

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC161330

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FCC ID: 2ANK8-S02

Original Grant

Report No. : TB-FCC161330

Applicant : Shenzhen Forever Young Technology Co., Ltd

Equipment Under Test (EUT)

EUT Name : WiFi Smart Plug

Model No. : S02

Series Model No. : N/A

Brand Name : Zitech

Receipt Date : 2018-08-02

Test Date : 2018-08-03 to 2018-08-13

Issue Date : 2018-08-14

Standards : FCC Part 15: 2017, Subpart C(15.247)

Test Method : ANSI C63.10: 2013

Conclusions : PASS

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

Ray Lai

The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer:

Engineer Supervisor : WAN S

Engineer Manager :

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

Rev.01	Initial issue of report	2018-08-14
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1. General Information about EUT

1.1 Client Information

Applicant : Shenzhen Forever Young Technology Co.,Ltd		Shenzhen Forever Young Technology Co.,Ltd	
Address : 4/F, No.5 Bldg, Fu Hong Industrial Shenzhen, China		4/F, No.5 Bldg, Fu Hong Industrial Park, Fu Yong Town, Bao'an District, Shenzhen, China	
Manufacturer		Shenzhen Forever Young Technology Co.,Ltd	
Address		4/F, No.5 Bldg, Fu Hong Industrial Park, Fu Yong Town, Bao'an District, Shenzhen, China	

1.2 General Description of EUT (Equipment Under Test)

EUT Name	ı	WiFi Smart Plug		
Models No.	:	S02		
Model Difference		N/A	THE PARTY OF THE P	
		Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz	
		Number of Channel:	802.11b/g/n(HT20):11 channels see note(3)	
		RF Output Power:	802.11b: 16.60 dBm 802.11g: 14.89 dBm 802.11n (HT20): 13.17 dBm	
Product		Antenna Gain:	2.5dBi PCB Antenna	
Description		Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n: OFDM(BPSK,QPSK,16QAM, 64QAM)	
		Bit Rate of Transmitter:	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6 Mbps 802.11n:up to 150Mbps	
Power Supply	ď	Input/Output: AC100V-240V		
Software Version :		N/A		
Hardware Version	n : N/A			
Connecting I/O Port(S)		Please refer to the User's Manual		

Note:

- (1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v04.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Channel List:



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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	08	2447		

Note:CH 01~CH 11 for 802.11b/g/n(HT20) CH 03~CH 09 for 802.11n(HT40)

- (4) The Antenna information about the equipment is provided by the applicant.
- 1.3 Block Diagram Showing the Configuration of System Tested

TX Mode

EUT

1.4 Description of Support Units

The EUT has been test as an independent unit.



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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 Test				
Final Test Mode	Description			
Mode 1 TX B Mode				
	For Radiated Test			
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				

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:

802.11b Mode: CCK (1 Mbps) 802.11g Mode: OFDM (6 Mbps)

802.11n (HT20) Mode: MCS 0 (6.5 Mbps)

- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a portable 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 WLAN.

Test Software Version	0.00	N/A	
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	DEF	DEF	DEF
IEEE 802.11g OFDM	DEF	DEF	DEF
IEEE 802.11n (HT20)	DEF	DEF	DEF

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 _{Lab})
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	±3.42 dB ±3.42 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	±4.40 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 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 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, 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: 2005 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: 2005 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.

IC Registration No.: (11950A-1)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A-1.



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2. Test Summary

	FCC Part	t 15 Subpart C(15.247)/ RSS 247	Issue 2	
Standa	rd Section	Test Item	1	Remark
FCC	IC	rest item	Judgment	
15.203	1	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.4	Conducted Emission	PASS	N/A
15.205	RSS-GEN 7.2.2	Restricted Bands	PASS	N/A
15.247(a)(2)	RSS 247 5.2 (1)	6dB Bandwidth	PASS	N/A
15.247(b)	RSS 247 5.4 (4)	Peak Output Power	PASS	N/A
15.247(e)	RSS 247 5.2 (2)	Power Spectral Density	PASS	N/A
15.247(d)	RSS 247 5.5	Band Edge	PASS	N/A
15.247(d)& 15.209	RSS 247 5.5	Transmitter Radiated Spurious Emission	PASS	N/A

Note: "/" for no requirement for this test item.

N/A is an abbreviation for Not Applicable.



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3. Test Equipment

Conducted Emiss	ion Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul.18, 2018	Jul. 17, 2019
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul.18, 2018	Jul. 17, 2019
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul.18, 2018	Jul. 17, 2019
LISN	Rohde & Schwarz	ENV216	101131	Jul.18, 2018	Jul. 17, 2019
Radiation Emission	on Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul.18, 2018	Jul. 17, 2019
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul.18, 2018	Jul. 17, 2019
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.16, 2018	Mar. 15, 2019
Bilog Antenna	ETS-LINDGREN	3142E	00117542	Mar.16, 2018	Mar. 15, 2019
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.16, 2018	Mar. 15, 2019
Horn Antenna	ETS-LINDGREN	3117	00143209	Mar.16, 2018	Mar. 15, 2019
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 15, 2018	Jul. 14, 2019
Pre-amplifier	Sonoma	310N	185903	Mar.16, 2018	Mar. 15, 2019
Pre-amplifier	HP	8449B	3008A00849	Mar.16, 2018	Mar. 15, 2019
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.16, 2018	Mar. 15, 2019
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conduct	ed Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul.18, 2018	Jul. 17, 2019
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul.18, 2018	Jul. 17, 2019
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Oct. 26, 2017	Oct. 25, 2018
Vector Signal Generator	Agilent	N5182A	MY50141294	Oct. 26, 2017	Oct. 25, 2018
Analog Signal Generator	Agilent	N5181A	MY50141953	Oct. 26, 2017	Oct. 25, 2018
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Oct. 26, 2017	Oct. 25, 2018
DE Dower Senser	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Oct. 26, 2017	Oct. 25, 2018
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Oct. 26, 2017	Oct. 25, 2018
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Oct. 26, 2017	Oct. 25, 2018



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4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

4.1.2 Test Limit

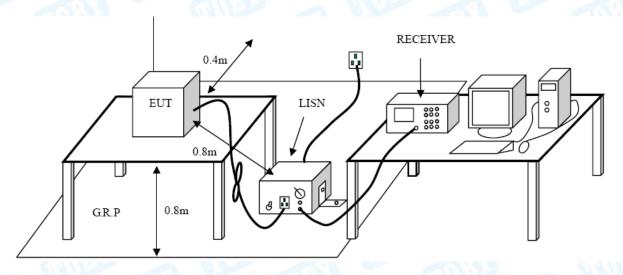
Conducted Emission Test Limit

-0130	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.

4.2 Test Setup



4.3 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.



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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 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Please refer to the Attachment A.



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5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limits (9 kHz~1000 MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

Radiated Emission Limit (Above 1000MHz)

Frequency	Distance of 3m (dBuV/m)		
(MHz)	Peak	Average	
Above 1000	74	54	

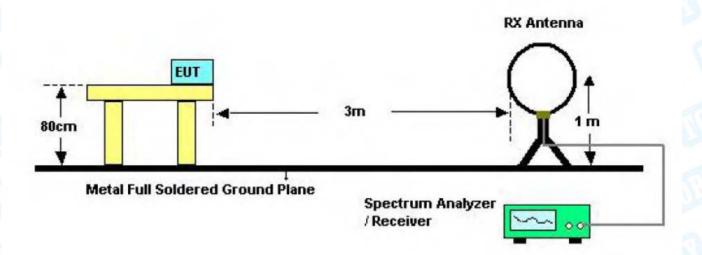
Note:

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

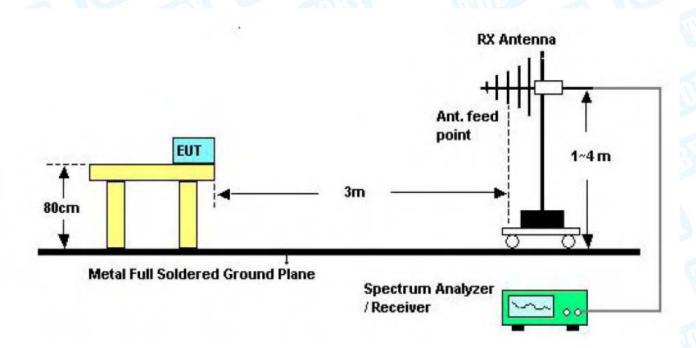


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5.2 Test Setup



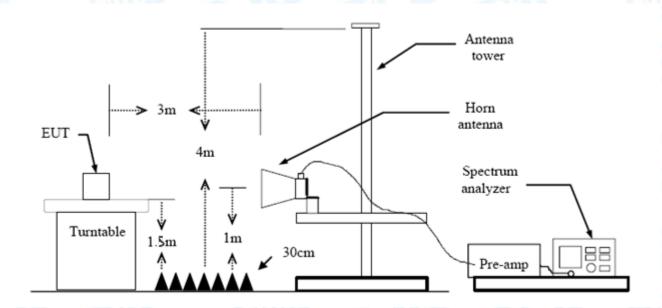
Below 30MHz Test Setup



Below 1000MHz Test Setup



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Above 1GHz Test Setup

5.3 Test Procedure

- (1) 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.
- (2) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (3) 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.
- (4) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 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.
- (5) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (6) 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.
- (7) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.



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5.5 Test Data

Remark: During testing 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.

Please refer to the Attachment B.



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6. Restricted Bands Requirement

6.1 Test Standard and Limit

6.1.1 Test Standard

FCC Part 15.247(d)

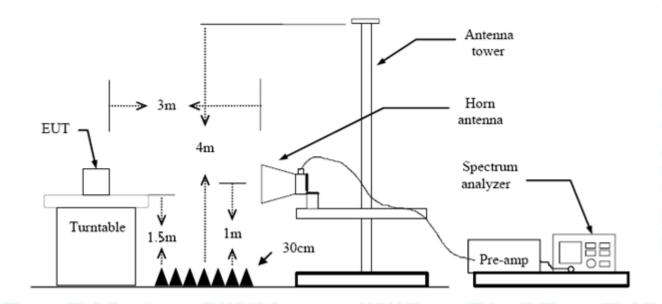
FCC Part 15.209

FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Distance of 3m (dBuV/m)			
Band (MHz)	Peak	Average		
2310 ~2390	74	54		
2483.5 ~2500	74	54		

6.2 Test Setup



6.3 Test Procedure

- (1) 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.
- (2) 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.



