

FCC Radio Test Report FCC ID: VO8-T92

This report concerns (check one): ■Original Grant □Class II Change

For

Bluetooth Headset

Model Name: T92

Brand Name: Bluedio

Report No.: ENC100918GZ45F1

Date of Issue: Sep.27, 2010

Prepared For

Guangzhou Liwei Electronics Co., Ltd.
No.33, Zhenzhongbei Road,Shenshan Industrial Park Baiyuan District
Guangzhou 510460 P.R. China

TEL: +86-20-8606 2626 FAX: +86-20-8606 2626-800

Prepared By

East Notice Certification Service Co., Ltd.
317/319, 3/F, HuiCheng Building, XiangPu Street, DongPu,
TianHe, GuangZhou, China

TEL: +86-20-2331 4234 FAX: +86-20-8256 8534





317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234

Fax:+86-020-8256 8534 Http://www.enc-lab.com

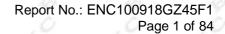




TABLE OF CONTENTS

1	. CERTIFICATION	<u> </u>	3
2	. SUMMARY OF TEST RESULTS		4
	2.1 TEST FACILITY	Á	5
	2.2 MEASUREMENT UNCERTAINTY	0.47	5
3	. GENERAL INFORMATION		6
	3.1 GENERAL DESCRIPTION OF EUT	,	6
	3.2 DESCRIPTION OF TEST MODES	á	8
	3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	048	8
	3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYST	TEM TESTED	g
	3.5 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)	<i>~</i>	10
4	. EMC EMISSION TEST	, Q	11
	4.1 CONDUCTED EMISSION MEASUREMENT	0.00	11
	4.1.1 POWER LINE CONDUCTED EMISSION LIMITS		11
	4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING		
	4.1.3 TEST PROCEDURE	40	12
	4.1.4 DEVIATION FROM TEST STANDARD	0.03	12
	4.1.5 TEST SETUP		12
	4.1.6 EUT OPERATING CONDITIONS	47	13
	4.1.7 TEST RESULTS	.0	14
	4.2 RADIATED EMISSION MEASUREMENT	<u> </u>	16
	4.2.1 RADIATED EMISSION LIMITS		16
	4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING	47	17
	4.2.3 TEST PROCEDURE	<i>O</i>	18
	4.2.4 DEVIATION FROM TEST STANDARD	<u></u>	18
	4.2.5 TEST SETUP		19
	4.2.6 EUT OPERATING CONDITIONS	A) T	19
	4.2.7 TEST RESULTS (BETWEEN30 – 1000 MHZ)	, O	20
	4.2.8 TEST RESULTS (ABOVE 1000 MHZ)	<u></u>	22
5	NUMBER OF HOPPING CHANNEL		46
	5.1 APPLIED PROCEDURES / LIMIT		46
	5.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	<u> </u>	46
	5.1.2 TEST PROCEDURE 5.1.3 DEVIATION FROM STANDARD	â	46
	5.1.3 DEVIATION FROM STANDARD	404	46
	5.1.4 TEST SETUP		
	5.1.5 EUT OPERATION CONDITIONS	<u>(</u>	46
	5.1.6 TEST RESULTS		47
6	. AVERAGE TIME OF OCCUPANCY	04	49
	6.1 APPLIED PROCEDURES / LIMIT	ΔŸ	49
	6 1 1 MEACHDEMENT INICTOLIMENTS LICT		10





Page 2 of 84

6.1.2 TEST PROCEDURE	
6.1.3 DEVIATION FROM STANDARD	
6.1.4 TEST SETUP	
6.1.5 EUT OPERATION CONDITIONS	
6.1.6 TEST RESULTS	
7. HOPPING CHANNEL SEPARATION MEASUREMENT	
7.1 APPLIED PROCEDURES / LIMIT	
7.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	
7.1.2 TEST PROCEDURE	63
7.1.3 DEVIATION FROM STANDARD	
7.1.4 TEST SETUP	63
7.1.5 EUT OPERATION CONDITIONS	2.00
7.1.6 TEST RESULTS	64
8 . BANDWIDTH TEST	
8.1 APPLIED PROCEDURES / LIMIT	
8.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	68
8.1.2 TEST PROCEDURE	
8.1.3 DEVIATION FROM STANDARD	68
8.1.4 TEST SETUP	68
8.1.5 EUT OPERATION CONDITIONS	68
8.1.6 TEST RESULTS	
9 . PEAK OUTPUT POWER TEST	73
9.1 APPLIED PROCEDURES / LIMIT	73
9.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	73
9.1.2 TEST PROCEDURE	73
9.1.3 DEVIATION FROM STANDARD	73
9.1.4 TEST SETUP	73
9.1.5 EUT OPERATION CONDITIONS	73
9.1.6 TEST RESULTS	74
10 . ANTENNA CONDUCTED SPURIOUS EMISSION	78
10.1 APPLIED PROCEDURES / LIMIT	78
10.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING	78
10.1.2 TEST PROCEDURE	78
10.1.3 DEVIATION FROM STANDARD	78
10.1.4 TEST SETUP	79
10.1.5 EUT OPERATION CONDITIONS	
10.1.6 TEST RESULTS	80
11 PHOTOGRAPHS OF TEST SETUP	





Page 3 of 84

1. CERTIFICATION

Applicant:	Guangzhou Liwei Electronics Co., LTD.	
Address:	No.33, Zhenzhongbei Road, Shenshan Industrial Park Baiyun District, Guangzhou 510460 P.R., china	
Product Description:	Bluetooth Headset	
Brand Name: Bluedio		
Model Number:	T92	
FCC ID:	VO8-T92	
Report Number:	ENC100918GZ45F1	
Date of Test:	Sep.18, 2010~Sep.27, 2010	
Standards:	FCC Part15, Subpart C(15.247)/ANSI C63.4: 2003	

WE HEREBY CERTIFY THAT:

East Notice Certification

The above equipment was tested by East Notice Certification Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

Checked By

Officered by

Authorized By

Ray Zhou Sep.27, 2010

Yemig (Sep.27, 2010



Page 4 of 84

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247), Subpart C				
Standard Section	Test Item	Judgment	Remark	
15.207	Conducted Emission	PASS	65	
15.247(c)	Antenna conducted Spurious Emission	PASS	Ó	
15.247(a)(1)	Hopping Channel Separation	PASS	204	
15.247 (b)(1)	Peak Output Power	PASS	4	
15.247 (c)	Radiated Spurious Emission	PASS	0	
15.247 (a)(1)(iii)	Number of Hopping Frequency	PASS	200	
15.247(a)(1)(iii)	Dwell Time	PASS	Ø	
15.205	Restricted Bands	PASS	CIDA	
15.203	Antenna Requirement	PASS	25	
1.1307 1.1310 2.1091 2.1093	RF Exposure Compliance	PASS	000	

NOTE:

(1)" N/A" denotes test is not applicable in this Test Report

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification



Page 5 of 84

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C03/CB03** at the location of CGEL Cunnan Street, Shayongnan, Sanyuanli District, Guangzhou, Guangdong, China, 510400.

FCC register No.: 597719

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U, (dB)	NOTE
DG-C03	CISPR	150 KHz ~ 30MHz	1.94	1000

B. Radiated Measurement:

East Notice Certification

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)	NOTE
CB03	CISPR	30MHz ~ 200MHz	04 V	3.82	04
4	4	30MHz ~ 200MHz	н∳	3.60	
A TO	THE PARTY OF THE P	200MHz ~ 1,000MHz	V	3.86	1.5
The same of the sa	140	200MHz ~ 1,000MHz	H	3.94	2049

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou Tel:+86-020-2331 4234

Fax:+86-020-8256 8534 Http://www.enc-lab.com



Page 6 of 84

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment Bluetooth Headset				
Brand Name	Bluedio	00 00 00 00°		
Model Name	T92	TO ATT ATT		
OEM Brand/Model Name	O N/A	20 20		
Model Difference	N/A	,04 ,04 ,04		
DIT DIT D	The EUT is a Bluetooth H	leadset		
	Operation Frequency:	2402~2480 MHz		
	Modulation Type:	GFSK(1Mbps) π/4-DQPSK(2Mbps)		
	Bit Rate of Transmitter	8-DPSK(3Mbps)		
	Number Of Channel	79 CH		
Product Description	Antenna Designation:	Please see Note 3.		
	Antenna Gain(Peak)	Please see Note 3.		
	Output Power:	2.08 dBm (1Mbps) 2.19 dBm (3Mbps)		
	in User's Manual, the EU ⁻ ITE/Computing Device. M	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.		
Channel List	Please refer to the Note 2	CAT CAT CAT		
Power Source	DC Voltage supplied from	AC/DC adapter & Li-ion battery		
Power Rating	#AC/DC Adapter: Model name:LW002 I/P AC 22-240V~ 50Hz, 350mA O/P 5.1~5.5V, 500mA # Li-ion battery 3.7Vdc			
Connecting I/O Port(s)	Please refer to the User's	Manual		
Products Covered	N/A	500 500 500		

Note:

East Notice Certification

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





Page 7 of 84

2. Channel List

Channel	Frequency(MHz)	Channel	Frequency(MHz)	Channel	Frequency(MHz)
00	2402	27	2429	54	2456
~1	2403	28	2430	55	2457
⁴ / ₂ ₄	2404	29	2431	56	2458
3	2405	30	2432	57	2459
4	2406	31	2433	58	2460
5	2407	32	2434	59	2461
6	2408	33	2435	60	2462
7.6	2409	34	2436	61	2463
8	2410	35	2437	62	2464
9	2411	36	2438	63	2465
9 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	9 43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	9 47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	<u>51</u>	2453	78	2480
25	2427	52	2454	1. 15	1. 15 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
26	2428	53	2455	140	04 704

3. Table for Filed Antenna

	Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
ſ	- 4	- 4	- 47	PRINTED ANT	N/A	1.80	BT Antenna





Page 8 of 84

3.2 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.

1	Pretest Mode	Description
Mode 1		CH00 (1Mbps/3Mbps) EUT only
4	Mode 2	CH39 (1Mbps/3Mbps) EUT only
45	Mode 3	CH78 (1Mbps/3Mbps) EUT only
.0	Mode 4	Charger Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as Following:

For Conducted Emission Final Test Mode Description	

For Radiated Emission				
Final Test Mode	Description			
Mode 1	CH00 (1Mbps/3Mbps) EUT only			
Mode 2	CH39 (1Mbps/3Mbps) EUT only			
Mode 3	CH78 (1Mbps/3Mbps) EUT only			

Note:

East Notice Certification

(1) The measurements are performed at the highest, middle, lowest available channels.

