

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC163416 Page: 1 of 78

FCC Radio Test Report FCC ID: 2AR4Y-WF1162T

Original Grant

Report No.	÷	TB-FCC163416		
Applicant	1000	SHENZHEN HOPESTAR SCI-TECH CO., LIMITED		
Equipment Under	Test	(EUT)		
EUT Name	:	Android tablet		
Model No.		WF1162T		
Series Model No.	. : See the page of 6.			
Brand Name	ame :			
Receipt Date	eipt Date : 2018-12-15			
Test Date	a: \	2018-12-15 to 2019-1-22		
Issue Date	2:	2019-01-23		
Standards	1	: FCC Part 15, Subpart C (15.247: 2018)		
Test Method	ii	ANSI C63.10: 2013		
Conclusions	4	PASS		

Jason xu

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In the configuration tested, the EUT complied with the standards specified above, The EUT technically complies with the FCC and IC requirements

HNgason

n Stt

Test/Witness Engineer

Test/Witness Engineer

Approved& Authorized

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



Contents

CON	NTENTS	2
1.	GENERAL INFORMATION ABOUT EUT	5
	1.1 Client Information	5
	1.2 General Description of EUT (Equipment Under Test)	
	1.3 Block Diagram Showing the Configuration of System Tested	
	1.4 Description of Support Units	7
	1.5 Description of Test Mode	7
	1.6 Description of Test Software Setting	9
	1.7 Measurement Uncertainty	9
	1.8 Test Facility	10
2.	TEST SUMMARY	
3.	TEST EQUIPMENT	12
4.	CONDUCTED EMISSION TEST	
	4.1 Test Standard and Limit	
	4.2 Test Setup	
	4.3 Test Procedure	
	4.4 EUT Operating Mode	14
	4.5 Test Data	
5.	RADIATED EMISSION TEST	
	5.1 Test Standard and Limit	
	5.2 Test Setup	
	5.3 Test Procedure	17
	5.4 EUT Operating Condition	
	5.5 Test Data	
6.	RESTRICTED BANDS REQUIREMENT	
	6.1 Test Standard and Limit	
	6.2 Test Setup	
	6.3 Test Procedure	
	6.4 EUT Operating Condition	20
	6.5 Test Data	20
7.	BANDWIDTH TEST	21
	7.1 Test Standard and Limit	
	7.2 Test Setup	
	7.3 Test Procedure	
	7.4 EUT Operating Condition	21
	7.5 Test Data	
8.	PEAK OUTPUT POWER TEST	
	8.1 Test Standard and Limit	



	8.2 Test Setup	22
	8.3 Test Procedure	22
	8.4 EUT Operating Condition	22
	8.5 Test Data	22
9.	POWER SPECTRAL DENSITY TEST	23
	9.1 Test Standard and Limit	
	9.2 Test Setup	23
	9.3 Test Procedure	23
	9.4 EUT Operating Condition	23
	9.5 Test Data	23
10.	ANTENNA REQUIREMENT	24
	10.1 Standard Requirement	24
	10.2 Antenna Connected Construction	24
ATT	ACHMENT A CONDUCTED EMISSION TEST DATA	25
ATT	ACHMENT B RADIATED EMISSION TEST DATA	29
ATT	ACHMENT C RESTRICTED BANDS REQUIREMENT TEST DATA	49
ATT	ACHMENT D BANDWIDTH TEST DATA	64
ATT	ACHMENT E PEAK OUTPUT POWER TEST DATA	70
ATT	ACHMENT F POWER SPECTRAL DENSITY TEST DATA	73



Report No.: TB-FCC163416 Page: 4 of 78

Revision History

Report No.	Version	Description	Issued Date
TB-FCC163416	Rev.01	Initial issue of report	2019-01-23
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1. General Information about EUT

1.1 Client Information

Applicant	-	SHENZHEN HOPESTAR SCI-TECH CO., LIMITED		
Address	:	601-606, Floor 6, Building E, Yuanfen Industrial Park, Dalang Sub-District, Longhua District, Shenzhen, Guangdong, CN SHENZHEN HOPESTAR SCI-TECH CO., LIMITED		
Manufacturer				
Address		601-606, Floor 6, Building E, Yuanfen Industrial Park, Dalang Sub-District, Longhua District, Shenzhen, Guangdong, CN		

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Android tablet		
Models No.	:	WF1162T, See note (3)		
Model Different	:	All these models are the same PCB, layout and electrical circuit, the only different is appearance and color.		
TOTAL CONT		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: 16.62dBm 802.11g: 15.48dBm 802.11n (HT20): 15.45dBm	
Product		Antenna Gain:	1.14dBi FPC Antenna	
Description	B	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	:	DC Voltage Supply from DC Adapter(FJ-SW1202000U). DC Voltage supplied by Li-ion battery.		
Power Rating		Input:		
Software Version	:	N/A		
Hardware Version	:	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 v05.
- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Models No.

Models No.

WF7008, WF1008, WL1303, WL1506, WL1703, WB1901A, WB2101A, WB2401A, WB2801A, WB3701A, HP8280T, H108T, HP1012T, HP1020T, HP1162T, HP1332T, HP1411T, HP1413T, HP1561T, HP1562T HP1563T, HP1564T, HP1731T, HP1733T, HP1851T, HP1852, HP1853T, HP2151T, HP2153T, HP2401T, HP2403T, HP2701T, HP2703T, HP3201T, HP3203T, HP4301T, HP4303T, HP5501T, HP5503T, 708, 8078, 1001, ZA108T, ZA133T-64, ZA140T, ZA215T-64, YF-008G, SA133T-64



(4) Channel List:

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)					

(5) The Antenna information about the equipment is provided by the applicant.

1.3 Block Diagram Showing the Configuration of System Tested

5	EUT ADAPTER
1	
1	
5	EUT
5	

1.4 Description of Support Units

The EUT has been tested as an independent unit.

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	Normal Working with 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.



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	RFTestTool.exe		
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	55	55	58
IEEE 802.11g OFDM	30	30	32
IEEE 802.11n (HT20)	30	30	30

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})
	Level Accuracy:	
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Dedicted Emission	Level Accuracy:	
Radiated Emission	9kHz to 30 MHz	±4.60 dB
Dedicted Emission	Level Accuracy:	
Radiated Emission	30MHz to 1000 MHz	±4.40 dB
Dedicted Emission	Level Accuracy:	
Radiated Emission	Above 1000MHz	±4.20 dB



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. FCC Accredited Test Site Number: 854351.

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.



2. Test Summary

Standard Section		T = (11 = 11		_
FCC IC		Test Item	Judgment	Remark
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

N/A is an abbreviation for Not Applicable.



3. Test Equipment

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 Emissio	n Test	<u>.</u>		<u>.</u>	<u>-</u>
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. 14, 2018	Jul. 13, 2019
Pre-amplifier	Sonoma	310N	185903	Mar.17, 2018	Mar. 16, 2019
Pre-amplifier	HP	8449B	3008A00849	Mar.17, 2018	Mar. 16, 2019
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.17, 2018	Mar. 16, 2019
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducte	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	Sep. 15, 2018	Sep. 14, 2019
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 15, 2018	Sep. 14, 2019
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 15, 2018	Sep. 14, 2019
D'A D	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO26	Sep. 15, 2018	Sep. 14, 2019
	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO29	Sep. 15, 2018	Sep. 14, 2019
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO31	Sep. 15, 2018	Sep. 14, 2019
	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO33	Sep. 15, 2018	Sep. 14, 2019



4. Conducted Emission Test

- 4.1 Test Standard and Limit
 - 4.1.1Test Standard FCC Part 15.207
 - 4.1.2 Test Limit

Eroqueney	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		

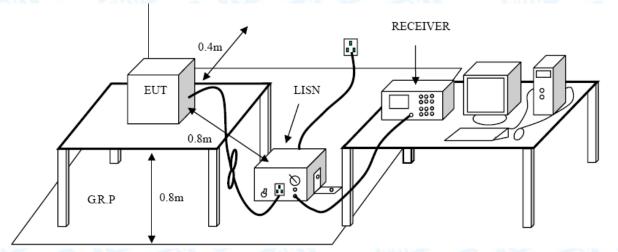
Notes:

(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.



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.



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
(MHz)Distance of 3m (dBuV/m)PeakAverageAbove 10007454

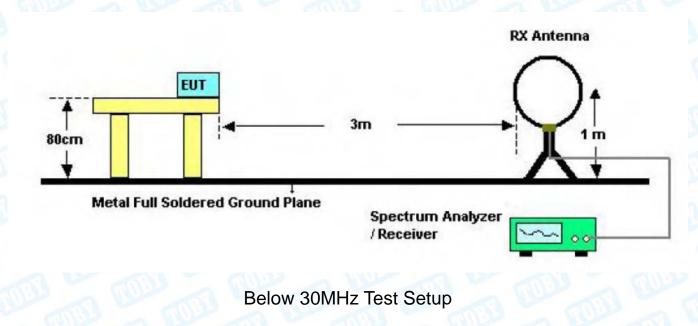
Note:

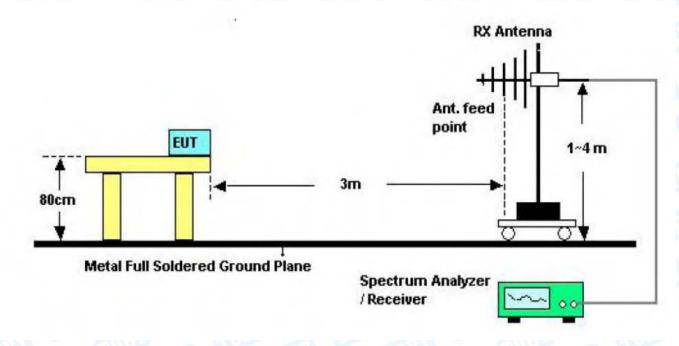
(1) The tighter limit applies at the band edges.

(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)



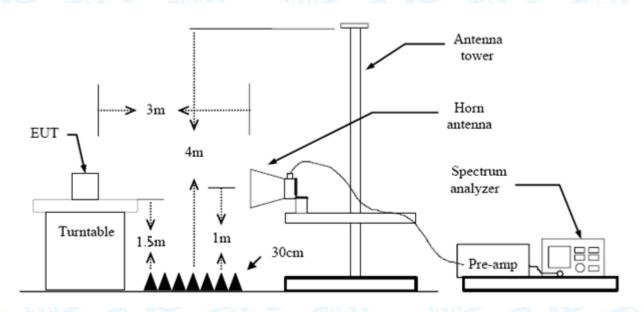
5.2 Test Setup





Below 1000MHz Test Setup





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) Measurements at frequency Below 1GHz. The EUT was placed on a rotating 0.8m 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.
- (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.

