

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC185469 Page: 1 of 41

Radio Test Report FCC ID: 2A3XN-SCORE7C

Original Grant

Report No.	Ril	TB-FCC185469
Applicant	:	Keefe Group
Equipment Under 1	'est (E	EUT)
EUT Name	:	Tablet PC
Model No.	1	SCORE 710
Series Model No.	:	P701B
Brand Name	1.0	SCORE 7C
Sample ID		20211022-01_1-01#& 20211022-01_1-02#
Receipt Date	1	2021-12-13
Test Date		2021-12-13 to 2022-01-06
Issue Date		2022-01-06
Standards	5	FCC Part 15 Subpart C 15.247
Test Method	÷	ANSI C63.10: 2013 KDB 558074 D01 15.247 Meas Guidance v05r02
Conclusions	:	PASS
		In the configuration tested, the EUT complied with the standards specified above.
Witness Engineer		: Countle 4 Camille Li

Engineer Supervisor

Engineer Manager

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

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TB-RF-074-1.0



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Revision History

Report No.	Version	Description	Issued Date
TB-FCC185469	Rev.01	Initial issue of report	2022-01-06
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1. General Information about EUT

1.1 Client Information

TOBY

Applicant	1	Keefe Group
Address		10880 Linpage PI, St. Louis, MO 63132, United States
Manufacturer	-	Shenzhen Ployer Electronics Co., Ltd.
Address		6~7F, Building 8, Rundongsheng Industrial Area, Longzhu Community, Xixiang Street, Bao'an District, Shenzhen, 518000, China.

1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Tablet PC	The start	
Models No.	÷	SCORE 710, P701B		
Model Difference	5	All PCB boards and circuit diagrams are the same, the only difference is that names.		
AT LUC		Operation Frequency:	802.11b/g/n(HT20): 2412MHz~2462MHz 802.11n(HT40): 2422MHz~2452MHz	
TOBY		Number of Channel:	nnel: 802.11b/g/n(HT20):11 channels 802.11n(HT40): 7 channels	
Product		Antenna Gain:	1.55dBi PIFA Antenna	
Description		Modulation Type:	802.11b: DSSS(CCK, DQPSK, DBPSK) 802.11g/n:OFDM(BPSK,QPSK,16QAM,64 QAM)	
TOBY TUS		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 Rating		DC 3.7V by battery		
Software Version		Android10.0		
Hardware Version	:	V1.0		
Remark:	1			

(1) The antenna gain and adapter provided by the applicant, the verified for the RF conduction test provided by TOBY test lab.

- (2) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- (3) Antenna information provided by the applicant.

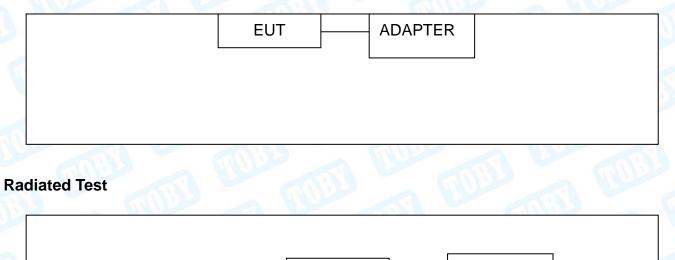


(4) Channel List:

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 1	1 for 802.11b/g/n(HT2	20)			
CH 03~CH 0	9 for 802.11n(HT40)				

1.3 Block Diagram Showing the Configuration of System Tested

Conducted Test





1.4 Description of Support Units

Equipment Information					
Name	Model	FCC ID/VOC	Manufacturer	Used "√"	
Adapter	TULE .		HUAWEI	V	
		Cable Information			
Number	Shielded Type	Ferrite Core	Length	Note	
				9	
Remark: the L	ISB Cable and adapt	ter provided by TOB	Y test lab.	an b	

1.5 Description of Test Mode

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

	For Conducted Emission Test
Final Test Mode	Description
Mode 1	Charging with TX b Mode Channel 01
Fo	or Radiated and RF Conducted 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
Noto	

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 802.11g Mode: OFDM 802.11n (HT20) Mode: MCS 0

- (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 RF setting.

