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| F | CC REPORT For WCDMA | |
|--|---|--|
| Report No : Project No | CHTEW2208032401 Report Verification: SHT2207115003EW 2ASWW-TAB83G | |
| Applicant: | XINCHUANGXIN INTERNATIONAL CO.,LTD | |
| Address | ROOM 605 6/F, FA YUEN COMMERCIAL BUILDING, 75-77 FA YUEN STREET MONGKOK KL | |
| Product Name: | Tablet | |
| Trade Mark | CORN | |
| Model No | The leader tab8 3G | |
| Listed Model(s) | | |
| Standard: | FCC CFR Title 47 Part 2 | |
| | FCC CFR Title 47 Part 22 | |
| | FCC CFR Title 47 Part 24 | |
| Date of receipt of test sample | Aug.09, 2022 | |
| Date of testing | Aug.09, 2022-Aug.25, 2022 | |
| Date of issue | Aug.29, 2022 | |
| Result: | Pass | |
| Compiled by (position+printedname+signature): | File administrators Fanghui Zhu | |
| Supervised by (position+printedname+signature): | Project Engineer Caspar Chen Managar Hans Hu | |
| Approved by (position+printedname+signature): | Manager Hans Hu | |
| Testing Laboratory Name: : | Shenzhen Huatongwei International Inspection Co., Ltd. | |
| Address | 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China | |
| | | |

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The test report merely correspond to the test sample.

2022-08-29

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1. TEST STANDARDS AND REPORT VERSION

1.1. Applicable Standards

The tests were performed according to following standards:

FCC Rules Part 2: FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

FCC Rules Part 22: PUBLIC MOBILE SERVICES

FCC Rules Part 24: PERSONAL COMMUNICATIONS SERVICES

<u>TIA/EIA 603 E March 2016</u>:Land Mobile FM or PM Communications Equipment Measurement and Performance Standards.

ANSI C63.26: 2015: 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 | 2022-08-29 | Original |
| | | |
| | | |
| | | |
| | | |

2022-08-29

2. TEST DESCRIPTION

| Section | Test Item | Section in CFR 47 | Result #1 | Test Engineer |
|---------|--|----------------------|-----------|------------------------|
| | | Part 2.1046 | | |
| 5.1 | Conducted Output Power | Part 22.913(a) | Pass | Tiancheng Huang |
| | | Part 24.232(c) | | |
| 5.2 | Peak-to-Average Ratio | Part 24.232 | Pass | Tiancheng Huang |
| | | Part 2.1049 | | |
| 5.3 | 99% Occupied Bandwidth & 26 dB Bandwidth | Part 22.917(b) | Pass | Tiancheng Huang |
| | | Part 24.238(b) | | |
| | | Part 2.1051 | | |
| 5.4 | Band Edge | Part 22.917 | Pass | Tiancheng Huang |
| | | Part 24.238 | | |
| | Conducted Spurious | Part 2.1051 | | |
| 5.5 | Conducted Spurious Emissions | Part 22.917 | Pass | Tiancheng Huang |
| | | Part 24.238 | | |
| | | Part 2.1055(a)(1)(b) | | |
| 5.6 | Frequency stability vs temperature | Part 22.355 | Pass | Tiancheng Huang |
| | lemperature | Part 24.235 | | |
| | | Part 2.1055(d)(1)(2) | | |
| 5.7 | Frequency stability vs voltage | Part 22.355 | Pass | Tiancheng Huang |
| | | Part 24.235 | | |
| 5.8 | ERP and EIRP | Part 22.913(a) | Pass | |
| 5.0 | | Part 24.232(b) | F 033 | Tiancheng Huang |
| | | Part 2.1053 | | |
| 5.9 | Radiated Spurious Emissions | Part 22.917 | Pass | Pan Xie |
| | | Part 24.238 | | |

Note:

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

3. SUMMARY

3.1. Client Information

| Applicant: | XINCHUANGXIN INTERNATIONAL CO., LTD | |
|---------------|--|--|
| Address: | ROOM 605 6/F, FA YUEN COMMERCIAL BUILDING, 75-77 FA YUE 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: | Tablet |
| Trade Mark: | CORN |
| Model No.: The leader tab8 3G | |
| Listed Model(s): | - |
| Power supply: | DC 3.8V from Battery |
| Hardware version: | S863T-7731E-V1.0 |
| Software version: | The leader tab8 3G_V01_20220730 |

3.3. Radio Specification Description

| Support Operating Band: | Band II | 🛛 Band V | | |
|------------------------------|-------------------|----------|---------|----------------|
| Operating Frequency Range: | Please refer to n | ote #2 | | |
| Support Type: | WCDMA | 🛛 HSDPA | 🛛 HSUPA | |
| Modulation Type: | | 🗌 16QAM | | |
| Power Class: | 🛛 Class 3 | | | |
| Antenna type: | Interna | | | |
| Antenna gain ^{#3} : | Band II: 1.2dBi | | | Band V: 0.6dBi |

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 |
|------------|--------------------|--------------------|
| Band II | 1852.40~1907.60MHz | 1932.40~1987.60MHz |
| Band V | 826.40~846.60MHz | 871.40~891.60MHz |

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

| Laboratory Name | Shenzhen Huatongwei International Inspection Co., Ltd. | | |
|----------------------|--|----------------------|--|
| Laboratory Location | 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China | | |
| Connect information: | Tel: 86-755-26715499 E-mail: <u>cs@szhtw.com.cn</u> <u>http://www.szhtw.com.cn</u> | | |
| Qualifications | Туре | Accreditation Number | |
| Qualifications | FCC | 762235 | |

3.4. Testing Laboratory Information

4. TEST CONFIGURATION

4.1. Test frequency list

| FDD Band II | | FDD Band V | |
|-------------|-----------------|------------|-----------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 9262 | 1852.40 | 4132 | 826.40 |
| 9400 | 1880.00 | 4182 | 836.40 |
| 9538 | 1907.60 | 4233 | 846.60 |

4.2. Descriptions of Test mode

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.

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 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 | YPHT22071150003 | |

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 | | | | |

| | VN=Nominal Voltage | DC 3.8V |
|--------------|-----------------------|----------------------|
| Voltage | VL=Lower Voltage | DC 3.5V |
| | VH=Higher Voltage | DC 4.2V |
| Tomporatura | TN=Normal Temperature | 25 °C |
| Temperature | Extreme Temperature | From −30°C to + 50°C |
| Humidity | 30~60 % | |
| Air Pressure | 950-1050 hPa | |

4.5. Testing environmental condition

4.6. Statement of the measurement uncertainty

| Test Items | MeasurementUncertainty |
|--|-----------------------------------|
| Radio frequency | <1GHz: 0.022ppm >1GHz: 0.64ppm |
| Conducted output power | 0.65 dB |
| ERP and EIRP | 0.65 dB |
| Conducted spurious emission | 0.65 dB |
| Radiated spurious emission | <1GHz: 2.85dB >1GHz: 3.66dB |
| 99% Occupied Bandwidth & 26 dB Bandwidth | <1GHz: 0.022ppm >1GHz: 0.64ppm |