3.3 TABLE OF PARAMETERS OF TEXT 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 FHSS

Test software Version	Test program: Bluetest.exe					
Frequency 2402 MHz		2441 MHz	2480 MHz			
Parameters-1Mbps	A 3	A3 A	3			
Parameters-3Mbps	030	<u></u> 63	3			

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by FNC, this document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com Fax:+86-020-8256 8534 Http://www.enc-lab.com



Page 9 of 84

3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

1615	16.50	バックラ	14.50	15.50	feet
		E 1			
		E-1 EUT			
		EUI			





Page 10 of 84

3.5 DESCRIPTION OF SUPPORT UNITS (CONDUCTED MODE)

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.

1 16/1	() (C) () () ()	0 6.14	(2) (1,3,6(2)	5 3 Mel 2	L 2 WC2	1 1467
Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Bluetooth Headset	Bluedio	T92	VO8-T92	88286100728	EUT
145	,045,04	5 ,04	5,045	,045	,045	045
A	5 45 T	47	4 4	4	F 45	,
and the)O	- C	40 40	C	/ O	مكنير
14	204 204	204	204	204	200	04

Item	Shielded Type	Ferrite Core	Length Note	Note
14	204 204	100	200	204 204 204
3	4	4	9 4	4 4
TO STATE	CLOST CLO	F CATE	CAST	cost cost cost
7	÷ 4	A.T. Y	at a	The state of the s
. (0 0	,0	6 6	,0 ,0 ,1

Note:

- (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 <code>[Length]</code> column.





Page 11 of 84

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

EDECLIENCY (MU-)	Class A (Class A (dBuV)		Class B (dBuV)		
FREQUENCY (MHz)	Quasi-peak	Average	Quasi-peak	Average	Standard	
0.15-0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR	
0.50-5.0	73.00	60.00	56.00	46.00	CISPR	
5.0-30.0	73.00	60.00	60.00	50.00	CISPR	

0.15-0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50-5.0	73.00	60.00	56.00	46.00	FCC
5.0-30.0	73.00	60.00	60.00	50.00	FCC

Note

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	05/28/2011
2	LISN	Rolf Heine	NNB-2-16Z	99044	05/28/2011
3	50Ω Terminator	SHX	TF2-3G-A	08122901	05/28/2011
4	Transient Limiter	Agilent	11947A	3107A03668	05/28/2011
5	Test Cable	N/A	C-06_C03	N/A	05/28/2011
6	Emi Test Receiver	R&S	ESCS30	8333641017	05/28/2011

Remark: "N/A" denotes No Model No., Serial No. or No Calibration specified.

Receiver Parameters Setting

East Notice Certification

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

The results shown in this test cepart refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234

Fax:+86-020-8256 8534 Http://www.enc-lab.com



Page 12 of 84

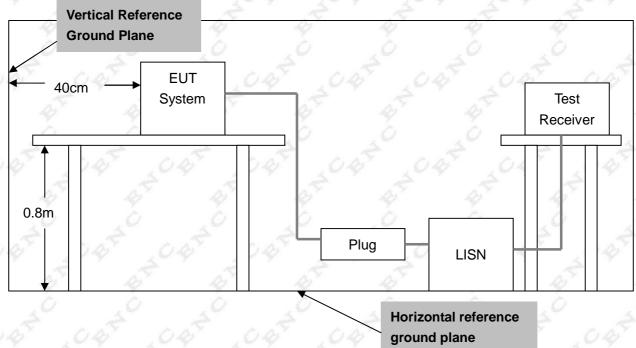
4.1.3 TEST PROCEDURE

- a) 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.
- b) 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.
- c) 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.
- d) LISN at least 80 cm from nearest part of EUT chassis.
- e) For the actual test configuration, please refer to the related Item -EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1. Support units were connected to second LISN.

2 .Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes Vertical Reference Ground Plane





Page 13 of 84

4.1.6 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.





Page 14 of 84

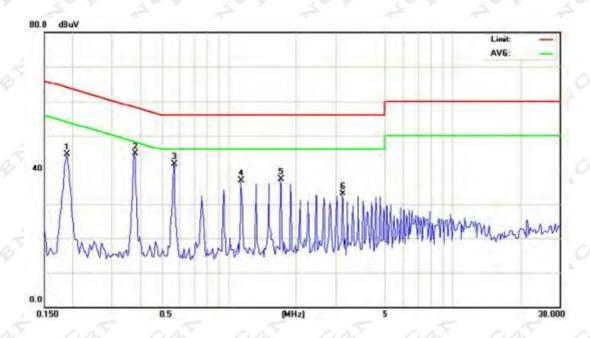
4.1.7 TEST RESULTS

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	AC 120V/60Hz
Test Mode:	Charger Mode	00 00	00 00

Freq.	Terminal	Measured(dBuV)		Limits(dBuV)		Margin	Note
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	Note
0.19	Line	44.61	*	64.04	54.04	-19.43	(QP)
0.38	Line	44.82	04	58.28	48.28	-13.46	(QP)
0.57	Line	41.66	*	56.00	46.00	-14.34	(QP)
1.15	Line	36.96	*	56.00	46.00	-19.04	(QP)
1.72	Line	37.37	*	56.00	46.00	-18.63	(QP)
3.24	Line	33.09	04	56.00	46.00	-22.91	(QP)

Remark:

- (1) All readings are QP Mode value unless otherwise stated AVG in column of 『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。 In this case, a "*" marked in AVG Mode column of Interference Voltage Measured。
- (2) Measuring frequency range from 150KHz to 30MHz.



The results shown in this test eport refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.





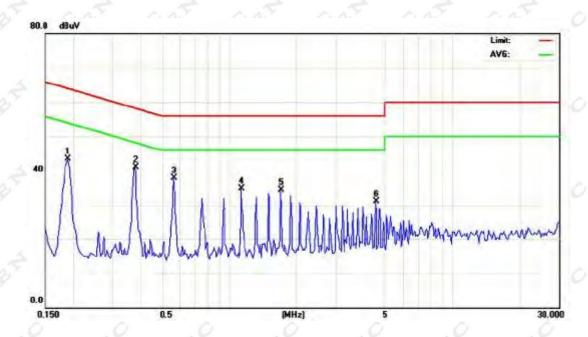
Page 15 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	AC 120V/60Hz
Test Mode:	Charger Mode	0 ,0	

Freq.	Terminal	Measured	d(dBuV)	Limits(dBuV)	Margin	Note	
(MHz)	L/N	QP-Mode	AV-Mode	QP-Mode	AV-Mode	(dB)	Note	
0.19	Neutral	43.49	*	64.04	54.04	-20.55	(QP)	
0.38	Neutral	41.23	*	58.28	48.28	-17.05	(QP)	
0.57	Neutral	37.99	04	56.00	46.00	-18.01	(QP)	
1.15	Neutral	34.92	*	56.00	46.00	-21.08	(QP)	
1.71	Neutral	34.63	*	56.00	46.00	-21.37	(QP)	
4.56	Neutral	31.04	*	56.00	46.00	-24.96	(QP)	

Remark:

- (1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz; SPA setting in RBW=10KHz, VBW =10KHz, Swp. Time = 0.2 sec./MHz. Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=10KHz, VBW=10KHz, Swp. Time =0.2 sec./MHz.
- (2) All readings are QP Mode value unless otherwise stated AVG in column of Note. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a "*" marked in AVG Mode column of Interference Voltage Measured.
- (3) Measuring frequency range from 150KHz to 30MHz.







Page 16 of 84

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

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. Frequencies

Frequencies (MHz)	Field Strength (micorvolts/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 4
88~216	150	3
216~960	049 200 2049	204 234 204
Above 960	500	3 2

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

Frequencies (MHz)	Class A (dBu	ıV/m) (at 3M)	Class B (dBuV/m) (at 3M)		
Frequencies (IVIF12)	PEAK	AVERAGE	PEAK	AVERAGE	
Above 1000	80	60	74	54	

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Upper freque	uency generated or ency of measurement evice or on which the ites or tunes (MHz)	l Range (MHz)					
Below 1.705	4 204	04	100	30	204	209	1
1.705 – 108	4 4	4	4	1000	J. 4	3	
108 – 500	,0 ,0	,0	,0	2000) (2	
500 – 1000	5 05°	005	005	5000	005	02	3
Above 1000	4 4	5 th harmon whichever	ic of the highe	st frequenc	y or 40 GHz		

cation in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is available on request and the brief issued by FNC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brie information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com Fax:+86-020-8256 8534 Http://www.enc-lab.com



Page 17 of 84

4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1 🔏	Antenna	ETS	3115	00075789	05/28/2011
2	Amplifier	Agilent	8449B 3	008A02274	05/28/2011
3	Spectrum	Agilent	E4408B	US39240143	05/28/2011
4	Test Cable	HUBER+SUHNER	GZ02 High Fre	N/A	05/28/2011
5	Antenna	Schwarbeck	VULB9160	9160-3232	05/28/2011
6	Amplifier	HP	8447D	2944A09673	05/28/2011
7	Test Receiver	R&S	ESCI	100895	05/28/2011
8	Test Cable	N/A	C-01_GZ02	N/A	05/28/2011
9	Controller	СТ	SC100	N/A	N/A

Remark: "N/A" denotes No Model Name / Serial No. and No Calibration specified.

