



AUDIX Technology (Shenzhen) Co., Ltd.

FCC ID: 2AJXQFRWR5014TFC

FCC PART 15C TEST REPORT FOR CERTIFICATION

On Behalf of

HUNAN FULLRIVER HIGH TECHNOLOGY CO., LTD.

Atom Engine Burner

FR-WR5014TF-C

FCC ID: 2AJXQFRWR5014TFC

Prepared for : HUNAN FULLRIVER HIGH TECHNOLOGY CO., LTD.  
FullRiver Industrial Area Economic Development Zone LiLing  
City HuNan Province China

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Date of Test : May.18~Sep.28, 2016  
Date of Report : Dec.08, 2016

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## TEST REPORT CERTIFICATION

Applicant : HUNAN FULLRIVER HIGH TECHNOLOGY CO., LTD.  
Manufacturer : HUNAN FULLRIVER HIGH TECHNOLOGY CO., LTD.  
Product : Atom Engine Burner  
FCC ID : 2AJXQFRWR5014TFC  
(A) Model No. : FR-WR5014TF-C  
(B) Power Supply : DC 12V  
(C) Test Voltage : DC 12V From Adapter Input AC 120V/60Hz

Tested for comply with:  
FCC CFR 47 Part 15 Subpart C: 2016

Test procedure used:  
ANSI C63.10: 2013

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

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

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

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

Date of Test : May.18~Sep.28, 2016 Report of date: Dec.08, 2016

Prepared by : Cindy Zhu Reviewed by : Sunny Lu  
Cindy Zhu / Assistant Deputy Manager



Approved & Authorized Signer :

## 1. SUMMARY OF STANDARDS AND RESULTS

### 1.1. Description of Standards and Results

The EUT has 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	PASS
Radiated Emission	FCC Part 15: 15.209	PASS
Band Edge Compliance	FCC Part 15: 15.247	PASS
Conducted spurious emissions	FCC Part 15: 15.247	PASS
6dB Bandwidth	FCC Part 15: 15.247	PASS
Peak Output Power	FCC Part 15: 15.247	PASS
Power Spectral Density	FCC Part 15: 15.247	PASS
MPE Estimation	FCC Part 15: 15.247	PASS
Antenna requirement	FCC Part 15: 15.203	PASS
N/A is an abbreviation for Not Applicable.		

## 2. GENERAL INFORMATION

### 2.1. Description of Device (EUT)

Product	: Atom Engine Burner
Model No.	: FR-WR5014TF-C
FCC ID	: 2AJXQFRWR5014TFC
Radio	: IEEE802.11 b/g/n
Operation Frequency	: IEEE 802.11b: 2412MHz—2462MHz IEEE 802.11g: 2412MHz—2462MHz IEEE 802.11n HT20: 2412MHz—2462MHz IEEE 802.11n HT40: 2422MHz—2452MHz
Modulation Technology	: IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK) IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM,QPSK,BPSK)
Antenna Assembly Gain	: PCB Layout Antenna, 2.0dBi gain
Applicant	: HUNAN FULLRIVER HIGH TECHNOLOGY CO., LTD. FullRiver Industrial Area Economic Development Zone LiLing City HuNan Province China
Manufacturer	: HUNAN FULLRIVER HIGH TECHNOLOGY CO., LTD. FullRiver Industrial Area Economic Development Zone LiLing City HuNan Province China
Factory	: HUNAN FULLRIVER HIGH TECHNOLOGY CO., LTD. FullRiver Industrial Area Economic Development Zone LiLing City HuNan Province China
Adapter	: Manufacturer: AMIGO; M/N: AMS115-1201500FU INPUT:AC 100-240V 50/60Hz 0.8A Max OUTPUT:12V 1.5A DC Cable: Unshielded, Detachable 1.5m
Date of Test	: May.18~Sep.28, 2016
Date of Receipt	: May.16, 2016
Sample Type	: Prototype production

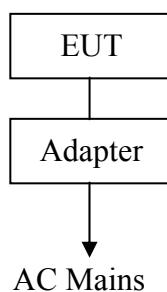
## 2.2. Test Information

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

Tested mode, channel, and data rate information			
Mode	data rate (Mbps)(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	MCS0	Low :CH1	2412
	MCS0	Middle: CH6	2437
	MCS0	High: CH11	2462
IEEE 802.11n HT40	MCS0	Low :CH3	2422
	MCS0	Middle: CH6	2437
	MCS0	High: CH9	2452

Note: 1. According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.  
 2. 11b/g Mode choose the antenna which has maximum emission for the radiated emission and bandedge compliance test for 11n mode test with two antennas transmitting simultaneously and compliance with KDB662911.

## 2.3. Block diagram of connection between the EUT and simulators



**(EUT: Atom Engine Burner)**

**2.4. Test Facility****Site Description**

Name of Firm

Audix Technology (Shenzhen) Co., Ltd.  
No. 6, Kefeng Road, Science & Technology  
Park, Nanshan District , Shenzhen, Guangdong,  
China

3m Anechoic Chamber

Certificated by FCC, USA  
Registration Number: 90454  
Valid Date: Jul.12, 2017

3m &amp; 10m Anechoic Chamber

Certificated by FCC, USA  
Registration Number: 794232  
Valid Date: Jul.12, 2017

EMC Lab.

Certificated by Industry Canada  
Registration Number: IC 5183A-1  
Valid Date: May.14, 2017

Certificated by DAkkS, Germany  
Registration No: D-PL-12151-01-00  
Valid Date: Dec.15, 2016

Accredited by NVLAP, USA  
NVLAP Code: 200372-0  
Valid Date: Mar.31, 2017

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

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 1 Conduction	3.2dB(150kHz to 30MHz)
Uncertainty for Radiation Emission test in 3m chamber	2.8dB(30~200MHz, Polarization: H)
	2.8dB(30~200MHz, Polarization: V)
	2.8dB(200M~1GHz, Polarization: H)
	2.8dB(200M~1GHz, Polarization: V)
Uncertainty for Radiation Emission test in 3m chamber (1GHz-18GHz)	5.8dB(1~6GHz, Distance: 3m)
	5.8dB(6~18GHz, Distance: 3m)
Uncertainty for Radiated Spurious Emission test in RF chamber	3.6dB
Uncertainty for Conduction Spurious emission test	2.0dB
Uncertainty for Output power test	0.8dB
Uncertainty for Bandwidth test	83kHz
Uncertainty for DC power test	0.1%
Uncertainty for test site temperature and humidity	0.6°C
	3%

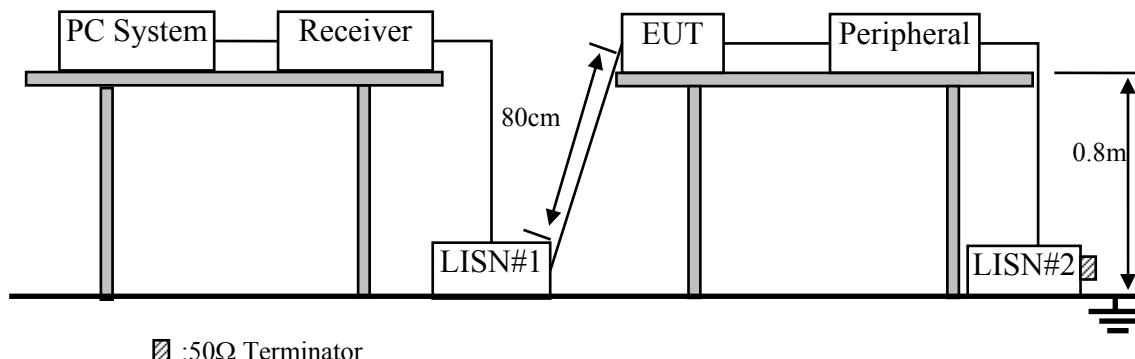
### 3. POWER LINE CONDUCTED EMISSION TEST

#### 3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	1# Shielding Room	AUDIX	N/A	N/A	Apr.17,16	1 Year
2.	Test Receiver	Rohde & Schwarz	ESCI	100842	Apr.24,16	1 Year
3.	L.I.S.N.#1	Rohde & Schwarz	ESH2-Z5	100429	Oct.18,15	1 Year
4.	L.I.S.N.#2	Kyoritsu	K NW-403D	8-1750-2	Apr.24,16	1 Year
5.	Terminator	Hubersuhner	50Ω	No.1	May.05,16	1 Year
6.	Terminator	Hubersuhner	50Ω	No.2	May.05,16	1 Year
7.	RF Cable	MIYAZAKI	3D-2W	No.1	Apr.24,16	1 Year
8.	Coaxial Switch	Anritsu	MP59B	6200766906	Apr.23,16	1 Year
9.	Test Software	AUDIX	e3	6.100913a	N/A	N/A

Note: N/A means Not applicable.

#### 3.2. Block Diagram of Test Setup



■ :50Ω 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. Atom Engine Burner (EUT)

Model Number : FR-WR5014TF-C

Serial Number : N/A

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

### 3.5.Operating Condition of EUT

- 3.5.1. Setup the EUT and simulator as shown as Section 3.2.
- 3.5.2. Turn on the power of all equipments.
- 3.5.3. PC run test software to control EUT work in Tx(WiFi 2.4GHz) mode.

### 3.6.Test Procedure

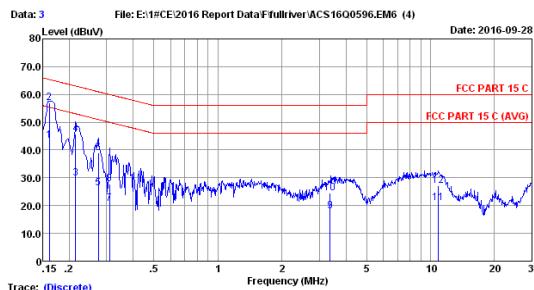
The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power Via PC connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Test.

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

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

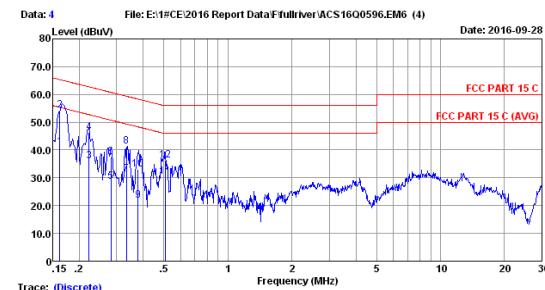
### 3.7.Power Line Conducted Emission Test Results

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



No	Freq (MHz)	LISN (dB)	Cable (dB)	Emission			Margin (dB)	Remark
				Factor	Loss	Reading (dBuV)	Level (dBuV)	Limits (dBuV)
1	0.161	0.12	0.02	43.30	43.44	55.39	11.95	Average
2	0.161	0.12	0.02	56.70	56.84	65.39	8.55	QP
3	0.214	0.12	0.02	29.80	29.94	53.06	23.12	Average
4	0.214	0.12	0.02	45.60	45.74	63.06	17.32	QP
5	0.274	0.12	0.02	26.01	26.15	51.00	24.85	Average
6	0.274	0.12	0.02	38.81	38.95	61.00	22.05	QP
7	0.310	0.13	0.02	20.40	20.55	49.97	29.42	Average
8	0.310	0.13	0.02	27.60	27.75	59.97	32.22	QP
9	3.364	0.22	0.08	17.80	18.10	46.00	27.90	Average
10	3.364	0.22	0.08	24.10	24.40	56.00	31.60	QP
11	10.905	0.40	0.15	20.50	21.05	50.00	28.95	Average
12	10.905	0.40	0.15	26.50	27.05	60.00	32.95	QP

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



No	Freq (MHz)	LISN (dB)	Cable (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.162	0.12	0.02	41.00	41.14	55.36	14.22	Average
2	0.162	0.12	0.02	54.20	54.34	65.36	11.02	QP
3	0.222	0.12	0.02	35.81	35.95	52.74	16.79	Average
4	0.222	0.12	0.02	46.31	46.45	62.74	16.29	QP
5	0.282	0.13	0.02	28.60	28.75	50.76	22.01	Average
6	0.282	0.13	0.02	37.30	37.45	60.76	23.31	QP
7	0.334	0.13	0.02	31.20	31.35	49.35	18.00	Average
8	0.334	0.13	0.02	41.20	41.35	59.35	18.00	QP
9	0.378	0.14	0.03	21.69	21.80	48.32	26.46	Average
10	0.378	0.14	0.03	32.89	33.06	58.32	25.26	QP
11	0.506	0.14	0.03	30.27	30.44	46.00	15.56	Average
12	0.506	0.14	0.03	36.07	36.24	56.00	19.76	QP

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

## 4. RADIATED EMISSION TEST

### 4.1. Test Equipment

#### 4.1.1. For frequency range 30MHz~1000MHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	3#Chamber	AUDIX	N/A	N/A	Mar.28,16	1 Year
2.	EMI Spectrum	Agilent	E4407B	MY41440292	Apr.24,16	1 Year
3.	Test Receiver	Rohde & Schwarz	ESVS10	834468/011	Apr.24,16	1 Year
4.	Amplifier	HP	8447D	2648A04738	Apr.24,16	1 Year
5.	Tri-log-Broadband Antenna	SCHWARZBECK	VULB 9168	9168-710	Jul.20,16	1 Year
6.	RF Cable	MIYAZAKI	CFD400NL-LW	No.3	Sep.26.16	1 Year
7.	Coaxial Switch	Anritsu	MP59B	6201397222	Apr.23,16	1 Year
8.	Attenuator	EMCI	EMCI-N-6-06	AT-N0639	Sep.26.16	1 Year
9.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A

Note: N/A means Not applicable.

