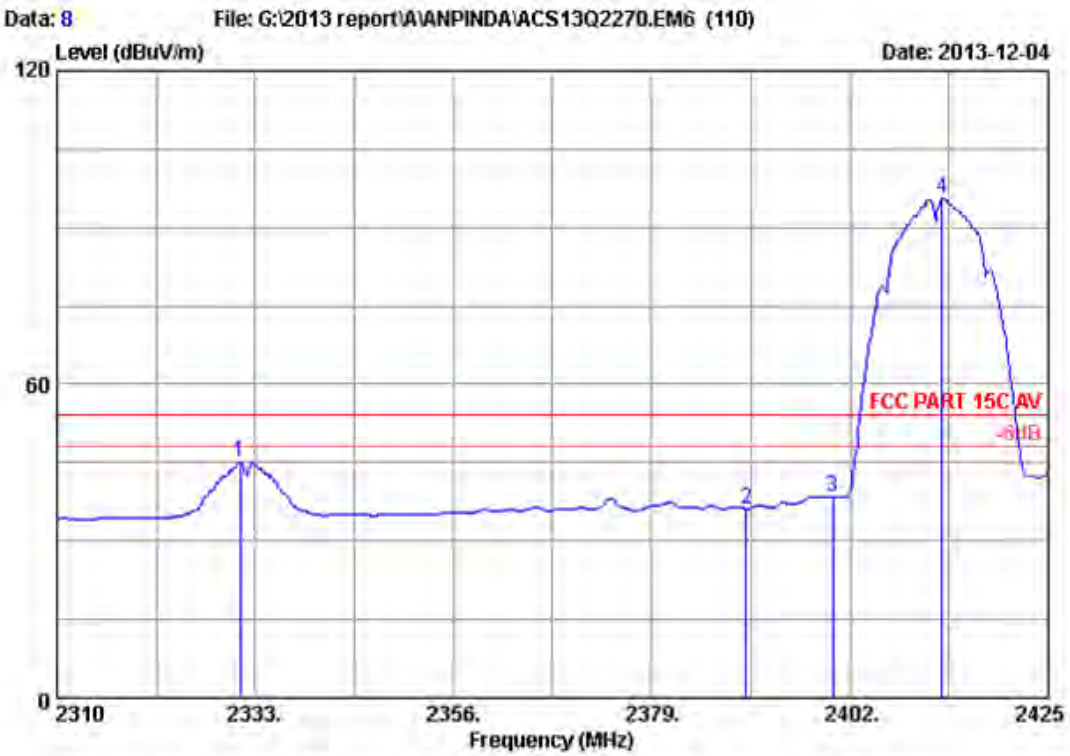
Pass (The testing data was attached in the next pages.)



Site no. : RF Chamber Data no. : 7
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	2333.000	28.03	5.70	35.70	54.58	52.61	74.00	21.39	Peak
2	2390.000	28.16	5.78	35.70	50.57	48.81	74.00	25.19	Peak
3	2400.000	28.18	5.80	35.70	53.88	52.16	74.00	21.84	Peak
4	2412.005	28.21	5.81	35.70	104.19	102.51	74.00	-28.51	Peak

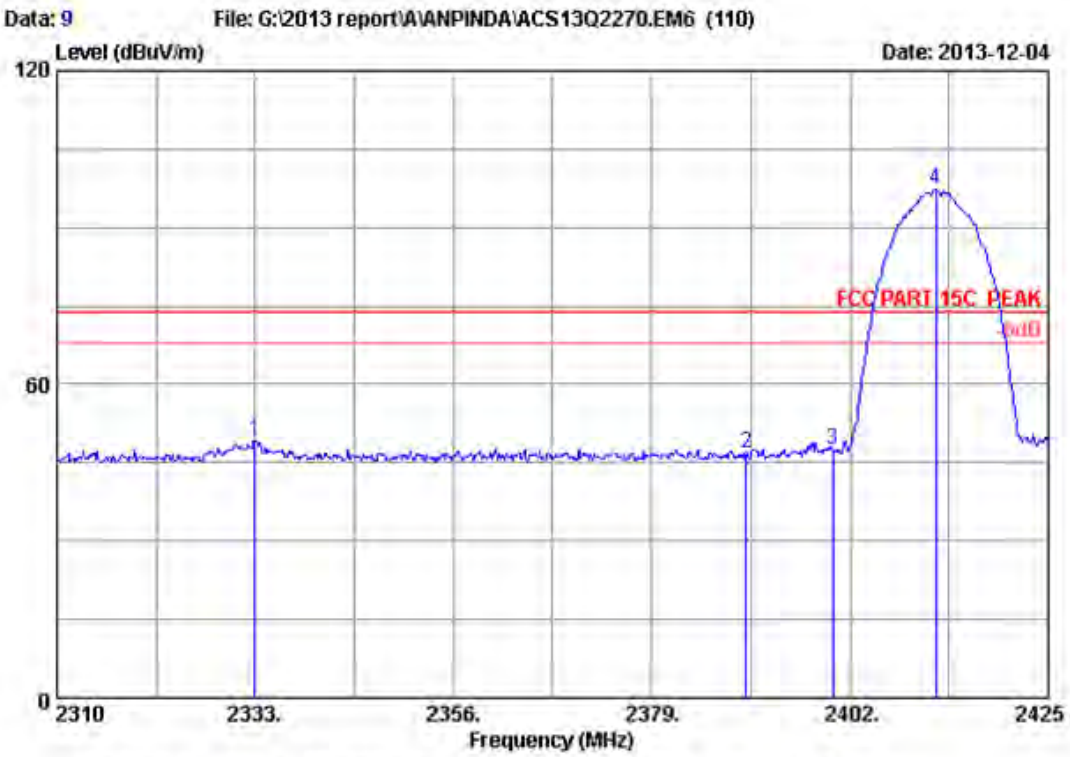
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 8
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	2331.275	28.03	5.70	35.70	47.06	45.09	54.00	8.91	Average
2	2390.000	28.16	5.78	35.70	37.92	36.16	54.00	17.84	Average
3	2400.000	28.18	5.80	35.70	40.20	38.48	54.00	15.52	Average
4	2412.695	28.21	5.82	35.70	97.28	95.61	54.00	-41.61	Average

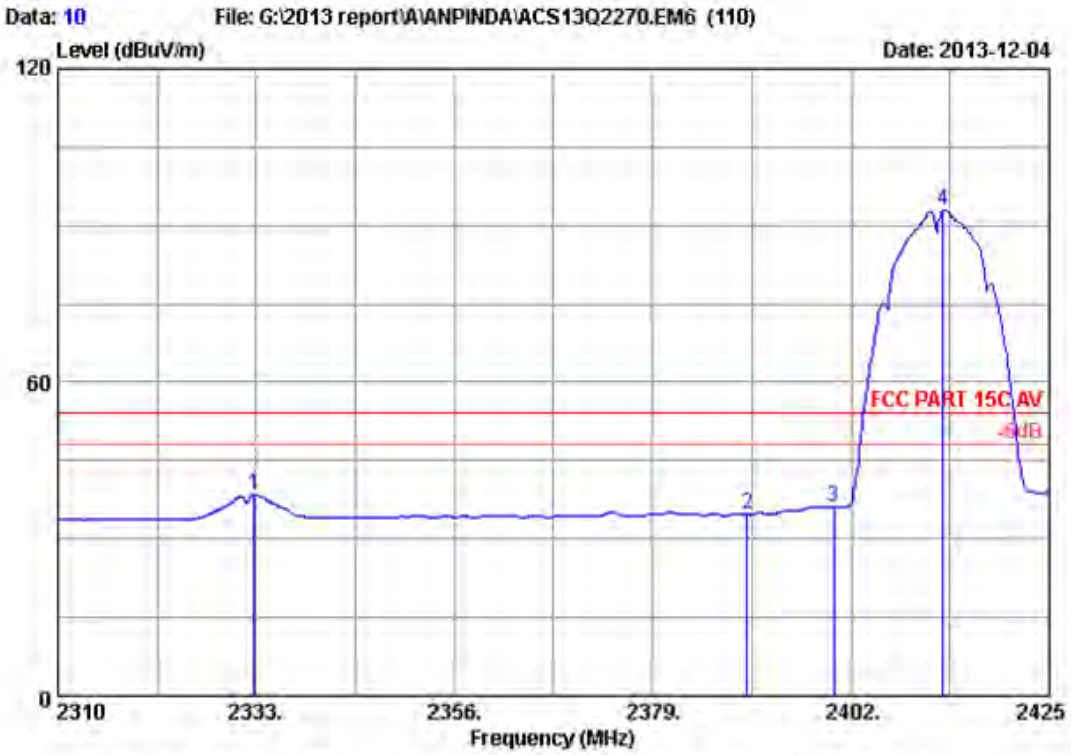
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 9
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	2333.000	28.03	5.70	35.70	51.14	49.17	74.00	24.83	Peak
2	2390.000	28.16	5.78	35.70	48.48	46.72	74.00	27.28	Peak
3	2400.000	28.18	5.80	35.70	49.26	47.54	74.00	26.46	Peak
4	2412.005	28.21	5.81	35.70	98.90	97.22	74.00	-23.22	Peak

