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F	CC REPORT			
	For WCDMA			
Report No:	CHTW24030033 Repo	ort Verification:		
Project No	SHT2403015402W			
FCC ID:	2ASWW-GT40	CITIV/2030053		
Applicant:	XINCHUANGXIN INTERNATIONAL CO. LTD			
Address	ROOM 605 6/F, FA YUEN COMMERCIAL BUILDING, 75-77 FA YUEN STREET MONGKOK KL			
Product Name:	Feature phone			
Trade Mark	CORN			
Model No	GT40			
Listed Model(s)				
Standard :	FCC CFR Title 47 Part 2 FCC CFR Title 47 Part 22 Subpart H FCC CFR Title 47 Part 24 Subpart E FCC CFR Title 47 Part 27			
Date of receipt of test sample:	Mar. 05, 2024			
Date of testing:	Mar. 06, 2024- Mar. 22, 2024			
Date of issue	Mar. 27, 2024			
Result	Pass			
Compiled by (position+printedname+signature):	File administrators Xiaodong Zhao	\times iaodong Zheo		
Supervised by (position+printedname+signature):	Project Engineer Xiaodong Zhao _	Xiaodong Zheo		
Approved by (position+printedname+signature):	Manager Xu Yang	In. Jong		
Testing Laboratory Name: :	Shenzhen Huatongwei International	Inspection Co., Ltd.		
Address	Building 7, Baiwang Idea Factory, No. Yangguang Community, Xili Subdistric Shenzhen, Guangdong, China			

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The test report merely correspond to the test sample.

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1. TEST STANDARDS AND REPORT VERSION

1.1. Applicable Standards

The tests were performed according to following standards:

FCC CFR Title 47 Part 2: Frequency Allocations and Radio Treaty Matters; General Rules and Regulations

FCC CFR Title 47 Part 22 Subpart H: Cellular Radiotelephone Service

FCC CFR Title 47 Part 24 Subpart E: Broadband PCS

FCC CFR Title 47 Part 27: Miscellaneous Wireless Communications Services

<u>ANSI C63.26-2015</u>: American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

KDB 971168 D01 Power Meas License Digital Systems v03: MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS

1.2. Report version information

Revision No.	Date of issue	Description
N/A	2024-03-27	Original

2. TEST DESCRIPTION

Section	Test Item	Section in CFR 47	Result #1	Test Engineer
5.1	Conducted Output Power	Part 2.1046 Part 22.913(a) Part 24.232(c) Part 27.50	Pass	Xiaodong Zhao
5.2	Peak-to-Average Ratio	Part 24.232 Part 27.50	Pass	Xiaodong Zhao
5.3	99% Occupied Bandwidth & 26 dB Bandwidth	Part 2.1049 Part 22.917(b) Part 24.238(b) Part 27.53	Pass	Xiaodong Zhao
5.4	Band Edge	Part 2.1051 Part 22.917 Part 24.238 Part 27.53	Pass	Xiaodong Zhao
5.5	Conducted Spurious Emissions	Part 2.1051 Part 22.917 Part 24.238 Part 27.53	Pass	Xiaodong Zhao
5.6	Frequency stability vs temperature	Part 2.1055(a)(1)(b) Part 22.355 Part 24.235 Part 27.54	Pass	Xiaodong Zhao
5.7	Frequency stability vs voltage	Part 2.1055(d)(1)(2) Part 22.355 Part 24.235 Part 27.54	Pass	Xiaodong Zhao
5.8	ERP and EIRP	Part 22.913(a) Part 24.232(b) Part 27.50	Pass	Xiaodong Zhao
5.9	Radiated Spurious Emissions	Part 2.1053 Part 22.917 Part 24.238 Part 27.53	Pass	Yifan Wang

Note:

#1: The test result does not include measurement uncertainty value

2024-03-27

3. <u>SUMMARY</u>

3.1. Client Information

Applicant:	XINCHUANGXIN INTERNATIONAL CO. LTD	
Address:	ROOM 605 6/F, FA YUEN COMMERCIAL BUILDING, 75-77 FA YUEN STREET MONGKOK KL	
Manufacturer:	Shenzhen Chiteng Technology Co.,LTD	
Address:	Second Floor, Area A, Building 4, Huiye Technology Workshop, Guanguang Road, Tangjia Community, Gongming Street, Guangming New District, Shenzhen, Guangdong	

