

Report No: JYTSZB-R12-2101603

# FCC REPORT (Bluetooth)

Applicant:	Todos Industrial Limited		
Address of Applicant:	Room 308, building A3, Fuhai information port, Fuhai street, Bao'an District, Shenzhen City, Guangdong Province, 518000		
Equipment Under Test (E	EUT)		
Product Name:	Tablet PC		
Model No.:	Tab64, Tab 64, Tab7ii, Tab8ii, Tab10ii, TabX1, TabX2, TabX3, TabX4, TabXX (X can be "0" to "9", "a" to"z"), TabAl1, Tab1066, TabN1, TabN2, TabN3, TabN4		
Trade mark:	Aprix, Geex, Hiup, None, Quadrant		
FCC ID:	2AZQ6-AP64		
Applicable standards:	FCC CFR Title 47 Part 15 Subpart C Section 15.247		
Date of sample receipt:	16 Aug., 2021		
Date of Test:	16 Aug., to 07 Sep., 2021		
Date of report issued:	08 Sep., 2021		
Test Result:	PASS *		

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



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 and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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### 2 Version

Version No.	Date	Description
00	08 Sep., 2021	Original

Tested by:

Mike.OU Test Engineer Winner Thang

Date: 08 Sep., 2021

Reviewed by:

Project Engineer

Date: 08 Sep., 2021

Project No.: JYTSZE2108062



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### **4** Test Summary

Test Items	Section in CFR 47	Test Data	Result
Antenna Requirement	15.203 & 15.247 (b)	See Section 6.1	Pass
AC Power Line Conducted Emission	15.207	See Section 6.2	Pass
Conducted Peak Output Power	15.247 (b)(1)	Appendix A – BT	Pass
20dB Occupied Bandwidth	15.247 (a)(1)	Appendix A – BT	Pass
Carrier Frequencies Separation	15.247 (a)(1)	15.247 (a)(1) Appendix A – BT	
Hopping Channel Number	15.247 (a)(1)	Appendix A – BT	Pass
Dwell Time	15.247 (a)(1)	Appendix A – BT	Pass
Conducted Band Edge	45 005 8 45 000	Appendix A – BT	Pass
Radiated Band Edge	15.205 & 15.209	See Section 6.9.2	Pass
Conducted Spurious Emission		Appendix A – BT	Pass
Radiated Spurious Emission	15.247(d)	See Section 6.10.2	Pass
Remark:			

Pass: The EUT complies with the essential requirements in the standard. 1.

2. N/A: Not Applicable.

The cable insertion loss used by "RF Output Power" and other conduction measurement items is 0.5dB (provided by З. the customer).

Test Method:	ANSI C63.10-2013
rest method:	KDB 558074 D01 15.247 Meas Guidance v05r02



### **5** General Information

### **5.1 Client Information**

Applicant:	Todos Industrial Limited
Address:	Room 308, building A3, Fuhai information port, Fuhai street, Bao'an District, Shenzhen City, Guangdong Province, 518000
Manufacturer:	Todos Industrial Limited
Address:	Room 308, building A3, Fuhai information port, Fuhai street, Bao'an District, Shenzhen City, Guangdong Province, 518000

## **5.2 General Description of E.U.T.**

Product Name:	Tablet PC			
Model No.:	Tab64, Tab 64, Tab7ii, Tab8ii, Tab10ii, TabX1, TabX2, TabX3, TabX4, TabXX (X can be "0" to "9", "a" to"z"), TabAl1, Tab1066, TabN1, TabN2, TabN3, TabN4			
Operation Frequency:	2402MHz~2480MHz			
Transfer rate:	1/2/3 Mbits/s			
Number of channel:	79			
Modulation type:	GFSK, π/4-DQPSK, 8DPSK			
Modulation technology:	FHSS			
Antenna Type:	Internal Antenna			
Antenna gain:	0.1 dBi			
Power supply:	Rechargeable Li-ion Battery DC3.8V, 6000mAh			
AC adapter:	Model: EE-0502000UZ Input: AC100-240V, 50/60Hz, 0.5A Output: DC 5.0V, 2000mA			
Remark:	Model No.: Tab64, Tab 64, Tab7ii, Tab8ii, Tab10ii, TabX1, TabX2, TabX3, TabX4, TabXX (X can be "0" to "9", "a" to"z"), TabAI1, Tab1066, TabN1, TabN2, TabN3, TabN4 were identical inside, the electrical circuit design, layout, components used and internal wiring, with only difference being model name.			
Test Sample Condition:	The test samples were provided in good working order with no visible defects.			

Operation	Operation Frequency each of channel for GFSK, $\pi$ /4-DQPSK, 8DPSK							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency	
0	2402MHz	20	2422MHz	40	2442MHz	60	2462MHz	
1	2403MHz	21	2423MHz	41	2443MHz	61	2463MHz	
2	2404MHz	22	2424MHz	42	2444MHz	62	2464MHz	
3	2405MHz	23	2425MHz	43	2445MHz	63	2465MHz	
4	2406MHz	24	2426MHz	44	2446MHz	64	2466MHz	
5	2407MHz	25	2427MHz	45	2447MHz	65	2467MHz	
15	2417MHz	35	2437MHz	55	2457MHz	75	2477MHz	
16	2418MHz	36	2438MHz	56	2458MHz	76	2478MHz	
17	2419MHz	37	2439MHz	57	2459MHz	77	2479MHz	
18	2420MHz	38	2440MHz	58	2460MHz	78	2480MHz	
19 2421MHz 39 2441MHz 59 2461MHz								
Remark: Channel 0, 39 &78 selected for GFSK, $\pi$ /4-DQPSK and 8DPSK.								



#### 5.3 Test environment and mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	54 % RH
Atmospheric Pressure:	1010 mbar
Test Modes:	
Non-hopping mode:	Keep the EUT in continuous transmitting mode with worst case data rate.
Hopping mode:	Keep the EUT in hopping mode.
Remark	GFSK (1 Mbps) is the worst case mode.
Padiated Emission: The same	Ne was placed 0.8m (below 1GHz)/1.5m (above 1GHz) above the ground plane

Radiated Emission: The sample was placed 0.8m (below 1GHz)/1.5m (above 1GHz) above the ground plane of 3m chamber\*. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

### **5.4 Description of Support Units**

The EUT has been tested as an independent unit.

#### **5.5 Measurement Uncertainty**

Parameters	Expanded Uncertainty
Conducted Emission (9kHz ~ 30MHz)	±1.60 dB (k=2)
Radiated Emission (9kHz ~ 30MHz)	±3.12 dB (k=2)
Radiated Emission (30MHz ~ 1000MHz)	±4.32 dB (k=2)
Radiated Emission (1GHz ~ 18GHz)	±5.16 dB (k=2)
Radiated Emission (18GHz ~ 40GHz)	±3.20 dB (k=2)

### 5.6 Additions to, deviations, or exclusions from the method

No

### 5.7 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### • FCC - Designation No.: CN1211

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

#### • ISED – CAB identifier.: CN0021

The 3m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

#### • A2LA - Registration No.: 4346.01

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <u>https://portal.a2la.org/scopepdf/4346-01.pdf</u>

### 5.8 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd. Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China. Tel: +86-755-23118282, Fax: +86-755-23116366 Email: info-JYTee@lets.com, Website: <u>http://www.ccis-cb.com</u>