5.4 EUT Operating Condition

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

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.



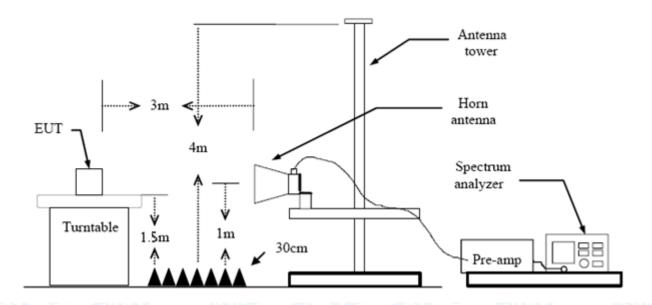
6. Restricted Bands Requirement

- 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	ncy 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 Below 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.



- (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.

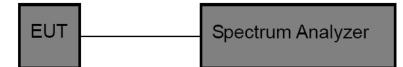


7. Bandwidth Test

- 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)						
Test Item	Test Item Limit Frequency Range(
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.

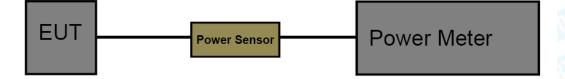


8. Peak Output Power Test

- 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)					
Test Item Limit Frequency Range(M					
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 v05. 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.

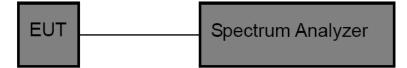


9. Power Spectral Density Test

- 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 v05.

- (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.



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 1.14dBi, 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 FPC Antenna. It complies with the standard requirement.

Antenna Type			
	Permanent attached antenna		
	Unique connector antenna		
	Professional installation antenna		

Attachment A-- Conducted Emission Test Data

TOBY

Temperature:	24 °	°C	R	elative Hur	midity:	56%	
Test Voltage:	AC	120V/60Hz		MUDE	2		
Terminal:	Line	Line					
Test Mode:	Norr	Normal working with TX B Mode					a W
Remark:	Only	/ worse cas	e is reported	d	N T	07	20
90.0 dBuV			1				
							P: VG:
× × ×	×		Hard Happy June Ward				
	"DUNANVIA						
		Man Manufactures of the second se			1		
40			Hand MANAMARK Unwell	Monthly Andrew Marchen	Lugalution an working	about March March 1	
Uwmu	\sim		I .idelin.	a neceletrite 166 esterna			mummerium
	174	han fraderik de ser ser ser ser ser ser ser ser ser se	nonth-half to all and a second a	- Maria and a frank and a second second	ender and the second dense		
							Ne marene winder I
-10							
0.150	0	.5	(MHz)		5		30.000
		Reading	Correct	Measure			
No. Mk. F	req.	Level	Factor	ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1 * 0.	1580	50.93	9.58	60.51	65.56	-5.05	QP
2 0.	1580	21.75	9.58	31.33	55.56	-24.23	AVG
3 0.	1980	48.47	9.58	58.05	63.69	-5.64	QP
4 0.	1980	24.62	9.58	34.20	53.69	-19.49	AVG
5 0.2	2180	46.99	9.58	56.57	62.89	-6.32	QP
6 0.2	2180	22.18	9.58	31.76	52.89	-21.13	AVG
7 0.1	2580	44.86	9.59	54.45	61.49	-7.04	QP
8 0.1	2580	20.67	9.59	30.26	51.49	-21.23	AVG
9 0.3	3220	41.87	9.59	51.46	59.65	-8.19	QP
	3220	19.42	9.59	29.01		-20.64	AVG
	4060	38.53	9.60	48.13	57.73		QP
	4060	24.35	9.60	33.95		-13.78	AVG
*:Maximum dat	a x:0		:over margir				
			orrect Fact				



Temperature:	24 ℃	Relative Humidity:	56%
Test Voltage:	AC 120V/60Hz	The start	
Terminal:	Neutral	- RUP AV	
Test Mode:	Normal working wi	ith TX B Mode	2 400
Remark:	Only worse case is	s reported	
90.0 dBuV			
KX XX XX			QP: AVG:
	A CONTRACTOR OF THE STATE		
40		Here with a second and a second	and and a second s
	"hard and a second	mpression and and the second and and and and and and and and and a	De Constantino de Con
-10			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	*	0.1539	51.42	9.58	61.00	65.78	-4.78	QP
2		0.1539	22.27	9.58	31.85	55.78	-23.93	AVG
3		0.1731	49.99	9.58	59.57	64.81	-5.24	QP
4		0.1731	23.43	9.58	33.01	54.81	-21.80	AVG
5		0.1980	48.42	9.58	58.00	63.69	-5.69	QP
6		0.1980	25.53	9.58	35.11	53.69	-18.58	AVG
7		0.2180	47.14	9.58	56.72	62.89	-6.17	QP
8		0.2180	22.92	9.58	32.50	52.89	-20.39	AVG
9		0.2660	44.38	9.59	53.97	61.24	-7.27	QP
10		0.2660	21.69	9.59	31.28	51.24	-19.96	AVG
11		0.3980	39.16	9.60	48.76	57.89	-9.13	QP
12		0.3980	25.60	9.60	35.20	47.89	-12.69	AVG
*:Ma	ximum	data x:C	ver limit !:c	over margin				
Emis	sion L	_evel= Rea	d Level+ Co	rect Factor				



Temperature:	24 ℃	R	elative Hum	idity:	56%	
Test Voltage:	AC 240V/6	60Hz	No.	TEL D	5	033
Terminal:	Line	The second	A.V	2	<u>_ (J</u>	110 2
Test Mode:	Normal wo	orking with TX B	Mode	a v	-	<u>8 5</u>
Remark:	Only worse	e case is reported	d Sa M	in the second	av	1000
90.0 dBuV					QP:	
	××××××××××××××××××××××××××××××××××××××	MA MANAMANA ANA ANA ANA ANA ANA ANA ANA	hill After Hill and good of a		AVG:	AWWWWWWW Pea
.10 0.150	0.5 Rea	(MHz) ding Correct	5 Measure-			30.000
No. Mk. F	req. Lev	<u> </u>		Limit	Over	
N	/Hz dB	uV dB	dBuV	dBuV	dB	Detector
1 0.1	580 31	.81 9.58	41.39	65.56	-24.17	QP
2 0.1	580 20	.02 9.58	29.60	55.56	-25.96	AVG
3 0.1	980 30	.75 9.58	40.33	63.69	-23.36	QP
4 0.1	980 18	.64 9.58	28.22	53.69	-25.47	AVG
5 0.3	339 28	23 9.59	37.82	59.35	-21.53	QP
6 0.3	339 20.	.68 9.59	30.27	49.35	-19.08	AVG
7 0.3	940 31	.66 9.60	41.26	57.98	-16.72	QP
8 * 0.3		.99 9.60	33.59	47.98	-14.39	AVG
		.89 9.60	39.49		-17.76	QP
		23 9.60	32.83		-14.42	AVG
		.99 9.60	33.59		-22.41	QP
12 0.5 *:Maximum data			25.82	40.00	-20.18	AVG



Temperature:	24 ℃		Relat	tive Humid	ity:	56%	
Test Voltage:	AC 240V	/60Hz	10	122	a 10		av
Terminal:	Neutral	E	RU V	- MUL		2 00	-
Test Mode:	Normal v	vorking with	TX B Mod	е	600	2	and a
Remark:	Only wor	se case is	reported	(The	1	100	2
90.0 dBuV							
40 XX MMM	ANT MA	, M. M.M	(Ma,Ms,AllumAlma,	MANN and Marken April		QP: AVG:	
-10 0.150	0.5		/// [/] ////////////////////////////////	5			30.000
	Re	ading (Correct	Measure-			
No. Mk. F			Factor	ment	Limit	Over	
Ν	MHz o	lBuV	dB	dBuV	dBuV	dB	Detector
1 0.1	1620 3	2.87	9.58	42.45	65.36	-22.91	QP
2 0.1	1620 2	1.81	9.58	31.39	55.36	-23.97	AVG
3 0.1	1740 3	1.62	9.58	41.20	64.76	-23.56	QP
4 0.1	1740 2	0.13	9.58	29.71	54.76	-25.05	AVG
5 0.3	3420 2	9.67	9.59	39.26	59.15	-19.89	QP
6 0.3	3420 2	1.80	9.59	31.39	49.15	-17.76	AVG
7 0.4	4060 3	2.88	9.60	42.48	57.73	-15.25	QP
8 0.4	4060 2	4.62	9.60	34.22		-13.51	AVG
		3.08	9.60	42.68		-14.65	QP
		4.58	9.60	34.18		-13.15	AVG
		6.30	9.61	35.91		-20.09	QP
	3380 1	7.20	9.61 r margin	26.81		-19.19	AVG



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

IHZ~1GHZ		(ALL)				6633	
Temperature	e: 24 °C			Relative Hum	idity:	56%	and a
Test Voltage	: AC 1	20V/60HZ	(III)		Mar P		
Ant. Pol.	Horiz	zontal	3	COD)	al	HOLE	A V
Test Mode:	TX B	Mode 2412	MHz	[070]	2	- M	12 and
Remark:	Only	worse case	is reported	Com Lan	III	100	
80.0 dBuV/m							
					(RF)FCC 1	5C 3M Radiation	
						Margin -6	ae [
				4	Б Х		
				Z 3	6		
30				1 MA / 1	ΛŤ		d. N.
			ot. A.	V ~~ ·	" Jaw	how when	
my		- Martin	mount	N			
	for more	NuMAN					
-20 30.000 40	50 60	70 80	(MHz)	300	400 5	500 600 700	1000.000
50.000 40	JU 60	Reading	Correct	Measure-	400 :	00 000 700	1000.000
No. Mk.	Freq.	Level	Factor		imit	Over	
	MHz	dBuV			BuV/m	dB	Detector
4 44			dB/m				
	97.8926	45.39	-19.93		43.50	-18.04	QP
2 2	27.6904	49.67	-18.42	31.25	46.00	-14.75	QP
3 24	42.5252	49.20	-17.60	31.60	46.00	-14.40	QP
4 ! 33	34.8589	55.08	-15.07	40.01	46.00	-5.99	QP
5 * 39	96.2412	54.85	-12.45	42.40	46.00	-3.60	QP
6 48	85.6093	40.03	-11.00	29.03	46.00	-16.97	QP