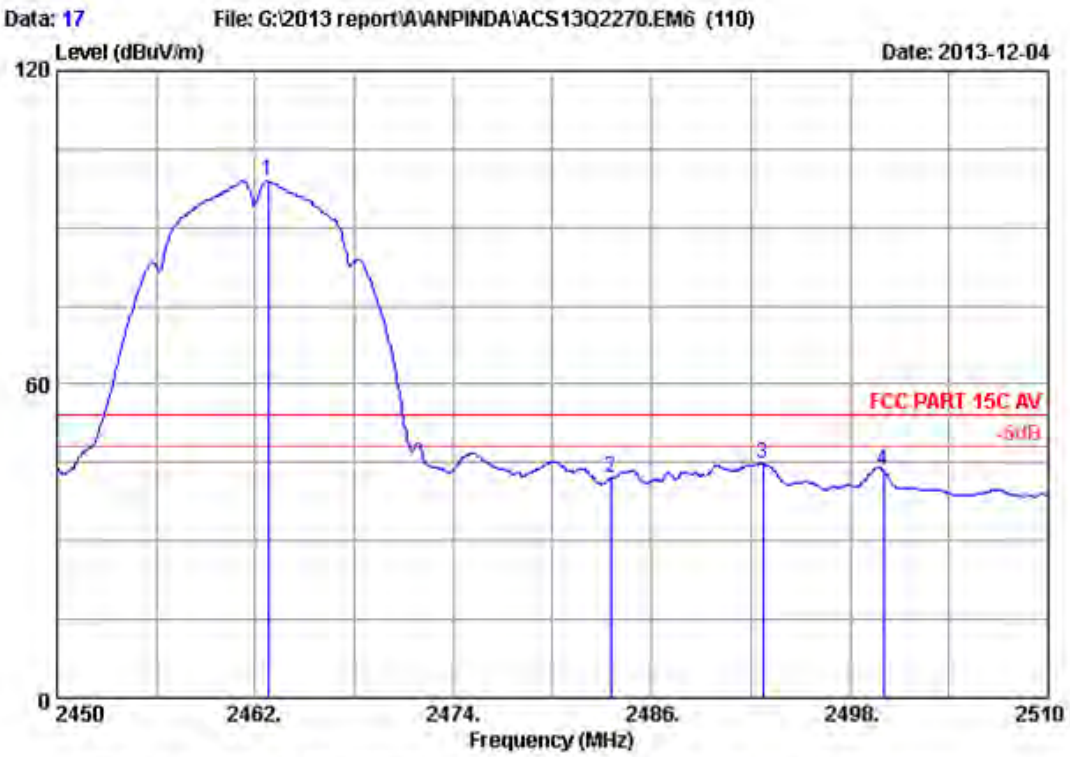
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 10
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2412MHz Tx Mode
M/N : F1P

	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	2332.770	28.03	5.70	35.70	40.47	38.50	54.00	15.50	Average
2	2390.000	28.16	5.78	35.70	36.37	34.61	54.00	19.39	Average
3	2400.000	28.18	5.80	35.70	37.91	36.19	54.00	17.81	Average
4	2412.695	28.21	5.82	35.70	94.68	93.01	54.00	-39.01	Average

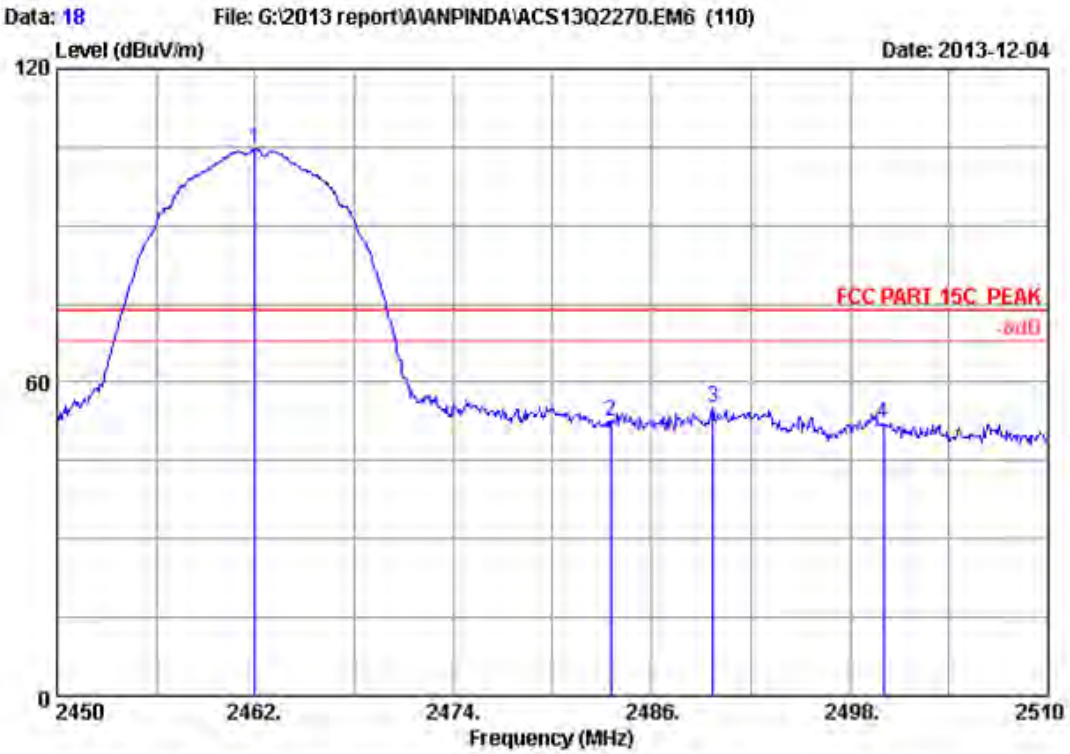
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 17
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	2462.780	28.32	5.89	35.70	100.37	98.88	54.00	-44.88	Average
2	2483.500	28.36	5.92	35.70	43.49	42.07	54.00	11.93	Average
3	2492.720	28.38	5.93	35.70	46.27	44.88	54.00	9.12	Average
4	2500.000	28.40	5.94	35.70	44.94	43.58	54.00	10.42	Average

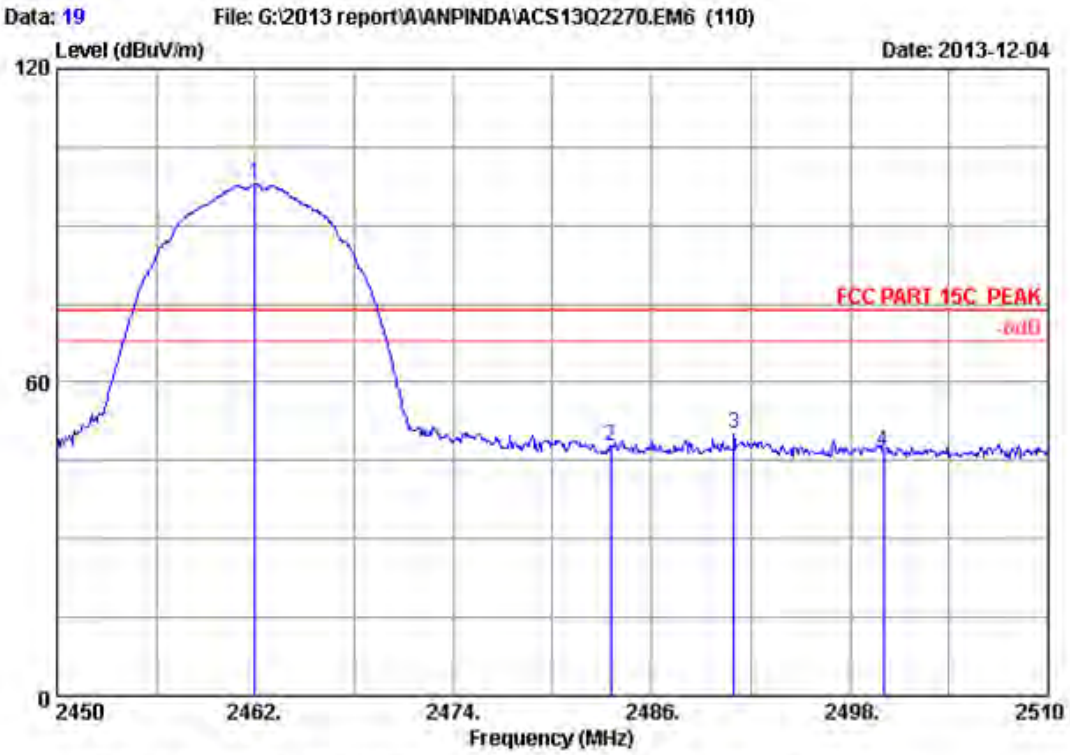
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 18
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	106.17	104.68	74.00	-30.68	Peak
2	2483.500	28.36	5.92	35.70	53.93	52.51	74.00	21.49	Peak
3	2489.720	28.38	5.93	35.70	56.45	55.06	74.00	18.94	Peak
4	2500.000	28.40	5.94	35.70	53.48	52.12	74.00	21.88	Peak