Test Software: MT7603U_QA_Tool					
	Test Mode: Continuously transmitting				
Mode	Data Rate	Channel	Parameters		
The second	CCK/ 1Mbps	01	20		
802.11b	CCK/ 1Mbps	06	20		
	CCK/ 1Mbps	11	20		
	OFDM/ 6Mbps	01	16		
802.11g	OFDM/ 6Mbps	06	14		
	OFDM/ 6Mbps	11	14		
	MCS 0	01	14		
802.11n(HT20)	MCS 0	06	14		
	MCS 0	11	14		
	MCS 0	03	9		
802.11n(HT40)	MCS 0	06	9		
	MCS 0	09	9		

1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U_3$, 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	±4.50 dB	
Radiated Emission	Level Accuracy: 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 1/F.,Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

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

A2LA Certificate No.: 4750.01

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

IC Registration No.: (11950A)

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



2. Test Summary

Standard Section	Toot Kom		lu dama ant	Demeria	
FCC	Test Item	Test Sample(s)	Judgment	Remark	
FCC 15.207(a)	Conducted Emission	20211022-01_1-01#	PASS	N/A	
FCC 15.209 & 15.247(d)	Radiated Unwanted Emissions	20211022-01_1-01#	PASS	N/A	
FCC 15.203	Antenna Requirement	20211022-01_1-02#	PASS	N/A	
FCC 15.247(a)(2)	6dB Bandwidth	20211022-01_1-02#	PASS	N/A	
	99% Occupied bandwidth	20211022-01_1-02#	PASS	N/A	
FCC 15.247(b)(3)	Peak Output Power and E.I.R.P	20211022-01_1-02#	PASS	N/A	
FCC 15.247(e)	Power Spectral Density	20211022-01_1-02#	PASS	N/A	
FCC 15.247(d)	Band Edge Measurements	20211022-01_1-02#	PASS	N/A	
FCC 15.207(a)	Conducted Unwanted Emissions	20211022-01_1-02#	PASS	N/A	
FCC 15.247(d)	Emissions in Restricted Bands	20211022-01_1-02#	PASS	N/A	
	On Time and Duty Cycle	20211022-01_1-02#		N/A	

Note: 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
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0
RF Test System	JS1120	Tonscend	V2.6.88.0336

4. Test Equipment

Conducted Emission	Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jul. 02, 2021	Jul. 01, 2022
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 02, 2021	Jul. 01, 2022
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 02, 2021	Jul. 01, 2022
LISN	Rohde & Schwarz	ENV216	101131	Jul. 02, 2021	Jul. 01, 2022
Radiation Emission T	est			•	
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 02, 2021	Jul. 01, 2022
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 02, 2021	Jul. 01, 2022
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 02, 2021	Jul. 01, 2022
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar.01, 2020	Feb. 28, 2022
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar.01, 2020	Feb. 28, 202
Horn Antenna	ETS-LINDGREN	BBHA 9170	BBHA9170582	Mar.01, 2020	Feb. 28, 202
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jul. 06, 2021	Jul. 05, 2022
Pre-amplifier	Sonoma	310N	185903	Feb. 25, 2021	Feb. 24, 2022
Pre-amplifier	HP	8449B	3008A00849	Feb. 25, 2021	Feb. 24, 202
Pre-amplifier	SKET	LNPA_1840G-50	SK201904032	Feb. 25, 2021	Feb. 24, 202
Cable	HUBER+SUHNER	100	SUCOFLEX	Feb. 25, 2021	Feb. 24, 2022
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna Conducted E	Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 02, 2021	Jul. 01, 2022
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jul. 02, 2021	Jul. 01, 2022
MXA Signal Analyzer	Agilent	N9020A	MY49100060	Sep. 10, 2021	Sep. 09, 202
Vector Signal Generator	Agilent	N5182A	MY50141294	Sep. 10, 2021	Sep. 09, 202
Analog Signal Generator	Agilent	N5181A	MY50141953	Sep. 10, 2021	Sep. 09, 202
	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO26	Sep. 10, 2021	Sep. 09, 202
	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO29	Sep. 10, 2021	Sep. 09, 202
RF Power Sensor	DARE!! Instruments	RadiPowerRPR3006W	17I00015SNO31	Sep. 10, 2021	Sep. 09, 202
	DARE!! Instruments	RadiPowerRPR3006W	17100015SNO33	Sep. 10, 2021	Sep. 09, 202



5. Conducted Emission Test

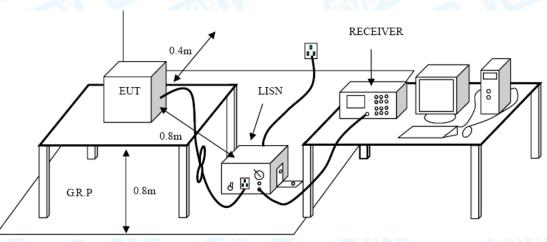
- 5.1 Test Standard and Limit
 - 5.1.1 Test Standard
 - FCC Part 15.207
 - 5.1.2 Test Limit

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

Notes:

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

5.2 Test Setup



5.3 Test Procedure

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

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

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

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

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



5.4 Deviation From Test Standard

No deviation

5.5 EUT Operating Mode

Please refer to the description of test mode.