*:Maximum data x:Over limit !:over margin



Temperature:	24 ℃	TUL	Relative Hu	umidity:	56%	32
Test Voltage:	AC 120V/	/60HZ		Le la	13 V	110
Ant. Pol.	Vertical		RUSS	A U	(III)	YA
Test Mode:	TX B Mod	de 2412MHz		NOD -	a ve	1
Remark:	Only wors	se case is rep	orted	A RUE	2	A STATE
80.0 dBuV/m		· · · ·				
30 1 X		2 3	5 × ×	(RF)FC	C 15C 3M Radiatio Margin -t	
-20	60 70 80	<u> </u>	MHz)	300 400	500 600 700	1000.00
	req. Le	ading Corr evel Fac ^{3uV} dB/	ctor ment	Limit	Over	Detecto
1 46.9		3.02 -22.				QP
).62 -22.				QP
						-
		.17 -22.				QP
4 197.	8926 52	2.76 -19.	93 32.83	43.50	-10.67	QP
5 227.	6904 52	2.13 -18.	42 33.71	46.00	-12.29	QP
J 221.	0904 JZ		42 33.71	40.00	-12.23	9

*:Maximum data x:Over limit !:over margin



Above 1GHz

Гem	perature:	2	24 ℃				Relativ	e Humidit	y: 5	6%	
Fest	Voltage:	ŀ	AC 120	0V/60H	łΖ	LAN D	2 ~	1 Leve	-	2	1100
Ant.	Pol.	H	lorizor	ntal	33	-	W/Do		CO.	-	S. 12
Fest	Mode:	7	XBM	lode 2	412M	Hz		MUDD	1	1 800	
Rem	nark:		lo rep mit.	ort for	the er	nissior	n which m	ore than 10) dB b	elow the	prescribe
100.0	dBuV/m										
									(RF) FCC	PART 15C (F	PEAK)
		1 X							(RF) FC	C PART 15C	AVG1
50											
		2 X									
0.0											
L	00.000 3550.00	61	00.00	8650.00	1120	0.00 13	750.00 163	00.00 18850.0	0 214	00.00	26500.00 MH

No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4825.158	42.83	11.82	54.65	74.00	-19.35	peak
2	*	4825.158	28.92	11.82	40.74	54.00	-13.26	AVG



Iem	perature	e:	24 °										
Test	Voltage	:	AC	120V/	60HZ	11	1000	-	1 13	-	<u> </u>	101	
Ant.	Pol.		Verti	cal	ABY.		~ 5	SUP.	2	A WW	10		
Test	Mode:		TX E	B Moc	le 2412	2MHz	2	-	MUL	2	185		
Rem	ark:				for the d limit.	emis	sion v	vhich	more th	an 10 dB	below tl	ne	
100.0	dBu¥∕m												
										(RF) FCC	PART 15C (PEAK)	
		2 ×								(RF) FC	C PART 15C	AVGI	
50		1											
-		1 X											
0.0													
100	0.000 3550.	00 6	6100.00	8650.	00 11	200.00	13750.0	0 163	00.00 18	850.00 2140	00.00	26500.00 M	

No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4822.560	29.00	11.83	40.83	54.00	-13.17	AVG
2		4822.896	42.47	11.83	54.30	74.00	-19.70	peak



Temperature:	24 ℃			Relativ	ve Humidity:	56%	
Test Voltage:	AC 12	0V/60HZ	2010	1		<u>al</u> -	10
Ant. Pol.	Horizo	ntal		Willie	10	TON'	12
Test Mode:	TXB	Mode 2437	'MHz	1	MUL	3 100	-
Remark:		oort for the ibed limit.	emissior	n which m	nore than 10 dE	3 below the	
100.0 dBuV/m							
					(RF) FC	C PART 15C (PEAK	0
1					(BE) E	CC PART 15C JAVG	a
50 ×							
2 X							
0.0	6100.00	8650.00 112	00.00 1375	0.00 16300).00 18850.00 214	400.00 2	6500.00 1

No.	Mk.	Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.300	42.65	11.92	54.57	74.00	-19.43	peak
2	*	4874.330	29.11	11.92	41.03	54.00	-12.97	AVG



Tem	peratu	re:	24 °	С			Relat	ive Hur	nidity:	56%	
Test	Voltag	ge:	AC	120V	/60HZ	All a		10	-	20 2	110
Ant.	Pol.		Verti	ical	(B)	-	Un	2	a	100	VP
Test	Mode	:	TX E	3 Mo	de 2437	7MHz	-	MUL	2	1 Ver	-00
Rem	ark:				t for the d limit.	emission	which	more th	an 10 dB	below the	Con the
100.0	dBuV/m										
-											
									(RF) FCC	PART 15C (PEA	0
		1 X							(RF) FC	C PART 15C (AV)	3)
50		2 X									
0.0											
100	10.000 355	50.00 6	100.00	8650	1.00 112	200.00 1375	D.00 163	00.00 18	850.00 214	00.00	26500.00 MH
No	. Mk.	Fre	q.		ading evel	Correc Factor		asure- ent	Limit	Over	
		MH	Z	d	BuV	dB/m	dB	uV/m	dBuV/m	dB	Detecto
1		4872.	728	42	2.88	11.91	54	4.79	74.00	-19.21	peak
2	*	4874.	906	29	9.17	11.91	4′	1.08	54.00	-12.92	AVG



Femperat	ure:	24 ℃			Relati	ve Humidity:	56%	
Test Voltage: AC 120V/60HZ							ST -	101
Ant. Pol. Horizontal							00	L P
Fest Mode	e :	TXBN	/lode 246	2MHz		MUSS	a ve	-
Remark:			ort for the bed limit.		which n	nore than 10 d	B below the	
100.0 dBuV/i	<u>n</u>							
						(BE) F	CC PART 15C (PEA)	0
	1							
50	×					(HF)	FCC PART 15C (AVC	i]
	2 X							
0.0								
1000.000 3	550.00 6	100.00 8	650.00 11	200.00 13750).00 1630	0.00 18850.00 2	1400.00 2	26500.00 M

No). Mk.	. Freq.	Level	Factor	ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.538	42.63	12.01	54.64	74.00	-19.36	peak
2	*	4923.538	29.38	12.01	41.39	54.00	-12.61	AVG



Temperati	ure:	24 ℃			Relativ	e Humidity:	56%			
Fest Volta	ge:	AC 120V/60HZ								
Ant. Pol.		Vertical								
Fest Mode	: :	TX B Mode 2462MHz								
Remark:		No report for the emission which more than 10 dB below the prescribed limit.								
100.0 dBu¥/r	n									
						(RF) FC	CC PART 15C (PEAK)			
50	2 X					(RF) I	CC PART 15C (AVG)			
50	1 X									
0.0		100.00 86	50.00 112	00.00 1375	0.00 16300.	00 18850.00 21	400.00 26500.00			

No. Mk.		. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4923.712	29.46	12.01	41.47	54.00	-12.53	AVG
2		4925.428	43.12	12.01	55.13	74.00	-18.87	peak



Temperature:	24 °C		Relative Humidity:	56%
Fest Voltage:	AC 12	0V/60HZ	ma man	
Ant. Pol.	Horizo	ontal	RUP AU	
Fest Mode:	TX G	Mode 2412MHz		2 100
Remark:		oort for the emiss ibed limit.	sion which more than 10 d	B below the
100.0 dBuV/m				
			(RF) F	CC PART 15C (PEAK)
	1		(RF)	FCC PART 15C (AVG)
50	2			
	2 X			
0.0				

No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.232	42.23	11.83	54.06	74.00	-19.94	peak
2	*	4825.362	28.97	11.82	40.79	54.00	-13.21	AVG



Temperate	ure:	24 °C				Relative	Humidity:	56%	
Test Volta	ge:	AC 1	20V/60	HZ	100		No.	19	61
Ant. Pol.		Vertic	cal		25	10000	30	-	200
Test Mode	e :	TX G	Mode	2412MH	z	5		0 V	-
Remark:			eport foi cribed li		ssion w	hich mor	e than 10 d	B below	the
100.0 dBuV/r	n								
							(RF) F	CC PART 15C	(PEAK)
	2 X						(RF)	FCC PART 15	C (AVG)
50									
	1 X								
0.0									
1000.000 3	550.00 6	100.00	8650.00	11200.00	13750.0	D 16300.00	18850.00 2	1400.00	26500.00 🕨

No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4822.986	28.99	11.83	40.82	54.00	-13.18	AVG
2		4824.294	43.16	11.83	54.99	74.00	-19.01	peak



Гen	nperature:	24 ℃		Relative Humidity:	56%
Tes	t Voltage:	AC 120)V/60HZ		
Ant	. Pol.	Horizor	ntal	A RUB A	
Tes	t Mode:	TXGN	lode 2437MH	z	2 400
Rer	nark:		ort for the emi bed limit.	ission which more than 10 o	B below the
100.0) dBuV/m				
				(RF)	FCC PART 15C (PEAK)
	1			(RF	FCC PART 15C (AVG)
50	X				
	2 X				
0.0	00.000 3550.00	6100.00 80	650.00 11200.00	13750.00 16300.00 18850.00	21400.00 26500.00 M

No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.126	42.27	11.92	54.19	74.00	-19.81	peak
2	*	4874.786	29.10	11.92	41.02	54.00	-12.98	AVG



emp	erature:	24 ℃			Relativ	ve Humidity:	56%	
est V	/oltage:	AC 120	V/60HZ	aum		1 Leve	- 1 P	E.II
nt. P	Pol.	Vertical			MUDE		E.C.	P
est N	lode:	TX G M	lode 243	7MHz		MUS	a	-
Rema	rk:		ort for the bed limit.	emissior	n which m	nore than 10 d	B below the	2
00.0	dBuV/m							
						(86) 50	CC PART 15C (PEAK)	
						(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	JU FARTE ISU (FEAK)	
	1					(05)	FCC PART 15C (AVG)	
50	×						FUC PART TOC (AVG)	
	2 X							
0.0								
	000 3550.00	6100.00 86	650.00 112	200.00 1375	0.00 16300	0.00 18850.00 21	400.00 2650	D. 00 MI

NO.	WIK.	Freq.	Level	Factor	ment	LIITIIL	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.156	42.83	11.92	54.75	74.00	-19.25	peak
2	*	4875.302	29.14	11.91	41.05	54.00	-12.95	AVG



emperature:	24	°C			Relat	ive Humidity	y: 56%	
est Voltage:	A	C 120V	/60HZ	Map	~		1200	1001
Ant. Pol.	Н	orizonta	al		alle		and the second	20
est Mode:	Т	G Mo	de 2462	2MHz	1	MUSS	~ 0	
Remark:			t for the ed limit.	emissior	n which	more than 10) dB below	the
00.0 dBu¥/m								
						(R	F) FCC PART 150	C (PEAK)
	1 X					(RF) FCC PART 1	5C (AVG)
50	2 X							
	×							
0.0	6100.0	0 8650	00 113	00.00 1375	50.00 163	D0.00 18850.00	21400.00	26500.00 M