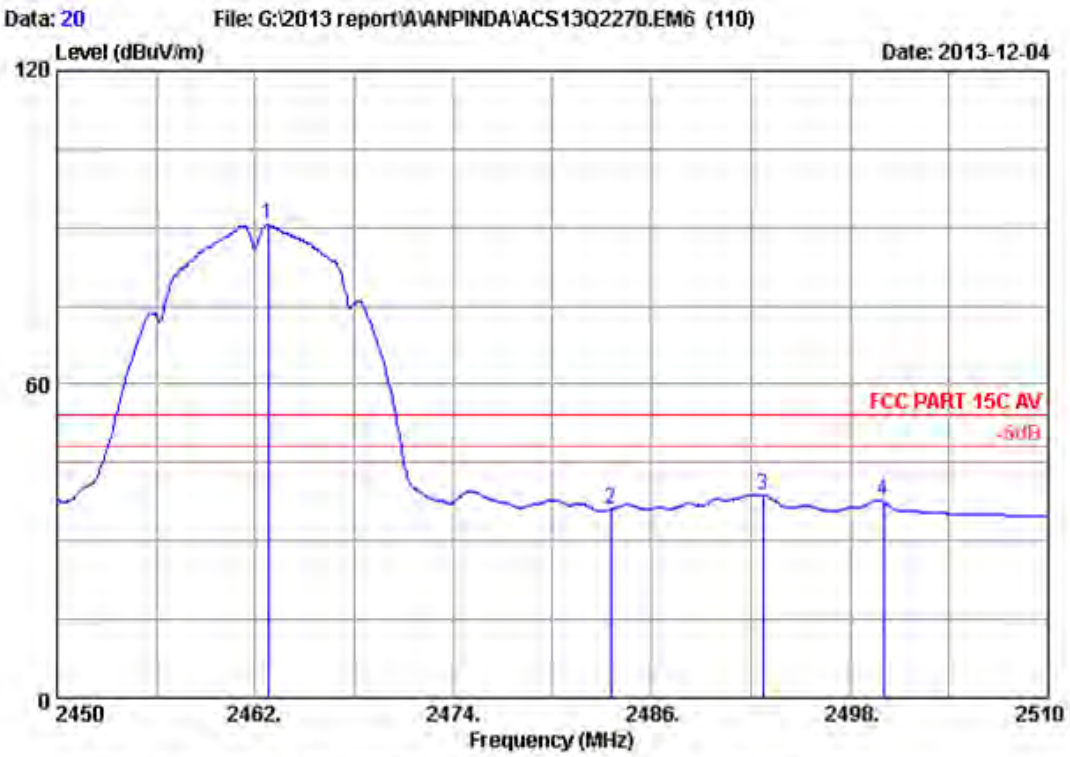
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 19
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	99.45	97.96	74.00	-23.96	Peak
2	2483.500	28.36	5.92	35.70	49.15	47.73	74.00	26.27	Peak
3	2490.980	28.38	5.93	35.70	51.63	50.24	74.00	23.76	Peak
4	2500.000	28.40	5.94	35.70	48.03	46.67	74.00	27.33	Peak

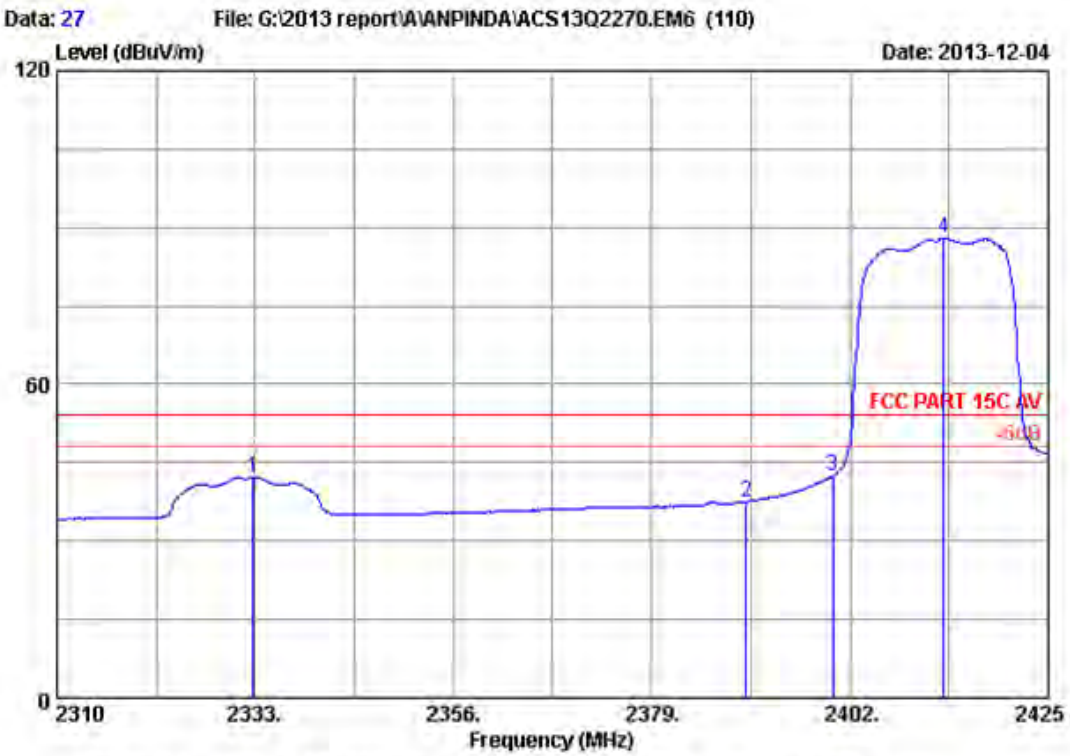
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 20
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11b 2462MHz Tx Mode
M/N : F1P

	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	2462.780	28.32	5.89	35.70	92.00	90.51	54.00	-36.51	Average
2	2483.500	28.36	5.92	35.70	37.45	36.03	54.00	17.97	Average
3	2492.720	28.38	5.93	35.70	40.30	38.91	54.00	15.09	Average
4	2500.000	28.40	5.94	35.70	39.02	37.66	54.00	16.34	Average

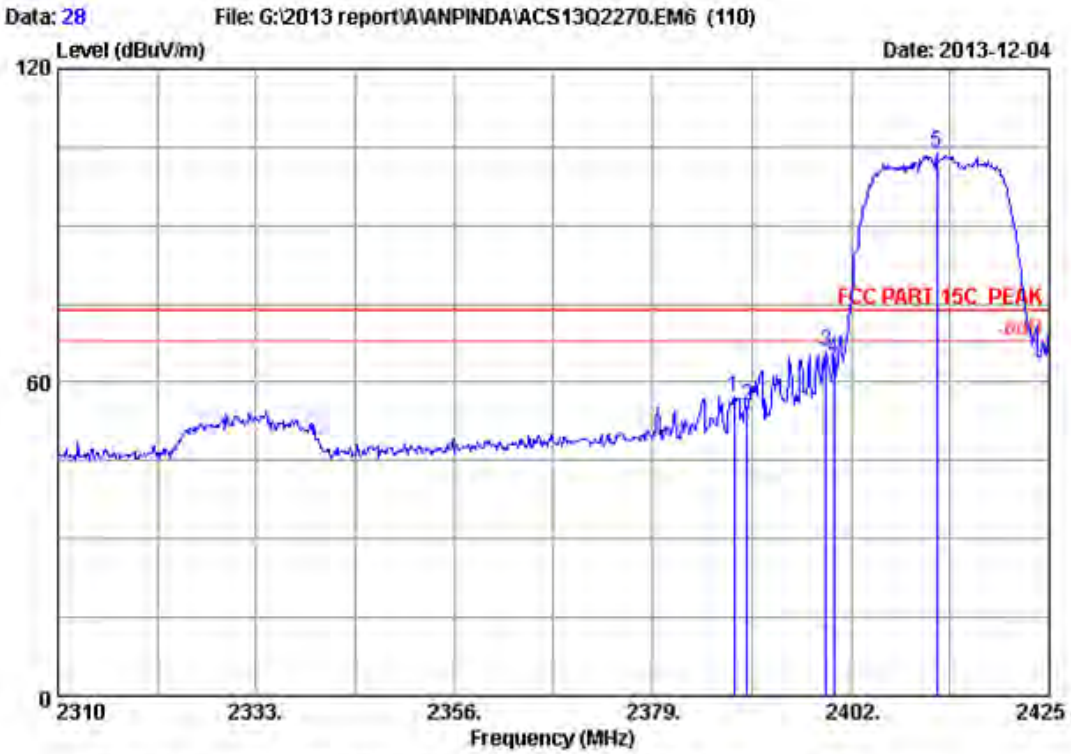
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 27
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	2332.770	28.03	5.70	35.70	44.20	42.23	54.00	11.77	Average
2	2390.000	28.16	5.78	35.70	39.27	37.51	54.00	16.49	Average
3	2400.000	28.18	5.80	35.70	44.26	42.54	54.00	11.46	Average
4	2412.925	28.21	5.82	35.70	89.74	88.07	54.00	-34.07	Average