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(3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

- (4) 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.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 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.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) 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.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

6.5 Test Data

Please refer to the Attachment C.



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7. Bandwidth Test

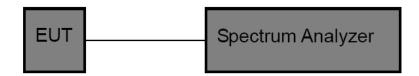
7.1 Test Standard and Limit

7.1.1 Test Standard FCC Part 15.247 (a)(2)

7.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210							
Test Item	Test Item Limit Frequency Range(MH:						
Bandwidth	>=500 KHz (6dB bandwidth)	2400~2483.5					

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
- (3)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

7.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Digital photo framesdle and high channel for the test.

7.5 Test Data

Please refer to the Attachment D.



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8. Peak Output Power Test

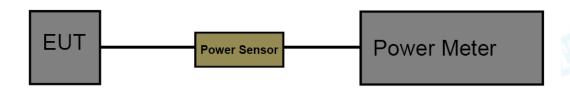
8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (b)

8.1.2 Test Limit

FCC Part 15 Subpart C(15.247)/RSS-210						
Test Item Limit Frequency Range(MH						
Peak Output Power	1 Watt or 30 dBm	2400~2483.5				

8.2 Test Setup



8.3 Test Procedure

The measurement is according to section 9.1.2 of KDB 558074 D01 DTS Meas Guidance v04. 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.

8.4 EUT Operating Condition

The EUT was set to continuously transmitting in the max power during the test.

8.5 Test Data

Please refer to the Attachment E.



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9. Power Spectral Density Test

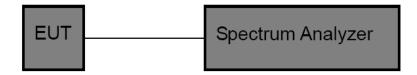
9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247 (e)

9.1.2 Test Limit

FCC Part 15 Subpart C(15.247)					
Test Item Limit Frequency Range(MHz)					
Power Spectral Density	8dBm(in any 3 kHz)	2400~2483.5			

9.2 Test Setup



9.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement according to section 10.2 of KDB 558074 D01 DTS Meas Guidance v04.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyser center frequency to DTS channel center frequency.
- (3) Set the span to 1.5 times the DTS bandwidth.
- (4) Set the RBW to: 3 kHz(5) Set the VBW to: 10 kHz
- (6) Detector: peak(7) Sweep time: auto
- (8) Allow trace to fully stabilize. Then use the peak marker function to determine the maximum amplitude level.

9.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Digital photo framesdle and high channel for the test.

9.5 Test Data

Please refer to the Attachment F.



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10. Antenna Requirement

10.1 Standard Requirement

10.1.1 Standard FCC Part 15.203

10.1.2 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.

10.2 Antenna Connected Construction

The gains of the antenna used for transmitting is 2.5dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

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

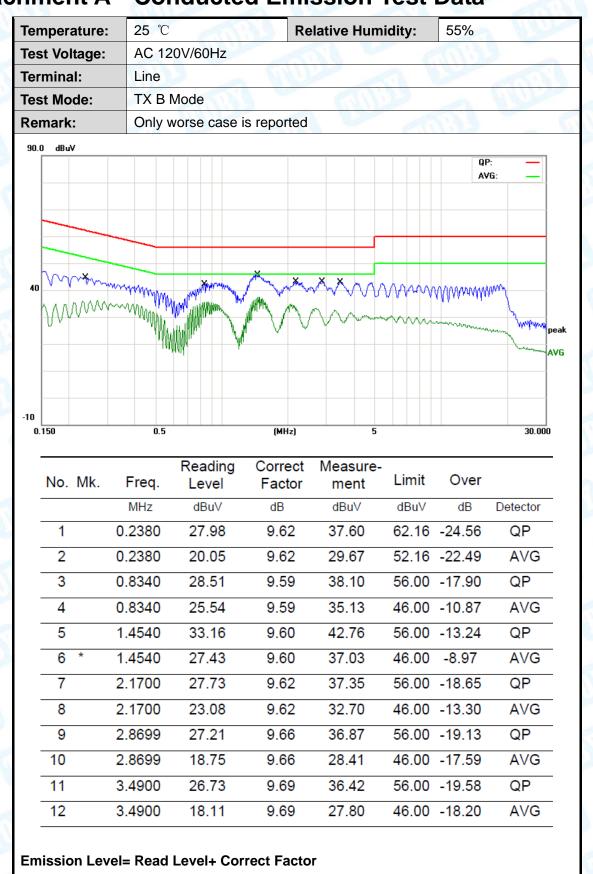
	Antenna Type	
JOB .	⊠Permanent attached antenna	M
a D	Unique connector antenna	
	Professional installation antenna	1000



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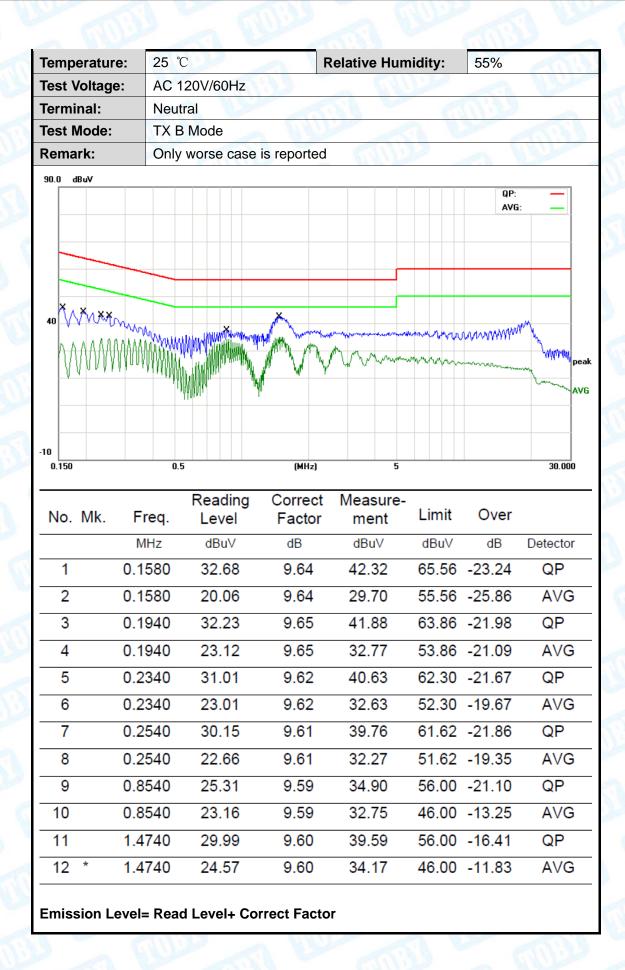


TOBY



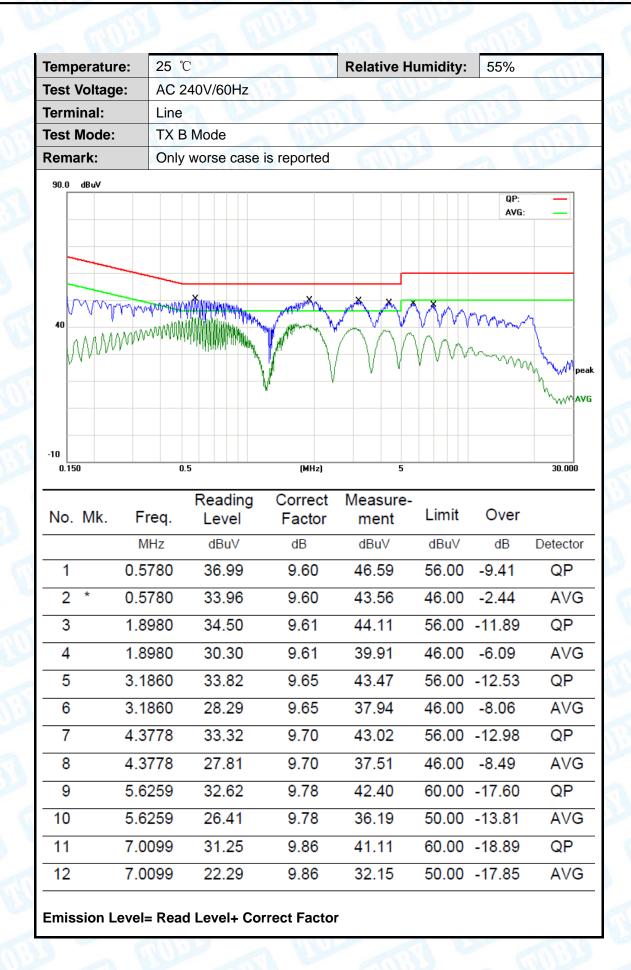


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Tempera	ture: 25	$^{\circ}$		Relative Hu	midity:	55%	
Test Volt	age: AC	240V/60Hz	TO THE	- OHI	L. Bar		Alle
Terminal	l: Neu	ıtral		810	6	CUIT	
Test Mod	de: TX	B Mode	A MAG				
Remark:	Only	y worse case	is reported	MILLE	9		
40 40 -10 0.150	MWWWWW	200 April 190 Ap	(MHz)	5	√√√√	QP: AVG:	AV6
No. Mi	k. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
110. 1111	MHz	dBuV	dB	dBuV	dBu∀	dB	Detector
1	0.5780	32.58	9.58	42.16		-13.84	QP
2 *	0.5780	30.55	9.58	40.13	46.00	-5.87	AVG
3	1.5780	29.87	9.60	39.47		-16.53	QP
4	1.5780	25.17	9.60	34.77		-11.23	AVG
5	3.2300	29.87	9.68	39.55		-16.45	QP
6	3.2300	25.84	9.68	35.52		-10.43	AVG
7	4.4539	29.14	9.81	38.95		-10.46	QP
8	4.4539	24.81	9.81	34.62		-11.38	AVG
9	5.8179	28.22	10.07	38.29		-21.71	QP
10	5.8179	20.84	10.07	30.91		-19.09	AVG
	7.0659	28.13	10.29	38.42	60.00	-21.58	QP
11	7.0000		10.29	29.21		-20.79	AVG



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Attachment B-- Radiated Emission Test Data

