





RADIO TEST REPORT FCC ID: 2ASQYLE-701

Product: TWS EARPHONES

Trade Mark: N/A

Model No.: LE-701 U Buds, LE-701T, LE-701A, LE-701B, Family Model: LE-702, LE-702T, LE-703, LE-705, LE-706 Report No.: S19030405002002 Issue Date: 17 Apr. 2019

Prepared for

Shenzhen Lanlian Digital Technology Co., Ltd. 5\F, No.5 Workshop, Yongxin Industrial Factories, No.89, Hengping St, Henggang Community, Longgang Shenzhen, China

Prepared by

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1 TEST RESULT CERTIFICATION

Applicant's name:	Shenzhen Lanlian Digital Technology Co., Ltd.		
Address:	5\F, No.5 Workshop, Yongxin Industrial Factories, No.89, Hengping St, Henggang Community, Longgang Shenzhen, China		
Manufacturer's Name:	Shenzhen Lanlian Digital Technology Co., Ltd.		
Address:	5\F, No.5 Workshop, Yongxin Industrial Factories, No.89, Hengping S Henggang Community, Longgang Shenzhen, China		
Product description			
Product name:	TWS EARPHONES		
Model and/or type reference:	LE-701		
Family Model:	U Buds, LE-701T, LE-701A, LE-701B, LE-702, LE-702T, LE-703, LE-705, LE-706		

Measurement Procedure Used:

APPLICABLE STANDARDS

APPLICABLE STANDARD/ TEST PROCEDURETEST RESULTFCC 47 CFR Part 2, Subpart JFCC 47 CFR Part 15, Subpart CKDB 174176 D01 Line Conducted FAQ v01r01CompliedANSI C63.10-2013KDB 558074 D01 15.247 Meas Guidance v05

This device described above has been tested by Shenzhen NTEK Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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The test results of this report relate only to the tested sample identified in this report.

Date of Test	: 08 Mar. 2019 ~ 21 Mar. 2019
Testing Engineer	: (Mary Hu)
Technical Manager	Jason chen
	(Jason Chen)
	Sam. Chen
Authorized Signatory	:
	(Sam Chen)





2 SUMMARY OF TEST RESULTS

FCC Part15 (15.247), Subpart C					
Standard Section	Test Item	Verdict	Remark		
15.207	Conducted Emission	PASS			
15.247 (a)(2)	6dB Bandwidth	PASS			
15.247 (b) Peak Output Power		PASS			
15.209 (a)Radiated Spurious Emission15.205 (a)		PASS			
15.247 (e) Power Spectral Density		PASS			
15.247 (d) Band Edge Emission		PASS			
15.247 (d) Spurious RF Conducted Emission PASS		PASS			
15.203 Antenna Requirement PASS					

Remark:

- 1. "N/A" denotes test is not applicable in this Test Report.
- 2. All test items were verified and recorded according to the standards and without any deviation during the test.
- 3. There are left and right ear plugs on the EUT. Both have been tested.





3 FACILITIES AND ACCREDITATIONS

3.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

3.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description		
CNAS-Lab.		he Laboratory has been assessed and proved to be in compliance with
		NAS-CL01:2006 (identical to ISO/IEC 17025:2005)
	I	he Certificate Registration Number is L5516.
IC-Registration	Т	he Certificate Registration Number is 9270A-1.
FCC- Accredited	Т	est Firm Registration Number: 463705.
	D	esignation Number: CN1184
A2LA-Lab.		he Certificate Registration Number is 4298.01
		his laboratory is accredited in accordance with the recognized
		nternational Standard ISO/IEC 17025:2005 General requirements for ne competence of testing and calibration laboratories.
		his accreditation demonstrates technical competence for a defined
		cope and the operation of a laboratory quality management system
	(r	efer to joint ISO-ILAC-IAF Communique dated 8 January 2009).
Name of Firm	: S	henzhen NTEK Testing Technology Co., Ltd.
Site Location	: 1/	/F, Building E, Fenda Science Park, Sanwei Community, Xixiang
	S	treet, Bao'an District, Shenzhen 518126 P.R. China.

3.3 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 %.

No.	Item	Uncertainty
1	Conducted Emission Test	±2.80dB
2	RF power, conducted	±0.16dB
3	Spurious emissions, conducted	±0.21dB
4	All emissions, radiated(30MHz~1GHz)	±2.64dB
5	All emissions, radiated(1GHz~6GHz)	±2.40dB
6	All emissions, radiated(>6GHz)	±2.52dB
7	Temperature	±0.5°C
8	Humidity	±2%





4 GENERAL DESCRIPTION OF EUT

Product Feature and Specification					
Equipment	TWS EARPHONES				
Trade Mark	N/A				
FCC ID	2ASQYLE-701				
Model No.	LE-701				
Family Model	U Buds, LE-701T, LE-701A, LE-701B, LE-702, LE-702T, LE-703, LE-705, LE-706				
Model Difference	All models are the same circuit and RF module, except the model name.				
Difference between the Left unit and right unit	The circuit diagram and the electronic components between the left and right ear is the same, The part placement of certain components between the two are difference. Their PCB Layout is different. The R unit is the Main earplugs, its working principle is that the Main earplug drives another earplugs L.				
Operating Frequency	2402MHz~2480MHz				
Modulation	GFSK				
Number of Channels	40 Channels				
Bluetooth Version	BT V5.0				
Antenna Type	FPC Antenna				
Antenna Gain	1.8dBi				
	DC supply:				
Power supply	Earphone: DC 3.7V/40mAh from Battery or DC 5V form Charging case Charging case: DC 3.7V/450mAh from Battery or DC 5V from USB Port.				
	Adapter supply:				
HW Version	V1.2				
SW Version	V1.2				

Note: Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.





Revision History

Report No.	Version	Description	Issued Date
S19030405002002	Rev.01	Initial issue of report	17 Apr. 2019





5 DESCRIPTION OF TEST MODES

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 above was evaluated respectively.

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

Test of channel included the lowest and middle and highest frequency to perform the test, then record on this report.

Those data rates (1Mbps for GFSK modulation) were used for all test.

The EUT was pretested with 3 orientations placed on the table for the radiated emission measurement -X, Y, and Z-plane. The X-plane results were found as the worst case and were shown in this report.

Carrier Frequency and Channel list:

Channel	Frequency(MHz)
0	2402
1	2404
19	2440
20	2442
38	2478
39	2480

Note: fc=2402MHz+k×2MHz k=0 to 39

The following summary table is showing all test modes to demonstrate in compliance with the standard.

Test Cases						
Test Item	Data Rate/ Modulation					
Test nem	BT V5.0 / GFSK					
AC Conducted Emission	Mode 1: normal link mode					
	Mode 1: normal link mode					
Radiated Test	Mode 2: Bluetooth Tx Ch00_2402MHz_1Mbps					
Cases	Mode 3: Bluetooth Tx Ch19_2440MHz_1Mbps					
	Mode 4: Bluetooth Tx Ch39_2480MHz_1Mbps					
Conducted Test	Mode 2: Bluetooth Tx Ch00_2402MHz_1Mbps					
Conducted Test Cases	Mode 3: Bluetooth Tx Ch19_2440MHz_1Mbps					
Cases	Mode 4: Bluetooth Tx Ch39_2480MHz_1Mbps					

Note:

1. The engineering test program was provided and the EUT was programmed to be in continuously transmitting mode.

2. AC power line Conducted Emission was tested under maximum output power.

3. For radiated test cases, the worst mode data rate 1Mbps was reported only, because this data rate has the highest RF output power at preliminary tests, and no other significantly frequencies found in conducted spurious emission.

4. EUT is set to continuous transmission mode. duty cycle greater than 98%.

5. EUT built-in battery-powered, the battery is fully-charged.





SETUP OF EQUIPMENT UNDER TEST 6 6.1 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM For AC Conducted Emission Mode AC PLUG C-1 E-1 AE-1 EUT Adapter For Radiated Test Cases EUT For Conducted Test Cases Measurement C-2 EUT Instrument Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.





6.2 SUPPORT EQUIPMENT

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note
AE-1	Adapter	N/A	N/A	N/A	Peripherals

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	USB Cable	NO	NO	0.5m
C-2	RF Cable	YES	NO	0.1m

Notes:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in [Length] column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".





6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation& Conducted Test equipment

		estequipment					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibrati on period
1	Spectrum Analyzer	Aglient	E4407B	MY45108040	2018.05.19	2019.05.18	1 year
2	Spectrum Analyzer	Agilent	N9020A	MY49100060	2018.10.08	2019.10.07	1 year
3	Spectrum Analyzer	R&S	FSV40	101417	2018.10.08	2019.10.07	1 year
4	Test Receiver	R&S	ESPI7	101318	2018.05.19	2019.05.18	1 year
5	Bilog Antenna	TESEQ	CBL6111D	31216	2018.04.08	2019.04.07	1 year
6	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2018.05.19	2020.05.18	2 year
7	Horn Antenna	EM	EM-AH-1018 0	2011071402	2018.04.08	2019.04.07	1 year
8	Broadband Horn Antenna	SCHWARZBE CK	BBHA 9170	803	2018.11.03	2019.11.02	1 year
9	Amplifier	EMC	EMC051835 SE	980246	2018.08.05	2019.08.04	1 year
10	Active Loop Antenna	SCHWARZBE CK	FMZB 1519 B	055	2018.11.03	2019.11.02	1 year
11	Power Meter	DARE	RPR3006W	15I00041SN 084	2018.08.05	2019.08.04	1 year
12	Test Cable (9KHz-30MHz)	N/A	R-01	N/A	2017.04.21	2020.04.20	3 year
13	Test Cable (30MHz-1GHz)	N/A	R-02	N/A	2017.04.21	2020.04.20	3 year
14	High Test Cable(1G-40G Hz)	N/A	R-03	N/A	2017.04.21	2020.04.20	3 year
15	High Test Cable(1G-40G Hz)	N/A	R-04	N/A	2017.04.21	2020.04.20	3 year
16	Filter	TRILTHIC	2400MHz	29	2017.04.19	2020.04.18	3 year
17	temporary antenna connector (Note)	NTS	R001	N/A	N/A	N/A	N/A

Note:

We will use the temporary antenna connector (soldered on the PCB board) When conducted test And this temporary antenna connector is listed within the instrument list





AC Co	AC Conduction Test equipment						
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2018.05.19	2019.05.18	1 year
2	LISN	R&S	ENV216	101313	2018.04.18	2019.04.19	1 year
3	LISN	SCHWARZBE CK	NNLK 8129	8129245	2018.05.19	2019.05.18	1 year
4	50Ω Coaxial Switch	ANRITSU CORP	MP59B	6200983704	2018.05.19	2020.05.18	2 year
5	Test Cable (9KHz-30MH z)	N/A	C01	N/A	2017.04.21	2020.04.20	3 year
6	Test Cable (9KHz-30MH z)	N/A	C02	N/A	2017.04.21	2020.04.20	3 year
7	Test Cable (9KHz-30MH z)	N/A	C03	N/A	2017.04.21	2020.04.20	3 year

Note: Each piece of equipment is scheduled for calibration once a year except the Aux Equipment & Test Cable which is scheduled for calibration every 2 or 3 years.





7 TEST REQUIREMENTS

7.1 CONDUCTED EMISSIONS TEST

7.1.1 Applicable Standard

According to FCC Part 15.207(a) and KDB 174176 D01 Line Conducted FAQ v01r01

7.1.2 Conformance Limit

Fraguanov(MHz)	Conducted Emission Limit			
Frequency(MHz)	Quasi-peak	Average		
0.15-0.5	66-56*	56-46*		
0.5-5.0	56	46		
5.0-30.0	60	50		

Note: 1. *Decreases with the logarithm of the frequency

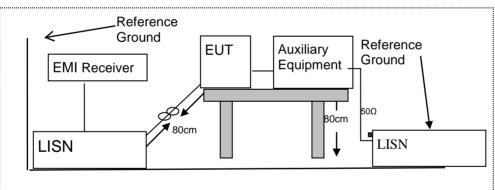
2. The lower limit shall apply at the transition frequencies

3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

7.1.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.1.4 Test Configuration



7.1.5 Test Procedure

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
- 2. The EUT was placed on a table which is 0.8m above ground plane.
- 3. Connect EUT 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.
- 4. 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 40cm long.
- 5. 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.
- 6. LISN at least 80 cm from nearest part of EUT chassis.
- 7. The frequency range from 150KHz to 30MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
- 9. For the actual test configuration, please refer to the related Item –EUT Test Photos.





7.1.6 Test Results

EUT:	TWS EARPHONES	Model Name :	LE-701
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

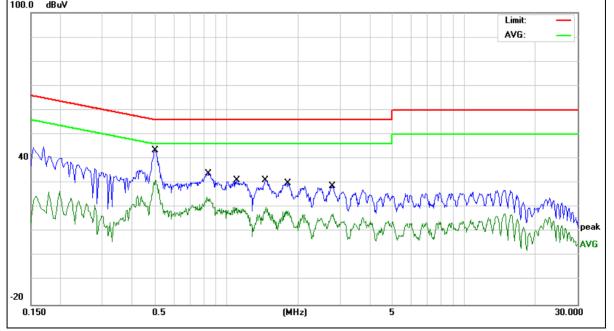
Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Dement
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.5020	33.72	9.74	43.46	56.00	-12.54	QP
0.5020	21.55	9.74	31.29	46.00	-14.71	AVG
0.8420	24.09	9.74	33.83	56.00	-22.17	QP
0.8420	14.40	9.74	24.14	46.00	-21.86	AVG
1.1019	21.48	9.74	31.22	56.00	-24.78	QP
1.1019	10.33	9.74	20.07	46.00	-25.93	AVG
1.4540	21.51	9.76	31.27	56.00	-24.73	QP
1.4540	10.16	9.76	19.92	46.00	-26.08	AVG
1.8180	20.20	9.78	29.98	56.00	-26.02	QP
1.8180	8.80	9.78	18.58	46.00	-27.42	AVG
2.7860	18.86	9.82	28.68	56.00	-27.32	QP
2.7860	7.52	9.82	17.34	46.00	-28.66	AVG

Remark:

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.