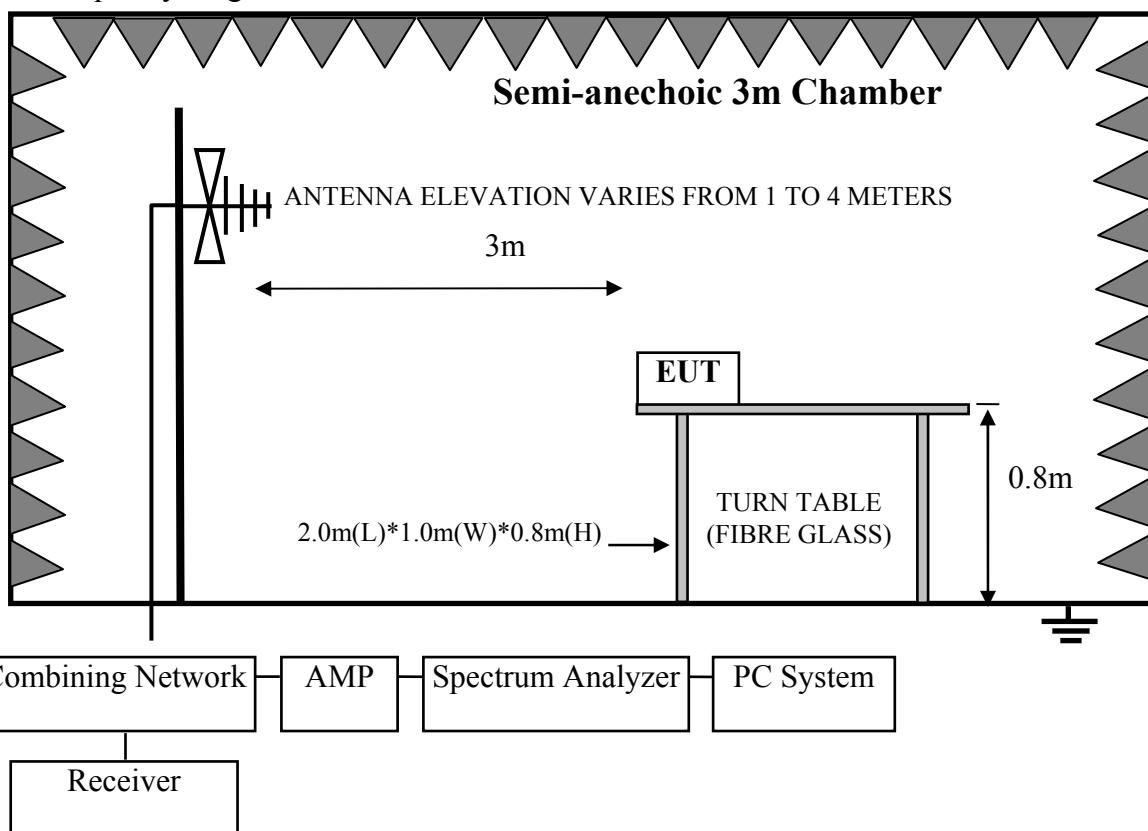
#### 4.1.2. For frequency range 1GHz~25GHz (In 3m Anechoic Chamber)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum Analyzer	Agilent	E4446A	US44300459	Apr.24,16	1 Year
2.	Horn Antenna	ETS	3115	9510-4580	Oct.15,15	1 Year
3.	Amplifier	Agilent	8449B	3008A02495	Apr.24,16	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX104	274094/4	Apr.24,16	1 Year
5.	Horn Antenna	ETS	3116	00060089	Oct.15,15	1 Year
6.	Test Software	AUDIX	e3	6.2009-5-21a(n)	N/A	N/A

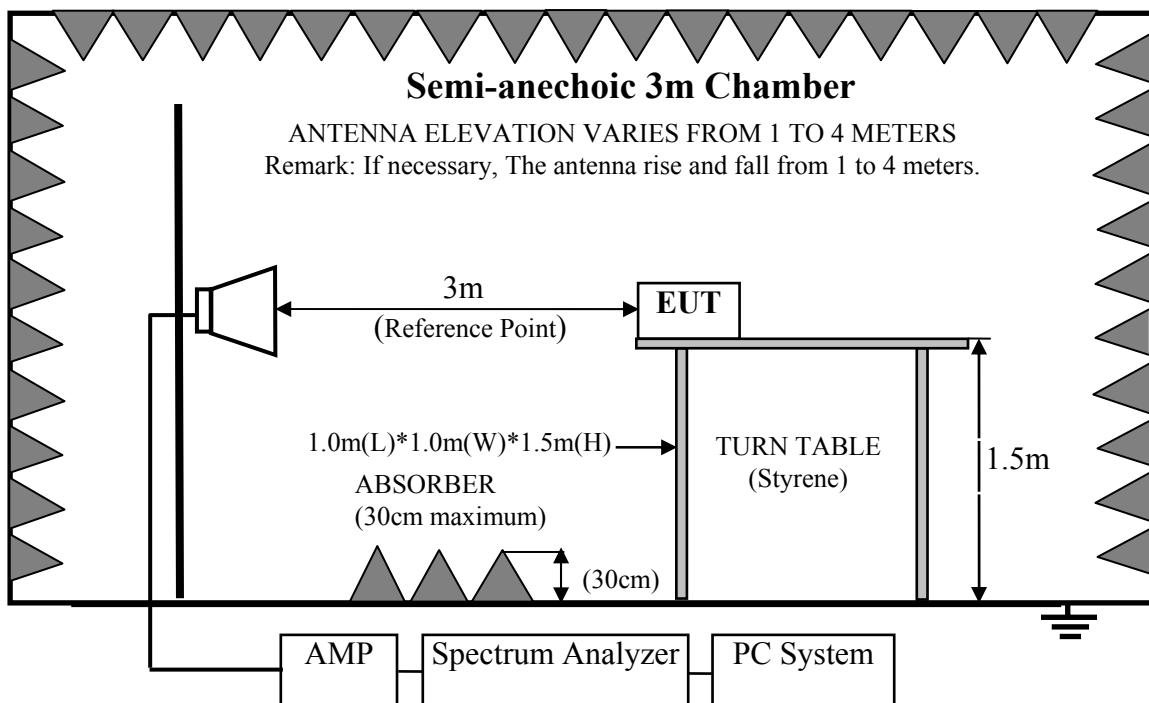
Note: N/A means Not applicable.

#### 4.2. Block Diagram of Test Setup

For frequency range 30MHz-1000MHz



For frequency range 1GHz-25GHz



### 4.3.Radiated Emission Limit

#### 4.3.1. 15.247&209 limits

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

Remark : (1) Emission level dB $\mu$ V = 20 log Emission level  $\mu$ V/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
1.0495 - 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
6.2115 - 6.2118	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	( <sup>2</sup> )

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 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.

#### 4.4.1. Atom Engine Burner (EUT)

Model Number : FR-WR5014TF-C

Serial Number : N/A

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

#### 4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT and simulator as shown as Section 4.2.
- 4.5.2. Turn on the power of all equipments.
- 4.5.3. Let EUT work in Tx (WiFi 2.4GHz) mode

#### 4.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground for frequency 30MHz~1000MHz, 1.5 meter high above ground for frequency above 1GHz and put the absorbing with 2.4m(L)\*2.4m(W)\*0.3m(H) on the 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 for frequency 30MHz~1000MHz, and the Horm antenna is used as receiving antenna for frequency above 1GHz. Both horizontal and vertical polarization of the antenna are set on test.

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

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

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

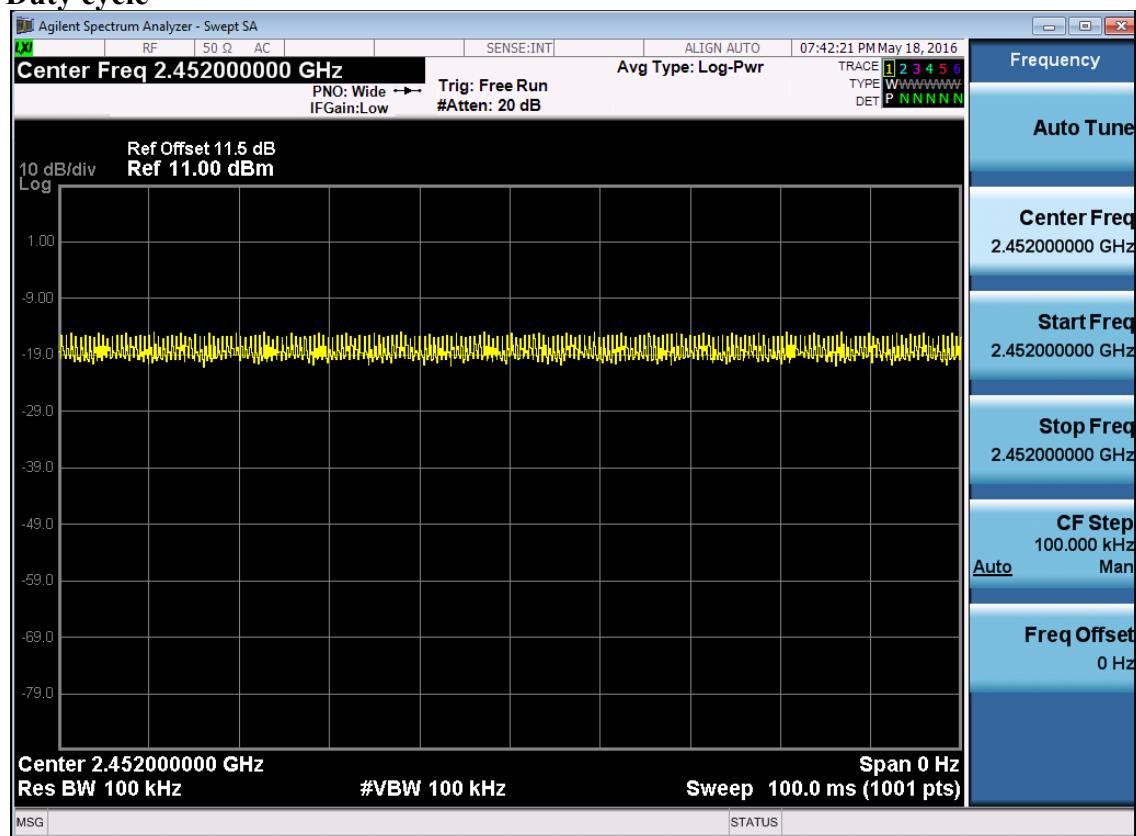
The frequency range from 30MHz to 10<sup>th</sup> harmonic (25GHz) are checked. and no any emissions were found from 18GHz to 25GHz, So the radiated emissions from 18GHz to 25GHz were not record.

#### 4.7. Radiated Emission Test Results

**PASS.**

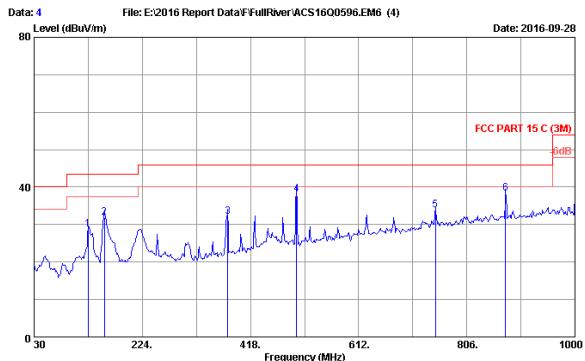
All the emissions from 30MHz to 25 GHz were comply with 15.209 limits.

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

**Duty cycle**

**Note: The Duty Cycle is close to 100%.**

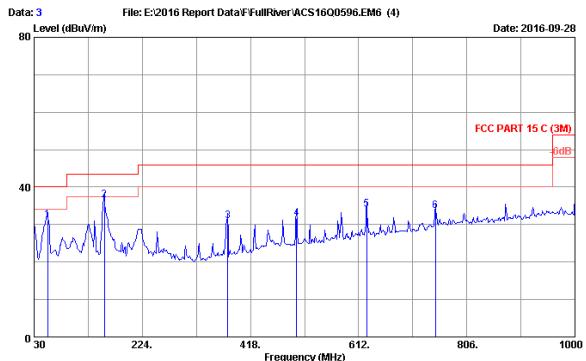
## Frequency: 30MHz~1GHz



Site no. : 3m Chamber Data no. : 4  
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : HORIZONTAL  
Limit : FCC PART 15 C (3M)  
Env. / Ins. : 21.4°C/52% Engineer : Leo-Li  
EUT : Atom Engine Burner M/N:FR-WRS014TF-C  
Power rating : DC 12V From Adapter Input AC 120V/60Hz  
Test Mode : Tx Mode

No.	Freq (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission			Margin (dB)	Remark
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)		
1	127.000	17.67	1.24	9.58	28.69	43.59	14.81	QP
2	156.100	18.72	1.37	10.81	31.90	46.50	11.00	QP
3	377.260	21.65	2.36	6.06	32.07	46.00	13.93	QP
4	500.450	23.95	2.80	11.25	38.00	46.00	8.00	QP
5	749.740	27.83	3.86	2.17	33.86	46.00	12.14	QP
6	875.840	28.64	4.50	5.08	38.42	46.00	7.58	QP

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

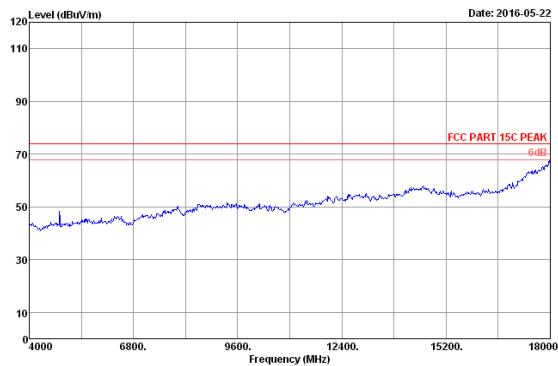


Site no. : 3m Chamber Data no. : 3  
Dis. / Ant. : 3m ANT 2016 9168 710 Ant. pol. : VERTICAL  
Limit : FCC PART 15 C (3M)  
Env. / Ins. : 21.4°C/52% Engineer : Leo-Li  
EUT : Atom Engine Burner M/N:FR-WRS014TF-C  
Power rating : DC 12V From Adapter Input AC 120V/60Hz  
Test Mode : Tx Mode

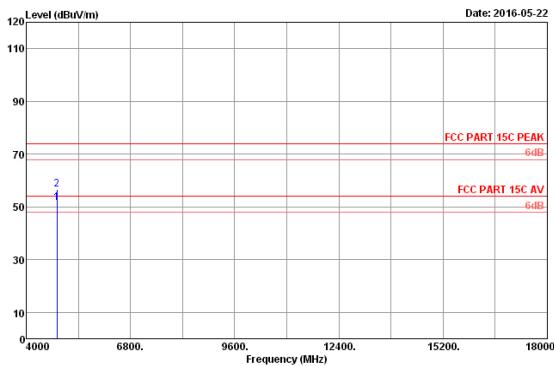
No.	Freq (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Emission			Margin (dB)	Remark
				Reading (dBuV)	Level (dBuV/m)	Limits (dBuV/m)		
1	54.250	20.31	0.86	10.07	31.24	40.00	8.76	QP
2	156.100	21.72	1.37	13.42	36.51	49.00	6.99	QP
3	377.260	21.65	2.36	7.05	31.06	46.00	14.94	QP
4	500.450	23.95	2.80	4.89	31.64	46.00	14.36	QP
5	626.550	26.28	3.33	4.39	34.00	46.00	12.00	QP
6	749.740	27.83	3.86	1.97	33.66	46.00	12.34	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



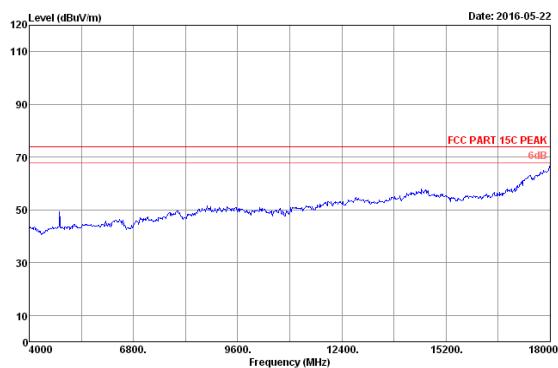
Site no. : 3m Chamber Data no. : 1  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2K Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2412MHz Tx