3.2. Product Description

Main unit information:	
Product Name:	Feature phone
Trade Mark:	CORN
Model No.:	GT40
Listed Model(s):	-
Power supply:	DC 3.7V from Li-ion Battery
Hardware version:	ZS621TF_MB_V1.0
Software version:	ZS621TF_48X128_240320_B24410TF_3_GT40_CORN_EnFrPoSp _V01_20240314
Accessory unit information:	
Battery information:	BL-19A Voltage: 3.7V Capacity: 1800mAh 3.7V Li-ion BATTERY 6.66Wh
Adapter information:	Input: AC100-240V 50/60Hz 150mA Output: DC 5.2V, 500mA

3.3. Radio Specification Description

Support Operating Band:	🛛 Band II	🛛 Band IV	🛛 Band V	
Operating Frequency Range:	Please refer to n	ote #2		
Support Type:	🖾 WCDMA	🛛 HSDPA	🖾 HSUPA	DC-HSUPA
Modulation Type:	🛛 QPSK	🗌 16QAM		
Power Class:	Class 3	Class 4		
Antenna type:	PIFA			
Antenna gain #3:	Band II: 0.5dBi	Band IV: (0.5dBi	Band V: -1.0dBi

Note:

○ 🛛 means that this feature is supported; 🗋: means that this feature is not supported

O #2: Operating frequency range is as follow:

```
WCDMA Band
```

Uplink frequency

Downlink frequency

Shenzhen Huatongwei International Inspection Co., Ltd.

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Band II		1852.40)~1907.60MHz	<u>.</u>	1932.40~1	1987.60MHz
Band IV		1712.40~1752.60MHz		2112.40~2	2152.60MHz	
Band V		826.40)~846.60MHz		871.40~8	891.60MHz

O #3: The antenna gain is provided by the applicant, and the applicant should be responsible for its authenticity, HTW lab has not verified the authenticity of its information

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.		
Laboratory Location	Building 7, Baiwang Idea Factory, No.1051, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong, China		
Contact information:	Tel: 86-755-26715499 E-mail: <u>cs@szhtw.com.cn</u> <u>http://www.szhtw.com.cn</u>		
	Туре	Accreditation Number	
Qualifications:	FCC Registration Number 762235		
	FCC Designation Number CN1181		

4. TEST CONFIGURATION

4.1. Test frequency list

FDD	Band II	FDD Band IV		FDD Band V	
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
9262	1852.40	1312	1712.40	4132	826.40
9400	1880.00	1413	1732.60	4182	836.40
9538	1907.60	1513	1752.60	4233	846.60

4.2. Test mode

Test mode Link mode	Test mode	Link mode

1) Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems and ANSI C63.26 with maximum output power.

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

All modes and data rates and positions were investigated, test modes are chosen to be reported as the worst case configuration below:

Band	Radiated test items	Conducted test items
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

4.3. Test sample information

Test item	HTW sample no.
Conducted test items	Please refer to the description in the appendix report
Radiated test items	YPHT24030154001_02

Note:

Conducted test items: Conducted Output Power, Peak-Average Ratio, 99% Occupied Bandwidth & 26 dB Bandwidth, Band Edge, Conducted Spurious Emissions, Frequency stability, ERP and EIRP

Radiated test items: Radiated Spurious Emission

4.4. Support unit used in test configuration and system

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

The following peripheral devices and interface cables were connected during the measurement:

Whethe	er support unit is used?			
~	No			
Item	Equipment	Trade Name	Model No.	Other
1				
2				

4.5. Testing environmental condition

	VN=Nominal Voltage	DC 3.70V
Voltage	VL=Lower Voltage	DC 3.33V
	VH=Higher Voltage	DC 4.07V
Tomporatura	TN=Normal Temperature	25 °C
Temperature	Extreme Temperature	From -30°C to + 50°C
Humidity	30~60 %	
Air Pressure	950-1050 hPa	

