# **FCC RF Test Report**

APPLICANT : Quanzhou Tesunho Electronics Co., Ltd

**EQUIPMENT**: IP Trunking Radio

BRAND NAME : TESUNHO tesuino

MODEL NAME : TH-682pro

FCC ID : 2AKS9TH682PRO

STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L)

CLASSIFICATION : PCS Licensed Transmitter held to face (PCF)

TEST DATE(S) : May 13, 2024 ~ May 28, 2024

This product installed a RF module (Brand Name: Quectel, Model Name: EC25-AF; EC25-AF MINIPCIE, FCC ID: XMR201808EC25AF) during the test, only Conducted Power, ERP/EIRP and RSE test items are tested in this report, all the other test results are leveraged from module RF report.

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

JasonJia

Approved by: Jason Jia





Report No.: FG442609A

### Sporton International Inc. (ShenZhen)

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People's Republic of China

Sporton International Inc. (ShenZhen)

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Report Template No.: BU5-FG22/24/27 Version 2.0

## **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG442609A	Rev. 01	Initial issue of report	Jun. 06, 2024

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#### SUMMARY OF TEST RESULT

Report FCC Rule		Description Limit		Result	Remark
	§2.1046	Conducted Output Power	-	Report Only	-
	§22.913(a)(5)	Effective Radiated Power	< 7 Watts	PASS	-
3.4	§24.232(c)	Equivalent Isotropic Radiated Power	< 2 Watts	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power	< 1 Watts	PASS	-
-	§24.232(d)	Peak-to-Average Ratio	< 13 dB	PASS	-
-	- §2.1049 Occupied Bandwidth		Reporting Only	PASS	-
-	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Band Edge Measurement	< 43+10log10(P[Watts])	PASS	-
\$2.1051 \$22.917(a) - \$24.238(a) \$27.53(h)		Conducted Emission	< 43+10log10(P[Watts])	PASS	-
	§2.1055 §22.355	Frequency Stability for	< 2.5 ppm for Part 22		
-	§2.1055 §24.235 §27.54	Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053; §22.917(a); §24.238(a); §27.53(h)	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	Under limit 43.49 dB at 7520.00 MHz

**Remark 1:** All test results were leveraged from module RF report which can refer to Report No "R1806A0301-R1V1" for WCDMA Band V, "R1806A0301-R2V1" for WCDMA Band II and "R1806A0301-R3V1" for WCDMA Band IV.

#### **Conformity Assessment Condition:**

- The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits
  or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of
  non-compliance that may potentially occur if measurement uncertainty is taken into account.
- 2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

#### Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

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### 1 General Description

### 1.1 Applicant

**Quanzhou Tesunho Electronics Co., Ltd** No.605 BLDG 1, 269 Tiyu Str. FZ, QZ, FJ

#### 1.2 Manufacturer

**Quanzhou Tesunho Electronics Co., Ltd** No.605 BLDG 1, 269 Tiyu Str. FZ, QZ, FJ

### 1.3 Product Feature of Equipment Under Test

Product Feature				
Equipment	IP Trunking Radio			
Brand Name	TESUNHO tesuinho"			
Model Name	TH-682pro			
FCC ID	2AKS9TH682PRO			
IMEI Code	Radiation: 863890053372793			
HW Version	T12AV1.0-2125			
SW Version	A110AG20000ZE10			
EUT Stage	Production Unit			

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification					
	WCDMA:				
Ty Fraguency	Band V:	824 MHz ~ 849 MHz			
Tx Frequency	Band II:	1850 MHz ~ 1910 MHz			
	Band IV:	1710 MHz ~ 1755 MHz			
	WCDMA:				
By Fraguency	Band V:	869 MHz ~ 894 MHz			
Rx Frequency	Band II:	1930 MHz ~ 1990 MHz			
	Band IV:	2110 MHz ~ 2155 MHz			
	WCDMA:				
Maximum Quanua Bowar to Antonno	Band V:	23.19 dBm			
Maximum Output Power to Antenna	Band II:	22.94 dBm			
	Band IV:	23.04 dBm			
Antenna Type	Dipole Ante	nna			
Antenna Gain	Cellular Band: 2.1 dBi				

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	PCS Band: 1.9 dBi AWS Band: 1.9 dBi
Type of Modulation	WCDMA: BPSK HSDPA: QPSK HSUPA: QPSK

#### 1.5 Modification of EUT

No modifications are made to the EUT during all test items.