### **5.9 Test Instruments list**

Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
3m SAC	ETS	9m*6m*6m	966	01-19-2021	01-18-2024
BiConiLog Antenna	SCHWARZBECK	VULB9163	497	03-03-2021	03-02-2022
Biconical Antenna	SCHWARZBECK	VUBA9117	359	07-02-2021	07-01-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	916	03-03-2021	03-02-2022
Horn Antenna	SCHWARZBECK	BBHA9120D	1805	06-26-2021	06-25-2022
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170582	11-18-2020	11-17-2021
EMI Test Software	AUDIX	E3	V	/ersion: 6.110919b	)
Pre-amplifier	HP	8447D	2944A09358	03-03-2021	03-02-2022
Pre-amplifier	CD	PAP-1G18	11804	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP30	101454	03-03-2021	03-02-2022
Spectrum analyzer	Rohde & Schwarz	FSP40	100363	11-18-2020	11-17-2021
EMI Test Receiver	Rohde & Schwarz	ESRP7	101070	03-03-2021	03-02-2022
Spectrum Analyzer	Agilent	N9020A	MY50510123	11-18-2020	11-17-2021
Signal Generator	Rohde & Schwarz	SMX	835454/016	03-03-2021	03-02-2022
Signal Generator	R&S	SMR20	1008100050	03-03-2021	03-02-2022
RF Switch Unit	MWRFTEST	MW200	N/A	N/A	N/A
Test Software	MWRFTEST	MTS8200		Version: 2.0.0.0	
Cable	ZDECL	Z108-NJ-NJ-81	1608458	03-03-2021	03-02-2022
Cable	MICRO-COAX	MFR64639	K10742-5	03-03-2021	03-02-2022
Cable	SUHNER	SUCOFLEX100	58193/4PE	03-03-2021	03-02-2022
DC Power Supply	XinNuoEr	WYK-10020K	1409050110020	09-25-2020	09-24-2021
Temperature Humidity Chamber	HengPu	HPGDS-500	20140828008	11-01-2020	10-31-2021
Simulated Station	Rohde & Schwarz	CMW500	140493	07-16-2021	07-15-2022
10m SAC	ETS	RFSD-100-F/A	Q2005	03-31-2021	04-01-2024
BiConiLog Antenna	SCHWARZBECK	VULB 9168	1249	03-31-2021	04-01-2022
BiConiLog Antenna	SCHWARZBECK	VULB 9168	1250	03-31-2021	04-01-2022
EMI Test Receiver	R&S	ESR 3	102800	04-06-2021	04-07-2022
EMI Test Receiver	R&S	ESR 3	102802	04-06-2021	04-07-2022
Pre-amplifier	Bost	LNA 0920N	2016	04-06-2021	04-07-2022
Pre-amplifier	Bost	LNA 0920N	2019	04-06-2021	04-07-2022
Test Software	R&S	EMC32		Version: 10.50.40	

Conducted Emission:							
Test Equipment	Test Equipment Manufacturer Model No. Serial No.		Cal. Date	Cal. Due date			
	Manadalo	inouci ito.	oonan to:	(mm-dd-yy)	(mm-dd-yy)		
EMI Test Receiver	Rohde & Schwarz	ESCI	101189	03-03-2021	03-02-2022		
Pulse Limiter	SCHWARZBECK	OSRAM 2306	9731	03-03-2021	03-02-2022		
LISN	CHASE	MN2050D	1447	03-03-2021	03-02-2022		
LISN	Rohde & Schwarz	ESH3-Z5	8438621/010	06-18-2021	06-17-2022		
Cable	HP	10503A	N/A	03-03-2021	03-02-2022		
EMI Test Software	AUDIX	E3	Version: 6.110919b				

Conducted method:					
Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Date (mm-dd-yy)	Cal. Due date (mm-dd-yy)
Spectrum Analyzer	Keysight	N9010B	MY60240202	11-27-2020	11-26-2021
Vector Signal Generator	Keysight	N5182B	MY59101009	11-27-2020	11-26-2021
Analog Signal Generator	Keysight	N5173B	MY59100765	11-27-2020	11-26-2021
Power Detector Box	MWRF-test	MW100-PSB	MW201020JYT	11-27-2020	11-26-2021
Simulated Station	Rohde & Schwarz	CMW270	102335	11-27-2020	11-26-2021
RF Control Box	MWRF-test	MW100-RFCB	MW200927JYT	N/A	N/A

JianYan Testing Group Shenzhen Co., Ltd. No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China. Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366

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PDU	MWRF-test	XY-G10	N/A	N/A	N/A	
Test Software	MWRF-tes	MTS 8310	Version: 2.0.0.0			
DC Power Supply	Keysight	E3642A	MY60296194	11-27-2020	11-26-2021	

## 6 Test results and measurement data

### 6.1 Antenna Requirement

Standard requirement:	FCC Part 15 C Section 15.203 & 247(b)			
<ul> <li>15.203 requirement:</li> <li>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, 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.</li> <li>15.247(b) (4) requirement:</li> <li>(4) The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.</li> </ul>				
E.U.T Antenna:				
The Bluetooth antenna is an Internal antenna which permanently attached, and the best case gain of the antenna is 0.1 dBi.				



### **6.2 Conducted Emissions**

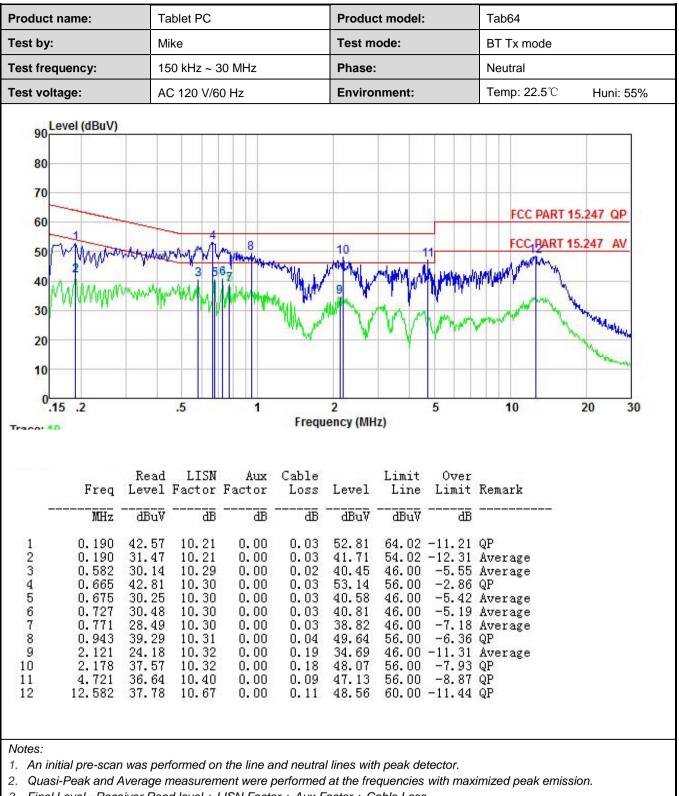
Test Requirement:	FCC Part 15 C Section 15.	207			
Test Frequency Range:	150 kHz to 30 MHz				
Class / Severity:	Class B				
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto				
Limit:	Frequency range (MHz) Limit (dBuV)				
		Quasi-peak	Average		
	0.15-0.5	66 to 56*	56 to 46*		
	0.5-5	56	46		
	5-30 * Decreases with the logari	60 thm of the frequency	50		
Test setup:	Reference Pl				
	AUX       E.U.T         Equipment       E.U.T         Test table/Insulation plane         Remarkc         E.U.T: Equipment Under Test         LISN Line Impedence Stabilization Networ         Test table height=0.8m				
Test procedure:	<ol> <li>50ohm/50uH coupling in</li> <li>The peripheral devices a LISN that provides a 500 termination. (Please reference)</li> <li>Both sides of A.C. line interference. In order to positions of equipment</li> </ol>	tion network (L.I.S.N.). Th npedance for the measuri	his provides a ng equipment. main power through a lance with 500hm the test setup and m conducted sion, the relative ables must be changed		
Test Instruments:	Refer to section 5.9 for det	ails			
Test mode:	Hopping mode				
Test results:	Pass				