100.0 dBuV





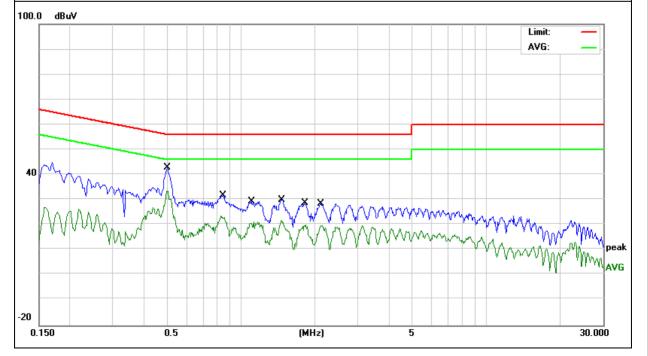


EUT:	TWS EARPHONES	Model Name :	LE-701
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	Ν
Test Voltage :	DC 5V from Adapter AC 120V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Demerk
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.5020	33.09	9.75	42.84	56.00	-13.16	QP
0.5020	23.89	9.75	33.64	46.00	-12.36	AVG
0.8459	22.09	9.75	31.84	56.00	-24.16	QP
0.8459	14.03	9.75	23.78	46.00	-22.22	AVG
1.1019	19.65	9.75	29.40	56.00	-26.60	QP
1.1019	11.61	9.75	21.36	46.00	-24.64	AVG
1.4699	20.30	9.77	30.07	56.00	-25.93	QP
1.4699	12.11	9.77	21.88	46.00	-24.12	AVG
1.8260	18.95	9.79	28.74	56.00	-27.26	QP
1.8260	10.16	9.79	19.95	46.00	-26.05	AVG
2.1179	18.54	9.80	28.34	56.00	-27.66	QP
2.1179	10.02	9.80	19.82	46.00	-26.18	AVG

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.





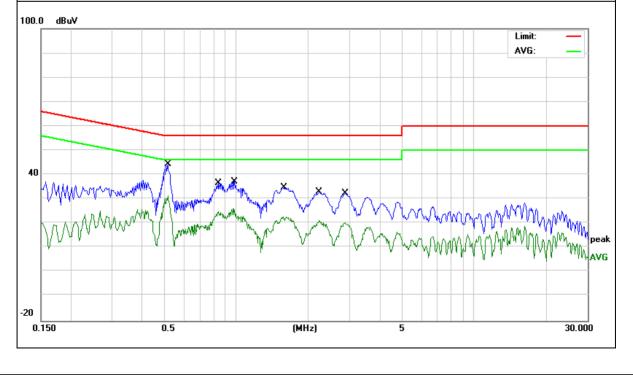


EUT:	TWS EARPHONES	Model Name :	LE-701
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	L
Test Voltage :	DC 5V from Adapter AC 240V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Domork
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.5140	34.60	9.74	44.34	56.00	-11.66	QP
0.5140	21.70	9.74	31.44	46.00	-14.56	AVG
0.8420	26.77	9.74	36.51	56.00	-19.49	QP
0.8420	15.13	9.74	24.87	46.00	-21.13	AVG
0.9820	27.47	9.74	37.21	56.00	-18.79	QP
0.9820	16.41	9.74	26.15	46.00	-19.85	AVG
1.5780	25.04	9.77	34.81	56.00	-21.19	QP
1.5780	13.04	9.77	22.81	46.00	-23.19	AVG
2.2260	23.25	9.78	33.03	56.00	-22.97	QP
2.2260	11.43	9.78	21.21	46.00	-24.79	AVG
2.8660	22.54	9.82	32.36	56.00	-23.64	QP
2.8660	10.59	9.82	20.41	46.00	-25.59	AVG

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.







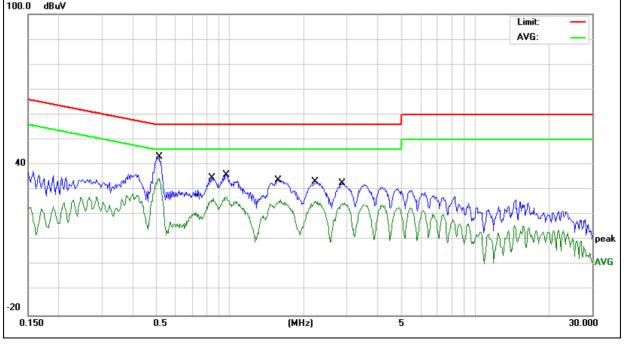
EUT:	TWS EARPHONES	Model Name :	LE-701
Temperature:	26 ℃	Relative Humidity:	54%
Pressure:	1010hPa	Phase :	Ν
Test Voltage :	DC 5V from Adapter AC 240V/60Hz	Test Mode:	Mode 1

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Damark
(MHz)	(dBµV)	(dB)	(dBµV)	(dBµV)	(dB)	Remark
0.5140	33.45	9.75	43.20	56.00	-12.80	QP
0.5140	24.79	9.75	34.54	46.00	-11.46	AVG
0.8460	25.14	9.75	34.89	56.00	-21.11	QP
0.8540	16.83	9.75	26.58	46.00	-19.42	AVG
0.9660	26.12	9.75	35.87	56.00	-20.13	QP
0.9660	17.45	9.75	27.20	46.00	-18.80	AVG
1.5740	24.14	9.78	33.92	56.00	-22.08	QP
1.5740	16.12	9.78	25.90	46.00	-20.10	AVG
2.2300	23.60	9.80	33.40	56.00	-22.60	QP
2.2300	15.63	9.80	25.43	46.00	-20.57	AVG
2.8780	22.83	9.86	32.69	56.00	-23.31	QP
2.8780	15.00	9.86	24.86	46.00	-21.14	AVG

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.

100.0 dBuV







7.2 RADIATED SPURIOUS EMISSION

7.2.1 Applicable Standard

According to FCC Part 15.247(d) and 15.209 and ANSI C63.10-2013

7.2.2 Conformance Limit

According to FCC Part 15.247(d): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)). According to FCC Part15.205, Restricted bands

Accoluting to TCC Fait 15.20	1		
MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

	Restricted Frequency(MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance
Γ	0.009~0.490	2400/F(KHz)	20 log (uV/m)	300
Γ	0.490~1.705	2400/F(KHz)	20 log (uV/m)	30
Γ	1.705~30.0	30	29.5	30
	30-88	100	40	3
	88-216	150	43.5	3
	216-960	200	46	3
	Above 960	500	54	3

Limits of Radiated Emission Measurement(Above 1000MHz)

Frequency(MHz)	Class B (dBuV/	/m) (at 3M)
r requency(iviniz)	PEAK	AVERAGE
Above 1000	74	54

Remark: 1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. Limit line=Specific limits(dBuV) + distance extrapolation factor.

a) At frequencies at or above 30 MHz:

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

b) At frequencies below 30 MHz:

Distance extrapolation factor =40log(Specific distance/ test distance)(dB);



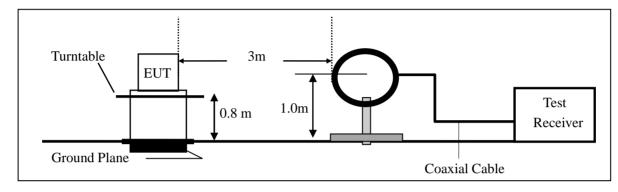


7.2.3 Measuring Instruments

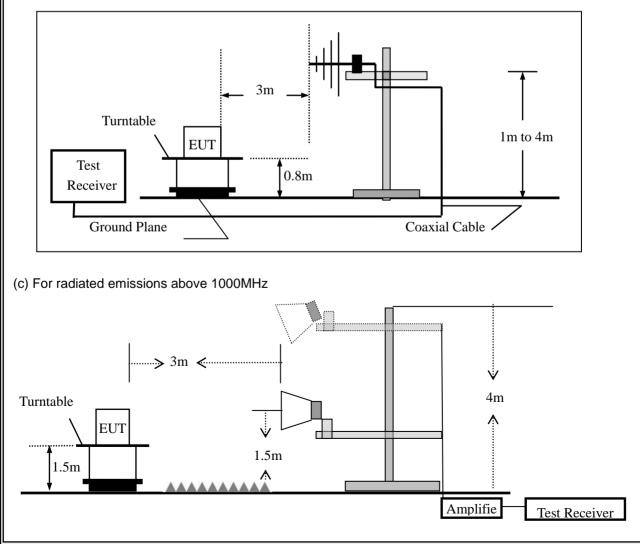
The Measuring equipment is listed in the section 6.3 of this test report.

7.2.4 Test Configuration

(a) For radiated emissions below 30MHz



(b) For radiated emissions from 30MHz to 1000MHz







7.2.5 Test Procedure

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT. Use the following spectrum analyzer settings:

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For the radiated emission test above 1GHz: Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- e. 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.
- f. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- g. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported





During the radiated emission t	est, the Spectrum An	st, the Spectrum Analyzer was set with the following configurations:							
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth						
30 to 1000	QP	120 kHz	300 kHz						
Ab 200	Peak	1 MHz	1 MHz						
Above 1000	Average	1 MHz	10 Hz						

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] =10*lg(100 [kHz]/narrower RBW [kHz])., the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

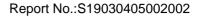
7.2.6 Test Results

■ Spurious Emission below 30MHz (9KHz to 30MHz)

EUT:	TWS EARPHONES	Model No.:	LE-701
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu

Freq.	Ant.Pol.	Emission L	.evel(dBuV/m)	Limit 3	m(dBuV/m)	Over	r(dB)
(MHz)	H/V	PK	AV	PK	AV	PK	AV

Note: the amplitude of spurious emission that is attenuated by more than 20dB below the permissible limit has no need to be reported.







■ Spurious Emission below 1GHz (30MHz to 1GHz)

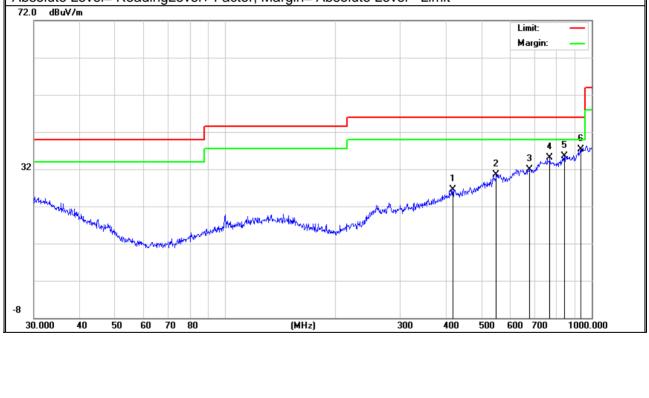
All the modulation modes have been tested, and the worst result was report as below:

EUT:	TWS EARPHONES	Model Name :	LE-701
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010hPa	Test Mode:	Mode 1
Test Voltage :	DC 3.7V(Left)		

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	417.6409	6.34	20.26	26.60	46.00	-19.40	QP
V	549.0193	6.10	24.49	30.59	46.00	-15.41	QP
V	675.2078	6.98	25.01	31.99	46.00	-14.01	QP
V	768.7481	7.64	27.46	35.10	46.00	-10.90	QP
V	842.1295	6.91	28.62	35.53	46.00	-10.47	QP
V	932.2714	6.61	30.70	37.31	46.00	-8.69	QP
Remark	•						

Remark:

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit





Б



(H/V)(MHz)(dBuV)(dB)(dBuV/m)(dBuV/m)(dB)H250.30128.4714.9523.4246.00-22.58QFH280.02375.9117.3723.2846.00-22.72QFH552.88316.1424.5130.6546.00-15.35QFH679.96008.3624.9833.3446.00-12.66QFH747.48258.0427.5135.5546.00-10.45QF	Polar	Freq	uency	у		Mete eadii		Fac	tor	Emis Lev		n -	L	.imit	S	N	largi	n	Rema
H 280.0237 5.91 17.37 23.28 46.00 -22.72 QF H 552.8831 6.14 24.51 30.65 46.00 -15.35 QF H 679.9600 8.36 24.98 33.34 46.00 -12.66 QF H 77.4825 8.04 27.51 35.55 46.00 -10.45 QF H 909.6666 5.93 29.53 35.46 46.00 -10.54 QF Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit 72.0 dBuV/m dBuV/m<	(H/V)	(M	Hz)		(dBu\	/)	(dl	В)	(dBu	V/m))	(dl	BuV/	m)		(dB)		
H 552.8831 6.14 24.51 30.65 46.00 -15.35 QF H 679.9600 8.36 24.98 33.34 46.00 -12.66 QF H 747.4825 8.04 27.51 35.55 46.00 -10.45 QF H 909.6666 5.93 29.53 35.46 46.00 -10.54 QF Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit 72.0 dBuV/m 45.55 46.00 32	Н	250	.3012	2		8.47	,	14.	95	23.	42		4	46.00)	-	22.58	8	QP
H 679.9600 8.36 24.98 33.34 46.00 -12.66 QF H 747.4825 8.04 27.51 35.55 46.00 -10.45 QF H 909.6666 5.93 29.53 35.46 46.00 -10.54 QF Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit 72.0 dBuV/m Imit: Imit:	Н	280	.0237	,		5.91		17.	37	23.	28		2	16.00)	-	22.72	2	QP
H 679.9600 8.36 24.98 33.34 46.00 -12.66 QF H 747.4825 8.04 27.51 35.55 46.00 -10.45 QF H 909.6666 5.93 29.53 35.46 46.00 -10.54 QF Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit 72.0 dBuV/m Imit: Imit:	Н	552	.8831			6.14		24.	51	30.	65		2	16.00)	-	15.3	5	QP
H 747.4825 8.04 27.51 35.55 46.00 -10.45 QF H 909.6666 5.93 29.53 35.46 46.00 -10.54 QF Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit 72.0 dBuV/m dBuV/m Margin: 1 3 4 1 2 3 4 1 2 8	Н					8.36		24.	98				4	16.00)	-	12.66	6	QP
H 909.6666 5.93 29.53 35.46 46.00 -10.54 QF Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit 72.0 dBuV/m Limit: Margin: 32 32 1 3 1 3 1 8																			QP
Remark: Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit 72.0 dBuV/m 32 4 32 4 32 4 3 4 5 5 6 1 2 4 4 4 4 4 4 4 4 4 4 4 4 4																			QP
	Absolute	e Level=	Read	ding	Lev	el+ F	acto	r, Mar	gin= A	bsolute	e Lev	vel -	Lim	it				·	-
																M	argin:		
8						_													
32 1 2 4 1 2 8 1 2 4 1 1 1																	5 4 X	6	M
8	32														3		X	www	
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8		mall and which the state	Myrowy	mathicage	MM	at www.	not make the	nontrank	a happing and a	Handhakkenno		al free al free							
		40	50 E	50 T	70 8	0			(MHz)			300		400	500	600	700	100	0.000