### 1.6 Maximum ERP/EIRP Power, and Emission Designator

FCC Rule	Frequency Band	Frequency Range (MHz)	Type of Modulation	Maximum ERP/EIRP(W)
Part 22	WCDMA Band V	826.4 ~ 846.6	BPSK	0.2061
Part 24	WCDMA Band II	1852.4 ~ 1907.6	BPSK	0.3048
Part 27	WCDMA Band IV	1712.4 ~ 1752.6	BPSK	0.3119

## 1.7 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)					
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595					
	Sporton Site No.	FCC Designation No.	FCC Test Firm			
Test Site No.	Sporton Site No.	1 CC Designation No.	Registration No.			
	TH01-SZ	CN1256	421272			

Test Firm	Sporton International Inc. (ShenZhen)					
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985					
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.			
	03CH03-SZ	CN1256	421272			

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#### 1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24

### 1.9 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2, 22(H), 24(E), 27(L)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

#### Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

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### 2 Test Configuration of Equipment Under Test

#### 2.1 Test Mode

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

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Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

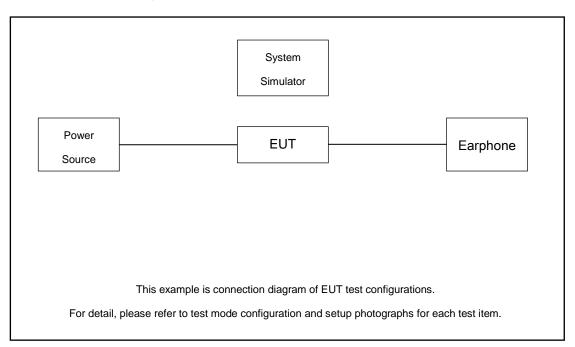
- 1. 30 MHz to 9000 MHz for GSM850 and WCDMA Band V.
- 2. 30 MHz to 18000 MHz for WCDMA Band IV.
- 3. 30 MHz to 19100 MHz for GSM1900 and WCDMA Band II.

All modes and data rates and positions were investigated.

Test modes are chosen to be reported as the worst case configuration below:

Test Modes					
Band	Radiated TCs	Conducted TCs			
WCDMA Band V	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link			
WCDMA Band II	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link			
WCDMA Band IV	■ RMC 12.2Kbps Link	■ RMC 12.2Kbps Link			

### 2.2 Connection Diagram of Test System



The EUT has been configuration operated in a manner tended to maximize its emission characteristics in a typical application.

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## 2.3 Support Unit used in test configuration

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Agilent	E5515C	N/A	N/A	Unshielded, 1.8 m

## 2.4 Frequency List of Low/Middle/High Channels

Frequency List								
Band	Channel/Frequency(MHz)	Lowest	Middle	Highest				
WCDMA Band V	Channel	4132	4182	4233				
	Frequency	826.4	836.4	846.6				
WCDMA Band II	Channel	9262	9400	9538				
	Frequency	1852.4	1880.0	1907.6				
WCDMA	Channel	1312	1413	1513				
Band IV	Frequency	1712.4	1732.6	1752.6				

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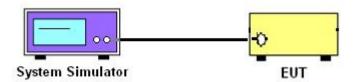
### 3 Conducted Test Result

### 3.1 Measuring Instruments

See list of measuring instruments of this test report.

### 3.2 Test Setup

### 3.2.1 Conducted Output Power



### 3.3 Test Result of Conducted Test

Please refer to Appendix A.

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#### 3.4 Conducted Output Power and ERP/EIRP

#### 3.4.1 Description of the Conducted Output Power and ERP/EIRP

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The ERP of mobile transmitters must not exceed 7 Watts for WCDMA Band V.

The EIRP of mobile transmitters must not exceed 2 Watts for WCDMA Band II.

The EIRP of mobile transmitters must not exceed 1 Watts for WCDMA Band IV.

According to KDB 412172 D01 Power Approach,

 $EIRP = P_T + G_T - L_C$ , ERP = EIRP - 2.15, where

 $P_T$  = transmitter output power in dBm

 $G_T$  = gain of the transmitting antenna in dBi

L<sub>C</sub> = signal attenuation in the connecting cable between the transmitter and antenna in dB

#### 3.4.2 Test Procedures

- 1. The testing follows ANSI C63.26 Section 5.2
- 2. The transmitter output port was connected to the system simulator.
- 3. Set EUT at maximum power through the system simulator.
- 4. Select lowest, middle, and highest channels for each band and different modulation.
- 5. Measure and record the power level from the system simulator.