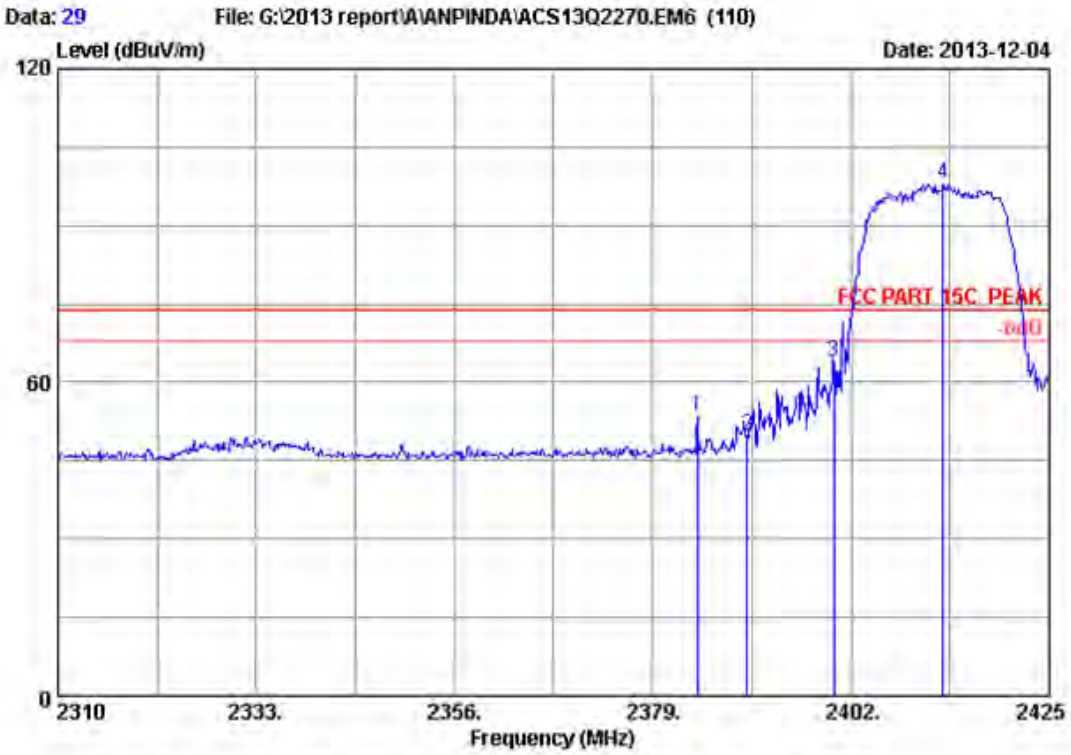
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 28
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	2388.430	28.15	5.78	35.70	58.98	57.21	74.00	16.79	Peak
2	2390.000	28.16	5.78	35.70	57.36	55.60	74.00	18.40	Peak
3	2399.125	28.18	5.80	35.70	67.48	65.76	74.00	8.24	Peak
4	2400.000	28.18	5.80	35.70	66.26	64.54	74.00	9.46	Peak
5	2412.005	28.21	5.81	35.70	105.54	103.86	74.00	-29.86	Peak

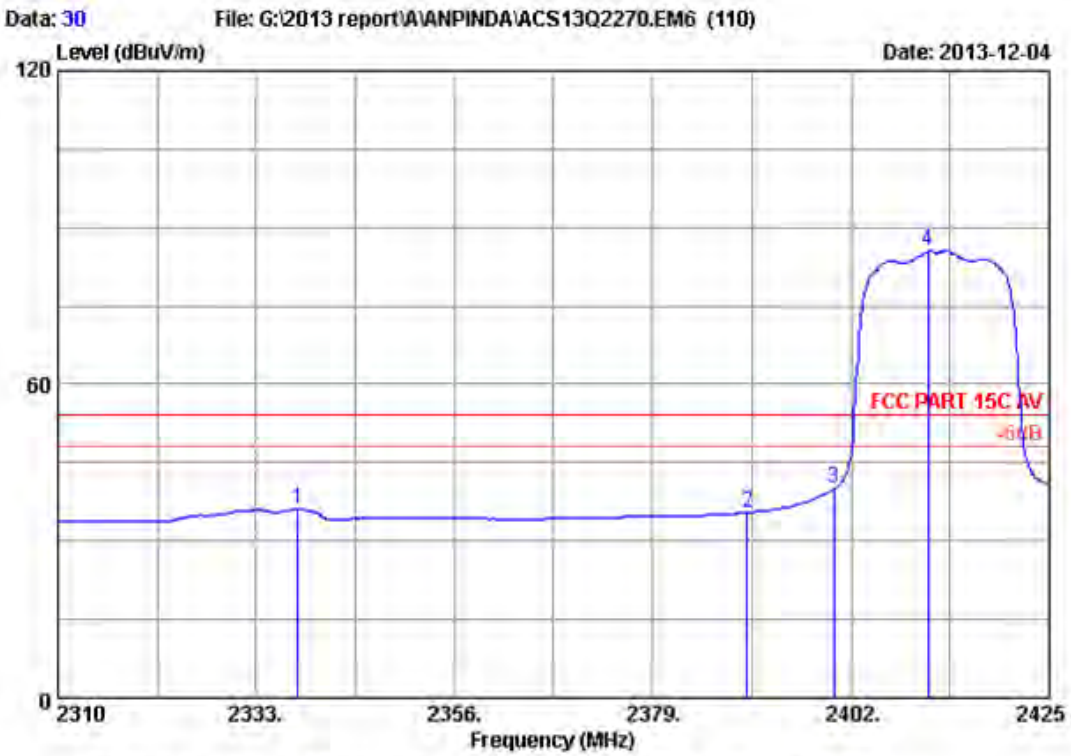
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 29
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	2384.175	28.15	5.77	35.70	55.25	53.47	74.00	20.53	Peak
2	2390.000	28.16	5.78	35.70	51.42	49.66	74.00	24.34	Peak
3	2400.000	28.18	5.80	35.70	65.47	63.75	74.00	10.25	Peak
4	2412.695	28.21	5.82	35.70	99.67	98.00	74.00	-24.00	Peak

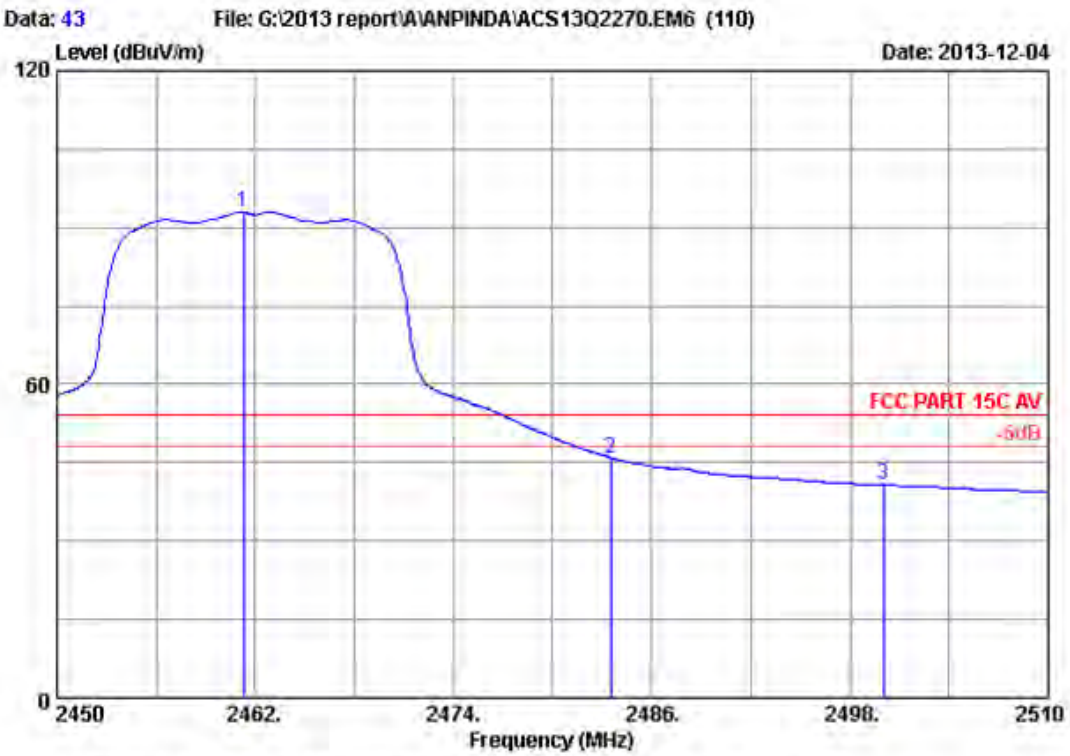
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 30
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2412MHz Tx Mode
M/N : F1P

	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	2337.830	28.04	5.71	35.70	38.08	36.13	54.00	17.87	Average
2	2390.000	28.16	5.78	35.70	37.22	35.46	54.00	18.54	Average
3	2400.000	28.18	5.80	35.70	41.68	39.96	54.00	14.04	Average
4	2410.970	28.20	5.81	35.70	87.21	85.52	54.00	-31.52	Average

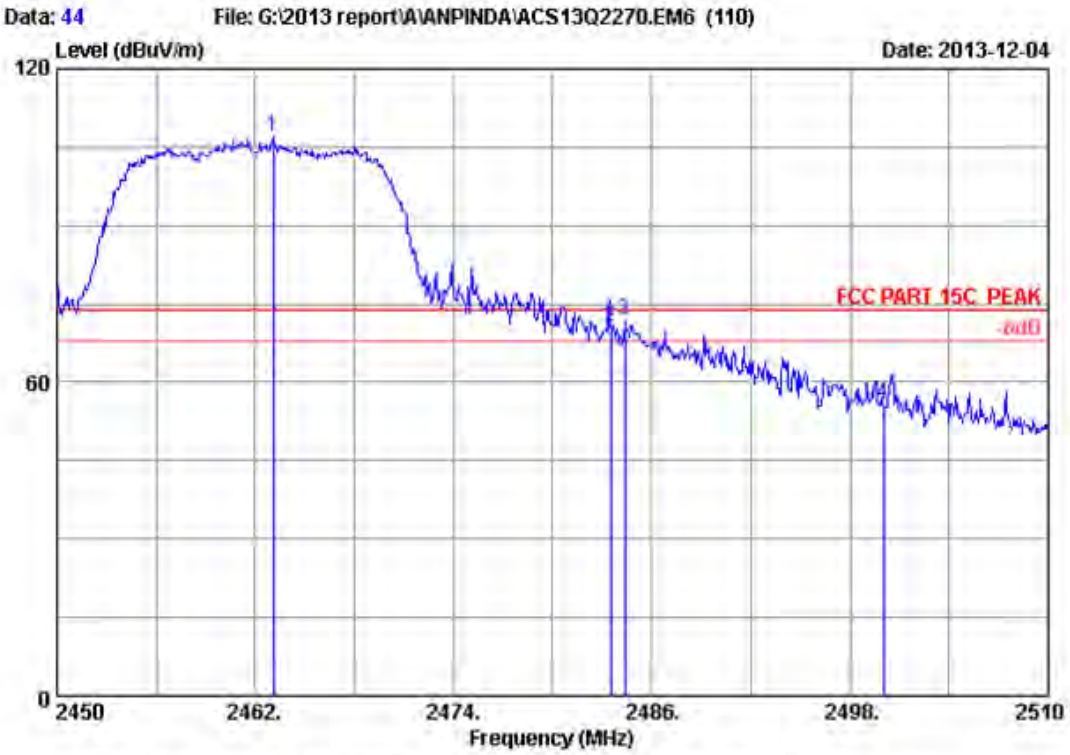
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 43
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	2461.280	28.31	5.89	35.70	94.45	92.95	54.00	-38.95	Average
2	2483.500	28.36	5.92	35.70	47.33	45.91	54.00	8.09	Average
3	2500.000	28.40	5.94	35.70	42.15	40.79	54.00	13.21	Average