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

4.7. Equipments Used during the Test

| • | 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) |
| 0 | Signal and spectrum Analyzer | R&S | HTWE0242 | FSV40 | 100048 | 2021/09/13 | 2022/09/12 |
| 0 | Signal & Spectrum Analyzer | R&S | HTWE0262 | FSW26 | 103440 | 2021/09/13 | 2022/09/12 |
| • | Spectrum Analyzer | Agilent | HTWE0286 | N9020A | MY50510187 | 2021/09/13 | 2022/09/12 |
| • | Radio communication tester | R&S | HTWE0287 | CMW500 | 137688-Lv | 2021/09/13 | 2022/09/12 |
| • | Test software | Tonscend | N/A | JS1120 | N/A | 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 | N/A | 2018/09/27 | 2022/09/26 |
| • | Spectrum Analyzer | R&S | HTWE0098 | FSP40 | 100597 | 2021/09/13 | 2022/09/12 |
| • | Loop Antenna | R&S | HTWE0170 | HFH2-Z2 | 100020 | 2021/04/06 | 2024/04/05 |
| • | Broadband Horn Antenna | SCHWARZBECK | HTWE0103 | BBHA9170 | BBHA9170472 | 2020/04/27 | 2023/04/26 |
| • | Ultra-Broadband Antenna | SCHWARZBECK | HTWE0123 | VULB9163 | 538 | 2021/04/06 | 2024/04/05 |
| • | Horn Antenna | SCHWARZBECK | HTWE0126 | 9120D | 1011 | 2020/04/01 | 2023/03/31 |
| • | Pre-amplifier | CD | HTWE0071 | PAP-0102 | 12004 | 2021/11/05 | 2022/11/04 |
| • | Broadband Preamplifier | SCHWARZBECK | HTWE0201 | BBV 9718 | 9718-248 | 2022/02/28 | 2023/02/27 |
| • | RF Connection Cable | HUBER+SUHNER | HTWE0120- 01 | 6m 18GHz S Serisa | N/A | 2022/02/25 | 2023/02/24 |
| • | RF Connection Cable | HUBER+SUHNER | HTWE0120- 02 | 6m 3GHz RG Serisa | N/A | 2022/02/25 | 2023/02/24 |
| • | RF Connection Cable | HUBER+SUHNER | HTWE0120- 03 | 6m 3GHz RG Serisa | N/A | 2022/02/25 | 2023/02/24 |
| • | RF Connection Cable | HUBER+SUHNER | HTWE0120- 04 | 6m 3GHz RG Serisa | N/A | 2022/02/25 | 2023/02/24 |
| • | RF Connection Cable | HUBER+SUHNER | HTWE0121- 01 | 6m 18GHz S Serisa | N/A | 2018/09/27 | 2022/09/26 |
| • | EMI Test Software | Audix | N/A | E3 | N/A | N/A | N/A |

| • | Auxiliary Equi | oment | | | | | |
|------|--------------------|--------------|---------------|-----------|------------|---------------------------------|---------------------------------|
| 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 | HTWE0254 | GPL-2 | N/A | 2021/09/14 | 2022/09/13 |
| • | DC Power Supply | Gwinstek | HTWE0274 | SPS-2415 | GER835793 | N/A | N/A |

5. TEST CONDITIONS AND RESULTS

5.1. Conducted Output Power

LIMIT

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

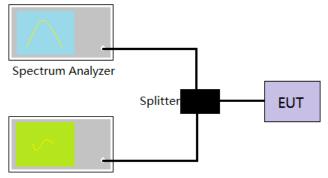
Refer to appendix A on the section 8 appendix report

5.2. Peak-Average Ratio

<u>LIMIT</u>

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

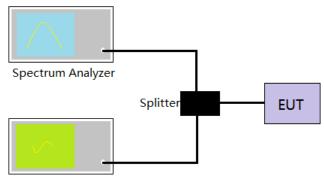
Refer to appendix B on the section 8 appendix report

5.3. 99% Occupied Bandwidth & 26 dB Bandwidth

LIMIT

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

Refer to appendix C on the section 8 appendix report

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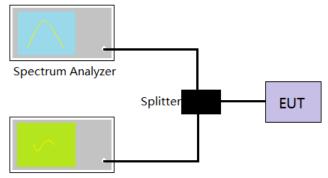
5.4. Band Edge

<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

Refer to appendix D on the section 8 appendix report

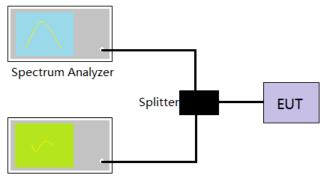
5.5. Conducted Spurious Emissions

LIMIT

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

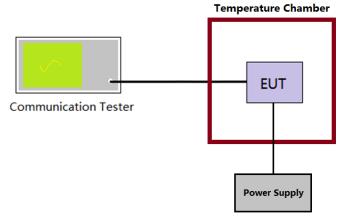
Refer to appendix E on the section 8 appendix report

5.6. Frequency stability VS Temperature measurement

<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

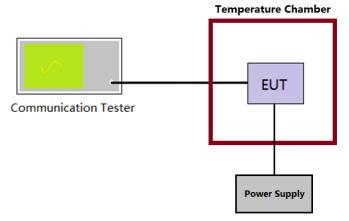
Refer to appendix F on the section 8 appendix report

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°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

Refer to appendix F on the section 8 appendix report

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)
- 3. EIRP = conducted power + Gain(dBi)

ERP = EIRP - 2.15

TEST RESULTS

☑ Passed □ Not Applicable

Refer to appendix G on the section 8 appendix report

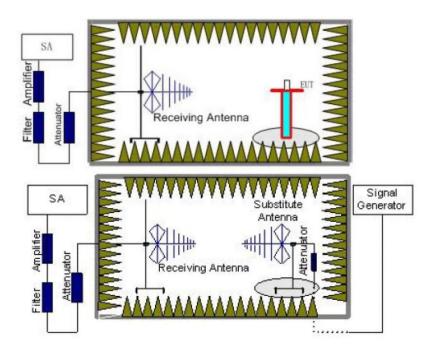
2022-08-29

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.
- 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.
- 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.
- 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

| | | | W | CDMA B | and II | | | | |
|---------------|------------------|----------------|---------------|-------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | | 9262 | | F | olarizatio | n: | F | lorizonta | al |
| Mark | Frequency MHz | Reading dBm | Antenna dB | Cable dB | Preamp dB | Level dBm | Limit dBm | Over limit | Remark |
| 1 | 115.36 | -35.69 | 17.59 | 7.63 | 30.96 | -41.43 | -13.00 | -28.43 | Peak |
| 2 | 400.56 | -64.02 | 25.43 | 9.19 | 30.45 | -59.85 | -13.00 | -46.85 | Peak |
| 3 | 1355.70 | -67.51 | 37.07 | 12.07 | 29.40 | -47.77 | -13.00 | -34.77 | Peak |
| 4 | 2322.48 | -69.71 | 40.25 | 14.40 | 29.00 | -44.06 | -13.00 | -31.06 | Peak |
| 5 | 3705.85 | -34.38 | 42.28 | 7.70 | 37.14 | -21.54 | -13.00 | -8.54 | Peak |
| 6 | 5562.15 | -42.40 | 43.79 | 9.71 | 32.92 | -21.82 | -13.00 | -8.82 | Peak |
| Test channel: | | 9262 | | F | olarizatio | n: | V | ertical | |
| Mark | Frequency | Reading | Antenna | Cable | Preamp | Level | Limit | 0ver | Remark |
| | MHz | dBm | dB | dB | dB | dBm | dBm | limit | |
| 1 | 38.78 | -49.89 | 20.75 | 6.92 | 30.85 | -53.07 | -13.00 | -40.07 | Peak |
| 2 | 119.06 | -61.47 | 22.27 | 7.65 | 30.91 | -62.46 | -13.00 | -49.46 | Peak |
| 3 | 1425.97 | -70.37 | 37.76 | 12.23 | 29.37 | -49.75 | -13.00 | -36.75 | Peak |
| 4 | 2176.72 | -70.27 | 41.35 | 13.97 | 29.38 | -44.33 | -13.00 | -31.33 | Peak |
| 5 | 5554.08 | -50.55 | 43.95 | 9.70 | 32.79 | -29.69 | -13.00 | -16.69 | Peak |
| 6 | 9267.14 | -60.51 | 49.76 | 13.94 | 31.17 | -27.98 | -13.00 | -14.98 | Peak |