#### **Measurement Data:**

90 Level (dBuV) 80 70 60 60 60 60 60 60 60 60 60 6	Product name:	Tablet PC	Product mo	del: Ta	ab64	
Rest voltage:         AC 120 V/60 Hz         Environment:         Temp: 22.5 °C         Huni: 55%           90	est by:	Mike	Test mode:	B	BT Tx mode	
$\frac{1}{10000000000000000000000000000000000$	est frequency:	150 kHz ~ 30 MHz	Phase:	Li	ne	
$\frac{1}{10000000000000000000000000000000000$	est voltage:	AC 120 V/60 Hz	Environme	nt: Te	emp: 22.5℃ Huni: 55%	
Read       LISN       Aux       Cable       Limit       Over         Freq       Level       Factor       Factor       Loss       Level       Line       Limit       Remark         MHz       dBuV       dB       dB       dB       dBuV       dB       dB         1       0.158       43.10       10.22       0.00       0.01       53.33       65.56       -12.23 QP         2       0.158       29.87       10.22       0.00       0.01       50.56       -15.46       Average         3       0.170       41.94       10.22       0.00       0.01       52.17       64.94       -12.77 QP         4       0.627       39.23       10.30       0.00       0.02       38.56       46.00       -7.44       Average         6       0.724       27.77       10.30       0.00       0.03       38.10       46.00       -8.54       Average         7       1.088       27.07       10.32       0.00       0.10       48.41       56.00       -7.59 QP         9       2.527       26.51       10.34       0.00       0.13       36.98       46.00       -9.02       Average         10	80 70 60 50 40 2 40 20 10		2	w.~~~~~	FGC PART 15.247 AV	
FreqLevelFactorFactorLossLevelLineLimitRemark $MHz$ $dBuV$ $dB$ $dB$ $dB$ $dB$ $dBuV$ $dBuV$ $dBuV$ $dB$ 10.15843.1010.220.000.0153.3365.56-12.23QP20.15829.8710.220.000.0140.1055.56-15.46Average30.17041.9410.220.000.0152.1764.94-12.77QP40.62739.2310.300.000.0249.5556.00-6.45QP50.62728.2410.300.000.0238.5646.00-7.90Average60.72427.7710.300.000.0338.1046.00-7.90Average71.08827.0710.320.000.1048.4156.00-7.59QP92.52726.5110.340.000.1336.9846.00-9.02Average102.60837.6010.340.000.1248.0656.00-7.94QP1111.43837.8810.650.000.1148.6460.00-11.36QP	ICe: 17		Frequency (MHz)			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					x	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MHz dBu		dB dBuV dBuV	, <u>a</u>		
	2         0.158         29.8           3         0.170         41.9           4         0.627         39.2           5         0.627         28.2           6         0.724         27.7           7         1.088         27.0	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	<ul> <li>-15.46 Avera;</li> <li>-12.77 QP</li> <li>-6.45 QP</li> <li>-7.44 Avera;</li> <li>-7.90 Avera;</li> <li>-8.54 Avera;</li> <li>-7.59 QP</li> <li>-9.02 Avera;</li> <li>-7.94 QP</li> </ul>	ge ge	





3. Final Level =Receiver Read level + LISN Factor + Aux Factor + Cable Loss.



0.5 Conducted Out			
Test Requirement:	FCC Part 15 C Section 15.247 (b)(1)		
Receiver setup:	RBW=1MHz, VBW=3MHz, Detector=Peak (If 20dB BW ≤1 MHz) RBW=2MHz, VBW=6MHz, Detector=Peak (If 20dB BW > 1 MHz and < 3MHz)		
Limit:	For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels: 1 watt. For all other requency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.		
Test setup:			
Test Instruments:	Refer to section 5.9 for details		
Test mode:	Non-hopping mode		
Test results:	Pass		
Measurement Data:	Refer to Appendix A - BT		

#### 6.3 Conducted Output Power

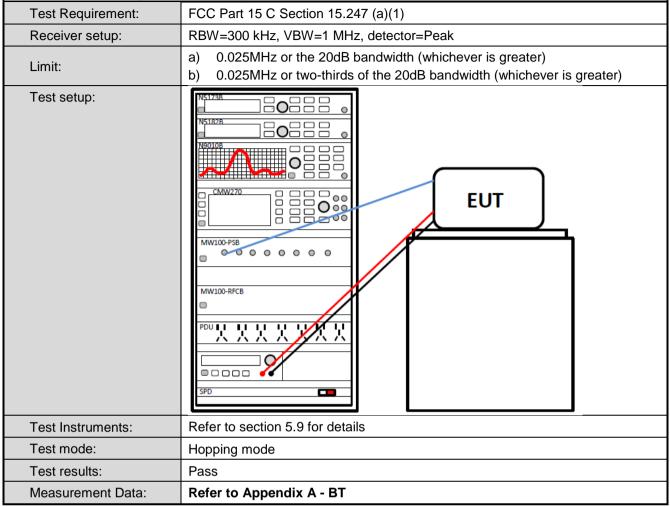


#### 6.4 20dB Occupy Bandwidth

Test Requirement:	FCC Part 15 C Section 15.247 (a)(1)
Receiver setup:	DH1: RBW=15 kHz, VBW=47 kHz, detector=Peak 2DH1&3DH: RBW=20 kHz, VBW=62 kHz, detector=Peak
Limit:	Within authorization band
Test setup:	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Non-hopping mode
Test results:	Pass
Measurement Data:	Refer to Appendix A - BT



### 6.5 Carrier Frequencies Separation





### 6.6 Hopping Channel Number

Test Deguinement	FCC Dort 45 C Section 45 247 (c)(4)		
Test Requirement:	FCC Part 15 C Section 15.247 (a)(1)		
Receiver setup:	RBW=100 kHz, VBW=300 kHz, Center Frequency=2441MHz,		
	Frequency Range: 2400MHz~2483.5MHz, Detector=Peak		
Limit:	15 channels		
Test setup:			
Test Instruments:	Refer to section 5.9 for details		
Test mode:	Hopping mode		
Test results:	Pass		
Measurement Data:	Refer to Appendix A - BT		



#### 6.7 Dwell Time

Test Requirement:	FCC Part 15 C Section 15.247 (a)(1)
Receiver setup:	RBW=1 MHz, VBW=1 MHz, Span=0 Hz, Detector=Peak
Limit:	0.4 Second
Test setup:	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Hopping mode
Test results:	Pass
Measurement Data:	Refer to Appendix A - BT



### 6.8 Pseudorandom Frequency Hopping Sequence

Test Requirement:	FCC Part 15 C Section 15.247 (a)(1) requirement:	
Frequency hopping systems	s shall have hopping channel carrier frequencies separated by a mini	mum of
25 kHz or the 20 dB bandwi	ridth of the hopping channel, whichever is greater.	
	pping systems operating in the 2400-2483.5 MHz band may have ho	
	that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of	
	r is greater, provided the systems operate with an output power no gr	
	shall hop to channel frequencies that are selected at the system hopp	
	ordered list of hopping frequencies. Each frequency must be used eq	
	nsmitter. The system receivers shall have input bandwidths that matches of their corresponding transmitters and shall shift frequencies in	nine
synchronization with the trar		
,	uency Hopping Sequence	
•		etaga
	nce may be generated in a nine-stage shift register whose 5th and 9th dulo-two addition stage. And the result is fed back to the input of the fi	
	is with the first ONE of 9 consecutive ONEs; i.e. the shift register is ini	
with nine ones.		
Number of shift register sta	tages: 9	
• Length of pseudo-random	sequence: $2^9 - 1 = 511$ bits	
Longest sequence of zeros	os: 8 (non-inverted signal)	
	┨ <u>┝┥</u> ┝┥ <u>┝</u> ┥┝┨┝┨┝┨┝┥┝╤╸	
	¥	
	(+)•	
Linear Feedback S	Shift Register for Generation of the PRBS sequence	
An example of Pseudorando	lom Frequency Hopping Sequence as follow:	
0 2 4 6	<u>62 64 78 1 73 75 77</u>	
Each frequency used equall	lly on the average by each transmitter.	
	input bandwidths that match the hopping channel bandwidths of their	
	and shift frequencies in synchronization with the transmitted signals.	