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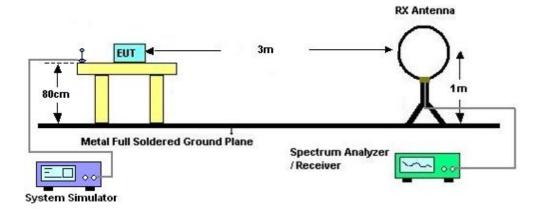
### 4 Radiated Test Items

### 4.1 Measuring Instruments

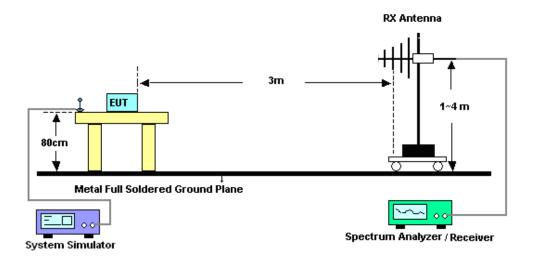
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test below 30MHz



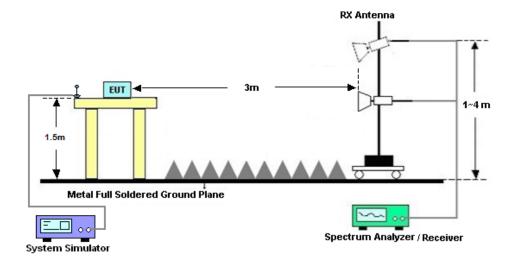
#### 4.2.2 For radiated test from 30MHz to 1GHz



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#### 4.2.3 For radiated test above 1GHz



#### 4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

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#### 4.4 Field Strength of Spurious Radiation Measurement

#### 4.4.1 Description of Field Strength of Spurious Radiated Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

#### 4.4.2 Test Procedures

- 1. The testing follows ANSI C63.26 Section 5.5
- 2. The EUT was placed on a rotatable wooden table 0.8 meters for frequency below 1GHz and 1.5 meter for frequency above 1GHz above the ground.
- 3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- 4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.
- 6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.
- 7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 9. Taking the record of output power at antenna port.
- 10. Repeat step 7 to step 8 for another polarization.
- 11. EIRP (dBm) = S.G. Power Tx Cable Loss + Tx Antenna Gain
- 12.ERP (dBm) = EIRP 2.15
- 13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 14. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

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## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	May 28, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V , 3A	Oct. 16, 2023	May 28, 2024	Oct. 15, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007	0.4GHz~26.5GHz	Dec. 25, 2023	May 28, 2024	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	May 28, 2024	Jul. 04, 2024	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 09, 2024	May 13, 2024~ May 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 28, 2022	May 13, 2024~ May 14, 2024	Jun. 27, 2024	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 09, 2024	May 13, 2024~ May 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Aug. 20, 2023	May 13, 2024~ May 14, 2024	Aug. 19, 2025	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 09, 2024	May 13, 2024~ May 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 18, 2023	May 13, 2024~ May 14, 2024	Oct. 17, 2024	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 07, 2023	May 13, 2024~ May 14, 2024	Jul. 06, 2024	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	May 13, 2024~ May 14, 2024	Apr. 08, 2025	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 27, 2023	May 13, 2024~ May 14, 2024	Dec. 26, 2024	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010002729	N/A	Oct. 18, 2023	May 13, 2024~ May 14, 2024	Oct. 17, 2024	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 13, 2024~ May 14, 2024	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 13, 2024~ May 14, 2024	NCR	Radiation (03CH03-SZ)

NCR: No Calibration Required

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### 6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

#### **Uncertainty of Conducted Measurement**

Test Item	Uncertainty
Conducted Power	±1.34 dB

#### Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

	<u>-</u>
Measuring Uncertainty for a Level of	3.0 dB
Confidence of 95% (U = 2Uc(y))	3.0 UB

#### Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

	7
Measuring Uncertainty for a Level of	0.C -ID
Confidence of 95% (U = 2Uc(y))	3.6 dB
30111de110e 01 30 /0 (0 = 200(y))	

#### **Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)**

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))  3.8 dB
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----- THE END -----

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## **Appendix A. Test Results of Conducted Test**