9KHz~30MHz

From 9KHz to 30MHz: 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

	Temperature: 25 °C					Relative Humidity: 55%					
Tes	st Volta	ge:	AC 120	V/60HZ				60	100		
An	t. Pol.		Horizor	ntal		TO THE PARTY OF TH					
Tes	st Mode	:	TXBM	lode 2412M	Hz	OTHER DE					
Re	mark:		Only w	orse case is	reported						
80.0	D dBuV/m										
							(RF)FCC	15C 3M Radia			
								Margir	1 -6 dB		
30											
	1		2		3	4 5 X 5	6 X	mul.	wylhw.		
	m~~~	Λ,	Å		Λ Å.	M.M.	and when he	4-			
		m	hum		Mund M	· ·					
20							100				
31	0.000 4	0 50	0 60 70	80	(MHz)	300	400	500 600 7	00 1000		
	No	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over			
		IVIIX.	MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detecto		
		*			-18.08	18.76	40.00	-21.24	QP		
	1		37.8121	36.84	10.00	10.70					
	2		37.8121 56.7917	36.84	-24.01	15.53	40.00	-24.47	QP		
								-24.47 -27.49	QP QP		
	2		56.7917	39.54	-24.01	15.53	40.00				
	3		56.7917 174.4241	39.54 36.38 38.97	-24.01 -20.37	15.53 16.01	40.00 43.50	-27.49	QP		
	3 4		56.7917 174.4241 229.2931	39.54 36.38 38.97	-24.01 -20.37 -18.33	15.53 16.01 20.64	40.00 43.50 46.00	-27.49 -25.36	QP QP		



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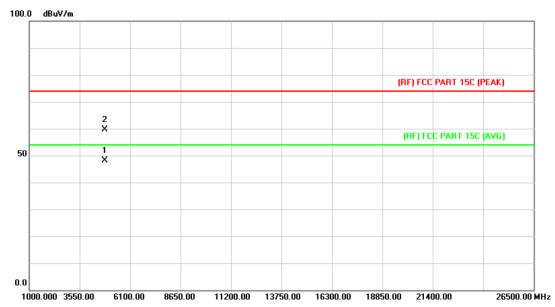
emperature:	25 ℃		Re	elative Humic	dity: 5	5%			
est Voltage:	AC 12	AC 120V/60HZ							
nt. Pol.	Vertic	Vertical							
est Mode:	TX B	Mode 2412	MHz		10				
Remark:	Only	worse case	is reported	THE STATE OF THE S		2 10	Market		
80.0 dBuV/m									
					(RF)FCC 1	5C 3M Radiation			
						Margin -6	dB		
							+		
30 X	2					6			
man la la	/ ^X \	3	4 ★	5	Jan Marie	mand man	Munde		
			Ny m	Mumm	Mary New				
	Www.	W \	Al SAM	(MV					
20 20 30.000 40 50			(MHz)						
	1 60 70			200	400 5	NN CNN 7NN	1000 00		
30.000 40 30	60 70		(14112)	300	400 5	00 600 700	1000.00		
		Reading	Correct	Measure-			1000.00		
No. Mk.	Freq.	Level		Measure- ment	Limit	Over			
No. Mk.			Correct	Measure-					
No. Mk.	Freq.	Level	Correct Factor	Measure- ment	Limit	Over			
No. Mk. 1	Freq.	Level dBuV	Correct Factor	Measure- ment	Limit dBuV/m	Over	Detecto		
No. Mk. F	Freq. MHz .7129	dBuV 49.34	Correct Factor dB/m -19.96	Measure- ment dBuV/m 29.38	Limit dBuV/m 40.00	Over dB -10.62	Detecto		
No. Mk. F	Freq. MHz .7129 .6094	Level dBuV 49.34 50.18 40.78	Correct Factor dB/m -19.96 -23.87 -22.13	Measure- ment dBuV/m 29.38 26.31 18.65	Limit dBuV/m 40.00 40.00 40.00	Over dB -10.62 -13.69 -21.35	Detecto QP QP QP		
No. Mk. F	Freq. MHz .7129 .6094 .1117	Level dBuV 49.34 50.18 40.78 44.87	Correct Factor dB/m -19.96 -23.87 -22.13 -22.46	Measure- ment dBuV/m 29.38 26.31 18.65 22.41	Limit dBuV/m 40.00 40.00 40.00 43.50	Over dB -10.62 -13.69 -21.35 -21.09	Detector QP QP QP QP		
No. Mk. F	Freq. MHz .7129 .6094	Level dBuV 49.34 50.18 40.78	Correct Factor dB/m -19.96 -23.87 -22.13	Measure- ment dBuV/m 29.38 26.31 18.65	Limit dBuV/m 40.00 40.00 40.00	Over dB -10.62 -13.69 -21.35	Detecto QP QP QP		



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Above 1GHz

Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ	Million	
Ant. Pol.	Horizontal		
Test Mode:	TX B Mode 2412MHz		
Remark:	No report for the emission	which more than 10 dE	B below the prescribed
	limit.	3 4	

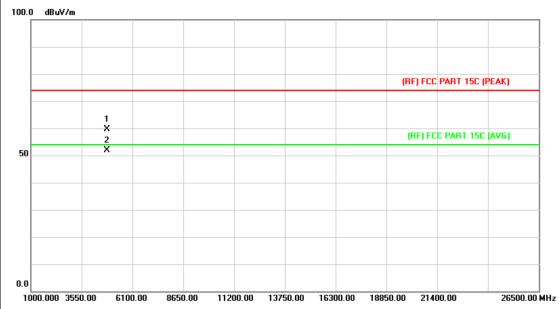


No	. Mk	. Freq.	_		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4824.030	33.56	14.55	48.11	54.00	-5.89	AVG
2		4824.210	45.10	14.55	59.65	74.00	-14.35	peak



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í	Temperature:	25 ℃	Relative Humidity:	55%			
	Test Voltage:	AC 120V/60HZ					
	Ant. Pol.	Pol. Vertical					
	Test Mode:	TX B Mode 2412MHz	10				
	Remark:	No report for the emission was prescribed limit.	hich more than 10 dB	below the			

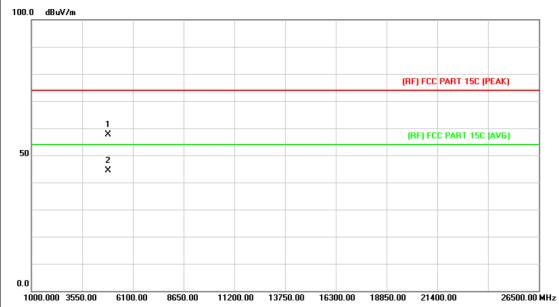


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4824.012	45.18	14.55	59.73	74.00	-14.27	peak
2	*	4824.012	37.40	14.55	51.95	54.00	-2.05	AVG



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Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	C 120V/60HZ					
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX B Mode 2437MH	lz					
Remark:	No report for the emission which more than 10 dB below the						
prescribed limit.							

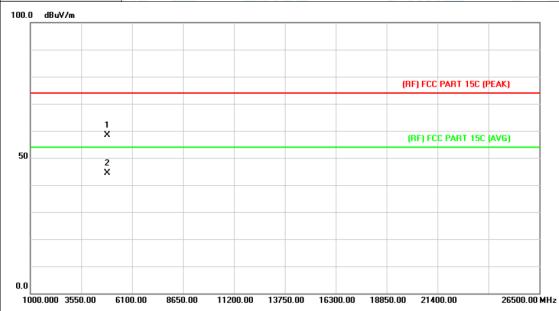


No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.850	42.79	14.86	57.65	74.00	-16.35	peak
2	*	4874.408	29.56	14.86	44.42	54.00	-9.58	AVG



Page: 33 of 77

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	C 120V/60HZ					
Ant. Pol.	Vertical	ertical					
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						

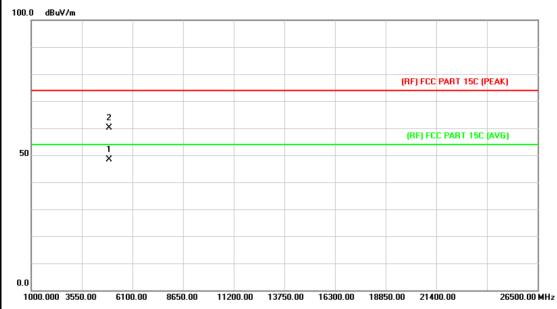


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.124	43.65	14.85	58.50	74.00	-15.50	peak
2	*	4874.564	29.56	14.86	44.42	54.00	-9.58	AVG



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Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60HZ	AC 120V/60HZ				
Ant. Pol.	Horizontal	Horizontal				
Test Mode:	TX B Mode 2462MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

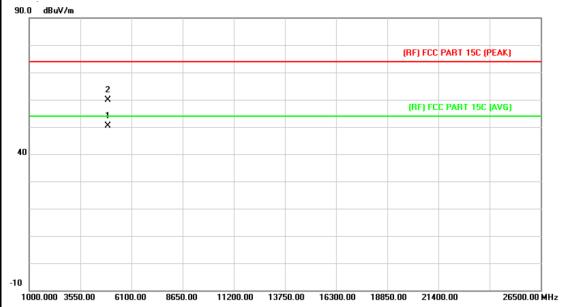


N	o. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.952	33.25	15.17	48.42	54.00	-5.58	AVG
2		4924.294	44.86	15.17	60.03	74.00	-13.97	peak



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Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	C 120V/60HZ					
Ant. Pol.	Vertical	'ertical					
Test Mode:	TX B Mode 2462MHz						
Remark: No report for the emission which more than 10 dB below the prescribed limit.							
-							



No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.990	36.13	14.15	50.28	54.00	-3.72	AVG
2		4924.030	45.69	14.15	59.84	74.00	-14.16	peak



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Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	C 120V/60HZ					
Ant. Pol.	Horizontal	lorizontal					
Test Mode:	TX G Mode 2412MHz						
Remark:	No report for the emission which more than 10 dB below the prescribed limit.						