4.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	Conducted Output Power	0.66
2	Peak-to-Average Ratio	-
3	99% Occupied Bandwidth & 26 dB Bandwidth	0.002%
4	Band Edge	1.68dB
5	Conducted Spurious Emissions	1.68dB
6	Frequency stability	0.02ppm
7	Radiated Spurious Emission	4.54dB for 30MHz-1GHz
1		5.10dB for above 1GHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

Page:

4.7. Equipments Used during the Test

•	RF Conducted	test item					
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Spectrum Analyzer	Agilent	HTWE0286	N9020A	MY50510187	2023/08/22	2024/08/21
•	Radio communication tester	R&S	HTWE0287	CMW500	137688-Lv	2023/08/25	2024/08/24
•	Test software	Tonscend	N/A	JS1120	N/A	N/A	N/A
•	T-Cock	Weinschel	HTWE0289	1580	SC329	2023/08/22	2024/08/21

•	Auxiliary Equi	pment					
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Climate chamber	ESPEC	HTWS0715	GPL-2	N/A	2023/08/21	2024/08/20
•	DC Power Supply	Gwinstek	HTWE0274	SPS-2415	GER835793	N/A	N/A

•	Radiated Spu	rious Emission					
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Semi-Anechoic Chamber	Albatross projects	HTWE0122	SAC-3m-01	C11121	2023/4/17	2026/4/16
•	Spectrum Analyzer	R&S	HTWE0098	FSP40	100597	2023/08/22	2024/08/21
•	Spectrum Analyzer	R&S	HTWE0385	N9020A	MY54486658	2023/08/22	2024/08/21
•	Ultra-Broadband Antenna	SCHWARZBECK	HTWE0123	VULB9163	538	2021/04/06	2024/04/05
•	Horn Antenna	SCHWARZBECK	HTWE0126	BBHA 9120D	1011	2023/02/14	2026/02/13
•	Pre-Amplifer	CD	HTWE0071	PAP-0102	12004	2023/05/25	2024/05/24
•	Broadband Pre- amplifier	SCHWARZBECK	HTWE0201	BBV 9718	9718-248	2023/05/25	2024/05/24
•	Test Software	Audix	N/A	E3	N/A	N/A	N/A

•	Auxiliary Equi	pment					
Used	Test Equipment	Manufacturer	Equipment No.	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
•	Radio communication tester	R&S	HTWE0287	CMW500	137688-Lv	2023/08/25	2024/08/24
•	High pass filter	Wainwright	HTWE0297	WHKX3.0/18G-10SS	38	2023/05/15	2024/05/14
•	Band Stop filter	-	HTWE0039	N/A	N/A	2024/01/25	2025/01/24

5. TEST CONDITIONS AND RESULTS

5.1. Conducted Output Power

<u>LIMIT</u>

N/A

TEST CONFIGURATION



Communication Tester

TEST PROCEDURE

- 1. The EUT output port was connected to communication tester.
- 2. Set EUT at maximum power through communication tester.
- 3. Select lowest, middle, and highest channels for each band and different modulation.
- 4. Measure the maximum burst average power.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

☑ Passed □ Not Applicable

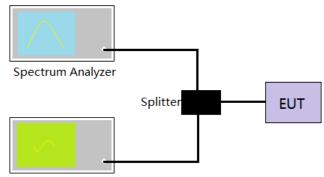
TEST DATA

5.2. Peak-Average Ratio

LIMIT

13dB

TEST CONFIGURATION



Communication Tester

TEST PROCEDURE

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter
- 2. Set EUT in maximum power output.
- 3. Center Frequency = Carrier frequency, RBW > Emission bandwidth of signal
- 4. The signal analyzer was set to collect one million samples to generate the CCDF curve
- 5. The measurement interval was set depending on the type of signal analyzed.
 - i. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms.
 - ii. For bursttransmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that issynced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in whichthetransmitter is operating at maximum power
- 6. Record the maximum PAPR level associated with a probability of 0.1%.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