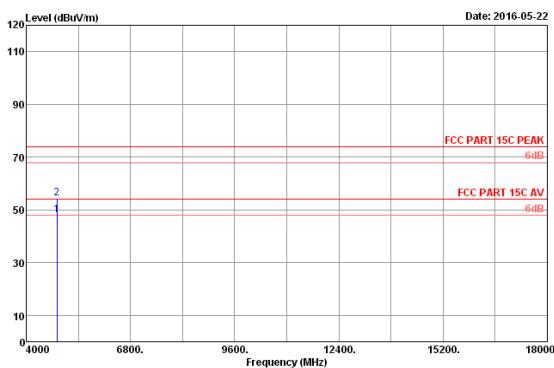
Site no. : 3m Chamber Data no. : 2  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2K Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. (dBi)	Cable (dB)	AMP (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.98	11.77	42.58	36.68	51.85	54.00	2.35 Average
2	4824.00	32.98	11.77	47.62	36.68	56.89	74.00	17.31 Peak

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



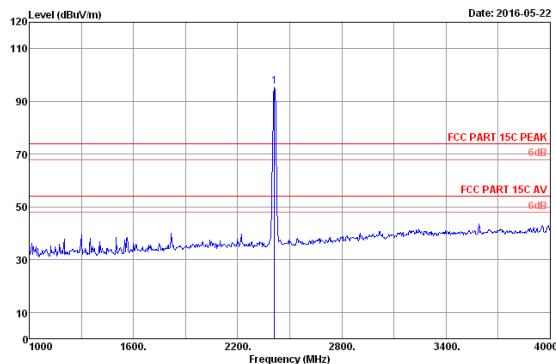
Site no. : 3m Chamber Data no. : 3  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2K Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2412MHz Tx



Site no. : 3m Chamber Data no. : 4  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2K Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. (dBi)	Cable (dB)	AMP (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.98	11.77	38.87	36.68	47.94	54.00	6.06 Average
2	4824.00	32.98	11.77	45.28	36.68	54.35	74.00	19.65 Peak

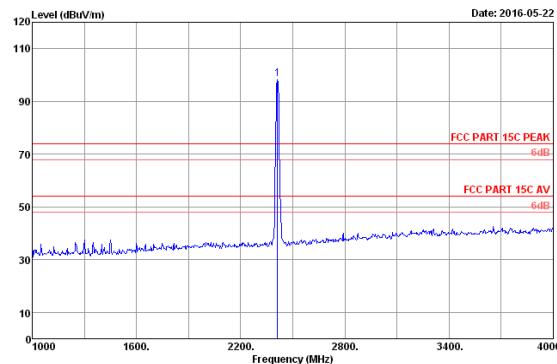
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBmV)	AMP factor (dB)	Emission Level (dBmV/m)	Limits (dBmV/m)	Margin (dB)	Remark
1	2412.00	28.28	8.35	95.33	36.39	95.54	74.00	-21.54	Peak

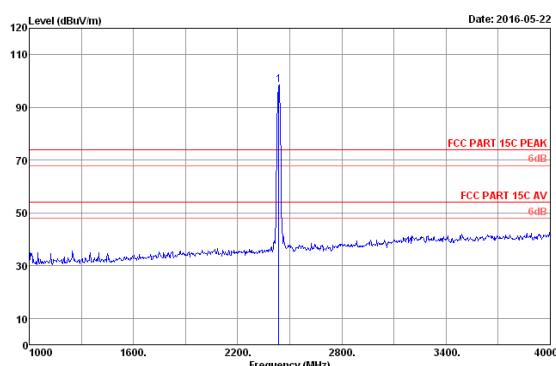
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBmV)	AMP factor (dB)	Emission Level (dBmV/m)	Limits (dBmV/m)	Margin (dB)	Remark
1	2412.00	28.28	8.35	98.33	36.39	98.54	74.00	-24.54	Peak

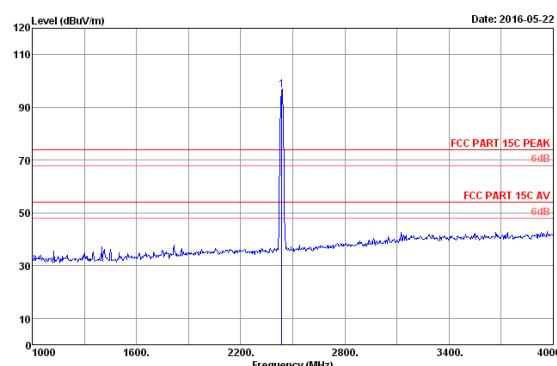
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBmV)	AMP factor (dB)	Emission Level (dBmV/m)	Limits (dBmV/m)	Margin (dB)	Remark
1	2437.00	28.26	8.38	98.23	36.38	98.49	74.00	-24.49	Peak

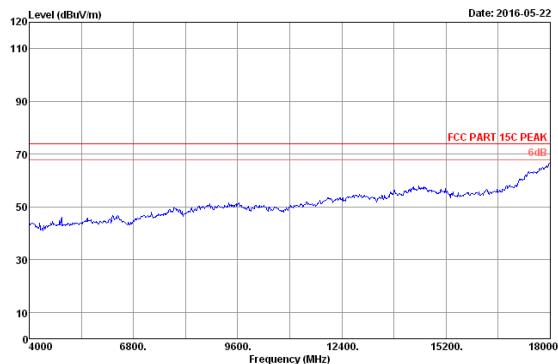
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2437MHz Tx

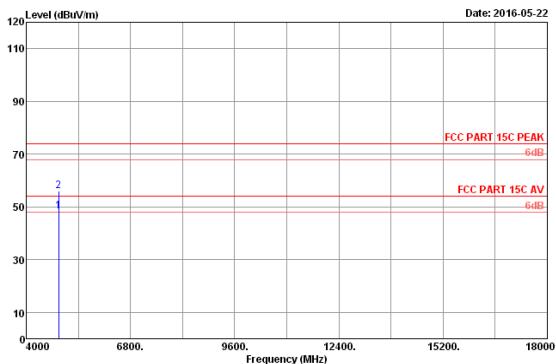
No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBmV)	AMP factor (dB)	Emission Level (dBmV/m)	Limits (dBmV/m)	Margin (dB)	Remark
1	2437.00	28.26	8.38	96.41	36.38	96.67	74.00	-22.67	Peak

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



Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2437MHz Tx

Data no. : 13  
Ant. pol. : VERTICAL  
Pre : 101.2kPa  
Engineer : Leo-Li

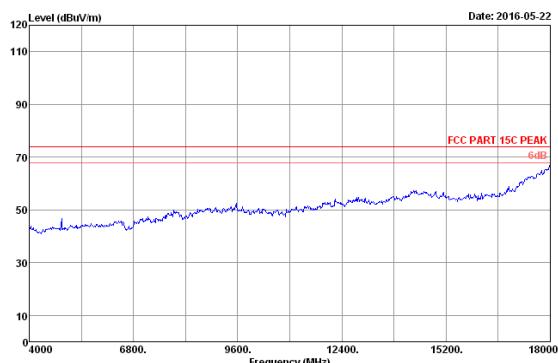


Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2437MHz Tx

Data no. : 14  
Ant. pol. : VERTICAL  
Pre : 101.2kPa  
Engineer : Leo-Li

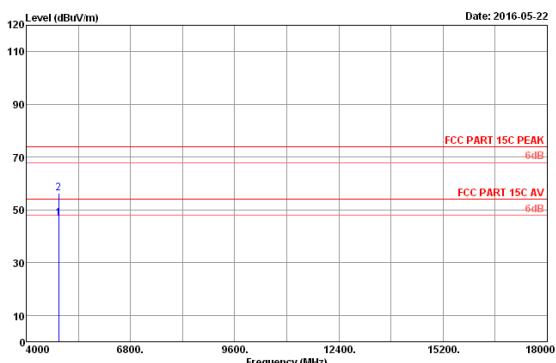
No.	Freq. (MHz)	Ant. Factor (dBi/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.10	11.80	39.15	36.69	48.36	54.00	5.64	Average
2	4874.00	33.10	11.80	46.75	36.69	55.96	74.00	18.04	Peak

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



Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2437MHz Tx

Data no. : 15  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

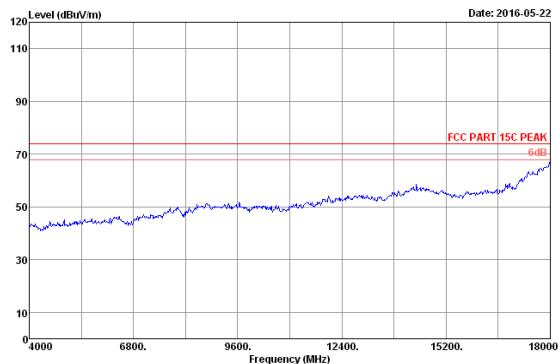


Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2437MHz Tx

Data no. : 16  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

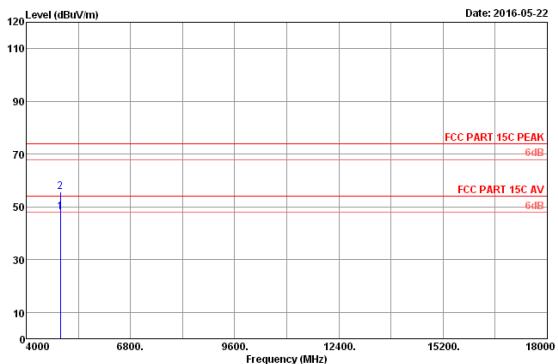
No.	Freq. (MHz)	Ant. Factor (dBi/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	4874.00	33.10	11.80	37.58	35.69	46.79	54.00	7.21	Average
2	4874.00	33.10	11.80	47.12	35.69	56.33	74.00	17.67	Peak

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



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2462MHz Tx

Data no. : 17  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

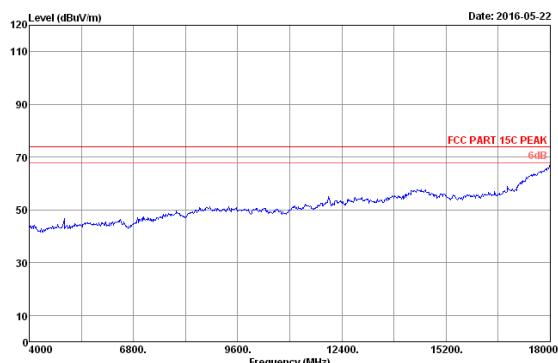


Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2462MHz Tx

Data no. : 18  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

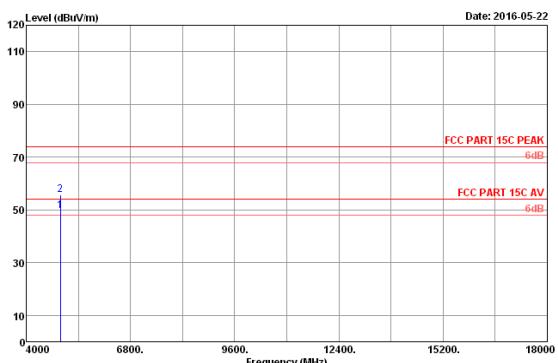
No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	33.22	11.83	38.62	36.70	47.97	54.00	6.03	Average
2	4924.00	33.22	11.83	46.38	36.70	55.73	74.00	18.27	Peak

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



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2462MHz Tx

Data no. : 19  
Ant. pol. : VERTICAL  
Pre : 101.2kPa  
Engineer : Leo-Li

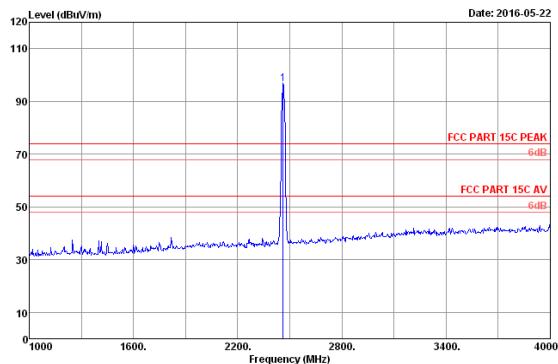


Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2462MHz Tx

Data no. : 20  
Ant. pol. : VERTICAL  
Pre : 101.2kPa  
Engineer : Leo-Li

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	4924.00	33.22	11.83	40.23	35.70	49.58	54.00	4.42	Average
2	4924.00	33.22	11.83	46.39	36.70	55.74	74.00	18.26	Peak

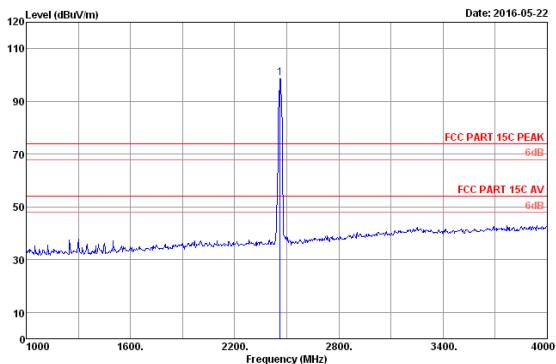
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -AMP Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	96.26	36.38	96.65	74.00	-22.55	Peak

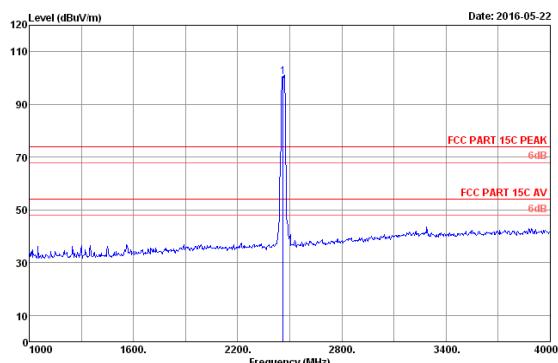
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	98.47	36.38	98.77	74.00	-24.77	Peak

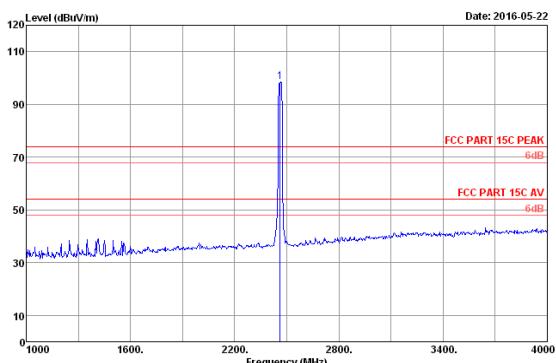
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	100.34	36.38	100.64	74.00	-26.64	Peak

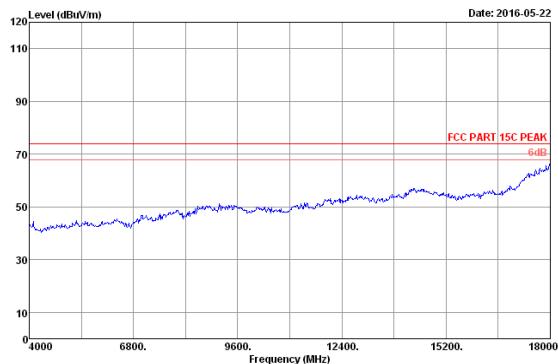
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