## 6.9 Band Edge

#### 6.9.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)		
Receiver setup:	RBW=100 kHz, VBW=300 kHz, Detector=Peak		
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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.		
Test setup:			
Test Instruments:	Refer to section 5.9 for details		
Test mode:	Non-hopping mode and hopping mode		
Test results:	Pass		
Measurement Data:	Refer to Appendix A - BT		



#### 6.9.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C Section 15.209 and 15.205							
Test Frequency Range:	2310 MHz to 2390 MHz and 2483.5 MHz to 2500 MHz							
Test Distance:	3m							
Receiver setup:	Frequency	Detector	tor RBW		VBW Remark			
	Above 1GHz	Peak		1MHz		MHz	Peak Value	
	Above IGH2	RMS		1MHz	31	3MHz Average Value		
Limit:	Frequenc	су	Lim	it (dBuV/m @3	3m)		Remark	
	Above 1G	H7		54.00		Average Value		
	7,5076 10	112		74.00		F	Peak Value	
Test setup:	AE EUT Horn Antenna Tower Ground Reference Plane Test Receiver							
Test Procedure:	<ol> <li>The EUT was placed on the top of a rotating table 1.5meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> </ol>							
Test Instruments:	Refer to section	5.9 for deta	ails	· · ·				
Test mode:	Non-hopping m	ode						
Test results:	Passed							



#### **GFSK Mode:**

	ne:	Tablet PC			Product Mo	odel:	Tab64	
st By:		Mike			Test mode:	:	DH1 Tx	mode
st Channe	l:	Lowest channel			Polarization:		Vertical	
st Voltage	:	AC 120/60Hz	2		Environme	nt:	Temp: 2	24℃ Huni: 579
				FCC PART 1	5 C			
100								Δ
90 80								
70								FCC PART 15 C-PK Limit
	والإستانية أستعرف المتحد المتحد المتحد	والمستخبر فاستلفوه الأستانية ومستقصا والمتناع		an an ball and a start of a day of a start o		anticitite de la companya de la comp	la science data a direct star in 2	FCC PART 15 C-AV Limit
[ш/Л18р] ворани 50 40	Acord Supervision Acord and de	utional protocolistic for historical business (	1	موالدار من المعرود معود المعالية والمالية و	3	4444441.48149999999944444444444444444444	<u>6</u>	an a
30								
20 +								
20								
20 10 0 2.31G	2.3194G	2.3288G	2.3382G 2.347			2.3758G	2.3852G	2.3946G 2.404G
10 0 2.31G	2.3194G PK Limit − ♦ PK Detector		2 3382G 2 347 ertical PK — Vertical	Frequency[ł		2.3758G	2.3852G	2.3946G 2.404G
10 0 2.31G	— PK Limit —	AV Limit Ve AV Detector		Frequency[ł		2.3758G	2.3852G	2.3946G 2.404G
10 0 231G	PK Limit     PK Detector     PK Detector	AV Limit Ve AV Detector Ve	ertical PK Vertical Level++	Frequency[i	lz] Limit⇔	Margine	2.3852G	2.3946G 2.404G
10 0 231G Susp NO.+	PK Limit     PK Detector      PK Detector      Freq      [MHz]	AV Limit	ertical PK Vertical Level [dBuV/m].2	Frequency[i AV Factor [dB]	Limit⊭ [dBμV/m]⊮	Margin⊮ [dB]∘	Trace	Polarity₀
10 0 2.316 Susp	PK Limit     PK Detector     PK Detector	AV Limit Ve AV Detector Ve	ertical PK Vertical	Frequency[i	lz] Limit⇔	Margine		
10 0 231G Susp NO.4 1₽	PK Limit PK Detector PK Detector ected Data Freq [MHz] 2339.44	AV Limit Ve AV Detector Ve	ertical PK — Vertical Level [dBµV/m] 44.35	Frequency[i AV Factor [dB] 6.91	Limite [dBµV/m]e 54.00e	Margin⊮ [dB]⊮ 9.65₽	Trace AV.	Polarity. Vertical.
10 0 2316 Susp NO.4 10 24	<ul> <li>▶ PK Limit</li> <li>▶ PK Detector</li> <li>■ Ected Data</li> <li>▶ Freq</li> <li>■ [MHz]</li> <li>■ 2339.44</li> <li>■ 2339.85</li> </ul>	AV Limit Ve AV Detector Ve	Level [dBµV/m] 44.35 52.13 2	Frequency[i AV Factor [dB] 6.91 6.91	Limit [dBµV/m] 54.00 74.00	Margin.∉ [dB].∉ 9.65.€ 21.87.€	Trace. AV. PK.	Polarity Vertical Vertical
10 0 2316 Susp NO.* 1e 2e 3e	<ul> <li>PK Limit</li> <li>PK Detector</li> <li>PK Detector</li> <li>Erreq</li> <li>[MHz]</li> <li>2339.44</li> <li>2339.85</li> <li>2362.31</li> </ul>	AV Limit → Ve AV Detector List P Reading P [dBµV/m]P 37.44P 45.22P 38.68P	Level [dBµV/m] 44.35 52.13 45.67	Frequency[i AV Factor [dB] 6.91 6.91 6.99 6.99	Limit. [dBuV/m]. 54.00. 74.00. 54.00.	Margin⊮ [dB]₽ 9.65₽ 21.87₽ 8.33₽	Trace AV PK AV	Polarity.₀ Vertical.₀ Vertical.₀ Vertical.₀





1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.

2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



	e:	Tablet PC			Product Mo	odel:	Tab64		
est By:	Mike				Test mode:	:	DH1 Tx	mode	
est Channel	:	Highest chan	inel		Polarization:		Vertical		
est Voltage:		AC 120/60Hz			Environme	Temp: 24°C Huni: 579			
100 90 80 70 60 10 10 10 10 10 10 10 10 10 10 10 10 10		1		FCC PART 1	5 C			FCC PART 1	
40 30 20 10 2 4786	2.4802G PK Limit PK Detector	2 4824G AV Limit Ve AV Detector	2.4846G 2.486 ertical PK — Vertical	Frequency[	2.4912G Hz]	2.4934G	2.4956G	2.4978G	2.5G
30 20 10 2.478G	- PK Limit -	AV Limit Ve AV Detector		Frequency[		2.4934G	2.4956G	2.4978G	2.5G
30 20 10 2.478G	PK Limit     PK Detector	AV Limit Ve AV Detector		Frequency[		2.4934G	2.4956G		25G
30 20 10 2 478G Susp	PK Limit PK Detector ected Data Freq.↔	AV Limit	ertical PK Vertical Level⊷	Frequency[	tz] Limite	Margine		Pola	4
30 20 10 2.478G Susp NO.~	PK Limit PK Detector PK Detector PK Detector PK Detector	AV Limit Ve AV Detector Ve	ertical PK Vertical Levele [dBuV/m].2	Frequency AV Factor	tz] Limit⊷ [dBμV/m]↔	Margin∉ [dB]∘	Trace	Pola	arity.
30 20 10 0 2.4786 Susp NO. 2 1	PK Limit PK Detector ected Data Freq.∉ [MHz]∉ 2483.50	AV Limit Ve AV Detector Ve	ertical PK — Vertical Levele [dBµV/m]e 51.97€	Frequency AV Factor [dB] 7.69 ø	<sup>+z]</sup> Limit [dBµV/m] 74.00	Margin.∉ [dB].∉ 22.03₽	Trace∘ PK∘	Pola Ver Ver	arity <i>∞</i> tical∞
30 20 10 0 24786 Susp NO.~ 1~ 2~	<ul> <li>PK Limit</li> <li>PK Detector</li> <li>PK Detecto</li></ul>	AV Limit Ve AV Detector Ve	ertical PK — Vertical Level⊷ [dBµV/m]₄ 51.97₊ 44.13₊	Frequency AV Factor 4 [dB] 4 7.69 4 7.69 4	Limit [dBµV/m] 74.00 54.00	Margin.∘ [dB].∘ 22.03.∘ 9.87.∘	Trace PK AV	Pola Ver Ver	aritye ticale
30 20 10 0 2.478G Susp NO.* 1* 2* 3*	<ul> <li>PK Limit</li> <li>PK Detector</li> <li>PK Detecto</li></ul>	AV Limit Ve AV Detector Ve <b>List</b> e Reading v [dBµV/m]e 44.28e 36.44e 37.01e	ertical PK — Vertical Level [dBµV/m]، 51.97، 44.13، 44.74،	Frequency AV Factor [dB] ? 7.69 ? 7.69 3 7.73 ?	Limit [dBµV/m] 74.00 54.00 54.00	Margin.∉ [dB].₂ 22.03.¢ 9.87.¢ 9.26.¢	Trace PK AV AV	Pola Ver Ver Ver	arity tical tical