☑ Passed □ Not Applicable

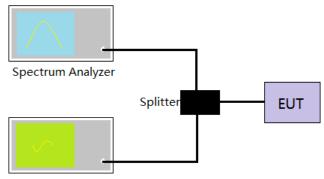
TEST DATA

5.3. 99% Occupied Bandwidth & 26 dB Bandwidth

<u>LIMIT</u>

N/A

TEST CONFIGURATION



Communication Tester

TEST PROCEDURE

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter
- 2. Set EUT in maximum power output.
- 3. Spectrum analyzer setting as follow:

Center Frequency= Carrier frequency, RBW=1% to 5% of anticipated OBW, VBW= 3 * RBW, Detector=Peak, Trace maximum hold.

4. Record the value of 99% Occupied bandwidth and -26dB bandwidth.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

🛛 Passed

Not Applicable

TEST DATA

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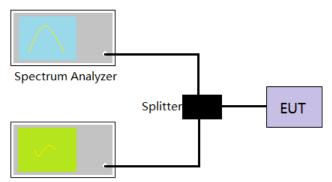
2024-03-27

<u>LIMIT</u>

Part 24.238 and Part 22.917 and Part 27.53 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

TEST CONFIGURATION



Communication Tester

TEST PROCEDURE

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter
- 2. Set EUT in maximum power output.
- 3. The band edges of low and high channels were measured.
- 4. Spectrum analyzer setting as follow:

RBW=100KHz, VBW = 300KHz, Sweep time= Auto

5. Record the test plot.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

☑ Passed □ Not Applicable

<u>TEST DATA</u>

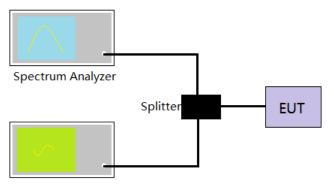
5.5. Conducted Spurious Emissions

<u>LIMIT</u>

Part 24.238 and Part 22.917 and Part 27.53 specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

The specification that emissions shall be attenuated below the transmitter power (P) by at least 43 + 10 log (P) dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

TEST CONFIGURATION



Communication Tester

TEST PROCEDURE

- 1. The EUT was connected to the spectrum analyzer and communication tester via a power splitter
- 2. Set EUT in maximum power output.
- Spectrum analyzer setting as follow: Below 1GHz, RBW=100KHz, VBW = 300KHz, Detector=Peak, Sweep time= Auto Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peak, Sweep time= Auto Scan frequency range up to 10th harmonic.
- 4. Record the test plot.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

☑ Passed □ Not Applicable

TEST DATA

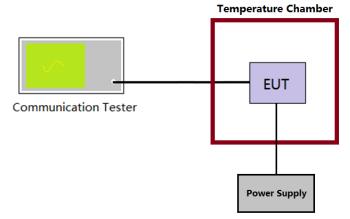
5.6. Frequency stability VS Temperature measurement

Page:

<u>LIMIT</u>

2.5ppm

TEST CONFIGURATION



TEST PROCEDURE

- 1. The equipment under test was connected to an external DC power supply and input rated voltage.
- 2. The EUT output port was connected to communication tester.
- 3. The EUT was placed inside the temperature chamber.
- 4. Turn EUT off and set the chamber temperature to –30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.
- 5. Repeat step 4 measure with 10°C increased per stage until the highest temperature of +50°C reached.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

🛛 Passed

Not Applicable

<u>TEST DATA</u>

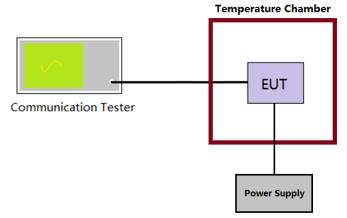
Page:

5.7. Frequency stability VS Voltage measurement

LIMIT

2.5ppm

TEST CONFIGURATION



TEST PROCEDURE

- 1. The equipment under test was connected to an external DC power supply and input rated voltage.
- 2. The EUT output port was connected to communication tester.
- 3. The EUT was placed inside the temperature chamber at $25^{\circ}C$
- The power supply voltage to the EUT was varied ±15% of the nominal value measured at the input to the EUT
- 5. Record the maximum frequency change.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