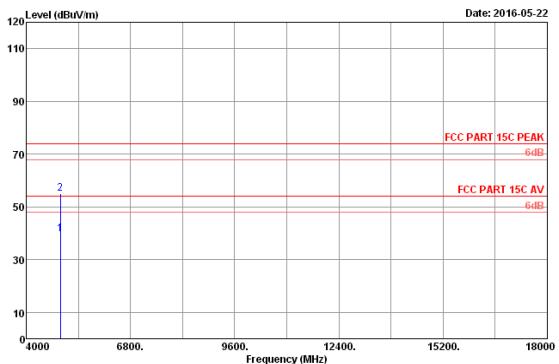
Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	98.27	36.38	98.57	74.00	-24.57	Peak

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



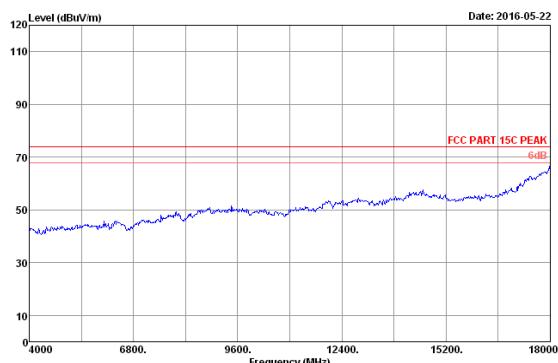
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx



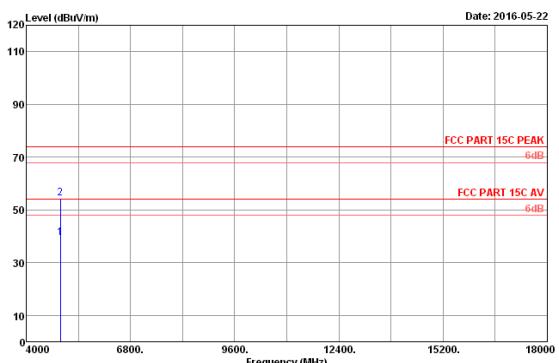
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dBi/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	33.22	11.83	30.24	36.70	39.59	54.00	14.41	Average
2	4924.00	33.22	11.83	45.73	36.70	55.08	74.00	18.92	Peak

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



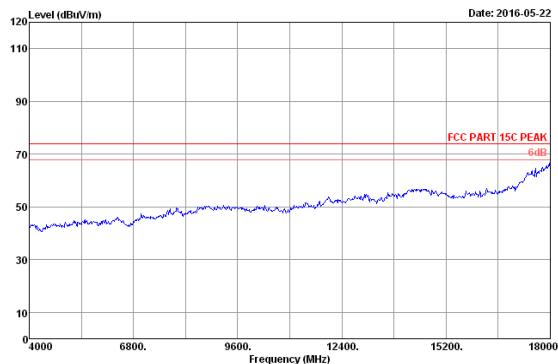
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx



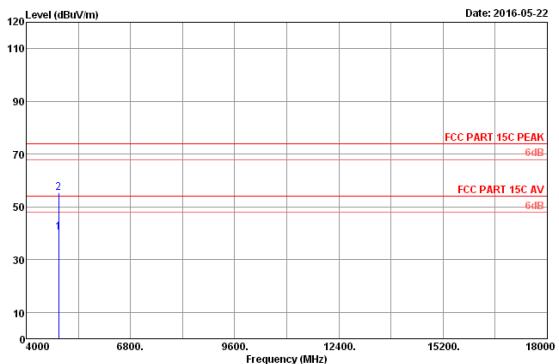
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dBi/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	4924.00	33.22	11.83	30.15	36.70	39.50	54.00	14.50	Average
2	4924.00	33.22	11.83	45.19	36.70	54.54	74.00	19.46	Peak

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



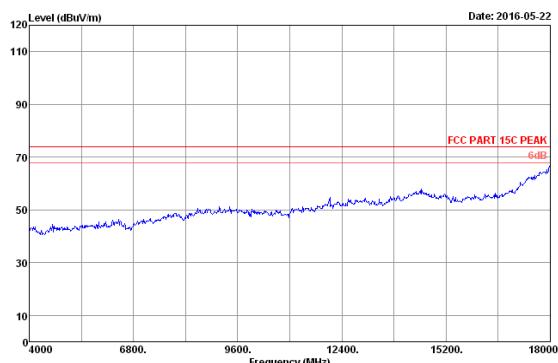
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2437MHz Tx



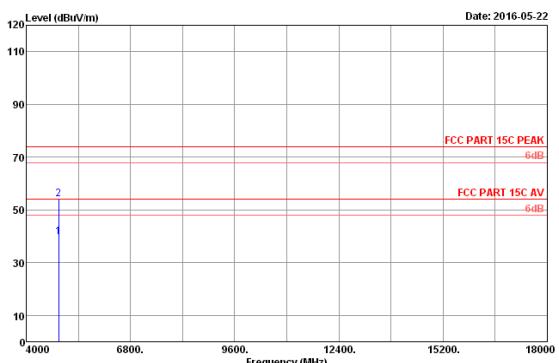
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dBi/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.10	11.80	30.96	36.69	40.17	54.00	13.83	Average
2	4874.00	33.10	11.80	46.02	36.69	55.23	74.00	18.77	Peak

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



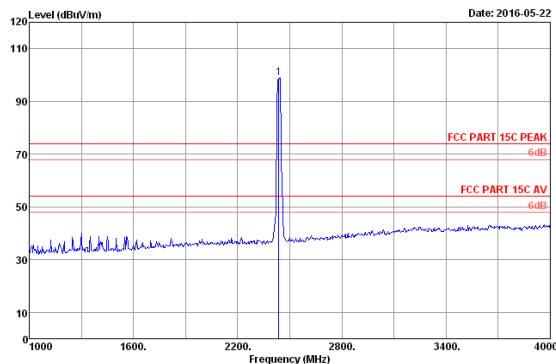
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2437MHz Tx



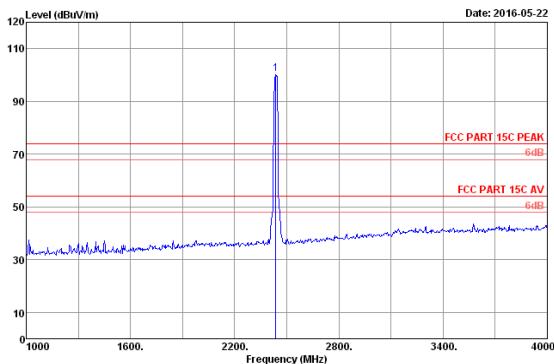
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11g 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dBi/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	4874.00	33.10	11.80	30.47	35.69	39.68	54.00	14.32	Average
2	4874.00	33.10	11.80	44.85	35.69	54.06	74.00	19.94	Peak

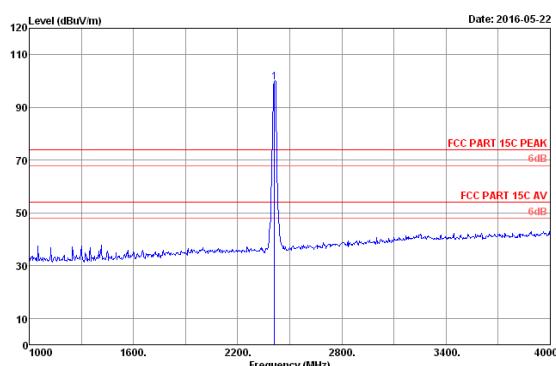
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -AMP Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



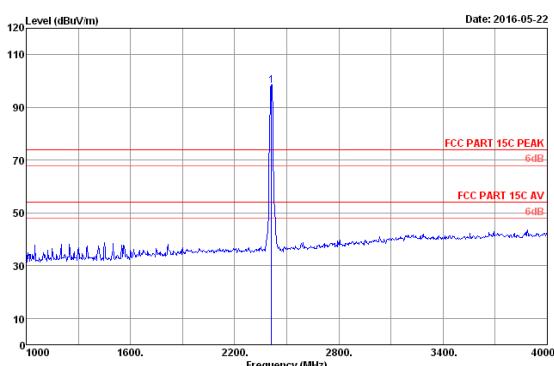
Site no. : 3m Chamber Data no. : 41  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IIEEE802.11g 2437MHz Tx



Site no. : 3m Chamber Data no. : 42  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IIEEE802.11g 2437MHz Tx



Site no. : 3m Chamber Data no. : 43  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IIEEE802.11g 2437MHz Tx



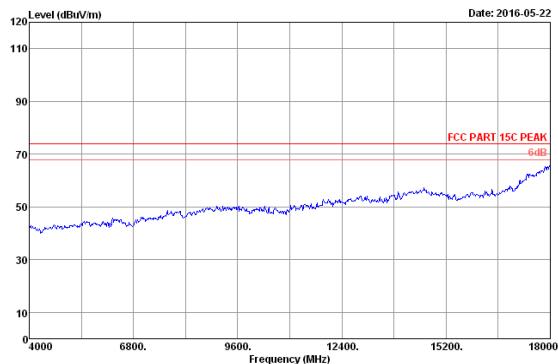
Site no. : 3m Chamber Data no. : 44  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IIEEE802.11g 2437MHz Tx

Site no. : 3m Chamber Data no. : 45  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IIEEE802.11g 2437MHz Tx

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

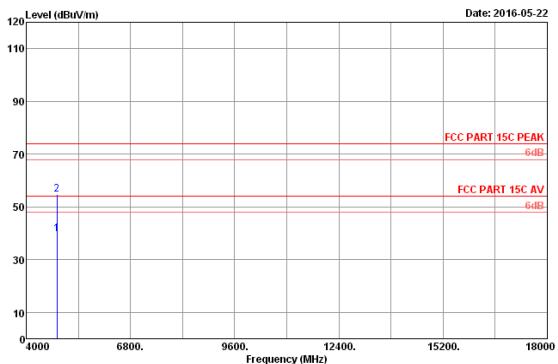
Site no. : 3m Chamber Data no. : 44  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IIEEE802.11g 2412MHz Tx

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



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11g 2412MHz Tx

Data no. : 49  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

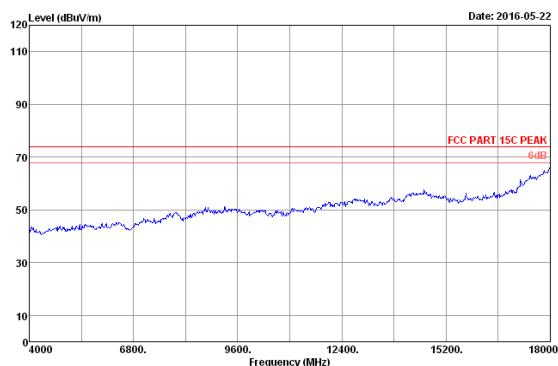


Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11g 2412MHz Tx

Data no. : 50  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

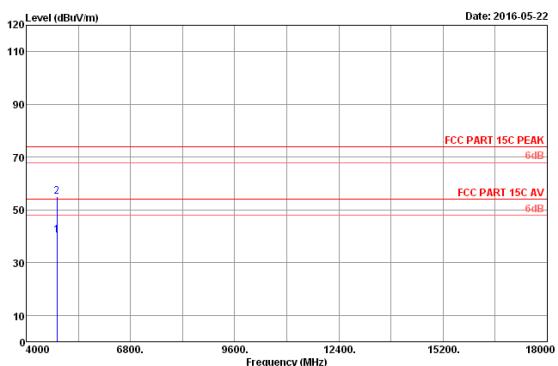
No.	Freq. (MHz)	Ant. Factor (dBi)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.98	11.77	30.69	36.68	39.76	54.00	14.24	Average
2	4824.00	32.98	11.77	45.77	36.68	54.84	74.00	19.16	Peak

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



Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11g 2412MHz Tx

Data no. : 51  
Ant. pol. : VERTICAL  
Pre : 101.2kPa  
Engineer : Leo-Li

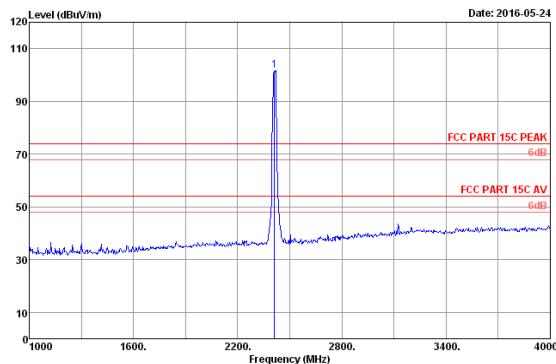


Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2K  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11g 2412MHz Tx

Data no. : 52  
Ant. pol. : VERTICAL  
Pre : 101.2kPa  
Engineer : Leo-Li

No.	Freq. (MHz)	Ant. Factor (dBi)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.98	11.77	31.22	35.68	40.29	54.00	13.71	Average
2	4824.00	32.98	11.77	46.13	35.68	55.20	74.00	18.80	Peak

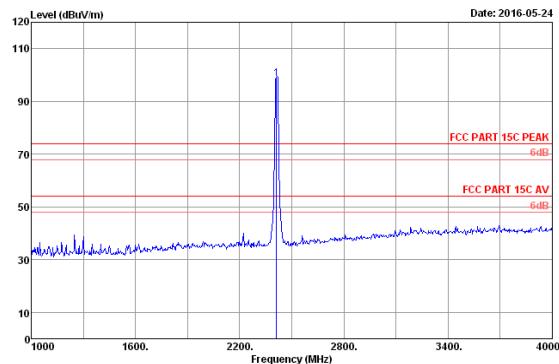
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -AMP Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580) Data no. : 53  
Limit : FCC PART 15C PEAK Ant. pol. : HORIZONTAL  
Env. / Ins. : 22.6°C/51.2% Pre. : 101.2kPa  
EUT : Atom Engine Burner Engineer : Leo-Li  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.29	8.35	101.63	36.39	101.84	74.00	-27.84	Peak

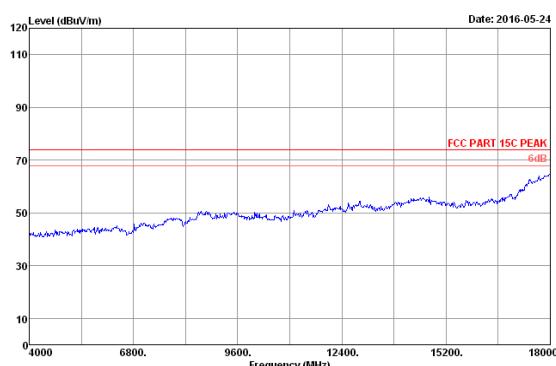
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