5.6 Test Data

Please refer to the Attachment A inside test report.



6. Radiated and Conducted Unwanted Emissions

- 6.1 Test Standard and Limit
 - 6.1.1 Test Standard

FCC Part 15.209 & FCC Part 15.247(d)

6.1.2 Test Limit

General field strength limits at frequencies Below 30MHz					
FrequencyField StrengthMeasurement Distance					
(MHz)	(meters)				
0.009~0.490	2400/F(KHz)	300			
0.490~1.705	24000/F(KHz)	30			
1.705~30.0	30	30			

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

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

General field strength limits at frequencies Above 1000MHz				
Frequency Distance of 3m (dBuV/m)				
(MHz)	Peak	Average		
Above 1000	74	54		

Note:

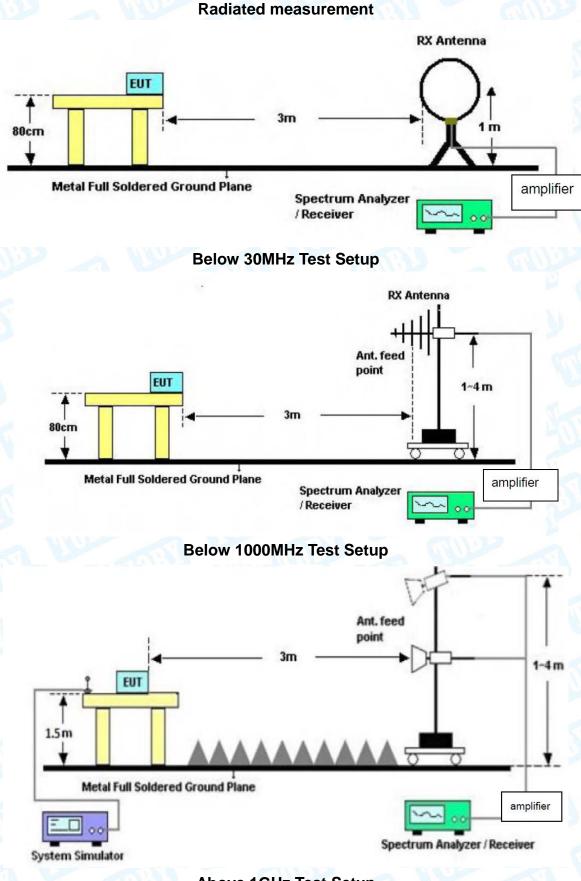
(1) The tighter limit applies at the band edges.

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

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



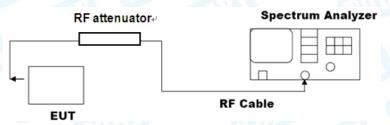
6.2 Test Setup



Above 1GHz Test Setup



Conducted measurement



6.3 Test Procedure

---Radiated measurement

● The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.

• Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

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

• The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

● If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Below 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

● Testing frequency range 30MHz-1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection. Testing frequency range 9KHz-150Hz the measuring instrument use VBW=200Hz with Quasi-peak detection. Testing frequency range 9KHz-30MHz the measuring instrument use VBW=9kHz with Quasi-peak detection.

● Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

•For the actual test configuration, please see the test setup photo.



--- Conducted measurement

Reference level measurement

Establish a reference level by using the following procedure:

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

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

Emission level measurement

Establish an emission level by using the following procedure:

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

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

6.4 Deviation From Test Standard

No deviation

6.5 EUT Operating Mode

Please refer to the description of test mode.

6.6 Test Data

Radiated measurement please refer to the Attachment B inside test report. Conducted measurement please refer to the Appendix C section 7.