No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4924.342	42.66	12.01	54.67	74.00	-19.33	peak
2	*	4924.984	29.39	12.01	41.40	54.00	-12.60	AVG



	ire:	24 ℃			Relativ	/e Humidity:	56%
est Voltag	ge:	AC 120	0V/60HZ	(UD)	_		
Ant. Pol.		Vertica	anal		W1055	20	
est Mode	:	TXGN	Node 246	32MHz	1	MUSS	2
Remark:			ort for the bed limit.		which m	nore than 10 dl	B below the
00.0 dBuV/m							
						(0.0) 50	
							C PART 15C (PEAK)
	1 ×					(RF) F	CC PART 15C (AVG)
50	2						
	×						
0.0	50.00 6	100.00 8	650.00 11	200.00 1375	D.00 16300	.00 18850.00 21	400.00 26500.00 M

		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4924.408	43.72	12.01	55.73	74.00	-18.27	peak
2	*	4924.408	29.39	12.01	41.40	54.00	-12.60	AVG



rempe	erature:	24 ℃			Relativ	e Humidity:	56%	
Test V	oltage:	AC 12	20V/60HZ	MAD	-	Les 1	S 2	5
Ant. P	ol.	Horizo	ontal		WAR.	10	-	2
Test M	lode:	TX N(HT20) Mc	de 2412M	Hz	AUDA	a V	-
Remai	'k:		port for the ribed limit.		which m	ore than 10 d	B below th	e
100.0 d	Bu¥/m							
						(RF) FI	CC PART 15C (PI	EAK)
	1 ×					(RF)	FCC PART 15C /	WG)
50	2 X							
	×							
0.0								
1000.0	00 3550.00	6100.00	8650.00 11	200.00 13750	.00 16300.	00 18850.00 21	400.00	26500.00

1		4823.982	42.71	11.83	54.54	74.00	-19.46
2	*	4823.982	29.00	11.83	40.83	54.00	-13.17

peak AVG



remt	perature:	2	24 °C			Rela	tive Humidit	y:	56%	
Test	Voltage:	A	C 120	V/60HZ	100	2	2 44	-	20	61
Ant.	Pol.	١	/ertical	and		(AND		6	-	R
Test	Mode:	1	X N(H	T20) Mo	ode 2412	MHz	MUSS	-	N REG	~
Rem	ark:			ort for th bed limit		on which	more than 1	0 dB	below th	e
100.0	dBu¥/m									
									DADT 150 (0	
							IF	IFJ FLL	PART 15C (PI	EAKJ
50	Y							(RF) FCC	C PART 15C /	AVG)
	2	e K								
0.0						_				
	0.000 3550.00	6100	.00 86	50.00 1	1200.00 13	750.00 16	300.00 18850.00	2140	0.00	26500.00

NO.	. MK	. Freq.	Level	Factor	ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.598	42.30	11.83	54.13	74.00	-19.87	peak
2	*	4825.242	28.96	11.82	40.78	54.00	-13.22	AVG



Ien	nperatu	re:	24 °	С			Re	elative H	lumidity:	56%	
Tes	t Voltag	e:	AC	120V/6	OHZ	02		2	Lun -	1200	ind.
Ant	. Pol.		Hori	zontal	33		100	120	2	-	5 C
Tes	t Mode:		1 XT	N(HT20) Moc	le 243	7MHz			3 V	
Rer	nark:			eport fo		emissi	ion whi	ch more	e than 10 d	dB below	the
100.0) dBuV/m										
									(RF)	FCC PART 150	(PEAK)
		Z X							(BF	FCC PART 1	ic (AVG)
50											
		1 X									
0.0											
10	00.000 3550	D.00 E	6100.00	8650.00	1120	0.00 1	3750.00	16300.00	18850.00	21400.00	26500.00 M

No.	Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4872.992	29.06	11.91	40.97	54.00	-13.03	AVG
2		4874.558	43.28	11.92	55.20	74.00	-18.80	peak



Temp	erature	:	24 °	С			Relat	ive Hur	nidity:	56%	
Test \	/oltage:		AC	120V	/60HZ	MOD	-	1 13	-		1.0
Ant. F	Pol.		Verti	ical	and		W/D	2	2 0		3.45
Test N	Node:		TXN	N(HT	20) Mo	de 2437M	Hz	aus	2	2 100	
Rema	rk:			- A	t for the ed limit.		which	more th	an 10 de	B below the	
100.0	dBuV/m										
									(RF) FC	C PART 15C (PE)	AK)
		2 X							(RF) F	CC PART 15C A	/6)
50		1 X									
0.0											
1000.0	000 3550.00	06	100.00	8650	.00 11	200.00 13750).00 163	00.00 184	850.00 21	400.00	26500.00 M
No.	Mk.	Fre	eq.		ading evel	Correc Facto		asure- ient	Limit	Over	
		MH	lz	d	lBuV	dB/m	dE	3uV/m	dBuV/	m dB	Detec

		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4874.720	29.07	11.92	40.99	54.00	-13.01	AVG
2		4874.792	42.56	11.92	54.48	74.00	-19.52	peak



1

2

remper	ature:	24 ℃			Relative H	lumidity:	56%	
Test Vo	Itage:	AC 120	0V/60HZ	MUP		-	2 5	101
Ant. Po	J.	Horizo	ntal		RUDE	a W	100	a (2
Test Mo	ode:	TX N(F	1T20) Mo	de 2462MF	łz	20 ~	N ROOM	
Remark	c :		ort for the bed limit.	emission	which more t	han 10 dB	below the	e
100.0 dBu	uV/m							
						(0.0) 500		
							PART 15C (PE	
	1 ×					(RF) FC	C PART 15C #	WG)
50	2 X							
	×							
0.0								
	D 3550.00 B	100.00 8	650.00 112	200.00 13750.	00 16300.00	8850.00 2140	0.00	26500.00 M

12.01

12.01

54.07

41.35

74.00

54.00

-19.93

-12.65

peak

AVG

42.06

29.34

Emission Level= Read Level+ Correct Factor

4922.968

4922.968



rem	perature:		24 ℃				Rela	ative H	umidity:	56%	
Test	Voltage:		AC 12	20V/60H	ΗZ	100	1	1 1	-	S	101
Ant.	Pol.		Vertic	al	3	25	400	2	3 100	-6	3000
Test	Mode:		TX N(HT20)	Mode 2	462M⊦	Iz	au	2	1 600	
Rem	ark:			port for ribed lir		ission v	which	more th	an 10 dB	below th	e
100.0	dBuV/m										
									(RFJ FCC	PART 15C (P	EAKJ
		1 X							(BF) FC	C PART 15C (AVG1
50											
		2 X									
0.0											
100	0.000 3550.00	61	00.00	8650.00	11200.00	13750.0	0 163	00.00 18	850.00 2140	0.00	26500.00 N

NO	. MK	. Freq.	Level	Factor	ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4922.572	44.08	12.01	56.09	74.00	-17.91	peak
2	*	4925.032	29.40	12.01	41.41	54.00	-12.59	AVG



Attachment C-- Restricted Bands Requirement Test Data

Temperature:	24 °C		Relative Hu	imidity:	56%	
Test Voltage:	AC 120V/60HZ	and a	ann -	2	200	-
Ant. Pol.	Horizontal		29	GOD	-	011
Test Mode:	TX B Mode 241	2MHz	-		1997	-
Remark:	N/A			(and	6	a_i
120.0 dBuV/m						
70			1		4 3 ART 15C (PEAK PART 15C (AVE	
20.0	0 2347.00 2357.00 23	67.00 2377.00	2 2387.00 23	87.00 2407.	00 2	427.00
	Reading	Correct	Measure-			
No. Mk.	Freq. Level	Factor	ment	Limit	Over	
	MHz dBuV	dB/m	dBuV/m	dBuV/m	dB	Dete
1 23	390.000 49.45	4.35	53.80	74.00	-20.20	ре
2 23	390.000 39.20	4.35	43.55	54.00	-10.45	A
			101.98	_ Fundamenta	I Frequency	A١
3 * 24	11.200 97.57	4.41	101.90			



Tem	peratu	ire:	24 ℃	TUP		Relati	ive Hur	nidity:	56%	33
Test	t Volta	ge:	AC 120	0V/60HZ	MAR	~	U	-	3	110
Ant.	Pol.	,	Vertica	ang s	-	RUP	-	a	00	
Test	Mode	:	TX B M	lode 241	2MHz		MUL		No.	-
Rem	nark:		N/A	and a		MBY.	-	aus	-	U
120.0	dBuV/m	1								
70							1 X 2 X		4 3 X PART 15C (PEAL	
20.0	27.000 23	37.00 234	7.00 2	357.00 23	67.00 2377.	00 2387	7.00 23	97.00 240	7.00	2427.00 MF
No	o. Mk.	Freq		eading Level	Correct Factor		sure- ent	Limit	Over	
		MHz		dBuV	dB/m	dBu	uV/m	dBuV/m	dB	Detecto
1		2390.00	00	48.26	4.35	52	2.61	74.00	-21.39	peak
2		2390.00	00	36.85	4.35	41	.20	54.00	-12.80	AVG
	*	2411.40	00	98.51	4.41	102	2.92	- Fundament	al Frequency	AVG
3										



Temp	peratu	ire:	24 °	C	and a		Relat	ive Hu	imidity:	56%	132
Test \	Voltag	ge:	AC 1	120V/60	HZ	100	1		200	3 2	TTO
Ant. I	Pol.		Horiz	zontal		2	AUP	2	a W	(MR)	
Test	Mode	:	TX E	B Mode 2	2462MH	Ηz		RU	2	1 Mar	-
Rema	ark:		N/A	- CON		10	183		600	-	No.
120.0	dBuV/m										
70		2		γ	3 4/~~~~~~					PART 15C (PEA	
20.0 2449	.000 24	59.00 2	469.00	2479.00	2489.00	2499.0	0 250	9.00 2	2519.00 252	9.00	2549.00 MH
No.	. Mk.	Fre	q.	Readi Leve		Correct Factor		sure- ent	Limit	Over	
		MH	z	dBuV		dB/m	dBi	uV/m	dBuV/m	dB	Detector
1	*	2462.6	600	99.03	3 4	4.53	10	3.56	Fundamenta	al Frequency	AVG
2	Х	2463.0	000	103.6	2	4.53	10	8.15	 Fundamenta	al Frequency	peak
3		2483.	500	49.19	9 4	4.58	53	3.77	74.00	-20.23	peak
				37.92	2		42		54.00	-11.50	AVG