Test Engineer :	Khan Zhen	Temperature :	22~23°C
rest Engineer.		Relative Humidity :	40~42%

## Conducted Output Power(Average power) and ERP/EIRP

Band		WCDMA V					
	TX Channel	4132	4182	4233	ERP(W)		
	Rx Channel	4357	4407	4458			
Fre	equency (MHz)	826.4	836.4	846.6	L	L M H	
3GPP Rel 99	AMR 12.2Kbps	23.13	23.06	23.09	0.2032	0.2000	0.2014
3GPP Rel 99	RMC 12.2Kbps	23.19	23.18	23.11	0.2061	0.2056	0.2023
3GPP Rel 6	HSDPA Subtest-1	22.32	22.18	22.26	0.1687	0.1633	0.1663
3GPP Rel 6	HSDPA Subtest-2	22.27	22.39	22.30	0.1667	0.1714	0.1679
3GPP Rel 6	HSDPA Subtest-3	21.82	21.71	21.82	0.1503	0.1466	0.1503
3GPP Rel 6	HSDPA Subtest-4	21.81	21.70	21.82	0.1500	0.1462	0.1503
3GPP Rel 8	DC-HSDPA Subtest-1	22.75	22.77	22.72	0.1862	0.1871	0.1849
3GPP Rel 8	DC-HSDPA Subtest-2	22.70	22.73	22.69	0.1841	0.1854	0.1837
3GPP Rel 8	DC-HSDPA Subtest-3	22.24	22.27	22.27	0.1656	0.1667	0.1667
3GPP Rel 8	DC-HSDPA Subtest-4	22.22	22.26	22.24	0.1648	0.1663	0.1656
3GPP Rel 6	HSUPA Subtest-1	22.02	22.37	22.15	0.1574	0.1706	0.1622
3GPP Rel 6	HSUPA Subtest-2	20.86	20.82	20.80	0.1205	0.1194	0.1189
3GPP Rel 6	HSUPA Subtest-3	20.96	20.86	20.94	0.1233	0.1205	0.1227
3GPP Rel 6	HSUPA Subtest-4	20.85	20.52	20.67	0.1202	0.1114	0.1153
3GPP Rel 6	HSUPA Subtest-5	22.17	22.17	22.27	0.1629	0.1629	0.1667

Band			WCDMA IV					
	TX Channel	1312	1413	1513		EIRP(W)		
	Rx Channel	1537	1638	1738				
Fre	equency (MHz)	1712.4	1732.6	1752.6	L	M	Н	
3GPP Rel 99	AMR 12.2Kbps	22.99	22.94	22.92	0.3083	0.3048	0.3034	
3GPP Rel 99	RMC 12.2Kbps	23.04	23.03	22.98	0.3119	0.3112	0.3076	
3GPP Rel 6	HSDPA Subtest-1	22.20	22.23	22.24	0.2570	0.2588	0.2594	
3GPP Rel 6	HSDPA Subtest-2	22.25	22.26	22.27	0.2600	0.2606	0.2612	
3GPP Rel 6	HSDPA Subtest-3	21.75	21.90	21.80	0.2317	0.2399	0.2344	
3GPP Rel 6	HSDPA Subtest-4	21.83	21.91	21.80	0.2360	0.2404	0.2344	
3GPP Rel 8	DC-HSDPA Subtest-1	22.52	22.57	22.40	0.2767	0.2799	0.2692	
3GPP Rel 8	DC-HSDPA Subtest-2	22.55	22.56	22.41	0.2786	0.2793	0.2698	
3GPP Rel 8	DC-HSDPA Subtest-3	22.06	22.04	21.70	0.2489	0.2477	0.2291	
3GPP Rel 8	DC-HSDPA Subtest-4	22.06	22.00	21.95	0.2489	0.2455	0.2427	
3GPP Rel 6	HSUPA Subtest-1	21.80	22.22	21.81	0.2344	0.2582	0.2350	
3GPP Rel 6	HSUPA Subtest-2	20.62	20.57	20.75	0.1786	0.1766	0.1841	
3GPP Rel 6	HSUPA Subtest-3	20.93	20.96	20.96	0.1919	0.1932	0.1932	
3GPP Rel 6	HSUPA Subtest-4	20.70	20.93	20.92	0.1820	0.1919	0.1914	
3GPP Rel 6	HSUPA Subtest-5	22.10	22.20	22.20	0.2512	0.2570	0.2570	