roduct N	ame:		Tablet PC			Product Mc	del:	Tab64		
est By:			Mike			Test mode:		DH1 Tx mode		
est Chan	nel:		Highest channel			Polarization:		Horizontal		
est Volta			AC 120/60H			Environme		Temp: 2		: 57%
	.g		/10/120/0011	-						,
40	20				FCC PART 1	15 C				
10	90									
	30-									
	70	7							FCC PART 15 C-PK Lir	nit
	50		N.							
2	50			alteletika enistantea tarena desenatulia desta	al a la secta de la secta d	3 dudbindsonius Pathonikina.	and a stand good a local state of some of		FCC PART 15 C-AV Li	
	10		2	the substant of the second contract of the second state and the second state and the second state and the second	. Martiniana frigitaturu i Martina Lippana di	4	واستراحه ودهار أحار والمتعادية ومراجع والمعار	5 	a da ana ang sa ang	-
_	30									
3	30									
3	20									
32										
- 3 2 1	20	2.4802G	2.4824G	2.4846G 2.486			2.4934G	2.4956G	2.4978G	2.5G
- 3 2 1	20 10 0 2.478G				Frequency[		2.4934G	2.4956G	2.4978G	 2.5G
- 3 2 1	20 10 0 2.478G	2.4802G PK Limit – PK Detector		2.4846G 2.486 lorizontal PK — Hori:	Frequency[		2.4934G	2.4956G	2.4978G	 2.5G
- 3 2 1	20 10 0 2.478G	PK Limit –	— AV Limit — H		Frequency[		2.4934G	2.4956G	2.4978G	2.5G
3 2 1 2	20 10 0.478G	PK Limit –	→ AV Limit → H ♦ AV Detector		Frequency[		2.4934G	2.4956G	2.4978G	2.5G
3 2 1 2 2 <b>Su</b>	20 10 0 2.478G	PK Limit – PK Detector	→ AV Limit → H ♦ AV Detector		Frequency[		2.4934G Margin			2.5G
3 2 1 2 2 <b>Su</b>	20 10 0.478G	PK Limit - PK Detector	AV Limit H AV Detector	iorizontal PK — Hori:	Frequency[	Hz]		2.4956G	2.4978G Polarity	2.5G
3 2 1 2 <b>Su</b>	20 10 0 2.478G <b>JSPEC</b> O.~	PK Limit PK Detector ted Data Freq. 2 [MHz] 2	AV Limit H AV Detector H List Reading [dBµV/m]	lorizontal PK — Hori: Level↔ [dBuV/m].₂	Frequency[ zontal AV Factor	Hz] Limit∉ [dBµV/m]∉	Margin⊮ [dB]⊮	Trace	Polarity	
3 2 1 2 2 <b>Su</b>	20 10 0 2.478G <b>JSPEC</b> 0.4 1.4	PK Limit PK Detector	AV Limit H AV Detector H List Reading	lorizontal PK — Hori: Level≓	Frequency( zontal AV Factor	Hz] Limite	Margin⊭			р.,
3 2 1 2 2 3 2 2 3 2 2 3 1 2 2 3 1 2 2 3 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 1 1 2 2 1	20 10 0 2.478G <b>JSPEC</b> 0.47 14 2.478G	PK Limit PK Detector <b>Eted Data</b> Freq.~ [MHz].~ 2483.50	AV Limit H AV Detector H List Reading [dBµV/m]→ 43.60↔	Level⊷ [dBµV/m]↔ 51.29↔	Frequency	Hz] Limit.⊷ [dBµV/m].∘ 74.00.•	Margin⊷ [dB].∘ 22.71⊷	Trace∍ PK₀	Polarity⊮ Horizontal	р.
3 2 1 2 3 8 1 2 8 1 2 3	20 10 0 2.478G <b>Ispec</b> 0 1 2 3 3	PK Limit PK Detector <b>Eted Data</b> Freq.44 [MHZ]49 2483.50 2483.50	AV Limit H AV Detector List Reading [dBµV/m] 43.60 36.31	Level [dBµV/m] 51.29 44.00	Frequency zontal AV Factor [dB] 7.69 7.69 8	Hz] Limit.↓ [dBµV/m].↓ 74.00.↓ 54.00.↓	Margin. [dB]. 22.71⊷ 10.00⊷	Trace PK AV	Polarity⊮ Horizontal Horizontal	ρ.
3 2 1 2 2 3 3 2 1 2 2 3 2	20 10 0 2.478G <b>Ispec</b> <b>O</b> 2 <b>I</b> -2 <b>J</b> -2 <b></b>	PK Limit PK Detector	AV Limit H AV Detector H List Reading [dBµV/m]→ 43.60↔ 36.31↔ 45.18↔	Level [dBµV/m]. <sup>2</sup> 51.29. <sup>2</sup> 44.00. <sup>2</sup> 52.92. <sup>2</sup>	Frequency[ zontal AV Factor [dB] 7.69 7.69 7.74	Hz] Limit [dBµV/m] 74.00 54.00 74.00	Margin. [dB]. 22.71. 10.00. 21.08.	Traces       PKe       AVe       PKe	Polarity Horizontal Horizontal Horizontal	

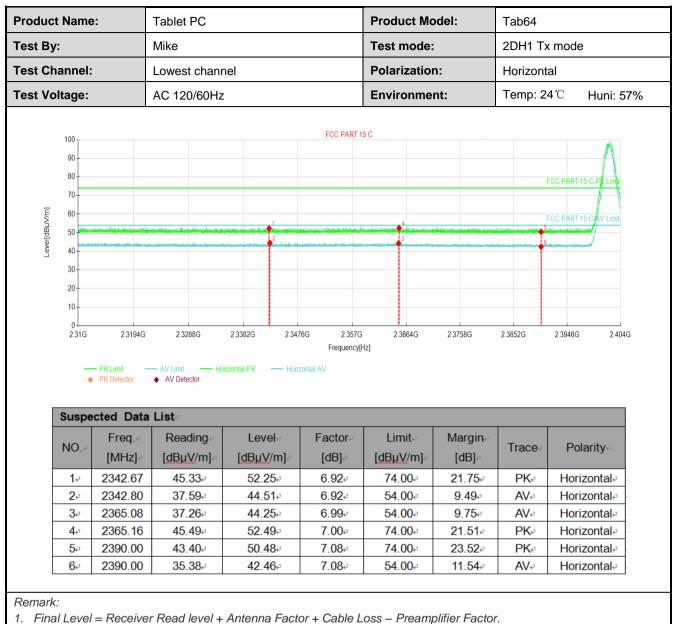
Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.
 The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