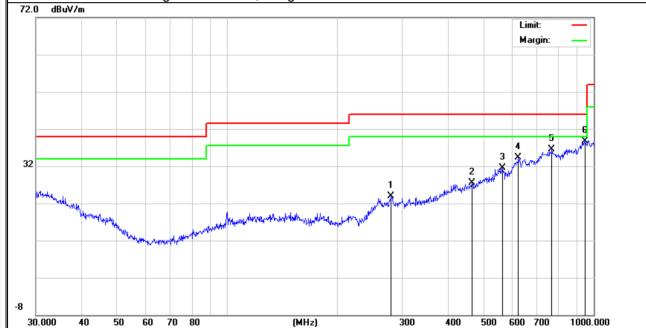




EUT:	TWS EARPHONES	Model Name :	LE-701
Temperature:	20 ℃	Relative Humidity:	48%
Pressure:	1010hPa	Test Mode:	Mode 1
Test Voltage :	DC 3.7V(Right)		

Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	280.0237	6.48	17.37	23.85	46.00	-22.15	QP
V	465.5994	6.68	20.86	27.54	46.00	-18.46	QP
V	562.6624	7.34	24.15	31.49	46.00	-14.51	QP
V	622.8899	9.54	24.80	34.34	46.00	-11.66	QP
V	768.7481	9.15	27.45	36.60	46.00	-9.40	QP
V	945.4397	7.72	31.01	38.73	46.00	-7.27	QP

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit





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Polar	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
(H/V)	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
Н	250.3012	8.47	14.95	23.42	46.00	-22.58	QP
Н	552.8831	6.14	24.51	30.65	46.00	-15.35	QP
Н	679.9600	8.36	24.98	33.34	46.00	-12.66	QP
Н	747.4825	8.04	27.51	35.55	46.00	-10.45	QP
Н	863.0561	6.75	28.67	35.42	46.00	-10.58	QP
Н	945.4397	7.05	31.01	38.06	46.00	-7.94	QP
	e Level= Reading avvm					Limit: – Margin: –	
						3 4 5 3 × ×	
32	week we	undergan working	low and a log of the second	way when the production	z Angelonovalan adaban kanand	and the second	
8		70 80	(MHz)		300 400 500	600 700 14	D00.000





Spuriou EUT:	us Emissio		ARPHONE			,		LE-701			
-			ARPHONE	-0		el No.:					
Temperatu	re:	20 ℃			Rela	tive Humid	ity:	48%	6		
Test Mode:		Mode2/ (Left)	Mode3/Mo	ode4	Test	By:		Ma	lary Hu		
						-					
Frequenc		Cable	Antenna	Prea	•	Emission	Limi	ts	Margin	<u> </u>	
<u>у</u>		loss (dB)	Factor	Fac		Level		(/m)	_	Remark	Comment
(MHz)	(dBµV)	(dB)	dB/m	(dl	/	(dBµV/m) 402 MHz)-/			(dB)		
4004 705	00.50	5.04							44.04	DL	Vertical
4804.765	62.56	5.21	35.59	44.		59.06	74.0		-14.94	Pk	Vertical
4804.765	49.20	5.21	35.59	44.		45.70	54.0		-8.30	AV	Vertical
7206.917	61.31	6.48	36.27	44.		59.46	74.0		-14.54	Pk	Vertical
7206.917	42.59	6.48	36.27	44.		40.74	54.0		-13.26	AV	Vertical
4804.692	63.56	5.21	35.55	44.		60.02	74.0		-13.98	Pk	Horizontal
4804.692	46.32	5.21	35.55	44.		42.78	54.0		-11.22	AV	Horizontal
7206.967	65.33	6.48	36.27	44.		63.56	74.00		-10.44	Pk	Horizontal
7206.967	46.32	6.48	36.27	44.	-	44.55	54.00		-9.45	AV	Horizontal
					,	440 MHz)-A					
4879.726	63.62	5.21	35.66	44.		60.29	74.0		-13.71	Pk	Vertical
4879.726	43.59	5.21	35.66	44.		40.26	54.0		-13.74	AV	Vertical
73219.86	62.59	7.10	36.50	44.		61.76	74.0		-12.24	Pk	Vertical
73219.86	43.29	7.10	36.50	44.		42.46	54.0		-11.54	AV	Vertical
4879.726	61.33	5.21	35.66	44.		58.00	74.0		-16.00	Pk	Horizontal
4879.726	42.23	5.21	35.66	44.	20	38.90	54.0	0	-15.10	AV	Horizontal
73219.86	62.62	7.10	36.50	44.	43	61.79	74.0	0	-12.21	Pk	Horizontal
73219.86	46.89	7.10	36.50	44.	-	46.06	54.0	-	-7.94	AV	Horizontal
			High	Chan	nel (2	480 MHz)-	Above	1G			
4960.715	63.02	5.21	35.52	44.	21	59.54	74.0	0	-14.46	Pk	Vertical
4960.715	43.09	5.21	35.52	44.	21	39.61	54.0	0	-14.39	AV	Vertical
7440.777	62.49	7.10	36.53	44.	60	61.52	74.0	0	-12.48	Pk	Vertical
7440.777	42.25	7.10	36.53	44.	60	41.28	54.0	0	-12.72	AV	Vertical
4960.848	61.05	5.21	35.52	44.	21	57.57	74.0	0	-16.43	Pk	Horizontal
4960.848	44.10	5.21	35.52	44.	21	40.62	54.0	0	-13.38	AV	Horizontal
7440.855	63.95	7.10	36.53	44.	60	62.98	74.0	0	-11.02	Pk	Horizontal
7440.855	44.86	7.10	36.53	44.	60	43.89	54.0	0	-10.11	AV	Horizontal

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
(2) Emission Level= Antenna Factor + Cable Loss + Read Level - Preamp Factor
(3)All other emissions more than 20dB below the limit.





EUT:		TWS E	ARPHON	ES	Мос	lel No.:		LE-701				
Temperatu	ure:	20 ℃			Relative Humidity:			48%				
Test Mode	:	Mode2 (Right)	/Mode3/M	ode4	Test	t By:		Ма	Mary Hu			
Frequenc y	Read Level	Cable loss	Antenna Factor	Prea Fac	tor	Emission Level	Limit	-	Margin	Remark	Comment	
(MHz)	(dBµV)	(dB)	dB/m	(dE	,	(dBµV/m)		,	(dB)			
			Low	Chanr	nel (2	402 MHz)-/	Above 1	IG				
4804.764	62.90	5.21	35.59	44.3	30	59.40	74.00	0	-14.60	Pk	Vertical	
4804.764	49.54	5.21	35.59	44.3	30	46.04	54.00	0	-7.96	AV	Vertical	
7206.916	61.65	6.48	36.27	44.6	50	59.80	74.00	0	-14.20	Pk	Vertical	
7206.916	42.93	6.48	36.27	44.6	50	41.08	54.00	0	-12.92	AV	Vertical	
4804.691	63.90	5.21	35.55	44.3	30	60.36	74.00	0	-13.64	Pk	Horizontal	
4804.691	46.66	5.21	35.55	44.3	30	43.12	54.00	0	-10.88	AV	Horizontal	
7206.966	65.67	6.48	36.27	44.52		63.90	74.00	0	-10.10	Pk	Horizontal	
7206.966	46.66	6.48	36.27	44.52		44.89	54.00	0	-9.11	AV	Horizontal	
			Mid	Chann	el (2	440 MHz)-A	Above 1	G				
4879.73	63.96	5.21	35.66	44.2	20	60.63	74.00	0	-13.37	Pk	Vertical	
4879.73	43.93	5.21	35.66	44.2	20	40.60	54.00	0	-13.40	AV	Vertical	
7321.99	62.93	7.10	36.50	44.4	43	62.10	74.00	0	-11.90	Pk	Vertical	
7321.99	43.63	7.10	36.50	44.4	43	42.80	54.00	0	-11.20	AV	Vertical	
4879.73	61.67	5.21	35.66	44.2	20	58.34	74.00	0	-15.66	Pk	Horizontal	
4879.73	42.57	5.21	35.66	44.2	20	39.24	54.00	0	-14.76	AV	Horizontal	
7321.99	62.96	7.10	36.50	44.4	43	62.13	74.00	0	-11.87	Pk	Horizontal	
7321.99	47.23	7.10	36.50	44.4		46.40	54.00		-7.60	AV	Horizontal	
			High	Chanr	nel (2	480 MHz)-	Above	1G				
4960.714	63.36	5.21	35.52	44.2	21	59.88	74.00	0	-14.12	Pk	Vertical	
4960.714	43.43	5.21	35.52	44.2	21	39.95	54.00	0	-14.05	AV	Vertical	
7440.776	62.83	7.10	36.53	44.6	50	61.86	74.00	0	-12.14	Pk	Vertical	
7440.776	42.59	7.10	36.53	44.6	50	41.62	54.00	0	-12.38	AV	Vertical	
4960.847	61.39	5.21	35.52	44.2	21	57.91	74.00	0	-16.09	Pk	Horizontal	
4960.847	44.44	5.21	35.52	44.2	21	40.96	54.00	0	-13.04	AV	Horizontal	
7440.854	64.29	7.10	36.53	44.6	50	63.32	74.00	0	-10.68	Pk	Horizontal	
7440.854	45.20	7.10	36.53	44.6	50	44.23	54.00	0	-9.77	AV	Horizontal	