🛛 Passed

Not Applicable

TEST DATA Refer to the appendix report

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5.8. ERP and EIRP

LIMIT WCDMA Band V: 7W (38.45dBm) ERP WCDMA Band II: 2W (33dBm) EIRP WCDMA Band IV: 1W (30dBm) EIRP

TEST PROCEDURE

- 1. According to the power tested in section 5.1, select the maximum power in each mode, and use the following formula to calculate the corresponding ERP/EIRP.
- 2. ERP = conducted power + Gain(dBd)
- EIRP = conducted power + Gain(dBi)
 ERP = EIRP 2.15

TEST RESULTS

☑ Passed □ Not Applicable

TEST DATA

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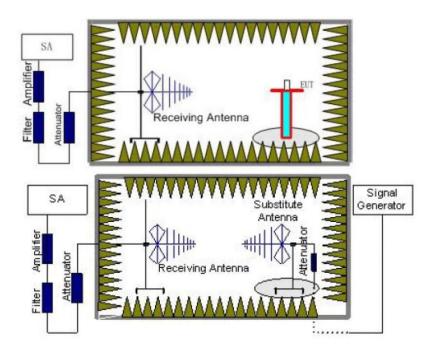
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5.9. Radiated Spurious Emission

<u>LIMIT</u>

-13dBm

TEST CONFIGURATION



TEST PROCEDURE

- 1. Place the EUT in the center of the turntable.
 - a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane
 - b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.
- 2. Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.
- 3. The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.
- 4. Receiver or Spectrum set as follow:

Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto

Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto

- 5. Each emission under consideration shall be evaluated:
 - a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
 - b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
 - c) Return the turntable to the azimuth where the highest emission amplitude level was observed.
 - d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
 - e) Record the measured emission amplitude level and frequency
- 6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.
- 7. Set-up the substitution measurement with the reference point of the substitution antenna located as near

as possible to where the center of the EUT radiating element was located during the initial EUT measurement.

- 8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.
- 9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.
- 10. For each emission that was detected and measured in the initial test
 - a) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
 - b) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.
 - c) Record the output power level of the signal generator when equivalence is achieved in step b).
- 11. Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.
- 12. Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:

Pe = Ps(dBm) - cable loss (dB) + antenna gain (dBd)

where

Pe = equivalent emission power in dBm

Ps = source (signal generator) power in dBm

NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.

13. Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from:

gain (dBd) = gain (dBi) – 2.15 dB.

If necessary, the antenna gain can be calculated from calibrated antenna factor information

14. Provide the complete measurement results as a part of the test report.

TEST MODE

Please refer to the clause 4.2

TEST RESULTS

⊠ Passed □

Not Applicable

			V	VCDMA I	Band II				
Test channel:		9262		I	Polarization	ו:	Hori	zontal	
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	60.40	-79.62	24.20	1.43	30.84	-84.83	-13.00	-71.83	Peak
2	759.66	-79.84	29.15	5.60	29.45	-74.54	-13.00	-61.54	Peak
3	1263.65	-71.30	36.87	7.46	28.90	-55.87	-13.00	-42.87	Peak
4	2877.34	-74.30	40.85	12.16	24.23	-45.52	-13.00	-32.52	Peak
5	3700.26	-36.14	42.29	5.19	41.60	-30.26	-13.00	-17.26	Peak
6	10696.21	-67.78	52.17	9.85	41.57	-47.33	-13.00	-34.33	Peak
Test ch	annel:	9262		I	Polarization	ו:	Vertical		
Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark
	MHZ	dBm	dB	dB	dB	dBm	dBm	limit	
1	42.79	-76.27	21.39	1.19	30.56	-84.25	-13.00	-71.25	Peak
2	847.15	-80.89	29.82	5.96	29.33	-74.44	-13.00	-61.44	Peak
3	1316.07	-71.20	37.39	7.62	29.05	-55.24	-13.00	-42.24	Peak
4	2849.03	-75.12	40.77	12.02	24.52	-46.85	-13.00	-33.85	Peak
5	3700.26	-37.51	42.32	5.19	41.60	-31.60	-13.00	-18.60	Peak
6	11428.08	-67.48	53.15	10.31	42.30	-46.32	-13.00	-33.32	Peak