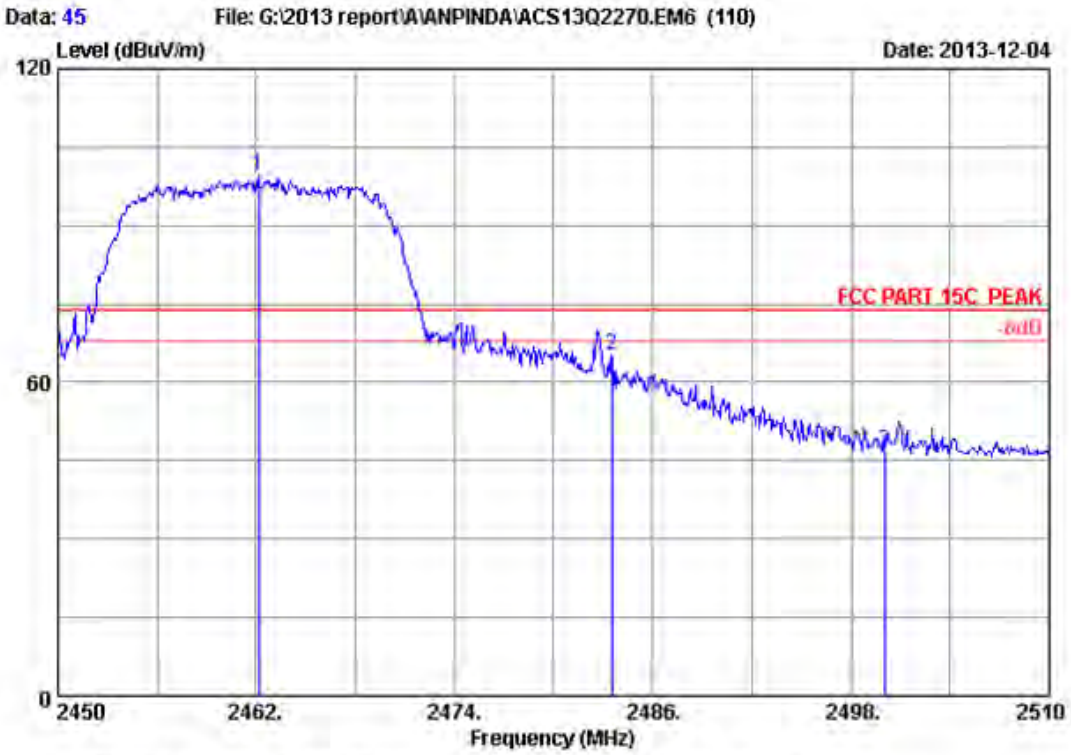
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 44
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	2463.080	28.32	5.89	35.70	108.47	106.98	74.00	-32.98	Peak
2	2483.500	28.36	5.92	35.70	71.86	70.44	74.00	3.56	Peak
3	2484.380	28.37	5.92	35.70	73.17	71.76	74.00	2.24	Peak
4	2500.000	28.40	5.94	35.70	57.04	55.68	74.00	18.32	Peak

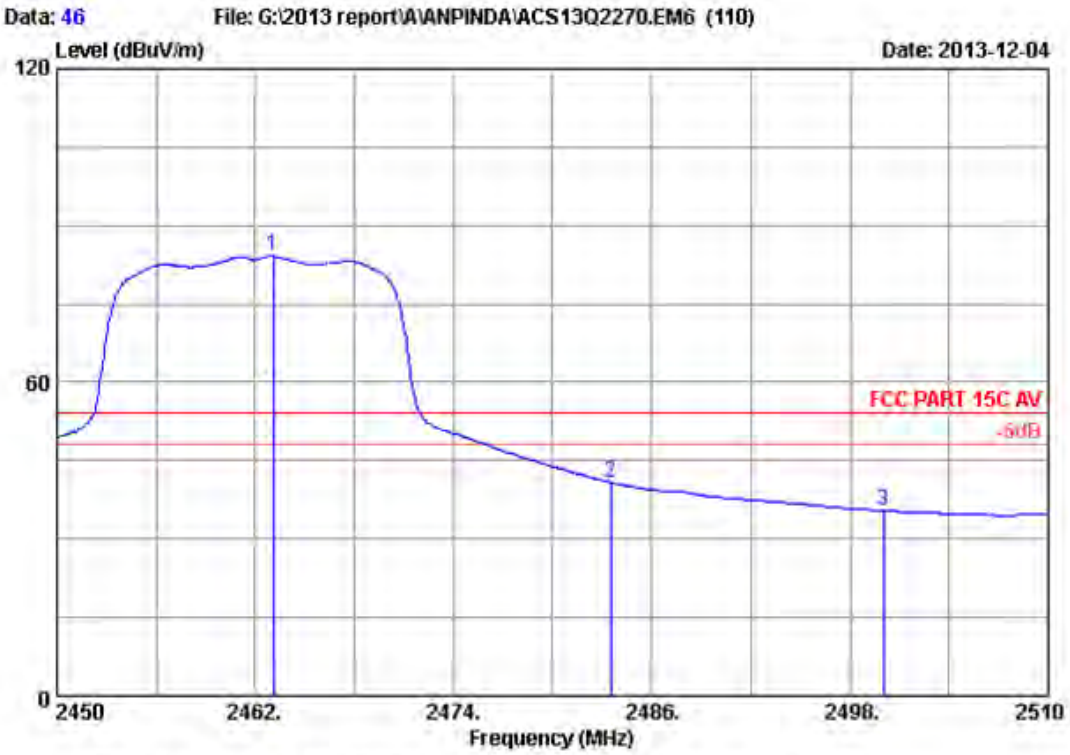
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 45
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	2462.120	28.32	5.89	35.70	101.27	99.78	74.00	-25.78	Peak
2	2483.500	28.36	5.92	35.70	66.61	65.19	74.00	8.81	Peak
3	2500.000	28.40	5.94	35.70	48.01	46.65	74.00	27.35	Peak

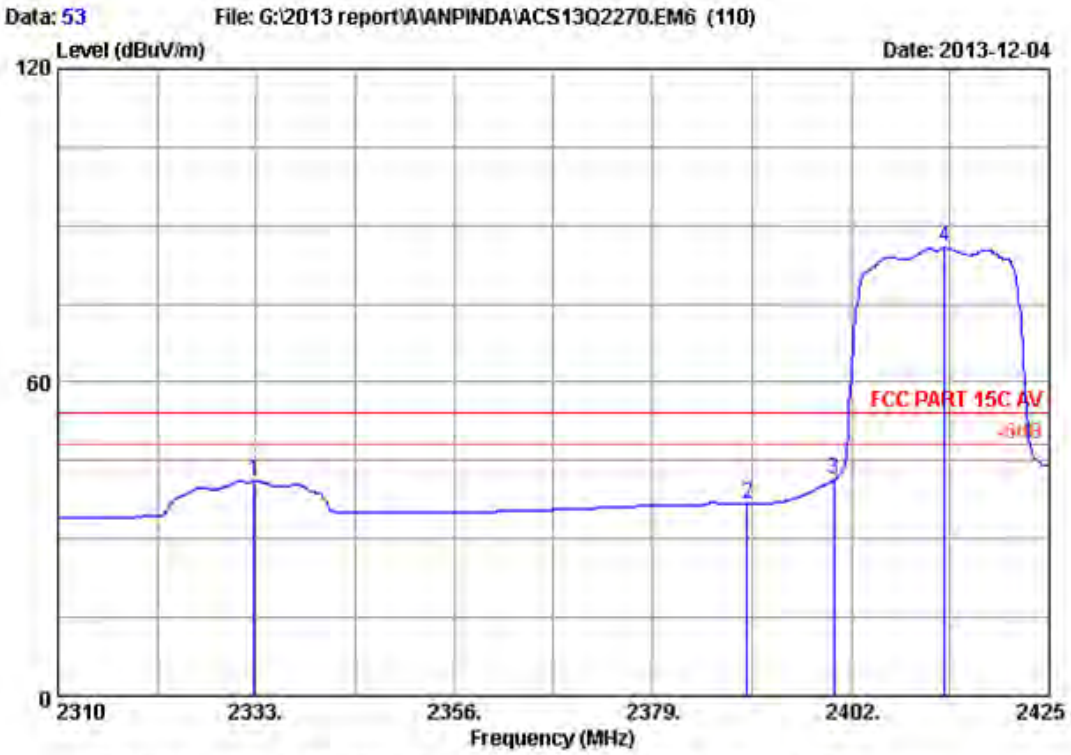
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 46
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11g 2462MHz Tx Mode
M/N : F1P