| Test channel: | | 9400 | | F | Polarizatio | on: | H | Iorizonta | al |
|-----------------------|-----------------------------------|--|-------------------------------|--------------------------------------|---|--|--|---|----------------------|
| Mark | Frequency | Reading | Antenna | Cable | Preamp | Level | Limit | 0ver | Remark |
| | MHz | dBm | dB | dB | dB | dBm | dBm | limit | |
| 1 | 38.78 | -49.97 | 27.60 | 6.92 | 30.85 | -46.30 | -13.00 | -33.30 | Peak |
| 2 | 114.15 | -50.62 | 17.90 | 7.62 | 30.97 | -56.07 | -13.00 | -43.07 | Peak |
| 3 | 1360.17 | -68.77 | 37.08 | 12.08 | 29.41 | -49.02 | -13.00 | -36.02 | Peak |
| 4 | 2768.80 | -72.69 | 40.43 | 16.25 | 26.07 | -42.08 | -13.00 | -29.08 | Peak |
| 5 | 3754.53 | -38.59 | 42.23 | 7.82 | 37.01 | -25.55 | -13.00 | -12.55 | Peak |
| 6 | 5635.22 | -41.21 | 43.77 | 9.78 | 33.38 | -21.04 | -13.00 | -8.04 | Peak |
| | | | | | | | | | |
| Fest channel: | | 9400 | | F | Polarizatio | n: | 1 | /ertical | |
| Test channel: Mark | Frequency | 9400 Reading | Antenna | Cable | Polarizatic Preamp | n: Level | Limit | /ertical _{Over} | Remark |
| | Frequency MHz | | Antenna dB | | | | | | Remark |
| | | Reading | | Cable | Preamp | Level | Limit | 0ver | Remark Peak |
| Mark | MHz | Reading dBm | dB | Cable dB | Preamp dB | Level dBm | Limit dBm | Over limit | |
| Mark 1 | MHz 38.78 | Reading dBm -50.16 | dB 20.75 | Cable dB 6.92 | Preamp dB 30.85 | Level dBm -53.34 | Limit dBm -13.00 | Over limit -40.34 | Peak |
| Mark 1 2 | MHz 38.78 117.40 | Reading dBm -50.16 -49.38 | dB 20.75 22.66 | Cable dB 6.92 7.64 | Preamp dB 30.85 30.93 | Level dBm -53.34 -50.01 | Limit dBm -13.00 -13.00 | Over limit -40.34 -37.01 | Peak Peak |
| 1 2 3 | MHz 38.78 117.40 1465.68 | Reading dBm -50.16 -49.38 -68.74 | dB 20.75 22.66 37.76 | Cable dB 6.92 7.64 12.33 | Preamp dB 30.85 30.93 29.27 | Level dBm -53.34 -50.01 -47.92 | Limit dBm -13.00 -13.00 -13.00 | Over limit -40.34 -37.01 -34.92 | Peak Peak Peak |

| Test channel: | | 9538 | | F | Polarizatio | on: | ŀ | Iorizonta | ıl | |
|---------------|-----------------------------------|-----------------------------------|-------------------------------|-----------------------------|-------------------------------|-----------------------------------|-----------------------------------|---|----------------------|--|
| Mark | Frequency | Reading | Antenna | Cable | Preamp | Level | Limit | 0ver | Remark | |
| | MHz | dBm | dB | dB | dB | dBm | dBm | limit | | |
| 1 | 38.78 | -50.37 | 27.60 | 6.92 | 30.85 | -46.70 | -13.00 | -33.70 | Peak | |
| 2 | 117.40 | -54.67 | 17.08 | 7.64 | 30.93 | -60.88 | -13.00 | -47.88 | Peak | |
| 3 | 1321.87 | -69.52 | 37.00 | 11.99 | 29.54 | -50.07 | -13.00 | -37.07 | Peak | |
| 4 | 2456.32 | -70.47 | 39.51 | 15.06 | 28.15 | -44.05 | -13.00 | -31.05 | Peak | |
| 5 | 3814.91 | -34.28 | 42.12 | 7.94 | 36.72 | -20.94 | -13.00 | -7.94 | Peak | |
| 6 | 5717.54 | -39.36 | 43.89 | 9.88 | 33.43 | -19.02 | -13.00 | -6.02 | Peak | |
| Test channel: | | 9538 | | F | Polarizatio | on: | ١ | /ertical | | |
| Ma -1- | _ | | | c - L 1 - | | | | | | |
| Mark | Frequency | Reading | Antenna | Cable | Preamp | Level | Limit | Over | Remark | |
| Mark | Frequency MHz | Reading dBm | Antenna dB | dB | dB | dBm | Limit dBm | | Remark | |
| Mark 1 | | | | | | | | limit | Remark Peak | |
| | MHz | dBm | dB | dB | dB | dBm | dBm | limit -36.12 | | |
| 1 | MHz 45.75 | dBm -46.87 | dB 21.68 | dB 7.00 | dB 30.93 | dBm -49.12 | dBm -13.00 | limit -36.12 -47.60 | Peak | |
| 1 2 | MHz 45.75 400.56 | dBm -46.87 -64.59 | dB 21.68 25.25 | dB 7.00 9.19 | dB 30.93 30.45 | dBm -49.12 -60.60 | dBm -13.00 -13.00 | limit -36.12 -47.60 -35.16 | Peak Peak | |
| 1 2 3 | MHz 45.75 400.56 1440.14 | dBm -46.87 -64.59 -68.94 | dB 21.68 25.25 37.76 | dB 7.00 9.19 12.27 | dB 30.93 30.45 29.25 | dBm -49.12 -60.60 -48.16 | dBm -13.00 -13.00 -13.00 | limit -36.12 -47.60 -35.16 -30.13 | Peak Peak Peak | |

Remark:

1.

The emission behaviour belongs to narrowband spurious emission. The emission levels of not record in the report are very lower than the limit and not show in test report. 2.

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Date of issue:

| | | | W | CDMA B | and V | | | | |
|---------------|------------------|----------------|---------------|-------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | | 4132 | | P | olarizatio | n: | F | lorizonta | I |
| Mark | Frequency MHz | Reading dBm | Antenna dB | Cable dB | Preamp dB | Level dBm | Limit dBm | Over limit | Remark |
| 1 | 37.84 | -62.63 | 27.46 | 6.90 | 30.86 | -59.13 | -13.00 | -46.13 | Peak |
| 2 | 400.56 | -62.84 | 25.43 | 9.19 | 30.45 | -58.67 | -13.00 | -45.67 | Peak |
| 3 | 2474.92 | -40.98 | 39.41 | 6.17 | 37.29 | -32.69 | -13.00 | -19.69 | Peak |
| 4 | 3308.19 | -53.45 | 40.39 | 7.25 | 37.05 | -42.86 | -13.00 | -29.86 | Peak |
| 5 | 4958.68 | -56.39 | 44.22 | 9.25 | 34.69 | -37.61 | -13.00 | -24.61 | Peak |
| 6 | 5776.92 | -57.13 | 43.97 | 9.97 | 33.33 | -36.52 | -13.00 | -23.52 | Peak |
| Test channel: | | 4132 | | F | olarizatio | n: | V | ertical | |
| Mark | Frequency MHz | Reading dBm | Antenna dB | Cable dB | Preamp dB | Level dBm | Limit dBm | | Remark |
| 1 | 36.92 | -56.45 | 20.19 | 6.89 | 30.87 | -60.24 | -13.00 | -47.24 | Peak |
| 2 | 400.56 | -59.68 | 25.25 | 9.19 | 30.45 | -55.69 | -13.00 | -42.69 | Peak |
| 3 | 1655.35 | -43.98 | 36.13 | 4.97 | 37.20 | -40.08 | -13.00 | -27.08 | Peak |
| 4 | 2474.92 | -37.85 | 39.25 | 6.17 | 37.29 | -29.72 | -13.00 | -16.72 | Peak |
| 5 | 4958.68 | -55.67 | 44.33 | 9.25 | 34.69 | -36.78 | -13.00 | -23.78 | Peak |
| 6 | 5776.92 | -63.35 | 44.10 | 9.97 | 33.33 | -42.61 | -13.00 | -29.61 | Peak |

