

Shenzhen Toby Technology Co., Ltd.

Report No.: TB-FCC150914

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FCC Radio Test Report FCC ID: 2AJOE7198-06

Original Grant

Report No. TB-FCC150914

Shenzhen Suoba Electronics Limited **Applicant**

Equipment Under Test (EUT)

EUT Name True Wireless Earbud and Mic

7198-06 Model No.

Series Model No. N/A

Brand Name N/A

Receipt Date 2016-12-09

Test Date 2016-12-10 to 2016-12-18

Issue Date 2016-12-19

Standards FCC Part 15: 2016, Subpart C(15.247)

Test Method ANSI C63.10: 2013

Conclusions PASS

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

The EUT technically complies with the FCC requirements

Test/Witness Engineer

Approved& Authorized

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

TB-RF-074-1.0

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1. General Information about EUT

1.1 Client Information

Applicant : Shenzhen Suoba Electronics Limited

Address : 4th JianShe Industrial Park, 71 area, Baoan District, ShenZhen, China

Manufacturer : Shenzhen Suoba Electronics Limited

Address : 4th JianShe Industrial Park, 71 area, Baoan District, ShenZhen, China

1.2 General Description of EUT (Equipment Under Test)

EUT Name	1	True Wireless Earbud and	True Wireless Earbud and Mic		
Models No.		7198-06			
Model Difference	Ŀ	N/A			
Product :		Operation Frequency:	Bluetooth 4.1: 2402~2480 MHz		
	9	Number of Channel:	Bluetooth: 79 Channels see Note 2		
		Max Peak Output Power:	Bluetooth: 4.889 dBm(GFSK)		
		Antenna Gain:	1.5 dBi PCB Antenna		
		Modulation Type:	GFSK 1Mbps(1 Mbps) π /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)		
Power Supply	:	DC Voltage Supplied by th	` ' '		
a Chillian		DC Supply by the Battery.			
Power Rating	:	DC 5.0 V by Host System.			
		DC 3.7 V by 40mAh Li-Lion Battery.			
Connecting I/O Port(S)	Š	Please refer to the User's I	Please refer to the User's Manual		

Note

(1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

(2) Channel List:

	Bluetooth Channel List				
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461



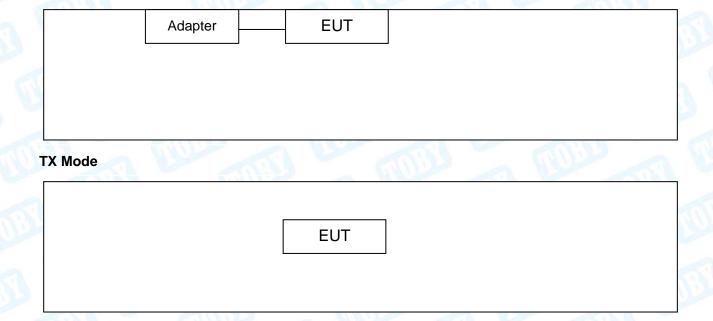
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06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454	AL IV	
26	2428	53	2455		1110

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

1.3 Block Diagram Showing the Configuration of System Tested

AC Charging with TX Mode





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1.4 Description of Support Units

The EUT has been test as an independent unit

1.5 Description of Test Mode

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

	For Conducted Test
Final Test Mode	Description
Mode 1	AC Charging with TX GFSK Mode

For Radiated Test			
Final Test Mode Description			
Mode 1	AC Charging with TX GFSK Mode		
Mode 2	TX Mode(GFSK) Channel 00/39/78		
Mode 3	TX Mode(π /4-DQPSK) Channel 00/39/78		
Mode 4	TX Mode(8-DPSK) Channel 00/39/78		
Mode 5	Hopping Mode(GFSK)		
Mode 6	Hopping Mode(π /4-DQPSK)		
Mode 7	Hopping Mode(8-DPSK)		

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. We have pretested all the test modes above.

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:

TX Mode: GFSK (1 Mbps)
TX Mode: π /4-DQPSK (2 Mbps)
TX Mode: 8-DPSK (3Mbps)

(2) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on X-plane as the normal use. Therefore only the test data of this X-plane was used for radiated emission measurement test.



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1.6 Description of Test Software Setting

During testing channel power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of Bluetooth mode.

Test Software Version		FCC Test tools v1.06	
Frequency	2402 MHz	2441MHz	2480 MHz
GFSK	DEF	DEF	DEF
π /4-DQPSK	DEF	DEF	DEF
8-DPSK	DEF	DEF	DEF

1.7 Measurement Uncertainty

The reported uncertainty of measurement $y \pm U$, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U _{Lab})
	Level Accuracy:	THE THUS
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Padiated Emission	Level Accuracy:	.4.60 dB
Radiated Emission	9kHz to 30 MHz	±4.60 dB
Dadiated Emission	Level Accuracy:	. 4. 40 dD
Radiated Emission	30MHz to 1000 MHz	±4.40 dB
Radiated Emission	Level Accuracy:	±4.20 dB
Naulateu ElliiSSIOII	Above 1000MHz	±4.20 UB



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1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

CNAS (L5813)

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

FCC List No.: (811562)

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

IC Registration No.: (11950A-1)

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



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2. Test Summary

	F	CC Part 15 Subpart C(15.247)/ RSS	247 Issue 1	
Standard Section FCC IC		T		_
		Test Item	Judgment	Remark
15.203	1	Antenna Requirement	PASS	N/A
15.207	RSS-GEN 7.2.2	Conducted Emission	PASS	N/A
15.205	RSS-Gen 7.2.3	Restricted Bands	PASS	N/A
15.247(a)(1)	RSS 247 5.1 (2)	Hopping Channel Separation	PASS	N/A
15.247(a)(1)	RSS 247 5.1 (4)	Dwell Time	PASS	N/A
15.247(b)(1)	RSS 247 5.4 (2)	Peak Output Power	PASS	N/A
15.247(b)(1)	RSS 247 5.1 (4)	Number of Hopping Frequency	PASS	N/A
15.247(c)& 15.209	RSS 247 5.5	Radiated Spurious Emission	PASS	N/A
15.247(a)	RSS 247 5.1 (1)	99% Occupied Bandwidth & 20dB Bandwidth	PASS	99%OBW GFSK:925.7652kHz π/4-DQPSK: 1215.50kHz 8-DPSK: 1183.90KHz

Note: N/A is an abbreviation for Not Applicable.



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3. Test Equipment

AC Main C	Conducted Emiss	sion			
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
EMI Test Receiver	ROHDE& SCHWARZ	ESCI	100321	Jul. 22, 2016	Jul. 21, 2017
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jul. 22, 2016	Jul. 21, 2017
L.I.S.N	Rohde & Schwarz	ENV216	101131	Jul. 22, 2016	Jul. 21, 2017
L.I.S.N	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jul. 22, 2016	Jul. 21, 2017
Radiation	Spurious Emiss	ion			Cal. Due
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 22, 2016	Jul. 21, 2017
EMI Test Receiver	Rohde & Schwarz	ESPI	100010/007	Jul. 22, 2016	Jul. 21, 2017
Bilog Antenna	ETS-LINDGREN	3142E	00117537	Mar. 20, 2016	Mar. 19, 2017
Horn Antenna	ETS-LINDGREN	3117	00143207	Mar. 19, 2016	Mar. 18, 2017
Pre-amplifier	Sonoma	310N	185903	Mar. 20, 2016	Mar. 19, 2017
Pre-amplifier	HP	8447B	3008A00849	Mar. 26, 2016	Mar. 25, 2017
Loop Antenna	Laplace instrument	RF300	0701	Mar. 19, 2016	Mar. 18, 2017
Cable	HUBER+SUHNER	100	SUCOFLEX	Mar. 26, 2016	Mar. 25, 2017
Positioning Controller	ETS-LINDGREN	2090	N/A	N/A	N/A
Antenna C	conducted Emiss	sion			
Description	Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due Date
Spectrum Analyzer	Agilent	E4407B	MY45106456	Jul. 22, 2016	Jul. 21, 2017
Spectrum Analyzer	Rohde & Schwarz	ESCI	100321	Jul. 22, 2016	Jul. 21, 2017



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4. Conducted Emission Test

4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

4.1.2 Test Limit

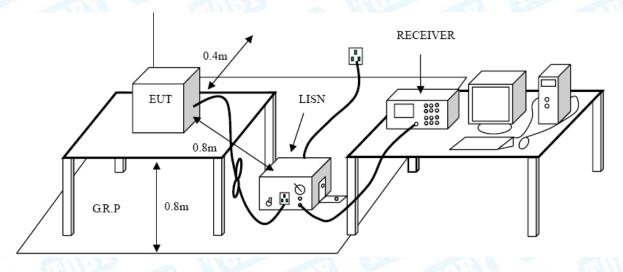
Conducted Emission Test Limit

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

Notes:

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

4.2 Test Setup



4.3 Test Procedure

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

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



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

LISN at least 80 cm from nearest part of EUT chassis

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

4.4 EUT Operating Mode

Please refer to the description of test mode.

4.5 Test Data

Test data please refer the following pages.



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EU1	T: True Wireless Earbud and Mic Model Name :			7198-06				
Tem	peratu	ıre:	25 ℃		3.0	Rela	ative Humidity	y : 55%
Tes	t Voltaç	ge:	AC 120)V/60 Hz				30
Terr	minal:		Line	3	THE OWNER OF THE PERSON OF THE			
Tes	t Mode	:	Chargii	ng with TX	GFSK Mod	de 2402 MH	Hz	Millian
Ren	nark:		Only w	orse case i	s reported			
90.0	90.0 dBuV							
								QP: — AVG: —
		_						
:		_						
40								
			X	x				
	N.			\sim	Morrows	armania	all the second	log of Marketine
		~~	~~~\	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Λ.,	na Barkera Araba a	1100	peak
				74 M A A		and the state of t	(north or report and the second of the seco	AVG
-1 0 0.	150		0.5		(MHz)		5	30.000
	No. N	Иk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit Ove	er
			MHz	dBu∀	dB	dBu∀	dBu∀ dB	Detector
	1 '	*	0.1500	34.87	10.12	44.99	65.99 -21.0	0 QP
	2		0.1500	15.80	10.12	25.92	55.99 -30.0	7 AVG
	3		0.1874	29.72	10.12	39.84	64.15 -24.3	1 QP
	4		0.1874	11.24	10.12	21.36	54.15 -32.7	9 AVG
	5		0.3180	19.37	10.08	29.45	59.76 -30.3	1 QP
	6		0.3180	5.46	10.08	15.54	49.76 -34.2	2 AVG
	7		0.5500	17.12	10.02	27.14	56.00 -28.8	6 QP
	8		0.5500	8.64	10.02	18.66	46.00 -27.3	4 AVG
	9		1.1420	10.06	10.15	20.21	56.00 -35.7	9 QP
	10		1.1420	1.17	10.15	11.32	46.00 -34.6	8 AVG

Emission Level= Read Level+ Correct Factor

3.36

-2.76

10.06

10.06

13.42

7.30

4.9580

4.9580

11

12

QP

AVG

56.00 -42.58

46.00 -38.70



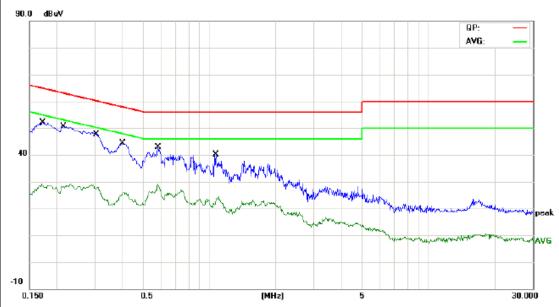
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EUT:	True \	Nireless Ea	rbud and M	lic Mo	del Nam	Model Name :		
Temperature:	25℃		Relative Humidity:			55%		
Test Voltage:	AC 12	20V/60 Hz	13	671	MARK		MAG	
Terminal:	Neutra	al				TO B	9	
Test Mode:	Charg	ing with TX	GFSK Mo	de 2402 M	Hz			
Remark:	Only v	worse case	is reported		333	-	DATE	
90.0 dBuV								
							P: — VG: —	
×								
40 X								
	X.							
many and a second	4 2		What was				han l	
1000	more M	11111	an in charlothe	jodenski nastroni († 1945) Podrugija prima († 1945)	drywydd y gan	katala manga barupaka	be Are Market and the bearing	
	7		manne	and Market Makes and a second	agrana and a sugar	***************************************	Αν	
0.150	0.5		(MHz)	5			30.000	
		D	0					
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
No. Mk.	Freq.	_				Over	Detector	
No. Mk.		Level	Factor	ment	Limit dBu∀		Detector QP	
	MHz	Level dBu∀	Factor dB	ment dBu∀	dBuV 65.34	dB		
1 *	MHz 0.1624	dBuV 33.24	Factor dB 9.94	ment dBu√ 43.18	Limit dBu√ 65.34 55.34	dB -22.16	QP	
1 * 2 3	MHz 0.1624 0.1624 0.2162	dBuV 33.24 13.36 26.13	Factor dB 9.94 9.94 10.02	ment dBuV 43.18 23.30 36.15	Limit dBuV 65.34 55.34 62.96	dB -22.16 -32.04 -26.81	QP AVG QP	
1 * 2 3 4	MHz 0.1624 0.1624 0.2162 0.2162	Level dBuV 33.24 13.36 26.13 7.71	9.94 9.94 10.02	ment dBuV 43.18 23.30 36.15 17.73	Limit dBuV 65.34 55.34 62.96 52.96	dB -22.16 -32.04 -26.81 -35.23	QP AVG QP AVG	
1 * 2 3 4 5	MHz 0.1624 0.1624 0.2162 0.2162 0.3020	Level dBuV 33.24 13.36 26.13 7.71 19.80	9.94 9.94 10.02 10.02	ment dBuV 43.18 23.30 36.15 17.73 29.82	Limit dBuV 65.34 55.34 62.96 52.96 60.19	dB -22.16 -32.04 -26.81 -35.23 -30.37	QP AVG QP AVG QP	
1 * 2 3 4 5	MHz 0.1624 0.1624 0.2162 0.2162 0.3020 0.3020	Level dBuV 33.24 13.36 26.13 7.71 19.80 4.16	9.94 9.94 10.02 10.02 10.02	ment dBuV 43.18 23.30 36.15 17.73 29.82 14.18	Limit dBuV 65.34 55.34 62.96 52.96 60.19 50.19	dB -22.16 -32.04 -26.81 -35.23 -30.37 -36.01	QP AVG QP AVG QP AVG	
1 * 2 3 4 5 6 7	MHz 0.1624 0.1624 0.2162 0.2162 0.3020 0.3020 0.3899	Level dBuV 33.24 13.36 26.13 7.71 19.80 4.16 16.59	Factor dB 9.94 9.94 10.02 10.02 10.02 10.02	ment dBuV 43.18 23.30 36.15 17.73 29.82 14.18 26.61	Limit dBuV 65.34 55.34 62.96 52.96 60.19 50.19 58.06	dB -22.16 -32.04 -26.81 -35.23 -30.37 -36.01 -31.45	QP AVG QP AVG QP AVG QP	
1 * 2 3 4 5 6 7	MHz 0.1624 0.1624 0.2162 0.2162 0.3020 0.3020 0.3899 0.3899	Level dBuV 33.24 13.36 26.13 7.71 19.80 4.16 16.59 2.78	Factor dB 9.94 9.94 10.02 10.02 10.02 10.02 10.02 10.02	ment dBuV 43.18 23.30 36.15 17.73 29.82 14.18 26.61 12.80	Limit dBuV 65.34 55.34 62.96 52.96 60.19 58.06 48.06	dB -22.16 -32.04 -26.81 -35.23 -30.37 -36.01 -31.45 -35.26	QP AVG QP AVG QP AVG QP AVG	
1 * 2 3 4 5 6 7 8 9	MHz 0.1624 0.1624 0.2162 0.2162 0.3020 0.3020 0.3899 0.3899	Level dBuV 33.24 13.36 26.13 7.71 19.80 4.16 16.59 2.78 13.13	Factor dB 9.94 9.94 10.02 10.02 10.02 10.02 10.02 10.02 10.03	ment dBuV 43.18 23.30 36.15 17.73 29.82 14.18 26.61 12.80 23.16	Limit dBuV 65.34 55.34 62.96 52.96 60.19 50.19 58.06 48.06 56.00	dB -22.16 -32.04 -26.81 -35.23 -30.37 -36.01 -31.45 -35.26 -32.84	QP AVG QP AVG QP AVG QP AVG QP AVG	
1 * 2 3 4 5 6 7 8 9	MHz 0.1624 0.1624 0.2162 0.2162 0.3020 0.3020 0.3899 0.3899 0.5220	Level dBuV 33.24 13.36 26.13 7.71 19.80 4.16 16.59 2.78 13.13 3.25	Factor dB 9.94 9.94 10.02 10.02 10.02 10.02 10.02 10.02 10.03 10.03	ment dBuV 43.18 23.30 36.15 17.73 29.82 14.18 26.61 12.80 23.16 13.28	Limit dBuV 65.34 55.34 62.96 52.96 60.19 50.19 58.06 48.06 56.00 46.00	dB -22.16 -32.04 -26.81 -35.23 -30.37 -36.01 -31.45 -35.26 -32.84 -32.72	QP AVG QP AVG QP AVG QP AVG QP AVG	
1 * 2 3 4 5 6 7 8 9	MHz 0.1624 0.1624 0.2162 0.2162 0.3020 0.3020 0.3899 0.3899	Level dBuV 33.24 13.36 26.13 7.71 19.80 4.16 16.59 2.78 13.13	Factor dB 9.94 9.94 10.02 10.02 10.02 10.02 10.02 10.02 10.03	ment dBuV 43.18 23.30 36.15 17.73 29.82 14.18 26.61 12.80 23.16	Limit dBuV 65.34 55.34 62.96 52.96 60.19 50.19 58.06 48.06 56.00 46.00	dB -22.16 -32.04 -26.81 -35.23 -30.37 -36.01 -31.45 -35.26 -32.84	QP AVG QP AVG QP AVG QP AVG QP AVG	