	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	2463.080	28.32	5.89	35.70	85.61	84.12	54.00	-30.12	Average
2	2483.500	28.36	5.92	35.70	42.33	40.91	54.00	13.09	Average
3	2500.000	28.40	5.94	35.70	36.74	35.38	54.00	18.62	Average

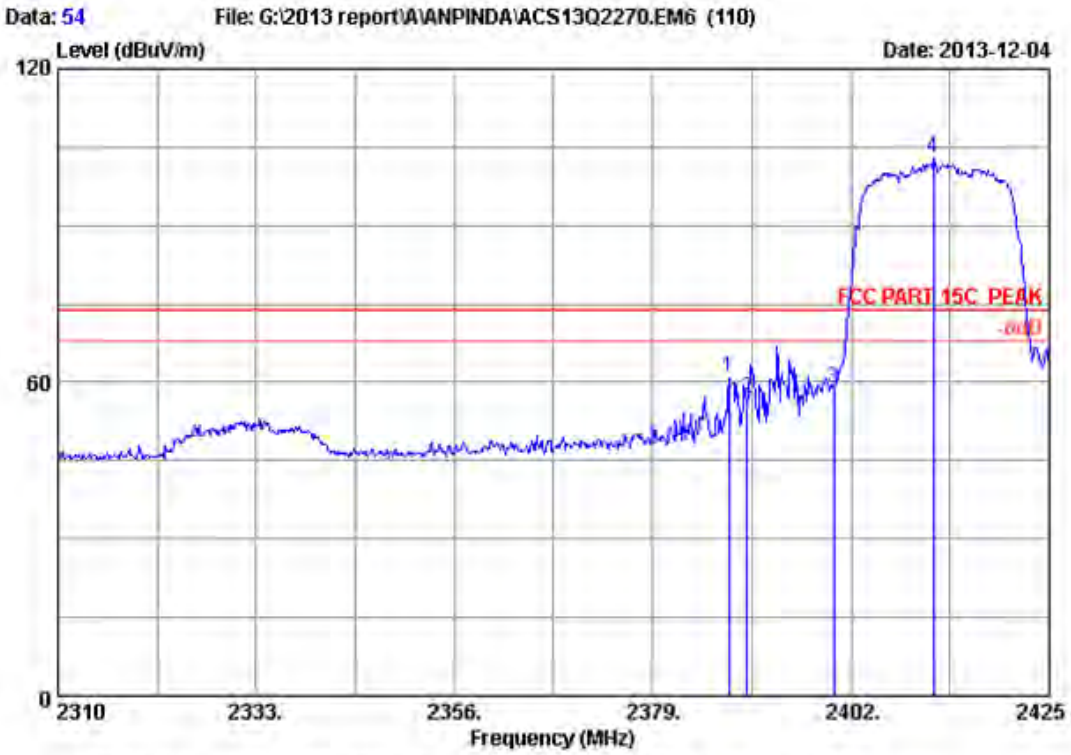
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 53
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

	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	2332.770	28.03	5.70	35.70	43.16	41.19	54.00	12.81	Average
2	2390.000	28.16	5.78	35.70	38.51	36.75	54.00	17.25	Average
3	2400.000	28.18	5.80	35.70	43.12	41.40	54.00	12.60	Average
4	2412.925	28.21	5.82	35.70	87.43	85.76	54.00	-31.76	Average

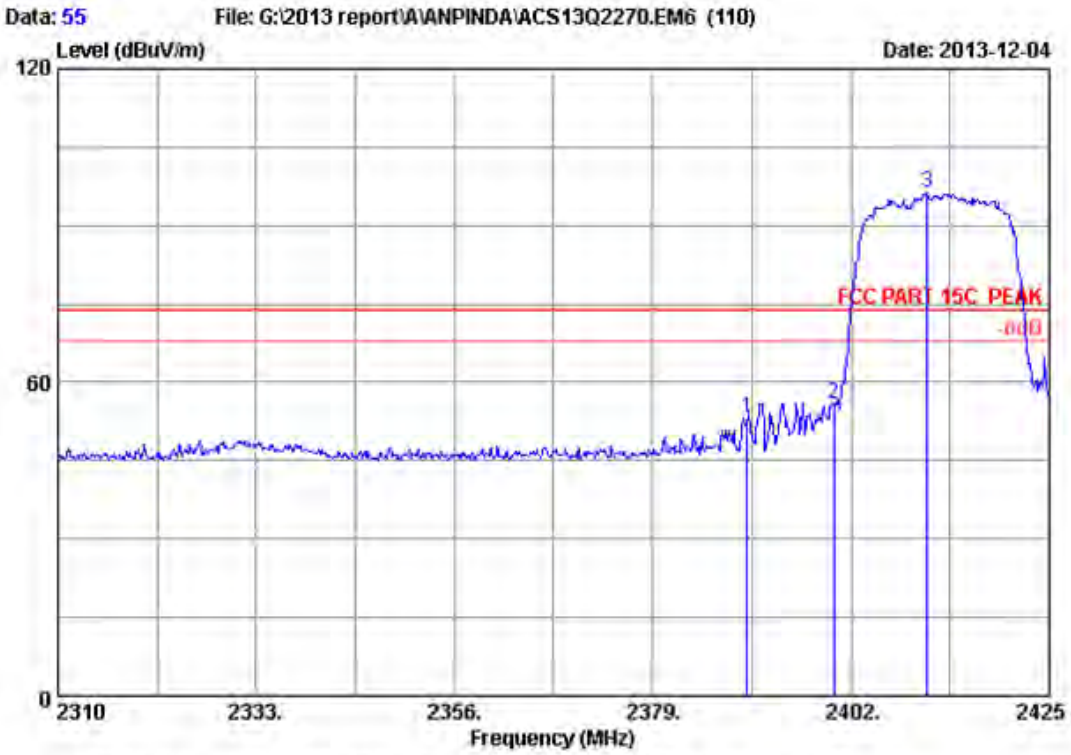
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 54
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

	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	2387.855	28.15	5.78	35.70	62.65	60.88	74.00	13.12	Peak
2	2390.000	28.16	5.78	35.70	58.43	56.67	74.00	17.33	Peak
3	2400.000	28.18	5.80	35.70	60.63	58.91	74.00	15.09	Peak
4	2411.545	28.21	5.81	35.70	104.52	102.84	74.00	-28.84	Peak

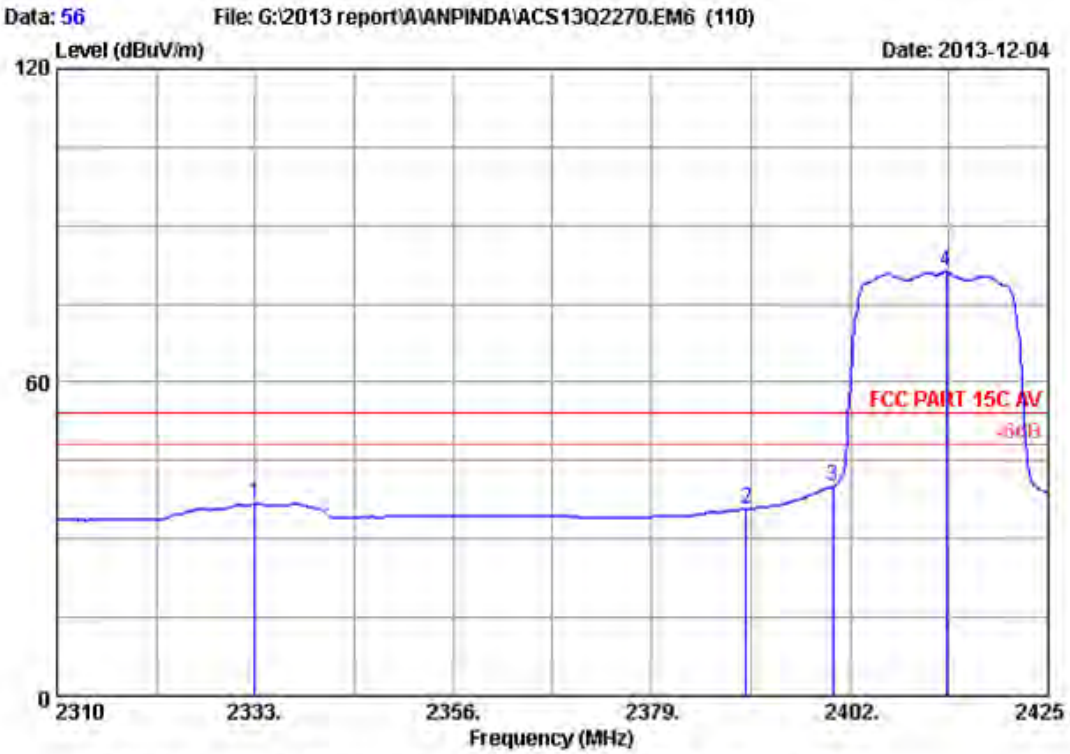
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 55
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