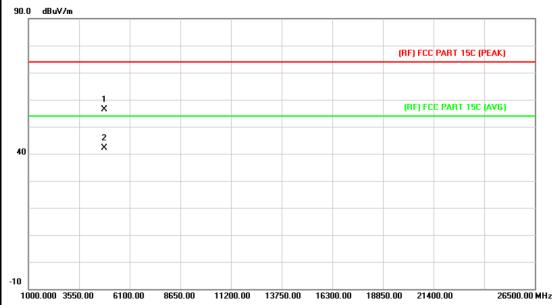


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4822.998	43.63	14.55	58.18	74.00	-15.82	peak
2	*	4824.072	29.45	14.55	44.00	54.00	-10.00	AVG



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Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	AC 120V/60HZ					
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX G Mode 2412MHz	TX G Mode 2412MHz					
Remark: No report for the emission which more than 10 dB below the prescribed limit.							
	•						

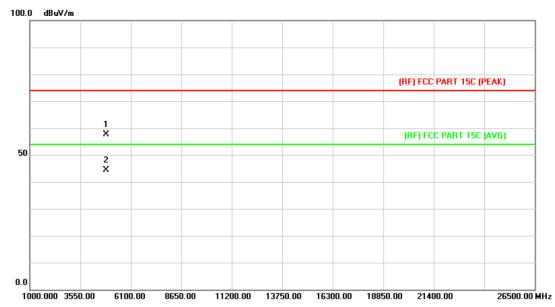


No. Mk.		. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.962	42.84	13.56	56.40	74.00	-17.60	peak
2	*	4823.962	28.61	13.56	42.17	54.00	-11.83	AVG



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Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60HZ					
Ant. Pol.	Horizontal					
Test Mode:	TX G Mode 2437MHz					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

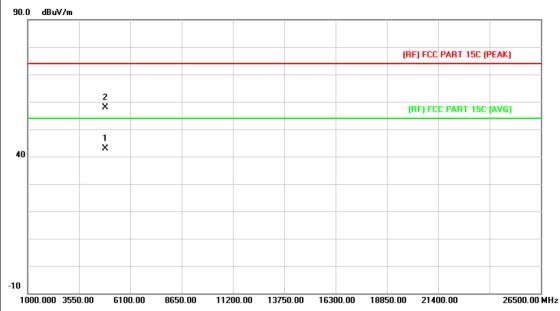


N	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.790	42.77	14.86	57.63	74.00	-16.37	peak
2	*	4873.790	29.49	14.86	44.35	54.00	-9.65	AVG



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Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ	AC 120V/60HZ					
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX G Mode 2437M	TX G Mode 2437MHz					
Remark:	Remark: No report for the emission which more than 10 dB below the prescribed limit.						
90.0 dRuV/m	<u> </u>						

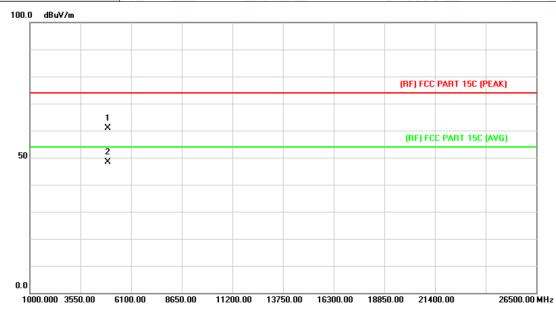


N	o. N	1k.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4	4873.541		13.86	42.88	54.00	-11.12	AVG
2		4	4873.803	44.03	13.86	57.89	74.00	-16.11	peak



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í	Temperature:	25 ℃	Relative Humidity:	55%			
	Test Voltage:	AC 120V/60HZ					
	Ant. Pol.	Horizontal					
	Test Mode:	TX G Mode 2462MHz	TX G Mode 2462MHz				
	Remark: No report for the emission which more than 10 dB below the prescribed limit.						

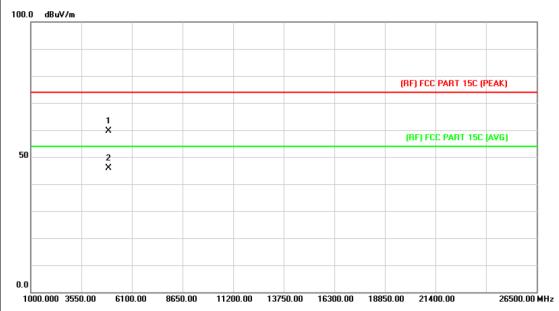


N	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4924.030	45.77	15.17	60.94	74.00	-13.06	peak
2	*	4924.030	33.21	15.17	48.38	54.00	-5.62	AVG



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	Temperature:	25 ℃	Relative Humidity:	55%			
}	Test Voltage:	AC 120V/60HZ					
	Ant. Pol.	Vertical					
	Test Mode:	TX G Mode 2462MHz	TX G Mode 2462MHz				
	Remark:	No report for the emission which more than 10 dB below the prescribed limit.					

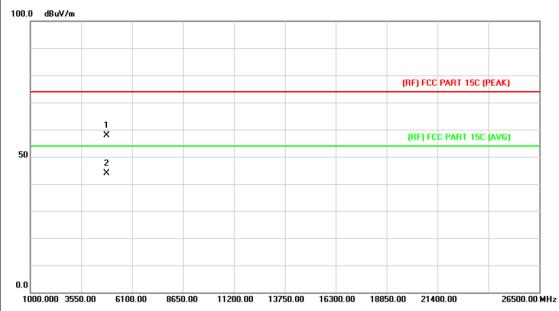


No.	. Mk	Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.712	44.56	15.17	59.73	74.00	-14.27	peak
2	*	4923.970	30.60	15.17	45.77	54.00	-8.23	AVG



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į	Temperature:	25 ℃	Relative Humidity:	55%		
}	Test Voltage:	AC 120V/60HZ				
	Ant. Pol.	Horizontal				
	Test Mode:	TX N(HT20) Mode 2412Mi	Нz			
Remark: No report for the emission which more than 10 dB below the prescribed limit.						

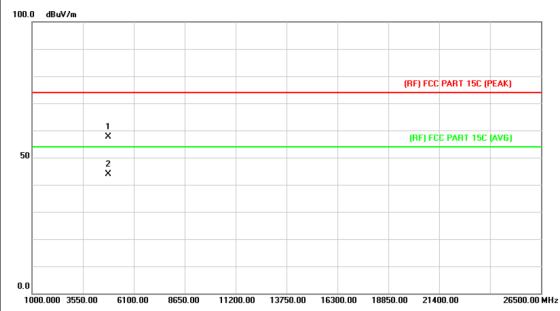


No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.484	43.40	14.55	57.95	74.00	-16.05	peak
2	*	4823.484	29.30	14.55	43.85	54.00	-10.15	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ		- W
Ant. Pol.	Vertical		Tibe of
Test Mode:	TX N(HT20) Mode	2412MHz	
Remark:	No report for the e	mission which more than 10 dE	3 below the
	•		

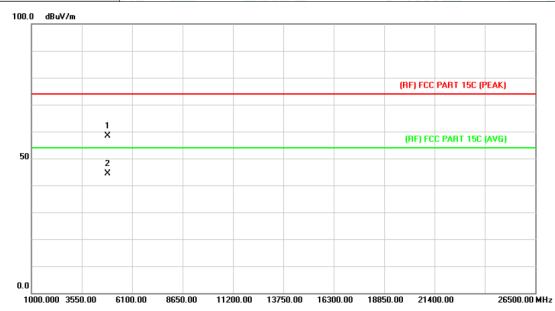


No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.514	43.16	14.55	57.71	74.00	-16.29	peak
2	*	4823.592	29.38	14.55	43.93	54.00	-10.07	AVG



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Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	AC 120V/60HZ						
Ant. Pol.	Ant. Pol. Horizontal						
Test Mode:	TX N(HT20) Mod	e 2437MHz					
Remark:	No report for the prescribed limit.	emission which more than 10 dB	3 below the				

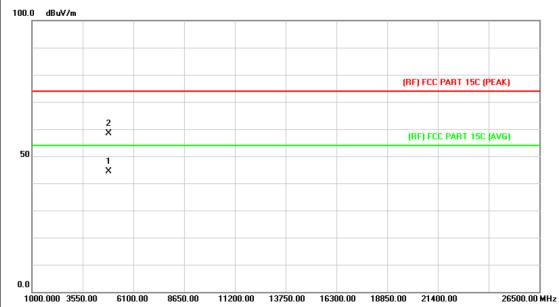


No.	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.562	43.41	14.86	58.27	74.00	-15.73	peak
2	*	4874.108	29.55	14.86	44.41	54.00	-9.59	AVG



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į	Temperature:	25 ℃	Relative Humidity:	55%					
}	Test Voltage:	AC 120V/60HZ							
	Ant. Pol.	Vertical	'ertical						
	Test Mode:	TX N(HT20) Mode 2437Mi	Нz						
	Remark:	No report for the emission prescribed limit.	which more than 10 dE	3 below the					

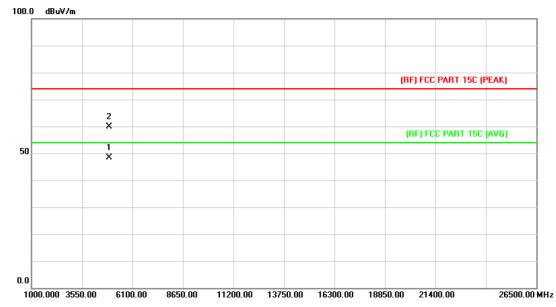


No	. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4874.504		14.86	44.42	54.00	-9.58	AVG
2		4875.350	43.55	14.87	58.42	74.00	-15.58	peak



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Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60HZ							
Ant. Pol.	lorizontal							
Test Mode:	TX N(HT20) Mode 2462MH:							
Remark:	No report for the emission was prescribed limit.	hich more than 10 dB	below the					



N	o. Mk	. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4924.048	33.22	15.17	48.39	54.00	-5.61	AVG
2		4924.510	44.61	15.17	59.78	74.00	-14.22	peak



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1	Temperature:	25 ℃	Relative Humidity:	55%				
	Test Voltage:	AC 120V/60HZ						
	Ant. Pol.	/ertical						
	Test Mode:	TX N(HT20) Mode 2462MHz						
	Remark:	No report for the emission w prescribed limit.	hich more than 10 dB l	pelow the				