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

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification



Page 18 of 84

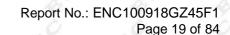
4.2.3 TEST PROCEDURE

- 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 meters above the ground at a 3 meter semi-anechoic chamber. 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; 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. 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.
- e. 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.
- f. For the actual test configuration, please refer to the related Item -EUT Test Photos.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

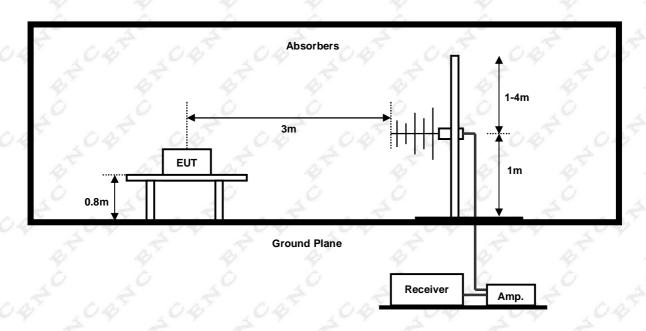




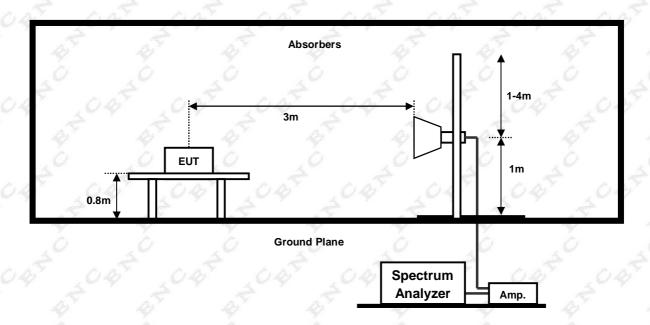


4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com Fax:+86-020-8256 8534 Http://www.enc-lab.com



Page 20 of 84

4.2.7 TEST RESULTS (BETWEEN30 - 1000 MHZ)

EUT:		Bluetooth Hea	th Headset Model Name: T92					
Tempera	ture:	22 ℃	30 30	Relative Humid	ity: <	70 %	50	5
Pressure	: 04	1015hPa	00	Test Voltage:	12	DC 3.7	7V	00
Test Mod	le:	TX 2402MHz	-CH00-1Mbps			7	1	
Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)		ts(QP) uV/m)	Margin (dB)	Note
54.41	V	49.55	-19.27	30.28	40	0.00	-9.72	04
112.36	V	52.47	-21.17	31.30	43	3.50	-12.20	
207.84	V	56.68	-22.01	34.67	43	3.50	-8.83	
357.28	V	52.97	-17.64	35.33	40	6.00	-10.67	کنیہ
437.43	V	47.71	-15.50	32.21	40	6.00	-13.79	04
587.93	V	49.92	-12.77	37.15	40	6.00	-8.85	

Remark:

- (1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = $0.3 \text{ sec./MHz}_{\odot}$
- (2) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.
- (4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification

317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com Fax:+86-020-8256 8534 Http://www.enc-lab.com



-9.85

Page 21 of 84

EUT:		Bluetooth Headset		Model Name:		T92		
Temperat	ture:	22 ℃	A T A	Relative Humid	ity:	70 %		
Pressure	:	1015hPa	49 49	Test Voltage:		DC 3.7	7V	4
Test Mod	e:	TX 2402MHz	-CH00-1Mbps	40	- 5	0	4	5
Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)		ts(QP) uV/m)	Margin (dB)	Note
77.55	Н	52.97	-22.88	30.09	40	0.00	-9.91	
213.73	Н	54.48	-21.76	32.72	43	3.50	-10.78	كنير
357.09	, 6/4	54.84	-17.64	37.20	46	6.00	-8.80	04
488.86	Ϋ́H	49.53	-14.58	34.95	46	6.00	-11.05	
591.67	Н	46.62	-12.68	33.94	46	6.00	-12.06	

Remark

701.74

Н

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = $0.3 \text{ sec./MHz}_{\odot}$

36.15

46.00

- (2) All readings are Peak unless otherwise stated QP in column of <code>[Note]</code> . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (3) Measuring frequency range from 30MHz to 1000MHz.

-10.79

46.94

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table.







Page 22 of 84

4.2.8 TEST RESULTS (ABOVE 1000 MHZ)

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode ·	TX 2402MHz – CH 00-1Mbps	1112 1112	CIAT CIAT

Freq. Ant.Pol. (MHz) H/V	Reading		Ant./CF	Act. Limit		15 15			
	Peak (dBuV)	AV (dBuV)	CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note	
2390.00	V	17.61	7.55	31.10	48.71	38.65	74.00	54.00	X/E
2402.09	V	62.23	27.81	31.09	93.32	58.90	1.5	1.5	X/F
4804.01	V	67.56	45.64	4.20	71.76	49.84	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of \[\text{Note} \] . Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform_0
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within

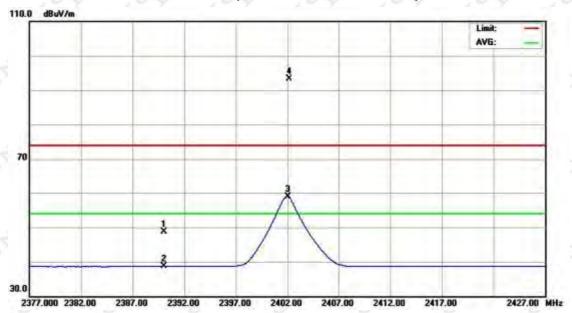
The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by FNC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brie information for its validation can be assessable and confirmed at http://www.enc-lab.com.

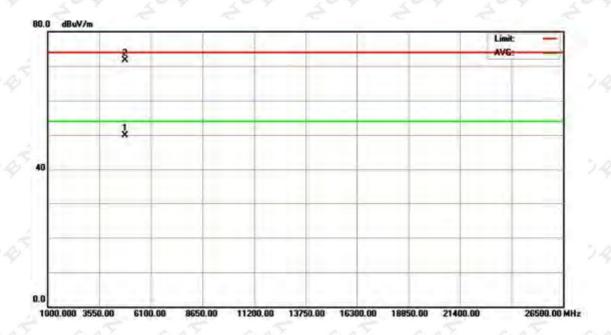
East Notice Certification



Page 23 of 84

TX CH00 (Above 1000 MHz, Vertical)









Page 24 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	TX 2402MHz - CH 00-1Mbps	, 0	20 20 2

Freq.	Ant.Pol.	Rea	ding	Ant./CF	Act. I	Limit 🔾 🔷 🧷	,04	,0	4
(MHz)	H/V	Peak	AV	CF(dB)	Peak	AV	Peak	AV	Note
(1711 12)	11/0	(dBuV)	(dBuV)	Ci (ub)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	7
2390.00	Н	17.74	7.46	31.10	48.84	38.56	74.00	54.00	X/E
2401.90	, (H 4)	61.48	27.47	31.09	92.57	58.56	,04	,0	X/F
4803.95	T H	65.05	44.78	4.20	69.25	48.98	74.00	54.00	X/H

Remark:

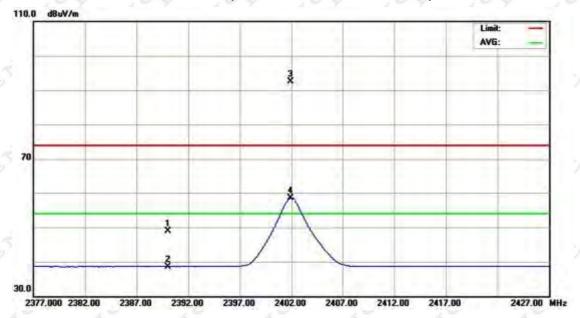
East Notice Certification

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna



Page 25 of 84

TX CH00 (Above 1000 MHz, Horizontal)









Page 26 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 ℃	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	TX 2441MHz -CH39-1Mbps	,0	20 20 2

Freq. Ant.Pol. (MHz) H/V	Ant Pol	Reading		Apt /CE	Act. Limit			4, 4	
	-40	Peak (dBuV)	AV (dBuV)	Ant./CF CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note
2440.92	V	64.47	28.95	31.03	95.50	59.98	A	_ is	X/F
4882.13	V4	60.46	42.60	4.51	64.97	47.11	74.00	54.00	X/H

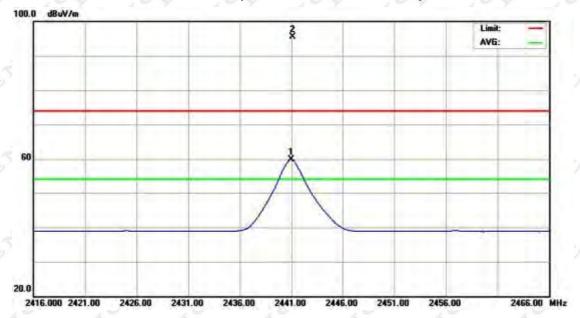
Remark

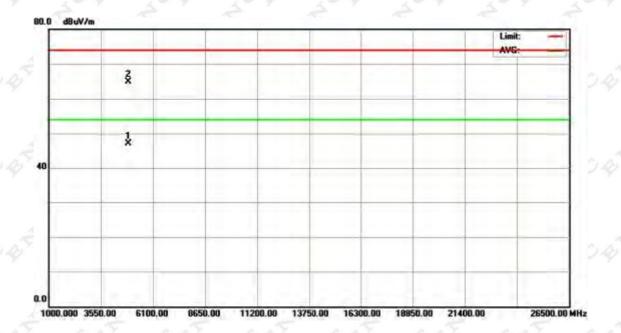
- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna



Page 27 of 84

TX CH39 (Above 1000 MHz, Vertical)









Page 28 of 84

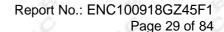
EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode ·	TX 2441MHz -CH39-1Mbps	000 000	CIDY CIDY

	Ant Dol	Reading		A = 1 /CE	Act. Limit		1.5		
	Ant.Pol. H/V	Peak (dBuV)	AV (dBuV)	Ant./CF CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note
2441.13	, O 4	59.36	26.78	31.03	90.39	57.81	,04	,0	X/F
4881.48	H	59.20	41.91	4.51	63.71	46.42	74.00	54.00	X/H

Remark

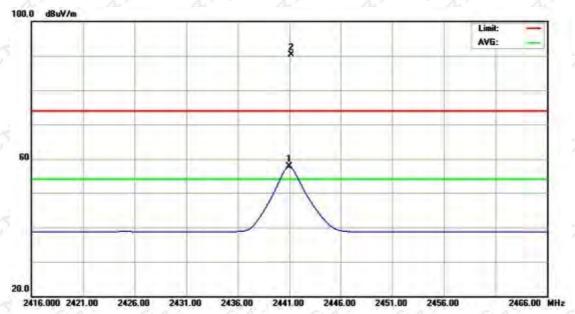
- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

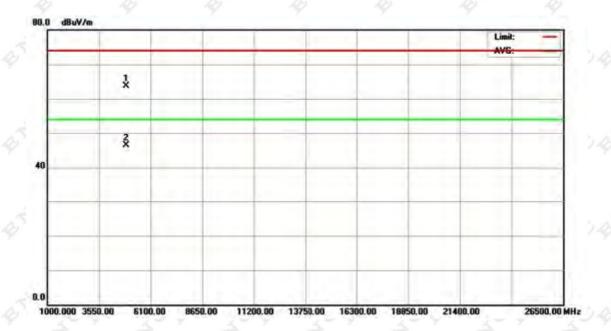






TX CH39 (Above 1000 MHz, Horizontal)









Page 30 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 ℃	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	TX 2480MHz -CH78-1Mbps	,0	10 10 10

