

## Shenzhen Toby Technology Co., Ltd.



Report No.: TBR-C-202305-0139-3

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# Radio Test Report

FCC ID: 2AW68-NP2035G

**Report No.** : TBR-C-202305-0139-3

**Applicant**: Shenzhen SDMC Technology Co., Ltd.

**Equipment Under Test (EUT)** 

**EUT Name**: AC2000 Dual Band WiFi GPON Terminal,

**Dual Band WiFi GPON Terminal** 

Model No. : NP2035G

Series Model No. : NP2081GB

Brand Name : SDMC

Sample ID : HC-C-202305-0139-01-01&HC-C-202305-0139-01-02

**Receipt Date** : 2023-06-25

**Test Date** : 2023-06-26 to 2023-07-13

**Issue Date** : 2023-07-13

Standards : FCC Part 15 Subpart C 15.247

Test Method : ANSI C63.10: 2013

KDB 558074 D01 15.247 Meas Guidance v05r02

KDB 662911 D01 Multiple Transmitter Output v02r01

Conclusions : PASS

In the configuration tested, the EUT complied with the standards specified above.

Witness Engineer :

**Engineer Supervisor** 

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1.0



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# **Revision History**

Report No.	Version	Description	Issued Date
TBR-C-202305-0139-3	Rev.01	Initial issue of report	2023-07-13
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## 1. General Information about EUT

#### 1.1 Client Information

Applicant	Ŀ	Shenzhen SDMC Technology Co., Ltd.
Address  Room 1022, Floor 10, Building A, Customs Building, No. 2, Xiii 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen, China, 518000		Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen, China, 518000
Manufacturer : Shenzhen SDMC Technology Co., Ltd.		Shenzhen SDMC Technology Co., Ltd.
Address		Room 1022, Floor 10, Building A, Customs Building, No. 2, Xin'an 3rd Road, Dalang Community, Xin'an Street, Bao'an District, Shenzhen, China, 518000

## 1.2 General Description of EUT (Equipment Under Test)

<b>EUT Name</b>	:	AC2000 Dual Band WiFi GPON Terminal, Dual Band WiFi GPON Terminal			
Models No.	)	NP2035G, NP2081GB			
Model Different	•	All these models are identical in the same PCB, layout and electrical circuit, The only difference is model name and product name.			
		Operation Frequency:	2412MHz~2462MHz		
		Number of Channel:	802.11b/g/n(HT20): 11 channels 802.11n(HT40): 7 channels		
Product Description		Antenna Gain:	4.45dBi PCB Antenna 1 4.02dBi PCB Antenna 2		
		Modulation Type:	802.11b: DSSS (DQPSK, DBPSK, CCK) 802.11g: OFDM (BPSK, QPSK,16QAM, 64QAM) 802.11n: OFDM (BPSK, QPSK,16QAM, 64QAM)		
Power Rating	3	AC Adapter (Model:SA182V-120150U)( <b>SUNUN</b> ) Input: 100-240V~50/60Hz 0.4A Output: 12.0V—1.5A			
Software Version	- W	N/A			
Hardware Version		V1.0	V1.0		
Domorks	<u> </u>				

- (1) The adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.
  (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Antenna information from antenna specification.





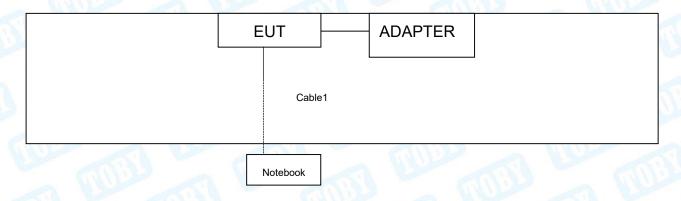
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## (4) Channel List:

1,1500					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	80	2447		
Note: CH 01~CH 1	11 for 20MHz Bandwi	dth			

Note: CH 01~CH 11 for 20MHz Bandwidth CH 03~CH 09 for 40MHz Bandwidth

## 1.3 Block Diagram Showing the Configuration of System Tested



## 1.4 Description of Support Units

	311212								
	Equipment Information								
Name	Model	FCC ID/VOC	Manufacturer	Used "√"					
Notebook	Inspiron 5493		DELL	1					
	Cable Information								
Number	Shielded Type	Ferrite Core	Length	Note					
Cable 1	NO	NO	1.5M	Accessory					





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#### 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For Conducted Emission Test(AC Power)					
Final Test Mode	Description				
Mode 1	TX b Mode Channel 01				
	For Radiated and RF Conducted Test				
Final Test Mode	Final Test Mode Description				
Mode 2	TX Mode b Mode Channel 01/06/11				
Mode 3	TX Mode g Mode Channel 01/06/11				
Mode 4	TX Mode n(HT20) Mode Channel 01/06/11				
Mode 5	TX Mode n(HT40) Mode Channel 03/06/09				

#### Note:

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:

Mode	Data Rate	
B Mode-SISO	1Mbps	
G Mode-SISO	6Mbps	
B Mode-CDD	1Mbps	
G Mode-CDD	6Mbps	
N(HT20) Mode-CDD	MCS0	
N(HT40) Mode-CDD	MCS0	

(2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.

(3) The EUT is considered a Mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.



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#### 1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF setting.

	Test Software:			0 W	
	est Mode: Cont	inuously trai			
Mode	Channel				
		SIS	50	CD	D
		Ant.1	Ant.2	Ant.1	Ant.2
	01	22	22	20	)
802.11b	06	22	22	20	)
	11	22	22	20	)
A HILL	01	1C	1C	18	3
802.11g	06	1C	1C	18	3
	11	1C	1C	18	3
	01	1		18	3
802.11n(HT20)	06			18	3
	11	1		18	3
	03	1		14	4/1/5/1/2
802.11n(HT40)	06			14	1
	09			14	1 (

## 1.7 Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	±3.50 dB ±3.10 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	$\pm 4.60~\mathrm{dB}$
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	$\pm$ 4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	$\pm 4.20~\mathrm{dB}$
RF Power-Conducted		±0.95 dB
Power Spectral Density- Conducted	UNIT WOR	±3dB
Occupied Bandwidth	1	±3.8%
Unwanted Emission- Conducted		±2.72 dB





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#### 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

**CNAS (L5813)** 

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.



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# 2. Test Summary

tandard Section	Test Item	Test Sample(s)	Judgment
FCC 15.207(a)	Conducted Emission	HC-C-202305-0139-01-01	PASS
FCC 15.209 & 15.247(d)	Radiated Unwanted Emissions	HC-C-202305-0139-01-01	PASS
FCC 15.203	Antenna Requirement	HC-C-202305-0139-01-02	PASS
FCC 15.247(a)(2)	6dB Bandwidth	HC-C-202305-0139-01-02	PASS
FCC 15.247(b)(3)	RF Output Power	HC-C-202305-0139-01-02	PASS
FCC 15.247(e)	Power Spectral Density	HC-C-202305-0139-01-02	PASS
FCC 15.247(d)	Band Edge Measurements	HC-C-202305-0139-01-02	PASS
FCC 15.207(a)	Conducted Unwanted Emissions	HC-C-202305-0139-01-02	PASS
FCC 15.247(d) FCC 15.205	Emissions in Restricted Bands	HC-C-202305-0139-01-02	PASS
	On Time and Duty Cycle	HC-C-202305-0139-01-02	1

<sup>(2)</sup> Some test items only test the worst case, Please refer to the test data for details.