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06				
Temperature:	25℃	55%					
Test Voltage:	e: AC 240V/60 Hz						
Terminal:	Line						
Test Mode:	Charging with TX GFSK Mode 24	02 MHz	D. H. L.				
Remark: Only worse case is reported							
	•						



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB	dBu∀	dBu∀	dB	Detector
1	*	0.1720	33.97	9.96	43.93	64.86	-20.93	QP
2		0.1720	11.62	9.96	21.58	54.86	-33.28	AVG
3		0.2139	27.17	10.02	37.19	63.05	-25.86	QP
4		0.2139	7.85	10.02	17.87	53.05	-35.18	AVG
5		0.3059	23.21	10.02	33.23	60.08	-26.85	QP
6		0.3059	11.57	10.02	21.59	50.08	-28.49	AVG
7		0.3996	22.27	10.02	32.29	57.86	-25.57	QP
8		0.3996	15.19	10.02	25.21	47.86	-22.65	AVG
9		0.5817	20.20	10.06	30.26	56.00	-25.74	QP
10		0.5817	9.73	10.06	19.79	46.00	-26.21	AVG
11		1.0700	19.27	10.06	29.33	56.00	-26.67	QP
12		1.0700	11.52	10.06	21.58	46.00	-24.42	AVG



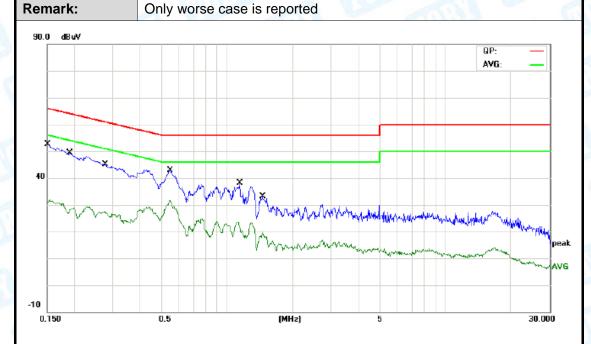
EUT: True Wireless Earbud and Mic Model Name: 7198-06

Temperature: 25 °C Relative Humidity: 55%

Test Voltage: AC 240V/60 Hz

Terminal: Neutral

Test Mode: Charging with TX GFSK Mode 2402 MHz



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBu∀	dB	dBu∀	dBu∀	dB	Detector
1	0.1499	7.30	10.12	17.42	66.00	-48.58	QP
2	0.1499	2.56	10.12	12.68	56.00	-43.32	AVG
3 *	0.1901	29.57	10.12	39.69	64.03	-24.34	QP
4	0.1901	10.24	10.12	20.36	54.03	-33.67	AVG
5	0.2757	23.32	10.09	33.41	60.94	-27.53	QP
6	0.2757	9.04	10.09	19.13	50.94	-31.81	AVG
7	0.5500	18.39	10.02	28.41	56.00	-27.59	QP
8	0.5500	9.29	10.02	19.31	46.00	-26.69	AVG
9	1.1417	15.73	10.15	25.88	56.00	-30.12	QP
10	1.1417	6.14	10.15	16.29	46.00	-29.71	AVG
11	1.4497	15.89	10.12	26.01	56.00	-29.99	QP
12	1.4497	7.95	10.12	18.07	46.00	-27.93	AVG



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5. Radiated Emission Test

5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

Radiated Emission Limit (9 kHz~1000MHz)

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

Radiated Emission Limit (Above 1000MHz)

Frequency	Class B (dBuV/m)(at 3m)			
(MHz)	Peak	Average		
Above 1000	74	54		

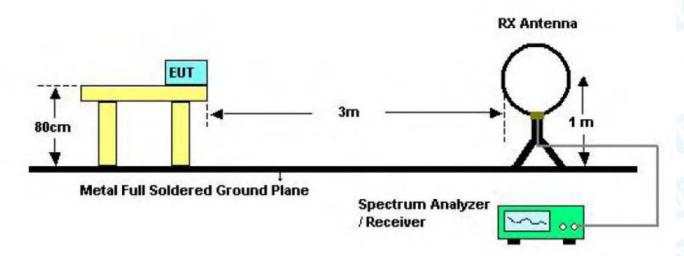
Note:

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

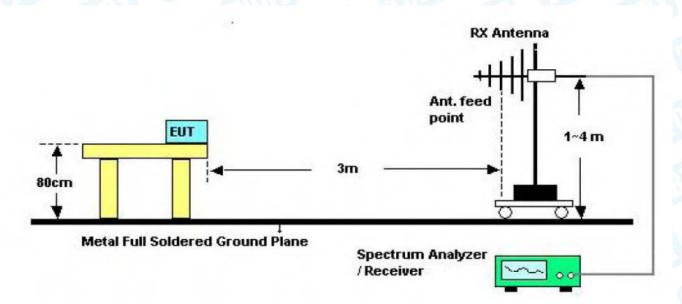


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5.2 Test Setup



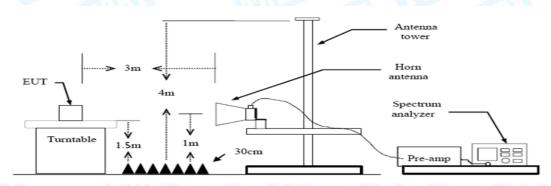
Below 30MHz Test Setup



Below 1000MHz Test Setup



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Above 1GHz Test Setup

5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

5.4 EUT Operating Condition

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

5.5 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10Hz with Peak Detector for Average Values.

Test data please refer the following pages.



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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

EUT:	True \	Wireless Ea	arbud and Mid	Мо	del Nam	e :	7198-	-06
Temperature: 25		HART		Rela	ative Hum	nidity:	55%	
Test Voltage:	AC12	0V/60Hz	WILLIAM STATE		HAIN			
Ant. Pol.	Horizo	ontal		1013			11117	
Test Mode:	TX GI	FSK Mode	2402MHz		103	1 4		6
Remark:	Only	worse case	is reported		Mr.		1	4
80.0 dB uV/m								
30	1 2 x	3	* *		(RF)FCC		argin -6 dB	J/9-A-
20 30.000 40 50	60 70	80	(MHz)	30	Transfer and All Control			000.00
-20	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	80	(MHz)	30	The Market Market			000.00
-20 30.000 40 50	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		(MHz)		The Market Market			000.00
-20 30.000 40 50	60 70	80 Reading	(MHz) Correct M Factor	au easure-	10 400	500 500		
-20 30.000 40 50 No. Mk.	60 70 Freq.	80 Reading Level	(MHz) Correct M Factor dB/m	easure- ment	lo 400	500 600 Over	700 1	or_
No. Mk.	Freq.	Reading Level	(MHz) Correct M Factor dB/m -24.54	easure- ment dBuV/m	Limit dBuV/m	500 500 Over	Detector peak	(
No. Mk.	Freq. MHz	Reading Level dBuV 47.67	Correct M Factor dB/m -24.54 -23.63	easure- ment dBuV/m 23.13	Limit dBuV/m 40.00	Over dB -16.87	Detector peak	or (
No. Mk. 1 54 2 71 3 95	Freq. MHz 1.2610	Reading Level dBuV 47.67 48.24	Correct M Factor dB/m -24.54 -23.63	easure- ment dBuV/m 23.13 24.61	Limit dBuV/m 40.00 40.00	Over dB -16.87	Detector peak	or C
No. Mk. 1 54 2 71 3 95 4 * 13	Freq. MHz 1.2610 1.8320 5.0930	Reading Level dBuV 47.67 48.24 50.02	Correct M Factor dB/m -24.54 -23.63 -22.28	easure- ment dBuV/m 23.13 24.61 27.74	Limit dBuV/m 40.00 40.00 43.50	Over dB -16.87 -15.39 -15.76	Detector peak	or c

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



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	AC120V60Hz		4
Ant. Pol.	Vertical	A AMERICAN	
Test Mode:	TX GFSK Mode 2402MHz		CHILL.
Remark:	Only worse case is reported		



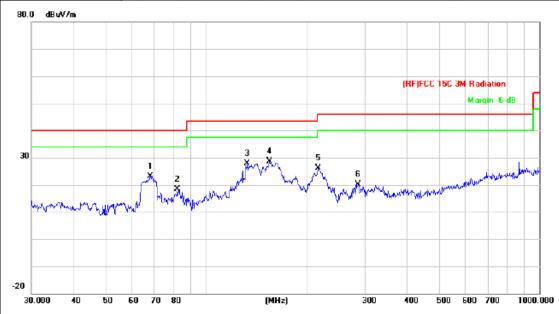
No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		56.5929	38.84	-24.58	14.26	40.00	-25.74	peak
2		86.2001	39.65	-22.97	16.68	40.00	-23.32	peak
3	×	133.1511	50.87	-22.01	28.86	43.50	-14.64	peak
4		157.5588	46.75	-20.45	26.30	43.50	-17.20	peak
5		218.3085	41.64	-19.19	22.45	46.00	-23.55	peak
6		339.5888	32.11	-14.79	17.32	46.00	-28.68	peak

^{*:}Maximum data x:Over limit !:over margin



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06				
Temperature:	Temperature: 25°C		55%				
Test Voltage:	ge: AC 120V/60Hz						
Ant. Pol.	Horizontal						
Test Mode: ΤΧ π/4-DQPSK Mode 2402MHz							
Remark:		The state of the s					



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		68.1512	46.94	-23.85	23.09	40.00	-16.91	peak
2		82.0704	41.65	-23.22	18.43	40.00	-21.57	peak
3		133.1511	49.87	-22.01	27.86	43.50	-15.64	peak
4	*	155.3642	49.31	-20.61	28.70	43.50	-14.80	peak
5		217.5440	45.47	-19.22	26.25	46.00	-19.75	peak
6		285.9778	37.01	-16.93	20.08	46.00	-25.92	peak

^{*:}Maximum data x:Over limit !:over margin



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EUT:	True \	Wireless Ea	arbud and M	lic Mo	del Name	:	7198-06				
Temperature:	25℃		3.9	Rela	tive Humi	idity:	55%	þ			
Гest Voltage:	AC 12	20V/60Hz		AL IC							
Ant. Pol.	Vertic	Vertical									
Test Mode:	TXπ	/4-DQPSK	Mode 2402	2MHz	(A)		MILL ST	1			
Remark:	Only	worse case	is reported	(De							
80.0 dBuV/m								,			
					(RF)FC	C 15C 3M	Radiation				
							Margin -6 dB	-			
								-			
301	2	3	Å								
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Musika my	hy S	AND	Mary John	_{M-M} AAAAA\ML	Andrew Standard Control	and Marketine					
"loge" i											
								1			
								-			
-20											
30.000 40 50	60 70	80	(MHz)	3	300 400	500	500 700 1000). 00			
No. Mk. F	req.	Reading Level	Correct Factor	Measure- ment	Limit	Ove	r				
- N	ИHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector				
1 54.	2610	50.67	-24.54	26.13	40.00	-13.8	37 peak				
2 71.	8319	50.74	-23.63	27.11	40.00	-12.8	39 peak				
3 95.	0930	50.02	-22.28	27.74	43.50	-15.7	76 peak				
4 * 131.	.7574	54.52	-22.03	32.49	43.50	-11.0	01 peak				
	.8240	43.45	-20.78	22.67	43.50	-20.8					
	.9945	38.47	-17.01	21.46	46.00	-24.					
0 201	.3343										



