

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC171371

Page: 1 of 82

FCC Radio Test Report FCC ID: XMF-MID8011

Original Grant

Report No. TB-FCC171371

Applicant Lightcomm Technology Co., Ltd.

Equipment Under Test (EUT)

EUT Name 8"Tablet

Model No. 100003561

Series Model No. MID8011

Brand Name onn

Receipt Date 2020-01-02

2020-01-03 to 2020-01-14 **Test Date**

Issue Date 2020-01-14

Standards FCC Part 15, Subpart C 15.247

ANSI C63.10: 2013 **Test Method**

Conclusions PASS

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

The EUT technically complies with the FCC and IC requirements

Test/Witness Engineer

Engineer Supervisor

Engineer Manager

the report.

Jack Deng

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

TB-RF-074-1.0





Page: 2 of 82

Contents

COr	NIENIS	2
1.	GENERAL INFORMATION ABOUT EUT	5
	1.1 Client Information	5
	1.2 General Description of EUT (Equipment Under Test)	5
	1.3 Block Diagram Showing the Configuration of System Tested	
	1.4 Description of Support Units	
	1.5 Description of Test Mode	
	1.6 Description of Test Software Setting	
	1.7 Measurement Uncertainty	
	1.8 Test Facility	
2.	TEST SUMMARY	
3.	TEST SOFTWARE	
4.	TEST EQUIPMENT	11
5.	CONDUCTED EMISSION TEST	12
	5.1 Test Standard and Limit	12
	5.2 Test Setup	
	5.3 Test Procedure	13
	5.4 Deviation From Test Standard	13
	5.5 EUT Operating Mode	13
	5.6 Test Data	
6.	RADIATED EMISSION TEST	14
	6.1 Test Standard and Limit	14
	6.2 Test Setup	15
	6.3 Test Procedure	16
	6.4 Deviation From Test Standard	17
	6.5 EUT Operating Condition	17
	6.6 Test Data	
7.	RESTRICTED BANDS REQUIREMENT	18
	7.1 Test Standard and Limit	18
	7.2 Test Setup	18
	7.3 Test Procedure	
	7.4 Deviation From Test Standard	19
	7.5 EUT Operating Condition	19
	7.6 Test Data	19
8.	BANDWIDTH TEST	20
	8.1 Test Standard and Limit	20
	8.2 Test Setup	
	8.3 Test Procedure	20



Page: 3 of 82

	8.4 Deviation From Test Standard	20
	8.5 EUT Operating Condition	20
	8.6 Test Data	
9.	PEAK OUTPUT POWER TEST	21
	9.1 Test Standard and Limit	21
	9.2 Test Setup	
	9.3 Test Procedure	
	9.4 Deviation From Test Standard	21
	9.5 EUT Operating Condition	
	9.6 Test Data	21
10.	POWER SPECTRAL DENSITY TEST	22
	10.1 Test Standard and Limit	22
	10.2 Test Setup	
	10.3 Test Procedure	
	9.4 Deviation From Test Standard	
	9.5 EUT Operating Condition	
	9.6 Test Data	
11.	ANTENNA REQUIREMENT	23
	11.1 Standard Requirement	
	11.2 Deviation From Test Standard	23
	11.3 Antenna Connected Construction	
ΔΤΤ	ACHMENT A CONDUCTED EMISSION TEST DATA	
	ACHMENT C RESTRICTED BANDS REQUIREMENT AND BAND-E	
	ACHMENT C RESTRICTED BANDS REQUIREMENT AND BAND-E	
	ACHMENT D BANDWIDTH TEST DATA	
	ACHMENT E PEAK OUTPUT POWER TEST DATA	
ATT	ACHMENT F POWER SPECTRAL DENSITY TEST DATA	75



Page: 4 of 82

Revision History

Report No.	Version	Description	Issued Date
TB-FCC171371	Rev.01	Initial issue of report	2020-01-14
TO THE REAL PROPERTY.			a Our
		The state of the s	TO DO
a Company			The state of the s
Mirror Wall	3 100		
			A COLO
		TOTAL GUEST	
3		China Inne	Mild I



Page: 5 of 82

1. General Information about EUT

1.1 Client Information

Applicant : Lightcomm Technology Co., Ltd.		
Address : UNIT 1306 13/F ARION COMMERCIAL CENTRE, 2-12 QUEEN ROAD WEST, SHEUNG WAN HK		UNIT 1306 13/F ARION COMMERCIAL CENTRE, 2-12 QUEEN'S ROAD WEST, SHEUNG WAN HK
Manufacturer : Huizhou Hengdu Electronics Co., Ltd.		Huizhou Hengdu Electronics Co., Ltd.
Address No.8 Huitai Road, Huinan High-tech Industrial Park Huizhou, Guangdong, China		No.8 Huitai Road, Huinan High-tech Industrial Park, Huiao Avenue, Huizhou, Guangdong, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	8"Tablet		
Models No.		100003561, MID80)11	
Model Difference		All these models are only difference is m	re in the same PCB, layout and electrical circuit, the nodel name	
TODAY TO	1	Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz	
	45	Number of Channel:	802.11b/g/n(HT20):11 channels see note(3) 802.11n(HT40):7 channels see note(3)	
Product Description		RF Output Power:	802.11b: 15.78 dBm 802.11g: 14.80 dBm 802.11n (HT20): 13.82 dBm 802.11n (HT40): 12.81 dBm	
		Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n: OFDM(BPSK,QPSK,16QAM,64QAM)	
		Antenna Gain:	2.92dBi FPC Antenna	
Power Supply	:	Adapter (TEKA01: Input: AC 100-240\ Output: DC 5V 2A DC 3.8V by 6600m	V, 50/60Hz, 0.35A	
Software Version		QP1A.190711.020	release-keys	
Hardware Version	:	: MID8011MQ_MT8768_LPDDR4_DSP_MB-VER1.1		
Connecting I/O Port(S)		Please refer to the User's Manual		
Remark	1	The antenna gain and adapter provided by the applicant, the verified for the RF conduction test and adapter provided by TOBY test lab.		

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.



Page: 6 of 82

(3) 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	80	2447		

Note: CH 01~CH 11 for 802.11b/g/n(HT20) CH 03~CH 9 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

Charging Mode+TX mode

APPLICATION OF THE PARTY OF THE				
Adapter		EUT		
	Cable 1			

TX Mode



1.4 Description of Support Units

Equipment Information							
Name Model FCC ID/VOC Manufacturer Used "							
			MI	√			
	Cable Information						
Number	Shielded Type	Ferrite Core	Length	Note			
Cable 1	Yes	NO	1.0M	Accessory			



Page: 7 of 82

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 Charging + 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				
Mode 5	TX Mode N(HT40) Mode Channel 03/06/09				

Note:

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

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

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

802.11n (HT20) Mode: MCS 0 (6.5 Mbps) 802.11n (HT40) Mode: MCS 0 (13 Mbps)

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



Page: 8 of 82

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	THE PARTY OF THE P	LaunchEngmode	
Channel	CH 01	CH 06	CH 11
IEEE 802.11b DSSS	15	15	15
IEEE 802.11g OFDM	17	17	17
IEEE 802.11n (HT20)	17	17	17
Test Software Version	TO THE	n/a	
Channel	CH 03	CH 06	CH 09
IEEE 802.11n (HT40)	18	18	18

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	±3.50 dB ±3.10 dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	±4.60 dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	\pm 4.50 dB
Radiated Emission	Level Accuracy: Above 1000MHz	±4.20 dB



Page: 9 of 82

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.