Temp	eratu	re:	24 °	C		Relative Hu	imidity:	56%	39
Test \	/oltag	ge:	AC	120V/60HZ	Linn	AV	10	3	110
Ant. F	Pol.		Vert	ical		RUDE	aw	(OB)	
Test N	Node	:	TX E	B Mode 246	62MHz	5	2	1 Mar	-
Rema	rk:		N/A	(BOD)		TBU	ELOP3	-	No.
120.0	dBuV/m								
70	/			3 X X				PART 15C (PEA)	
20.0	000 240	<u>30 00 2</u>	470.00	2480.00 2	490.00 2500.0	10 2510.00 2	520.00 2530.	00 3	2550.00 MH
	Mk.			Reading		Measure-		Over	
140.	IVIIX.	мн	·	dBuV		dBuV/m	dBuV/m	dB	Detecto
4	*				dB/m				
1		2461.		97.33	4.53	101.86	Fundamental	Frequency	AVG
2	Х	2463.	000	102.09	4.53	106.62	Fundamental	Frequency	peak
3		2483.	500	47.87	4.58	52.45	74.00	-21.55	peak
									AVG



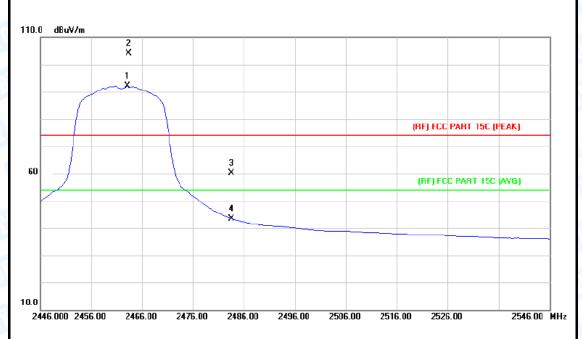
Temp	eratu	re:	24	°C			Relat	tive Hu	midity:	56%	
Test \	/oltag	ge:	AC	120V	/60HZ	MUD	2	10	in the second se	63 V	110
Ant. F	Pol.		Hori	izonta	al 💧		W/DE	2	aU	-	3 2
Test N	Node	:	TX	G Mo	de 2412	2MHz	-	MU	2	3 19	100
Rema	rk:		N/A	-		6	IL ST	-	au		Rec.
110.0	dBu¥∕m										
									3 X		
									4		
									×		
									(RF) FC	C PART 15C (PE	AKI
											-
60							1		1		
							×	-/	/ (RF) F	CC PART 15C A	<u>(a)</u>
						2					
			TX G Mode N/A								
10.0											
2332.	000 234	12.00 2	352.00			2.00 238			402.00 24	12.00	2432.00 MH
No	Mk.	Err	o a		-	Correc Facto		asure-	Limit	Over	
NO.	IVIN.		· ·			Facto		ient			
		MH				dB/m		8uV/m	dBuV/n		Detecto
1		2390.	000	52	2.79	4.35	5	7.14	74.00	-16.86	i peak
2		2390.	000	- 3	8.25	4.35	4	2.60	54.00) -11.40	AVG
3	Х	2410.	600	98	8.73	4.41	10	3.14	Fundame	ntal Frequency	peak
	*	2410.			6.48	4.41		0.89			AVG



Tem	perati	ure:	24	°C			Rel	ative I	Humidity	: 56%	
Test	Volta	ge:	AC	120V/60	HZ	MIL	-	21		100	100
Ant.	Pol.		Vert	ical	83	-	WITE	2	S V		a P
Test	Mode):	TX	G Mode	2412	2MHz	-	11	100	3 V	-00
Rem	ark:		N/A	-		6	ARY.		100	20 -	1 USE
110.0	dBuV/m	1								2	
										3 X	
										4 ×	
									\int		
									(BF) F	CC PART 15C (F	EAKJ
60							1			FCC PART 15C	
								/			
							Š	e la			
┢	1.000 2341.00										
-											
10.0 233	1.000 23	41.00	2351.00	2361.00	237	1.00 2381.	00 239	91.00	2401.00 2	411.00	2431.00 MH
				Readi	na	Correct	Mea	asure-			
No	. Mk.	Fr	eq.	Leve		Factor		ent	Limit	Over	
		М	Hz	dBuV	/	dB/m	dB	uV/m	dBuV/	m dB	Detecto
1		2390	.000	53.4	0	4.35	5	7.75	74.0	0 -16.2	5 peak
2		2390	.000	38.7	2	4.35	43	3.07	54.0	0 -10.9	
3	Х	2410		100.3		4.41		4.80		ental Frequenc	
4	*	2413		88.1		4.41				ental Frequenc	-
+		2413	.400	00.1.	2	4.41	9.	2.53			AVG



Temperature:	24 ℃	Relative Humidity:	56%
Test Voltage:	AC 120V/60HZ		
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2463.200	87.69	4.53	92.22		I Frequency	AVG
2	Х	2463.400	99.52	4.53	104.05	Fundamenta	Frequency	peak
3		2483.500	55.50	4.58	60.08	74.00	-13.92	peak
4		2483.530	38.86	4.58	43.44	54.00	-10.56	AVG



Tempo	eratu	re:	24	°C	Ann	A	Relative	e Humidity:	56%	13.9
Test V	/oltag	je:	AC	120V	//60HZ	mue	~	and the second	3 2	110
Ant. P	ol.		Vert	ical	A B	5	RUPE	2	TOP.	
Test N	lode		TX	G Mo	de 246	2MHz			1 Ver	-00
Rema	rk:		N/A	A	63		BU	- RUD		UL
110.0	dBu¥∕m									
		2 X								
		1								
	(_ ~ _								
	+							(RF) FCC	PART 15C (PEA	.K)
	1									
60					- 3					
					3 X			(RF) FC	C PART 15C AV	G)
					4					
					~					
10.0										
2447.0	000 24	97.UU 24	67.00	2477		87.00 2497.00		2517.00 2527	.uu	2547.00 MH
No.	Mk.	Fre	q.		ading evel	Correct Factor	Measur ment	e- Limit	Over	
		MH	z	d	BuV	dB/m	dBuV/n	n dBuV/m	dB	Detecto
1	*	2460.8	300	8	7.07	4.53	91.60	Fundamental	Frequency	AVG
2	Х	2464.4	100	9	9.70	4.53	104.23	3 Fundamental	- Frequency	peak
3		2483.5	500	5	1.03	4.58	55.61	74.00	-18.39	peak
4		2483.5	500	3	7.28	4.58	41.86	54.00	-12.14	AVG



Tem	perat	ure:	24	°C	W W B	-	Rela	ative H	lumidity	/: 5	6%	13
Test	t Volta	ge:	AC	120V/	60HZ	mus	1	V		13	4 3 C PART 15C (PERK) CC PART 15C (PERK) 10.00 2430.00 MHz OVER	
Ant.	Pol.		Hor	izontal			WID	2	SI V			
Test	Mode	: :	TX	N(HT2	20) Mo	de 2412M	IHz	MU	2	5	Aler-	-00
Rem	nark:		N/A	-	3	6	MB1	-	Ser.	22	~	100
110.0	dBu∀/n	n										
										4 ×		
										з		
-										_×_		
-									(BF) F	CC PAR	F 15C (PEA	K]
60								1 X				
┝		ark: dBuV/m 000 2340.00 2 Mk. Fre MH							(RF)	FCC PA	RT 15C (AV	61
							į	2				
-												
-												
-												
10.0		M0.00		2360.0		70.00 2380.	00 000	0.00 2	400.00 2			
23.	50.000 2.					Correct						2450.00 10
No	. Mk	Fre	q.	Lev	ding vel	Factor		isure- ent	Limit		Over	
		MH:	Z	dB	uV	dB/m	dB	uV/m	dBuV/	m	dB	Detecto
1		2390.0	000	53.	.92	4.35	58	3.27	74.0	0 -	15.73	peak
2		2390.0	000	38.	.44	4.35	42	2.79	54.0	0 -	11.21	AVG
3	*	2410.6	600	85.	98	4.41	90).39	Fundame	ental Fro	equency	AVG
4	Х	2412.8	000	98	77	4.41	40	3.18			aguency	peak



Tem	perat	ure:	24	°C			Relativ	e Hu	midity:	56%	133
Test	: Volta	ge:	AC	120V/60	DHZ	MUD	~	U	10	20	100
Ant.	Pol.		Vert	ical	8	-	RUPE	-	3 100	00	
Test	Mode	: :	TXI	N(HT20) Mo	de 2412MF	Ηz	AU		1 Sec	-
Rem	nark:		N/A	- COL		6	BU	-	and	-	USP -
110.0	dBuV∕r	n								_	
										4 X	
									3	3	
		_								····	
									(RF) FCC	PART 15C (PEA	K]
60							1 X			PART 15C (AV	
								-/	(mr)rtt	, FANT TOC AV	
	30.000 2340.00 0. Mk. F 239 239						2 X				
	t Mode: nark: dBuV/m 30.000 2340.00 2390 2390 2390 2390 2390										
10.0	20 000 - 24	240.00 2	350.00	2360.00	22	70.00 2380.0	0 2390.0	<u>10 24</u>	100.00 2410.	00	2430.00 Mi
				Read		Correct	Meas				
No	o. Mk	. Fre	q.	Leve	-	Factor	mei		Limit	Over	
		MH	Z	dBu	/	dB/m	dBu\	//m	dBuV/m	dB	Detecto
1		2390.	000	55.9	4	4.35	60.2	29	74.00	-13.71	peak
2		2390.	000	39.2	4	4.35	43.	59	54.00	-10.41	AVG
3	*	2410.	600	87.8	2	4.41	92.2	23	- Fundamental	Frequency	AVG
				100.4		4.41	104		-	I Frequency	peak



Temp	eratu	ire:	24 °	°C	LAT R		1	Relati	ive Hu	imidity	y:	56%	13	
Test \	Voltag	ge:	AC	120V/	60HZ	an.	2	-	10	-	1	3	2	110
Ant. I	Pol.		Hori	zonta		-	5	MILE P	~	J V		-01		2
Test I	Mode	:	1 X T	N(HT2	20) Mo	de 2462	2MH	z	NUS	2	<	1 Mar	-	
Rema	ark:		N/A	-	5		1160	BU	-	au	22	-		
110.0	dBu¥/m													_
		2	2											
		1 X												
				1										
				++						(RF)	FCC P	ART 15C (PE	AK]	
	- [
60					3 X									
				$-\langle$	^	•				(RF) FCC	PART 15C (A	WG)	_
					4 X									
			_								-			
10.0				0.475		AF 03 0		0505.0	0.054				0545.0	
2445	.000 24	55.UU 24	65.00	2475.	JU 248	85.00 2 [,]	495.00	2505.0	10 251	5.00	2525.0	IU	2545.0	U MH
				Rea	ding	Corre	ect	Meas	ure-					
No.	Mk.	Free] .	Le	vel	Fact	or	mei	nt	Limi	t	Over		
		MHz		dB	luV	dB/m	ı	dBu\	//m	dBuV	//m	dB	Det	ecto
1	*	2463.2	00	86	.76	4.53	3	91.3	29	Fundam	ental	Frequency	A	VG
2	Х	2464.0	00	99	.20	4.53	3	103.	.73	Fundam	ental	Frequency	р	eak
3		2483.5	00	53	.21	4.58	3	57.	79	74.0	00	-16.2	1 p	eak
<u> </u>														