Spurio	Spurious Emission in Restricted Band 2310-2390MHz and 2483.5-2500MHz									
EUT:		TWS EA	RPHONES	6 Mod	el No.:	LE-	701			
Temperatu	ure:	20 ℃		Rela	tive Humidit	y: 48%	, D			
Test Mode	:	Mode2/ M	Mode4 (Lef	t) Test	By:	Mar	Mary Hu			
					-					
Frequenc	Meter	Cable	Antenna	Preamp	Emission	Limits	Margin	Detector		
у	Reading	Loss	Factor	Factor	Level		, ,		Comment	
(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµV/m)	(dBµV/m)	(dB)	Туре		
0040.00	00.04	0.07	07.00		FSK	74	04.40		l la rimanta l	
2310.00	62.91	2.97	27.80	43.80	49.88	74	-24.12	Pk	Horizontal	
2310.00	46.02	2.97	27.80	43.80	32.99	54	-21.01	AV Pk	Horizontal Vertical	
2310.00	60.58 46.31	2.97 2.97	27.80	43.80 43.80	47.55 33.28	74 54	-26.45 -20.72	AV		
2310.00 2390.00	40.31 60.87	3.14	27.80 27.21		47.42	54 74	-20.72	Pk	Vertical Vertical	
2390.00	48.87	3.14	27.21	43.80 43.80	35.42	54	-20.56	AV	Vertical	
2390.00	61.91	3.14	27.21	43.80	48.46	74	-25.54	Pk	Horizontal	
2390.00	50.81	3.14	27.21	43.80	37.36	54	-20.04	AV	Horizontal	
2483.50	60.01	3.58	27.70	44.00	47.29	74	-26.71	Pk	Vertical	
	38.92	3.58	27.70	44.00	26.20	54	-27.80	AV	Vertical	
2483 50			21.10	44.00	20.20	04	21.00	7.0	Vortiour	
2483.50 2483.50				44 00	49 19	74	-24 81	Pk	Horizontal	
2483.50 2483.50 2483.50	61.91 42.84	3.58 3.58	27.70 27.70	44.00 44.00	49.19 30.12	74 54	-24.81 -23.88	Pk AV	Horizontal Horizontal	
2483.50	61.91	3.58 3.58	27.70	44.00			-23.88			
2483.50 2483.50	61.91 42.84	3.58 3.58	27.70 27.70	44.00	30.12	54	-23.88 701			
2483.50 2483.50 EUT:	61.91 42.84 Jre:	3.58 3.58 TWS EA 20 ℃	27.70 27.70	44.00 Mode Rela	30.12 el No.: tive Humidit	54 LE- y: 48%	-23.88 701			
2483.50 2483.50 EUT: Temperatu	61.91 42.84 Jre:	3.58 3.58 TWS EA 20 ℃	27.70 27.70 RPHONES	44.00 Mode Rela	30.12 el No.: tive Humidit	54 LE- y: 48%	-23.88 701			
2483.50 2483.50 EUT: Temperatu	61.91 42.84 ure: : :	3.58 3.58 TWS EA 20 ℃	27.70 27.70 RPHONES Mode4 (Rig Antenna	44.00 Mode Rela	30.12 el No.: tive Humidit	54 LE- ⁻ y: 48% Mar	-23.88 701 5 y Hu	AV		
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y	61.91 42.84 ure: : : Meter Reading	3.58 3.58 TWS EA 20 ℃ Mode2/ Mode2/ Mode2/ Mode2/	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor	44.00 Mod Rela ght) Test Preamp Factor	30.12 el No.: tive Humidit By: Emission Level	54 LE- y: 48% Mar Limits	-23.88 701 5 y Hu Margin	AV		
2483.50 2483.50 EUT: Temperatu Test Mode	61.91 42.84 ure: : :	3.58 3.58 TWS EA 20 ℃ Mode2/ N Cable	27.70 27.70 RPHONES Mode4 (Rig Antenna	44.00 Mod Rela ght) Test Preamp Factor (dB)	30.12 el No.: tive Humidit By: Emission Level (dBµV/m)	54 LE- ⁻ y: 48% Mar	-23.88 701 5 y Hu	AV	Horizontal	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz)	61.91 42.84 ure: : : Meter Reading (dBµV)	3.58 3.58 TWS EA 20 °C Mode2/ № Cable Loss (dB)	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m	44.00 Mod Rela Int) Test Preamp Factor (dB) G	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK	54 LE- y: 48% Mar Limits (dBµV/m)	-23.88 701 5 9 Hu Margin (dB)	AV Detector Type	Comment	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00	61.91 42.84 ure: : : : : : : : : : : : : : : : : : :	3.58 3.58 TWS EA 20 ℃ Mode2/ Mode2/ Mode3 Loss (dB)	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80	44.00 Mod Rela ht) Test Preamp Factor (dB) G 43.80	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55	54 LE- y: 48% Mar Limits (dBµV/m) 74	-23.88 701 5 y Hu Margin (dB) -24.45	AV Detector Type Pk	Horizontal Comment Horizontal	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00	61.91 42.84 μre: Meter Reading (dBμV) 62.58 45.69	3.58 3.58 TWS EA 20 ℃ Mode2/ Mode2/ Mode3 (dB) 2.97 2.97	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80	44.00 Mod Rela ht) Test Preamp Factor (dB) G 43.80 43.80	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66	54 LE- y: 48% Mar Limits (dBµV/m) 74 54	-23.88 701 y Hu Margin (dB) -24.45 -21.34	AV Detector Type Pk AV	Horizontal Comment Horizontal Horizontal	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00	61.91 42.84 μre: 	3.58 3.58 TWS EA 20 °C Mode2/ N Cable Loss (dB) 2.97 2.97 2.97	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80	44.00 Mod Rela pht) Test Preamp Factor (dB) G 43.80 43.80 43.80	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22	54 LE- ⁻ y: 48% Mar Limits (dBµV/m) 74 54 74	-23.88 701 y Hu Margin (dB) -24.45 -21.34 -26.78	AV Detector Type Pk AV Pk	Horizontal Comment Horizontal Horizontal Vertical	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00 2310.00	61.91 42.84 μre: e: Meter Reading (dBμV) 62.58 45.69 60.25 45.98	3.58 3.58 TWS EA 20 °C Mode2/ N Cable Loss (dB) 2.97 2.97 2.97 2.97	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80 27.80	44.00 Mod Rela (ht) Test Preamp Factor (dB) G 43.80 43.80 43.80 43.80	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22 32.95	54 LE- y: 48% Mar Limits (dBµV/m) 74 54 74 54	-23.88 701 5 701 701 701 701 701 701 701 701 701 701	AV Detector Type Pk AV Pk AV	Horizontal Comment Horizontal Horizontal Vertical Vertical	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00 2310.00 2310.00 2390.00	61.91 42.84 μre: : : : : : : : : : : : : : : : : : :	3.58 3.58 TWS EA 20 ℃ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode3 2.97 2.97 2.97 2.97 3.14	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80 27.80 27.80 27.80	44.00 Mod Rela ht) Test Preamp Factor (dB) G 43.80 43.80 43.80 43.80	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22 32.95 47.09	54 LE- y: 48% Mar Limits (dBµV/m) 74 54 74 54 74	-23.88 701 5 701 701 701 701 701 701 701 701 70 701 70 70 701 70 70 701 70 70 70 70 70 70 70 70 70 70 70 70 70	AV Detector Type Pk AV Pk AV Pk	Horizontal Comment Horizontal Horizontal Vertical Vertical Vertical	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00 2310.00 2310.00 2390.00 2390.00	61.91 42.84 μre: Meter Reading (dBμV) 62.58 45.69 60.25 45.98 60.54 48.54	3.58 3.58 TWS EA 20 ℃ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode3 2.97 2.97 2.97 2.97 3.14 3.14	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80 27.80 27.80 27.21 27.21	44.00 Mod Rela pht) Test Preamp Factor (dB) G 43.80 43.80 43.80 43.80 43.80 43.80	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22 32.95 47.09 35.09	54 LE- y: 48% Mar Limits (dBµV/m) 74 54 74 54 74 54	-23.88 701 y Hu Margin (dB) -24.45 -21.34 -26.78 -21.05 -26.91 -18.91	AV Detector Type Pk AV Pk AV Pk AV	Horizontal Comment Horizontal Horizontal Vertical Vertical Vertical Vertical	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00 2310.00 2310.00 2390.00 2390.00	61.91 42.84 μre: :: Meter Reading (dBμV) 62.58 45.69 60.25 45.98 60.54 48.54 60.54 48.54 61.58	3.58 3.58 TWS EA 20 °C Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode3 2.97 2.97 2.97 2.97 3.14 3.14 3.14	27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80 27.80 27.21 27.21 27.21	44.00 Mod Rela pht) Test Preamp Factor (dB) G 43.80 43.80 43.80 43.80 43.80 43.80 43.80	30.12 el No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22 32.95 47.09 35.09 48.13	54 LE- y: 48% Mar Limits (dBµV/m) 74 54 74 54 74 54 74 54 74	-23.88 701 y Hu Margin (dB) -24.45 -21.34 -26.78 -21.05 -26.91 -18.91 -25.87	AV Detector Type Pk AV Pk AV Pk AV Pk AV Pk	Horizontal Comment Horizontal Horizontal Vertical Vertical Vertical Vertical Horizontal	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00 2310.00 2310.00 2390.00 2390.00 2390.00 2390.00	61.91 42.84 μre: 	3.58 3.58 TWS EA 20 °C Mode2/ N Cable Loss (dB) 2.97 2.97 2.97 2.97 2.97 3.14 3.14 3.14 3.14	27.70 27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80 27.80 27.80 27.21 27.21 27.21 27.21	44.00 Mod Rela pht) Test Preamp Factor (dB) G 43.80 43.80 43.80 43.80 43.80 43.80 43.80 43.80	30.12 al No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22 32.95 47.09 35.09 48.13 37.03	54 LE- y: 48% Mar Limits (dBµV/m) 74 54 74 54 74 54 74 54 74 54	-23.88 701 y Hu Margin (dB) -24.45 -21.34 -26.78 -21.05 -26.91 -18.91 -25.87 -16.97	AV Detector Type Pk AV Pk AV Pk AV Pk AV AV	Horizontal Comment Horizontal Horizontal Vertical Vertical Vertical Vertical Horizontal Horizontal	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00 2310.00 2310.00 2390.00 2390.00 2390.00 2390.00 2390.00 2483.50	61.91 42.84 μre: 	3.58 3.58 TWS EA 20 °C Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode2/ Mode3 2.97 2.97 2.97 2.97 3.14 3.14 3.14 3.14 3.58	27.70 27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80 27.80 27.80 27.80 27.21 27.21 27.21 27.21 27.21 27.21	44.00 Mod Rela pht) Test Preamp Factor (dB) G 43.80 43.	30.12 a) No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22 32.95 47.09 35.09 48.13 37.03 46.96	54 LE- y: 48% Mar Limits (dBµV/m) 74 54 74 54 74 54 74 54 74 54 74	-23.88 701 5 701 701 701 701 701 701 701 701 701 70 70 70 70 70 70 70 70 70 70 70 70 70	AV Detector Type Pk AV Pk AV Pk AV Pk AV Pk AV Pk	Horizontal Comment Horizontal Horizontal Vertical Vertical Vertical Vertical Horizontal Horizontal Horizontal	
2483.50 2483.50 EUT: Temperatu Test Mode Frequenc y (MHz) 2310.00 2310.00 2310.00 2310.00 2390.00 2390.00 2390.00 2390.00	61.91 42.84 μre: 	3.58 3.58 TWS EA 20 °C Mode2/ N Cable Loss (dB) 2.97 2.97 2.97 2.97 2.97 3.14 3.14 3.14 3.14	27.70 27.70 27.70 RPHONES Mode4 (Rig Antenna Factor dB/m 27.80 27.80 27.80 27.80 27.80 27.21 27.21 27.21 27.21	44.00 Mod Rela pht) Test Preamp Factor (dB) G 43.80 43.80 43.80 43.80 43.80 43.80 43.80 43.80	30.12 al No.: tive Humidit By: Emission Level (dBµV/m) FSK 49.55 32.66 47.22 32.95 47.09 35.09 48.13 37.03	54 LE- y: 48% Mar Limits (dBµV/m) 74 54 74 54 74 54 74 54 74 54	-23.88 701 y Hu Margin (dB) -24.45 -21.34 -26.78 -21.05 -26.91 -18.91 -25.87 -16.97	AV Detector Type Pk AV Pk AV Pk AV Pk AV AV	Horizontal Comment Horizontal Horizontal Vertical Vertical Vertical Vertical Horizontal Horizontal	

Note: (1) All other emissions more than 20dB below the limit.