Freq. Ant.Po	Ant Dol	Ant Bol Reading		Ant./CF	Act.	Limit 🗸 🧳	,04	4, ×	
	H/V	Peak (dBuV)	AV (dBuV)	CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note
2480.08	V	64.57	29.22	30.98	95.55	60.20		_1	X/F
2483.50	V 4	24.81	12.52	30.97	55.78	43.49	74.00	54.00	X/E
4959.89	V	55.74	39.20	4.81	60.55	44.01	74.00	54.00	X/H

Remark:

East Notice Certification

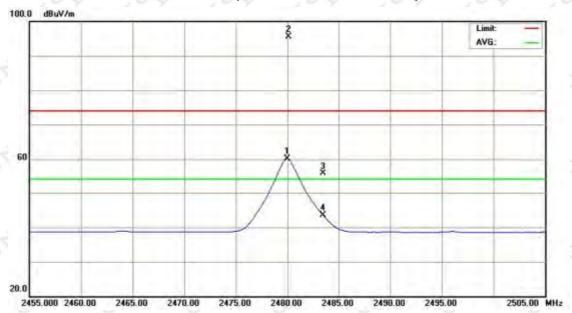
- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

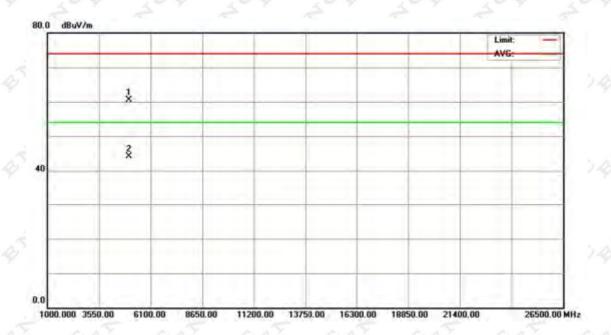
The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is sued by FNC, this document is available on request and the brie nformation for its validation can be assessable and confirmed at http://www.enc-lab.com.



Page 31 of 84

TX CH78 (Above 1000 MHz, Vertical)









Page 32 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 ℃	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	TX 2480MHz -CH78-1Mbps	,0	,0 ,0 ,

Freq.	Ant.Pol.	Ant Bol Reading		Ant./CF	Act. Limit		,04	4,	
(MHz)	H/V	Peak	AV	CF(dB)	Peak	AV	Peak	AV	Note
(IVIDZ) H	Γ1/ V	(dBuV) (dBuV) CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	3		
2480.10	Н	64.38	30.54	30.98	95.36	61.52	2	Lis V	X/F
2483.50	, (H.4)	24.60	12.41	30.97	55.57	43.38	74.00	54.00	X/E
4960.02	T H	53.60	38.07	4.81	58.41	42.88	74.00	54.00	X/H

Remark:

East Notice Certification

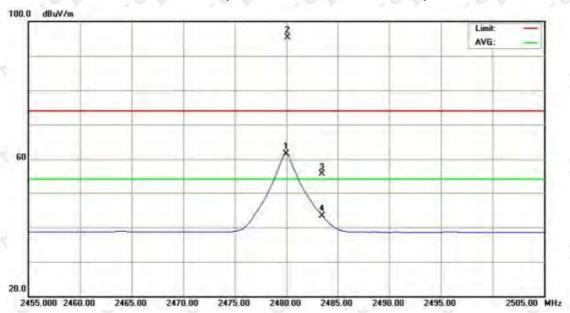
- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。
- (4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is sued by FNC, this document is available on request and the brie nformation for its validation can be assessable and confirmed at http://www.enc-lab.com.



Page 33 of 84

TX CH78 (Above 1000 MHz, Horizontal)









Page 34 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	TX 2402MHz - CH 00-3Mbps	20	10 10 1

Freq. Ant.Pol. (MHz) H/V	Ant Dol	Reading		Ant /CE	Act.	Limit 🔷	,04	4,	
		Peak (dBuV)	AV (dBuV)	Ant./CF CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note
2390.00	V	17.61	7.64	31.10	48.71	38.74	74	54.00	X/E
2401.92	V	64.38	31.03	31.09	95.47	62.12	,04	,0	X/F
4804.01	V	61.75	42.30	4.20	65.95	46.50	74.00	54.00	X/H

Remark

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

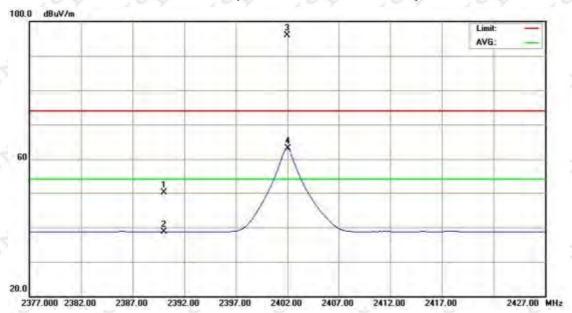
The results shown in this (est report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is sued by FNC, this document is available on request and the brie nformation for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification



Page 35 of 84

TX CH00 (Above 1000 MHz, Vertical)









Page 36 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	TX 2402MHz - CH 00-3Mbps	,0	,0 ,0 ,

Freq.	Ant.Pol.	Rea	Reading		Act. Limit		,04",0		4
(MHz)	H/V	Peak	AV	Ant./CF CF(dB)	Peak	AV	Peak	AV	Note
(IVII IZ)	Γ1/ V	(dBuV)	(dBuV)	CF(ub)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	3
2390.00	Н	19.00	7.57	31.10	50.10	38.67	74.00	54.00	X/E
2401.95	, (H.4)	64.38	31.03	31.09	95.47	62.12	,04	,0	X/F
4803.95	T H	60.02	41.35	4.20	64.22	45.55	74.00	54.00	X/H

Remark

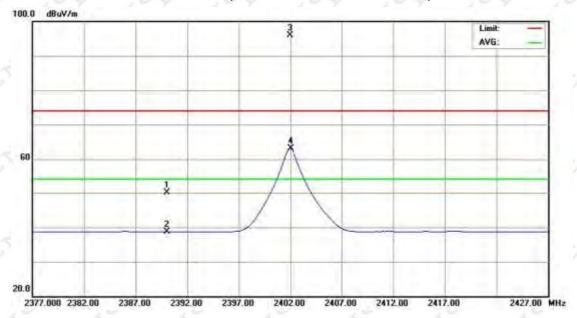
- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

The results shown in this (est report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is sued by FNC, this document is available on request and the brie nformation for its validation can be assessable and confirmed at http://www.enc-lab.com.



Page 37 of 84

TX CH00 (Above 1000 MHz, Horizontal)









Page 38 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	TX 2441MHz – CH 39-3Mbps	, 0	20 20 2

Freq.	Ant Pol	Ant.Pol. Reading		Ant./CF	Act. Limit		,04",0		\$1°
(MHz)	H/V	Peak (dBuV)	AV (dBuV)	CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note
2441.00	V	62.49	27.66	31.03	93.52	58.69	2	1	X/F
4882.05	V	57.12	39.67	4.51	61.63	44.18	74.00	54.00	X/H

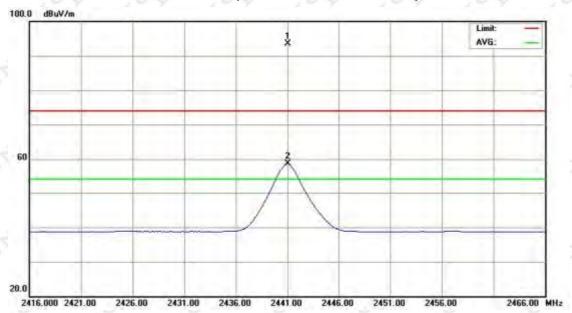
Remark:

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna



Page 39 of 84

TX CH39 (Above 1000 MHz, Vertical)









Page 40 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 ℃	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	TX 2441MHz -CH39-3Mbps	,0	10 10 10

Freq.	Ant.Pol.	Rea	ding	Ant./CF	Act. I	_imit() 4)	,04	,0	\$ "
(MHz)	H/V	Peak (dBuV)	AV (dBuV)	CF(dB)	Peak (dBuV/m)	AV (dBuV/m)	Peak (dBuV/m)	AV (dBuV/m)	Note
2441.00	Н	64.77	30.49	31.03	95.80	61.52	X	- A	X/F
4881.83	, H 4	53.73	38.26	4.51	58.24	42.77	74.00	54.00	X/H

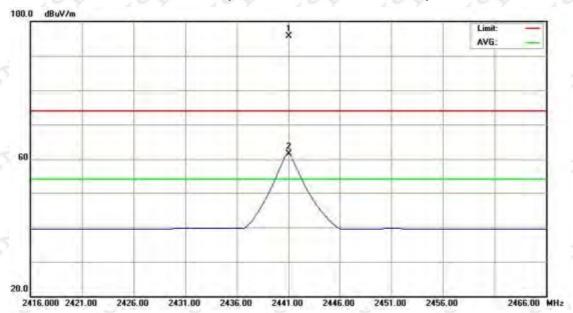
Remark:

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna



Page 41 of 84

TX CH39 (Above 1000 MHz, Horizontal)









Page 42 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	TX 2480MHz -CH78-3Mbps	,0	,0 ,0 ,

Freq.	Ant.Pol.	Rea	Reading		Act. Limit		,04",0		47
(MHz)	H/V	Peak	AV	Ant./CF CF(dB)	Peak	AV	Peak	AV	Note
(IVII IZ)	11/ V	(dBuV)	(dBuV)	CF(ub)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	3
2480.00	V	60.61	26.65	30.98	91.59	57.63	2	Lis V	X/F
2483.50	V	20.32	10.97	32.35	52.67	43.32	74.00	54.00	X/E
4960.26	V	53.37	35.94	4.81	58.18	40.75	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

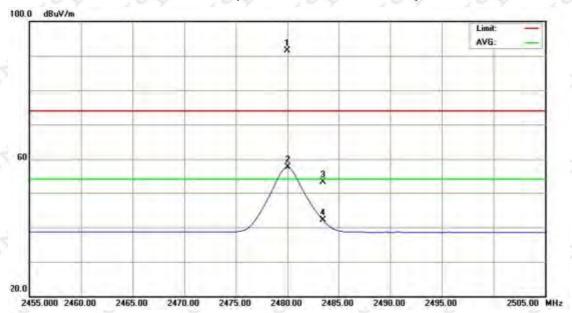
The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by FNC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brie information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification



Page 43 of 84

TX CH78 (Above 1000 MHz, Vertical)









Page 44 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 ℃	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	TX 2480MHz -CH78-3Mbps	,0	.0 .0 .