Temperature:	24 ℃			Relative H	lumidity:	56%	33	
Test Voltage:	AC 12	AC 120V/60HZ						
Ant. Pol.	Vertic	Vertical						
Test Mode:	TX N	(HT20) Mo	de 2462M	Hz	Jun -		-	
Remark:	N/A	(BO)		TBU T	a Paulo	1	Con the	
110.0 dBuV/m								
	2 X							
	1							
	×	<u>_</u>						
		\rightarrow			(BF) FCC	PART 15C (PEAK	a	
					()			
60			3					
			×		(RF) FC	C PART 15C (AVC	i)	
			4					
			*					
10.0								
2443.000 2453.00	2463.00	2473.00 248	33.00 2493.0	0 2503.00	2513.00 252	3.00 2	2543.00 MI	
		Reading	Correct	Measure)-			
No. Mk. F	req.	Level	Factor	ment	Limit	Over		
N	IHz	dBuV	dB/m	dBuV/m	dBuV/m	n dB	Detecto	
1 * 2460	0.400	86.47	4.53	91.00	Fundamenta	al Frequency	AVG	
2 X 2460	0.600	98.28	4.53	102.81	Fundamenta	al Frequency	peal	
3 2483	3.500	52.77	4.58	57.35	74.00		peal	
4 2483	3.500	37.22	4,58	41.80	54.00	-12.20	AVG	
. 2100		J. LL			01.00	.2.20		



(2) Conducted Test

mperature:	24 ℃	Relative Humidity:	56%		
est Voltage:	AC 120V/60HZ				
est Mode:	TX B Mode 2412MHz / TX B Mode 2462MHz				
emark:	The EUT is programed	in continuously transmittin	g mode		
	um Analyzer - Swept SA				
		Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100	03:19:33 PM Dec 17, 2018 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N		
	IFGain:LowAt	ten: 30 dB Mkr	1 2.411 5 GHz		
10 dB/div	Ref 23.63 dBm		8.904 dBm		
3.63		utered a second s	Manna		
-6.37			-11.16 dBm		
-26.4		a data ba	ч. М.,		
-36.4		Mar			
-56.4	en gen mit der den stellte er finder den men stellte stellte stellte stellte stellte stellte stellte stellte st I stellte stellt				
Start 2.3270			top 2.42700 GHz		
#Res BW 10		0 kHz Sweep 9.6 FUNCTION FUNCTION WIDTH FUNCTION	00 ms (1001 pts)		
1 N 1 2 N 1 3 N 1	f 2.400 0 GHz -44.592 dBm				
	f 2.389 0 GHz -46.288 dBm		E		
7					
9					
10			-		
		m STATUS			
MSG	um Anakozer - Swent SA	III STATUS	, ,		
11 MSG III Keysight Spectru LX R	um Analyzer - Swept SA RF 75 Ω AC CORREC SENSE: q 2.497000000 GHz	NT ALIGN AUTO AUTO AVITO AVIT	03:27:09 PM Dec 17, 2018 TRACE 12, 34,5 5		
11 MSG III Keysight Spectru LX R	RF 75 Ω AC CORREC SENSE: q 2.497000000 GHz PNO: Fast Tri	NT ALIGN AUTO Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100 ten: 30 dB	03:27:09 PM Dec 17, 2018 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P NNNNN		
11 MSG MSG MSG MSG Center Fred 10 dB(dby B	RF 75 Ω AC CORREC SENSE: q 2.497000000 GHz	NT ALIGN AUTO Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100 ten: 30 dB	03:27:09 PM Dec 17, 2018		
11 Keysight Spectru VM R Center Fred 10 dB/div F 10 dB/div F	RF 75 Ω AC CORREC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low At	NT ALIGN AUTO Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100 ten: 30 dB	03:27:09 PM Dec 17, 2018 TRACE 2 3 4 5 5 TYPE MWWWWW DET P NNNNN 1 2.461 5 GHz		
11 × Msc Msc Msc Center Free 10 dB/div F Log	RF 75 Ω AC CORREC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low At	NT ALIGN AUTO Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100 ten: 30 dB	03:27:09 PM Dec 17, 2018 TRACE 2 3 4 5 5 TYPE MWWWWW DET P NNNNN 1 2.461 5 GHz		
11 r Msc IM Keysight Spectru IM R Center Free 10 dB/div 13.6 3.60	RF 75 Ω AC CORREC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low At	NT ALIGN AUTO Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100 ten: 30 dB	03:27:09 PM0ec 17, 2018 TRACE 12 3 4 3 6 TYPE DET P NUNNN DET P NUNNN 1 2.461 5 GHz 8.399 dBm		
11 x Sci MSC Center Free 10 dB/div 9 13.6 3.60 -6.40 -16.4 -26.4 -36.4	RF 75 Q. AC CORREC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low Tri At Ref 23.60 dBm	INT ALIGN AUTO Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100 ten: 30 dB MKr	03:27:09 PM0ec 17, 2018 TRACE 12 3 4 3 6 TYPE DET P NUNNN DET P NUNNN 1 2.461 5 GHz 8.399 dBm		
11 × C MSG Image: Content Free 10 dB/div 13 6 3 60 -6.40 -16.4 -26.4	RF 75.9. AC CORPEC SENSE: Q 2.497000000 GHz PNO: Fast IFGain:Low At Ref 0ffset 3.6 dB Ref 23.60 dBm	NT ALIGN AUTO Avg Type: Log-Pwr g: Free Run Avg Hold:>100/100 ten: 30 dB	03:27:09 PM0ec 17, 2018 TRACE 12 3 4 3 6 TYPE DET P NUNNN DET P NUNNN 1 2.461 5 GHz 8.399 dBm		
11 × C MSG Image: Content Free 10 dB/div 13 6 3.60 -6.40 -16.4 -26.4 -46.4	RF 75 Q. AC CORREC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low Tri At Ref 23.60 dBm	INT ALIGN AUTO G: Free Run Avg Type: Log-Pwr ten: 30 dB MKr	03:27:09 PM0ec 17, 2018 TRACE 12 3 4 3 6 TYPE DET P NUNNN DET P NUNNN 1 2.461 5 GHz 8.399 dBm		
11 x Keysight Spectru X R Center Fred 10 dB/div 13.6 3.60 -6.40 -16.4 -26.4 -46.4 -6.4	RF 75.9. AC CORPEC SENSE: Q 2.497000000 GHz PN0: Fast Tri PN0: Fast Fast Tri Ref Offset 3.6 dB PN0: Fast Market Market Market <t< td=""><td>INT ALIGN AUTO g: Free Run Avg Type: Log-Pwr Avg Hold:>100/100 MKr</td><td>03:27:09 PM0ec 17, 2018 TRACE 12 3 4 3 6 TYPE DET P NUNNN DET P NUNNN 1 2.461 5 GHz 8.399 dBm</td></t<>	INT ALIGN AUTO g: Free Run Avg Type: Log-Pwr Avg Hold:>100/100 MKr	03:27:09 PM0ec 17, 2018 TRACE 12 3 4 3 6 TYPE DET P NUNNN DET P NUNNN 1 2.461 5 GHz 8.399 dBm		
11 x Sci MSC Center Free 10 dB/div 99 13.6 3.60 -6.4 -66.4 -66.4 -66.4 Start 2.4470	RF 75.9. AC CORPEC SENSE: Q 2.497000000 GHz PN0: Fast IFGain:Low Tri At Ref Offset 3.6 dB PN0: Fast Tri At 0.0 GHz 0 GHz #VBW 30 00 GHz #VBW 30 00 GHz \$399 dBm	INT ALIGN AUTO g: Free Run Avg Type: Log-Pwr Avg Hold:>100/100 MKr	03:27:09 PM0ec 17, 2018 TRACE 2 3 4 5 0 TYPE 1 2 3 4 5 0 TYPE 2 NUM NN 1 2.461 5 GHz 8.399 dBm 		
11 x Sc IM Sc IM Sc Center Free 10 dB/div F 10 dB/div 13 6 3.00 -6.4 -66.4 Start 2.4470 #Res BW 10 MKR MODE TRCI 1 N 2 N 1 N	RF 75.9. AC CORPEC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low Tri At Ref Offset 3.6 dB Tri Ref Offset 3.6 dB Tri At Quite of the set	NT ALIGN AUTO g: Free Run Avg Type: Log-Pwr Avg Hold:>100/100 Mkr 3 4 5 0 kHz Sweep 9.6	03:27:09 PM0ec 17, 2018 TRACE 2 3 4 5 0 TYPE 1 2 3 4 5 0 TYPE 2 NUM NN 1 2.461 5 GHz 8.399 dBm 		
11 x Sci MSC Center Free 10 dB/div 9 13.6 3.60 -6.4 -6.4 -6.4 -6.4 -6.4 -6.4 -6.4 -76.4	RF 75.9. AC CORPEC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low Tri At Ref Offset 3.6 dB PNO: Fast Tri At Ref Offset 3.6 dB Image: Comparison of the sense of the sens	NT ALIGN AUTO g: Free Run Avg Type: Log-Pwr Avg Hold:>100/100 Mkr 3 4 5 0 kHz Sweep 9.6	03:27:09 PM0ec 17, 2018 TRACE 2 3 4 3 0 TYPE 1 2 3 4 3 0 TYPE 2 NUM NN 1 2.461 5 GHz 8.399 dBm 		
11 x Sc MSC Image: Sector Sect	RF 75.9. AC CORPEC SENSE: q 2.497000000 GHz PNO: Fast IFGain:Low Tri At Ref Offset 3.6 dB Tri Ref Offset 3.6 dB Tri At Quite of the set	NT ALIGN AUTO g: Free Run Avg Type: Log-Pwr Avg Hold:>100/100 Mkr 3 4 5 0 kHz Sweep 9.6	03:27:09 PM0ec 17, 2018 TRACE 2 3 4 3 0 TYPE 1 2 3 4 3 0 TYPE 2 NUM NN 1 2.461 5 GHz 8.399 dBm 		