Test channel:		9400	9400			Polarization:			Horizontal		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark		
1	778.59	-68.68	29.74	5.70	29.51	-62.75	-13.00	-49.75	Peak		
2	944.72	-73.63	29.33	6.34	29.26	-67.22	-13.00	-54.22	Peak		
3	1348.27	-71.23	37.05	7.73	29.09	-55.54	-13.00	-42.54	Peak		
4	2890.01	-74.71	40.87	12.17	24.30	-45.97	-13.00	-32.97	Peak		
5	3766.79	-38.73	42.22	5.17	41.58	-32.92	-13.00	-19.92	Peak		
6	5646.08	-60.04	43.79	6.55	40.75	-50.45	-13.00	-37.45	Peak		
Test cha	annel:	9400		P	Polarization:		Vertical				
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark		
1	89.87	-81.60	25.83	1.77	30.69	-84.69	-13.00	-71.69	Peak		
2	850.14	-80.77	29.84	5.97	29.35	-74.31	-13.00	-61.31	Peak		
3	1462.46	-70.79	37.76	8.10	28.97	-53.90	-13.00	-40.90	Peak		
4	2203.18	-71.14	41.69	10.29	29.13	-48.29	-13.00	-35.29	Peak		
5	3757.21	-39.67	42.15	5.18	41.59	-33.93	-13.00	-20.93	Peak		
6	5646.08	-58.30	43.95	6.55	40.75	-48.55	-13.00	-35.55	Peak		

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Test channel:		9538	9538			:	Horizontal			
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark	
1	37.84	-80.36	27.46	1.12	30.64	-82.42	-13.00	-69.42	Peak	
2	850.14	-80.02	29.76	5.97	29.35	-73.64	-13.00	-60.64	Peak	
з	1263.65	-70.80	36.87	7.46	28.90	-55.37	-13.00	-42.37	Peak	
4	2787.11	-74.76	40.61	11.83	24.76	-47.08	-13.00	-34.08	Peak	
5	3815.03	-33.44	42.12	5.30	41.56	-27.58	-13.00	-14.58	Peak	
6	11515.68	-68.05	52.97	10.37	42.30	-47.01	-13.00	-34.01	Peak	
Test channel:		9538	9538		Polarization:		Vertical			
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark	
1	92.76	-81.66	25.85	1.80	30.68	-84.69	-13.00	-71.69	Peak	
2	856.14	-80.88	29.88	6.00	29.37	-74.37	-13.00	-61.37	Peak	
з	1291.72	-70.90	37.28	7.54	29.01	-55.09	-13.00	-42.09	Peak	
4	2708.63	-73.53	40.00	11.67	25.54	-47.40	-13.00	-34.40	Peak	
5	3815.03	-35.31	41.98	5.30	41.56	-29.59	-13.00	-16.59	Peak	
6	10999.95	-67.16	52.79	10.00	42.30	-46.67	-13.00	-33.67	Peak	

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			W	CDMA Ba	and IV				
Test channel:		1312		Р	olarization	:	Horizo	ontal	
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	42.79	-80.13	26.49	1.19	30.56	-83.01	-13.00	-70.01	Peak
2	889.90	-77.55	29.58	6.13	29.65	-71.49	-13.00	-58.49	Peak
3	1713.13	-70.64	36.40	8.86	29.09	-54.47	-13.00	-41.47	Peak
4	2355.89	-70.66	40.07	10.63	28.23	-48.19	-13.00	-35.19	Peak
5	3428.21	-43.27	39.99	4.98	41.60	-39.90	-13.00	-26.90	Peak
6	5138.58	-46.94	44.07	6.24	41.05	-37.68	-13.00	-24.68	Peak
Test cha	annel:	1312		P	Polarization:		Vertical		
Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark
	MHz	dBm	dB	dB	dB	dBm	dBm	limit	
1	90.82	-81.87	25.88	1.78	30.69	-84.90	-13.00	-71.90	Peak
2	720.63	-79.69	29.00	5.43	29.59	-74.85	-13.00	-61.85	Peak
3	1562.11	-71.60	37.76	8.41	28.77	-54.20	-13.00	-41.20	Peak
4	2212.88	-70.52	41.57	10.30	29.05	-47.70	-13.00	-34.70	Peak
5	3428.21	-38.27	40.01	4.98	41.60	-34.88	-13.00	-21.88	Peak
6	5138.58	-41.18	44.10	6.24	41.05	-31.89	-13.00	-18.89	Peak