| Test channel: | | 4183 | | F | Polarizatio | on: | F | lorizonta | ıl |
|---------------|------------------|----------------|---------------|-------------|--------------|--------------|--------------|---------------|--------|
| Mark | Frequency MHz | Reading dBm | Antenna dB | Cable dB | Preamp dB | Level dBm | Limit dBm | Over limit | Remark |
| 1 | 35.89 | -57.93 | 27.16 | 6.88 | 30.89 | -54.78 | -13.00 | -41.78 | Peak |
| 2 | 193.44 | -56.94 | 21.31 | 8.14 | 30.50 | -57.99 | -13.00 | -44.99 | Peak |
| 3 | 1672.30 | -57.31 | 36.25 | 5.03 | 37.11 | -53.14 | -13.00 | -40.14 | Peak |
| 4 | 2513.01 | -48.46 | 39.20 | 6.18 | 37.29 | -40.37 | -13.00 | -27.37 | Peak |
| 5 | 5009.43 | -63.75 | 44.34 | 9.33 | 34.83 | -44.91 | -13.00 | -31.91 | Peak |
| 6 | 5850.92 | -62.31 | 44.14 | 10.05 | 33.39 | -41.51 | -13.00 | -28.51 | Peak |

| est channel: | | 4183 | | F | Polarizatio | on: | \vee | /ertical | |
|--------------|------------------|----------------|---------------|-------------|--------------|--------------|--------------|---------------|--------|
| Mark | Frequency MHz | Reading dBm | Antenna dB | Cable dB | Preamp dB | Level dBm | Limit dBm | Over limit | Remark |
| 1 | 34.90 | -56.44 | 19.55 | 6.87 | 30.90 | -60.92 | -13.00 | -47.92 | Peak |
| 2 | 400.56 | -59.81 | 25.25 | 9.19 | 30.45 | -55.82 | -13.00 | -42.82 | Peak |
| 3 | 1672.30 | -49.65 | 36.17 | 5.03 | 37.11 | -45.56 | -13.00 | -32.56 | Peak |
| 4 | 2513.01 | -50.29 | 39.22 | 6.18 | 37.29 | -42.18 | -13.00 | -29.18 | Peak |
| 5 | 3342.04 | -58.48 | 40.11 | 7.29 | 37.31 | -48.39 | -13.00 | -35.39 | Peak |
| 6 | 5009.43 | -63.26 | 44.48 | 9.33 | 34.83 | -44.28 | -13.00 | -31.28 | Peak |

| Test channel: | | 4233 | | F | Polarizatio | on: | ł | Horizonta | al | |
|---------------|-----------|---------|---------|-------|-------------|--------|--------|-----------|--------|--|
| Mark | Frequency | Reading | Antenna | Cable | Preamp | Level | Limit | 0ver | Remark | |
| | MHz | dBm | dB | dB | dB | dBm | dBm | limit | | |
| 1 | 32.99 | -64.06 | 26.67 | 6.85 | 30.92 | -61.46 | -13.00 | -48.46 | Peak | |
| 2 | 600.20 | -73.72 | 27.87 | 9.93 | 30.43 | -66.35 | -13.00 | -53.35 | Peak | |
| 3 | 2532.28 | -47.28 | 39.10 | 6.23 | 37.30 | -39.25 | -13.00 | -26.25 | Peak | |
| 4 | 3384.85 | -53.47 | 39.71 | 7.34 | 37.26 | -43.68 | -13.00 | -30.68 | Peak | |
| 5 | 5073.59 | -57.03 | 44.21 | 9.35 | 34.86 | -38.33 | -13.00 | -25.33 | Peak | |
| 6 | 5925.86 | -54.73 | 44.35 | 10.12 | 33.47 | -33.73 | -13.00 | -20.73 | Peak | |
| Test channel: | | 4233 | | F | Polarizatio | on: | N | Vertical | | |
| Mark | Frequency | Reading | Antenna | Cable | Preamp | Level | Limit | 0ver | Remark | |
| | MHz | dBm | dB | dB | dB | dBm | dBm | limit | | |
| 1 | 34.90 | -57.07 | 19.55 | 6.87 | 30.90 | -61.55 | -13.00 | -48.55 | Peak | |
| 2 | 400.56 | -59.26 | 25.25 | 9.19 | 30.45 | -55.27 | -13.00 | -42.27 | Peak | |
| 3 | 1689.41 | -45.02 | 36.21 | 5.08 | 37.17 | -40.90 | -13.00 | -27.90 | Peak | |
| 4 | 2532.28 | -45.66 | 39.21 | 6.23 | 37.30 | -37.52 | -13.00 | -24.52 | Peak | |
| 5 | 5073.59 | -56.97 | 44.29 | 9.35 | 34.86 | -38.19 | -13.00 | -25.19 | Peak | |
| 6 | 5925.86 | -64.76 | 44.52 | 10.12 | 33.47 | -43.59 | -13.00 | -30.59 | Peak | |

Remark:

1.

The emission behaviour belongs to narrowband spurious emission. The emission levels of not record in the report are very lower than the limit and not show in test report. 2.

2022-08-29

6. TEST SETUP PHOTOS OF THE EUT







7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT

Refer to the test report No.: CHTEW22080324

8. APPENDIX REPORT

APPENDIX REPORT

| Project No. | SHT2207115001EW | Radio Specification | WCDMA |
|-----------------|-----------------|---------------------|--------------------|
| Test sample No. | YPHT22071150003 | Model No. | The leader tab8 3G |
| Start test date | 2022/8/17 | Finish date | 2022/8/18 |
| Temperature | 24.7℃ | Humidity | 34% |
| Test Engineer | Tiancheng.Huang | Auditor | Xiaodong Zheo |

| Appendix clause | Test item | Result |
|--------------------|--|--------|
| A | Conducted Output Power | PASS |
| В | Peak-to-Average Ratio | PASS |
| С | 26 dB Bandwidth and Occupied Bandwidth | PASS |
| D | Band edge | PASS |
| E | Conducted Spurious Emission | PASS |
| F | Frequency Stability | PASS |
| G | ERP and EIRP | PASS |

8.1 Appendix A: Conducted Output Power

Test Result

| Band | Channel | Power(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|---------|
| Band II | 9262 | 23.15 | 33 | PASS |
| Band II | 9400 | 23.13 | 33 | PASS |
| Band II | 9538 | 22.98 | 33 | PASS |
| Band V | 4132 | 24.09 | 38.5 | PASS |
| Band V | 4182 | 24.24 | 38.5 | PASS |
| Band V | 4233 | 23.84 | 38.5 | PASS |

| Band | Channel | SubTest | Power(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|------------|---------|
| Band II | 9262 | HSDPA_Sub1 | 20.24 | 33 | PASS |
| Band II | 9262 | HSDPA_Sub2 | 19.94 | 33 | PASS |
| Band II | 9262 | HSDPA_Sub3 | 19.59 | 33 | PASS |
| Band II | 9262 | HSDPA_Sub4 | 19.18 | 33 | PASS |
| Band II | 9400 | HSDPA_Sub1 | 20.23 | 33 | PASS |
| Band II | 9400 | HSDPA_Sub2 | 18.40 | 33 | PASS |
| Band II | 9400 | HSDPA_Sub3 | 17.78 | 33 | PASS |
| Band II | 9400 | HSDPA_Sub4 | 17.48 | 33 | PASS |
| Band II | 9538 | HSDPA_Sub1 | 20.03 | 33 | PASS |
| Band II | 9538 | HSDPA_Sub2 | 19.83 | 33 | PASS |
| Band II | 9538 | HSDPA_Sub3 | 19.59 | 33 | PASS |
| Band II | 9538 | HSDPA_Sub4 | 17.47 | 33 | PASS |
| Band V | 4132 | HSDPA_Sub1 | 21.93 | 38.5 | PASS |
| Band V | 4132 | HSDPA_Sub2 | 20.81 | 38.5 | PASS |
| Band V | 4132 | HSDPA_Sub3 | 20.28 | 38.5 | PASS |
| Band V | 4132 | HSDPA_Sub4 | 20.47 | 38.5 | PASS |
| Band V | 4182 | HSDPA_Sub1 | 20.63 | 38.5 | PASS |
| Band V | 4182 | HSDPA_Sub2 | 20.88 | 38.5 | PASS |
| Band V | 4182 | HSDPA_Sub3 | 20.01 | 38.5 | PASS |
| Band V | 4182 | HSDPA_Sub4 | 21.13 | 38.5 | PASS |
| Band V | 4233 | HSDPA_Sub1 | 21.61 | 38.5 | PASS |
| Band V | 4233 | HSDPA_Sub2 | 21.81 | 38.5 | PASS |
| Band V | 4233 | HSDPA_Sub3 | 21.10 | 38.5 | PASS |
| Band V | 4233 | HSDPA_Sub4 | 21.08 | 38.5 | PASS |