	purious Emi							LE-701				
EUT:			S EARPH	IONES	Model N	√ o.:						
Tempe	erature:	20 ℃	2		Relative	e Humidity:	48%	, D	-			
Test M	Node:	Mod	le2/ Mod	e4(Left)	Test By	:	Mar	y Hu				
I												
	Frequenc	Readin	Cable	Antenn	Preamp	Emission	Limits	Margin	Detect			
	У	g Level	Loss	а	Factor	Level			or	Comment		
	(MHz)	(dBµV)	(dB)	dB/m	(dB)	(dBµ V/m)	(dBµ V/m)	(dB)	Туре			
1	3260	64.79	4.04	29.57	44.70	53.70	74	-20.30	Pk	Vertical		
	3260	45.96	4.04	29.57	44.70	34.87	54	-19.13	AV	Vertical		
1	3260	63.97	4.04	29.57	44.70	52.88	74	-21.12	Pk	Horizontal		
	3260	49.25	4.04	29.57	44.70	38.16	54	-15.84	AV	Horizontal		
	3332	66.96	4.26	29.87	44.40	56.69	74	-17.31	Pk	Vertical		
1	3332	50.5	4.26	29.87	44.40	40.23	54	-13.77	AV	Vertical		
	3332	67.81	4.26	29.87	44.40	57.54	74	-16.46	Pk	Horizontal		
	3332	50.36	4.26	29.87	44.40	40.09	54	-13.91	AV	Horizontal		
	17797	46.89	10.99	43.95	43.50	58.33	74	-15.67	Pk	Vertical		
7	17797	31.5	10.99	43.95	43.50	42.94	54	-11.06	AV	Vertical		
	11191	51.5			· · · · · · · · · · · · · · · · · · ·	-						
	17797	49.12	11.81	43.69	44.60	60.02	74	-13.98	Pk	Horizontal		
						60.02 41.39	74 54	-13.98 -12.61	Pk AV	Horizontal Horizontal		
	17788	49.12	11.81	43.69	44.60							
EUT:	17788	49.12 30.49	11.81	43.69 43.69	44.60	41.39		-12.61				
	17788	49.12 30.49	11.81 11.81 S EARPH	43.69 43.69	44.60 44.60 Model N	41.39	54	-12.61 701				
	17788 17788 erature:	49.12 30.49 TWS 20 °C	11.81 11.81 S EARPH	43.69 43.69	44.60 44.60 Model N Relative	41.39 No.: e Humidity:	54 LE- ⁻ 48%	-12.61 701				
Tempe	17788 17788 erature:	49.12 30.49 TWS 20 °C	11.81 11.81 S EARPH	43.69 43.69 HONES	44.60 44.60 Model N Relative Test By	41.39 No.: e Humidity:	54 LE- ⁻ 48%	-12.61 701 6				
Tempe	17788 17788 erature:	49.12 30.49 TWS 20 °C	11.81 11.81 S EARPH	43.69 43.69 HONES	44.60 44.60 Model N Relative Test By Preamp	41.39 No.: e Humidity: r: Emission	54 LE- ⁻ 48% Mar	-12.61 701 6 y Hu				
Tempe	17788 17788 erature: Mode:	49.12 30.49 TWS 20 °C Mod	11.81 11.81 S EARPH C le2/ Mod	43.69 43.69 HONES e4(Right)	44.60 44.60 Model N Relative Test By	41.39 No.: Humidity: :: Emission Level	54 LE- 48% Mar	-12.61 701 6	AV	Horizontal		
Tempe	17788 17788 erature: Mode: Frequenc y	49.12 30.49 TWS 20 °C Mod Readin g Level	11.81 11.81 S EARPH C le2/ Mod Cable Loss	43.69 43.69 HONES e4(Right) Antenn a	44.60 44.60 Model N Relative Test By Preamp Factor	41.39 No.: e Humidity: r: Emission Level (dBµ	54 LE- 48% Mar Limits (dBµ	-12.61 701 6 y Hu Margin	AV Detect or			
Tempe	17788 17788 erature: Mode: Frequenc y (MHz)	49.12 30.49 TWS 20 °C Mod Readin g Level (dBµV)	11.81 11.81 S EARPH C le2/ Mod Cable Loss (dB)	43.69 43.69 HONES e4(Right) Antenn a dB/m	44.60 44.60 Model N Relative Test By Preamp Factor (dB)	41.39 No.: Humidity: :: Emission Level (dBµ V/m)	54 LE- 48% Mar Limits (dBµ V/m)	-12.61 701 6 y Hu Margin (dB)	AV Detect or Type	Horizontal Comment		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79	11.81 11.81 S EARPH C le2/ Mod Cable Loss (dB) 4.04	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70	41.39 No.: Humidity: : Emission Level (dBµ V/m) 53.70	54 LE- 48% Mar Limits (dBµ V/m) 74	-12.61 701 6 7y Hu Margin (dB) -20.30	AV Detect or Type Pk	Horizontal Comment Vertical		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79 45.96	11.81 11.81 S EARPH C le2/ Mod Loss (dB) 4.04 4.04	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70	41.39 No.: Humidity: :: Emission Level (dBµ V/m) 53.70 34.87	54 LE- 48% Mar Limits (dBµ V/m) 74 54	-12.61 701 6 7 Hu Margin (dB) -20.30 -19.13	AV Detect or Type Pk AV	Comment Vertical Vertical		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260	49.12 30.49 TWS 20 °C Mod Readin g Level (dBµV) 64.79 45.96 63.97	11.81 11.81 S EARPH C le2/ Mod Cable Loss (dB) 4.04 4.04 4.04	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70	41.39 No.: Humidity: :: Emission Level (dBµ V/m) 53.70 34.87 52.88	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74	-12.61 701 6 y Hu Margin (dB) -20.30 -19.13 -21.12	AV Detect or Type Pk AV Pk	Horizontal Comment Vertical Vertical Horizontal		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79 45.96 63.97 49.25	11.81 11.81 S EARPH C le2/ Mod Cable Loss (dB) 4.04 4.04 4.04 4.04	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70	41.39 No.: Humidity: :: Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54	-12.61 701 6 7y Hu Margin (dB) -20.30 -19.13 -21.12 -15.84	AV Detect or Type Pk AV Pk AV	Horizontal Comment Vertical Vertical Horizontal Horizontal		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260 3260 3332	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79 45.96 63.97 49.25 66.96	11.81 11.81 S EARPH C le2/ Mod Loss (dB) 4.04 4.04 4.04 4.04 4.04	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57 29.57 29.87	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70 44.70	41.39 No.: Humidity: :: Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16 56.69	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54 74	-12.61 701 6 7 Hu Margin (dB) -20.30 -19.13 -21.12 -15.84 -17.31	AV Detect or Type Pk AV Pk AV Pk	Horizontal Comment Vertical Vertical Horizontal Horizontal Vertical		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260 3260 3332 3332	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79 45.96 63.97 49.25 66.96 50.5	11.81 11.81 S EARPH C le2/ Mod Cable Loss (dB) 4.04 4.04 4.04 4.04 4.04 4.26 4.26	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57 29.87 29.87	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70 44.70 44.40	41.39 No.: Humidity: Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16 56.69 40.23	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54	-12.61 701 6 7y Hu Margin (dB) -20.30 -19.13 -21.12 -15.84	AV Detect or Type Pk AV Pk AV	Horizontal Comment Vertical Vertical Horizontal Horizontal		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260 3260 3332 3332 3332	49.12 30.49 TWS 20 ℃ Mod Level (dBµV) 64.79 45.96 63.97 49.25 66.96 50.5 67.81	11.81 11.81 S EARPH C le2/ Mod Loss (dB) 4.04 4.04 4.04 4.04 4.04	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57 29.57 29.87	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70 44.70	41.39 No.: Humidity: :: Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16 56.69	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54 74	-12.61 701 6 7 Hu Margin (dB) -20.30 -19.13 -21.12 -15.84 -17.31	AV Detect or Type Pk AV Pk AV Pk	Horizontal Comment Vertical Vertical Horizontal Horizontal Vertical		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260 3260 3332 3332	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79 45.96 63.97 49.25 66.96 50.5	11.81 11.81 S EARPH C le2/ Mod Cable Loss (dB) 4.04 4.04 4.04 4.04 4.04 4.26 4.26	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57 29.87 29.87	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70 44.70 44.40	41.39 No.: Humidity: Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16 56.69 40.23	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54 74 54 74	-12.61 701 6 y Hu Margin (dB) -20.30 -19.13 -21.12 -15.84 -17.31 -13.77	AV Detect or Type Pk AV Pk AV Pk AV	Horizontal Comment Vertical Vertical Horizontal Horizontal Vertical Vertical		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260 3260 3332 3332 3332	49.12 30.49 TWS 20 ℃ Mod Level (dBµV) 64.79 45.96 63.97 49.25 66.96 50.5 67.81	11.81 11.81 S EARPH C C le2/ Mod Cable Loss (dB) 4.04 4.04 4.04 4.04 4.04 4.04 4.26 4.26 4.26	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57 29.57 29.87 29.87	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70 44.70 44.40	41.39 No.: Humidity: Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16 56.69 40.23 57.54	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54 74 54 74	-12.61 701 6 7 Hu Margin (dB) -20.30 -19.13 -21.12 -15.84 -17.31 -13.77 -16.46	AV Detect or Type Pk AV Pk AV Pk AV Pk	Horizontal Comment Vertical Vertical Horizontal Horizontal Vertical Vertical Vertical Horizontal		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260 3260 3332 3332 3332	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79 45.96 63.97 49.25 66.96 50.5 67.81 50.36	11.81 11.81 S EARPH C le2/ Mod Loss (dB) 4.04 4.04 4.04 4.04 4.04 4.04 4.26 4.26 4.26 4.26	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57 29.87 29.87 29.87 29.87	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70 44.70 44.40 44.40	41.39 No.: Humidity: : Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16 56.69 40.23 57.54 40.09	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54 74 54 74 54 74	-12.61 701 6 y Hu Margin (dB) -20.30 -19.13 -21.12 -15.84 -17.31 -13.77 -16.46 -13.91	AV Detect or Type Pk AV Pk AV Pk AV Pk AV Pk	Horizontal Comment Vertical Vertical Horizontal Vertical Vertical Vertical Horizontal Horizontal		
Tempe	17788 17788 erature: Mode: Frequenc y (MHz) 3260 3260 3260 3260 3260 3332 3332 3332	49.12 30.49 TWS 20 ℃ Mod Readin g Level (dBµV) 64.79 45.96 63.97 49.25 66.96 50.5 66.96 50.5 67.81 50.36 46.89	11.81 11.81 S EARPH C le2/ Mod Cable Loss (dB) 4.04 4.04 4.04 4.04 4.04 4.04 4.04 4.26 4.26 4.26 10.99	43.69 43.69 HONES e4(Right) Antenn a dB/m 29.57 29.57 29.57 29.57 29.57 29.87 29.87 29.87 29.87 29.87 29.87	44.60 44.60 Model N Relative Test By Preamp Factor (dB) 44.70 44.70 44.70 44.70 44.40 44.40 44.40 44.40	41.39 No.: Humidity: Emission Level (dBµ V/m) 53.70 34.87 52.88 38.16 56.69 40.23 57.54 40.09 58.33	54 LE- 48% Mar Limits (dBµ V/m) 74 54 74 54 74 54 74 54 74	-12.61 701 6 70 Hu Margin (dB) -20.30 -19.13 -21.12 -15.84 -17.31 -13.77 -16.46 -13.91 -15.67	AV Detect or Type Pk AV Pk AV Pk AV Pk AV Pk	Horizontal Comment Vertical Vertical Horizontal Horizontal Vertical Horizontal Horizontal Vertical Horizontal Vertical		

Note: (1) All other emissions more than 20dB below the limit.





7.3 6DB BANDWIDTH

7.3.1 Applicable Standard

According to FCC Part 15.247(a)(2) and KDB 558074 D01 15.247 Meas Guidance v05 Section 8.2.

7.3.2 Conformance Limit

The minimum permissible 6dB bandwidth is 500 kHz.

7.3.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.3.4 Test Setup

Please refer to Section 6.1 of this test report.

7.3.5 Test Procedure

The testing follows Subclause 11.8 of ANSI C63.10

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

Use the following spectrum analyzer settings:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) \ge 3*RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.

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

7.3.6 Test Results

EUT:	TWS EARPHONES	Model No.:	LE-701
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu

1.0#	Channel	Frequency (MHz)	6dB bandwidth (kHz)	Limit (kHz)	Result
Left	Low	2402	692.281	≥500	Pass
	Middle	2440	682.984	≥500	Pass
	High	2480	695.796	≥500	Pass

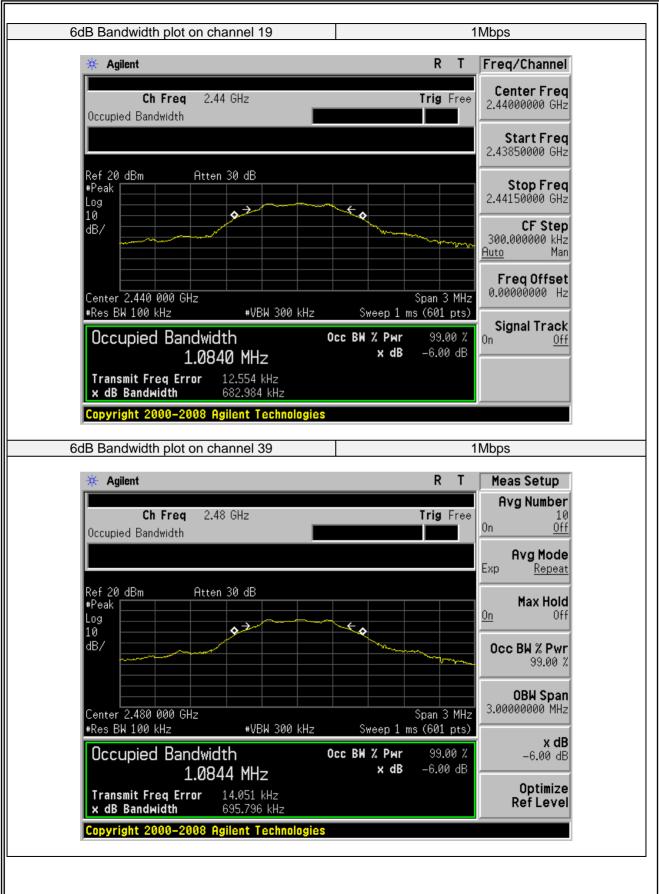




			Certificate #4298.01		
	Channel	Frequency (MHz)	6dB bandwidth (kHz)	Limit (kHz)	Result
Right	Low	2402	685.669	≥500	Pass
	Middle	2440	673.501	≥500	Pass
	High	2480	696.765	≥500	Pass
				•	
			est Plot (Left)		
	6dB Bandwid	h plot on channel 00		1Mbps	
	🔆 Agilent			R T Freq/Ch	annel
	C Occupied Bar Ref 20 dBm	h Freq 2.402 GHz ndwidth Atten 30 dB		Center 2.4020000 Start 2.4005000	00 GHz Freq
	#Peak Log 10 dB/			2.4035000	Step
	Center 2.402 #Res BW 100	kHz #VBW 300	kHz Sweep1ms	Signal	00 Hz
	Uccupie	d Bandwidth 1.0919 MHz	Осс ВW % Рwr x dB	99.00 % On -6.00 dB	<u>Off</u>
	Transmit F × dB Band	req Error 16.330 kHz width 692.281 kHz			
		000–2008 Agilent Techno	logies		
	,				

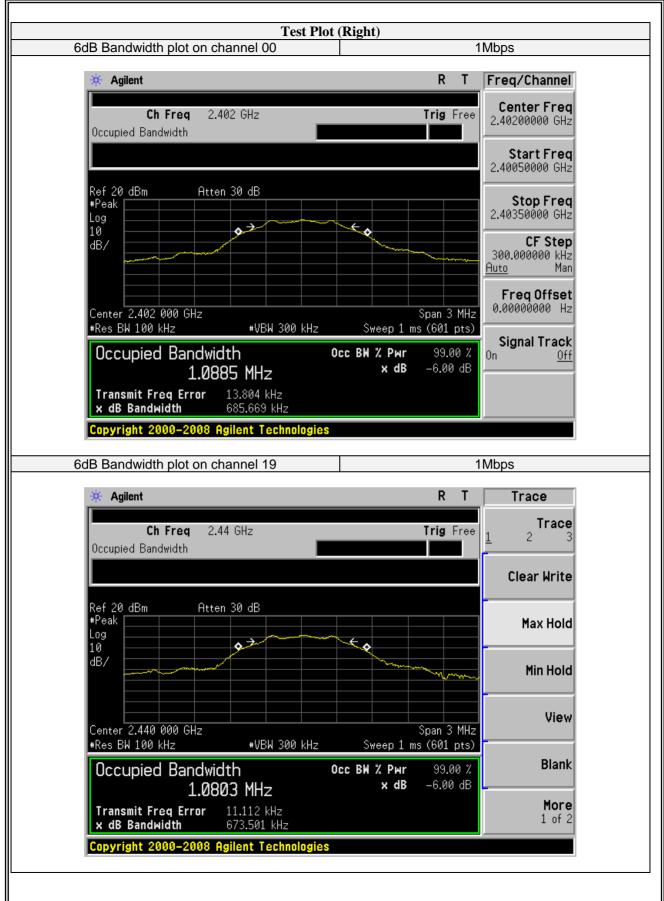
















6dB Bandwidth plot on channel 39	1	Mbps
* Agilent	RT	
Ch Freq 2.48 GHz	r i Trig Free	Meas Setup Avg Number
Occupied Bandwidth		On <u>Off</u> Avg Mode Exp Repeat
Ref 20 dBm Atten 30 dB #Peak Log	€	Exp Repeat Max Hold On Off
10 dB/		Occ BW % Pwr 99.00 %
Center 2.480 000 GHz #Res BW 100 kHz #VBW 300 kHz	Span 3 MHz Sweep 1 ms (601 pts)	OBW Span 3.00000000 MHz
	DCC BW % Pwr 99.00 % x dB -6.00 dB	x dB -6.00 dB
Transmit Freq Error9.773 kHz× dB Bandwidth696.765 kHz		Optimize Ref Level
Copyright 2000-2008 Agilent Technologies		





7.4 PEAK OUTPUT POWER

7.4.1 Applicable Standard

According to FCC Part 15.247(b)(3) and KDB 558074 D01 15.247 Meas Guidance v05 Section 8.3.1.