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=U	T:			Tru	ue \	Vire	eless	s Ea	irbud a	nd M	lic	Мо	del	Na	me	:	•	7198	3-06	
Гen	npera	ture:		25	$^{\circ}$ C				18			Rela	ativ	е Н	umic	dity		55%		
Гes	t Volta	age:		AC	12	20V/	/60H	łz		45	VIII.	V			M	1	N			
4nt	t. Pol.			Но	rizo	onta	al		10					N.	111				S	
Гes	t Mod	e:		TX	8-1	DPS	SK N	/lode	e 2402	MHz	6	M	b	3					777	P
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														(8	RFJFCC	150 3				٦
																	Mai	rgin -6	dB	H
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	D. 000	40	50	60	70	80			(MI	łz)		3	300	1	00	500	600	700	100	
						R	eadi		Corr	ect	Mea	sure						700	100	_
		Mk.	Fı	req		Re	_eve	el _	Corr	ect tor	me	sure ent		Lim	iit	0	ver			or.
	No.	Mk.	Fi	req IHz		Re	_eve dBu\	el V	Corr Fac	ect tor	me dBu	sure ent uV/m		Lim	iit ∨/m	0	ver dB	D	etect	
	No.	Mk.	Fi M 54.2	req 1Hz 261		Re	_eve dBu\ 45.6	el / 7	Corr Fac dB/r	ect tor n	dBu 21	sure ent uV/m .13		Lim dBu	iit ∨/m	0	ver	D.	etect peal	k
	No.	Mk.	Fr M 54.2 78.4	req 1Hz 261	0	Re	dBu\ 45.6 46.2	el 7 7	Corr Fac dB/r -24.5	ect tor n 54	21 22	sure ent uV/m .13		Lim dBu 40.	iit ∨/m .00	-1 -1	ver dB 8.83	7 ₁	etect peal	k k
	No. 1 2 3	Mk.	Fr M 54.2 78.4 95.0	req 1Hz 261 113	0 3	Re L	dBu\ 45.6 46.2 49.0	7 2 2	Corr Fac dB/r	ect tor n 54	21 22	sure ent uV/m .13		Lim dBu 40.	iit ∨/m	-1 -1 -1	ver dB 8.83 7.18	7 ₁ 8 ₁ 6 ₁	etect peal	k k
30 30	No.	Mk.	Fr M 54.2 78.4	req 1Hz 261 113	0 3	Re L	dBu\ 45.6 46.2	7 2 2	Corr Fac dB/r -24.5	ect tor 54 40	21 22 26	sure ent uV/m .13	;- -	Lim dBu 40. 40.	iit ∨/m .00	-1 -1 -1	ver dB 8.83	7 ₁ 8 ₁ 6 ₁	etect peal	k k
	No. 1 2 3	Mk.	Fr M 54.2 78.4 95.0	req 1Hz 261 113 193	0 3 0 74	4 4	dBu\ 45.6 46.2 49.0	7 2 2 2 2	Corr Fac dB/r -24.5	ect tor 54 40 28	21 22 26 29	sure ent //m 13 82	;- -	40. 43.	.00 .00	-1 -1 -1	ver dB 8.83 7.18	7 8 6	etecto peal peal peal	k k

Emission Level= Read Level+ Correct Factor

x:Over limit !:over margin

*:Maximum data



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Relative Humidity:	EUT:		Tr	ue W	ireles	ss Ea	irbud and N	/lic Mc	del l	Name	:	7	198-	06	
Ant. Pol. TX 8-DPSK Mode 2402MHz Remark: Only worse case is reported REFFEC 19C 3M Radiation Marcin 6 dB	Tempe			$^{\circ}\mathbb{C}$		1	818	Rel	lative	Humic	lity:	5	5%	W	è
TX 8-DPSK Mode 2402MHz Only worse case is reported Remark: Only worse case is reported	Test V	oltage:	AC	C 120	V/60	Hz		WILL IN		A					
Collaboration Correct Measure Limit Over	Ant. P	ol.	Ve	Vertical											
No. Mk. Freq. Reading Level Factor ment Limit Over MHz dBuV dBm dBuV/m dBuV/m dB Detector	Test M	lode:	T	TX 8-DPSK Mode 2402MHz											
No. Mk. Freq. Reading Level Factor Measure-Factor Measure-Factor Measure-Factor Measure-Table March & Grant &	Rema	rk:	Or	nly wo	orse	case	is reported			1					ď
No. Mk. Freq. Reading Level Factor ment Limit Over MHz dBuV dB/m dBuV/m dBuV/m dB Detector	80.0	dBuV/m													_
No. Mk. Freq. Reading Level Correct Factor Measure- Factor ment Limit Dimit Limit Over 1 56.5929 41.84 -24.58 17.26 40.00 -22.74 peak 2 74.1350 45.17 -23.55 21.62 40.00 -18.38 peak 3 86.2001 43.65 -22.97 20.68 40.00 -19.32 peak 4 * 133.1511 48.37 -22.01 26.36 43.50 -17.14 peak	-20		AMMAN Å.	and C	Water.	May Map		· was designed and the second		ggjóttari karandar ^{al}	And Joseph Control	M ar	gin -6 c	we have	
No. Mk. Freq. Level Factor ment Limit Over MHz dBuV dBuV dBuV/m dBuV/m dBuV/m dB Detector 1 56.5929 41.84 -24.58 17.26 40.00 -22.74 peak 2 74.1350 45.17 -23.55 21.62 40.00 -18.38 peak 3 86.2001 43.65 -22.97 20.68 40.00 -19.32 peak 4 * 133.1511 48.37 -22.01 26.36 43.50 -17.14 peak	30.0	00 40	50 60							400	500	600	700	1000	J. OC
1 56.5929 41.84 -24.58 17.26 40.00 -22.74 peak 2 74.1350 45.17 -23.55 21.62 40.00 -18.38 peak 3 86.2001 43.65 -22.97 20.68 40.00 -19.32 peak 4 * 133.1511 48.37 -22.01 26.36 43.50 -17.14 peak	١	No. Mk.	Fred						e- L	.imit	Ov	er			
2 74.1350 45.17 -23.55 21.62 40.00 -18.38 peak 3 86.2001 43.65 -22.97 20.68 40.00 -19.32 peak 4 * 133.1511 48.37 -22.01 26.36 43.50 -17.14 peak			MHz		dBu	ıV	dB/m	dBu∀/n	n c	iBu∀/m	d	В	Dete	ector	
3 86.2001 43.65 -22.97 20.68 40.00 -19.32 peak 4 * 133.1511 48.37 -22.01 26.36 43.50 -17.14 peak	1		56.592	29	41.	84	-24.58	17.26		40.00	-22	2.74	ре	ak	
4 * 133.1511 48.37 -22.01 26.36 43.50 -17.14 peak	2		74.135	50	45.	17	-23.55	21.62		40.00	-18	3.38	ре	ak	
	3		86.200)1	43.	65	-22.97	20.68		40.00	-19	3.32	ре	ak	
	4	*	133.15	11	48.	37	-22.01	26.36	, ,	43.50	-17	7.14	ре	ak	
	5		164.90	71	44.	29	-20.59	23.70		43.50	-19	9.80			

^{*:}Maximum data x:Over limit !:over margin

218.3085

Emission Level= Read Level+ Correct Factor

38.64

-19.19

19.45

-26.55

peak

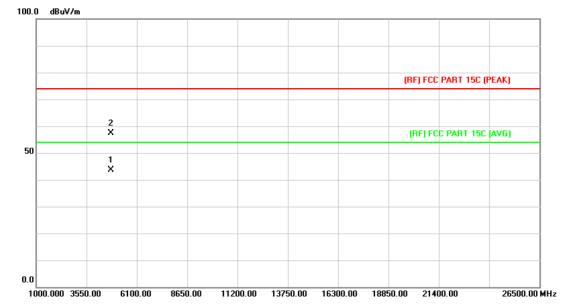
46.00



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Above 1GHz

True Wireless Earbud and Mic	Model Name :	7198-06					
25℃	Relative Humidity:	55%					
AC 120V/60Hz	AC 120V/60Hz						
Horizontal							
TX GFSK Mode 2402MHz	THE PARTY OF	A.B.					
	No report for the emission which more than 10 dB below the						
	25°C AC 120V/60Hz Horizontal TX GFSK Mode 2402MHz	25°C Relative Humidity: AC 120V/60Hz Horizontal TX GFSK Mode 2402MHz No report for the emission which more than 10 dB below					

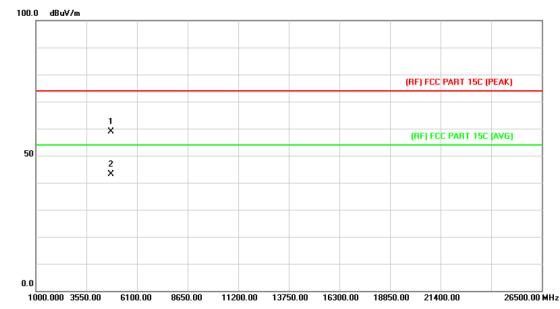


No	o. Mł	c. Freq.	_	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∨	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	4803.126	30.25	13.44	43.69	54.00	-10.31	AVG
2		4804.325	44.05	13.44	57.49	74.00	-16.51	peak



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06					
Temperature:	25℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60Hz		4					
Ant. Pol.	Vertical	TO VILLE						
Test Mode:	TX GFSK Mode 2402MHz	201377	DITT. S					
Remark:	No report for the emission which more than 10 dB below the prescribed limit.							
100 0 ID VI								

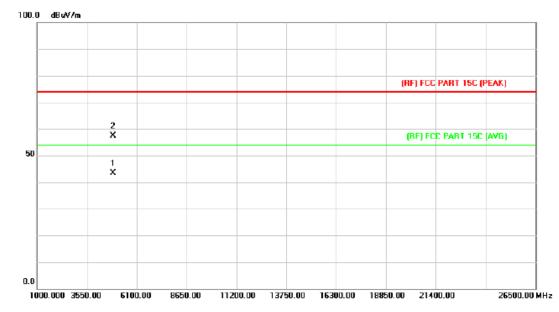


No	. Mk	. Freq.			Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBuV/m	dBuV/m	dB	Detector
1		4804.119	45.35	13.44	58.79	74.00	-15.21	peak
2	*	4804.325	29.72	13.44	43.16	54.00	-10.84	AVG



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06					
Temperature:	25°C Relative Humidity: 55%							
Test Voltage:	AC 120V/60Hz							
Ant. Pol.	Horizontal							
Test Mode:	TX GFSK Mode 2441MHz	10:30	CHI.					
Remark:	No report for the emission which	more than 10 dB below	w the					
	prescribed limit.							

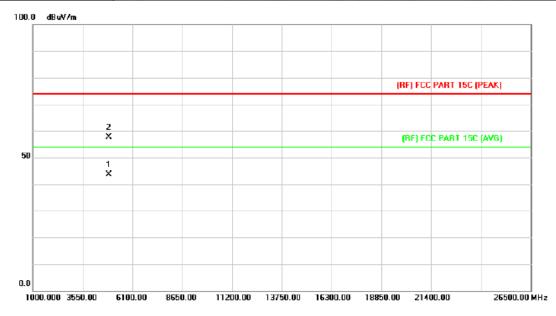


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1	*	4880.779	29.61	13.89	43.50	54.00	-10.50	AVG
2		4882.192	43.60	13.90	57.50	74.00	-16.50	peak



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06						
Temperature:	25℃	Relative Humidity:	55%						
Test Voltage:	AC 120V/60Hz								
Ant. Pol.	Vertical								
Test Mode:	TX GFSK Mode 2441MHz		DITT.						
Remark:	No report for the emission which	No report for the emission which more than 10 dB below the							
	prescribed limit.								

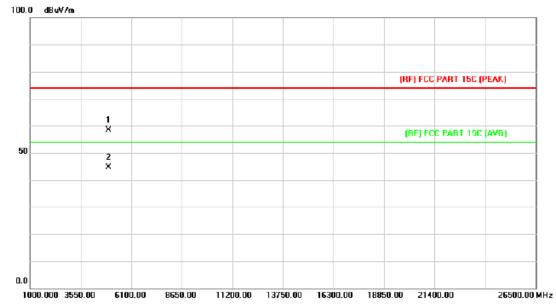


No	o. Mk	. Freq.		Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu\//m	dB	Detector
1	*	4881.424	29.63	13.90	43.53	54.00	-10.47	AVG
2		4882.422	43.78	13.90	57.68	74.00	-16.32	peak



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06					
Temperature:	25℃	Relative Humidity:	55%					
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz						
Ant. Pol.	Horizontal							
Test Mode:	TX GFSK Mode 2480MHz		MILLER					
Remark:	No report for the emission which prescribed limit.	No report for the emission which more than 10 dB below the						

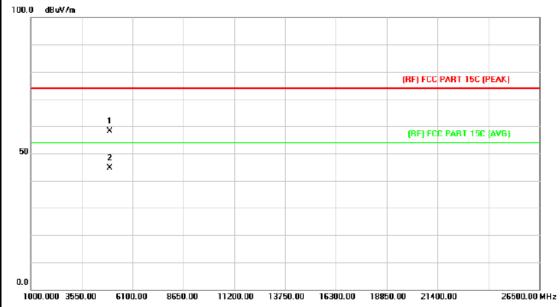


No	Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		4959.493	44.00	14.36	58.36	74.00	-15.64	peak
2	*	4960.111	30.38	14.36	44.74	54.00	-9.26	AVG



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature: 25°C		Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX GFSK Mode 2480MHz	11133	DIO.
Remark:	No report for the emission which prescribed limit.	more than 10 dB below	w the
100.0 dP-466s			

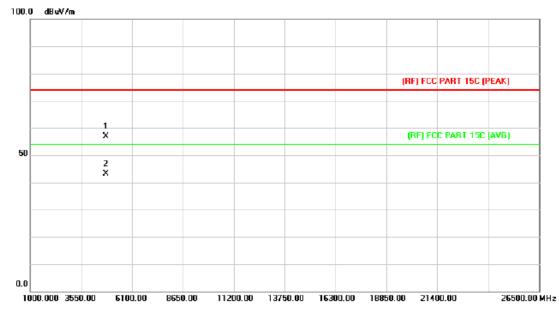


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		4959.746	43.88	14.36	58.24	74.00	-15.76	peak
2	*	4960.110	30.33	14.36	44.69	54.00	-9.31	AVG



Page: 32 of 93

EUT:	True Wireless Earbud and Mic	Model Name :	7198-06				
Temperature:	25℃	25°C Relative Humidity: 55%					
Test Voltage:	AC 120V/60Hz						
Ant. Pol.	Horizontal	Horizontal					
Test Mode:	TX 8-DPSK Mode 2402MHz		CALL STORY				
Remark:	No report for the emission which prescribed limit.	n more than 10 dB belo	w the				

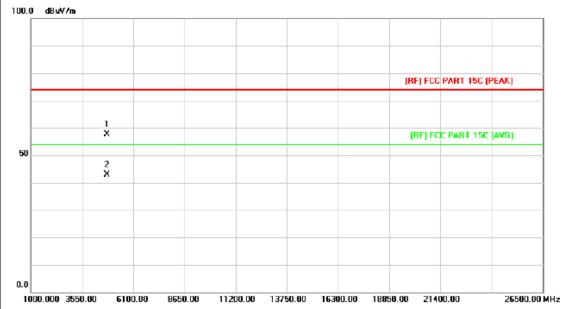


No.	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		4803.434	43.41	13.44	56.85	74.00	-17.15	peak
2	*	4804.960	29.58	13.44	43.02	54.00	-10.98	AVG