10 of 82 Page:

2. Test Summary

FCC Part 15 Subpart C(15.247)/ RSS 247 Issue 2				
Standard Section		Test Item	ludament	Damank
FCC	IC	rest 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 Software

Test Item	Test Software	Manufacturer	Version No.
Conducted Emission	EZ-EMC	EZ	CDI-03A2
Radiation Emission	EZ-EMC	EZ	FA-03A2RE



Page: 11 of 82

4. Test Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 13, 2019	Jul. 12, 2020
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 13, 2019	Jul. 12, 2020
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 13, 2019	Jul. 12, 2020
LISN	Rohde & Schwarz	ENV216	101131	Jul. 13, 2019	Jul. 12, 2020
Radiation Emission T	est		<u>:</u>	•	
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 13, 2019	Jul. 12, 2020
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 13, 2019	Jul. 12, 2020
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jan. 31, 2019	Jan. 30, 2020
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Jan. 27, 2019	Jan. 26, 2020
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.03, 2019	Mar. 02, 2020
Horn Antenna	ETS-LINDGREN	BBHA 9170	BBHA9170582	Aug.07, 2019	Aug. 06, 2020
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 13, 2019	Jul. 12, 2020
Pre-amplifier	Sonoma	310N	185903	Mar.04, 2019	Mar. 03, 2020
Pre-amplifier	HP	8449B	3008A00849	Mar.03, 2019	Mar. 02, 2020
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Jul. 27, 2019	Jul. 26, 2020
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar.03, 2019	Mar. 02, 2020
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted I	Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 13, 2019	Jul. 12, 2020
Spectrum Analyzer	Rohde & Schwarz	ESCI	100010/007	Jul. 13, 2019	Jul. 12, 2020
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 16, 2019	Sep. 15, 2020
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 16, 2019	Sep. 15, 2020
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 16, 2019	Sep. 15, 2020
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO26	Sep. 16, 2019	Sep. 15, 2020
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO29	Sep. 16, 2019	Sep. 15, 2020
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 16, 2019	Sep. 15, 2020
	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO33	Sep. 16, 2019	Sep. 15, 2020



Page: 12 of 82

5. Conducted Emission Test

5.1 Test Standard and Limit

5.1.1Test Standard FCC Part 15.207

5.1.2 Test Limit

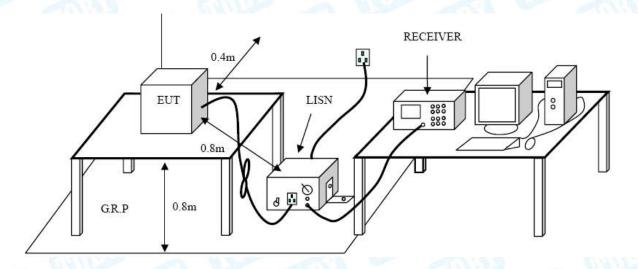
Conducted Emission Test Limit

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

Notes:

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

5.2 Test Setup





Page: 13 of 82

5.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

Please refer to the description of test mode.

5.6 Test Data

Please refer to the Attachment A.



Page: 14 of 82

6. Radiated Emission Test

6.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.209

6.1.2 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	

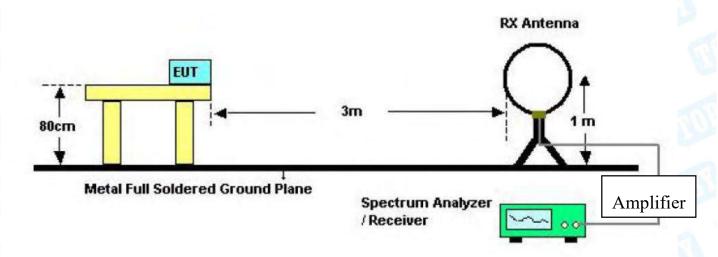
Note:

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

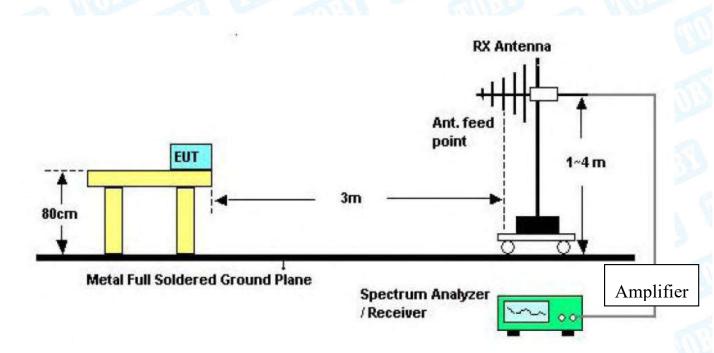


Page: 15 of 82

6.2 Test Setup



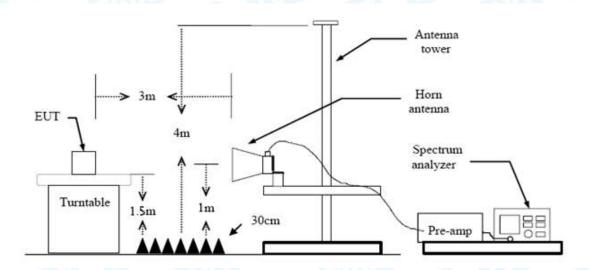
Below 30MHz Test Setup



Below 1000MHz Test Setup



Page: 16 of 82



Above 1GHz Test Setup

6.3 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. 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.



Page: 17 of 82

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Condition

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

6.6 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.



Page: 18 of 82

7. Restricted Bands Requirement

7.1 Test Standard and Limit

7.1.1 Test Standard

FCC Part 15.247(d)

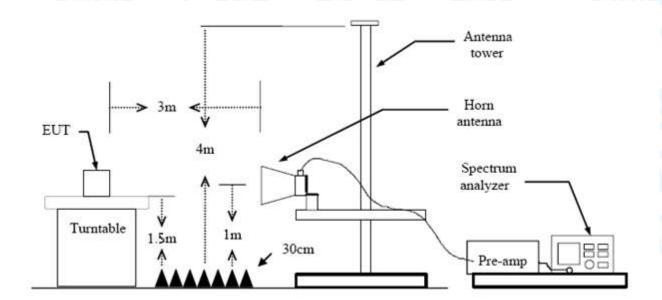
FCC Part 15.209

FCC Part 15.205

7.1.2 Test Limit

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

7.2 Test Setup





Page: 19 of 82

7.3 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.

7.4 Deviation From Test Standard

No deviation

7.5 EUT Operating Condition

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

7.6 Test Data

Please refer to the Attachment C.



Page: 20 of 82

8. Bandwidth Test

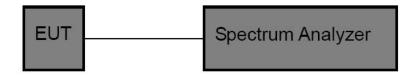
8.1 Test Standard and Limit

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

8.1.2 Test Limit

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

8.2 Test Setup



8.3 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.

8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Condition

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

8.6 Test Data

Please refer to the Attachment D.



Page: 21 of 82

9. Peak Output Power Test

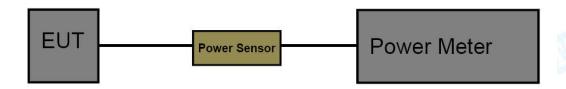
9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247 (b)

9.1.2 Test Limit

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

9.2 Test Setup



9.3 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.