7. Restricted Bands Requirement

- 7.1 Test Standard and Limit
 - 7.1.1 Test Standard

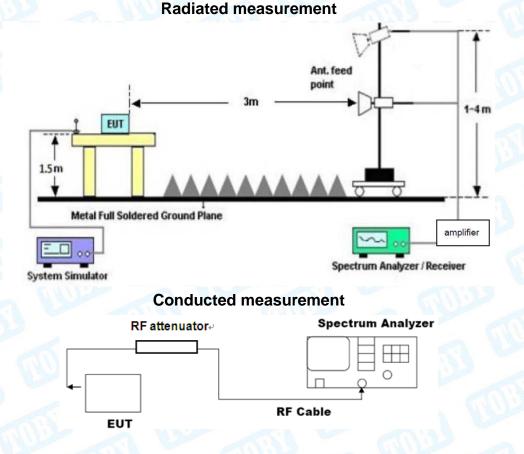
FCC Part 15.205 & FCC Part 15.247(d)

7.1.2 Test Limit

Distance Meters(at 3m)			
Peak (dBuV/m)	Average (dBuV/m)		
74	54		
74	54		
Peak (dBm)see 7.3 e)	Average (dBm) see 7.3 e)		
-41.20	-21.20		
-41.20	-21.20		
	Peak (dBuV/m) 74 74 Peak (dBm)see 7.3 e) -41.20		

alternative to radiated measurements for determining compliance in the restricted frequency bands requirements. If conducted measurements are performed, then proper impedance matching must be ensured and an additional radiated test forcabinet/case emissions is required.

7.2 Test Setup





7.3 Test Procedure

---Radiated measurement

• Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.

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

● The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

• The Peak Value and average value both need to comply with applicable limit above 1 GHz.

● Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

• For the actual test configuration, please see the test setup photo.

--- Conducted measurement

a) Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency (see 11.12.2.3 through 11.12.2.5 for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).

b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP (see 11.12.2.6 for guidance on determining the applicable antenna gain).

c) Add the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies \leq 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies > 1000 MHz).

d) For MIMO devices, measure the power of each chain and sum the EIRP of all chains in linear terms (i.e., watts and mW).

e) Convert the resultant EIRP to an equivalent electric field strength using the following relationship:

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

where

E is the electric field strength in dBuV/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

f) Compare the resultant electric field strength level with the applicable regulatory limit.

g) Perform the radiated spurious emission test.



7.4 Deviation From Test Standard

No deviation

7.5 EUT Operating Mode

Please refer to the description of test mode.

7.6 Test Data

Remark: The test uses antenna-port conducted measurements as an alternative to radiated measurements for determining compliance in the restricted frequency bands requirements.

Please refer to the Appendix C section 6&8.



8. Bandwidth Test

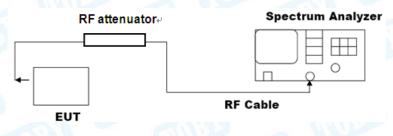
- 8.1 Test Standard and Limit
 - 8.1.1 Test Standard

FCC Part 15.205 & FCC Part 15.247(d)

8.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
-6dB bandwidth (DTS bandwidth)	>=500 KHz	2400~2483.5
99% occupied bandwidth		2400~2483.5

8.2 Test Setup



8.3 Test Procedure

---DTS bandwidth

- The steps for the first option are as follows:
- a) Set RBW = 100 kHz.
- b) Set the VBW≥[3*RBW].
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.

g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

---occupied bandwidth

● The occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission. The following procedure shall be used for measuring 99% power bandwidth:

a) The instrument center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be between 1.5 times and 5.0 times the OBW.

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW, unless otherwise specified by the applicable requirement.

c) Set the reference level of the instrument as required, keeping the signal from exceeding



the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than [10 log (OBW/RBW)] below the reference level. Specific guidance is given in 4.1.5.2.

d) Step a) through step c) might require iteration to adjust within the specified range.

e) Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.

f) Use the 99% power bandwidth function of the instrument (if available) and report the measured bandwidth.

g) If the instrument does not have a 99% power bandwidth function, then the trace data points are recovered and directly summed in linear power terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached; that frequency is recorded as the lower frequency. The process is repeated until 99.5% of the total is reached; that frequence between these two frequencies.

 h) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

8.4 Deviation From Test Standard

No deviation

8.5 EUT Operating Mode

Please refer to the description of test mode.

8.6 Test Data

Please refer to the Appendix C section 3&4.