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06			
Temperature:	25℃	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
Ant. Pol.	Vertical					
Test Mode:	TX 8-DPSK Mode 2402MHz		Millian			
Remark:	No report for the emission which prescribed limit.	more than 10 dB below	the			

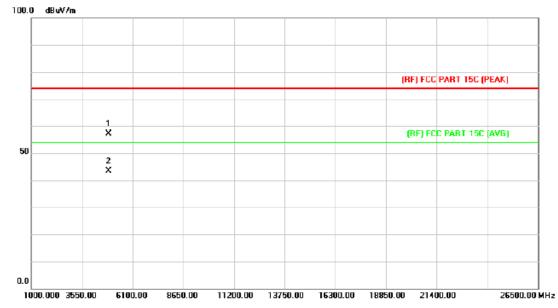


No	. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		4804.078	44.09	13.44	57.53	74.00	-16.47	peak
2	*	4804.900	29.55	13.44	42.99	54.00	-11.01	AVG



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EUT: True Wireless Earbud and Mic		Model Name :	7198-06				
Temperature:	25℃	55%					
Test Voltage:	AC 120V/60Hz						
Ant. Pol.	Horizontal						
Test Mode:	TX 8-DPSK Mode 2441MHz	111:32	UMILLE				
Remark:	No report for the emission which prescribed limit.	more than 10 dB below	the				

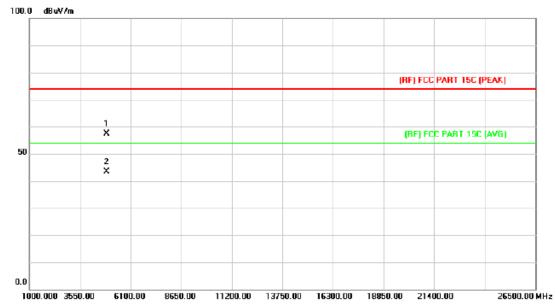


No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		4881.340	43.22	13.90	57.12	74.00	-16.88	peak
2	*	4881.464	29.58	13.90	43.48	54.00	-10.52	AVG



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06	
Temperature:	Temperature: 25°C Relative Hum			
Test Voltage:	AC 120V/60Hz	THE STATE OF THE S		
Ant. Pol.	Vertical			
Test Mode:	TX 8-DPSK Mode 2441MHz	M:N	MILLER	
Remark:	No report for the emission which r prescribed limit.	nore than 10 dB below	the	
	<u> </u>	·		



No	o. Mk.	Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu\//m	dB	Detector
1		4881.148	43.53	13.90	57.43	74.00	-16.57	peak
2	*	4881.830	29.56	13.90	43.46	54.00	-10.54	AVG



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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 8-DPSK Mode 2480MHz		MILLER
Remark:	No report for the emission which prescribed limit.	more than 10 dB below	the

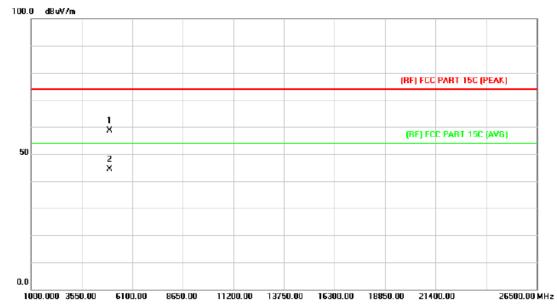


No	o. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu\//m	dB	Detector
1	*	4960.110	30.10	14.36	44.46	54.00	-9.54	AVG
2		4960.600	44.83	14.36	59.19	74.00	-14.81	peak



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EUT:	True Wireless Earbud and Mic	7198-06			
Temperature:	25℃	55%			
Test Voltage:	AC 120V/60Hz				
Ant. Pol.	Vertical				
Test Mode:	TX 8-DPSK Mode 2480MHz				
Remark:	No report for the emission which more than 10 dB below the prescribed limit.				



No	. Mk	. Freq.	Reading Level		Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		4959.444	44.16	14.36	58.52	74.00	-15.48	peak
2	*	4960.394	30.12	14.36	44.48	54.00	-9.52	AVG

Emission Level= Read Level+ Correct Factor



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6. Restricted Bands Requirement

6.1 Test Standard and Limit

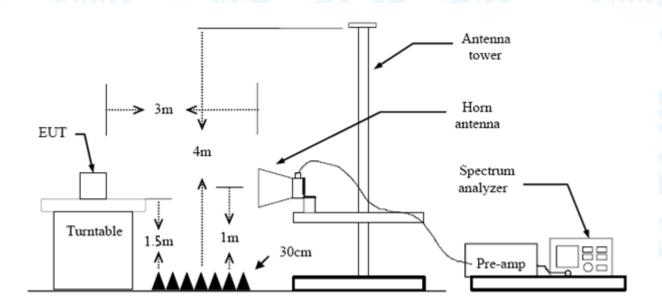
6.1.1 Test Standard FCC Part 15.209 FCC Part 15.205

6.1.2 Test Limit

Restricted Frequency	Class B (dE	BuV/m)(at 3m)
Band (MHz)	Peak	Average
310 ~2390	74	54
2483.5 ~2500	74	54

Note: All restriction bands have been tested, only the worst case is reported.

6.2 Test Setup



6.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.



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

- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.
- (8) For the actual test configuration, please see the test setup photo.

6.4 EUT Operating Condition

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

6.4 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10Hz with Peak Detector for Average Values.

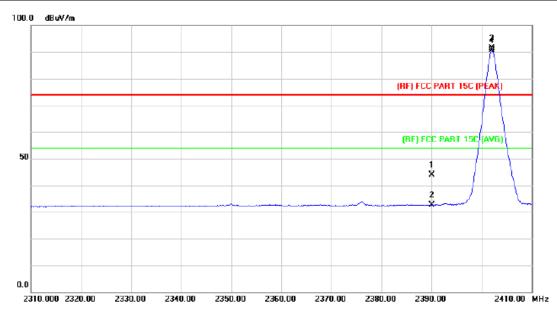
All restriction bands have been tested, only the worst case is reported.



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(1) Radiation Test

ì	EUT:	True Wireless Earbud and Mic	Model Name :	7198-06		
	Temperature:	25℃	Relative Humidity:	55%		
	Test Voltage:	AC 120V/60Hz				
	Ant. Pol.	Horizontal	Horizontal			
	Test Mode:	TX GFSK Mode 2402MHz				
	Remark:	N/A				

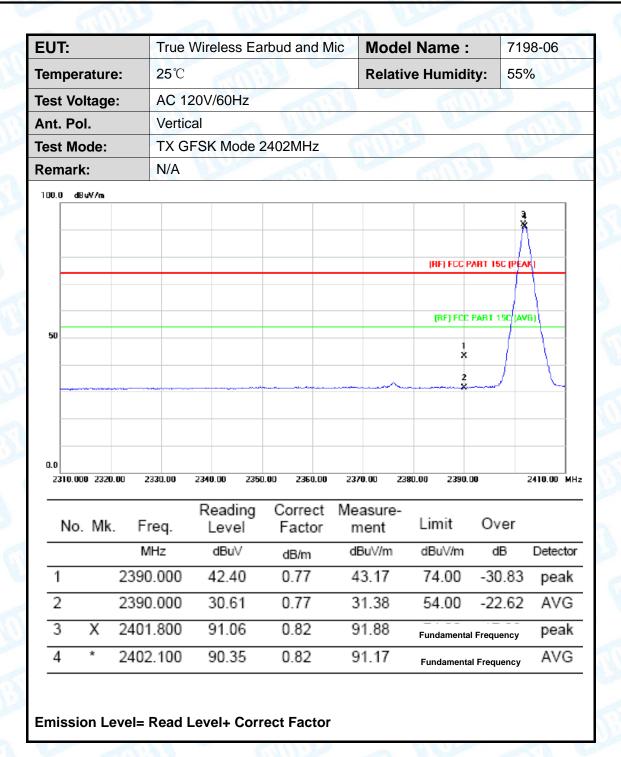


No	. Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBu∀	dB/m	dBu∀/m	dBu∀/m	dB	Detector
1		2390.000	43.04	0.77	43.81	74.00	-30.19	peak
2		2390.000	31.75	0.77	32.52	54.00	-21.48	AVG
3	Χ	2402.000	90.66	0.82	91.48	Fundamental	Frequency	peak
4	*	2402.100	89.72	0.82	90.54	Fundamental	Frequency	AVG

Emission Level= Read Level+ Correct Factor



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EUT:	True Wireless E	arbud and Mic	Model Na	me :	7198-06
Temperature:	25℃ Relativ		Relative H	umidity:	55%
Test Voltage:	AC 120V/60Hz				
Ant. Pol.	Horizontal	Horizontal			Chim.
Test Mode:	TX GFSK Mode 2480 MHz				A Property of
Remark:	N/A			W. Call	
100.0 dBuV/m					
<u>*</u>					
			(RE) FCC PART 15C ((PEAK)
3			(F	F) FCC PART 150	(AVG)
50 *					
2473.000 2483.00 2	2493.00 2503.00 251	3.00 2523.00 25	33.00 2543.00	2553.00	2573.00 MHz
	D 1:	O (M			
No. Mk. F	Reading req. Level		easure- ment Lin	nit Ove	er
N	MHz dBu√	dB/m	Bu∀/m dBι	ıV/m dB	Detector
1 X 2479	9.800 92.57	1.15	93.72 Funda	mental Frequenc	y peak
					v AVG
2 * 2480	0.000 92.06	1.15	93.21 Funda	mental Frequenc	y AVG
	0.000 92.06 3.500 54.25			.00 -18.	

Emission Level= Read Level+ Correct Factor

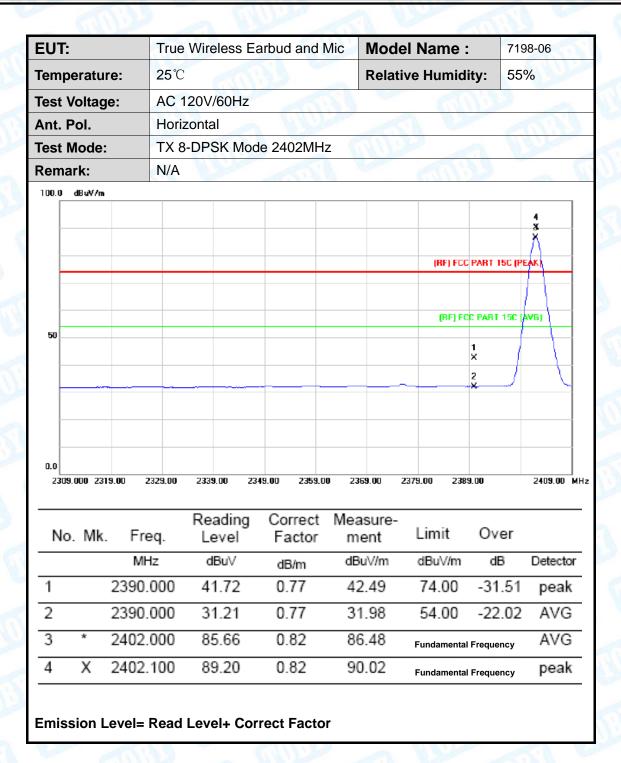


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UT:	True	Wireless Ea	rbud and M	ic Mod	el Name :	7198-06
emperature:	25℃		13	Relat	ive Humidity:	: 55%
est Voltage:	AC 1	20V/60Hz		1 13		13
nt. Pol.	. Vertical			A STATE		
est Mode:	TX G	FSK Mode	2480 MHz		7	Million
emark:	N/A	Alle	1	Charles		
100.0 dBuV/m						
50 ×					(RF) FCC PART	
0.0 2473.000 2483.00	2493.00	2503.00 2513	3.00 2523.00	2533.00 2	2543.00 2553.00	2573.00 MH
No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit O	ver
	MHz	dBu∀	dB/m	dBu∀/m	dBuV/m	dB Detector
1 X 24	479.800	92.02	1.15	93.17	Fundamental Frequ	_{ency} peak
2 * 24	480.000	91.70	1.15	92.85	Fundamental Frequ	encv AVG
3 24	483.500	53.98	1.17	55.15	74.00 -1	8.85 peak
	483.500	50.46	1.17	51.63	54.00 -2	2.37 AVG

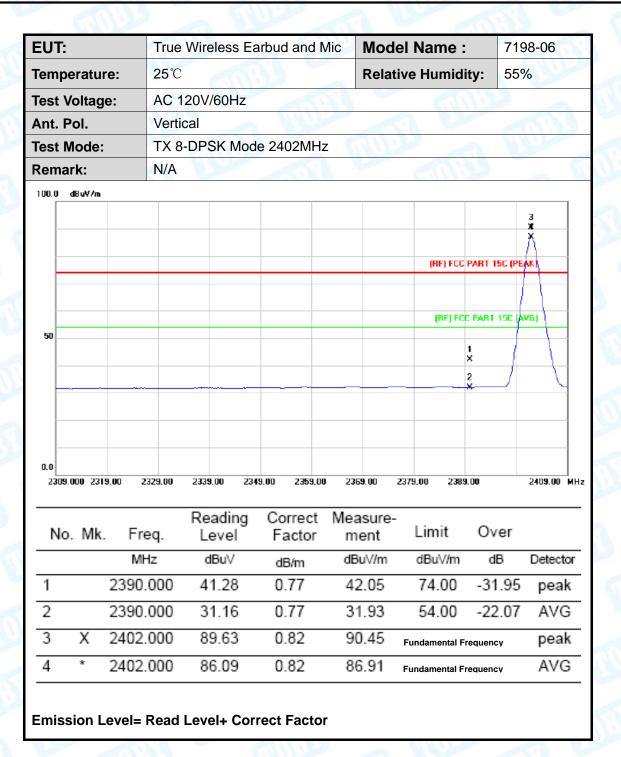


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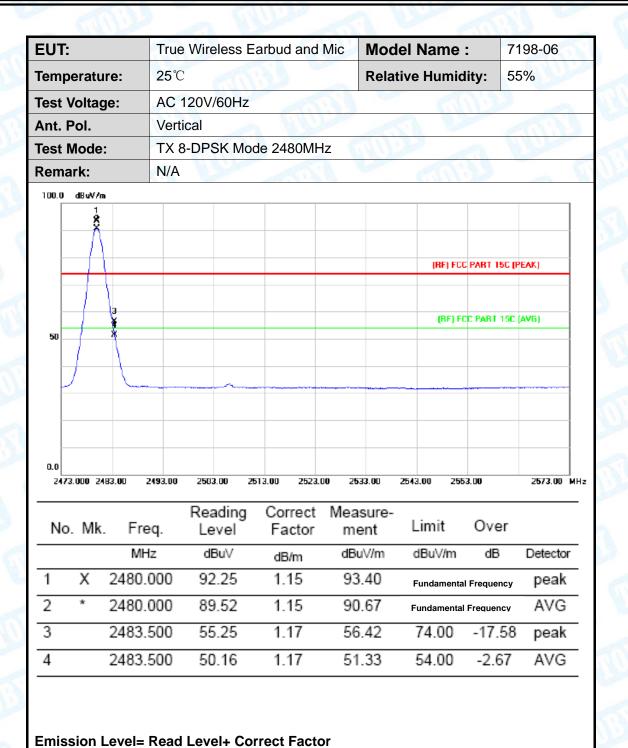
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EUT:	True Wireless	Earbud and N	Mic Model I	Name :	7198-06
Temperature:	25℃		Relative	Humidity:	55%
Test Voltage:	AC 120V/60H	Z	W. C.	MILLER	
Ant. Pol.	Horizontal	a WW			
Test Mode:	TX 8-DPSK M	lode 2480MHz	4 Williams		
Remark:	N/A			THE PARTY OF	
100.0 dBuV/m					
1 X X					
				(RF) FCC PART 15C (F	PEAK)
3				(RF) FCC PART 15C	(AVG)
50 *					,
	<u> </u>				
0.0 2473.000 2483.00 24	493.00 2503.00	2513.00 2523.00	2533.00 2543.0	0 2553.00	2573.00 MHz
No. Mk. Fr	Readin eq. Level		Measure- ment Li	mit Over	
М	Hz dBu√	dB/m	dBu√/m di	BuV/m dB	Detector
1 X 2480	.000 92.94	1.15	94.09 Fund	damental Frequency	peak
2 * 2480	.000 89.72	1.15	90.87 _{Fund}	lamental Frequency	AVG
3 2483	.500 56.27	1.17	57.44 7	4.00 -16.56	peak
4 2483	.500 50.34	1.17	51.51 5	4.00 -2.49	AVG