9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Condition

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

9.6 Test Data

Please refer to the Attachment E.



Page: 22 of 82

10. Power Spectral Density Test

10.1 Test Standard and Limit

10.1.1 Test Standard FCC Part 15.247 (e)

10.1.2 Test Limit

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

10.2 Test Setup



10.3 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 centre frequency to DTS channel centre 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 Deviation From Test Standard

No deviation

9.5 EUT Operating Condition

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

9.6 Test Data

Please refer to the Attachment F.



Page: 23 of 82

11. Antenna Requirement

11.1 Standard Requirement

11.1.1 Standard

FCC Part 15.203

11.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

11.2 Deviation From Test Standard

No deviation

11.3 Antenna Connected Construction

The gains of the antenna used for transmitting is 2.92dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

Result

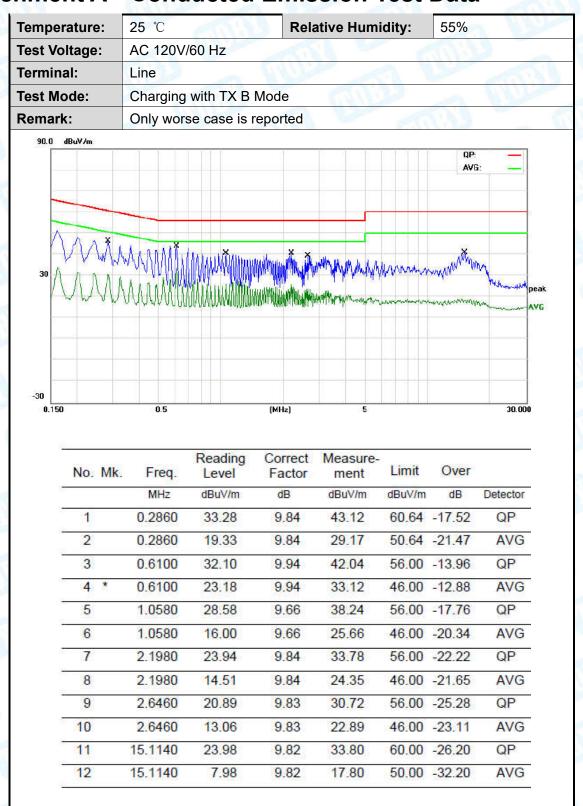
The EUT antenna is a FPC Antenna. It complies with the standard requirement.

Antenna Type		
☐Permanent attached antenna		
⊠Unique connector antenna		
☐Professional installation antenna	9	



Page: 24 of 82

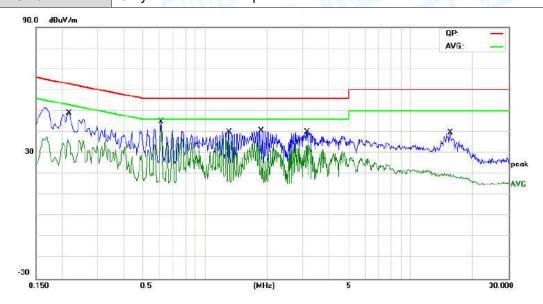






25 of 82 Page:

Temperature:	25 ℃	Relative Humidity:	55%	
Test Voltage:	AC 120V/60 Hz			
Terminal:	Neutral			
Test Mode:	Charging with TX B Mode			
Remark:	Only worse case is reported		THE PARTY OF	



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV/m	dB	dBuV/m	dBuV/m	dB	Detector
1		0.2180	21.10	9.61	30.71	62.89	-32.18	QP
2		0.2180	10.21	9.61	19.82	52.89	-33.07	AVG
3		0.6100	33.90	9.79	43.69	56.00	-12.31	QP
4	*	0.6100	32.96	9.79	42.75	46.00	-3.25	AVG
5		1.3060	27.50	9.69	37.19	56.00	-18.81	QP
6		1.3060	24.94	9.69	34.63	46.00	-11.37	AVG
7		1.8780	27.47	9.85	37.32	56.00	-18.68	QP
8		1.8780	18.58	9.85	28.43	46.00	-17.57	AVG
9		3.1420	26.92	9.86	36.78	56.00	-19.22	QP
10		3.1420	18.88	9.86	28.74	46.00	-17.26	AVG
11		15.5860	22.57	9.83	32.40	60.00	-27.60	QP
12		15.5860	8.54	9.83	18.37	50.00	-31.63	AVG



Page: 26 of 82

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 ℃			Relative H	lumidity	/ : 55%	%
est Voltage:		AC 120V/	/60 Hz	-	All Inches			
Ant. Pol.		Horizonta		(2)		100		100
est Mode:		TX B Mod	de 2412MH	łz		S. De	1	
Remark:		Only wors	se case is i	reported				
80.0 dBuV/m								
						(RF)FCC	15C 3M Rad	liation gin -6 dB
30	1 *	2 X		3 ~ ~~~	, in the second	5	6	manne
Management	M.	my)	many		My)	Mah da		
-20	Phone .	my)		V	1			
	50 Mk.	60 70 80 Freq.	Reading Level	(MHz) Correct Factor	300 Measure- ment	400 Limit	500 600 Over	700 1000
-20 30.000 40			Reading	Correct	300 Measure-	Mariana Cara	0.2700	700 1000 Detector
-20 30.000 40 No.	Mk.	Freq.	Reading Level	Correct Factor	300 Measure- ment	Limit	Over	Detector
-20 30.000 40 No.	Mk.	Freq.	Reading Level	Correct Factor	300 Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector QP
-20 30.000 40 No.	Mk.	Freq. MHz 46.6664	Reading Level dBuV 53.47	Correct Factor dB/m -22.22	Measure- ment dBuV/m 31.25	Limit dBuV/m 40.00	Over dB -8.75	Detector QP
-20 30.000 40 No.	Mk.	Freq. MHz 46.6664 79.5207	Reading Level dBuV 53.47 49.78	Correct Factor dB/m -22.22 -22.60	300 Measure- ment dBuV/m 31.25 27.18	Limit dBuV/m 40.00 40.00	Over dB -8.75 -12.82	Detector QP QP QP QP
-20 30.000 40 No. 1 2 3	Mk.	Freq. MHz 46.6664 79.5207	Reading Level dBuV 53.47 49.78 47.72	Correct Factor dB/m -22.22 -22.60 -20.34	300 Measure- ment dBuV/m 31.25 27.18 27.38	Limit dBuV/m 40.00 40.00 43.50	Over dB -8.75 -12.82 -16.12	Detector QP QP QP QP QP QP