#### $\pi/4$ -DQPSK mode

	Name	-	Tablet PC			Product Mc	odel:	Tab64		
Test By:	:		Mike			Test mode:		2DH1 Tx mode		
Test Ch	annel:		Lowest channel			Polarization:		Vertical		
Test Vo	st Voltage:		AC 120/60Hz			Environment:		Temp: 24°C Huni: 57		uni: 57%
	100				FCC PART 1	5 C				Δ
	90									
	80								FCC PART 15 C-F	<sup>o</sup> K Limit
Ē	70 60									
Level[dBµV/m]	50	ali con de la del a biser la contra de setativ	ann bath leiteath a mhr clair 🔶 m	and the second state of the second state of the	al a loke market with a method to be	A to fi in the line of the bird based by the stand based by	(Arradation ) for the state of the Landscore of	en actualite and the stillment of many 6	FCC PART 15 C	V Limit
vel[d	40	n dan sisa kanta fisika ya kanata kan kisika ata		unan alaas at messan dae larata weekan dae dae	allen and a state of the state		lan of state to a state of the	5		
e	30									
	20									
		2.3194G	2.3288G	2.3382G 2.347	'6G 2.357G Frequency[ł		2.3758G	2.3852G	2.3946G	2.404G
	20 10 0 2.31G	– PK Limit – PK Detector	AV Limit Ve AV Detector	2.3382G 2.347 rtical PK — Vertical	Frequency[H		2.3758G	2.3852G	2.3946G	2.404G
[	20 10 0 2.31G	- PK Limit - PK Detector	- AV Limit Ve ♦ AV Detector	rtical PK — Vertical	Frequency[ł	+z]		2.3852G	2.3946G	2.404G
F	20 10 0 2.31G	PK Limit PK Detector	AV Limit Ve ♦ AV Detector List Reading	rtical PK — Vertical Level⊷	Frequency[ł AV Factor	tz] Limit⇔	Margin.e	2.3852G		
	20 10 0 2.31G	- PK Limit - PK Detector	- AV Limit Ve ♦ AV Detector	rtical PK — Vertical	Frequency[ł	+z]			23946G Polarit	
	20 10 0 2.31G Suspe NO.+3 13	ected Data Freq.~ [MHz].~ 2333.48	AV Limit Ve ♦ AV Detector List P Reading (dBµV/m) P 45.70P	rical PK Vertical Level [dBµV/m] 52.59	Frequency(F AV Factor [dB],0 6.89,0	Limit⊷ [dBµV/m]⊷ 74.00⊷	Margin. [dB]⊶ 21.41⊷	Trace.⇒ PK.₀	Polarit	ty
	20 10 0 2.31G • Suspe	ected Data Freq.4 [MHz].2	AV Limit Ve ♦ AV Detector List Reading [dBµV/m] 45.70 37.49 ₽	tical PK — Vertical Level [dBµV/m], 52.59, 44.38,	Frequency[+ AV Factor [dB]	Limit⊷ [dBµV/m]⊷	Margin⊮ [dB]⊮ 21.41₽ 9.62₽	Trace	Polarit Vertica Vertica	ty∉ al∉ al∉
	20 10 0 2.31G Suspe NO.+3 13	PK Limit           PK Detector           Pcted         Data           Freq4         [MHz]-4           2333.48         2333.58           2361.66         Control	AV Limit Ve ♦ AV Detector List Reading [dBµV/m] 45.70 37.49 45.79 45.79	rtical PK Vertical Level↔ [dBµV/m].→ 52.59.↔ 44.38.↔ 52.77.↔	Frequency[F AV Factor [dB] 6.89 6.89 6.89 6.98	Limit [dBµV/m] 74.00 54.00 74.00	Margin. [dB] 21.41. 9.62. 21.23.	Trace PK AV PK	Polarit Vertica Vertica	ty≠ al≠ al≠
	20 10 0 2.31G Suspe NO. 2 2 2	PK Limit           PK Detector           Pcted         Data           Freq           [MHz]           2333.48           2333.58           2361.66           2361.84	AV Limit Ve ♦ AV Detector List P Reading (dBµV/m) P 45.70P 37.49P 45.79P 37.97P	tical PK — Vertical Level [dBµV/m], 52.59, 44.38,	Frequency(F AV Factor [dB] $\varphi$ 6.89 $\varphi$ 6.89 $\varphi$	Limit [dBµV/m] 74.00 54.00 74.00 54.00	Margin. [dB]. 21.41. 9.62. 21.23. 9.05.	Trace PKe AVe	Polarit Vertica Vertica Vertica	ly⊭ al≠ al≠ al≠ al≠
	20 10 0 2.31G Suspe NO. 0 10 2.21G Suspe 3.0	PK Limit           PK Detector           Pcted         Data           Freq4         [MHz]-4           2333.48         2333.58           2361.66         Control	AV Limit Ve ♦ AV Detector List Reading [dBµV/m] 45.70 37.49 45.79 45.79	rtical PK Vertical Level↔ [dBµV/m].→ 52.59.↔ 44.38.↔ 52.77.↔	Frequency[F AV Factor [dB] 6.89 6.89 6.89 6.98	Limit [dBµV/m] 74.00 54.00 74.00	Margin. [dB] 21.41. 9.62. 21.23.	Trace PK AV PK	Polarit Vertica Vertica	ty⇔ al⇔ al⇔ al⇔ al⇔ al⇔





2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



roduct Name	e:	Tablet PC			Product Mc	del:	Tab64	
est By:		Mike	ke				2DH1 T>	x mode
est Channel	:	Highest channel			Polarization:		Vertical	
est Voltage:		AC 120/60Hz	2		Environme	nt:	Temp: 2	4℃ Huni: 57
100 90 80 70 60 40 40		2		FCC PART 1	5 C			FCC PART 15 C-PK Limit
30 30 20 10 0 2.478G	2.4802G PK Limit PK Detector	2.4824G AV Limit Va AV Detector	2.4846G 2.4860 ertical PK — Vertical	Frequency[	2.4912G Hz]	2.4934G	2.4956G	2.4978G 2.5G
30 20 10 0 2.478G	— PK Limit —	AV Limit Ve		Frequency[		2.4934G	2.4956G	2 4978G 2 5G
30 20 10 0 2.478G	PK Limit -	AV Limit Ve		Frequency[		2.4934G 2.4934G Margin⊷ [dB]-∘	2.4956G	24978G 2.5G
30 20 10 0 2.478G	PK Limit PK Detector	AV Limit	ertical PK — Vertical	Frequency[ AV Factor	Hz] Limit⇔	Margine		
30 20 10 0 2.478G Suspe	PK Limit PK Detector PC Detector PK Detector PK Detector PK Detector PK Detector	AV Limit Vertex AV Detector	ertical PK — Vertical Level⊷ [dBµV/m]₽	Frequency[ AV Factor	لنmit بر [dBuV/m] ک	Margin.∉ [dB].₀	Trace	Polarity∂
30 20 10 0 2.478G Suspe NO2	PK Limit PK Detector ected Data Freq.40 [MHz]40 2483.50	AV Limit Va AV Detector Va List Reading [dBµV/m] 43.75¢	Level [dBµV/m] 51.44	Frequency AV Factor e [dB] e 7.69e	Limit [dBµV/m] 74.00	Margin⊮ [dB]∞ 22.56₽	Trace- PK-	Polarity. Vertical⊷
30 20 10 0 2.478G 2.478G NO.~ 1.0 2.2	PK Limit PK Detector ected Data Freq [MHz] 2483.50 2483.50	AV Limit Va AV Detector Va List Reading [dBµV/m] 43.75 36.25 Va	ertical PK Vertical Level↔ [dBµV/m]↔ 51.44↔ 43.94↔	Frequency AV Factor [dB] 7.69 7.69	Limit [dBµV/m] 74.00 54.00	Margin.∉ [dB].₂ 22.56.₂ 10.06.₽	Trace. PKe <sup>3</sup> AVe <sup>3</sup>	Polarity Vertical₀ Vertical₀
30 20 10 0 2.478G Suspe NO.~ 1~ 2.~ 3.~	PK Limit PK Detector Freq.~ [MHz].~ 2483.50 2483.50 2491.19	AV Limit → Ve AV Detector List → Reading → [dBµV/m] → 43.75 → 36.25 → 37.29 →	Errical PK	Frequency AV Factor [dB] 7.69 7.69 7.74	Limit. [dBµV/m]. 74.00. 54.00. 54.00.	Margin.√ [dB].∘ 22.56.∘ 10.06.∘ 8.97.∘	Trace PK¢ AV¢ AV¢	Polarity - Vertical - Vertical - Vertical -