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Band WCDMA II TX Channel 9262 9400 9538 EIRP(W) **Rx Channel** 9662 9800 9938 Frequency (MHz) 1852.4 1880 1907.6 AMR 12.2Kbps 3GPP Rel 99 22.91 22.54 22.56 0.2793 0.3027 0.2780 3GPP Rel 99 RMC 12.2Kbps 22.94 22.58 22.57 0.3048 0.2805 0.2799 3GPP Rel 6 **HSDPA Subtest-1** 22.06 21.91 21.76 0.2489 0.2404 0.2323 3GPP Rel 6 **HSDPA Subtest-2** 22.14 21.91 21.85 0.2535 0.2404 0.2371 21.35 3GPP Rel 6 **HSDPA Subtest-3** 21.67 21.45 0.2275 0.2163 0.2113 3GPP Rel 6 HSDPA Subtest-4 21.66 21.45 21.34 0.2270 0.2163 0.2109 3GPP Rel 8 DC-HSDPA Subtest-1 22.25 22.36 22.18 0.2600 0.2667 0.2559 DC-HSDPA Subtest-2 22.32 22.16 0.2642 0.2729 0.2547 3GPP Rel 8 22.46 3GPP Rel 8 DC-HSDPA Subtest-3 21.84 21.98 21.76 0.2366 0.2443 0.2323 3GPP Rel 8 DC-HSDPA Subtest-4 21.84 21.97 21.75 0.2366 0.2438 0.2317 0.2393 21.72 0.2301 3GPP Rel 6 **HSUPA Subtest-1** 21.89 21.20 0.2042 3GPP Rel 6 HSUPA Subtest-2 20.69 20.64 0.1816 0.1795 0.1718 20.45 3GPP Rel 6 **HSUPA Subtest-3** 20.75 20.61 20.54 0.1841 0.1782 0.1754 3GPP Rel 6 **HSUPA Subtest-4** 20.92 20.82 20.82 0.1914 0.1871 0.1871 3GPP Rel 6 HSUPA Subtest-5 22.10 21.80 21.80 0.2512 0.2344 0.2344

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## **Appendix B. Test Results of Radiated Test**

## **Radiated Spurious Emission**

Test Engineer :		Temperature :	22~25°C	
	Shunping You	Relative Humidity :	48~52%	

	WCDMA Band V(RMC 12.2Kbps)									
Channel	Frequency (MHz)	ERP (dBm)	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)	
	1673.04	-59.57	-13	-46.57	-65.79	-62.82	4.00	9.40	Н	
	2509.56	-62.26	-13	-49.26	-72.51	-65.83	4.88	10.60	Н	
Middle	3346.08	-65.34	-13	-52.34	-77.37	-70.27	5.52	12.60	Н	
	1673.04	-65.77	-13	-52.77	-71.72	-69.02	4.00	9.40	V	
	2509.56	-64.42	-13	-51.42	-75.00	-67.99	4.88	10.60	V	
	3346.08	-64.67	-13	-51.67	-77.08	-69.60	5.52	12.60	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

	WCDMA Band II(RMC 12.2Kbps)									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)	
	3760	-62.99	-13	-49.99	-77.64	-69.74	5.85	12.60	Н	
	5640	-61.73	-13	-48.73	-79.48	-67.53	7.30	13.10	Н	
Middle	7520	-56.49	-13	-43.49	-78.80	-59.64	8.35	11.50	Н	
Middle	3760	-62.53	-13	-49.53	-77.36	-69.28	5.85	12.60	V	
	5640	-61.83	-13	-48.83	-79.47	-67.63	7.30	13.10	V	
	7520	-56.60	-13	-43.60	-78.79	-59.75	8.35	11.50	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

WCDMA Band IV(RMC 12.2Kbps)									
Channel	Frequency (MHz)	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3465.2	-62.81	-13	-49.81	-75.56	-69.66	5.65	12.50	Н
	5197.8	-62.01	-13	-49.01	-79.57	-67.68	7.13	12.80	Н
	6930.4	-58.39	-13	-45.39	-79.24	-61.79	8.40	11.80	Н
	3465.2	-63.44	-13	-50.44	-76.73	-70.29	5.65	12.50	V
	5197.8	-61.94	-13	-48.94	-79.45	-67.61	7.13	12.80	V
	6930.4	-58.06	-13	-45.06	-78.92	-61.46	8.40	11.80	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

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