Page: 27 of 82

emperature:	25 ℃		Re	lative Humic	dity: 5	5%	TANK
est Voltage:	AC 12	0V/60 Hz				1	
Ant. Pol.	Vertica	d V	1		67	1733	
est Mode:	TXB	/lode 2412N	lHz		(W		
Remark:	Only w	orse case is	reported	MILL	2	a W	No.
30	2 X	3	4 5 X X	- Marine Marine	(RF)FCC 1	5C 3M Radiation Margin - 6	dB
-20 30 000 40	50 EN 70	Reading	(MH=) Correct	Measure-		500 500 700	1000 000
No Mk	Fred	Level	Factor		Limit	Over	
No. Mk.	Freq.	Level	Factor dB/m	ment			Detecto
10 Personal Service Service Committee Committe	MHz	dBuV	dB/m	ment dBuV/m	dBuV/m	dB	DESEALTVES
1 3	MHz 1.9542	dBuV 46.27	dB/m -14.48	ment dBuV/m 31.79	dBuV/m	dB -8.21	QP
1 3 2 * 4	MHz 1.9542 8.6719	dBuV 46.27 57.08	dB/m -14.48 -22.90	ment dBuV/m 31.79 34.18	dBuV/m 40.00 40.00	dB -8.21 -5.82	QP QP
1 3 2 * 4 3 7	MHz 1.9542 8.6719 8.9651	dBuV 46.27 57.08 54.66	dB/m -14.48 -22.90 -22.66	ment dBuV/m 31.79 34.18 32.00	dBuV/m 40.00 40.00 40.00	dB -8.21 -5.82 -8.00	QP QP QP
1 3 2 * 4 3 7 4 14	MHz 1.9542 8.6719 8.9651 43.3257	dBuV 46.27 57.08 54.66 53.55	dB/m -14.48 -22.90 -22.66 -22.14	ment dBuV/m 31.79 34.18 32.00 31.41	dBuV/m 40.00 40.00 40.00 43.50	dB -8.21 -5.82 -8.00 -12.09	QP QP QP
1 3 2 * 4 3 7 4 14	MHz 1.9542 8.6719 8.9651	dBuV 46.27 57.08 54.66	dB/m -14.48 -22.90 -22.66	ment dBuV/m 31.79 34.18 32.00	dBuV/m 40.00 40.00 40.00	dB -8.21 -5.82 -8.00 -12.09	QP QP QP

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



Page: 28 of 82

Above 1GHz

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V		- C			
Ant. Pol.	Horizontal	(3)				
Test Mode:	TX B Mode 2412MHz					
Remark:	No report for the emission which more than 20 dB below the prescribed					
	limit.					

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	,	4823.898	43.22	16.10	59.32	74.00	-14.68	peak
2	*	4823.898	29.09	16.10	45.19	54.00	-8.81	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V	The same of	Con The Control				
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX B Mode 2412MHz						
Remark:	No report for the emission which more than 20 dB below the						
	prescribed limit.		CALLER OF THE PARTY OF THE PART				

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	3	4823.514	43.13	15.65	58.78	74.00	-15.22	peak
2	*	4823.514	29.29	15.65	44.94	54.00	-9.06	AVG



Page: 29 of 82

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	THE PERSON NAMED IN				
Ant. Pol.	Horizontal					
Test Mode:	TX B Mode 2437MHz					
Remark: No report for the emission which more than 20 dB below the						
	prescribed limit.					

No	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.114	41.11	15.88	56.99	74.00	-17.01	peak
2	*	4874.114	29.47	15.88	45.35	54.00	-8.65	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V	W. Comment	Contract of the second				
Ant. Pol.	Vertical						
Test Mode:	TX B Mode 2437MHz						
Remark:	No report for the emission which more than 20 dB below the						
	prescribed limit.		THE WALL				

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4872.770	43.86	15.87	59.73	74.00	-14.27	peak
2	(*)	4872.848	29.48	15.87	45.35	54.00	-8.65	AVG



Page: 30 of 82

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	Will Service				
Ant. Pol.	Horizontal					
Test Mode:	TX B Mode 2462MHz					
Remark:	No report for the emission prescribed limit.	which more than 20 dB	3 below the			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4922.836	42.49	16.10	58.59	74.00	-15.41	peak
2	*	4922.836	28.92	16.10	45.02	54.00	-8.98	AVG

Emission Level= Read Level+ Correct Factor

elative Humidity:	55%					
Million and	White the second					
Vertical						
Remark: No report for the emission which more than 20 dB below the						
	ich more than 20 db					

No	. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4922.932	41.76	16.10	57.86	74.00	-16.14	peak
2	*	4922.932	29.16	16.10	45.26	54.00	-8.74	AVG



Page: 31 of 82

Temperature:	25 °C Relative Humidity: 55%				
Test Voltage:	DC 3.8V				
Ant. Pol.	Horizontal				
Test Mode:	TX G Mode 2412MHz				
Remark: No report for the emission which more than 20 dB below the prescribed limit.					

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4824.384	41.68	15.65	57.33	74.00	-16.67	peak
2	*	4824.384	29.69	15.65	45.34	54.00	-8.66	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V	THUE TO	Contract of the second				
Ant. Pol.	Vertical						
Test Mode:	TX G Mode 2412MHz						
Remark:	No report for the emission which more than 20 dB below the prescribed limit.						

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4823.916	40.31	15.65	55.96	74.00	-18.04	peak
2	*	4823.916	29.70	15.65	45.35	54.00	-8.65	AVG



Page: 32 of 82

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V	THE PERSON NAMED IN					
Ant. Pol.	Horizontal						
Test Mode:	TX G Mode 2437MHz						
Remark: No report for the emission which more than 20 dB below the prescribed limit.							

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.640	42.52	15.88	58.40	74.00	-15.60	peak
2	*	4873.640	28.99	15.88	44.87	54.00	-9.13	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	THU TO	Contract of the second			
Ant. Pol.	Vertical					
Test Mode:	TX G Mode 2437MHz					
Remark:	No report for the emission which more than 20 dB below the					
	prescribed limit.		THE CHILL			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4875.008	42.43	15.88	58.31	74.00	-15.69	peak
2	*	4875.008	29.21	15.88	45.09	54.00	-8.91	AVG



Page: 33 of 82

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	THE PERSON NAMED IN				
Ant. Pol.	Horizontal					
Test Mode:	TX G Mode 2462MHz					
Remark: No report for the emission which more than 20 dB below the						
	prescribed limit.					

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4924.678	41.89	16.11	58.00	74.00	-16.00	peak
2	*	4924.678	29.44	16.11	45.55	54.00	-8.45	AVG

Emission Level= Read Level+ Correct Factor

25 ℃	Relative Humidity:	55%			
DC 3.8V	THU TO	Contract of the second			
Vertical					
TX G Mode 2462MHz					
Remark: No report for the emission which more than 20 dB below the					
prescribed limit.	-may	T CHILL			
	DC 3.8V Vertical TX G Mode 2462MHz No report for the emission	DC 3.8V Vertical TX G Mode 2462MHz No report for the emission which more than 20 dB			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.430	41.05	16.10	57.15	74.00	-16.85	peak
2	*	4923.430	29.47	16.10	45.57	54.00	-8.43	AVG



Page: 34 of 82

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage: DC 3.8V						
Ant. Pol.	Ant. Pol. Horizontal					
Test Mode:	TX N(HT20) Mode 2412M	Hz				
Remark: No report for the emission which more than 20 dB below the						
	prescribed limit.					

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4824.564	44.06	15.65	59.71	74.00	-14.29	peak
2	*	4824.564	29.30	15.65	44.95	54.00	-9.05	AVG

Emission Level= Read Level+ Correct Factor

25 ℃	Relative Humidity:	55%				
DC 3.8V		Contract of the second				
Vertical						
TX N(HT20) Mode 24	12MHz					
No report for the emission which more than 20 dB below the						
prescribed limit.						
	DC 3.8V Vertical TX N(HT20) Mode 24 No report for the emis	DC 3.8V Vertical TX N(HT20) Mode 2412MHz No report for the emission which more than 20 dB				

No	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4824.234	43.74	15.65	59.39	74.00	-14.61	peak
2	×	4824.234	29.31	15.65	44.96	54.00	-9.04	AVG



Page: 35 of 82

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	Test Voltage: DC 3.8V						
Ant. Pol.	Ant. Pol. Horizontal						
Test Mode:	TX N(HT20) Mode 2437M	Hz					
Remark: No report for the emission which more than 20 dB below the							
	prescribed limit.						