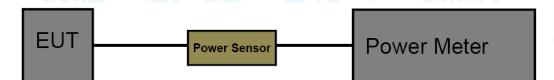
9. Peak Output Power

- 9.1 Test Standard and Limit
 - 9.1.1 Test Standard
 - FCC Part 15.247(b)(3)
 - 9.1.2 Test Limit

Test Item	Test Item Limit	
Peak Output Power	not exceed 1 W or 30dBm	2400~2483.5

9.2 Test Setup

TOBY



9.3 Test Procedure

● The EUT was connected to RF power meter via a broadband power sensor as show the block above. The power sensor video bandwidth is greater than or equal to the DTS bandwidth of the equipment.

9.4 Deviation From Test Standard

No deviation

9.5 EUT Operating Mode

Please refer to the description of test mode.

9.6 Test Data

Please refer to the Appendix C section 2.



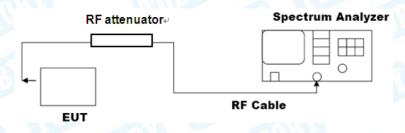
10. Power Spectral Density

```
10.1 Test Standard and Limit
```

- 10.1.1 Test Standard
- FCC Part 15.247(e)
- 10.1.2 Test Limit

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

10.2 Test Setup



10.3 Test Procedure

• The following procedure shall be used if maximum peak conducted output power was used to determine compliance, and it is optional if the maximum conducted (average) output power was used to determine compliance:

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

j) If measured value exceeds requirement, then reduce RBW (but no less than 3 kHz) and repeat.

10.4 Deviation From Test Standard

No deviation

10.5 Antenna Connected Construction

Please refer to the description of test mode.

10.6 Test Data

Please refer to the Appendix C section 5.



11. Antenna Requirement

11.1 Test Standard and Limit

11.1.1 Test Standard FCC Part 15.203

11.1.2 Requirement

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

11.2 Deviation From Test Standard

No deviation

11.3 Antenna Connected Construction

The gains of the antenna used for transmitting is 2dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

11.4 Test Data

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

	Antenna Type			
772	Permanent attached antenna	00		
2	Unique connector antenna			
D	Professional installation antenna	100		

Attachment A-- Conducted Emission Test Data

Т	emperature:	22.5 ℃		Re	lative Humi	dity:	42%	6112
T	est Voltage:	AC 12	0V/60Hz				1.	
T	erminal:	Line		- ALL			Ultra	
T	est Mode:	Mode	1	U	1		5	(COD)
	emark:	Only w	orse case is	reported.	A ROLD	1		2
		0.5		(MHz)	5			peak
		0.5						30.000
	No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector
	1	0.1940	25.20	11.65	36.85	63.86	-27.01	QP
	2	0.1940	13.47	11.65	25.12	53.86	-28.74	AVG
	3	0.2900	25.56	11.60	37.16	60.52	-23.36	QP
	4	0.2900	14.25	11.60	25.85	50.52	-24.67	AVG
	5	0.5740	25.81	11.45	37.26	56.00	-18.74	QP
	6	0.5740	14.62	11.45	26.07	46.00	-19.93	AVG
	7 *	4 0000	00.04	44.44	10.15	FO 00	40.55	0.0

11.14

11.14

10.12

10.12

10.18

10.18

43.45

27.35

28.96

21.56

30.70

24.34

56.00 -12.55

46.00 -18.65

56.00 -27.04

46.00 -24.44

60.00 -29.30

50.00 -25.66

QP

AVG

QP

AVG

AVG

QP

Remark: 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)

1.0820

1.0820

4.2500

4.2500

8.9180

8.9180

32.31

16.21

18.84

11.44

20.52

14.16

7

8

9

10

11

12

*

2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)

TOBY

Temperature:	22.5℃	Relative Humidity:	42%
Test Voltage:	AC 120V/60Hz		The MUP
Terminal:	Neutral	av	
Test Mode:	Mode 1		
Remark:	Only worse case is reported		
80.0 dBuV 30 -20 0.150	0.5 (MHz)		QP: AVG:
0.150	0.5 (MHZ)	5	30.000

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB	dBu∨	dBu∨	dB	Detector
1		0.1980	28.22	11.67	39.89	63.69	-23.80	QP
2		0.1980	13.68	11.67	25.35	53.69	-28.34	AVG
3		0.2940	27.53	11.59	39.12	60.41	-21.29	QP
4		0.2940	15.05	11.59	26.64	50.41	-23.77	AVG
5		0.4900	27.41	11.50	38.91	56.17	-17.26	QP
6		0.4900	14.55	11.50	26.05	46.17	-20.12	AVG
7	*	1.0820	32.39	11.14	43.53	56.00	-12.47	QP
8		1.0820	18.62	11.14	29.76	46.00	-16.24	AVG
9		3.9900	17.62	10.11	27.73	56.00	-28.27	QP
10		3.9900	12.81	10.11	22.92	46.00	-23.08	AVG
11		8.6500	21.79	10.08	31.87	60.00	-28.13	QP
12		8.6500	16.44	10.08	26.52	50.00	-23.48	AVG