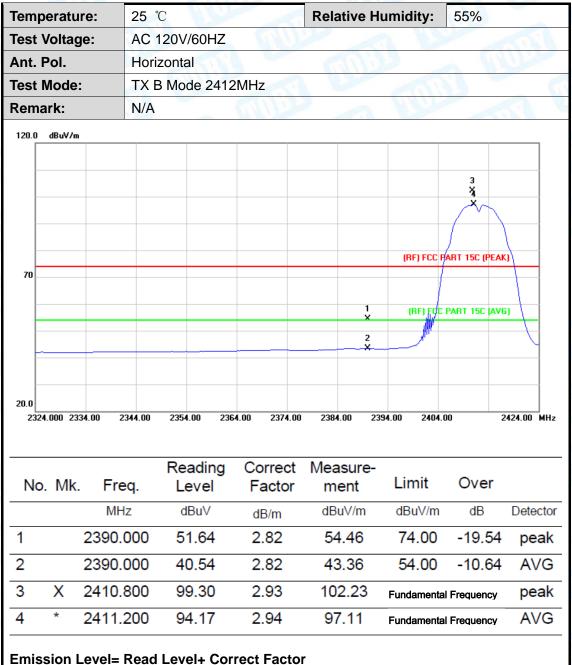
No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.520	44.15	15.17	59.32	74.00	-14.68	peak
2	*	4923.520	30.23	15.17	45.40	54.00	-8.60	AVG



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Attachment C-- Restricted Bands Requirement Test Data

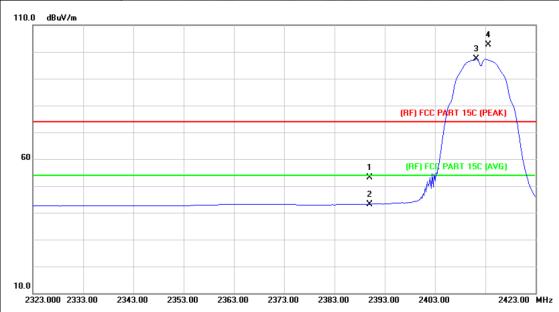
(1) Radiation Test





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No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	50.34	2.82	53.16	74.00	-20.84	peak
2		2390.000	40.38	2.82	43.20	54.00	-10.80	AVG
3	*	2411.200	94.43	2.94	97.37	Fundamental	Frequency	AVG
4	Χ	2413.600	99.59	2.95	102.54	Fundamental	Frequency	peak



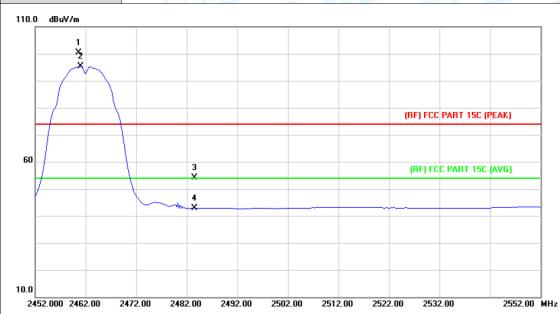
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Tem	peratu	re:	25 °C	C		Relati	ve Hui	midity:	55%	
Test	t Voltag	je:	AC 1	20V/60HZ	7		CHI		- N	The same
Ant.	Pol.		Horiz	zontal		188		(all	11373	
Test	Mode:		TX B	Mode 24	62MHz			100	- A	W.
Rem	nark:		N/A		3	. 5			a W	1 keep
110.0) dBuV/m									
60		1 X2 X		3 × 4 ×					ART 15C (PEAK	
10.0 24	I51.000 240	61.00 24	171.00	2481.00	2491.00 2501.	00 2511	.00 25	21.00 2531.0	00 2	551.00 MHz
N	lo. Mk	. Fre	q.	Reading Level	g Correc Facto		sure- ent	Limit	Over	
		MH	Z	dBu∀	dB/m	dB	uV/m	dBuV/m	dB	Detecto
1	Χ	2460.	600	97.02	3.26	10	0.28	Fundamenta	I Frequency	peak
2	*	2461.	000	91.85	3.26	95	5.11	— Fundamenta	I Frequency	AVG
3		2483.	500	50.40	3.41	53	3.81	74.00	-20.19	peak
4		2483.	500	40.15	3.41	43	3.56	54.00	-10.44	AVG



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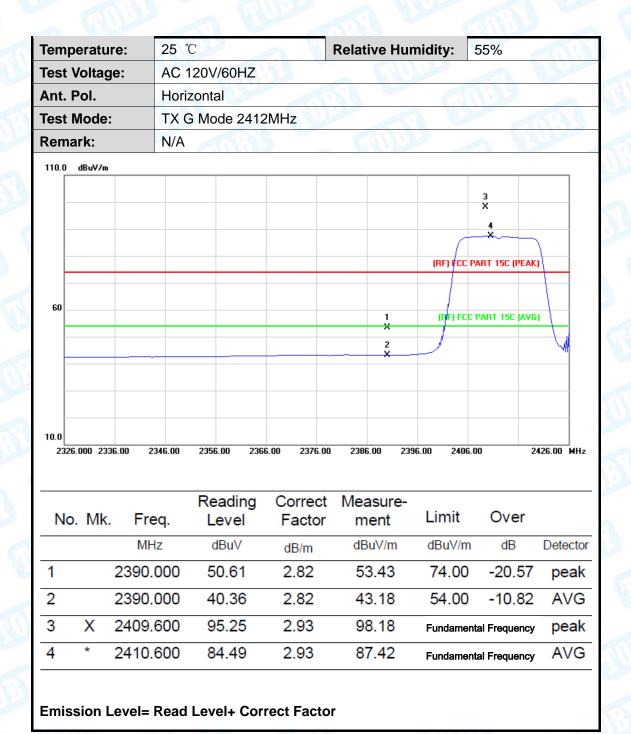
	Temperature:	25 ℃	Relative Humidity:	55%
	Test Voltage:	AC 120V/60HZ		
	Ant. Pol.	Vertical	31 - 6	
Ì	Test Mode:	TX B Mode 2462MHz		
4	Remark:	N/A	MIDE	July 1



			Daration	0	N 4			
No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2460.600	97.24	3.26	100.50	Fundamental Frequency		peak
2	*	2461.000	92.06	3.26	95.32	Fundamental Frequency		AVG
3		2483.500	50.78	3.41	54.19	74.00	-19.81	peak
4		2483.500	39.40	3.41	42.81	54.00	-11.19	AVG



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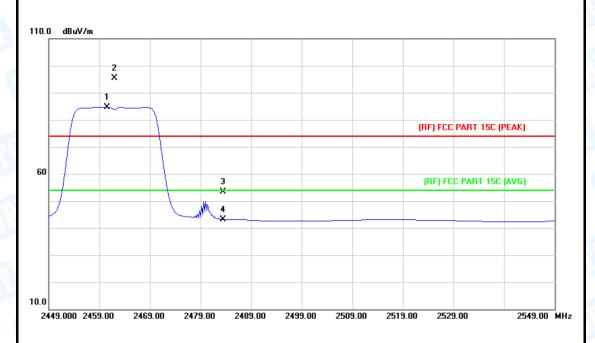
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em	peratur	e:	25 °C			Relative H	umidity:	55%	
est	Voltag	e:	AC 1	20V/60HZ	33	THI CHILL	استانا		A British
nt.	Pol.		Verti	cal		118	(11)	133	
est	Mode:		TX G	Mode 2412	2MHz		J C	1	MA
Remark:			N/A			THE P		a W	Marie
110.0	dBuV/m								
								4	
								×	
								X	
ŀ							(RF) FCC F	PART 15C (PEA	K)
60									
ŀ						1 ×	(R/F) FCC	PART 15C (AV	G) \
						2 X			M
-									
-									
10.0									
	26.000 233 Jo. Mk		46.00	Reading Level	Correct Factor	Measure- ment	2406. Limit	Over	2426.00 MI
	io. iviik	MH		dBuV	dB/m	dBuV/m	dBuV/m	dB	Detecto
1		2390.	000	50.48	2.82	53.30	74.00	-20.70	peak
2		2390.	000	39.89	2.82	42.71	54.00	-11.29	AVG
	*			05.04	0.05	07.00		_	AVG
3	*	2413.	400	85.04	2.95	87.99	Fundamental	Frequency	AVG



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25 ℃	Relative Humidity:	55%				
AC 120V/60HZ	AC 120V/60HZ					
Horizontal	Horizontal					
TX G Mode 2462MHz						
N/A						
	AC 120V/60HZ Horizontal TX G Mode 2462MHz	AC 120V/60HZ Horizontal TX G Mode 2462MHz				

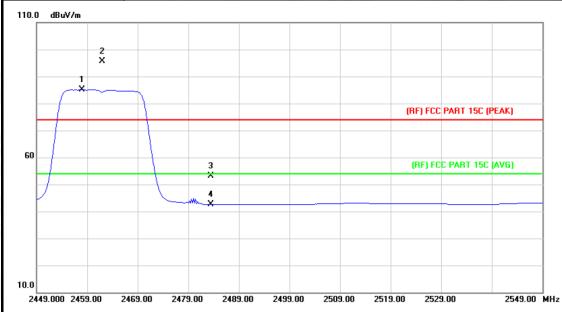


No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2460.600	81.44	3.26	84.70	Fundamental Frequency		AVG
2	Χ	2462.000	91.99	3.27	95.26	Fundamental	Frequency	peak
3		2483.500	50.06	3.41	53.47	74.00	-20.53	peak
4		2483.500	39.76	3.41	43.17	54.00	-10.83	AVG



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Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:			
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A	WILD BY	July 1



No.	. Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2458.000	81.87	3.24	85.11	Fundamental F	Frequency	AVG
2	Χ	2462.000	92.34	3.27	95.61	Fundamental F	Frequency	peak
3		2483.500	49.68	3.41	53.09	74.00	-20.91	peak
4		2483.500	39.17	3.41	42.58	54.00	-11.42	AVG



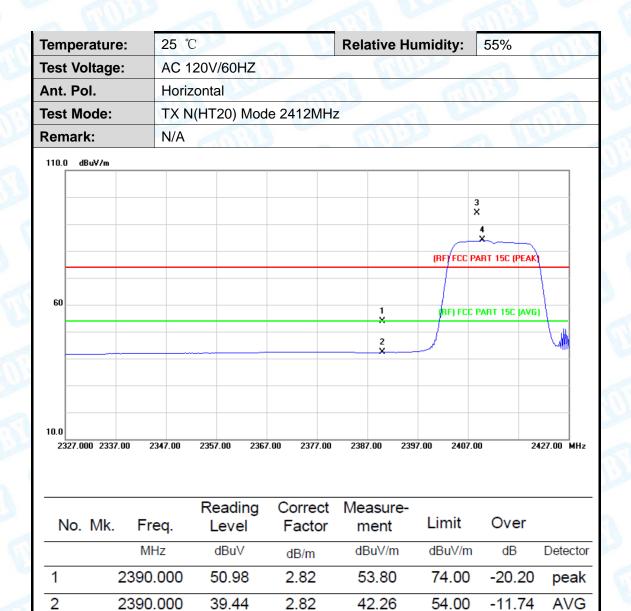
3

4

X

Report No.: TB-FCC161330

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Emission Level= Read Level+ Correct Factor