No	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.394	41.33	15.88	57.21	74.00	-16.79	peak
2	*	4873.394	29.43	15.88	45.31	54.00	-8.69	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	William In	Contract of the second			
Ant. Pol.	Vertical					
Test Mode:	TX N(HT20) Mode 2437M	Hz				
Remark:	No report for the emission which more than 20 dB below the					
	prescribed limit.					

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	×	4872.974	29.46	15.87	45.33	54.00	-8.67	AVG
2		4873.052	42.71	15.87	58.58	74.00	-15.42	peak



Page: 36 of 82

Temperature:	25 ℃	Relative Humidity:	55%					
Test Voltage:	DC 3.8V	DC 3.8V						
Ant. Pol.	Horizontal							
Test Mode:	TX N(HT20) Mode 2462MH	z						
Remark:	No report for the emission which more than 20 dB below the							
	prescribed limit.							

No	. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.526	42.38	16.10	58.48	74.00	-15.52	peak
2	*	4923.526	28.97	16.10	45.07	54.00	-8.93	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%		
Test Voltage:	DC 3.8V				
Ant. Pol.	Vertical				
Test Mode:	TX N(HT20) Mode 2462MHz				
Remark:	No report for the emission which more than 20 dB below the				
	prescribed limit.				

No	. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4923.616	43.05	16.10	59.15	74.00	-14.85	peak
2	×	4923.616	28.93	16.10	45.03	54.00	-8.97	AVG



Page: 37 of 82

Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	THE PERSON NAMED IN	
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2422MI	Hz	
Remark:	No report for the emission	which more than 20 dE	B below the
	prescribed limit.		33 6

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4843.070	40.90	15.74	56.64	74.00	-17.36	peak
2	*	4843.070	29.60	15.74	45.34	54.00	-8.66	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V	THU TO	Contract of the second			
Ant. Pol.	Vertical	/ertical				
Test Mode:	TX N(HT40) Mode 242	22MHz				
Remark: No report for the emission which more than 20 dB below the						
	prescribed limit.		T CHILL			

No	. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4842.602	43.26	15.73	58.99	74.00	-15.01	peak
2	*	4843.796	29.64	15.75	45.39	54.00	-8.61	AVG



Page: 38 of 82

Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	THE PERSON NAMED IN	
Ant. Pol.	Horizontal		
Test Mode:	TX N(HT40) Mode 2437MI	Hz	
Remark:	No report for the emission	which more than 20 dE	B below the
	prescribed limit.		73 6

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.012	42.42	15.88	58.30	74.00	-15.70	peak
2	*	4874.012	29.12	15.88	45.00	54.00	-9.00	AVG

Emission Level= Read Level+ Correct Factor

25 ℃	Relative Humidity:	55%			
DC 3.8V	THU TO	Contract of the second			
Vertical	ertical				
TX N(HT40) Mode 2437M	1Hz				
mark: No report for the emission which more than 20 dB below the					
prescribed limit.		THE CHILL			
	DC 3.8V Vertical TX N(HT40) Mode 2437M No report for the emission	DC 3.8V Vertical TX N(HT40) Mode 2437MHz No report for the emission which more than 20 dB			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.100	42.89	15.87	58.76	74.00	-15.24	peak
2	×	4873.100	29.12	15.87	44.99	54.00	-9.01	AVG



Page: 39 of 82

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V					
Ant. Pol.	Horizontal					
Test Mode:	TX N(HT40) Mode 2452MH	Z				
Remark: No report for the emission which more than 20 dB below the						
	prescribed limit.					

No	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4902.500	41.13	16.01	57.14	74.00	-16.86	peak
2	*	4902.500	29.21	16.01	45.22	54.00	-8.78	AVG

Emission Level= Read Level+ Correct Factor

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V		- O U			
Ant. Pol.	Vertical	ertical				
Test Mode:	TX N(HT40) Mode 2	TX N(HT40) Mode 2452MHz				
Remark:	No report for the em	ssion which more than 20 dB	below the			
	prescribed limit.					

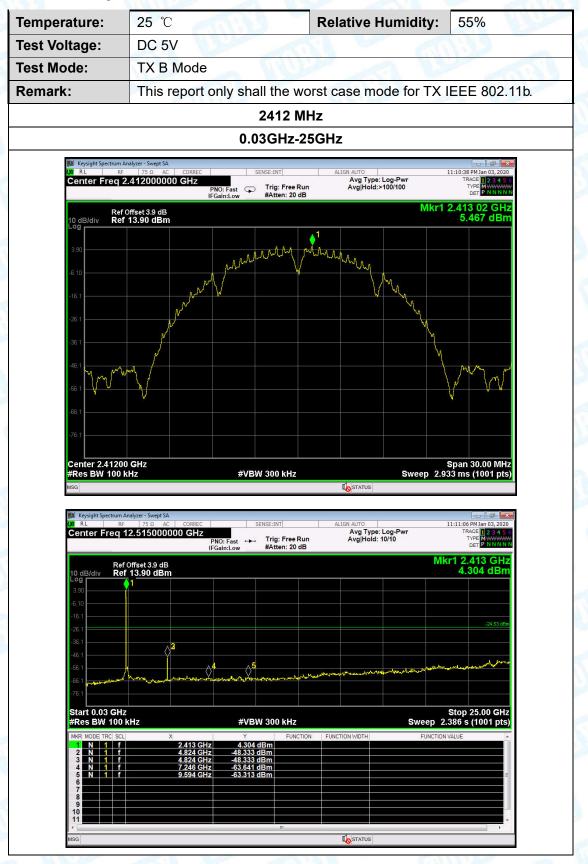
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	×	4904.214	29.41	16.01	45.42	54.00	-8.58	AVG
2		4904.251	41.24	16.01	57.25	74.00	-16.75	peak

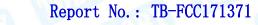




Page: 40 of 82

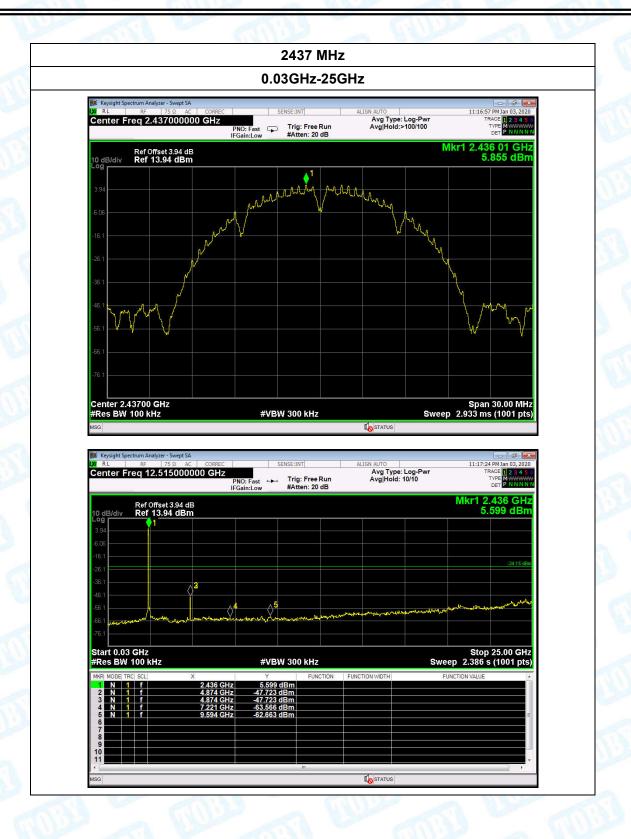
Conducted RF Spurious Emission Test Data