WCDMA

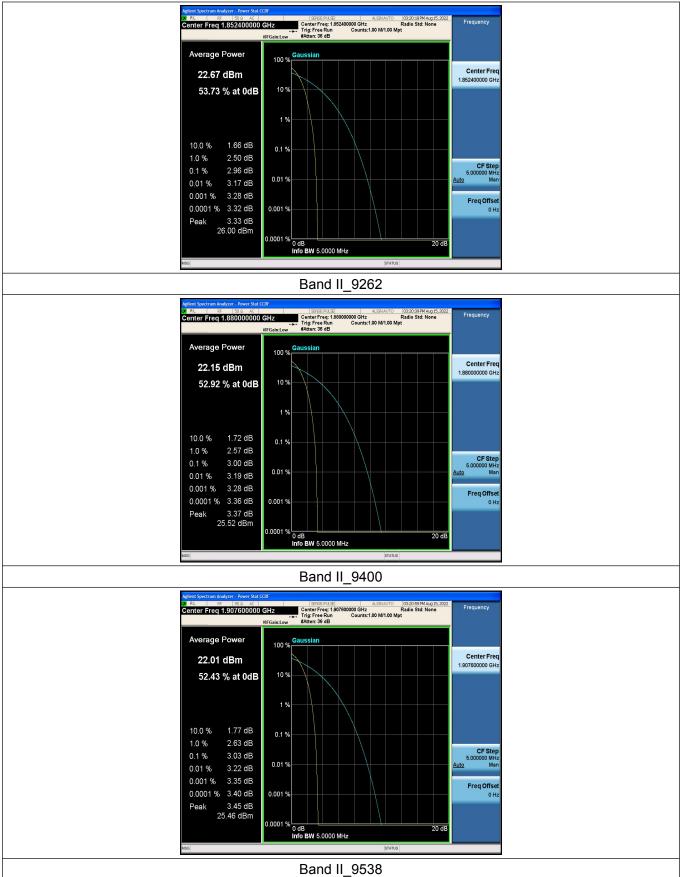
| Band | Channel | SubTest | Power(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|------------|---------|
| Band II | 9262 | HSUPA_Sub1 | 17.20 | 33 | PASS |
| Band II | 9262 | HSUPA_Sub2 | 17.35 | 33 | PASS |
| Band II | 9262 | HSUPA_Sub3 | 17.00 | 33 | PASS |
| Band II | 9262 | HSUPA_Sub4 | 17.41 | 33 | PASS |
| Band II | 9262 | HSUPA_Sub5 | 20.56 | 33 | PASS |
| Band II | 9400 | HSUPA_Sub1 | 17.58 | 33 | PASS |
| Band II | 9400 | HSUPA_Sub2 | 17.74 | 33 | PASS |
| Band II | 9400 | HSUPA_Sub3 | 17.40 | 33 | PASS |
| Band II | 9400 | HSUPA_Sub4 | 17.73 | 33 | PASS |
| Band II | 9400 | HSUPA_Sub5 | 20.62 | 33 | PASS |
| Band II | 9538 | HSUPA_Sub1 | 17.12 | 33 | PASS |
| Band II | 9538 | HSUPA_Sub2 | 17.33 | 33 | PASS |
| Band II | 9538 | HSUPA_Sub3 | 17.00 | 33 | PASS |
| Band II | 9538 | HSUPA_Sub4 | 17.39 | 33 | PASS |
| Band II | 9538 | HSUPA_Sub5 | 20.35 | 33 | PASS |
| Band V | 4132 | HSUPA_Sub1 | 18.76 | 38.5 | PASS |
| Band V | 4132 | HSUPA_Sub2 | 19.13 | 38.5 | PASS |
| Band V | 4132 | HSUPA_Sub3 | 19.52 | 38.5 | PASS |
| Band V | 4132 | HSUPA_Sub4 | 19.43 | 38.5 | PASS |
| Band V | 4132 | HSUPA_Sub5 | 22.75 | 38.5 | PASS |
| Band V | 4182 | HSUPA_Sub1 | 19.12 | 38.5 | PASS |
| Band V | 4182 | HSUPA_Sub2 | 19.42 | 38.5 | PASS |
| Band V | 4182 | HSUPA_Sub3 | 19.73 | 38.5 | PASS |
| Band V | 4182 | HSUPA_Sub4 | 19.54 | 38.5 | PASS |
| Band V | 4182 | HSUPA_Sub5 | 23.21 | 38.5 | PASS |
| Band V | 4233 | HSUPA_Sub1 | 18.95 | 38.5 | PASS |
| Band V | 4233 | HSUPA_Sub2 | 19.19 | 38.5 | PASS |
| Band V | 4233 | HSUPA_Sub3 | 19.47 | 38.5 | PASS |
| Band V | 4233 | HSUPA_Sub4 | 19.30 | 38.5 | PASS |
| Band V | 4233 | HSUPA_Sub5 | 22.95 | 38.5 | PASS |

8.2 Appendix B: Peak-to-Average Ratio

Test Result

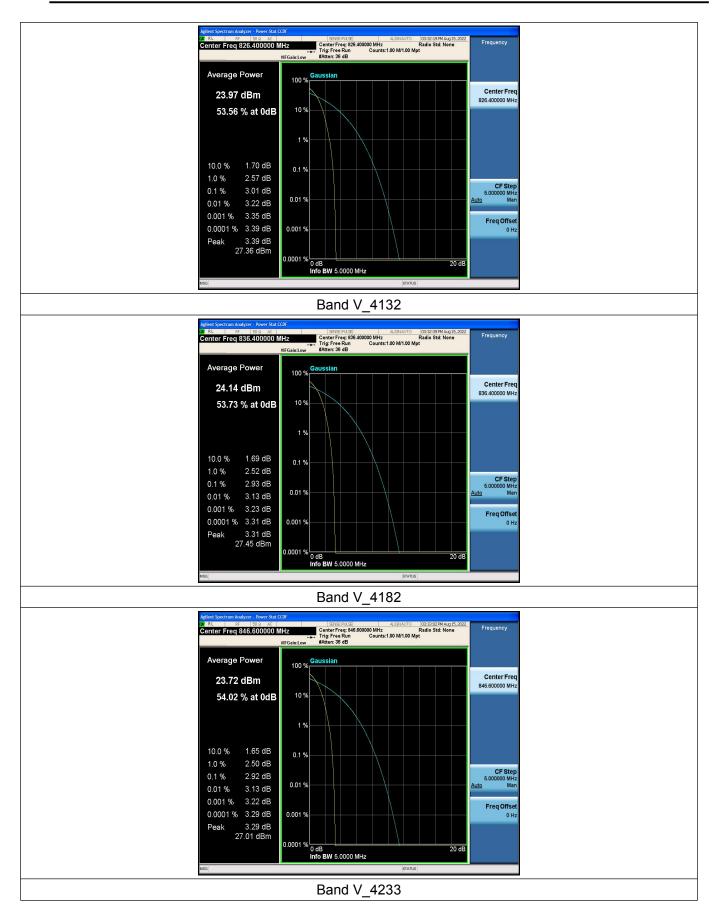
| Band | Channel | Peak-to-Average Ratio(dB) | Limit(dB) | Verdict |
|---------|---------|---------------------------|-----------|---------|
| Band II | 9262 | 2.96 | 13 | PASS |
| Band II | 9400 | 3.00 | 13 | PASS |
| Band II | 9538 | 3.03 | 13 | PASS |
| Band V | 4132 | 3.01 | 13 | PASS |
| Band V | 4182 | 2.93 | 13 | PASS |
| Band V | 4233 | 2.92 | 13 | PASS |