Emission Level= Read Level+ Correct Factor

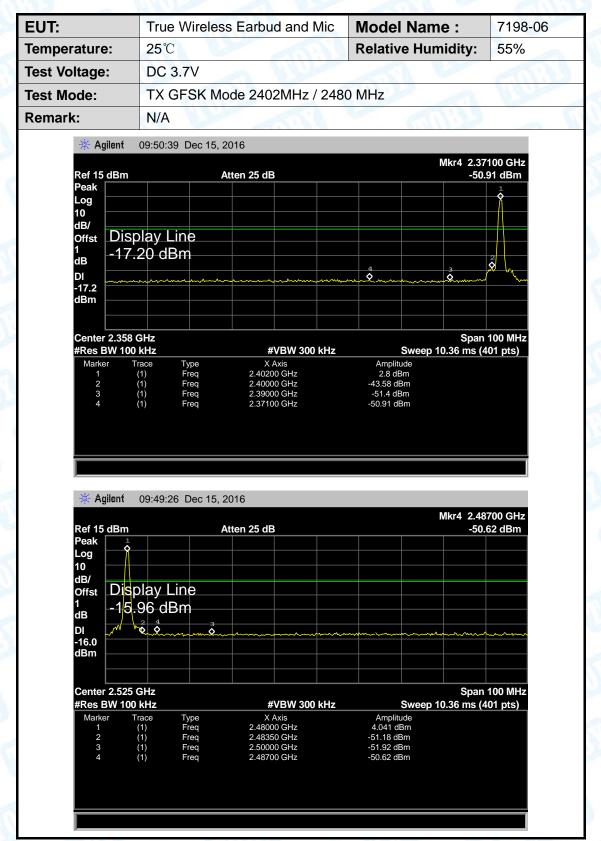


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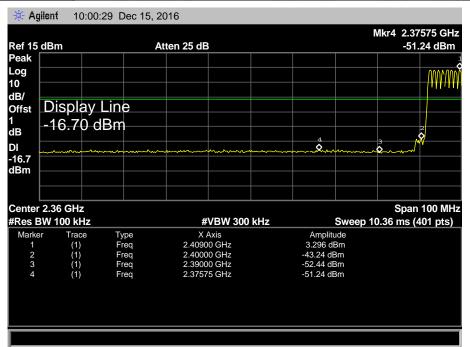


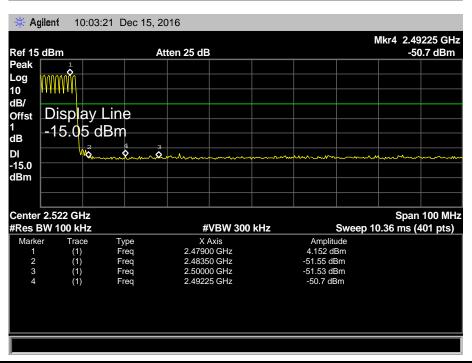
(2) Conducted Test





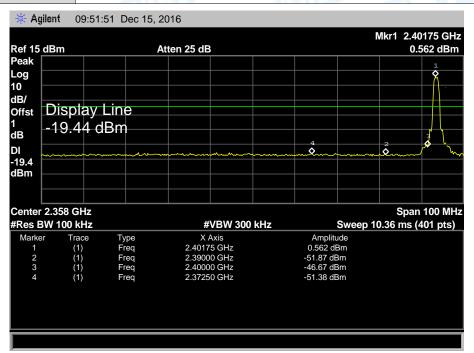
EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	GFSK Hopping Mode		
Remark:	N/A	THE PARTY OF	DITT.

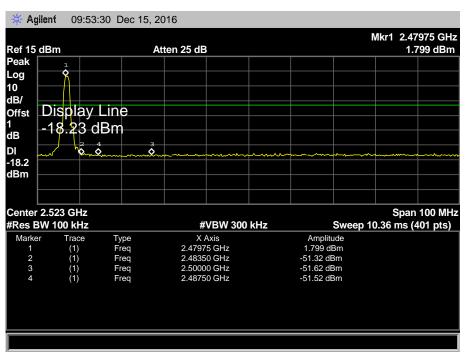






EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	TX 8-DPSK Mode 2402MHz / 2480 MHz		
Remark:	N/A		CHI)





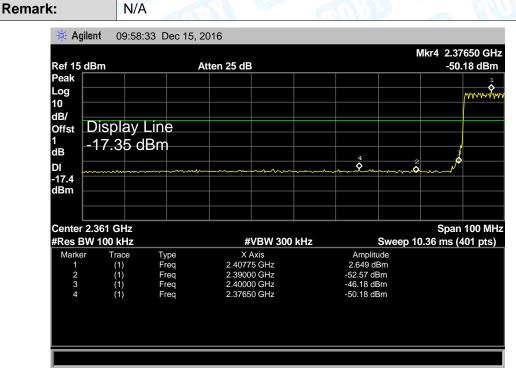


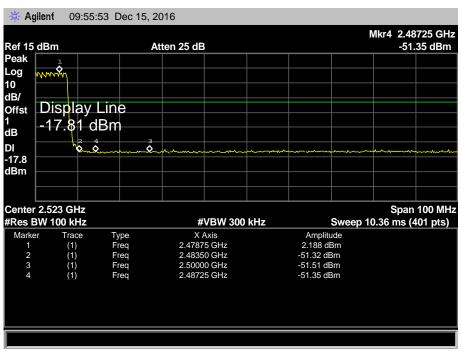
EUT: True Wireless Earbud and Mic Model Name: 7198-06

Temperature: 25℃ Relative Humidity: 55%

Test Voltage: DC 3.7V

Test Mode: 8-DPSK Hopping Mode







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7. Number of Hopping Channel

7.1 Test Standard and Limit

6.1.1 Test Standard FCC Part 15.247 (a)(1)

6.1.2 Test Limit

Section	Test Item	Limit
15.247	Number of Hopping Channel	>15

7.2 Test Setup



7.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=100 KHz, VBW=100 KHz, Sweep time= Auto.

7.4 EUT Operating Condition

The EUT was set to the Hopping Mode by the Customer.

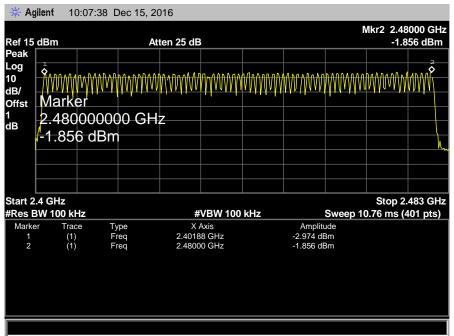
7.5 Test Data



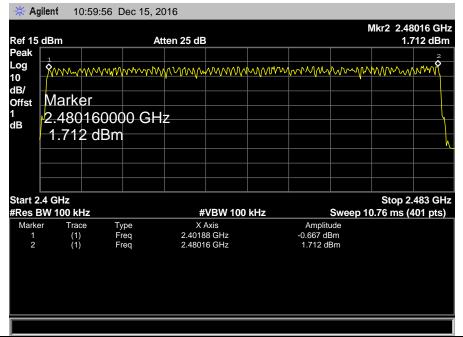
EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	Hopping Mode (GFSK/8-DPSK)		

Frequency Range	Quantity of Hopping Channel	Limit
2402MU- 2490MU-	79	. 45
2402MHz~2480MHz	79	>15

GFSK Mode









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8. Average Time of Occupancy

8.1 Test Standard and Limit

8.1.1 Test Standard FCC Part 15.247 (a)(1)

8.1.2 Test Limit

Section	Test Item	Limit
15.247(a)(1)/ RSS-210	Average Time of	0.4.000
Annex 8(A8.1d)	Occupancy	0.4 sec

8.2 Test Setup



8.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting: RBW=1MHz, VBW=1MHz.
- (3) Use video trigger with the trigger level set to enable triggering only on full pulses.
- (4) Sweep Time is more than once pulse time.
- (5) Set the center frequency on any frequency would be measure and set the frequency span to zero.
- (6) Measure the maximum time duration of one single pulse.
- (7) Set the EUT for packet transmitting.
- (8) Measure the maximum time duration of one single pulse.

8.4 EUT Operating Condition

The average time of occupancy on any channel within the Period can be calculated with formulas:

 ${Total of Dwell} = {Pulse Time} * (1600 / X) / {Number of Hopping Frequency} * {Period} = 0.4s * {Number of Hopping Frequency}$

Note: X=2 or 4 or 6 (1DH1=2, 1DH3=4, 1DH5=6. 2DH1=2, 2DH3=4, 2DH5=6. 3DH1=2,3DH3=4, 3DH5=6)

The lowest, middle and highest channels are selected to perform testing to record the dwell time of each occupation measured in this channel, which is called Pulse Time here.

The EUT was set to the Hopping Mode by the Customer.



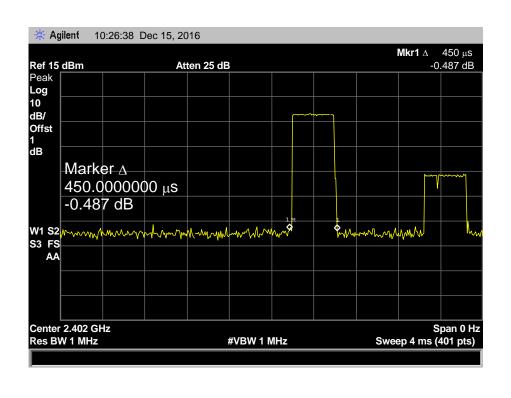
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8.5 Test Data

EUT:	True Wireless Earbud and Mic		Model Name :		7198-06	
Temperature:	25℃		Relative Humic	dity:	55%	
Test Voltage:	DC 3.7V	OC 3.7V				
Test Mode:	Hopping Mod	Hopping Mode (GFSK DH1)				
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result	
(MHz)	(ms)	(ms)	(s)	(ms)	Result	
2402	0.450	144.00				
2441	0.440	140.80	31.60	400	PASS	
2480	0.440	140.80				
Nata Durall time Dula Time (ma) (1000 a 0 a 70) 04 0						

Note: Dwell time=Pulse Time (ms) \times (1600 \div 2 \div 79) \times 31.6

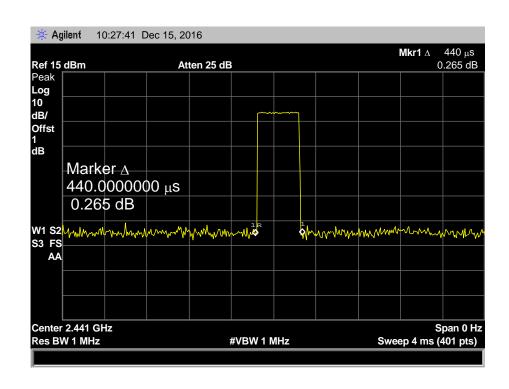
GFSK Hopping Mode DH1



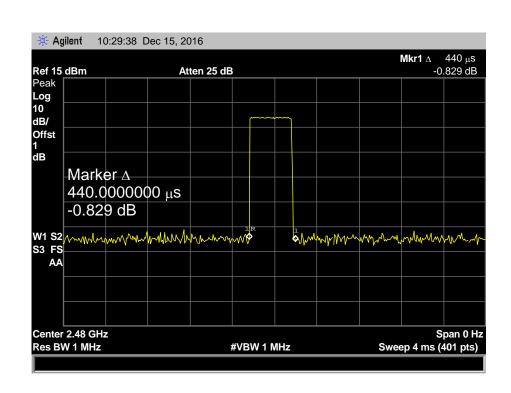


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GFSK Hopping Mode DH1 2441 MHz



GFSK Hopping Mode DH1



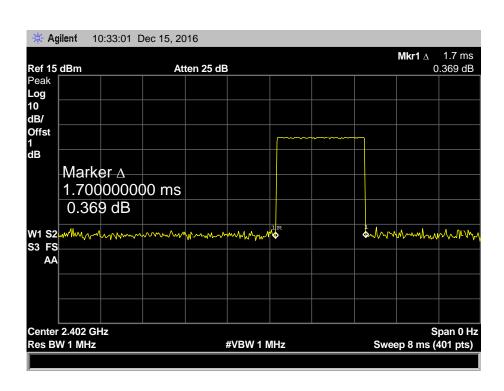


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EUT:	True Wirele	True Wireless Earbud and Mic		Model Name :	
Temperature:	25 ℃	25℃		Relative Humidity:	
Test Voltage:	DC 3.7V		1	100	
Test Mode:	Hopping M	ode (GFSK DH3)		F. P.	
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	1.700	272.00			
2441	1.700	272.00	31.60	400	PASS
2480	1.700	272.00			