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



Attachment B--Unwanted Emissions Data

---Radiated Unwanted Emissions

9 KHz~30 MHz

From 9 KHz to 30 MHz: Conclusion: PASS

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

30MHz~1GHz

Temp	peratur	e:	23.	9° ℃					Rela	ative	Humi	dity:	4	4%	10		
Test	Voltag	e:	AC	120	0V/6	0H	z		12	000	1	R	3		22	2	
Ant.	Pol.		Ho	rizo	ntal	-		11			100	16					
Fest	Mode:		Мо	de 2	2		44	J. Car	1	-	N.	1	1	1			_
Rema	ark:		On	ly w	orse	e ca	se is	reporte	d.	NY2		2					2
80.	0 dBu¥/m	ı															_
												(RF)FC	C 15C 3N	l Rad	iation		
						-								Marc	jin -6 d	B	H
																	l
30						ſ											
50	1	2 2															
	m	X 3				-		un sem	~~~	s K Junto	when	6 	enny	non	rhodun	Mart	-
	m J	AM				ñ .	Marmal	www	www	~~~							
		v i	Why	m	when	(wr											
						-						_					
-20	0.000 4	0 5	i0 60		0 80			(MHz									

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	36.0007	38.87	-17.60	21.27	40.00	-18.73	peak
2		42.3022	40.41	-20.59	19.82	40.00	-20.18	peak
3		48.3318	41.23	-23.00	18.23	40.00	-21.77	peak
4		150.5378	34.24	-21.53	12.71	43.50	-30.79	peak
5		229.2931	35.62	-18.46	17.16	46.00	-28.84	peak
6		419.1081	29.23	-12.27	16.96	46.00	-29.04	peak

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

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. QuasiPeak (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- 3. Margin (dB) = QuasiPeak (dB μ V/m)-Limit QPK(dB μ V/m)

TOBY

Temperature:	23.9 ℃		R	elative Humi	dity:	44%	
Test Voltage:	AC 120)V/60Hz					4013
Ant. Pol.	Vertica						3
Test Mode:	Mode 2	2	all	20	14	U.S.	
Remark:	Only w	orse case is	reported.	-		III.	1 DE
80.0 dBuV/m							
					(RF)FCC	15C 3M Radiation	
						Margin -6	dB
30 ×					5	6	
March	2	3		m	Whythere	www.tom	mm
	mar and	a mar	r	MA MAN			
		VW~\~(**	May	ar i waayin			
-20 30.000 40	50 60 70		(MHz)	300	400	500 600 700	1000.000
					100		1000.000
No. Mk.	Frog	Reading	Correct	Measure-	Limit	Over	
INO. IVIK.	Freq.	Level	Factor	ment			
	MHz	dBu∨	dB/m	dBuV/m	dBuV/i		Detecto
1 * 42	2.3022	51.37	-20.59	30.78	40.0	0 -9.22	peal
2 49	9.7068	45.33	-23.45	21.88	40.0	0 -18.12	peal
3 11	2.1305	39.59	-22.55	17.04	43.5	0 -26.46	peal
4 21	6.7828	33.49	-19.16	14.33	46.0	0 -31.67	· ·
	9.1860	41.61	-14.27	27.34	46.0		-
6 68	9.5644	32.63	-7.02	25.61	46.0	0 -20.39	peal

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

Remark:

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

Above 1-25GHz

			T	
	Temperature:	23.6 ℃	Relative Humidity:	47%
Ant. Pol. Horizontal	Test Voltage:	DC 3.7V		
	Ant. Pol.	Horizontal		any a
Test Mode: TX B Mode 2412MHz	Test Mode:	TX B Mode 2412MHz	NUL A	

_	No.	Mk.	Freq.			Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		*	4823.818	28.44	12.43	40.87	54.00	-13.13	AVG
2	2		4823.918	42.55	12.43	54.98	74.00	-19.02	peak

Remark:

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
- 2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)
- 3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		E S
Test Mode:	TX B Mode 2412MHz	and a	11UL