91.29

81.10

2.92

2.93

94.21

84.03

2408.800

2409.800

peak

AVG

Fundamental Frequency

Fundamental Frequency



10.0

2326.000 2336.00

2346.00

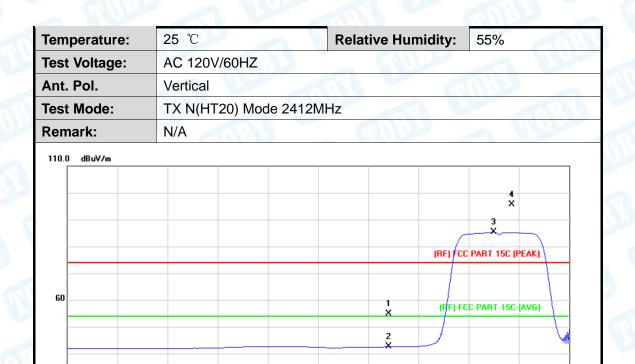
2356.00

2366.00

Report No.: TB-FCC161330

2426.00 MHz

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No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	52.18	2.82	55.00	74.00	-19.00	peak
2		2390.000	39.73	2.82	42.55	54.00	-11.45	AVG
3	*	2411.000	82.34	2.93	85.27	Fundamental Frequency		AVG
4	X	2414.600	92.59	2.95	95.54	Fundamental Frequency		peak

2376.00

2386.00

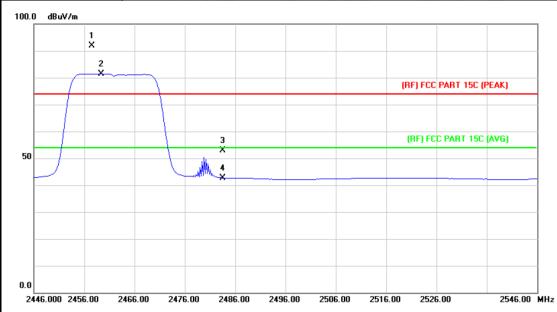
2396.00

2406.00



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	Temperature:	25 ℃	Relative Humidity:	55%					
	Test Voltage:	AC 120V/60HZ	AC 120V/60HZ						
	Ant. Pol.	Horizontal							
	Test Mode:	TX N(HT20) Mode 2462MHz							
4	Remark:	N/A	MIDS	3 Alba					
ı									

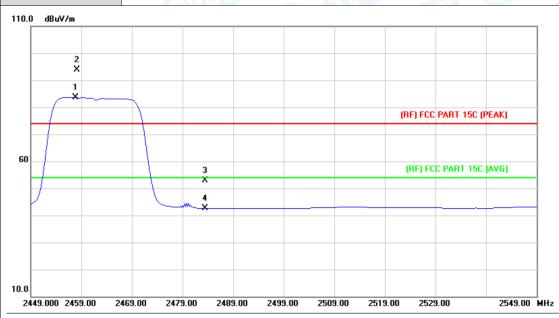


1	Vo. N	Лk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	Х		2457.600	88.75	3.24	91.99	Fundamental	Frequency	peak
2	*		2459.400	78.25	3.25	81.50	Fundamental F	requency	AVG
3			2483.500	49.55	3.41	52.96	74.00	-21.04	peak
4			2483.500	39.34	3.41	42.75	54.00	-11.25	AVG



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Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60HZ							
Ant. Pol.	Vertical	Vertical						
Test Mode:	TX N(HT20) Mode	TX N(HT20) Mode 2462MHz						
Remark:	N/A		THE PARTY OF THE P					



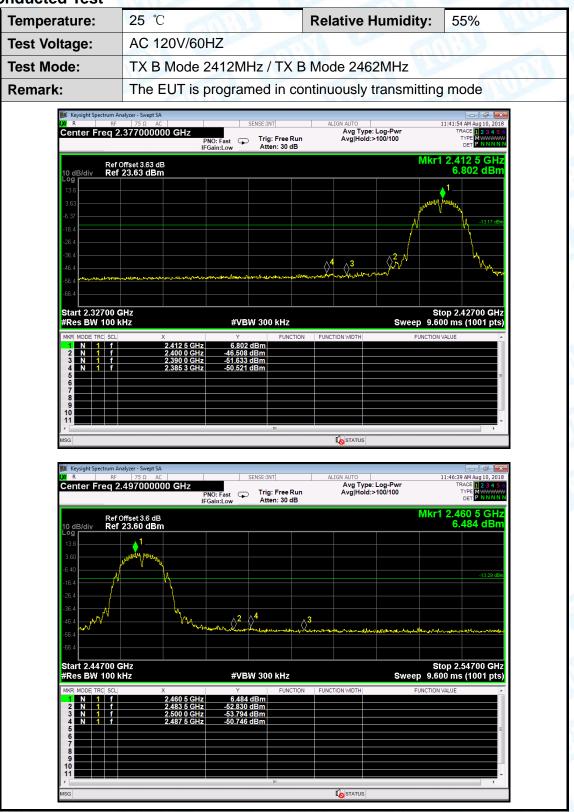
No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2457.800	80.41	3.24	83.65	Fundamental Frequency		AVG
2	X	2458.200	90.74	3.24	93.98	Fundamental Frequency		peak
3		2483.500	49.39	3.41	52.80	74.00	-21.20	peak
4		2483.500	39.15	3.41	42.56	54.00	-11.44	AVG



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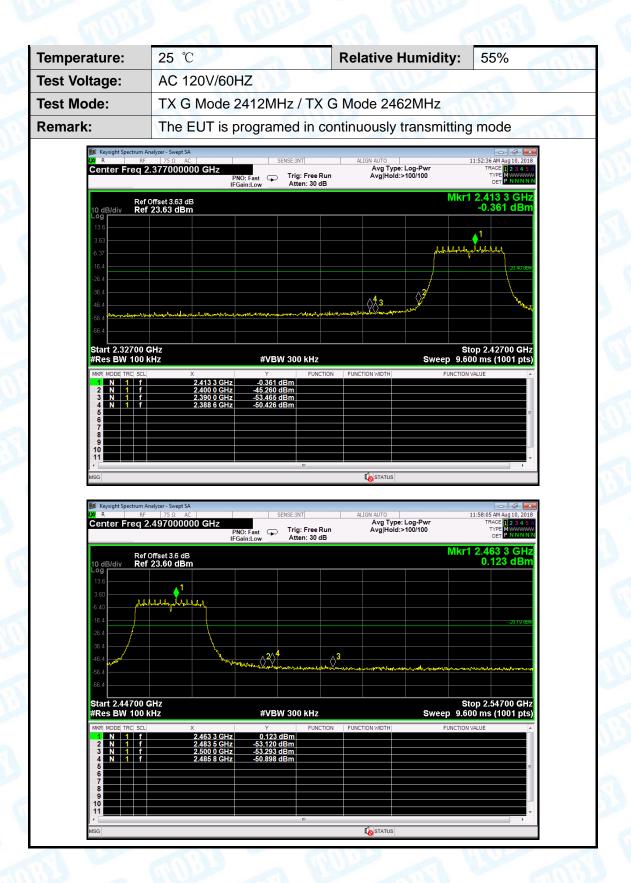
(2) Conducted Test







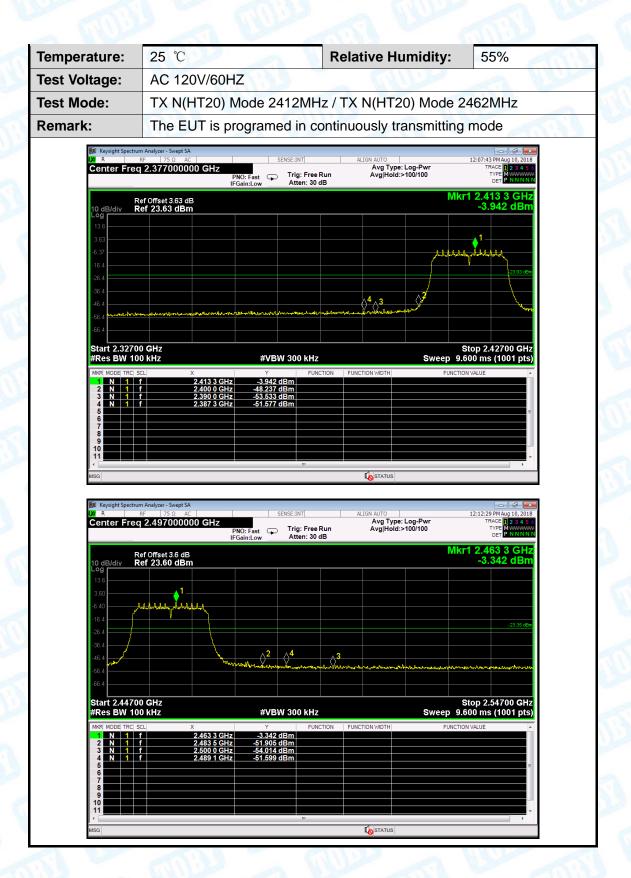
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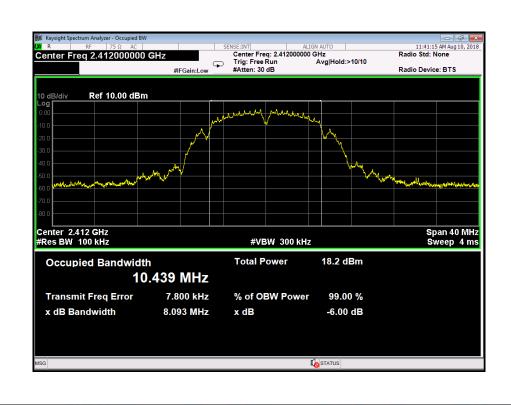