Temperature:	24 °C	Relative Humidity:	56%					
Test Voltage:	AC 120V/60HZ							
Test Mode:	TX G Mode 2412MHz / TX G Mode 2462MHz							
Remark:	The EUT is programed in cor	The EUT is programed in continuously transmitting mode						
Keysight Spectrum An UXI R RF Center Freq 2. Ref C	alyzer - Swept SA TS Ω AC CORREC SENSE:INT 3770000000 GHZ PNO: Fast IFGain:Low Trig: Free Run Atten: 30 dB 23.63 dB Atten: 40 dB Att	ALIGN AUTO Avg Type: Log-Pwr Avg Hold:>100/100	2.413 3 GHz -0.072 dBm					
GS.4 Start 2.32700 G #Res BW 100 k MRR MODE TRCI SCL 1 2 N 1 f 3 N 4 N 5 6 7 7			op 2.42700 GHz 00 ms (1001 pts) VALUE					
9 10 11 MSG MSG MSG MSG RE Center Freq 2.	nalyzer - Swept SA 75 Ω AC CORREC 497000000 GHZ PNO: Fast IFGain:Low Trig: Free Run Atten: 30 dB	Avg Type: Log-Pwr Avg Hold:>100/100	03:41:18 PM Dec 17, 2018 TRACE 13.8 4 5 0 THE MUNICIPAL OF THE MUNICIPAL OF THE PLAN HAW					
10 dE/div Ref 10 dE/div Ref 13.6 3.60 -6.40 -16.4 -36.4 -36.4 -46.4 -66.4	Diffset 3.6 dB 23.60 dBm		2.463 3 GHz -0.257 dBm					
Start 2.44700 G #Res BW 100 k MKR MODE TRC SCL 1 N 1 f	XHz #VBW 300 kHz X Y FUNCTION 2.463.3 GHz -0.257 dBm		op 2.54700 GHz 00 ms (1001 pts) VALUE					
2 N 1 f 3 N 1 f 4 N 1 7 6 0 9 9 10 0 11	2.483 5 GHz 4.8,580 dBm 2.500 0 GHz - 54,109 dBm 2.483 5 GHz - 48,580 dBm 2.483 5 GHz - 48,580 dBm	STATUS						

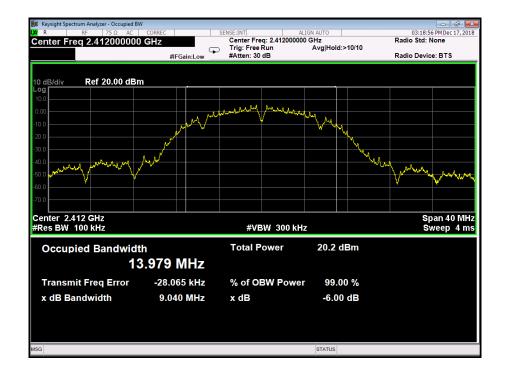




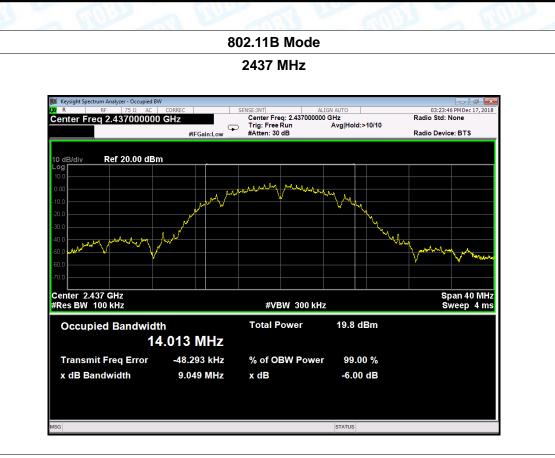
Attachment D-- Bandwidth Test Data

Temperature:	24 ℃	Relative Humidity:	56%		
Test Voltage:	AC 120V/60HZ	L'AND U			
Test Mode:	TX 802.11B Mode				
Channel frequence	cy 6dB Bandwidth	99% Bandwidth	Limit		
(MHz)	(MHz)	(MHz)	(MHz)		
2412	9.040	13.979			
2437	9.049	14.013	>=0.5		
2462	9.009	9.009 14.013			
	902 11	IP Modo			

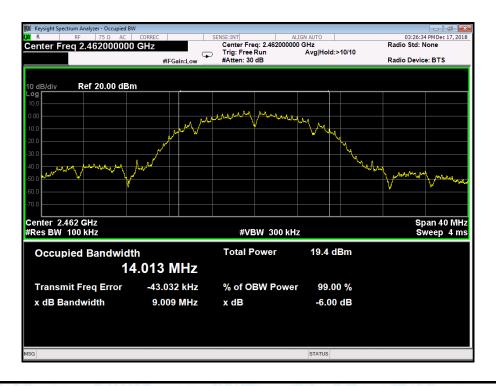
802.11B Mode





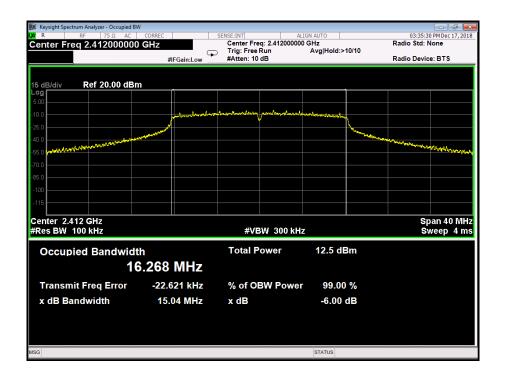


802.11B Mode

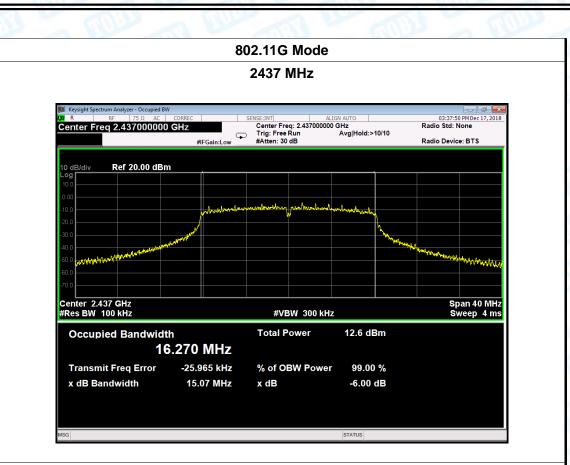




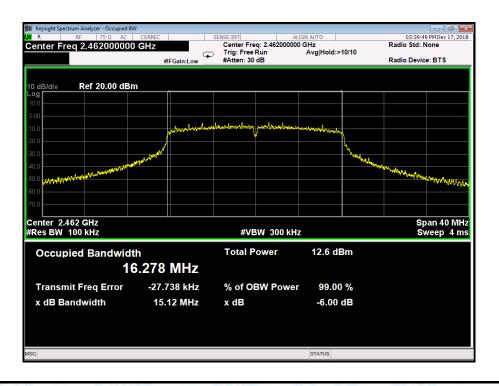
Temperature:	24	°C	Relative Humidity:	56%	
Test Voltage:	AC	C 120V/60HZ			
Test Mode:	le: TX 802.11G Mode				
Channel frequency 6dE		6dB Bandwidth	ndwidth 99% Bandwidth		
(MHz)		(MHz)	(MHz)	(MHz)	
2412		15.04	16.268		
2437		15.07	16.270	>=0.5	
2462 15.12		16.278			
		802.11G	Mode		







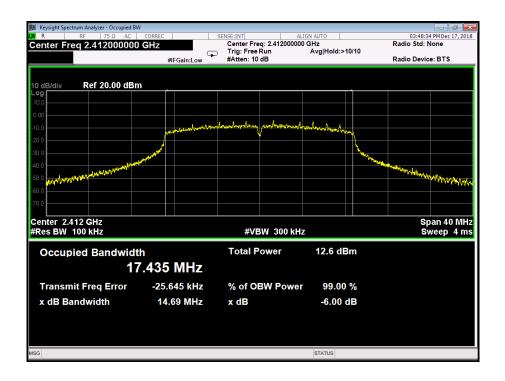
802.11G Mode



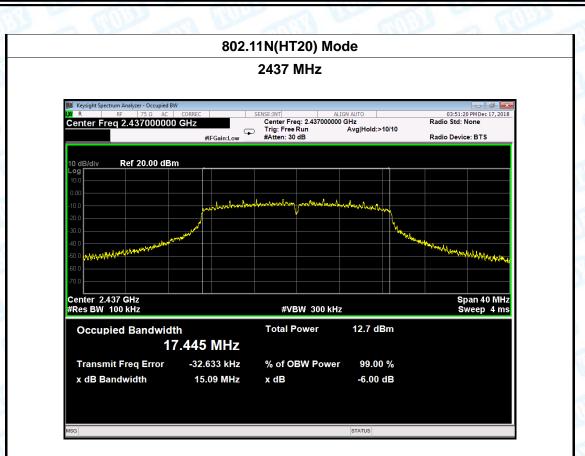


Temperature:	24 ℃	Relative Humidity:	56%		
Test Voltage:	AC 120V/60HZ				
Test Mode:	TX 802.11N(HT20) Mode				
Channel frequency 6dB Bandwidth 99% Ba		99% Bandwidth	Limit		
(MHz)	(MHz)	(MHz)	(MHz)		
2412	14.69	17.435			
2437	15.09	17.445	>=0.5		
2462 15.47		47 404	7		
2462	15.47	17.434			