7.4.2 Conformance Limit

The maximum peak conducted output power of the intentional radiator for systems using digital modulation in the 2400 - 2483.5 MHz bands shall not exceed: 1 Watt (30dBm). If transmitting antenna of directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

7.4.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.4.4 Test Setup

Please refer to Section 6.1 of this test report.

7.4.5 Test Procedure

The testing follows Subclause 11.9.1.1 of ANSI C63.10 The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement. Set to the maximum power setting and enable the EUT transmit continuously. The EUT was operating in controlled its channel. Use the following spectrum analyzer settings: Set the RBW \geq DTS bandwidth. Set VBW =3*RBW. Set the span \geq 3*RBW Set Sweep time = auto couple. Set Detector = peak. Set Trace mode = max hold. Allow trace to fully stabilize. Use peak marker function to determine the peak amplitude level.

7.4.6 Test Results

EUT:	TWS EARPHONES			Мо	Model No.: LE-7		E-701		
Temperature:		20 °C			Relative Humidity: 48%		48%		
Test Mode:	st Mode: Mode2/Mode3/Mode4		Te	st By:	Mary	1ary Hu			
Left:									
Test Channel		Frequency (MHz) Power Settir		g	Peak Output Power (dBm)		LIMIT (dBm)	Verdict	
					1Mbps				
00	2	2402	Default		0.59		30	PASS	
19	2	2440	0 Default		1.56		30	PASS	
39	2	2480	Default		1.89		30	PASS	



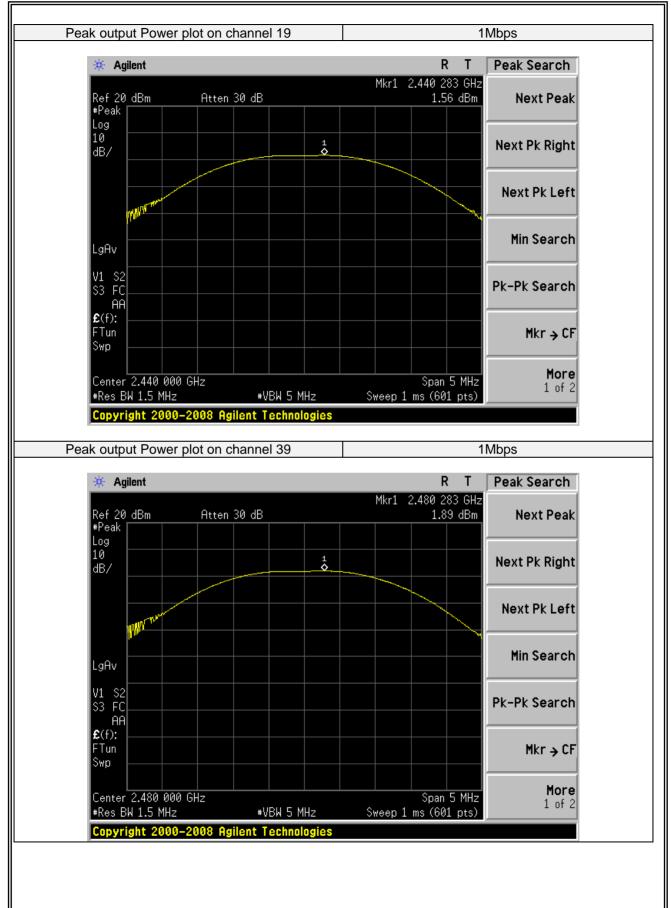
E7



Test Channel Frequency (MHz) Power Setting Peak Output Power (dBm) LIMIT (dBm) Verdict 00 2402 Default 0.70 30 PASS 19 2440 Default 1.64 30 PASS 39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 1Mbps Peak Search Next Peak Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Lgdv 4 4 0.59 dBm Next Peak Uglv 4 4 4 0.59 dBm Next Pk Left Uglv 4 4 4 4 4 4 4 Uglv 4	Test Channel (MHz) Power Setting (dBm) (dBm) Verdict 00 2402 Default 0.70 30 PASS 19 2440 Default 1.64 30 PASS 39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 1Mbps Next Peak Mer 20 dBm Atten 30 dB 0.59 dBm 10 1 0 14 Next Peak Log 10 1 0 14 Next Peak Log 10 1 1 0 14 Next Pk Right VI S2 10 1 1 1 1 1 Next Pk Search VI S2 1 1 1 1 1 Next Pk Search VI S2 1 1 1 1 1 Next Pk Search VI S2 1 1 1 1 1 1	Right:							
00 2402 Default 0.70 30 PASS 19 2440 Default 1.64 30 PASS 39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 1Mbps	00 2402 Default 0.70 30 PASS 19 2440 Default 1.64 30 PASS 39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 Mkr1 2.402 225 GHz 0 0.59 dBm Next Peak 0 0 0 Next Peak 0 0 0 Next Peak 0 0 0 0 Next Pk Right 0 0 0 0 0 Next Pk Right 0 0 0 0 0 0 0 0 0	Test Channel		Power Setting					Verdict
19 2440 Default 1.64 30 PASS 39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 1Mbps Mkr1 2.402 225 GHz R T Peak Search Ref 20 dBm Atten 30 dB Mkr1 2.402 225 GHZ Next Peak Log 0 1 Next Peak Next Peak U39 0 1 0 1 Next Pk Left U39 0 1 0 1 Next Pk Left U39 0 1 0 1 Next Pk Left U30 0 1 0 1 Next Pk Left W1 S2 3 0 1 0 1 0 1 0 Center 2.402 000 GHz *VBM 5 MHz Smeep 1 ms (601 pts) 7 1 1 1	19 2440 Default 1.64 30 PASS 39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 1Mbps Mkr1 2.402 225 GHz R T Peak Search Ref 20 dBm Atten 30 dB Mkr1 2.402 225 GHZ Next Peak Log 0 1 Next Peak Next Peak U39 0 1 0 1 Next Pk Left U39 0 1 0 1 Next Pk Left U39 0 1 0 1 Next Pk Left U30 0 1 0 1 Next Pk Left W1 S2 3 0 1 0 1 0 1 0 Center 2.402 000 GHz *VBM 5 MHz Smeep 1 ms (601 pts) 7 1 1 1								
39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 1Mbps # Agilent R T Peak Search Next Peak Image:	39 2480 Default 1.96 30 PASS Test Plot (Left) Peak output Power plot on channel 00 1Mbps # Agilent R T Peak Search Next Peak Image:								
Test Plot (Left) Peak output Power plot on channel 00 1Mbps Agilent R T Peak Search Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Log 0 0.59 dBm Next Peak Iog 1 1 Next Pk Right Iog 1 1 Next Pk Right Iog 1 1 Next Pk Left IgAv 1 1 1 IgAv 1 1 1 1 IgAv 1 1 1 1 1 Next Pk Left Nin Search 1 1 1 IgAv 1 1 1 1 1 Span 5 MHz Span	Test Plot (Left) Peak output Power plot on channel 00 1Mbps Agilent R T Peak Search Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Log 0 0.59 dBm Next Peak Iog 1 1 Next Pk Right Iog 1 1 Next Pk Right Iog 1 1 Next Pk Left IgAv 1 1 1 IgAv 1 1 1 1 IgAv 1 1 1 1 1 Next Pk Left Nin Search 1 1 1 IgAv 1 1 1 1 1 Span 5 MHz Span								
Peak output Power plot on channel 00 1Mbps # Agilent R T Peak Search Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Uog 10 1 Next Pk Right UgAv 1 0 Min Search V1 S2 S2 Peak Pk-Pk Search Win Search Min Search Min Search PK-Pk Search Mkr → CF Mar Span 5 MHz More I of 2 Span 5 MHz More	Peak output Power plot on channel 00 1Mbps # Agilent R T Peak Search Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Uog 10 1 Next Pk Right UgAv 1 0 Min Search V1 S2 S2 Peak Pk-Pk Search Win Search Min Search Min Search PK-Pk Search Mkr → CF Mar Span 5 MHz More I of 2 Span 5 MHz More	39	2480	Default	1	.96		30	PASS
Peak output Power plot on channel 00 1Mbps # Agilent R T Peak Search Ref 20 dBm Atten 30 dB 0.59 dBm • Peak 0.59 dBm Next Peak Log 1 Next Pk Right UgAv 1 0 Min Search V1 S2 1 Min Search Pt Pt Pk Search Mkr -> CF Main Start Next Pk Search More 1 of 2	Peak output Power plot on channel 00 1Mbps # Agilent R T Peak Search Ref 20 dBm Atten 30 dB 0.59 dBm • Peak 0.59 dBm Next Peak Log 1 Next Pk Right UgAv 1 0 Min Search V1 S2 1 Min Search Pt Pt Pk Search Mkr -> CF Main Start Next Pk Search More 1 of 2			Те	st Plot (Lefi)			
Next Peak Log 0.59 dBm 10 1 dB/ 1 LgAv 1 LgAv 1 V1 S2 1 S3 FC 1 FTun 1 Swp 1 Center 2.402 000 GHz +VBH 5 MHz *Res BW 1.5 MHz *VBH 5 MHz	Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Log 1 1 1 Next Pk Right MB/ 1 1 1 Next Pk Right MB/ 1 1 1 Next Pk Right LgAv 1 1 1 Next Pk Left LgAv 1 1 1 1 Next Pk Left V1 S2 1 1 1 1 1 Next Pk Search AFC 1 1 1 1 1 1 1 Strip 1<	Peak ou	tput Power plot)	1	Mbps	
Mkr1 2.402 225 GHz Next Peak 0.59 dBm Next Peak Log 1 1 Next Pk Right Next Pk Right Next Pk Left Next Pk Left LgAv 1 1 Next Pk Search Y1 S2 1 1 Next Pk Search AFC 1 1 1 Next Pk Search AFC 1 1 1 1 Syspe 1 1 1 1 Center 2.402 000 GHz Syspe 5 MHz *Res BW 1.5 MHz *VBN 5 MHz Sweep 1 ms (601 pts) More	Mkr1 2.402 225 GHz Next Peak 0.59 0.59 0.59 10 1 1 1 Next Pk Right Next Pk Right Next Pk Left Next Pk Left LgAv 1 1 1 Next Pk Left V1 52 1 1 1 Next Pk Search AFF FC 1 1 1 Next Pk Search AFF 1 1 1 1 Next Pk Search Mkr + CF Span 5 MHz Sweep 1 ms (601 pts) More	- Size	Agilent			R	т	Peak Search	T
Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Log 10 1 Next Pk Right UdB/ 1 1 Next Pk Right UgAv 1 1 Next Pk Left LgAv 1 1 Next Pk Left UgAv 1 1 1 V1 \$2 1 1 1 S3 FC 1 1 1 AA 1 1 1 E(f): 1 1 1 FTun 1 1 1 1 Swpp 1 1 1 1 Center 2.402 000 GHz +VBM 5 MHz Sweep 1 ms (601 pts) 1 of 2	Ref 20 dBm Atten 30 dB 0.59 dBm Next Peak Log 10 1 Next Pk Right UdB/ 1 1 Next Pk Right UgAv 1 1 Next Pk Left LgAv 1 1 Next Pk Left V1 \$2 1 1 Next Pk Search AA 1 1 Next Pk Search Pk-Pk Search Mkr > CF More YRes BW 1.5 MHz *VBW 5 MHz Sweep 1 ms (601 pts)							r ouk oour on	
Log 10 dB/ 1 1 Next Pk Right LgAv 1 1 Next Pk Left LgAv 1 1 Min Search V1 S2 S3 FC 2 2 2 G(f): FTun Swp 1 1 1 Center 2.402 000 GHz *Res BW 1.5 MHz *VEW 5 MHz Sweep 1 ms (601 pts)	Log 10 dB/ 1 1 Next Pk Right VI S2 S3 FC AA Next Pk Left E(f): FTun Swp Min Search Center 2.402 000 GHz *Res BW 1.5 MHz *VBW 5 MHz Sweep 1 ms (601 pts)	Ref #Pea	20 dBm A	tten 30 dB				Next Peak	
dB/ 1 Next Pk Right LgAv Next Pk Left LgAv Min Search V1 S2 S3 FC AA AA £(f): FTun Swp Span 5 MHz Center 2,402 000 GHz #VBW 5 MHz Sweep 1 ms (601 pts)	dB/ 1 Next Pk Right LgAv Next Pk Left LgAv Min Search V1 S2 S3 FC AA Pk-Pk Search FTun Mkr ÷ CF Swp Span 5 MHz Center 2.402 000 GHz *VBW 5 MHz Sweep 1 ms (601 pts)	Log							
LgAv Min Search V1 \$2 \$3 FC AA Min Search E(f): FTun \$wp Mkr → CF Center 2.402 000 GHz #Res BW 1.5 MHz #VBW 5 MHz Sweep 1 ms (601 pts)	LgAv Min Search V1 \$2 \$3 FC AA Min Search E(f): FTun \$wp Mkr > CF Center 2.402 000 GHz #Res BW 1.5 MHz #VBW 5 MHz Sweep 1 ms (601 pts)	d₿/			1 �			Next Pk Right	
LgHv Image: Constraint of the second se	LgHv Image: Second					Kharkananan	hy. Wyre	Next Pk Left	
AA E(f): Mail Mail Mail Swp Swp Mkr → CF Center 2.402 000 GHz Span 5 MHz More #Res BW 1.5 MHz #VBW 5 MHz Sweep 1 ms (601 pts) 1 of 2	AA E(f): Mkr → CF FTun Mkr → CF Swp Mkr → CF Center 2.402 000 GHz Span 5 MHz #Res BW 1.5 MHz #VBW 5 MHz Sweep 1 ms (601 pts)							Min Search	
FTun Swp Mkr → CF Center 2.402 000 GHz #Res BW 1.5 MHz *VBW 5 MHz Span 5 MHz Sweep 1 ms (601 pts) More 1 of 2	FTun Swp Mkr → CF Center 2.402 000 GHz Span 5 MHz #Res BW 1.5 MHz #VBW 5 MHz Sweep 1 ms (601 pts)		9A) AF				,	Pk-Pk Search	
Center 2.402 000 GHz Span 5 MHz I of 2 #Res BW 1.5 MHz #VBW 5 MHz Sweep 1 ms (601 pts) 1 of 2	Center 2.402 000 GHz Span 5 MHz Span 5 MHz 1 of 2 #Res BW 1.5 MHz #VBW 5 MHz Sweep 1 ms (601 pts) 1 of 2	FTur						Mkr → CF	
Copyright 2000–2008 Agilent Technologies	Copyright 2000–2008 Agilent Technologies			#VBW 5 MI	Hz S			More 1 of 2	
		Cop	yright 2000–2001	3 Agilent Technolo	ogies				Í