## 3. Test Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE
Radiation Emission	EZ-EMC	EZ	FA-03A2RE+
RF Test System	JS1120-3	Tonscend	V3.2.22





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# 4. Test Equipment

Conducted Emission	n Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 20, 2023	Jun. 19, 2024
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 20, 2023	Jun. 19, 2024
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 20, 2023	Jun. 19, 2024
LISN	Rohde & Schwarz	ENV216	101131	Jun. 20, 2023	Jun. 19, 2024
Radiation Emission	Test	-			
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Sep. 01, 2022	Aug. 31, 2023
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 22, 2023	Feb.22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Dec. 05, 2021	Dec. 04, 2023
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP051845	AP21C806141	Sep. 01, 2022	Aug. 31, 2023
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Sep. 01, 2022	Aug. 31, 2023
Pre-amplifier	HP	8449B	3008A00849	Feb. 22, 2023	Feb.22, 2024
Highpass Filter	CD	HPM-6.4/18G		N/A	N/A
Highpass Filter	CD	HPM-2.8/18G		N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conducted	Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 01, 2022	Aug. 31, 2023
Spectrum Analyzer	KEYSIGHT	N9020B	MY60110172	Sep. 01, 2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 01, 2022	Aug. 31, 2023
DE Dawar Carra	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 01, 2022	Aug. 31, 2023
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 01, 2022	Aug. 31, 2023
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 01, 2022	Aug. 31, 2023
RF Control Unit	Tonsced	JS0806-2	21F8060439	Sep. 01, 2022	Aug. 31, 2023
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A



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## 5. Conducted Emission Test

#### 5.1 Test Standard and Limit

5.1.1 Test Standard

#### FCC Part 15.207

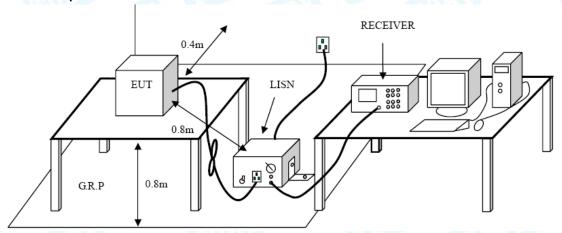
#### 5.1.2 Test Limit

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

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

#### 5.2 Test Setup



#### 5.3 Test Procedure

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.
- ●Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- •LISN at least 80 cm from nearest part of EUT chassis.
- The bandwidth of EMI test receiver is set at 9 kHz, and the test frequency band is from





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0.15MHz to 30MHz.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

Please refer to the description of test mode.

5.6 Test Data

Please refer to the Attachment A inside test report.



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## 6. Radiated and Conducted Unwanted Emissions

#### 6.1 Test Standard and Limit

6.1.1 Test Standard

#### FCC Part 15.209 & FCC Part 15.247(d)

#### 6.1.2 Test Limit

General field strength limits at frequencies Below 30MHz				
Frequency Field Strength Measurement Distance				
(MHz) (microvolt/meter)** (meters)		(meters)		
0.009~0.490	2400/F(KHz)	300		
0.490~1.705	24000/F(KHz)	30		
1.705~30.0	30	30		

**Note:** 1, The emission limits for the ranges 9-90 kHz and 110-490 kHz are based on measurements employing a linear average detector.

General field strength limits at frequencies above 30 MHz					
Frequency	Frequency Field strength Measurement Distance				
(MHz)	(µV/m at 3 m)	(meters)			
30~88	100	3			
88~216	150	3			
216~960	200	3			
Above 960	500	3			

General field strength limits at frequencies Above 1000MHz			
Distance of 3m (dBuV/m)  Peak Average			
			74
	Distance of 3		

#### Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 5.4(d), the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

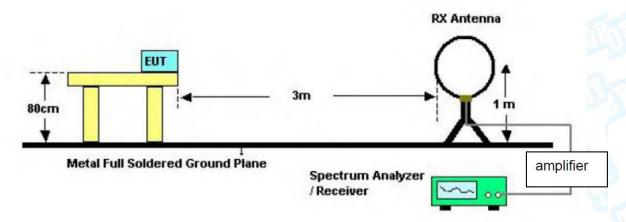




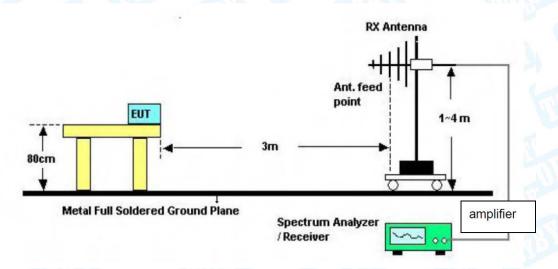
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## 6.2 Test Setup

#### Radiated measurement



#### **Below 30MHz Test Setup**



# Below 1000MHz Test Setup Ant. feed point Metal Full Soldered Ground Plane Spectrum Analyzer / Receiver

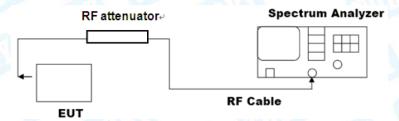
**Above 1GHz Test Setup** 





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#### Conducted measurement



#### 6.3 Test Procedure

#### ---Radiated measurement

- The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.
- Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.



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#### --- Conducted measurement

#### ■ Reference level measurement

Establish a reference level by using the following procedure:

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set the span to≥1.5 times the DTS bandwidth.
- c) Set the RBW = 100 kHz.
- d) Set the VBW≥[3\*RBW].
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

#### Emission level measurement

Establish an emission level by using the following procedure:

- a) Set the center frequency and span to encompass frequency range to be measured.
- b) Set the RBW = 100 kHz.
- c) Set the VBW≥[3\*RBW].
- d) Detector = peak.
- e) Sweep time = auto couple.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

#### 6.4 Deviation From Test Standard

No deviation

#### 6.5 EUT Operating Mode

Please refer to the description of test mode.

#### 6.6 Test Data

Radiated measurement please refer to the Attachment B inside test report.

Conducted measurement please refer to the external appendix report of 2.4G Wi-Fi.