Test Graphs



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Appendix C: 26dB Bandwidth and Occupied Bandwidth 8.3

Test Result

| Band | Channel | Occupied Bandwidth | 26dB Bandwidth | Limit(kHz) | Verdict | |
|---------|---------|--------------------|----------------|------------|---------|--|
| Danu | Channel | (kHz) | (kHz) | | verdict | |
| Band II | 9262 | 4149.9 | 4677 | | PASS | |
| Band II | 9400 | 4153.5 | 4672 | | PASS | |
| Band II | 9538 | 4163.7 | 4694 | | PASS | |
| Band V | 4132 | 4141.7 | 4684 | | PASS | |
| Band V | 4182 | 4147.5 | 4674 | | PASS | |
| Band V | 4233 | 4147.0 | 4685 | | PASS | |

WCDMA

Test Graphs



Shenzhen Huatongwei International Inspection Co., Ltd.

WCDMA

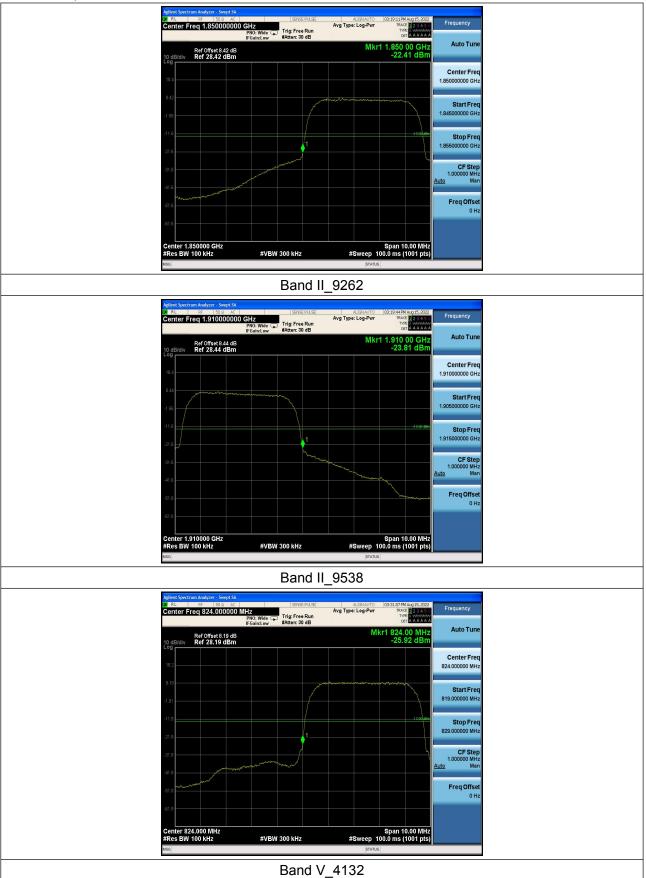


8.4 Appendix D: Band Edge

Test Result

| Band | Channel | Value(dBm) | Limit(dBm) | Verdict |
|---------|---------|------------|------------|---------|
| Band II | 9262 | -22.41 | -13 | PASS |
| Band II | 9538 | -23.81 | -13 | PASS |
| Band V | 4132 | -25.92 | -13 | PASS |
| Band V | 4233 | -25.84 | -13 | PASS |

Test Graphs



Shenzhen Huatongwei International Inspection Co., Ltd.

WCDMA

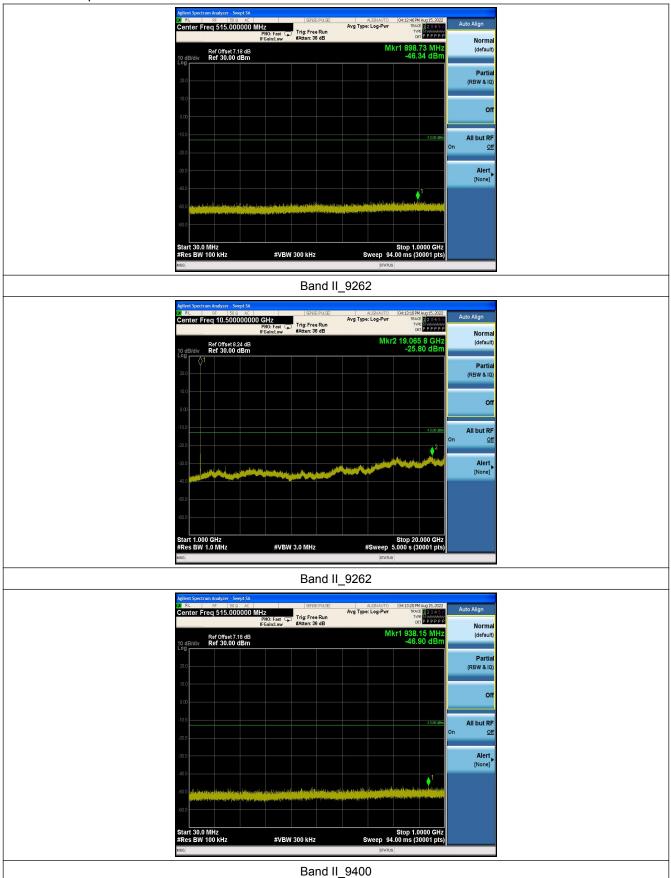
| Aglient Spectrum Analyzer - Swept SA W RL RF 50 R AC Center Freq 849.000000 | SENSE:PULSE | ALIGNAUTO Avg Type: Log-Pwr | 03:31:42 PM Aug 15, 2022 TRACE 1 2 3 4 5 5 TYPE A WWWWWW DET A A A A A A | Frequency |
|---|--------------|--------------------------------|---|-------------------------------------|
| Ref Offset 7.83 dB 10 dB/div Ref 27.83 dBm | | Mkr | 1 849.00 MHz -25.84 dBm | Auto Tune |
| 17.8 | | | _ | Center Freq 849.000000 MHz |
| 7.83 | | | | Start Freq 844.000000 MHz |
| -12.2 | 1 | | 13.00 dBn | Stop Freq 854.000000 MHz |
| -32.2 | - Min | and the second second | | CF Step 1.000000 MHz Auto Man |
| -52.2 | | | | Freq Offset 0 Hz |
| 62.2 Center 849.000 MHz #Res BW 100 kHz | #VBW 300 kHz | #Sweep 100 | Span 10.00 MHz 0.0 ms (1001 pts) | |
| MSG | | STATUS | | |
| | Band V | _4233 | | |