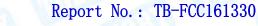
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Attachment D-- Bandwidth Test Data

Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	AC 120V/60HZ		7:19		
Test Mode:	TX 802.11B Mode				
Channel frequency 6dB Bandwidth		99% Bandwidth	Limit		
(MHz)	(MHz)	(MHz)	(MHz)		
2412	8.093	10.439			
2437	8.076	10.456	>=0.5		
2462	8.520	10.429			

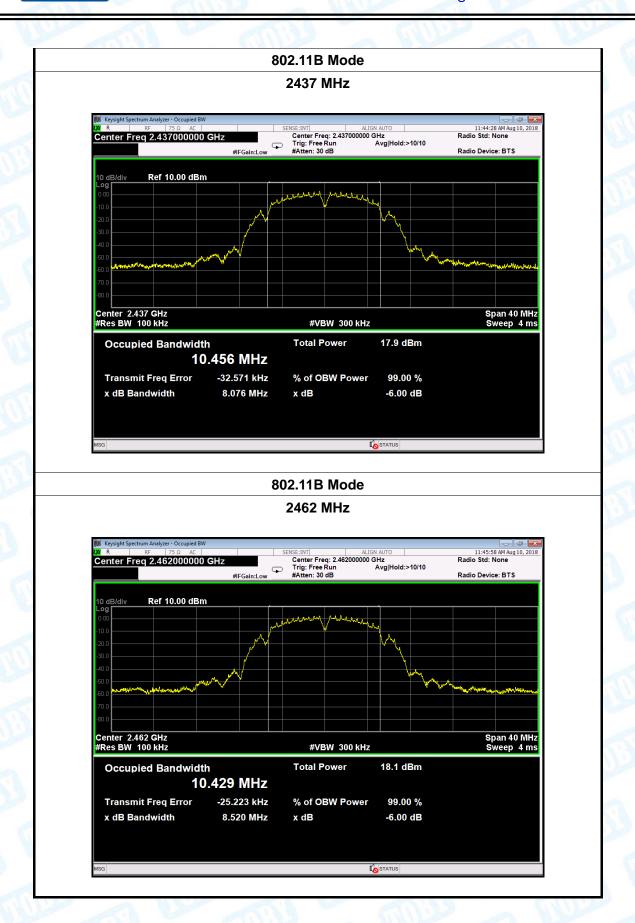
802.11B Mode





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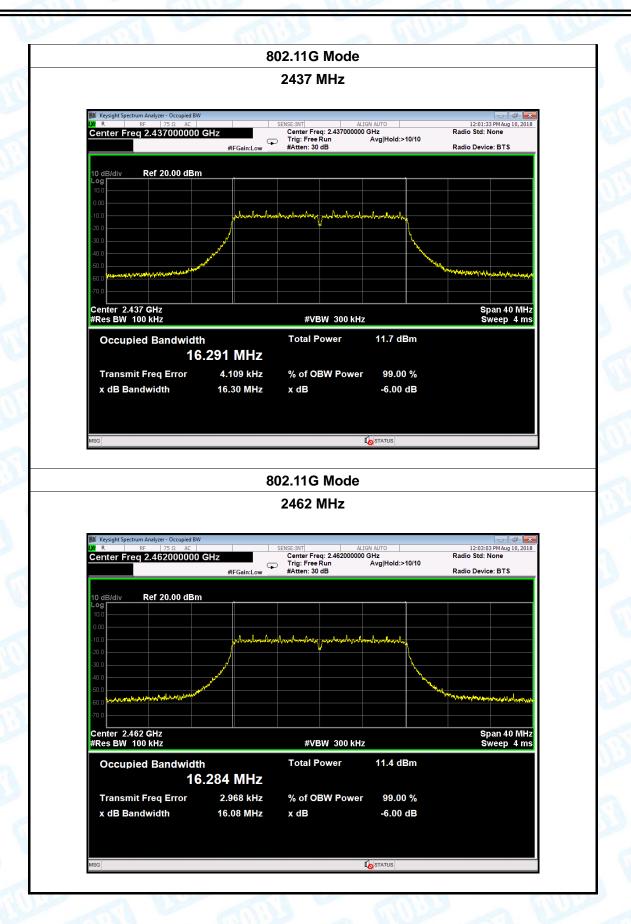
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Temperature:	re: 25 °C Relative Humidity			ty: 5	55%		
est Voltage:	AC 120V/60HZ						a V
est Mode:	TX 80	2.11G Mode	-	EU -	- 6		139
Channel freque	ncy	6dB Bandw	vidth	99% Ba	ndwidt	h	Limi
(MHz)		(MHz)		(M	Hz)		(MHz
2412		16.08		16.	279		
2437		16.30		16.	291		>=0.
2462		16.08		16.	284		
	1	8	02.11G N	lode			
			2412 MH	J-,			
Center Frec	n Analyzer - Occupied B RF 75 \(\Omega \) AC 2.412000000 Ref 20.00 dB	O GHz #IFGain:Low	Talan Fara Dan	ALIGN AUTO 412000000 GHz	>10/10	12:00: Radio Std: Radio Devi	
10 dB/div Log 10.0 -10.0 -20.0 -40.0	75 Ω AC 2.41200000	O GHz #IFGain:Low	Center Freq: 2 Trig: Free Run	ALIGN AUTO 412000000 GHz	>10/10	Radio Std:	35 PM Aug 10, 2018 None
10 dB/div Log 10.0 -10.0 -20.0 -40.0	75 Ω AC 2.41200000	O GHz #IFGain:Low	Center Freq: 2 Trig: Free Run	ALIGN AUTO 412000000 GHz Avg Hold:	>10/10	Radio Std:	35 PMAug 10, 2018 None sice: BTS
10 dB/dlv Log 10.00 -10.0 -20.0 -40.0 -60.0	Ref 20.00 dB	O GHz #IFGain:Low	Center Freq: 2 Trig: Free Run #Atten: 30 dB	ALIGN AUTO 412000000 GHz Avg Hold:	>10/10	Radio Std:	35 PMAug 10, 2018 None sice: BTS
10 dB/div Log 10.0	Ref 20.00 dB	#FGain:Low	Center Freq: 2 Trig: Free Run #Atten: 30 dB	ALIGN AUTO 412000000 GHz Avg Hold:		Radio Std:	ice: BTS
Center Frec 10 dB/div Log 10.0 .000 .10.0 .20.0 .30.0 .40.0 .50.0 .60.0 .70.0 Center 2.41: #Res BW 10 Occupie	Ref 20.00 dB	m #FGain:Low	Center Freq: 2 Trig: Free Run #Atten: 30 dB	ALIGN AUTO 412000000 GHz Avg Hold:	Bm	Radio Std:	ice: BTS



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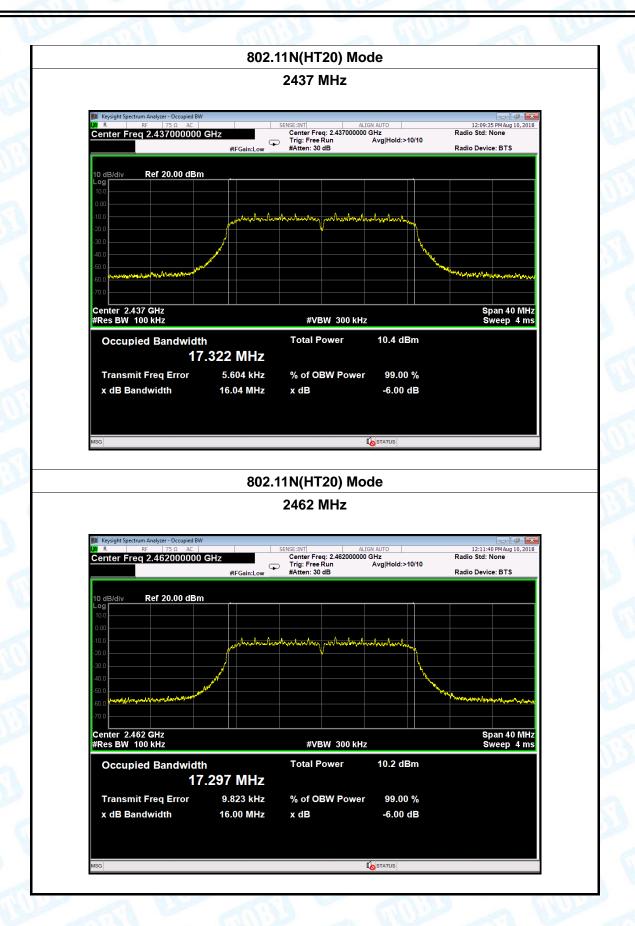
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Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	AC 120V/60HZ	Will Day		
Test Mode:	TX 802.11N(HT20) Mode		1:39	
Channel frequen	cy 6dB Bandwidth	99% Bandwidth	Limit	
(MHz)	(MHz)	(MHz)	(MHz)	
2412	16.27	17.301		
2437	16.04	17.322	>=0.5	
2462	16.00	16.00 17.297		
	802.11N(HT2	20) Mode		
	2412 N	1Hz		
Keysight Spectrum Ar				
Center Freq 2	75 0 AC SENSE:NT 412000000 GHz	: 2.412000000 GHz Radio un Avg Hold:>10/10	12:07:08 PM Aug 10, 2018 D Std: None	
	ef 20.00 dBm			
Log				



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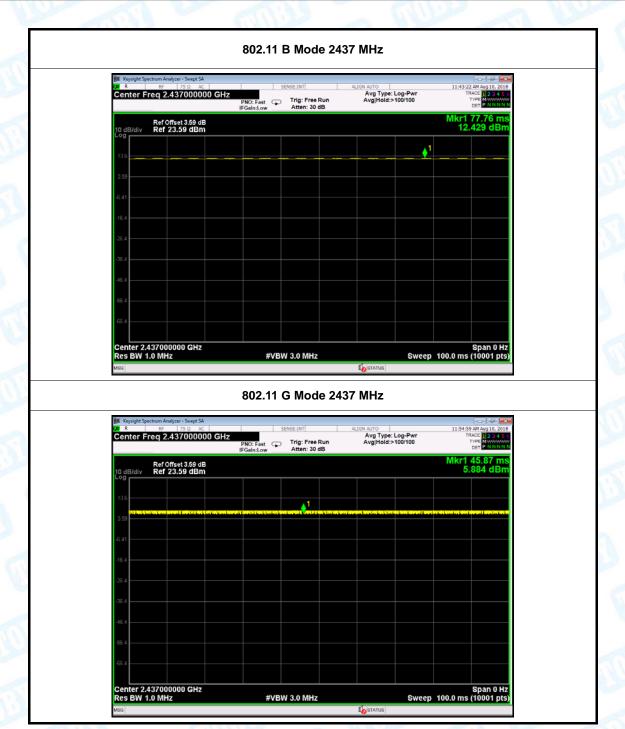
Attachment E-- Peak Output Power Test Data