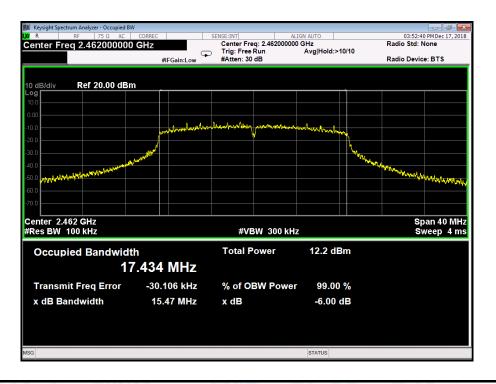
802.11N(HT20) Mode







802.11N(HT20) Mode



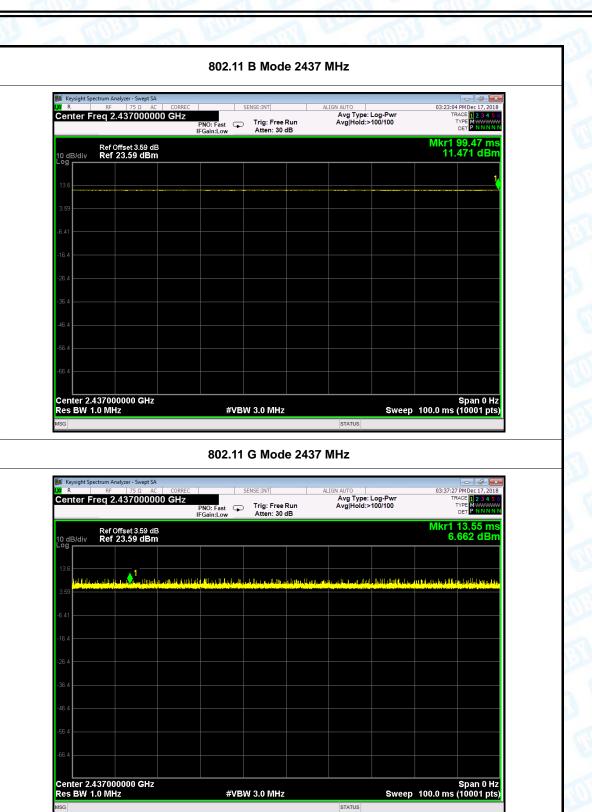


Attachment E-- Peak Output Power Test Data

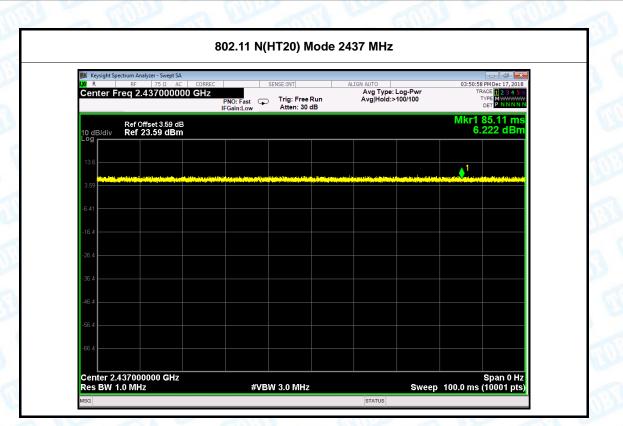
Test Condition	is: Continuous transm	Continuous transmitting Mode				
Temperature:	24 °C	Relative Humidity:	56%			
Test Voltage:	AC 120V/60HZ		3 100			
Mode	Channel frequency (MHz)	Test Result (dBm)	Limit (dBm)			
802.11b	2412	16.62				
	2437	16.14				
	2462	16.62				
	2412	15.48				
802.11g	2437	15.25	30			
-	2462	15.34				
000.44.	2412	15.45				
802.11n (UT20)	2437	15.39				
(HT20)	2462	14.85				
	Resu	ult: 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				





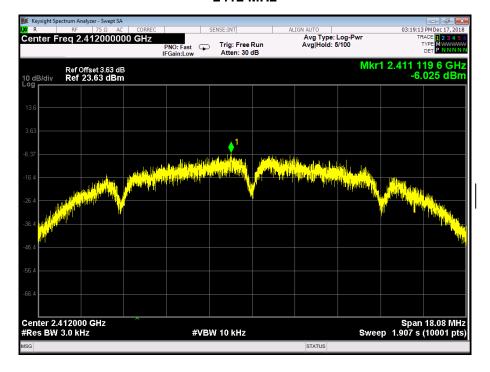




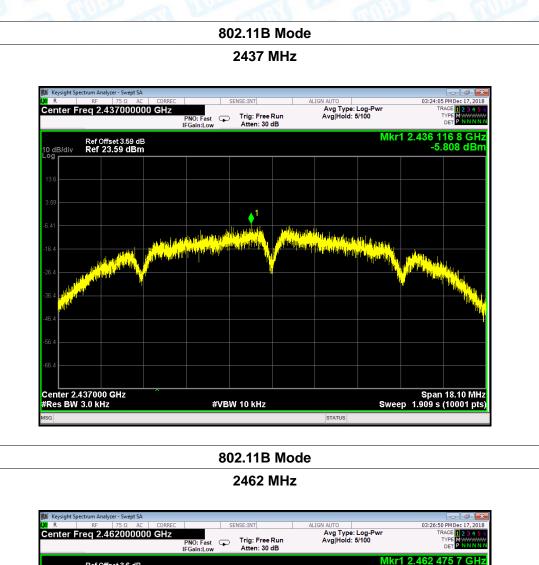
Attachment F-- Power Spectral Density Test Data

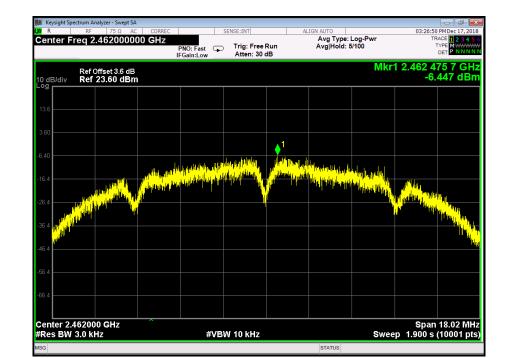
TOBY

Temperature:	24 °C	°CRelative Humidity:56%				
Test Voltage:	AC 120V/60HZ					
Test Mode:	TX 802.11B Mode					
Channel Freq	quency Power Density Limit					
(MHz)	(MHz) (dBm/3 kHz) (dB		(dBm/3kHz)			
2412 -6.025						
2437		-5.80	8	8		
2462		-6.447				
		802.11B	Mode			



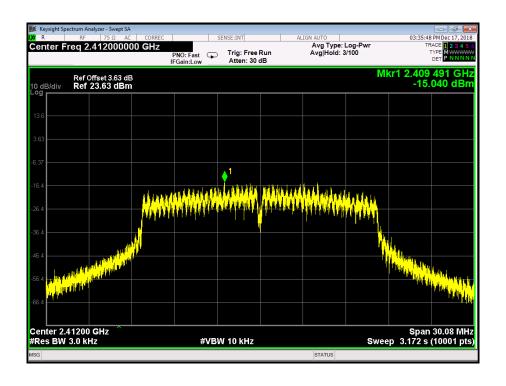








Temperature:	24 ℃	TUP -	Temperature:	24 ℃		
Test Voltage:	AC 120V/	C 120V/60HZ				
Test Mode:	TX 802.1	TX 802.11G Mode				
Channel Freq	luency	Power Density Limit				
(MHz)		(dBm/3	kHz)	(dBm/3kHz)		
2412		-15.040				
2437		-15.4	51	8		
2462 -14.517			17			
		802.11G	Mode			





802.11G Mode 2437 MHz

 Kyright Spectrum Analyzer - Swegt SA
 Coll-Gell Consect

 DR
 RP
 75.0 AC
 CORREC
 SENSE:INT
 ALION AUTO
 03:89:21 PNDe:17, 2018

 Center Freq 2.437/000000 GHz
 PNO: Fast
 Trig: Free Run
 Arg Type: Log-Pwr
 Avg Type: Log-Pwr

 Ref Offset 3.59 dB
 Mkr1 2.436 048 GHz
 -1.5.451 dBm
 -1.5.451 dBm

 10 dB/div
 Ref 23.59 dBm
 -1.5.451 dBm
 -1.5.451 dBm

 13.6
 -1.5.451 dBm
 -1.5.451 dBm
 -1.5.451 dBm

 13.6
 -1.5.451 dBm
 -1.5.451 dBm
 -1.5.451 dBm

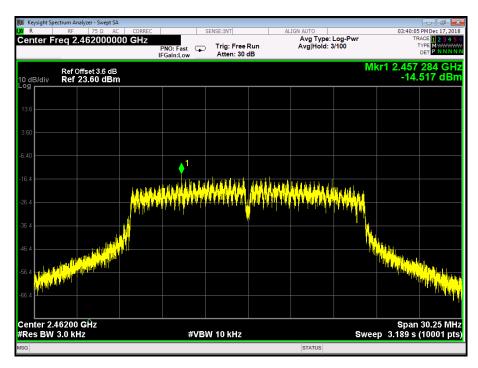
 13.6
 -1.5.451 dBm
 -1.5.451 dBm
 -1.5.451 dBm

 14.64
 -1.5.451 dBm
 -1.5.451 dBm
 -1.5.451 dBm

 15.6
 -1.5.451 dBm
 -1.5.451 dBm
 -1.5.451 dBm

 16.41
 -1.5.551

802.11G Mode 2462 MHz



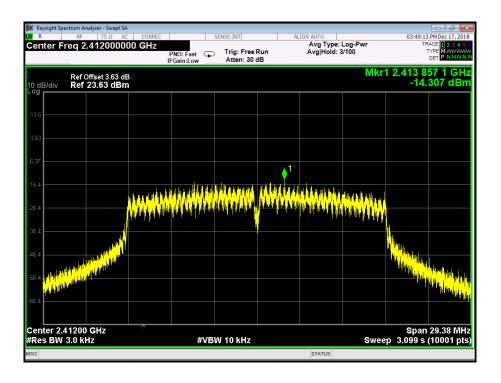
Report No.: TB-FCC163416 Page: 76 of 78





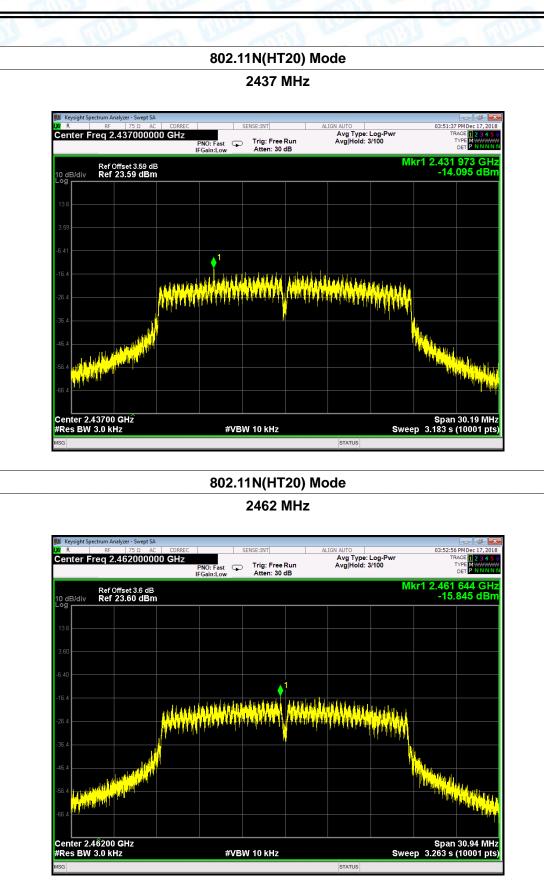
Temperature:	24 ℃	Temperatu		24 ℃		
Test Voltage:	AC 120V/	AC 120V/60HZ				
Test Mode:	TX 802.11	802.11N(HT20) Mode				
Channel Freq	luency	ncy Power Density Limit				
(MHz)		(dBm/3 kHz)		(dBm/3kHz)		
2412	2412 -14.30		7			
2437		-14.095		8		
2462	2462		5			

802.11N(HT20) Mode





-----END OF REPORT-----





Report No.: TB-FCC163416 Page: 78 of 78