Freq.	Ant.Pol.	Rea	Reading		Act. Limit		,04",0		4
(MHz)	H/V	Peak	AV	Ant./CF CF(dB)	Peak	AV	Peak	AV	Note
(IVITZ)	∏ / V	(dBuV)	(dBuV)	CF(ub)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	3
2480.00	Н	62.06	29.20	30.98	93.04	60.18	2	Lis V	X/F
2483.50	, O 4)	23.94	11.52	30.97	54.91	42.49	74.00	54.00	X/E
4960.26	T H	48.09	45.50	3.98	52.07	49.48	74.00	54.00	X/H

Remark:

- (1) All readings are Peak unless otherwise stated QP in column of <code>『Note』</code>. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform.
- (2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency. "F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)
- (3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission .
- (4) Data of measurement within this frequency range shown "*" in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
- (5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (6) EUT Orthogonal Axis: "X" denotes Laid on Table; "Y" denotes Vertical Stand; "Z" denotes Side Stand
- (7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

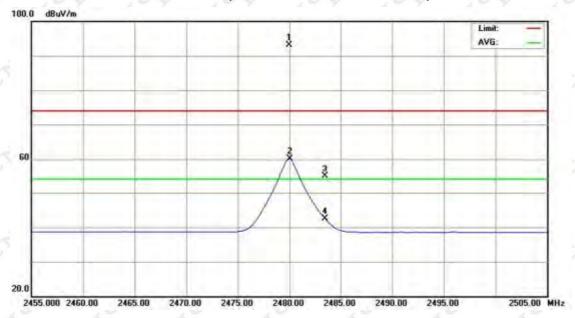
The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by FNC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brie information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification



Page 45 of 84

TX CH78 (Above 1000 MHz, Horizontal)









Page 46 of 84

5. NUMBER OF HOPPING CHANNEL

5.1 APPLIED PROCEDURES / LIMIT

	FCC Part15 (15.247), Subpart C							
Section Test Item Frequency Range (MHz) Result								
15.247 (a)(1)(iii)	Number of Hopping Channel	2400-2483.5	PASS					

5.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	05/28/2011

Remark: "N/A" denotes No Model Name, Serial No. or No Calibration specified.

Spectrum Parameters	Setting		
Attenuation	Auto		
Span Frequency	> Operating Frequency Range		
RB	149 2049 100 kHz 9 2049 2049		
VB	100 kHz		
Detector	Peak		
Trace	Max Hold		
Sweep Time	14 204 204 Auto 4 204 204		

5.1.2 TEST PROCEDURE

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

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



5.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by FNC, this document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification

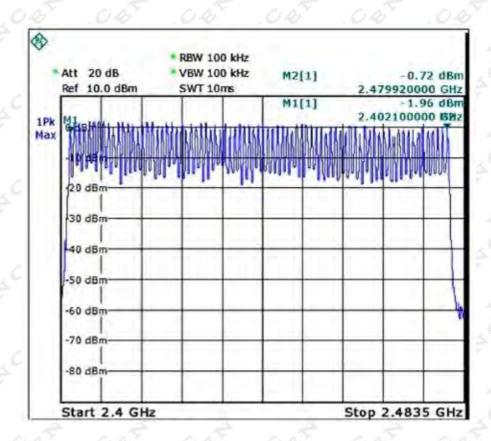
317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou Tel:+86-020-2331 4234



Page 47 of 84

5.1.6 TEST RESULTS

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	Hopping Mode -1Mbps	700 YOU	704 704
Numb	per of Hopping Channel	49	479



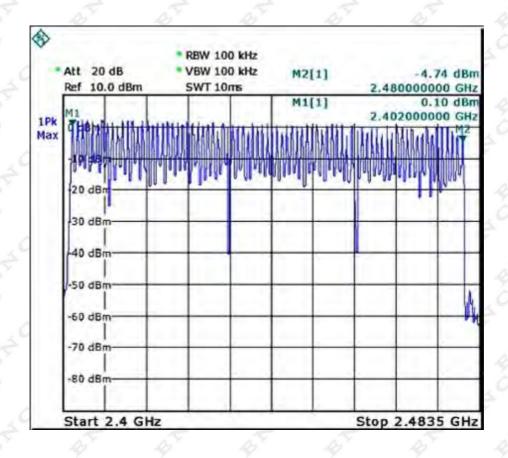




Report No.: ENC100918GZ45F1 Page 48 of 84

EUT: O.	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	Hopping Mode -3Mbps	30	A A

Number of Hopping Channel 79







Page 49 of 84

6. AVERAGE TIME OF OCCUPANCY

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C							
Section Test Item Limit Frequency Range (MHz) Result							
15.247 (a)(1)(iii)	15.247 (a)(1)(iii) Average Time of Occupancy 0.4sec 2400-2483.5 PASS						

6.1.1 MEASUREMENT INSTRUMENTS LIST

Á	Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
	1	Spectrum Analyzer	R&S	FSP 40	100185	05/28/2011

Remark: "N/A" denotes No Model Name, Serial No. or No Calibration specified.

6.1.2 TEST PROCEDURE

- a. The transmitter output (antenna port) was connected to the spectrum analyzer
- b. Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- c. Use a video trigger with the trigger level set to enable triggering only on full pulses.
- d. Sweep Time is more than once pulse time.
- e. Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- f. Measure the maximum time duration of one single pulse.
- g. Set the EUT for DH5, DH3 and DH1 packet transmitting.
- h. Measure the maximum time duration of one single pulse.
- i. DH5 Packet permit maximum 1600/79/6 = 3.37 hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $3.37 \times 31.6 = 106.6$ within 31.6 seconds.
- j. DH3 Packet permit maximum 1600 / 79 / 4 = 5.06 hops per second in each channel (3 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $5.06 \times 31.6 = 160$ within 31.6 seconds.
- k. DH1 Packet permit maximum 1600 / 79 / 2 = 10.12 hops per second in each channel (1 time slot RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $10.12 \times 31.6 = 320$ within 31.6 seconds.

6.1.3 DEVIATION FROM STANDARD

No deviation.

East Notice Certification

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document is available on request and the brie information for its validation can be assessable and confirmed at http://www.enc-lab.com.

317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com



Page 50 of 84

6.1.4 TEST SETUP

EUT	1		47	SPECTRUM
	÷ ·	4	7	ANALYZER

6.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.





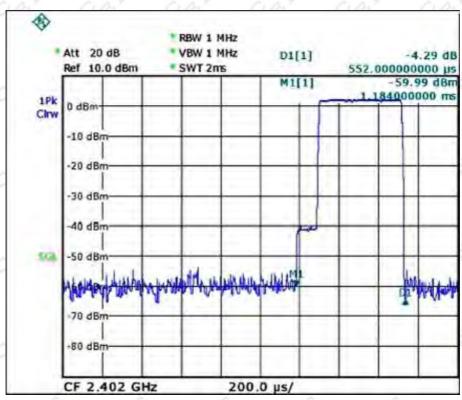
Page 51 of 84

6.1.6 TEST RESULTS

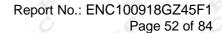
EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 ℃	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH00-DH1/DH3/DH5 -1Mbps	104 104	704 704

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits (s)
DH1	2402MHz	0.552	0.177	0.400
DH3	2402MHz	1.832	0.293	0.400
DH5	2402MHz	3.152	0.336	0.400

CH00-DH1

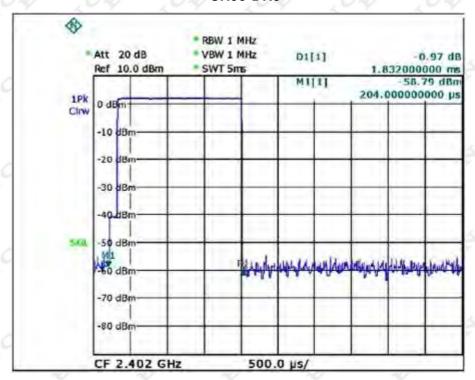




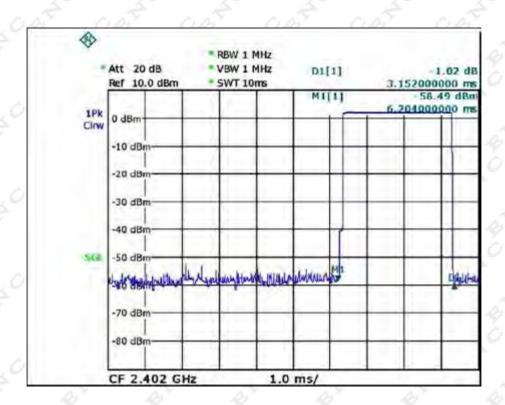




CH00-DH3



CH00-DH5



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com

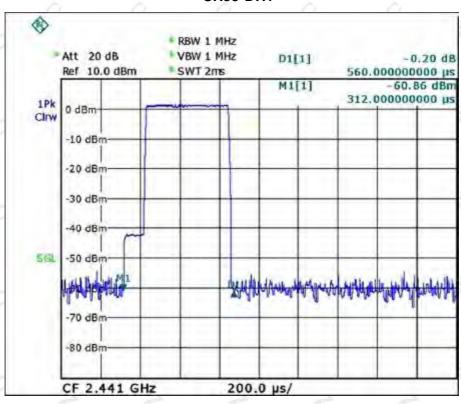


Page 53 of 84

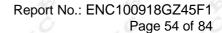
EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH39 -DH1/DH3/DH5 -1Mbps	40	10 10 1

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits (s)
DH1	2441MHz	0.560	0.179	0.4000
DH3	2441MHz	1.830	0.293	0.4000
0 4 DH5 0 4	2441MHz	3.080	0.329	0.4000

CH39-DH1

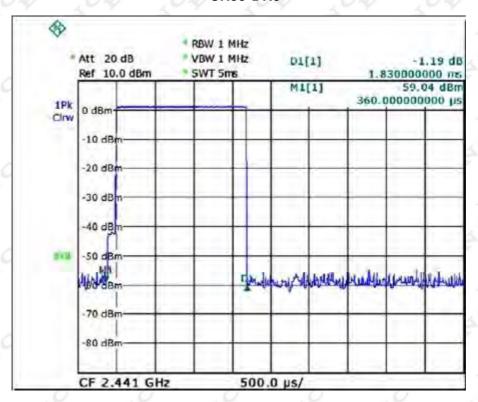




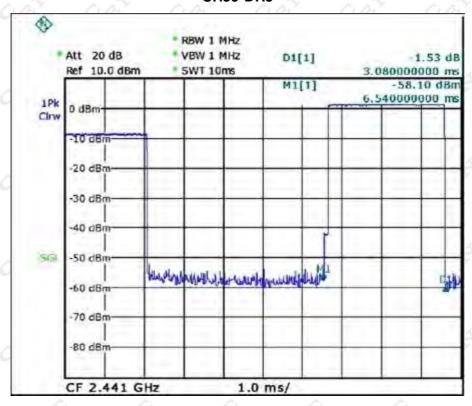




CH39-DH3



CH39-DH5



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com

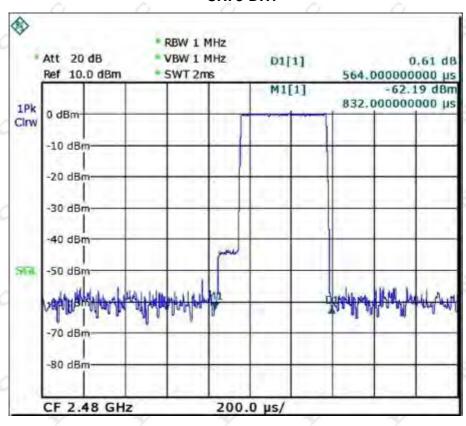


Page 55 of 84

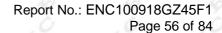
EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 ℃	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	CH39 -DH1/DH3/DH5 -1Mbps	, O	() ()