Note: Dwell time=Pulse Time (ms) \times (1600 \div 4 \div 79) \times 31.6

GFSK Hopping Mode DH3

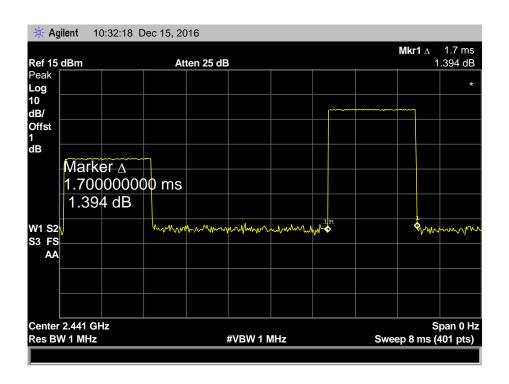




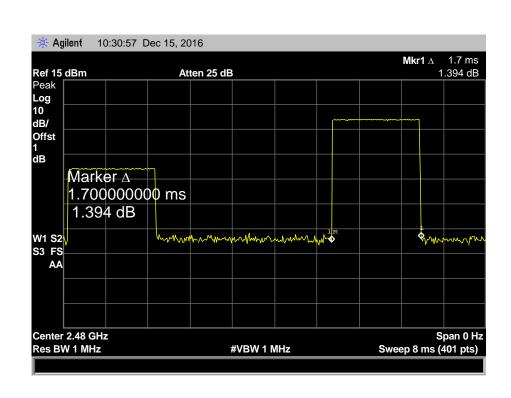
Report No.: TB-FCC150914 Page: 58 of 93







GFSK Hopping Mode DH3



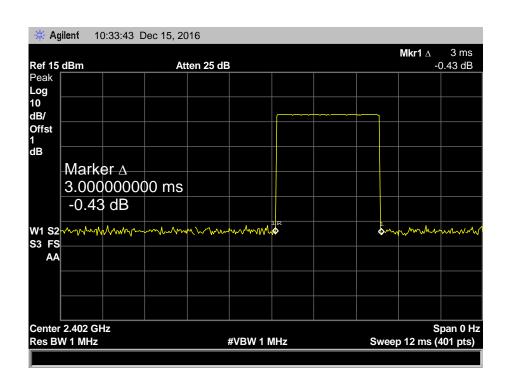


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EUT:	True Wirele	True Wireless Earbud and Mic		e :	7198-06
Temperature:	25℃	25℃		idity:	55%
Test Voltage:	DC 3.7V	DC 3.7V			3
Test Mode:	Hopping M	ode (GFSK DH5)		F Brown	
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	3.000	320.00			
2441	3.000	320.00	31.60	400	PASS
2480	3.000	320.00			

Note: Dwell time=Pulse Time (ms) \times (1600 \div 6 \div 79) \times 31.6

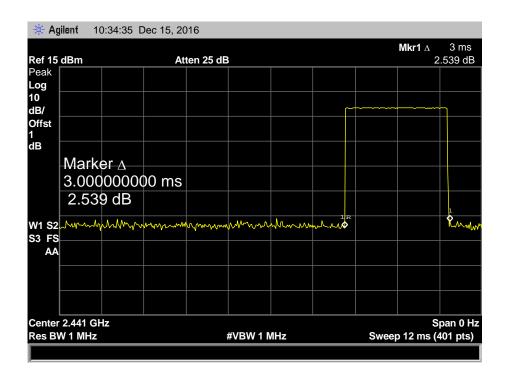
GFSK Hopping Mode DH5



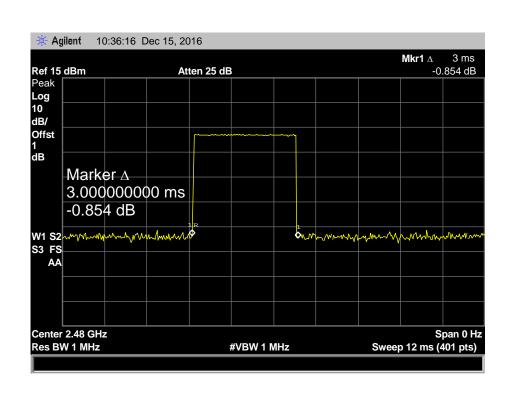




2441 MHz



GFSK Hopping Mode DH5



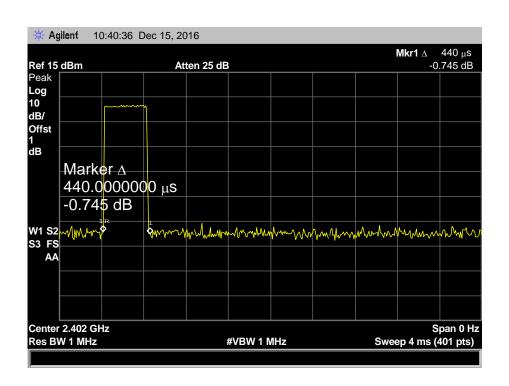


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EUT:	True Wirele	True Wireless Earbud and Mic		e :	7198-06
Temperature:	: 25 ℃	25℃		idity:	55%
Test Voltage:	DC 3.7V	DC 3.7V			
Test Mode:	Hopping M	Hopping Mode (π /4-DQPSK DH1)			
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	0.440	140.80			
2441	0.440	140.80	31.60	400	PASS
2480	0.450	144.00			

Note: Dwell time=Pulse Time (ms) \times (1600 \div 2 \div 79) \times 31.6

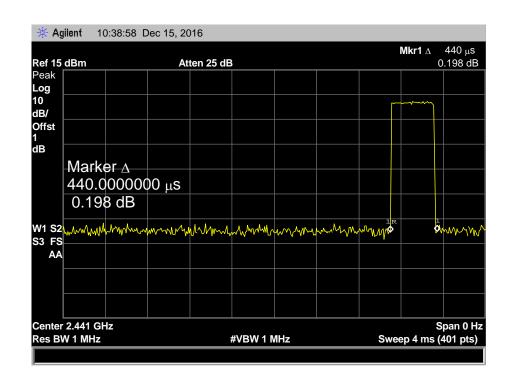
π /4-DQPSK Hopping Mode DH1



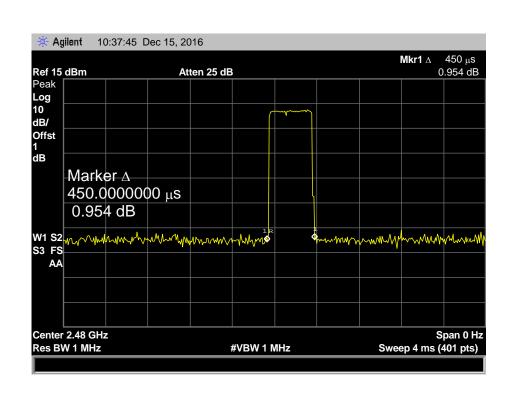


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π /4-DQPSK Hopping Mode DH1 2441 MHz



π/4-DQPSK Hopping Mode DH1



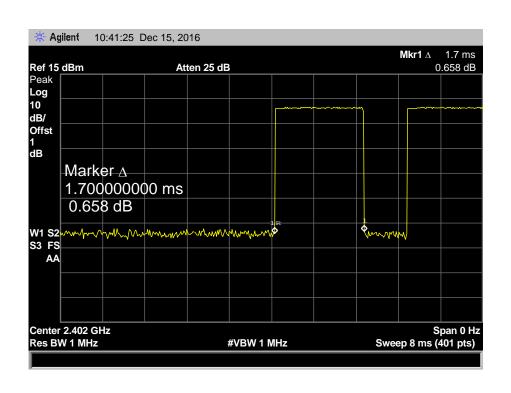


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EUT:		True Wire	True Wireless Earbud and Mic		e :	7198-06
Temperature	ture: 25°C		erature: 25°C Relative Humidity:		55%	
Test Voltage:		DC 3.7V				
Test Mode: Hopping Mode (π /4-DQPSK DF			H3)			
Channel	Pu	Ise Time	Total of Dwell	Period Time	Limit	Result
(MHz)		(ms)	(ms)	(s)	(ms)	Result
2402		1.700	272.00			
2441		1.700	272.00	31.60	400	PASS
2480		1.720	275.20			

Note: Dwell time=Pulse Time (ms) \times (1600 \div 4 \div 79) \times 31.6

π /4-DQPSK Hopping Mode DH3

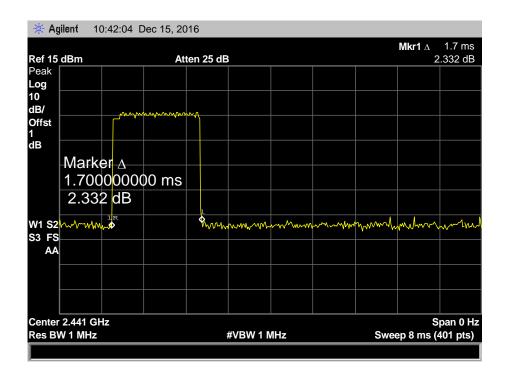




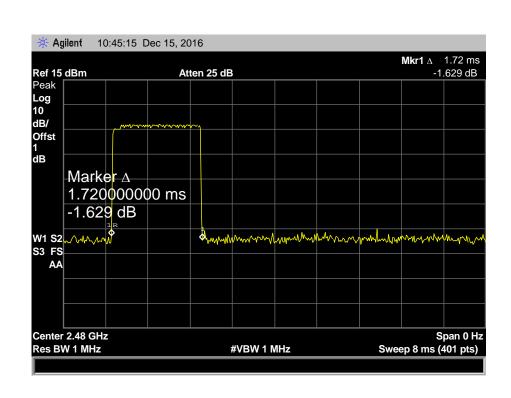
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π /4-DQPSK Hopping Mode DH3

2441 MHz



π/4-DQPSK Hopping Mode DH3





2480

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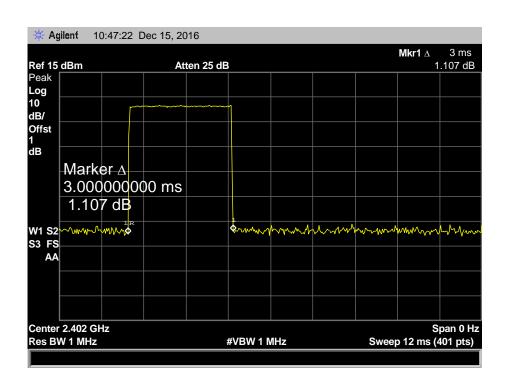
EUT:	True Wireles	True Wireless Earbud and Mic		Model Name :		
Temperature:	: 25 ℃	25℃		Relative Humidity:		
Test Voltage:	DC 3.7V		1			
Test Mode:	Hopping M	Hopping Mode (π /4-DQPSK DH5)				
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result	
(MHz)	(ms)	(ms)	(s)	(ms)	Nesuit	
2402	3.000	320.00				
2441	3.000	320.00	31.60	400	PASS	

Note: Dwell time=Pulse Time (ms) \times (1600 \div 6 \div 79) \times 31.6

3.000

π /4-DQPSK Hopping Mode DH5

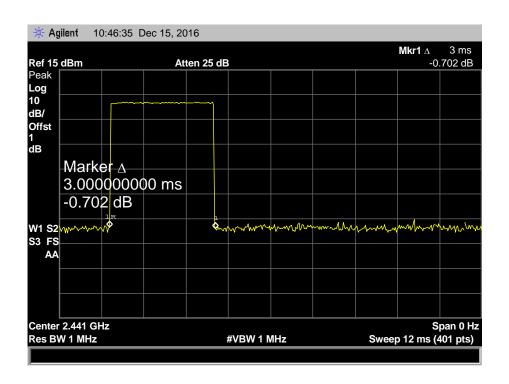
320.00



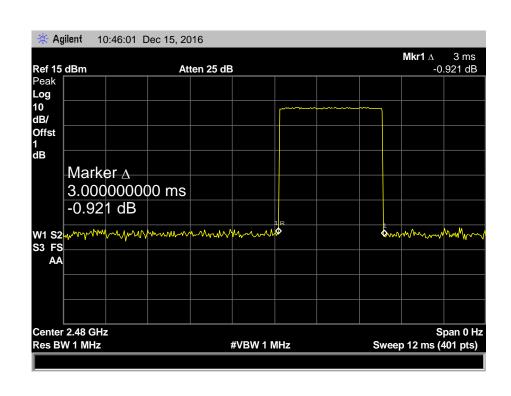


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π/4-DQPSK Hopping Mode DH5



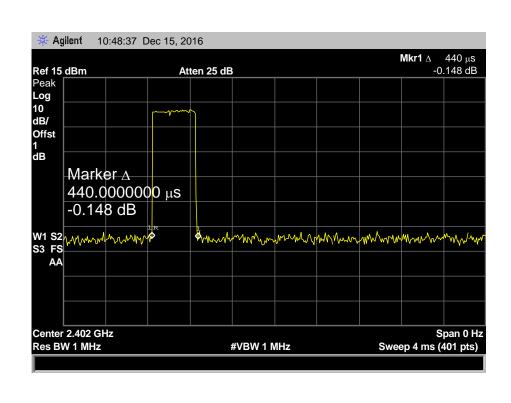


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EUT:	True Wirele	True Wireless Earbud and Mic		Model Name :	
Temperature:	25℃	25℃		idity:	55%
Test Voltage:	DC 3.7V		CHILD S		MAG
Test Mode:	Hopping M	ode (8-DPSK DH1)	1	THE STATE OF	
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	0.440	140.80			
2441	0.440	140.80	31.60	400	PASS
2480	0.440	140.80			

Note: Dwell time=Pulse Time (ms) x $(1600 \div 2 \div 79)$ x31.6

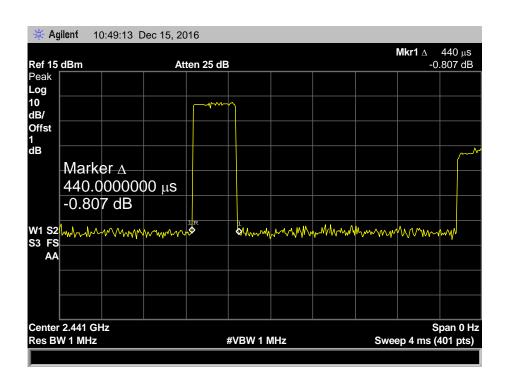
8-DPSK Hopping Mode DH1



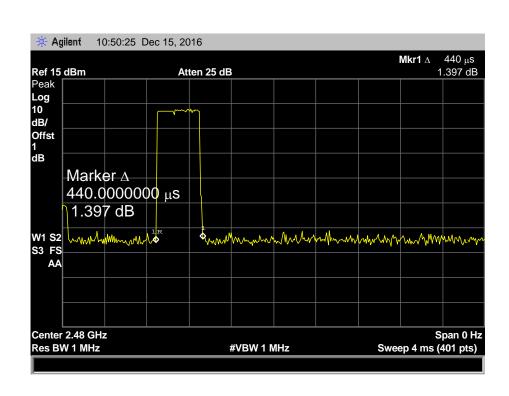


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8-DPSK Hopping Mode DH1



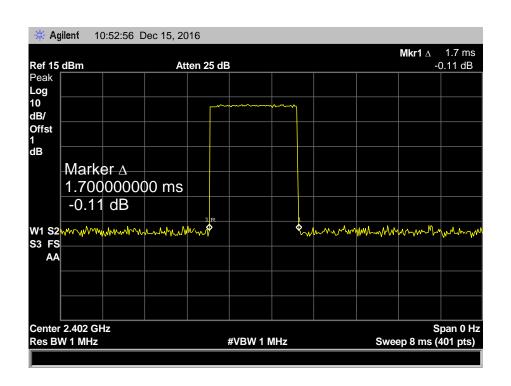


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EUT:	True Wirele	True Wireless Earbud and Mic		e :	7198-06
Temperature:	: 25 ℃	25℃		Relative Humidity:	
Test Voltage:	DC 3.7V		1		9
Test Mode:	Hopping M	ode (8-DPSK DH3)		S. D.	
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	1.700	272.00			
2441	1.700	272.00	31.60	400	PASS
2480	1.700	272.00			