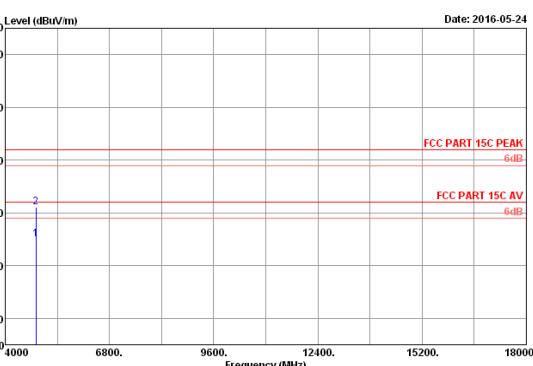
Site no. : 3n Chamber Data no. : 54  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2412.00	28.29	8.35	98.45	36.39	98.66	74.00	-24.66	Peak

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



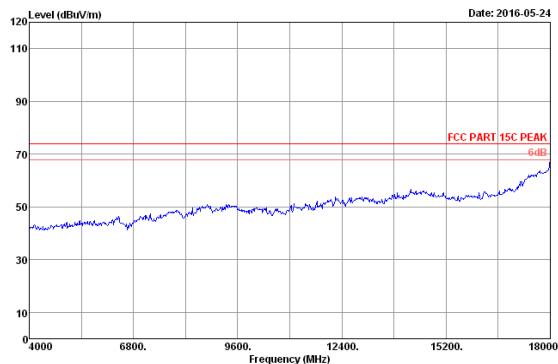
Site no. : 3n Chamber Data no. : 55  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2412MHz Tx



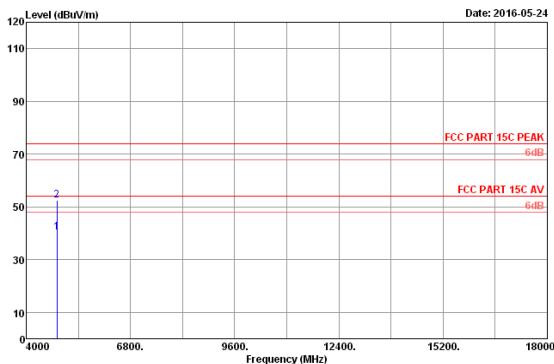
Site no. : 3n Chamber Data no. : 60  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.98	11.77	30.96	35.68	40.03	54.00	13.97	Average
2	4824.00	32.98	11.77	43.12	35.68	52.19	74.00	21.81	Peak

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



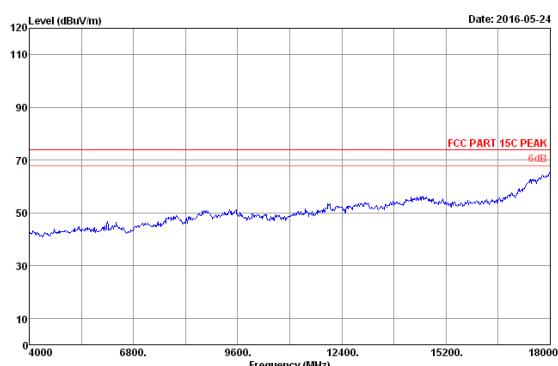
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580) Data no. : 61  
 Limit : FCC PART 15C PEAK Ant. pol. : VERTICAL  
 Env. / Ins. : 22.6°C/51.2% Pre. : 101.2kPa  
 EUT : Atom Engine Burner Engineer : Leo-Li  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2412MHz Tx



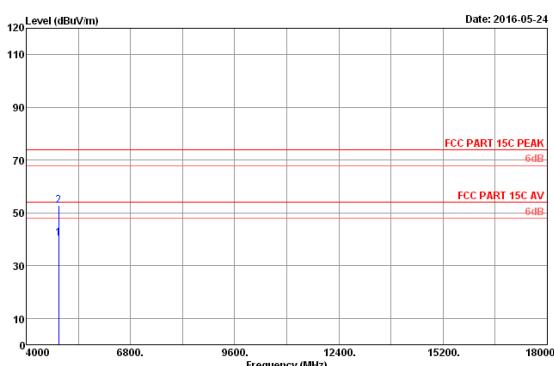
Site no. : 3m Chamber Data no. : 62  
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
 EUT : Atom Engine Burner Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/uA)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4824.00	32.98	11.77	31.40	36.68	40.47	54.00	13.53	Average
2	4824.00	32.98	11.77	43.59	36.68	52.46	74.00	21.64	Peak

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



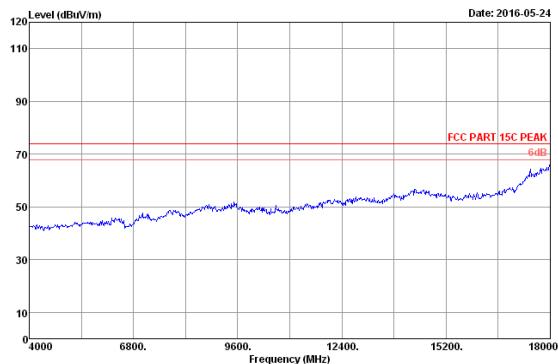
Site no. : 3m Chamber Data no. : 63  
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
 EUT : Atom Engine Burner Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2437MHz Tx



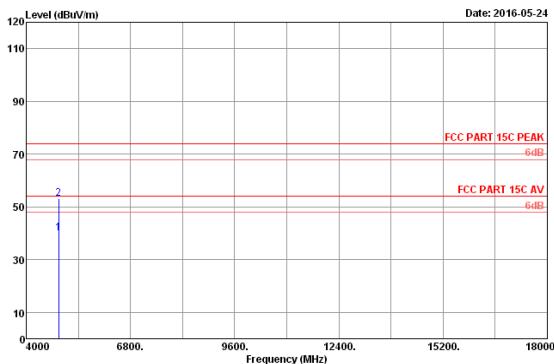
Site no. : 3m Chamber Data no. : 64  
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
 EUT : Atom Engine Burner Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/uA)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.10	11.80	31.26	35.69	40.47	54.00	13.53	Average
2	4874.00	33.10	11.80	43.69	35.69	52.90	74.00	21.10	Peak

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



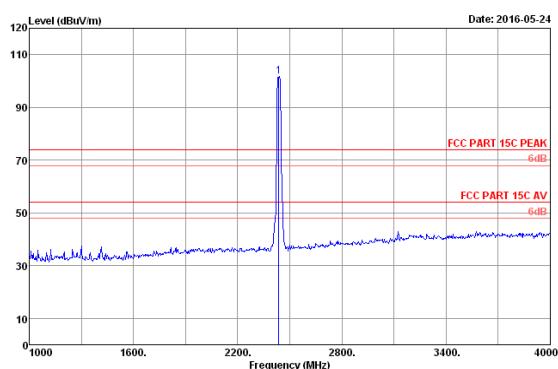
Site no. : 3m Chamber Data no. : 65  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2437MHz Tx



Site no. : 3m Chamber Data no. : 66  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.10	11.80	30.87	36.69	40.08	54.00	13.92	Average
2	4874.00	33.10	11.80	44.02	36.69	53.23	74.00	20.77	Peak

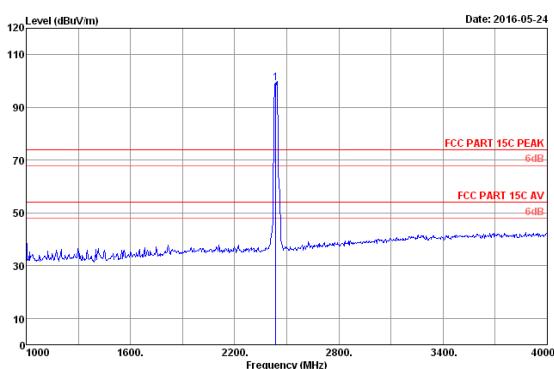
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 67  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.26	8.38	101.37	36.38	101.63	74.00	-27.63	Peak

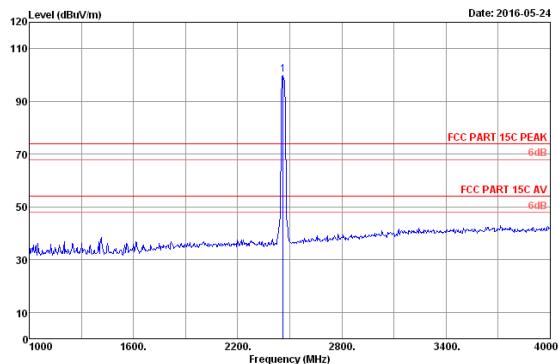
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 68  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre. : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT20 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2437.00	28.26	8.38	98.82	36.38	99.08	74.00	-25.08	Peak

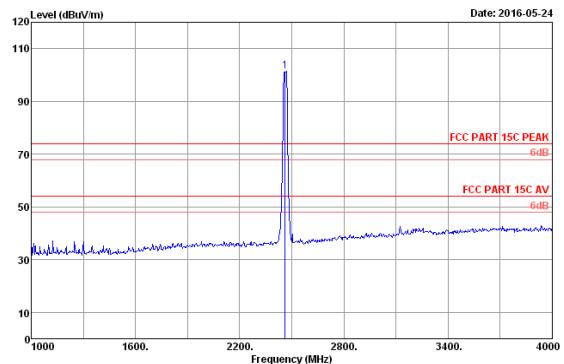
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3n Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2K  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	99.87	36.38	100.17	74.00	-26.17	Peak

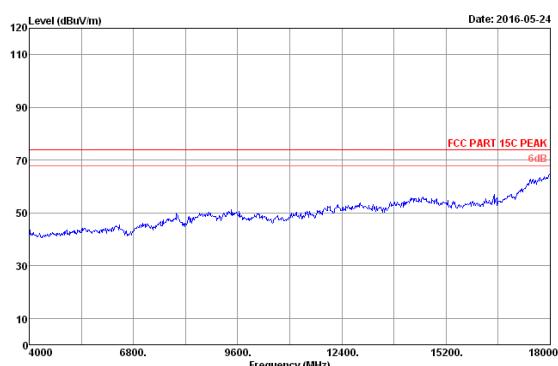
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



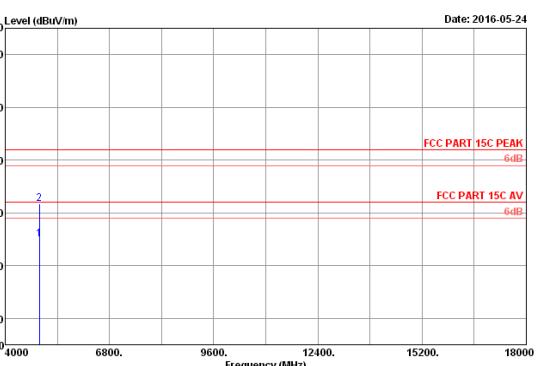
Site no. : 3n Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2K  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	101.23	36.38	101.53	74.00	-27.53	Peak

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



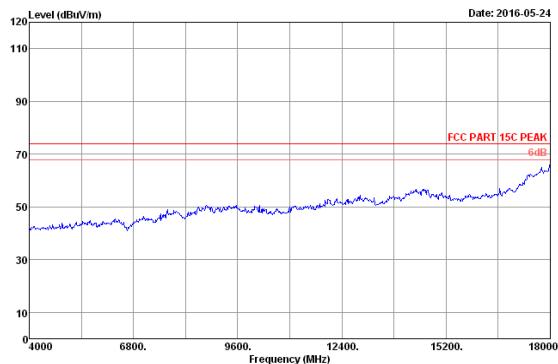
Site no. : 3n Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2K  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx



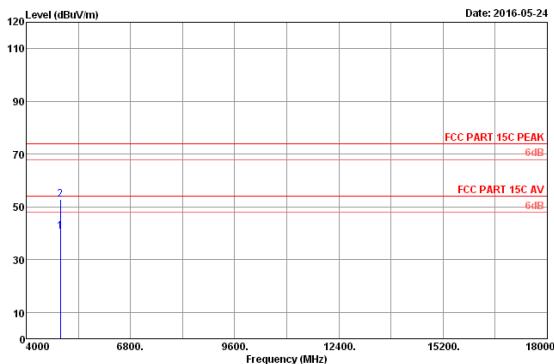
Site no. : 3n Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2K  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	33.22	11.83	30.67	35.70	40.02	54.00	13.98	Average
2	4924.00	33.22	11.83	44.13	35.70	53.48	74.00	20.52	Peak

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



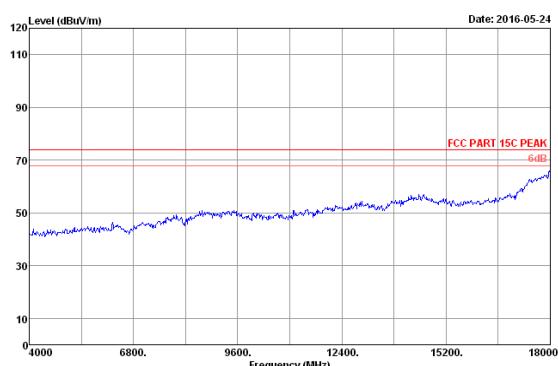
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx



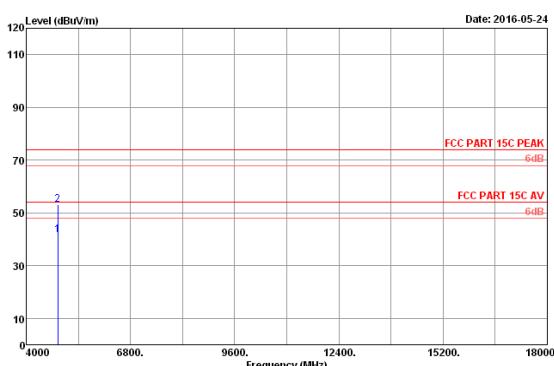
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dBi/s)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4924.00	33.22	11.83	31.42	36.70	40.77	54.00	13.23	Average
2	4924.00	33.22	11.83	43.61	36.70	52.96	74.00	21.04	Peak

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



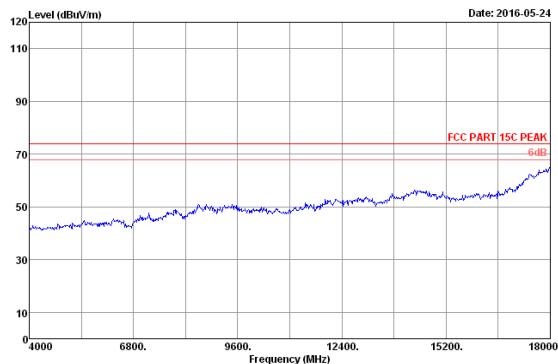
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT40 2422MHz Tx



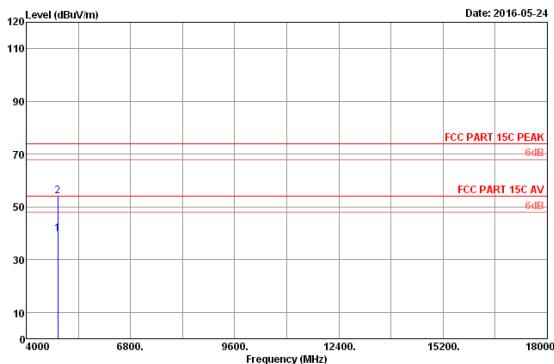
Site no. : 3m Chamber  
 Dis. / Ant. : 3m 2016 3115(4580)  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 22.6°C/51.2%  
 EUT : Atom Engine Burner  
 Power rating : DC 12V From Adapter Input AC120V/60Hz  
 Test Mode : IEEE802.11nHT40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dBi/s)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/A)	Limits (dBuV/A)	Margin (dB)	Remark
1	4844.00	33.03	11.78	32.53	35.68	41.66	54.00	12.34	Average
2	4844.00	33.03	11.78	43.85	35.68	52.98	74.00	21.02	Peak