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## 7. Restricted Bands Requirement

#### 7.1 Test Standard and Limit

7.1.1 Test Standard

#### FCC Part 15.205 & FCC Part 15.247(d)

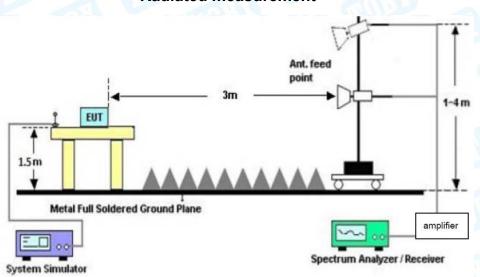
#### 7.1.2 Test Limit

Restricted Frequency	Distance Meters(at 3m)		
Band (MHz)	Peak (dBuV/m)	Average (dBuV/m)	
2310 ~2390	74	54	
2483.5 ~2500	74	54	
	Peak (dBm)see 7.3 e)	Average (dBm) see 7.3 e)	
2310 ~2390	-21.20	-41.20	
2483.5 ~2500	-21.20	-41.20	

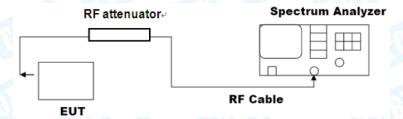
Note: According the ANSI C63.10 11.12.2 antenna-port conducted measurements may also be used as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test forcabinet/case emissions is required.

## 7.2 Test Setup

#### Radiated measurement



#### **Conducted measurement**







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#### 7.3 Test Procedure

#### ---Radiated measurement

- Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- The Peak Value and average value both need to comply with applicable limit above 1 GHz.
- Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- For the actual test configuration, please see the test setup photo.

#### --- Conducted measurement

- a) Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 11.12.2.3 through 11.12.2.5 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to
- determine the EIRP (see 11.12.2.6 for guidance on determining the applicable antenna gain).
- c) Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies
- $\leq$ 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for

frequencies > 1000 MHz).

- d) For MIMO devices, measure the power of each chain and sum the EIRP of all chains in linear terms (i.e., watts and mW).
- e) Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

 $E = EIRP-20 \log d + 104.8$ 





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where

E is the electric field strength in dBuV/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

- f) Compare the resultant electric field strength level with the applicable regulatory limit.
- g) Perform the radiated spurious emission test.

#### 7.4 Deviation From Test Standard

No deviation

#### 7.5 EUT Operating Mode

Please refer to the description of test mode.

#### 7.6 Test Data

Radiated measurement please refer to the Attachment C inside test report.

Conducted measurement please refer to the external appendix report of 2.4G Wi-Fi.





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## 8. Bandwidth Test

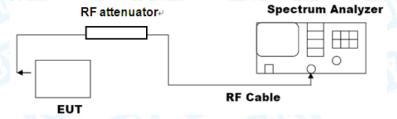
- 8.1 Test Standard and Limit
  - 8.1.1 Test Standard

FCC Part 15.247(d)

8.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
-6dB bandwidth	>=500 KHz	2400~2483.5
(DTS bandwidth )	>=500 KHz	2400~2403.3

## 8.2 Test Setup



#### 8.3 Test Procedure

#### ---DTS bandwidth

- The steps for the first option are as follows:
- a) Set RBW = 100 kHz.
- b) Set the VBW≥[3\*RBW].
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

#### ---occupied bandwidth

- ●The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:
- a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the





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OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.
- d) Step a) through step c) might require iteration to adjust within the specified range.
- e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
- f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.
- g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequency is recorded as the upper frequency. The 99% power bandwidth is the difference between these two frequencies.
- h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

#### 8.4 Deviation From Test Standard

No deviation

#### 8.5 EUT Operating Mode

Please refer to the description of test mode.

#### 8.6 Test Data

Please refer to the external appendix report of 2.4G Wi-Fi.





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## 9. RF Output Power

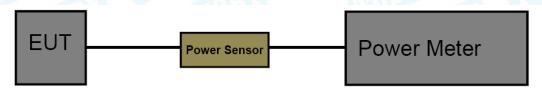
- 9.1 Test Standard and Limit
  - 9.1.1 Test Standard

FCC Part 15.247(b)(3)

9.1.2 Test Limit

Test Item Limit		Frequency Range(MHz)
RF Output Power	not exceed 1 W or 30dBm	2400~2483.5

#### 9.2 Test Setup



#### 9.3 Test Procedure

- The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.
- 9.4 Deviation From Test Standard No deviation
- 9.5 EUT Operating Mode

  Please refer to the description of test mode.
- 9.6 Test Data

Please refer to the external appendix report of 2.4G Wi-Fi.





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## 10. Power Spectral Density

#### 10.1 Test Standard and Limit

10.1.1 Test Standard

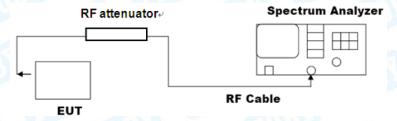
RSS 247 5.2(b)

FCC Part 15.247(e)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)	
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5	

#### 10.2 Test Setup



#### 10.3 Test Procedure

- ●The following procedure shall be used if maximum peak conducted output power was used to determine compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:
- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 times the DTS bandwidth.
- c) Set the RBW to 3 kHz≤RBW≤100 kHz.
- d) Set the VBW ≥[3\*RBW].
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW
- j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

#### 10.4 Deviation From Test Standard

No deviation

#### 10.5 Antenna Connected Construction

Please refer to the description of test mode.

#### 10.6 Test Data

Please refer to the external appendix report of 2.4G Wi-Fi.





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## 11. Antenna Requirement

#### 11.1 Test Standard and Limit

11.1.1 Test Standard

#### FCC Part 15.203

#### 11.1.2 Requirement

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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### 11.2 Deviation From Test Standard

No deviation

#### 11.3 Antenna Connected Construction

The max. gains of the antenna used for transmitting is 4.45dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 11.4 Test Data

The EUT antenna is a PCB Antenna. It complies with the standard requirement.

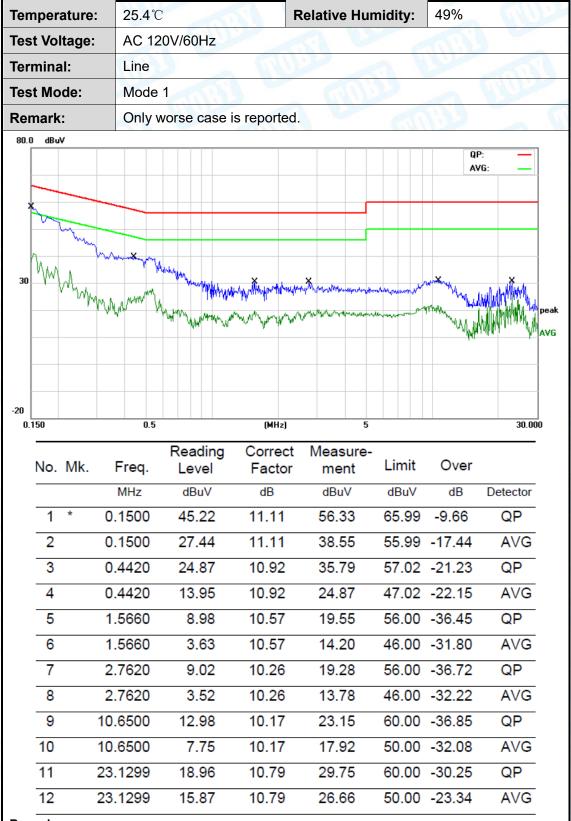
Antenna Type		
0.087	Permanent attached antenna	
	⊠Unique connector antenna	
WUBA.	☐Professional installation antenna	