Note: Dwell time=Pulse Time (ms) \times (1600 \div 4 \div 79) \times 31.6

8-DPSK Hopping Mode DH3

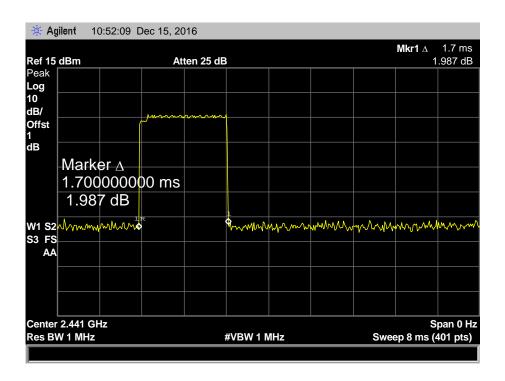




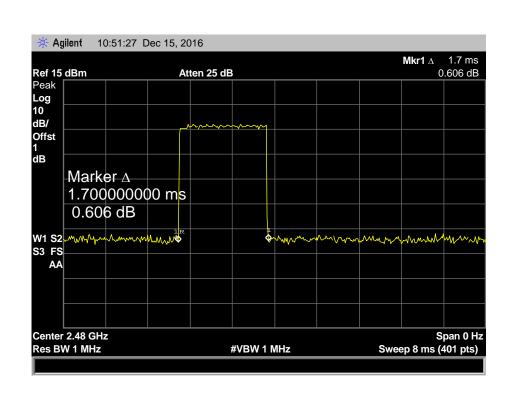
Report No.: TB-FCC150914 Page: 70 of 93



2441 MHz



8-DPSK Hopping Mode DH3



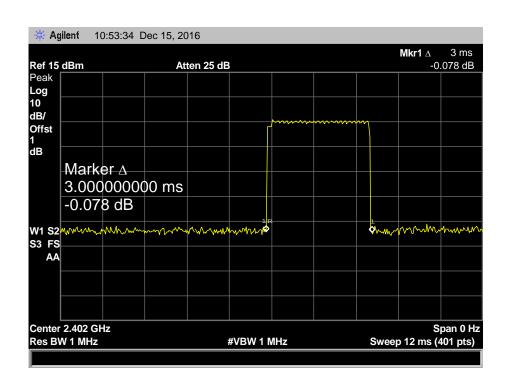


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EUT:	True Wirele	True Wireless Earbud and Mic		e :	7198-06
Temperature:	25 ℃	25 ℃		idity:	55%
Test Voltage:	DC 3.7V		1		3
Test Mode:	Hopping M	ode (8-DPSK DH5)		F. P.	
Channel	Pulse Time	Total of Dwell	Period Time	Limit	Result
(MHz)	(ms)	(ms)	(s)	(ms)	Result
2402	3.000	320.00			
2441	3.000	320.00	31.60	400	PASS
2480	3.000	320.00			

Note: Dwell time=Pulse Time (ms) \times (1600 \div 6 \div 79) \times 31.6

8-DPSK Hopping Mode DH5

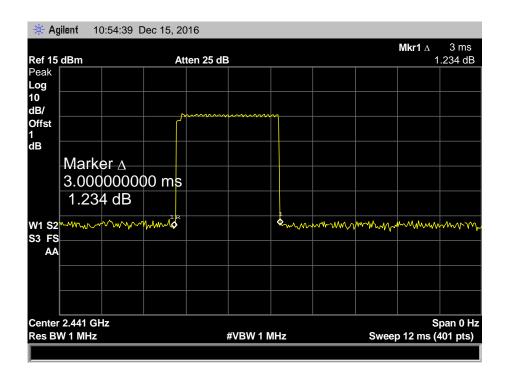




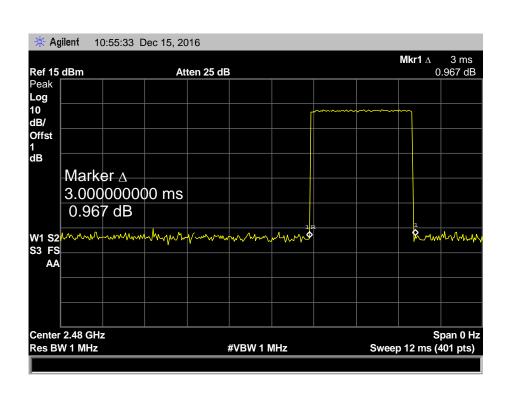
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8-DPSK Hopping Mode DH5

2441 MHz



8-DPSK Hopping Mode DH5





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9. Channel Separation and Bandwidth Test

9.1 Test Standard and Limit

9.1.1 Test Standard FCC Part 15.247

9.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Bandwidth	<=1 MHz (20dB bandwidth)	2400~2483.5
Channel Separation	>25KHz or >two-thirds of the 20 dB bandwidth Which is greater	2400~2483.5

9.2 Test Setup



9.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Channel Separation: RBW=30 kHz, VBW=100 kHz.

Bandwidth: RBW=30 kHz, VBW=100 kHz.

- (3) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.
 - (4) Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:30 kHz, and Video Bandwidth:100 kHz. Sweep Time set auto.

9.4 EUT Operating Condition

The EUT was set to the Hopping Mode for Channel Separation Test and continuously transmitting for the Bandwidth Test.

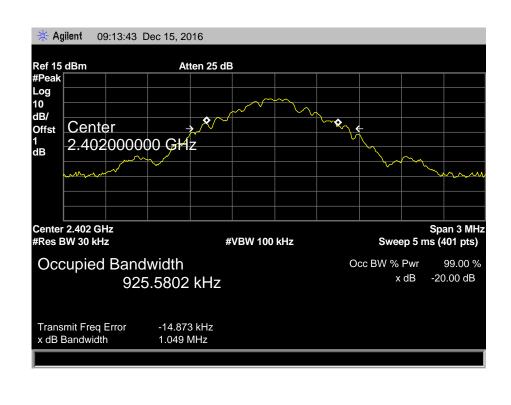


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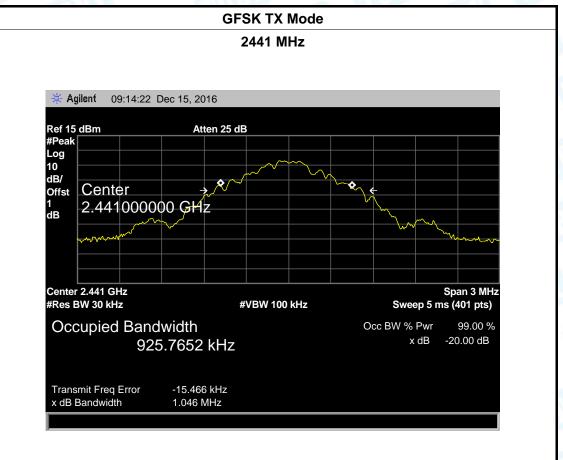
9.5 Test Data

EUT:	True Wireless Earbu	ud and Mic Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V	MILLION TO THE REAL PROPERTY.	
Test Mode:	TX Mode (GFSK)	THE PARTY OF THE P	Miller
Channel frequer	99% OF		20dB Bandwidth *2/3 (kHz)
2402	925.58	02 1049.00	699.33
2441	925.76	52 1046.00	697.33
2480	923.61	08 1044.00	696.00

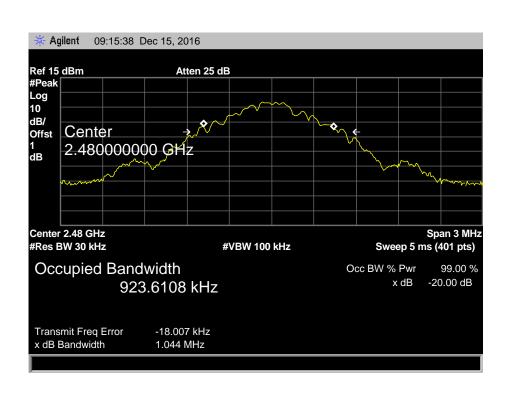
GFSK TX Mode







GFSK TX Mode 2480 MHz

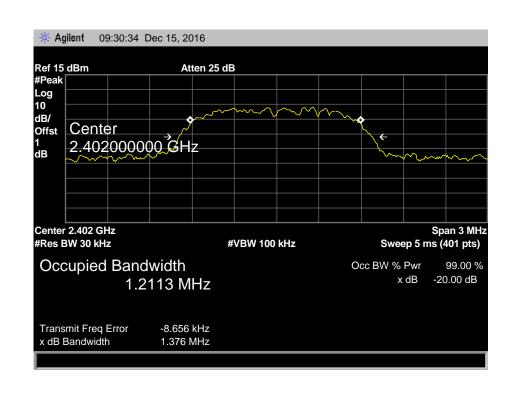




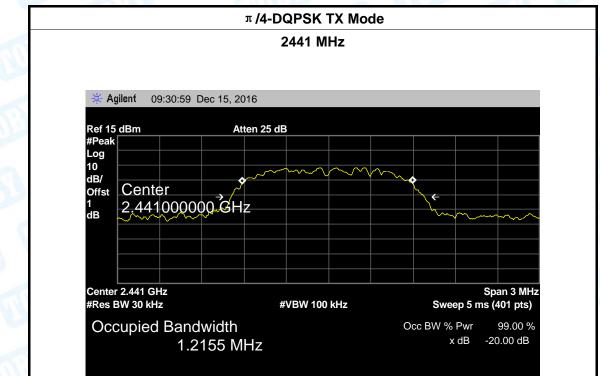
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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	TX Mode (π/4-DQPSK)		
Channel frequence	99% OBW	20dB Bandwidth	20dB
(MHz)	(kHz)	(kHz)	Bandwidth
(1411 12)	(RH2)	(KI 12)	*2/3 (kHz)
2402	1211.30	1376.00	917.33
2441	1215.50	1376.00	917.33

π/4-DQPSK TX Mode





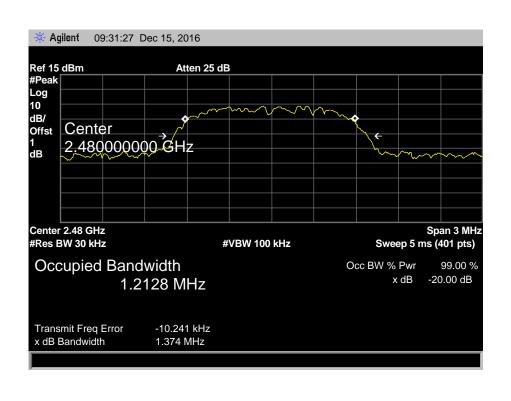


π/4-DQPSK TX Mode

-9.488 kHz

1.376 MHz

Transmit Freq Error x dB Bandwidth



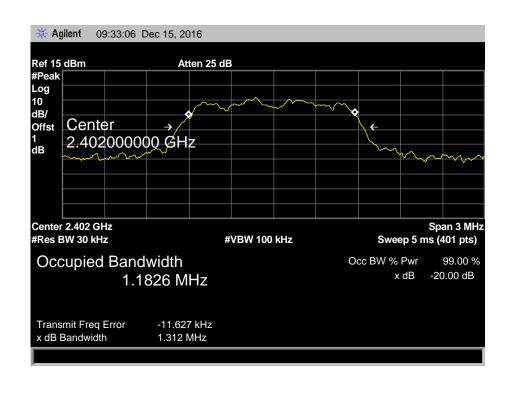


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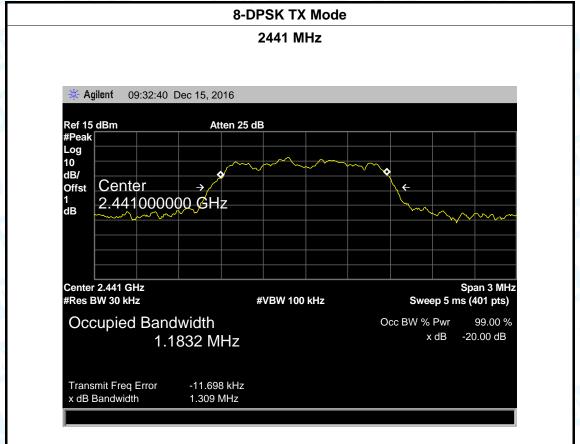
EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	TX Mode (8-DPSK)		CHILL STREET

Channel frequency (MHz)	99% OBW (kHz)	20dB Bandwidth (kHz)	20dB Bandwidth *2/3 (kHz)
2402	1182.60	1312.00	874.67
2441	1183.20	1309.00	872.67
2480	1183.90	1309.00	872.67

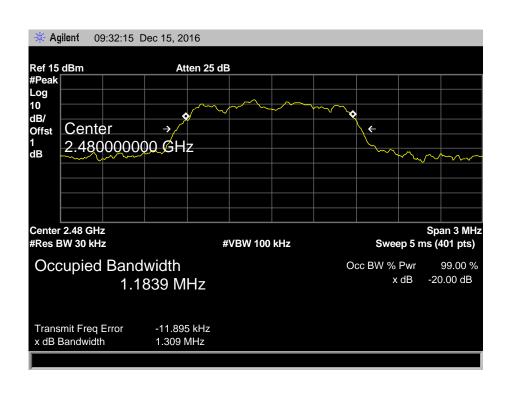
8-DPSK TX Mode







8-DPSK TX Mode



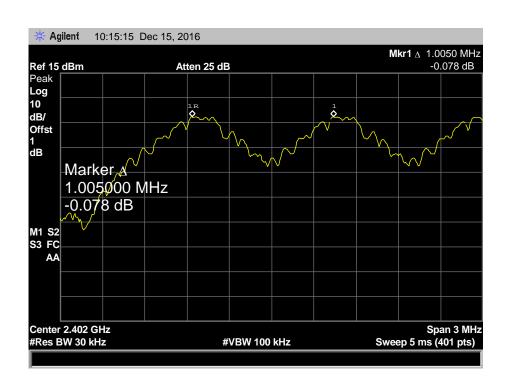


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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	Hopping Mode (GFSK)		CT 1117

Channel frequency	Separation Read Value	Separation Limit
(MHz)	(kHz)	(kHz)
2402	1005.00	699.33
2441	1005.00	697.33
2480	1005.00	696.00