2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



	e:	Tablet PC			Product Mc	odel:	Tab64		
fest By:		Mike			Test mode:		2DH1 T	x mode	
Fest Channel	:	Highest channel			Polarization:		Horizontal		
Fest Voltage:		AC 120/60Hz	2		Environme	nt:	Temp: 2	<b>24℃</b>	Huni: 57%
100 90 80 70 50 80 40 40				FCC PART 1	5 C	affre an tra with a state of the attra attra	5 - 1999 - 2019 - 6	FCC PART 1	
30 20 10 2.478G	PK Detector	AV Detector	2.4846G 2.4860 prizontal PK — Horiz	Frequency[ł	2.4912G iz]	2.4934G	2.4956G	2.4978G	2.56
30 20 10 2.478G	— PK Limit —	AV Limit → Ho ◆ AV Detector		Frequency[ł		2.4934G	2 4956G	2.4978G	256
30 20 10 2.478G	─ PK Limit — ▶ PK Detector	AV Limit → Ho ◆ AV Detector		Frequency[ł		2.4934G 2.4934G Margin⊮ [dB]₽	2 4956G		2.5G
30 20 10 0 2.478G	PK Limit PK Detector PC Detector PK Detector Freq.*	AV Limit Ho AV Detector List.e Reading.e	orizontal PK Horiz Level&	Frequency[I contal AV Factor	tz] Limite	Margin.4		Pola	
30 20 10 0 2.478G Suspe NO.~	PK Limit PK Detector	AV Limit Ho AV Detector Ho List Reading [dBµV/m]	nizontal PK — Horiz Level⊮ [dBµV/m].₂	Frequency[I contal AV Factor	tz] Limit⊮ [dBµV/m]⊷	Margin.∉ [dB]-₂	Trace	Pola	arity₽
30 20 10 0 2.478G Suspe NO2	ected Data Freq.4 [MHz].2 2483.50	AV Limit Ho AV Detector Ho List Reading [dBµV/m] 44.13	Level [dBµV/m],2 51.82,2	Frequency[i contal AV Factor [dB] 7.69+	Limit [dBµV/m]. 74.00.	Margin⊮ [dB]∞ 22.18₽	Trace. PK.	Pola Horiz Horiz	arity.₀ contal.₀
30 20 10 0 24786 Suspe NO.~ 1+ 2	PK Limit PK Detector PK Detector Freq.↔ [MHz].→ 2483.50 2483.50	AV Limit Ho AV Detector List Reading [dBµV/m] 44.13 36.13 2	Level [dBµV/m], 51.82, 43.82,	Frequency[ contal AV Factor [dB] 7.69 7.69 7.69	Limit [dBµV/m] 74.00+ 54.00+	Margin. [dB].₀ 22.18.₀ 10.18.₀	Trace PK AV	Pola Horiz Horiz Horiz	arity contal contal
30 20 10 0 2.478G Suspe NO7 1+7 2.5 3-7	PK Limit PK Detector PK Detector Freq.4 [MHz].2 2483.50 2483.50 2490.91	AV Limit Ho AV Detector <b>List</b> Reading [dBµV/m] 44.13 36.13 45.62	Level [dBµV/m] 51.82 43.82 53.36 6	Frequency[ contal AV Factor [dB] 7.69 7.69 7.74	Limit [dBµV/m] 74.00↔ 54.00↔ 74.00↔	Margin.∉ [dB].¢ 22.18¢ 10.18¢ 20.64¢	Trace PK AV PK	Pola Horiz Horiz Horiz	arity.⊭ contal.₽ contal.₽ contal.₽

2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



#### 8DPSK mode

	me:	Tablet PC			Product Mo	odel:	Tab64		
st By:		Mike			Test mode:	:	3DH1 Tx mode		
st Chann	el:	Lowest channel			Polarization:		Vertical		
st Voltag	e:	AC 120/60Hz	7		Environme	nt:	Temp: 2	<b>24</b> ℃	Huni: 57%
100- 90- 80- 70- [L. 60- 50- [				FCC PART 1				FCC PART 15	5C-PKLint
30 - 20 - 10 - 2.3	IG 2.3194G PK Limit • PK Detector	2.3288G	2.3382G 2.347 ertical PK — Vertical	Frequency[		2.3758G	2.3852G	2.3946G	2.404G
20- 10- 2.3	PK Limit	AV Limit Vi AV Detector		Frequency[		2.3758G	2.3852G	2.3946G	2.404G
20- 10- 2.3	PK Limit PK Detector Pected Data Freg. 4	AV Limit Vi AV Detector		Frequency[		2.3758G Margin⊷ [dB]-2	2.3852G		2.404G
20- 10- 2.3 Sus	PK Limit PK Detector PF Detector PF Ceq. 4 [MHz]-	AV Limit Vi ◆ AV Detector Vi a List Reading -2	ertical PK — Vertical	Frequency[ AV Factor	Hz] Limite	Margine		Pola	4
20- 10- 2.3 Sus	PK Limit PK Detector PK Det	AV Limit Vi AV Detector  AV Detector  List  Reading  (dBuV/m]	ertical PK — Vertical Level↔ [dBµV/m].₂	Frequency[ AV Factor	Hz] Limit⊮ [dBµV/m]⊮	Margin.∉ [dB].₂	Trace	Pola	arity₽
20- 10- 2.3 Sus NC	PK Limit         PK Detector           pected Data         Freq.           [MHz]         2331.71           2331.92         2331.92	AV Limit V AV Detector V <b>List</b> Reading [dBuV/m] 37.06	ertical PK — Vertical Level [dBµV/m] 43.94	Frequency[ AV Factor [dB] 6.88	Limit.₀ [dBµV/m]₀ 54.00₀	Margin⊮ [dB]⊮ 10.06₽	Trace₀ AV₊	Pola Vert Vert	arity@ tical@
20- 10- 2.3 Sus NC 14 2.4	PK Limit         PK Detector           PK Detector	AV Limit	ertical PK — Vertical Level [dBµV/m] 43.94 51.93 2	Frequency[ AV Factor [dB].0 6.88.0 6.89.0	Limit. [dBµV/m]. 54.00. 74.00.	Margin.⊲ [dB].∘ 10.06.∘ 22.07.∘	Trace AV4 PK4	Pola Vert Vert	arity tical tical
20- 10- 2.3 Sus NC 1- 2.4 3-	PK Limit         PK Detector           PK Detector	AV Limit V ♦ AV Detector V • AV Detec	ertical PK → Vertical Level↔ [dBµV/m]↔ 43.94↔ 51.93↔ 44.48↔	Frequency[ AV Factor [dB] 6.88+ 6.89+ 6.98+	Limit [dBµV/m] 54.00 74.00 54.00	Margin. [dB]. 10.06. 22.07. 9.52.	Trace∞ AV⊷ PK⊷ AV⊷	Pola Vert Vert Vert Vert	arity iical iical

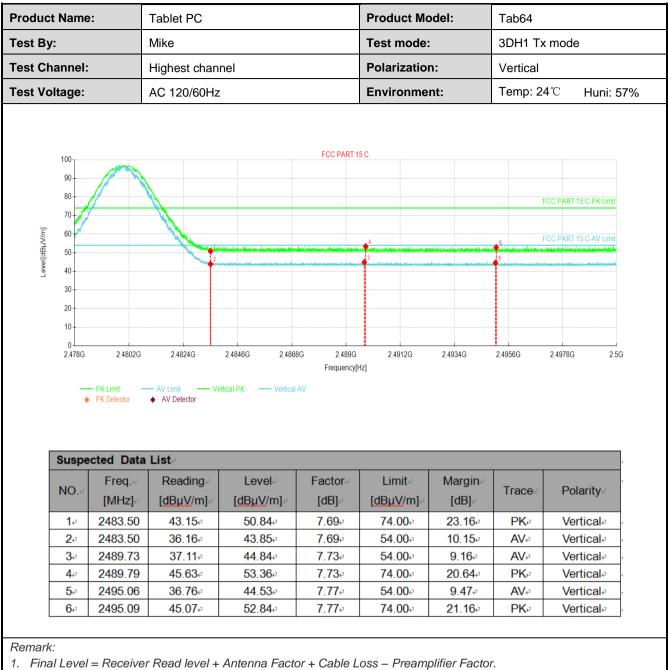




1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor.

2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.