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



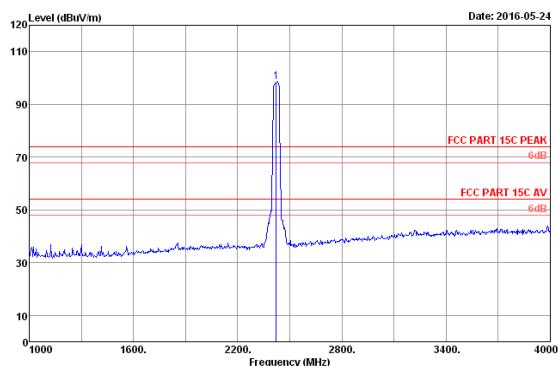
Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2422MHz Tx



Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	limits (dBuV/m)	Margin (dB)	Remark
1	4844.00	33.03	11.78	30.51	36.68	39.64	54.00	14.36	Average
2	4844.00	33.03	11.78	45.02	36.68	54.15	74.00	19.85	

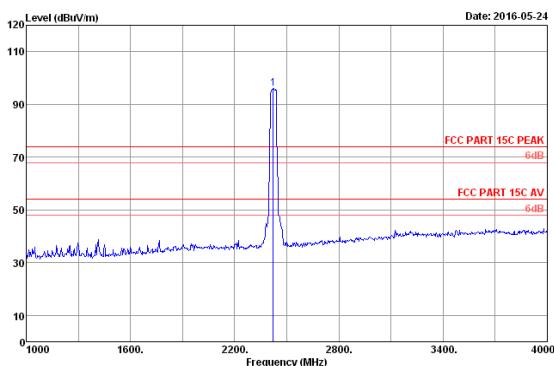
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	limits (dBuV/m)	Margin (dB)	Remark
1	2422.00	28.25	8.36	98.27	36.38	98.50	74.00	-24.50	Peak

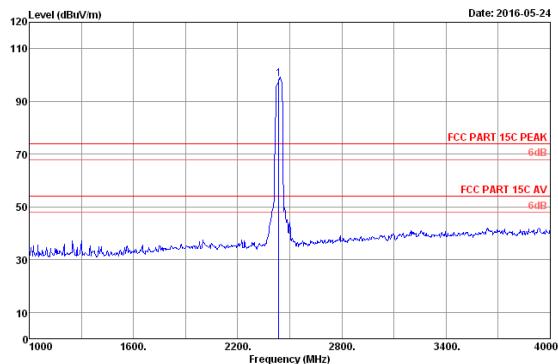
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	limits (dBuV/m)	Margin (dB)	Remark
1	2422.00	28.25	8.36	95.74	36.38	95.97	74.00	-21.97	Peak

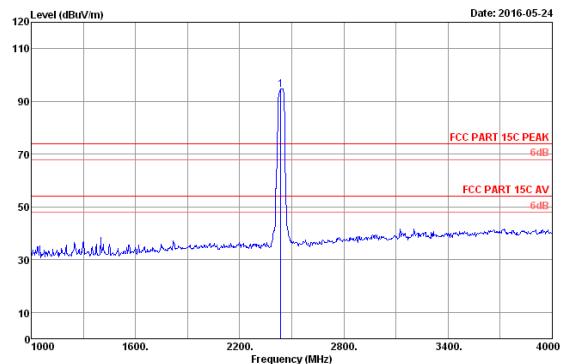
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2KPa  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dB <sub>UV</sub> )	AMP factor (dB)	Emission Level (dB <sub>UV</sub> /m)	Limits (dB <sub>UV</sub> /m)	Margin (dB)	Remark
1	2437.00	28.26	8.38	98.40	36.38	98.66	74.00	-24.66	Peak

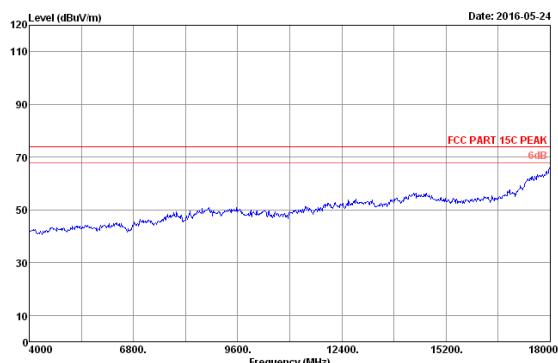
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
-Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



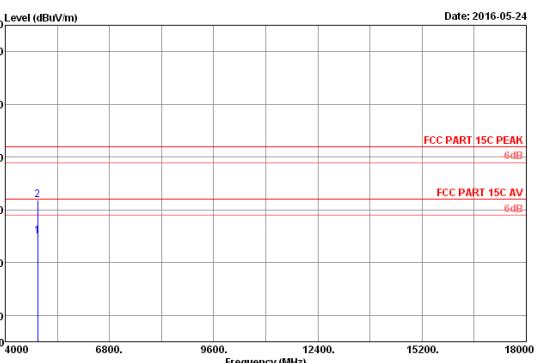
Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2KPa  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2437MHz Tx

No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dB <sub>UV</sub> )	AMP factor (dB)	Emission Level (dB <sub>UV</sub> /m)	Limits (dB <sub>UV</sub> /m)	Margin (dB)	Remark
1	2437.00	28.26	8.38	94.24	36.38	94.50	74.00	-20.50	Peak

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



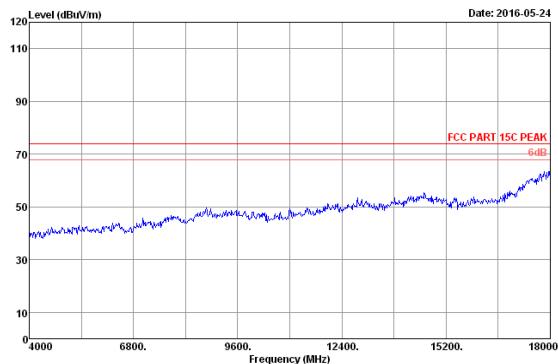
Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2KPa  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2437MHz Tx



Site no. : 3n Chamber  
Dis. / Ant. : 3m 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2KPa  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2437MHz Tx

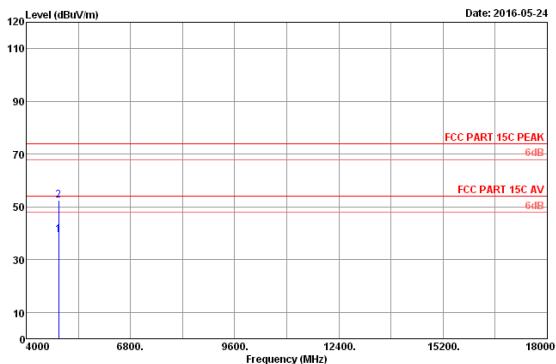
No.	Freq. (MHz)	Ant. Factor	Cable Loss (dB)	Reading (dB <sub>UV</sub> )	AMP factor (dB)	Emission Level (dB <sub>UV</sub> /m)	Limits (dB <sub>UV</sub> /m)	Margin (dB)	Remark
1	4874.00	33.10	11.80	30.85	35.69	40.06	54.00	13.94	Average
2	4874.00	33.10	11.80	44.52	35.69	53.73	74.00	20.27	Peak

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



Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2437MHz Tx

Data no. : 93  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

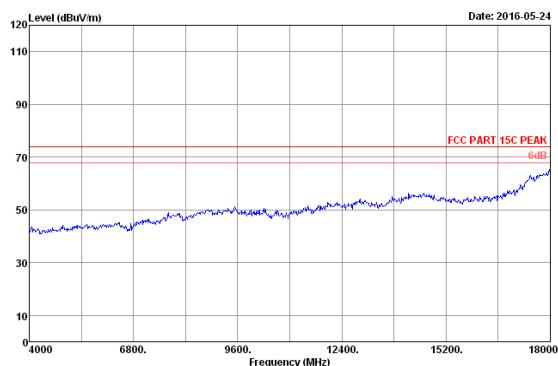


Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2437MHz Tx

Data no. : 94  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

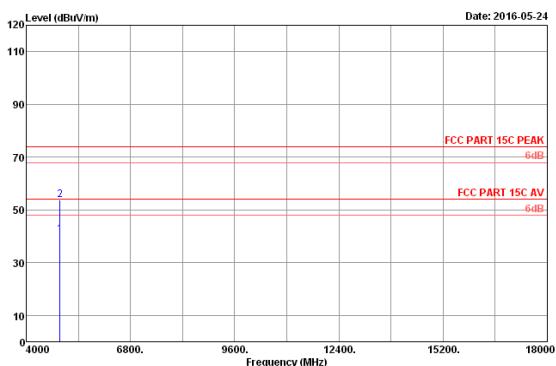
No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dBuV)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	4874.00	33.10	11.80	30.28	36.69	39.49	54.00	14.51	Average
2	4874.00	33.10	11.80	43.21	36.69	52.42	74.00	21.68	Peak

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



Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2452MHz Tx

Data no. : 95  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

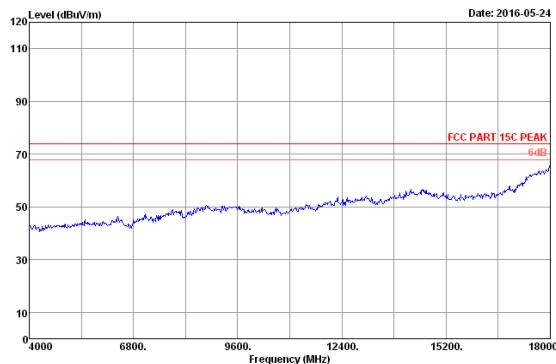


Site no. : 3n Chamber  
Dis. / Ant. : 3n 2016 3115(4580)  
Limit : FCC PART 15C PEAK  
Env. / Ins. : 22.6°C/51.2%  
EUT : Atom Engine Burner  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHT40 2452MHz Tx

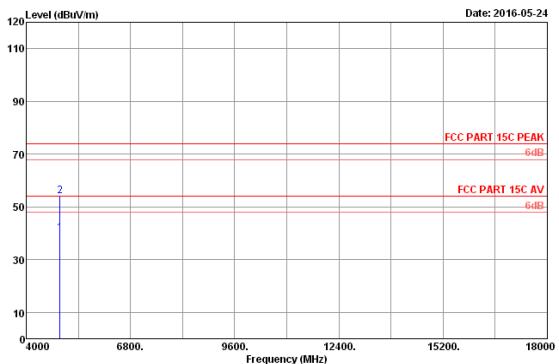
Data no. : 96  
Ant. pol. : HORIZONTAL  
Pre : 101.2kPa  
Engineer : Leo-Li

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dBuV)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	4904.00	33.17	11.82	31.22	35.70	40.51	54.00	13.49	Average
2	4904.00	33.17	11.82	44.31	35.70	53.60	74.00	20.40	Peak

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



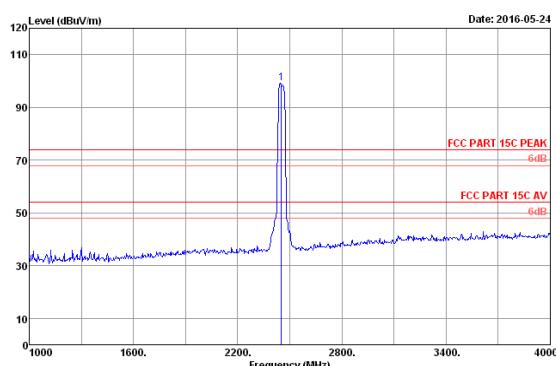
Site no. : 3m Chamber  
Dis. / Ant. : 3m 2016 3115(4580) Data no. : 97  
Limit : FCC PART 15C PEAK Ant. pol. : VERTICAL  
Env. / Ins. : 22.6°C/51.2% Pre : 101.2kPa  
EUT : Atom Engine Burner Engineer : Leo-Li  
Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2452MHz Tx



Site no. : 3m Chamber Data no. : 98  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2452MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	limits (dBuV/m)	Margin (dB)	Remark
1	4904.00	33.17	11.82	30.88	36.70	39.87	54.00	14.13	Average
2	4904.00	33.17	11.82	44.92	36.70	54.21	74.00	19.79	Peak

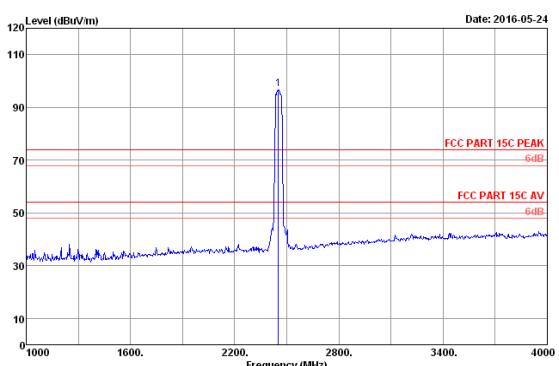
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 103  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2452MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	limits (dBuV/m)	Margin (dB)	Remark
1	2452.00	28.27	8.39	98.79	36.38	99.07	74.00	-25.07	Peak

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



Site no. : 3m Chamber Data no. : 104  
Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL  
Limit : FCC PART 15C PEAK Pre : 101.2kPa  
Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li  
EUT : Atom Engine Burner Power rating : DC 12V From Adapter Input AC120V/60Hz  
Test Mode : IEEE802.11nHt40 2452MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	limits (dBuV/m)	Margin (dB)	Remark
1	2452.00	28.27	8.39	96.53	36.38	96.81	74.00	-22.81	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor  
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	Agilent	N9030A	MY51380221	Oct.17,15	1 Year
2.	Attenuator	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	No.1	Oct.17,15	1 Year

### 5.2. Limit

In any 100kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is 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.