١	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBu\//m	dB	Detector
1		*	4823.924	28.44	12.43	40.87	54.00	-13.13	AVG
2			4824.074	41.73	12.43	54.16	74.00	-19.84	peak

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		nup.
Ant. Pol.	Horizontal	200	
Test Mode:	TX B Mode 2437MHz		NUS ST

No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.640	41.91	12.75	54.66	74.00	-19.34	peak
2	*	4873.732	28.60	12.75	41.35	54.00	-12.65	AVG

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V	anits a	
Ant. Pol.	Vertical	COB.	CUD.
Test Mode:	TX B Mode 2437MHz		

No	. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu∀/m	dB	Detector
1		4873.500	41.90	12.75	54.65	74.00	-19.35	peak
2	*	4873.618	28.75	12.75	41.50	54.00	-12.50	AVG

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		GUY!
Ant. Pol.	Horizontal	1	
Test Mode:	TX B Mode 2462MHz		IU ST

No.	. Mk	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∖/m	dBu\//m	dB	Detector
1		4924.088	41.71	13.06	54.77	74.00	-19.23	peak
2	*	4924.258	28.61	13.06	41.67	54.00	-12.33	AVG

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX B Mode 2462MHz		

No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∨/m	dBu∀/m	dB	Detector
1		4923.526	41.82	13.06	54.88	74.00	-19.12	peak
2	*	4923.702	28.34	13.06	41.40	54.00	-12.60	AVG

Remark:

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

2. Peak/AVG ($dB\mu V/m$)= Corr. (dB/m)+ Read Level ($dB\mu V$)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

TOBY

				1 C C C C C C C C C C C C C C C C C C C
Temperature:	23.6 ℃	Relative Humidity:	47%	
Test Voltage:	DC 3.7V			MU22
Ant. Pol.	Horizontal	1	1170	1
Test Mode:	TX G Mode 2412MHz		NUC	

N	o. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu∀/m	dB	Detector
1	*	4823.602	28.32	12.43	40.75	54.00	-13.25	AVG
2		4823.728	41.27	12.43	53.70	74.00	-20.30	peak

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V	20	
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2412MHz		

N	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∀/m	dBu\//m	dB	Detector
1	*	4823.658	27.98	12.43	40.41	54.00	-13.59	AVG
2		4824.394	41.34	12.43	53.77	74.00	-20.23	peak

Remark:

1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB) 2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		MUP
Ant. Pol.	Horizontal	100	
Test Mode:	TX G Mode 2437MHz		

No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4873.744	42.29	12.75	55.04	74.00	-18.96	peak
2	*	4873.854	28.40	12.75	41.15	54.00	-12.85	AVG

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		
Ant. Pol.	Vertical		
Test Mode:	TX G Mode 2437MHz	COR!	

N	р. M	k. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1	*	4873.906	28.52	12.75	41.27	54.00	-12.73	AVG
2		4874.500	42.10	12.75	54.85	74.00	-19.15	peak

Remark:

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

2. Peak/AVG ($dB\mu V/m$)= Corr. (dB/m)+ Read Level ($dB\mu V$)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V	Con BU	RUPE
Ant. Pol.	Horizontal	200	
Test Mode:	TX G Mode 2462MHz		

No.	. Mk.	Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu∀/m	dB	Detector
1		4923.742	41.41	13.06	54.47	74.00	-19.53	peak
2	*	4924.064	28.33	13.06	41.39	54.00	-12.61	AVG

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 °C	Relative Humidity:	47%
Test Voltage:	DC 3.7V		NUL S
Ant. Pol.	Vertical	COR.	and b
Test Mode:	TX G Mode 2462MHz		No.

N	o. Mk	. Freq.	•		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu∖/m	dB	Detector
1	*	4923.824	28.40	13.06	41.46	54.00	-12.54	AVG
2		4923.992	42.72	13.06	55.78	74.00	-18.22	peak

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V	COURS -	and the
Ant. Pol.	Horizontal	1	
Test Mode:	TX n(HT20) Mode 241	2MHz	

No	. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∨/m	dBuV/m	dB	Detector
1		4823.678	42.06	12.43	54.49	74.00	-19.51	peak
2	*	4823.876	28.03	12.43	40.46	54.00	-13.54	AVG

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		E
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode	e 2412MHz	

No	. Mk	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4824.186	41.83	12.43	54.26	74.00	-19.74	peak
2	*	4824.458	28.08	12.43	40.51	54.00	-13.49	AVG