The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



		Tablet PC			Product Mo	del:	Tab64	
est By:		Mike			Test mode:		3DH1 T	x mode
est Channel	:	Highest channel			Polarization:		Horizontal	
est Voltage:		AC 120/60Hz	2		Environme	nt:	Temp: 2	24℃ Huni: 57%
100 90 80 70 70 40 60 60 60 60 40 90 90 40				FCC PART 1	5 C	th dougle days and the design with	5	FCC PART 15 C-PK Limit
30 20 10 0 2.478G	PK Detector	AV Detector	2.4846G 2.4860 vrizontal PK — Horiz	Frequency[H	2.4912G 1z]	2.4934G	2.4956G	2.4978G 2.5G
30 20 10 0 2.478G	PK Limit PK Detector	AV Limit Ho ◆ AV Detector	orizontal PK – Horiz	Frequency[ł	łz]		2.4956G	2.4978G 2.5G
30 20 10 0 2.478G	PK Limit PK Detector	AV Limit Ho ◆ AV Detector Liste Reading -	orizontal PK Horiz Level+	Frequency() contal AV Factor	tz] Limit≓	Margine	2.4956G	24978G 25G Polarity⊮
30 20 10 0 2.4786 Suspe	PK Limit PK Detector	AV Limit Ho ♦ AV Detector List Reading [dBµV/m]	nizontal PK — Horiz Level↔ [dBµV/m].∂	Frequency(F contal AV Factor- [dB]-2	lz] Limit∉ [dBµV/m]∉	Margin.≓ [dB]-∍	Trace	Polarity <i>∞</i>
30 20 10 0 2.4786 Suspe NO2	PK Limit PK Detector	AV Limit Ho AV Detector List Reading [dBµV/m] 43.68+	Level [dBµV/m] 51.37€	Frequency[ł tontal AV Factor⊷ [dB]⊷ 7.69⊷	Limit⊮ [dBµV/m]⊮ 74.00₽	Margin⊮ [dB]⊮ 22.63₽	Trace∘ PK∘	Polarity <i>₀</i> Horizontal <i>₀</i>
30 20 10 0 2.478G <b>Suspe</b> NO.~	PK Limit PK Detector PK Detector Ected Data Freq [MHz] 2483.50 2483.50	AV Limit Ho AV Detector List Reading [dBµV/m] 43.68+ 36.68+	Level [dBµV/m] 51.37 44.37	Frequency(F contal AV Factor [dB] 7.69 7.69 7.69	Limit [dBµV/m] 74.00+ 54.00+	Margin.∉ [dB].∉ 22.63.€ 9.63.€	Trace⇒ PK↔ AV↔	Polarity. Horizontal. Horizontal.
30 20 10 0 2.4786 Suspe NO2	PK Limit PK Detector PK Detector Freq.4 [MHz],0 2483.50 2483.50 2490.14	AV Limit Ho AV Detector List: Reading: [dBµV/m]: 43.68: 36.68: 45.45:	Level [dBµV/m] 51.37 44.37 53.18	Frequency(F contal AV Factor	Limit. [dBµV/m]. 74.00. 54.00. 74.00.	Margin.√ [dB]√ 22.63√ 9.63√ 20.82√	Trace PKe AVe PKe	Polarity. Horizontal. Horizontal.
30 20 10 0 2.478G Suspe NO.47 147 247 347	PK Limit PK Detector PK Detector Ected Data Freq [MHz] 2483.50 2483.50	AV Limit Ho AV Detector List Reading [dBµV/m] 43.68+ 36.68+	Level [dBµV/m] 51.37 44.37	Frequency(F contal AV Factor [dB] 7.69 7.69 7.69	Limit [dBµV/m] 74.00+ 54.00+	Margin.∉ [dB].∉ 22.63.€ 9.63.€	Trace⇒ PK↔ AV↔	Polarity. Horizontal. Horizontal.

2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report



### 6.10 Spurious Emission

#### 6.10.1 Conducted Emission Method

Test Requirement:	FCC Part 15 C Section 15.247 (d)
Limit:	In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator 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.
Test setup:	
Test Instruments:	Refer to section 5.9 for details
Test mode:	Non-hopping mode
Test results:	Pass
Measurement Data:	Refer to Appendix A - BT



#### 6.10.2 Radiated Emission Method

Test Requirement:	FCC Part 15 C S	Section 15.2	209				
Test Frequency Range:	9 kHz to 25 GHz	2					
Test Distance:	3m or 10m						
Receiver setup:	Frequency	Detecto	r	RBW	VBW	/	Remark
	30MHz-1GHz	Quasi-pea	ak	120kHz	300k⊢	łz	Quasi-peak Value
	Above 1GHz	Peak		1MHz	3MHz	z	Peak Value
	Above IGHZ	RMS		1MHz	3MHz	z	Average Value
Limit:	Frequenc	;y	Limi	it (dBuV/m @	⊉10m)		Remark
	30MHz-88N	ЛНz		30.0		C	Quasi-peak Value
	88MHz-216	MHz		33.5		Ç	Quasi-peak Value
	216MHz-960	MHz		36.0		Ç	Quasi-peak Value
	960MHz-10	GHz		44.0		C	Quasi-peak Value
	Frequenc	у	Lin	nit (dBuV/m @	⊉3m)		Remark
	Above 1G	H7 -		54.0			Average Value
		112		74.0			Peak Value
	EUT Tur Tak Ground Above 1GHz	m 0.8m	im im 1m 1m			An RF T	arch itenna est eiver
Test Procedure:				3m Ground Reference Plane acceiver	Pre- Ampufier Contr	ating	Tower Tower table 0.8m(below 10 meter chamber
	(below 1G⊢ 360 degree	lz)or 3 mete s to determ	er ch nine t	hamber(abov he position (	/e 1GHz of the hig	). Th ghest	e table was rotated

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Project No.: JYTSZE2108062



	away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
	3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
	4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.
	<ol> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> </ol>
	6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.
Test Instruments:	Refer to section 5.9 for details
Test mode:	Non-hopping mode
Test results:	Pass
Remark:	<ol> <li>Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.</li> <li>9 kHz to 30 MHz is noise floor and lower than the limit 20dB, so only shows the data of above 30MHz in this report.</li> </ol>



#### Measurement Data (worst case):

#### Below 1GHz:

Product Name:	Tablet PC	Product Model:	Tab64
Test By:	Mike	Test mode:	BT Tx mode
Test Frequency:	30 MHz ~ 1 GHz	Polarization:	Vertical & Horizontal
Test Voltage:	AC 120/60Hz	Environment:	Temp: 24℃ Huni: 57%
	FullSpec	tru m	
45 T			ECC PART 15.247 10m
40			
≥ <sup>30</sup>			*,
	*		
	*		
10-	Martin Martin		
diaper the second			
0			
30M	50 60 80 100M Freque	200 300 400 ncy in Hz	500 800 1G

#### Critical Freqs.

	Frequency↓ (MHz)↩	MaxPeak↓ (dBµ V/m)∂	Limit↓ (dBµ V/m)⊮	Margin↓ (dB)∉	Height↓ (cm)↩	Pole	Azimuth↓ (deg)∉	Corr.↓ (dB/m)⊷
•	37.760000↩	<b>15.29</b> ₽	30.00↩	14.71₽	100.0₽	<b>V</b> ₽	<b>17.0</b> ↩	<b>-16.1</b> ₽
•	59.294000↩	15.63₽	30.00↩	14.37₽	100.0↩	<b>V</b> ₽	182.0↩	<b>-16.3</b> ₽
•	104.787000	23.78↩	33.50∉	<b>9.72</b> ₽	100.0↩	<b>V</b> ₽	<b>258.0</b> ↔	<b>-18.4</b> ₽
•	118.3670004	22.36	33.50∉	11.14	100.0↩	<b>V</b> ₄2	182.0↩	-17.2 <i>₽</i>
•	139.8040004	<b>15.21</b> ₽	33.50∉	18.29₽	100.0↩	V	302.0∉	<b>-15.7</b> ₽
•	945.098000↩	27.06↩	36.00∉	8.94	100.0↩	<b>V</b> ₽	125.0↩	-0.1₽

Remark:

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor.
- 2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.
- 3. The Aux Factor is a notch filter switch box loss, this item is not used.



#### Above 1GHz:

		Test ch	annel: Lowest ch	annel		
		Det	tector: Peak Valu	e		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4804.00	56.39	-9.60	46.79	74.00	27.21	Vertical
4804.00	63.28	-9.60	53.68	74.00	20.32	Horizonta
		Dete	ctor: Average Va	lue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4804.00	48.99	-9.60	39.39	54.00	14.61	Vertical
4804.00	58.70	-9.60	49.10	54.00	4.90	Horizonta
		Test ch	annel: Middle ch	annel		
		Det	ector: Peak Valu	ie		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4882.00	56.85	-9.05	47.80	74.00	26.20	Vertical
4882.00	63.21	-9.05	54.16	74.00	19.84	Horizonta
		Dete	ctor: Average Va	llue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4882.00	48.79	-9.05	39.74	54.00	14.26	Vertical
4882.00	59.17	-9.05	50.12	54.00	3.88	Horizonta
		Test cha	annel: Highest ch	nannel		
		Det	ector: Peak Valu	ie		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4960.00	56.60	-8.45	48.15	74.00	25.85	Vertical
4960.00	63.36	-8.45	54.91	74.00	19.09	Horizonta
		Dete	ctor: Average Va	lue		
Frequency (MHz)	Read Level (dBuV)	Factor(dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Margin (dB)	Polarizatio
4960.00	48.66	-8.45	40.21	54.00	13.79	Vertical
	59.08	-8.45	50.63	54.00	3.37	Horizonta

2. The emission levels of other frequencies are lower than the limit 20dB and not show in test report.



## **8 EUT Constructional Details**

Reference to the test report No.: JYTSZB-R12-2101600

-----End of report-----