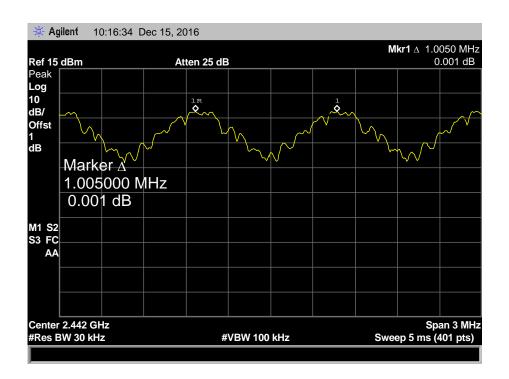
GFSK Hopping Mode



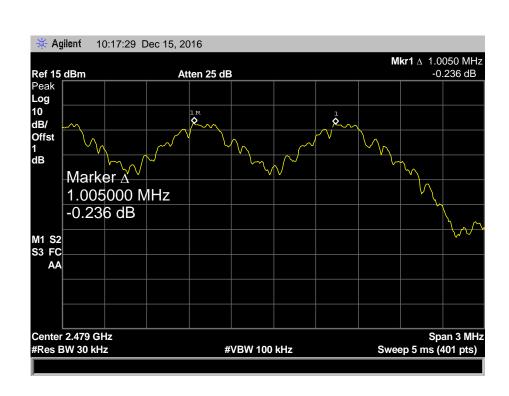




2441 MHz



GFSK Hopping Mode



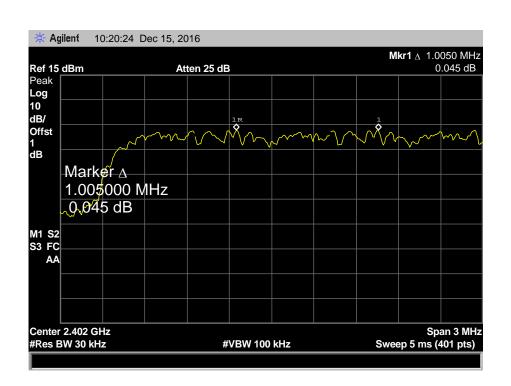


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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	Hopping Mode (π/4-DQPSK)	10:30	

Channel frequency	Separation Read Value	Separation Limit
(MHz)	(kHz)	(kHz)
2402	1005.00	917.33
2441	1005.00	917.33
2480	1005.00	916.00

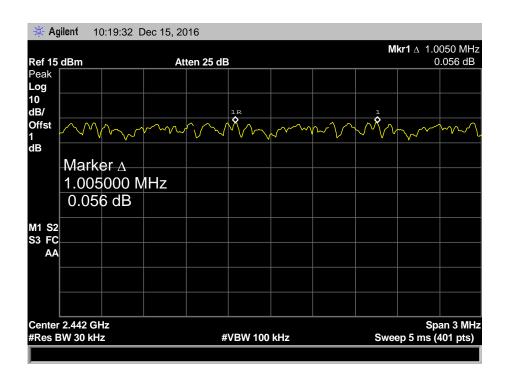
π /4-DQPSK Hopping Mode



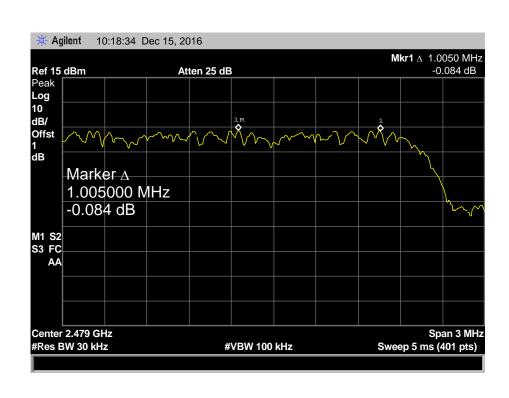




2441 MHz



π/4-DQPSK Hopping Mode



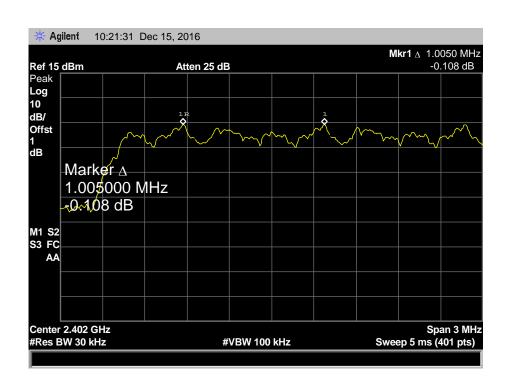


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EUT:	True Wireless Earbud and Mic	Model Name :	7198-06
Temperature:	25℃	Relative Humidity:	55%
Test Voltage:	DC 3.7V		
Test Mode:	Hopping Mode (8-DPSK)		

Channel frequency	Separation Read Value	Separation Limit	
(MHz)	(kHz)	(kHz)	
2402	1005.00	874.67	
2441	1005.00	872.67	
2480	1005.00	872.67	

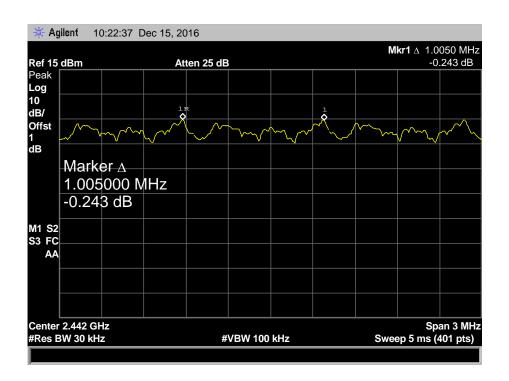
8-DPSK Hopping Mode



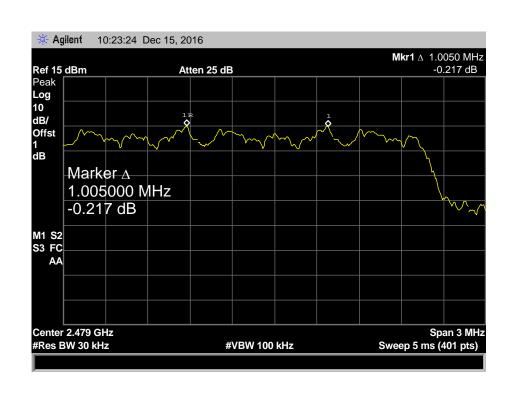




2441 MHz



8-DPSK Hopping Mode





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10. Peak Output Power Test

10.1 Test Standard and Limit

10.1.1 Test Standard FCC Part 15.247 (b) (1)

10.1.2 Test Limit

Test Item	Limit	Frequency Range(MHz)
Peak Output Power	Hopping Channels>75 Power<1W(30dBm) Other <125 mW(21dBm)	2400~2483.5

10.2 Test Setup



10.3 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Peak Detector: RBW=1 MHz, VBW=3 MHz for bandwidth less than 1MHz. RBW=3 MHz, VBW=3 MHz for bandwidth more than 1MHz.

10.4 EUT Operating Condition

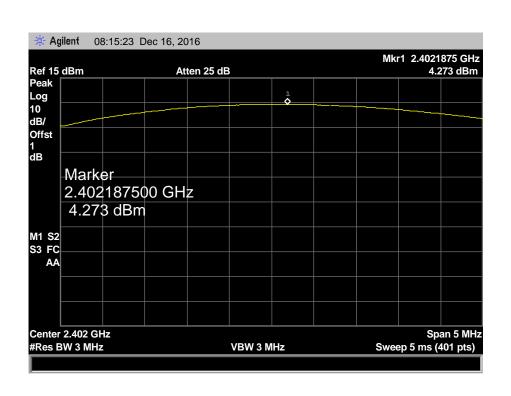
The EUT was set to continuously transmitting in the max power during the test.



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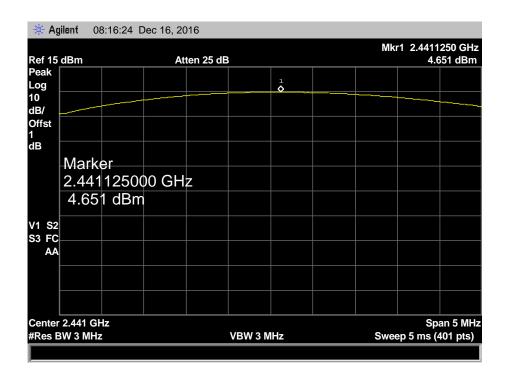
10.5 Test Data

EUT:	True Wireless Earbud and Mic		Model Name :		7198-06
Temperature:	25℃		Relative Humidity:		55%
Test Voltage:	DC 3.7V				MAL
Test Mode:	TX Mode	(GFSK)	C. De	COLUMN TO SERVICE STATE OF THE	
Channel frequency		Test Result	lt Lin		nit
(MHz)		(dBm)		(dBm)	
2402		4.273			
2441		4.651		21	
2480		4.889			
		GFSK TX Mod	е		

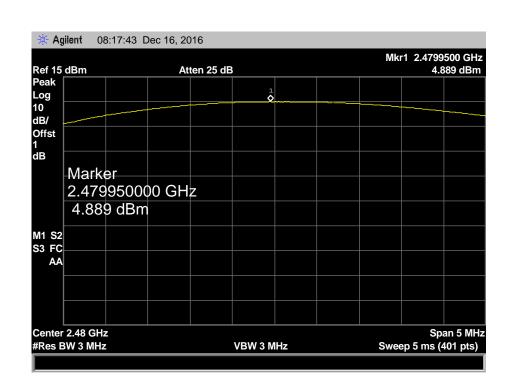




GFSK TX Mode 2441 MHz



GFSK TX Mode

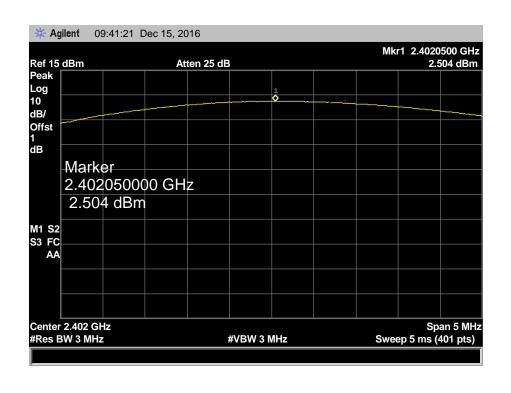




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EUT:	True Wireless Earbud and Mic		Model Name :	7198-06	
Temperature:	25℃		Relative Humidity:	55%	
Test Voltage:	DC 3.7V		TO B	4	
Test Mode:	TX Mode	(π /4-DQPSK)			
Channel frequency		Test Result L		mit	
(MHz)		(dBm)	(d	(dBm)	
2402		2.504			
2441 2480		3.031		21	
		3.241			
		π/4-DQPSK TX M	lode		

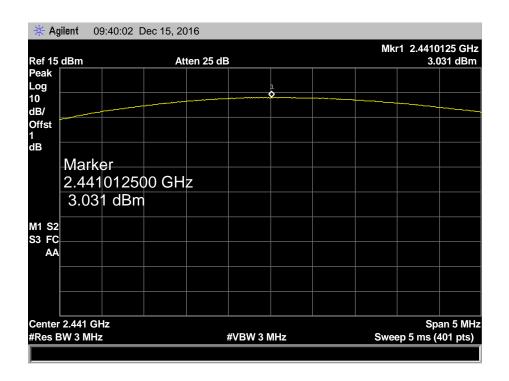
ישו או זאן



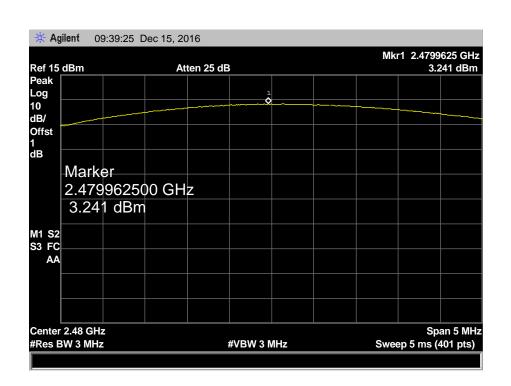




2441 MHz



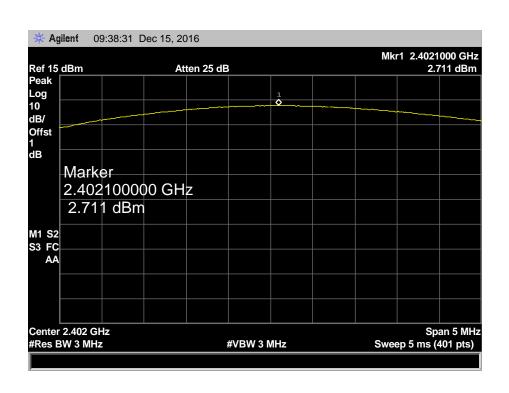
π/4-DQPSK TX Mode





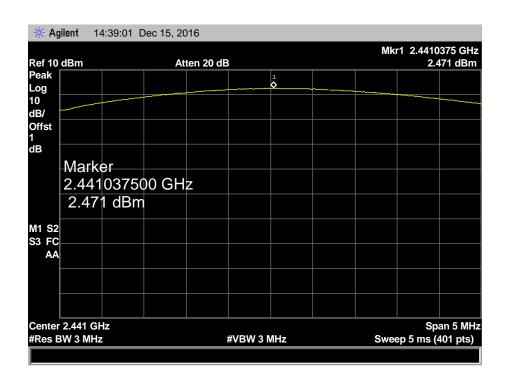
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EUT:	True Wireless Earbud and Mic		Model Name :		7198-06
Temperature:	25℃		Relative Humidity: 5		55%
Test Voltage:	DC 3.7V	NO.			
Test Mode:	TX Mode (8-DPSK)				
Channel frequency		Test Result		Limit	
(MHz)		(dBm)		(dBm)	
2402		2.711			
2441		2.471		21	
2480		3.370			
		8-DPSK TX Mod	le		

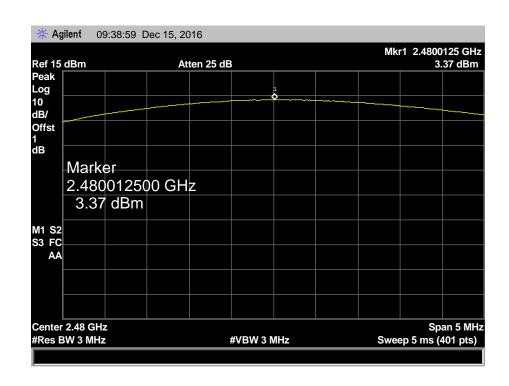








8-DPSK TX Mode





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11. Antenna Requirement

11.1 Standard Requirement

11.1.1 Standard FCC Part 15.203

11.1.2 Requirement

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

11.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 1.5 dBi, and the antenna connector is de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

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

	Antenna Type
a gu	▶ Permanent attached antenna
	□ Unique connector antenna
100	☐ Professional installation antenna

----END OF REPORT----