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits (s)
DH1	2480MHz	0.564	0.181	0.4000
DH3	2480MHz	1.830	1.860	0.4000
0 4 DH5 0 4 V	2480MHz	3.070	0.328	0.4000

CH78-DH1

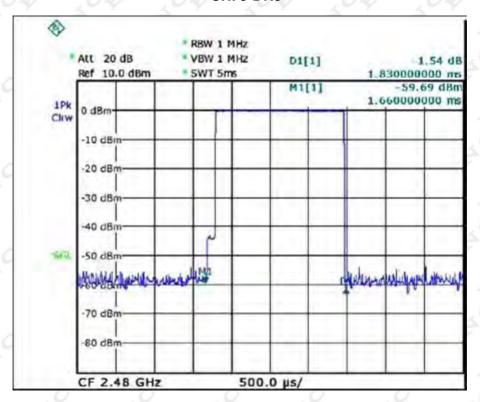




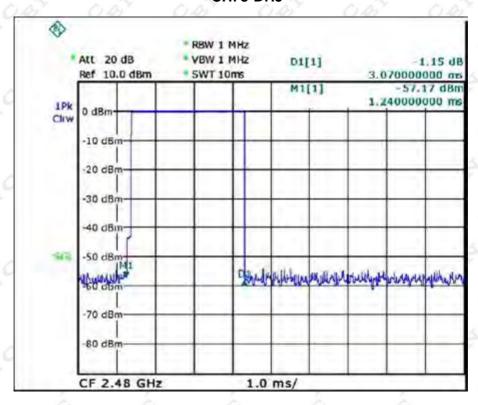




CH78-DH3



CH78-DH5



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com

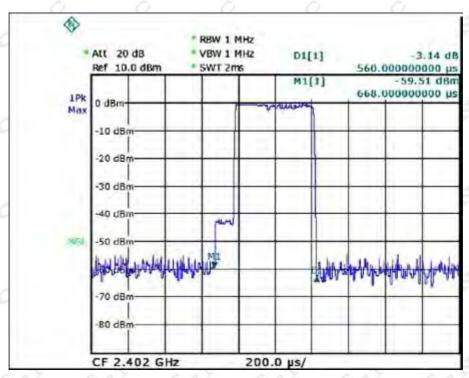


Page 57 of 84

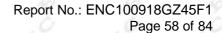
EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	CH00-DH1/DH3/DH5 -3Mbps	40	0 10 10

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits (s)
DH1	2402MHz	0.560	0.179	0.4000
DH3	2402MHz	1.848	0.296	0.4000
0.45 DH5 0.45	2402MHz	3.108	0.332	0.4000

CH00-DH1

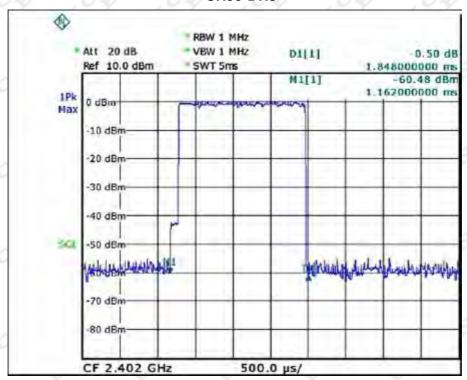




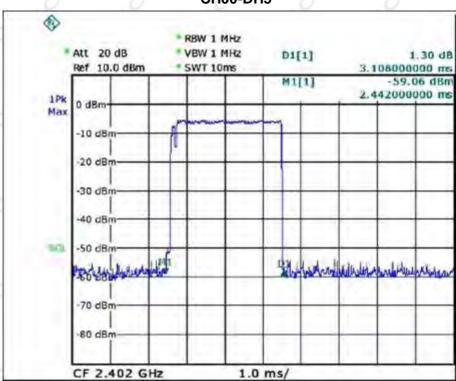




CH00-DH3



CH00-DH5



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com

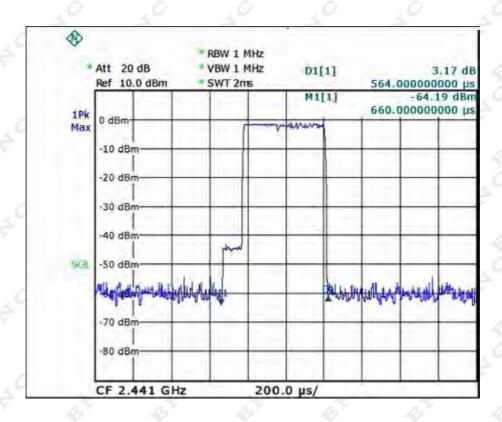


Page 59 of 84

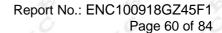
EUT: O.	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	CH39 -DH1/DH3/DH5 -3Mbps	χ.Ο	10 10 1

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits (s)
DH1	2441MHz	0.564	0.181	0.4000
DH3	2441MHz	1.848	0.296	0.4000
0.45 DH5 0.45	2441MHz	3.108	0.332	0.4000

CH00-DH1

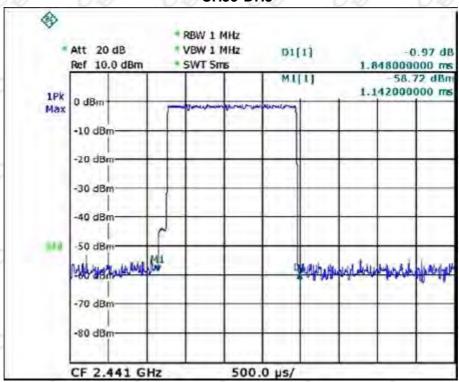




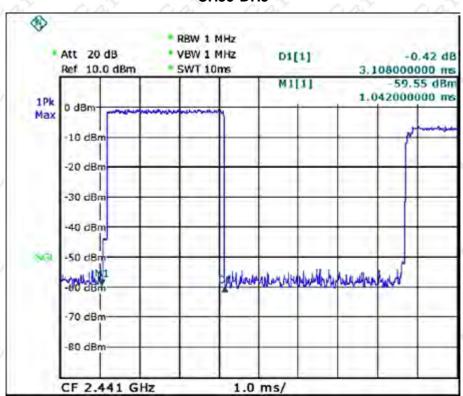




CH39-DH3



CH39-DH5



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com

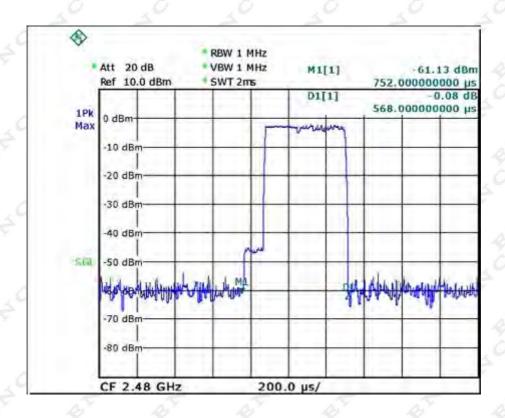


Page 61 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	CH78 -DH1/DH3/DH5-3Mbps	χ	10 10 1

Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (s)	Limits (s)
DH1	2480MHz	0.568	0.182	0.4000
DH3	2480MHz	1.848	1.860	0.4000
0.67 DH5 0.67	2480MHz	3.168	0.338	0.4000

CH00-DH1

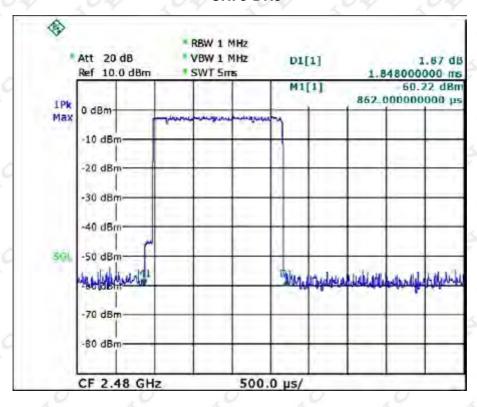




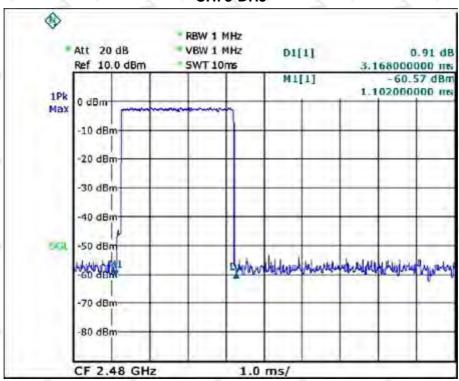




CH78-DH3



CH78-DH5



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com



Page 63 of 84

7. HOPPING CHANNEL SEPARATION MEASUREMENT

7.1 APPLIED PROCEDURES / LIMIT

Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

7.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING

I	tem	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
5	1	Spectrum Analyzer	R&S	FSP 40	100185	05/28/2011

Remark: "N/A" denotes No Model Name, Serial No. or No Calibration specified.

Spectrum Parameter	Setting			
Attenuation	9 204 204 Auto 4 204 204			
Span Frequency	> Measurement Bandwidth or Channel Separation			
RB	30 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)			
VB	100 kHz (20dB Bandwidth) / 300 kHz (Channel Separation)			
Detector Peak Trace	Max Hold Q Q Q Q			
Sweep Time	Auto			

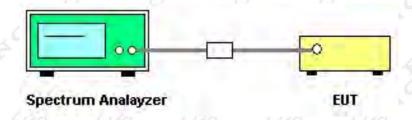
7.1.2 TEST PROCEDURE

- a. The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
- b. The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for 20 dB bandwidth measurement.
- c. The resolution bandwidth of 100 kHz and the video bandwidth of 300 kHz were utilised for channel separation measurement.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



7.1.5 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by FNC, this document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.