	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	54.86	53.10	74.00	20.90	Peak
2	2400.000	28.18	5.80	35.70	57.45	55.73	74.00	18.27	Peak
3	2410.855	28.20	5.81	35.70	97.88	96.19	74.00	-22.19	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. : RF Chamber Data no. : 56
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2412MHz Tx Mode
M/N : F1P

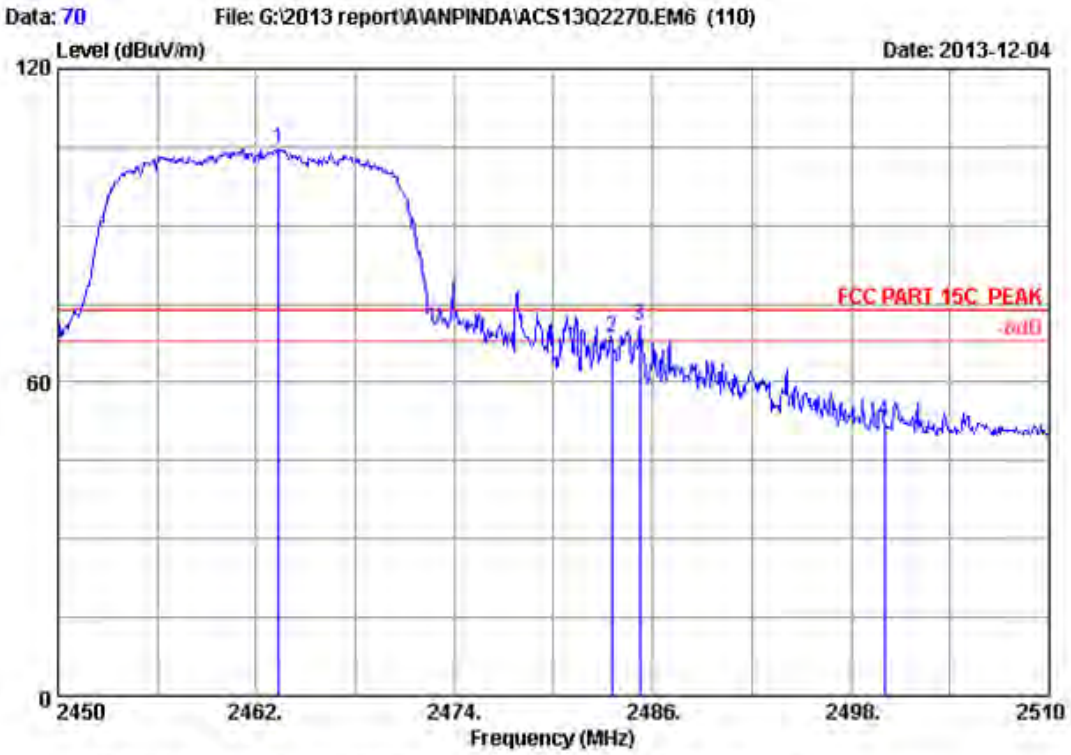
	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2333.000	28.03	5.70	35.70	38.76	36.79	54.00	17.21	Average
2	2390.000	28.16	5.78	35.70	37.52	35.76	54.00	18.24	Average
3	2400.000	28.18	5.80	35.70	41.85	40.13	54.00	13.87	Average
4	2413.155	28.21	5.82	35.70	82.78	81.11	54.00	-27.11	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. : RF Chamber Data no. : 69
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	2461.100	28.31	5.89	35.70	94.46	92.96	54.00	-38.96	Average
2	2483.500	28.36	5.92	35.70	46.97	45.55	54.00	8.45	Average
3	2500.000	28.40	5.94	35.70	41.40	40.04	54.00	13.96	Average

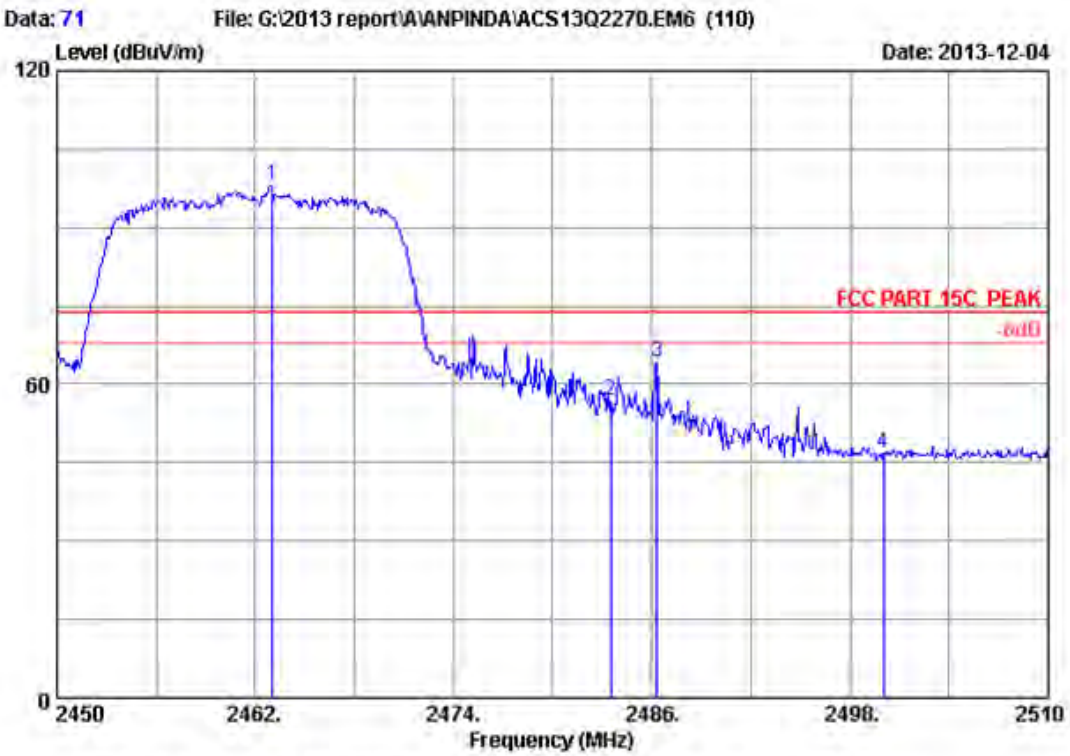
Remarks:
1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : RF Chamber Data no. : 70
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : HORIZONTAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	2463.380	28.32	5.89	35.70	106.11	104.62	74.00	-30.62	Peak
2	2483.500	28.36	5.92	35.70	70.10	68.68	74.00	5.32	Peak
3	2485.220	28.37	5.92	35.70	72.35	70.94	74.00	3.06	Peak
4	2500.000	28.40	5.94	35.70	53.72	52.36	74.00	21.64	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. : RF Chamber Data no. : 71
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C PEAK
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	2463.020	28.32	5.89	35.70	99.39	97.90	74.00	-23.90	Peak
2	2483.500	28.36	5.92	35.70	58.41	56.99	74.00	17.01	Peak
3	2486.300	28.37	5.92	35.70	65.65	64.24	74.00	9.76	Peak
4	2500.000	28.40	5.94	35.70	48.30	46.94	74.00	27.06	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. : RF Chamber Data no. : 72
Dis. / Ant. : 3m 2013 3115 (4580) Ant. pol. : VERTICAL
Limit : FCC PART 15C AV
Env. / Ins. : 23°C/54% Engineer : Leo-Li
EUT : New tab F1
Power supply : DC 5V From Adapter Input AC 120V/60Hz
Test mode : IEEE802.11n HT20 2462MHz Tx Mode
M/N : F1P

	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	2461.100	28.31	5.89	35.70	84.58	83.08	54.00	-29.08	Average
2	2483.500	28.36	5.92	35.70	38.96	37.54	54.00	16.46	Average
3	2500.000	28.40	5.94	35.70	36.95	35.59	54.00	18.41	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.

7. 6dB BANDWIDTH Test

7.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
2.	Horn Antenna	EMCO	3115	9510-4580	May.28, 13	1 Year
3.	HF Cable	Hubersuhner	Sucoflex104	-	May.08, 13	1 Year

7.2.Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

7.3.Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 300KHz RBW and 1MHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

7.4.Test Results

EUT: New tab F1		
M/N: F1P		
Test date: 2013-12-06	Pressure: 101.2±1.0kpa	Humidity: 52.3±3.0 %
Tested by: Leo-Li	Test site: RF site	Temperature: 23.5±0.6 ℃

Cable loss: 1 dB		Attenuator loss: 20 dB	
Test Mode	CH	6dB bandwidth （MHz）	Limit (KHz)
11b	CH1	8.139	>500
	CH6	8.153	>500
	CH11	8.155	>500
11g	CH1	15.95	>500
	CH6	16.01	>500
	CH11	16.00	>500
11n HT20	CH1	17.23	>500
	CH6	17.24	>500
	CH11	17.29	>500
Conclusion：PASS			

Test Mode: IEEE 802.11b
Test CH1: 2412MHz

Test CH6: 2437MHz

Test CH11: 2462MHz

Test Mode: IEEE 802.11g
Test CH1: 2412MHz

Test CH6: 2437MHz

Test CH11: 2462MHz

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

Test CH6: 2437MHz

Test CH11: 2462MHz

8. OUTPUT POWER TEST

8.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
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
5.	Power Meter	Anritsu	ML2487A	6K00002472	May.08, 13	1Year
6.	Power Sensor	Anritsu	MA2491A	033005	May.08, 13	1Year

8.2.Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

8.3.Test Procedure

1, Use the spectrum analyzer’s channel power function.
2, Set the RBW=1MHz
3, Set the VBW=3MHz
4, Set the span to a value that is 5-30% greater than the EBW.
5, Detector=Peak
6, Sweep time=auto couple
7, Trace mode=max hold
8, Allow trace to fully stabilize
9, Use the spectrum analyzer’s integrated band power measurement function with band limits set equal to the EWB band edges.