Remark:

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

2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		AUP
Ant. Pol.	Horizontal		
Test Mode:	TX n(HT20) Mode 2437N	ИНz	

No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu\/m	dB	Detector
1	*	4873.532	28.63	12.75	41.38	54.00	-12.62	AVG
2		4873.648	42.56	12.75	55.31	74.00	-18.69	peak

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

	Ellin		
Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		and i
Ant. Pol.	Vertical		NUL S
Test Mode:	TX n(HT20) Mode	e 2437MHz	The second

No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu∀/m	dB	Detector
1	*	4873.658	28.49	12.75	41.24	54.00	-12.76	AVG
2		4874.146	42.28	12.75	55.03	74.00	-18.97	peak

Remark:

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

2. Peak/AVG ($dB\mu V/m$)= Corr. (dB/m)+ Read Level ($dB\mu V$)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

TOBY

Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		aut -
Ant. Pol.	Horizontal	AU	
Test Mode:	TX n(HT20) Mode 2462	MHz	

No	o. M	k. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu\//m	dBuV/m	dB	Detector
1	*	4924.014	28.43	13.06	41.49	54.00	-12.51	AVG
2		4924.462	41.90	13.06	54.96	74.00	-19.04	peak

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		E
Ant. Pol.	Vertical		
Test Mode:	TX n(HT20) Mode 246	2MHz	

No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		4923.568	42.00	13.06	55.06	74.00	-18.94	peak
2	*	4924.378	28.51	13.06	41.57	54.00	-12.43	AVG

Remark:

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

2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6℃	Relative Humidity:	47%			
Test Voltage:	DC 3.7V					
Ant. Pol.	Horizontal		L'E A			
Test Mode:	TX n(HT40) Mode 2422MI	Hz	Collim 1			

N	lo. I	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	r	4844.452	28.43	12.57	41.00	54.00	-13.00	AVG
2			4844.488	41.83	12.57	54.40	74.00	-19.60	peak

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		and b
Ant. Pol.	Vertical		
Test Mode:	TX n(HT40) Mode 2422Mł	Hz	TUUS OF

No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4843.970	41.88	12.57	54.45	74.00	-19.55	peak
2	*	4844.424	28.35	12.57	40.92	54.00	-13.08	AVG

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dBµV/m)-Limit PK/AVG(dBµV/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.



Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V		THUS A
Ant. Pol.	Horizontal	A V	
Test Mode:	TX n(HT40) Mode 2437N	ИНz	

No	. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBu∀/m	dB	Detector
1		4873.578	41.84	12.75	54.59	74.00	-19.41	peak
2	*	4874.218	28.28	12.75	41.03	54.00	-12.97	AVG

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.6 ℃	Relative Humidity:	47%
Test Voltage:	DC 3.7V	anis a	
Ant. Pol.	Vertical	COB -	(III)
Test Mode:	TX n(HT40) Mode 2437Mł	Hz	The second second

No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4874.178	41.84	12.75	54.59	74.00	-19.41	peak
2	*	4874.402	28.38	12.75	41.13	54.00	-12.87	AVG

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

TOBY

Temperature:		e: 23.6	23.6°C Relative Humidity:		ity: 47	47%		
Test Voltage:		e: DC	3.7V			850		MUP
Ant. Po	ol.	Hori	zontal		av		1.	
Test M	ode:	TX r	n(HT40) Mode	2452MHz	12	O.K.		
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
No.	Mk.	Freq. MHz	•			Limit dBu∀/m	Over dB	Detector
No.	Mk.		Level dBu∨	Factor	ment			Detector peak

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

Temperature:	23.5℃	Relative Humidity:	49%			
Test Voltage:	DC 3.7V		5			
Ant. Pol.	Vertical	TORY -				
Test Mode:	TX n(HT40) Mode 2452M	Hz				

_	No.	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
			MHz	dBu∨	dB/m	dBuV/m	dBu∀/m	dB	Detector
1			4903.518	41.91	12.94	54.85	74.00	-19.15	peak
2	2	*	4904.046	28.57	12.94	41.51	54.00	-12.49	AVG

Remark:

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

2. Peak/AVG (dBµV/m)= Corr. (dB/m)+ Read Level (dBµV)

3. Margin (dB) = Peak/AVG (dB μ V/m)-Limit PK/AVG(dB μ V/m)

4. The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

5. No report for the emission which more than 20dB below the prescribed limit.

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