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## **Attachment A-- Conducted Emission Test Data**



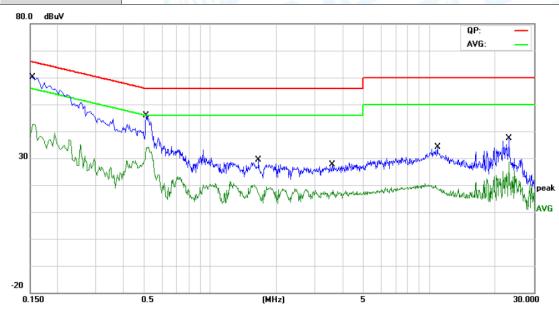
- 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)





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Temperature:	25.4℃	Relative Humidity:	49%
Test Voltage:	AC 120V/60Hz		Chine Contract
Terminal:	Neutral		
Test Mode:	Mode 1	The same	
Remark:	Only worse case is r	reported.	A VIII
80 U ABIN	-		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1539	45.48	10.99	56.47	65.78	-9.31	QP
2		0.1539	28.17	10.99	39.16	55.78	-16.62	AVG
3		0.5100	28.34	10.92	39.26	56.00	-16.74	QP
4		0.5100	21.44	10.92	32.36	46.00	-13.64	AVG
5		1.6540	11.49	10.60	22.09	56.00	-33.91	QP
6		1.6540	5.34	10.60	15.94	46.00	-30.06	AVG
7		3.5900	11.28	10.15	21.43	56.00	-34.57	QP
8		3.5900	5.89	10.15	16.04	46.00	-29.96	AVG
9		10.8740	16.02	10.21	26.23	60.00	-33.77	QP
10		10.8740	7.05	10.21	17.26	50.00	-32.74	AVG
11		23.1299	23.59	10.79	34.38	60.00	-25.62	QP
12		23.1299	17.29	10.79	28.08	50.00	-21.92	AVG

- Remark: 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)





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## **Attachment B--Unwanted Emissions Data**

#### --- Radiated Unwanted Emissions

#### 9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB Below the permissible value has no need to be reported.

#### 30MHz~1GHz

ember	mperature: 24.3°C			Relative	Humidity	: 45	%		
est Vo	Itage:	AC	120V/60Hz						
nt. Po	ol.	Hori	zontal			EMO.	Media.	1	1
est Mo	ode:	Mod	le 1		THE REAL PROPERTY.			100	
Remark	k:	Only	y worse cas	se is report	ed.				111
80.0 dl	BuV/m								_
70									
60									
						(RF)FC	CC 15C 3M Ra	adiation	
50						Margin	1-6 dB		
40							Ş.		4
					X		Tr I		
30 20	an all defendance of the control of	Marrie .		A A A A A A A A A A A A A A A A A A A		Mayor Marine	property and the state of the s	ALANAMAN PARAMANAN	peak
20	the state of the s	March March				MayorMayana	Day Day be being the	A Complete Complete	wpeak
20 10	the state of the s	"Mysik May				Mayor Mayana	and the state of	Annah Marak	w peak
20 10 0 -10	the state of the s			San Market			tong servery		
20 10 0	the stable the many or have been a	60.00		(MI	Hz	300.00			
20 10 0 -10 -20	Freque (MHz	60.00		Factor (dB/m)	Hz)		Margin		000.000
20	Freque	60.00 ency z)	Reading	Factor	Hz)	300.00 Limit	Margin	10	000.000
20 110 0 -10 -20 30.000	Freque (MHz	60.00 ency z)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	10 Detector	P/F
20 10 0 -10 -20 30.000 No.	Freque (MHz	60.00 ency z) 415	Reading (dBuV) 50.92	Factor (dB/m) -25.15	Level (dBuV/m) 25.77	300.00 Limit (dBuV/m) 43.50	Margin (dB) -17.73	Detector QP	P/F
20 10 0 -10 -20 30.000 No.	Freque (MHz 105.64	60.00 ency z) 115 577	Reading (dBuV) 50.92 47.84	Factor (dB/m) -25.15 -23.15	Level (dBuV/m) 25.77 24.69	Limit (dBuV/m) 43.50 43.50	Margin (dB) -17.73 -18.81	Detector  QP  QP	P/F
20 10 0 -10 -20 30.000 No. 1 2 3	Freque (MHz 105.64 131.75 157.55	60.00 ency z) 415 577 588	Reading (dBuV) 50.92 47.84 47.90	Factor (dB/m) -25.15 -23.15 -22.21	Level (dBuV/m) 25.77 24.69 25.69	Journal Limit (dBuV/m) 43.50 43.50 43.50	Margin (dB) -17.73 -18.81 -17.81	Detector  QP  QP  QP	P/F P P

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)





**Relative Humidity:** Temperature: 24.3℃ 45% **Test Voltage:** AC 120V/60Hz Ant. Pol. Vertical **Test Mode:** Mode 1 Remark: Only worse case is reported.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1 *	46.6664	55.22	-22.64	32.58	40.00	-7.42	QP	Р
2	51.8430	55.17	-22.72	32.45	40.00	-7.55	QP	Р
3	209.3129	47.97	-24.45	23.52	43.50	-19.98	QP	Р
4	250.3012	47.36	-22.68	24.68	46.00	-21.32	QP	Р
5	303.5437	42.47	-20.79	21.68	46.00	-24.32	QP	Р
6	501.1790	46.56	-15.42	31.14	46.00	-14.86	QP	Р

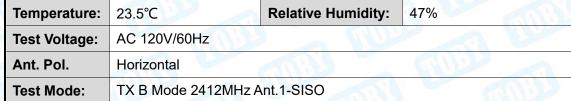
- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB $\mu$ V/m)-Limit QPK(dB $\mu$ V/m)

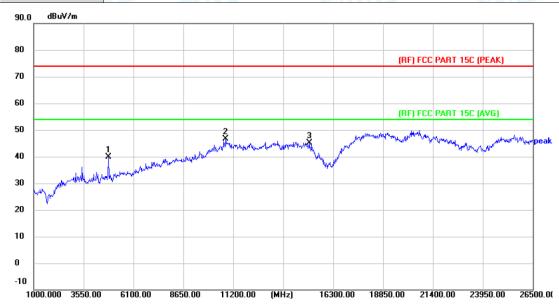




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#### **Above 1GHz**





No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4825.000	53.91	-13.98	39.93	74.00	-34.07	peak	Р
2 *	10817.500	42.71	3.83	46.54	74.00	-27.46	peak	Р
3	15076.000	37.66	7.56	45.22	74.00	-28.78	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