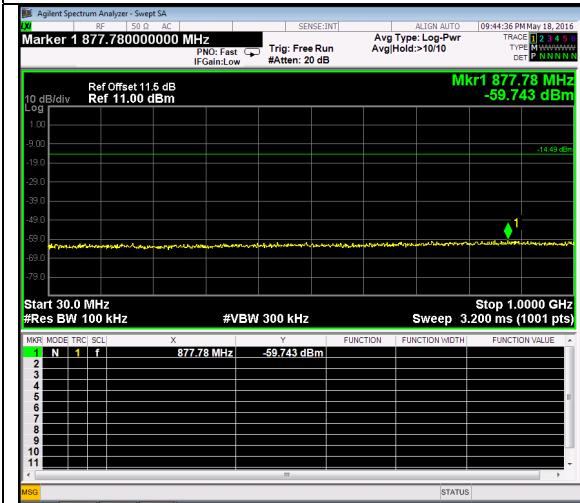
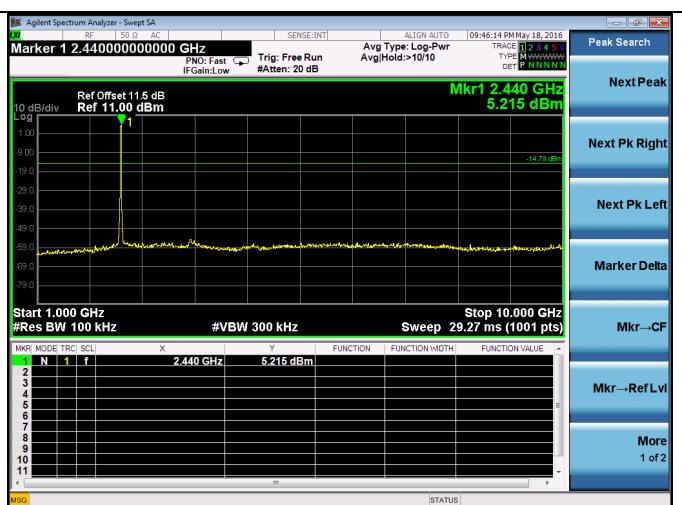
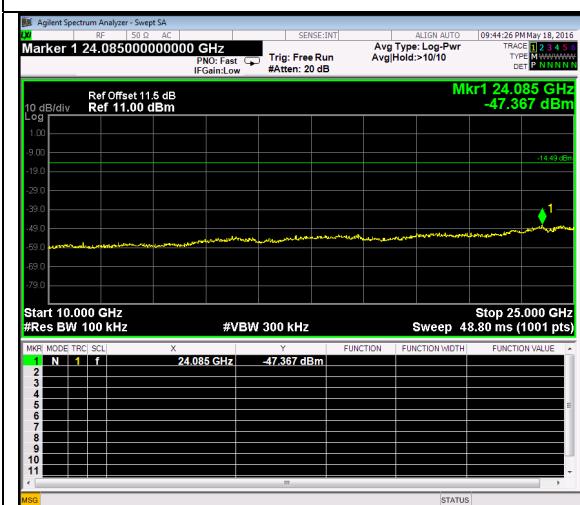
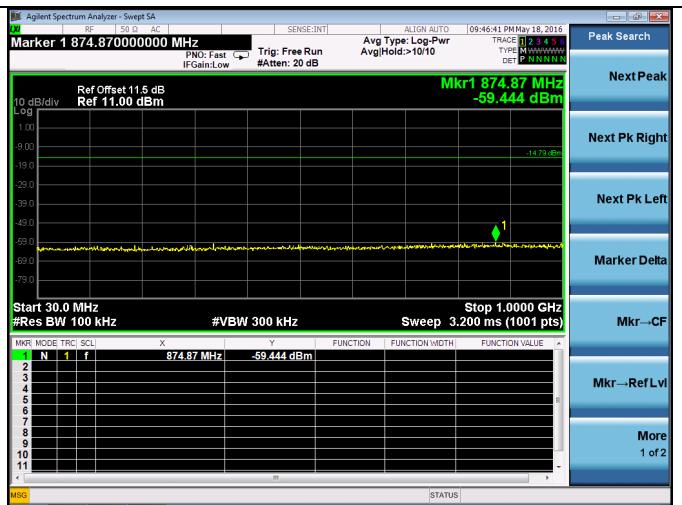
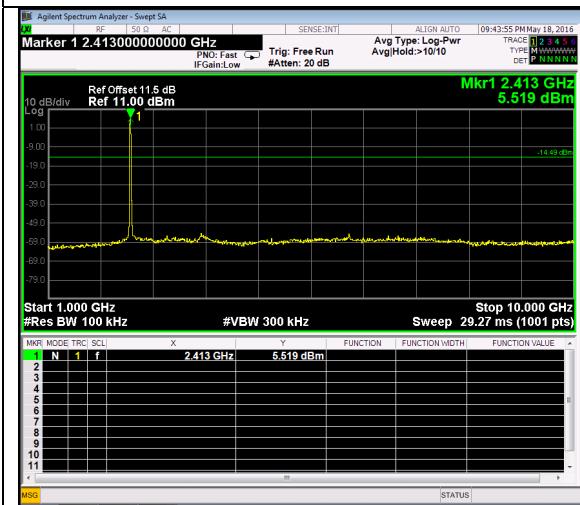
### 5.3. Test Procedure

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 with peak detector.

### 5.4. Test result

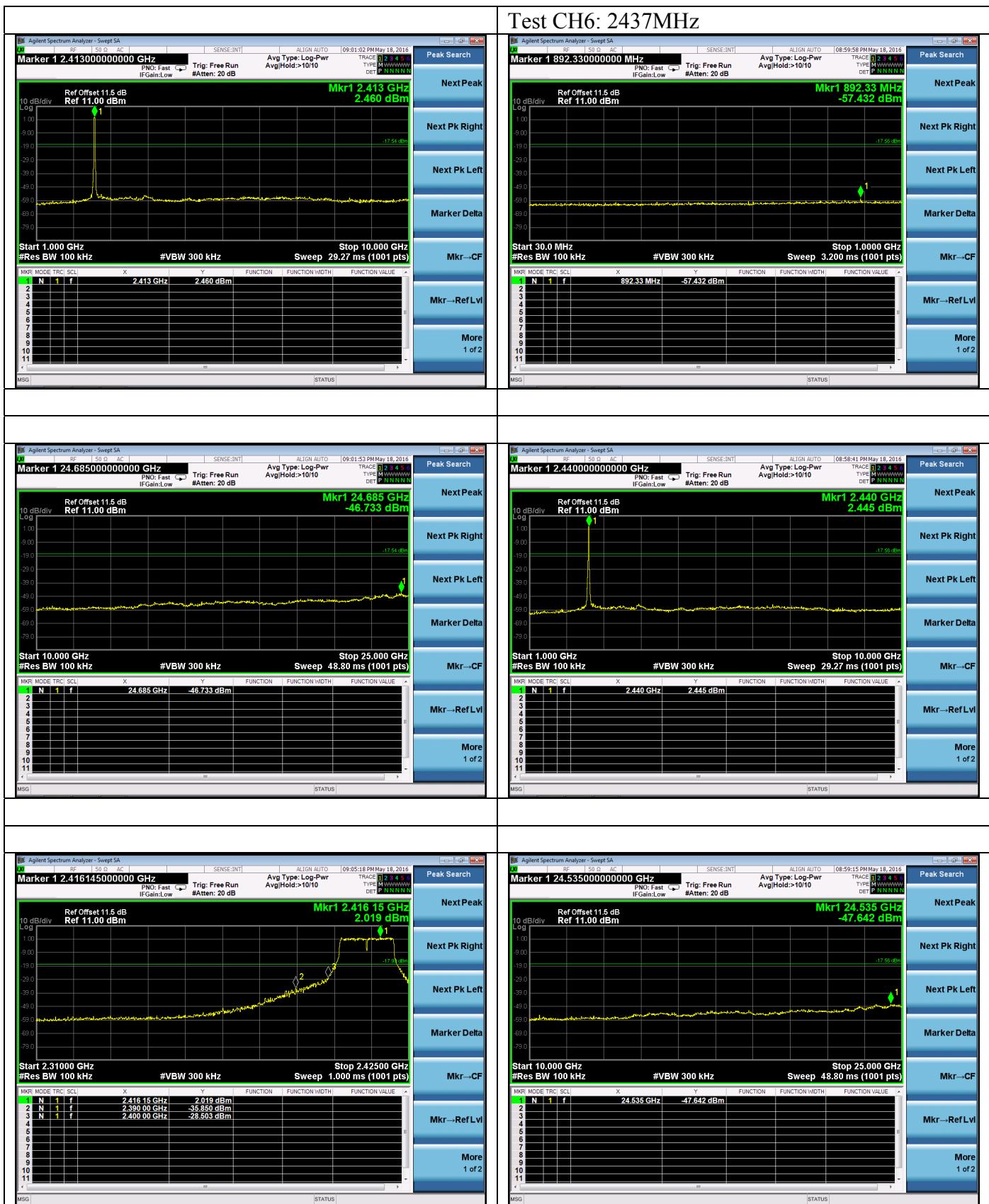
**PASS** (The testing data was attached in the next pages.)

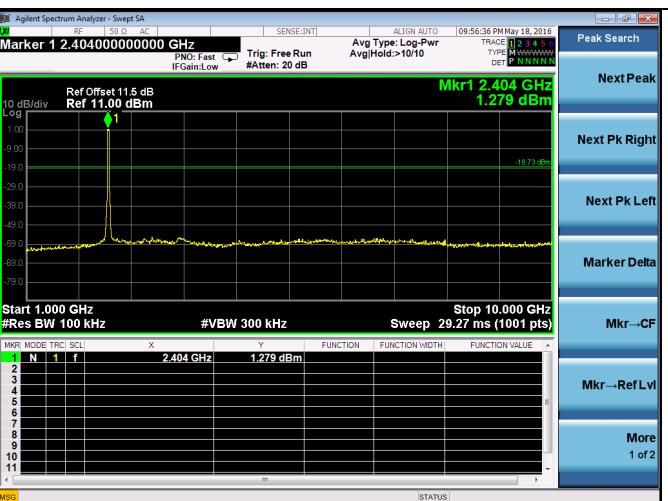
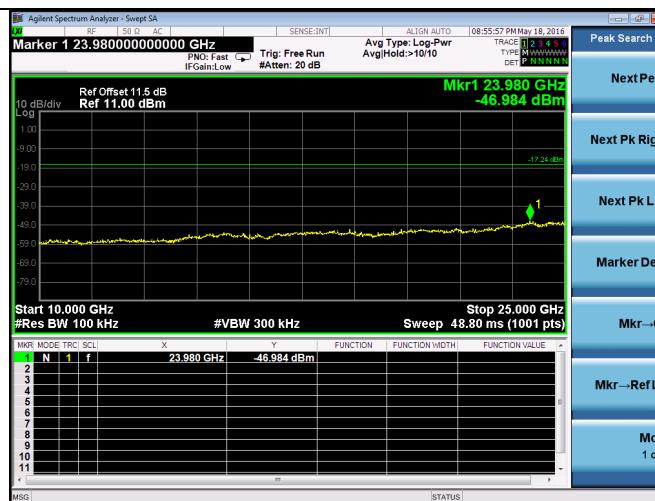
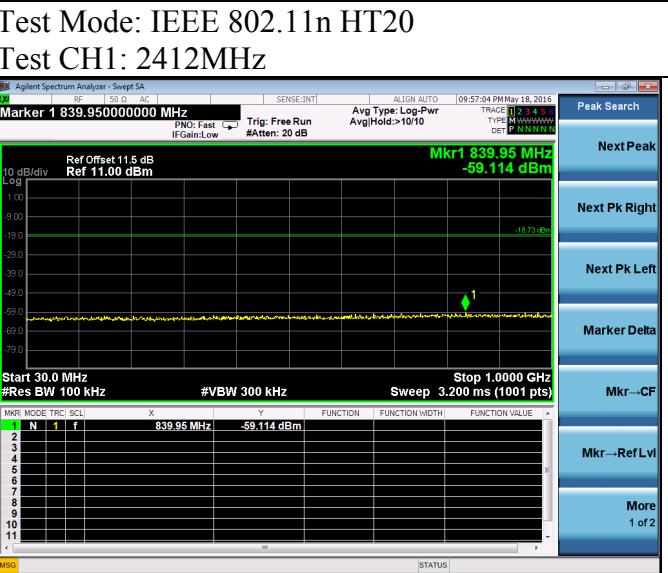
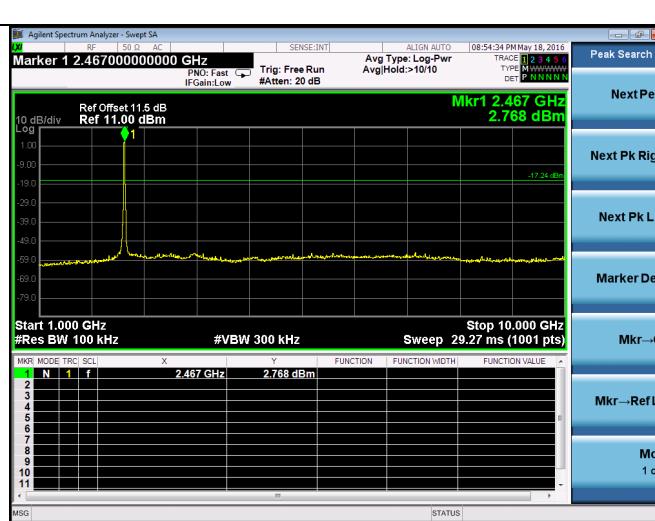
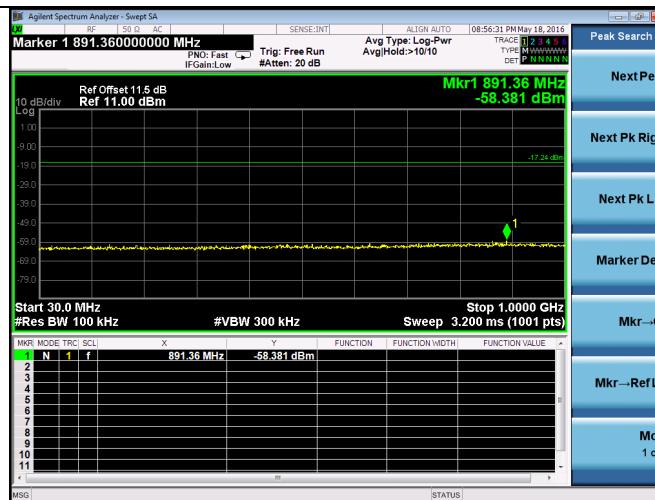
**ANT1:**