Test Condition	ns:	Continuous transmitting Mode				
Temperature:	perature: 25 °C Relat			Relative Humidity:	55%	
Test Voltage:		AC 120V/60HZ	An	O V		
Mode	С	nannel frequency (MHz) Test Result (dBm)		st Result (dBm)	Limit (dBm)	
		2412		16.60		
802.11b		2437	16.13			
		2462	16.33			
802.11g		2412	14.89 14.42		30	
		2437				
		2462		14.11		
000 44		2412	12.31			
802.11n		2437		13.18		
(HT20)		2462		12.85		
Result: PASS						

Duty Cycle					
Mode	Channel frequency (MHz)	Test Result			
	2412				
802.11b	2437				
	2462				
	2412				
802.11g	2437	>98%			
	2462				
000 44	2412				
802.11n (HT20)	2437				
	2462				

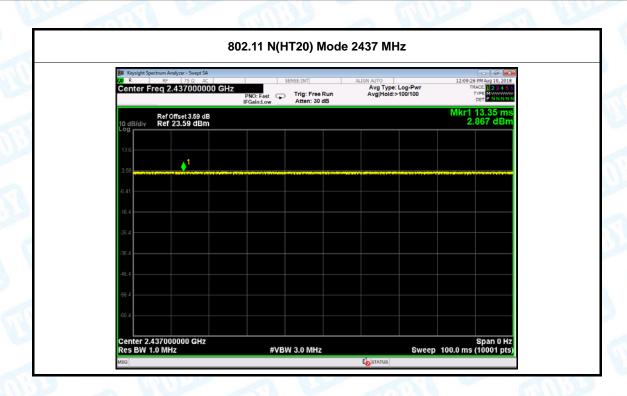


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Attachment F-- Power Spectral Density Test Data

Temperature:	25 ℃		Relative Humidity:	55%	
Test Voltage:	AC 120V/	60HZ	511	m:N	
Test Mode:	TX 802.11B Mode				
Channel Frequency Power			ensity	Limit	
(MHz)		(dBm/3	(dBm/3 kHz)		
2412		-7.221			
2437		-7.917		8	
2462		-7.29	91		
			<u> </u>		

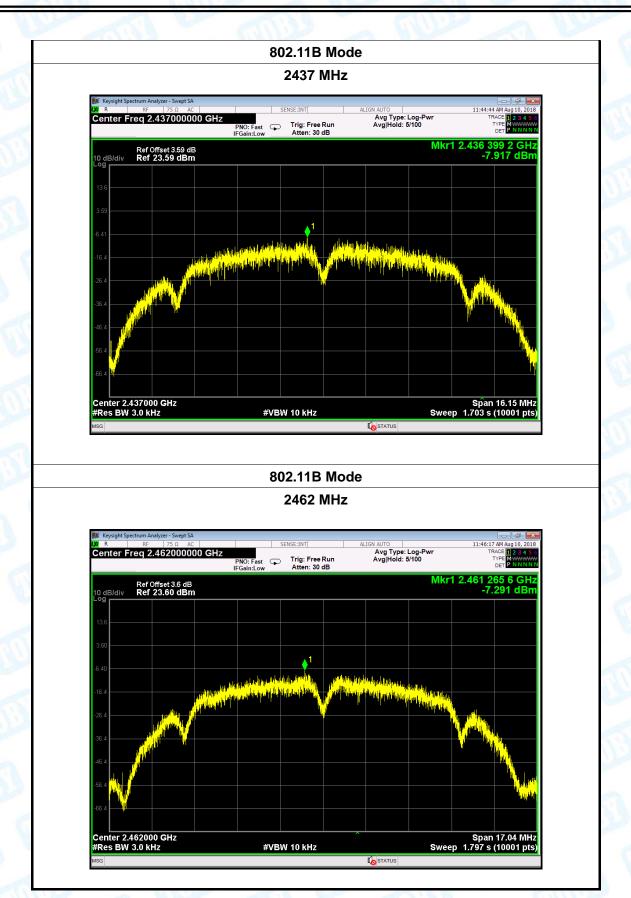
802.11B Mode





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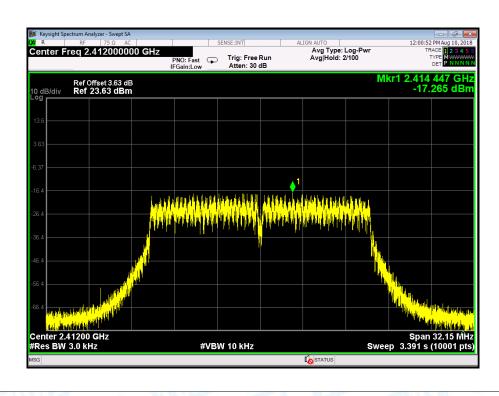






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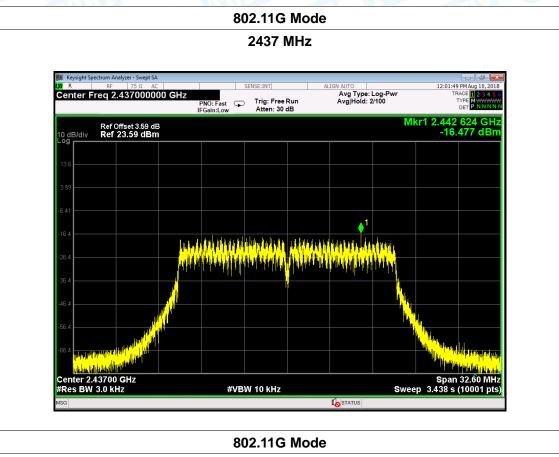
Temperature:	25 ℃		Temperature:	25 ℃
Test Voltage:	AC 120V/	60HZ	W. Carrier	
Test Mode:	TX 802.1	1G Mode	11 - 6	11:33
Channel Freq	uency	Power De	nsity	Limit
(MHz)		(dBm/3 k	Hz)	(dBm/3 kHz)
2412		-17.26	5	
2437		-16.477		8
2462		-17.642	2	
		802.11G N	lode	

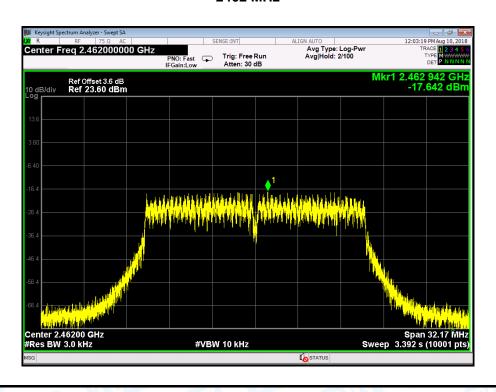




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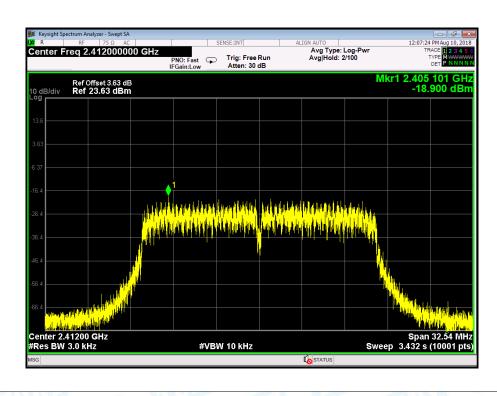




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Temperature:	25 ℃		Temperature:	25 ℃		
Test Voltage:	AC 120V	AC 120V/60HZ				
Test Mode:	TX 802.1	TX 802.11N(HT20) Mode				
Channel Freq	uency	Power De	nsity	Limit		
(MHz)		(dBm/3 kHz)		(dBm/3 kHz)		
2412 2437 2462		-18.90)			
		-17.84	5	8		
		-19.48	-19.480			
		902 44N/UT2)) Modo			

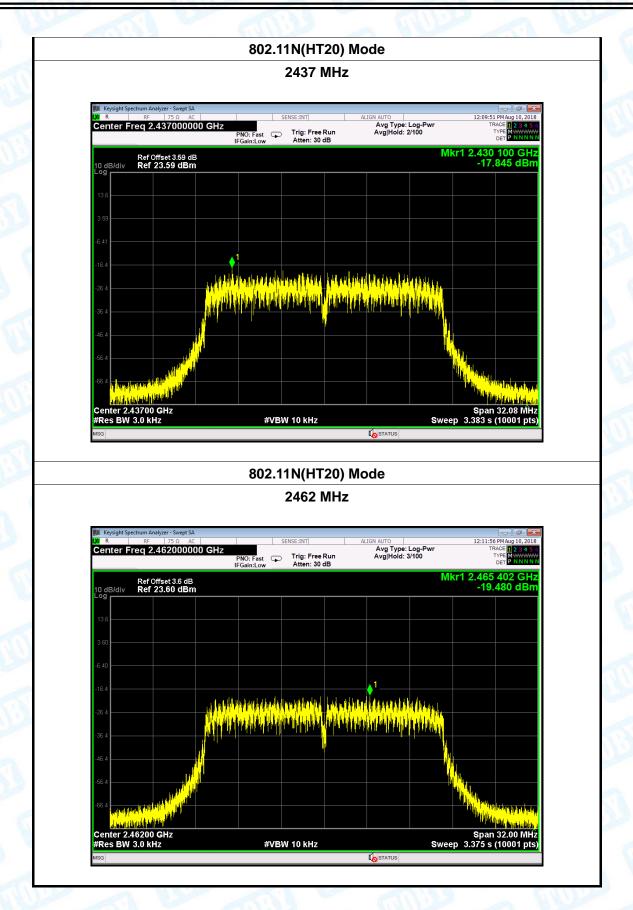
802.11N(HT20) Mode





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-END OF REPORT---