8.4.Test Results

EUT: New tab F1		
M/N: F1P		
Test date: 2013-12-05	Pressure: 101.1±1.0kpa	Humidity: 52.2±3.0 %
Tested by: Leo-Li	Test site: RF site	Temperature: 22.8±0.6 ℃

Cable loss: 1.0dB		Attenuator loss: 20 dB	
Test Mode	CH (MHz)	Peak output Power （dBm）	Limit (dBm)
11b	CH1	18.36	30
	CH6	18.59	30
	CH11	18.86	30
11g	CH1	22.89	30
	CH6	22.96	30
	CH11	23.03	30
11n HT20	CH1	21.37	30
	CH6	21.80	30
	CH11	21.91	30
Conclusion: PASS			

Test Mode: IEEE 802.11b

Test CH1: 2412MHz

Test CH6: 2437MHz

Test CH11: 2462MHz

Test Mode: IEEE 802.11g
Test CH1: 2412MHz

Test CH6: 2437MHz

Test CH11: 2462MHz

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

Test CH6: 2437MHz

Test CH11: 2462MHz

9. POWER SPECTRAL DENSITY TEST

9.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	N9030A	MY51380221	Oct.31, 13	1Year
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

9.2.Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

9.3.Test Procedure

1. Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.
2. Set analyzer center frequency to center frequency.
3. Set the span to 1.5 times the DTS Bandwidth.
4. Set the RBW=3KHz; VBW=10KHz; Detector=Peak
   Sweep time= AUTO Couple; Trace Mode= max hold
5. Allow trace to fully stabilize.
6. Use the peak marker function to determine the maximum amplitude level within the RBW.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude

9.4.Test Results

EUT: New tab F1		
M/N: F1P		
Test date: 2013-12-05	Pressure: 101.1±1.0kpa	Humidity: 52.8±3.0 %
Tested by: Leo-Li	Test site: RF site	Temperature: 23.6±0.6 ℃

Duty cycle X: 100%			
Test Mode	CH	Result (dBm/MHz)	Limit （dBm/MHz）
11b	CH1	-2.804	8
	CH6	-3.307	8
	CH11	-4.046	8
11g	CH1	-7.930	8
	CH6	-7.483	8
	CH11	-7.625	8
11n HT20	CH1	-9.238	8
	CH6	-8.248	8
	CH11	-8.220	8
Conclusion: PASS			

Test Mode: IEEE 802.11b
Test CH1: 2412MHz

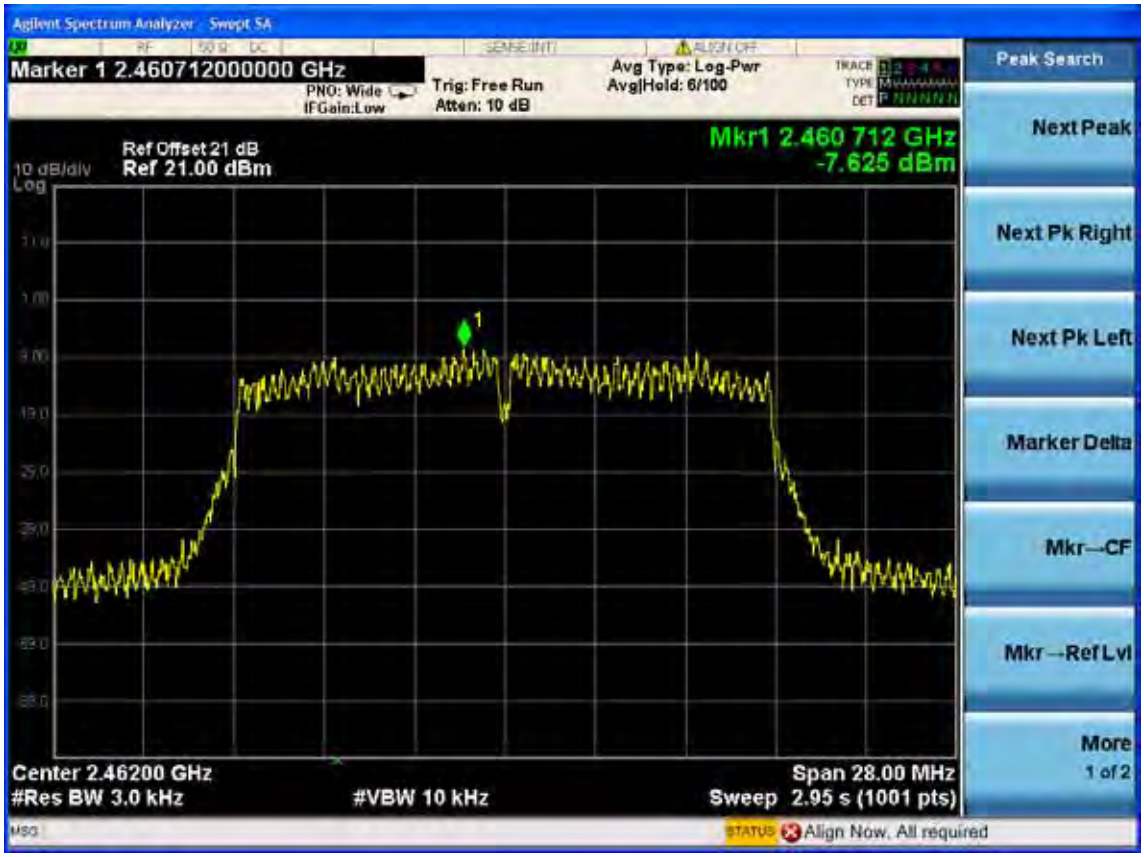
Test CH6: 2437MHz

Test CH11: 2462MHz

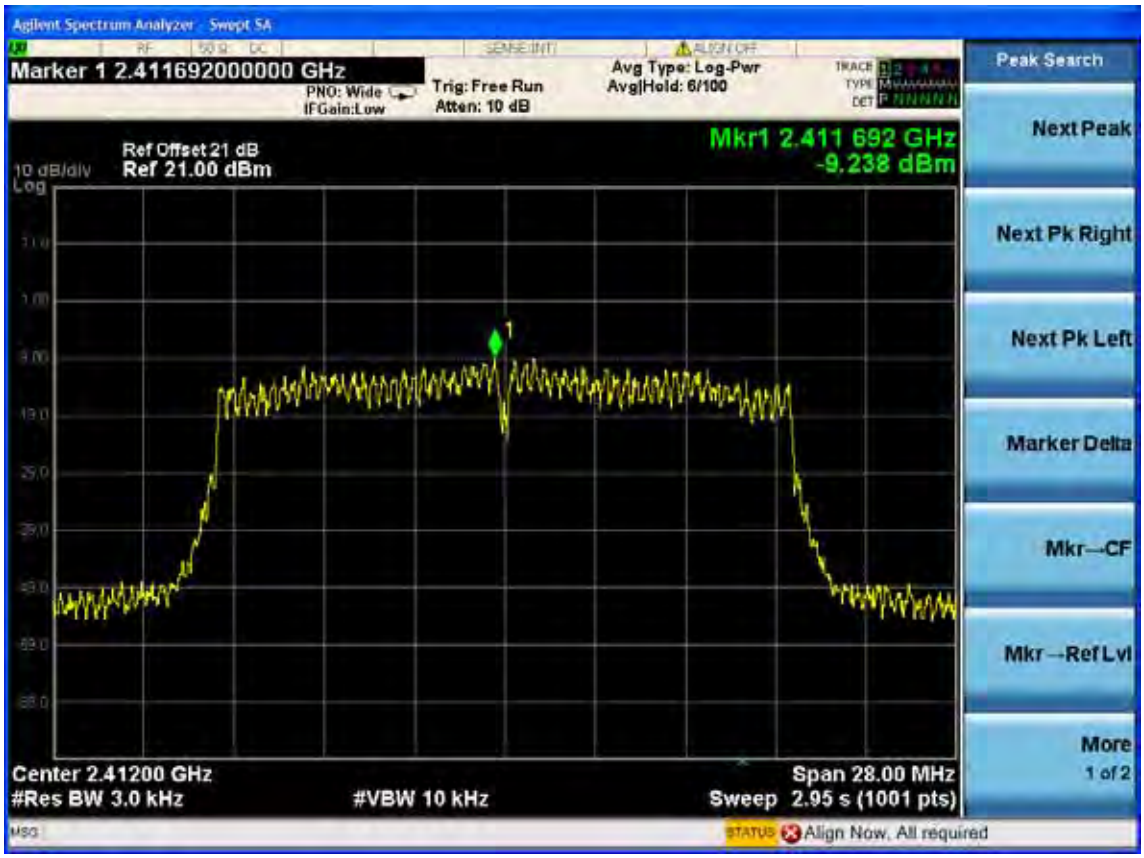
Test Mode: IEEE 802.11g
Test CH1: 2412MHz

Test CH6: 2437MHz

Test CH11: 2462MHz



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



Test CH6: 2437MHz

Test CH11: 2462MHz

10. ANTENNA REQUIREMENT

10.1. STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.2. ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product are IFA antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 2.68dBi.

11.DEVIATION TO TEST SPECIFICATIONS

[NONE]