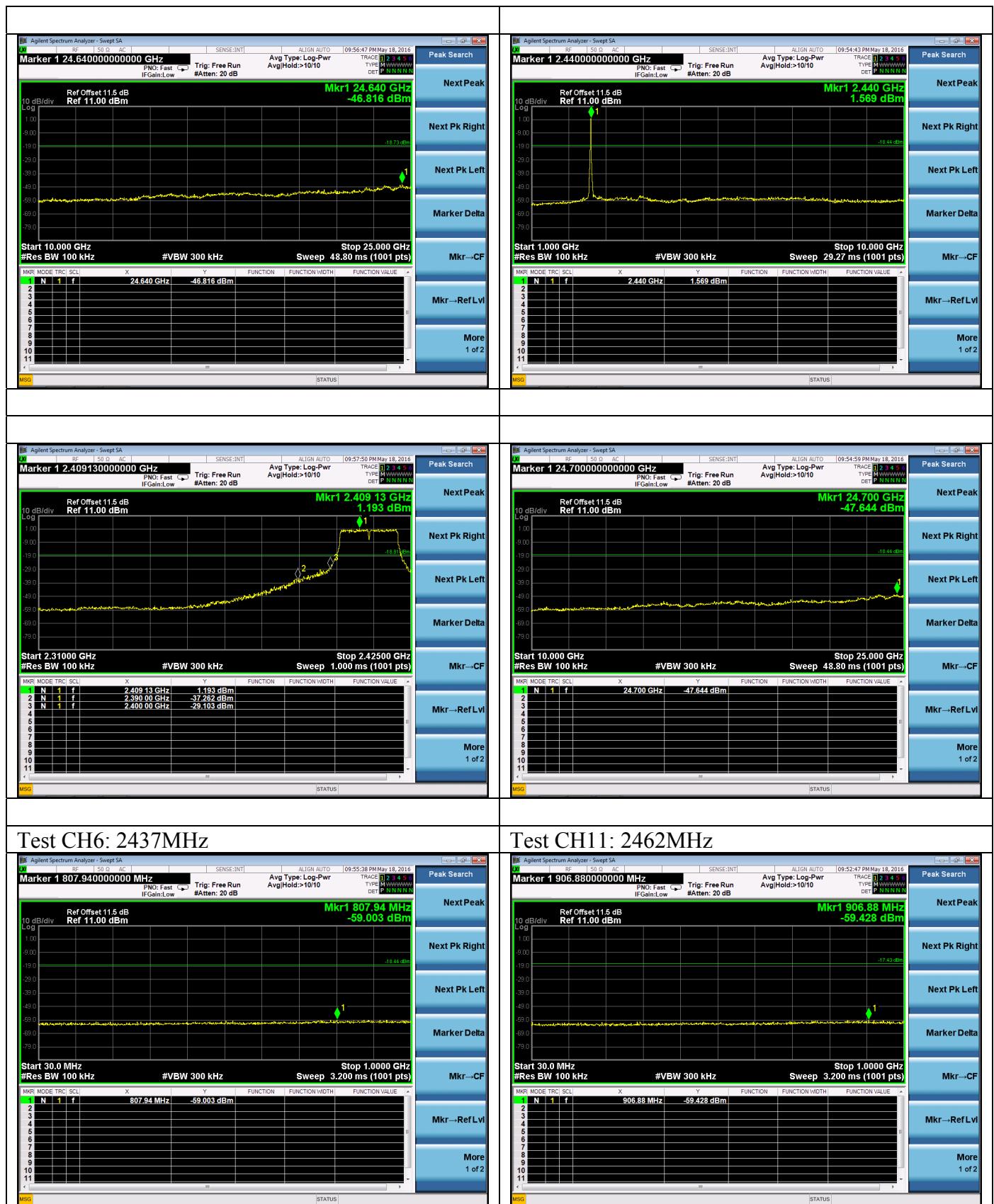
 Test Mode: IEEE 802.11b  
 Test CH1: 2412MHz

**Test CH6: 2437MHz**


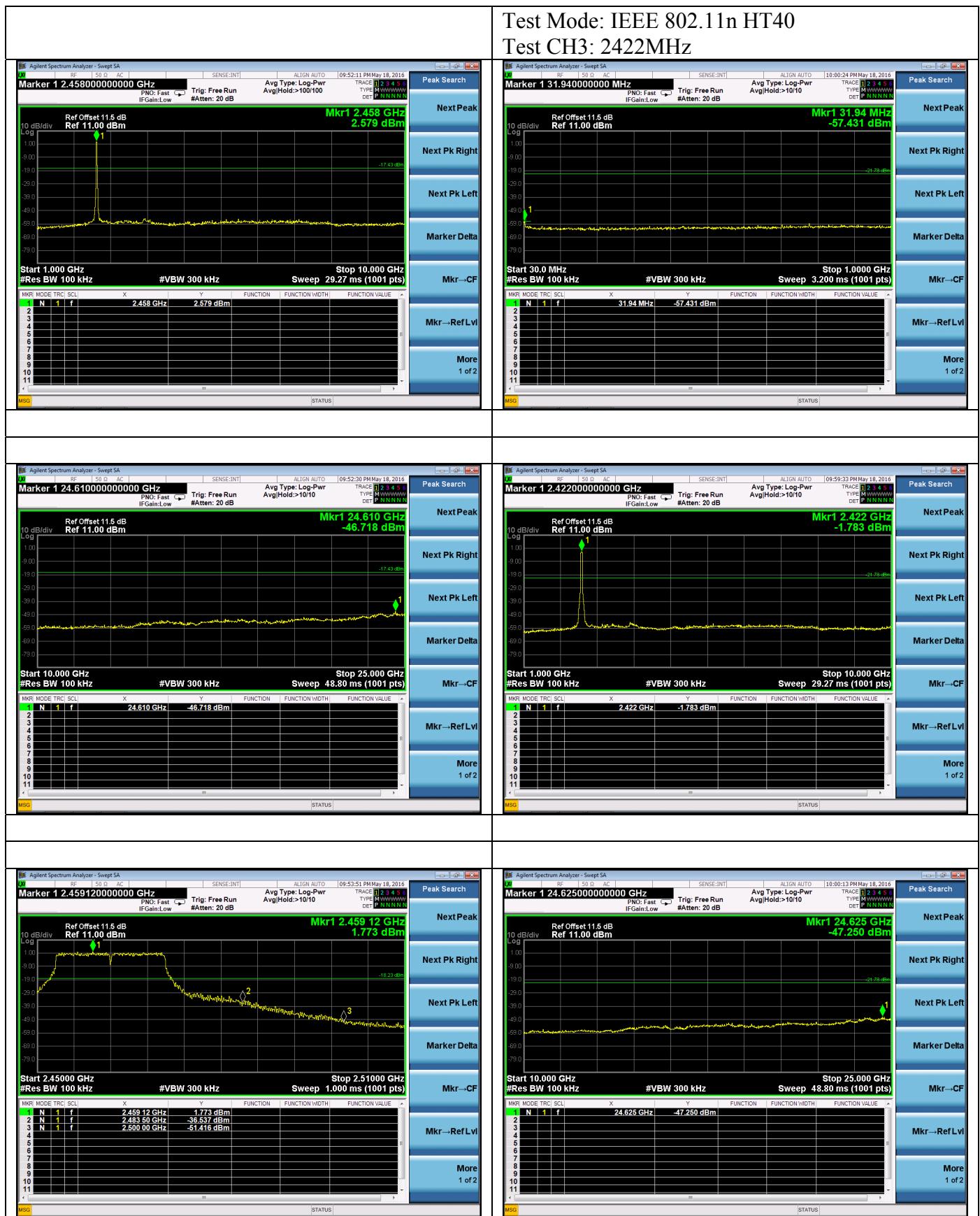


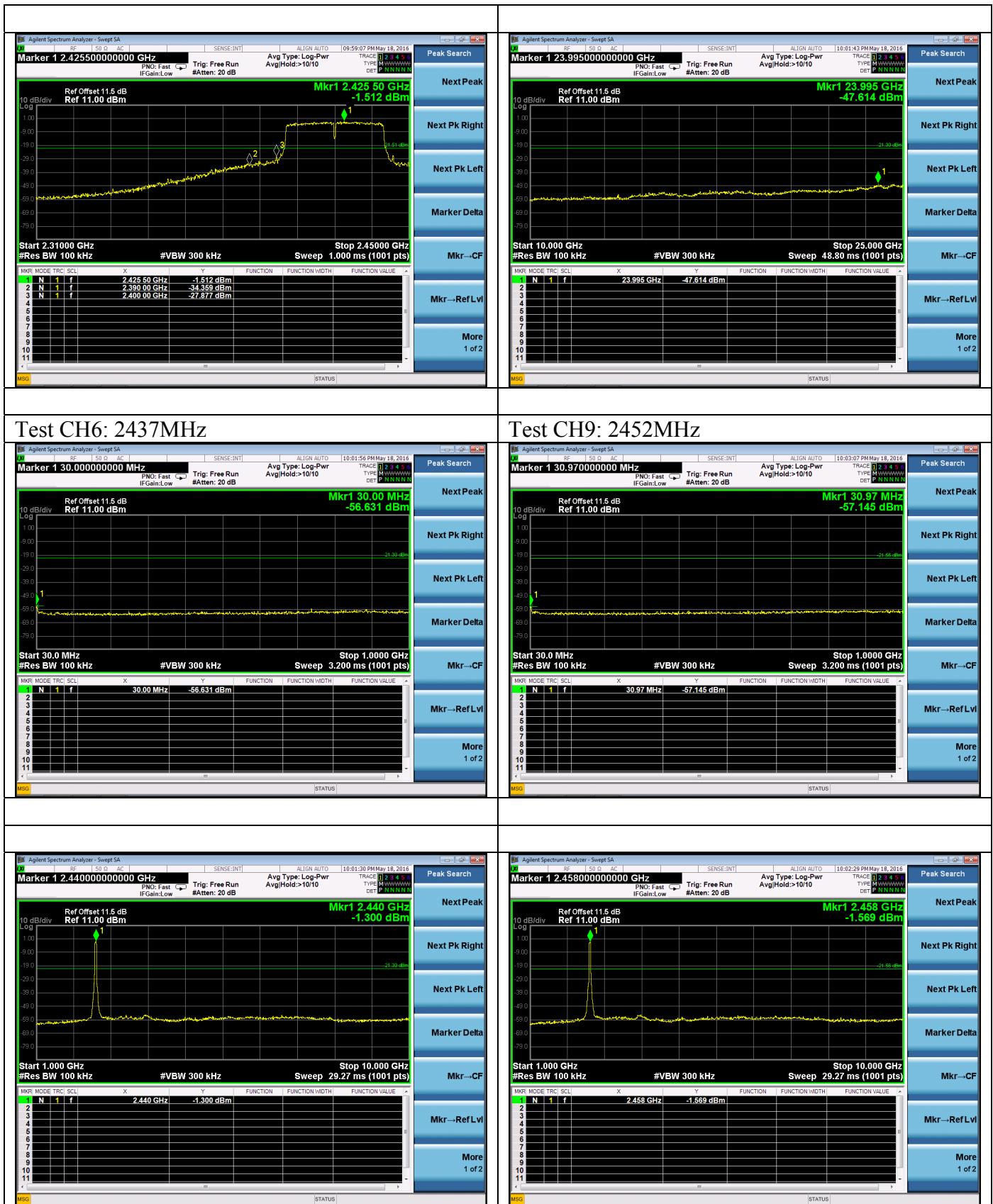
## Test CH6: 2437MHz

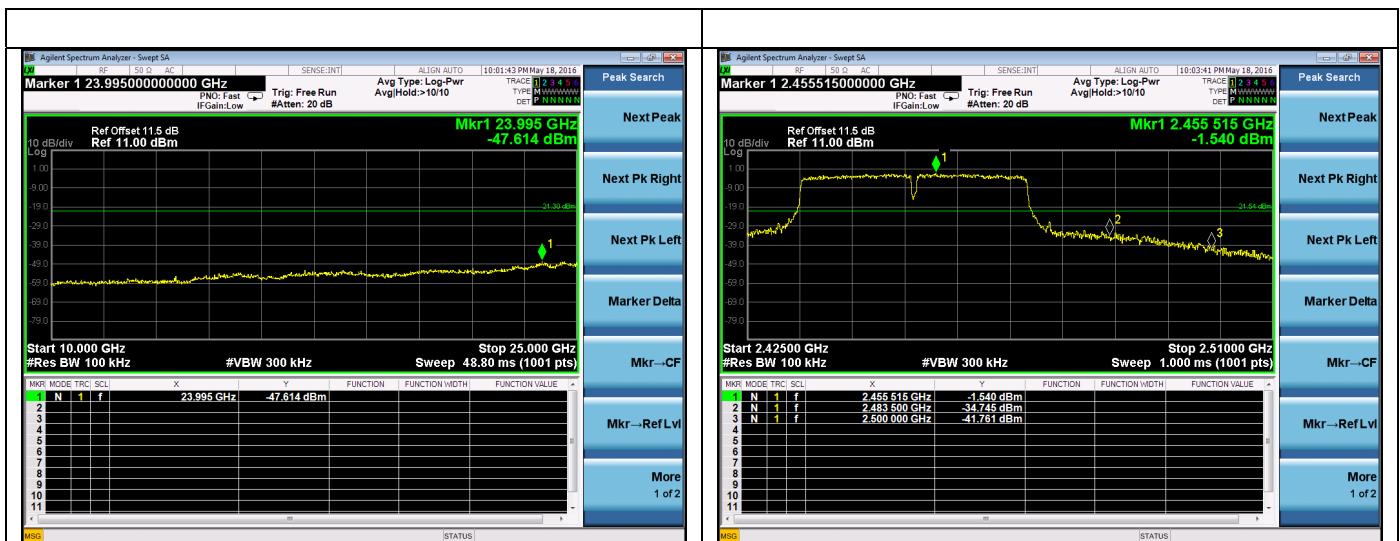


**Test CH11: 2462MHz**




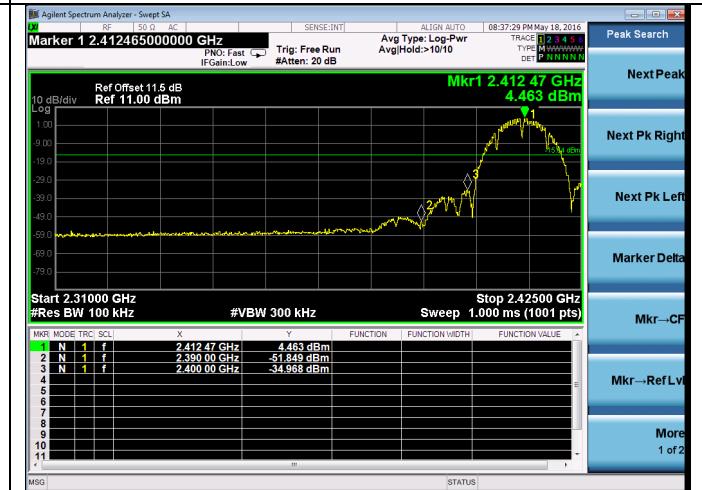
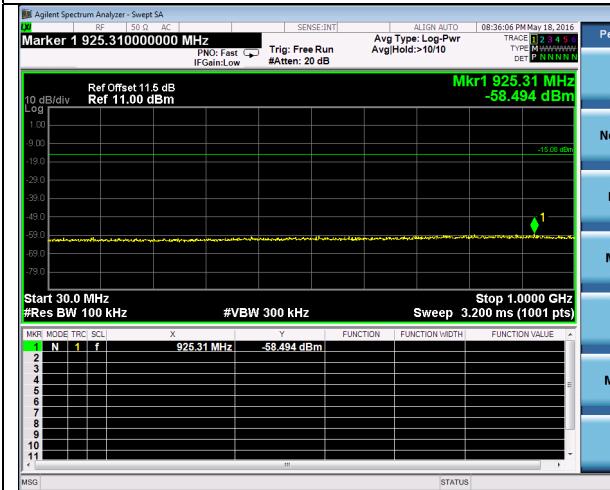






**ANT2:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz


**Test CH6: 2437MHz**