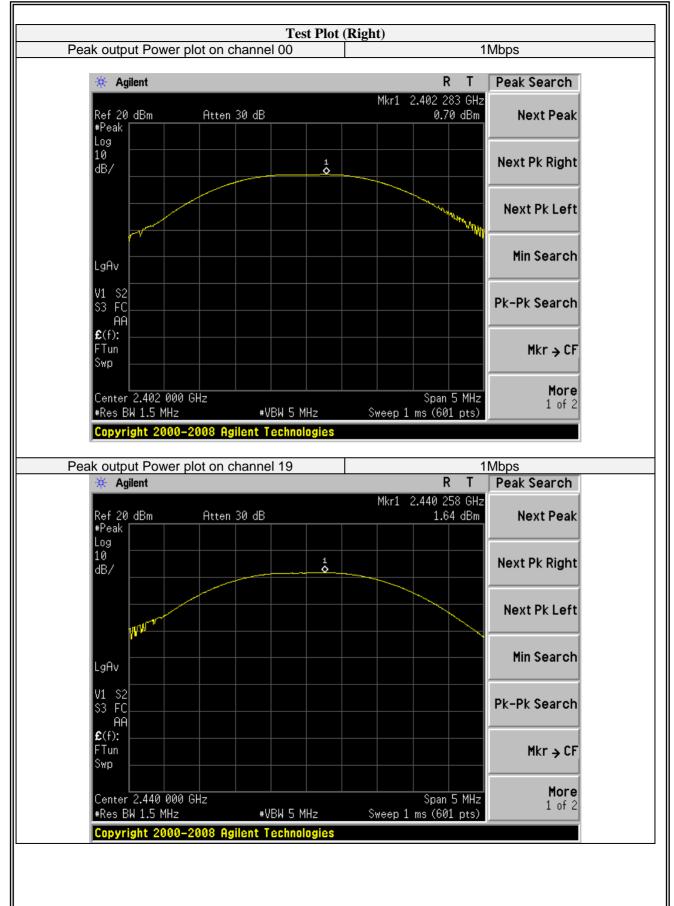






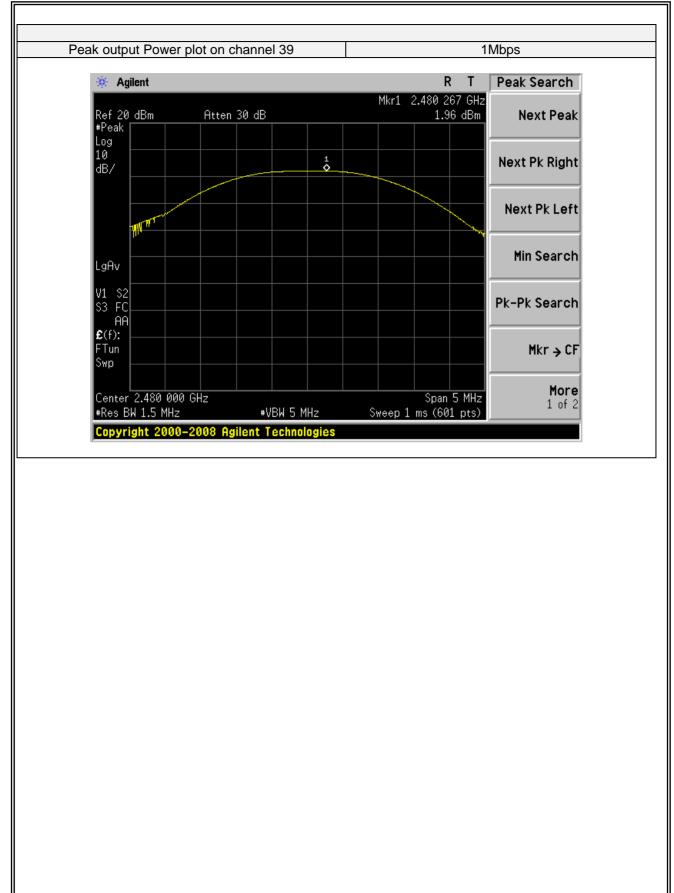
















7.5 POWER SPECTRAL DENSITY

7.5.1 Applicable Standard

According to FCC Part 15.247(e) and KDB 558074 D01 15.247 Meas Guidance v05 Section 8.4.

7.5.2 Conformance Limit

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

7.5.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.5.4 Test Setup

Please refer to Section 6.1 of this test report.

7.5.5 Test Procedure

The testing follows Measurement Procedure Subclause 11.10.2 of ANSI C63.10 This procedure shall be used if maximum peak conducted output power was used to demonstrate compliance, and is optional if the maximum conducted (average) output power was used to demonstrate compliance.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

a) Set analyzer center frequency to DTS channel center frequency.

- b) Set the span to 1.5*DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW \geq 3 RBW.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.
- j) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.





7.5.6 Test Results

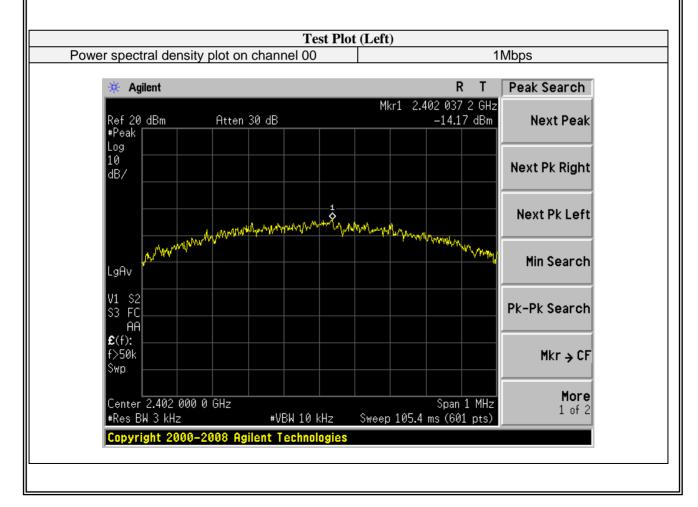
EUT:	TWS EARPHONES	Model No.:	LE-701
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode3/Mode4	Test By:	Mary Hu

Left:

Test Channel	Frequency (MHz)	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Verdict
1Mbps				
00	2402	-14.17	8	PASS
19	2440	-12.27	8	PASS
39	2480	-11.13	8	PASS

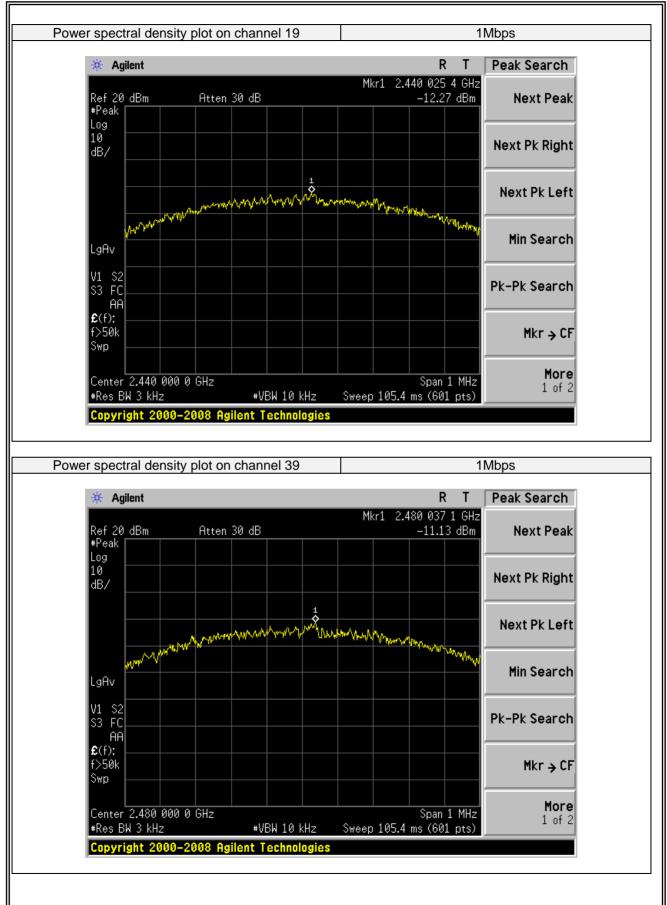
Right:

Test Channel	Frequency (MHz)	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Verdict
1Mbps				
00	2402	-13.18	8	PASS
19	2440	-11.82	8	PASS
39	2480	-11.23	8	PASS





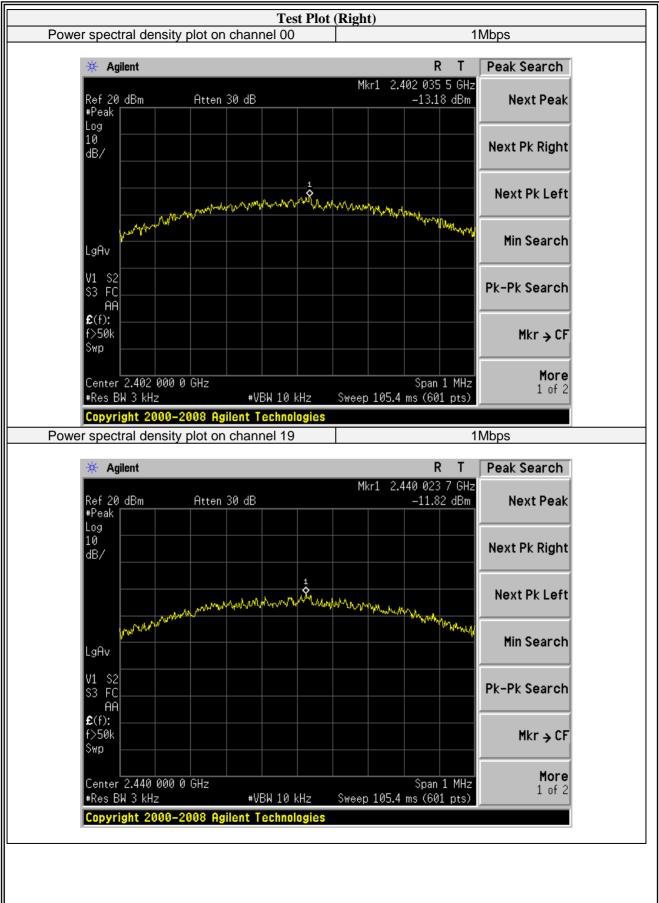








Report No.:S19030405002002







er spectral density plot on channel 39	1Mbps
* Agilent	R T Peak Search
Ref 20 dBm Atten 30 dB #Peak	Mkr1 2.480 010 1 GHz -11.23 dBm Next Peak
Log 10 dB/	Next Pk Right
h hun men man han han han han han han han han han h	Next Pk Left
LgAv	Min Search
V1 S2 S3 FC AA	Pk-Pk Search
£(f): f>50k Swp	Mkr → CF
Center 2.480 000 0 GHz #Res BW 3 kHz #VBW 10 kH	Span 1 MHz More Hz Sweep 105.4 ms (601 pts)
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7.6 CONDUCTED BAND EDGE MEASUREMENT

7.6.1 Applicable Standard

According to FCC Part 15.247(d) and KDB 558074 D01 15.247 Meas Guidance v05 Section 8.7.

7.6.2 Conformance Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

7.6.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.6.4 Test Setup

Please refer to Section 6.1 of this test report.

7.6.5 Test Procedure

The testing follows FCC KDB 558074 D01 15.247 Meas Guidance v05 Section 8.7.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously.

The EUT was operating in controlled its channel.

Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.

Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.

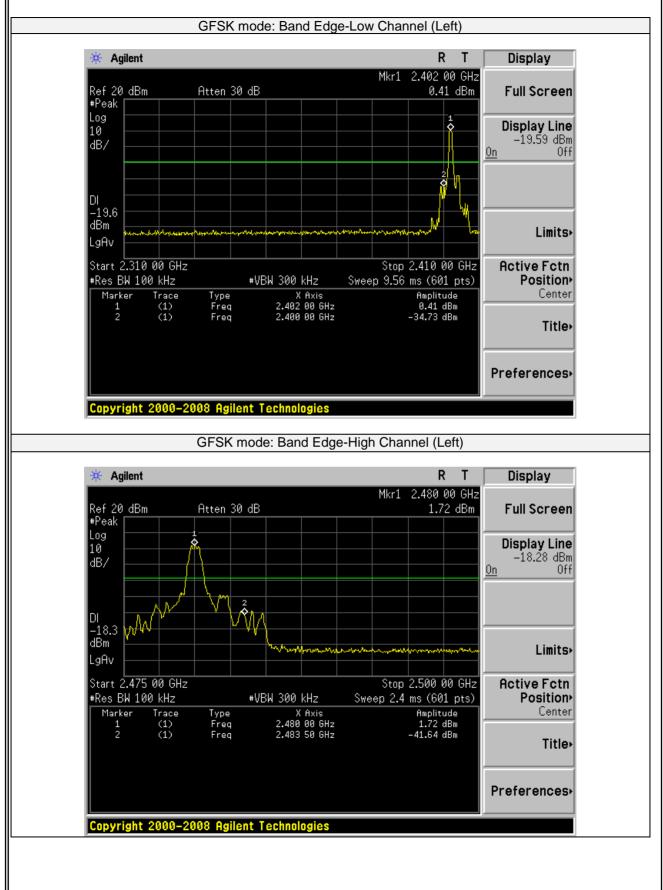
Repeat above procedures until all measured frequencies were complete.