8.5 Appendix E: Conducted Spurious Emission

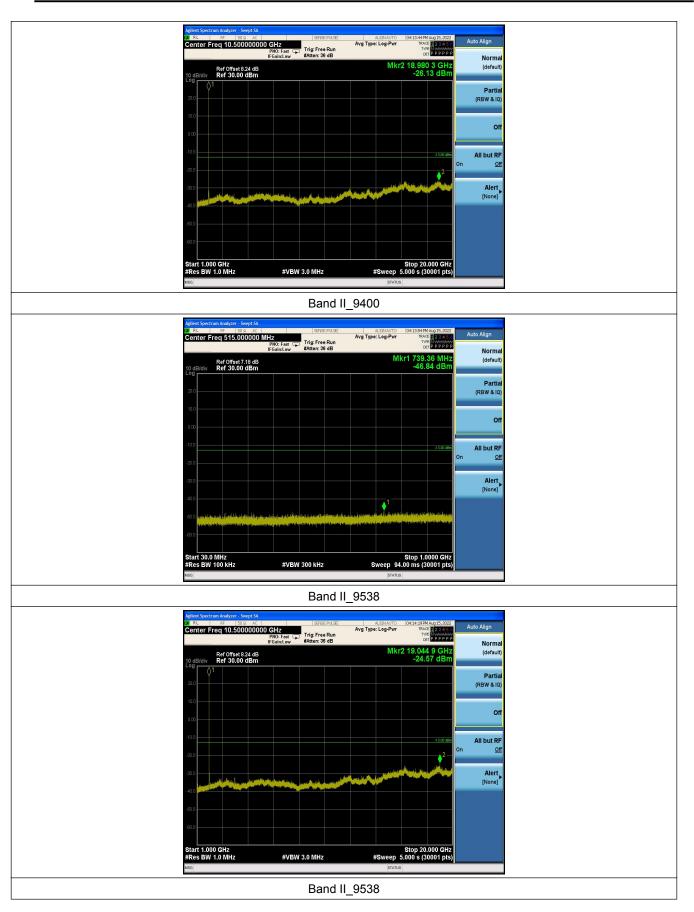
Test Result

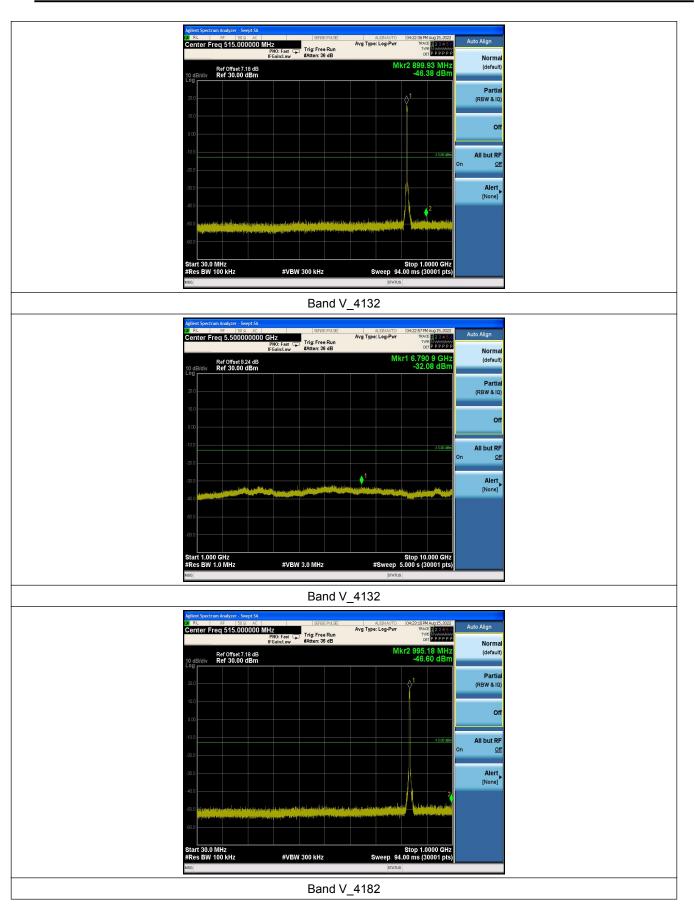
| Band | Channel | Frequency Rang(Mhz) | Value(dBm) | Limit(dBm) | Verdict |
|---------|---------|---------------------|------------|------------|---------|
| Band II | 9262 | 30~1000 | -46.34 | -13 | PASS |
| Band II | 9262 | 1000~20000 | -25.80 | -13 | PASS |
| Band II | 9400 | 30~1000 | -46.90 | -13 | PASS |
| Band II | 9400 | 1000~20000 | -26.13 | -13 | PASS |
| Band II | 9538 | 30~1000 | -46.84 | -13 | PASS |
| Band II | 9538 | 1000~20000 | -24.57 | -13 | PASS |
| Band V | 4132 | 30~1000 | -46.38 | -13 | PASS |
| Band V | 4132 | 1000~10000 | -32.08 | -13 | PASS |
| Band V | 4182 | 30~1000 | -46.60 | -13 | PASS |
| Band V | 4182 | 1000~10000 | -31.98 | -13 | PASS |
| Band V | 4233 | 30~1000 | -46.78 | -13 | PASS |
| Band V | 4233 | 1000~10000 | -32.17 | -13 | PASS |

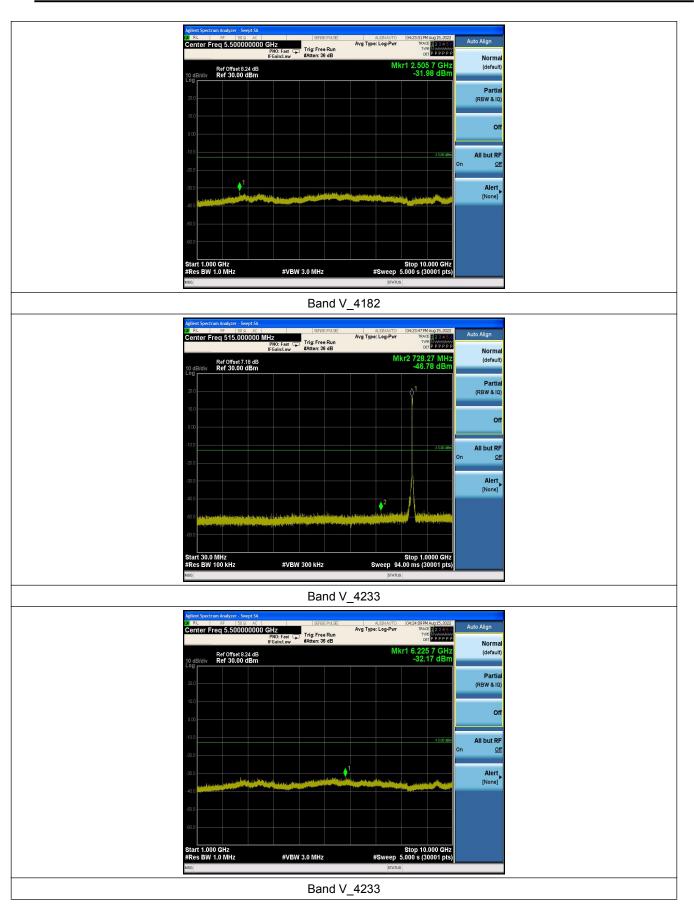
Test Graphs



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8.6 Appendix F: Frequency Stability

Test Result

| | Voltage | | | | | | | | |
|---------|---------|------------------|--------------------|-------------------|--------------------|----------------|---------|--|--|
| Band | Channel | Voltage (Vdc) | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict | | |
| Band II | 9262 | VL | TN | 0.24 | 0.000130 | 2.5 | PASS | | |
| Band II | 9262 | VN | TN | 0.02 | 0.000011 | 2.5 | PASS | | |
| Band II | 9262 | VH | TN | -0.36 | -0.000194 | 2.5 | PASS | | |
| Band II | 9400 | VL | TN | 0.06 | 0.000032 | 2.5 | PASS | | |
| Band II | 9400 | VN | TN | 0.84 | 0.000447 | 2.5 | PASS | | |
| Band II | 9400 | VH | TN | 0.56 | 0.000298 | 2.5 | PASS | | |
| Band II | 9538 | VL | TN | -0.32 | -0.000168 | 2.5 | PASS | | |
| Band II | 9538 | VN | TN | 0.14 | 0.000073 | 2.5 | PASS | | |
| Band II | 9538 | VH | TN | 0.70 | 0.000367 | 2.5 | PASS | | |
| Band V | 4132 | VL | TN | 0.65 | 0.000787 | 2.5 | PASS | | |
| Band V | 4132 | VN | TN | -0.79 | -0.000956 | 2.5 | PASS | | |
| Band V | 4132 | VH | TN | 0.31 | 0.000375 | 2.5 | PASS | | |
| Band V | 4182 | VL | TN | -0.13 | -0.000155 | 2.5 | PASS | | |
| Band V | 4182 | VN | TN | 0.62 | 0.000741 | 2.5 | PASS | | |
| Band V | 4182 | VH | TN | 1.38 | 0.001650 | 2.5 | PASS | | |
| Band V | 4233 | VL | TN | 0.48 | 0.000567 | 2.5 | PASS | | |
| Band V | 4233 | VN | TN | 1.49 | 0.001760 | 2.5 | PASS | | |
| Band V | 4233 | VH | TN | 0.40 | 0.000472 | 2.5 | PASS | | |