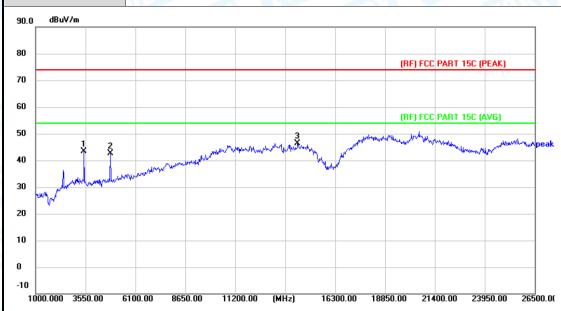




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Temperature:	23.5℃	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		The Court of the C
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412M	1Hz Ant.1-SISO	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	61.11	-17.61	43.50	74.00	-30.50	peak	Р
2	4825.000	56.51	-13.98	42.53	74.00	-31.47	peak	Р
3 *	14387.500	39.59	6.91	46.50	74.00	-27.50	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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Temperature:	23.5℃	Relative Humidity: 47%
Test Voltage:	AC 120V/60Hz	
Ant. Pol.	Horizontal	
Test Mode:	TX B Mode 2437MHz Ar	nt.1-SISO
90.0 dBuV/m		
80		(DE) FOO DADY AFO (DEAK)
70		(RF) FCC PART 15C (PEAK)
eo		(RF) FCC PART 15C (AVG)
50 40 1 2	ally may be not any of mander and	white the state of
30 Marine Land	all stand boundary of the stand	
20		
10		
-10		
1000.000 3550.00	6100.00 8650.00 11200.00 (M	Hz) 16300.00 18850.00 21400.00 23950.00 26500.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	54.51	-17.61	36.90	74.00	-37.10	peak	Р
2	4876.000	52.41	-13.89	38.52	74.00	-35.48	peak	Р
3 *	14362.000	39.38	6.73	46.11	74.00	-27.89	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

- Cont. Anteinia Factor (dB/m) Cable 2033 (dB/
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.

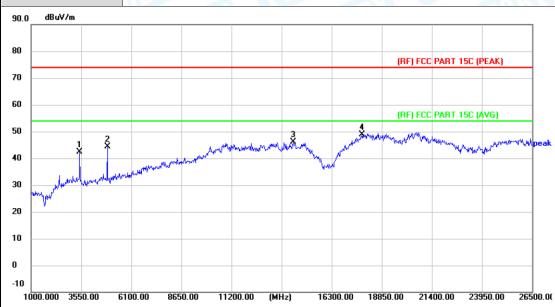
  5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2437MHz A	nt.1-SISO	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	59.97	-17.61	42.36	74.00	-31.64	peak	Р
2	4876.000	58.22	-13.89	44.33	74.00	-29.67	peak	Р
3	14336.500	39.48	6.55	46.03	74.00	-27.97	peak	Р
4 *	17855.500	35.76	13.14	48.90	74.00	-25.10	peak	Р

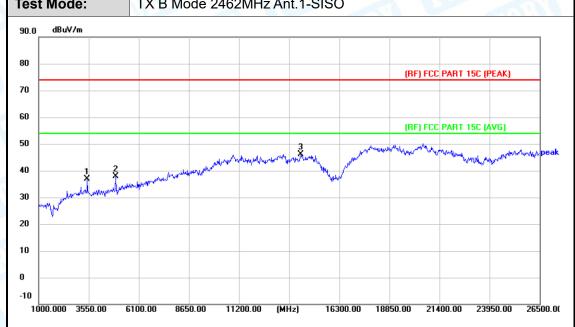
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz	mm3	
Ant. Pol.	Horizontal		
Tost Modo:	TY B Mode 2/62MHz	Ant 1 SISO	HILL



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	3473.500	54.55	-17.61	36.94	74.00	-37.06	peak	Р
2	4927.000	51.60	-13.76	37.84	74.00	-36.16	peak	Р
3 *	14336.500	39.47	6.55	46.02	74.00	-27.98	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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Temperature:	23.5℃		Relative Humidit	<b>y</b> : 47%				
Гest Voltage:	AC 120V/60Hz							
Ant. Pol.	Vertical	Vertical  TX B Mode 2462MHz Ant.1-SISO						
Test Mode:	TX B Mode							
90.0 dBuV/m								
80								
70				(RF) FCC PART 1	5C (PEAK)			
60				(RF) FCC PART 1	EC (AVC)			
50		3 *	A A A A A A A A A A A A A A A A A A A	May be the second	المعنى ماريد المعنى			
40 * *	no water from the other water from a	plant of market by the board of the second	and have been been been been been been been be		My walnut to the same of the s			
30 May Market Ma	NO WILLIAM OF THE PARTY OF THE							
20								
10								
0								
-10		0 11200.00						

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	60.51	-17.61	42.90	74.00	-31.10	peak	Р
2	4927.000	56.86	-13.76	43.10	74.00	-30.90	peak	Р
3	12322.000	42.95	4.93	47.88	74.00	-26.12	peak	Р
4 *	17881.000	36.18	13.36	49.54	74.00	-24.46	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

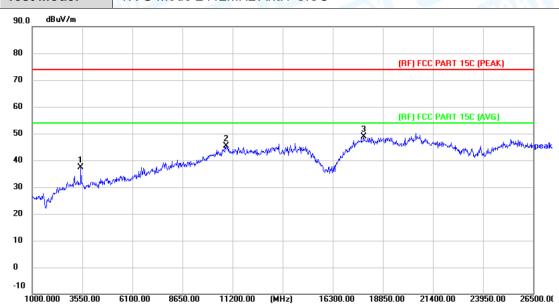
- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz, the rest signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5°C	Relative Humidity:	47%		
Test Voltage:	AC 120V/60Hz		Million		
Ant. Pol.	Horizontal TX G Mode 2412MHz Ant.1-SISO				
Test Mode:					



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	55.05	-17.61	37.44	74.00	-36.56	peak	Р
2	10868.500	41.37	4.07	45.44	74.00	-28.56	peak	Р
3 *	17881.000	35.57	13.36	48.93	74.00	-25.07	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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emperature:	23.5℃	Relative	Humidity:	47%
est Voltage:	AC 120V/60Hz			CATA!
nt. Pol.	Vertical	U.S.	Contract of	
est Mode:	TX G Mode 24	12MHz Ant.1-SISO	A V	
30.0 dBuV/m				
30			(BF) F(	CC PART 15C (PEAK)
70			()	
60			(RF) FO	CC PART 15C (AVG)
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1 1/4	Marie and the second	*\\		
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1000.000 3550.00	6100.00 8650.00	11200.00 (MHz) 16300	0.00 18850.00 2	1400.00 23950.00 26500.

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	60.86	-17.61	43.25	74.00	-30.75	peak	Р
2	10945.000	41.73	4.20	45.93	74.00	-28.07	peak	Р
3 *	17320.000	36.87	9.96	46.83	74.00	-27.17	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

- Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.