7.6.6 Test Results

EUT:	TWS EARPHONES	Model No.:	LE-701
Temperature:	20 ℃	Relative Humidity:	48%
Test Mode:	Mode2/Mode4	Test By:	Mary Hu

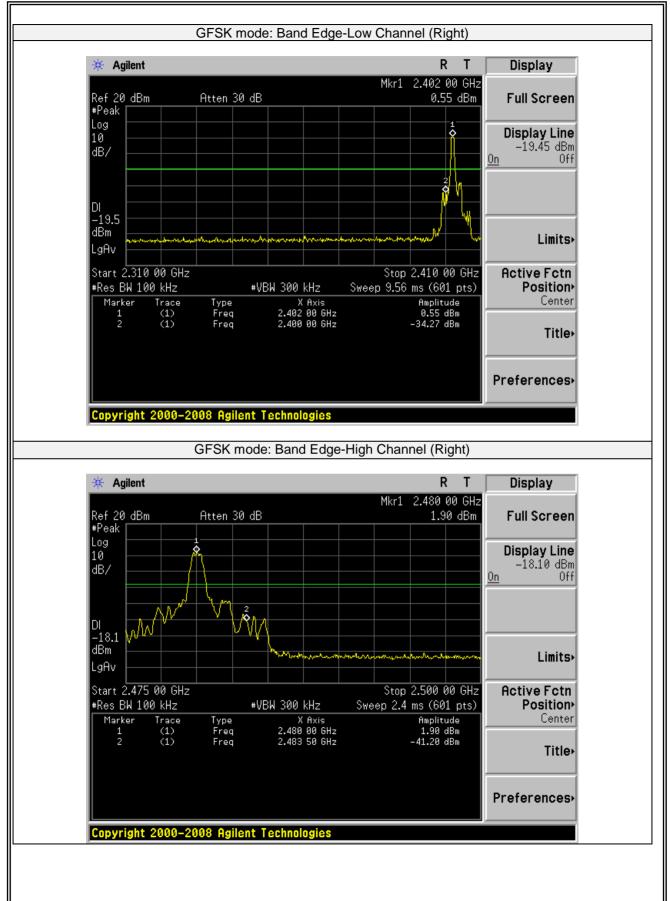


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7.7 SPURIOUS RF CONDUCTED EMISSIONS

7.7.1 Conformance Limit

1. Below -20dB of the highest emission level in operating band.

2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

7.7.2 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

7.7.3 Test Setup

Please refer to Section 6.1 of this test report.

7.7.4 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW= 300KHz to measure the peak field strength , and measure frequeny range from 9KHz to 26.5GHz.

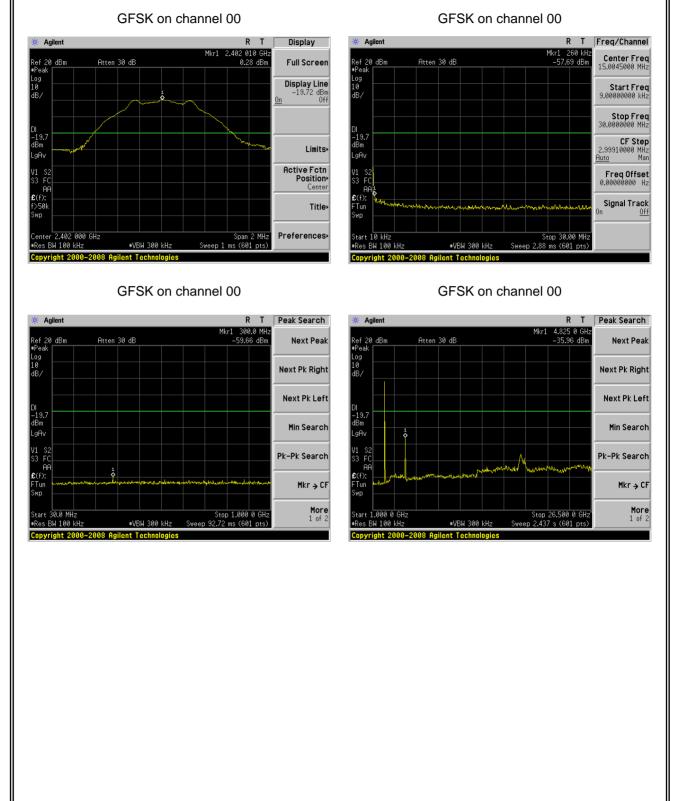
7.7.5 Test Results

Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data.





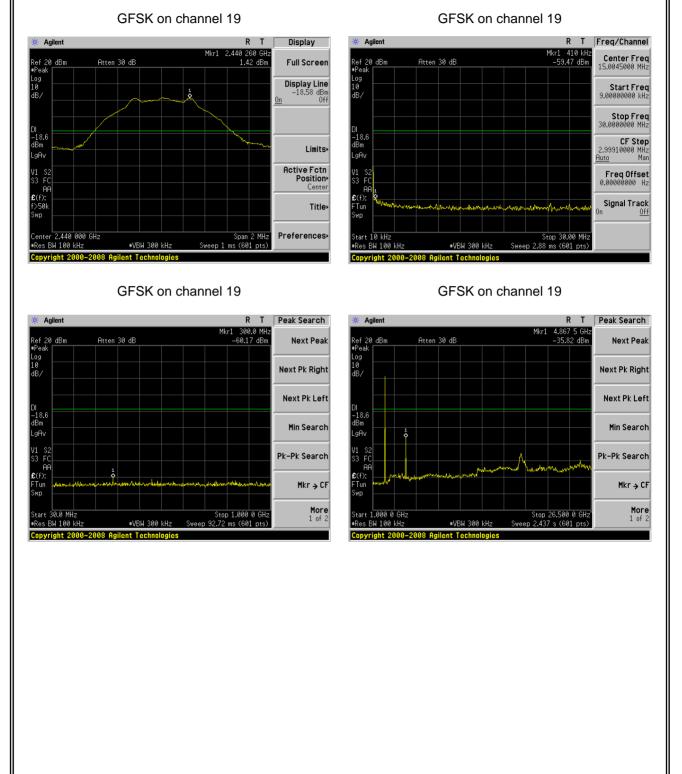
Test Plot (Left)







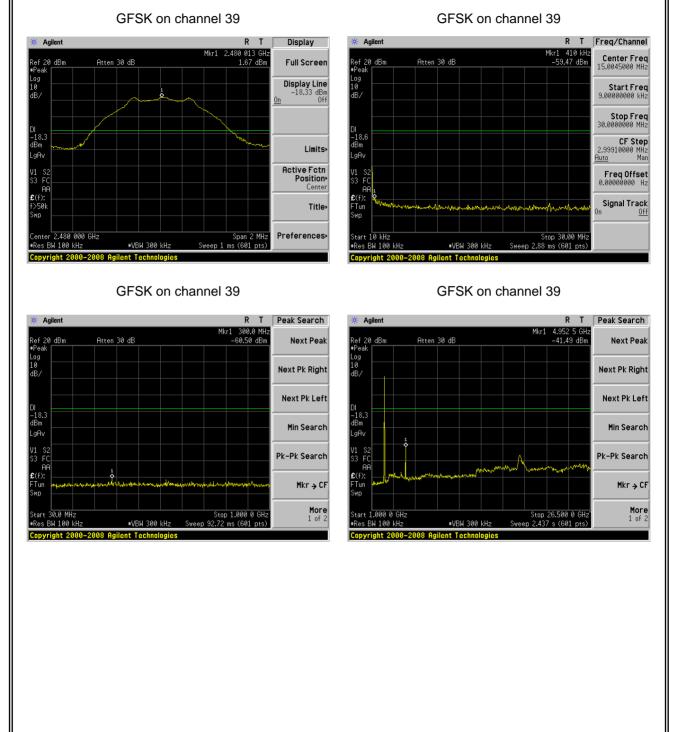
Test Plot (Left)





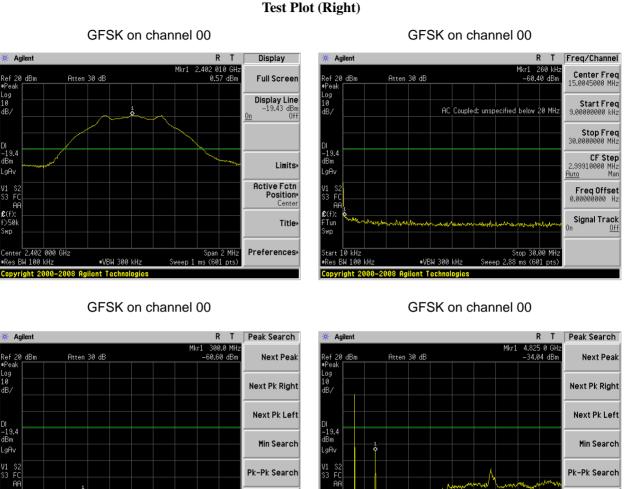


Test Plot (Left)









€(f)[·]

Tun

wp

Start 1.000 0 GHz

Res BW 100 kHz

vright 2

Mkr → CF

More 1 of 2

Stop 1.000 0 GHz Sweep 92.72 ms (601 pts)

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∎VBW 300 kHz

£(f)

Tur

iwp

Start 30.0 MHz ≡Res BW 100 kHz

Mkr → CF

More 1 of 2

Stop 26.500 0 GHz Sweep 2.437 s (601 pts)

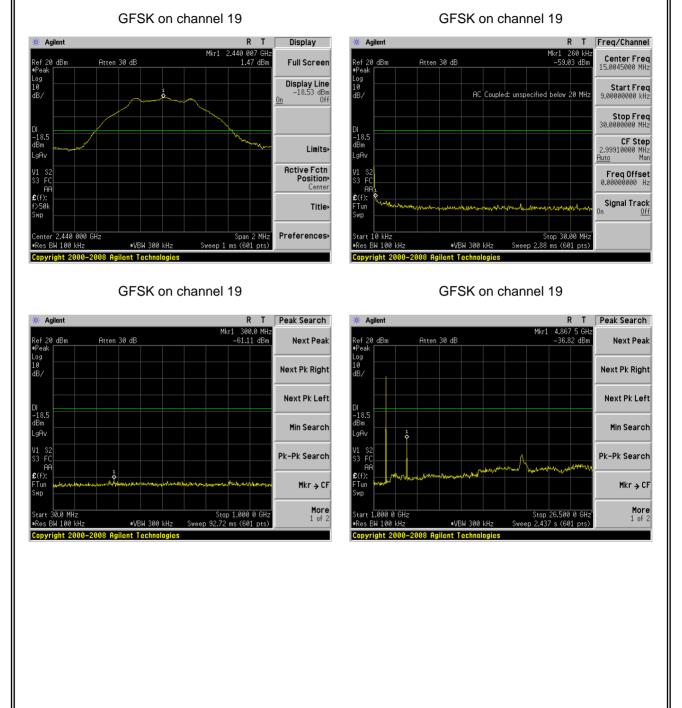
≢VBW 300 kHz

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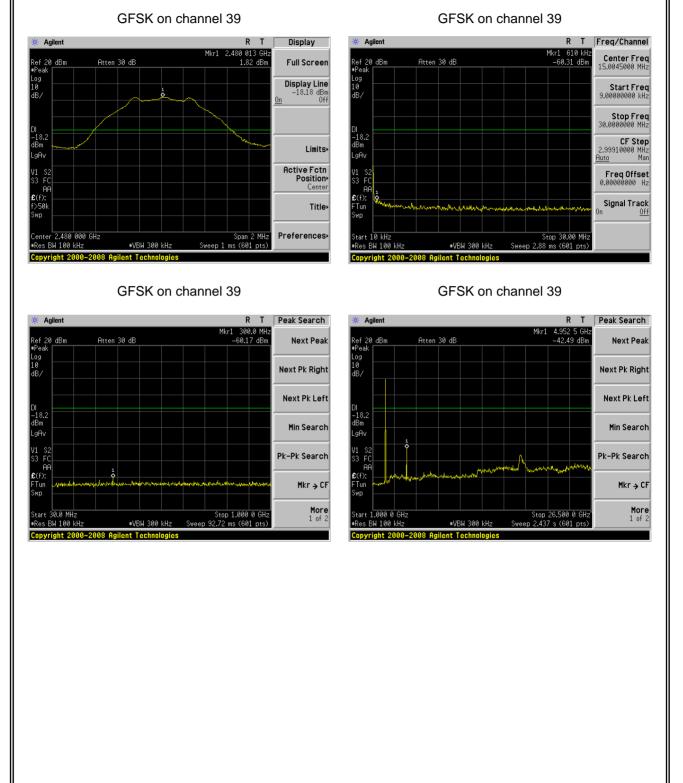
Test Plot (Right)







Test Plot (Right)







7.8 ANTENNA APPLICATION

7.8.1 Antenna Requirement

15.203 requirement: For intentional device, according to 15.203: 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.

7.8.2 Result

The EUT antenna is permanent attached FPC Antenna (Gain: 1.8dBi) It comply with the standard requirement.

END OF REPORT