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| Temperature | | | | | | | | |
|------------------|--------------|------------------|------------------------|-------------------|--------------------|----------------|--------------|--|
| Band | Channel | Voltage (Vdc) | Temperatur e (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict | |
| Band II | 9262 | VN | -30 | 2.10 | 0.001134 | 2.5 | PASS | |
| Band II | 9262 | VN | -20 | -0.08 | -0.000043 | 2.5 | PASS | |
| Band II | 9262 | VN | -10 | 0.00 | 0.000000 | 2.5 | PASS | |
| Band II | 9262 | VN | 0 | -1.14 | -0.000615 | 2.5 | PASS | |
| Band II | 9262 | VN | 10 | -0.14 | -0.000076 | 2.5 | PASS | |
| Band II | 9262 | VN | 20 | 0.14 | 0.000076 | 2.5 | PASS | |
| Band II | 9262 | VN | 30 | 0.79 | 0.000426 | 2.5 | PASS | |
| Band II | 9262 | VN | 40 | 1.57 | 0.000848 | 2.5 | PASS | |
| Band II | 9262 | VN | 50 | 0.09 | 0.000049 | 2.5 | PASS | |
| Band II | 9400 | VN | -30 | 0.35 | 0.000186 | 2.5 | PASS | |
| Band II | 9400 | VN | -20 | 2.04 | 0.001085 | 2.5 | PASS | |
| Band II | 9400 | VN | -10 | 0.82 | 0.000436 | 2.5 | PASS | |
| Band II | 9400 | VN | 0 | -0.21 | -0.000112 | 2.5 | PASS | |
| Band II | 9400 | VN | 10 | -1.19 | -0.000633 | 2.5 | PASS | |
| Band II | 9400 | VN | 20 | -0.21 | -0.000112 | 2.5 | PASS | |
| Band II | 9400 | VN | 30 | -0.40 | -0.000213 | 2.5 | PASS | |
| Band II | 9400 | VN | 40 | -0.49 | -0.000261 | 2.5 | PASS | |
| Band II | 9400 | VN | 50 | 1.31 | 0.000697 | 2.5 | PASS | |
| Band II | 9538 | VN | -30 | -0.10 | -0.000052 | 2.5 | PASS | |
| Band II | 9538 | VN | -20 | 0.50 | 0.000262 | 2.5 | PASS | |
| Band II | 9538 | VN | -10 | 0.92 | 0.000482 | 2.5 | PASS | |
| Band II | 9538 | VN | 0 | 0.18 | 0.000094 | 2.5 | PASS | |
| Band II | 9538 | VN | 10 | 1.87 | 0.000980 | 2.5 | PASS | |
| Band II | 9538 | VN | 20 | -1.07 | -0.000561 | 2.5 | PASS | |
| Band II | 9538 | VN | 30 | 0.68 | 0.000356 | 2.5 | PASS | |
| Band II | 9538 | VN | 40 | -1.29 | -0.000676 | 2.5 | PASS | |
| Band II | 9538 | VN | 50 | 0.87 | 0.000456 | 2.5 | PASS | |
| Band V | 4132 | VN | -30 | -0.91 | -0.001101 | 2.5 | PASS | |
| Band V | 4132 | VN | -20 | -0.03 | -0.000036 | 2.5 | PASS | |
| Band V | 4132 | VN | -10 | 0.11 | 0.000133 | 2.5 | PASS | |
| Band V | 4132 | VN | 0 | 0.57 | 0.000690 | 2.5 | PASS | |
| Band V | 4132 | VN | 10 | 0.99 | 0.001198 | 2.5 | PASS | |
| Band V Band V | 4132 | VN | 20 | -0.01 | -0.000012 | 2.5 | PASS | |
| Band V Band V | 4132 | VN | 30 | -0.43 | -0.000520 | 2.5 | PASS | |
| Band V Band V | 4132 | VN | 40 | 1.49 | 0.001803 | 2.5 | PASS | |
| Band V Band V | 4132 | VN | 50 | 0.67 | 0.000811 | 2.5 | PASS | |
| Band V Band V | 4182 | VN | -30 | 1.57 | 0.001877 | 2.5 | PASS | |
| Band V Band V | 4182 | VN | -20 | 0.56 | 0.000670 | 2.5 | PASS | |
| Band V Band V | 4182 | VN | -20 | 0.36 | 0.000430 | 2.5 | PASS | |
| Band V Band V | 4182 | VN | 0 | 0.29 | 0.000347 | 2.5 | PASS | |
| Band V Band V | 4182 | VN | 10 | 0.29 | 0.000514 | 2.5 | PASS | |
| Band V Band V | 4182 | VN | 20 | 0.43 | 0.000813 | 2.5 | PASS | |
| Band V Band V | 4182 | VN | 30 | 1.06 | 0.001267 | 2.5 | PASS | |
| Band V | 4182 | VN | 30 40 | 0.41 | 0.001287 | 2.5 | PASS | |
| Band V Band V | | | | | | | | |
| | 4182 4233 | VN VN | 50 -30 | 0.04 | 0.000048 | 2.5 | PASS PASS | |

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Radio Specification:

WCDMA

| Band V | 4233 | VN | -20 | 0.76 | 0.000898 | 2.5 | PASS |
|--------|------|----|-----|-------|-----------|-----|------|
| Band V | 4233 | VN | -10 | 0.51 | 0.000602 | 2.5 | PASS |
| Band V | 4233 | VN | 0 | -0.13 | -0.000154 | 2.5 | PASS |
| Band V | 4233 | VN | 10 | -0.41 | -0.000484 | 2.5 | PASS |
| Band V | 4233 | VN | 20 | -0.12 | -0.000142 | 2.5 | PASS |
| Band V | 4233 | VN | 30 | -0.51 | -0.000602 | 2.5 | PASS |
| Band V | 4233 | VN | 40 | -0.63 | -0.000744 | 2.5 | PASS |
| Band V | 4233 | VN | 50 | -0.04 | -0.000047 | 2.5 | PASS |

8.7 Appendix G: ERP and EIRP

Test Result

| Band | | Conducted | Antenna | EIRP | | Limit | |
|---------|-------|-----------|---------|-------|--------|-------|---------|
| | Mode | Power | Gain | (dDm) | (W) | (W) | Verdict |
| | | (dBm) | (dBi) | (dBm) | | | |
| Band II | WCDMA | 23.15 | 1.20 | 24.35 | 0.2723 | 2 | PASS |
| | HSDPA | 20.24 | 1.20 | 21.44 | 0.1393 | 2 | PASS |
| | HSUPA | 20.62 | 1.20 | 21.82 | 0.1521 | 2 | PASS |

| Band | Mode | Conducted | Antenna | ERP | | T insit | |
|--------|-------|-----------|---------|-------|--------|--------------|---------|
| | | Power | Gain | (dDm) | (W) | Limit (W) | Verdict |
| | | (dBm) | (dBi) | (dBm) | | | |
| Band V | WCDMA | 24.24 | 0.60 | 22.69 | 0.1858 | 7 | PASS |
| | HSDPA | 21.93 | 0.60 | 20.38 | 0.1091 | 7 | PASS |
| | HSUPA | 23.21 | 0.60 | 21.66 | 0.1466 | 7 | PASS |

-----End of the Report -----