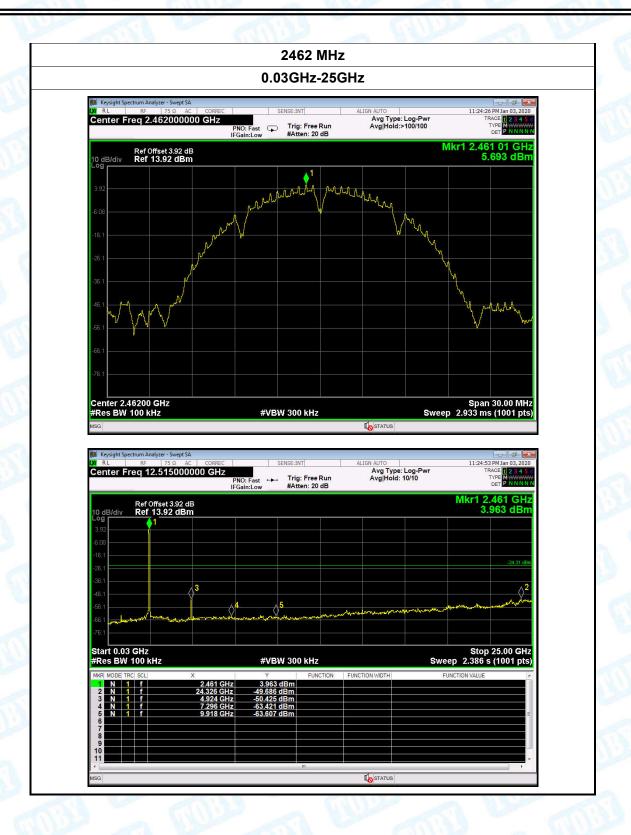


Page: 41 of 82











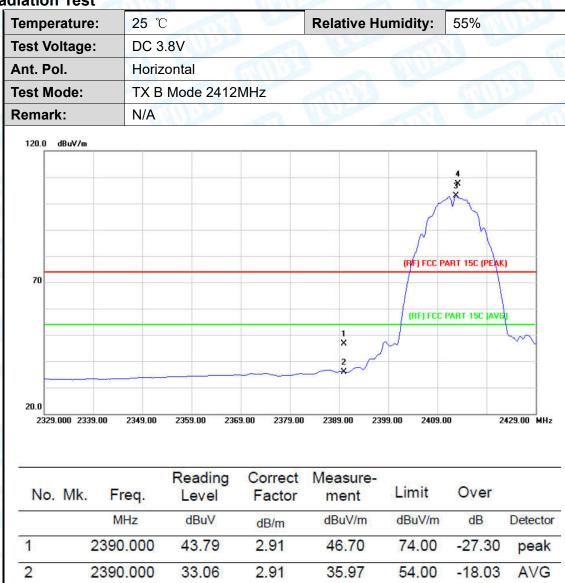
Page: 43 of 82

Attachment C-- Restricted Bands Requirement and Band-edge Test Data

(1) Radiation Test

3

X



Emission Level= Read Level+ Correct Factor

99.81

104.37

3.00

3.01

102.81

107.38

Fundamental Frequency

Fundamental Frequency

2412.800

2413.200

AVG

peak



Page: 44 of 82

emperature:	25 ℃	Relative Humidity:	55%
est Voltage:	DC 3.8V	THE PARTY OF THE P	
nt. Pol.	Vertical		UP TO
est Mode:	TX B Mode 2412MHz		
emark:	N/A		THE REAL PROPERTY.
110.0 dBuV/m			
60			CC PART 15C (PEAK)

No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	42.18	2.91	45.09	74.00	-28.91	peak
2		2390.000	31.59	2.91	34.50	54.00	-19.50	AVG
3	*	2411.200	90.63	3.00	93.63	Fundamental Frequency		AVG
4	X	2413.200	94.73	3.01	97.74	Fundamental F	requency	peak



Page: 45 of 82

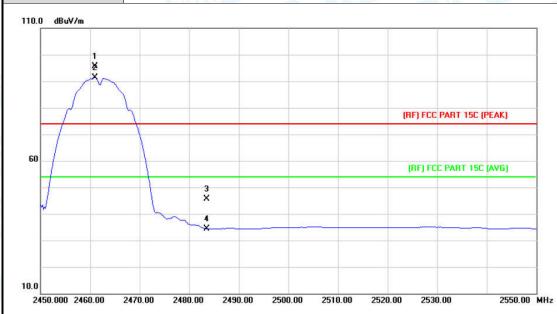
Temperature:	25 ℃	Relative Humidity:	55%	
est Voltage:	DC 3.8V	CHILDREN CONTRACTOR		
nt. Pol.	Horizontal			
est Mode:	TX B Mode 2462MH	Z		
Remark:	N/A	CONTRACT OF THE PARTY OF THE PA	A WILL	
120.0 dBuV/m				
	1			
	Ä			
	A h			
/	1	(RF) FC	PART 15C (PEAK)	
70				
		(RF) FI	CC PART 15C (AVG)	
	3 X	3.57	economic de constituire de la constituire de	
	7,4			
	×	~~		
20.0				

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2461.000	103.64	3.27	106.91	Fundamental Frequency		peak
2	*	2461.200	99.27	3.28	102.55	_ Fundamental	Frequency	AVG
3		2483.500	47.33	3.40	50.73	74.00	-23.27	peak
4		2483.500	35.35	3.40	38.75	54.00	-15.25	AVG



Page: 46 of 82

		,	
Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V		- W
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		
Remark:	N/A		A HALL

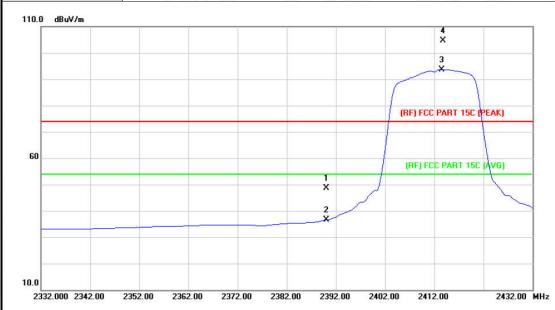


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2461.000	92.29	3.27	95.56	Fundamental Frequency		peak
2	*	2461.000	88.11	3.27	91.38	Fundamental	Frequency	AVG
3		2483.500	42.19	3.40	45.59	74.00	-28.41	peak
4		2483.500	31.06	3.40	34.46	54.00	-19.54	AVG



Page: 47 of 82

١	Temperature:	25 ℃	Relative Humidity:	55%
ì	Test Voltage:	DC 3.8V		- W
	Ant. Pol.	Horizontal		
	Test Mode:	TX G Mode 2412MHz		
	Remark:	N/A	MILLE	William Control