Test channel:		1413		Р	olarization	Horizo	Horizontal		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	38.78	-81.39	27.60	1.13	30.62	-83.28	-13.00	-70.28	Peak
2	688.42	-75.93	28.10	5.31	29.63	-72.15	-13.00	-59.15	Peak
3	1270.61	-70.54	36.89	7.49	28.83	-54.99	-13.00	-41.99	Peak
4	2714.58	-72.31	39.90	11.67	25.48	-46.22	-13.00	-33.22	Peak
5	3463.29	-44.11	40.49	4.97	41.60	-40.25	-13.00	-27.25	Peak
6	5204.40	-53.68	43.95	6.31	41.02	-44.44	-13.00	-31.44	Peak
Test channel:		1413		P	Polarization:		Vertical		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	87.68	-81.43	24.87	1.75	30.67	-85.48	-13.00	-72.48	Peak
2	688.42	-78.47	28.59	5.31	29.63	-74.20	-13.00	-61.20	Peak
3	1327.69	-71.14	37.44	7.67	28.91	-54.94	-13.00	-41.94	Peak
4	2777.94	-73.47	40.52	11.83	25.04	-46.16	-13.00	-33.16	Peak
-	3472.12	-45.75	40.69	4.98	41.60	-41.68	-13.00	-28.68	Peak
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Test channel:		1513		P	olarization	:	Horizo		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	36.92	-79.75	27.32	1.10	30.65	-81.98	-13.00	-68.98	Peak
2	754.33	-80.78	29.24	5.57	29.45	-75.42	-13.00	-62.42	Peak
3	1937.43	-68.78	38.39	9.52	29.34	-50.21	-13.00	-37.21	Peak
4	2176.72	-69.72	40.76	10.21	29.25	-48.00	-13.00	-35.00	Peak
5	3507.65	-39.72	41.11	5.11	41.60	-35.10	-13.00	-22.10	Peak
6	5257.66	-42.27	43.99	6.33	41.00	-32.95	-13.00	-19.95	Peak
Test channel:		1513	Polarization:			:	Vertical		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	88.93	-79.82	25.42	1.76	30.68	-83.32	-13.00	-70.32	Peak
2	593.90	-75.21	27.20	4.88	29.79	-72.92	-13.00	-59.92	Peak
3	1937.43	-69.24	37.75	9.52	29.34	-51.31	-13.00	-38.31	Peak
4	2327.59	-69.86	40.17	10.62	28.74	-47.81	-13.00	-34.81	Peak
5	3507.65	-38.69	41.23	5.11	41.60	-33.95	-13.00	-20.95	Peak
6	5257.66	-42.12	43.98	6.33	41.00	-32.81	-13.00	-19.81	Peak