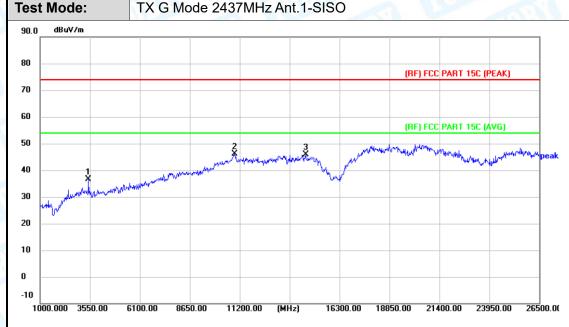
  5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	3473.500	54.13	-17.61	36.52	74.00	-37.48	peak	Р
2 *	10945.000	41.93	4.20	46.13	74.00	-27.87	peak	Р
3	14566.000	38.99	6.79	45.78	74.00	-28.22	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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- CPC	rature:	23.5	5°C			R	elativ	e F	lumi	dity:	47%		
Test Vo	ltage:	AC	120V/	60Hz	Z	(Cal			M				M
Ant. Po	ol.	Vert	ical	13/1/	1		1	1					
Test Mo	ode:	TX	G Mod	de 24	37MHz	Ant.1	SISC	)		1			
90.0 dB	BuV/m												_
80										(BF) F	CC PART 15	C (PEAK)	
70										()		o (i z. ii.)	
60										(RF) F	CC PART 15	C (AVG)	
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30	Markey Markey Markey	North Marketon											
20													
20													
20 10 0		3100.00	8650	00	11200.00	(MHz)	163	no no	188	50 OO	21400 00	23950.00 2	6500.0
10		6100.00	8650.0	00	11200.00	(MHz)	1630	00.00	188	50.00	21400.00	23950.00 2	<u>65</u> 00.0
20		су	8650.0 Readi (dBu)	ing	Facto	r	_evel		Liı	50.00 mit IV/m)	21400.00 Margin (dB)	1	
20 10 0 1000.00	00 3550.00 0	су	Readi	ing V)	Facto	r I	_evel	m)	Liı (dBu	mit	Margin		6500.0

4 \*

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

13214.500

17524.000

40.82

36.45

 Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
 Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
 The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.

5. No report for the emission which below the prescribed limit.

5.80

11.21

74.00

74.00

46.62

47.66

-27.38

-26.34

peak

peak

Ρ

- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz	COULT TO	
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz A	Ant.1-SISO	
90.0 dBuV/m			
80		(BE) ECC	PART 15C (PEAK)
70		(RF) FCC	PART TOC (FEAK)
60			PART 15C (AVG)
40	And the second of the second o	and the same of th	philiphy who were peak
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-10			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4060.000	51.11	-16.53	34.58	74.00	-39.42	peak	Р
2	7732.000	47.27	-6.92	40.35	74.00	-33.65	peak	Р
3 *	14387.500	39.25	6.91	46.16	74.00	-27.84	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
  2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
  3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
  4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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Tem	nperature:	23.5℃			Relative H	lumidity:	47%	
Tes	t Voltage:	AC 120V	/60Hz	20 4	67	737		CHIT:
Ant	. Pol.	Vertical	AHI		1 B			
Tes	t Mode:	TX G Mo	de 2462	2MHz Ant	1-SISO	a W		
90.0	dBuV/m							
80						(05) 500		
70						(HF) FCC	PART 15C (P	EAKJ
60						(RF) FCC I	PART 15C (A	vG)
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40	2 June June June	and the second of the second o	planted the feet		The state of the s		<b>,</b> ,	
30 20								
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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	61.56	-17.61	43.95	74.00	-30.05	peak	Р
2	4927.000	49.27	-13.76	35.51	74.00	-38.49	peak	Р
3	13240.000	41.18	5.80	46.98	74.00	-27.02	peak	Р
4 *	17473.000	37.54	10.92	48.46	74.00	-25.54	peak	Р

(MHz)

16300.00 18850.00

21400.00

23950.00

-10

1000.000 3550.00

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

8650.00

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
   No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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16300.00 18850.00 21400.00 23950.00 26500.00

Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz A	Ant.1+2-CDD	The same
90.0 dBuV/m			
80			(RF) FCC PART 15C (PEAK)
70			
60			(RF) FCC PART 15C (AVG)
50	1	many portioned	Marchaly med many many many many peak
30 my mand way	And the second s	Vole.	
20			
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0			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4825.000	56.16	-13.98	42.18	74.00	-31.82	peak	Р
2	13316.500	42.25	5.86	48.11	74.00	-25.89	peak	Р
3 *	17779.000	38.13	12.54	50.67	74.00	-23.33	peak	Р

(MHz)

# Remark:

1000.000 3550.00

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

6100.00

8650.00

- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value<average limit, So only show the peak value.





16300.00 18850.00 21400.00 23950.00

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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		GU!
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2412M	Hz Ant.1+2-CDD	
90.0 dBuV/m			
80		(BE)	FCC PART 15C (PEAK)
70			Tee FAIT 13c (LAK)
60		(DE)	FCC PART 15C (AVG)
50	Land Amellia Control		May halan har and a peak

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	60.92	-17.61	43.31	74.00	-30.69	peak	Р
2	4825.000	58.05	-13.98	44.07	74.00	-29.93	peak	Р
3 *	14923.000	40.80	7.36	48.16	74.00	-25.84	peak	Р

11200.00 (MHz)

## Remark:

30 20

10

0 -10

1000.000 3550.00

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

6100.00

- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5℃	Relative Humidity:	47%
Гest Voltage:	AC 120V/60Hz		CM:
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2437MHz	Ant.1+2-CDD	The state of the s
90.0 dBuV/m			
80		(RE) E	CC PART 15C (PEAK)
70		(11)	CC TAIT 13C (LAK)
60		(RF) F	CC PART 15C (AVG)
50 40 *	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	warming & warming the	Promondum peak
30 my determination	Samuel State of the good transfer of the state of the sta	W	
20			
3			
-10   1000.000 3550.00 6	\$100.00 8650.00 11200.00	(MHz) 16300.00 18850.00	21400.00 23950.00 26500.00

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	4876.000	55.26	-13.89	41.37	74.00	-32.63	peak	Р
2	10919.500	41.92	4.21	46.13	74.00	-27.87	peak	Р
3 *	17855.500	36.16	13.14	49.30	74.00	-24.70	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
   No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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Tempe	rature:	23.5	5°C			Relat	ive H	umid	ity:	47%		
Test Vo	Itage:	AC	120V	/60H	Z	Care	e e	ATT.			(II)	77
Ant. Po	ol.	Ver	tical	AH								
Test Mo	ode:	TX	В Мос	de 24	137MHz /	Ant.1+2	-CDD		1	Miles		
90.0 dB	uV/m											
80									(RF)	FCC PART 15	SC (PEAK)	
60								5	(RF)	FCC PART 15	SC (AVG)	
40 40 30 20	*2 3 	ide of the state o	and the second	Mary Mary Andrews	and the second	my miles			are the second	and the second second	A Company of the Comp	∖.∧pe≀
10												
	0 3550.00 6	100.00	8650	.00	11200.00	(MHz)	16300.0	0 188	50.00	21400.00	23950.00 2	26500
-10	Frequence (MHz)		Read (dBu	ling	Factor (dB/m)	r Le	vel	Lir	50.00 mit V/m)	Margin	23950.00 2	26500. P/F
1000.00	Frequenc	су	Read	ling IV)	Factor	r Le	vel V/m)	Lir (dBu	mit	Margin		
1000.00 No.	Frequenc (MHz)	су 0	Read (dBu	ling IV)	Factor (dB/m)	r Le ) (dBu	vel V/m) .17	Lir (dBu	mit V/m)	Margin (dB)	Detector	P/F
No.	Frequence (MHz) 3142.00	0 0	Read (dBu	ling IV) 90	Factor (dB/m)	r Le <sup>o</sup> (dBu	vel V/m) .17	Lir (dBu 74	mit V/m)	Margin (dB) -27.83	Detector peak	P/F
No. 1 2	Frequence (MHz) 3142.00 3473.50	0 0 0	Read (dBu 63.9	ling IV) 90 02	Factor (dB/m) -17.73 -17.61	r Le <sup>o</sup> (dBu	vel V/m) .17 .41 .39	Lir (dBu 74 74 74	mit V/m) .00	Margin (dB) -27.83 -30.59	Detector peak peak	P/F P