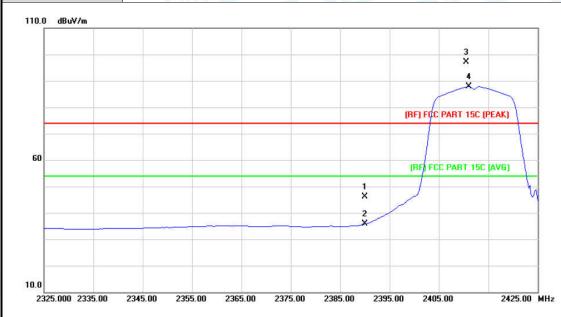


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	45.67	2.91	48.58	74.00	-25.42	peak
2		2390.000	33.62	2.91	36.53	54.00	-17.47	AVG
3	*	2413.600	90.69	3.01	93.70	- Fundamental F	requency	AVG
4	X	2413.800	101.72	3.01	104.73	Fundamental F	requency	peak



Page: 48 of 82

Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	THE PERSON NAMED IN	
Ant. Pol.	Vertical	13	
Test Mode:	TX G Mode 2412MHz		
Remark:	N/A		S AMERICA

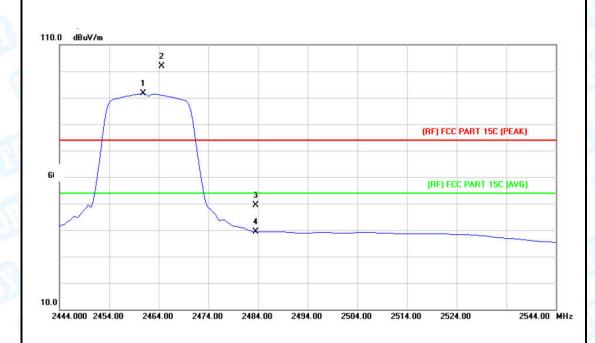


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	43.20	2.91	46.11	74.00	-27.89	peak
2		2390.000	32.89	2.91	35.80	54.00	-18.20	AVG
3	X	2410.600	94.17	2.99	97.16	Fundamental Frequency		peak
4	*	2411.000	84.82	2.99	87.81	- Fundamental	Frequency	AVG



Page: 49 of 82

Temperature:	25 ℃	Relative Humidity:	55%
Test Voltage:	DC 3.8V	Will Service	
Ant. Pol.	Horizontal		
Test Mode:	TX G Mode 2462MHz		
Remark:	N/A		A VILLE



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	2460.800	88.24	3.27	91.51	— Fundamental Frequency		AVG
2	X	2464.600	98.66	3.29	101.95	Fundamental	Frequency	peak
3		2483.500	46.07	3.40	49.47	74.00	-24.53	peak
4		2483.500	35.95	3.40	39.35	54.00	-14.65	AVG

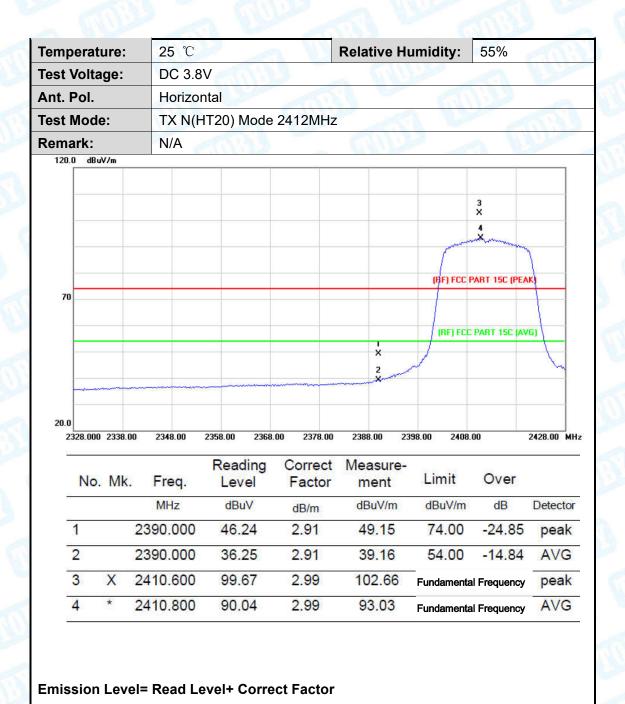


Page: 50 of 82

empe	rature) :	25 ℃		A VU	Relative H	umidity:	55%	1120
est Vo	ltage	:	DC 3.	8V		- OII	ر الماليا		
nt. Po	ol.		Vertic	al		11	The same	133	
est Mo	ode:		TX G	Mode 2462	2MHz		1 C		
emarl	k:		N/A)			a W	a la se
100.0	dBuV/m								
	,	2 X							
							(RF) FCC PA	ART 15C (PEAK)	
			+						
			+				BELECC F	PART 15C (AVG	
50				3			(11,1100)	THIT TOO PAYO	
/				×					
				* *			-		*
0.0									
	000 246 . Mk.		9q.	Reading Level	Correct Factor	Measure- ment	20.00 2530.00 Limit	Over	550.00 MHz
1		MH	z	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detecto
1	X	2459.	600	88.85	3.27	92.12	Fundamental	Frequency	peak
1						00.70		F	AVG
2	*	2460.	600	79.46	3.27	82.73	Fundamental	requency	AVO
	*	2460. 2483.		79.46 41.13	3.40	44.53	74.00	-29.47	peak



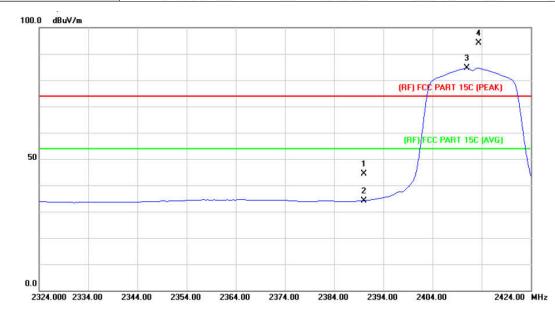
Page: 51 of 82





Page: 52 of 82

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V						
Ant. Pol.	Vertical						
Test Mode:	TX N(HT20) Mode 2412MHz						
Remark:	N/A	COLUMN TO THE REAL PROPERTY OF THE PERTY OF	William Control				

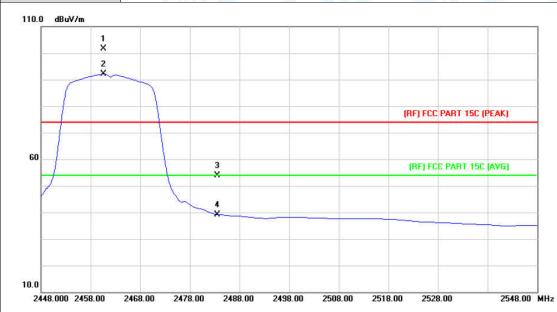


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	41.48	2.91	44.39	74.00	-29.61	peak
2		2390.000	31.31	2.91	34.22	54.00	-19.78	AVG
3	*	2411.000	81.63	2.99	84.62	Fundamental Frequency		AVG
4	X	2413.400	91.00	3.01	94.01	Fundamental	Frequency	peak



Page: 53 of 82

L.							
Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V	DC 3.8V					
Ant. Pol.	Horizontal		133				
Test Mode:	TX N(HT20) Mode 2462M	TX N(HT20) Mode 2462MHz					
Remark:		A VILLE					