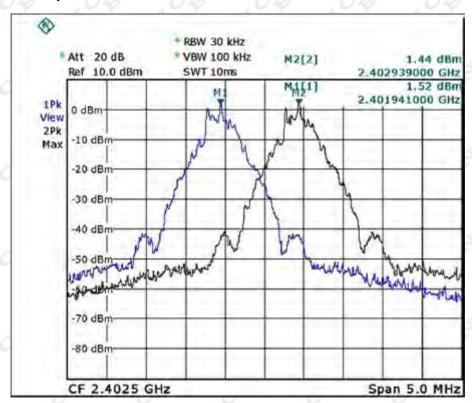
Page 64 of 84

7.1.6 TEST RESULTS

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH00 / CH39 /CH78-1Mbps	700 700	7040 7040

Frequency	Ch. Separation (MHz)	20d Bandwidth B (kHz)	Result
2402MHz	÷ 11	838.00	Complies
2441MHz	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	878.00	Complies
2480MHz	£ 1£ 4	878.00	Complies

Ch. Separation Limits: >20dB bandwidth or >2/3 of 20dB bandwidth

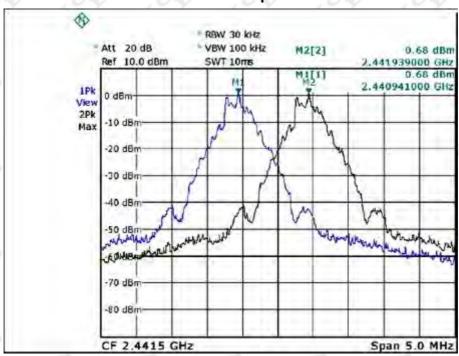




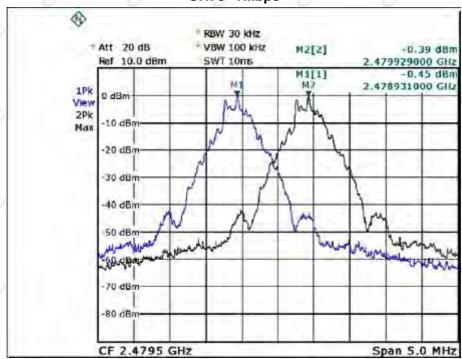




CH39 -1Mbps



CH78 -1Mbps



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com



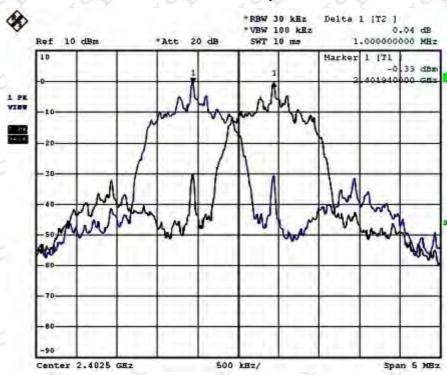
Page 66 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH00 / CH39 /CH78-3Mbps	, e	0 10 1

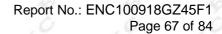
Frequency	Ch. Separation (MHz)	20d Bandwidth B (kHz)	Result
2402MHz	19 3	1210	Complies
2441MHz	10 10	1190	Complies
2480MHz	7 041 04	1190	Complies

Ch. Separation Limits: >20dB bandwidth or >2/3 of 20dB bandwidth

CH00 -3Mbps

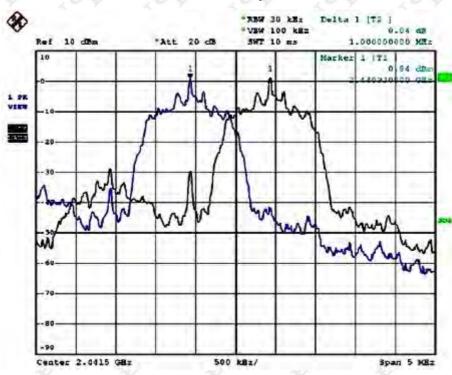




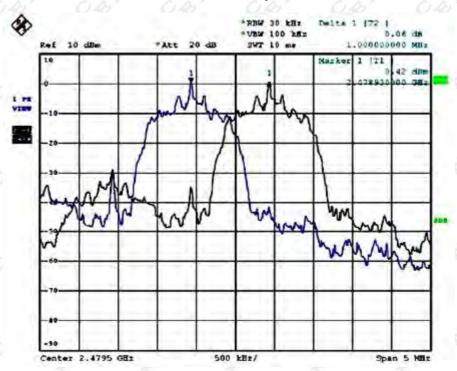




CH39 -3Mbps



CH78 -3Mbps







Page 68 of 84

8. BANDWIDTH TEST

8.1 APPLIED PROCEDURES / LIMIT

	FCC P	art15 (15.247) , Sub	part C	
Section Test Item Limit Frequency Range (MHz) Result				
15.247 (a)(2)	Bandwidth	≤ 1 MHz (20dB bandwidth)	2400-2483.5	PASS

8.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	05/28/2011

Remark: "N/A" denotes No Model Name, Serial No. or No Calibration specified.

Spectrum Parameters	Setting				
Attenuation	04 04 Auto 4 04 04				
Span Frequency	> Measurement Bandwidth or Channel Separation				
RB	30 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)				
VB	100 kHz (20dB Bandwidth) / 300 kHz (Channel Separation)				
Detector	04 04 Peak 4 04 04				
Trace	Max Hold				
Sweep Time	Auto				

8.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 10KHz, VBW=100KHz, Sweep time = Auto.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP

EUT	8	Ö	Š	SPECTRUM
	a Til	a Til	The state of the s	ANALYZER
			00	

8.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification



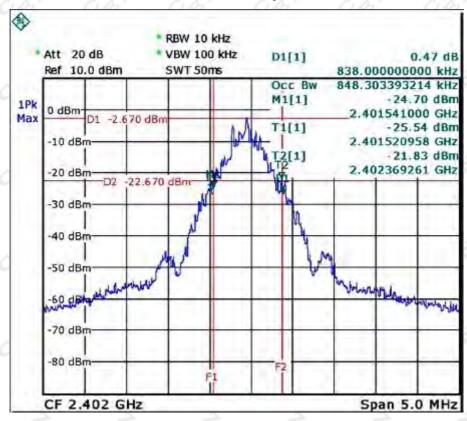
Page 69 of 84

8.1.6 TEST RESULTS

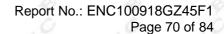
EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	CH00 / CH39 /CH78-1Mbps	1040 1040	7040 7040

Frequency	20dB Bandwidth (KHz)	Channel Separation (MHz)	Result
2402MHz	838.00	≤ 1MHz	PASS
2441MHz	878.00	≤ 1MHz	PASS
2480MHz	878.00	≤ 1MHz	PASS

Ch. Separation Limits: >20dB bandwidth or >2/3 of 20dB bandwidth CH00 -1Mbps

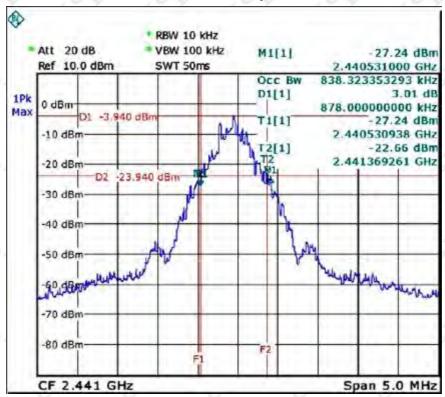




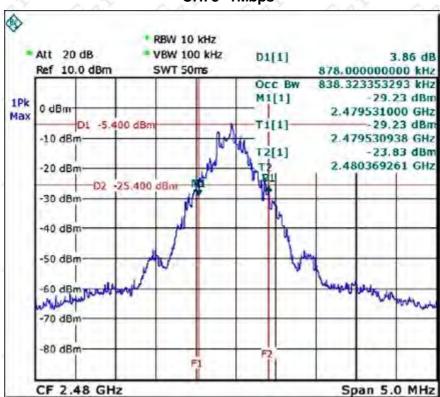




CH39 -1Mbps



CH78 -1Mbps



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com



Page 71 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH00 / CH39 /CH78-3Mbps		10 10 1

Frequency	20dB Bandwidth (KHz)	2/3 of 20dB bandwidth (KHz)	Channel Separation (MHz)	Result
2402MHz	1210.00	806.67	≤ 1MHz	PASS
2441MHz	1190.00	793.33	≤ 1MHz	PASS
2480MHz	1190.00	793.33	≤ 1MHz	PASS

Ch. Separation Limits: >20dB bandwidth or >2/3 of 20dB bandwidth

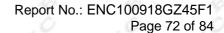
CH00 -3Mbps



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

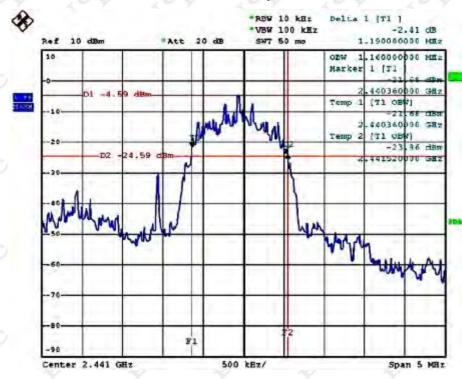


317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com

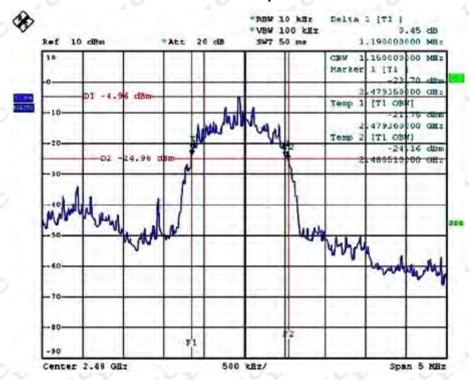




CH39 -3Mbps



CH78 -3Mbps







Page 73 of 84

9. PEAK OUTPUT POWER TEST

9.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C						
Section	Test Item	Limit	Frequency Range (MHz)	Result		
15.247 (b)(1)	Peak Output Power	125mW or 20.97dBm	2400-2483.5	PASS		

9.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	05/28/2011

Remark: "N/A" denotes No Model Name, Serial No. or No Calibration specified.

9.1.2 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 1MHz, VBW= 1MHz, Sweep time = Auto.