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.

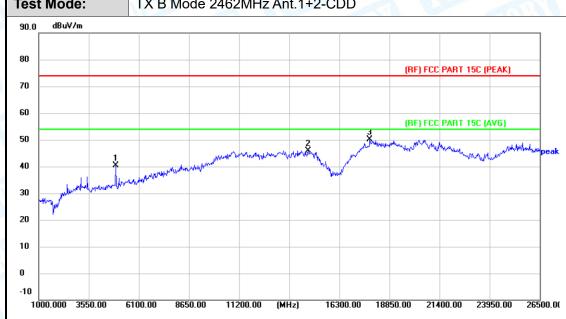
  5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		THU !
Ant. Pol.	Horizontal		
Toot Mode:	TV P Mode 2462MHz /	ht 1+2 CDD	The state of the s



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4927.000	54.24	-13.76	40.48	74.00	-33.52	peak	Р
2	14719.000	39.12	6.82	45.94	74.00	-28.06	peak	Р
3 *	17855.500	36.89	13.14	50.03	74.00	-23.97	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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16300.00 18850.00 21400.00 23950.00

Tem	perature:	23.5°C			Relative	Humid	ity:	47%		
Test	t Voltage:	AC 120	V/60Hz	(A)		an			ON I	
Ant.	Pol.	Vertical	MAG			100		ARY.		
Test	Mode:	TX B Me	ode 2462	MHz An	t.1+2-C[	OD	I M			
90.0	dBuV/m									1
80							(DE) FO	D1DT 156 (		
70							(RF) FC	PART 15C (I	PEAKJ	
60							(RF) FC	PART 15C (	AVG1	
50	1 .	n .		Add	n hak	JAN JOHN LINE		Atomorphic april a property region		peak
40	, ,	E K	and the state of t	Marind Marin	Maria Maria	of the state of th		"The Wall	Walter T.	

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	61.22	-17.61	43.61	74.00	-30.39	peak	Р
2	4927.000	55.92	-13.76	42.16	74.00	-31.84	peak	Р
3 *	17779.000	37.57	12.54	50.11	74.00	-23.89	peak	Р

(MHz)

20 10

-10

1000.000 3550.00

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)

6100.00

8650.00

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m) = Corr. (dB/m) + Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5℃	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz	WW.	
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2412MHz Ar	nt.1+2-CDD	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	3473.500	52.85	-17.61	35.24	74.00	-38.76	peak	Р
2	11327.500	40.92	4.89	45.81	74.00	-28.19	peak	Р
3 *	18722.500	49.06	0.00	49.06	74.00	-24.94	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		The same
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz Ant.	1+2-CDD	
90.0 dBuV/m			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	59.25	-17.61	41.64	74.00	-32.36	peak	Р
2	10945.000	41.68	4.20	45.88	74.00	-28.12	peak	Р
3 *	18340.000	48.76	0.00	48.76	74.00	-25.24	peak	Р

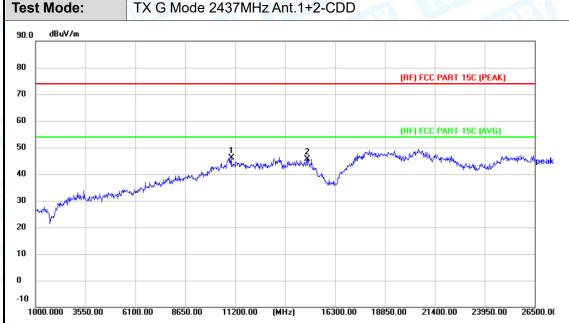
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz	COURSE OF THE PARTY OF THE PART	Miller
Ant. Pol.	Horizontal		
		77 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1 *	10996.000	41.85	4.18	46.03	74.00	-27.97	peak	Р
2	14897.500	38.36	7.35	45.71	74.00	-28.29	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

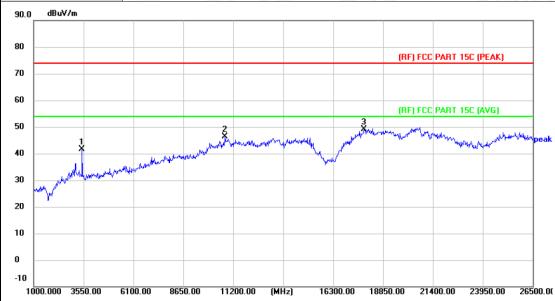






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Temperature:	23.5℃	Relative Humidity:	47%			
Test Voltage:	AC 120V/60Hz		CHILL.			
Ant. Pol. Vertical						
Test Mode:	TX G Mode 2437MH	z Ant.1+2-CDD				
90.0 dBuV/m						



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	59.30	-17.61	41.69	74.00	-32.31	peak	Р
2	10766.500	42.91	3.50	46.41	74.00	-27.59	peak	Р
3 *	17881.000	35.81	13.36	49.17	74.00	-24.83	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

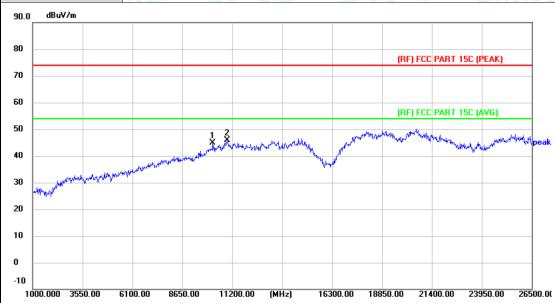






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Temperature:	23.5°C	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		THUY!
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz A	nt.1+2-CDD	
90.0 dBuV/m			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	10205.500	43.11	1.79	44.90	74.00	-29.10	peak	Р
2 *	10945.000	41.77	4.20	45.97	74.00	-28.03	peak	Р