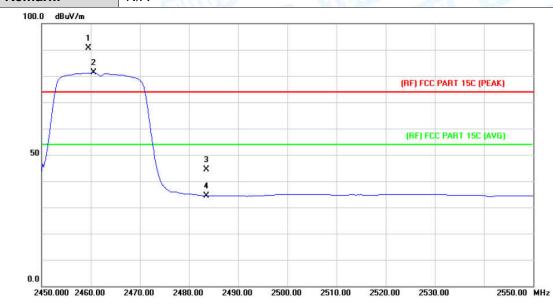


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2460.600	98.26	3.27	101.53	Fundamental F	requency	peak
2	*	2460.600	88.86	3.27	92.13	- Fundamental F	requency	AVG
3		2483.500	50.50	3.40	53.90	74.00	-20.10	peak
4		2483.500	35.71	3.40	39.11	54.00	-14.89	AVG



Page: 54 of 82

Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V					
Ant. Pol.	Vertical					
Test Mode:	TX N(HT20) Mode 2462M	TX N(HT20) Mode 2462MHz				
Remark:	N/A	COLUMN TO THE REAL PROPERTY OF THE PERTY OF	A VIII			
100.0 dBuV/m						

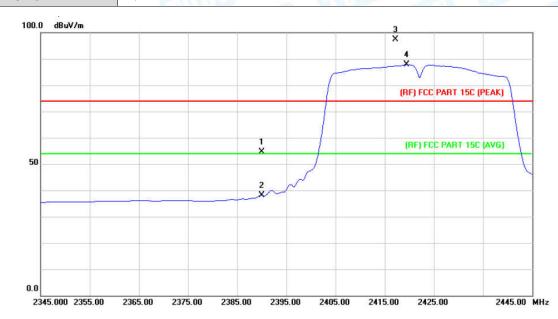


No	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	X	2459.600	87.46	3.27	90.73	Fundamental I	Frequency	peak
2	*	2460.600	78.00	3.27	81.27	- Fundamental I	requency	AVG
3		2483.500	41.01	3.40	44.41	74.00	-29.59	peak
4		2483.500	30.96	3.40	34.36	54.00	-19.64	AVG



Page: 55 of 82

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V						
Ant. Pol.							
Test Mode:	TX N(HT40) Mode 2422MHz						
Remark:	N/A	THE STATE OF THE S	THE PARTY OF				

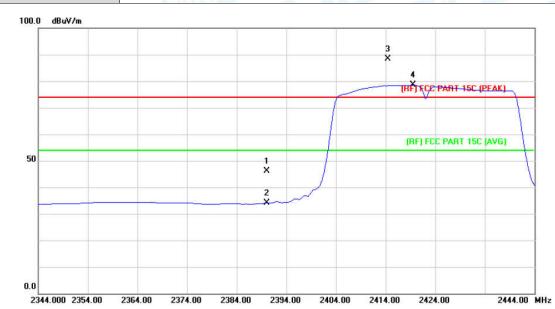


No.	. Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	51.74	2.91	54.65	74.00	-19.35	peak
2		2390.000	35.27	2.91	38.18	54.00	-15.82	AVG
3	X	2417.200	94.29	3.04	97.33	Fundamental	Frequency	peak
4	*	2419.400	84.73	3.04	87.77	Fundamental	Frequency	AVG



Page: 56 of 82

Temperature:	25 ℃	Relative Humidity:	55%				
Test Voltage:	DC 3.8V						
Ant. Pol.	Vertical						
Test Mode:	TX N(HT40) Mode 2422	TX N(HT40) Mode 2422MHz					
Remark:	N/A	W. D. C.	A MILL				

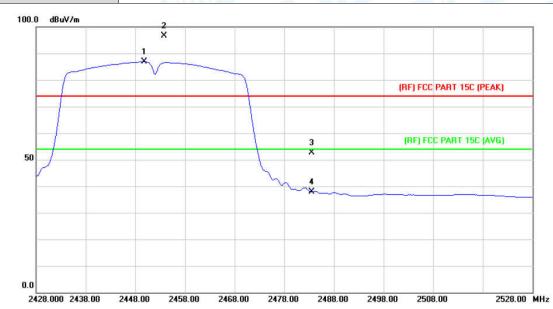


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		2390.000	43.21	2.91	46.12	74.00	-27.88	peak
2		2390.000	31.17	2.91	34.08	54.00	-19.92	AVG
3	X	2414.400	85.37	3.01	88.38	Fundamental	Frequency	peak
4	*	2419.600	75.50	3.04	78.54	Fundamental	Frequency	AVG



Page: 57 of 82

١	Temperature:	25 ℃	Relative Humidity:	55%				
ì	Test Voltage:	DC 3.8V						
	Ant. Pol.	Horizontal						
	Test Mode:	TX N(HT40) Mode 2452M	TX N(HT40) Mode 2452MHz					
	Remark:	N/A	WILL ST	Marie Comment				

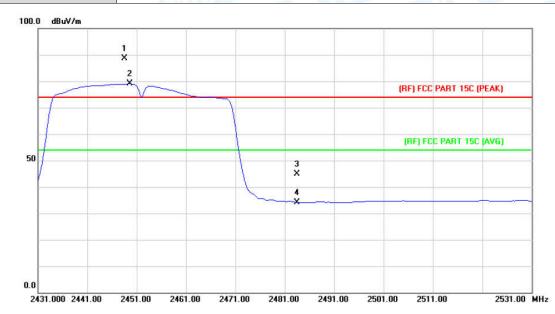


No.	Mk.	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	×	2449.800	83.73	3.21	86.94	Fundamental Frequency		AVG
2	X	2453.800	93.43	3.24	96.67	Fundamental Frequency		peak
3		2483.500	49.11	3.40	52.51	74.00	-21.49	peak
4		2483.500	34.39	3.40	37.79	54.00	-16.21	AVG



Page: 58 of 82

١	Temperature:	25 ℃	Relative Humidity:	55%			
	Test Voltage:	DC 3.8V					
	Ant. Pol.	Vertical					
	Test Mode:	TX N(HT40) Mode 2452MHz					
	Remark:	N/A	WILL ST	THE REAL PROPERTY.			



Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
X	2448.600	85.46	3.20	88.66	Fundamental Frequency		peak
*	2449.600	75.87	3.21	79.08	Fundamental Frequency		AVG
	2483.500	41.38	3.40	44.78	74.00	-29.22	peak
	2483.500	30.83	3.40	34.23	54.00	-19.77	AVG
	X	MHz X 2448.600 * 2449.600 2483.500	Mk. Freq. Level MHz dBuV X 2448.600 85.46 * 2449.600 75.87 2483.500 41.38	Mk. Freq. Level Factor MHz dBuV dB/m X 2448.600 85.46 3.20 * 2449.600 75.87 3.21 2483.500 41.38 3.40	Mk. Freq. Level Factor ment MHz dBuV dB/m dBuV/m X 2448.600 85.46 3.20 88.66 * 2449.600 75.87 3.21 79.08 2483.500 41.38 3.40 44.78	Mk. Freq. Level Factor ment Limit MHz dBuV dBuV dBuV/m dBuV/m X 2448.600 85.46 3.20 88.66 Fundamental * 2449.600 75.87 3.21 79.08 Fundamental 2483.500 41.38 3.40 44.78 74.00	Mk. Freq. Level Factor ment Limit Over MHz dBuV dBuV dBuV/m dBuV/m dBuV/m dB X 2448.600 85.46 3.20 88.66 Fundamental Frequency * 2449.600 75.87 3.21 79.08 Fundamental Frequency 2483.500 41.38 3.40 44.78 74.00 -29.22