9.1.3 DEVIATION FROM STANDARD

No deviation.

9.1.4 TEST SETUP



9.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification



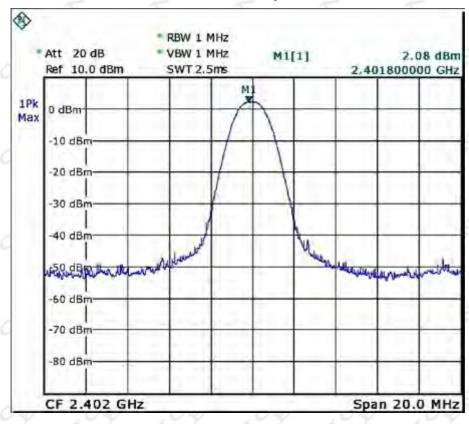
Page 74 of 84

9.1.6 TEST RESULTS

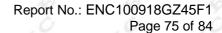
EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage :	DC 3.7V
Test Mode:	CH00/ CH39 /CH78 -1Mbps	204 204	7040 7040

Test Channel	Frequency	Peak Output Power	LIMIT	LIMIT
rest Chamilei	(MHz)	(dBm)	(dBm)	(mW)
CH00	2402	2.08	20.97	125
CH39	2441	0.97	20.97	125
CH78	2480	-0.38	20.97	125

CH00 -1Mbps

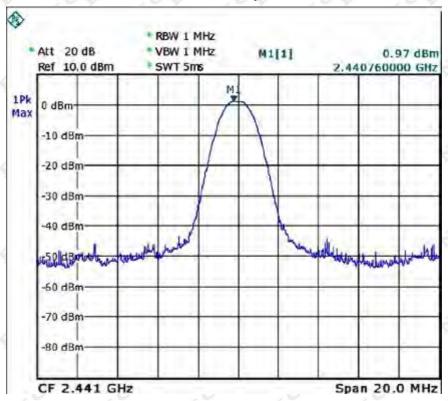




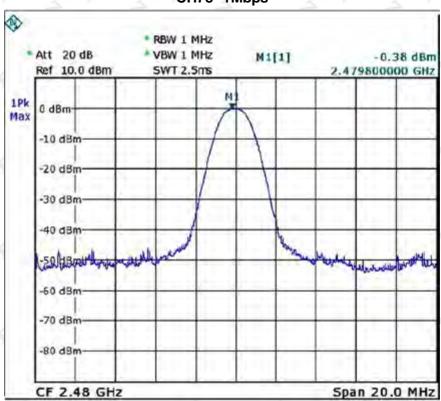




CH39 -1Mbps



CH78 -1Mbps



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com

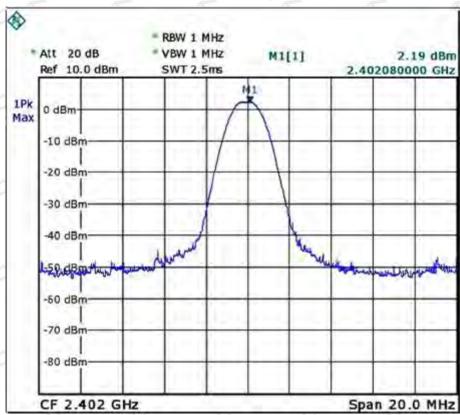


report No LING TO	0010021011
,0 ,0	Page 76 of 84

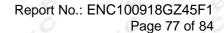
EUT: O.	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH00 / CH39 /CH78-3Mbps	, o	, , , ,

	Frequency	Peak Output Power	LIMIT	LIMIT
Test Channel	(MHz)	(dBm)	(dBm)	(W)
CH00	2402	2.19	20.97	125
CH39	2441	1.04	20.97	125
CH78	2480	-0.02	20.97	125

CH00 -3Mbps

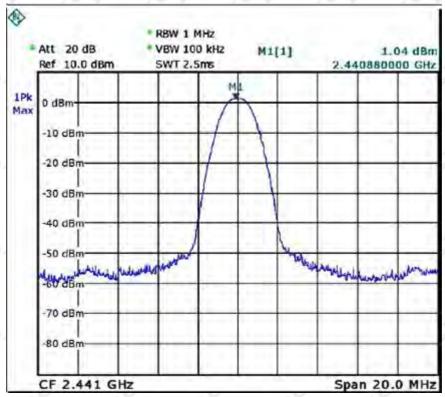




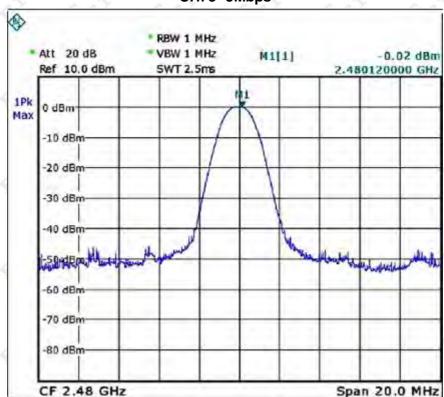




CH39 -3Mbps



CH78 -3Mbps



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com



Page 78 of 84

10. ANTENNA CONDUCTED SPURIOUS EMISSION

10.1 APPLIED PROCEDURES / LIMIT

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.

Frequencies (MHz)	Field Strength (micorvolts/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	9 1043 104	
216~960	200	3	
Above 960	500	3 /	

10.1.1 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	05/28/2011

Remark: "N/A" denotes No Model Name, Serial No. or No Calibration specified.

The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting		
Attenuation	9 04 0 Auto 04 04		
Span Frequency	100 MHz		
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average		
RB / VB (other emission)	100 KHz /100 KHz for Peak		

10.1.2 TEST PROCEDURE

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

10.1.3 DEVIATION FROM STANDARD

No deviation.

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document is available on request and the brie information for its validation can be assessable and confirmed at http://www.enc-lab.com.

East Notice Certification 317/319 3/F Street, Dong

317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234



Page 79 of 84

10.1.4 TEST SETUP

EUT	47	A)	4	SPECTRUM
7000	- A	10	10	ANALYZER

10.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.





Page 80 of 84

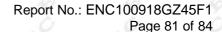
10.1.6 TEST RESULTS

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH00 / CH78-1Mbps	00 00	00 00

Pocult V V					
2350.65	-60.66	2496.59	-59.60		
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)		
bandwidth outside the frequency band		bandwidth within the frequency band.			
The max. radio frequency power in any 100kHz		The max. radio frequency power in any 100 kHz			

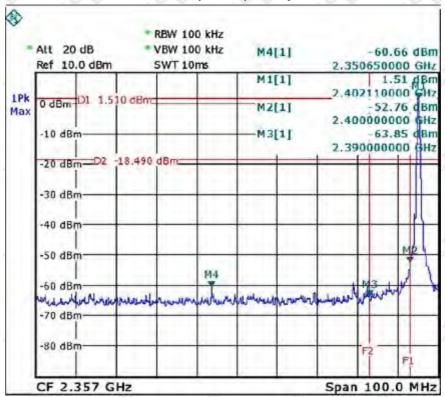
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.



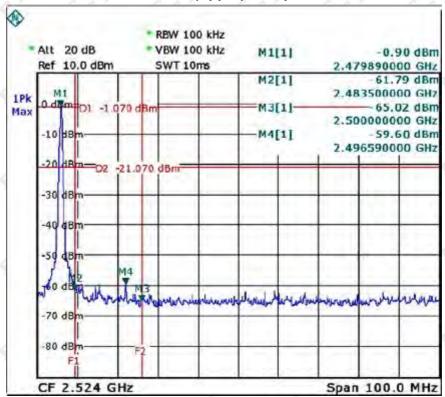




CH00 (Lower) -1 Mbps



CH 78 (Upper) -1 Mbps



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com



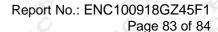
Page 82 of 84

EUT:	Bluetooth Headset	Model Name:	T92
Temperature:	22 °C	Relative Humidity:	70 %
Pressure:	1015hPa	Test Voltage:	DC 3.7V
Test Mode:	CH00 / CH78-3Mbps	1 40	40 40 4

The max. radio frequency power in any 100kHz		The max. radio frequency power in any 100 kHz	
bandwidth outside the frequency band		bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2385.49	-60.35	2488.96	-59.77
4 4	Re	sult	Total Control

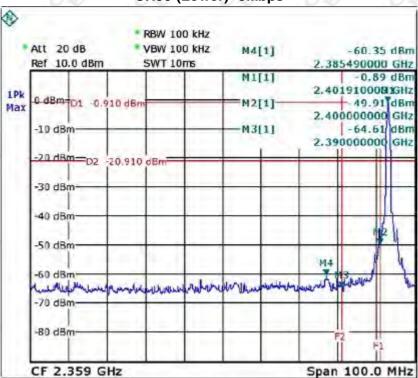
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.



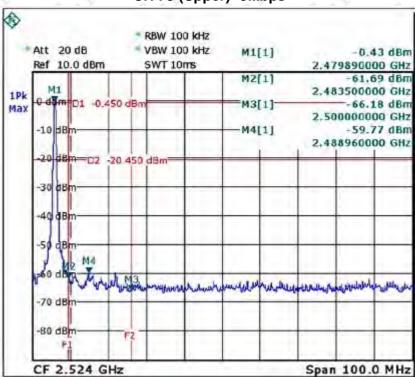




CH00 (Lower) -3Mbps



CH 78 (Upper) -3Mbps



The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou

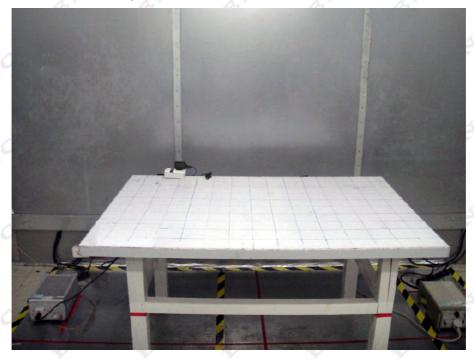
Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com



Page 84 of 84

11 . PHOTOGRAPHS OF TEST SETUP

Photographs-Conducted Emission Test Setup



Photographs-Radiated Emission Test Setup



----END OF REPORT----

The results shown in this test report refer only to the sample(s) tested unless otherwise stated and the sample(s) are retained for 30 days only. The document is issued by ENC, this document cannot be reproduced except in full with our prior written permission. The document is available on request and the brief information for its validation can be assessable and confirmed at http://www.enc-lab.com.



317/319 3/F HuiCheng Building, XiangPu Street, DongPu, TianHe, GuangZhou Tel:+86-020-2331 4234 E-mail: enc@ enc-lab.com