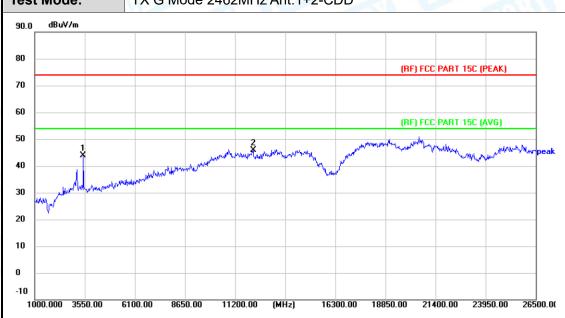
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5℃	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		THE STATE OF THE S
Tost Mode:	TY G Mode 2462MHz Ant	1+2_CDD	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	3473.500	61.48	-17.61	43.87	74.00	-30.13	peak	Р
2 *	12118.000	40.65	5.34	45.99	74.00	-28.01	peak	Р

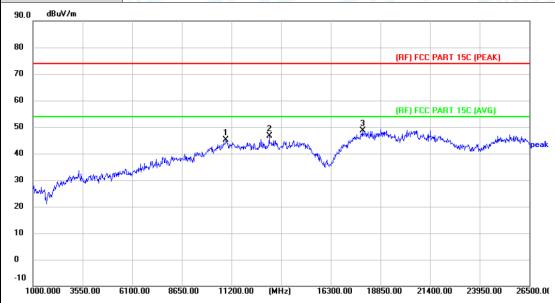
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m) 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5℃	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz	mn33	THUE
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2412N	/IHz Ant.1+2-CDD	
00 0 JD. W.L			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	10919.500	40.95	4.21	45.16	74.00	-28.84	peak	Р
2	13138.000	40.76	5.83	46.59	74.00	-27.41	peak	Р
3 *	17932.000	35.14	13.61	48.75	74.00	-25.25	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dB $\mu$ V/m)= Corr. (dB/m)+ Read Level (dB $\mu$ V) 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

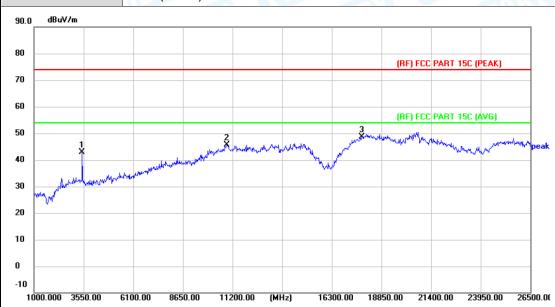






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Temperature:	23.5℃	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz		THU !
Ant. Pol.	Vertical		TO THE
Test Mode:	TX n(HT20) Mode 2412MF	lz Ant.1+2-CDD	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	3473.500	60.50	-17.61	42.89	74.00	-31.11	peak	Р
2	10919.500	41.43	4.21	45.64	74.00	-28.36	peak	Р
3 *	17830.000	35.61	12.95	48.56	74.00	-25.44	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Ten	nperature:	23.5℃	) ~		Relativ	e Humi	dity:	47%		-
Tes	t Voltage:	AC 120\	//60Hz							
Ant	. Pol.	Horizont	al			1033				
Tes	t Mode:	TX n(HT	20) Mod	e 2437N	IHz Ant.	1+2-CD	D		A	
90.0	dBuV/m									
80							(DE) 500	DIDT 450 #		
70							(RF) FCC	PART 15C (	PEAKJ	
60							(RF) FCC	PART 15C (	AVG)	
50			2 X	Mariana	Marketon.	3 Marinal Marinal Control	harman distriction from	de andre de anglique	A STANFARM	√√ peak
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30	m/mountain man man									
20										
10										
0 -10										
	000.000 3550.00	6100.00 86	50.00 112	200.00 (MF	lz) 163	00.00 188	950.00 21 <i>4</i>	100.00 23	950.00	26500.0

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	7120.000	48.77	-8.85	39.92	74.00	-34.08	peak	Р
2	10894.000	42.94	4.20	47.14	74.00	-26.86	peak	Р
3 *	17728.000	36.93	12.15	49.08	74.00	-24.92	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
  3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

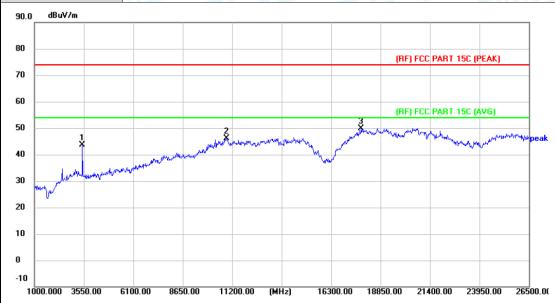




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Temperature:	23.5℃	Relative Humidity:	47%				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX n(HT20) Mode 2437MHz Ant.1+2-CDD						



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector	P/F
1	3473.500	61.26	-17.61	43.65	74.00	-30.35	peak	Р
2	10919.500	41.92	4.21	46.13	74.00	-27.87	peak	Р
3 *	17855.500	36.79	13.14	49.93	74.00	-24.07	peak	Р

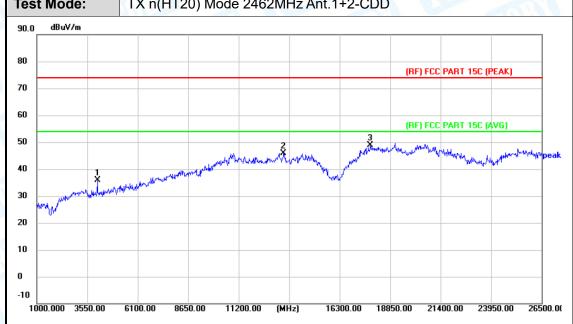
- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dB $\mu$ V/m)= Corr. (dB/m)+ Read Level (dB $\mu$ V)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Temperature:	23.5℃	Relative Humidity:	47%
Test Voltage:	AC 120V/60Hz	mild !	WILL STREET
Ant. Pol.	Horizontal		Tan-
Toot Model	TV n/UT20) Mode 2462N	AU- Ant 112 CDD	



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	4060.000	52.38	-16.53	35.85	74.00	-38.15	peak	Р
2	13469.500	39.77	6.13	45.90	74.00	-28.10	peak	Р
3 *	17855.500	35.73	13.14	48.87	74.00	-25.13	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dB $\mu$ V/m)-Limit PK/AVG(dB $\mu$ V/m)
- 4. The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.







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ť	Temperature:	23.5℃	Relative Humidity:	47%			
V	Test Voltage: AC 120V/60Hz						
	Ant. Pol.	Vertical					
Test Mode: TX n(HT20) Mode 2462MHz Ant.1+2-CDD							



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F
1	3473.500	60.80	-17.61	43.19	74.00	-30.81	peak	Р
2	7706.500	47.97	-6.95	41.02	74.00	-32.98	peak	Р
3 *	17855.500	36.29	13.14	49.43	74.00	-24.57	peak	Р

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated 1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency. Test with highpass filter (Pass Frequency: 2.8-18G and 8-25G), and 18GHz-26.5GHz is the noise, No other signals were detected.
- 5. No report for the emission which below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