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			V	CDMA B	and V				
Test channel:		4132		Polarization:			Horiz		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	40.74	-74.86	27.43	1.16	30.59	-76.86	-13.00	-63.86	Peak
2	374.67	-70.50	24.80	3.80	30.40	-72.30	-13.00	-59.30	Peak
3	1776.37	-70.78	36.63	8.99	28.84	-54.00	-13.00	-41.00	Peak
4	2269.51	-71.94	40.56	10.48	28.63	-49.53	-13.00	-36.53	Peak
5	8022.46	-66.68	48.05	8.07	40.76	-51.32	-13.00	-38.32	Peak
6	11812.58	-68.12	52.72	10.57	42.30	-47.13	-13.00	-34.13	Peak
Test ch	annel:	4132		Polarization:		Vertical			
Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark
	MHZ	dBm	dB	dB	dB	dBm	dBm	limit	
1	42.79	-67.03	21.39	1.19	30.56	-75.01	-13.00	-62.01	Peak
2	449.85	-74.16	25.28	4.19	29.72	-74.41	-13.00	-61.41	Peak
3	1782.24	-71.05	36.43	9.05	28.87	-54.44	-13.00	-41.44	Peak
4	2222.63	-71.86	41.45	10.31	28.92	-49.02	-13.00	-36.02	Peak
5	7451.57	-66.86	48.50	7.83	41.05	-51.58	-13.00	-38.58	Peak
6	10888.51	-67.16	52.69	9.95	42.19	-46.71	-13,00	-33.71	Peak

Test channel:		4183		P	olarization	:	Horizo		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	138.99	-69.28	17.34	2.22	30.56	-80.28	-13.00	-67.28	Peak
2	474.21	-72.17	25.36	4.31	29.82	-72.32	-13.00	-59.32	Peak
3	1563.83	-70.72	36.17	8.42	28.79	-54.92	-13.00	-41.92	Peak
4	2225.07	-71.43	40.82	10.33	28.88	-49.16	-13.00	-36.16	Peak
5	4996.69	-64.04	44.35	6.09	41.11	-54.71	-13.00	-41.71	Peak
6	11486.41	-66.21	52.98	10.35	42.30	-45.18	-13.00	-32.18	Peak
Test channel:		4183	183		Polarization:		Vertical		
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark
1	142.45	-73.66	21.54	2.25	30.53	-80.40	-13.00	-67.40	Peak
2	449.85	-74.27	25.28	4.19	29.72	-74.52	-13.00	-61.52	Peak
3	1550.14	-70.94	37.76	8.37	28.76	-53.57	-13.00	-40.57	Peak
4	2232.42	-72.51	41.32	10.37	28.75	-49.57	-13.00	-36.57	Peak
5	4996.69	-61.89	44.50	6.09	41.11	-52.41	-13.00	-39.41	Peak
6	11457.21	-66.01	53.17	10.33	42.30	-44.81	-13.00	-31.81	Peak

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Test channel:		4233			Polarization:		Horizontal			
Mark	Frequency	Reading	Antenna	Cable	Preamp	Level	Limit	Over	Remark	
	MHZ	dBm	dB	dB	dB	dBm	dBm	limit		
1	41.75	-65.93	26.96	1.18	30.58	-68.37	-13.00	-55.37	Peak	
2	449.85	-75.73	25.95	4.19	29.72	-75.31	-13.00	-62.31	Peak	
3	1749.26	-70.86	36.54	8.93	28.86	-54.25	-13.00	-41.25	Peak	
4	2229.97	-72.68	40.79	10.35	28.80	-50.34	-13.00	-37.34	Peak	
5	8022.46	-67.09	48.05	8.07	40.76	-51.73	-13.00	-38.73	Peak	
6	10400.86	-67.76	51.44	9.71	40.60	-47.21	-13.00	-34.21	Peak	
Test channel:		4233			Polarization:		Vertical			
Mark	Frequency MHz	Reading dBm	Antenna dB	Cable dB	Preamp dB	Level dBm	Limit dBm	Over limit	Remark	
1	41.75	-70,64	21.29	1.18	30.58	-78.75	-13.00	-65.75	Peak	
2	374.67	-70.46	24.67	3.80	30.40	-72.39	-13.00	-59.39	Peak	
3	1589.81	-71.51	37.76	8.48	29.17	-54.44	-13.00	-41.44	Peak	
4	2237.33	-72.40	41.26	10.38		-49.45	-13.00	-36.45	Peak	
5	7489.60	-67.17	48.44	7.63		-52.18	-13.00		Peak	
6	10560.94	-68.16	52.38	9.79		-47.11	-13.00		Peak	

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Refer to the test report No.: CHTW24030032

7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Refer to the test report No.: CHTW24030032

8. APPENDIX REPORT